# APPENDIX A

# SOIL BORING LOGS

Project Na	ne:		Project Nu	mber:		Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York	
Boring Nu	nhor		Doto Drillo	d.		(Quonset Hut "C" AOC)	
boring Nur	SB-1		8/26/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method:			Sampling Method:	
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed:			Casing Ma	terial / Diame	er:	Total Depth (feet):	
No				None		13.0	
Notes:	PID values in "()" a Soil sample SB-1 (. Ground-water samp	are headspace 5 - 6) submitte ple SB-1 subn	readings. ed for laborat nitted for labo	ory analysis (V oratory analysis	OC, SVOC, (VOC, SVO	TICs, heptane). DC, TICs, heptane).	
Depth	Sample Interval	Recovery	PID Sample			Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2.5	0.5 - 1		Asphalt/ba	ase; fill material (cinders).	
-			(4.9 - 9.0)		Gray/brow	n silty clay; soft; moist.	
-							
-							
-							
5	5 - 10	5.0	0.4 - 1.1	SB-1	5 - 7.5 fee	t: Saturated brown silt and clay with coarse gravel.	
-			(1.6 - 2.1)	(5 - 6)	7.5 - 10: E	Brown clayey silt with coarse gravel.	
-							
-							
-							
10	10 - 15	2.5	0 - 1.0		Gray/brow	vn clayey site with coarse gravel (1/4 - 1-inch)	
-			(1.9 - 2.2)				
-					Refusal at	13 feet.	
-							
-					Boring SI	B-1 terminated at 13 feet (refusal)	
15							
-							

Project Nar	no.		Project Number:			Location:	
For	mer Norton/Nachu	Site	029.08			Watervliet New York	
101		a She		029.08		(Quonset Hut "C" AQC)	
Boring Nur	nhor		Doto Drillo	d		Logged by:	
Doring Run	SB-2		8/26/2003			Boh Zei	
	50-2			0/20/2005		<b>1</b> 00 201	
Drilling Company:		Drilling M	ethod:		Sampling Method:		
Environr	mental Cleanup Soli	itions Inc	2	Geoprobe <sup>TM</sup>		Macro-Core	
Liiviioin	nontal Cloundp Son	ations. me.		Geoprove			
Well Install	ed•		Casing Ma	terial / Diamet	•••	Total Denth (feet):	
vv en mistun	No		Cubing Ivia	None		13.0	
110				110110		1010	
Notes:	PID values in "()"	are headspace	readings.				
	Soil sample SB-2 (	10 - 11) subm	itted for labo	ratory analysis (	TOC).		
Soil sample SB-2 (11 - 12) submitted for laboratory analysis (VOC, SVOC, TICs, heptane).							
	_					-	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.0	0.2 - 0.5		Upper 1 fc	pot: Flakes of red epoxy-like material: asphalt and cinders	
					- 11 -		
-			(2.5 - 2.9)		Whitish sa	ndy layer to gray/brown silty clay; damp.	
-							
-							
-							
5	5 - 10	5.0	0.3 - 0.6		Grav grave	el. Brown clay with minor silt (Top 1 foot).	
					,,,	, , , , , , , , , , , , , , , , , , ,	
-			(2.0 - 4.0)		Moist from	n 6.5 - 8 feet.	
-					Clayey silt	, drier to bottom. Gravel at base.	
-							
_							
_							
10	10 - 15	3.0	0.4 - 0.5	SB-2	Brown cla	y to silty clay/clayey silt; wet	
-			(2.2 - 3.3)	(10 - 11)	Gray rock	fragments at base.	
-				SB-2			
				(11 10)			
-				(11 - 12)			
_					Boring SI	R-2 terminated at 13 feet (refusal)	
					201 mg 01	- a communea at 10 feet (fetusai).	
15							
-							

Project Nar	ne:		Project Number:			Location:		
For	mer Norton/Nashua	a Site	9	029.08		Watervliet, New York		
						(Solvent Recovery Room AOC)		
Boring Nur	nber:		Date Drille	d:		Logged by:		
	SB-3		8/26/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core		
Well Install	ed:		Casing Ma	terial / Diamet	er:	Total Depth (feet):		
No				None		15.0		
Notes:	PID values in "()" a	are headspace	readings.					
Soil sample SB-3 (10 - 11) submitted for laboratory analysis (VOC, SVOC, TICs, heptane).								
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0 - 5	1.5	0 - 0.1		6" asphalt	at top.		
-			(2.5 - 3.1)		Saturated	brown fine to coarse sand and gravel		
-								
-								
-								
5	5 - 10	2.0	0 - 0.3		Brown to	gray fine sand with silt and coarse gravel (1/4 - 1-inch);		
-			(2.0 - 2.5)		moist.			
-								
-								
-								
10	10 - 15	5.0	0 - 0.3	SB-3	Saturated.	Upper 12": fine to coarse sand and gravel (1/4 - 1/2-inch).		
-			(2.7 - 4.7)	(10 - 11)	Gray fine s	sand with silt and gravel (1/8 - 1/4-inch).		
-								
-								
-								
15								
-					Boring SI	B-3 terminated at 15 feet.		

Project Nar	ne:		Project Number:			Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York	
						(Solvent Recovery Room AOC)	
Boring Nur	nber:		Date Drille	d:		Logged by:	
	SB-4		8/20/2005			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method:			Sampling Method:	
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed:			Casing Ma	terial / Diamet	ter:	Total Depth (feet):	
No				None		15.0	
Notes: PID values in "()" are headspace			readings.				
	Soil sample SB-4 (	9 - 10) submit	ted for labora	atory analysis (V	VOC, SVOC	C, TICs, heptane).	
Denth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color. texture. structure	
0	0.5	1.5			6" combalt	at tom	
0	0-5	1.5	0.5 - 0.4		o aspiran	a top.	
-			(2.8 - 3.2)		Brown fin	e to coarse sand and silt; 1/4 - 1-inch gravel.	
-							
-							
-							
5	5 - 10	5.0	0 - 0.4		Upper 18"	: Brown fine to coarse sand and silt; 1/4 - 1-inch gravel.	
-			(4.2 - 4.5)		12 inches:	Brown/gray fine sand with silt.	
-					Gray fine	sand and silt and gravel (1/8 - 1/4-inch).	
-				SB-4			
-				(9 - 10)			
10	10 - 15	5.0	0.2 - 0.4		Saturated.		
-			(4.2 - 4.6)		Upper 12"	': Brown fine to coarse sand and silt, 1/8-1/4-inch gravel.	
-					Gray fine	to coarse sand with silt and 1/4 - 1-inch gravel.	
-							
-							
15							
-					Boring SI	B-4 terminated at 15 feet.	

Proiect Nar	ne:		Project Number:			Location:		
For	mer Norton/Nashua	a Site		029.08		Watervliet, New York		
						(Building #61 Doorway Spill AOC)		
Boring Nur	nber:		Date Drille	d:		Logged by:		
	SB-5		8/26/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environmental Cleanup Solutions. Inc.		tions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core		
Well Install	ed:		Casing Ma	terial / Diamet	er:	Total Depth (feet):		
No				None		15.0		
Notes:	PID values in "()" a	are headspace	readings.					
Soil sample SB-5 (8 - 9) submitted for laboratory analysis (VOC, SVOC, TICs, heptane).								
Donth	Sample Interval	Decovory	BID	Samula	7	Soil Classification / Description		
(feet)	Sample Interval	(foot)	(nnm)	Sample		Soli Classification / Description		
(leet)	(leet)	(leet)	(ppm)	miervai	┨────	color, lexture, structure		
0	0 - 5	2.0	0.2 - 0.4		6" asphalt	at top.		
-			(2.2 - 2.5)		Brown fine	e to coarse sand with silt and 1/4 - 1/2-inch gravel.		
-								
-								
-								
5	5 - 10	2.0	0.1 - 0.4		Brown fin	e to coarse sand with silt and 1/4 - 1/2-inch gravel.		
-			(3.5 - 4.5)		Lower 4":	Gray fine to coarse sand with gravel.		
-								
-				SB-5				
-				(8 - 9)				
10	10 - 15	5.0	0.1 - 0.4		Saturated.			
-			(3.0 - 4.3)		10 - 12': m	nedium to coarse sand and gravel (1/8 - 1/4-inch).		
-					12 - 14': fi	ne to coarse sand.		
-					14 - 14.5':	Gray silty clay.		
-					14.5 - 15':	Gray silty clay with 1/2 - 1-inch gravel.		
15								
-					Boring SF	3-5 terminated at 15 feet.		

Proiect Name:			Project Number:			Location:			
For	mer Norton/Nashu	Site		029.08		Watervliet New York			
101	inci i voiton/i vasitua	1 She		027.00		(Former Departor Summ Dit SWML)			
						(Former Bearlex Sump Pit SwMO)			
Boring Nun	nber:		Date Drilled:			Logged by:			
	SB-6			8/27/2003		Bryan J. Machella			
Drilling Component			Drilling M	othod		Sampling Mathod:			
Drining Co	mpany.		Di liling Mi	culou.		Samping Wethou.			
Environr	nental Cleanup Solu	tions. Inc.		Geoprobe <sup>1M</sup>		Macro-Core			
Well Install	ed:		Casing Ma	terial / Diamete	r:	Total Depth (feet):			
	No		cubing him	None		11.0			
	NO			None		11.0			
Notes:	PID values in "()"	are headspace	readings.						
	Soil sample SB-6 (	9 - 10) and SE	8-6 (10 - 11)	submitted for la	boratory an	alysis (VOC, SVOC, TICs, heptane).			
Donth	Sample Interval	Docovory	DID	Sampla		Soil Classification / Description			
Depti	Sample miler var	Recovery	ΠD (	Sample		Son Classification / Description			
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure			
0	0 - 5	2.0	0.0		3" concret	re at top			
Ũ	ů č		0.0		e concret				
			(0,1, 0,6)		Eill motori	al ailta ann da amarral Innialr an d aghhlag			
-			(0.4 - 0.6)		Fill materi	er sins, sands, graver, brick and cobbles.			
-									
-									
-									
5	5 - 10	2.0	0.0		Silts sand	s and gravel (1/8 - 1/4-inch) Brick material at bottom			
5	5 10	2.0	0.0		onto, ound				
			(0,0)						
-			(0.0)						
-									
-				SB-6					
-				(9 - 10)					
				× ,					
10	10 - 15	1.0	29 - 35	SB-6	Saturated	silts sands and gravel: brick fragments			
10	10 - 15	1.0	27 - 33	50-0	Saturated	sins, sands, and graver, onek magnents			
			(50, (0, 0)	(10, 11)	D				
-			(50 - 69.8)	(10 - 11)	Boring SI	B-6 terminated at 11 feet (refusal).			
-									
-									
-									
15									
15									
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Project Nar	ne:		Project Number:			Location:		
For	mer Norton/Nashua	a Site	Ŭ	029.08		Watervliet, New York		
						(Former Beartex Sump Pit SWMU)		
Boring Nur	nber:		Date Drille	d:		Logged by:		
	SB-7		8/27/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environr	nental Cleanup Solu	ations. Inc.		Geoprobe <sup>TM</sup>		Macro-Core		
Well Installed:			Casing Ma	terial / Diamete	er:	Total Depth (feet):		
No				None		10.5		
Notes: PID values in "()" are headspace			readings.					
	Soil sample SB-7 (	9 - 10) submit	heptane). Insufficient sample volume for SVOC analysis.					
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0 - 5	3.0	0.0		3" concret	e at top.		
-			(0.2 - 0.9)		Silts, sands	s and gravel (1/2 - 1/2-inch). Brick material at bottom.		
-								
-								
-								
5	5 - 10	1.5	0.0		Same as al	bove (SAME AS ABOVE).		
-			(0.0 - 0.1)		Wet at bot	tom.		
-								
-				SB-7				
				(0, 10)				
-				(9 - 10)				
10	10 - 15		0.0					
-			(12 - 14.7)		Boring SI	3-7 terminated at 10.5 feet (refusal).		
-								
-								
-								
15								
-								

			I	-					
Project Nar	ne:		Project Nu	mber:		Location:			
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York			
						(Former Beartex Sump Pit SWMU)			
Boring Nun	nber:		Date Drilled:			Logged by:			
	SB-8		8/27/2003			Bryan J. Machella			
Drilling Co	mpany:		Drilling Method:			Sampling Method:			
Environmental Cleanup Solutions. Inc.		Geoprobe <sup>TM</sup>			Macro-Core				
Well Installed:			Casing Ma	terial / Diamete	er:	Total Depth (feet):			
No			8	None		10.5			
Notes: PID values in "()" are headspace			readings.						
Soil sample SB-8 (9 - 10) subm			ted for labora	atory analysis (S	VOC. TICs	3).			
Soil sample SB-8 (10 - 11) submitted for laboratory analysis (VOC, TICs, heptane).									
Depth	Sample Interval	Recovery	PID	Sample	Sample Soil Classification / Description				
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure			
(1000)	(1000)	(1000)	(ppiii)	Inter vur		color, texture, structure			
0	0 - 5	3.0	0.0		3" concret	e.			
-			(0.2 - 1.5)		Silts, sands	s and gravel (1/2 - 1/2-inch). Brick material at bottom.			
-									
-									
_									
5	5 - 10	1.5	0.0		Sands, silts	s, gravel, and brick material.			
-			(0.0 - 2.1)		Lower 3":	large cobbles; wet.			
-									
-				SB-8					
-				(9 - 10)					
10	10 15	0.5	<b>8</b> 11	5D 8	Door recou	very Concrete like material (fine to coarse grained); wat			
10	10 - 15	0.5	0-11	50-0		cry. Concrete-like material (line to coarse graned), wet.			
-			(6 - 8)	(10 - 11)	Boring SI	3-8 terminated at 10.5 feet (refusal).			
-									
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-									
15									
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Project Nai	me•		Project Number:			Location:		
For	mer Norton/Nashu:	o Site	I IUJCCI INU.	029.08		Watervliet New York		
101	iner i vorton/i vusitut	1 blic	025100			(Former Beartex Sump Pit SWMU)		
Boring Nur	nber:		Date Drille	d:		Logged hy:		
boring tur	SB-9		8/27/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environmental Cleanup Solutions. Inc.		8	Geoprobe <sup>TM</sup>		Macro-Core			
Well Installed:			Casing Ma	terial / Diamet	er:	Total Depth (feet):		
No				None		10.5		
Notes:	PID values in "()" a Soil sample SB-9 (	are headspace 9 - 10) submit	readings. tted for labora	atory analysis (V	OC, SVOC	C, TICs, heptane).		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0.5	1.5	0.0		3" concret	e at top		
0	0-5	1.5	0.0		5 concret	e at top.		
-			(1.2 - 3.9)		Tan - dark	brown silts, sands, and gravel.		
-								
-								
-								
5	5 - 10	2.5	0 - 0.5		Tan - dark	brown silts, sands, and gravel.		
-			(2 - 5.5)		Brick mate	erial present in lower 12" of sample.		
-					Lower 3":	Wet.		
-				SB-9				
-				(9 - 10)				
10	10 - 15	0.25	0 - 1		Poor recov	very. Sands, silts, gravel (1/2 - 1").		
-			(1.5 - 2.9)		Boring SI	3-9 terminated at 10.5 feet (refusal).		
-								
-								
-								
15								
-								

Project Nar	ne:		Project Number:			Location:		
For	mer Norton/Nashua	a Site	v	029.08		Watervliet, New York		
						(Quonset Hut "B" AOC)		
Boring Nur	nber:		Date Drille	d:		Logged by:		
	SB-10			8/27/2003		Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environr	nental Cleanup Solu	tions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core		
Well Installed:			Casing Ma	terial / Diamet	er:	Total Depth (feet):		
No				None		15.0		
Notes: PID values in "()" are headspace			readings.					
	Soil sample SB-10	(8 - 9) submit	ted for labora	atory analysis (V	/OC, SVOC	C, TICs, heptane).		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0 - 5	2.0	0 - 2.5		Brown fin	e to coarse sands; silts and gravel intermixed.		
-			(2 - 4.7)					
-								
-								
-								
5	5 - 10	2.0	2 - 13.5		Upper 12"	': Dark brown fine to medium sands with some silt.		
-			(5 - 8)		Lower 12'	': Saturated; fine to medium sands; silts and 1/4 - 1/8-		
-					inch grave	el intermixed.		
-				SB-10	Wet at 9 fe	eet.		
-				(8 - 9)				
10	10 - 15	5.0	0 - 0.8		Saturated.			
-			(2 - 4.1)		Upper 2': l	Brown silts, sands, and gravel; 1/8 - 1-inch pebbles		
-					Middle 12	": Brown silt with fine sand.		
-					Lower 12'	': fine to coarse gravel (1/2 - 1-inch)		
-								
15								
-					Boring SI	B-10 terminated at 15 feet.		

-							
Project Name:		Project Nu	nber:		Location:		
For	mer Norton/Nashua	a Site	_	029.08		Watervliet. New York	
						(Quonset Hut "B" AOC)	
Boring Nur	nber:		Date Drille	d:		Logged by:	
2 of ing 1 (ui	SB-11		2 21	8/27/2003		Bryan J. Machella	
Drilling Co	mnanv:		Drilling Method:			Sampling Method:	
Environ	mental Cleanun Salı	utions Inc		Caarraha <sup>TM</sup>		Magra Core	
LIIVIIOIII	liental Cleanup Son	ations. me.		Geoprobe		Wiacio-Core	
<b>XX7 II T</b> ( II				· · 1/D: /			
Well Install	led:		Casing Mat	terial / Diamet	ter:	Total Depth (feet):	
	No			None		15.0	
		<u> </u>	<u> </u>				
Notes:	PID values in "()"	are headspace	readings.				
	Soil sample SB-11	(4 - 5) submit	tted for labora	tory analysis (	VOC, SVOC	C, TICs, heptane).	
	1				-11		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	1.5	0.2 - 0.5		Brown fin	e to coarse sand: silt and gravel intermixed.	
-			(2.5 - 5.5)	SB-11			
-				(4 - 5)			
-							
-							
5	5 - 10	1.5	0.0		Upper 6":	Brown fine to medium sands and gravel (1/4 - 1/2-inch)	
-			(1.5 - 1.8)		Lower 12	": Saturated; fine to coarse sands and gravel	
-					(1/2 - 1-in	ch).	
-							
-							
10	10 15	4.5	0.0		G 1		
10	10 - 15	4.5	0.0		Saturated.	Upper 2.5": fine to coarse sands and gravel (1/8 - 1/4")	
			(1.5. 2.7)		(". D		
-			(1.5 - 2.7)		0 : Brown	i siits with fine sand.	
					6": Eina ta	a coarca cand and graval	
-					0. Fille to	coarse sand and graver.	
					12". Grav	silt with fine sand	
-					12 . Olay	sit with fine sand.	
_							
15							
-					Boring SI	B-11 terminated at 15 feet.	

Project Nar	ne:		Project Number:			Location:			
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York			
						(Quonset Hut "B" AOC)			
Boring Nur	nber:		Date Drilled:			Logged by:			
SB-12			8/27/2003			Bryan J. Machella			
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:			
Environr	nental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core			
Well Install	ed:		Casing Ma	terial / Diamete	er:	Total Depth (feet):			
No				None		15.0			
Notes:	PID values in "()"	are headspace	readings.						
	Soil sample SB-12	(7.5 - 8.5) sub	omitted for la	boratory analysi	s (VOC, SV	VOC, TICs, heptane).			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description			
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure			
0	0 - 5	2.5	0.0		Brown fin	e to coarse sand; silt and gravel intermixed.			
-			(0.5 - 1.9)						
-									
-				SB-12					
-				(7.5 - 8.5)					
5	5 - 10	2.5	0.0		Brown fin	e to coarse sand; silt and gravel intermixed.			
-			(1.5 - 2.9)		Increased	silt content in lower 6" of sample. Wet at 8.5'.			
-									
-									
-									
10									
-					Boring SI	B-12 terminated at 10 feet.			
-									
_									
15									
15									
-									

Proiect Nar	me:		Project Number:			Location	
For	mer Norton/Nashua	a Site	1 0 0 0 0 0 1 1 0	029.08		Watervliet New York	
						(Filter Room AOC)	
Boring Nun	nber:		Date Drille	d:		Logged by:	
8	SB-13		8/28/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:	
Environr	nental Cleanup Solu	tions. Inc.	8	Geoprobe <sup>TM</sup>		Macro-Core	
Liiviioin	inentai eneantap bon			Geoplobe			
Well Install	ed•		Casing Ma	terial / Diamet	er•	Total Denth (feet):	
vv en mstan	No.		Cusing Mu	None		15.0	
	110			rtone		15.0	
Notes:	PID values in "()" :	are headspace	readings			J	
10005	Soil sample SB-13	(9 - 10) subm	itted for labo	ratory analysis (	voc svo	OC TICs hentane)	
	Son sample SD 15	() 10) subin	inted for hoo	fatory analysis (	100,510	, 1103, heptano).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color. texture. structure	
		• •					
0	0 - 5	2.0	0.0		3": Concre	ete; Brown fine to medium sands with silt; 1/4 - 1-inch	
			(0,0)		111		
-			(0.0)		pebbles pr	esent.	
-							
-							
-							
5	5 - 10	3.0	0.0		Brown fin	e to medium sand with gravel (1/4 - 1/2"); increased	
-			(0.1 - 0.5)		gravel con	tent in lower 6" of sample. Wet in lower 3".	
-							
				SD 12			
-				<b>3D-13</b>			
-				(9 - 10)			
				(5 10)			
10	10 - 15	5.0	0.0		Saturated;	Upper 2': gray silty clay.	
-			(0.5 - 0.9)		Lower 3':	Gray silt with fine sand	
-							
-							
-							
15							
13							
-					Boring SI	B-13 terminated at 15 feet.	

DetectN			Datat			Π <b>τ</b>
Project Name:		Project Number:			Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York
						(Filter Room AOC)
Boring Nun	nber:		Date Drille	d:		Logged by:
	SB-14		8/28/2003			Bryan J. Machella
Drilling Co	mpany:		Drilling Mo	ethod:		Sampling Method:
Environr	nental Cleanup Solu	tions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
	-			1		
Well Install	ed:		Casing Ma	terial / Diamet	er:	Total Depth (feet):
	No		0	None		15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-14	(9 - 10) subm	itted for labo	ratory analysis (	VOC, SVO	OC, TICs, heptane).
	Soil sample SB-14	A (20 - 25) is	a duplicate sa	ample of SB-14	(9 - 10).	
	-		-	-		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0.5	2.0	0.0		3": Concre	ate: Brown fine to medium conde with cilt: 1/8 1/4 inch
0	0-5	2.0	0.0		5 . Concre	ete, Brown fine to medium saids with sitt, 178 - 174-men
_			(0,0)		nebbles pr	esent
			(0.0)		pecoles pr	cont.
-						
-						
-						
5	5 - 10	3.0	0.0		SAME AS	S ABOVE; increased gravel content. Wet in lower 3".
			(10.00)			
-			(1.8 - 2.3)			
-						
_				SB-14		
				55 11		
-				(9 - 10)		
10	10 - 15	4.0	0.0	(Duplicate)	Upper 6":	Brown fine to coarse sand and gravel; silts and fine
-			(1.5 - 2.2)		sands inter	rmixed.
-					Lower 2':	Gray silt with fine sand; 1 - 2-inch pebbles present.
-						
_						
15						
-					Boring SI	B-14 terminated at 15 feet.

			Project Number			Tt.		
Project Nar	ne: maar Martan (Maabuu	- Cita	Project Nu	<b>mber:</b>		Location:		
FOI	mer morton/masnua	a She		029.08		(Former Test Pit/Solvent Lines - Building #61)		
Boring Nur	nhori		Doto Drillo	d.		Loggod by:		
Doring Nul	SB-15		8/28/2003			Bryan J. Machella		
Drilling Co	mnanv:		Drilling M	ethod:		Sampling Method:		
Environr	mental Cleanun Soli	itions Inc	Drining III	Geoprobe <sup>TM</sup>		Macro-Core		
LIIVIIOIII	nental Cleanup 500	ations. me.		Geoplobe		Wallo-Cole		
Well Install	ed•		Casing Ma	terial / Diamet	er•	Total Denth (feet):		
vv en mstun	No		Cusing Mu	None		15.0		
	110			1,0110		1010		
Notes:	PID values in "()"	are headspace	readings.	eadings.				
	Soil sample SB-15	(6 - 7) submit	ted for laborated	atory analysis (V	VOC, SVOC	C, TICs, heptane).		
	L.			5 5 (				
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0 - 5	3.5	0.0		3" concret	e.		
-			(3 - 4)		Brown to	dark brown fine sands and silt; 1/8 - 1-inch pebbles.		
					Devials most	anial at 2.5		
-					впск таб	enal at 5.5.		
-								
-								
_								
5	5 - 10	4.0	70 - 80	SB-15	Black cinc	ler-like material present from 6 - 7' (PID: 70 - 80 ppm).		
-			(65 - 70)	(6 - 7)	Lower 2.5	': Gray silty clay; soft; low to medium plasticity.		
			Ϋ́Υ, Ϋ́Υ`, Ϋ́Υ, Ϋ́Υ`, Υ``, Ϋ́Υ`, Υ``, Υ``, Υ``, Υ``, Υ``, Υ``, Υ``,					
-			(Upper)		PID in lov	ver 2.5': 5 - 6 ppm.		
_			(5 - 6)					
-			(lower)					
10	10 - 15	2.5	0.5 - 3		Saturated;	gray fine to coarse sands with silt; 1/4 - 1-inch pebbles.		
-			(3 - 4)					
-								
-								
-								
15								
15								
-					Boring SI	B-15 terminated at 15 feet.		

Project Nar	ne:		Project Number:			Location:		
For	mer Norton/Nashu	a Site	029.08			Watervliet New York		
101		u one		029.00		(Former Test Dit/Solvent Lines Building #61)		
						(Tormer rest russivent Lines - Building #01)		
Boring Nun	nber:		Date Drilled:			Logged by:		
SB-16				8/28/2003		Bryan J. Machella		
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:		
Environr	nental Cleanun Soli	utions Inc	8	Geographa <sup>TM</sup>		Macro Core		
Environ	nemai Cleanup 300	utions. inc.		Geoprobe		Macro-Core		
Well Install	ed:		Casing Ma	terial / Diamet	er:	Total Depth (feet):		
	No		U	None		15.0		
Notes:	PID values in "()"	are headsnace	readings			J		
INOLES.	Call assessed on the SD 16	(65,75)	le se itte diffe si le	1 4 1		VOC TIC: hastens)		
	Soli sample SB-16	(0.5 - 7.5) su	binitted for la	boratory analys	is (voc, s	VOC, TICS, heptane).		
Durth		<b>D</b>	DID	C I.				
Depth	Sample Interval	Recovery	PID	Sample		Soli Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure		
0	0 - 5	3.0	1 - 3		3": Concre	ete.		
			_					
-			(3 - 3.1)		Light broy	vn/brown to gray fine sand and silt: 1/4 - 1-inch		
			(0 011)		8			
-					gravel inte	ermixed		
					Bruverinte			
_								
-								
5	5 - 10	4.0	0 - 3	SB-16	Upper 12"	12": Dark brown fine sand and silt.		
Ũ	0 10		0.0	52 10	opper 12			
-			(4 - 15)	(6.5 - 7.5)	3": Cinder	-like material.		
			()	(0.0 / 0.0)				
-					Slightly m	oist at 7'.		
					~ 8 . 5			
-					Brown to	grav silty clay: medium plasticity.		
-								
10	10 - 15	3.0	0.0		Saturated;	gray coarse sand/coarse gravel (1/4 - 1-inch);		
-			(1.5 - 2)		increased a	silt/clay content in lower 6" of sample.		
			, , ,					
-								
-								
-								
15								
-					Boring SI	B-16 terminated at 15 feet.		
					-			

						)[ <del>_</del> •
Project Nar	ne:		Project Nu	mber:		Location:
For	mer Norton/Nashua	a Site		029.08		Watervliet, New York
						(Former Test Pit/Solvent Lines - Building #61)
Boring Nun	nber:		Date Drilled:			Logged by:
	SB-17		8/28/2003			Bryan J. Machella
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:
Environr	nental Cleanup Solu	tions. Inc.	0	Geoprobe <sup>TM</sup>		Macro-Core
				Geoprove		
Woll Install	od.		Cosing Mo	torial / Diamate		Total Dopth (foot):
vv cii ilistali	cu.		Casing Ma	Nono	cl .	
	NO			None		15.0
NI	DID					
notes:	PID values III () a	(12 14)	readings.			
	Soil sample SB-1/	(13 - 14) subi	mitted for lab	oratory analysis	(VOC, SV	UC, TICs, neptane).
	Ground-water sam	ple SB-17 sub	mitted for la	boratory analysis	s (VOC, SV	OC, TICs, heptane).
		D	DTD	<u> </u>	1	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3.5	0 - 0.5		3": Concre	ete.
-			(2.5 - 3)		Brown to	dark brown silts and fine sands; 1/4 - 1/2 pebbles present.
-						
-						
-						
5	5 - 10	3.0	1 - 6		Upper 1.5	: Dark brown silts and fine sands; cinder-like material
-			(8 - 9)		present at	6.5'.
-					Lower 1.5	': Grey silty clay; medium plasticity.
-						
-						
10	10 15	2.0	100 100		a	
10	10 - 15	3.0	120 - 193		Saturated;	gray coarse sand/coarse gravel; 1/4 - 1-inch angular
			(280)	CD 17		
-			(280)	SB-1/	rock fragn	ients. Increased silt/clay content in lower 6" of sample.
				(12 14)	T-1	1
-				(13 - 14)	1 oluene o	dor present.
-						
_						
15						
1.5						
-					Boring SI	3-17 terminated at 15 feet.

Draigat Nor	201		Draigat Nu	mhom		Location	
Project Ivan	ne:	a.,	Project mu	mber:		Location:	
ГОІ	mer morton/masnua	a She		029.08		Watervilet, New LOIK	
	-					(Former Test Ph/Solvent Lines - Building #01)	
Boring Nur	nber:		Date Drilled:			Logged by:	
	SB-18		872972003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Mo	ethod:		Sampling Method:	
Environr	nental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
	-			1			
Well Install	ed:		Casing Ma	terial / Diamet	er:	Total Depth (feet):	
	No			None		15.0	
<b>Notes:</b> PID values in "()" are headspace			readings.				
11000051	No soil or ground-y	water samples	submitted fo	r laboratory ana	lvsis		
	Tto son of ground	water sumples	Sublinueu 10	i idooratory und	19515.		
Denth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(nnm)	Interval		color texture structure	
(1001)	(itet)	(ICCI)	(ppm)	Inter var			
0	0 - 5	NM	0.0		3": Concre	ete.	
-			(0.3 - 1)		Light brov	vn fine sands and silt; 1/2 - 1-inch gravel present.	
					Brick mate	arial present at 4.5'	
-					DIICK IIIau	enai present at 4.5.	
-							
-							
5	5 10	4.0	20 40		Upper 2': I	Dark brown eilte and fine cande: $1/2$ , $1/4$ inch pabblas:	
5	5-10	4.0	20-40		opper 2.1	bark brown sits and the sands, 178 - 174-men peoples,	
-			(5 - 10)		Cinder ma	terial also present.	
-					Lower 1.5	': Brown to gray clay; medium to high plasticity.	
-					Angular q	uartz fragments present in lower 3" of sample.	
-					Cinder ma	terial also present at 7'.	
10	10 - 15	3.0	100 - 300		Saturated:	fine to coarse sand and gravel. Increased silt and	
			(100 500)		1		
-			(400 - 500)		clay conten	nt in lower 6°.	
-							
-							
-							
15							
15							
-					Boring SI	3-18 terminated at 15 feet.	

Project Nar	ne:		Project Nu	mber:		Location:
For	mer Norton/Nashua	a Site		029.08		Watervliet, New York
						(Former Test Pit/Solvent Lines - Building #61)
Boring Nun	nber:		Date Drilled:			Logged by:
SB-19				8/29/2003		Bryan J. Machella
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core
Woll Install	٥d٠		Casing Ma	torial / Diamoto		Total Denth (feet):
Yes (MP-11)			PVC -	1-1/2-inch (Pre-	-Pack)	15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-19	(13.5 - 14.5)	submitted for	r laboratory analy	ysis (VOC,	SVOC, TICs, heptane).
	Ground-water sam	ple SB-19 sub	mitted for la	boratory analysis	(VOC, SV	OC, TICs, heptane).
					1	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3.0	0.5 - 1		3": Concre	ete.
-			(4 - 5.1)		Light brow	vn fine sands and silt; 1/8 - 1/2-inch gravel present.
-					Brick mate	erial present at 3.5'.
-					Lower 1': s	silty clay with fine sand and gravel; loose
-						
5	5 - 10	2.5	10 - 20		Upper 4":	Brown fine sands and silts; 1/4 - 1/2-inch pebbles.
-			(9 - 11)		6": Concre	ete-like material.
-					9": Dark b	rown cinder-like material; loose; silt to gravel size;
-					1/2 - 1-inc	h pebbles.
-					Gray clay;	medium to high plasticity; increased silt in lower 3"
10	10 - 15	3.0	>1,000		Saturated;	fine to coarse sand and gravel; 1 - 2-inch pebbles;
-					strong tolu	iene odor.
-						
-						
-				SB-19		
15				(13.5 - 14.5)		
-					Boring SI	3-19 terminated at 15 feet.

·						1		
Project Nai	ne:		Project Number:			Location:		
For	mer Norton/Nashua	a Site		029.08		Watervliet, New York		
-						(Former Test Pit/Solvent Lines - Building #61)		
Boring Nur	nber:		Date Drilleo	d:		Logged by:		
	SB-20		8/29/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method:			Sampling Method:		
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core		
Well Installed:			Casing Ma	terial / Diamet	ter:	Total Depth (feet):		
No				None		15.0		
Notes: PID values in "()" are headspac			readings.					
	Soil sample SB-20	(4 - 5) and (1	1 - 12) submi	itted for laborat	ory analysis	(VOC, SVOC, TICs, heptane).		
Donth	Somple Interval	Deserver		Comple		Soil Classification / Description		
(feet)	(feet)	(feet)	(nnm)	Sample		color texture structure		
(Itel)	(leet)	(1001)	(ppm)	Inter var				
0	0 - 5	4.0	0.5 - 15		3": Concre	ete.		
-			(25 - 35)		Light brown - dark brown fine sands and silts; 1/4 - 1/2-inch			
-					pebbles present.			
-				SB-20 Cinder material present from 4 - 5 feet.		aterial present from 4 - 5 feet.		
-				(4 - 5)	(4 - 5)			
5	5 - 10	5.0	2 - 5		Upper 2 - 3 ": Brown silty clay.			
-			(7.5 - 9.5)		3": Brown	fine sand and silt with gravel.		
-					6 - 10': Liş	ght brown to gray silty clay; soft; low to medium		
-					plasticity.	Silts and fine sands in lower 3" of sample.		
-								
10	10 - 15	4.0	0 - 20		Upper 6":	Brown silty clay; medium to high plasticity.		
-			(25 - 35)	SB-20	Wet at 12			
-				(11 - 12)	12 - 15': 0	Gray fine to coarse sand with gravel. 0.5 - 2" angular		
_					rock fragn	nents.		
_								
15								
15					Dent			
-					Boring SI	5-20 terminated at 15 leet.		

			1	_		1L	
Project Nai	me:		Project Number:			Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
Boring Nur	nber:		Date Drille	d:		Logged by:	
	SB-21		9/2/2003			Bryan J. Machella	
Drilling Company:			Drilling Method:			Sampling Method:	
Environ	nental Cleanup Solu	tions. Inc.	0	Geoprobe <sup>TM</sup>		Macro-Core	
Wall Installed			Casing Ma	terial / Diamet	er.	Total Denth (feet):	
wen installed:			Casing Ma	None		15 0	
	110			Ttolle		15.0	
Notes:	PID values in "()"	are headsnace	readings			J	
notes.	Soil comple SP 21	(12  14) sub-	nittad for lab	orotory on obvio	WOC SV	OC TICs herters)	
	Son sample SB-21	(13 - 14) sub		oratory analysis	s(voc, sv	oc, mes, neptane).	
Donth	Sample Interval	Docovory		Sampla		Soil Classification / Description	
(feet)	Sample miler var	(feet)		Judament			
(leet)	(leet)	(leet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.0	0.5 - 3		3": Concrete.		
-			(3.5 - 4.5)	Light tan fine sands and silts.			
-				2': Silty clay/clayey silt; 1/4 - 1-inch gravel.			
-				Lower 3": Brown fine sands and silt with gravel.			
_							
-	<b>7</b> 10						
5	5 - 10	4.0	1 - 10		Upper 6":	Light tan fine sands and silts.	
-			(3 - 7)		3": 1/2 - 2	-inch angular rock fragments.	
-					3": fine to	coarse grained cinder material.	
-					Lower 2':	Dark gray silty clay; soft; slightly moist.	
-					1/4 - 1-inc	h angular rock fragments.	
10	10 - 15	3.0	0.5 - 7		10 - 13.5':	Silty clay - clayey silt; silts and gravel intermixed.	
-			(2 - 20)		Lower 12'	": Saturated; gray fine to medium sands with gravel;	
-					1/4 - 1/2-ii	nch pebbles.	
-				SB-21			
-				(13 - 14)			
15							
1.5					Donin - Cl	D 01 terminated at 15 feet	
-					Boring SI	D-21 terminated at 15 feet.	

Project Nar	ne:		Project Number:			Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York	
	-			-		(Former Test Pit/Solvent Lines - Building #61)	
Boring Nur	nber:		Date Drilled: $0/2/2003$			Logged by: Bryan I. Machalla	
	<b>3D-</b> 22		91212005			Biyan J. Machena	
Drilling Co	mpany:		Drilling M	ethod:		Sampling Method:	
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed:			Casing Ma	terial / Diamete	er:	Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()" a	are headspace	readings.				
	Soil sample SB-22	(6.5 - 7.5) and	d (12.5 - 13.	5) submitted for	laboratory	analysis (VOC, SVOC, TICs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.5	0.5 - 6		3": Concre	ete.	
-			(1.5 - 3)		Light tan f	fine sands and silts; 1/8 - 1/2-inch pebbles.	
-					Lower 2':	Light tan - dark brown silt with trace gravel.	
-							
-							
5	5 - 10	4.0	150 - 180		Upper 12"	': Brown silt with gravel.	
-			(40 - 100)	SB-22	6.5 - 7.5': ]	Dark brown fine to coarse cinder material (1/4 - 1/2-inch).	
-				(6.5 - 7.5)	8 - 9.5': Gi	ray clay; soft; medium to high plasticity.	
-					Lower 2":	1/4 - 2" angular rock fragments.	
-							
10	10 - 15	3.5	3 - 60		11.5 - 12.5	5': Gray clay; soft; medium plasticity.	
-			(140 - 150)	SB-22	12.5 - 13.5	5': Gray clay; Brown fine sands/silts intermixed.	
-			(@ water)	(12.5 - 13.5)	Wet at 13'		
-			(4 - 5)		Lower 18'	': Fine to coarse sands and gravel; 1/4 - 1-inch pebbles.	
-			(at bottom)				
15							
-					Boring SI	B-22 terminated at 15 feet.	

Project Na	me:		Project Number	•	Location:
Fo	rmer Norton/Nashu	a Site	i roject i tumber	. 029.08	Watervliet. New York
					(Former Test Pit/Solvent Lines - Building #61)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-23			9/2/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	:	Sampling Method:
Environmental Cleanup Solutions. Inc.			C	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" No soil or ground-	are headspace water samples	readings. submitted for labo	pratory analysis	
			PID	Sampla	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
(1000)	0.5		10, 12		
0	0 - 5	2.5	10 - 13		3 <sup>-</sup> Concrete.
-			(10 - 13)		Light tan to dark brown fine sands and silts; 1/8 - 1/4-inch gravel.
-					
-					
-					
5	5 - 10	4.0	>1,000		Upper 2': Fine sands and silts.
-			(5,000)		Cinder material present from 7 - 7.5'.
-					Lower 2': Gray clay; strong toluene odor.
-					PID increasing with depth: 10 - 15 - >1,000 ppm.
-					
10	10 - 15	3.0	1,000 - 5,000		Saturated; fine to coarse sand with silt. Coarser grained in
-			(20 - 30)		lower 1.5' of sample.
-			(at bottom)		PID decreasing with depth: 5,000 - 700 - 100 ppm.
-					
-					
15					
-					Boring SB-23 terminated at 15 feet.

Project Nar	me:		Project Number			Location:	
For	rmer Norton/Nashua	a Site	U U	029.08		Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-24		9/2/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes: PID values in "()" are headspace			readings.				
	No soil or ground-v Auger refusal at 4 f	water samples feet on first tw	submitted for labo 70 attempts (brick a	oratory analysis. material).			
Depth Sample Interval Recovery			PID	Sample	1	Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.0	5 - 10		3": Concret	ete.	
-			(14 - 16)		Fine sands	and silts with 1/8 - 1/4-inch gravel; cinder material	
-					present in l	lower 6 inches of sample. Brick material at 4'.	
-							
-							
5	5 - 10	3.0	10 - 20		7 - 9': Black	k fine to coarse grained cinder material	
-			500 - 700		Lower 12":	: Gray silty clay; soft; moist; toluene odor.	
-			(700 - 900)		PID higher	in lower 12" of sample.	
-					PID increas	sing with depth.	
-							
10	10 - 15	3.0	200 - 500		Fine to mee	dium sand with silt; coarser grained with depth;	
-			(800 - 900)		1/4 - 1/2-in	hch gravel in lower 12"; saturated.	
-			(5 - 10)				
-			(at bottom)				
-							
15							
-					Boring SB	3-24 terminated at 15 feet.	

Project Name:		Project Number:			Location:	
Former Norton/Nashua Site				029.08		Watervliet, New York
Boring Number:			Date Drilled:			(Former Test Fit/Sorvent Lines - Bunding #01)
Doring Tu	SB-25		Duit Drineu.	9/2/2003		Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:		Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
Yes (MP-10)			PVC - 1-	1/2-inch (Pre-Pa	ack)	15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-25	(7.5 - 10) sub /OC samples a	mitted for laborate	ory analysis (VO SB-25 (7 5 - 10	)) ))	TICs, heptane).
	Ground-water sam	ple SB-25 sub	mitted for laborate	ory analysis (VO	), )C, SVOC, '	TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	2.5	4 - 7		3": Concre	ete.
-			(5 - 9)		Light tan t	to dark brown fine sands and silts; 1/4 - 1-inch gravel.
-					Brick mate	erial present at 4'.
-						
-						
5	5 - 10	4.0	500 - 1,200		6 - 7': Brov	wn fine sands and silts; 1/2 - 1-inch gravel present.
-			(1,500 - 1,600)	SB-25	7 - 10': Gr	ay silty clay; soft; medium plasticity; moist.
-				(7.5 - 10)	Lower 6":	clayey silt; moist.
-				MS/MSD	Strong tolu	uene odor.
-						
10	10 - 15	4.0	1,000 - 1,500		PID decrea	asing with depth.
-			(1,500 - 1,700)		Saturated;	fine to medium sand with silt.
-			(5 - 9)		Coarser sa	and and gravel in lower 12" of sample
-			(at bottom)		Strong tolu	uene odor present.
-						
15						
-					Boring SI	B-25 terminated at 15 feet.

Project Name:		Project Number:			Location:		
Former Norton/Nashua Site Boring Number: SB-26			029.08			Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
			Date Drilled:	9/3/2003		Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()" a Soil sample SB-26 Ground-water sam	are headspace (9 - 10) subm ple SB-26 sub	readings. itted for laboratory omitted for laborate	y analysis (VOC ory analysis (VC	C, SVOC, TIG DC, SVOC, T	Cs, heptane). IICs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2.5	15 - 21		3": Concret	te.	
-			(2.5 - 3.5)		Light tan -	dark brown fine sands and silts; 1/8 - 1/4-inch pebbles.	
-					Brick mate	rial present at 4 feet (3 inches).	
-					Concrete-li	ke material in lower 6" of sample (silts - gravel).	
-							
5	5 - 10	2.0	0.1 - 0.5		Upper 3": I	Light tan fine sands and silts and 1/4 - 1-inch gravel.	
-			(2 - 4.5)		Dark brown	n silt with fine sand and gravel.	
-					Brick mate	rial in lower 3 inches of sample (wet).	
-							
-				SB-26			
10	10 - 15	2.0	>1,000	(9 - 10)	Strong tolu	ene odor.	
-			(>9,999)		Gray fine to	o coarse sands and gravel (1/2 - 1-inch)	
-					PID reading	g at 15 feet - 11 - 16 ppm.	
-							
-							
15							
-					Boring SB	-26 terminated at 15 feet.	

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York
Boring Number:		Data Drillad:		(Former Test Pit/Solvent Lines - Building #61)	
SB-27		Date Driffed:	9/3/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environmental Cleanup Solutions. Inc. Well Installed: No Notes: PID values in "()" are headspace No soil or ground-water samples Obstruction at 10 feet.			(	Geoprobe <sup>TM</sup>	Macro-Core
			Casing Materia	Il / Diameter: None	Total Depth (feet): 15.0
			readings.	oratory analysis	I
Depth (feet)	Sample Interval	Recovery	PID (nnm)	Sample Interval	Soil Classification / Description
0	0.5	1.5	(ppm)		
U	0-5	1.5	13 - 23		5. Concrete.
-			(25 - 30)		Light tan - dark brown fine sands and silts. 1 - 2-inch rock/
-					brick fragments present. Brick material in lower 3" of sample.
-					
-					
5	5 - 10	0.5	25 - 30		Poor recovery; loose material - brick, rock fragments.
-			(25 - 30)		Boring SB-27 terminated at 10 feet.
-					
-					
-					
10	10 - 15				No Recovery.
-					
-					
-					
-					
15					
15					
-					

<b>E</b>					
Project Name: Former Norton/Nashua Site		Project Number	r: 029.08	Location: Watervliet, New York	
					(Former Test Pit/Solvent Lines - Building #61)
Boring Number:			Date Drilled:		Logged by:
	SB-28			9/3/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		t
	No soil or ground-	water samples	s submitted for lab	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	15 - 20		3": Concrete.
-			(15 - 20)		Light tan - brown fine sands and silts with 1/8 - 1/4-inch gravel.
-					
-					
-					
5	5 - 10	2.0	15 - 23		Upper 6": Light gray fine sands and silts; 1/4 - 1/2-inch gravel.
-			(15 - 20)		Gray silty clay; medium plasticity; increased silt content in
-					lower 6" of sample. 1/2 - 1-inch pebbles present.
-					
-					
10	10 - 15	4.0	>1,000		Upper 6": Grayish brown silty clay; soft; medium to high plasticity.
-			(>9,999)		Strong toluene odor.
-					11.5 - 12.5': Silty clay with gravel (1/4 - 1/2-inch)
-					Lower 2': Saturated; fine to coarse sand and gravel.
-					
15					
-					Boring SB-28 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Former Norton/Nashua Site			r roject rumber	029.08	Watervliet, New York (Former Test Pit/Solvent Lines - Building #61)
Boring Number:			Date Drilled:		Logged by:
	SB-29			9/3/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" Soil sample SB-29	are headspace (11 - 12) sub	readings. mitted for laborate	ory analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.0	15 - 20		3": Concrete.
-			(20 - 25)		Upper 6": fine to coarse sand and gravel.
-					Lower": Light brown clayey silt with 1/4 - 1/2-inch pebbles.
-					Wet at 4 feet.
-					
5	5 - 10	3.0	20 - 25		7 - 8.5': Light brown silty clay; moist; soft; medium to high
-			(20 - 25)		plasticity; 1/8 - 1/4-inch gravel.
-					Lower 1.5': Light brown - gray clayey silt; soft; moist.
-					
-					
10	10 - 15	4.0	(15 - 25)		Gray fine to coarse sand with silt; wet; coarser material in lower
-			(20 - 25)	SB-29	1.5' of sample.
-				(11 - 12)	
-					
-					
15					
-					Boring SB-29 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
For	rmer Norton/Nashua	Site		029.08	Watervliet, New York
Boring Nun	aher:		Date Drilled •		(Former Test Ph/Solvent Lines - Building #61)
SB-30			Date Drineu.	9/3/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	:	Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Install	ed: No		Casing Material	/ Diameter: None	Total Depth (feet): 15.0
Notes:	PID values in "()" a No soil or ground-w	re headspace 1 vater samples s	eadings. submitted for labor	atory analysis.	"
Depth (feet)	Sample Interval	Recovery	PID (nnm)	Sample	Soil Classification / Description
(Teet)	(feet)	(reet)	( <b>ppm</b> )	Interval	color, texture, structure
0	0 - 5	3.5	15 - 20		3": Concrete.
-			(20 - 23)		Light tan - dark brown fine sands and silts and 1/8 - 1/4 pebbles.
-					Cinder material present at 3.5 - 4'.
-					
- 5	5 - 10	3.0	100 - 300		Grav silty clay: soft to stiff: strong toluane odor
5	5 - 10	5.0	100 - 500		Gray sity eray, sort to sint, strong totuene outer.
-			>1000		PID increasing with depth (100 - 1,000 - 9,999 ppm).
-			(>9,999)		
-					
-	10.15		1 000		
10	10 - 15	2.5	>1,000		Upper 6": Silty clay with 1 - 2-inch rock fragments.
-			(>9,999)		13 - 15': Saturated; gray fine to coarse sand and gravel; 1 - 2-inch
-			(300 - 400)		rock fragments present.
-			(at bottom)		Lower 8": Gray silty clay; stiff; medium plasticity.
-			1 000		
15	15 - 20	1.5	>1,000		Miscellaneous material (gray fine to coarse sand and gravel).
-			(>9,999)		Boring SB-30 terminated at 16 feet (refusal).
-					
-					
20					
-					

Project Name: Former Norton/Nashua Site			Project Number	: 029.08	Location: Watervliet New York
10.		She		029.00	(Former Tank Farm SWMU)
Boring Nun	nber: SB-31		Date Drilled:	9/4/2003	Logged by: Bryan J. Machella
Drilling Co	mnanv:		Drilling Method	•	Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	(	• Geoprobe <sup>TM</sup>	Macro-Core
Well Install	ed: Yes (MP-4)		Casing Material PVC - 1-	/ Diameter: 1/2-inch (Pre-Pa	ack) Total Depth (feet): 20.0
Notes:	PID values in "()" a Soil sample SB-31 MS and MSD QA/C	re headspace r (11 - 13) subm QC samples als	eadings. itted for laborator so collected from S	y analysis (VOC SB-31 (11 - 13).	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	4.0	7 - 9		Brown silty clay with gravel; soft; wet; 1/4 - 1/2-inch gravel.
-			(12 - 13)		Lower 12": Brown silty clay; soft; wet; medium to high plasticity;
-					1/4 - 1/2-inch pebbles present.
-					
-					
5	5 - 10	4.0	5 - 80		Upper 16": Light brown/gray silty clay; trace gravel; medium to
-					high plasticity.
-					5": Coarse gravel/shale material
-					3": Light brown/gray silty clay; trace gravel.
-					9": Gray fine to coarse sands and gravel (silts/clays intermixed).
-					Lower 15": Gray silty clay to fine to medium sands and silt.
10	10 - 15	3.5	200 - 500	SB-31	Saturated; Gray fine sand with silt.
-			(400 - 1300)	(11 - 13)	13'8" - 14'4": Fine to coarse sand and gravel (1/8 - 1/2-inch).
-			(15 - 20)	MS/MSD	Lower 6": Gray silty clay with gravel (1/4 - 1/2-inch).
-			(at bottom)		Toluene odor.
15	15 - 20	4.0	7 - 50		16 - 17': Gray silty clay with gravel (1/8 - 1/4-inch); stiff.
-			(20 - 23)		Gray silts and clay with gravel; 1 - 3-inch shale material.
-					
-					
-					
20					
-					Boring SB-31 terminated at 20 feet (refusal).

Project Name:			Project Number:		Location:
Fo	rmer Norton/Nashua	Site		029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Number:			Date Drilled:		Logged by:
SB-32				9/4/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method:		Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	G	eoprobe <sup>TM</sup>	Macro-Core
Well Install	ed:		Casing Material	/ Diameter:	Total Depth (feet):
	Yes (MP-3)		PVC - 1-1	/2-inch (Pre-P	ack) 20.0
Notes:	PID values in "()" a	re headspace	readings.	tory analysis	
	NO SON OF ground-w	vater samples		nory anarysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1.5	5 - 9		Brown mix of sands, silts, and gravel (2 - 3-inch); moist.
-			(18 - 20)		
_					
-					
5	5 - 10	1.5	>1,000		same as above. Strong toluene odor.
-			(1,000 - 4,000)		
-					
-					
_					
-					
10	10 - 15	3.0	1,000 - 3,000		Saturated.
-			(>9,999)		Upper 6": Saturated. Fine to coarse sands with silt; 1 - 3" pebbles.
-			(40 - 50)		Lower 12": Gray silty clay; trace gravel.
-			(at bottom)		
15	15 - 20	4.0	1,000 - 4,000		Saturated.
-			(800 - 1,200)		Gray silty clay with gravel (1/4 - 1-inch).
-					Lower 3': Clayey silt with trace gravel; stiff.
_					
-					
20					
-					Boring SB-32 terminated at 20 feet (refusal).

Project Name:			Project Number:	:	Location:
Fo	rmer Norton/Nashua	Site		029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Nur	nber:		Date Drilled:		Logged by:
	SB-33			9/4/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method:	:	Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	G	eoprobe <sup>TM</sup>	Macro-Core
Well Install	ed:		Casing Material	/ Diameter:	Total Depth (feet):
	Yes (MP-2)		PVC - 1-1	1/2-inch (Pre-P	ack) 21.0
Notes:	PID values in "()" a	re headspace	readings.		
	Soll sample SB-55	(8 - 9) submin	ed for laboratory a	nalysis (VUC, S	SVOC, TICs, neptane).
Depth	Sample Interval	Recovery	РЮ	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.0	14 - 22		Brown mix of sands, silts, and gravel (1/2 - 1-inch); moist.
-			(15 - 20)		Moist at 4 - 5 feet.
-					Lower 12": Clayey silt to silty clay; trace gravel.
-					
-					
5	5 - 10	4.0	50 - 1,000		Wet.
-			(>9,999)		Upper 12": Gray silty clay; soft; medium to high plasticity.
-					6": Fine to coarse sands and gravel.
-					Lower 12": Gray silty clay with gravel (1/4 - 1/2-inch).
-				SB-33	
-				(8 - 9)	
10	10 - 15	5.0	>1,000		Saturated; strong toluene odor throughout.
-			(>9,999)		Mix of sands, silts, and gravel.
-					13 - 14': Coarse gravel (1/8 - 1/2-inch)
-					14 - 15': Gray fine sands and silts with gravel (1/4 - 1-inch).
15	15 - 20	4.0	60 - 500		Upper 3': Coarse sand and gravel (1/4 - 1/2-inch).
-			(20 - 1,000)		Lower 12": gray fine sands/silts. Hole collapsing.
-					
-					
-					
20					
-					Boring SB-33 terminated at 21 feet (refusal).

Project Name: Former Norton/Nashua Site			Project Number:	029.08	Location: Watervliet, New York
					(Former Tank Farm SWMU)
Boring Number: SB-34			Date Drilled:	9/5/2003	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method:		Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	G	eoprobe <sup>TM</sup>	Macro-Core
Well Install	ed: Yes (MP-1)		Casing Material / PVC - 1-1	/ Diameter: 1/2-inch (Pre-Pa	ack) Total Depth (feet): 21.0
Notes:	PID values in "()" a Soil sample SB-34	re headspace 1 (7 - 8) submitt	readings. ed for laboratory ar	nalysis (VOC, S	SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.0	0.0		Brown - dark brown silty clay with 1/4 - 1/2" pebbles; moist
-			(5 - 7)		
-					
-		l			
5	5 - 10	3.0	0 - >5,000		7 - 8': Brown - gray silty clay; soft; medium to high plasticity.
-				SB-34	8'3" - 9': Gray silty clay with gravel.
-				(7 - 8)	9 - 10': fine to coarse sand and gravel (1/2 - 1-inch).
-		l			PID increasing with depth.
- 10	10 - 15	3.0	100 - 1500		Upper 12": coarse gravel; saturated.
-			(5,000 - 6,500)		Lower 2': Gray fine to coarse sand and gravel (1/4 - 1/2-inch).
-					
-					
15	15 - 20				
-					
- _		l			
-		l			
20		1			
-		l			Boring SB-34 terminated at 21 feet (refusal).

Project Name:		Project Number	•	Location:	
Former Norton/Nashua Site			i rojece rumor	029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-35			9/5/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" a No soil or ground-v	are headspace water samples	readings. submitted for labo	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.5	20 - 30		Upper 1.5': Brown fine sands and silt with 1/8 - 1/4 pebbles.
-			(25 - 28)		Brick material present at 3'.
-					Lower 12": gray silty clay; stiff to soft.
-					
-					
5	5 - 10	4.0	5 - 95		Upper 2.5': Gray silty clay; stiff; medium to high plasticity.
-			(17 - 250)		Lower 12": Dark gray fine sand and silt; 1/2 - 1-inch gravel/shale.
-					Slight toluene odor at base.
-					
-					
10	10 - 15	5.0	20 - 50		Saturated.
-			(900 - 1,000)		10 - 11.5': Gray fine to coarse sands and gravel (1/2 - 1/2-inch).
-			(15 - 20)		11.5 - 13': Gray fine to medium sands with silt.
-			(at bottom)		13 - 13.5': Gray fine to coarse sand and gravel.
-					13.5 - 15': Gray silty clay; trace gravel.
15					
-					Boring SB-35 terminated at 15 feet.
Project Na	me:		Project Number	r:	Location:
----------------	--	----------------	---------------------	------------------	--
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Number:			Date Drilled:		Logged by:
	SB-36			9/5/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environ	onmental Cleanup Solutions. Inc. Geoprobe <sup>TM</sup> Macro-Core		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-36	(7 - 8) submit	ted for laboratory	analysis (VOC,	, SVOC, TICs, heptane).
	Ground-water sam	ple SB-36 sub	mitted for laborate	ory analysis (VC	OC, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Upper 12": Brown fine to coarse sands with gravel.
-			(10 - 16)		Middle 12": Dark brown fine sands/silts; 1/8 - 1/4-inch gravel.
-					Lower 12": Gray to light brown silty clay; soft; medium to high
-					plasticity.
-					
5	5 - 10	4	10 - 17		Upper 3': light brown silty clay; trace gravel (1/2 - 1-inch).
-			(15 - 20)		Lower 12": Dark brown/gray silty clay with 1/2 - 1-inch pebbles.
-				SB-36	
-				(7 - 8)	
-					
10	10 - 15	3	10 - 15		Upper 2.5': fine to coarse gravel (1/4 - 2-inch)
-			(10 - 15)		Lower 6": Gray clayey silt; trace gravel.
-					
-					
-					
15					
-					Boring SB-36 terminated at 15 feet.

Project Na	me:		Project Number	•	Location:		
Former Norton/Nashua Site				029.08	Water (B	Watervliet, New York (Building #59)	
Boring Nu	mber: SB-37		Date Drilled:	9/5/2003	Logged by: Brya	an J. Machella	
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:		
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	N	Aacro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):		
No				None		15.0	
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for labo	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification	on / Description	
(feet)	(feet)	(feet)	(ppm)	Interval	color, textur	e, structure	
0	0 - 5	2	5 - 10		": concrete.		
-					Upper 12": Light tan fine to medium	m sands; 1/8 - 1/4-inch gravel.	
-					ower 12": brick material.		
-							
-							
5	5 - 10				lo Recovery.		
-							
-							
-							
-							
10	10 - 15	2	50 - 600		aturated. Gray fine to medium sat	nds and silt.	
-			(1,400 - 1,500)				
-							
-							
-							
15							
-					oring SB-37 terminated at 15 fo	eet.	

Project Name:		Project Number	•	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Nu	Boring Number:		Date Drilled:		(Building #59)
Doring I'u	SB-38		Date Drineu.	9/5/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-38 (9 - 10) subr			readings. hitted for laboratory	y analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	5 - 10		3": concrete.
-			(10 - 13)		Light tan to brown fine sands and silt; brick material at 3.5'.
-					Lower 12": Brown silty clay to clayey silt.
-					
-					
5	5 - 10	2	5 - 10		Upper 12": Brown silty clay; trace gravel
-			(25 - 30)		Lower 12": Gray silty clay to clayey silt; moist.
-					
-					
-				SB-38	
10	10 - 15	4	200 - 600	(9 - 10)	Upper 3': Gray fine sand and silt; saturated.
-			(1,900 - 2,100)		Lower 12": fine to coarse sand and gravel (1/8 - 1/4-inch).
-					
-					
-					
15					
-					Boring SB-38 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #59)
Boring Number:			Date Drilled:	9/5/2003	Logged by:
	30-39			91512005	Biyan J. Machena
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe	Macro-Core
Well Instal	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	2:0
Notes: PID values in "()" are headspace   No soil or ground-water sample: Refusal at 2 feet.			readings. submitted for lab	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1	0.0		3": concrete.
-			(0.0)		Light tan fine sands and silts; brick material in lower 6" of sample.
-					Boring SB-39 terminated at 2 feet. (Refusal)
-					
-					
5	5 - 10				
-					
_					
_					
_					
10	10 - 15				
-	10 10				
-					
-					
-					
15					
-					Boring SB-39 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #59)
Boring Number:		Date Drilled:		Logged by:	
	SB-40			9/8/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-40 (9 - 10) subr			readings. hitted for laborator	y analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	25 - 32		3": concrete.
-			(30 - 37)		Light tan to brown fine sands and silts; brick material at 3.5'.
-					
-					
-					
5	5 - 10	3	25 - 30		Light tan to brown fine sands and silts;
-			(30 - 37)		cinder material present at 7.5'.
-					Lower 12": Silty clay to clayey silt.
-					
-				SB-40	
10	10 - 15	2	20 - 25	(9 - 10)	Saturated.
-			(30 - 32)		Upper 12": gray clayey silt.
-					Fine to coarse sands and silt. Coarser sand and gravel in lower 3".
-					
-					
15					
-					Boring SB-40 terminated at 15 feet.

Project Na	me:		Project Number	r:		Location:	
For	rmer Norton/Nashu	a Site	ů	029.08		Watervliet, New York	
						(Building #59)	
Boring Nu	mber:		Date Drilled:			Logged by:	
SB-41			9/8/2003		Bryan J. Machella		
Drilling Co	ompany:		Drilling Methoo	d:		Sampling Method:	
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No			None		15.0		
Notes:	PID values in "()"	are headspace	readings.				
	Soil sample SB-41	(7.5 - 8.5) sub	bmitted for laborat	tory analysis (VC	DC, SVOC,	TICs, heptane).	
	Soil sample SB-41	A (20 - 25) is	a duplicate sample	e of SB-41 (7.5 ·	- 8.5).		
Depth	Sample Interval	Recoverv	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	30 - 35		3": concre	te.	
-			(30 - 36)		Light tan -	dark brown fine sands and silts; brick material present	
-					at 2.5 - 3.5	5'.	
-					Lower 6":	Brown clayey silt.	
-							
5	5 - 10	4	20 - 25		Light brow	vn silty clay; trace gravel; soft; low to medium plasticity	
-			(30 - 33)	SB-41	Lower 1.5	': Light brown to gray fine sand and silt; wet.	
-				(7.5 - 8.5)			
-				(Duplicate)			
-							
10	10 - 15	3	15 - 20		Saturated.		
-			(25 - 30)		Upper 12"	: Gray fine sand with silt.	
-					Middle 12	": Gray coarse sand and gravel (1/4 - 1/2-inch).	
-					Lower 12"	': Gray silty clay with 1/4 - 1/2-inch gravel/shale.	
-							
15							
-					Boring SI	B-41 terminated at 15 feet.	

Project Na	me:		Project Number	r:	Location:
Fo	rmer Norton/Nashu	a Site	, , , , , , , , , , , , , , , , , , ,	029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Number: SB-42			Date Drilled:	9/8/2003	Logged by: Bryan J. Machella
			Duilling Mathem	1.	Comelia - Mathada
Environ:	mpany: mental Cleanup Solu	utions. Inc.		1: Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace Soil sample SB-42 (8 - 9) submit			readings. tted for laboratory	analysis (VOC,	, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	20 - 25		Fine to medium sands with silt and 1/4 - 1-inch pebbles.
-			(30 - 37)		Cinder material present at 3.5 - 4'.
-					Lower 6": Brown silty clay with gravel (1/4 - 1-inch).
-					
-					
5	5 - 10	3	25 - 54		Upper 12": Brown silty clay with gravel (1/4 - 1-inch).
-			(50 - 57)		Brick material present at 7'.
-					Middle 12": Gray silty clay with gravel (1/2 - 1-inch).; wet.
-				SB-42	Lower 3": Gray fine to coarse sand and gravel (1/2 - 1-inch).
-				(8 - 9)	
10	10 - 15	3	20 - 23		Saturated. Coarse sand and gravel (1/2 - 1-inch).
-			(45 - 48)		
-					
-					
-					
15					
-					Boring SB-42 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58 AOC - West Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-43			9/8/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No			None	15.0	
Notes:	Notes: PID values in "()" are headspace Soil sample SB-43 (9 - 10) subn		readings. itted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
	Soil sample SB-43	(9 - 10) subm	itted for laborator	y analysis (TOC	<u>`)</u> .
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	25 - 30		3": Concrete
-			(15 - 50)		Brown - dark brown fine to medium sands with silt and gravel
-					(1/4 - 1-inch).
-					Lower 6": gray silty clay; soft; medium plasticity.
-					
5	5 - 10	3.5	30 - 37		Upper 12": Fine to medium sands with silt and gravel
-			(45 - 47)		Lower 2.5': Gray silty clay; soft; medium plasticity.
-					
-					
-				SB-43	
10	10 - 15	2.5	25 - 40	(9 - 10)	Fine to coarse sand and gravel (1/4 - 1-inch); wet at 13.5'.
-					
-					
-					
-					
15					
-					Boring SB-43 terminated at 15 feet.

Project Name:		Project Number:			Location:	
Former Norton/Nashua Site			029.08			Watervliet, New York (Building #58 AOC - West Cutout)
Boring Nu	nber: SB-44		Date Drilled:	9/8/2003	Logge	ed by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Samp	ling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Installed: No		Casing Materia	l / Diameter: None	Total	<b>Depth (feet):</b> 15.0	
Notes: PID values in "()" are headspace Soil sample SB-44 (8 - 9) submit			readings. ited for laboratory	analysis (VOC,	SVOC, TICs, hept	ane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval		Soil Classification / Description color, texture, structure
0	0 - 5	2.5	30 - 39		3": Concrete	
-			(40 - 47)		Light tan - gray fi	ne sands and silts; 1/4 - 1/2-inch rock fragments.
-					Brick material pre	esent from 3.5 - 5'.
-						
-						
5	5 - 10	3.5	35 - 45		Brown - gray silty	y clay; soft; medium to high plasticity;
-			(58 - 61)		trace gravel; mois	st at 9'.
-					Lower 3": Gray fi	ine to medium sand and silt.
-				SB-44		
-				(8 - 9)		
10	10 - 15	4	15 - 20		Upper 12": fine to	o medium sand and silt.
-					Middle 12": Fine	to coarse sand and gravel (1/8 - 1/4-inch).
-					Lower 12": Fine t	to medium sand.
-						
-						
15						
-					Boring SB-44 te	rminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58 AOC - West Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-45			9/8/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No			None	15.0	
Notes: PID values in "()" are headspace Soil sample SB-45 (9 - 10) subm			readings. hitted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	30 - 37		3": Concrete
-			(40 - 47)		Light tan - gray fine sands and silts; 1/4 - 1/2-inch rock fragments.
-					Brick material present from 3.5 - 5'.
-					
-					
5	5 - 10	5	40 - 45		Brown - gray silty clay; trace gravel.
-			(40 - 45)		Moist at bottom of sample.
-					
-					
-				SB-45	
10	10 - 15	2	40 - 50	(9 - 10)	Upper 12": Saturated; gray silt with fine sand.
-					Middle 6": Gray silty clay with gravel.
-					Lower 6": fine to coarse sand and gravel.
-					
-					
15					
-					Boring SB-45 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58 AOC - West Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-46			9/8/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No			None	15.0	
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-46	(9 - 10) subm	nitted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	35 - 40		3": Concrete
-			(45 - 50)		Light tan - brown fine sands and silts; trace gravel (1/8 - 1/4-inch).
-					Brick material present at 3'.
-					
-					
5	5 - 10	3.5	30 - 35		Upper 12": Brown silty clay with gravel; loose.
-			(42 - 45)		Gray silty clay; trace gravel; soft; medium plasticity.
-					
-					
-				SB-46	
10	10 - 15	3	30 - 35	(9 - 10)	Saturated.
-			(38 - 40)		Upper 3": Gray silty clay; trace gravel.
-					Fine to coarse sand and gravel
-					
-					
15					
-					Boring SB-46 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
Boring Number:			Data Drillad:		(Building #58 AOC - West Cutout)
SB-47			Date Dimeu.	9/8/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	Well Installed:			l / Diameter:	Total Depth (feet):
	No			None	2.0
Notes: PID values in "()" are headspace No soil or ground-water sample Refusal at 2 feet.			readings. submitted for labo	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
-					
-					Boring SB-47 terminated at 2 feet. (Refusal)
-					
-					
5	5 - 10				
-					
-					
-					
-					
10	10 - 15				
-					
-					
-					
-					
15					
-					

Project Na	mo·		Project Number	r•	ŀ	Location	
Fo	rmer Norton/Nashu	a Site	I Toject Nullide	029.08		Watervliet, New York (Building #58 AOC - East Cutout)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-48			9/9/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:		Sampling Method:	
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes: PID values in "()" are headspace Soil sample SB-48 (8 - 9) submi			readings. tted for laboratory	analysis (VOC,	, SVOC, TICs	s, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2.5	0 - 1		3": Concret	e	
-			(3.3)		Light tan - l	brown fine sands and silts; 1/4 - 1/2-inch pebbles.	
-							
-							
-							
5	5 - 10	4	0.0		Upper 6": E	Brown silty clay; trace gravel; loose.	
-			(4 - 4.5)		Light brown	n silty clay; soft; medium to high plasticity.	
-					Lower 12":	Gray clayey silt; wet	
-				SB-48			
-				(8 - 9)			
10	10 - 15	2	0.0		Saturated.		
-			(4.5 - 5.5)		Gray clayey	z silt.	
-							
-							
-							
15						49 4	
-					Boring SB	-48 terminated at 15 feet.	

Project Name:		Project Numbe	er:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Nu	mhore		Data Drillad:		(Building #58 AOC - East Cutout)
SB-49		Date Dimeu:	9/9/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-49 (8.5 - 9.5) su			e readings. bmitted for labora	atory analysis (V	OC, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		3": Concrete
-			(5 - 5.7)		Light tan - brown fine sands and silts; 1/4 - 1/2-inch pebbles.
-					Brick material present in lower 12" of sample.
-					
-					
5	5 - 10	2.5	0.0		Upper 3": Brick material
-			(6 - 6.3)		Brown to gray silty clay; soft; medium to high plasticity.
-					Lower 3": wet; gray fine to medium sands with silt.
-				SB-49	
-				(8.5 - 9.5)	
10	10 - 15	4	0.0		Saturated.
-			(6 - 6.7)		Gray clayey silt; 1-inch gravel present; shale material at 14.5'.
-					
-					
-					
15					
-					Boring SB-49 terminated at 15 feet.

Project Na	mo·		Project Numbe	r•	L ocation:		
Former Norton/Nashua Site			I Toject I tullioe	029.08	Watervliet, New V (Building #58 AOC - E	Watervliet, New York (Building #58 AOC - East Cutout)	
Boring Nu	mber: SB-50		Date Drilled:	9/9/2003	Logged by: Bryan J. Mache	ella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:		
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core		
Well Installed: No		Casing Materia	al / Diameter: None	Total Depth (feet): 15.0			
Notes: PID values in "()" are headspace Soil sample SB-50 (8 - 9) submi			readings. tted for laboratory	analysis (VOC.	VOC, TICs, heptane).		
Depth (feet)	Sample Interval	Recovery (feet)	PID (ppm)	Sample	Soil Classification / Descrip	otion	
0	(100)	( <b>Ieet</b> )					
0	0 - 3	2	0.0		5. Concrete		
-			(7 - 7.6)		Light tan - brown fine sands and silts; 2-inch ro	ock fragments at 4.5'.	
-							
-							
-							
5	5 - 10	4	0.0		Upper 6": Cinder material.		
-			(5 - 6)		Gray silty clay; soft; medium to high plasticity.		
-					Lower 12": Gray clayey silt; wet.		
-				SB-50			
-				(8 - 9)			
10	10 - 15	4	0.0		Gray clayey silt; wet; stiff.		
-			(3.5 - 4)				
-							
-							
-							
15							
-					Boring SB-50 terminated at 15 feet.		

Project Name:		Project Number	•	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Boring Number: SB-51		Date Drilled:	9/9/2003	Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:	Sampling Method:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>™</sup>	Macro-Core	
Well Installed: No		Casing Materia	l / Diameter: None	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace Soil sample SB-51 (11.5 - 12.5)			readings. submitted for labo	ratory analysis (	VOC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	1 - 2		3": Concrete
-			500 - 700		Brown - dark brown fine sands and silts; trace gravel.
-			(1500 - Wood)		Wood material at 4'; creosote odor; elevated PID.
-			(1 - 3)		Brick and concrete material.
-			(at bottom)		
5	5 - 10	3	2.5 - 3		Upper 12": Brown silty clay; fine to coarse sand and gravel
-			(6 - 6.5)		intermixed.
-					Lower 2': Gray silty clay; soft; medium plasticity; wet at 9.5'
-					
-					
10	10 - 15	4	6 - 7		Gray silty clay; trace gravel; saturated at 12.5'
-				SB-51	Lower 15": fine to coarse sand and gravel.
-				(11.5 - 12.5)	
-					
-					
15					
-					Boring SB-51 terminated at 15 feet.

Project Na	me•		Project Number	••	Location:
Former Norton/Nashua Site			r roject rumber	029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Boring Number: SB-52		Date Drilled:	9/9/2003	Logged by: Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	l / Diameter: None	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace   Soil sample SB-52 (6 - 7) submit			readings. tted for laboratory	analysis (VOC,	Z, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	4	0.0		3": Concrete
-			(4 - 5)		Light tan - dark brown fine sands and silts; brick material present
-					Slight creosol odor at 1.5 - 2.5'.
-					
-					
5	5 - 10	4	(100 - 120)		Find sands and silts.
-				SB-52	Brown - gray silty clay; soft; medium to high plasticity.
-				(6 - 7)	1/4 - 1/2-inch quartz fragments at 8'.
-					
-					
10	10 - 15				No Recovery.
-					
-					
-					
-					
15					
-					Boring SB-52 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-53			9/9/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-53 (9 - 10) subr			e readings. hitted for laborator	y analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	0.0		3": Concrete
-			(3 - 3.6)		Gray - dark brown fine sands and silts with gravel (1/2 - 1-inch).
-					Brick material present at 4'.
-					
-					
5	5 - 10	2.5	0.0		Upper 6": Brick material.
-			(4 - 7)		Lower 15": Gray clayey silt; trace gravel.
-					
-					
-				SB-53	
10	10 - 15	3	0.0	(9 - 10)	Upper 6": Brown silty clay; trace coarse sand and gravel.
-			(4 - 4.5)		Lower 2.5': Saturated; fine to coarse sands and gravel.
-					
-					
-					
15					
-					Boring SB-53 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-54			9/9/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No			None	15.0	
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-54	(9 - 10) subn	litted for laborator	y analysis (VOC	2, SVOC, TICs, neptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	0.0		3": Concrete
-			(4 - 4.3)		Brown - dark brown fine sands and silts;
-					1/4 - 1-inch pebbles present.
-					
-					
5	5 - 10	1.5	0.0		Poor recovery.
-			(5 - 5.6)		Brown silty clay with gravel; loose.
-					Lower 2": Gray clayey silt.
-					
-				SB-54	
10	10 - 15	3	0.0	(9 - 10)	Saturated.
-			(3.9 - 4.4)		Gray fine to coarse sand and gravel.
-					
-					
-					
15					
-					Boring SB-54 terminated at 15 feet.

Project Na	me:		Project Numbe	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Roring Nu	mber		Date Drilled •		Logged by:
Doring i tu	SB-55		Duce Drineu.	9/10/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
No			None	15.0	
Notes: PID values in "()" are headspace Soil sample SB-55 (9 - 10) subm			readings. nitted for laborator	ry analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0 - 1		3": Concrete
-			(1.5 - 2)		Brown - dark brown fine sands and silts; 1/4 - 1/2-inch pebbles.
-					Brick material present at 3'2" - 3'9". Concrete-like material at 4'.
-					Lower 3": brown silty clay with gravel.
-					
5	5 - 10	4	0 - 1		Brown to gray silty clay; trace gravel; medium to high plasticity.
-			(3.5 - 4)		wet at 9'.
-					Lower 12": clayey silt with gravel.
-					
-				SB-55	
10	10 - 15	4	0 - 1	(9 - 10)	Brown to gray clayey silt; fine to coarse sand intermixed; loose.
-			(2 - 3)		
-					
-					
-					
15					
-					Boring SB-55 terminated at 15 feet.

Project Na	me:		Proiect Numbe	r:	Location:
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58 AOC - East Cutout)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-56			9/10/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-56	(8 - 8.5) subr	nitted for laborato	ry analysis (VO	C, SVOC, TICs, heptane).
Denth	Commits Indonesi	Deserver	BID	Gammla	Seil Cleariting / Description
(feet)	Sample Interval	(foot)	PID	Sample	solon texture structure
(leet)	(leet)	(leet)	(ppm)	Interval	
0	0 - 5	2	1 - 3		3": Concrete
-			(3 - 4)		Brown fine to coarse sands and silt; 1/4 - 1/2-inch pebbles.
-					
-					
-					
5	5 - 10	2	4 - 5		Brown silty clay; fine to coarse sand and gravel intermixed;
-			(3 - 4.5)		loose; 1 - 2-inch rock fragments present.
-				SB-56	Lower 12": silty clay - clayey silt; wet at bottom
-				(8 - 8.5)	Purple-colored material at 8 - 8.5'.
-					
10	10 - 15	3.5	0.5 - 1.2		Upper 1.5': gray fine to medium sand with silt; saturated.
-			(5 - 6)		Lower 2': Gray fine to coarse sand and gravel.
-					
-					
-					
15					
-					Boring SB-56 terminated at 15 feet.

Project Name:		Project Number:			Location:	
Former Norton/Nashua Site			029.08			Watervliet, New York (Building #58 AOC - East Cutout)
Boring Number:		Date Drilled:			Logged by:	
	SB-57			9/10/2003		Bryan J. Machella
Drilling Co	ompany:		Drilling Methoo	d:		Sampling Method:
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		None	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
No				None		15.0
Notes:	PID values in "()"	are headspace	readings.			
	Ground-water sam	ple SB-57 sub	mitted for laborat	ory analysis (VO	C, SVOC, '	TICs, heptane).
	Boring installed for MS/MSD OA/OC	r collection of	ground-water san	nple. Soil sample	s not collect	ted.
Depth	Sample Interval	Recoverv	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5				Boring ins	talled for collection of ground-water sample.
-					Soil sampl	es not collected.
-						
-						
-						
5	5 - 10					
-						
-						
-						
-						
10	10 - 15					
-						
-						
-						
-						
15						
-					Boring SI	3-57 terminated at 15 feet.

Project Name:		Project Number:			Location:	
Former Norton/Nashua Site			029.08			Watervliet, New York (Building #58 AOC - West Cutout)
Boring Number:		Date Drilled:			Logged by:	
	SB-58			9/10/2003		Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:		Sampling Method:
Environ	mental Cleanup Solu	itions. Inc.	(	Geoprobe <sup>TM</sup>		None
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
No				None		15.0
Notes:	PID values in "()"	are headspace	readings.			
	Ground-water sam	ple SB-58 sub	omitted for laborate	ory analysis (VC	DC, SVOC, T	ΓICs, heptane).
	Boring installed for	r collection of	ground-water sam	ple. Soil sample	es not collect	ed.
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5				Boring inst	talled for collection of ground-water sample.
-					Soil sample	es not collected.
-						
-						
-						
5	5 - 10					
-						
-						
-						
-						
10	10 - 15					
-						
-						
-						
-						
15						
-					Boring SB	3-58 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #59)
Boring Nu	mber: SB-59		Date Drilled:	9/10/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	ll / Diameter: None	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace Soil sample SB-59 (9 - 10) subr			readings. hitted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	1 - 3		3": Concrete
-			(12 - 13)		Light tan - dark brown fine to coarse sand and silt; 1/4 - 1-inch
-					pebbles. Brick material present at 3.5'.
-					
-					
5	5 - 10	4	1 - 3		Brick material at 8'.
-			(10 - 12)		Gray silty clay; soft; medium to high plasticity
-					Gray fine sand and silt; wet.
-					
-				SB-59	
10	10 - 15	4	0.5 - 9	(9 - 10)	Saturated.
-			(30 - 39)		Upper 2.5': Gray silt with fine sand.
-					Middle 6": fine to coarse sand and gravel.
-					Lower 12": clayey silt.
-					
15					
-					Boring SB-59 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #61)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-60			9/10/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	nl / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspac Soil sample SB-60 (9 - 10) sub			e readings. nitted for laborator	ry analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval	Recovery (feet)	PID Sample		Soil Classification / Description
	(100)	(leet)	( <b>ppin</b> )	Intervar	
0	0 - 5	NA	0.5		3 <sup>°</sup> : Concrete
-			(3.5 - 4)		Brown silty clay with gravel (1/4 - 1/2-inch).
-					
-					
-					
5	5 - 10	3	0 - 5		Silty clay with fine to coarse sands and
-			(4 - 5)		gravel (1/4 - 1-inch pebbles).
-					
-					
-				SB-60	
10	10 - 15	2.5	20 - 30	(9 - 10)	Saturated.
-			(40 - 50)		Gray fine to coarse sands and gravel.
-					
-					
-					
15					
-					Boring SB-60 terminated at 15 feet.

Project Na	me:		Project Number			Location:	
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York	
						(Former Tank Farm SWMU)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-61			9/10/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for labo	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	3 - 5		Brown to d	ark gray fine to coarse sands ands silt;	
-					1/4 - 1-ii	nch gravel.	
-					Lower 12":	Gray silty clay; trace gravel; moist; soft; medium	
-					to high plas	ticity.	
-							
5	5 - 10	NA	3,000 - 4,000		Gray silty c	lay; trace gravel; 1 - 2-inch rock fragments at 8.5 - 9'.	
-					Lower 3": §	gray fine sand and silt; wet; toluene odor.	
-							
-							
-							
10	10 - 15	3	500 - 1,000		Saturated.		
-			(1,800 - 1,900)		Upper 6": S	Silty clay	
-			(75)		Middle 12"	: fine sand and silt.	
-			(at bottom)		Lower 12":	fine to coarse sand and gravel; strong toluene odor.	
-							
15							
-					Boring SB	-61 terminated at 15 feet.	

Project Na	me:		Project Number	:		Location:	
For	mer Norton/Nashu	a Site	5	029.08		Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
Boring Nu	nber:		Date Drilled:			Logged by:	
	SB-62		9/11/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	Water sample SB-6	52 submitted f	or laboratory analy	ysis (VOC, SVC	DC, TICs, he	eptane).	
	Water sample SB-6	52A is a duplic	cate sample of SB-	62.			
					71		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	100 - 170		3": Concre	ete.	
-			(100 - 150)		Light - dar	rk brown fine to coarse sands and silt; 1/4 - 1/2-inch	
-					pebbles. C	Gray silty clay present from 3.5 - 4'.	
-							
-							
5	5 - 10	4	5,000 - 6,000		Light tan -	- dark brown fine to coarse sands and silt;	
-					1/4 - 1/2-ii	nch pebbles. Cinder material present from 8 - 8.5'.	
-					8.5 - 10': C	Gray silty clay; trace gravel; soft; medium to high	
-					plasticity;	strong toluene odor.	
-							
10	10 - 15	2.5	>9,999		Saturated.		
-					Upper 6":	Gray silty clay; trace gravel.	
-					Lower 2':	fine to coarse sands and gravel.	
-					Coarse	r grained with depth.	
-							
15							
-					Boring SI	B-62 terminated at 15 feet.	

Project Na	me:		Project Number	•	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
					(Former Test Pit/Solvent Lines - Building #58)
Boring Nu	nber:		Date Drilled:		Logged by:
	SB-63			9/11/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	l:	Sampling Method:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	oratory analysis.	í.
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	35 - 50		3": Concrete.
-			(35 - 40)		Brown - dark brown fine to medium sands with silt;
-					1/4 - 1/2-inch pebbles present; cinder material present at 3'.
-					
-					Fine sands and silts; 1/4 - 1/2-inch pebbles;
5	5 - 10	3	2,000 - 3,000		cinder material throughout.
-			(lower)		Lower 12": brown to gray silty clay; soft; medium to high
-			(10 - 15)		plasticity; strong toluene odor and elevated PID
-			(upper)		in lower 12" of sample.
-					
10	10 - 15	2.5	3,000 - 4,000		Saturated.
-			(upper)		Gray fine to coarse sand and gravel. Finer grained sands/silts
-			(15 - 20)		in upper portion of sample.
-			(lower)		
-					
15					
-					Boring SB-63 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
For	rmer Norton/Nashua	a Site	_	029.08	Watervliet, New York
					(Former Test Pit/Solvent Lines - Building #61)
Boring Number:			Date Drilled:	0.41.42000	Logged by:
	SB-64			9/11/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.		C	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Material	/ Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		7L_7L
	No soil or ground-	water samples	submitted for labo	oratory analysis	
Denth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	3 - 6		3": Concrete.
-			(8 - 10)		Brown fine to coarse sands and silt; 1/8 - 1/4 gravel.
-					4 - 4.5': fine sand and silt: brown to grav slate clav at bottom.
-					
-					
5	5 - 10	3.5	1,000 - 7,000		Brown - dark brown fine sands and silt;
-					Lower 18": Dark gray silty clay (strong toluene odor).
-					PID increasing with depth.
-					
-					
10	10 - 15	2	2,000 - 4,000		Upper 12": fine sands and silt.
-			(upper)		Middle 6": Gray silty clay.
-			200 - 300		Lower 12": fine to coarse sand and gravel (1/4 - 1/2-inch).
-			(lower)		
-					
15					
-					Boring SB-64 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
Destruction New York and				(Former Test Pit/Solvent Lines - Building #58)	
SB-65			Date Drilled:	9/11/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	:	Sampling Method:
Environmental Cleanup Solutions. Inc.		G	Geoprobe <sup>TM</sup>	Macro-Core	
Well Installed: No			Casing Material	/ Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspac No soil or ground-water sample			readings.	oratory analysis.	JL
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	2 - 4		3": Concrete.
-			(7 - 8)		Dark brown - black fine sands and silt.
-					Cinder material present at 4 feet.
-					
-					
5	5 - 10	3.5	1,500 - 1,700		Dark brown - black fine sands and silt.
-					8.5 - 10': Brown - dark gray silty clay.
-			1,700 - 2,200		Cinder material present at 9.5'.
-			(lower 12")		
-					
10	10 - 15	0.5	1,600 - 1,700		Poor recovery.
-					Gray silty clay; fine to coarse sands and silt also present.
-					
-					
-					
15					
-					Boring SB-65 terminated at 15 feet.

Project Na	me:		Project Number:			Location:	
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
Doring Nur	nhau		Data Drillada			(Former Test Pit/Solvent Lines - Building #58)	
Boring Nu	SB-66		9/11/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core		
Well Installed:			Casing Materia	I / Diameter:		Total Depth (feet):	
No				INOILE		15.0	
Notes: PID values in "()" are headspace   Soil sample SB-66 (9 - 12) subr   MS and MSD QA/QC samples			readings. itted for laborator lso collected from	y analysis (VOC SB-66 (9 - 12).	C, SVOC, TI	Cs, heptane).	
Depth	Sample Interval	Recovery	PID	PID Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	NM	2 - 3		3": Concre	te; 3" brick material.	
-			(6 - 8)		Dark brow	n fine to medium sands and silt.	
-					Cinder ma	terial present in lower 2" of sample.	
-							
-							
5	5 - 10	3	6 - 8		Dark brow	n - maroon - light gray fine to medium sands and silt.	
-			(upper 2')		Cinder ma	terial present from 8.5 - 9 feet	
-			1,700 - 2,200		Lower 12"	: Dark brown clayey silt; strong toluene odor.	
-			(lower 12")				
-							
10	10 - 15	3	2,500 - 3,000	SB-66	Saturated.		
-				(9 - 12)	Upper 12"	: gray fine sand and silt.	
-			(100 - 125)	MS/MSD	Lower 2': 0	Gray fine to coarse sand and gravel (1/8 - 1/4-inch)	
-			(bottom)				
-							
15							
-					Boring SE	3-66 terminated at 15 feet.	

Project Na	me:		Project Number	•	Location:
Fo	rmer Norton/Nashua	a Site	_	029.08	Watervliet, New York
	-				(Former Test Pit/Solvent Lines - Building #61)
SB-67			Date Drilled:	9/11/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	INO			None	15.0
Notes: PID values in "()" are headspace No soil or ground-water sample			readings. submitted for labo	pratory analysis.	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	0.5 - 1		3": Concrete.
-					Light gray - light brown fine sand and silt.
-					Cinder material present at 4.5'.
-					Lower 3" tan clayey silt and gravel (1/8 - 1/4-inch).
-					
5	5 - 10	2.5	0 - 1		Brown - gray silty clay. brick material present at 3.5'.
-					
-					
-					
-					
10	10 - 15	0.5	2,800 - 3,000		Poor recovery.
-					Brown to gray silty clay; strong toluene odor.
-					
-					
-					
15					
-					Boring SB-67 terminated at 15 feet.

Project Na	me:		Project Number	•		Location:	
For	rmer Norton/Nashua	a Site	1 0 9000 1 (0	029.08		Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
Boring Number:			Date Drilled:			Logged by:	
	SB-68		9/11/2003			Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	l:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		Geoprobe <sup>TM</sup>			Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()" a	are headspace	readings.				
	Soil samples SB-68	3 (4 - 5) and S	B-68 (9 - 10) subr	mitted for labora	atory analysi	s (VOC, SVOC, TICs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	90 - 105		3": Concre	ete.	
-			(100 - 126)		Light tan -	dark brown fine sands and silt.	
-					Cinder ma	terial present in lower 6" of sample.	
-				SB-68			
-				(4 - 5)			
5	5 - 10	4	50 - 60		Light brov	vn silty clay with gravel (1/4 - 1/2-inch).	
-			(35 - 40)		Lower 12'	': wet; gray fine to coarse sands.	
-			(7 - 8)				
-			(at bottom)				
-				SB-68			
10	10 - 15	3	9 - 10	(9 - 10)	Saturated.		
-			(7 - 8)		Brown to	gray fine to coarse sand and gravel.	
-							
-							
-							
15							
-					Boring SI	B-68 terminated at 15 feet.	

Project Na	me:		Project Number	r:		Location:
For	rmer Norton/Nashua	a Site	· · · · · · · · · · · · · · · · · · ·	029.08		Watervliet, New York
						(Former Test Pit/Solvent Lines - Building #61)
Boring Nui	mber: SB-69		Date Drilled:	9/12/2003		Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:		Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core
Well Installed: No			Casing Materia	I / Diameter: None		Total Depth (feet): 15.0
Notes: PID values in "()" are headspace No soil or ground-water sample			readings.	oratory analysis.	<u></u> ][	
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample		Soil Classification / Description
			( <b>pp</b> iii)	Interval		color, texture, structure
U	0-5	2.5	0.5 - 0.0		3": Concret	te.
-			(3.0)		Brown fine	e sand and silt; trace gravel; moist at 4'.
-						
-						
-						
5	5 - 10	2	2 - 10		Moist. Upp	per 12": brown fine sands with silt
-			(4 - 5)		and 1/8	- 1/4-inch gravel.
-					Lower 12":	: silty clay with gravel (1/4 - 1-inch).
-						
-						
10	10 - 15	4'	>9,999		Saturated; f	fine to coarse sand and gravel.
-					Strong tolu	ene odor.
-						
-						
-						
15						
-					Boring SB	-69 terminated at 15 feet.

Droject No.	<b>m</b> o:		Project Number	r.	Location
For	rmer Norton/Nashu	a Site	i roject Number	029.08	Watervliet, New York
					(Former Test Pit/Solvent Lines - Building #61)
Boring Number:			Date Drilled:		Logged by:
SB-70			9/12/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for lab	oratory analysis.	).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	3 - 10		3": Concrete.
-			(7 - 8)		Brown to dark brown fine sands and silt and 1/8 - 1/4-inch gravel.
-					Cinder material present at lower 6" of sample.
-					
-					
5	5 - 10	2	2 - 3		Upper 2": Cinder material (fine to coarse grained).
-			(3.5 - 4)		Gray silty clay with gravel (1/8 - 1/2-inch).
-					Slightly moist at bottom.
-					
-					
10	10 - 15	3 inches	200 - 400		No recovery
-					
-					
-					
-					
15					
-					Boring SB-70 terminated at 15 feet.

Project Na	me:		Project Number	r•		Location:	
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
						(Former Test Pit/Solvent Lines - Building #61)	
Boring Nu	nber: SB-71		Date Drilled:	9/12/2003		Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:		Sampling Method:	
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	Yes (MP-12)		PVC - 1-	-1/2-inch (Pre-P	ack)	15.0	
Notes: PID values in "()" are headspace Water sample SB-71 submitted			readings. for laboratory anal	ysis (VOC, SVC	DC, TICs, he	eptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(Teet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.5	15 - 20		3": Concre	ete.	
-			(25 - 30)		Upper 2': I	Dark brown fine sands and silt with 1/4 - 1/2-inch gravel.	
-					Middle 12	": tan silt and fine sand.	
-					Lower 6":	fine to coarse grained cinder material.	
-							
5	5 - 10	4	5 - 12		Upper 6":	cinder material.	
-			(20 - 25)		6 - 8.5': Gi	ray/brown silty clay; trace gravel.	
-					Lower 18'	': Gray fine to coarse sand and gravel; wet.	
-							
-							
10	10 - 15	4	>9,999		Saturated;	fine to coarse sand and gravel (1/4 - 1-inch).	
-					Strong tol	uene odor.	
-							
-							
-							
15							
-					Boring SI	B-71 terminated at 15 feet.	
Project Na	me:		Project Number	•	Location:		
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For	rmer Norton/Nashu	a Site		029.08		Watervliet, New York	
					(Former T	est Pit/Solvent Lines - Building #61)	
Boring Nu	mber:		Date Drilled:		Logged by:		
	SB-72			9/12/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	l:	Sampling Met	hod:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (f	eet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	Soil sample SB-72	(9 - 10) subm	itted for laborator	y analysis (VOC	SVOC, TICs, heptane and	TOC).	
Denth	Sample Interval	Recovery	PID	Sample	Soil Clas	sification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval	color	, texture, structure	
0	0.5	2	<u> </u>		2": Conorata	, ,	
0	0-5	5	8 - 10		5 . Collectete.		
-			(10 - 16)		Upper 10": tan fine sands a	nd silt with gravel; loose.	
-					Lower 18": Light to dark b	rown fine sand and silt.	
-							
-							
5	5 - 10	4	>9,999		Upper 6": Black to dark bro	own cinder material (fine to coarse).	
-			(lower 12")		Remainder: Gray/tan silty c	elay; trace gravel (1/4 - 1/2-inch).	
-			200 - 300		Strong toluene odor in lowe	er 12" of sample; slightly moist.	
-			(middle)				
-				SB-72			
10	10 - 15	3	>9,999	(9 - 10)	Saturated.		
-					Fine to coarse sands and gr	avel.	
-					Lower 12": fine sand and s	ilt.	
-							
-							
15							
-					Boring SB-72 terminated	at 15 feet.	

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
					(Former Test Pit/Solvent Lines - Building #61)
Boring Nui	mber: SB-73		Date Drilled:	9/12/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace Soil sample SB-73 (3.5 - 4.5) su			readings. bmitted for laborat	tory analysis (V	OC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	4	50 - 99		3": Concrete.
-			(3.5 feet)		Light tan - dark brown fine sands and silt.
-			(50 - 70)	SB-73	Cinder material present in lower 12" of sample.
-				(3.5 - 4.5)	
-					
5	5 - 10	4	15 - 20		Tan to gray silty clay; soft to firm; medium plasticity.
-					Rock fragments (2-inch) present at 8.5 - 9.5 feet.
-					
-					
-					
10	10 - 15	4	20 - 30		Upper 12": silty clay/fine sand and silt.
-					Lower 2.5': Saturated; gray fine to coarse sand
-					and gravel (1/8 - 1/4-inch).
-					
-					
15					
-					Boring SB-73 terminated at 15 feet.

Project Na	me:		Project Number	•	I	Location:	
For	rmer Norton/Nashu	a Site	r ojecer (unioer	029.08		Watervliet, New York	
					(Former Test Pit/Solvent Lines - Building #61)		
Boring Number: SB-74		Date Drilled: 9/12/2003			Logged by: Bryan J. Machella		
Drilling Co	mpany:		Drilling Method	l:	S	Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed: No			Casing Materia	l / Diameter: None	ŋ	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace No soil or ground-water sample:			readings. submitted for labo	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	20 - 25		3": Concrete	2.	
-			(38 - 40)		Light to darl	k brown fine sands and silt.	
-					Cinder mate	erial present from 4 - 4.5'.	
-							
-							
5	5 - 10	3	25 - 30		Upper 2": da	ark brown fine sand and silt.	
-			(25 - 30)		Middle 12":	Gray/brown clayey silt.	
-					Remainder:	Brown fine sand and silt with 1/4 - 1/2-inch gravel.	
-							
-							
10	10 - 15	1.5	2,000 - 3,000		Poor recover	ry.	
-					Strong tolue	ene odor.	
-							
-							
-							
15							
-					Boring SB-	74 terminated at 15 feet.	

·					
Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
					(Former Test Pit/Solvent Lines - Building #61)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-75			9/12/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	nl / Diameter:	Total Depth (feet):
No			None	15.0	
Notes:	PID values in "()"	are headspace	readings.		
	Soil samples SB-7:	5 (3.5 - 4.5) a	nd SB-75 (9 - 10)	submitted for la	aboratory analysis (VOC, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0.5	4	15 25		2"h Companyta
0	0-5	4	13 - 23		5 : Concrete.
-			(25 - 31)		Light tan/brown fine sands and silt with 1/8 - 1/2-inch gravel.
-					
-					
-				SB-75	
5	5 - 10	5	20 - 23	(3.5 - 4.5)	Tan/light brown clayey silt; trace gravel.
-			(15 - 19)		Slightly moist in lower 3" of sample.
-					
-					
-				SB-75	
10	10 - 15			(9 - 10)	No Recovery.
-					
-					
-					
-					
15					
-					Boring SB-75 terminated at 15 feet.

Project Na	me:		Project Number	r:	L	ocation:
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York (Former Test Pit/Solvent Lines - Building #61)
Boring Nu	nber:		Date Drilled:		L	ogged by:
SB-76			9/12/2003		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:	Sa	ampling Method:
Environ	nental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Т	otal Depth (feet):
	No			None		15.0
Notes: PID values in "()" are headspace Soil sample SB-76 (9 - 10) subr			readings. iitted for laborator	y analysis (VOC	C, SVOC, TICs	, heptane).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	20 - 27		3": Concrete.	
-			(13 - 15)		Upper 18": L	ight brown fine sands and silt; trace gravel.
-					Middle 12": H	Black cinder material (fine to coarse grained).
-					Lower 12": B	Brown clayey silt.
-						
5	5 - 10	3	20 - 30		Fine to coarse	e sand, silt, 1/4 - 1-inch gravel.
-			(25 - 30)		wet at 9.5'.	
-						
-						
-				SB-76		
10	10 - 15	3	10 - 20	(9 - 10)	Gray/brown c	coarse sand and gravel (1/2 - 1-inch).
-						
-						
-						
-						
15						
-					Boring SB-7	6 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Number:		Date Drilled:		Logged by:	
	SB-77			9/15/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	s submitted for lab	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	4 - 10		Asphalt.
-			(0.0)		Dark brown/gray fine sands and silt with gravel (1/8 - 1/2-inch).
-					Moist from 3.5 - 4.5'.
-					
-					
5	5 - 10	4	0.0		Brown to gray silty clay with gravel (1/4 - 2-inch); loose.
-			(9 - 11)		Wet at 9': gray fine to coarse sand and gravel.
-					
-					
-					
10	10 - 15	3.5	>9,999		Saturated.
-					Upper 6": Brown to gray silty clay.
-					Remainder: Fine to coarse sand and gravel (1/8 - 1/2-inch).
-					Strong toluene odor.
-					
15					
-					Boring SB-77 terminated at 15 feet.

Project Nat For	me: rmer Norton/Nashu	a Site	Project Numbe	<b>r:</b> 029.08	Location: Watervliet, New York
					(Former Tank Farm SWMU)
Boring Nu	mber: SB-78		Date Drilled:	9/15/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	al / Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspace Soil sample SB-78 (8 - 9) subm			readings. tted for laboratory	analysis (VOC,	, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	0 - 0.2		Asphalt.
-			(0.0)		Brown fine sands and silt with gravel (1/8 - 2-inch).
-					3 - 3.5': Black fine sands and silt
-					3.5 - 5': Orange/brown to brown silt and fine sand.
-					
5	5 - 10	3	0.0		Brown fine sands and silt with gravel (1/4 - 1-inch).
-					Coarser grained with depth.
-					Wet at 8.5'.
-				SB-78	
-				(8 - 9)	
10	10 - 15	5	0.0		Saturated.
-					Brown fine to coarse sands and gravel.
-					
-					
-					
15					
-					Boring SB-78 terminated at 15 feet.

Project Na	me:		Project Number	r:	L	ocation:	
Fo	rmer Norton/Nashu	a Site		029.08		Watervliet, New York (Former Tank Farm SWMU)	
Boring Number: SB-79			Date Drilled:	9/15/2003	L	ogged by: Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	1:	S	ampling Method:	
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed: No			Casing Materia	I / Diameter: None	Т	<b>Total Depth (feet):</b> 15.0	
Notes: PID values in "()" are headspace No soil or ground-water sample:			readings. submitted for lab	oratory analysis.	<u> </u>		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3.5	0.0		Asphalt. Dar	k brown fine to	
-			(1 - 3)		medium s	and and gravel; cinder material present.	
-					3": gray silty	clay - clayey silt.	
-					4 - 5': gray si	lty clay. Brick material present at 4.5'.	
-							
5	5 - 10	5	0.0		Tan silty clay	to clayey silt; soft; low to medium plasticity	
-			(3.5 - 4.5)		Wet at 9.5'.		
-			700 - 800				
-			(lower 6")				
-							
10	10 - 15	3	20 - 30		Saturated.		
-			(100 - 130)		Gray fine to c	coarse sand and gravel.	
-							
-							
-							
15							
-					Boring SB-7	79 terminated at 15 feet.	

Project Name:		Project Number	•	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Number:		Date Drilled:		Logged by:	
	SB-80			9/15/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Asphalt.
-			(0.5 - 1.5)		Brown fine to medium sands and silt, 1/4 - 1/2-inch gravel.
-					Brick material present at 3.5'.
-					Lower 12": light brown clayey silt; moist.
-					
5	5 - 10	3	25 - 35		Upper 12": Tan clayey silt.
-			(350 - 450)		Brown to gray fine sand and silt; clayey silt;
-					1/8 - 1/2-inch gravel.
-					Lower 6": Wet; fine to coarse sand and gravel (1/4 - 1/2-inch).
-					
10	10 - 15	3	10 - 15		Saturated.
-			(45 - 60)		Coarse sand and coarse gravel.
-					Finer grained with depth.
-					Lower 12": Gray clayey silt; stiff.
-					
15					
-					Boring SB-80 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Former Tank Farm SWMU)
Boring Nu	nber:		Date Drilled:		Logged by:
	SB-81			9/15/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-81	(9 - 10) subn	nitted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Asphalt/gravel.
-			(10 - 13)		Brown to dark brown fine sands and silt
-					with gravel (1/4 - 1/2-inch).
-					
-					
5	5 - 10	3	8 - 14		Slightly moist
-			(14 - 16)		Upper 12": tan fine sand and silt
-					Lower 2': fine sand and silt with 1/4 - 1-inch gravel.
-					
-				SB-81	
10	10 - 15	3	0.0	(9 - 10)	Saturated.
-			(9 - 10)		Coarse sand and gravel (1/4 - 1-inch).
-					Finer grained with depth.
-					Lower 12": gray clayey silt; trace gravel.
-					
15					
-					Boring SB-81 terminated at 15 feet.

Project Na	me:		Project Number	•	L	location:
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York
Boring Number:			Date Drilled:		I	(Former Tank Farm SWMU)
SB-82		9/15/2003			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:	S	ampling Method:
Environ	Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Т	Total Depth (feet):
	No			None		15.0
Notes: PID values in "()" are headspace Soil sample SB-82 (9 - 10) subm Water sample SB-82 submitted			readings. itted for laborator or laboratory anal	y analysis (VOC ysis (VOC, SVC	C, SVOC, TICs DC, TICs, hept	s, heptane). iane).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	0 - 1		Asphalt. Da	rk brown/light brown
-			(10 - 12)		fine sands	s and silt with gravel (1/8 - 1/4-inch).
-					1 - 2-inch an	gular rock fragments present at 3'.
-						
-						
5	5 - 10	NM	500 - 1,100		Fine to coars	e sands and silt with 1/8 - 1-inch gravel.
-					Lower 12": f	ine to coarse sand and gravel; wet.
-						
-						
-				SB-82		
10	10 - 15	4	0.0	(9 - 10)	Upper 2': Sat	turated; fine to coarse sand and coarse gravel.
-					Lower 2': Gr	ay clayey silt; stiff; 1/8 - 1/4-inch gravel present.
-						
-						
-						
15						
-					Boring SB-8	82 terminated at 15 feet.

Project Name:		Project Number		Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Former Tank Farm SWML)
Boring Nu	mber:		Date Drilled:		Logged by:
201119114	SB-83			9/15/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>	Macro-Core	
Well Installed:			Casing Materia	l / Diameter:	Total Depth (feet):
	INO			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-83 (9 - 10) subr			readings. hitted for laboratory	y analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Dark brown - brown fine sands and silt
-			(10 - 12)		with 1/4 - 1/2-inch gravel.
-					Rock and wood fragments at 3 - 3.5'.
-					
-					
5	5 - 10	3	2.5		Fine to coarse sands with silt and gravel (1/4 - 1-inch)
-			(upper 2.5')		Lower 6": wet; gray fine to medium sand.
-			400 - 500		Petroleum-like odor in lower 6":
-			(lower 3")		
-				SB-83	
10	10 - 15	4	10 - 15	(9 - 10)	Saturated.
-			(7 - 10)		Upper 2': Gray fine to coarse sand and gravel (1/8 - 1/2-inch).
-					Lower 2': Gray clayey silt; trace gravel.
-					
-					
15					
-					Boring SB-83 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
Boring Nu	mber:		Date Drilled:		Logged by:
SB-84			Dute Dimeu	9/15/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>™</sup>	Macro-Core
Well Installed: No			Casing Materia	II / Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspace Soil sample SB-84 (8 - 9) subm			readings. tted for laboratory	analysis (VOC	, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	0.0		Asphalt.
-			(15 - 16)		Brown fine sands and silt with gravel; loose gravelly silt.
-					
-					
-					
5	5 - 10	3.5	0.0		Upper 2': same as above - gravelly silt.
-			(4 - 5)		Lower 12": Saturated; gray silt with fine sand
-					and gravel (1/4 - 1-inch).
-				SB-84	
-				(8 - 9)	
10	10 - 15	4	0.0		Saturated.
-			(4 - 7)		Upper 12": Fine to coarse sand and gravel (1/8 - 1/4-inch).
-					Lower 3': gray clayey silt; trace gravel (1/2 - 1-inch).
-					
-					
15					
-					Boring SB-84 terminated at 15 feet.

Project Na	me•		Project Number	p•	Location:
Former Norton/Nashua Site			i roject i unisci	029.08	Watervliet, New York (Building #58)
Boring Nu	mber: SB-85		Date Drilled:	9/16/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led: No		Casing Materia	II / Diameter: None	Total Depth (feet): 15.0
Notes:	Notes: PID values in "()" are headspace No soil or ground-water sample			oratory analysis.	I
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	10 - 15		3" Concrete.
-			(10 - 15)		Brown - dark brown fine sands and silt.
-					Cinder material present throughout.
-					
-					
5	5 - 10	2.5	10 - 45		Cinder material (fine to coarse grained).
-			(35 - 50)		Lower 12": Brown fine silt; septic odor; very soft; organic-like.
-					
-					
-					
10	10 - 15	1.5	20 - 27		Poor recovery.
-			(9 - 10)		Lower 12": wet; gray silt with 1/2 - 2-inch gravel.
-					
-					
-					
15					
-					Boring SB-85 terminated at 15 feet.

Project Name:		Project Number		Location:	
For	mer Norton/Nashu	a Site	1 10,000 1 (0	029.08	Watervliet, New York
					(Building #59)
Boring Nu	nber:		Date Drilled:		Logged by:
SB-86			9/16/2003	Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	oratory analysis.	
Death		<b>D</b>	BID	C l.	
Deptn (foot)	Sample Interval	(foot)	PID (ppm)	Sample	Soli Classification / Description
(leet)	(leet)	(leet)	(ррш)	Interval	
0	0 - 5	3	9 - 10		3" Concrete.
-			(15 - 20)		Light to dark brown fine sand and silt;
-					trace gravel (1/8 - 1/4-inch). Cinder material present at 3.5'.
-					
-					
5	5 - 10	3	15 - 20		Brown to black fine sand and silt; trace gravel (1/4 - 1-inch).
-			(15 - 20)		Cinder material present in lower 12" (moist).
-					Brick material present at 9'.
-					
-					
10	10 - 15	2	1,000 - 1,500		Saturated.
-			(1,500)		Fine to coarse sand and gravel.
-			(15 - 20)		
-			(at bottom)		
-					
15					
-					Boring SB-86 terminated at 15 feet.

Project Na	me:		Project Number	r:		Location:
Fo	rmer Norton/Nashu	a Site	i roject rumber	029.08		Watervliet, New York (Building #59)
Boring Nu	mher		Date Drilled •			(During #57)
SB-87			9/16/2003			Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	5	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	r .	Total Depth (feet):
	No			None		15.0
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for lab	oratory analysis.		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	NM	20 - 60		3" Concrete	2.
-			(50 - 55)		Light to dar	k brown fine sand and silt; trace
-					gravel (1	/8 - 1/4-inch). Brick material present at 2.5 - 3'.
-						
-						
5	5 - 10	2	15 - 20		Upper 12":	Brown fine sand and silt; 1/4 - 1/2-inch pebbles.
-			(15 - 20)		Cinder mate	erial present at 9;.
-					Gray clayey	silt; wet.
-						
-						
10	10 - 15	3	>9,999		Clayey silt to	o fine to coarse sand and gravel; strong toluene odor.
-					Saturated at	13'.
-						
-						
-						
15						
-					Boring SB-	-87 terminated at 15 feet.

Project Name:		Project Number:			Location:		
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
						(Building #59)	
Boring Number:			Date Drilled:			Logged by:	
SB-88		9/16/2003			Bryan J. Machella		
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for labo	oratory analysis.			
Denth	Sample Interval	Recoverv	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	18 - 20		3" Concrete	e.	
-			(15 - 20)		Upper 9": I	Light tan fine sand and silt; trace gravel (1/8 - 1-inch).	
-					Remainder	: Cinder and brick material.	
-							
-							
5	5 - 10	3	4,000 - 5,000		Upper 12":	fine sands and silts with brick and concrete material.	
-					6": Gray fir	ne to medium sand and silt; wet.	
-					10": Dark t	brown silt/clay; soft	
-					9 - 10': Gra	y clayey silt (high PID).	
-							
10	10 - 15	3	1,200 - 1,700		Upper 12":	Gray clayey silt; trace gravel (1/4 - 1/2-inch).	
-			(top)		Lower 2': S	Saturated; fine to coarse sand and gravel.	
-			(15 - 25)				
-			(bottom)				
-							
15							
-					Boring SB	-88 terminated at 15 feet.	

Project Na	ne:		Project Number			Location:	
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
						(Building #59)	
Boring Nu	nber:		Date Drilled:	0.11.610.000		Logged by:	
	SB-89			9/16/2003		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environ	nental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for labo	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	20 - 27		3" Concret	le.	
-			(20 - 25)		Light tan -	dark brown fine sands and silt with 1/4 - 1/2-inch	
-					pebbles	s. Brick/concrete material present from 3.5 - 4.5'.	
-							
-							
5	5 - 10	3.5	18 - 20		Upper 4":	Concrete material (fine to coarse grained).	
-			(20 - 25)		Middle 12	": Black fine sand and silt; brick material at 7.5'.	
-					Lower 2': C	Gray silty clay to clayey silt; moist.	
-							
-							
10	10 - 15	2.5	4,000 - 7,000		Upper 12"	: Gray clayey silt.	
-			(23 - 27)		Remainder	:: fine to coarse sand and gravel; saturated.	
_			(bottom)				
			(bottom)				
-							
-							
15							
-					Boring SB	3-89 terminated at 15 feet.	

Project Na	me:		Project Number	•	Location:
Former Norton/Nashua Site			i rojece rumor	029.08	Watervliet, New York (Building #59)
Boring Number:			Date Drilled:		Logged by:
	SB-90			9/16/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()" a No soil or ground-	are headspace water samples	readings. submitted for labo	oratory analysis	<u> </u>
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.5	20 - 25		3" Concrete.
-			(20 - 47)		Light brown - brown - gray fine sand and silt with
-					1/4 - 1/2-inch gravel. Brick material present at 3.5'.
-					
-					
5	5 - 10	2.5	5,000 - 7,000		Upper 10": gray fine sand and silt; trace gravel; moist
-					Middle 3": Brown fine silt; soft; toluene odor.
-					Lower 12": Gray clayey silt; moist; strong toluene odor.
-					
-					
10	10 - 15	3	2,000 - 5,000		Upper 12": gray clayey silt; saturated strong toluene odor.
-			(60 - 85)		Lower 2': fine to coarse sand and gravel.
-			(bottom)		
-					
-					
15					
-					Boring SB-90 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Nu	mhor		Data Drillad:		(Building #59)
SB-91			Date Diffied.	9/16/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-91 (9 - 10) subr			readings. nitted for laborator	y analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	15 - 20		3" Concrete.
-			(20 - 25)		Light tan - brown fine sands and silt; trace gravel (1/4 - 1/2-inch).
-					Lower 6": larger gravel (1/2 - 1-inch).
-					
-					
5	5 - 10	3.5	10 - 15		Upper 6": fine sands and silt with 1/2 - 2-inch gravel.
-			(20 - 25)		Brown - gray silty clay; soft; medium to high plasticity;
-					increasing silt content in lower 12" of sample.
-					
-				SB-91	
10	10 - 15	3	0 - 1	(9 - 10)	Saturated.
-					Gray silt/clayey silt.
-					Lower 6": fine to coarse sand and gravel.
-					
-					
15					
-					Boring SB-91 terminated at 15 feet.

Project Na	me•		Project Number	••		Location:	
Fo	rmer Norton/Nashu	a Site	i roject i tumber	029.08		Watervliet, New York (Building #59)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-92			9/16/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for labo	oratory analysis			
Denth	Sample Interval	Recovery	PID	Sampla		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	15 - 20		3" Concrete	p	
0	0-5	5	15 - 20		5 Concrete		
-			(20 - 25)		Upper 12":	Brown fine sand and silt; 1/4 - 1-inch gravel; present.	
-					Brick mater	rial present	
-					Maroon to	yellowish tan silt to coarse sand.	
-							
5	5 - 10	1.5	15 - 20		Yellowish t	tan - maroon brick material (silt to coarse grained sand ).	
-			(20 - 21)		Brown clay	yey silt. Large 2-inch gravel in lower 6" of sample.	
-					Brick mater	rial present in lower end of sample.	
-							
_							
10	10 - 15	NM	(700 - 900)		No recover		
10	10 - 15	11111	(700 - 900)		NO IECOVEL	y	
-					Some gray	clayey silt in tip of sleeve.	
-							
-							
-							
15							
-					Boring SB	-92 terminated at 15 feet.	

Project Na	me:		Project Number	r:	L	location:
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York (Building #59)
Boring Number:			Date Drilled:		I	Logged by:
SB-93			9/17/2003			Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	s	ampling Method:
Environi	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	nl / Diameter:	Т	Total Depth (feet):
	NO			None		15.0
Notes:PID values in "()" are headspaceSoil sample SB-93 (7 - 9) submiSoil sample SB-93A (20 - 25) is			readings. tted for laboratory a duplicate sample	analysis (VOC, e of SB-93 (7 - 9	SVOC, TICs, 9).	heptane).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	0.0		3" Concrete.	
-			(0.0)		Upper 8": Yo	ellowish tan fine to coarse sand and silt.
-					7": black cin	der material (fine to coarse grained).
-					12": Brown	fine sands with silt and gravel.
-					Lower 12": I	Brown clayey silt; trace gravel.
5	5 - 10	3.5	0.0		Brown fine s	sands and silt; 1/4 - 1/2-inch gravel; wet at 9'.
-			(0.0)			
-				SB-93		
-				(7 - 9)		
-				(Duplicate)		
10	10 - 15	4	0.0		Upper 12": H	Brown fine sand and silt with gravel.
-					16": Gray fir	ne sand and silt.
-					Lower 16": §	gray clayey silt; stiff.
-					3" of coarse	sand and gravel in lower 6" of sample.
-						
15						
-					Boring SB-9	93 terminated at 15 feet.

Project Na	me:		Project Number	•	Location:
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:		Logged by:
	SB-94			9/17/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc. Geoprobe <sup>TM</sup> Macro-Co			Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	NM	3 - 5		3" Concrete.
-			(3 - 6)		Upper 12": Brick material.
-					Brown fine sand and silt; trace gravel (1/4 - 1/2-inch).
-					Cinder material present.
-					
5	5 - 10	4	2,000 - 5,000		Upper 18": Dark brown fine sand and silt with cinder material.
-					8 - 10': Gray clayey silt with gravel.
-					Strong toluene odor in lower 2' of sample.
-					
-					
10	10 - 15	4	1,500 - 2,000		Upper 18": clayey silt with gravel.
-			(upper 12")		Lower 2.5': saturated; gray fine to coarse sand and gravel.
-			(0.0)		
-			(bottom)		
-					
15					
-					Boring SB-94 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58)
Boring Number: SB-95			Date Drilled:	9/17/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l <b>:</b>	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.	- C	Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Material	I / Diameter: None	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace No soil or ground-water sample			readings.	oratory analysis.	JL
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	10 - 15		3" Concrete.
-			(15 - 17)		Brown - dark brown - black fine sand and silt with gravel.
-					Brick material at 2 - 3.5'.
-					
-					
5	5 - 10	3	20 - 40		Dark brown fine sand and silt; wet from 8 - 9'.
-			(20 - 37)		Lower 12": gray clayey silt.
-					
-					
-					
10	10 - 15	3	3,000 - 5,000		Upper 12": gray clayey silt.
-					Middle 18": gray fine to coarse sand and gravel; saturated.
-					Lower 12": gray clayey silt.
-					
-					
15					
-					Boring SB-95 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:	0/17/2002	Logged by:
	3D-90			9/1//2003	Biyan J. Machena
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.	arotory on alvaia	
	No son or ground-	water samples	submued for labo	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	10 - 15		3" Concrete.
-			(15 - 20)		Brown - dark brown fine sand and silt
-					with gravel (1/8 - 1/4-inch).
-					
-					
5	5 - 10	3	15 - 20		Upper 12": Brown fine sands and silt with gravel.
-			(19 - 20)		Lower 2.5': Dark brown clayey silt; soft; septic odor.
-					
-					
-					
10	10 - 15	2.5	60 - 125		Saturated.
-					Silt with fine to coarse sand and gravel (1/4 - 1-inch).
-					Slight toluene odor.
_					
_					
15					
15					
-					Boring SB-96 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
					(Building #58)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-97			9/17/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	oratory analysis.	s.
Depth	Sample Interval	Recoverv	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	10 - 15		3" Concrete.
-			(18 - 20)		Brown fine to medium sands and silt; 1/8 - 1/2 gravel.
-					
-					
-					
5	5 - 10	3	15 - 20		Upper 12": Brown fine sand and silt with gravel.
-			(50 - 52)		Lower 2': Dark brown clayey silt; soft; septic odor.
-					
-					
-					
10	10 - 15	2.5	1,000 - 3,000		Saturated.
-			(900 - 1,500)		Silt and fine to coarse sand; 1/4 - 1-inch gravel.
-			(15 - 20)		Slight toluene odor.
-			(bottom)		
-					
15					
-					Boring SB-97 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #59)
Boring Number:			Date Drilled:	0.11.7.12.0.0.2	Logged by:
	SB-98			9/1//2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-98	(9 - 10) subm	nitted for laborator	y analysis (VO	C, SVOC, TICs, heptane).
	·			1	
Depth (feet)	Sample Interval	Recovery	PID (nnm)	Sample Interval	Soil Classification / Description
0	0 - 5	4	10 - 15		3" Concrete.
-			(20 - 25)		Brown fine sands and silt with gravel (1/4 - 1/2-inch).
-					Brick material present at 2.5'.
-					Lower 6": clayey silt with gravel.
_					
_		_			
5	5 - 10	5	10 - 18		Light brown clayey silt with gravel (1/4 - 1-inch); moist.
-			(25 - 30)		Increasing gravel content in lower 2" of sample.
-					
-					
				<b>GD</b> 00	
-				SB-98	
10	10 - 15	5	10 - 50	(9 - 10)	Saturated.
-			(20 - 25)		Gray clayey silt with gravel (1 - 2-inch); stiff; upper 2' wet.
-					
_					
-					
15					
-					Boring SB-98 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #59)
Boring Number:			Date Drilled:		Logged by:
6	SB-99			9/17/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	Notes: PID values in "()" are headspace Soil sample SB-99 (9 - 10) subr			y analysis (VOO	C, SVOC, TICs, heptane).
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample	Soil Classification / Description
(leet)	(leet)	(leet)	(ppm)	mtervai	
0	0 - 5	3.5	15 - 20		3" Concrete.
-			(20 - 25)		Dark brown - brown fine sand and silt with
-					gravel (1/4 - 1/2-inch). Cinder material present at 2.5 - 3.5 '.
-					
-					
5	5 - 10	NM	15 - 20		Grayish brown clayey silt with gravel; wet at 10'.
-			(25 - 30)		
-					
-					
-				SB-99	
10	10 - 15	5	15 - 17	(9 - 10)	Saturated.
-					Gray clayey silt; 1/2 - 1-inch pebbles in lower 2'.
-					
-					
-					
15					
-					Boring SB-99 terminated at 15 feet.

Project Na	me:		Project Number	•	Location:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Building #58)		
Boring Number:			Date Drilled:		Logged by:		
SB-100				9/18/2003	Bryan J. Machella		
Drilling Co	mpany:		Drilling Method	l:	Sampling Method:		
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):		
	No			None	15.0		
Notes: PID values in "()" are headspace   Soil sample SB-100 (9 - 11) sub   MS and MSD QA/QC samples			readings. mitted for laborato llso collected from	ry analysis (VO SB-100 (9 - 11	IC, SVOC, TICs, heptane). ).		
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure		
0	0 - 5	5	3 - 7		3" Concrete.		
-			(8 - 10)		Light - dark brown fine sands and silt.		
-					Cinder material present in lower 12" of sample.		
-							
-					Upper 12": Brown fine sand and silt		
5	5 - 10	2.5	2,000 - 3,000		with 1/2 - 1-inch gravel; moist.		
-			(lower 12")		Middle 6": Brown silty clay; soft; medium to high plasticity.		
-					Lower 12": gray clayey silt; strong toluene odor.		
-							
-				SB-100			
10	10 - 15	3	2,000 - 3,000	(9 - 11)	Upper 6": gray clayey silt; moist.		
-			(upper)	MS/MSD	Lower 2': fine to coarse sand and gravel; saturated.		
-			(0.0)				
-			(lower)				
-							
15							
-					Boring SB-100 terminated at 15 feet.		

Project Name:		Project Number	:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-101			9/18/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	•	Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	/ Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	No soil or ground-	water samples	submitted for labo	pratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	4	5 - 11		3" Concrete.
-					Brown fine sands and silt with gravel (1/4 - 1-inch).
-					Brick material present at 3'.
-					Cinder material present in lower 12" of sample.
-					
5	5 - 10	0.5	(1,100 - 1,600)		Poor recovery.
-					Brown fine sand and silt with gravel.
-					Lower 3" gray clayey silt; toluene odor; large rock fragments in
-					bottom of sample.
-					
10	10 - 15	3	1,000 - 1,500		Upper 9": 2 - 3-inch quartz fragments
-			(1,000 - 1,700)		Middle 3": gray clayey silt; wet.
-			(13 - 15)		Lower 2': saturated; gray fine to medium sands and gravel.
-			(bottom)		
-					
15					
-					Boring SB-101 terminated at 15 feet.

Project Na	me•		Project Number	•		Location:	
For	rmer Norton/Nashua	a Site	i roject Rumber	. 029.08		Watervliet, New York	
						(Building #58)	
Boring Number:			Date Drilled:			Logged by:	
	SB-102			9/18/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes:	PID values in "()"	are headspace	readings.			JI	
	Soil samples SB-10	02 (4 - 5) and	SB-102 (9 - 10) su	bmitted for lab	oratory anal	ysis (VOC, SVOC, TICs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	4	(25 - 30)		3" Concre	te.	
-			(top)		Brown fin	e sands and silt with gravel (1/4 - 1-inch).	
-			(200 - 400)		Brick mate	erial present at 3' to 4'.	
-			(lower 6")				
-				SB-102			
5	5 - 10	3	2,000 - 3,500	(4 - 5)	Upper 12"	': Brown fine sands and silt with gravel (1/4 - 1-inch).	
-					Lower 2':	gray clayey silt; wet; strong toluene odor.	
-							
-							
-				SB-102			
10	10 - 15	2.5	1,000 - 2,100	(9 - 10)	Upper 6":	gray clayey silt with gravel; strong toluene odor.	
-			(top)		Lower 2':	saturated; fine to coarse sand and gravel (1/2 - 1-inch).	
-			(20 - 25)				
-			(bottom)				
-							
15							
-					Boring SI	B-102 terminated at 15 feet.	

Project Na	me•		Project Number	r•	Lo	ration:	
For	rmer Norton/Nashu	a Site	r rojece r tumber	029.08	200	Watervliet, New York (Building #58)	
Boring Nu	mber:		Date Drilled:		Log	gged by:	
	SB-103			9/18/2003		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:	Sar	npling Method:	
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Tot	al Depth (feet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for lab	oratory analysis.			
Death		<b>D</b>	DID	Sl.	1		
(feet)	Sample Interval	(foot)		Sample		solon texture structure	
(leet)	(leet)	(leet)	(ррш)	Interval		color, texture, structure	
0	0 - 5	4	15 - 17		3" Concrete.		
-			(25 - 30)		Light - dark bro	own fine sand and silt with gravel (1/4 - 1/2-inch).	
-					Brick material	present at 2.5 - 3'.	
-					Cinder materia	l present in lower 2' of sample.	
-							
5	5 - 10	NM	100 - 300		Upper 12": Dat	rk brown/black cinder material (fine to	
-			(cinders)		coarse grain	ed). 12": Brown fine sand and silt with gravel.	
-			(45 - 65)		8": Brown silty	clay; soft; medium to high plasticity.	
-			(bottom)		8": gray clayey	silt with 2 - 3-inch rock fragments.	
-							
10	10 - 15	2	600 - 800		Upper 6": gray	clayey silt; wet.	
-			(upper)		Lower 1.5': sat	urated; fine to coarse sand and gravel; 1/2 - 1-inch	
-			(15 - 20)		pebbles.		
-			(lower)				
-							
15							
-					Boring SB-10	3 terminated at 15 feet.	

Project Name:		Project Number:			Location:		
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
						(Building #58)	
Boring Nu	nber:		Date Drilled:	0.11.0.12.0.0.2		Logged by:	
	SB-104			9/18/2003		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:		Sampling Method:	
Environ	nental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	No soil or ground-	water samples	submitted for labo	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	15 - 25		3" Concre	te.	
-			(25 - 30)		Brown fin	e sand and silt with gravel.	
-					Cinder ma	aterial present from 2.5 - 3'; brick material from 3 - 3.5'.	
-					6": light gi	ray concrete-like material (fine to coarse grained).	
-					Lower 6":	dark brown fine sands and silt with cinders.	
5	5 - 10	0.5	50 - 150		Poor recov	very.	
-					Brown fin	e sands and silt; wet.	
-					Brown to	gray clayey silt; soft; wet.	
-							
-							
10	10 - 15	2	1,600 - 1,800		Upper 12"	': gray clayey silt with 1/4 - 1/2-inch gravel.	
-					Lower 12'	": saturated; gray fine to coarse sand and gravel	
-					(1/4 - 1/2-	inch).	
-							
-							
15							
-					Boring SI	B-104 terminated at 15 feet.	

Project Name:		Project Number		Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
					(Building #58)
Boring Number: SB-105			Date Drilled:	9/18/2003	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for labo	oratory analysis.	·
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.5	20 - 115		3" Concrete.
-			(38 - 105)		Gray - dark brown fine sands and silt with gravel.
-					Lower 12": gray clayey silt with gravel.
-					
-					
5	5 - 10	5	(25 - 35)		Gray silty clay to clayey silt; low to medium plasticity.
-			(upper)		
-			160 - 175		
-			(180 - 182)		
-			(lower)		
10	10 - 15	3	(18 - 85)		Saturated.
-					Upper 6": gray clayey silt with gravel.
-					Lower 2': fine to coarse sand and gravel.
-					
-					
15					
-					Boring SB-105 terminated at 15 feet.

Project Na	Project Name:		Project Number:			Location:	
Former Norton/Nashua Site				029.08		Watervliet, New York (Building #58)	
Boring Number: SB-106			Date Drilled:	9/18/2003		Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	l:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes:	Notes: PID values in "()" are headspace No soil or ground-water samples			oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval	<u> </u>	color, texture, structure	
0	0 - 5	4	30 - 50		3" Concret	le.	
-			(35 - 45)		Light brow	n - gray fine sand and silt and 1/8 - 1/2-inch gravel.	
-							
-							
-							
5	5 - 10	2.5	35 - 45		Brown to g	gray clayey silt with gravel (1/4 - 2-inch); moist.	
-					Lower 12"	: brown clayey silt with gravel.	
-							
-							
-							
10	10 - 15	2	1,500 - 1,700		Upper 12"	gray clayey silt with gravel (1/8 - 1/2-inch); wet.	
-					Lower 12"	: saturated; fine to coarse sand with 2 - 3-inch	
-					rock fragm	ents.	
-							
-							
15							
-					Boring SE	8-106 terminated at 15 feet.	

Project Na	me:		Project Number	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York	
Poring Nu	mhom		Data Drilladı		(Dunuing #39)	
SB-107			Date Drineu.	9/19/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):	
	No			None	15.0	
Notes:PID values in "()" are headspaceSoil sample SB-107 (9 - 10) subSoil sample SB-107A (20 - 25)			readings. mitted for laborato s a duplicate samp	ory analysis (VO ble of SB-107 (9	DC, SVOC, TICs, heptane). ) - 10).	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure	
0	0 - 5	3.5	18 - 23		3" Concrete.	
-			(23 - 25)		Brown fine sand and silt with gravel (1/4 - 1-inch).	
-						
-						
-						
5	5 - 10	0.5	20 - 25		Poor recovery.	
-					Brown fine sand and silt with gravel (1/4 - 1-inch).	
-					Large rock fragments present.	
-				SB-107		
-				(9 - 10)		
10	10 - 15	3	19 - 20	(Duplicate)	Gray clayey silt with gravel; wet.	
-			(18 - 20)			
-						
-						
-						
15						
-					Boring SB-107 terminated at 15 feet.	
Project Na	me:		Project Number	r:		Location:
--	--------------------	---------------	--------------------------------	-------------------	-------------------	--
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York (Building #58)
Boring Number: SB-108		Date Drilled:			Logged hv	
		Dute Dimeu.	9/19/2003		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:		Sampling Method:
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>1M</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
No			None		15.0	
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for lab	oratory analysis.		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	10 - 15		3" Concret	te.
-			(20 - 25)		Brick mate	erial present at 2.5 - 3'.
-					Lower 2': I	Dark brown/black cinder material (fine to coarse grained).
-						
-						
5	5 - 10				Refusal at	5'.
-					Boring SE	3-108 terminated at 5 feet (refusal).
-						
-						
-						
10	10 - 15					
-						
-						
-						
-						
15						
-						

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:		Date Drilled:		Logged by:	
SB-109		Duce Dimeur	9/19/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	ll Installed: Casing			l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for labo	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
( <b>reet</b> )	0 - 5	(leet)	(ppm)	Interval	3" Concrete. Refusal at 6 inches.
-					Boring SB-109 terminated at 0.5 feet (refusal).
_					
_					
-	5 10				
5	5 - 10				
-					
-					
-					
-					
10	10 - 15				
-					
-					
-					
-					
15					
-					

Proiect Na	me:		Project Number	:	Location:
Former Norton/Nashua Site			i rojece rumor	029.08	Watervliet, New York (Building #58)
Boring Number: SB-110		Date Drilled:		Logged by:	
			9/19/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	/ Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-110 (8 - 9) subn			readings. iitted for laboratory	/ analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	19 - 20		3" Concrete.
-			(25 - 30)		Brown fine sand and silt with gravel (1/8 - 1/2-inch).
-					
-					
-					
5	5 - 10	4	300 - 500		Upper 12": gray silty clay.
-			1,000 - 1,500		Middle 12": gray fine sand and silt.
-			(9 feet)		Lower 12": gray clayey silt.
-				SB-110	
-				(8 - 9)	
10	10 - 15	2.5	500 - 1,000		Upper 8": gray clayey silt with gravel.
-					Remainder: fine to coarse sand and coarse gravel (1/4 - 1-inch).
-					
-					
-					
15					
-					Boring SB-110 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Former Norton/Nashua Site			i rojecer (unioe)	029.08	Watervliet, New York (Building #58)
Boring Number:		Date Drilled:		Logged by:	
	SB-111			9/19/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-111 (7 - 8) subn			readings. itted for laborator	y analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	4	15 - 20		3" Concrete.
-			(25 - 27)		Brown fine sand and silt with gravel (1/8 - 1-inch).
-					
-					
-					
5	5 - 10	4	15 - 20		Upper 2': fine sand and silt with gravel (1/4 - 1/2-inch).
-			(25 - 30)	SB-111	Middle 9": silty clay with gravel (1/4 - 1/2-inch).
-				(7 - 8)	Lower 12": fine sand and silt.
-					
-					
10	10 - 15	2	20 - 25		Upper 6": gray clayey silt with gravel.
-					Lower 1.5': saturated; fine sand and silt with 1/4 - 1/2-inch gravel.
-					
-					
-					
15					
-					Boring SB-111 terminated at 15 feet.

Project Na	me:		Project Number	r:		Location:	
Fo	rmer Norton/Nashu	a Site	029.08			Watervliet, New York (Building #58)	
Boring Number: SB-112		Date Drilled: 9/19/2003			Logged by: Bryan J. Machella		
Drilling Co	ompany:		Drilling Metho	d:		Sampling Method:	
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
No			None		15.0		
Notes:PID values in "()" are headspaceSoil sample SB-112 (8 - 9) subnSoil sample SB-112A (20 - 25) i			readings. iitted for laborator s a duplicate samp	y analysis (VOC ble of SB-112 (8	C, SVOC, TI - 9).	Cs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2	15 - 22		3" Concret	te.	
-			(19 - 22)		Upper 12"	: brown fine sandy silt.	
-					Lower 12"	: dark brown fine sand and silt with 1/4 - 1-inch gravel.	
-							
-							
5	5 - 10	3	10 - 15		Upper 8": 1	fine sand and silt with gravel.	
-			(40 - 50)		12": dark b	prown clayey silt; soft; septic odor.	
-					6": dark br	own silty clay; soft; medium to high plasticity.	
-				SB-112	Lower 12"	: gray clayey silt.	
-				(8 - 9)			
10	10 - 15	4	10 - 15	(Duplicate)	Gray claye	y silt with gravel; wet.	
-							
-							
-							
-							
15							
-					Boring SB	B-112 terminated at 15 feet.	

Project Name:		Project Numbe	r:	Location:	
Fo	rmer Norton/Nashu	a Site	-	029.08	Watervliet, New York (Building #58)
Boring Nu	mber: SB-113		Date Drilled:	11/24/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	al / Diameter: None	Total Depth (feet): 15.0	
Notes: PID screening not conducted du Soil samples SB-113 (3 - 4) and			e to malfunctionir SB-113 (9 - 10) s	ng PID. ubmitted for lab	boratory analysis (VOC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	NM		3" Concrete.
-					Light brown to black fine sands and silt.
-					Fine to coarse-grained cinder-like material present at 2.5 - 3.5'.
-				SB-113	Lower 12": Brown clayey silt with 1/8 - 1/4" gravel.
-				(3 - 4)	No odors or staining present.
5	5 - 10	4	NM		Brown to gray clayey silt to silty clay with gravel.
-					1 - 2" rock fragments present at 7 - 8.5'.
-					No odors or staining present.
-					
-				SB-113	
10	10 - 15	4	NM	(9 - 10)	Upper 6": brown clayey silt with 1/8 - 1/4" gravel; soft.
-					Middle 18": wet; silts and gravel; loose; 1 - 2" angular fragments.
-					Lower 18": Saturated; gray fine to coarse sand and gravel.
-					No odors or staining present.
-					
15					
-					Boring SB-113 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York (Building #61)
Boring Number: SB-114		Date Drilled:	11/24/2003	Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:
Environ	nental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	II / Diameter: None	Total Depth (feet): 15.0	
Notes: PID screening not conducted du Soil sample SB-114 (8 - 9) subn			e to malfunctionin itted for laborator	g PID. y analysis (VOC	C, SVOC, TICs, heptane).
Depth (foot)	Sample Interval	Recovery (foot)	PID (nnm)	Sample Interval	Soil Classification / Description
0	0 - 5	2	NM		3" Concrete
-	0.5	2			Brown fine sands and silt with gravel (1/8 - 1/4").
-					No odors or staining present.
-					
-					
5	5 - 10	3.5	NM		Brown fine sands and silt with gravel.
-					1 - 2" rock fragments present in lower 18" of sample.
-					Lower 12": wet.
-				SB-114	No odors or staining present.
-				(8 - 9)	
10	10 - 15	3	NM		Upper 12": brown fine sand and silt with gravel.
-					Lower 2': Saturated. Brown coarse sand and coarse gravel.
-					No odors or staining present.
15					
-					Boring SB-114 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #61)
Boring Number:			Date Drilled:		Logged by:
	SB-115			11/24/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	ıl / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID screening not	conducted du	e to malfunctionir	ng PID.	
	Soil sample SB-11	5 (8 - 9) subm	nitted for laborator	y analysis (VO	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	NM		3" Concrete.
-					Upper 18": brown fine sand and silt with gravel.
-					Lower 6": Brick material.
-					No odors or staining present.
-					
5	5 - 10	3	NM		Upper 12": brick/concrete-like material (1 - 2" diameter).
-					Middle 12": Brown fine sand and silt with gravel.
-					Lower 12": Silts to fine to coarse sand and gravel; wet; 1/4 - 1/2"
-				SB-115	angular rock fragments.
-				(8 - 9)	No odors or staining present.
10	10 - 15	3	NM		Saturated.
-					Upper 6": brown to gray fine to coarse sand and gravel.
-					Middle 6": Coarse gravel; 1 - 2" angular rock fragments.
-					Lower 18": gray fine to coarse sand and gravel.
-					No odors or staining present.
15					
-					Boring SB-115 terminated at 15 feet.

Project Name:		Project Numbe	er:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:		Date Drilled:		Logged by:	
	SB-116			11/24/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID screening not conducted du Soil sample SB-116 (8.5 - 9.5) s			e to malfunctionin ubmitted for labo	ng PID. ratory analysis ('	VOC, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	NM		3" Concrete.
-					Brown fine sand and silt; 1/8 - 1" gravel/angular rock fragments.
-					No odors or staining present.
-					
-					
5	5 - 10	3	NM		Brown fine sand and silt; 1/2 - 1" gravel/angular rock fragments.
-					Lower 3": wet; silt to fine to coarse sand and gravel; trace clay at 4'.
-					No odors or staining present.
-				SB-116	
-				(8.5 - 9.5)	
10	10 - 15	3	NM		Saturated.
-					Upper 12": coarse sand and coarse gravel (1/2 - 3/4").
-					Lower 2': gray fine to coarse sand and gravel; slight toluene odor.
-					
-					
15					
-					Boring SB-116 terminated at 15 feet.

Project Na	me:		Project Numbe	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Number:		Date Drilled:		(Building #58)	
Doring i tu	SB-117		Dute Dimeur	11/24/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	al / Diameter: None	Total Depth (feet): 15.0	
Notes:     PID screening not conducted du Soil sample SB-117 (8 - 9) subn			e to malfunctionir nitted for laborator	ng PID. ry analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	NM		3" Concrete.
-					Brown silty fine sand; brick material present at 4'.
-					1/4 - 1/2" pebbles present in lower 10".
-					No odors or staining present.
-					
5	5 - 10	3	NM		Upper 12": brown fine sand and silt with gravel; 1/4 - 1/2" pebbles.
-					Lower 18": brown silty fine sand; wet in lower 12".
-					No odors or staining present.
-				SB-117	
-				(8 - 9)	
10	10 - 15	3	NM		Saturated.
-					Upper 12": brown silty fine sand; increasing coarse sand and
-					gravel content with depth.
-					Lower 14": gray coarse sand and gravel (1/8 - 1/4").
-					No odors or staining present.
15					
-					Boring SB-117 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Nu	mber: SB-118		Date Drilled:	11/24/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	Il / Diameter: None	Total Depth (feet): 15.0	
Notes: PID screening not conducted du Soil sample SB-118 (8.5 - 9.5) s			e to malfunctionin ubmitted for labor	ag PID. ratory analysis (V	/OC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	NM		3" Concrete.
-					Brown to gray fine sand and silt with gravel; black cinder-like
-					material present from 3 to 4'.
-					No odors or staining present.
-					
5	5 - 10	3	NM		Gravelly silty clay; loose; wet in lower 6":
-					No odors or staining present.
-					
-				SB-118	
-				(8.5 - 9.5)	
10	10 - 15	4	NM		Saturated.
-					Brown to gray fine to coarse sand and gravel.
-					Gravelly clayey silt present from 13 to 14'.
-					Lower 12": gray fine to coarse sand and gravel.
-					No odors or staining present.
15					
-					Boring SB-118 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:		Logged by:
	SB-119			11/24/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID screening not conducted du Soil sample SB-119 (8 - 9) subn			e to malfunctionir nitted for laborator	ng PID. Ty analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1	NM		3" Concrete.
-					Fine sand and silt with gravel; poor recovery.
-					No odors or staining present.
-					
-					
5	5 - 10	5	NM		Upper 6": fine sands, silts, and gravel (1/2 - 1")
-					Brown/gray clayey silt; trace gravel.
-					Lower 18": silty fine sand; wet in lower 12".
-				SB-119	No odors or staining present.
-				(8 - 9)	
10	10 - 15	5	NM		Fine sands and silt with gravel (1/8 - 1/2").
-					Wet at 12.5'.
-					No odors or staining present.
-					
-					
15					
-					Boring SB-119 terminated at 15 feet.

Project Na	me:		Project Numbe	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
					(Building #59)
Boring Number: SB-120			Date Drilled:	11/25/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	15.0
Notes:PID values in "()" are headspaceSoil sample SB-120 (9 - 10) subSoil sample SB-120A (20 - 25) it			readings. mitted for laborate s a duplicate samp	ory analysis (VO ple of SB-120 (9	IC, SVOC, TICs, heptane). I - 10).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		3" Concrete.
-			(0.2)		Brown fine sand and silt with gravel (1/8 - 1/2").
-					
-					
-					
5	5 - 10	4	0.0		Upper 12": same as above.
-			(0.0)		Brown silty clay; soft; medium to high plasticity; wet.
-					Lower 6": brown to gray clayey silt.
-					
-				SB-120	
10	10 - 15	4	0.0	(9 - 10)	Wet; gray clayey silt; trace gravel.
-			(0.0)	(Duplicate)	
-					
-					
-					
15					
-					Boring SB-120 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	Site		029.08	Watervliet, New York
Poring Nur	uhar.		Data Drilled:		(Building #61 - by MH-12)
D0filig 1vun	SB-121		Date Drineu.	11/25/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	tions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: Yes (MW-11)			Casing Material	<b>/ Diameter:</b> PVC/2-inch	Total Depth (feet): 22.5
Notes: PID values in "()" are headspace Soil sample SB-121 (8 - 9) subm			readings. itted for laboratory	<sup>7</sup> analysis (VOC,	SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		3" Concrete.
-					Upper 12": brown clayey silt with gravel; loose.
_					4": light tan fine to coarse sand.
_					4": brick material.
_					I ower 10", brown fine cand and silt with grave
5	5 10	25	2.0		Lower 10 . orown time said and sitt with graver.
5	5 - 10	3.3	0.0		Upper 6": loose fine-grained concrete material.
-					2': brown to dark brown fine to medium sand with silt and
-					gravel; loose.
-					Lower 12": brown silts and clay with gravel; brick material present.
-				SB-121	
10	10 - 15	3.5	0.0	(8 - 9)	Upper 6": brown fine to medium sand with silt and gravel; moist.
-					12'1" - 13'1": gray concrete-like material.
-					Lower 2': saturated; gray coarse sand and gravel (1/4 - 1"); trace shale.
_					
15	15 20	5	0.0		0
15	15 - 20	5	0.0		
-					Upper 17": gray coarse sand and gravel (1/8 - 1/4").
-					12": gray clayey silt; stiff; trace gravel.
-					Lower 2': shale material; silt and gravel present.
-					
20					
-					
-					
-					SB-121 terminated at 22.5' (refusal)

Former Norton/Nashua Site 029.08 Water-liet, New York (Building #59)   Boring Number: SB-122 Date Drilled: 11/25/2003 Logged by: Bryan J. Machella   Drilling Company: Environmental Cleanup Solutions. Inc. Drilling Method: Geoprobe <sup>TM</sup> Sampling Method: Macro-Core   Well Installed: Yes (MP-8) Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack) Total Depth (feet): 15.0   Notes: PID values in "()" are headspace readings. Soil sample SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil sample collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).   Depth Sample Interval (feet) Recovery PID   Interval Soil Classification / Description (feet) Soil Classification / Description (feet)   - 0 0 - 5 3 0.0   - 3 0.0 3" Concrete.   - 0 0 - 5 3 0.0   - 0 0.3 0.0 Brown to dark brown fine sand and silt with gravel.   - 0 0.4 SB-122 Upper 18": brown fine sand and silt with gravel; trace clay.   - 0 10 - 15 4 0.0 Saturated.   - 0.0 SB-122 gray silty clay; soft; medium to high plasticity.   - 0 10 - 15 4 0.0 Satur	Project Nai	ne:		Project Numbe	r:		Location:
Boring Number: SB-122     Date Drilled: 11/25/2003     Logged by: Bryan J. Machella       Drilling Company: Environmental Cleanup Solutions. Inc.     Drilling Method: Geoprobe <sup>TM</sup> Sampling Method: Macro-Core       Well Installed: Yes (MP-8)     Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack)     Total Depth (feet): 15.0       Notes:     PID values in "()" are headspace readings. Soil sample SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).     Soil Classification / Description color, texture, structure       Depth     Sample Interval     Recovery     PID     Sample     Soil Classification / Description color, texture, structure       0     0 - 5     3     0.0     3" Concrete.     Brown to dark brown fine sand and silt with gravel.       -     (0.0)     Brick material present from 3 to 3.5" (1/4 - 1/2").     Brick material present from 3 to 3.5" (1/4 - 1/2").       -     SB-122     (8.5 - 9.5)     Saturated.     Upper 18": brown fine sand and silt with gravel; trace clay.       -     SB-122     Saturated.     Saturated.     Upper 2: gray fine sand and silt.       -     SB-122     Saturated.     Upper 2: gray fine sand and coarse gravel.	For	mer Norton/Nashua	a Site		029.08		Watervliet, New York
Dering Number: SB-122 Drilling Method: Bryan J. Machella   Drilling Company: Environmental Cleanup Solutions. Inc. Drilling Method: Geoprobe <sup>DM</sup> Sampling Method: Macro-Core   Well Installed: Yes (MP-8) Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack) Total Depth (feet): 15.0 Total Depth (feet): 15.0   Notes: PID values in '0' are headspace readings. Soil sample SB-122 (8.5 - 9.5) Soil Classification / Description color, texture, structure   0 0 - 5 3 0.0 3" Concrete.   - (0.0) Brown to dark brown fine sand and silt with gravel.   - 0 3 0.0   - 0 3 0.0   - 0 0.5 3   - 0 3 0.0   - 0 0.5 3   - 0 0.5 3   - 0 0.5 3   - 0 0.0 3" Concrete.   - 0 0.0 Brick material present from 3 to 3.5" (1/4 - 1/2").   - 0 3 0.0 Upper 18": brown fine sand and silt with gravel; trace clay.   - 0 10.15 4 0.0 Saturated.   - 0 0.0 <t< th=""><th colspan="3">Desta Nuclear</th><th>Data Dallada</th><th></th><th></th><th>(Building #59)</th></t<>	Desta Nuclear			Data Dallada			(Building #59)
Drilling Company: Environmental Cleanup Solutions. Inc. Drilling Method: Geoprobe <sup>TM</sup> Sampling Method: Macro-Core   Well Installed: Yes (MP-8) Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack) Total Depth (feet): 15.0   Notes: PID values in "()" are headspace readings. Soil samples SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples Collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).   Depth Sample Interval (feet) Recovery PID Sample   0 0 - 5 3 0.0 3" Concrete.   - . . . Brown to dark brown fine sand and silt with gravel.   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . <td< td=""><td>Boring Nur</td><td>nber: SB-122</td><td></td><td>Date Drilled:</td><td>11/25/2003</td><td></td><td>Logged by: Brvan I. Machella</td></td<>	Boring Nur	nber: SB-122		Date Drilled:	11/25/2003		Logged by: Brvan I. Machella
Drilling Company: Environmental Cleanup Solutions. Inc. Drilling Method: Geoprobe <sup>TM</sup> Sampling Method: Macro-Core   Well Installed: Yes (MP-8) Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack) Total Depth (feet): 15.0   Notes: PID values in "()" are headspace readings. Soil samples SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).   Depth Sample Interval (feet) Recovery PID Sample Interval Soil Classification / Description color, texture, structure   0 0 - 5 3 0.0 3" Concrete.   - - 6(0.0) Brown to dark brown fine sand and silt with gravel. Brick material present from 3 to 3.5' (1/4 - 1/2").   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - - - - -   - -		55 122			11/20/2000		Digui di Machena
Environmental Cleanup Solutions. Inc.   Geoprobe <sup>TM</sup> Macro-Core     Well Installed: Yes (MP-8)   Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack)   Total Depth (feet): 15.0     Notes:   PID values in "()" are headspace readings. Soil sample SB-122 (8,5 - 9,5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil sample collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).     Depth   Sample Interval (feet)   Recovery   PID   Sample Interval   Soil Classification / Description color, texture, structure     0   0 - 5   3   0.0   3" Concrete.     -   .   .   .   Brown to dark brown fine sand and silt with gravel.     -   .   .   .   .   Brick material present from 3 to 3,5" (1/4 - 1/2").     -   .   .   .   .   .   Lower 18": gray silty clay; soft; medium to high plasticity.     -   .   .   .   .   .   .   Lower 2: coarse sand and silt.     -   .   .   .   .   .   .   .   .     -   .   .   .   .   .   .   .   .   .     -   . <th>Drilling Co</th> <th>mpany:</th> <th></th> <th>Drilling Metho</th> <th>d:</th> <th></th> <th>Sampling Method:</th>	Drilling Co	mpany:		Drilling Metho	d:		Sampling Method:
Well Installed: Yes (MP-8) Casing Material / Diameter: PVC - 1-1/2-inch (Pre-Pack) Total Depth (feet): 15.0   Notes: PID values in "()" are headspace readings. Soil sample SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).   Depth Sample Interval (feet) Recovery (feet) PID (feet) Sample (feet) S	Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core
Yes (MP-8) PVC - 1-1/2-inch (Pre-Pack) 15.0   Notes: PID values in "()" are headspace readings. Soil sample SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet). Soil Classification / Description color, texture, structure   Depth Sample Interval (feet) Recovery (feet) PID (feet) Sample (feet) Soil Classification / Description color, texture, structure   0 0 - 5 3 0.0 3" Concrete.   - . . Brown to dark brown fine sand and silt with gravel.   - . . Brick material present from 3 to 3.5' (1/4 - 1/2").   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   - . . . .   -	Well Installed:			Casing Materia	nl / Diameter:		Total Depth (feet):
Notes:     PID values in "()" are headspace readings. Soil sample SB-122 (8.5 - 9.5) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).       Depth (feet)     Sample Interval (feet)     Recovery (feet)     PID (ppm)     Sample Interval     Soil Classification / Description color, texture, structure       0     0 - 5     3     0.0     3" Concrete.       -     -     -     Brown to dark brown fine sand and silt with gravel.       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -	Yes (MP-8)			PVC - 1	-1/2-inch (Pre-Pa	ack)	15.0
For any of a spin of a spin of any of a spin of a spi	Notes:	PID values in "()" a	are headspace	readings			
Soil samples collected to a depth of 15 feet. Point driven to bedrock refusal (23 feet).     Depth (feet)   Sample Interval (feet)   Recovery (feet)   PID (ppm)   Sample Interval   Soil Classification / Description color, texture, structure     0   0 - 5   3   0.0   3" Concrete.     -   0   0.1   3" Concrete.     -   0   0.0   Brown to dark brown fine sand and silt with gravel.     -   0   0.0   Brick material present from 3 to 3.5" (1/4 - 1/2").     -   0   0.0   0.0   Upper 18": brown fine sand and silt with gravel; trace clay.     -   0   0.0   SB-122   Lower 18": gray silty clay; soft; medium to high plasticity.     -   0   10 - 15   4   0.0   Saturated.     -   0   0.0   Saturated.   Upper 2: gray fine sand and silt.     -   0   0.0   Saturated.   Upper 2: coarse sand and coarse gravel.	i totes.	Soil sample SB-122	2 (8.5 - 9.5) s	ubmitted for labor	atory analysis (V	OC, SVOC,	TICs, heptane).
Depth (feet)     Sample Interval (feet)     Recovery (feet)     PID (ppm)     Sample Interval     Soil Classification / Description color, texture, structure       0     0 - 5     3     0.0     3" Concrete.       -     1     1000000000000000000000000000000000000		Soil samples collec	ted to a depth	of 15 feet. Point	driven to bedroc	k refusal (23	feet).
OpportSampleSampleSample(feet)(feet)(ppm)Intervalcolor, texture, structure00 - 530.03" Concrete	Donth	Sample Interval	Dogovory	DID	Samula		Soil Classification / Description
0     0 - 5     3     0.0     3" Concrete.       -     .     .     .     Brown to dark brown fine sand and silt with gravel.       -     .     .     .     .     Brown to dark brown fine sand and silt with gravel.       -     .     .     .     .     .     .       -     .     .     .     .     .     .       -     .     .     .     .     .     .       -     .     .     .     .     .     .       -     .     .     .     .     .     .     .       -     .     .     .     .     .     .     .     .       -     .     .     .     .     .     .     .     .     .     .       -     .     .     .     .     .     .     .     .     .     .     .     .     .     .     .     .     .     .	(feet)	(feet)	(feet)	(ppm)	Sample Interval		color, texture, structure
-   -   -   Brown to dark brown fine sand and silt with gravel.     -   -   Brick material present from 3 to 3.5' (1/4 - 1/2").     -   -   -     5   5 - 10   3   0.0     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     -   -   -     10   10 - 15   4   0.0     -   -   -   -     -   -   -   -     -   -   -   -     -   -   -   -     -   -   -   -     -	0	0 - 5	3	0.0		3" Concrete	a
-   (0.0)   Brown to dark brown fine sand and silt with gravel.     -   Brick material present from 3 to 3.5' (1/4 - 1/2").     -   Upper 18": brown fine sand and silt with gravel; trace clay.     -   (0.0)     -   (0.0)     -   (0.0)     -   (0.0)     -   (0.0)     -   (0.0)     -   (0.0)     -   (0.0)     -   (8.5 - 9.5)     10   10 - 15   4     -   (8.5 - 9.5)     -   Saturated.     -   Upper 2': gray fine sand and silt.     -   Lower 2': coarse sand and coarse gravel.	0	0.0	U	6.6			
-   Brick material present from 3 to 3.5' (1/4 - 1/2").     -   Brick material present from 3 to 3.5' (1/4 - 1/2").     -   Description     5   5 - 10     5   5 - 10     6   0.0     -   Upper 18": brown fine sand and silt with gravel; trace clay.     -   0.0     -   0.0     -   SB-122     -   (8.5 - 9.5)     10   10 - 15     4   0.0     Saturated.     -   Upper 2: gray fine sand and silt.     -   Lower 2: coarse sand and coarse gravel.	-			(0.0) Brown to d		Brown to d	ark brown fine sand and silt with gravel.
-   -	-					Brick mater	rial present from 3 to 3.5' (1/4 - 1/2").
-   -	-						
5   5 - 10   3   0.0   Upper 18": brown fine sand and silt with gravel; trace clay.     -   .   .   .   .     -   .   .   .   .     -   .   .   .   .     -   .   .   .   .     -   .   .   .   .     -   .   .   .   .     10   10 - 15   4   0.0   .   .     .   .   .   .   .   .     .   .   .   .   .   .     .   .   .   .   .   .     .   .   .   .   .   .     .   .   .   .   .   .     .   .   .   .   .   .   .     .   .   .   .   .   .   .   .     .   .   .   .   .   .   .   .     .   .   . <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
5   5 - 10   3   0.0   Upper 18": brown fine sand and silt with gravel; trace clay.     -   (0.0   (0.0   Lower 18": gray silty clay; soft; medium to high plasticity.     -   SB-122   (8.5 - 9.5)   Lower 18": gray silty clay; soft; medium to high plasticity.     10   10 - 15   4   0.0   Saturated.     -   Lower 2': gray fine sand and silt.   Lower 2': coarse sand and coarse gravel.	_						
-(0.0Lower 18": gray silty clay; soft; medium to high plasticitySB-122SB-122-(8.5 - 9.5)(8.5 - 9.5)1010 - 1540.0SaturatedLower 2': gray fine sand and silt.Lower 2': coarse sand and coarse gravel.	5	5 - 10	3	0.0		Upper 18":	brown fine sand and silt with gravel; trace clay.
-   -   SB-122     -   -   (8.5 - 9.5)     10   10 - 15   4   0.0     -   -   Upper 2': gray fine sand and silt.     -   -   Lower 2': coarse sand and coarse gravel.	-			(0.0		Lower 18":	gray silty clay; soft; medium to high plasticity.
-   SB-122     -   (8.5 - 9.5)     10   10 - 15   4   0.0     -   Upper 2': gray fine sand and silt.     -   Lower 2': coarse sand and coarse gravel.	-						
- - - (8.5 - 9.5)   10 10 - 15 4 0.0 Saturated.   - - Upper 2': gray fine sand and silt. Lower 2': coarse sand and coarse gravel.					SB 122		
-   (8.5 - 9.5)     10   10 - 15   4   0.0   Saturated.     -   Upper 2': gray fine sand and silt.   Lower 2': coarse sand and coarse gravel.     -   -   -   -	-				3D-122		
10   10 - 15   4   0.0   Saturated.     -   -   Upper 2': gray fine sand and silt.   Upper 2': coarse sand and coarse gravel.     -   -   -   -   -	-				(8.5 - 9.5)		
- Upper 2': gray fine sand and silt.   - Lower 2': coarse sand and coarse gravel.	10	10 - 15	4	0.0		Saturated.	
- Lower 2': coarse sand and coarse gravel.	-					Upper 2': gi	ray fine sand and silt.
-						Lower 2': o	carse sand and coarse gravel
	-					Lower 2. C	oarse sand and coarse graver.
	-						
	-						
15	15						
Boring SB-122 terminated at 15 feet	_					Boring SB	-122 terminated at 15 feet

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Former Solvent Lines - Building #61)
Boring Number:			Date Drilled:		Logged by:
	SB-123			11/26/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace Soil sample SB-123 (8.5 - 9.5) s			readings. ubmitted for labora	atory analysis (V	/OC, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.9 - 1.0		3" Concrete.
-			(0.9 - 1.1)		Light brown to gray fine sand and silt with gravel.
-					Black fine to coarse grained cinder-like material in lower 8".
-					
-					
5	5 - 10	3	40 - 200		Upper 3": black fine to coarse grained cinder-like material.
-			>9,999		3": gray fine to coarse grained concrete-like material.
-			(lower 12")		Lower 2': brown to gray silty clay with gravel; coarser grained
-					with depth.
-				SB-123	Strong toluene odor in lower 12" of sample.
10	10 - 15	2	>9,999	(8.5 - 9.5)	Saturated.
-					Fine to coarse sand and gravel (1/8 - 1/4"); trace silt.
-					Strong toluene odor.
-					
-					
15					
-					Boring SB-123 terminated at 15 feet.

Project Na	mo·		Project Number	r.	Location
Fo	rmer Norton/Nashu	a Site	i roject i unibel	029.08	Watervliet New York
10		a one		029.00	(Former Solvent Lines - Building #61)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-124			Dute Dimeut	11/26/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace Soil samples SB-124 (4 - 5) and			readings. SB-124 (9 - 10) s	ubmitted for lab	ooratory analysis (grain size).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.5	10 - 17		3" Concrete.
-					Light gray to dark brown fine sand and silt with gravel.
-					Lower 6": brownish gray silt; trace cinder-like material.
-					
-				SB-124	
5	5 - 10	4	1 - 3	(4 - 5)	Upper 3": brown silt.
-			(1.5 - 2)		Lower 3.5': brown to gray clayey silt to silty clay; trace gravel.
-					
-					
-				SB-124	
10	10 - 15	1	90 - 200	(9 - 10)	Poor recovery.
-					Toluene odor present.
-					
-					
-					
15					
-					Boring SB-124 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site			0	029.08	Watervliet, New York (Former Solvent Lines - Building #61)
Boring Number:			Date Drilled:		Logged by:
SB-125			11/26/2003	Bryan J. Machella	
Drilling Co	mpany:		Drilling Method:		Sampling Method:
Environmental Cleanup Solutions. Inc. Geoprobe <sup>TM</sup>			Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
Soil sample SB-125 (8.5 - 9.5) s Soil sample SB-125 (14 - 15) su		5 (8.5 - 9.5) si 5 (14 - 15) sul	ubmitted for labor bmitted for labora	atory analysis (V tory analysis (gra	VOC, SVOC, TICs, heptane). rain size).
Depth	Depth Sample Interval Recovery PID Sample				Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	5 - 11		3" Concrete.
-			(10 - 11)		Light gray to dark brown fine sand and silt with gravel.
-					Trace brick material at 4'.
-					
-					
5	5 - 10	3.5	2 - 9		Upper 6": dark brown fine sand and silt; trace cinder material.
-			(2.5 - 3.0)		Lower 3': brown to gray clayey silt to silty clay with gravel.
-					Wet in lower 3".
-					
-				SB-125	
10	10 - 15	3	>9,999	(8.5 - 9.5)	Saturated. Strong toluene odor.
-					Gray fine to coarse sand and gravel.
-					
-					
-					
15				SB-125	
-				(14 - 15)	Boring SB-125 terminated at 15 feet.

Project Name:		Project Number	r•	Location	
For	rmer Norton/Nashu	a Site	i roject rumber	029.08	Watervliet, New York
					(Former Solvent Lines - Building #61)
Boring Nu	nber:		Date Drilled:		Logged by:
SB-126				11/26/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()"	are headspace	readings.		
Soil sample SB-126 (9 - 10) sub Soil samples SB-126 (4 - 5), SB			mitted for laborate 126 (8 - 9), and S	ory analysis (VO 3B-126 (14 - 15)	C, SVOC, TICs, heptane). submitted for laboratory analysis (grain size).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3.5	3 - 4		3" Concrete.
-			(0.5 - 1)		Brown fine sand and silt; trace gravel.
-					Brick material present at 2.5'.
-					
-				SB-126	
5	5 - 10	5	80 - 5,000	(4 - 5)	Upper 6": brown fine sand and silt; trace gravel.
-			(>9,999)		3": fine to coarse grained concrete-like material.
-					8": dark brown fine sand and silt.
-				SB-126	6": fine to coarse sand and gravel $(1/4 - 1/2")$ .
-				(8 - 9) and	Lower 2.5': brown to gray clayey silt; trace 1/2 - 1" pebbles.
10	10 - 15	3	>9,999	(9 - 10)	Saturated.
-					Upper 12": gray clayey silt; trace gravel.
-					Lower 2': fine to coarse sand and gravel.
-					
-					
15				SB-126	
-				(14 - 15)	Boring SB-126 terminated at 15 feet.

Project Na	me:		Project Number			Location:	
For	rmer Norton/Nashu	a Site		029.08		Watervliet, New York	
						(Building #58)	
Boring Number:			Date Drilled:			Logged by:	
	SB-127		11/26/2003			Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
Yes (MP-9)		PVC - 1-	-1/2-inch (Pre-P	ack)	15.0		
Notes:	PID values in "()"	are headspace	readings.				
	Water sample SB-1	127 submitted	for laboratory ana	ılysis (VOC, SV	OC, TICs,	heptane).	
Depth	Sample Interval	Recoverv	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2	1.5 - 1.7		3" Concre	te.	
-			(1.3 - 1.6)		Brown fin	te sand and silt with gravel (1/4 - 1/2").	
-							
-							
-							
5	5 - 10	3	1 - 2		Brown fin	te to coarse sand and silt; trace clay; loose.	
-			(4 - 4.5)		Lower 3":	: 1/8 - 1/4" gravel; wet.	
-							
-							
-							
10	10 - 15	2.5	4000 - 5000		Saturated.		
-			(top)		Fine to co	arse sand and gravel.	
-			5 - 10				
-			(bottom)				
-							
15							
-					Boring Sl	B-127 terminated at 15 feet.	

Project Na	me•		Project Number	r•	I	Location:
For	rmer Norton/Nashu	a Site	I toject i tunis e	029.08	ľ	Watervliet. New York
						(Railroad right-of-way - Southern Tracks)
Boring Number:			Date Drilled:		I	Logged by:
SB-128			12/1/2003			Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	S	Sampling Method:
Environi	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	]	Fotal Depth (feet):
No				None		15.0
Notes: PID values in "()" are headspace Soil sample SB-128 (10.5 - 11.5			readings. ) submitted for lab	ooratory analysis	(VOC, SVO	C, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	2	0.5 - 1.0		3" Concrete	
-			(0.9 - 1.3)		Brown to gr	ay silty clay; trace gravel; moist; soft; medium to
-					high plastici	ty.
-						
-						
5	5 - 10	3.5	1 - 3		Upper 2': bro	own to gray silty clay; trace gravel; soft; medium to
-			(0.5 - 0.7)		high plastici	ty; moist.
-					Lower 1.5':	saturated; gray fine to medium sand.
-						
-						
10	10 - 15	5	30 - 85	SB-128	Saturated.	
-			(200 - 300)	(10.5 - 11.5)	Gray fine to	coarse sand and gravel.
-						
-						
-						
15						
-					Boring SB-	128 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Railroad right-of-way - Southern Tracks)
Boring Number:			Date Drilled:		Logged by:
	SB-129			12/1/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc. Geoprobe <sup>TM</sup> Macro-C				Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	Notes: PID values in "()" are headspace Soil sample SB-129 (8 - 9) subm		readings. hitted for laboratory	y analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2	0 - 0.1		Brown silt to fine to medium sand and gravel (1/8 - 1/4").
-			(30 - 33)		Lower 6": brown silty clay; soft; medium to high plasticity.
-					Moist to wet.
-					
-					
5	5 - 10	3	200 - >9,999		Saturated; strong toluene odor.
-					Upper 10": gray silty clay; trace coarse sand and gravel.
-					Lower 2': fray fine to medium sand.
-				SB-129	PID increasing with depth.
-				(8 - 9)	
10	10 - 15	3	100 - >1,000		Saturated.
-					Fine to medium sand and gravel.
-					PID decreasing with depth.
-					
-					
15					
-					Boring SB-129 terminated at 15 feet.

Project Na	me:		Project Number	:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
					(Railroad right-of-way - Southern Tracks)
Boring Number: SB-130			Date Drilled:	12/1/2003	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>™</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" Soil sample SB-13	are headspace 0 (4 - 5) subn	readings. hitted for laborator	y analysis (VOO	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3.5	1 - 3		Upper 1.5': brown fine sand and gravel; moist to wet.
-			(10 - 12)		Lower 2': brown to gray silty clay; trace gravel; soft; medium
-					to high plasticity.
-					
-				SB-130	
5	5 - 10	3.5	1 - 3	(4 - 5)	Upper 2': gray silty clay; soft; medium plasticity; trace gravel.
-			(0.2 - 0.3)		Lower 1.5': fine to coarse sand and gravel; trace clay and shale
-					material (1/2 - 1").
-					
-					
10	10 - 15	3	0 - 0.5		Saturated.
-			(0.5 - 1)		Fine to coarse sand and coarse gravel.
-					
-					
-					
15					
-					Boring SB-130 terminated at 15 feet.

Project Na	me:		Proiect Numbe	r:	I	location:
Former Norton/Nashua Site			029.08			Watervliet, New York (Railroad right-of-way - Southern Tracks)
Boring Number:			Date Drilled:		L	Logged by:
	SB-131			12/1/2003		Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	S	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	T	Fotal Depth (feet):
No				None		15.0
Notes:	Notes: PID values in "()" are headspace			ratory analysis (V	VOC. SVOC. 7	TICs, heptane).
	Son Sample SD 10	1 (110 010) 5				1.00, (optimite).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	1	0.0		Poor recover	ry.
-			(0.1)		Brown claye	ey silt; trace gravel; moist.
-						
-						
-				SB-131		
5	5 - 10	3	0.0	(4.5 - 5.5)	Same as abo	we. Increased gravel content in lower 6" of sample
-			(0.0)		(1/4 - 1/2").	
-						
-						
-						
10	10 - 15	2.5	1.5 - 2.1		Saturated.	
-			(2 - 2.5)		Coarse sand	and coarse gravel (1/8 - 1/2").
-						
-						
-						
15						
-					Boring SB-1	131 terminated at 15 feet.

Project Na	me:		Project Number	••	Location:
For	rmer Norton/Nashu	a Site	r roject runiser	029.08	Watervliet, New York
					(Railroad right-of-way - Southern Tracks)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-132			12/1/2003	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" No soil or ground-	are headspace water samples	readings. submitted for labo	oratory analysis.	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	4	0 - 0.1		Brown silty clay; medium to high plasticity; soft.
-			(0 - 0.1)		
-					
-					
-					
5	5 - 10	5	50 - 4,500		Upper 3': brown to gray silty clay.
-					Lower 2': gray fine to medium sand and silt.
-					PID increasing with depth.
-					
-					
10	10 - 15	5	4000 - 5000		Saturated.
-			(top)		Fine to medium sand and silt.
-			50 - 80		PID decreasing with depth.
-			(bottom)		
-					
15					
-					Boring SB-132 terminated at 15 feet.

Project Na	me:		Project Number	•	Location:
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Railroad right-of-way - Northern Tracks)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-133				12/1/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	:	Sampling Method:
Environmental Cleanup Solutions. Inc. Geoprobe <sup>TM</sup>			Macro-Core		
Well Instal	led:		Casing Material	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()" a Water sample SB-1	are headspace	readings. for laboratory ana	lysis (VOC, SV	OC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2	0 - 1		Fine to medium sand and silt; trace gravel (1/8 - 1/4"); moist.
-			(0.2)		1 - 2" angular rock fragments at 4'.
-					
-					
-					
5	5 - 10	3	1.5 - 2.5		Brown fine to medium sand and silt.
-			(0.5 - 1)		Lower 12" moist.
-					
-					
-					
10	10 - 15	2	200 - 688		Saturated.
-			(1,000 - 1,300)		Upper 12": fine to coarse sand and gravel.
-					Lower 12": fine to medium sand and gravel.
-					
-					
15					
-					Boring SB-133 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Railroad right-of-way - Northern Tracks)
Boring Nu	mher		Date Drilled ·		Logged by:
SB-134			Dute Dimeu	12/2/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes: PID values in "()" are headspace Soil sample SB-134 (7 - 8) subm			readings. hitted for laborator	y analysis (VOO	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	(0.0 - 1.0)		Dark brown to brown silt to fine to medium sand and gravel
-					(1/4 - 1/2"); wet.
-					
-					
-					
5	5 - 10	4.5	(2.5 - 3.0)		Upper 6": brown fine sand and silt.
-					Middle 2.5': brown silty clay with gravel (1/4 - 1/2").
-				SB-134	Lower 1.5': brown silty clay with gravel (1/4 - 1/2").
-				(7 - 8)	
-					
10	10 - 15	4	1,00 - 4,000		Saturated.
-			(upper)		Upper 12": gray fine sand and silt.
-			80 - 200		Lower 3': gray fine to coarse sand and gravel.
-			(lower)		Toluene odor present.
-					
15					
-					Boring SB-134 terminated at 15 feet.

Project Name:		Project Number:			Location:	
Fo	rmer Norton/Nashu	a Site		029.08		Watervliet, New York
						(Railroad right-of-way - Northern Tracks)
Boring Number:			Date Drilled:	12/2/2003		Logged by: Bryan I. Machella
	50 155			12/2/2005		Digan 5. Machena
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
Yes (MP-5)			PVC - 1-	-1/2-inch (Pre-Pa	ack)	15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-13	5 (4 - 5) subm	itted for laborator	y analysis (VOC	C, SVOC, TI	Cs, heptane).
	Water sample SB-	135 submitted	for laboratory ana	alysis (VOC, SV driven to bedroc	OC, TICs, h k refusal (21	leptane).
Depth	Sample Interval	Recovery	PID	Sample	K Terusar (2)	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	15 - 40		Upper 1.5'	: dark brown to brown fine sand and silt; trace gravel;
-			(0.9 - 3)		moist.	
-					Middle 6":	brown clayey silt.
-					Lower 6":	brown fine sand and silt.
-				SB-135	PID increa	sing with depth.
5	5 - 10	3	10 - 40	(4 - 5)	Upper 6": I	brown clayey silt.
-			(upper)		Middle 12'	": brown fine sand and silt; trace gravel.
-			1 - 3		Lower 2': t	prown fine to coarse sand and gravel (1/4 - 1/4").
-			(lower)			
-						
10	10 - 15	4	1.5 - 7		Saturated.	
-			(1.5 - 2)		Brown to g	gray fine to coarse sand and gravel.
-					Increased g	gravel content in lower 2.5' (1/8 - 1/2").
-						
-						
15						
-					Boring SB	8-135 terminated at 15 feet.

Project Name:		Project Number:			Location:	
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York
Boring Nu			Data Drilladi			(Railroad right-of-way - Northern Tracks)
Boring ivu	SB-136		Date Drineu:	12/2/2003		Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:
Environ	mental Cleanup Solu	itions. Inc.	(	∃eoprobe <sup>™</sup>		Macro-Core
Well Installed: Yes (MP-7)			Casing Materia PVC - 1-	<b>I / Diameter:</b> ·1/2-inch (Pre-Pa	ack)	Total Depth (feet): 15.0
Notes:	PID values in "()" a Soil sample SB-136 Water sample SB-1 SB-136A is a dupli Soil samples collec	are headspace 6 (8 - 9) subm 136 submitted icate of water s ted to a depth	readings. itted for laboratory for laboratory ana sample SB-136. of 15 feet. Point	y analysis (VOC dysis (VOC, TIC driven to bedroc	, SVOC, TIC Ss and heptar k refusal (23	Cs, heptane). ne). .5 feet).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	<u> </u>	color, texture, structure
0	0 - 5	2.5	0.5 - 0.8		Fine to coar	rse sand and gravel; trace silt.
-					Lower 6": c	clayey silt; trace gravel.
-						
-						
-						
5	5 - 10	2	0.5 - 1.1		Brown fine	to coarse sand and gravel; wet.
-						
-						
-						
-						
10	10 - 15	1	0.5 - 1		Poor recove	ery.
-			(0.8 - 0.9)		Fine to coar	rse sand and gravel $(1/2 - 1")$ .
-						
-						
-						
15						
-					Boring SB	-136 terminated at 15 feet.

Project Name:		Project Number:			Location:	
Fo	rmer Norton/Nashua	a Site	029.08			Watervliet, New York (Railroad right-of-way - Northern Tracks)
Boring Number:			Date Drilled:			Logged by:
SB-137			12/3/2003		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:		Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
	Yes (MP-6)		PVC - 1-	-1/2-inch (Pre-P	ack)	15.0
Notes:	Monitoring well in Soil samples collec	stalled in bori ted to a depth	II ing; soil samples not collected. a of 15 feet. Point driven to bedrock refusal (			2 feet).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval		Soil Classification / Description color, texture, structure
0	0 - 5				No soil san	nples collected during well installation.
-						
-						
-						
-						
5	5 - 10					
-						
-						
-						
-						
10	10 - 15					
-						
_						
15						
15						
-					Boring SB	3-137 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York
	-				(Adjacent to MH-1 (SAN))
SB-138			Date Drilled:	12/3/2003	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
Yes (MW-13)			]	PVC/2-inch	15.0
Notes: PID values in "()" are headspace Soil samples SB-138 (4 - 5) and Soil sample SB-138 (8.5 - 8.8) s			readings. SB-138 (7.7 - 8.5 abmitted for labor	) submitted for la atory analysis (S	aboratory analysis (VOC, SVOC, TICs, heptane). VOC and TICs).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.1 - 0.2		Asphalt.
-			(0.3 - 0.4)		Brown fine sand and silt with gravel and
-					1/8 - 1/2" rock fragments; moist; trace clay.
-					4 - 4.5': silty clay; trace gravel.
-				SB-138	
5	5 - 10	3	40 - 80	(4 - 5)	Upper 15": brown to gray silty clay with gravel; soft.
-			(above concrete)		Concrete bedding material from 8'9" to 9'3".
-			50 - 60	SB-138	Wood material (slightly elevated PID) present at 8'6" to 8'9".
-			(wood material)	(7.7 - 8.5) and	Lower 6": saturated; gray fine to coarse sand and gravel.
-				(8.5 - 8.8)	
10	10 - 15	5	0.2 - 0.5		Saturated.
-			(0.1 - 0.2)		Upper 12": silt and clay with gravel; soft.
-					Lower 18": silt and gravel (1/4 - 1/2").
-					
-					
15					
-					Boring SB-138 terminated at 15 feet (refusal).

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	Site	-	029.08	Watervliet, New York
Poring Nur	nhore		Data Drilladı		(Adjacent to MH-5)
SB-139			Date Dimeu.	12/4/2003	Bryan J. Machella
Drilling Co	mpany:	tions Inc	Drilling Method	l: Coorento <sup>TM</sup>	Sampling Method:
Elivitoli	mental Cleanup Solu	mons. mc.		Geoprobe	Macro-Core
Well Install	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	Yes (MW-12)		PVC/1-	1/4-inch (pre-pa	ck) 21.0
Notes:	PID values in "()" a	ire headspace	readings.		
	Soil sample SB-139	9 (4 - 5) subm	itted for laboratory	y analysis (VOC	, SVOC, TICs, heptane).
	SB-139A is a dupli	cate sample of	f SB-139 (4 - 5).		
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	0 - 0.8		Asphalt.
-			(0.2)		Brown fine sand and silt with gravel; moist.
-					
-					
_				SB-139	
5	5 - 10	2	0 - 0 1	(4 - 5)	Brown fine to coarse sand and gravel: wet
5	5 - 10	2	0-0.1	(4 - 5)	blown mie to coalse said and gravel, wet.
-			(0 - 0.1)	(Duplicate)	
-					
-					
-					
10	10 - 15	4	0 - 0.1		Upper 12": brown fine to coarse sand and gravel.
-			(0 - 0.1)		13": brown to gray clayey silt; stiff to soft.
-					6": gray silty clay; soft.
-					Lower 6": fine to coarse sand and gravel. Shale material (1/2 - 1").
_					
15	15 20				No Descuerry
15	15 - 20				No Recovery.
-					
-					
-					
-					
20					
-					
-					SB-139 terminated at 21 feet (refusal).

Project Name:		Project Number	r:		Location:	
Fo	rmer Norton/Nashu	a Site	029.08			Watervliet, New York (Proximal to MH6)
Boring Number:			Date Drilled:			Logged by:
SB-140				12/4/2003		Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
Yes			]	PVC/2-inch		15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-14	0 (6 - 8) subm	itted for laborator	y analysis (VOC	, SVOC, TI	Cs, heptane).
	MS and MSD QA	QC samples a	also collected from SB-140 (6 - 8).			) 5 feet)
Denth	Sample Interval	Recovery	PID	Sample	k ielusai (15	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	2	0.2 - 0.3		Brown fine	e sand and silt with gravel.
-			(0.1 - 0.2)		Wet from 3	3'4" to 3'10".
-					1/2 - 1" roc	ck fragments present from 4' - 4'3".
-						
-						
5	5 - 10	4	0.1 - 0.3		Brown fine	e sand and silt with gravel (1/4 - 1/2").
-			(0.1 - 0.30)	SB-140	Increased s	ilt content and trace clay in lower 18".
-				(6 - 8)		
-				MS/MSD		
-						
10	10 - 15	5	0.2 - 0.4		Upper 6": ł	prown fine sand and silt; trace clay.
-			(0.3 - 0.4)		Lower 4.5	brown to gray fine sand and silt with gravel.
-						
-						
-						
15						
-					Boring SB	-140 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York (East of Former Tank Farm)
Boring Number:			Date Drilled:		Logged by:
SB-141				12/4/2003	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	l:	Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
Yes (MW-15)			F	PVC/4-inch	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-14 Soil samples collec	1 (14 - 15) sul ted to a depth	bmitted for laborat of 15 feet. Point of	ory analysis (VO	OC, SVOC, TICs, heptane). ck refusal (23 feet).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1	1.8 - 2.1		Poor recovery.
-			(2.9)		Brown fine sand and silt with gravel.
-					Brick and cinder material in lower 6".
-					
-					
5	5 - 10	1	7 - 9		Poor recovery.
-			(50 - 55)		Clayey silt; wet.
-			1200 - 1300		
-			(bottom)		
-					
10	10 - 15	5	20 - 70		Upper 3': gray fine to coarse sand and gravel.
-					Lower 2': gray clayey silt with gravel.
-					
-					
-				SB-141	
15				(14 - 15)	
-					Boring SB-141 terminated at 15 feet.

Project Name:		Project Number:			Location:	
For	rmer Norton/Nashu	a Site		029.08		Watervliet, New York
						(Former Tank Farm)
Boring Nu	nber:		Date Drilled:		]	Logged by:
SB-142			12/4/2003			Bryan J. Machella
Drilling Co	mpany:		Drilling Methoo	d:	;	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>™</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	,	Total Depth (feet):
Yes (MW-14)			]	PVC/4-inch		15.0
Notes:	PID values in "()"	are headspace	readings.			
	Soil sample SB-14	2 (10 - 12) su	bmitted for miscel	laneous parame	ters (physical	testing).
	Soil samples collec	ted to a depth	of 15 feet. Point	driven to bedroc	ck refusal (20	.5 leet).
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	0.4 - 5		Brown fine	sand and silt with gravel (1/8 - 1/4"); wet at 3.5'.
-			(5 - 8)			
-						
-						
-						
5	5 - 10	2.5	30 - 35		Upper 6": b	brown fine sand and silt with gravel $(1/2 - 1")$ .
-			(top)		Gray gravel	lly silty clay; toluene odor present.
-			400 - 600		Coarser gra	ined with depth.
-			(bottom)			
-						
10	10 - 15	5	>9,999	SB-142	Upper 6": g	gray fine to coarse sand and gravel.
-				(10 - 12)	Sample fror	m 10 to 12 feet kept intact in sleeve for physical testing.
-					Gray silt.	
-					Strong tolue	ene odor and free-phase toluene product present.
-				SB-141		
15				(14 - 15)		
-					Boring SB-	-142 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:		Logged by:
	SB-143			12/5/2003	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	Yes (MW-17)		]	PVC/2-inch	15.0
Notes:	Monitoring well (N	/W-17) instal	lled in boring; soil	samples not col	lected.
	1		7	1	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5				No soil samples collected during well installation.
-					
-					
-					
-					
5	5 - 10				
-					
-					
-					
-					
10	10 - 15				
-					
-					
-					
-					
15					
-					Boring SB-143 terminated at 15 feet.
Project Name:		Project Number	:	Location:	
--	---------------------	----------------	---------------------------------	------------------------	--
Former Norton/Nashua Site				029.08	Watervliet, New York
Poring Nu	mhon		Data Drilladı		(Former Test Pit - Building #61)
SB-144		Date Driffed:	1/19/2004	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for labo	oratory analysis	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Concrete.
-			(0.0)		Fine to coarse sand and gravel $(1/8 - 1/2")$ .
-					Cinder material in upper 6". Brick material in lower 12".
-					
-					
5	5 - 10	4	795 - 1,100		Upper 6": fine to coarse grained cinder material (1/8 - 1/4").
-					8": dark gray fine sand and silt.
-					18": gray silty clay; medium to high plasticity.
-					Lower 6": gray fine to coarse sand and silt; trace medium sand.
-					Strong toluene odor.
10	10 - 15	3	630		Saturated.
-			(upper)		Gray fine to coarse sand and gravel. Increased gravel content in
-			30 - 35		lower 12" (1/8 - 1/4"); slight toluene odor.
-			(lower)		
-					
15					
-					Boring SB-144 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site Boring Number: SB-145				029.08	Watervliet, New York (Former Test Pit - Building #61)
			Date Drilled:	1/19/2004	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No		Casing Materia	ll / Diameter: None	Total Depth (feet): 15.0	
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for lab	oratory analysis	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	0.0		Concrete.
-			(0.0)		Light tan/brown silt to fine to coarse sand and gravel (1/4 - 1/2").
-					Lower 2': dark brown silt with coarse sand and gravel intermixed;
-					cinder material present.
-					Lower 2": yellowish tan fine to coarse sand and gravel.
5	5 - 10	3	20 - 25		Upper 12": brown silt to coarse sand and gravel cinder
-			(8 - 9)		material present.
-					Lower 2': gray silty clay; soft; medium plasticity; 1" gravel in
-					lower 6".
-					
10	10 - 15	2	180 - 190		Saturated.
-			(upper)		Upper 6": gray shale material.
-			8 - 10		Clayey silt with gravel
-			(lower)		Fine to coarse sand and gravel.
-					Slight toluene odor.
15					
-					Boring SB-145 terminated at 15 feet.

Project Name:		Project Number	•	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York
Boring Nu	oring Number:				(Former Solvent Lines - Building #01)
SB-146			Date Dimeu.	1/19/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	C	Geoprobe <sup>TM</sup>	Macro-Core
Well Installed:			Casing Materia	I / Diameter:	Total Depth (feet):
	NO			None	15.0
Notes: PID values in "()" are headspace No soil or ground-water samples			readings. submitted for labo	pratory analysis	
Depth (feet)	Sample Interval	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description
0	0 - 5	3	( <b>ppm</b> )		Concrete
		-			
-			(3 - 6)		Upper 6": gray fine to coarse sand with silt and gravel.
-					Brownish gray silt; trace clay.
-					
-					
5	5 - 10	4	1000 - 2500		Wet.
-					Upper 6": silt; trace clay.
-					2': gray gravelly silty clay.
-					Lower 12": gray fine sand and silt; trace medium sand.
-					Strong toluene odor.
10	10 - 15	2	>2,000		Saturated.
-					Gray fine to coarse sand and gravel.
-					Strong toluene odor.
-					
-					
15					
-					Boring SB-146 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #56)
Boring Nu	mber:		Date Drilled:		Logged by:
2 01 mg 1 (u	SB-147			1/19/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-147 (9 - 10) sub			readings. mitted for laborate	ory analysis (VC	DC, SVOC, TICs, heptane).
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample	Soil Classification / Description
(leet)	(leet)	(leet)	(ppm)	Interval	
0	0 - 5	2	4 - 5		Concrete.
-			(0.6 - 0.8)		Brown to dark brown silt to coarse sand and gravel (1/4 - 1/2").
-					
-					
-					
5	5 - 10	1	6 - 8		Poor recovery.
-			(0.0)		Brown silt, fine sand, and gravel. Large (1 - 2") rock fragments.
-					
-					
-				SB-147	
10	10 - 15	4	0.3 - 0.9	(9 - 10)	Saturated.
-					Fine to coarse sand. Coarse gravel in lower 12".
-					
-					
-					
15					
-					Boring SB-147 terminated at 15 feet.

Project Name:		Project Number:			Location:		
Former Norton/Nashua Site			029.08			Watervliet, New York (Building #56)	
Boring Nu	Boring Number:					Logged by:	
SB-148				1/19/2004		Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:		Sampling Method:	
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	al / Diameter:		Total Depth (feet):	
No				None		15.0	
Notes:	PID values in "()"	are headspace	readings.				
	Soil sample SB-14	8 (7 - 9) subm	itted for laborator	ry analysis (VOC	C, SVOC, TI	Cs, heptane).	
	SB-148A (20 - 25) Water sample SB-	148 submitted	for laboratory and	8 (7 - 9) alvsis (VOC-SV	OC TICs h	(entane)	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	3	0.0		Concrete.		
-			(0.0)		Brown to d	lark brown fine sand with silt and gravel (1/8 - 1/4").	
-					Cinder mat	terial present at 3.5' and 5'.	
-							
-							
5	5 - 10	3	0.0		Light brow	n silt and fine sand; 1/4 - 1/2" pebbles present.	
-			(0.0)		Lower 12"	: brown to gray clayey silt; saturated.	
-				SB-148	Wet at 8.5	- 9'.	
-				(7 - 9)			
-				(Duplicate)			
10	10 - 15	3	0.0		Saturated.		
-			(0.0)		Gray claye	y silt with gravel; soft to stiff.	
-					Lower 16"	: fine to coarse sand and gravel.	
-							
-							
15							
-					Boring SB	-148 terminated at 15 feet.	

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #56)
Boring Number: SB-149			Date Drilled:		Logged by:
				1/20/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	e readings.		
	Soil sample SB-14	9 (6 - 7) subn	nitted for laborator	ry analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Fine sand and silt with gravel (1/8 - 1/2").
-					Brick material at 3.5; concrete material at 4 - 4.5'.
-					
-					
5	5 - 10	4	0.0		Upper 12": light brown silt and fine sand.
-			(0.0)	SB-149	Middle 2': brown fine to medium sand and silt.
-				(6 - 7)	Lower 12": brown to gray clayey silt; saturated.
-					
-					
10	10 - 15	4	0.0		Upper 12": fine sand and silt with gravel.
-			(0.0)		12": brown clayey silt; wet.
-					12": gray clayey silt with gravel.
-					Lower 12": fine to coarse sand and gravel and 1/4 - 1/2" pebbles.
-					
15					
-					Boring SB-149 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York
Boring Nu	mher:		Date Drilled ·		(Building #56)
SB-150			Duce Drineu.	1/20/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	itions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	al / Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspace Soil sample SB-150 (7 - 8) subr			neadings.	y analysis (VOC	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Brown fine sand and silt with gravel.
-					Lower 12": silt and fine sand.
-					
-					
5	5 - 10	3	0.0		Upper 6": brown silt and fine sand.
-			(0.0)		12": brown fine to medium sand and silt.
-				SB-150	Lower 18": brown to gray clayey silt.
-				(7 - 8)	Wet at 8'.
-					
10	10 - 15	3	0.0		Saturated.
-			(0.0)		Gray fine to coarse sand and gravel (1/8 - 1/2").
-					
-					
-					
15					
-					Boring SB-150 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-151			1/20/2004	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: PID values in "()" are headspace Soil sample SB-151 (9 - 10) sub			readings. mitted for laborate	ory analysis (VC	OC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Upper 6": brown fine sand and silt with gravel.
-					15": Dark brown to black cinder material (fine to coarse grained).
-					Lower 8": brown silt and gravel (1/8 - 1/2").
-					
5	5 - 10	3	2.5		Fine to coarse sand and gravel; trace silt. Increased silt content
-			(0.0)		in lower 12 ". Wet in lower 3".
-					
-					
-				SB-151	
10	10 - 15	3	400 - 600	(9 - 10)	Saturated.
-			(upper)		Fine to coarse sand and coarse gravel; slight toluene odor.
-			20 - 80		
-			(lower)		
-					
15					
-					Boring SB-151 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number: SB-152			Date Drilled:	1/20/2004	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe	Macro-Core
Well Installed: No			Casing Materia	al / Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspace Soil sample SB-152 (6.5 - 7.5) s			readings. ubmitted for labor	ratory analysis (V	/OC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Brown fine to medium sand with silt and gravel.
-					Lower 17": silt, coarse sand, gravel (1/8 - 1/2").
-					
-					
5	5 - 10	3.5	0.0		Brown silt and fine sand.
-			(0.0)	SB-152	Fine to medium sand with silt; trace gravel.
-				(6.5 - 7.5)	Saturated at 7.5'.
-					
-					
10	10 - 15	4	0.0		Saturated.
-			(0.0)		Brown to gray fine to coarse sand and gravel.
-					Lower 6": coarse gravel.
-					
-					
15					
-					Boring SB-152 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:		Logged by:
	SB-153			1/20/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	PID values in "()"	are headspace	readings.		
	Soil sample SB-15	3 (8 - 9) subn	nitted for laborator	ry analysis (VOC	C, SVOC, TICs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1.5	0.0		Concrete.
-			(0.0)		Brown fine sand and silt with gravel (1/2 - 1").
-					Cinder material in lower 2".
-					
-					
5	5 - 10	3	0.0		Upper 12": brown silt and gravel; brick material at 7.5'.
-			(0.0)		Lower 2': Dark brown to gray clay; high plasticity; moist.
-					Trace silt in lower 12".
-				SB-153	
-				(8 - 9)	
10	10 - 15	3.5	0.0		Saturated.
-			(0.0)		Upper 6": brownish gray silty clay with gravel.
-					Gray fine sandy silt.
-					
-					
15					
-					Boring SB-153 terminated at 15 feet.

Project Na	me:		Project Numbe	r:	Location:
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #57)
Boring Nu	Boring Number: SB-154			1/20/2004	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solo	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	al / Diameter: None	Total Depth (feet): 15.0
Notes: PID values in "()" are headspace Soil sample SB-154 (8.5 - 9.5) s			readings. ubmitted for labor	ratory analysis (V	VOC, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Brown to dark brown to gray fine sand and silt with gravel.
-					Cinder and brick material at 3.5 - 4.5' (1/4 - 1/2" fragments).
-					
-					
5	5 - 10	3	0.0		Upper 6": concrete-like material (fine to coarse grained).
-			(0.0)		Brown fine to coarse sand with silt and gravel.
-					Wet in lower 3".
-				SB-154	
-				(8.5 - 9.5)	
10	10 - 15	3	0.0		Saturated.
-			(0.0)		Brown fine to coarse sand and gravel.
-					
-					
-					
15					
-					Boring SB-154 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
Former Norton/Nashua Site				029.08	Watervliet, New York (Building #58)
Boring Number:			Date Drilled:		Logged by:
	SB-155			1/20/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Insta	lled:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:         PID values in "()" are headspace           Soil sample SB-155 (7 - 8) subn		readings. nitted for laborator	ry analysis (VO	C, SVOC, TICs, heptane).	
D th		D		<u>Constant</u>	
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.0		Concrete.
-			(0.0)		Upper 10": brown fine sand and silt with gravel.
-					4": concrete-like material.
-					Lower 12": brown fine sand with silt and gravel (1/8 - 1/4").
-					Brick material at 2.5' and 4'.
5	5 - 10	3	0.0		Upper 12": silt to fine to coarse sand and gravel (1/4 - 1/2").
-			(0.0)		3": clayey silt and gravel.
-				SB-155	Lower 18": fine to coarse sand with silt and gravel.
-				(7 - 8)	Coarser grained in lower 8".
-					
10	10 - 15	2.5	0.0		Saturated.
-			(0.0)		Fine to coarse sand and coarse gravel $(1/2 - 1")$ .
-					
-					
-					
15					
-					Boring SB-155 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:		
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York	
D N					(West of former tank farm)	
Boring Nu	mber: SB-156		Date Drilled:	1/20/2004	Logged by: Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:	Casing Material / Diameter: Total Depth (feet):			Total Depth (feet):	
	No			None	15.0	
Notes:	PID values in "()" Soil sample SB-15 MS/MSD QA/QC	are headspace 6 (7 - 9) subm samples also o	e headspace readings. (7 - 9) submitted for laboratory analysis (VOC, SVOC, TICs, heptane). amples also collected from SB-156 (7 - 9).			
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure	
0	0 - 5	3	0.0		Concrete.	
-			(0.0)		Dark brown to black to light brown silt to fine to coarse sand	
-					and gravel. Wet at 4'; dry below 4'3".	
-						
-						
5	5 - 10	3	0.0		Orange-brown silty clay with gravel.	
-			(0.0)		8 - 8.5': brown silt and fine sand.	
-					4": clayey silt. Saturated at 9'.	
-				SB-156	Lower 6": gray fine to coarse sand and gravel.	
-				(7 - 9)		
10	10 - 15	3.5	0.0	MS/MSD	Saturated.	
-			(0.0)		Gray fine to coarse sand and gravel.	
-						
-						
-						
15						
-					Boring SB-156 terminated at 15 feet.	

Project Name:		Project Numbe	r:	Location:	
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Former Test Pit - Building #61)
Boring Nu	mber:		Date Drilled:		Logged by:
6	SB-157			1/21/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	PID values in "()" Soil sample SB-15	are headspace 7 (8 - 9) subn	e readings. nitted for laborator	ry analysis (VOO	C, SVOC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	3	0.0		Concrete.
-			(0.0)		Light brown to brown fine sand and silt with gravel.
-					Brick material at 3.5'
-					Lower 12": cinder material (1/8 - 1/2").
-					
5	5 - 10	4	0.0		Orange-brown to gray clayey silt with gravel.
-			(0.0)		Moist to wet in lower 6".
-					
-				SB-157	
-				(8 - 9)	
10	10 - 15	3	0.0		Saturated.
-			(0.0)		Fine to coarse sand and coarse gravel.
-					
-					
-					
15					
-					Boring SB-157 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Nu	mhor		Data Drillad:		(Railfoad right-of-way - Southern Tracks)
Doring Nu	SB-158		Date Dillieu.	1/22/2004	Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core	
Well Installed:			Casing Materia	l / Diameter:	Total Depth (feet):
No				None	12.0
Notes:         PID values in "()" are headspace readings.           Soil sample SB-158 (8 - 9) submitted for laboratory analysis (VOC, SVOC, T           Water sample SB-158 submitted for laboratory analysis (VOC, SVOC, TICs,				C, SVOC, TICs, heptane). /OC, TICs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.2 - 0.6		Brown fine sand and silt; trace gravel.
-			(0.5)		Trace clay in lower 3"; moist.
-					
-					
-					
5	5 - 10	2.5	0.2 - 0.4		Brown fine to coarse sand and gravel; wet at 9'.
-			(0.4)		
-					
-				SB-158	
-				(8 - 9)	
10	10 - 15	2	0.7 - 0.9		Saturated.
-			(0.5)		Brown to gray fine to coarse sand and gravel.
-					Coarser grained in lower 12".
-					Boring SB-158 terminated at 12 feet (refusal).
-					
15					
-					

Project Name:		Project Number	:		Location:		
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York (Alden Street right-of-way)	
Boring Nu	nber:		Date Drilled:			Logged by:	
	SB-159		8/11/2004			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
Yes (MP-14)			PVC/1-	1/4-inch (pre-pa	ck)	15.0	
Notes: No soil or ground-water sample		water samples	submitted for labo	oratory analysis.			
			<u></u>		1		
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure		
0	0 - 5	3	0.5 - 1.5		Upper 6":	Dark gray silt to fine to coarse sand and gravel	
-					Middle 10	": silty clay; trace gravel.	
-					Lower 12'	': brown silt to fine to coarse sand; trace gravel.	
-							
-							
5	5 - 10	2	5 - 1100		Wet at 9'.		
-					Brown fin	e to coarse sand; coarse gravel	
-					Faint tolue	ene odor.	
-							
-							
10	10 - 15	NM	100 - 1800		Saturated.		
-					Fine to coa	arse sand; coarse gravel.	
-					Slight tolu	ene odor.	
-							
-							
15							
-					Boring SI	3-159 terminated at 15 feet.	

Project Name:		Project Number	:	Location:	Location:	
For	rmer Norton/Nashu	a Site		029.08		Watervliet, New York (Alden Street right-of-way)
Boring Nu	mber:		Date Drilled:		Logged by:	
	SB-160			8/11/2004		Bryan J. Machella
Drilling Co	Drilling Company:		Drilling Method	1:	Sampling M	ethod:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth	(feet):
Yes (MP-16)		PVC/1-	1/4-inch (pre-pa	()	15.0	
Notes: No soil or ground-water sample			s submitted for labo	oratory analysis.		
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample	Soil Cl	lassification / Description
(leet)	(leet)	(leet)	(ppm)	Interval	COL	or, texture, structure
0	0 - 5	2.5	0.2 - 0.6		Brown silt to fine to coar	rse sand and gravel.
-						
-						
-						
-						
5	5 - 10	2.5	2 - 4		Brown silt to fine to coarse sand and gravel.	
-					Wet at 9.5'. No odors pre	esent.
					-	
-						
-						
-						
10	10 - 15	4	0 - 0.5		Saturated.	
-					Fine to coarse sand and c	coarse gravel.
-					Lower 13": gray silty clay	y; trace gravel.
-						
-						
15						
-					Boring SB-160 termina	ated at 15 feet.

Project Name:		Project Number	r:		Location:		
For	rmer Norton/Nashua	a Site	029.08			Watervliet, New York (Alden Street right-of-way)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-161		8/11/2004			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
Yes (MP-15)			PVC/1-	1/4-inch (pre-pa	ck)	15.0	
Notes: No soil or ground-water sample			submitted for lab	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2	0.9 - 1.1		Brown silt	to fine to coarse sand and	
-					and gra	vel (1/8 - 1/4-inch fragments).	
-							
-							
-							
5	5 - 10	1.5	1 - 2	Same as above. Wet in lower 3".			
-							
-							
-							
-	10 15	2.5	0.0		Saturated		
10	10 - 15	2.3	0.0		Saturated.	to coarse sand: coarse gravel	
					No odors i	present	
-							
-							
15							
					┣───		
-					Boring SI	B-161 terminated at 15 feet.	

Project Name:		Project Number	r:		Location:	
For	rmer Norton/Nashua	a Site	029.08			Watervliet, New York
Boring Nu	mher		Date Drilled ·			(Alden Street right-of-way)
Doring Itu	SB-162		8/11/2004			Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	r ·	Total Depth (feet):
	Yes (MP-13)		PVC/1-	1/4-inch (pre-pa	ack)	15.0
Notes: No soil or ground-water sample			s submitted for lab	oratory analysis.		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	0.0		Brown silt t	o fine to coarse sand
-					and grav	el (1/8 - 1/4-inch fragments).
_						
-						
-						
5	5 - 10	1	0.0		Same as above. Wet in lower 3".	
-					Brick mater	ial present at bottom of sample.
-						
-						
-						
10	10 - 15	2	0.0		Saturated.	
-					Gray fine to	o coarse sand; coarse gravel (1/8 - 1-inch fragments).
_					No odors pr	resent.
_					1	
15						
15						
-					Boring SB-	-162 terminated at 15 feet.

Project Name:		Project Number:			Location:		
For	rmer Norton/Nashua	a Site	029.08			Watervliet, New York (Alden Street right-of-way)	
Boring Nu	mber:		Date Drilled:			Logged by:	
	SB-163		8/11/2004			Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	l:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core		
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	Yes (MP-17)		PVC/1-	1/4-inch (pre-pa	nck)	15.0	
Notes:	Water sample MP-	17 submitted	for laboratory anal	lysis (VOC, TIC	Cs, heptane).		
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval		Soil Classification / Description color, texture, structure	
0	0 - 5	2	0.0		Gravelly clayey silt; moist.		
-							
-							
-							
-							
5	5 - 10	2	0.0		Light brov	wn coarse sand and gravel (1/4 - 1/2-inch pebbles);	
-					trace silty	clay; shell fragments in lower 6".	
-							
-							
-							
10	10 - 15	3	3000 - 3500		Saturated.		
-			80 - 120		Fine to coa	arse sand and gravel.	
-			(bottom)		Toluene o	dor present.	
-							
-							
15							
-					Boring SI	B-163 terminated at 15 feet.	

Project Name:		Project Number	r:		Location:	
For	rmer Norton/Nashua	a Site	029.08			Watervliet, New York (Alden Street right-of-way)
Boring Nu	mber:		Date Drilled:			Logged by:
8	SB-164		9/8/2004			Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:		Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
Yes (VMP-1)			PVC/1-inch (	(vapor monitorin	g point)	3.0
Notes: No soil or ground-water sample			submitted for labo	oratory analysis.		
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	2.5	0.0		Asphalt, g	gravel base.
-					Brown sil	t to fine to coarse sand and gravel.
-						
-						
-					Boring S	B-164 terminated at 3 feet.
5						
-						
-						
-						
-						
10						
-						
-						
-						
-						
15						
-						

Project Name:		Project Number:			Location:		
For	rmer Norton/Nashua	ı Site		029.08		Watervliet, New York (Alden Street right-of-way)	
Boring Nu	nber:		Date Drilled:			Logged by:	
8	SB-165		9/8/2004			Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:		Sampling Method:	
Environmental Cleanup Solutions. Inc.		(	Geoprobe <sup>TM</sup>		Macro-Core		
Well Installed:			Casing Materia	l / Diameter:		Total Depth (feet):	
Yes (VMP-2)			PVC/1-inch (	(vapor monitorin	g point)	7.5	
Notes: No soil or ground-water sample			submitted for labo	oratory analysis.			
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure		
0	0 - 5	3	0.0		Asphalt, gravel base.		
-					Brown silt	t to fine to coarse sand and gravel; trace clay.	
-							
-							
-							
5	5 - 10	2	0.0		Brown silt	t to fine to coarse sand and gravel; trace clay.	
-							
-							
-					Boring Sl	B-165 terminated at 7.5 feet.	
-							
10							
-							
-							
-							
-							
15							
-							

Project Name:		Project Number:			Location:		
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York (Alden Street right-of-way)	
Boring Nur	nber:		Date Drilled:			Logged by:	
	SB-166		9/8/2004			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:	
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
Yes (MP-18)		PVC/1-	1/4-inch (pre-pa	ick)	15.0		
Notes:	No soil or ground-	water samples	submitted for lab	oratory analysis.			
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description		
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure	
0	0 - 5	2	0.0		Brown silt	t to fine to coarse sand and gravel; moist.	
-							
-							
-							
-							
5	5 - 10	3	0.0		Brown coa	arse sand; coarse gravel.	
-					Moist to w	vet to saturated.	
-					No odors j	present.	
-							
-							
10	10 - 15	5	0.0		Saturated.		
-					Upper 18"	': brown to gray coarse sand and gravel.	
-					Lower 3.5	': gray silt to fine sand.	
-					No odors j	present.	
-							
15							
-					Boring SI	B-166 terminated at 15 feet.	

Project Name:		Project Number	r:	Location:	Location:		
For	rmer Norton/Nashua	a Site		029.08	Watervl (Alden Str	iet, New York eet right-of-way)	
Boring Nu	mber:		Date Drilled:		Logged by:		
	SB-167			9/8/2004	Bryan	J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:		
Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Ma	cro-Core		
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):		
Yes (MP-19)			PVC/1-	1/4-inch (pre-pa	)	15.0	
Notes: No soil or ground-water sample			s submitted for lab	oratory analysis			
Depth (feet)	Sample Interval	Recovery	PID (nnm)	Sample Interval	Soil Classification	/ Description	
0	0 - 5	2	0.0		Brown gravelly silty clay; moist.		
-					Shale material at 4'.		
_							
_							
5	5 10	3	0.0		Prown silt to fine to coarse sand, wat	to saturated	
5	5-10	5	0.0		Control propert	to saturated.	
-					Loarse graver present.		
-					No odors present.		
-							
-							
10	10 - 15	5	0.0		Saturated.		
-					Coarse sand and coarse gravel.		
-					Frace silt in lower 6".		
-					No odors present.		
-							
15							
-					Boring SB-167 terminated at 15 fe	et.	

Project Name:		Project Number:			Location:		
For	rmer Norton/Nashua	a Site		029.08		Watervliet, New York (Alden Street right-of-way)	
Boring Number:			Date Drilled:			Logged by:	
	SB-168			9/8/2004		Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:		Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):	
	Yes (MP-20)			1/4-inch (pre-pa	uck)	15.0	
Notes: No soil or ground-water sample			s submitted for lab	oratory analysis			
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval		Soil Classification / Description color, texture, structure	
0	0 - 5	2	0-01		Brown silt	to fine to coarse sand and gravely moist	
Ū	0-5	2	0 - 0.1		DIOWII SIIC	to fine to coarse sand and graver, moist.	
-							
-							
-							
-							
5	5 - 10	2	0 - 0.2		Wet at 9.5'		
-					Gravelly si	lty clay. 1/2 - 1-inch gray rock fragments at 9' to 9'3".	
_					No odors r	present	
					- · · · · · · · · · · · ·		
-							
-							
10	10 - 15	3	0.5 - 1.0		Saturated.		
-					Gray coars	e sand; coarse gravel (1 - 2-inch fragments).	
-							
-							
-							
15							
-					Boring SB	8-168 terminated at 15 feet.	

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
Boring Number:			Date Drilled •		Logged by:
SB-169			Duce Dimeu.	9/8/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	Il / Diameter: None	Total Depth (feet): 13 (Refusal)
Notes:	No soil or ground-	water samples	submitted for lab	oratory analysis	
Notes: No soil or ground-water samples			submitted for hit	oratory unarysis.	
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample	Soil Classification / Description
(leet)	(leet)	(leet)	(ppm)	Interval	
0	0 - 5	2	0.0		Brown gravelly clayey silt; moist in lower 6".
-					
-					
-					
-					
5	5 - 10	2	0.0		Coarse sand and gravel (1/2 - 1-inch fragments).
-					Trace silty clay intermixed.
-					No odors present.
-					
-					
10	10 - 15	2	0.1 - 0.2		Saturated.
-					Brown fine to coarse sand and gravel.
-					Gray shale materiel.
-					
-					Boring SB-169 terminated at 13 feet (refusal).
15					
-					

Project Name:		Project Number:			Location:	
Former Norton/Nashua Site				029.08		Watervliet, New York (Alden Street right-of-way)
Boring Nu	nber:		Date Drilled:		L	logged by:
	SB-170			9/8/2004		Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	S	ampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Т	Total Depth (feet):
	Yes (MP-21)		PVC/1-	1/4-inch (pre-pa	uck)	15.0
Notes:	No soil or ground-	water samples	submitted for labo	oratory analysis.		
Depth	Sample Interval	Recovery	PID	PID Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3	0.1 - 0.3		Brown grave	elly clayey silt.
-					Brown silty o	clay from 3'3" to 3'1-".
-						
-						
-						
5	5 - 10	3	0.1		Fine to coars	e sand and gravel (1/8 - 2" fragments).
-					Moist to wet	
-					No odors pre	esent.
-						
-						
10	10 - 15	4	0.1 - 0.3		Saturated.	
-					Brown fine t	to coarse sand and coarse gravel.
-					Lower 2'3":	gray silt to fine to medium sand; 1 - 2" shale
-					fragments in	lower 3".
-						
15						
-					Boring SB-1	170 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Alden Street right-of-way)
Boring Number:			Date Drilled:		Logged by:
	SB-171			9/10/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	15.0
Notes:	No soil or ground-	water samples	s submitted for lab	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.1		Black to light brown silt to fine to coarse sand; trace gravel.
-					Moist to wet.
-					
-					
-					
5	5 - 10	2	0 - 0.3		Fine to coarse sand; trace gravel; wet/saturated at 9.5'.
-					No odors present.
-					
-					
-					
10	10 - 15	0	NM		No recovery; all water.
-					No odors present.
-					
-					
-					
15					
-					Boring SB-171 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Alden Street right-of-way)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-172			9/10/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	l:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	No soil or ground-	water samples	submitted for labo	oratory analysis.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.1		Upper 12": black silt and gravel.
-					Lower 2': Brown gravelly clayey silt.
-					Moist to wet.
-					
-					
5	5 - 10	3	10 - 40		Brown silt and gravel.
-					Lower 15": brown to gray gravelly clayey silt.
-					Slight toluene odor in lower 12".
-					
-					
10	10 - 15	4.5	100 - 4500		Saturated.
-					Upper 2': ray fine to coarse sand and gravel.
-					Middle 12": silt to fine to medium sand and gravel.
-					Lower 12": clayey silt.
-					Toluene odor present.
15					
-					Boring SB-172 terminated at 15 feet.

Project Name:		Project Numbe	r:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York
Boring Nu	mber:		Date Drilled:		Logged by:
SB-173				9/10/2004	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	10.0
Notes: Soil sample SB-173 (3 - 3.5) sub			omitted for laborat	ory analysis (V	DC, TICs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color. texture. structure
0	0 - 5	3	20 - 60		Brown to gray gravelly clayey silt.
-					Coarse gravel from 2.5 to 3'.
-					Lower 12": gray clayey silt.
-				SB-173	
-				(3 - 3.5)	
5	5 - 10	NM	0 - 7		Saturated.
-					Upper 15": brown clayey silt.
-					Silt to coarse sand and gravel.
-					Lower 6": 1/2 to 1.5" rock fragments.
-					No odors present.
10					
-					Boring SB-173 terminated at 10 feet.
-					
-					
- 15					
-					

Project Name:		Project Number	r:		Location:	
For	mer Norton/Nashua	a Site		029.08		Watervliet, New York (Alden Street right-of-way)
Boring Number:			Date Drilled:			Logged by:
	SB-174			9/10/2004		Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:		Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.	(	Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:		Total Depth (feet):
	No			None		15.0
Notes:						
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval		color, texture, structure
0	0 - 5	3.5	0.0		Upper 8": b	black silt and gravel.
-					Middle 15"	: brown gravelly clayey silt.
-					Lower 16":	brown silt to fine to coarse sand and gravel.
-						
-						
5	5 - 10	3	0.0		Brown silt	to fine to c coarse sand and gravel.
-			400 - 950		Shale fragn	nents at 8.5'.
-			(lower 3")		Wet at 9.5'	(toluene odor).
-					Lower 3": §	gravel.
-						
10	10 - 15	0.5	500 - 1100		Coarse sand	d and gravel; toluene odor.
-						
-						
-						
-						
15						
-					Boring SB	-174 terminated at 15 feet.

Project Name:		Project Number	:	Location:	
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York
D N					(Alden Street right-of-way)
SB-175			Date Drilled:	9/10/2004	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	1:	Sampling Method:
Environ	nental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:					
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Black to light brown silt and gravel; wet at 3'.
-					Lower 12": brown silt to fine to coarse sand and gravel.
-					
-					
-					
5	5 - 10	3	0.0		Brown to gray silt to fine to coarse sand and gravel.
-					Lower 12": brown gravelly clayey silt (1/2 to 1" fragments).
-					
_					
10	10 - 15	5	0.0		Saturated.
-					Gray silt to fine to medium sand; trace gravel.
-					No odors present.
-					No odors present.
-					
15					
-					Boring SB-175 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Craig Street right-of-way)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-176			10/25/2004	Bryan J. Machella	
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>™</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: Soil sample SB-176 (7.5 - 8) sul Water sample SB-176 submittee			mitted for laborate for laboratory and	ory analysis (VC alysis (VOC, TIC	OC, TICs, heptane). Cs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	4	0.0		Dark brown to tan clayey silt; trace gravel (top soil).
-					
-					
-					
-					
5	5 - 10	4	0.0		Silt to fine to coarse sand; trace gravel.
-					Lower 10": brown to gray gravelly clayey silt.
-				SB-176	Moist at 8'.
-				(7.5 - 8)	
-					
10	10 - 15	5	0.0		Saturated.
-					Gray gravelly silty clay.
-					Lower 2': silt to fine to coarse sand and gravel.
-					No odors present.
-					
15					
-					Boring SB-176 terminated at 15 feet.

Project Name:		Project Number:			Location:		
Fo	rmer Norton/Nashua	a Site		029.08		Watervliet, New York (Craig Street Right-of-way)	
Boring Nu	mber:		Date Drilled:		Lo	wood hy:	
SB-177			Dute Dimeu	10/25/2004		Bryan J. Machella	
Drilling Co	ompany:		Drilling Metho	d:	Sa	mpling Method:	
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Installed: Ves (MP 22)			Casing Materia PVC/1-	I / Diameter: 1/4-inch (pre-pa	To	tal Depth (feet): 15.0	
Notes:	Soil sample SB-17	7 (8.5 - 9) sul	omitted for laborat	ory analysis (VC	DC, TICs, hepta	ne).	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval		Soil Classification / Description color, texture, structure	
0	0 - 5	2	0.0		Dark brown to	o tan clayey silt; trace gravel (top soil).	
-					Wood/organic	e material from 3'6" to 4'.	
-					Quartz fragme	ents at 4.7'.	
-							
-							
5	5 - 10	1.5	0.0		Silt to fine to a	coarse sand; trace gravel.	
-					Moist at 9'; we	et at 10'.	
-							
-				SB-177			
-				(8.5 - 9)			
10	10 - 15	4	0.0		Upper 19": sa	turated. moist to dry below.	
-					Silt to fine to o	coarse sand and gravel.	
-					Shale material	l in lower 2'.	
-							
-							
15							
-					Boring SB-17	77 terminated at 15 feet.	

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Craig Street Right-of-way)
Boring Number:			Date Drilled:		Logged by:
SB-178				10/25/2004	Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>™</sup>	Macro-Core
Well Install	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	14 (refusal)
Notes: Soil sample SB-178 (9 - 10) sub Water sample SB-178 submittee			mitted for laborato for laboratory and	ory analysis (VO alysis (VOC, TIC	C, TICs, heptane). Cs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1	0.0		Dark brown to tan clayey silt; trace gravel (top soil).
-					
-					
-					
-					
5	5 - 10	1	0.0		Sand, silt, and gravel; moist.
-					Shale fragments at 9'2".
-					
-					
-				SB-178	
10	10 - 15	2	0.0	(9 - 10)	Saturated.
-					Silt, sand, and coarse gravel.
-					Lower 12": fine to coarse grained gray shale; dry.
-					
-					
15					Boring SB-178 terminated at 14 feet (refusal).
-					

Project Name:		Project Numbe	r:	Location:		
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York	
Boring Nu	mhor		Data Drillad:		(Craig Street Right-of-way)	
SB-179		Date Dimeu.	10/25/2004	Bryan J. Machella		
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core	
Well Instal	led:		Casing Materia	nl / Diameter:	Total Depth (feet):	
	No			None	15.0	
Notes: Soil sample SB-179 (7.5 - 8) su Water sample SB-179 submitted			omitted for laborat	ory analysis (VC alysis (VOC, TI	C, TICs, heptane). Cs, heptane).	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure	
0	0 - 5	3	0.0		Dark brown to tan clayey silt; trace gravel (top soil).	
-					Cinder material at 3'.	
-					3'3" - 4'4": light brown clay; quartz fragments at 4 - 4.5'.	
-					Lower 5": silt to fine sand; trace medium sand; slightly moist.	
-						
5	5 - 10	4	0.0		Upper 2': brown silt to fine sand; trace medium sand; trace	
-					gravel from 8'2" to 8'8".	
-				SB-179	Lower 14": gray gravelly clayey silt.	
-				(7.5 - 8)	Saturated at 8'4".	
-						
10	10 - 15	4	0.0		Saturated.	
-					Fine to coarse grained weathered shale.	
-						
-						
-						
15						
-					Boring SB-179 terminated at 15 feet.	
Project Na	me:		Project Numbe	r:	Location:	
---	---------------------------	--------------------	---	---	--	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (Craig Street Right-of-way)	
Boring Nu	nber: SB-180		Date Drilled:	10/25/2004	Logged by: Bryan J. Machella	
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core	
Well Installed: No		Casing Materia	II / Diameter: None	Total Depth (feet): 14 (refusal)		
Notes:Soil sample SB-180 (8 - 9) subnSoil sample SB-180A (20 - 25)Water sample SB-180 submittee			itted for laborator s a duplicate samp for laboratory and	y analysis (VOC ble of SB-180 (8 alysis (VOC, TIG	C, TICs, heptane). 8 - 9). ICs, heptane).	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID Sample (ppm) Interval		Soil Classification / Description color, texture, structure	
0	0 - 5	1.5	0.0		Dark brown to tan clayey silt; trace gravel (top soil).	
-					Silt to fine to coarse sand and gravel.	
-					Lower 2": gravelly clayey silt.	
-						
-						
5	5 - 10	2	0.0		Brown silt to fine to coarse sand and gravel (1.8 - 1/2" fragments).	
-					Wet at 8.5'.	
-					Quartz fragments at 9'3".	
-				SB-180		
-				(8 - 9)		
10	10 - 15	1.5	0.0	Dup.	Saturated.	
-					Coarse sand and pebble gravel.	
-					Lower 6": shale fragments.	
-						
-						
15					Boring SB-180 terminated at 14 feet (refusal).	
-						

Project Na	me:		Project Number	r:	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (21 Alden Street Property)
Boring Nu	nber:		Date Drilled:		Logged by:
	SB-181			12/6/2005	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Method:
Environi	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: Soil sample SB-181 (9 - 9.5) sub Water sample SB-181 submitted		mitted for laborate for laboratory and	ory analysis (VC alysis (VOC, TIC	DC, TICs, heptane). Cs, heptane).	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	1	0.0		Brown silt, sand, and gravel; wet.
-					
-					
-					
-					
5	5 - 10	2	0.0		Brown silt, sand, and gravel; moist to wet.
-					Saturated at 9.5 feet.
-					
-				SB-181	
-				(9 - 9.5)	
10	10 - 15	4	0.0		Saturated.
-					Upper 1.5': gray silt to gravel (1/8 - 1/2").
-					Lower 2.5': fine to coarse sand; trace gravel.
-					
-					
15					
-					Boring SB-181 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (21 Alden Street Property)
Boring Nu	nber:		Date Drilled:	12/6/2005	Logged by: Bryan I. Machella
	50-162			12/0/2003	Biyan J. Wachena
Drilling Co	mpany:		Drilling Methoo	d:	Sampling Method:
Environi	mental Cleanup Sol	utions. Inc.		Geoprobe	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes:	Soil sample SB-18	2 (9.5 - 10) su	ibmitted for labora	atory analysis (V	OC, TICs, heptane).
	water sample 3D-	182 sublitted		alysis (VOC, TR	zs, neptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	3	0.0		Brown clayey silt to silty clay; moist.
-					
-					
_					
-					
5	5 - 10	2	0.0		Brown clay to gravel.
-					Wet at 9'9".
-					Lower 1.5': gravelly silt.
-					
-				SB-182	
10	10 - 15	5	0.0	(9.5 - 10)	Saturated.
-					Gray fine to coarse sand; coarse gravel.
-					Lower 10": clayey silt to silty clay.
-					
-					
15					
-					
-					Boring SB-182 terminated at 15 feet.

Project Na	me:		Project Number	r:	Location:
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (21 Alden Street Property)
Boring Nui	nber: SB-183		Date Drilled:	12/6/2005	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environi	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	II / Diameter: None	Total Depth (feet): 15.0
Notes: Soil sample SB-183 (9 - 9.5) sul Water sample SB-183 submittee			for laboratory and	ory analysis (VC alysis (VOC, TIC	C, TICs, heptane). Cs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID Sample		Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Dark brown silt, sand, and gravel.
-					Lower 16": clayey silt to silty clay; trace gravel.
-					1/4 - 1/2" shale fragments.
-					
-					
5	5 - 10	4	0.0		Upper 2': light brown silty clay medium plasticity; trace
-					gravel.
-					Wet at 9.5'.
-				SB-183	
-				(9 - 9.5)	
10	10 - 15	4	0.0		Saturated.
-					Upper 2': gray fine to coarse sand.
-					8 - 9': gray angular rock fragments.
-					Lower 1': gray clayey silt with gravel.
-					
15					
-					Boring SB-183 terminated at 15 feet.

Project Na	Project Name:		Project Numbe	r:	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (21 Alden Street Property)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-184			12/6/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
	No			None	10.0
Notes: Soil sample SB-184 (8.5 - 9) sub Water sample SB-184 submitted			mitted for laborat for laboratory an	tory analysis (VC alysis (VOC, TI	DC, TICs, heptane). Cs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PIDSample(ppm)Interval		Soil Classification / Description color, texture, structure
0	0 - 5	2.5	0.0		Light brown silty clay; high plasticity; trace gravel.
-					
-					
-					
-					
5	5 - 10	3	0.0		Upper 2': silty clay with gravel; loose.
-					Lower 12": silt to fine to coarse sand; coarse gravel.
-				SB-184	Saturated at 9.
_				(8.5 - 9)	
10	10 - 15				
-					Boring SB-184 terminated at 15 feet.
-					
-					
-					
15					
-					

Project Na	me:		Project Number	r:	Location:
Fo	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (23 Alden Street Property)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-185			12/6/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
No				None	14.5 (refusal)
Notes:	No soil samples co	llected.			
	Water sample SB-1	185 submitted	for laboratory ana	alysis (VOC, TI	Cs, heptane).
Depth (feet)	Sample Interval	Recovery	PID Sample		Soil Classification / Description
(Teet)	(leet)	(leet)	(ррт)	Interval	color, texture, structure
0	0 - 5	1	0.0		Silt, sand, and gravel.
-					
_					
-					
-					
5	5 - 10	0			No Recovery.
-					
-					
_					
10	10 15	2	0.0		Catavata d
10	10 - 15	5	0.0		Saturated.
-					Silt and very fine sand; trace gravel.
-					Lower 3': gray clayey silt with gravel.
-					
-					
15					
-					Boring SB-185 terminated at 14.5 feet (refusal).

Project Na	me:		Project Number:			Location:	
For	mer Norton/Nashu	a Site		029.08		Watervliet, New York	
Boring Nu	nber:		Date Drilled:			(21 Alden Street Property)	
boring tur	SB-186		Duit Dimeu.	12/6/2005		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:	Sa	mpling Method:	
Environ	nental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	Та	otal Depth (feet):	
	No			None		15.0	
Notes: Soil sample SB-186 (9.5 - 10) so Water sample not collected.			bmitted for labora	ntory analysis (V	OC, TICs, hept	iane).	
Depth	Sample Interval	Recovery	PID	Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	opm) Interval		color, texture, structure	
0	0 - 5	3	0.0		Light brown c	slayey silt with gravel' moist.	
-					Lower 12": si	It to fine to coarse gravel; loose.	
-							
-							
-							
5	5 - 10	3			Silt to fine to a	coarse sand and gravel.	
-			0.0		Wet at 9'3".		
-					Slight toluene	odor present.	
-			0.5				
-			15	SB-186			
10	10 - 15	3.5	1,200	(9.5 - 10)	Saturated.		
-					Fine to coarse	sand and coarse gravel.	
-			80 - 95		Lower 6": gra	y clayey silt.	
-			0				
-			0				
15			0				
-					Boring SB-18	86 terminated at 15 feet.	

Project Na	me:		Project Numbe	r:	Location:
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (21 Alden Street Property)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-187			12/6/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	10.0
Notes: Soil sample SB-187 (7.5 - 9.5) s Water sample not collected.			ubmitted for labor	atory analysis (N	VOC, TICs, heptane). MS and MSD collected.
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2.5	0.0		Top soil; sand, silt, gravel.
-					3.5 - 4.5': light brown silty clay; trace gravel.
-					Lower 6": silt to gravel.
-					
-					
5	5 - 10	3.5			Upper 1.5': light brown silty clay with gravel.
-					8 - 10': wet; silt to fine to coarse sand.
-			0.0		
-			0.0	SB-187	
-			0.0	(7.5 - 9.5)	
10	10 - 15		0.0		
-					Boring SB-187 terminated at 10 feet.
-					
-					
-					
15					
-					

Project Na	me:		Project Number:			Location:	
Former Norton/Nashua Site				029.08		Watervliet, New York (23 Alden Street Property)	
Boring Nur	nber:		Date Drilled:		J	Logged by:	
	SB-188			12/6/2005		Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	1:	5	Sampling Method:	
Environ	mental Cleanup Solu	utions. Inc.	Geoprobe <sup>TM</sup> Macro-Core			Macro-Core	
Well Instal	led:		Casing Materia	l / Diameter:	r	Fotal Depth (feet):	
	No			None		15.0	
Notes:	Soil sample SB-18	8 (9.5 - 10) su	bmitted for labora	atory analysis (V	OC, TICs, he	ptane).	
	Duplicate soil sam	ple collected.					
	Water sample SB-	188 submitted	for laboratory and	alysis (VOC, TIC	L's, heptane).	MS/MSD collected.	
Depth	Depth Sample Interval Recovery			Sample		Soil Classification / Description	
(feet)	(feet)	(feet)	(ppm)	(ppm) Interval		color, texture, structure	
0	0 - 5	2	0.0		Silt to fine to	o coarse sand; trace gravel; moist.	
-							
-							
-							
-							
5	5 - 10	2			Wet at 9.5' (	(toluene odor present).	
-					Brown to gr	ay silt to fine to coarse sand and gravel.	
-							
-			30 - 45				
-			15 - 30	SB-188			
10	10 - 15		700 - 1,000	(9.5 - 10)	Saturated.		
-					Fine to coar	se sand and coarse gravel.	
-							
-			2,000				
-			115				
15			20 - 30				
-					Boring SB-	188 terminated at 15 feet.	

Project Na	Project Name:		Project Number	r:	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number:			Date Drilled:		Logged by:
	SB-189			12/6/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environi	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	10.0
Notes:	Soil sample SB-18 Water sample not of	9 (9 - 9.5) sub collected	mitted for laborat	ory analysis (VC	OC, TICs, heptane).
	water sumple not c	onected.			
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(Teet)	(Teet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	0.0		Top soil; sand, silt, gravel; moist.
-					Lower 12": silt to gravel; loose.
-					
-					
-					
5	5 - 10	2.5	0.0		Saturated at 9.5'
-					Clayey silt with gravel.
-					Lower 12": silt to coarse gravel.
-				SB-189	
-				(9 - 9.5)	
10	10 - 15				
-					Boring SB-189 terminated at 10 feet.
-					
-					
-					
15					
-					

Project Name:		Project Number	r:	Location:	Location:	
For	rmer Norton/Nashua	a Site		029.08	(2:	Watervliet, New York 5/29 Alden Street Property)
Boring Nur	mber:		Date Drilled:		Logged by:	
	SB-190			12/6/2005		Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Meth	iod:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>		Macro-Core
Well Instal	led:		Casing Materia	ıl / Diameter:	Total Depth (fe	eet):
	No			None		10.0
Notes:	Soil sample SB-19	0 (9 - 9.5) sub	mitted for laborate	ory analysis (VC	, TICs, heptane).	
	Water sample SB-1	190 submitted	for laboratory ana	alysis (VOC, TIC	heptane).	
Depth	Sample Interval	Recovery	PID	Sample	Soil Class	sification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color,	, texture, structure
0	0 - 5	2	0.0		`op soil; silt, sand, and grav	rel; moist.
-						
-						
-						
_						
5	5 - 10	2	0.0		ilt. sand, and gravel.	
					Wat at 0.5'	
_					vet at 9.5.	
-						
-						
-						
10	10 - 15					
-					Soring SB-190 terminated	l at 10 feet.
-						
-						
-						
15						
-						

Project Na	me:		Project Number	r:	Location:
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Nu	nber:		Date Drilled:		Logged by:
Doring Tu	SB-191		Duce Dimeu.	12/6/2005	Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Sol	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: Soil sample SB-191 (9 - 9.5) sub Water sample SB-191 submitted			mitted for laborate for laboratory and	ory analysis (VC alysis (VOC, TIC	DC, TICs, heptane). Cs, heptane). Duplicate water sample collected.
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(leet)	(leet)	(leet)	(ppm)	Interval	
0	0 - 5	3	0.0		1 op soil; silt, sand, and gravel.
-					Lower 1.5': orange brown silty clay; trace gravel; medium to
-					high plasticity.
-					
-					
5	5 - 10	2.5			Wet at 8.5'
-					Upper 12": brown silt, sand, and gravel.
-					Middle 8": gray silt to fine to coarse sand.
-			5 - 10	SB-191	Lower 12": silt to fine to coarse sand to coarse gravel.
-			20 - 25	(9 - 9.5)	Toluene odor present at 9 to 10'.
10	10 - 15		>2,000		Saturated.
-					Fine to coarse sand to coarse gravel.
-					Toluene odor present in upper portion of sample.
-			>1,000		
-			70		
15			0.0		
-					Boring SB-191 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number: SB-192			Date Drilled:	12/6/2005	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Methor	d:	Sampling Method:
Environ	Environmental Cleanup Solutions. Inc.			Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	al / Diameter: None	Total Depth (feet): 7.0 (refusal)
Notes: No soil or ground-water samples			s collected due to s	shallow refusal.	JL
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color. texture. structure
0	0 - 5	2	0.0		Top soil.
-					3'9" - 4'4": brick material.
-					Lower 6": brown clayey silt; loose; low plasticity.
-					
-					
5	5 - 10	2	0.0		Clayey silt with gravel
-					
-					
-					Boring SB-192 terminated at 7 feet (refusal).
-					
10	10 - 15				
-					
-					
-					
-					
15					
-					

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number:			Date Drilled:		Logged by:
SB-193				12/6/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	d:	Sampling Method:
Environ	mental Cleanup Solu	utions. Inc.		Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: Soil sample SB-193 (9 - 9.5) sub Water sample SB-193 submitted			for laboratory and	ory analysis (VC alysis (VOC, TI	DC, TICs, heptane). Cs, heptane).
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5	2	0.0		Top soil.
-					Clayey silt to silty clay.
-					
_					
-					
5	5 - 10	2	0.0		Orange brown silty clay with gravel.
-					Coarse gravel in lower 8".
-					Lower 3": wet.
-				SB-193	
-				(9 - 9.5)	
10	10 - 15	3	0.0		Saturated.
-					Fine to coarse sand and coarse gravel.
-					Lower 12": silt to gravel.
_					
-					
15					
-					Boring SB-193 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number: SB-194			Date Drilled:	12/6/2005	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	II / Diameter: None	Total Depth (feet): 15.0
Notes: Soil sample SB-194 (9 - 9.5) sub Water sample SB-194 submitted			mitted for laborate for laboratory and	ory analysis (VC alysis (VOC, TIC	C, TICs, heptane). Cs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2	0.0		Top soil; moist gravelly silty clay.
5	5 - 10	2	0.0		Gravelly clayey silt; moist to wet.
				SB-194 (9 - 9.5)	
10 - - - 15	10 - 15	2	0.1		Saturated. Brown to gray coarse sand and gravel.
-					Boring SB-194 terminated at 15 feet.

Project Name:		Project Number	r:	Location:	
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number: SB-195			Date Drilled:	12/6/2005	Logged by: Bryan J. Machella
Drilling Co	mpany:		Drilling Method	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>	Macro-Core
Well Installed: No			Casing Materia	II / Diameter: None	Total Depth (feet): 10.0
Notes: No soil or ground-water samples			s collected due to s	hallow refusal.	
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2	0.0		Gravelly clayey silt; moist.
_					
-					
-					
5	5 - 10	2	0.0		Silt, sand, and gravel.
-					Wet at 9.5'
-					
-					
10	10 - 15				
-					Boring SB-195 terminated at 10 feet.
-					
-					
-					
15					
-					

Project Name:		Project Numbe	r:	Location:	
For	rmer Norton/Nashu	a Site		029.08	Watervliet, New York (Mr. Forgette's property)
Boring Nu	mber:		Date Drilled:		Logged by:
SB-196				12/7/2005	Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	al / Diameter:	Total Depth (feet):
No				None	10.0
Notes: Soil sample SB-196 (4.5 - 5) sub Water sample SB-196 submitted			mitted for laborat for laboratory and	ory analysis (V( alysis (VOC, TI	OC, TICs, heptane). Cs, heptane).
Depth (feet)	Sample Interval (feet)	Recovery (feet)	PID (ppm)	Sample Interval	Soil Classification / Description color, texture, structure
0	0 - 5	2	0.0		Top soil.
-					Clayey silt with gravel; loose.
-					Slightly moist at bottom of sample.
_					
_				SB-196	
5	5 - 10	2	0.0	(4.5 - 5)	Saturated
5	5 - 10	2	0.0	(4.5 - 5)	Drown to grow oilt to find to control and
-					Brown to gray sut to the to coarse sand.
-					
-					
-					
10	10 - 15				
-					Boring SB-196 terminated at 10 feet.
-					
-					
-					
15					
-					

Project Name:			Project Number	r:	Location:
For	mer Norton/Nashu	a Site		029.08	Watervliet, New York
Boring Number:			Date Drilled •		Logged by:
SB-197			Date Dillicu.	1/23/2006	Bryan J. Machella
Drilling Co	mpany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
	No			None	15.0
Notes: Water sample SB-197 submitted SB-197 (4 - 5) and (14 - 15) sub SB-197 (9 - 10) submitted for la			for laboratory and mitted for grain si boratory analysis o	alysis (VOC, TI ze analysis. of TOC.	Cs, heptane).
Depth (fast)	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(leet)	(leet)	(leet)	(ppm)	Interval	
0	0 - 5	2	0.0		Brown clayey silt to silty clay with gravel.
-					
-					
-					
-				SB-197	
5	5 - 10	1	0.0	(4 - 5)	Brown silt, sand, and gravel.
_					Wet in lower 6"
-					
-					
				SP 107	
-				30-197	
10	10 - 15	2	0.0	(9 - 10)	Saturated.
-					Brown to gray sand to coarse gravel (1/2 to 1").
_					
-					
-				SB-197	
15				(14 - 15)	
-					Boring SB-197 terminated at 15 feet.

Project Name:			Project Number:			Location:	
For	mer Norton/Nashua	a Site	029.08			Watervliet, New York	
Boring Number:			Date Drilled ·			(25/29 Alden Street Property)	
SB-198			1/23/2006			Bryan J. Machella	
Drilling Co	mpany:		Drilling Method	d:		Sampling Method:	
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>		None	
Well Install	ed:		Casing Materia	l / Diameter:		Total Depth (feet):	
	No			None		15.0	
Notes: Water sample SB-198 submitted			l for laboratory and	alysis (VOC, TI	Cs, heptane)	JI	
Depth (foot)	Sample Interval	Recovery	PID (nnm)	Sample Interval		Soil Classification / Description	
0	0 - 5 5 - 10 10 - 15				No soil sar a ground-v	nples collected; boring installed for collection of water sample.	
- - 15 -					Boring SI	3-198 terminated at 15 feet.	

Project Name:			Project Number	:	Location:
For	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Nu	mber:		Date Drilled:		Logged by:
	SB-199			1/23/2006	Bryan J. Machella
Drilling Co	ompany:		Drilling Method	1:	Sampling Method:
Environmental Cleanup Solutions. Inc.			(	Geoprobe <sup>TM</sup>	Macro-Core
Well Instal	led:		Casing Materia	l / Diameter:	Total Depth (feet):
Yes (MW-18)				None	10.0
Notes:	SB-199 (8.5 - 9) st	ubmitted for la	aboratory analysis of	of TOC.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	color, texture, structure
0	0 - 5				No Sample.
-					
-					
-					
-					
5	5 - 10	4			Silty clay with gravel.
-					Saturated at 9'.
-			0		Toluene odor present.
-			0 - 1		Lower 1.5': gray fine to coarse sand and gravel.
-			3000 - 5000		
10			200 - 300		
-					Boring SB-199 terminated at 10 feet.
-					
_					
15					
15					
-					

Project Name:		Project Number	r:	Location:	
Fo	rmer Norton/Nashua	a Site		029.08	Watervliet, New York (25/29 Alden Street Property)
Boring Number: SB-200			Date Drilled:	1/24/2006	Logged by: Bryan J. Machella
Drilling Co	ompany:		Drilling Metho	d:	Sampling Method:
Environmental Cleanup Solutions. Inc.				Geoprobe <sup>TM</sup>	None
Well Installed: Yes (MW-19)			Casing Materia	II / Diameter: None	Total Depth (feet): 15.0
Notes: No soil samples collected see SE			3-195 for lithologic	c description.	
Depth	Sample Interval	Recovery	PID	Sample	Soil Classification / Description
(feet)	(feet)	(feet)	(ppm)	Interval	<u>color, texture, structure</u>
0	0-5				No soil samples collected; boring installed for installation of
-					ground-water monitoring well MW-19.
-					
_					
-					
5	5 - 10				
-					
-					
-					
_					
10	10 15				
10	10 - 15				
-					
-					
-					
-					
15					
-					Boring SB-200 terminated at 15 feet.

# **APPENDIX B**

## MONITORING POINT/WELL, VAPOR MONITORING POINT CONSTRUCTION LOGS






























































#### WELL CONSTRUCTION DIAGRAM Former norton/nashua tape products facility watervliet, new york



#### WELL CONSTRUCTION DIAGRAM Former norton/nashua tape products facility watervliet, new york









**APPENDIX C** 

**GROUND-WATER FIELD SAMPLING FORMS** 

Forensic Environmental Services, Inc. Well Sampling Form							
		men estubili	ig rot in				
Date: 2.118/04			Sampler				
Project/Site: WATAVIUL			Location				
Well ID: MP-1							
Inner Casing diameter:			Casing Materia				
Weather Conditions: SUNNY 25	°F						
PID reading from well:	,	ppm					
Total Depth of Well (from top inner casing)	i:	feet					
Depth to Water (DTW) (from top inner cas	ing): 8.64	feet					
Linear feet of water in well:	· •	feet					
Is DTW included in a complete round of pr	e-sampling synoptic	water level measu	irements?			yes	no
Thickness of floating product (if any): Description of floating product:		feet					
Purge Method: Peristaltic Pump	T. T. T. T		n -	/ <b>11</b> · · · ·			
Purge Start Time:	Purge End Time:		Purge Rat	e (gallons/min.):			
Total Volume Fulged.	Temperature	Conductivity	nH	Diss Oxygen	Redox (ORP)	Depth to	[
	°F °C	(us/cm)	(pH units)	(DDM)	(mV)	Water (ft)	
Initial:	16.80	560	7.27	4.68	-208.7	8.64	
:32 3 Minutes:	11.00	531	6.84	2.95	- 189.3	8.78	
: <b>35</b> 6 Minutes:	10.87	520	6.49	1.69	-175.8	8 75	
:38 9 Minutes:	10.98	565	6.42	1.30	-168.3	8.76	
: 4/ 12 Minutes:	11.06	590	6.41	1.11	-161.9	8.76	
:44' 15 Minutes:	11.03	607	6.39	0.98	-155.8	8.76	1
: 47 18 Minutes:	11.00	624	6.42	0.90	- 147.7	8.76	
· 50 21 Minutes	11.02	635	6.44	0.82	-142.9	8.76	
Sampling Method: :63 24 Min	11.02	142	1 115	6.79	-178.1	8 7/	L
Sampling Time:	11.00	640	6.89	0.73	-17.7.4	8 76	
Sampling Parameters		010	4.71	0.75	-1011	0.70	
Field Observations (turbidity, recharge rate	, odor, sheens, PID 1	readings):					
Purge Water Status (containerized & # of a	containers, filtered an	nd discharged, w/	discharge locat	ion):			
Comments:			*****				
0 <u></u>	NA TOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTO						

Date: $2/[5/04]$ Sample:: $35^{m}/M^{m}$ Project/Site: $aJATEDULleT$ Location:       Location: $bAt^{m}V   h^{k}   NY$ Well D: $MP - 2$ Imac Casing diameter: $[52 - 1/k^{d} - p^{10} - p^{10}] C.       Casing Material:       pVC         Weather Conditions:       J^{m}N^{-2}       NM       ppn       feet         Depth to Well (from top inner casing):       feet       feet       feet         Linear feet of water in well:       NM       ppn       feet         Depth to Well from top inner casing):       -feet       feet         Purge Matchod:       fielding produet (f any):       -feet         Parge Matchod:       Pirtialitio Pinnp       Purge Ead Time:       1^{n}         Purge Matchod:       Periative       Conductivity       pH       Diss. Oxygen       Redox (ORP)       Depth to         Purge Matchod:       Periative       Conductivity       pH       Diss. Oxygen       Redox (ORP)       Depth to         Purge Matchod:       Periative       Conductivity       pH       Diss. Oxygen       Redox (ORP)       Depth to         12 d// 3 Minutes:       12 + 7       Purge Matchod:       10^{m} 11/2 + 7/2 1/2 + 7/2 + 7/2 $	Forensic Environmental Services, Inc. Well Sampling Form							
Date: $2/[k]/o!$ Sampler: $35^{+}/M_{h}$ Project/Site: $MPP-Z$ Location:       Location: $MP + NY$ Immed Conditions: $JMP_{-2}$ Immed Conditions: $JMP_{-2}$ Immed Conditions: $JMP_{-2}$ Immed Conditions: $JMP_{-2}$ Weather Conditions: $JMP_{-2}$ Immed Conditions: $JMP_{-2}$ Use of the other invalition of the cosing):       feet       Immed Conditions: $JMP_{-2}$ Linear feet of water in well:       feet       Immed Conditions: $JMP_{-2}$ Linear feet of water in well:       feet       Immed Conditions: $JPP_{-2}$ Linear feet of water in well:       feet       Immed Conditions: $JPP_{-2}$ Depth of Well (from top inner cosing): $-feet$ Description of footing product $-$ -         Purge Mathod.       Period End footing product $-$ -       feet       Immed Conduct $-$ Purge Mathod.       Period I								
ProjectSite:Destination:Location:Location:Location:Location:NyWell D:MP - 2Lance Casing diameter: $1/2 - 1/\sqrt{k} - p^{1/2} $	Date: 2/18/04			Sampler: 35	M/MW			
Well D: $MP - 2$ Inner Casing diameter: Wether Conditions $J_{PNP_{-}} 3ci$ PD reading from well: Total Depth of Well (from top inner casing): Populo Water (DTW) (from top inner casing): Populo Water in well: is DTW included in a complete round of pre-sampling synoptic water level measurements? Purge Mothod: Perstallic Pump Purge Start Time: 12:14 Purge Mathod: Perstallic Pump Purge End Time: 12:17 Total Volume Purged: I = 0 I = 0	Project/Site: WATERVILET Location: WATERVILOT, NY							
Inner Casing diameter: $[2 - 1/\sqrt{4} - p^{0} - plcL]$ Casing Material: $puC$ Weather Conditions: $J_{P} = J_{P} = J_{$	Nell ID: MP-2							
Weather Conditions: JANY-364 PD reading from well: NM ppm Total Depth to Wall (from top inner casing): feet Linear feet of water in well: field to TW included in a complete round of pre-sampling synoptic water level measurements? yes (a) Depth to Water (DTW) (from top inner casing): $-$ feet Linear feet of water in well: field in any: $-$ feet Linear feet of water in well: $-$ feet Description of floating product (if any): $-$ feet - free (us/cm) (pH units) (ppm) (mV) Water (ff) $\cdot$ ( $-$ Initial $\underline{8.39}$ ( $\underline{12,823}$ ( $\underline{12,824}$ ( $\underline{23,024}$ ( $\underline{24,924}$ ( $\underline{23,024}$ ( $\underline{24,024}$ (	nner Casing diameter: 12-1Nch-pro-plck Casing Material: PVC							
PD reading from well: PD reading from well: Total Depth of Well (from top inner casing): Popth to Water (DTW) (from top inner casing): Purge Mathod: Peristalike Pump Purge Start Time: Purge Method: Peristalike Pump Purge Method: Peristalike Pump Purge Mathod: Purge Method: Purge Mathod: Purge Mathod: Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized	Weather Conditions: JINNY_ 30'							
Total Depth of Well (from top inner casing): 9.00 feet Depth to Water (DTW) (from top inner casing): 9.00 feet Linear feet of vater in well: feet Is DTW included in a complete round of pre-sampling synoptic water level measurements? yes (for Thickness of floating product: Purge Method: Peristalitie Pump Purge Start Time: 12:96 Purge End Time: 1:77 Purge Rate (gallons/min.): Total Volume Purged: 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons 1.5 gal	PID reading from well:		NM ppm					
Depth to Water (DTW) (from top imper casing): 9.00 feet Linear feet of Water in well: for well: for well: feet Linear feet of water in well: for well: for well: for well: feet Linear feet of measurements? yes (for well: for we	Total Depth of Well (from top inner casi	1g):	feet					
Linear feet of water in well: $feet$ Is DTW included in a complete round of pre-sampling synoptic water level measurements? yes Thickness of floating product (if any): feet Purge Method: Peristatitic Pump Purge Start Time: 17:14 Purge End Time: 17:17 Total Volume Purged: $Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic water level measurements? Purge Rate (gallons/min.): Total Volume Purged: Sampling Synoptic Water (fit)Sampling Method: Prise Synoptic Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge W$	Depth to Water (DTW) (from top inner o	asing): 9.00	feet					ì
Is D1 w methoded in a complete round of pre-sampling synophic water level measurements? Thickness of floating product (if any): feet Description of floating product : Purge Method: Peristalite Pump Purge Start Time: $12.46$ Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.5 gallons Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to 1.47 3 Minutes: $8.10$ $1.94.10$ $4.22$ $3.04$ $-1.58.4$ $9.001.49^{2} 3 Minutes: 7.82 1.8 4.20 4.24 3.02 -1.452 10.261.57$ 6 Minutes: $7.82$ $1.8$ $4.20$ $4.24$ $3.02$ $-1.452$ $10.261.57$ 9 Minutes: $9.10$ $1.85444$ $4.32$ $1.84$ $-1.36.8$ $10.7551.57$ 9 Minutes: $9.24$ $1.7884$ $4.42$ $1.21$ $-1.31.5$ $11.0991.01$ 15 Minutes: $9.27$ $1.4807$ $4.53$ $6.92$ $-1.22.8$ $11.4581.94$ 18 Minutes: $9.27$ $1.4807$ $4.53$ $6.92$ $-1.22.8$ $11.4581.94$ 18 Minutes: $8.05$ $1.302.3$ $4.57$ $2.01$ $-1.16.9$ $10.400Sampling Method: 11.8 2.477 8.54 1.2438 4.42 0.74 -1.16.9 11.57Sampling Parameters: 12.4 8.74 11.390 4.42 0.74 -1.16.5 12.155Sampling Parameters: 12.4 8.74 11.390 4.42 6.42 0.744 -1.15.2 (2.455)Field Observations (turbidity, recharge rate, odor, sheens, PID readings):124$ $4.01$ $4.047$ $5.54$ $1.044$ $3.047$ $-1.16.5$ $12.155Sampling Parameters: 12.4 8.05 1.302.3 4.464 0.464 -1.15.2 (2.455)Field Observations (turbidity, recharge rate, odor, sheens, PID readings):124$ $4.01$ $4.047$ $5.54$ $1.044$ $3.047$ $-1.011$ $1.44$ $-1.05$	Linear feet of water in well:		feet					1
Interformes of floating product (at any):	is DIW included in a complete round of	pre-sampling synoptic	water level measu	irements?			yes	(no
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Description of floating product (if any):		feet					Ŭ
I'ling Withing Prige Status Princip         Purge Status Princingation         Purge Status	Description of noating product:							
Total Volume Purged:       I age tails         Total Volume Purged:       I age tails       I age	Purge Start Time: 17	Purce End Time	1:27	Duras Dat				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Total Volume Purged:	, S gallons		Fuige Ka	e (galons/min.):			
$^{\circ}$ F $^{\circ}$ C       (µs/cm)       (µH units)       (ppm)       (mV)       Water (ft) $? -/C$ Initial: $8.38$ $/4,383$ $G.C.8$ $G.94$ $-/38.6$ $9.00$ $!4/9$ 3 Minutes: $8.10$ $19,4/0$ $C.22$ $3.04$ $-138.6$ $9.00$ $!4/9$ 3 Minutes: $7.82$ $18, L20$ $C.24$ $3.02$ $-1/452$ $(0.24)$ $!57$ 9 Minutes: $9.10$ $185444$ $G.32$ $1.86$ $-1/31.5$ $10.20$ $:57$ 9 Minutes: $9.16$ $185444$ $G.32$ $1.86$ $-1/31.5$ $10.75$ $:58$ 12 Minutes: $9.27$ $1/4801$ $G.53$ $G.92$ $-126.8$ $11.48$ $:0'$ 18 Minutes: $9.27$ $1/4801$ $G.53$ $G.92$ $-126.8$ $11.48$ $:15$ $:27971$ $8.54$ $122438$ $G.62$ $G.744$ $-116.9$ $16.60$ Sampling Time: $21.2777$ $8.54$ $122428$ $G.62$ $G.744$ $-116.512$ $12.455$ <tr< td=""><td><u> </u></td><td>Temperature</td><td>Conductivity</td><td>ъН</td><td>Diss, Oxygen</td><td>Redox (ORP)</td><td>Depth to</td><td>1</td></tr<>	<u> </u>	Temperature	Conductivity	ъН	Diss, Oxygen	Redox (ORP)	Depth to	1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		°F °C	(us/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$\frac{149}{1249} 3 \text{ Minutes:} \frac{119}{8.10} \frac{1940}{1940} \frac{1940}{6.22} \frac{1000}{3.04} \frac{1135}{1135} \frac{1100}{7} \frac{1000}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1100} \frac{1100}{1000} \frac{11000}{1000} \frac{11000}{10000} \frac{110000}{10000} \frac{11000}{10000} 11$	: 4/6 Initi	al: 8.38	14383	118	6.96	-138.6	9.00	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1/16 3 16-11	810	19410	1 22	3 21	-130.7	14.00	1
$\frac{152}{55} = 0 \text{ Minutes:} \frac{7.82}{9.10} \frac{18}{5444} \frac{120}{6.32} \frac{1.86}{1.86} \frac{-1452}{10.75} \frac{10.24}{1.21} \frac{10.24}{1.2$		3. 0.10	18	6.66	3.07	158.7	10.20	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	52 6 Minutes: 7.82 18,620 6.24 3.02 -1452 10.26							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	:55 9 Minutes: 9.10 18544 6.32 1.86 -136.8 10.75							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	, <b>58</b> 12 Minute	58 12 Minutes: 9.34 17984 4.42 1.21 -131.5 11.09						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	:01 15 Minute	s: 9.18	16433	6.48	1.04	-129.2	11.35	
115 $+0721$ Minutes:       8.05       13023       6.57       2.01 $-119.9$ 10.60         Sampling Method:       1/8 24 min       8.54       12438       6.62       0.74 $-118.4$ 11.51         Sampling Time:       121       27m       8.60       12242       6.66 $6.45$ $-116.5$ 12.15         Sampling Time:       121       27m       8.60       12242       6.66 $6.45$ $-116.5$ 12.15         Sampling Parameters:       124       8.74       11390 $6.66$ $6.64$ $-115.2$ $12.45$ Field Observations (turbidity, recharge rate, odor, sheens, PID readings): $124$ $1.04$ $0.47$ $0.47$ $-0.11$ $1.47$ $recharge + 5.000$ Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): $-115.2$ $12.45$	:04 18 Minute	es: 9.27	14801	6.53	0.92	-126.8	11.48	
Sampling Method: $1/8$ 24 m·· 8.54 $12438$ C.CZ O.74 $-1/8.4$ $(1.51)$ Sampling Time: $121$ 27 m 8.60 $12242$ C.GC $0.45$ $-1/6.5$ $12.15$ Sampling Parameters: $124$ 8.74 $1/390$ C.CC $0.64$ $-1/5.2$ $(2.65)$ Field Observations (turbidity, recharge rate, odor, sheens, PID readings): 124 $holl$ $hourt$ $DAY - holl 1+t$ recharge $t$ sample Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	115 -07 21 Minute	es: 8.05	13023	6.57	2.01	-119.9	10.60	
Sampling Time: $(21,277)$ G. CO $(1224)$ C. GG $(5.45)$ $-(116.5)$ $(2.15)$ Sampling Parameters: $(24)$ G. F. $(1390)$ C. GG $(5.46)$ $(2.45)$ $(2.15)$ Field Observations (turbidity, recharge rate, odor, sheens, PID readings): (124) $(1390)$ $(2.65)Field Observations (turbidity, recharge rate, odor, sheens, PID readings):(124)$ $(1390)$ $(2.65)Functional container of the state of containers, filtered and discharged, w/ discharge location):$	Sampling Method: 118 24 m	· 8 EV	12438	112	6 711	-118.4	11 51	L
Sampling Parameters: 124 8.74 11390 6.66 0.66 -115.2 12.65 Field Observations (turbidity, recharge rate, odor, sheens, PID readings): 124 Loll wort Dry - Will 1+t recharge + 5 August Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	Sampling Time: 171 -27	6.60	12242	1.1.1	0.74 A. 118	-116-7	215	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings): /24 Loll wort Dry - Will lot recharge f Sprogelt Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	Sampling Parameters: (24	8.76	11290	6.44	0.95	-110.5	12.15	
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	Field Observations (turbidity, recharge rate, odor, sheens, PID readings): 124 Loll wont Dry - Will lot recharge + sample							
Comments: 2	1							
10000 BELOW TUBIDG INTAME 105 Holded taby, Verniticted purge at #	I'UPGEO BAOW	ThBIDG IN	MARE 105	1 Hilded	talo 31 6	Minder (	pwge a	t ##\$
what very sulty - want dry during development seconding to Drillers' Notes	into vay	· silty - wa	nt diy du	ring devol	opmont preco	rdy to Dr.	ller Notes	

Forensic Environmental Services, Inc.

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Forensic Environmental Services, Inc. Well Sampling Form							
Date: 2/16/04			10-11 D.C	10) 101			
Project/Site: WAFE/VIM			Sampler: 153	he por a			
Well ID: MO-2	· · · ·		Location: WA	Farding Ny			
Innet Casino diameter: 18 - 116-	000		Coning Materia	1. 0.1			
Weather Conditions: That h	ppcic.		Casing Materia				
PID reading from well:		NM					
Total Depth of Well (from ton inner casing	<i>)</i> -	feet					
Depth to Water (DTW) (from top inner cashe		D foot					
Linear feet of water in well:	iing).	· · feet					,
Is DTW included in a complete round of p	e-sampling synoptic	water level mean	remento?			Ven	$\square$
Thickness of floating product (if any):	to sumpling synophe	feet	inements?			yes	
Description of floating product:		1001					
Purge Method: Peristaltic Pump					······································		
Purge Start Time: 2:28	Purge End Time:		Purge Rat	te (gallons/min.):			
Total Volume Purged:	gallons		E .	<i>.</i> ,			
	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	F (°	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:2.F Initial	7.43	573	6.57	294	-95.0	8.7	
·7)	9 00		6.02		-07 11	9.70	
3 Minutes	1.01	5 69	6.9 C	1. 39	76.9	1.37	
.37 <sub>6 Minutes</sub>	19.20	519	6.41	1.03	-92.5	19.39	
:37 9 Minutes	9.15	519	6.40	0.82	-92.6	9.40	
:90 12 Minutes	9.04	521	6.39	0.73	-91.6	9.41	
:43 15 Minutes	9.10	57.1	6.38	0.70	-91.0	9.47	
.46 18 Minuter	906	527	6 70	0.68	-90.0	a 117	
:45 21 Minutes		<u>p                                    </u>	0.57		•	1.4 C	
		1				11	
Sampling Method:							
Sampling Time: 2.30							
Sampling Parameters:							
Field Observations (turbidity, recharge rate	e, odor, sheens, PID 1	eadings):					
Purge Water Status (containerized & # of	containers, filtered ar	d discharged w/	discharge locati	ion).			
	,	in anothingen, in	unonta go 10000	ion <i>j.</i>			
Comments:							

Forensic Environmental Services, Inc. Well Sampling Form						
Date: 2/19/64		Sampler:	Savar Machel	h		
Project/Site: WAtarull Pt	***************************************	Location:	Instantal NY			
Well ID: MP-Y			<u> </u>		<b></b>	
Inner Casing diameter: 1 2 - Pr - pAck		Casing Ma	aterial: PVC			
Weather Conditions:						
PID reading from well:	~ M	$\operatorname{ppm}$				
Total Depth of Well (from top inner casing):	000	feet				
Depth to Water (DTW) (from top inner casing):	8.17	feet				
Linear feet of water in well:		feet				$\cap$
Is DTW included in a complete round of pre-sam	pling synoptic water level	measurements?			yes	(no)
Description of floating product (if any):		- ieet				
Purge Method: Peristaltic Purp						
Purge Start Time: F. 20 Pr	urge End Time:	Pure	Rate (gallons/min)			
Total Volume Purged:	gallons		(Berrono, 1111.).			
[	emperature Conduct	ivity pH	Diss. Oxygen	Redox (ORP)	Depth to	
	<sup>°</sup> F (C/ (µs/сп	n) (pH uni	ts) (ppm)	(mV)	Water (ft)	
ZU Initial	7.64 546	6.78	(1),5)	-728	8.73	
	12/ 501	11	UGC	-66 9	677	
· U ) 3 Minutes:	1.00 871	0.26	17.18	00.1	$\left( \cdot \right)$	
6 Minutes:	1.12 822	. 6.51	1.76	-66.3	(7,7)	
$: \mathcal{L}_{9 \text{ Minutes:}} $	1.8/2 815	6.45	1.19	-66.)	8.7	
:32	67 617		. 096	-655	5-77	
		0.70			0.11	
15 Minutes:	2.04 814	6.9%	0.10	67.6	(.))	
* 3 } 18 Minutes:	0.0) 815	6.44	0.95	-65.2	5.7)	
:4/ 21 Minutes:						
Sampling Method:		1		1		l
Sampling Time: Sill()	·					
Sampling Parameters:						
Field Observations (turbidity, recharge rate, odo	r, sheens, PID readings):					
	, , , , , , , , , , , , , , , , , , , ,					
Purge Water Status (containerized & # of containerized & # of containeri	mers, filtered and discharge	ed, w/ discharge l	ocation):			
Comments:						
L						

Forensic Environmental Services, Inc. Well Sampling Form					
Date: UISIOY Project/Site:	Sampler: BJM/MW Location: Watsvhat, NY				
Well ID: MP-5 - 58-13-5					
Inner Casing diameter: 12 - pr~prole	Casing Material: PVL				
Weather Conditions: Junny - 30					
PID reading from well: $\rho m$ ppr	n				
Total Depth of Well (from top inner casing):	at a second s				
Depth to Water (DTW) (from top inner casing):	al de la constante de la consta				
Linear feel of water in well: fee					
IS D1 w included in a complete round of pre-sampling synoptic water level mea.	surements? yes <b>t</b> o				
Description of floating product (n any) Tec					
Purge Method: Peristaltic Pump					
Purge Start Time: 3:09 Purge End Time:	Purge Rate (gallons/min.):				
Total Volume Purged: gallons					
Temperature Conductivity	pH Diss. Oxygen Redox (ORP) Depth to				
F (G (μs/cm)	(pH units) (ppm) (mV) Water (ft)				
109 Initial: 6.85 69-1	6.73 11.22 -99.3 9.00				
:12 3 Minuter 8.29 792	6.84 7.19 -91.9 9.84				
is summers. Euro					
6 Minutes: 8.9 C 805	0.86 116 -818 0.13				
9 Minutes: 8.51 F18	6.84 0.87 -89.0 10.29				
:7) 12 Minutes: 1.53 823	6.51 0.83 -87.4 10.39				
24 55 821	176 0.75 -87.3 0.40				
15 Minutes: 0.5 7 0 5	9.70				
18 Minutes:					
21 Minutes:					
Sampling Method:					
Sampling Time: 3, L)					
Sampling Parameters:					
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):					
Purge Water Status (containerized & # of containers filtered and discharged a	1/ discharge location):				
	(inscharge location).				
Comments: 51/ ty					

Forensic Environmental Services, Inc. Well Sampling Form							
Date: 7 118/04		Sampler: NS	m/hu		818 <u>11-213-11-713-21-11</u> -11-11-11-11-11-11-11-11-11-11-11-1		
Project/Site: WATTYING Location: UN Farylist. NY							
Well ID: MP-6 58-137	Well ID: MP-6 SB-137						
Inner Casing diameter: 2 1-2 - Prepach		Casing Materia	al: pvC				
Weather Conditions: 5-1-20							
PID reading from well:	NM ppm						
Total Depth of Well (from top inner casing):	PAS feet						
Depth to Water (DTW) (from top inner casing):	···· feet						
Linear reet of water in well:	ieei tio water lewel maaar	and the first state of the first					
Thickness of floating product (if any):	eet	irements?			yes	(ng	
Description of floating product:	1001						
Purge Method: Peristaltic Pump							
Purge Start Time: 5:37 Purge End Tin	ne:	Purge Rat	e (gallons/min.):				
Total Volume Purged: gallo	ons			D 1 (0DD)		1	
	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to		
-24	(µs/cm)	(pH units)	(ppm)		Water (ff)		
Initial: 6.7	31/	677	6.3)	-900	8.5		
3 Minutes: 8-50	502	6.67	2.46	-87.5	8.73		
$: 90_{6 \text{ Minutes}} [\overline{Y}, \overline{\gamma}]$	519	6.56	1,1)	-87.2	8.74		
193 9 Minutes: 883	550	6.57	0.85	-86.8	6.73		
:46 12 Minutes: 5.87	608	6.03	6.66	-86.6	8.73		
:49 15 Minutes: 8.80	63)	665	0.60	-86.7	5.77		
15 18 Minutes: 0.00	637	6.66	0.58	-86.8	1.53		
	675	667	0.50	- 56.7	5-77		
Sampling Method 221 Stalle DV 6	031	10.0 /	0.3 /	av c	0.1)	<u> </u>	
Sampling Times 7 . C/							
Sampling Printe. 3136							
Field Observations (turbidity techarge rate odor sheeps PII	D readings):						
	is routiligs).						
Durge Water Status (contained - 1 8 H - 6	1 J 1	1	·				
ange water Status (containenzed & # of containers, filtered	and discharged, w/	uischarge locat	ion):				
Commenter			····				
Comments:							

Date: 2/18/04 Project/Site: 2018 Project/Site: 201					
Well ID: MP-					
tunes Cosing diamater b D/C DO/K					
Weather Conditions:					
DID reading from wells					
Total Depth of Well (from ton inner againe):					
$\sum_{n=1}^{\infty} \sum_{n=1}^{\infty} \sum_{n$					
Linear feet of water in well:					
Le DTW included in a complete cound of an according an actionate level according to 2	6				
This D1 w included in a complete round of pre-sampling synopic water level measurements? yes	$\binom{no}{}$				
Description of floating product (in any).	$\bigcirc$				
Purse Method: Depisteltic Dump					
Purge Start Time: 4 ' C G Purge End Time: Purge Pate (gellons/min):					
Total Volume Purged: gallons					
Temperature Conductivity pH Diss Oxygen Redox (ORP) Depth	to				
$\tilde{F}$ $\tilde{C}$ (us/cm) (nH units) (nom) (mV) Water (	ft)				
$\frac{1}{100} \frac{1}{100} \frac{1}$					
Initial: 1.33 37 1.00 COE -33.7 0.7					
11 3 Minutes: 7.58 570 7.05 1.02 -04.5 5.15					
:15 ENTINE 760 574 7.08 0.67 -F4.7 F.15					
1/2 9 Minutes: 7.66 575 7.10 0.48 84.1 8.15					
11 12 Minutes: 7.59 573 7.11 0.44 55 8.15					
24 15 Minutes 7 64 571 7.10 CAV2 - F7.77 8.15					
18 Minutes:					
21 Minutes:					
Sampling Method:					
Sampling Time: 4:75					
Sampling Parameters:					
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):					
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):					
Comments:					

Forensic Environmental Services, Inc. Well Sampling Form							
Date: $5/16/61$			Sompler: 16 5	~~~			
Project/Site: INCLIMMANA			Tooption i Mart	7. What and	2		
	CR-177 RI. L.L.		Location: 677				
Inner Cosing diameters	IT AND SY CHO	~~	Contra Maria	1 OXC			
Weather Conditions:	prox		Casing Materia				
DD reading from well.		im					
Total Darth of Wall (from to include		r' ppm					
Total Depin of Well (from top inner	casing):	9,FY leet					
Depin to water (D1w) (from top in	iner casing):	i / ieet					
Linear leet of water in well:		teet					
is D1W included in a complete rour	nd of pre-sampling synoptic	water level measu	irements?			yes	( no
I hickness of floating product (if any	y):	feet					$\bigcirc$
Description of floating product:							
Purge Method: Peristaltic Pump			<b>.</b>	/ <b>11</b>			
Total Volume Durandi	Purge End Time:		Purge Rat	e (gallons/mm.):			
Total Volume Fulged	Temperatura	Conductivity	T	Dias Orange	Dedax (ODD)	Denth to	1
		Conductivity	pri (	Diss. Oxygen	Redox (ORP)		
		(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:56	Initial: 16.40	718	1.20	7.28	-43.0	9.89	
:55 <sub>3 M</sub>	linutes: 17,60	718	0.87	3.02	-60.3	9,86	
·58 <sub>6 М</sub>	finutes: 17.92	723	6.77	1.47	-61.7	9.86	
:0) 9 Minutes: 18.09 725 6.74 1.00 64.6 9.86							
:04 12 M	finutes: 1P. 23	726	6.71	0.75	-66.5	1.86	
:07 15 N	linutes: 18.29	רגר	6.71	0.67	-65.6	9.86	
:/ 0 18 N	Ainutes: 18.35	28	6.70	0.55	-65.4	9.86	
: <b>/3</b> 21 M	Ainutes: 18.34	728	6.70	0.57	-64.9	5.86	
Sampling Method:			-				
Sampling Time: 415							
Sampling Parameters:							
Field Observations (turbidity, rechar	rge rate, odor, sheens, PID 1	readings):					
		27					
Purge Water Status (containerized a	& # of containers, filtered ar	nd discharged, w/	discharge locati	on):			
Comments:							

.

Forensic Environmental Services, Inc. Well Sampling Form								
Date: 2/19/04				Complex RT	~			
Project/Site Intoniot	Date: C/17/0/ Sampler: ISJM							
Well ID: MP-9 - By most mall - SR-17.7								
Inner Casing diameter: 14 - nre-, ACK Casing Material: PUC								
Weather Conditions: Turn	- 30		<del></del>	<u></u> ,				
PID reading from well:			NM ppm					
Total Depth of Well (from top	inner casing)	:	feet					
Depth to Water (DTW) (from	top inner casi	ng): <b>9</b> ,	.87 feet					
Linear feet of water in well:			feet					
Is DTW included in a comple	te round of pro	-sampling synoptic	water level measu	rements?			yes	(no)
Thickness of floating product Description of floating produc	(if any): >t:		feet					
Purge Method: Peristaltic Pu Purge Start Time: <b>4.3</b> )	mp	Purge End Time:		Purge Rat	e (gallons/min.):			
Total Volume Puiged.		Temperature	Conductivity	nH	Dies Oswan	Redox (ORP)	Depth to	
		°F C	(us/cm)	(nHunita)	(nnm)		Water (ft)	
:3/	Initial:	15.04	1052	6.64	<u>(</u> pp)	-53.6	9.87	
:34	3 Minutes:	15.63	1084	6.60	1.99	-52.7	10.03	
:37	6 Minutes:	15.76	1087	6.62	1.27	-51.2	10.03	
:k a	9 Minutes:	15.83	1066	6.66	D.87	-51.6	10.03	:
*43	12 Minutes:	15.89	1040	6.69	0.77	-51.3	10.03	
:46	15 Minutes:	15.90	10,23	6.70	0.71	-50.9	10.03	
:49	18 Minutes:	15.89	10,11	6.71	a.66	-50.9	10.03	
:52	21 Minutes:	15.89	10.09	6.71	0.65	-50.7	10.07	
Sampling Method:		L				1		L
Sampling Time USS	•							
Sampling Parameters								
Field Observations (turbidity.	recharge rate.	odor, sheens, PID r	eadings):					
			<u>B</u> _).					
Purge Water Status (containerized & # of containers filtered and discharged w/ discharge land in the								
Purge water Status (containe	nzed & # of c	ontainers, filtered an	nd discharged, w/	discharge locati	on):			
Comments:	Comments:							

Date: 2/20/04 Project/Site: WHAVINET Well ID: MP-10 (SB-25) Inner Casing diameter: 12 - pre-pack Weather Conditions: PID reading from well: Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: Is DTW included in a complete round of pre-sampl			Sampler: 73 5 a	r iteruliet, N	9		
Inner Casing diameter: 12 - pre-pack Weather Conditions: PID reading from well: Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: Is DTW included in a complete round of pre-sample							
Weather Conditions: PID reading from well: Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: Is DTW included in a complete round of pre-sample	1		Casing Material	pvc			
Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: Is DTW included in a complete round of pre-sample		NM ppm					
Is DTW included in a complete round of pre-sampl	(	G.G. () feet					
Thickness of floating product (if any):	ling synoptic wa	iter level measu feet	rements?			yes	no
Description of floating product: Purge Method: Peristaltic Pump		·	<b>.</b>				
Purge Start Time: 1, 4, 4, Purg	ge End Time: gallons		Purge Rate	e (gallons/min.):			
Ter °F	mperature , F (°C)	Conductivity (µs/cm)	pH (pH units)	Diss. Oxygen (ppm)	Redox (ORP) (mV)	Depth to Water (ft)	
$\frac{23}{14}$ Initial:	5.84	700	480	1.98	-3/3	9.90	
29 3 Minutes: 1 6 Minutes: 1	37	<u>705</u>	1.95	a.M	-44.2	10.10	
9 Minutes: 17	, SO	697	7.00	0.40	-45.8	10,13	
· 3 12 Minutes: 1	1.57	67.3	7.04	0.39	-45.5	10.13	
18 Minutes:		•					
Sampling Method: Peristal fin pump					1	<u> </u>	
Sampling Time: <b>5.90</b> Sampling Parameters:							
Field Observations (turbidity, recharge rate, odor, s	sheens, PID rea	dings):					
Purge Water Status (containerized & # of container	ers, filtered and	discharged, w/	discharge locati	on):			
Comments:	n na an an an an an Anna an Anna Anna A						

Forensic Environmental Services, Inc. Well Sampling Form						
Date: 212004		Sampler AT	*M			
Project/Site: []	·····	Langtion:	Andrealist N	Y		
Well D: Mo. II (R-18)				/		
Unner Casing diameter: 1 Ore- AAck		Cosino Matari	1 10/16			
Weather Conditions:		Casing Materia				
DUD man ding from well						
PhD reading from well:	ppm					
1 Otal Depth of Well (from top inner casing):	a d d leet					
Depth to Water (DIW) (from top inner casing):	1.7 feet					
Linear feet of water in well:	feet					
Is DTW included in a complete round of pre-sampling syno	ptic water level measu	irements?			yes	6
Thickness of floating product (if any):	feet					_
Description of floating product:						
Purge Method: Peristaltic Pump						
Purge Start Time: <b>X</b> - <b>Y</b> Purge End Ti	ime:	Purge Rat	te (gallons/min.):			
Total Volume Purged: gall	lons	1	······			
l'emperature	e Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
F (C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:47 Initial: 14.7V	833	6.89	6.53	-29.8	999	
'50 3 Minutes 1588	857	6.60	1.19	-741	10.3	
in Styling 15 Gr	5:0	1 -1	(1) 70	233L	10.7	
6 Minutes: 19.11	750	6.10		20.0	10.5 C	
:56 9 Minutes: 15.99	845	6.54	0.76	- 5'5?)	10.35	
:59 12 Minutes: 16.02	852	6.54	0.70	-336	10.35	
:02 15 Minutes		· · · · · · · · · · · · · · · · · · ·				
			· · · · ·		+	
18 Minutes:						
21 Minutes:						
Sampling Method: Peristaine Pump						
Sampling Time: 2) 200						
Sampling Parameters:						
Field Observations (turbidity, recharge rate, odor, sheens, P	'ID readings):					**
	<i>c</i> /					
Purge Water Status (containerized & # of containers, filtere	zd and discharged, w/	discharge locati	ion):			
Comments:						

Forensic Environmental Services, Inc. Well Sampling Form					
Date: 2120/04	Sampler: ATA				
Project/Site: Latt.vhet. Ny					
Well ID: $MP - 12 (SB - 71)$					
Inner Casing diameter: 12 DIT-DACK	Casing Material: PVC				
Weather Conditions:					
PID reading from well: PID reading from well:	m				
Total Depth of Well (from top inner casing):					
Depth to Water (DTW) (from top inner casing):	eet				
Linear feet of water in well: fe	pet Contraction Contraction				
Is DTW included in a complete round of pre-sampling synoptic water level me	asurements? yes to				
Thickness of floating product (if any): fe Description of floating product:	cet				
Purge Method: Peristaltic Pump					
Purge Start Time: 7:/ V Purge End Time:	Purge Kate (gallons/mm.):				
Temperature Conductivit	v pH Diss Oxygen Redox (ORP) Depth to				
°F CO (us/cm)	(nH units) (npm) (mV) Water (ft)				
	159 (04 -292 007)				
. (O Initial: 15.8) 15)	0.0 0.0 0.0				
3 Minutes: 14.62 788	6.85 1.08 -21.9 10.07				
:16 6 Minutes: 14.75 287 6.88 0.58 -28.5 10.07					
:19 9 Minutes: 14.79 756	6.92 0.46 -292 19.03				
$\frac{11}{12} = \frac{11}{12} $					
	102 011 -290 000				
15  Minutes:  19.30  1173	6.93 0.9/ - 1.0 10.07				
18 Minutes:					
:3/ 21 Minutes:					
Sampling Method: Paristaltic prop					
Sampling Time: 9'?()					
Sampling Parameters:					
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):					
Purge Water Status (containerized & # of containers, filtered and discharged $w/$ discharge location).					
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):					
Comments:	1. e 5-11 ()				
Collecter Frold Black (P	5-way sample 1.4 6				

Forensic Environmental Services, Inc. Well Sampling Form	
Date: 21999	Sender RSM
Project/Site: (WAFaviv <sup>+</sup>	Jacobion: Incharabet AN
Well D: 16C)	
Inner Casing diameter: 2	Casino Material: NVC
Weather Conditions: Clurely - 30	
PID reading from well:	nn
Total Depth of Well (from top inner casing):	feet
Depth to Water (DTW) (from top inner casing): $7.59$ f	feet
Linear feet of water in well:	feet
Is DTW included in a complete round of pre-sampling synoptic water level measurements?	
Thickness of floating product (if any): f	feet
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: Purge End Time:	Purge Rate (gallons/min.):
I otal Volume Purged: gallons	
l'emperature Conductivit	ty pH Diss. Oxygen Redox (ORP) Depth to
<u>F</u> ( <u></u> <u></u> <u></u> <u></u> <u></u> (μs/cm)	(pH units) (ppm) (mV) Water (ft)
$:\mathcal{L}$ Initial: $9.59$ 1165	7.70 8.83 -29.2 7.54
16 3 Vinter 10.98 1160	179 146 -516 7/3
· · · · · · · · · · · · · · · · · · ·	7.0 1.10 5.0 1.05
- C1 6 Minutes: 11. L8 117L	1.01 1.11 -51.6 1.62
: 32 9 Minutes: 1) 44 1173	7.18 0.95 -530 7.63
· X 12 Minutes [1] 51 [1] 7	7.17 088 -5.15 017
•3) 12 Minutes: 11. 7 11 C	11 0.00 54.5 7.65
•38 15 Minutes: 11,60 11 10	7.16 0.81 -54.) 7.63
: <b>i</b> ) 18 Minutes: $1.70$ $1.65$	7.17 0.76 - 546 763
:44 21 Minutes: 1169 1160	1
Sampling Method:	1111013 39.3 1.03
Samping Time: 1-47	
Sampling Parameters: /	
ried Observations (turbidity, recharge rate, odor, sheens, PID readings):	
· · · ·	
Purge Water Status (containerized & # of containers, filtered and discharged w/ discharge location);	
a second difference and decondiged; w/ discharge location).	
Comment	
Comments:	
Forensic Environm Well Samp	ental Services, Inc. <sub>Jing Form</sub>
---	--
Date: $\neg /  c  /  c $	Sampler: 755A
Project/Site: Lystavini	Location: whtever, by
Well ID: 166-2	
Inner Casing diameter: 2	Casing Material: <i>f</i> 1 <i>i</i>
Weather Conditions: Cloudy - 30	
PID reading from well:	m
Total Depth of Well (from top inner casing):	
Depth to Water (DTW) (from top inner casing): 6.0. 16	ect
Linear feel of water in Well:	asurements? yes (no)
Thickness of floating product (if any):	eet
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: 12:49 Purge End Time:	Purge Rate (gallons/min.):
Total Volume Purged: gallons	TH Diss Oxygen Redox (ORP) Depth to
$\tilde{F}$	(pH units) (npm) (mV) Water (ft)
· 1) Initial: 0.57 639	1.13 1.6 -36.6 6.0
:48 3 Minutes: 9.18 61-1	7.56 9.71 -38.3 6.77
:51 6 Minutes: 9.38 56 L	7.47 3.91 -56.8 6:78
: 5 <sup>y</sup> 9 Minutes: 9.51 590	7.43 3.56 -55.6 6.80
:57 12 Minutes: 9.66 59)	7.40 3.12 -54.3 6.81
:06 15 Minutes: 9.74 600	7.38 2.56 -33.4 6.81
:03 18 Minutes: 972 605	7.37 2.35 -52.9 6.81
:06 21 Minutes: 9.76 611	7.36 2.24 -51.9 6.81
Sampling Method: :09 9.75 616	7.35 2.20 -51.7 6.51
Sampling Time:	
Sampling Parameters:	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	i n
Purge Water Status (containerized & # of containers, filtered and discharged,	w/ discharge location):
Comments:	

Forensic Environme Well Sampli	ntal Services, Inc. ng Form
Date: 7-/19/09	Sampler OSM
Project/Site: la Atorulit	Longing Later (1) of all
Inner Casino diameter:	Coome Material DVL
Weather Conditions: $C_{1} = 30$	
PID reading from well:	
Total Depth of Well (from ton inner casing):	
Depth to Water (DTW) (from top inner casing):	
Linear feet of water in well:	
Is DTW included in a complete round of pre-sampling synoptic water level measured	uremento?
Thickness of floating product (if any):	
Description of floating product:	L
Purge Method: Peristaltic Pump	
Purge Start Time: 1:55 Purge End Time:	Purge Rate (gallons/min)
Total Volume Purged: gallons	r di go rato (galono, mili).
Temperature Conductivity	pH Diss. Oxygen Redox (ORP) Depth to
°F <sup>°</sup> C (μs/cm)	(pH units) (ppm) (mV) Water (ft)
1:59 EFS UPS	797 757 767 890
3 Minutes: <b>9.95</b>	1.77 3.09 -51.6 8.90
:05 6 Minutes: 9,4/4 473	764 7.30 -45.1 \$91
9 76 U22	
$\cdot \circ \circ$	1.53 1.18 79.6 8.91
$: 11_{12 \text{ Minutes:}} 9.38 9.75$	7.49 1.64 -43.3 8.9
14 1516 920 472	145 153 -416 Pai
18 Minutes: 7. 7. 9 65	7.44 1.5-6 40.6 8.9)
21  Minutes:	
Sampling Method	
Sompling Time: 7770	
Commission Demonstration	
Sampling Parameters:	
ricid Observations (un bluity, recharge rate, odor, sheens, PhD readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w/	discharge location):
Commente	

- 20th Friday

Forensic Environmental Services, Inc. L339 Foo-699-E916

239-481-3800 Clen \$63-533-6111

Forensic Environm Well Samp	nental Services, Inc. pling Form
Date: 2/19/04	Sampler: BJM
Project/Site: WATEVVINT	Location: WAtarvliet, NY
Well ID: DGC-S	· · · · · · · · · · · · · · · · · · ·
Inner Casing diameter: 2	Casing Material:
Weather Conditions: Clarty - Le's	
PID reading from well:	
Total Depth of Well (from top inner casing):	
Depth to Water (D1W) (from top inner casing): <b>7.5</b>	CCI
Linear feet of water in well.	esurements? VCS (II)
Thickness of floating product (if any):	eet
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: 7:47 Purge End Time:	Purge Rate (gallons/min.):
Total Volume Purged: gallons	by Dia Ongen Reday (OPD) Depth to
°E C	(pH unita) (ppm) (mV) Water (ft)
.97 Initial: 0-10 P31	1.92 6.73 -96.8 7.37
:47 3 Minutes: 9.60 874	6.87 2.00 -59.4 7.67
50 6 Minutes: 0.09 893	6.73 1.32 -62.6 9.67
:53 <sub>9 Minutes:</sub> 10.40 596	6.69 1.02 65.4 9.70
:56 12 Minutes: 10.60 900	6.67 0.9 -66.1 9.70
155 15 Minutes: 10.83 901	1266 0.80 62.3 9.7)
:02 18 Minutes: 10.92 902	667 0.74 -5.3 9.7)
$(05_{21 \text{ Minutes:}})) \cdot (0) = (00)$	607 0.70 -66. 9.7)
Sampling Method: Sampling Time: J.C.) Sampling Parameters:	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged,	w/ discharge location):
Comments: VAUL NAMASCA DGC-13 r	7:00 = Dup of D6C-5

		Forensic I	Environmei Well Samplin	1tal Servico 19 Form	es, Inc.			
Date: 2/18/04			i i	Sampler:				
roject/Site: WATER	UET			Location:			***************************************	
Vell ID: 06C - 7								
nner Casing diameter:				Casing Materia	1:			
Veather Conditions:								
ID reading from well:			$\mathbf{p}\mathbf{p}\mathbf{m}$					
otal Depth of Well (from t	op inner casing)		feet					
Depth to Water (DTW) (fro	m top inner casi	ng): 8.68	feet					
inear feet of water in well:			feet					
s DTW included in a comp	lete round of pre	-sampling synoptic v	water level measu	irements?			yes	n
nickness of floating produ Description of floating prod	cī (11 any): uct:		feet					
Purge Method: Peristaltic F	ump							
urge Start Time:		Purge End Time:		Purge Rat	e (gallons/min.):			
Cotal Volume Purged:	· · · · · · · · · · · · · · · · · · ·	gallons	0.1.1.1					
		Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
		F C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
: C	>7 Initial:	8-6811.50	769	6.94	4.07	-161.8	8.68	
:10	<ul> <li>3 Minutes:</li> </ul>	11.51	775	6.94	2.15	-138.8	8.69	
: (	<b>3</b> 6 Minutes:	11.64	809	7.04	1.16	-131.5	8.69	
:1	<b>7</b> 9 Minutes:	11.64	811	7.07	0.80	-130.0	8.69	
.'2	• 12 Minutes:	11.84	812	7.11	0.63	-129.1	8.70	
: 2	<b>3</b> 15 Minutes:	11.83	810	7.10	·A.59	-179.0	8.70	
: 2	18 Minutes:	11.82	811	7.10	0.54	-129.2	8.72	
:2	9 21 Minutes:	(r 22	<u> </u>					
Sampling Method			1		I	1	1	1
Sampline Time: 107 B				•				
Sampling Parameters								
Field Observations (turbidi	ty, recharge rate	odor, sheens, PID ro	eadings):					
	,,							
······································						····		
Purge Water Status (contai	nerized & # of c	ontainers, filtered an	d discharged, w/	discharge locati	on):			
Comments:								

	Forensic	Environme Well Samplin	ntal Servico ng Form	es, Inc.			
Date: 7/18/04			Sampler Tic	7 /MIN			
Project/Site: WAtervlipt			Location 14	Atoruliit. NI	1		
Well D: D6C-8							
Inner Casing diameter: 7-1Nc*			Casing Materia	1:55			
Weather Conditions: Juniy - 201	\$		<b>.</b>	<i></i>	·		
PID reading from well:		NA ppm					
Total Depth of Well (from top inner cas	ing):	feet					
Depth to Water (DTW) (from top inner	casing):	1. C3 feet					
Linear feet of water in well:	o	feet					$\sim$
Is DTW included in a complete round of	f pre-sampling synoptic	water level measu	irements?			yes	(noj
Description of floating product (11 any):		teet					
Purge Method: Peristaltic Pump							
Purge Start Time: 10:27	Purge End Time:		Purge Rat	e (gallons/min.):			
Total Volume Purged:	gallons			-	<b>r</b>		
	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	FO	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:しつ Init	ial: 9.83	765	6.97	1853	-217.2	7,23	
:36 <sub>3 Minu</sub>	tes: 0-26	753	6.52	201	-2082	7.29	
: 37 6 Minu	tes: 10.28	749	4.40	1.66	-200.4	7.30	
• <b>36</b> 9 Minu	tes: 10.45	753	6.34	1.41	-187.2	7.30	
:35 <sub>12 Minu</sub>	tes: 10.53	761	6.34	1.28	-181.1	7.30	-
:yZ 15 Minu	tes: 10.56	77Z	6.35	1.17	- 177.4	7.31	
	tes: 10.47	783	6.34	1.09	- 171.9	7.31	
:49 <sub>21 Minu</sub>	tes: 10.51	792	6.32	1.02	-143.4	7.30	
Sampling Method: 51 24 Mi	1. 10.54	800	6.32	0.97	-155.6	7.30	
Sampling Time : 57 27 M	10.40	80)	6.36	976	-149.2	1.30	
Sampling Parameters: 57	10:45	808	6.33	0.40	-148.5	<u>ר. ר</u>	
Pield Observations (turbidity, recharge t	rate, odor, sheens, PID 1	readings):					
Purge Water Status (containerized & #	of containers, filtered ar	nd discharged, w/	discharge locati	ion):			
Field	Ecur -	so ms	12				

	Forensic	Environmei Well Samplin	ntal Service ng Form	es, Inc.			
10: 2/18/04			Sampler: B	M/MW			
pject/Site: Upfanli'			Location: $\omega$	Aforvilley, N	/		
ell ID: D6C-9							
ner Casing diameter:		2-INCH	Casing Materia	1: prc			
eather Conditions: 5, any Lo's							
D reading from well:		NN ppm					
tal Depth of Well (from top inner ca	sing):	IC feet					
epth to Water (DTW) (from top inner	casing):	ハフフ feet	L.				
near feet of water in well:		feet					C
DTW included in a complete round of	of pre-sampling synoptic	water level meas	urements?			yes	<u> </u>
nickness of floating product (if any):		feet	t				
escription of floating product:							
rge Method: Peristaltic Pump	Durge End Time		Purce Rat	e (gallons/min).			
Inge Statt Time: -/, C	r urge Enu Time gallons	S	I dige Ka	e (Eurono mur.).			
Jai Volume i urged.	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	°F (C)	(us/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
. 2.0	61	665	Lac	506	-1041	11.95	
	itial: 0.16	005	0.70	2.00		12 20	
: ${\cal O}_{_{3{ m Min}}}$	utes: 1.43	668	5.18	3.29	-103.7	12.20	
: 26 G Min	uter: 7, 7	673	7.20	3.07	-79.Y	12.22	
.7.5	Fab	178	1270	2 67	-98.0	12.23	
. • , 9 Min	utes: 0.00	0.0	1.00	711	610	17 77	
:34 <sub>12 Min</sub>		686	1.0L	61	-1 /. /	14.65	
:35 15 Mir	utes R.D	1695	17.70	2.32	1-76·Y	12.23	
:35	E.7.4	702	127G	2.06	-96.4	1723	
- 18 Mii		21	7.0		-955	1772	4
, 17 21 Mir	nutes: <b>Y</b> . <b>W</b>		11.19	1.8	[-1]	10.5	<u> </u>
ampling Method: Poistathe NV~ 4	44 8.20	713	7.19	179	-94,7	12.23	
Sampling Time: 9:50	4) 5.7 U	JIV	TIF	175	-94.3	)7.23	
Sampling Parameters:		<i>, • ,</i>	~~~0	1. 12	,,,,,,	-	
Field Observations (turbidity, recharg	e rate, odor, sheens, PID	readings):					
	U. O		/ 3' 1 1	<u>(</u> )			
Purge Water Status (containerized &	# of containers, filtered	and discharged, w	// discharge loca	tion):			
Comments:					Fal Nol		
Gold une - ()	10mm 11			-	line De inte	6	
	-my/L			Ja	in Oslug 2	)	

	Forensic l	Environme Well Sampli	ntal Service ng Form	es, Inc.			
Date: 2/18/09		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	Sampler: 3/1/	AN MACHANA	/ Mike Like	y	
Project/Site:			Location: WA	forulit, NY	· · · · · · · · · · · · · · · · · · ·		
Well ID: D6C-10							
nner Casing diameter:	7	L-INCL	Casing Materia				
Weather Conditions: Junny - 20 PID reading from well: Fotal Depth of Well (from top inner casing)	:	NM ppm	L E				
Depth to Water (DTW) (from top inner casi	ng):	9.70 fee	t				
Linear feet of water in well:		fee	t				
s DTW included in a complete round of pro Thickness of floating product (if any):	sampling synoptic s	water level meas	urements? t			yes	<b>®</b>
Description of floating product: NONE							
Purge Method: Peristaltic Pump Purge Start Time: 7:38 Total Volume Purged:	Purge End Time:	९:ऽ१	Purge Rat	e (gallons/min.):			
	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	°F Ø	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:38 Initial:	4.00	666	7.98	9.58	-113.1	9.70	
:4) <sub>3 Minutes:</sub>	4.70	624	7.66	3.97	-108.6	10.07	
:49 6 Minutes:	4.64	667	7.36	2.33	-108.7	10.07	
:47 9 Minutes:	4,6)	689	7.25	1.82	-108.3	10.0)	
:50 12 Minutes:	4.72	707	7.14	1.4)	-107.7	10.07	
15 Minutes:	4.60	717	7.08	1.33	-107.6	10.07	
:56 18 Minutes:	4.56	ってい	7.05	1.22	-106.7	107	
:5 21 Minutes:	9.72	721	7.02	1.20	-106.11	10.7	
Sampling Method: Peristan lo PUMY Sampling Time: 9:00 Sampling Parameters: Vec/5VoC		<u></u>		•	L		
Field Observations (turbidity, recharge rate	, odor, sheens, PID r	eadings):					
Purge Water Status (containerized & # of c	containers, filtered ar	nd discharged, w	/ discharge locat	ion):			
comments:							

	Forensic	e Environme Well Sampli	ntal Servie ng Form	ces, Inc.			
,56-121)	Sever 13100	d jug	Sampler: S Location: Up	sm Itorvlist, N	У		
		v	Casing Materi	al: PVC			
nner casing) op inner casi round of pro f any):  p	): ing): c-sampling synoptic	NF ppm feet feet water level measu feet	irements?			yes	no
Initial: 3 Minutes: 6 Minutes: 9 Minutes: 2 Minutes: 8 Minutes: 1 Minutes: • <b>pvr</b> charge rate, ed & # of co	Purge End Time: gallons Temperature F O. S I IZ.2S IZ.66 IZ.91 I3.0F I3.0F I3.16 I3.25 odor, sheens, PID results ntainers, filtered an	conductivity $(\mu s/cm)$ 536 549 557 56	Purge Rai pH (pH units) <b>7.82</b> <b>7.40</b> <b>7.10</b> <b>7.01</b> <b>7.01</b> <b>7.01</b> <b>7.01</b> <b>7.01</b> <b>7.01</b> <b>7.04</b> <b>6</b> <b>7.04</b> <b>6</b> <b>6</b> <b>7.04</b>	te (gallons/min.): Diss. Oxygen (ppm) 6.85 1.57 1.01 0.77 0.63 0.55 0.55 0.55 0.55 0.55 0.55	Redox (ORP) (mV) ]], O -13.7 -17.9 -17.9 -19.3 -20.8 -20.8 -20.8	Depth to Water (ft) /0.20 /0.21 /0.21 /0.21 /0.21 /0.21 /0.21 /0.21	
	S&-, 2) nner casing) op inner casi round of pro- f any): 	Forension S&-121) Sever (State and of pre-sampling synoptic f any): 	Forensic Environme Well Sampli S&-121) Sever Stady mer casing): $N^{k}$ ppm fact for inner casing): $I^{k}$ $I^{k}$ round of pre-sampling synoptic water level measures f any): feet P Purge End Time: gallons Temperature Conductivity $F$ $C$ ( $\mu$ s/cm) Initial: $I^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ 3 Minutes: $I^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ 6 Minutes: $I^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ 9 Minutes: $I^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ 9 Minutes: $I^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ $S_{k}^{k}$ 9 Minutes: $I^{k}$ $S_{k}^{k}$ $S_{k$	Forensic Environmental Servia Well Sampling Form         Sampler: IS Location: In Location: In Sever ISID values         Sever ISID values         Sampler: IS Location: In Location: In Sever ISID values         MM ppm feet feet round of pre-sampling synoptic water level measurements? fary): feet         Purge End Time: gallons         Murge Rat gallons         Murge Rat gallons	Forensic Environmental Services, Inc. Well Sampling Form         Sampler: $USF$ Location: $Upf = vilet, Pic         Sampler: USF         Location: Upf = vilet, Pic         Sampler: USF         Location: Upf = vilet, Pic         Sampler: USF         Casing Material: Pvc         MF ppm         pice feet         Purge End Time:         purge Rate (gallons/min.):         gallons         Purge End Time:         purge Rate (gallons/min.):         gallons         Purge Rate (gallons/min.):         gallons         Purge Rate (gallons/min.):         gallons         Purge Rate (gallons/min.):         IL-28       SUP         Junto:         IL-28       SUP         Junto:       IL-28       SUP         Junto:       IL-28       SUP         Junto:       IL-28       SUP     $	Forensic Environmental Services, Inc. Well Sampling Form         Sampler: $VSF$ NF ppm         prove         Purge End Time:         Purge Rate (gallons/min.):         Temperature Conductivity pH       Dise. Oxygen Redox (ORP)         Initial $ Q, S 1 = Sa 1 = Q$ Initial $ Q, S 1 = Sa 1 = Q$ Initial $ Q, S 1 = Sa 1 = Q$ Initial $ Q, S 2 = Sa 1 = Q$ Initial $ Q, $	Forensic Environmental Services, Inc. Well Sampling Form         Sample: $ISSF$ Location: $Iaf + rv   I + f_1 rv  $ Sever G(d d rg         Casing Material: $Pvc$ NF ppon feet op inuer casing): $IOUU$ feet feet         proge End Time: galloos       Purge Rate (gallons/min.): galloos         Purge End Time: galloos       Purge Rate (gallons/min.): galloos         Onductivity pH       Diss. Oxygen (nvV) Water (ft)         Initial $O \leq S 1$ $S \leq O > 1$ $O < C \cup O > 0$ $O < C \cup O > 0$ Minutes: $I \geq S \leq S 1$ $N \subset O > 1$ $O = O > S = 1$

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Forensis Environme	antol Courier Tur
Forensic Environme	ental Services, Inc.
wen samp.	ing Form
Date: 7./19/09	Sampler: BSM
Project/Site: WAFON NG	Location: WPT=VA T
Well ID: MW-JC By My-J	
Weather Conditions:	Casing Material: pvi
PID reading from well:	
Total Depth of Well (from top inner casing):	et
Depth to Water (DTW) (from top inner casing):	et
Linear feet of water in well: fee	et
Is DTW included in a complete round of pre-sampling synoptic water level mea	surements? yes no
Thickness of floating product (if any): fee	ef
Description of floating product:	
Purge Start Time: ///200 Purge End Time:	Durge Date (cellens(min))
Total Volume Purged: gallons	r urge Kale (ganons/mm.).
Temperature Conductivity	pH Diss. Oxygen Redox (ORP) Depth to
$^{\circ}F$ (C) (µs/cm)	(pH units) (ppm) (mV) Water (ft)
:06 Initial: 7,99 712	7,17 9,24 -52.0 9.5
:09 3 Minutes: 5.55 688	7.23 2.36 -53.5 9.50
17 6 Minutes: 8.67 681	7.26 1.95 -54.6 9.56
:15 9 Minutes: 8-73 675	7.27 1.48 55.2 9.5
1/F 12 Minutes: 8.95 670	1.20 1.46 -55 6 9.59
21 15 Minuter F.97 472	h 70 1.45 455 6 9.60
:7V 18 Minutes: 99 (57)	77/1.46 -56 6 60
	<u> </u>
Sampling Method:	
Sampling Time: 1/1:7.5	
Sampling Parameters:	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Purce Water Status (containaginal R. H Franking File 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	
r uge water status (contamerized & # of contamers, intered and discharged, w	7 discharge location):
Comments:	
L	

Fore	nsic Environmen Well Samplin	ntal Service	es, Inc.			
	asm					
Date: 2/19/09		Sampler: 135	~			
Project/Site: UN for Not	, MU-B	Location: WA	torulat, NY			
Well ID: MIDEL - MIN-1 (TAN) SB	no potes					
Inner Casing diameter: 2		Casing Material	: pvc			
Weather Conditions: Clark - 30's						
PID reading from well:	$N^{M}$ ppm					
Total Depth of Well (from top inner casing):	feet					
Depth to Water (DTW) (from top inner casing):	6.5 feet					
Linear feet of water in well:	teet				VAP	$(\overline{a})$
Is DTW included in a complete round of pre-sampling sys	noptic water level measu	irements?			yes	0
I mekness of floating product (if any):	Ieel					
Purge Method: Peristaltic Pump						
Purge Start Time: (VII) Purge End	Time:	Purge Rate	e (gallons/min.):			
Total Volume Purged:	gallons	-				
Temperat	ure Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
F	<b>Δ</b> (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:13 Initial: 7.66	1019	8.16	9.01	-72.4	6.50	
·16	1015	7.42	2.58	-67.8	7,17	
	I CULG	212		-he L	2.00	
:/9 6 Minutes: 8.10	1041	1.61	1.04	0.0	170	
:22 9 Minutes: 8-13	1081	7.48	0,76	54.1	170	
:25 12 Minutes 8.7.4	1107	7.37	0.67	-63.7	7.75	
:26 8.27	1116	17.72	0.40	-62.9	7.75	
	111	214	0.67	-61.0	7. PL	
*5/ 18 Minutes: (-3)		1717				
: 37 21 Minutes: 7. 6	1129	113		1-61.6	1.88	
Sampling Method: Sampling Time: 72:35 Sampling Parameters:					•	
Field Observations (turbidity, recharge rate, odor, sheens	s, PID readings):					
Purge Water Status (containerized & # of containers filt	tered and discharged w	discharge locati	on):			
a age water builds (containerized te # or containers, in	eres and appringed, w					
Comments:						

	Forensic	Environme Well Sampli	ntal Servic ng Form	ces, Inc.			
Date: 2 / LF/GV			0 1 27-	<b>\$</b> (. 1 (0)			
Project/Siter a logativit			Sampler: {3 -	ale all al and			
Well ID: Magel Mine	161		Location: 📈	BP-POINT, MY			
Inner Casing diameter: 4	/ /	****	Casing Mater	a DVC			
Weather Conditions:			Casing Materi		······································		
PID reading from well		NM mm					
Total Depth of Well (from top inner casing	).	t ppm					
Depth to Water (DTW) (from top inner cash	xino).	GV feet					
Linear feet of water in well:		feet					
Is DTW included in a complete round of p	e-sampling synoptic	water level measu	trements?			Vec	6
Thickness of floating product (if any):	e sampling synophe	feet				903	ty.
Description of floating product:		. 1000					
Purge Method: Peristaltic Pump							
Purge Start Time:	Purge End Time:		Purge Ra	te (gallons/min.):			
Total Volume Purged:	gallons	-					
	Temperature	Conductivity	pН	Diss. Oxygen	Redox (ORP)	Depth to	
	F (°C)	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
S) Initial	6.06	733	7.17	7.71	-103.0	8.94	
•06 3 Minutes	7.97	666	685	5.32	-103.2	9.05	
:03 <sub>6 Minutes</sub>	8.63	644	6.72	4.14	-103.)	9.10	
:66 9 Minutes	8.61	639	6.68	3.15	-101.	9.11	
:09 12 Minutes	8.47	637	6.55	2.74	700.6	913	
•17	627	620	663	2 46	-Ga U	915	
15 Minutes	<b>6.3</b>	037	0.0 5	2.70	11.7	1.1.5	
・ウ 18 Minutes	r. L9	631	6.6L	218	-98.2	9.))	
: 18 21 Minutes	8.35	631	66)	2.16	57.5	9.18	
Sampling Method: (1)	8.38	630	6.6)	2.10	-96.9	9.19	
Sampling Time: 2:22			·		•	-	
Sampling Parameters:							
Field Observations (turbidity, recharge rate	e, odor, sheens, PID r	eadings):					
Purge Water Status (containerized & # of	ontrinero filtoral	dipphared /	diash an - 1 - 1	<b>)</b> -			
i unge water Status (containenzed & # 61	comainers, intereu ai	iu discharged, w/	discharge locat	1011):			
Comments:							

Data 2 De lot	
Date: C/PTO Sampler: (557)	
Location: WATHORN, NY	
Inner Casing diameter: V	
Weather Conditions: Cla AL-24	
PID reading from well	
Total Depth of Well (from top inner casing)	
Depth to Water (DTW) (from top inner casine):	
Linear feet of water in well:	
Is DTW included in a complete round of pre-sampling synoptic water level measurements?	
Thickness of floating product (if any): feet	<u>u</u>
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: $Q O C$ Purge End Time: Purge Rate (gallons/min.):	
Total Volume Purged: gallons	
Temperature Conductivity pH Diss. Oxygen Redox (ORP) Depth to	
$F$ (C) ( $\mu$ s/cm) (pH units) (ppm) (mV) Water (ft)	
Initial: 5.72 1833 669 656 -71.2 8.88	
: X 3 Minutes 279 1970 651 3161 716 900	
2 5 Minutes. 00 1100 1006 500 600 1.08	
6 Minutes: 1.58 1769 251 2.61 -05.3 9.35	
:11 9 Minutes: 1.25 1138 6.59 3.29 -05.6 9.50	
:14 12 Minutes: work Day - well Act recharge & 5 cm/b	
1) 15 Minutes	
76 18 Minutes	
17.7 21 Minutes	
Compliane Marked	
Samping Time: T, S	
Sampling Parameters:	
ried Observations (lurbidity, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	
Comments:	
SUTTY & START	

Forensic Environ Well San	mental Services, Inc. npling Form
Date: 110/04	
Project/Site: Ustioulisk	Sampler: 18379
Well D: MINITIA - AV ADILA	Location: WARFAILER, NY
Inner Cosing diamater 7	
Weather Conditions: Clau A: - 79:34	Casing Material: PV C
PID reading from well:	
Total Depth of Wall (from ten inner and in)	
Depth to Water (DTH) (from the image is)	feet
Linear feet of water in walk	feet
le DTW included in a complete source la C	feet
Thiskness of floating are that (function)	easurements? yes (no)
Description of floating product:	feet
Purce Method: Derigtatia Dumo	
Purge Start Time: 10.35	
Total Volume Purged	Purge Rate (gallons/min.):
Temperature Conductivi	
°F °C (m/m)	Diss. Oxygen Redox (ORP) Depth to
	(pri units) (ppm) (mV) Water (fi)
Initial: 1.66 6FL	7.89 11.26 -49.7 8.64
:37 3 Minutes 8.67 674	8.56 7.63 -548 10.06
:41 900 175	677 576 44
6 Minutes: 1.00 613	0.11 S. JF -59. 11.03
9.39 <u>9 Minutes:</u> 9.39	8,87 5,13 -53,7 12,17
:17 12 635 676	
12 Windles: 1, 3, 5, 0, 10	1.0 4.91 - 33. 5 1.60
.50 15 Minutes: Well Work Dry -	well let recharge + SAMpte
:53 18 Minutes:	:
:SG 21 Minutes:	
Sampling Method	
Sampling Time: (1) 7 0	
Sampling Time, 7. 30	
Sampling Parameters:	
red Observations (unolony, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers filtered and discharged	w/ discharge location).
	w discharge location).
Comments:	
pour vertiend, "Silly	
1. × × × ×	
hell wind dry	

Forensic Environmental Services, Inc. Well Sampling Form							
Date: 2//4/04		$\sim$	Sampler:				
Project/Site: WAt2-Vhill	(MW-F	; ;	Location:	•			
Well ID: Mathering SR.	.143						
Inner Casing diameter:			Casing Materia				
Weather Conditions:			· ·····				
PID reading from well:		ppm					
Total Depth of Well (from top inner cas	ng):	feet					
Depth to Water (DTW) (from top inner	casing):	feet					
Linear fect of water in well:		feet					
Is DTW included in a complete round of	pre-sampling synoptic	water level meas	urements?			yes	no
Thickness of floating product (if any):		feet					
Description of floating product:							
Purge Method: Peristaltic Pump							
Purge Start Time: 5:00	Purge End Time:		Purge Rat	e (gallons/min.):			
I otal Volume Purged:	gallons		T				
	r	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	F	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$0^{\circ}$ Init	ial: 15,72	681	6.00	930	1-49.3	40.99	
: 03 3 Minu	tes: 17,53	72,	667	2.25	-77.0	9.95	
· CH6 6 Minur	tes: 1815	731	6.70	7.63	-116.1	9.95	
: 09 9 Minur	tes: 18-44	737	6.73	128	-145,5	9.95	
: 17 12 Minu	tes: 18.66	738	6.78	0.93	-94:0	9.55	
$(\cdot, ) \leq 15$ Minu	tes: 18.78	738	6.79	0.78	-91.8	9.95	
18 Minu	tes: 18.8.	736	6.79	0.72	-92.1	5.52	
2/ 21 Minu	tes: 18-86	-735	6.80	0:29	-93,5	9.53	
Sampling Method:		- <b>1</b>			1		
Sampling Time: 7 7-5							
Sampling Parameters							
Field Observations (turbidity, recharge r	ate, odor, sheens, PID r	readings).					
(	,,	ouuugs).					
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):							
Comments:		1 0	·····				
Collo	de MSI	mst					
	• - /						

	Forensic l	Environmen Well Samplin	tal Service g Form	es, Inc.			
Date: $1 \sqrt{15/04}$		I	Sampler: 735	m			
Droject/Site:	SC	GPP - Watervliet	Location:	Watervliet, New	York		
Well TD: M Wells							
Inner Casing diameter:	2"		Casing Materia	il: hVC			
Weather Conditions:							
Total Depth of Well (from ton inner casing	).	feet					
Depth to Water (DTW) (from top inner ca	sing): <b>7</b>	(O) feet					
Linear feet of water in well.	v (	feet					$\bigcirc$
Is DTW included in a complete round of p	re-sampling synoptic	water level measu	rements?			yes	( no-1
Thickness of floating product (if any):		feet					$\bigcirc$
Description of floating product:							
Purge Method: Peristaltic Pump							
Purge Start Time: 9 !0	Purge End Time:		Purge Rat	e (gallons/min.):			
Total Volume Purged:	gallons					D. 11	1
	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	F (°C)	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
: 07 Initia	18.54	825	7.12	3.34	2328	101	
i initia	10.01	670	185	IGU	7577	E.G3	
3 Minutes	11.59	230	6.0)	1.97	55 1.		
6 Minute	17.05	833	6.92	2.00	455.9	7.60	
• ]]	1/ 91	621	5.06	2.42	522.8	0.20	
9 Minute	10.11				576		-
<b>''/9</b> 12 Minute	s: 11.45	20	2. 45	2.04	3.18.9	1.50	-
:17 15 Minute	17.59	FLG	ふって	3.09	SP9.)	11.70	
	17.4	1077	402	270	1063	12.10	1
LV 18 Minute		835	7.0 5	3.30	9-3-1	12.05	-
: <b>7</b> 21 Minute	s 17.6 /	*33	4.54	2.67	623.0	16.85	
· 7 + 24 24 25 mil	-23 CI	6-37.	Y YL	3.15	678.0	13.37	
		1 30	1. 10		00		-
27 Minute	s: , , , , , , , , , , , , , , , , , , ,						
Sampling Method: Low Flow 37	18.51	837	4.15	3,77	622.0	14.23	
Sampling Time: S	J. DA	·Y	· · · h	A no al		-	
Sampling Parameters: 5 160/50	/ 0	/		- ran	No of	o mo	
Field Observations (turbidity, recharge ra	te, odor, sheens, PID	readings):			•		
Durne Water Status (containerized & # o	containers filtered a	nd discharged w	/ discharge loca	tion):	······································		
	. communes by more a	Bea, II		··· •			
Comments:							
					*****		

	Forensic	Environme Well Samplin	ntal Servic ng Form	es, Inc.			
Date: 6/6/04			Sampler: 75	F			
Project/Site:	S	GPP - Watervliet	Location:	Watervliet, New	York		
Well ID: MW-11		·····					
Inner Casing diameter: 24			Casing Materia	il: pVC			
Weather Conditions:							
Total Depth of Well (from top inner casing)	): 	feet					
Depth to Water (DTW) (from top inner cas	ing):	lect					$\langle \rangle$
Linear feet of water in well:	- compline symposites	Icel	vromonto?			VPC	
Is DIW included in a complete round of pr	e-sampling synopue	water ievel measi	fiements?			yes	
I nickness of floating product (if any).		1661					
Purge Method: Peristaltic Pump							
Purge Start Time: 7:20	Purge End Time:		Purge Rat	e (gallons/min.):			
Total Volume Purged:	gallons						1
	Temperature	Conductivity	pH	Diss. Oxygen	Redox (ORP)	Depth to	
	F (°C)	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
:20	17.12	510	6.84	1.96	-58.0	10.00	
- 3	11.57	Ura	112	0.7-	- 57 1.	10.01	
3 Minutes:	10.57	750	6. 15	V. 15			
6 Minutes:	16.38	999	6.67	0.65	-44)	10.01	
:29 9 Minutes:	6.21	441	6,66	0.52	-43.2	1001	
•27	11.11	1120	1 411	QUA	-421	10.01	1
· JC 12 Minutes	10. 1	931-	0.0%	1.1.L	111	10.01	1
: <b>J</b> 15 Minutes	16.05	438	6.65	0.36	761	10.0	4
: <b>J</b> 8 Minutes	16.01	438	6.62	0.33	-1/2,1	100)	
VI 21 Minutes	11.07	427	162	(r.)	-412	10.0	
• <b>u u</b>		-13/-	0.00	+0.15		<u> </u>	4
24 Minutes	:						-
. Y ) <sub>27 Minutes</sub>	:						
Sampling Method: Low Flow							
Sampling Time: G:4}							
Sampling Parameters: 7.60							
Field Observations (turbidity, recharge rate	, odor, sheens, PID i	readings):			···· ······		
	(	. 1. 17 1 1	/	:	· · · ·		
Purge Water Status (containerized & # of	containers, filtered as	nd discharged, w	discharge locat	lion):			
Comments:		, , , , , , , , , , , , , , , , ,					
L							

	Forensic Environme Well Sampli	ntal Services, Inc. ng Form	
Date: b/////04	SGPP - Watervliet	Sampler: TSS ~ Location: Watervliet, New York	
Vell ID: DGC-b			
nner Casing diameter:	7,"	Casing Material: PVC	
Weather Conditions: SUNNY -SCI		•	
Total Depth of Well (from top inner casin	g): fee	l	
Depth to Water (DTW) (from top inner ca	sing): 9.77 fee	l	\ \
Linear feet of water in well:	fee	t	$\alpha$
s DTW included in a complete round of p	ore-sampling synoptic water level meas	urements?	yes (no)
Thickness of floating product (if any):	fee	t	$\smile$
Description of floating product:			
Purge Method: Peristaltic Pump Purge Start Time: 9.45	Purge End Time:	Purge Rate (gallons/min.):	
Fotal Volume Purged:	gallons	Diss Owner Redox (ORP)	Depth to
	°E °C Conductivity	(all unita) (mm) (m <sup>1</sup> /	Water (ft)
	F (µs/cm)		
JY S Initia	1 16.84 1772	6.5 L LLO - 0L)	7.14
· </td <td>16.45 799</td> <td>6.54 0.57 -23.3</td> <td>19.75</td>	16.45 799	6.54 0.57 -23.3	19.75
		111 0111 -757	550
<b>·59</b> 6 Minute	s: [6. 5] [81]	6,26 0.99 511	<u> </u>
9 Minute	s 6.31 820	6.61 0.26 - 58.2	9.75
-10	11.70 RIC	6.67 0.70 -78.6	5.75
12 Minute	S 10. 5 6 8 1		
15 Minute	s las L SIF	0.03 0.33 -51.0	- 212
:06 18 Minute	es:		
`¢\$			
21 Minute	CS:		
24 Minut	es:		
-15 27 Minut	es:		
Counting Mathedu - Low Flow			
Sampling Method. Low Flow			
Sampling Time:			
Sampling Parameters: 8 00	ta adap abaang DID readings);		<u></u>
Field Observations (turbidity, recharge in	ne, odor, sneens, PiD readings).		
Purge Water Status (containerized & # c	of containers, filtered and discharged, w	v/ discharge location):	
			,
			******
Comments:	~		

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Forensic Environmer Well Samplin	ntal Services, Inc. ng Form
	a to be fall for a large to
Date: 0/ 19/07	Sampler: KAYRA /VALA II. JUST PORTON
Project/Site SGPP - Waterviet	Location: Waterviiet, New York
	Contine Material: (INC)
Weather Conditions: Cluster Lynx (	
Total Depth of Well (from top inner casing):	
Depth to Water (DTW) (from top inner casing):	
Linear feet of water in well:	
Is DTW included in a complete round of pre-sampling synoptic water level measu	rements? ves to?
Thickness of floating product (if any):	, Xi
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: 2.91 Purge End Time: 5.11	Purge Rate (gallons/min.):
Total Volume Purged: gallons	
Temperature Conductivity	pH Diss. Oxygen Redox (ORP) Depth to
$F C (\mu s/cm)$	(pH units) (ppm) (mV) Water (ft)
$\mathcal{L}^{(\prime)}$ Initial: $\mathcal{L}^{(\prime)}_{\mathcal{L}}$ $\mathcal{L}^{(\prime)}_{\mathcal{L}}$	129 2.79 111 8.74
:44 3 Minutes 13 24 816	650 134 516 917
17 5 Vindues. 13, 51 0 0	CE 095 725 970
(4) 6 Minutes: $(2-3)$ 8 $(2-3)$	3.0 / 0.11 30.0 1.00
5 <sup>6</sup> 9 Minutes: 121 876	5.63 0.89 39.8 9.25
(3) 12 Minutes 1198 POG	5.40 0.73 38.3 921
12 Minutes. 11 Dr. Day	576 1.00 2011 9711
56 15 Minutes: 110 C 80	5.00 0.30 57.9 1.59
.59 18  Minutes: / 2.00 (79)	5.00 0.95 42.0 9.34
:01 21 Minutes: 17.16 594	4,7) 1.07 43,1 9.35
	446 431 975
24  Minutes: $1.4 1.5 1.5$	9. 9. 1.00 1.35
27 Minutes: 11, 7 7 7 7 7	9.42 0.13 99.8 9.33
Sampling Method: Low Flow .'// //87, 79()	445 0.90 41.4 4.35
Sampling Time: 3:12	
Sampling Parameters: \$7,60	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
	1' 1 1 4' N
Purge Water Status (containerized & # of containers, filtered and discharged, w/	discharge location):
Comments:	

Forensic Environme Well Sampli	ntal Services, Inc. ng Form
vate: 6/14/04 signal/Sdc: SGPP - Watervliet	Sampler: B51/51 Location: Watervliet, New York
Vell D: MP-6	Casino Material: XVC
iner Casing diameter:       12         Veather Conditions:       c l c d y hund         otal Depth of Well (from top inner casing):       fee         Depth to Water (DTW) (from top inner casing):       \$P-3\$)         inear feet of water in well:       fee         s DTW included in a complete round of pre-sampling synoptic water level meas       fee         Chickness of floating product (if any):       fee	t t surements? yes no et
Description of floating product: Purge Method: Peristaltic Pump Purge Start Time:	Purge Rate (gallons/min.):
Gal Volume Purged:       ganons         Temperature       Conductivity $\hat{F}$ $\hat{C}$ $(\mu s/em)$ $\hat{I}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Sampling Parameters: 8760 Field Observations (turbidity, recharge rate, odor, sheens, PID readings): 3:57	
Purge Water Status (containerized & # of containers, filtered and discharged,	w/ discharge location):
Comments:	

SG	PP - Watervliet Lo	mpler: <b>TLS</b> cation: V	Watervliet. New Y	7 1.		
				/ OFK		
		oine Material	DYC			
casing): her casing): <b>7.8</b> d of pre-sampling synoptic v ): Purge End Time:	Feet feet feet vater level measurer feet	ising Material ments? Purge Rate	, (gallons/min.):		yes	<b>1</b> 0
gallons Temperature °F (°C) Initial: 19.53 Initial: 19.53 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 13.99 Initial: 12.55 Initial: ILSS ILSS ILSS Initial: ILSS Initial: ILSS IL	Conductivity (µs/cm) STS SFS SFY SF3 SF2 SF2 SF2 SF2 SF2 SF2 SF2 SF2 SF2 SF2	pH (pH units), 2.64 2.07 1.93 2.07 1.93 2.79 2.79 2.52 2.73 2.52 2.73 2.52 2.73 2.52 3.06 3.28 3.06	Diss. Oxygen (ppm) 405 1.42 1.24 0.42 0.47 0.42 0.55 0.77 0.75 0.75 0.64 0.60 0.64	Redox (ORP) (mV) 253.) 315.5 359.4 333.6 316.2 276.8 276.8 276.8 276.8 276.8 143.5 272.2 188.3 149.1 117.1	Depth to Water (ft) 7.80 7.82 7.82 7.82 7.82 7.82 7.82 7.82 7.82	
arge rate, odor, sheens, PID & # of containers, filtered a	readings):	s.36 3.57 discharge locat	tion):	111, 5 129.3	7,82	
	d of pre-sampling synoptic w Purge End Time: gallons Temperature F C Initial: 14.53 inutes: 13.99 inutes: 13.99 13.06 14.55 inutes: 12.55 inutes: inutes: 12.55 inutes:	$\begin{array}{c c} & \text{Fet} \\ \text{d of pre-sampling synoptic water level measure} \\ & & \text{Purge End Time:} \\ & & \text{gallons} \\ \hline \\ & & \text{Purge End Time:} \\ & & \text{gallons} \\ \hline \\ & & \text{gallons} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{IP} \\ \hline \\ & & \text{Initial:} \\ \hline \\ & & \text{IP} \\ \hline$	$\begin{array}{c c} & \text{rect} \\ \text{d of pre-sampling synoptic water level measurements?} \\ & & & \text{ feet} \\ \hline \\ & & & & & \\ \hline \\ & & & & \\ \hline \\ & & & &$	$\begin{array}{c} & \text{rest} \\ \text{do pre-sampling synoptic water level measurements?} \\ & \text{feet} \\ \end{array} \\ \begin{array}{c} & \text{feet} \\ \hline \\ Purge End Time: \\ gallons \\ \hline \\ purge Fact (gallons/min.): \\ gallons \\ \hline \\ \hline \\ gallons \\ \hline \\ \hline \\ \hline \\ preservation \\ \hline \\ pre$	Interest of pre-sampling synoptic water level measurements?         yrunge End Time:         Purge End Time:         Purge End Time:         Purge End Time:         gallons         Initial:         14.53         Initial:         19.55         Initial:         19.4.53         Initial:         19.4.53       575         2.64       40.05         13.49       575         2.65       40.05         13.49       575         2.65       40.05         13.49       575         2.05       1.472         3.06       572         2.16       0.471         33.54       12.55         12.55       570         2.52       0.475         12.55       570         2.52       0.475         12.55       570         2.52       570         2.52       570         2.53       545         3.06       0.70         12.55       545	for pre-sampling synoptic water level measurements?       yes         in generative       - feet         Purge End Time:         Purge End Time:         Durge Rate (gallons/min.):         Initial:         14.55         A conductivity         pH per surge         Conductivity         pH per surge Conductivity         pH per surge         Conductivity         pH per surge Conductivity         pH per surge Conductivity         Purge Rate (gallons/min.):         Initial:         14.55         14.55         12.624       9.03       25.57.0       7.640         Initia:         12.55       5.64       7.64       30.54       7.62         Initia:       12.55       5.64       7.52       0.64       30.54       7.62         Initia:       12.55       5.64       7.24       0.60       17.1       7.82         Initia:         12.54       5.54       3.44       0.60

Forensic Environmen Well Samplin	ntal Services, Inc. <sub>19</sub> Form
Date: 6/15/09 Project/Site: SGPP - Watervliet	Sampler: BRYAN MACHTUR (35m) Location: Watervliet, New York
Well ID: MW-13	Casing Material:
Inner Casing diameter:	
Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: Is DTW included in a complete round of pre-sampling synoptic water level measu Thickness of floating product (if any): Description of floating product:	urements? yes not
Purge Method: Peristaltic Pump Purge Start Time: Purge End Time:	Purge Rate (gallons/min.):
Total volume Furged.         Temperature       Conductivity $\hat{F}$ $\hat{C}$ $(\mu s/cm)$ $i2/$ Initial: $17.96$ $866$ $i2/$ 3 Minutes: $16.76$ $866$ $i2/$ 3 Minutes: $16.34$ $834$ $i30$ 9 Minutes: $16.34$ $834$ $i30$ 9 Minutes: $16.39$ $856$ $i30$ 9 Minutes: $16.39$ $834$ $i30$ 9 Minutes: $16.39$ $834$ $i30$ 9 Minutes: $16.39$ $856$ $i30$ 9 Minutes: $16.39$ $856$ $i30$ 9 Minutes: $15.99$ $866$ $i31$ 12 Minutes: $15.63$ $15.63$ $i32$ 18 Minutes: $15.63$ $17.6$ $i37$ 21 Minutes: $15.63$ $17.6$ $i37$ 27 Minutes: $15.79$ $15.63$ $i37$ $27$ Minutes: $15.79$ $15.5$ Sampling Method;       Low Flow	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Sampling Time: <b>C</b> . <b>S</b> O	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w	// discharge location):
Comments:	

Forensic Environme Well Sampli	ntal Services, Inc. ng Form
Date: 6/15/04	Sampler: TST
Droiost/Site: SGPP - Watervliet	Location: Watervliet, New York
Well ID. DBC-10	Casing Material: IVC
Inner Casing diameter.	
Weather Conditions:	1
Total Depth of Well (from top inner casing).	4
Depin to water (D1 w) (nom top innor casing).	
Linear feet of Water in Well:	surements? yes (no)
Is D1 W included in a complete round of pre-sampling synoptic water level measure in the sample is the synoptic water level measure in the	
I hickness of floating product (if any):	
Description of floating product.	
Purge Method: Penstance rump Durge Stort Time: <b>C</b> · <b>U 9</b> Purge End Time:	Purge Rate (gallons/min.):
Total Volume Purged: gallons	
Temperature Conductivity	pH Diss. Oxygen Redox (ORP) Depth to
$\stackrel{\circ}{\mathbf{F}} \left( \begin{array}{c} c \\ c \end{array} \right) $ (us/cm)	(pH units) (ppm) (mV) Water (ft)
.40	11 10 3111 LEFS 9-C
•77 Initial: 13. 15 326	Y.J J.Y, 000. 1 101
: <7 3 Minutes: 14 97 490	3.51 3.00 713. 2 9.00
	2.08 7.93 775.7 997
·>> 6 Minutes: 17.0 / 990	
:57 9 Minutes: 14.66 513	C.84 C.60 143.3 1.44
UUV -449	2.60 2.15 753.1 094
	710100 701 5 901
15 Minutes: 19, 21 567	0.001.00 130. 1.76
18 Minutes: 14 06 574	2.38 1.54 764.2 9.96
	be the second seco
:10 21 Minutes: NM - 08 C 6- 54	
いい 24 Minutes: NM ーンとく	
. The 27 Minutes NM - NEC	
	7 5 1 7 7 7 4 4
Sampling Method: Low Flow 1 17.35 3 13	1, j L 10, "
Sampling Time: 10'S	7.7/ 1.4/ 7.7.
Sampling Parameters: 8760 05 1110 Jo C	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
25 11 25 12 70 (7)	Last 1.51 JANU
J 17. 00 J	
D. THE Obtain the stand of the formation of filtered and discharged	w/discharge location):
Purge Water Status (containenzed $\alpha$ # of containers, intered and discharged,	7.55 782.0
28 17.67 487	(.) () () () () () () () () () () () () ()
	•
Comments:	

	Forensic Environmer Well Samplin	ntal Services, Inc. ng Form
<u>tistal</u>		Sampler BS
Date: 6119001	SGPD - Watervliet	Location: Watervliet, New York
Project/Site:	5011 - Wald the	
Well ID: DGC	21	Casing Material: DVC
nner Casing diameter:	V	Cashig Haterian P
Weather Conditions: Total Depth of Well (fr Depth to Water (DTW Linear feet of water in Is DTW included in a of Thickness of floating p	feet form top inner casing): ) (from top inner casing): well: complete round of pre-sampling synoptic water level measure product (if any): feet	urements? yes no
Description of floating	product:	
Purge Method: Perista Purge Start Time: , Total Volume Purged:	ltic Pump Purge End Time: gallons	Purge Rate (gallons/min.):
Sampling Method: Sampling Time:	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Sampling Parameters	S & U.C.	
Prield Observations (1	uronary, recharge rate, odor, sheens, r in readings).	•
Purge Water Status ( Comments:	containerized & # of containers, filtered and discharged, w	w/ discharge location):

Forensic Environme Well Samp	ental Services, Inc. ling Form
Du HISTOU	Sampler D.SA-
Droject/Site: SGPP - Watervli	et Location: Watervliet, New York
Well TD: MINE 17	
Inner Casing diameter: $\mathcal{V}''$	Casing Material: PVC
Weather Conditions:	
Total Depth of Well (from top inner casing): fe	et
Depth to Water (DTW) (from top inner casing):	et
Linear feet of water in well: 6	et 🔿
Is DTW included in a complete round of pre-sampling synoptic water level mea	isurements? yes (no)
Thickness of floating product (if any): fe	et
Description of floating product:	
Purge Method: Peristaltic Pump	
Purge Start Time: 11:2/ Purge End Time:	Purge Kate (gallons/min.):
Total Volume Purged: I gallons	PH Diss Oxygen Redox (ORP) Depth to
	(nH units) (nnm) (mV) Water (ff)
: C/ Initial: 16.99 601	5.65 9.1 555.1 0.18
:24 3 Minutes: 15.29 594	4.63 1.56 415.0 9.12
11 67 563	479 JUL 1102 970
6 Minutes:	1.01 1.91 9.5.0 1.00
9 Minutes: 14.98 591	9 13 1. 09 9726 1.60
:33 12 Minutes: 1475 561	U71129 449 9.23
: 36 15 Minutes: 19.95 591	4.10 1.25 505 9.27
: 35 18 Minutes:	
: <b>77</b> 21 Minutes:	
: <b>Y</b> 24 Minutes:	
:48-27 Minutes:	Y I I I I I I I I I I I I I I I I I I I
Sampling Method: Low Flow	
Sampling Time: //:U/	•
Sampling Parameters: 21.6.9	
Eveld Observations (turbidity recharge rate odor sheeps PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged,	w/ discharge location):
Comments:	

Forensic Environme Well Sampli	ntal Services, Inc. ng Form
Data (115/04	Sampler: Re
Date: GTSTU SGPP-Watervliet	Location Watervliet New York
Wall TD: M (wells	
Inner Cosing diameter:	Casing Material: IVC
Weather Conditions:	
Total Depth of Well (from top inner casing): Depth to Water (DTW) (from top inner casing): Linear feet of water in well: b = DTW isolwded in a complete round of pre-sampling synoptic water level meas	urements?
This complete found of pre-sampling synophic water level mode	
Description of floating product (in any).	
Purge Method: Peristaltic Pump Purge Start Time:// S Purge End Time: Total Volume Purged: gallons	Purge Rate (gallons/min.):
Temperature Conductivity $\stackrel{\circ}{F}$ $\stackrel{\circ}{C}$ $\stackrel{\circ}{(\mu s/cm)}$ 1/.51 Initial: $1F.4F$ $19760.7$ 3 Minutes: $16.90$ $19760.5$ 6 Minutes: $16.92$ $19F1$	pHDiss. OxygenRedox (ORP)Depth to $(pH units)$ $(ppm)$ $(mV)$ Water (ft) $4, 01$ $2,222$ $13,3$ $769$ $3,34$ $1,222$ $16,5$ $9.02$ $3,73$ $0,94$ $20,4$ $9,222$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3.18 0.16 24.8 9.42 3.28 0.16 24.8 9.42 3.28 0.73 2.2 9.57 3.18 0.76 21.9 9.87 3.08 0.76 25.0 9.98
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3.05 0.75 27.2 \$1/0.15
Sampling Method: Low Flow Sampling Time: / Z, ZS Sampling Parameters: 8Z6 9	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w	// discharge location):
Comments:	

Forensic Environmental Services, Inc. Well Sampling Form	
Date: ALISTON Sampler: BS	
Project/Site: SGPP - Watervliet Location: Watervliet, New York	
Well ID: NGC-7	
Inner Casing diameter: Casing Material: QVC	
Weather Conditions:	
Total Depth of Well (from top inner casing):	
Depth to Water (DTW) (from top inner casing):	
Linear feet of water in well: feet	
Is DTW included in a complete round of pre-sampling synoptic water level measurements?	yes (no)
Thickness of floating product (if any): leet	Ŭ
Description of floating product:	
Purge Method: Perstanc Pump Purge Start Time: Purge End Time: Purge Rate (gallons/min.):	
Total Volume Purged: gallons	ORP) Depth to
<sup>°</sup> T ( <sup>°</sup> ) ( <sup>°</sup> T ( <sup>°</sup> ) ( <sup>°</sup> T ( <sup>°</sup> )) ( <sup>°</sup> T ( <sup>°</sup> ))	() Water (ft)
F ( (µs/cm) (pri units) (ppri) (	
.16 Initial: 21.27 269 6.02 C.03 -1	6 8.50
19 3 Minutes: 18.30 828 5.16 1.20 34	1 2.34
22 6 Minutes: 17.53 F23 4.55 1.08 -0	8 8.35
2 9 Minutes: 17.47 820 4.37 0.99 12	1.36
28 12 Minutes D. 3< 820 4.39 0.90 16	7 8.36
12) 15 Minutes 17, 20 818 4.36 0.88 10	0 8.36
:74 18 Minutes:	
21 Minutes:	
24 Minutes:	
27 Minutes:	
Sampling Method: Low Flow	
Sampling Time: / 35	
Sampling Parameters: 8260	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Burge Water Status (containerized & # of containers filtered and discharged, w/ discharge location):	
Commentati	

Date: $\sqrt{15797}$ Sumpler $\sqrt{257}$ Sumpl		Forensic l	Environmer Well Samplin	ntal Service	es, Inc.			
Case:       N   1   - 1       Description (Second)       Waterviet, New York         Well DD D $( K)$ SGPP - Waterviet   Location:       Waterviet, New York         Inner Casing diameter:       2 '1'       Casang Material:       D V C         Well DD Wolf (from top inner easing):       6 -00       feet         Depth to Water (DW) (fonto primer casing):       6 -00       feet         Linear feet of water in well:       1 - 00       feet         Depth to Water (DW) (fonto primer casing):       6 -00       feet         Depth to Water (DW) (fonto primer casing):       6 -00       feet         Interkense of Davids product (fany):			I	Sampler D. F.	M			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			PP - Watervliet	Location:	Watervliet New	York		
Weil JJ JG				1500011011.				
Inter Conjuguration: Total Depth of Well (from top inner easing): Total Status product (from top): Total Status product (from top): Total Volume Porfed: Total Volum	Tanar Caping diameter:		-11	Casing Material	DVC			
We construct the construction of the construc	Weather Conditions:		ــــــــــــــــــــــــــــــــــــــ	Saming Interestion	<u> </u>			
Had Depth to Wart in well:       6.90       feet feet feet         Linear feet of vater in well:       6.90       feet feet         Is DTW included in a complete round of pre-sampling synoptic water level measurements?       yes         Thickness of floating product          Purge Method:          Purge Start Time:          Y       Initial:          Y       Initial:          Y       Initial:          Y       Initial:          Y       Initial:          Y       3 Minutes:          Y       6 Minutes:          Y       6 Minutes:          Y       10	Total Depth of Well (from ton inner assing)		feet					
Depth rules (containerized & # of containers, filtered and discharged, w/ discharge location):       Yes       10         Continents:       DGC - 11 - Dup/licante of DGC - 8 c F:00	Depth to Water (DTW) (from ton inner casing).	o): [	60 feet					Δ.
Links for the intervent of pre-sampling synoptic water level measurements?       yes       no         Borning in a complete round of pre-sampling synoptic water level measurements?       yes       no         Boerrightion of floating product (if any):       feet          Parge Method: Peristatic Examp       Purge End Time:       Purge Rate (gallons/min.):          Parge Method: Peristatic Examp       Purge End Time:       Purge Rate (gallons/min.):          Total Volume Purged:       Temperafors       Conductivity       pH       Diss. Cxygen       Redox (ORP)       Depth to         '4'       Initial:       ESS (19, 41, 35)       2.56       0.47       6.97         '4'       Initial:       ESS (19, 41, 35)       2.56       0.47       6.97         '4'       Initial:       ESS (10, 41, 35)       2.56       0.47       6.97         '4'       Initial:       ESS (10, 41, 35)       2.56       0.47       6.97         '5'       10 Minutes:       10.97       5.95       3.46       1.11       3.6.9       6.97         '5'       15 Minutes:       10.97       5.97       3.33       1.07       4.6.97         '5'       18 Minutes:       10.97       1.07       1.07	I inear feet of water in well.	<b>6</b>	· / feet					$\rightarrow$
Thickness of floating product (if any):	Is DTW included in a complete round of pre-	sampling synoptic v	vater level measu	rements?			yes	(no )
Description of Noting product Purge Mathed: Periodiality product Purge Mathed: Periodiality Purge End Time: Purge Start Starts (containerized & # of containers, filtered and discharged, w/ discharge location): DGC - 11 -> Dup/licente of DGC - Seg S:00	Thickness of floating product (if any):		feet					$\bigcirc$
Purge Kethod: Perisahic Pump Purge Start Time: Purge End Time: Purge Rate (gallons/min.): rotel Volume Purget: Purget Rate (gallons/min.): rotel Volume Purget: Purget Rate (gallons/min.): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Comments: DGC-11 = Dupplic Inter of DGC-FE C F:00	Description of floating product:							
Purge Start Time: // Purge End Time: purge Rate (gallons/min.): tailors Purge Rate (gallons/min.): tailors Temperative '4' Initial '5' C	Purge Method: Peristaltic Pump	<del></del>			<u></u>			
Total Volume Purfed: $1$ gallons Temperating Conductivity pH units) Diss. Oxygen Redox (ORP) Depth to 1 (pf units) (ppm) (mV) Water (ft) 1 (pf units) (ppm) (mV) (mV) (ppm) (mV) (mV) (ppm) (mV) (mV) (mV) (mV) (mV) (mV) (mV) (m	Purge Start Time: /: Y/	Purge End Time:		Purge Rate	e (gallons/min.):			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Total Volume Purged:	gallons		· · · · · ·				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Temperature	Conductivity	pH	Diss. Oxygen	Kedox (ORP)	Depth to	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		F (C)	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Sampling Method: Low Flow Sampling Method: Low Flow Sampling Method: Low Flow Sampling Method: Low Flow Sampling Time: $3266$ Purge Water Status (containers, filtered and discharged, w/ discharge location): Comments: $DGC-11 \rightarrow Duplicante of DGC-Segf:00$	1 • 41 <sub>Initial</sub>	895	619	4.75	2.56	0.4	6.90	
$\frac{100}{100} \frac{100}{100} \frac{100}{100}{100} \frac{100}{100} \frac{100}{100}$	· <u> </u>	11. 61	505	752	1.70	197	145	
$\begin{array}{c ccc} & & & & & & & & & & & & & & & & & &$	• 7 / 3 Minutes:	10.1	SOC	2.0	1.37	110		
$\frac{1609 \text{ Minutes:}}{1602 558 3.44 1.11 36.4 6.97}$ $\frac{16079 558 3.44 1.11 36.4 6.97}{1.5312 \text{ Minutes:}}$ $\frac{1609 2.331 1.07}{1.5312 \text{ Minutes:}}$ $\frac{1609 2.331 1.07}{1.532 1.07}$ $\frac{1609 2.24 \text{ Minutes:}}{1.532 2.26 1}$ $\frac{1609 2.27 \text{ Minutes:}}{1.532 2.26 1}$ Field Observations (turbidity, recharge rate, odor, sheens, PID readings): $Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):$ $DGC-11 \Rightarrow Duplicante of DGC-5 e.5 e.5 c.00$	<b>i 4 )</b> 6 Minutes:	16.91	785	365	118	4.5	6.7	1
$\begin{array}{c ccc} & & & & & & & & & & & & & & & & & &$	.50	16.79	SSV	3.4C	1.11	76.9	10.97	ļ
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		11 61	7.0	2.10		25-	161	
$\frac{156 \text{ 15 Minutes}}{18 \text{ Minutes}} = \frac{16.80}{18 \text{ Minutes}} = 16.8$	• <b>J J</b> 12 Minutes:	16.7 C	BUL	12.21	<b>/, ♡</b> )	Jer	10.17	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	<b>: 56</b> 15 Minutes:	h.80	609	3.23	107	40.0	6.5)	l
iol Minutes:         iol 21 Minutes:         iol 24 Minutes:         iol 24 Minutes:         iol 27 Minutes:         Sampling Method:         Low Flow         Sampling Time:         iol 200         Sampling Parameters:         8 260/         Field Observations (turbidity, recharge rate, odor, sheens, PID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Comments:         DGC-11       Duplicate of DGC-8 e 8:00	: <9	10			1			
Image: Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Comments:         DGC-11       Duplicate of DGC-8 e F:00	18 Minutes:		<u> </u>		+		-	1
ig       24 Minutes:         ig       27 Minutes:         Sampling Method:       Low Flow         Sampling Time:       io0         Sampling Parameters:       8 260         Field Observations (turbidity, recharge rate, odor, sheens, PID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Comments:       DGC-11       Duplicate of DGC-8 e F:00	21 Minutes:	<del>,</del>						-
Sampling Method: Low Flow Sampling Time: C:00 Sampling Parameters: 8260 Field Observations (turbidity, recharge rate, odor, sheens, PID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Comments: DGC-11 -> Duplicate of DGC-8 e F:00	24 Minutes:		1		<u></u>		+	-
Sampling Method: Low Flow Sampling Time: 7:00 Sampling Parameters: 8260 Field Observations (turbidity, recharge rate, odor, sheens, PID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Comments: DGC-11 => Duplicate of DGC-808:00	27 Minutes:							1
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Comments: DGC-11 = Duplicate of DGC-8 e 8:00	Sampling Method: Low Flow Sampling Time: 2:000 Sampling Parameters: 8260 Field Observations (turbidity, recharge rate,	odor, sheens, PID 1	readings):					
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Comments: DGC-11 = Duplicate of DGC-8 e 8:00						······································		
Comments: DGC-11 -> Duplicate of DGC-808:00	Purge Water Status (containerized & # of co	ontainers, filtered a	nd discharged, w	/ discharge locat	ion):			
Comments: DGC-11 -> Duplicate of DGC-808:00								
Comments: DGC-11 => Duplicate of DGC-808:00								
	Comments: DGC-1	1 -> `	Duplic	inte ut	<u>ک</u> ور	2-8e	P:0	Ó

	Forensic Environ Well Sai	mental Service	es, Inc.			
ate: 6 / 04 oject/Site:	SGPP - Wate	Sampler: Bervliet Location:	Watervliet, New	York		
ell ID: MP-9	12.4	Casing Materia				
eather Conditions: otal Depth of Well (from top inner casing epth to Water (DTW) (from top inner cas near feet of water in well:	); sing): {0.45	feet feet feet				$\bigcirc$
DTW included in a complete round of pr hickness of floating product (if any): escription of floating product:	re-sampling synoptic water level 1 	measurements? - feet			yes	
urge Method: Peristalitic Primp urge Start Time: Z: 4	Purge End Time: gallons	Purge Rat	e (gallons/min.):			
Z:44       Initial         3 Minutes       3 Minutes         50       6 Minutes         55       9 Minutes         56       12 Minutes         54       15 Minutes         55       12 Minutes         54       15 Minutes         55       21 Minutes         155       21 Minutes         157       21 Minutes	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c cccc} vity & pH \\ (pH units) \\ \hline 3 & S, & f \\ \hline 3 & S, & f \\ \hline 3 & S, & f \\ \hline 5 & S, & f \\ \hline 6 & 0, & f \\ \hline 6 & 0, & f \\ \hline 6 & 0, & f \\ \hline \end{array} $	Diss. Oxygen (ppm) 1.47 0.76 0.57 0.57 0.4( 0.4] 0.37 0.37 0.37 0.37 0.37 0.37	Redox (ORP) (mV) -50.4 -750.4 -75.7 -39.9 -39.9 -39.9 -39.9 -39.9 -30.1 -26.0 -26.0 -21.2	Depth to Water (ft) 10.45 9.60 9.61 9.61 9.61 9.61 9.61 9.61 9.61 9.61 9.61 9.61 9.61	
Sampling Time: 3.15 Sampling Parameters: 946 Field Observations (turbidity, recharge ra Purge Water Status (containerized & # o	te, odor, sheens, PID readings): f containers, filtered and discharg	ed, w/ discharge loca	tion):			
Comments:		-				

,

		Forensic 1	Well Samplin	g Form	es, mc.			
ate: b/b/	oif	SC	GPP - Watervliet	Sampler: 75	S	York		
Vell ID: MW-	17	ú		Cooine Materia	1. OVC			
ner Casing diamet	er:	U		Casing Materia	<u> </u>	<u></u>		
otal Depth of Well bepth to Water (DT inear feet of water DTW included in thickness of floatin	(from top inner casing) W) (from top inner cas in well: a complete round of pr g product (if any):	): ing): 9, e-sampling synoptic v	feet feet feet water level measu feet	irements?			yes	no
urge Method: Per urge Start Time:	istaltic Pump	Purge End Time:		Purge Rate	e (gallons/min.):			
<u>`otal Volume Purg</u>	g:20       Initial:         3 Minutes:       3 Minutes:         0       6 Minutes:         12       9 Minutes:         13       12 Minutes:         15       15 Minutes:         15       18 Minutes:         14       21 Minutes:         14       21 Minutes:         14       21 Minutes:         15       27 Minutes:         15       27 Minutes:	$\begin{array}{c} \text{gallons} \\ \hline \text{Temperful} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Conductivity (µs/cm) ) 3 ) 0 0 6 J 6 J 6 J 6 J 6 J 6 J 6 J 6 J	pH (pH units) 6.57 6.57 6.57 6.57	Diss. Oxygen (ppm) 7. LV 0.83 0.60 0.50 0.50 0.97	Redox (ORP) (mV) -70.7 -76.4 -79.6 -30.4 -79.7 -30.6	Depth to Water (ft) 9.6/ 9.6/ 9.6/ 9.6/ 9.6/ 9.6/	
Sampling Time: Sampling Paramet	ers: 5260/80	70 e odor sheens PID	readings):					
FICIO O DISCI VALIOIIS	, (taroiany, roonargo fat							
Purge Water Statu	s (containerized & # of	`containers, filtered a	nd discharged, w	// discharge loca	tion):			
Comments:								

Forensic Environmen Well Samplin	ntal Services, Inc. ng Form
	Sampler STA
ate: 6 1161 SGPP - Watervliet	Location Watervliet. New York
roject/site: Borr - Water Hier	
ver Casing diameter: 1.6.1	Casing Material: PV(
Vesther Conditions:	
Cotal Depth of Well (from top inner casing):	
Depth to Water (DTW) (from top inner casing): $9 < 6$ feet	
inear feet of water in well: feet	$\bigcirc$
s DTW included in a complete round of pre-sampling synoptic water level measu	arements? yes no
Thickness of floating product (if any): feet	~
Description of floating product:	
Purge Method: Peristaltic Pump	De las Dets (calleng/min ):
Purge Start Time: A start Time: Purge End Time: S start Time: Purge End Time: S start Time: S star	ruige Kate (Banons/IIIII.).
Temperature) Conductivity	pH Diss. Oxygen Redox (ORP) Depth to
$^{\circ}F$ $^{\circ}C$ (us/cm)	(pH units) (ppm) (mV) Water (ft)
	( ) = SIE -191 956
(.) / Initial: ( <b>7.5</b> ) 12	6.18 11.0 1.50
: 10 3 Minutes: 17.72 760	6.53 0.90 - 32. 1 9.69
:03 Winter 1260 255	6.49 0.59 -33.0 9.68
12 5 17 5 75	1115 252 745 964
9 Minutes: (1) 5 15 1	6.4 0.33 - 54.7 1.08
:09 12 Minutes: 17,50 762	6.51 0.17 -36. 1462
17 15 Minutes 17, 49 763	16.52 0.43 -38.3 9.65
18 Minutes:	
21 Minutes:	
2/ 24 Minutes	
27 Minutes:	
Sampling Method: Low Flow	
Sampling Time: $\mathcal{T}$	
Sampling Parameters: 8760	
Field Observations (turbidity, recharge rate, odor, sheens, PID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w	/ discharge location):
Comments:	

Forensic Environmental Services, Inc.							
	Well Samp	ling Form					
Date: 4/9/04	······	Sampler	Bryan I Mach	ella			
Project/Site:	SGPP - Wateruliet	Location:	Weterwliet Ma				
Well ID: MP-13			Waterviict, inc				
Inner Casing diameter:	inches	Casing Mater	-ial·	PVC			
Weather Conditions: $\Lambda \rho N$		1					
Total Depth of Well (from top inner casing):			15	feet			
Depth to Water (DTW) (from top inner casing):			J.F.F	feet			
Well Screened Interval:			5-15	feet			
Linear feet of water in well:			3. ()			4	
ls DTW included in a complete round of pre-samp	ling synoptic water lev	el measureme	nts?		yes	no	
Thickness of floating product (if any):	None 🗸			feet	Time:	Ó	
Description of floating product:	None /						
Purge Method: Peristaltic pump		610			- (		
Purge Start Time: 4.46 075	Purge End Time	:7.5X	Purge Rate (ga	ıls/minute): 🔿	06		
Total Volume Purged: ga	allons	$\overline{\mathbf{O}}$	1			-	
l empera	uure Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to		
:46	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)		
Initial: 196	1 431	6.80	0.36	6.0	1.H		
91 3 Minutes: 19,63	3 47.8	6.75	0.30	12.3	795	1	
:52 6 Minutes: 19 5	100	1 21/	1.77	761	100		
	90	6. 9	0.50		1775	-	
9 Minutes: $19, 6$	1 426	6.77	19.3c	32.0	17.95		
12 Minutes: 19.6	2 47.6	6.73	0.30	4.15	2.95		
15 Minutes	<del>_ / ≚</del>		1 - 2 -	10.1		-	
a y 18 Minutes:							
: 47 21 Minutes:						-	
:/ 0 24 Minutes:							
27 Minutes:						-	
16 30 Minutes:						-	
14 33 Minutes							
Stabilization Rate	+/ 20/	+/ 0.1	1/ 100/	10		4	
Sampling Method: Low Flow			+/- 10%	+/- 10 mV			
Sampling Start Time:	Sampling End T	lime:					
10.00							
Field Observations (turbidity, recharge rate, odor,	sheens, PID/FID readi	ngs):					
Purge Water Status (containerized & # of container	ers, filtered and dischar	ped w/disch	arge location).				
	,	,					
Comments:						····	
1 110 Wale = ()							

Forensic Environmental Services, Inc.								
Well Samp	ling Form							
	0							
Date: 9 10101								
Project/Ster & P. 14	Sampler: Bryan J. Machel	la						
Well ID: MAP. ) (	Location: Watervliet, New	' York						
Inner Casing diameter:	Caging Motorial	DVC						
Weather Conditions: 1 NN	Casing Matchai.	PVC						
Total Depth of Well (from top inner casing):	15	feat						
Depth to Water (DTW) (from top inner casing):	799	feet						
Well Screened Interval:	C1411	feet						
Linear feet of water in well: $\gamma_{-2}$								
Is DTW included in a complete round of pre-sampling synoptic water lev	el measurements?	ves no						
Thickness of floating product (if any): None		feet Time:						
Description of floating product: None		0						
Purge Method: Peristaltic pump	1/01/ 1							
Purge Start Time: [U, ] ] Purge End Time	U, Y  Purge Rate (gals	/minute): $\mathcal{O}_{\mathcal{O}} \mathcal{O}_{\mathcal{S}}$						
Temperature Spec Cond	pU Diss Oversen I	Deles Dele						
$^{\circ}$	(pH unite) (ppm)	(m)() Netro (0)						
10'il Initial IF SU Cal	(pri units) (ppin)	(mv) water (ft)						
111 Initial. 18-50 976	6.7 1 1.86	-29.67.99						
$3 \text{ Minutes:} \left[ f_{-} c \right] \left[ G_{-} S \right]$	6.55 0.17	-37.4 5.01						
6 Minutes: D.D. FEG	h.35 0.37	-115 5 10 0 -						
$(2)$ 9 Minutes: 1 $\mathcal{E}(1)$ $\nabla \mathcal{I}(2)$	6511 0.70	JJ OV C						
74	0.59 0.28	33.6 8.02						
$\frac{12 \text{ Minutes:}}{18.00 \text{ GG}}$	6.59 0.29	160 8 00						
15 Minutes: 17.67 763	6.54 0.22 -	-65.4 J.62						
32 18 Minutes: 17.78 737	6.54 0.20 -	68.9802						
-35 21 Minutes: 17,60 77,3	h.54 0.18	-7), 1807						
$-3 \leq 24$ Minutes: $(7) + (7) + (7)$	6.5U 0.1V	-77 5 60						
1/ 27 Minutes: 17 / 5 5 1 (	1.55 0.18	10000						
11 30 Minutes	0.0.0	13:67.00						
	·····							
9 / 33 Minutes:								
Stabilization Rate +/- 3%	+/- 0.1 +/- 10%	+/- 10 mv						
Sampling Start Time:	ime:							
Field Observations (turbidity, recharge fate, odor, sheens, PID/FID readir	igs):							
Purge Water Status (containerized & # of containers filtered and divide	and wildlesteres to star							
containers, intered and discharg	ged, w/ discharge location):							
PID 0-1-0.6								
Comments:								

Forensic Environm	ental Serv	rices, Inc.			
Well Sam	oling Form	,			
Date: GIGKIY					
Project/Site	Sampler:	Bryan J. Mach	ella		
Well ID: MP-15	Location:	Watervliet, Ne	w York		
Inner Casing diameter:	Capino Motori	iol.	DUC		
Weather Conditions: (LAN	Casing Mater	121.	FVC		
Total Depth of Well (from top inner casing):		K	feet		
Depth to Water (DTW) (from top inner casing):		#29	feet		
Well Screened Interval:		6-10	feet		
Linear feet of water in well: $6^{-1}$			1001		
Is DTW included in a complete round of pre-sampling synoptic water le	vel measuremer	nts?		Ves	no
Thickness of floating product (if any): None			feet	Time:	
Description of floating product: None					_
Purge Method: Peristalțic pump	200				
Purge Start Time: (1 + ) Purge End Time	= 4:55	Purge Rate (ga	ls/minute): $\mathcal{O}_{\cdot}$	٥S	
Total Volume Purged: gallons	· · · · · · · · · · · · · · · · · · ·	1	Y		
<sup>1</sup> Cond.	pH	Diss. Oxygen	Redox	Depth to	
	(pH units)	(ppm)	(mV)	Water (ft)	
Initial: 18-46 640	6.90	0.95	22.5	P.29	
3 Minutes: 18-19 59	6.80	1.37	76 5	8.70	
-2/ 6 Minutes: 16 73 (57)	6,71	101	85-7-		
	1 2 2	1.01	8 - C	1.50	
Minutes: 18-41 501	6. 22	G.56	95.5	$\left( \int \right) \left( \int \right)$	
(12) 12 Minutes: $(f, 3)$ 56 $f$	6.73	0.49	Sf. 3	F 70	
- 30 15 Minutes: 18.77 566	6.73	0.46	99.8	8.31	
33 18 Minutes: 18.38 566	6.73	0.45	100.1	5.30	
21 Minutes:					
24 Minutes:					
۲۶ 27 Minutes:					
: 45 30 Minutes:					
: / ( 33 Minutes:					
Stabilization Rate +/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow		1	.,		
Sampling Start Time:	ìme:				
Field Observations (turbidity, recharge rate, odor, sheeps, BID/EID root)					
read observations (throwny, reenange rate, odor, sheens, FID/FID read)	ngs):				
Purge Water Status (containerized & # of containers, filtered and dischar	ged, w/ dischar	ge location):			
PID = QUI NUCLIMA M	nent				
Comments:		100	17		
AND DAL NULLI	I A	NPJ	15		
VIF-SU = DUPILON		• • •	1)		
	and the second se		-		
<u>[</u>					

Forensic Environmental Services, Inc. Well Sampling Form							
Date: 1/9/04		Sampler	Bryan I. Mach	ella			
Project/Site:	SGPP - Watervliet	Location:	Watervliet Ne	w Vork			
Well ID: MF-16			water viter, ive	W TOIK			
Inner Casing diameter:	1.5 inches	Casing Mater	ial:	PVC			
Weather Conditions: んパイ		1					
Total Depth of Well (from top inner casin	g):		) 5 /	feet			
Depth to Water (DTW) (from top inner ca	sing):		つうえ	feet			
Well Screened Interval:			× 70	feet			
Linear feet of water in well:						$\cap$	
is DTW included in a complete round of p	re-sampling synoptic water lev	el measureme	nts?		yes	\ no	
Thickness of floating product (if any):	None			feet	Time:	$\bigcirc$	
Description of floating product:	None						
Purge Start Time:	Dura Patri	CUD		~			
Total Volume Purged:	Purge End Time	.94	Purge Rate (ga	ls/minute): O			
,	Femperature Spec Cond	nH	Dice Ovugen	Doday		1	
	°C (us/cm)	(nH unite)	(npm)	(mV)	Depth to		
F-39 Initial	1616 2786	(), ()			water (it)		
.47	0.20	0.61	1046	52 0	1,18		
3 Minutes:	19.69 2351	6.62	0.51	30.9	7.86		
6 Minutes:	7.76 7054	Libl	aun	1755	755		
18 9 Minutes	a 2B IEnd	<del>7 7 d</del>	and -				
SI sources.	1. 10 1005	6.67	V-98	01.1	7.07		
12 Minutes:	9461647	6.64	0-50	25.0	7.85		
35% 15 Minutes:	19.46 1611	1.64	a.L7.	79.8	116		
15 18 Minutes:	a.ud Icult	7 64-	art	1			
		0.01	0.6	33.1	18)		
	1.40 14 )	6.03	0.65	41. L	7.85		
24 Minutes:	9.47 1440	6.64	0,65	4ry	THE		
COB 27 Minutes:	9.46 1475	6.63	abb	Let 1	19/		
C7 30 Minutes		0.07	0000	$\mathbf{D}$	LES		
So Minutes.	1.96 1900	6.05	4.66	53.6	292		
33 Minutes:							
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv			
Sampling Start Time:	Sampling End T	ime:					
Field Observations (turbidity, recharge rate	e, odor, sheens, PID/FID readir	195).					
	. ,,,	-00/-					
Dunce Witten Office (			<u> </u>				
ruige water Status (containerized & # of c	containers, filtered and discharg	ged, w/ dischar	ge location):				
010-0 - No odu	5 present						
,	V						
Comments:					na (		

Forensic Environmental Services, Inc. Well Sampling Form								
Date: 9/7/09				Sampler:	Bryan J. Mache	ella		
Project/Site:		S	GPP - Watervliet	Location:	Watervliet, Nev	w York		
Well ID: MP-1	********							
Inner Casing diameter:			1.5 inches	Casing Mater	ial:	PVC	***************************************	
Weather Conditions: Jun トリー	3 لك	*********		4	·····			
Total Depth of Well (from top in	nner casi	ng):			- 15	feet		
Depth to Water (DTW) (from to	p inner c	asing):			0.0C	feet		
Well Screened Interval:					5-15	feet		
Linear feet of water in well:								$\frown$
Is DTW included in a complete r	round of	pre-sampling s	ynoptic water lev	el measuremen	nts?		yes	( no )
Thickness of floating product (if	any):		None 4			feet	Time:	$\bigcirc$
Description of floating product:			None					
Purge Method: Peristaltic pump				1-77				
Purge Start Time: 1.0 /			Purge End Time	ニートレ	Purge Rate (gal	s/minute):	U-UD SPM	
rotat volume Purged:	T	galions	Space Cond	T		D. L.		1
		°	spee. Cond.	pri (nH urite)	Diss. Oxygen	Kedox	Depth to	
			(µs/cm)	(pri units)	(ppm)	(mv)	water (ft)	
	Initial:	18.06	2758	6.5Y	[[.7]	1-755	8.62	
; C / 3 M	inutes:	17.69	1830	662	0.53	-76.9	8.66	
۰ <i>, ک</i> 6 M	linutes:	17.63	1672	6.58	0.42	-749	8.66	
5.7 9 M	inutes:	1759	1652	6.54	0.37	-77.8	8.66	
12 M	inutes:	17.56	1658	6.51	0.32	-72.0	8.66	
່ <sup>ງ ຈິ</sup> 15 M	inutes:	17.49	1670	150	0.32	-71.7	8.66	
;ここ 18 M	inutes:	17.50	1680	6.48	0.33	-714	Sint	
່ 🖓 21 M	inutes:	1	.00	<u>~ (0</u>		1/21		
· モン 24 M	inutes:							
5 27 M	inutes:							
- 3½ 30 M	inutes:							
:57 33 M	linutes:							
Stabilizatio	n Rate		+/- 3%	+/- 0.1	+/ 10%	+( 10 m)	•	
Sampling Method: Low Flow	<u>A ruto</u>		17-370	17-0.1	1/-10/0	47- 10 IIIv		
Sampling Start Time:	5		Sampling End T	ime: /:15				
Field Observations (turbidity, rea	charge r	ate, odor, sheen	s. PID/FID readin	195):				
(		,,	., . 1971 129 10441	·65).				
Duran Water St. (	10 "	<u> </u>						
r uige water Status (containerize	cu & # 0	i containers, filt	ered and dischar	ged, w/ dischar	rge location):			
Comments:								
L								

Forensic Environmental Services, Inc.

Forensic Environmental Services, Inc. Well Sampling Form							
			0				
Date: 1017 V/04			Sampler:	Bryan J. Mach	ella		
Project/Site:	WV .	SGPP, Wayne	Location:	Wayne, New J	ersey wat	erubet, N	Y
Well ID: MW-11	<u> </u>						/
Inner Casing diameter:		2 inches	Casing Mater	ial:	PVC		
Weather Conditions:		. 1					
PID/FID reading from well:		N1~ ppm					
Total Depth of Well (from top inner cas	sing):			0.00	feet		
Depth to Water (DTW) (from top inner	casing):			7.97	feet		
Well Screened Interval:					feet		
Linear feet of water in well:	c r		1				
Is DTW included in a complete round of	of pre-sampling	g synoptic water	level measure	ments?	feet	Time:	110
I hickness of floating product (If any):		None			1001	T mnc.	
Purge Method: Peristaltic pump		THORE					
Purge Start Time: 101.1 L	1	Purge End Tim	e:	Purge Rate (ga	als/minute):		
Total Volume Purged:	gallons	-					
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
10, 18 Initial:	1675	461	6.94	12.44	-92.Y	999	
Minutes:	nos	1,11	LCA	0-65	-992	line	
	$\frac{1}{2}$	911	0.10		010	10.05	
30 6 Minutes:	<u>  ), c   )</u>	909	6.90	0.52	-465	10.07	
<b>3</b> 9 Minutes:	na	408	689	0.45	-94.4	10.05	
<b>3</b> <sup>6</sup> 12 Minutes:	nis	1.08	Lan	CIUI	-955	10-05	
		140,	0.10		6/ 7	1.45	
)/ 15 Minutes:	<u>n.11</u>	408	6.90	<u><u><u><u></u></u><u><u></u><u><u></u><u><u></u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u></u></u>	-16.2	10-5	
$9 \downarrow 18$ Minutes:							
$4 \times 21$ Minutes:							
24 Minuton					-		
		· · ·					
27 Minutes:							
30 Minutes:							
22 Minuton			1		-		<i>.</i>
55 Williutes. Stabilization Data		+/_ 20/2	+/= 0.1	+/- 10%	+/- 10 my		1 A
Sampling Method: Low Flow	d	1 17 370	1 11-0.1	1 17-1070	<u>1 7 10 mv</u>	<u> </u>	
Sampling Start Time: /// . //	( )	Sampling End	Time:				
10 70							
Field Observations (turbidity, recharge	e rate, odor, sh	eens, PID/FID re	eadings):				-
Purge Water Status (containerized & #	of containers	, filtered and dis	charged, w/ di	scharge location	n):		
Purge water was processed through a	5-gallon carbo	n bucket and dis	eharged to the	surface adjace	nt to the well.		
Dut in SSS duem							
Comments:							
. 1	Forensic Environmo Well Sampl	ental Serv ling Form	ices, Inc.				
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1							
Date: 14128/04		Sampler:	Bryan J. Macho	ella			
Project/Site:	W SOPP, Wayne	Location:	Wayne New I	ersey what	pruliet, N	Ý	
Well ID: MW-14						/	
nner Casing diameter:	U inches	Casing Materi	al:	PVC			
Weather Conditions:							
PID/FID reading from well:	NM ppm						
Fotal Depth of Well (from top inner casin	g):			feet			
Depth to Water (DTW) (from top inner ca	ising):	0	1.81	feet			
Well Screened Interval:				reet	$\sim$		
Inear feet of water in well:		Invel meeowne	m om to <sup>0</sup>		$\langle \rangle$	no	
Is D1 w included in a complete found of p	pre-sampning synoptic water	level measure	ments?	feet	Time	110	
Description of floating product (if any).	None			1001	111110		
Purge Method: Peristaltic nump	None						
Purge Start Time: 5:47	Purge End Tim	e:	Purge Rate (ga	lls/minute):			
Total Volume Purged:	gallons		•		+		
1	emperature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to		
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)		
( 901 Initial:	08 329	6.72	203	-376	1.81		
S 3 Minutes:	570 750	628	667	-418	9.05		
SE ENimitari		1-25	0.0	112	945		
o ivinduces.	1.54 146	6.35	V.) ]	-45.9			
9 Minutes:	1.64 739	6 30	6.57	-46.4	9.05		
CY 12 Minutes:	573 739	629	0.58	+474	9.65		
$(c\gamma_{15 \text{ Minutes}})$		1					
:16 :000							
			<u> </u>				
21 Minutes:							
16 24 Minutes:							
19 27 Minutes							
· · · · · · · · · · · · · · · · · · ·							
2 30 Minutes:							
33 Minutes:							
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv			
Sampling Method: Low Flow Sampling Start Time: $G 205$	Sampling End	Time:					
Field Observations (turbidity, recharge r	ate, odor, sheens, PID/FID r	eadings):					
Purpe Water Status (containerized & # c	of containers filtered and dis	charged, w/ di	scharge location	ı):			
Purge water was processed through a 5-	gallon carbon bucket and dis	scharged to the	surface adjacer	nt to the well.			
		-	.,				
pur in 33 g au	m						
Commonto							
Comments:							

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		LOLCHER	Well Samp	ling Form	, 1110.			
te 10/2/10/				Sampler:	Bryan J. Machel	lla		
oject/Site:	1.1/	Burlington Co	School District	Location:	Columbus; New	Jersey wht	avit, NY	
ell ID: MIN-15						<u> </u>		
ner Casing diameter;			1/ inches	Casing Materi	al:	PVC		
eather Conditions: SUA	INY - coul			L				
D/FID reading from well	:		VV ppm					
otal Depth of Well (from	lop inner casir	ng):	đ			feet		
epth to Water (DTW) (fro	m top inner c	asing):			8:63	feet		
ell Screened Interval:						feet		
inear feet of water in well	:							
DTW included in a comp	olete round of	pre-sampling syn	noptic water leve	el measurement	s?		(yey)	no
hickness of floating produ	ict (if any):		None			feet	Time:	
escription of floating pro	duct:		None					
urge Method: Peristaltic	րսութ		D D. 170'		Dunce Deta (	(minuta):		
urge Start Time: 0 7	5	onllors	Furge End 1 mm	5.	rurge Kate (gai	simmute):		
otal volume Purgeo:		ganons     Temperature	Spec. Cond	Ha	Diss. Oxygen	Redox	Depth to	
		°C	(us/cm)	(pH units)	(mqq)	(mV)	Water (ft)	
8.76	- Z Initiali		1-7	1 20	757	799	863	
0.73	- muar.	19.50	1857	6.18	<u>C.1C</u>		0.01	
8.57	3 Minutes:	16 0 3	2012	6.50	0.79	-44.0	9.50	
36	6 Minutes:	1611	700	L 48	0.19	1-96.0	980	
29	0 Minutes:	11 5	1049	112	ab3	-966	1005	
)	9 ivinitutes.	16.1		0.41		10.	10.05	
ΥĽ	12 Minutes:	16.32	1996	10.45	0.6 L	-57.5	16:35	
¥5	15 Minutes:		1.			Ŧ		
i i i i i i i i i i i i i i i i i i i	18 Minutes							
10	10 141114105.							
5/	21 Minutes:							
51/	24 Minutes							
57	27 Minutes							1
• •		·				+		1
06	30 Minutes							4
63	33 Minutes	:						
Sta	bilization Rate	e	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Sampling Start Time:	Plow 4	3	Sampling End	Time:				
Field Observations (turbi	dity recharge	rate, odor, sheen	s. PID/FID readi	ings):				
	any, roomargo			0-7				
Purge Water Status (cont	ainerized & #	of containers, fil	Itered and discha	rged, w/ discha	rge location):			
Purge water was process	ed through a 5	-gallon carbon b	ucket and discha	irged to the sur	race adjacent to th	ne well.		
put in 55	is di	un						
1								
Comments:								

Date:       1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2		Forensic Environm Well Samp	ental Serv ling Form	ices, Inc.			
Jail in the second in the se	······································		Samplar	Bruan I Machal	10		
$ \begin{array}{c ccc} \begin{tabular}{ cccc } \hline \begin{tabular}{ ccccc } \hline \begin{tabular}{ cccccc } \hline \begin{tabular}{ ccccccccc } \hline \begin{tabular}{ cccccccccccccccccccccccccccccccccccc$	le: 1 / 18/07	Burlington Co. School District	Location:	Culumbus New	TOTSEN (LIN)	Lawliet N	Y
Non-Procention       Z inches Casing Material:       PVC         Weather Conditions: $\mathcal{N}^{\mathcal{M}}$ ppm       Feed feed for the value of the prime reasing): $\mathcal{N}^{\mathcal{M}}$ ppm         Veal Depth of Well (from top inner easing): $\mathcal{N}^{\mathcal{M}}$ ppm       Feed feed feed feed feed feed feed feed				-commons, INCM	JUIDUY VAI	7	/
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c}$	er Casing diameter:	7 inches	Casing Mater	ial:	PVC		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	ather Conditions:		Guong				
total Depth of Well (from top inner casing):       Image: Second S	D/FID reading from well:	ימספן איז	ł				
kepth to Water (DTW) (from top inner casing): $\mathcal{F}$ . $\mathcal{F}$ . $\mathcal{F}$ feet feet feet feet feet incertain well:         vell Screened Interval:       incertain well:         DTW included in a complete round of pre-sampling synoptic water level measurements?       feet feet         bickness of floating product (if any):       None       feet         bickness of floating product (if any):       None       feet         wrge Method:       Purgle End Time:       Purgle Rate (gals/minute):         vings Method: $\mathcal{F}$ . $\mathcal{F}$ gallors       Purgle Rate (gals/minute): $\mathcal{F}$ . $\mathcal{F}$ a minutes: $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ a minutes: $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ a minutes: $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ a minutes: $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ . $\mathcal{F}$ gallors $\mathcal{F}$ . $\mathcal{F}$ a minutes: $\mathcal{F}$ . $$	tal Depth of Well (from top inner cas	sing):		11	feet		
Vell Screened Interval:       feet         incar feet of water in well:       s DTW included in a complete round of pre-sampling synoptic water level measurements?       feet         s DTW included in a complete round of pre-sampling synoptic water level measurements?       feet       Time:         becription of floating product:       None       feet       Time:         varge Method: Peristaltic pump       Purge End Time:       Purge Rate (gals/minute):       feet         orgen Start Time:       O'' gallons       Purge Rate (gals/minute):       feet         Start Link       I'' T'' gallons       Diss. Oxygen       Redox       Deepth to         S::d       Initial       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Deepth to         S::f       Initial       I''' S'' S'' S'' S'' S'' S'' S'' S'' S''	pth to Water (DTW) (from top inner	casing):		204	feet		
incar feet of water in well: DTW included in a complete round of pre-sampling synoptic water level measurements? Thickness of floating product (if any): None feet Time: Secription of floating product: None feet Time: Purge End Time: Purge Rate (gals/minute): Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Temperature Spec. Cond. pH units) (ppm) (m V) Water (ft) Total Volume Purged: Total Volume Purged: To	ell Screened Interval:			° /	feet		
s DTW included in a complete round of pre-sampling synoptic water level measurements?	near feet of water in well:					$\sim$	
Thickness of floating product (if any):       None       feet       Time:         Description of floating product:       None       feet       Time:         Varge Method:       Purge End Time:       Purge Rate (gals/minute):       Time:         Total Volume Purged:       C. $\gamma$ gallons       Purge End Time:       Purge Rate (gals/minute):         Total Volume Purged:       C. $\gamma$ gallons       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to $\xi: \mathcal{A}_{intractive}$ Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to $\xi: \mathcal{A}_{intractive}$ Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to $\xi: \mathcal{A}_{intractive}$ Initial:       Temperature       Spec. Cond.       pH       nits       Optimerative       Depth to       Water (fit) $\xi: \mathcal{A}_{intractive}$ If $\{2, 1, 5, 5, 7, 5, 7, 5, 7, 7, 7, 7, 7, 5, 7, 5, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,$	DTW included in a complete round o	of pre-sampling synoptic water leve	el measurement	Ls?		(ves)	no
bescription of floating product: None wrge Method: Perisatic purpture of the floating product: Purge End Time: Purge Rate (gals/minute): total Volume Purged: C. N gallons Purge End Time: Purge Rate (gals/minute): C. N gallons  Purge Nate Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Vater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nater Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Nate	ickness of floating product (if any):	None			feet	Time:	
Purge Start Time:       Purge End Time:       Purge End Time:       Purge Rate (gals/minute):         Fordal Volume Purged:       Image Start Time:       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Water (ft)       I.143       I.275       S65       7.55       Y.16       Y.175       Y.145         Since       I.6       I.147       A.5       Y.16       I.275       Y.145       Y.145         Since       I.6       I.6       I.7       Y.17       I.25       I.26       I.16       Y.145         Y.1       I.25       I.75       I.8       Minutes:       I.6       Y.17       I.53       Y.14       Y.15         Y.2       I.8       Minutes:       I.6       Y.7       Y.16       Y.75       Y.16       Y.75       Y.16       Y.75       Y.75       Y.7	escription of floating product:	None					
Purge Start time:       Purge Rate (gats/minute).         Fordal Volume Purged:       C-75 gallows         Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sind       Initial:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         Sinth       Initial:       IV.95       Sinth       IV.95       Sinth       IV.95       IV.95 <t< td=""><td>rge Method: Peristaltic pump</td><td>יידיני בייד בייד אינט אייידי אינט אייידי אינט אייידי אינט אייידי אינט אייידי איי</td><td>o.</td><td>Durne Dete (a-1</td><td>(minute):</td><td></td><td></td></t<>	rge Method: Peristaltic pump	יידיני בייד בייד אינט אייידי אינט אייידי אינט אייידי אינט אייידי אינט אייידי איי	o.	Durne Dete (a-1	(minute):		
Total volume Funged.       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to $\xi:4$ Initial: $12.15$ $565$ $7.55$ $4.45$ $7.15$ $7.95$ $\xi:4$ Initial: $12.15$ $565$ $7.55$ $4.45$ $7.15$ $7.95$ $7.95$ $\xi:4$ Initial: $14.75$ $7.37$ $7.55$ $7.55$ $7.55$ $7.95$	rge Start Lime: 6 40	Cont collors	e:	Purge Kale (gan	s/minute).		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	tal volume ruiged.	Temperature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
$\begin{cases} \vdots \cdot d \\ \text{initial:} \\ \hline 12 + 5 \\ \hline 3 - 5 \\ \hline 14 + 75 \\ \hline 3 - 7 \\ \hline 3 - 7 \\ \hline 12 \\ \hline 13 \\ \hline 6 \\ \hline 14 + 75 \\ \hline 13 \\ \hline 7 \\ \hline 13 \\ \hline 6 \\ \hline 14 + 75 \\ \hline 14 + 75 \\ \hline 15 \\ \hline 12 \\ \hline 16 \\ \hline 17 \\ \hline 12 \\ \hline 18 \\ \hline 16 \\ \hline 16 \\ \hline 16 \\ \hline 16 \\ \hline 17 \\ \hline 12 \\ \hline 15 \\ \hline 10 \\ \hline 10 \\ \hline 12 \\ \hline 15 \\ \hline 11 \\ \hline 12 \\ \hline 15 \\ \hline 16 \\ \hline 17 \\ \hline 17 \\ \hline 17 \\ \hline 18 \\ \hline 10 \\ \hline $		°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c}$	Sich Initia	17-15 865	220	4 45	9)	804	
Sampling Method: Low Flow Sampling Method: Low Flow Sampling Method: Low Flow Sampling Start Time: Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	1111114		7,0-	7.10		Cit E	
$\frac{13}{16} = 6 \text{ Minutes:}  16 \cdot 17  67  5  7 \cdot 46  1 \cdot 25  36 \cdot 2  10 \cdot 16  12 \text{ Minutes:}  16 \cdot 57  97  7 \cdot 77  1 \cdot 25  17 \cdot 6  11 \cdot 66  11 \cdot 55  12 \text{ Minutes:}  16 \cdot 57  97  1 \cdot 37  1 \cdot 33  24 \cdot 9  11 \cdot 55  15 \text{ Minutes:}  15 \text{ Minutes:}  16 \cdot 77  18 \text{ Minutes:}  16 \cdot 77  10 \text{ Minutes:}  16 \cdot 77  30 \text{ Minutes:}  17 \cdot 78  30 \text{ Minutes:}  17 \cdot 78  30 \text{ Minutes:}  17 \cdot 78  30 \text{ Minutes:}  16 \cdot 77  30 \text{ Minutes:}  16 \cdot 77  30 \text{ Minutes:}  17 \cdot 78  16 \cdot 77  10 \text{ Minutes:}  17 \cdot 78  16 \cdot 77  10 \text{ Minutes:}  17 \cdot 78  16 \cdot 77  10 \text{ Minutes:}  17 \cdot 78  16 \cdot 78  10 \text{ Minutes:}  17 \cdot 78  10 \text{ Minutes:}$	3 Minute	s: 14,-15 75/	11		21.8	1.42	
$1^{1}$ 9 Minutes: $1^{1}$ <td>5 6 Minute</td> <td>s: 16.17 975</td> <td>7.46</td> <td>1.28</td> <td>30.L</td> <td>10.10</td> <td></td>	5 6 Minute	s: 16.17 975	7.46	1.28	30.L	10.10	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	L 9 Minute	51/53 957	h.Y/	1.2.5	17.0	11.60	
1)       12 Minutes:       1.31       1.31       1.53       C-1.1       11.35         15 Minutes:       DAY $\bigcirc$ 5.2 ° $\cdots$ 11       C-1.1       1.55 $\square$ $\square$ $\square$ $\square$ 15 Minutes:       DAY $\bigcirc$ 5.2 ° $\cdots$ 11       C-1.1 $\square$ $\square$ $\square$ $\square$ $\square$ 15 Minutes: $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ 15 Minutes: $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ 1       24 Minutes: $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ 3       24 Minutes: $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ 3       4       10 $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ 30 Minutes: $\square$	.5		5	100	huv	II es	
Is Minutes:       Image: Stabilization Rate         Image: Stabilization Rate       Image: Stabilization Rate         Image: St		s: 16.81 911	1.)]	1. 32	<u> </u>	11.	
7.5       18 Minutes:         7.5       21 Minutes:         7.5       21 Minutes:         7.5       24 Minutes:         7.5       24 Minutes:         7.5       24 Minutes:         7.5       27 Minutes:         7.5       30 Minutes:         7.7       30 Minutes:         7.7       30 Minutes:         7.7       30 Minutes:         7.7       30 Minutes:         9.4       33 Minutes:         9.5       Stabilization Rate         9.6       4.7         9.7       30 Minutes:         Sampling Method: Low Flow       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	τ L 15 Minute	5: DAY & 5:20	6.11	14 Man	· · · shr 17		
Image: Stabilization Rate	<b>こ</b> ダ 18 Minute	S:					
3)       24 Minutes:         3)       24 Minutes:         3)       27 Minutes:         3)       30 Minutes:         3)       30 Minutes:         3)       33 Minutes:         3)       33 Minutes:         3)       51abilization Rate	<b>T C</b> 21 Minute						
3)       24 Minutes:         3)       27 Minutes:         3)       30 Minutes:         3)       30 Minutes:         3)       33 Minutes:         3)       5tabilization Rate         3)       4/-3%         4/-3%       +/-0.1         5       5         Sampling Method:       Low Flow         Sampling Start Time:       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	y zi minut						
3' 27 Minutes:         30 Minutes:         31 30 Minutes:         32 3 Minutes:         33 Minutes:         Stabilization Rate            Sampling Method: Low Flow         Sampling Start Time:         Difficult         Sampling Start Time:         Difficult         Sampling Start Time:         Difficult         Sampling Start Time:         Difficult         Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	$\overline{\mathbf{z}}$ ) 24 Minute	\$S:					
77       30 Minutes:         9'       33 Minutes:         Stabilization Rate          Stabilization Rate          Sampling Method: Low Flow          Sampling Start Time:       ////////////////////////////////////	<b>ス</b> * 27 Minute	ès:					
4*       33 Minutes:         Stabilization Rate       +/- 3%         Sampling Method: Low Flow       +/- 10 mv         Sampling Start Time:       ////////////////////////////////////	לר 30 Minute	es:					
33 Minutes:         Stabilization Rate         Stabilization Rate         +/- 3%         +/- 0.1         Sampling Method: Low Flow         Sampling Start Time:         JOI SO         Sampling Start Time:         JOI SO         Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	Ut marine						
Stabilization Rate       +/- 3%       +/- 0.1       +/- 10 mv       +/- 10 mv         Sampling Method: Low Flow       Sampling End Time:       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):       Sampling End Time:         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):       Here Status (containerized & # of containers, filtered and discharged, w/ discharge location):	33 Minute	2S:		1/ 100/	1/ 10 mm		
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	ampling Method: Low Flow	Sampling End	+/- 0.1	+/- 10%	<u>+/-10 IIIv</u>		1
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):		a rota adar abaana DID/EID	ings);				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	ield Observations (turbidity, recharg	e rate, odor, sneens, r1D/r1D read	mgs).				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):							
Wurge water was processed through a 5-pattern carbon blicker and discharged to the surface adjacent to the well.	Purge Water Status (containerized &	# of containers, filtered and discha	rged, w/ discha	rge location):	e well.		
put in 55g drum	put in 55g dru	M	<b>U</b>				
Commante	Commonto						
Comments.	Comments:						
							•

		Forensic	Environme Well Sampl	ental Serv ing Form	ices, Inc.			
and a start			1	Complac	Riven I. Moobo	11a		
Date: $\left[ 0 \right] 2 \left[ 0 \right]$			0.1	Sampler:	Columburation		with all	r
Project/Site:	- wv	Burlington C.O.	School District	Location:		v Jersey UNI		
Well ID: D6C-0	,			Casina Mater	ial.	DVC		
Inner Casing diameter:				Casing Mater	101.	1 YC		
Weather Conditions: 70~	y		NM					
PID/FID reading from well:	n inner oggin	·a);	, phu			feet		
Total Depth of Well (from in	p inner casin	ig).			975	feet		
Depth to water (DT w) (not	n top miler ca	ising).			1.17	feet		
wen Screened Interval.						1001		
Linear leef of water in wen.	lete round of	pre-compline evr	optic water leve	measurement	is?		( and )	no
IS DT W Included in a comp	of (if any):	pre-sampning syn	None	measuremen	101	feet	Time:	
Description of floating produ	uct:		None					
Purge Method: Periotaltic p	umn		140110					
Purge Start Time: 9:15	2	1	Purge End Time	:	Purge Rate (ga	ls/minute):		
Total Volume Purged:		/ gallons	<u> </u>		-			
		Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
		С	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
5:10	, Initial:	16.16	760	6.70	3.73	-76.9	9.75	
G.23	3 Minutes:	1,27	176	6.83	V.87	-90.Y	9.81	
76	6 Minutes:	174	780	6-58	0.66	-97.4	981	
- 9		1 1.4	100	10 20	0.00	-631	172	
U)	9 Minutes:	17.97	18L	0.70	0.5 ]	13.6	1-4	
37	12 Minutes:	In.si	1783	691	10.56	-712	9.1)	
75	15 Minutes	1710	5511	IGU	0.55	-97.4	<b>()</b>	
38	18 Minutes:	1.(0	184	h.1/		+		
4/	21 Minutes:							
14	24 Minuton	<u> </u>						
	24 Minutes:		<u> </u>					
7)	27 Minutes:							
Ju Zu	30 Minutes:							
	33 N A							
	33 Minutes		L/ 20/		+/ 100/	+/- 10 my		
State Sampling Method: Low F Sampling Start Time:	low .36	וא כ	Sampling End	Time:	1 .7- 1070	1 ., 10 MV	1	
Field Observations (turbid	ity, recharge	rate, odor, sheen	s, PID/FID readi	ngs):				
Purge Water Status (conta	incrized & #	of containers fil-	tered and dischar	ed, w/ disch	arge location):			
Purge water was processe	d through a 5	-gallon carbon b	ucket and discha	rged to the sur	face adjacent to t	he well.		
put in 55	s du	Im		U	ŭ			
Comments:								

	Forensic	Environm	ental Serv	vices, Inc.			
		Well Samp	ling Form				
Date: 10/77/04			Sampler:	Bryan J. Mache	ella		
Project/Site:	W	SGPP, Wayne	Location:	Wayne, New Je	ersey in Ato	avier NX	/
Well ID: DCC-7					_, ., ., .		
Inner Casing diameter:		inches	Casing Mater	ial:	PVC		
Weather Conditions: 11-14			L				
PID/FID reading from well:	N	مر ppm					
Total Depth of Well (from top in	ner casing):				feet		
Depth to Water (DTW) (from top	inner casing):		8	24/	feet		
Well Screened Interval:			-		feet		
Linear feet of water in well:							
Is DTW included in a complete re	ound of pre-sampling	g synoptic water	level measure	ments?		(yes)	no
Thickness of floating product (if	any):	None			feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pump	,	Purce End Tim	e.	Purne Pate (on	le/minute)		
Total Volume Purged:	gallons	Turge Lind Tim	0.	i uige Kale (ga	is/innutcj.		
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
7:25 In	itial: 17.32	649	7.47	507	-17.6	241	
274 24	12 61	3-5-		1:07	11-1	VIIC	
5-5 5 Min	utes: 11.76	150	1.04	1.03	-110.1	0.40	
3 ) 6 Min	utes: 1),95	132	70	0.9/	-)09.9	8.40	
イロ 9 Min	utes: DSU	733	7.00	0.77	F111.8	8.40	
43 12 Min	utes: 1796	134	6.46	0-0	-1175	Fil	
46 15 Min	utes: 1791	774	6.68	0.6/	-114	Fud	
79 18 Min	utes: 1795	1720	610	ash	-117 2	1.4	
5Z 21 Min	utes: 1797 -	1720	196	0.55	-1130	EV I	
55 2424		+ 1 37	6.90			0.7	
5) 24 Min	iutes:						
27 Mir	iutes:		<u> </u>				
30 Mir	iutes:						
33 Mir	nutes:						
Stabilization	Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow,	<i>(</i>	Complete D 1	Time				
Samping Start Time. 5 `_	) <i>&gt;</i>	Samping End	1 me:				
Field Observations (turbidity, re	charge rate, odor, sh	eens, PID/FID re	eadings):				
	-		-				
Burne Water Status (apptainania	ad & # of container-	filtered and di-	abaraad with all	abaras la seti-	<u>``</u>		
Purge water was processed through	ugh a 5-gallon carbo	n bucket and dis	charged to the	surface adjacent	). t to the well		
			ena geo to the	surrace adjacen			
						······	
Comments:							
			-				

	Forensic	Environm	ental Serv	vices, Inc.			
		Well Samp	ling Form				
10-16-10-16-1					11		
		CODD IV	Sampler:	Bryan J. Mache	lla	. Lal MAN	
Project/Site:	LV	· borr, Wayne	Location:	Wayne, New Je	rscy water	curit, my	
Well ID: Mr J		inghao	Casing Motor	ial	DVC		
Weather Conditions: 115		inches	Casing Mater	181:	FVC		
PID/FID reading from well:	/						
Total Depth of Well (from top inner c	asino).	րով		15	feet		
Depth to Water (DTW) (from top inner c	asing).		F	78	feet		
Well Screened Interval:	i ousing).		U		feet		
Linear feet of water in well:					1001		
Is DTW included in a complete round	of pre-sampling	synoptic water	level measure	ments?		Ves	no
Thickness of floating product (if any)	or pro sumpring	None	lever measure	1101163.	feet	Time:	no
Description of floating product:		None					
Purge Method: Peristaltic pump							
Purge Start Time: 12:37		Purge End Tim	e:	Purge Rate (ga	ls/minute):		
Total Volume Purged:	gallons	••••••••••••••••••••••••••••••••••••••		_			
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	Č	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$(\sim 3)$ Initial:	14.59	739	hor	5.91	-84.2	5.78	
12:45 3 Minutes:	14.34	806	6.55	1.08	-87.1	9.0C	
.48 6 Minutes:	14 19	RIV	6.53	092	-80.2	900	
51 optimutou	11 011	RIS .		CIEN	- 7 P h		
9 Minutes:	14.29	012	6.) L	10.0 L	18.0	1.	
.57 12 Minutes:	14.26	17	6.50	0.75 .	178-6	9, -4	
:57 15 Minutes:	14.15	821	6.50	0.74	-77.7	9.00	
$\mathcal{O}^{G}$ 18 Minutes:	<i>I I</i>				····		
21 Minutes							
06 24 Minutes			1				
09 27 Minutes		· · · ·		-			
الا روم المعالي المعالي المعالي المعالي	:				l		
IT 22 Minutos						1	
Stabilization Date	·	+/ 20/	<u> </u>	±/ 100/	+/ 10	+	-
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	10 mV		1
Sampling Start Time: 7 `	$\nabla$	Sampling End	Time:				
10.5	$^{\prime}$						
Field Observations (turbidity, rechar	ge rate, odor, sh	eens, PID/FID re	eadings):		· ·		
Purge Water Status (containerized &	# of containers	, filtered and dis	charged, w/ di	scharge location	):		
Purge water was processed through a	a 5-gallon carbo	n bucket and dis	charged to the	surface adjacen	t to the well.		
Comments:		••••••••••••••••••••••••••••••••••••••					
Comments.							
1							

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Fo	rensic Environm Well Samp	ental Serv ling Form	vices, Inc.			
	*	0				
				13		
Date: 0/27/69	<u> </u>	Sampler:	Bryan J. Mache		hel ut	
Project/Site:	«SGPP, wayne	Location:	Wayne, rvew lo	ersey when	nviui, Ny	
Unper Casing diameter:	inches	Casino Mater	-iol-	PVC		
Weather Conditions: 010041	inches	Casing Maior	1d1.	170		
PID/FID reading from well:	N-M maa					
Total Depth of Well (from top inner casing)	: 		15	feet		
Depth to Water (DTW) (from top inner casi	ng):		840	feet		
Well Screened Interval:	-			feet		
Linear feet of water in well:					$\cap$	
Is DTW included in a complete round of pro	e-sampling synoptic water	level measure	ements?		Jes	no
Thickness of floating product (if any):	None			feet	Time:	
Description of floating product:	None					
Purge Method: Peristaltic pump			· · · · ·			
Purge Start Time: 1	Purge End Tim	e:	Purge Rate (ga	ls/minute):		
Total volume Fulged.	perature Spec Cond	DH	Diss Oxygen	Redox	Depth to	
	°C (us/cm)	(pH units)	(maa)	(mV)	Water (ft)	
1:48 Initial 11	11/ 20	1 11	711	117 6	NUC .	
	1.66 30/	6-47	L.11	91.2	27.8	
1 $3$ Minutes: $19$	19 301	6.11	0.65	5.6	8.50	
:/ <b>\$</b> 6 Minutes: <b> 4</b>	18 345	6.18	0.48	122.2	F 30	
21 9 Minutes: IU	10 353	114	0.111	-761	5<0	
14 1216 11		1 20		100	11	
12 Minutes:	11 400	6.5	0.41	- 44. 1	8.50	
$\mathcal{U}_{\mathcal{I}}$ 15 Minutes:	151 470	6.35	10.39	-56.7	8.50	
3° 18 Minutes: 1	43 507	1.78	0.36	61.2	8.50	
33 21 Minutes: 111	14 516	110	10.75	FAGE	550	
	$\frac{b}{b}$	6.90		100.0	8.1	
24 Minutes:	.67 <u>5 L-1</u>	6.90	0.55	100.9	8-50	
<b>3</b> 7 27 Minutes:						
72 30 Minutes:		1				
45 22 Minutor		-				
Stabilization Pata		+/ 0.1	1/ 109/	1/ 10 mm		
Sampling Method: Low Flow	+/- 3%	+/- 0.1	+/- 10%	+7-10 mV	1	
Sampling Start Time:	Sampling End	Time:				
Field Observations (turbidity, recharge rate	e, odor, sheens, PID/FID r	eadings):				
/						
Purge Water Status (containerized & # of o	containers, filtered and dis	charged, w/ di	scharge location	):		
Purge water was processed through a 5-ga	llon carbon bucket and dis	scharged to the	e surface adjacen	t to the well.		
Comments:					· · · · ·	
	Due V	1 MD	$\leq$	$\bigcirc 1$		
MP-50 =	こう) V () - S/	111		$\sim$	·1υ	
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Forensic Environmental Services, Inc.									
		Well Samp	ling Form						
Date: 10/27/04			Sampler:	Bryan J. Mache	ella				
Project/Site:	WV	-SGPP, Wayne	Location:	Wayne, New Ic	TSEY WATA	mulut, MY	,		
Well ID: MP-									
Inner Casing diameter:		inches	Casing Mater	ial:	PVC				
Weather Conditions: Claudy									
PID/FID reading from well:		N ppm		$\sim$					
Total Depth of Well (from top inr	er casing):		$\sim$	67	feet				
Depth to Water (DTW) (from top	inner casing):		)	. 1 ]	feet				
Well Screened Interval:					feet				
Linear feet of water in well:						$\bigcap$			
Is DTW included in a complete ro	und of pre-samplin	g synoptic water	level measure	ments?		yes	по		
Thickness of floating product (if a	my):	None			feet	Time:			
Description of floating product:		None							
Purge Method: Peristaltic pump	r	Purce End Tim	e	Purce Rote (on	c/minute).				
Total Volume Purged	/ pallon	ruge End Tim S	υ.	i nike ivare (Ba	ia/ininute).				
Total Volumo Faiged.	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to			
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
1.43 In	itial: 1517	575	1.19	211	EU O	291			
1111		5 25	10.0	5.11	01.	262			
$-\gamma\gamma$ 3 Min	ites: 14, 15	SJL	6.80	1.14	- 15. ")	1.12			
(5/ 6 Min	ites: 14.66	530	6.58	0.35	-76.1	7-97			
< 4 9 Min	ites: 14 LF	571	h.G.d	0.66	- Gu 1	7.67			
57	19.00	501	60	0.00	615	203			
j / 12 Min	utes: 19.68	510	0.10	0.51	11.				
0 🖉 15 Min	utes: 14.63	497	6.09	0.52	-86.6	7,95			
67 18 Min	utes: 14.63	486	6.08	0.51	-57.2	7.93			
66 21 Min	utes: )4.6.4	482	6.57	0.49	-81.2	7.93			
0 î 24 Min	utes:								
1 27 Min	utes:								
15 30 Min	utes:		-						
1 33 Min	utes:					+			
Stabilization	Pote	+/- 30/	+/ 0.1	+/- 10%	+/- 10 my				
Sampling Method: Low Flow	Raie	+7- 370	+7-0.1	+/- 10/0	1 +7- 10 my				
Sampling Start Time:	· ( )	Sampling End	Time:						
	· /		·						
Field Observations (turbidity, re	charge rate, odor, sl	neens, PID/FID r	eadings):						
Purge Water Status (containerize	ed & # of containers	s, filtered and dis	charged, w/ di	scharge location	ı):				
Purge water was processed three	igh a 5-gallon carbo	on bucket and dis	charged to the	surface adjacer	t to the well				
put in on-st	- 55, du	en							
	U								
Comments:						· · · · · · · · · · · · · · · · · · ·	······		

Forensic Environmental Services, Inc. Well Sampling Form									
Date: 10/28/04	Sampler: Bryan J. Machella								
Project/Sile: W Burlington Co. School District	Location: -Columbus, New Jersey (NAto, Uliet, NY								
Well ID: MP-9									
Inner Casing diameter: / S inches	s Casing Material: PVC								
Weather Conditions:									
PID/FID reading from well: $(1200)^{11}$ ppm	1								
Total Depth of Well (from top inner casing):	fcet								
Depth to Water (DTW) (from top inner casing):	J. J fect								
Well Screened Interval:	/ feet								
Linear rector water in wen.	al measurements?								
Thickness of floating product (if any):	feet Time								
Description of floating product: None									
Purge Method: Peristaltic pump									
Purge Start Time: 9:47 / J Purge End Time Total Volume Purged: 47 / J gallons	e: Purge Rate (gals/minute):								
Temperature Spec. Cond.	pH Diss. Oxygen Redox Depth to								
°C (µs/cm)	(pH units) (ppm) (mV) Water (ft)								
9:43 Initial: 15,71 891	7,69 573 -72.4 9.51								
9:53 3 Minutes: 16.53 917	664 0.70 -91.0 9.75								
56 6 Minutes: 16 51 583	114 058 014 975								
59 01/00/00/	6.01 0.51 -6.12 6.55								
9 Minutes. 16.83 811	0.09 0.59 11.3 9.75								
12 Minutes: $1657$	6.65 0.45 41.7 1.75								
a > 15 Minutes: $1691$ $57.5$	6.66 0.42 -93.2 6.75								
$O_{8}$ 18 Minutes: 1/ 57 57 d	LIG 14 -934 9.75								
1 $21$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$									
1, 21 Minutes: 16.7 C 810	6.0) 0.40 - 3.6 4.75								
/ <b>1</b> 24 Minutes:									
/ > 27 Minutes:									
<b>℃</b> G 30 Minutes:									
33 Minutes:									
Stabilization Rate +/- 3%	+/- 0.1 +/- 10% +/- 10 my								
Sampling Method: Low:Flow Sampling Start Time: Sampling End	Time:								
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID reading	ngs):								
Purge Water Status (containerized & # of containers, filtered and dischar Purge water was processed through a 5-gallon carbon bucket and dischar	ged, w/ discharge location): rged to the surface adjacent to the well.								
not in 55 2 drum									
Comments:									

Forens	ic Environme Well Sampl	e <b>ntal Serv</b> ling Form	vices, Inc.			
Date: 16/27/04		Sampler:	Bryan J. Mache	ella		
Project/Site:	SGPP, Wayne	Location:	Wayne, New Jo	ersey wat	enviur, My	/
Well ID: MP-18		<u> </u>			/	
Inner Casing diameter:	inches	Casing Mater	ial:	PVC		
PID/FID reading from well:	NM					
Total Depth of Well (from top inner casing):	ուփ		15.	feet		
Depth to Water (DTW) (from top inner casing):			599	feet		
Well Screened Interval:				feet		
Linear feet of water in well:					$\bigcirc$	
Is DTW included in a complete round of pre-sampl	ing synoptic water	level measure	ments?		yes	no
Thickness of floating product (if any):	None			feet	Time:	
Description of floating product:	None					
Purge Method: Peristaltic pump						
Purge Start Time: 14. 3.2	Purge End Tim	e:	Purge Rate (ga	ls/minute):		
Temperatur	re Spec. Cond.	nH	Diss. Oxygen	Redox	Depth to	
°C	(µs/cm)	(pH units)	(mqq)	(mV)	Water (ft)	
10.34 Initial: 15-70	676	710	240	- 54 1	249	
1 SC 200 11 22	520	1 01	1.05	01.0	92	
10.3° 3 Minutes: 10.3 L		Digy	1.80	34.8	1.05	
6  Minutes: 16.35	527	0.83	1.89	40.4	1.05	
56 9 Minutes: $16.40$	524	6.81	138	95.6	9.03	
5 12 Minutes: 16 41	5-7	6.81	1 89	491	G (3	
02 15 11 10 11		0-01	1.00		1.07	
13 Minutes:						
18 Minutes:						
$\sim 5$ 21 Minutes:						
1) 24 Minutes:						
12/ 27 Minutes:	·				+	
20 Minutes						
7 30 Minutes:						
7 ✓ 33 Minutes:						
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Start Time:	Sampling End	Time:				
Field Observations (turbidity, recharge rate, odor,	sheens, PID/FID re	eadings):				
Purge Water Status (containerized & # of container	ers, filtered and disc	charged, w/ di	scharge location	):		
Purge water was processed through a 5-gallon car	bon bucket and dis	charged to the	surface adjacen	t to the well.		
Commonto		*				
Comments: Fula Mart SC.	ngl KB	colle	veler p	] 0.(	(0	

	Forensic	<b>Environm</b> Well Samp	ental Serv ling Form	vices, Inc.			
Date: 14177 144			Samplar	Pruen I. Maah			
Project/Site:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SCPP Warte	Location:	Wayne New L		WH NY	
Well ID: M1-20			Booanon.	۷۷ <u>ل ۲۰۱۶ ر ۱۹۲۰ ر</u>	ersey crimin	<u>, , , , , , , , , , , , , , , , , , , </u>	
Inner Casing diameter:		7. S inches	Casing Mater	rial:	PVC		
Weather Conditions:			8				
PID/FID reading from well:		N~ ppm					
Total Depth of Well (from top i	nner casing):		,		feet		
Depth to Water (DTW) (from to	op inner casing):		à	r.29	feet		
Well Screened Interval:					feet		
Linear feet of water in well:						$\sim$	
Is DTW included in a complete	round of pre-samplin	g synoptic water	level measure	ments?		(yes	no
Thickness of floating product (i	f any):	None			feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pum	2	Dunge Fred Time	516		1 / 1 / 1		
Total Volume Purged:	. / pallons	Purge End 1 m	e: <b>u</b> -	Purge Rate (ga	ls/minute):		
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
8:59	nitial: 1395	410	2.92	311	700	575	
C'IC and		100	2.2	1.41	11.0	5-21	
	nutes: 17.60	657	1.63	9.68	101.0	F.36	
、ワ 6 Mi	nutes: 14_6 0	658	7.10	4.50	111.2	137	
116 <sub>9 Mi</sub>	nutes: 14.64	151-	7 19	4.31	III.S	527	
18 12 M	nutes:	1050	1.51		,	<i>a</i> , <i>·</i>	
C - 15 Mi	nutes:						
: LJ 18 Mi	nutes:						
JUF 21 M	inutes:						
MAC ( 5'	mites					+	
.)) 24 141							
J 9 27 M	inutes:						
、うつ 30 M	inutes:	2					
110 33 M	inutes:						
Stabilizatio	n Rate	+/- 3%	+/- 0.1	+/- 10%	+/-10  my		
Sampling Method: Low Flow Sampling Start Time:	17	Sampling End	Time:	1		-k	
Field Observations (turbidity, r	echarge rate, odor, sh	eens, PID/FID re	adings):				
Purge Water Status (containeri	zed & # of containers	, filtered and disc	harged, w/ dis	scharge location	):		
Purge water was processed thro	ough a 5-gallon carbo	n bucket and dis	charged to the	surface adjacent	to the well.		
Comments:							

s." Second

	Forensia	: Envi	ronm	ental Ser	vices. Inc.			
		We	ll Samp	ling Form				
			-	0				
Data: 101-2010				T				
Project/Site:		0.000		Sampler:	Bryan J. Mach	iella		
Well ID: AC 7	wv	SGPP,	Wayne	Location:	Wayne, New J	ersey MAA	torvivet, my	
Inner Casing diameter:		15	•	0.1.14				
Weather Conditions:		1.2	inches	Casing Mate	erial:	PVC		
PID/FID reading from well:		nin						
Total Depth of Well (from top inner ca	sina).		ppm			<u>^</u>		
Depth to Water (DTW) (from top inner	. casino).				5.66	feet		
Well Screened Interval:	cushig).				0.1	feet		
Linear feet of water in well:						reet		
Is DTW included in a complete round c	of pre-sampling	p synonti	c water	level measur	emento?			
Thickness of floating product (if any):	P P	None	e mater	level measure	cinents !	foot	yes Time	no
Description of floating product:		None				Teet	Time:	
Purge Method: Peristaltic pump				r				
Purge Start Time:	,	Purge E	nd Time	1.2 C	Purge Rate (ga	ls/minute):		
Total Volume Purged:	gallons					,		
	Temperature	Spec. (	Cond.	рН	Diss. Oxygen	Redox	Depth to	
Ruc	C	(μs/c	cm)	(pH units)	(ppm)	(mV)	Water (ft)	
J-YC Initial:	14.95	262	_	8.37	0.87	484	871	
3 Minutes:	1487	267		574	8-0	405	1. 71	
it 6 Minutes	11 811	77	-	501	10	71.0	0.1)	
49 Hindes.	14.59	10		8. LI	14. J	91.0	8.11	
9 Minutes:	14.80	261		8.18	0,73	52.0	1.71	
12 Minutes:	14.26	261	I	816	470	57 5	12.21	
15 Minutes				0710				
18 Minutes:						а 7 8		
21 Minutes:								
24 Minutes:								
27 Minutes:								
30 Minutes:								
33 Minutes							+	
Stabilization Rate		+/_ 7	3%	+/ 01	1/ 100/	1/ 10		
Sampling Method: Low Flow		1/	<u>, , , , , , , , , , , , , , , , , , , </u>	17-0.1	+/- 10%	+/- 10 mv		
Sampling Start Time:	•	Samplin	g End T	ìme:				
Pield Ober								
rield Observations (turbidity, recharge i	rate, odor, shee	ens, PID/	FID rea	dings):				
Clean ,								
47 								
Purge Water Status (containerized & # c	of containers, f	iltered ar	nd disch	arged, w/ dis	charge location)			
Purge water was processed through a 5-	gallon carbon	bucket a	nd disch	arged to the	surface adjacent	to the well.		
Comments:					······			·

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Forensic Environm Well Samp	ental Serv oling Form	vices, Inc.			
Date: $\frac{1}{15}$	Sampler:	Brvan J. Mach	ella		
Project/Site: SGPP - Watervliet	Location:	Watervliet. Ne	w York		
Well ID: MFZZ					
Inner Casing diameter: inches	Casing Mater	rial:	PVC		
Weather Conditions: SUNNY . 50-		<u>،</u>			
Total Depth of Well (from top inner casing):		P	feet		
Depth to Water (DTW) (from top inner casing):	9	-48	feet		
Well Screened Interval:	5	140	feet		
Linear feet of water in well:					
Is DTW included in a complete round of pre-sampling synoptic water lev	vel measureme	ents?		yes	(no
Thickness of floating product (if any): None			feet	Time:	
Description of floating product: None V					
Purge Method: Peristance pump		Duran Data (a.a	1-(		
Total Volume Purged: gallons	2:	Purge Rate (ga	ls/minute):		
Temperature Spec. Cond.	рН	Diss Oxygen	Redox	Depth to	
$^{\circ}C$ (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
2:15 Initial: 13 27 707	5.5		1157	QUE	
2/26/	106	4.19	162.2	7.90	
1 10 3 Minutes: 13 67 69 L	6.77	19.75	17)5	19.50	
35 6 Minutes: 13, 73 692	6.79	1433	173.7	951	
36 9 Minutes: 13 - 7 1 89	175	1052	1541	9 51	
35 001 501	$\left  \begin{array}{c} 0 \cdot 1 \end{array} \right $	17.13	11,0	$+1\cdot 1/-1$	
12 Minutes: 1379 68 E	6.19	19.12	169.9	5.51	
12 15 Minutes:					
18 Minutes:	1		1		
<b>5</b> / 24 Minutes:					
5 4 27 Minutes:			1		
5 30 Minutes					
33 Minutes:					
Stabilization Rate +/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Start Time: 2: 40 Sampling End T	ſime:				
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readi	ngs):				
Purge Water Status (containerized & # of containers, filtered and dischar	and w/ discha	arga location);			
i de water status (containenzed e # of containers, intered and dischar	geu, w/ uisein	nge location).			
Comments:	11	1	1/		
Enerkl. KRICA	Reale 1	P Liy	15		
In inter ( ) a	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	- 1			

	Forensic E	nvironmo Well Sampl	ental Serv ing Form	ices, Inc.			
Date: VI-105			Sampler:	Bryan J. Mache	ella		
Project/Site:	SGPP	- Watervliet	Location:	Watervliet, Nev	w York		
Well ID: MP-1							
Inner Casing diameter:	1	, S inches	Casing Materi	al:	PVC		
Weather Conditions:					******		
Total Depth of Well (from top inner casin	ng):			5.83	feet		
Depth to Water (DTW) (from top inner c	asing):		-		feet		
Well Screened Interval:					feet		
Linear feet of water in well:						$\bigcap$	
Is DTW included in a complete round of	pre-sampling syno	ptic water lev	el measureme	nts?		yes	no
Thickness of floating product (if any):	No	ne			feet	Time.	
Description of floating product:	No	ne					
Purge Method: Peristaltic pump. Purge Start Time: 2,35	Pu Pu	rge End Time	2:59	Purge Rate (ga	ls/minute):	5/24	
Total Volume Pulged.	Temperature S	Spec. Cond.	Ha	Diss. Oxygen	Redox	Depth to	
	°C	(us/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
7,53 Initiali	1027		1.70	0.06	-16.5	508	
	10,00		037	0.00	10.1	U. CU	and RAULA.
3 Minutes:	10.00 1		6.51	006	-16.)	8.00	five slip
5 7 6 Minutes:	10.7.6 -	789	6.74	0.00	-16.8	20-	
CZ 9 Minutes	1 50					ľ	
Q 5 12 Minutes							
CI 15 Minutes							
- 13 Minutes.							
t 18 Minutes.			1				
21 Minutes:							
24 Minutes:							
27 Minutes:							
30 Minutes:		<u>-,,,,,,,, -,,, -,,,,,,,,,,,,,,,</u>					
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	S	ampling End	Time:				
Field Observations (turbidity, recharge	rate, odor, sheens,	PID/FID read	lings):				
Purge Water Status (containerized & #	of containers, filter	ed and discha	arged, w/ disch	narge location):			
- 5530	trum or :	site					
Comments:							

Forensic Environm Well Samp	ental Serv lling Form	vices, Inc.			
1a10: 4/-7/05	Sampler:	Bryan J. Macho	ella		
roject/Site: SGPP - Watervliet	Location:	Watervliet, Nev	w York		
VellID: MD-5					
nner Casine diameter: 1, 5 inches	5 Casing Mater	jal:	PVC		
Weather Conditions: QV9Cr51-50					
otal Depth of Well (from top inner casing):		15	feet		
Depth to Water (DTW) (from top inner casing):		7.55	feet		
Well Screened Interval:		,	feet		
inear feet of water in well:				$\bigcirc$	
s DTW included in a complete round of pre-sampling synoptic water level	el measuremen	ts?		(yes)	no
Thickness of floating product (if any): None			feet	Time:	
Description of floating product: None					
Purge Method: Peristaltic pump		<b>D</b>	11.1	21-	
Purge Start Time: $[0, 1] \subset \square$ Purge End Tim	e:10:43	Purge Rate (ga	als/minute):	21-	
Fotal Volume Purged: gallons	Lin L	Diss Oxyger	Redox	Depth to	
i emperature spec. Cond.	(nHunita)	(nnm)	(mV)	Water (ft)	
	(pri units)	(ppm)		521	
0:39 Initial: 77 37	6.54	1.00	721	6.)	
37' 3 Minutes: 5.02 605	6 53	1.07	1-20.6	5.31	
V/2 6 Minutary 9 01 645	LISV	105	-777	5.31	
		1. 1.0	77.5	621	
93 9 Minutes: 7,08 606	6.34	1.00	-00-5	8-51	
4/2 12 Minutes:					
49 16 Minutag	-				
2 C 18 Minutes:					
21 Minutes:					
CF 24 Minutes:					
Col 27 Minutes:					
					1
					-
33 Minutes:					4
Stabilization Rate +/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Flow Sampling Start Time: / Sampling End	d Time:			100	
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID read	ings):				
				······································	
Purge Water Status (containerized & # of containers, filtered and disch	arged, w/ disch	arge location):			
> 550 dans auste					
- J J ovum in site					
Commente			<u></u>		
Commons.					

		Forensic	E Environm Well Samp	ental Serv ling Form	ices, Inc.			
Date: 4/1/03				Sampler:	Bryan J. Mache	lla		
Project/Site:		S	GPP - Watervliet	Location:	Watervliet Nev	w York		
Well ID: MP-6								
Inner Casing diameter:			1,5 inches	Casing Materi	al:	PVC		
Weather Conditions:								
Total Depth of Well (from	top inner casin	ng):			15	feet		
Depth to Water (DTW) (fro	om top inner c	asing):			7.38	feet		
Well Screened Interval:					v	feet		
Linear feet of water in well	:						$\bigcirc$	
Is DTW included in a comp	plete round of	pre-sampling syn	noptic water leve	l measurements	5?		yes	no
I hickness of floating produ	uct (11 any):		None			feet	Time:	
Purce Method: Peristaltic			None					
Purge Start Time: // Constant		gallons	Purge End Time	:: <i>  </i> :44	Purge Rate (gal	ls/minute):	9=	
		Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
		°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
35	Initial:	8.63	120	517	259	241.8	7.51	
28	3 Minutes:	8.61	118	5.16	7.49	7436	75)	
0	6 Minuter	FOU	110	517	217	7.44	7.17	
4/	o minutes.	E C		510	CIU	019.1	1.1/	
49	9 Minutes:	0.01	118	1.67	7.90	140	7.5)	
()	12 Minutes:							
SU	15 Minutes:							
	10 Minutoo		-	+				
	To Minutes.							
	21 Minutes:							
	24 Minutes:							
	27 Minutes:			1				
	20 1 6		+					
	30 Minutes:							
	33 Minutes:							
Stat	vilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		l
Sampling Method: Low F Sampling Start Time:	1.45		Sampling End '	Time:				
Field Observations (turbid	lity, recharge 1	ate, odor, sheens	s, PID/FID readir	ıgs):		<del>8</del>		
	· · · · · · · · · · · · · · · · · · ·							
Purge water Status (conta	inerized & # (	of containers, filt	ered and dischar	ged, w/ dischar	ge location):			
	55 dr	um er	site					
				8				
Comments:						·····		
L								

	Forensi	Fnvironm	antal Sam	ions Ing			
	FUICIISI	Well Samp	ling Form	ices, mc.			
		,	8				
Date: V/1/65			Sampler	Bryan I Mache	110	······	
Project/Site:	S	GPP - Watervliet	Location:	Watervliet New	v York	·····	
Well ID: MP-7				Water thet, New	JOIN		
nner Casing diameter:		1.5 inches	Casing Materi	al:	PVC		
Weather Conditions:				· -			
Fotal Depth of Well (from top inner casi	ng):			15	feet		
Depth to Water (DTW) (from top inner o	casing):			6.51	feet		
Well Screened Interval:				•	feet		
Linear feet of water in well:	· · · · · ·		<b>,</b>	0		$\bigcap$	
Thickness of floating product (if any):	pre-sampling sy	None	el measurements	5?	foot	Yes'	no
Description of floating product (I any).		None			leet	i me:	
Purge Method: Peristaltic pump		None				1.	
Purge Start Time: 11 35	7	Purge End Time	:: N:35	Purge Rate (gal	s/minute): Z	1405	
Total Volume Purged:	gallons		1	1	/		7
	lemperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
17:15	D El	(µs/cm)	(pH units)	(ppm)		Water (ft)	4
Initial:	8.36	130	6.04	1.37	233.2	1.08	
3 Minutes:	888	138	6.15	1.15	229.0	7.08	
1/ 6 Minutes:	853	150	6.20	120	2237	7.08	1
14 9 Minutes:	5.41	156	6.71	9.17	221.2	768	7.08
17 12 Minutes:	5.45		6.20	0.46	218.0		7.08
2° 15 Minutes:	Sur	161	6.36	C.Y /	787.6		3.18
2.3 18 Minutes:	F77-	23	6.43	079	7013		7.08
ZL 21 Minutes:	850	227	6.47	0.77	190.6		708
29 24 Minutes	FCF	175	6.50	614	175.L	708	
って 27 Minutes	5.50	223	(.50	G7A	171.2	701	-
S 30 Minutes	E()	7.70	6.51	0.22	1777	74	
33 Minutes							-
Stabilization Rate		+/- 3%	+/- 0 1	+/- 10%	+/- 10 my		-
Sampling Method: Low Flow 7/			1 17 0.1	1 1070			
Sampling Start Time: 10. 56	)	Sampling End	Time:				
Field Observations (turbidity, recharge	rate odor sheen	o DID/EID roodi			<u></u>		
i feld Observations (turbitity, reenarge	rate, ouor, sheen	s, r iD/i iD reauli	igs).				
	<u> </u>						
prurge water Status (containerized & #	or containers, fil	tered and dischar	ged, w/ dischar	ge location):			
) ssich	un on sit	e					
		-					
Comments:							
1							

	Forensic	e Environmo Well Sampl	e <b>ntal Serv</b> ling Form	ices, Inc.			
Data NICIUS			Complet	Rman   Machal	19		
			Sampler.	Biyan I. Machel	Val		
$\frac{1}{10000000000000000000000000000000000$		JPP - Watervliet	Location:	waterviiet, inew	YOFK		
Unper Cooine diameter:	·	15 inches	Casina Materi	al	PVC		
Weather Conditions: St. 4 56		r) menes	Casing Match	a	110		
Total Depth of Well (from ton inner ca	sino).				feet		
Depth to Water (DTW) (from ton inner	casine).				feet		
Well Screened Interval:	ousing).				feet		
Linear fect of water in well:							
Is DTW included in a complete round	of pre-sampling sv	noptic water leve	1 measurement:	s?		yes	no
Thickness of floating product (if any):		None			feet	Time:	$\bigcirc$
Description of floating product:		None					
Purge Method: Peristaltic pump						12	
Purge Start Time: 8:20	]	Purge End Time	:	Purge Rate (gal	s/minute): 1	100	
Total Volume Purged:	gallons		·			T	1
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	Č	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	•
EZC Initia	1: 13.00	741	6.78	0.20	-77.2		
<b>3</b> Minute	s BCT	1717	6.57	an	-767	Env	1
5,7 5,11	1216	7.0	117	CIE		0-14	-
5 6 Minute	s: / ).0.1	-105	6.0 0	0,15	-) b. C	3. 19	
<b>46</b> 9 Minute	s: 13.72	699	683	0,15	-76	8.74	
47 12 Minute	s:						
							-
76 IS Minute	:S:						4
79 18 Minute	es:						
TZ 21 Minute	es:						
Od Minut							-
24 Minut							-
27 Minute	es:						-
30 Minute	es:						
33 Minut	ac.						1
Stabilization B	ate	+/- 3%	+/= 0.1	+/- 10%	+/- 10 my		-
Sampling Method: Low Flow Sampling Start Time:	/	Sampling End	Time:				
Field Observations (turbidity, recharg	e rate, odor, sheen	is, PID/FID readin	1gs):				
Purpe Water Status (containerized &	# of containers fil	tered and dischar	and w/ dischar	ree location).			
555 d	un or	site	geu, wr uisena				
Comments:							

	Forensic Environm Well Samı	iental Serv oling Form	vices, Inc.			
Date: 4/8/03		Sampler:	Bryan J. Machel	lla		
roject/Site:	SGPP - Watervlie	t Location:	Watervliet, New	/ York		
Vell ID: MP10						
nner Casing diameter:	1.5 inche	s Casing Mater	rial:	PVC		
Veather Conditions:						
otal Depth of Well (from top inner casing	g):			feet		
Pepth to Water (DTW) (from top inner ca	sing):			feet		
Vell Screened Interval:				feet		
inear feet of water in well:	1		4.9			
SDIW included in a complete round of p	None	ei measuremen	us?	feet	yes Time:	no
methods of floating product (if any).	None			Teet	Time.	
urge Method: Peristaltic purap	None					
urge Start Time: 5, 46 Total Volume Purged:	Purge End Tim	e:	Purge Rate (gal	s/minute):		
	Temperature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
P: 57 Initial:	IN BR LST	6.7	0.15	-829	885	
OG 3 Minutes:	1450 667	6.00	1017	-137	23.7	
C3 CMIENTER	14-14 16 1	12:5		-23-	ccc	
6 Minutes:	19-14 69		<u>~</u> /6	782)	8-8)	
C/C 9 Minutes:						
CA 12 Minutes:						
1 <b>7</b> 15 Minutes:						
18 Minutes						
21 Minutes:						
24 Minutes:						
27 Minutes:						
30 Minutes:						
						-
3.5 Minutes:			1/ 100/			-
Stabilization Rate	+/- 3%	1 +/- 0.1	+/- 10%	+/- 10 mV		1
Sampling Start Time: 9:04	Sampling End	Time:				
Field Observations (turbidity, recharge ra	ate, odor, sheens, PID/FID read	ings):				
Purge Water Status (containerized & # o	f containers, filtered and discha	rged, w/ discha	arge location):			
		<u> </u>	~ /			
Comments:						

	Forensie	e <b>Environ</b> r Well Sam	nental Serv	vices, Inc.			
Date: $\frac{\gamma}{\gamma}$	SC	GPP - Watervlid	Sampler: et Location:	Bryan J. Mach Watervliet, Ne	ella w York		
Inner Casing diameter:		inche	es Casing Mater	ial:	PVC		
Weather Conditions: $\sqrt{rrc} rst - 5C$ Total Depth of Well (from top inner ca Depth to Water (DTW) (from top inner Well Screened Interval:	) sing): casing):	1.2	<u>,</u> フ	.53	feet feet feet		
Inear reet of water in well: Is DTW included in a complete round of Thickness of floating product (if any): Description of floating product: Purge Method: Peristaltic pump	of pre-sampling sy	ynoptic water le None None	evel measureme	nts?	feet	Time	no
Purge Start Time:	15 pallons	Purge End Tim	ne:1:27	Purge Rate (ga	ls/minute):	125	
$\begin{pmatrix} 1 & 2 \\ 3 & \text{Minutes:} \\ 2 & 3 & \text{Minutes:} \\ 3 & 6 & \text{Minutes:} \\ 3 & 9 & \text{Minutes:} \\ 3 & 12 & \text{Minutes:} \\ 3 & 15 & \text{Minutes:} \\ 3 & 18 & \text{Minutes:} \\ 3 & 21 & \text{Minutes:} \\ 4 & 21 & \text{Minutes:} \\ 2 & 21 & \text{Minutes:} \\ 3 & 0 & \text{Minutes:} \\ 3 & Mi$	Temperature           °C           IC.0 ¶           IC.1 ¶           IC.1 ¶	Spec. Cond. (µs/cm) 736 737 737 737 +/- 3%	pH (pH units) 6.6 6 6 5 6 6 7 7 7	Diss. Oxygen (ppm) Q.) C.) G.) G.) G.) G.) G.) G.) G.) G.) G.) G	Redox (mV) -63, 4 -63, 3 -63, 2	Depth to Water (ft) 7.55 7.55 7.55	
Sampling Start Time:		Sampling End	Time:				
Field Observations (turbidity, recharge Purge Water Status (containerized & # 4 5555	rate, odor, sheens of containers, filta Mum 0.	ered and discha 。った	ings): rged, w/ dischar	rge location):			
Comments: MP-S	-0 =	· Ju	nq	np-j	Ye	1:4	5

e.

Well Sampling Form

are: $\frac{1}{\sqrt{162}}$ Sampler: Bryan I. Machella triced/Site: SGPP - Watervile: Location: Watervilet, New York GID: $M \neq 1$ . ] and Casing dimeter: 1. 5 inches Casing Material: PVC /cadde Conditions: $n \mapsto n_3$ inches Casing Material: PVC /cadde Conditions: $n \mapsto n_3$ inches Casing Material: PVC /cadde Conditions: $n \mapsto n_3$ inches Casing Material: Feel Biscened Interval: feel Screene Interval: None / Second Inter							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Date: $4/7/67$		Sampler:	Bryan J. Mache	lla		
Cell ID: M p-1)       1.5       inches Casing Material:       PVC         increasing damater:       1.5       inches Casing Material:       PVC         casing damater:       1.5       inches Casing Material:       PVC         casing damater:       1.5       inches Casing Material:       PVC         casing control top inner casing):       1.5       inches Casing Material:       PVC         casing control top inner casing):       1.5       if ed       if ed         casing control top inner casing):       1.5       if ed       if ed         casing control top inner casing):       1.5       if ed       if ed         casing control top inner casing):       None       if ed       if ed         casing control top inner casing):       None       if ed       if ed         casing product (f any):       None       if ed       if ed       if if ed         page Method:       Perstallic product       None       if ed       if if ed       if if ed         ind Volume Purged       1.5       gallows       igppm       if if ed       if i	Project/Site:	SGPP - Watervliet	Location:	Watervliet, Nev	v York		
$ \begin{array}{c} 1, 5 & \text{inches} \left[ \text{Cashing Manachinic} & \text{PVC} \right] \\ \begin{array}{c} \text{Variable Conditions: } (V \leftarrow (A_{A})^{V}) \\ \text{Variable Conditions: } \\ \\ \\ \\ \text{Variable Conditions: } \\ \\ \\ \\ \\ \text{Variable Conditions: } \\ \\ \\ \\ \\ \\ \text{Variable Conditions: } \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	Well ID: MP-17						
Pather Conditions: C+: (A)       Image: A starting (C)       Image: A sta	Inner Casing diameter:	1, 5 inches	Casing Materi	ial:	PVC		
olal Deph of Well (from top inner casing): cpth to Water (DTW) (from top inner casing): incer feet of water (DTW) (from top inner casing): incer feet of water in well: incer feet of water in the well in the well:	Weather Conditions: $\sigma V^{-1} \wedge V^{-1}$		•••••••	:<			
eph to Water (DTW) (from top inner casing): 1/1/1 feet fee	Total Depth of Well (from top inner casing):			200	fect		
All Scened Interval:       feet         inser det of varier in well:       None         DTW included in a complete round of pre-sempling synoptic water level measurements?       feet         interval:       None         urge Malbod:       Perintalic pump         (1:4/1       Initial:         (2:5/1       State         (3:5/2       State         (4:5/2       State         (5:1       State         (5:1       St	Depth to Water (DTW) (from top inner casing):			7.41	fect		
inter for diver in well:       (yes)       no         DTW included in a complete round of pre-sampling synoptic water level measurements?       (yes)       no         with the set of hading product (if any):       None       Feet       Time:       no         wage Method:       Perspectation product:       None       Feet       Time:       10         wage Method:       Perspectation of noting product:       None       Perspectation of noting product:       10	Well Screened Interval:				feet		
DTW included in a complete round of pre-sampling synoptic water level measurements?       (yes) no         hickness of floating product (if any):       None       feet       Time::         wrege Michod:       Peristatic pump       Purge End Time: /: 57       Purge Rate (gals/minute):       /.5 //24/=         wrege Michod:       Peristatic pump       Purge End Time: /: 57       Purge Rate (gals/minute):       /.5 //24/=         /: 4//       Initial:       Temperature       \$pec. Cond.       pH units)       Diss. Oxygen       (mov)       Weater (fit)         yrege Sart Time:       /: 4//       Initial:       Temperature       \$pec. Cond.       pH units)       (ppm)       (mV)       Weater (fit)         yrege Sart Time:       /: 4//       Initial:       Temperature       \$pec. Cond.       pH units)       (ppm)       (mV)       Weater (fit)         yrege Sart Time:       /: 4//       Initial:       Temperature       \$pec. Cond.       pH units)       (ppm)       (mV)       Weater (fit)         yrege Sart Time:       /: 4//       I is Minutes:       //: 4//       I is Minutes:       //: 4//       /: 4//: 4//       /: 4//: 4//: 4//: 4//: 4//: 4//: 4//: 4	Linear feet of water in well:					Comments of the second s	
Indext Status (container zode: Ref of the s	Is DTW included in a complete round of pre-sam	pling synoptic water lev	el measuremen	nts?		( yes	no
escription of floating product: None $V$ wrge Mehdo. Peristatile pump wrge Mator. Peristatile pump wrge Mator. Peristatile pump 1.5 gallons Purge End Time: $1.5 9$ Purge Rate (gals/minute): $1.5/24$ = 1.5 gallons Purge End Time: $1.5 9$ Purge Rate (gals/minute): $1.5/24$ = 1.5 gallons Purge Cond 1.5 gallons Purge End Time: $1.5 9$ Purge Rate (gals/minute): $1.5/24$ = 1.5 9 Minutes: 1.5 0 $1.5 0$ $1.5$	Thickness of floating product (if any):	None			feet	Time	
urge Wathon: Performer       1.5 gallons       Purge End Time: 1:5 )       Purge Rate (gals/minute): 1.5 / 24/=         velume Purged:       1.5 gallons       Spec. Cond. (PH units)       (ppm)       (mov)       Depth to         1.4 y / Initial:       1.5 y 24/=       1.5 y 24/=       (mov)       Depth to       (mov)       Depth to         1.4 y / Initial:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=       (mov)       Depth to         1.5 gallons       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         1.5 distances       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.6 distances       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.6 distances       1.6 y 24/=       1.5 y 24/=       1.5 y 24/=         2.6 is 15 minutes:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.1 Minutes:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.1 Minutes:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.1 Minutes:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         2.1 Minutes:       1.5 y 24/=       1.5 y 24/=       1.5 y 24/=         3.6 minutes:       2.1 Minutes:       1.4 y 36/=       1.4 y 36/=       1.4 y 36/=	Description of floating product:	None L					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Purge Start Time: $1:35$ Total Volume Purged: $1:5_g$	Purge End Time	1:59	Purge Rate (gal	s/minute):	5/24=	
$\frac{1}{12} \frac{1}{12} \frac$	Temper	ature Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
$\frac{1.44}{9}$ Initial: $\frac{1.56}{9}$ $\frac{318}{9}$ $\frac{1.46}{9}$ $\frac{1.44}{9}$ $\frac{1.36}{9}$ $\frac{318}{9}$ $\frac{1.46}{9}$ $\frac{1.45}{9}$ $\frac{1.45}{9$	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$\frac{1}{\sqrt{3}} \frac{1}{3} \frac{1}{\sqrt{3}} \frac$	$\int \langle q' \rangle$ Initial: $I / I$	1. 218	L bla	$ \circ i $	-77/	8.00	
$\frac{1}{3} = \frac{1}{3} + \frac{1}$	47 3 Minutes: (('.)	1 841	6.6.5	CIS	-71.6	8.07	
$\frac{3}{5} 9 \text{ Minutes:} \qquad 10.41 \text{ FS} \qquad 10.41  $	$5^{C}$ 6 Minutes: $\sqrt{\Lambda}$		NA	NA	NIN	NM	
$\frac{51}{12} \text{ Minutes:} \qquad \qquad$	> 3 9 Minutes 16, 16	5 886	6.64	CIL	-7(1)	202	
$\frac{12 \text{ Minutes}}{51 \text{ 15 Minutes}} = \frac{10.9 \text{ C} \text{ 37 } \text{ 5} \text{ 5} \text{ 6} \text{ 6} \text{ 6} \text{ 1} \text{ 0} \text{ 1}  1$	5/ 12 Minutes 10, 11	1 192	1/11	0.16	701	0.00	
$\frac{51}{15 \text{ Minutes:}}   \underline{(.43)}   \underline{54}   \underline{(.60)}   \underline{(.74)}   \underline{(.60)}   \underline{(.60)} $	12 Minutes: 10-0	CBD	6.09	0.15	-70.1	0.7	
CL 18 Minutes:	$5$ 15 Minutes: 10- $9_0$	8 898	6.61	0.19	10.0	S.Y	
Comments:       Comments:	C L 18 Minutes:						
24 Minutes:	C) 21 Minutes:						
27 Minutes:	24 Minutes:						
30 Minutes:       33 Minutes:         33 Minutes:       33 Minutes:         Stabilization Rate	27 Minutes:						
33 Minutes:	30 Minutes						
Stabilization Rate        +/- 3%       +/- 0.1       +/- 10 mv          Sampling Method: Low Flow       Sampling End Time:       Sampling Start Time:       Sampling End Time:         Vield Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):       Sampling End Time:          Virge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):       Containerized & # of containers, filtered and discharged, w/ discharge location):         Containerized & .       55 - 5 Mum         Comments:			<u> </u>				
Stabilization Rate	33 Minutes:						
Sampling Start Time: 2:00 Sampling End Time: Tield Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Containery A. 55-5 Mun Comments:	Stabilization Kate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Containerized & SS-5 Mun Comments:	Sampling Start Time: 2:00	Sampling End 7	Гіme:				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Containery A. 55-5 Aun Comments:	Field Observations (turbidity, recharge rate, odor	, sheens, PID/FID readi	ings):				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Containerized & . 55-5 Aum Containerized & . 55-5 Aum							
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): Containery A. 55-5 Aun Comments:							
Containenged en 55-5 drum	Purge Water Status (containerized & # of contair	ers, filtered and dischar	rged, w/ discha	arge location):			
Comments:	Containinged in 55-50	shum					
	Comments:						

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	Forensic	Environmo Well Sampl	e <b>ntal Servi</b> ling Form	ces, Inc.			
Date: 4/7/05			Sampler:	Bryan J. Machel	la		
Project/Site:	SG	PP - Watervliet	Location:	Watervliet, New	York		
Well ID: MP-18		· · ·					
nner Casing diameter:		1.5 inches	Casing Materia	ıl:	PVC		
Weather Conditions: OVPRASE 50				,	<b>6</b> .		
Fotal Depth of Well (from top inner casin	g):			- NI	feet		
Depth to Water (DTW) (from top inner ca	sing):			1.89	feet		
Well Screened Interval:					leet		
Linear feel of water in well:	re cannling cun	ontic water leve	Imeasurements	<b>୨</b>		Q	no
Thickness of floating product (if any):	ne-sampning syn	None	i measurements	•	feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pump					. /		
Purge Start Time: $9!40$ Total Volume Purged:	/ gallons	Purge End Time	10:00	Purge Rate (gal	s/minute):	20 5	
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
9.59 Initial:	10.84	528	7.40	0.30	202	7.86	
T7 3 Minutes	UK	C76	240	077	263.3	786	
	10.56	r-14	240	0.20	2145	306	
6 Minutes:	10.00	14	1.10	0		1.80	
9 Minutes:							
CIG 12 Minutes:							
(S series			-				
15 Minutes:							
18 Minutes:							
15 21 Minutes:							
24 Minutes:					_		
27 Minutes: 27 Minutes:							
30 Minutes:					-		
33 Minutes:		./ 20/	1/01	1/ 100/	+/ 10 mm		
Stabilization Rate		1 +/- 3%	<u> </u>	+/-10%0	T- 10 IIIV		I
Sampling Start Time:		Sampling End	Time:				
Field Observations (turbidity, recharge r	ate, odor, sheens	s, PID/FID readi	ngs):	<u></u>			
Durse Water Status (containerized & #	f containers filt	ered and discha	roed w/ dischar	re location).			
	, containers, int	lered and discha	igou, wi uisonus	ge looution).			
-> 55 j drum or	site						
Comments:							

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	Forensie	e Environm Well Samp	ental Serv	ices, Inc.			
Date: 4/7/05			Sampler:	Bryan J. Machel	la		
Project/Site:	S	GPP - Watervliet	Location:	Watervliet, New	' York		
Well ID: MP-19		_					
Inner Casing diameter:		inches	Casing Materi	al:	PVC		•
Weather Conditions: QUe-CASE - 5	0	•		1			
Total Depth of Well (from top inner ca	sing):			むう	feet		
Depth to Water (DTW) (from top inner	r casing):		)	· 9 /	leel		
Well Screened Interval:					leet		
Linear feet of water in well:	of pre campling su	montic water leve	1 measurements	- <b>9</b>		(Ves)	no
Thickness of floating product (if any):	or pre-sampning sy	None	a measurementa	s:	feet	Time:	110
Description of floating product (I any).		None			1001	7 milet	
Purge Method: Peristaltic pump					<u></u>	1-5	
Purge Start Time: 10:50	15	Purge End Time	s: //`.)¶	Purge Rate (gal	s/minute): 人 グ	14=	
Total Volume Purged:	gallons	; 	f.		·	······	
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
<b>b</b>	Ċ	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initia	u: 8,63	539	6.74	14.12	102	7.49	
G 3 Minute	15: F.71	575	1,76	3.65	917	7.44	
13 Chinate	501	-> 2	6.80	210	706	7.44	
o minute	s: <u>Y, J</u>	50	150	3.10	1800		
9 Minute	5: 5.68	526	6.19	3.26	742	14)	
1 12 Minute	S: FOO	526	6.79	3.26	38.6	7.41	
ZZ 15 Minute							
7-5							
18 Minute	es:						
J 21 Minute	es:						
3/ 24 Minute	es:						
27 Minut	es:						
30 Minut	es:				· · · · · · · · · · · · · · · · · · ·		
33 Minut	es:	1/ 20/	+/ 0.1	+/ 109/	+( 10 m)		
Sampling Method: Low Flow Sampling Start Time:	late	Sampling End	 Time:	+/- 10%	+/- 10 mv		L
Field Observations (turbidity, recharge	ge rate, odor, sheer	ns, PID/FID readi	ngs):				
Purge Water Status (containerized &	# of containers, fi	Itered and dischar	rged, w/ dischar	ge location):			
	· •			·			
-> 555 du	m on sit	C					
, ,							
Comments:						<u></u>	
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	Forensic	E Environme Well Sampl	ental Serv ing Form	ices, Inc.			
Date: 1/7/6)			Sampler:	Bryan J. Mache	lla		
Project/Site:	SC	GPP - Watervliet	Location:	Watervliet, Nev	v York — 🤇 A	Nr St	
Well ID: LIF-22						,	
Inner Casing diameter:		inches	Casing Materi	ial:	PVC	,	
Weather Conditions: Overcast	50			15			
Total Depth of Well (from top inner cas	ing):		,	EVP	feet		
Depth to Water (DTW) (from top inner	casing):			330	feet		
Well Screened Interval:					feet		
Linear feet of water in well:						$\bigcap$	
Is DTW included in a complete round o	f pre-sampling syn	noptic water level	measurement	s?		( yes	no
Thickness of floating product (if any):		None			feet	Time	
Description of floating product:		None					
Purge Method: Peristaltic pump		Duran D. J.T.	G.17	Dunna Data (	la/minuta), 15	1175	
Purge Start Time: 7.00	1.5 millions	Furge End Time		Furge Kate (gal	is/initiate):		
	Temperature	Spec. Cond.	bH .	Diss. Oxvgen	Redox	Depth to	]
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
9:02 Initial	907	145	8-15	1231	11971	F.F.6 -	Static
nila n/15		99	512	121151	11/1	F 23	1
3 Minutes	2.69	210	1.16	1.45	Liber 1	5.01	
6 Minutes	1772	Sig	7.08	19.43	234.2	8.89	
21 9 Minutes	2.51	201	7.02	933	7777	8.89	-
24	007		50	1	207 7	506	4
12 Minutes	» <u>[7]</u>	310	677	9.35	691. 3	8.87	4
() 15 Minutes	s: 15.76	315	6.13	19.30	2461	189	
3° 18 Minutes	5.		1			· · · · · · · · · · · · · · · · · · ·	1
							4
3 21 Minutes	5:				· · · · · · · · · · · · · · · · · · ·		4
3 <sup>c</sup> 24 Minutes	s:						· · ·
<b>3</b> 7 27 Minutes	s:						
47 2024		1					4
30 Minute	s:					<u> </u>	-
45 33 Minute	s:						
Stabilization Ra	te	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv	Bin sen ble	
Sampling Method: Low Flow Sampling Start Time:		Sampling End <sup>*</sup>	Time:				
Field Observations (turbidity, recharge	e rate, odor, sheen	s, PID/FID readir	ngs):				
Purge Water Status (containerized & #	f of containers, fil	tered and dischar;	ged, w/ discha	rge location):			

"E

	Forensic <b>B</b>	Invironm	ental Serv	ices, Inc.			
		Well Samp	ling Form				
Date 4 18105			Complan	Davan I. Maaha			
Project/Site:	SGPI	P Waterwhiet	Location:	Wotomiliet New	vi Vark		
Well ID: MINI II		- water viter		watervnet, Nev	V YOIK		
Inner Casing diameter:		<b>7</b> inches	Casing Materi	al	PVC		
Weather Conditions:			1 outing materi		1.0		
Total Depth of Well (from top inner casi	ng):				feet		
Depth to Water (DTW) (from top inner o	asing):				feet		1
Well Screened Interval:					feet		
Linear feet of water in well:							$\sim$
Is DTW included in a complete round of	pre-sampling synop	otic water leve	l measurements	s?		yes	no
Thickness of floating product (if any):	No	one			feet	Time:	
Description of floating product:	Nc	one					<u> </u>
Purge Method: Peristellic pump	j p.						
Total Volume Purged	Pu gallons	rge End Time	:	Purge Rate (gal	s/minute):		
	Temperature 1	Spec. Cond.	Ha	Diss. Oxygen	Redox	Depth to	
	°C	(μs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
G: D Initial:	17.10 5	$\overline{c}$	55	an	638	5.50	
	17 50	$\frac{n}{2}$		1011-	-13.0	1.08	
3 Minutes:	16)	<u>)98</u>	114	0.16	-91.3	7.18	
$\sim$ 6 Minutes:	1237 3	500	$\left  \mathcal{I} \right $	0.16	59,	5.58	
<b>76</b> 9 Minutes:					<u>+</u>	100	
29 12 Minutes:							r
57 15 Minutes:							
18 Minutes:							
21 Minutes:							
24 Minutes:					-		
27 Minutes:							
30 Minutes:							
33 Minutes:				**			
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	5 Sa	unpling End T	ìme:	<del>nden en e</del>	-1i- <u></u> i- <u></u> iiiii		1 <u></u>
Field Observations (turbidity, recharge r	ate, odor, sheens, PI	D/FID readin	gs):				
Purge Water Status (containerized & # c	of containers, filtered	l and discharg	ed, w/ discharg	e location):			
-> On site =	555 drun	m					
Comments					·		
Comments.							

	Forensi	c Environm	ental Serv	vices, Inc.			
		Well Samı	oling Form				
Date: $4776$		·····	Sampler	Bryan I. Mach	nella		
Project/Site:	S	GPP - Watervliet	Location	Watervliet Na			
Well ID: MV-14	· · · · · · · · · · · · · · · · · · ·	/		water thet, 10	SW TOIK		
Inner Casing diameter:		1/ inches	Casing Mater	rial:	PVC		
Weather Conditions:		1					
Total Depth of Well (from top inner cas	ing):				feet		
Depth to Water (DTW) (from top inner	casing):			つわ	feet		
Well Screened Interval:				1.UC	feet		
Linear feet of water in well:							
Is DIW included in a complete round of	pre-sampling s	noptic water lev	el measureme	nts?		(yes)	no
I nickness of floating product (if any):		None			feet	Time	
Purge Method: Periotalia purge		None					
Purge Start Time: 7 70		Durna End Th	402	n n :	3	127,	
Total Volume Purged:	2 gallons	i arge End 1 me	7.5	Purge Rate (ga	us/minute): 🖤	1 252	
	Temperature	Spec. Cond.	Ha	Diss Oxvgen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(mag)	(mV)	Water (ft)	
2:57 Initial:	976	1/73	6 30	$\left[ \frac{1}{\alpha} \right] $	- V		
		40	20		1.62	1.70	
	9,20	975 ·	6.50	CIL	-35X	7.90	
C > 6 Minutes:	9.00	407	6.30	0.2	-355	761	
UG 9 Minutes:				· · · · · · · · · · · · · · · · · · ·			
(9 12 Minutes)							
[ 15 Minutes:							
18 Minutes:						1	
21 Minutes:							
24.24				<u> </u>			
24 Minutes:							
27 Minutes:							
30 Minutes:							
33 Minutory				+			
Stabilization Data							
Sampling Method: Low Flow	/	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Start Time: 1/1 ()		Sampling End T	ime:				
Field Observations (turbidity, recharge ra	ate, odor, sheens	, PID/FID readir	ngs):		·····		
Purge Water Status (containerized & # o	containers, filte	ered and dischard	ed w/ dischar	oe location).			
	,		5- <i></i> , 0150/101	Se rocation).			
~> SS5 du	em						
Comments:							

Well Sampling Form         Sampling Bryen J. Machelia         Forget Child         Well Conditions:         Well Conditions:         Well (Dr. M. Warr Viet, New York         Well (Dr. M. Warr Viet, New York         Well (Conditions:         Yell Depth of Well (from top inner casing):         See 5         Depth in Water (DT.W) (from top inner casing):         Yell Scienced Interval:         Later feel if water in well:         IS OF 100 Well (from top inner casing):         Note         Proge Start Time: 2: 2: 3         Purge Start Time: 2: 2: 3: 1/2         gallons         Temperature         Start Time: 2: 2: 3: 1/2         gallons         Temperature         Start Time: 2: 2: 3: 1/2         Purge Start Time: 2: 2: 3: 1/2         Start Time: 2: 2: 3: 1/2         Purge Start Time: 2: 2: 3: 1/2         Temperature         Start Time: 2: 2: 3: 1/2         Start Time: 2: 1/2: 1/2: 1/2: 1/2: 1/2: 1/2: 1/2:		Forensic Environm	ental Serv	vices, Inc.			
Date:       Marchella         Project/Site:       SGPP - Watervitet Location:       Watervitet, New York         Weil D:       Murilions:       1       Inches Casing Material:       PVC         Weider Conditions:       1       Inches Casing Material:       PVC         Weider Conditions:       Feel       feel         Date:       Markenites:       PVC         Weider Conditions:       Feel       feel         Date:       State in weil:       feel         bOW included in a complete round of pre-sampling synoptic water level measurements?       feel         Tinkenss of floating product (fi any):       None       feel         Purge Rate (gals/minute):       ///SE       feel         Tail Volume Purged:       Yeige Stat       for (Hunite):       feel         Tail Volume Purged:       Yeige Stat       for Yeige Stat       feel       fillinite:         Tail Volume Purged:       Yeige Stat       for Yeige Stat       for Yeige Stat       for Yeige Stat       for Yeige Stat         Yeige Stat       Minutes:       1       for Yeige Stat       for Yeige Stat       for Yeige Stat       for Yeige Stat         Yeige Stat       Minutes:       1       for Yeige Stat       for Yeige Stat       for Yeige Stat		Well Samp	ling Form				
Date:       March 100       Sample::       Bryan J. Machella         Project/Mate:       SGPP-Waterviet Location:       Waterviet, New York         Ino:       Casing clameter:       York       Waterviet, New York         Ino:       Casing clameter:       York       PVC         Verifier Conditions:       Feet       Feet       Feet         Tail       Depth of Well (from top inner casing):       Feet       Feet       Feet         Util Sceneed Interval:       account of pre-sampling synoptic water level measurements?       Feet       Time:       Too         Description of floating product (framy):       None       None       Feet       Time:       Too         Parge Method:       Feet       Time:       Status       None       Too       None							
Projectific       SGPP - Watervilet Location:       Watervilet, New York         Weil D2: Mow 1 Status       Incluse Casing Material:       PVC         Weild Conditions:       Total Depth of Well (from top inner casing):       Status       feet         Depth of Well from top inner casing):       Status       feet       feet         Linear feet of weat in well:       feet       feet       feet         Is DFW included in a complete round of pre-sampling symptic water level measurements?       feet       feet         Description of floating product:       None       feet       feet         Parge Method: Period line product:       None       feet       feet         Parge Method: Period 10 pre-sampling symptic water level measurements?       feet       feet         Parge Method: Period floating product:       None       feet       file         Parge Method: Period floating product:       None       feet       feet         31 12 Minutes       1.7.1       167.7       S.5.5       0.7.6       20.9.5       5.61         32 14 Minutes       1.2       1.6.3       S.9.4       feet       feet       feet         32 12 Minutes       1.2       1.6.3       S.9.4       0.6.3       S.8.5       5.7.5         33 Minutes	Date: VI7105		Sampler:	Bryan I Mach	-lla		
Well D2: Mov-15       Outcome (No. 100)         Inner Casing dinmeter:       4 inches Casing Material:       PVC         Well Concol Information (Prime Casing):       S. J.S. feet       feet         Tail Depth of Well (from top inner casing):       S. J.S. feet       feet         Ulter Consider in a complete round of pre-sampling synoptic water level measurements?       feet       feet         Trade Body in a complete round of pre-sampling synoptic water level measurements?       feet       file         Description of floating product (If any):       None       feet       file         Paring Method:       Data Time:       Structure Paring (Intel Intel Int	Project/Site:	SGPP - Watervliet	Location:	Watervliet New	w Vork		
Inter Casing diameter       Y inches Casing Material:       PVC         Weather Conditions:       Y inches Casing Material:       PVC         Veather Conditions:       Y inches Casing Material:       PVC         Total Depth for Well (from top inner casing):       Y inches Casing Material:       Feet         Depth for Water (DTW) (from top inner casing):       None       Feet       Feet         Inches Status product (f any):       None       Feet       Time:       Time:         Description of floating product (f any):       None       Purge End Time: ?: ZS       Purge Rate (gals/minute): 1//SS         Total Volume Purged:       ?: 10 / pailons       Purge End Time: ?: ZS       Purge Rate (gals/minute): 1//SS         Total Volume Purged:       ?: 10 / pailons       Purge End Time: ?: ZS       Purge Rate (gals/minute): 1//SS         Total Volume Purged:       ?: 10 / pailons       Purge End Time: ?: ZS       Purge Rate (gals/minute): 1//SS         Total Volume Purged:       ?: 10 / pailons       ?: 10 / pailons       Purge Value (from top inner casing): 7// pailons         Total Volume Purged:       ?: 10 / pailons       ?: 10 / pailons       ?: 10 / pailons       Purge Value (from top inner casing): 7// pailons         Total Volume Purged:       ?: 10 / pailons       ?: 10 / pailons       ?: 10 / pailons       ?: 10 / pailons	Well ID: MW-15			water viter, ive	W TOIK		
Weater Conditions:       Joint Depth of Well (from top inner casing):       Joint State (DTW) (from top inner casing):       Joint S	Inner Casing diameter:	L/ inches	Casing Mater	ial:	PVC		
Total Depth of Well (from top inner casing):       Set S       feet         Depth to Water (DTW) (from top inner casing):       Set S       feet         Linear feet of vater in well:       feet       feet         to Borned finaturest:       None       feet         Trickness of floating product:       None       feet       Time:         Purge Start Time:       Set S       Start Time:       feet       Time:         Purge Start Time:       Set S       Start Time:       feet       Time:       no         Start Time:       Set S       Start Time:       Set S       Start (fin)       feet       Time:       no         Trial Volume Purged:       Set S       Start (fin)       Purge End Time:       Start (fin)       feet       Time:       feet       feet       feet       no         Start Time:       Set S       Start (fin)       Purge End Time:       Start (fin)       fine:       fine: <td>Weather Conditions:</td> <td></td> <td>I</td> <td>******</td> <td></td> <td></td> <td></td>	Weather Conditions:		I	******			
Depth to Water (DTW) (from top inner casing):       Feet         Well Screened interval:       feet         Linear feet of water in well:       None         Is DTW included in a complete round of pre-sampling synoptic water level measurements?       feet         Truckness of floating product       None         Parge Method: Perisating pump       None         Parge Star Time:       STO         Yeng Star Time:       Stop (find)         Yeng Star Time:       Sampling Start Time:         Stop Start       Stop Start         Yeng Start Time:       Stop Start         Firinge Water Status (containerized & # of containers, filtere	Total Depth of Well (from top inner casing)	s 1	7	- a P	feet		
Well Sceneed Interval:       feet         Linear feet of water in well:       None       feet         BDTW included in a complete round of pre-sampling synoptic water level measurements?       feet       Time:       no         Description of floating product       None       feet       Time:       no         Purge Start Time:       Get Time:       None       feet       Time:       no         Purge Start Time:       Get Time:       Stabilization       None       feet       Time:       no         7/17ge Method:       Perstallize       Stabilization       Stabilization       None       feet       Time:       no         7/17ge Method:       Perstallize       Stabilization       Stabilization       None       feet       Time:       no         7/17ge Method:       Perstallize       Stabilization       None       Purge End Time:       Stabilization       None       None       Stabilization       None       None       Stabilization       None	Depth to Water (DTW) (from top inner casi	ng):	9	× 08	feet		
Linear feet of water in well:       Image: Start Time:       Image: Start Time: <t< td=""><td>Well Screened Interval:</td><td></td><td></td><td></td><td>feet</td><td></td><td></td></t<>	Well Screened Interval:				feet		
Is DTW included in a complete round of pre-sampling synoptic water level measurements?          Is DTW included in a complete round of pre-sampling synoptic water level measurements?       foot       Time:       no         Description of floating product (if any):       None       foot       Time:       no         Purge Method:       Period of floating product:       None       None       Time:       no         Purge Start Time:       Competition       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         31 floating       Tomperature       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         31 floating       Tomperature       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         31 floating       Tomperature       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         31 floating       Tomperature       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         32 floating       Simular       Spec: Cond.       pH       Diss: Oxygen       Redox       Depth to         33 floating       Spec: Cond.       PH       Diss: Oxygen       Redox       Depth to       Depth to         34 floating       Spec: Cond.       PH       Spec: Cond. <td>Linear feet of water in well:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Linear feet of water in well:						
Thickness of floating product (if any):       None       feet       Time:         Purge Method: Peristatic pump       Purge End Time: 3: 2: 5       Purge Rate (gals/minute): 1//5: 5         Purge Start Time:       3: 10       pallons         Purge Start Time:       167.4       5: 55       0: 76.5         Purge Start Time:       167.4       5: 55       0: 76.5         Purge Start Time:       165.3       5: 57       0: 76.7         Purge Start Time:       12       165.3       5: 57       0: 75.5         Purge Start Time:       12       165.3       5: 57       0: 75.5       5: 57         Purge Start Time:       12       165.3       5: 57       0: 75.5       5: 57         Purge Start Time:       12       11/55.3       5: 57       0: 75.5       0: 75       0: 75	Is DTW included in a complete round of pro	e-sampling synoptic water lev	el measureme	nts?		(yes)	no
Description of floating product:       None         Purge Mathod Peristalic pump       Purge End Time; 7:25       Purge Rate (gals/minute): 1/151         Total Volume Purge:       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         3:11       Initial:       9:23       167.4       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         3:12       Initial:       9:23       167.4       Statu       Oxygen       Redox       Depth to         3:13       Initial:       9:23       167.4       Statu       Oxygen       Redox       Depth to         3:14       Initial:       9:23       167.4       Statu       Oxygen       Redox       Depth to         3:12       Initial:       9:23       165.5       Statu       Oxygen       Redox       Depth to         3:12       Initial:       9:23       165.5       Statu       Oxygen       Redox       Depth to         3:12       Minutes:       9:33       12       Minutes:       9:35.8       Statu	Thickness of floating product (if any):	None			feet	Time:	
Parge Method: Perisdic pump Parge Start Time: 3:10 Purge End Time: 3:75 Purge Rate (gals/minute): 1/155 Total Volume Purged: Temperature Spec. Cond. pH Diss. Oxygen Redox Depth to (ppm) (mV) Water (ft) (ppm) (mV) (pt) (ppm) (mV) (pt) (ppm) (mV) (pt) (ppm) (mV) (pt) (	Description of floating product:	None					
Purge Start Time:     Qual Constrainer       Total Volume Purged:     Image Start Time:       3:19     Initial:       3:19     Initial:       1:10     Initial:       2:19     Initial:       1:10     1:10:11       2:19     Initial:       2:19     Initial:       1:10     1:10:12       2:19     Initial:       2:19     1:10:12       2:19     1:10:12       3:11     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:12     1:10:12       3:13     1:10:12       3:14     1:10:12       3:15     1:10:12       3:16     1:10:12       3:17     1:10:12       3:18     1:10:12       3:19     1:10:12       3:10:11     1:10:12       3:11     1:10:12       3:12     1:10:12       3:13:11     1:10:1	Purge Method: Peristaltic pump		ריר ל		/	1100	
Town round laget       Temperature       Spec. Cond.       pH       Diss. Oxygen       Redox       Depth to         3;11       Initial:       9.23       1674       5.55       0.76       2055       8:61         23       3 Minutes:       9.17       1653       5.84       0.77       205,8       8:75         25       9 Minutes:       9.17       1653       5.84       0.77       205,8       8:75         25       9 Minutes:       9.17       1653       5.84       0.77       205,8       8:75         3,1       12 Minutes:       9.17       1653       5.84       0.77       205,7       8:55         3,1       12 Minutes:       9.17       1653       5.84       0.77       205,7       8:75         3,1       12 Minutes:       9.17       1653       5.84       0.77       205,7       8:55         3,1       12 Minutes:       9.17       1653       5.84       0.77       206,7       205       8:61         3,1       12 Minutes:       9.1       9.1       16,7       9.1       16,7       9.1       16,7       9.1       16,7       9.1       16,7       9.1       16,7       16,7       16	Total Volume Purged:	Purge End Time	:3. LS	Purge Rate (gal	ls/minute):	15-	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		gailons	- JJ	Dies Onuser	/		
3.11       Initial:       9.23       1674       5.55       0.76       2065       5.67         7.15       Minutes:       9.17       1653       5.84       6.77       205.8       5.75         7.5       6 Minutes:       9.17       1653       5.84       6.77       205.8       5.67         7.5       6 Minutes:       9.17       1653       5.84       6.77       206.3       5.85         7.5       6 Minutes:       9.17       1653       5.84       6.77       206.3       5.85         7.5       9 Minutes:       9.17       1653       5.84       6.77       206.3       5.85         7.5       19 Minutes:       9.17       1653       5.84       6.77       206.3       5.85         7.5       18 Minutes:       9.17       1653       5.84       6.77       106.3       5.85         9.1       18 Minutes:       9.17       9.16       9.16       9.16       106.3		°C (us(cm))	(nH unita)	Diss. Oxygen	Kedox	Depth to	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7-19 1-10-10		(pri units)	(ppm)	(mv)	water (ft)	
2 C 3 Minutes:       9,77       165 3       589       6.77       205.8       8,75         25 9 Minutes:       9,72       1683       5.89       6.77       206.3       5.85         31 12 Minutes:       9       9       12		. 4 1014	2.85	0.76	2005	8.61	
7.5       6 Minutes:       9.11/1683       5.84       0.11/1663       5.84         7.5       9 Minutes:       9       9.11/1683       5.84       0.11/1663       5.84         7.5       9 Minutes:       9       9.11/1683       5.84       0.11/1663       5.84         7.5       9 Minutes:       9       9       9       9       10	$\mathcal{V} \mathcal{L}$ 3 Minutes: 9	51 1655	1284	()	705.8	8,75	
Z\$       9 Minutes:         3)       12 Minutes:         3)       12 Minutes:         3)       13 Minutes:         3)       18 Minutes:         21 Minutes:       21 Minutes:         21 Minutes:       21 Minutes:         30 Minutes:       21 Minutes:         31 Minutes:       21 Minutes:         32 Minutes:       21 Minutes:         33 Minutes:       21 Minutes:         34 Minutes:       21 Minutes:         35 Stabilization Rate       4/-3%         4/-3%       4/-0.1         4/-3%       4/-10 mv         Sampling Start Time:       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Muree Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         35 S S Muree       25 S Muree <t< td=""><td>ZJ 6 Minutes:</td><td>177 1683</td><td>5.84</td><td>0.77</td><td>7067</td><td>DEC</td><td></td></t<>	ZJ 6 Minutes:	177 1683	5.84	0.77	7067	DEC	
3)       12 Minutes:         3)       12 Minutes:         3)       13 Minutes:         3)       18 Minutes:         3)       18 Minutes:         21 Minutes:       21 Minutes:         21 Minutes:       21 Minutes:         30 Minutes:       27 Minutes:         30 Minutes:       30 Minutes:         33 Minutes:       33 Minutes:         Stabilization Rate       +/- 3%         +/- 3%       +/- 0.1         Sampling Method: Low Flow       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	78 010	100/		· · /	<u>u.,</u>	18-87	
\$1 12 Minutes:	20 9 Minutes:						
J       15 Minutes:	S) 12 Minutes:						
Is Minutes:       1 Minutes:         21 Minutes:       24 Minutes:         24 Minutes:       27 Minutes:         30 Minutes:       30 Minutes:         31 Minutes:       33 Minutes:         32 Minutes:       33 Minutes:         33 Minutes:       33 Minutes:         Sampling Method:       Low Flow         Sampling Start Time:       Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Status (containerized & # of containers, filtered and discharged, w/ discharge location):	3 / 15 Minutes:						
21 Minutes:	18 Minutes:						
24 Minutes:       24 Minutes:         27 Minutes:       30 Minutes:         33 Minutes:       33 Minutes:         Sampling Method: Low Flow       Sampling End Time:         Sampling Start Time:       36 Stabilization Rate         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):         Statistization         Statistization         Sampling Start Time:         Sampling Start Time:         Sampling End Time:         Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):         Comments:	21 Minutes						
24 Minutes:       27 Minutes:       27 Minutes:         30 Minutes:       30 Minutes:       33 Minutes:         33 Minutes:						ļ	
27 Minutes:	24 Minutes:						
30 Minutes:       33 Minutes:         33 Minutes:       33 Minutes:         Stabilization Rate	27 Minutes:						
33 Minutes:	30 Minutes:						
Stabilization Rate       +/- 3%       +/- 0.1       +/- 10 mv          Sampling Method: Low Flow       Sampling End Time:       Sampling End Time:          Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):       Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):        Stabilization Rate         For the status (containerized & # of containers, filtered and discharged, w/ discharge location):        Stabilization Rate         Comments:       Stabilization Rate        Stabilization Rate	33 Minutes:			1		+	
Sampling Method: Low Flow Sampling Start Time: 3:26 Sampling End Time: Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): 	Stabilization Rate	+/_ 30/2	+/ 0.1	+/ 109/	1/ 10	<u> </u>	
Sampling Start Time: 3:26 Sampling End Time: Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): -> 555 Mum Comments:	Sampling Method: Low Flow i		1 77-0.1	1 7/- 10%	1 +/- 10 mV	1 1	
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings): Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): S55 S Mum Comments:	Sampling Start Time: 3,76	Sampling End T	ìme:				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): 	Field Observations (turbidity, recharge rate,	odor, sheens, PID/FID readi	ngs):				
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): 							
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location): 							
Comments:	Purge Water Status (containerized & # of ea	intainers filtered and dischar	ord w/ diroha	ree location):			
Comments:		mamora, microu anu uiscilai	geu, w/ uischa	ige iocation):			
Comments:	-> 555 due	20					
Comments:		- 1					
Comments.	Commente					······	
	Comments:						
			:				

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1.01	ensic Environni Well Samp	ling Form	.cs, me.			
e: 6/03/05		Sampler: I	Bryan J. Machella	a York	·	
ject/Site:	SGPP - Waterviie		water vilet, i vert	1011		
IIID: MW-16	<b>7</b> inches	s Casing Material	: 1	PVC ·		
er Casing diameter:				<b>2</b>		
tal Depth of Well (from top inner casing):	5111		1	eet		
pth to Water (DTW) (from top inner casing):	8/4/		1	feet		
ell Screened Interval:						
hear feet of water in well:	nling synoptic water lev	el measurements	?		yes	no
DTW included in a complete round of pre-same iskness of floating product (if any):	None			feet	Time:	
according product (1 any)	None					
rge Method: Peristaltic pump			Duroa Pate (gale	minute).		
irge Start Time: 11.53	Purge End Tin	ne:	Furge Kate (gais	, mmuco).		
otal Volume Purged:	erature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initial: 18,	6 974	7.31	2.24	-30.0	0:1)	
	C ars	1777	145	24.4	13.51	
11:45 <sup>3</sup> Minutes: 16.7	8 1005		1.12			
$\gamma_{i} \circ \gamma = 6$ Minutes: $D \cap$	У				1200	-
UNU 9 Minutes:				<u> </u>		-
1 / 12 Minutes:						4
15 Minutes						
18 Minutes:						-
21 Minutes:						-
24 Minutes:						-
27 Minutes:						4
30 Minutes:						
33 Minutes:						
Stabilization Rate		+/- 0.1	+/- 10%	+/- 10 m	IV	
Sampling Method: Low Flow Sampling Start Time:	Sampling E	nd Time:				
Field Observations (turbidity, recharge rate, o	dor, sheens, PID/FID re	adings):				
	· · · · · · · · · · · · · · · · · · ·	harged w/ disch	arge location).		<u></u>	<u> </u>
Purge Water Status (containerized & # of con	tainers, filtered and disc	margen, withisen	iige ieealieii):			
Vory Sing entry						
Comments:						
Commonas.						

Well Sampling Form

te: 6/73/05		Sampler:	Bryan J. Machell	a		
piect/Site:	SGPP - Water	vliet Location:	Watervliet, New	York		
ell ID: MF-22						
her Casing diameter:	ir	ches Casing Mater	ial:	PVC		
eather Conditions:				•		
tal Depth of Well (from top inner cas	ing):			feet		
epth to Water (DTW) (from top inner	casing): 4.48			feet		
'ell Screened Interval:				ieet		
near feet of water in well:			-0		Ves	no
DTW included in a complete round o	f pre-sampling synoptic wate	r level measurement	IS?	fact	yes Time:	no
hickness of floating product (if any):	None			1001	1 1110.	
escription of floating product:	None					
urge Method: Peristaltic pump	T Durge End	Time:	Purge Rate (gals	s/minute):		
urge Start Time:	gallons	i mie.		,		
otal volume ruigeu.	Temperature Spec. Co	ond. pH	Diss. Oxygen	Redox	Depth to	
	°C (µs/cn	n) (pH units)	(ppm)	(mV)	Water (ft)	
8:04 million	14 19 1.41	7.07	665	188.5	9.50	
			107	711 1.	1950	
C) 3 Minutes	5 19.02 690	0.10	1/2 10	CIL.U	1.5-	
16 6 Minutes	s: 13.98 677	6.85	6.7P	235.0	9.50	
13 O Minute	14M 633	676	7.60	755.7	9.50	
			- 21	Elr2	9<0	
12 Minute	s: 4-51 646	6.27	7.00	<u> </u>		
19 15 Minute	s: 14.26 626	16.5L	7.14	309.0	7-50	
2/ 18 Minute	11.27 65	6.V1	701	2451	9.20	
	1110 00	1.20	1210		960	
U/21 Minute	s: 144 64	63)	1.00	340.1	1.50	
1つ 24 Minute	s: 14.74 626	635	$\left[ \right] \left[ \right] \left[ \right]$	339.2	7.50	
30 27 Minute						
						1
30 Minute	es:					4
36 33 Minute	es:					
Stabilization Ra	ate +/- 3	3% +/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	Samplin	g End Time:			,	
Field Observations (turbidity, recharg	ge rate, odor, sheens, PID/FID	readings):				
Purge Water Status (containerized &	# of containers, filtered and c	lischarged, w/ disch	arge location):			
i uige water blatus (containerisee er						
					•	
Comments:						
	and the second secon					

	Forensic	Environme Well Sampli	ental Servi ing Form	ces, Inc.			
-10316			Sampler:	Bryan J. Machell	a		
ale: L D C	SG	PP - Watervliet	Location:	Watervliet, New	York		
All ID: A DI							
uper Casing diameter		inches	Casing Materia	ıl:	PVC		
Veather Conditions:							
otal Depth of Well (from top inner	casing):	<i>.</i> .			feet		
epth to Water (DTW) (from top inr	ner casing): 9,2	4			feet		
Vell Screened Interval:	( •	1			feet	1	
inear feet of water in well:		(	1 1	0		(Ves)	no
s DTW included in a complete roun	d of pre-sampling syn	optic water leve	1 measurements	57	feet	Time	
hickness of floating product (if any	?):	None			ioot		
Description of floating product:		None					
Purge Method: Peristaltic pump	2	Purge End Time	:	Purge Rate (gals	s/minute):		
Total Volume Purged:	C gallons	0			T		
<u> </u>	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (It)	
X:50 Ini		625	6.43	11.19	276-5	9. <u>5</u>	
G 3 Minu	utes: ILI GC	170	LUG	I.n.	173.	1,32	
		17	T	117	1771	9 77	
500 6 Min	utes: 199	601	10.10	$  \cdot $ $\geq$	<u> </u>	4-15-	
۶۶ 9 Min	utes:						
67 12 Min	utes:						
(15 ) IS NO.			-				
	.u.cs.						
07 18 Min	utes:						1
21 Mir.	utes:						1
14 24 Mir	nutes:						
1 27 Mii	utes:						-
ن 30 Min	nutes:						4
33 Min	nutes:						
Stabilization	Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		<u> </u>
Sampling Method: Low Flow Sampling Start Time:	$\overline{)}$	Sampling End	Time:				
Field Observations (turbidity, rech	harge rate, odor, sheen	is, PID/FID read	ings):				
Purge Water Status (containerized	& # of containers, fil	Itered and discha	arged, w/ discha	arge location):			
							*
Comments:			<del>1</del> 20				

For	ensic Environm Well Sampl	e <b>ntal Serv</b> ling Form	ices, Inc.			
1910: 10/23/05		Sampler:	Bryan J. Machell	а		
roject/Site:	SGPP - Watervliet	Location:	Watervliet, New	York		
Vell ID: MP-15						
nner Casing diameter:	15 inches	Casing Mater	ial:	PVC		
Veather Conditions:						
otal Depth of Well (from top inner casing):				feet		
Depth to Water (DTW) (from top inner casing):	-51			feet		
Well Screened Interval:	l			teet		
inear feet of water in well:					(Jaco	no
s DTW included in a complete round of pre-samp	ling synoptic water leve	l measuremen	IS?	faat	Time	110
hickness of floating product (if any):	None			Teet	Time.	
Description of floating product:	None					
Purge Method: Peristaltic pump	Purge End Time	2.	Purge Rate (gals	s/minute):		
Purge Start Time:	gallons			,		
Total volume rungen. Tempe	rature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	c (μs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$\int 15$ Initial: 15 (	1 1075	575	0.5)	1912	12.63	
	1 1777		0.40	117	565	
1 3 Minutes: $3$	11001	h.22	0.9-1	96.	217	
$2^{\circ}$ 6 Minutes: $5^{\circ}$	× 11245	5.78	04)	115.7	1.105	
73 9 Minutes: ISI	3 1760	5.87	CUS	-7.5	8.63	
7/	5 1712	503	CJI A	20.5	813	
12 Minutes:	) I Log			FUNS	117	
$\gamma$ 15 Minutes: $\beta$	LU ILVO	Sn	0.51	26.0	0-03	
3 18 Minutes: $15, 2$	0 1281	5.80	0.37	79.1	8.03	
	1-01	-				
3 21 Minutes:						
75 24 Minutes:						-
4/ 27 Minutes:						
//						
30 Minutes:						-
33 Minutes:						-
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	Sampling End	l Time: lings):				
Purge Water Status (containerized & # of conta	iners, filtered and discha	arged, w/ disch	arge location):			
Comments:						

	Well Sampl	ling Form	1003 mo.			
te: 6/23/05		Sampler:	Bryan J. Machel	la		
oject/Site:	SGPP - Watervliet	Location:	Watervliet, New	York		
ell ID: MP-6		Carina Matari	cl	DVC		
ner Casing diameter:	inches	Casing Materi	ai:	rvc		
eather Conditions:	$\sim$			feet		
tal Depth of Well (from top linter casing).	N. 8-68			feet		
ell Screened Interval:	5). <b>(</b> ]			feet		
near feet of water in well:					$\bigcirc$	
DTW included in a complete round of pre-	sampling synoptic water leve	l measurement	s?		ves	no
nickness of floating product (if any):	None			feet	Time:	
escription of floating product:	None					
irge Method: Peristaltic pump			Dunce Data (cal	c/minute):		
arge Start Time: $9'40''$	Furge End Time	5.	ruige rate (gan	Simmute).		
Stal Volume Purged:	emperature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
9'SY Initial F	1-74 1226	6.04	Ny1-	-<.1	552	
57		1 n	0.71		En	
3 Minutes:	~JY 910	011	0-56	11.6	1.0 C	
6 Minutes:	L92 498	6.29	0.32	- 68.9	8.50	
• 3 9 Minutes: Y	1.87 514	637	0.79	-33.4	8.50	
el invite	1-0 [9-7	6.01	9 7 8	-35.4	1.57	
			028		F (5)	
C 1 15 Minutes:	55 500	6.90	1. 60	943	F.0 5	
17. 18 Minutes:						
15 21 Minutes:						
					1	
18 24 Minutes:						-
$\sim$ ; 27 Minutes:						4
30 Minutes:						
2 22 Minutes						1
Stabilization Data		+/- 0 1	+/- 10%	+/- 10 mv		-
Sampling Method: Low Flow	1 17- 5 70	1 17-0.1	1 1070			
Sampling Start Time:	Sampling End	Time:				
Field Observations (turbidity, recharge rate	, odor, sheens, PID/FID read	ings):	- -			
Purge Water Status (containerized & # of c	ontainers, filtered and discha	rged, w/ discha	arge location):			
Comments:			44444444444444444444444444444444444444			

	rorensic	Well Sampl	ing Form	, m.			
						-	
te: 22305			Sampler:	Bryan J. Machell	а		
oject/Site:	SC	GPP - Watervliet	Location:	Watervliet, New	York		
ell ID: MP-14		·					
ner Casing diameter:		-> inches	Casing Materia	al:	PVC		
eather Conditions:					( and		
tal Depth of Well (from top inner o	asing):	า			feet		
epth to Water (DTW) (from top inn	er casing): $\chi_{1}$	5			feet		
ell Screened Interval:					1661		
near feet of water in well:		- ontio wotor love	meenirement	c?		ves	no
DTW included in a complete round	t of pre-sampling sy	Nono	i measurement:	5:	feet	Time:	
hickness of floating product (if any	):	None					
escription of floating product:							
arge Method: Peristanic pump	1/	Purge End Time	2.	Purge Rate (gal	s/minute):		
otal Volume Purged:	ッフ gallons	-					
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
1	°C	(µs/cm)	(pH units)	(ppm)	(mV)	water (ft)	
[U:3] Ini	tial: 17.65	1757	650	0.30	-96.3	8.51	
27 2 1	tes: 1778	1 ach	1.n	6.22	-91.0	8.57	
	10. 1 C. 10	120	100			63	
6 Minu		173	682	0.00	17.5	<i>8-</i> )	
9 Minu	ites:						
46 12 Min	ites:						
47 IS Min	ntes:						1
<b>۶ L</b> 18 Min	ites:						4
<b>55</b> 21 Min	utes:						
SF 24 Min	uter						
24 Min	utes.						1
27 Min	utes:						-
30 Min	utes:						4
33 Mir	utes:						
Stabilization	Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Flow Sampling Start Time:	1	Sampling End	l Time:				
			in colu	·····			
Field Observations (turbidity, rech	arge rate, odor, shee	ns, PID/FID Icau	ings <i>)</i> .				
Durge Water Status (containerized	& # of containers. f	iltered and discha	arged, w/ discha	arge location):			
i uige water status (containerized							
				A	$\wedge$	) /	
Comments:		1	a th	$\angle \Lambda \Lambda$	V-	$\left  \right $	171
1 n.v.S	$\cap \supset$	() V	D OF		T ,	170	,10
			J	-	-		,
II I -							

vate:       Sampler:       Bryan J. Machella         roject/Site:       SGPP - Watervliet       Location:       Watervliet, New York         vell ID:       MP-17       inches       Casing Material:       PVC	
score     score     SGPP - Watervliet     Location:     Watervliet, New York       vell ID:     MP-17     inches     Casing Material:     PVC	
Vell ID:     MP-11       Iner Casing diameter:     Inches Casing Material:   PVC	
ner Casing diameter:	
Veather Conditions: feet	
$\frac{1}{2}$ $\frac{1}$	
Vell Screened Interval:	
inear feet of water in well:	
s DTW included in a complete round of pre-sampling synoptic water level measurements?	no
Thickness of floating product (if any): None feet	
Description of floating product: None	
Purge Method: Peristaltic pump	
Purge Start Time: JUJU Purge End Time. Turge Rate (gate initiate).	
Total Volume Purged:         Properture         Spec. Cond.         pH         Diss. Oxygen         Redox         Depth to	
°C (µs/cm) (pH units) (ppm) (mV) Water (ft)	
11'0 mitial 12 07 1675 0.37 -902 9.08	
$\frac{1}{10} - \frac{1}{10} $	
3 Minutes: 13.13 893 6 16 0150 16 7	
13  6 Minutes:  3.7) 840 6.76 6.71 91.1 1.8	
16 9 Minutes:	
2.2. 15 Minutes:	
18 Minutes:	
21 Minutes	
24 Minutes:	
27 Minutes:	
30 Minutes:	
33 Minutes: $+/.29/.+/.01$ $+/.10\%$ $+/.10 my$	1
$\frac{\text{Stabilization Rate}}{\text{Stabilization Rate}} + \frac{1}{7} - \frac{3}{76} + \frac{1}{7} - \frac{1}{9} - \frac{1}{10} + \frac{1}{1$	
Sampling Start Time:	
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):	
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):	
Comments:	
A DE LANCE COULORD	
$   \langle V \rangle \rangle / \langle V \rangle \rangle $	

	Forensic En	<b>vironme</b> Well Sampli	ntal Servio	ces, Inc.			
		T			-		
Date: 6/30			Sampler:	Bryan J. Machell	a		
Project/Site:	SGPP -	Watervliet	Location:	Watervliet, New	York		
Well ID: MP-			<u></u>	,			
nner Casing diameter:	143	inches	Casing Materia	1	r v C		
Weather Conditions:	,				feet		
Fotal Depth of Well (from top inner casing)	FUV				feet		
Depth to Water (DTW) (from top inner casin	ng): <b>0 ′ / /</b>				feet		
Well Screened Interval:	1						
inear feet of water in well:	a compling currenti	e water level	measurements	<i>י</i>		yes	no
Is DTW included in a complete round of pro	S-samping synopu	e water ieve	mousaromonas		feet	Time:	
Thickness of floating product (if any).	Non	e					
Description of Hoating product:	1.011	-					
Purge Method. Tensiance pump	Pur	ge End Time	:	Purge Rate (gals	s/minute):		
Total Volume Purged:	gallons				Dada	Depth to	
	Temperature S	pec. Cond.	pH	Diss. Oxygen	Kedox (mV)	Water (ft)	
	°C	(µs/cm)	(pH units)	(ppm)	(mv)	Water (II)	
$\mathcal{N}39$ Initial:	16.08 1	145	6.36	0.75	-105.4	1.52	
37 a Minutes		53	635	0.25	1015	932	
5 Winducs.	0.10		171	1014	100 5-	927	
$\mathbf{Y}^{\mathbf{U}}$ 6 Minutes:	16,00 0	<u>  )  </u>	6)6	0.01	F109.F	1.00	
43 9 Minutes:							
Vb 12 Minutes							
					1		
Y <sup>c</sup> 15 Minutes:							-
18 Minutes:							4
21 Minutes:							
21 111111111111							]
24 Minutes:							-
27 Minutes:							4
30 Minutes:							
33 Minutes:		<u>/ 20/</u>	+/. 0.1	+/- 10%	+/- 10 mv		1
Stabilization Rate		+/- 3%	77-0.1	1 10/0	<u></u>		
Sampling Start Time:	S	ampling End	Time:				
Field Observations (turbidity, recharge ra	ite, odor, sheens, P	ID/FID read	ings):				
	, .						
	Clumo Clumo	d and display	wood w/ dische	rae location).			
Purge Water Status (containerized & # o	f containers, filtere	a and discha	ligeu, w/uische	inge ioeation).			
Comments:							

	Forensic I	Well Sampli	ing Form	cco, 1110.			
		T		The second se			
=: 6/23/05			Sampler:	Bryan J. Machell	North		
ect/Site:	SGF	P - Watervliet	Location:	Waterviiet, New	YOIK		
IID: MP-2		<u> </u>	O Matania	.1.	PVC		
er Casing diameter:		> inches	Casing Materia	11.	1.40		
ather Conditions:	、				feet		
al Depth of Well (from top inner casing	); SG3				feet		
oth to Water (DTW) (from top inner cas	ing): 0 · / ·				feet		
Il Screened Interval:							
lear feet of water in well:	re-sampling syn(	optic water level	I measurements	?		yes	no
isokness of floating product (if any):	ייינים gקייימים איייסי ר	None			feet	Time:	
scription of floating product:	ړ	None					
ree Method: Peristaltic pump					1		
rge Start Time: 1230	I	Purge End Time		Purge Rate (gal	s/minute):		
tal Volume Purged:	gallons	Cana Cand	nH	Diss Oxygen	Redox	Depth to	
	Temperature	spec. Cond.	(pH units)	(mgg)	(mV)	Water (ft)	
	C		(pri units)	107P	FILE	1179	
Initial:	13.37	800	6.40	0.0	1010	1.5.1	
C 3 Minutes:	1604	819	6.44		-113-2	1)- 10	
13 6 Minutes:	11 22	VV	6.43	0.27	1224	11.70	
16	10.00	<u> </u>	-12-		1		
9 Minutes:						1	1
19 12 Minutes:							-
15 Minutes:							
Le Minuteri							
3 18 Minutes.							1
21 Minutes:							-
24 Minutes:							4
27 Minutes:							
		1					
30 Minutes:							1
33 Minutes:					1/ 10 may		-
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	1 +/- 10 mv		
Sampling Method: Low Flow		Sempling End	Time:				
Sampling Start Time:		Damping Dire					
Field Observations (turbidity, recharge i	rate, odor, sheen	s, PID/FID read	lings):				
N. Weter Disting (contain arigad P. H	of containers fil	tered and disch	arged, w/ disch	arge location):			
Purge water Status (containenzed & #	or containers, In	bare brown	U,				
HANIS. HI							
Comments:							
Fo	rensic Envir Wel	Conmental Sel I Sampling Form	vices, inc.				
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10/23/9		Sampler:	Bryan J. Mache				
ect/Site:	SGPP - Wa	tervliet Location:	Watervhet, Ne	W YOIK			
$IID: \mathcal{M}(\mathcal{P}, \mathcal{U})$				PVC			
er Casing diameter:	<u> </u>	inches Casing Mai		170			
ather Conditions:	<i></i>			feet			
al Depth of Well (from top inner casing):	904			feet			
th to Water (DTW) (from top inner casing):	$h^{\circ}$			feet			
Il Screened Interval:	/				$\bigcirc$		
ear feet of water in well:	nling synoptic w	ater level measurem	ents?		(yes)	no	
) W included in a complete round of pre-sam	None			feet	Time:		
ckness of floating product (if any).	None						
are Method: Peristaltic nump							
ge Start Time:	Purge E	nd Time:	Purge Rate (g	als/minute):			
al Volume Purged: 1' 4	gallons			Dedey	Depth to		
Temp	erature Spec.	Cond. pH	Diss. Oxyger		Water (ft)		
	<u>C</u> (μs	/cm) (pH uni	s) (ppm)				
2:06 Initial: 17.1	13 62	r 6.20	0.36	-646	10. ) 1		
······································	21 676	6.20	0.33	-65.2	1677		
		- 11	0.33	155	W.D		
1C 6 Minutes: $1$	LY 6L	) 61					
15 9 Minutes:							
1 S 12 Minutes:							
7/ 15) (mittee							
9 15 Minutes.						1	
18 Minutes:						-	
21 Minutes:						4	
24 Minutes:							
24 Minutes.						1	
27 Minutes:						-	
30 Minutes:						_	
33 Minutes							
Stabilization Pate		-/- 3% +/- (	.1 +/- 10%	+/- 10 mv		1	
Stabilization Rate	and the second se	<u> </u>					
Sampling Start Time: - 12	Samp	ling End Time:					
Field Observations (turbidity, recharge rate, or	lor, sheens, PID/I	FID readings):					
Purse Water Status (containerized & # of con	tainers, filtered ar	nd discharged, w/ di	charge location):				
Commente				<u></u>			
Comments:							

	Forensic	Environme Well Sampl	ental Servi ing Form	ces, Inc.			
. 1.0		1	<u> </u>	D I. Mashall			
e: (1)			Sampler:	Bryan J. Machel	Vork		
ject/Site:	SG	PP - Watervliet	Location:	Waterviiet, New	YOFK		
11 ID: NP-47		h	Canina Matani		PVC		
er Casing diameter:		inches	Casing Materia	ai.			
ather Conditions:	、 、	_			feet		
al Depth of Well (from top inner casing	» A V	5			feet		
pth to Water (DTW) (from top inner ca					feet		
Screened Interval:		, ,					
lear feet of water in well:	re-sampling svr	nontic water leve	] measurements	s?		yes	no
believes of floating product (if any):	ne sampning sy.	None			feet	Time:	
scription of floating product:		None					
ree Method: Peristaltic pump							
rge Start Time: VIIS		Purge End Time	;;	Purge Rate (gal	s/minute):		
tal Volume Purged:	gallons		<u>۲۲</u>	Dice Outrage	Redov	Denth to	
	Temperature	Spec. Cond.	pH (all min)	Diss. Oxygen		Water (ft)	
	<u>C</u>	(µs/cm)		$+ \sqrt{20}$		in m	
730 Initial:	17.3	1 405	6.67		riving	10.00	
3 3 Minutes:	17.11	A	6.67	1045	1-103.2	10:00	
26 0000	<u>()</u>	-116	110	6.39	-1039	10-	
5 Minutes:	1.12	1847-	her.	0.21	L1122	10	
<b>5</b> 9 Minutes:	17.15	520	10	6.36	103.7		
$\sqrt{7}$ 12 Minutes:	אררו	BOY	6.71	a.34	+102-3	10	
U/ 15 Minutes:	1120	hal	101	0.23	102.6	11	
$\frac{75}{10}$ is winded.			1:11	1022	167 11	( A	
18 Minutes:	12.34	142	0.10		10		-
21 Minutes:							4
24 Minutes:							
							]
27 Minutes:							1
30 Minutes:							4
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv	E de la	]
Sampling Method: Low Flow Sampling Start Time:		Sampling End	Time:				
			·				
Field Observations (turbidity, recharge	rate, odor, sheer	ns, PID/FID read	ings):				
<b>.</b>							
Purge Water Status (containerized & #	of containers, fi	ltered and discha	arged, w/ disch	arge location):			
Comments:	<u></u>						
Commond.							

Date: 6/123/05 Sampler: Bryan J. Machella	
roject/Site: SGPP - Watervliet Location: Watervliet, New York	k
Vell ID: MW-17	~
nner Casing diameter: Letter Casing Material: PVC	
Veather Conditions:       feet         Fotal Depth of Well (from top inner casing):       Image: Condition of the provided state of the provided	
Vell Screened Interval:	
Inear feet of water in well:	yes no
feet free for the formed of the sampling synchronic free formed of the sampling synchronic free formed for the formed of the sampling synchronic free formed for the formed of the sampling synchronic free formed of the sampling synchronic formed for the sampling synchronic for the sampling synchronic formed for the sampling synchronic forme formed for the sampling synchronic formed for the sampling	Time:
Description of floating product:	
Purge Start Time: 2:50 Purge End Time: Purge Rate (gals/mir	nute):
Temperature Spec. Cond. pH Diss. Oxygen	Redox Depth to
$^{\circ}C$ (µs/cm) (pH units) (ppm)	(mV) Water (ft)
340 Initial: 17-63 515 649 6.24 -1	108.8 995
3 3 Minutes: 1766 514 651 6.20 -1	1.45
16 6 Minutes 17 70 50 603 016 16	18.3 991
19 9 Minutes: $17.70$ $5.3$ $6.53$ $6.99$ $7.10$	08.6 2.93
23 12 Minutes:	
25 15 Minutes:	
2 18 Minutes:	
21 Minutes:	
24 Minutes:	
27 Minutes:	
30 Minutes:	
33 Minutes:	
Stabilization Rate +/- 3% +/- 0.1 +/- 10%	+/- 10 mv
Sampling Method: Low Flow Sampling Start Time: Sampling End Time:	
Field Observations (turbidity, recharge rate, odor, sheens, PID/FID readings):	
Dure Weter Status (containerized & # of containers filtered and discharged w/ discharge location):	
ipurge water Status (containenzeu & # of containers, intered and discharged, in discharge to any	
Comments:	

		Forensic	Environme Well Sampli	ental Servi	ces, Inc.			
Date: 12/23/05				Sampler:	Bryan J. Machell	a		
Project/Site:		SG	PP - Watervliet	Location:	Watervliet, New	York		
Well ID: MW-								
nner Casing diameter:			inches	Casing Materia	1:	PVC		
Veather Conditions: otal Depth of Well (from top	o inner casin	<sup>g):</sup> 89 <sup>-</sup>	7_			feet		
Depth to Water (DTW) (from	top inner ca	sing): • • •	0			feet		
Well Screened Interval:						,	$\bigcap$	
Inear feet of water in well:	te round of	re-compling evr	ontic water level	measurements	?		( yes/	no
s D1 W included in a comple	(if any):	ne-sampning syn	None	mousurements		feet	Time	
hickness of floating product	. (11 aliy).		None					
Purce Method: Peristaltic nu	nip							
Purge Start Time: 3 2	5	Z gallons	Purge End Time	:	Purge Rate (gals	s/minute):		
	Ī	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
		°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
3:5	) Initial:	1558	530	656	0.86	-4 K-X	17-76	
< l	2 11:	15.50	m	165	10, 7.16	-43.4	970	
) to	5 Minutes:	D.90	DUC	1 cc	13-16	36 -	1900	
5 %	6 Minutes:	1571	515	0-78	1. Lb	157.5	1.10	
07	9 Minutes:	K 19	504	696	11.51 -	+247	270	
Űs -	12 Minutes	KLI	44	6.94	1.68	FILE	9.70	
2	15 Minutes	15.M	1 the	6.93	1.R	-73.0-	970	
07	10 Minutes.		105	691	1 EG	-761	9.70	
21	18 Minutes:	5.46	485		1.2.	Land	A-70	
19	21 Minutes:	K.47	ypo	p ~ / _	1.9>	[ 20.0	1. 10	
6	24 Minutes:		/					-
70	27 Minutes:							-
	30 Minutes:					<u></u>		-
	33 Minutes:							4
Stabi	lization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Fle Sampling Start Time:	<u>``}</u>	roto odor cheen	Sampling End	Time:				
Field Observations (turbid)	iy, iconaige	ומוכ, טעטו, אווככוו		******				
			······					
Purge Water Status (contai	nerized & #	of containers, fil	tered and dischar	rged, w/ dischar	rge location):			
Comments:								
1								

	Forensic	Environme Well Samplin	ntal Servico ng Form	es, Inc.			
10101.10			Sampler: B	ryan J. Machella			
	SC	PP - Watervliet	Location: V	√atervliet, New Y	ork		
$\frac{1}{100}$					10		
er Casing diameter:		1.5 inches	Casing Material:	P	VC		
ather Conditions: Clarky -edt	- 51.2 - asing):			fe	et		
at Depth of wen (nonr top inner top inner	r casing): 6.55			fe	et		
All Screened Interval:	- (/ - /			16	et		
hear feet of water in well:						Ves	no
DTW included in a complete round	of pre-sampling sys	noptic water level	measurements?	ſ	eet T	ime:	$\bigcirc$
ickness of floating product (if any)	:	None		1,	-		
escription of floating product:	(	Nong					
rge Method: Peristaltic pump		Purse End Time	:	Purge Rate (gals/	minute):		
rge Start Time: ) ) )	1.5 gallons	i uigo Diid i inic		-		Derth	٦
otal Volume Purged:	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (It)	-
5 all Init	ial: 1576	206	6.75	6.77	-n.8	1.5/	
)	141.	600	L. 73	109	=74.7	7.55	
C 3 Minu	tes: []. 60	173	10	1.0	215	7.55	1
IC 6 Minu	tes: 14.41	794	013	1.17	-1.1	755	-
3 9 Min	ites: 15.11	298	6.72	1.69	-100	1.27	_
				1			
12 Minu	ites:						-
15 Min	ates:						
18 Min	otes:		-				_
21 Min	utes:						
24 Min	utes:						
27 Mir	utes:						
	utac:						
50 Will	lutes.						
33 Mii	nutes:		1/ 0.1	+/- 10%	+/- 10 mv		
Stabilization	Rate	+/- 3%	+/- 0.1	17 1070			
Sampling Method: Low Flow Sampling Start Time:	15	Sampling En	d Time:				
tions (turbidity, rec)	harge rate, odor, she	ens, PID/FID rea	dings):				
Field Observations (turbitity, ree	in Bo rate, erer, m						
			und wildisch	arge location);			
Purge Water Status (containerized	1 & # of containers.	filtered and disci	hargeu, wruisen	arge loounon).			
in the in 55 pollo	n drum			-			
Containerized on site in 55-gallo	(1 GFUIII)						
Comments:							
A							

Forensic Environmental Services,	Inc.
Well Sampling Form	

010 545		T	Sampler:	Bryan J. Machel	la		
: 10/13/°>	SUD	P - Watervliet	Location:	Watervliet, New	York		
ect/Site:	106	j = water met					
IID: MP-0		<b>S</b> inches	Casing Materi	al:	PVC		
er Casing diameter:		1					
ather Conditions. (CDC)		~			feet		
al Depth of Well (from top inner ca	sing): ().()	)			feet		
U Screened Interval:	0,				feet		$\sim$
ear feet of water in well:				<u>_</u>		Ves	no
DTW included in a complete round of p	ore-sampling sync	optic water leve	1 measurement	.S?	feet	Time:	$\bigcirc$
ickness of floating product (if any):	A C	lone			1001		
scription of floating product:	()	Noné					
rge Method: Peristaltic pump	- 1	Purge End Time	2.	Purge Rate (ga	ls/minute):		
rge Start Time: 11.	1.5 gallons	ungo zina i min				D. d. to	
tal Volume Pulged.	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	water (it)	
11:39 Initial:	11.7.3	589	6.45	0.46	18-6	<u> </u>	_
(17 - 2) (11-11-11-11-11-11-11-11-11-11-11-11-11-	1110	177	6118	0.42	9.1	1,)	
4 C 3 Minutes.	1.16		1	0.30	141	100	
45 6 Minutes:	11.24	692	16.50	10.1	$\frac{1}{1}$	1222	
45 9 Minutes:	11.19	655	6.)	0.38	1.1	<u>[,,)</u>	_
5/ 12 Minutes:	1108	ist	6.51	0.58	-0.9	( ( , , )	
e k i se stimutor		D-0					
57 15 Minutes.							
57 18 Minutes							
21 Minutes	:						
24 Minutes	:						
27 Minutes							
27 Minutes	•						
30 Minutes							
33 Minute	s:					2212	
Stabilization Ra	le	+/- 3%	+/- 0.	1 +/- 10%	+/- 101	11V 1	
Sampling Method: Low Flow		Sampling Fr	d Time:				
Sampling Start Time:		Sampring Li	iu Timo.				
Field Observations (turbidity, recharg	e rate, odor, sheer	ns, PID/FID rea	dings):				
	# of containers fi	Itered and disc	harged, w/ disc	charge location):			
Purge Water Status (containenzed &	- 01 00mamoro, -		-				
Containerized on site in 55-gallon dru	ım.						
		-			(		
Comments:	$\sim$	- ]	ad	MD_	-h		
			/ VI		<b>^ i</b>		

		Forensic	Environme Well Samplin	n <b>tal Servic</b> 19 Form	ces, Inc.			
			, L	Sampler: 1	Bryan J. Machella	l.		
		SG	PP - Watervliet	location:	Watervliet, New Y	York		
TID: //p//			1.5 inches	Casing Materia	l: F	VC		
ther Conditions: D A	N							
al Depth of Well (from to	p inner casing				1	eet		
th to Water (DTW) (from	n top inner cas	sing): 0	10		1	cel		
Il Screened Interval:					1	eei		
ear feet of water in well:					0		ves	no
DTW included in a compl	ete round of p	ore-sampling syn	optic water level	measurements	?	feet	Time:	$\cup$
ckness of floating produc	t (if any):	C	None			1001		
scription of floating prod	uct:	(	None					
ge Method: Peristaltic p	imp	<i>r</i>	Purge End Time	:	Purge Rate (gals	/minute):		
rge Start Time: > .	1	-5 gallons					D 41.4-	1
tal Volume Purged.		Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
		°C	(µs/cm)	(pH units)	(ppm)	(mV) ·	Water (ft)	4
-	) Initial	1022	en	6.88	0.62	-69.6	9.05	
5.1	L mua.	1.5	811	6.14	0.30	-71.5	9 45	
15	3 Minutes:	11.38	841	01	0.30	20	6.05	-
18	6 Minutes:	D.41	844	6.90	0-51	- ) (* )		
21	9 Minutes:							_
7 6	,		1					
	12 Minutes:							1
-17	15 Minutes:						_	
30	18 Minutes:							_
-	01.24							
	21 Minutes:							
	24 Minutes	:						
	27 Minutes	:						
	20 Minutes							
	30 Minutes	··						
	33 Minutes	3:			+/- 10%	+/- 10 m	,	
Sta	bilization Rat	e	+/- 3%	7/~ 0.1	1 17 1070			
Sampling Method: Low	Flow		Sampling En	d Time:				
Sampling Start Time.	5.17							
Field Observations (turbi	dity, recharge	e rate, odor, shee	ens, PID/FID read	lings):				
	toinerized &	f containers	filtered and disch	arged, w/ disch	narge location):			
Purge water Status (con	Lamenzeu de 1							
Containerized on site in	55-gallon dru	ım.			-			
Comments:								
11								

			Well Sampli	ng Form				
				Sampler	Bryan J. Machella	1		
: 10/25/05		ect	DD Wotervliet	Location:	Watervliet, New )	York		
ect/Site:		501	-P - Water viter					
ID: MP-1)			15 inches	Casing Materia	l: I	PVC		
r Casing diameter:			1.7					
ther Conditions: DAY	er casing):	0.1	(	•	í	`eet		
al Depth of Wen (noin top min	inner casir	12): 4.01	6		1	feet		
Li to water (D1 w) (nom top)		<i>5,</i>			1	feet		
ar feet of water in well:							220	
TW included in a complete ro	und of pre	sampling syn	optic water leve	l measurements	?	feat	yes Time	
ckness of floating product (if a	uny):	(1	None			1661	Time.	
scription of floating product:		()	None				o	
ge Method: Peristaltic pump			Durge End Time	2:49	Purge Rate (gals	s/minute): 2	4	
ge Start Time: SCi 25	1.	5 gallons	Pulge Isid Time					٦
al Volume Purged:		Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
		°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	4
3.111	Initial	IS SON	735	1102	524	20	9.41	
690		180	155	1211	204	5.7	9.41	7
() зм	linutes:	0.90	141	9.90	1.01	177	G (1)	-
46 GM	linutes:	5.92	1745	6.43	14.4 C	6.5		-
49 ON	Ainutes:	15911	7116	613	4.89	7.0	7.41	
() ()		<u>D.1</u>	196					
12 N	/linutes:		<u> </u>					1
5 15 N	Ainutes:							
5F 18N	Minutes:							
a)								
21 M	Vinutes:							
24 N	Minutes:							
27 1	Minutes:							
20.1	Minuter							
30	winnutes.		+					
33	Minutes:			1/01	+/_ 10%	+/- 10 r	nv	
Stabiliza	tion Rate		+/- 3%	+/- 0.1	+/- 10/0			
Sampling Method: Low Flow Sampling Start Time:	< O	/	Sampling En	d Time:				
	<u> </u>			1				
Field Observations (turbidity, 1	recharge r	ate, odor, shee	ns, PID/FID rea	dings):				
Purge Water Status (container	ized & # (	of containers, f	iltered and disch	harged, w/ disch	arge location):			
Containerized on site in 55-ga	allon drum	1.						
Comments		<u></u>						
Comments.	1 -	. 17	alcost to	Tont Pa	~~			
Elole 9	M	w-11	6103 (* 1.0	11				

	Forensic E	nvironme Well Samplin	ntal Servic ng Form	es, Inc.			
x 10/25/05		Ç	Sampler: I	Bryan J. Mache	lla		
iect/Site:	SGPF	- Watervliet I	location:	Watervliet, Nev	v York		
11 ID: MP-13					DVC		
er Casing diameter:	-	inches	Casing Materia	l:	PVC		
ather Conditions: 12A,~	<u>`</u>				feet		
tal Depth of Well (from top inner cash	$\frac{\log}{\log}$				feet		
pth to Water (DTW) (from top miler c					feet		
pear feet of water in well:							
DTW included in a complete round of	pre-sampling synor	otic water level	measurements'	?	feet	yes Time:	Cito
ickness of floating product (if any):	X	ORE			ICCL	Time.	
escription of floating product:		one					
rge Method: Peristaltic pump	Pi	urge End Time	:	Purge Rate (ga	ils/minute):		
tal Volume Purged:	-) gallons				Redox	Depth to	
	Temperature	Spec. Cond.	pH (~II unita)	Diss. Oxygen	(mV)	Water (ft)	
	C	(µs/cm)			1-11-7	7.0	
ji 2 Initial	15.18	<u> 735 </u>	107	10.9b	10.	210	
OS 3 Minutes	15,72 -	760	h. 04	0.5)	1-1/1	1.60	4
08 6 Minutes	15.28	765	7.02	0.43	-4.)	7.60	4
	1574	765	7.02	0.25	-9.0	7.60	
	··· <b>J J</b>	101					
17 12 Minutes	s:						1
17 15 Minute	s:		<u></u>				-
ZO 18 Minute	s:						-
21 Minute	s:						
24 Minute	s:						
07.) finite							
27 Millute							
30 Minute	es:						
33 Minut	es:			+ ( 100/	+/- 10 m		
Stabilization R	ate	+/- 3%	+/- 0.1	+/- 10%	<u> </u>	<u>1 V1</u>	
Sampling Method: Low Flow	$\neg$	Sampling End	Time:				
Sampling Start Time.							
Field Observations (turbidity, recharge	ge rate, odor, sheens	, PID/FID read	lings):				
Purge Water Status (containerized &	# of containers, filt	ered and disch	arged, w/ disch	arge location):			
o di sin in in in FE collon di	רחנני						
Containerized on site in 55-gailon d	-111						
						0	
Comments:			. 1		lubo N	np · 1s	
MP-19 11~	de wola	( larg	, pued	) and			
	-	0	•	1			

Well Sampling Form

ct/Site: ID: MP-19 Casing diameter:	SGP						
ID: MP-19 Casing diameter:		P - Watervliet	Location:	Watervliet, New	York		
Casing diameter:							
Casing thanketor		1.5 inches	Casing Materia	1:	PVC		
her Conditions:					•		
I Depth of Well (from top inner casin	ng):	1			feet		
h to Water (DTW) (from top inner c	asing): ``, '( /				feet		
Screened Interval:	,				1001		
ar feet of water in well:	and compline ounc	untic water level	measurements	?		yes	no
TW included in a complete round of	pre-sampling sync	Jone	mousurements		feet	Time:	$\cup$
kness of floating product (if any).	6	None					
e Method: Peristaltic pump							
ge Start Time: 12:00	1 Ś <sup>F</sup>	Purge End Time		Purge Rate (gals	s/minute):		
al Volume Purged:	gallons	Spec Cond	nH	Diss. Oxygen	Redox	Depth to	
	°	(us/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
	11 50	7517	678	Tin	50-1	7.17	
	16.5	3576	10.70		42.2	5.47	
الله على 3 Minutes	16.26		6. 18		11.0		1
6 Minutes	16.63	3531	6.19	1.16	195.C	<u>  /\4  </u>	4
っし 9 Minutes	:						1
25 12 Minutes	,.						
C 15 Minutes	5:						1
// 18 Minutes	s:						-
31 21 Minutes	s:						4
24 Minute	s:						_
27 Minute	.s.						
30 Minute	.s.						_
33 Minute	es:	1/ 20/	1/ 0.1	+/- 10%	+/- 10 my		
Stabilization Ra	te	+/- 3%	+/- 0.1	17-1070			
ampling Method: Low Flow		Sampling End	Time:				
	·						
ield Observations (turbidity, recharg	e rate, odor, sheen	s, PID/FID read	ings):				
urge Water Status (containcrized &	# of containers, fil	tered and discha	arged, w/ discha	arge location):			
				_			
Containerized on site in 55-gallon dr	um.			-			
Comments:		۸Λ	1				
An CIA	NSN	10 Was	top				

	Forensic	Environme Well Sampli	ntal Servic ng Form	es, Inc.			
ate: 14/25/25			Sampler: I	Bryan J. Machella	1		
oject/Site:	SG	PP - Watervliet	Location:	Watervliet, New Y	York		
ellID: MP-D				n			
ner Casing diameter:	İ	<u>S</u> inches	Casing Material	1	VC		
eather Conditions: RAIM				ſ	ect		
otal Depth of Well (from top inner cas	ng): · · · · · ·	0		ſ	èet		
epth to Water (DTW) (from top inner	casing): 1.4			1	eet '		
/ell Screened Interval:							$\square$
inear feet of water in well:	f nra camplina svi	ontic water leve	I measurements?	?		yes	( no
s DTW included in a complete round o		None		t	feet	Time:	$\smile$
hickness of floating product (if any).	ج	None					
Description of noaling product.							
Purge Start Time: 17:30	1 <	Purge End Time		Purge Rate (gals	/minute):		
Total Volume Purged:	( ) gallons		1 11	Dias Ovugan	Redox	Depth to	7
	Temperature	Spec. Cond.	pH	Diss. Oxygen	(mV)	Water (ft)	
-	C	(µs/cm)	(pH units)	(ppm)		1765	-
12247 Initia	1.16.87	962	6.70	0.)/	-91.1	$h_{1}$	_
·45 3 Minute	16.85	955	6.70	0.12	-923	7.99	
	11.48	asci	[[]]	0.75	-9/2	7.99	
986 Minute	5: 10.88	150	6.1.		961	7.61	-
5 9 Minute	s: 16.83	950	6.11	0.5L	- 1- 1	1701-	
5/ 12 Minute	s: 14.87	950	6.71	0.32	-87.5	144	
	10.0	1					
1) 15 Minute					1		
18 Minute	es:						
د€ 21 Minut	es:						
4 h - 24 Minut							
24 Minut					1		
2 27 Minut	es:						
30 Minut	es:						
33 Minu	·es:						
Stabilization R	ate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow	ate						
Sampling Start Time:	$\langle \langle \rangle$	Sampling En	d Time:				
1010			1				
Field Observations (turbidity, rechar	ge rate, odor, shee	ns, PID/FID read	lings):				
Purge Water Status (containerized &	# of containers, f	iltered and disch	arged, w/ discha	arge location):			
Containerized on site in 55-gallon d	rum.						
N. Contraction of the second sec							
Comments:							

Well Sampling Form

	Ţ					
Date: (0/25/05		Sampler:	Bryan J. Machella	<u>)</u>		
Project/Site:	SGPP - Watervliet	Location:	Watervliet, New	York		
Well ID: MP118				WC		
nner Casing diameter:	1.5 inches	Casing Materia	1: <u>I</u> ·	· v L		
Weather Conditions: TAIM			ſ	àct		
Fotal Depth of Well (from top inner casing):	1994 - 1. april		1			
Depth to Water (DTW) (from top inner casing):	815		1	eet		
Well Screened Interval:			I	CCI		$\frown$
linear feet of water in well:		1	ŋ		ves /	no
is DTW included in a complete round of pre-sa	mpling synoptic water leve	a measurements		feet	Time:	
Thickness of floating product (if any):	NODE					
Description of floating product:	None					
Purge Method: Peristaltic pump	Purge End Time	2:	Purge Rate (gals	/minute):		
Total Volume Purged:	gallons		-			
Total volume ranged. Ten	nperature Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (11)	
10:29 Initial 1/2 3	31 648	7.51	0.25	171.4	8:17	
		1751	0.75	1761	F.19	
3 ( 3 Minutes: 16.		1.11		1-71 -	5.9	
3.5 6 Minutes: /6	30 650	1.21	0.15	1.16.)	p·1)	
3d 9 Minutes:						
(1) 1035						
Y 12 Minutes:						
$\frac{1}{2}$ 15 Minutes:						-
47 18 Minutes:						
66 2126						
21 Minutes:						1
24 Minutes:						-
27 Minutes:						
20 Minutos			•			
50 Minutes:				-		1
33 Minutes:			1/ 100/	+/_ 10 my		-
Stabilization Rate		+/- 0.1	+/-10%	1 17-10 111	L	
Sampling Method: Low Flow Sampling Start Time: 10:36	Sampling En	d Time:				
	odor sheeps PID/FID read	dings):				
Field Observations (turbidity, recharge rate,	ouor, succus, radirid ica					
Purge Water Status (containerized & # of co	ontainers, filtered and disch	harged, w/disch	arge location):			
Containerized on site in 55-gallon drum.			-			
Comments:						
Comments.						

	Forensic Environm Well Samp	ental Serv ling Form	vices, Inc.		<u>An Brann, an Star (Chord China China Anna Anna Anna Anna Anna Anna Anna A</u>	
Date: 10/25/05		Sampler:	Brvan I. Mache	lla		
Project/Site:	SGPP - Watervliet	Location:	Watervliet. Nev	v York		
Well ID: MF-22						
Inner Casing diameter:	i S inches	Casing Materi	ial:	PVC		
Weather Conditions: TAI						
Total Depth of Well (from top inner ca	sing):			feet		
Depth to Water (DTW) (from top inner	casing): Y. Y C			feet		
Well Screened Interval:				feet		
Linear feet of water in well:	fano compline our outin outon lour	1	-0			
Thickness of floating product (if any):	or pre-sampling synoptic water leve	ameasurement	S ?	faat	yes	(no)
Description of floating product:	None			leet	I me:	
Purge Method: Peristaltic pump	Chok					
Purge Start Time: 9:15	Purge End Time	:	Purge Rate (gal	s/minute):		
Total Volume Purged:	gallons					
	Temperature Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
Guid	C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1.9.5 Initia	14.75 392	636	7.43	152	8.85	1
48 3 Minutes	14.77 281	6.16	7.41	1477	Pes	
5) 6 Minute	14 8/2 397	1 56	1000	17711	141	
	17.00 510	600	4.78	13 11	6.5	
9 Minutes	19.19 39L	606	<u>),                                    </u>	136.1	15)	
5 12 Minutes	14.50 592	6.06	7.50	131.9	8.55	
¢ ¢ 15 Minutes	32					
C 3 18 Minutes	::					
66 21 Minute						
21 Windle	».					
24 Minutes	5:				·	
27 Minute	5:					
30 Minute	3:					
33 Minute			-			
Stabilization Rat	+/ 30/	+/ 0.1	+/ 109/	+/ 10 mm		
Sampling Method: Low Flow		1	+/- 1070	<u>1</u> +/- 10 mV		1
Sampling Start Time: 9 - 37	Sampling End I	ime:				
Field Observations (turbidity, recharge	rate, odor, sheens, PID/FID readin	gs):				
Purge Water Status (containerized & #	of containers, filtered and discharg	ed, w/ discharg	ge location):			
			- /-			
Containerized on site in 55-gallon dru	n.		-			
Comments:						

	Forens	Well Sampli	ng Form				
			Complex	Bryan I. Machella			
10/25/05		CCDD Weterwliet	Location:	Watervliet, New Y	′ork		
ect/Site:		SGPP - Waterviter	1.00atron.	Trailor thois 1 to the			
D: MN/2/1		<b>t</b> inches	Casing Materia	l: P	VC		
ther Conditions: A.A.	<u> </u>		-				
l Depth of Well (from top inner	casing): 🥰			fe	eet		
th to Water (DTW) (from top int	ner casing): 9	50		10	eel		
Screened Interval:					001		$\sim$
ear feet of water in well:	d of pre campling	synoptic water leve	Imeasurements	?		yes	(no)
TW included in a complete roun	n of hic-sampling	None		f	eet T	ime:	$\sim$
cription of floating product:		None					
ge Method: Peristaltic pump				Durge Date (asla)	minute).		
ge Start Time: 1.53	1.5	Purge End Time	:	Furge Kate (gals/	minutoj.		
al Volume Purged:	Temperatu	re Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
7-111 In	itial 1/7	503	7.15	0.39	-97.4	9.50	
C.1 ° m	10 1	uch	1015	1077	-5701	950	
13 3 Min	$10^{10}$	410	+12	1021	-9-7	950	1
16 6 Min	nutes: 6-16	949	7.12	U.SC	11.5	1-J	4
<b>19</b> 9 Mir	nutes:						4
22 12 Mir	nutes:						_
25 15 Mi							
18 Mu	nutes:						1
• / 21 Mi	nutes:				+		-
24 Mi	nutes:				1		
27 M	nutes:						_
20 N A	inutes:						
30 M	mates.				-		7
33 M	inutes:	11.20/	+/ 0.1	+/- 10%	+/- 10 mv		
Stabilizatio	n Rate	<u>  +/- 3%</u>	1 -1- 0.1	1 1070			
Sampling Method: Low Flow	5	Sampling En	d Time:				
41			1' >				
Field Observations (turbidity, rec	charge rate, odor,	sheens, PID/FID read	ungs):				
Purge Water Status (containerize	ed & # of containe	ers, filtered and disch	arged, w/ disch	arge location):			
	n drum						
Containerized on site in 55-gain	/// UIU///.						
Comments:							
1							

10/25/05			Sampler:	Bryan J. Machell	a		
piect/Site:	SG	PP - Watervliet	Location:	Watervliet, New	York		
IIID: MW-16			<u> </u>	1	DVC		
er Casing diameter:		2 inches	Casing Materi	al:	ΓVC		
eather Conditions: RAN	\ <i>•</i>				feet		
tal Depth of Well (from top inner casing		5			feet		
pth to Water (DTW) (from top inner cas	ang). j o				feet		
ell Screened Interval:							$\dot{\mathbf{O}}$
DTW included in a complete round of p	re-sampling syr	optic water level	measurement	s?		yes	no
pickness of floating product (if any):		Nope			feet	Time:	
escription of floating product:	(	Noné					
urge Method: Peristaltic pump		Dungo End Time	•	Purge Rate (gal	s/minute):		
arge Start Time: [125	1.6 vallons	rurge End Time	·•	1 0.50 1 min (Bur			
otal Volume Purged:	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1:25 Initial:	1583	1231	6.98	13.65	-25	7.5	
1 Minuter	D 50	1231	17.14	0.81	29.4	10.50	
1 - 3 - 5 Winduces.	<u> </u>	1.556	+ / / /		1		
6 Minutes:	DRY						
9 Minutes:	Will I	pt rechar	<u>2. 7.2 40</u>	<u>r</u> "			
12 Minutes:							
15 Minutes:							
			-				
18 Minutes.							
21 Minutes:							-
24 Minutes:							-
27 Minutes:							_
20 Minutee							
50 minutes.							
33 Minutes		±/ 20/	+/-01	+/- 10%	+/- 10 mv		
Stabilization Rate		77- 378	1 17 0.1				
Sampling Start Time: - 1/		Sampling En	d Time:				
3.7)			<u></u>				
Field Observations (turbidity, recharge	rate, odor, shee	ns, PID/FID read	iings):				
Purge Water Status (containerized & #	of containers, f	iltered and disch	arged, w/ discl	narge location):			
Containerized on site in 55-gallon drun	າາ.			·			

	Forensie	e Environm	ental Serv	ices, Inc.			
		Well Samp	ling Form				
- 1/- // 5							
Date: $\frac{1}{1} \frac{1}{2} \frac{1}{2} \frac{1}{2}$			Sampler:	Bryan J. Machel	lla		
Project/Site:	S	GPP - Watervliet	Location:	Watervliet, New	/ York		
Well ID: 375737			Caring Materi				
Weether Conditions: Clear Av		inches	Casing Materi		<b>P</b> VC	*****	
Total Depth of Well (from top inner casi	na). 15				feet		
Depth to Water (DTW) (from top inner cash	asing): NM				feet		
Well Screened Interval: $1 - 1 \le$	using). J				feet		
Linear feet of water in well					1001		
Is DTW included in a complete round of	pre-sampling sy	nontic water leve	1 measurements	2		Ves	no
Thickness of floating product (if any):	P. 1 2 P. 1	None.			feet	Time:	
Description of floating product:	-	None					
Purge Method: Peristaltic pump			5-7 5				
Purge Start Time: Y-7C	<u>^</u>	Purge End Time	J.L	Purge Rate (gals	s/minute):		
Total Volume Purged:	0.) gallons						
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
1	Č	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initial:	1207	831	16 79	1.15	-1067		
3 Minutes:	12.14	536	635	1.1	-1018	-	
τ5 6 Minutes:	12.23	834	1.58	1.00	-1068		
9 Minutes:	<u> </u>				1.0		
12 Minutes:							
15 Minutes:							
18 Minutes:							
21 Minutes:							
24 Minutes:							
27 Minutes:							
30 Minutes:							
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 my		
Sampling Method: Low Flow Sampling Start Time: 8-26		Sampling End T	ìime:				<u></u>
Field Observations (turbidity, recharge r	ate, odor, sheens	, PID/FID readin	gs):				
	<u> </u>		1 / 1• 1	•			<u></u>
rurge water Status (containerized & # c	or containers, filte	ered and discharg	ed, w/ discharg	e location):			
Containerized on site in 55-gallon drum							
Comments:			499444444,440444,4404,4404,4404,4404,44				

	Forensic Env	vironme	ntal Servi	ices, Inc.			
	W	ell Samplin	ng Form				
Date: 17/109		S	Sampler:	Bryan J. Mache	lla		
Project/Site:	SGPP - V	Watervliet L	Location:	Watervliet, New	v York		
Well ID: 512-18 L							
Inner Casing diameter:		inches (	Casing Materia		РУС		
Weather Conditions: Class >	10						
Depth to Water (DTW) (from top inner cas					feet		
Well Screened Interval:	casing): [ • ]				feet		
Linear feet of water in well:					leet		
Is DTW included in a complete round o	f pre-sampling synoptic y	water level i	measurements	<b></b> 9		Noc	-
Thickness of floating product (if any):	None	~	mousurements		feet	ycs Time:	011
Description of floating product:	None				1001	i mio.	
Purge Method: Peristaltic pump		~	7.6				
Purge Start Time: XYY Total Volume Purged:	05 gallons Purge	End Time	(*S <sup>*</sup> )	Purge Rate (gal	s/minute):		
	Temperature Spec	c. Cond.	pН	Diss. Oxygen	Redox	Depth to	
5 . 3	<sup>°</sup> C (μ	.s/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
ð 55 Initial	11.46 12	9	698	2.59	-50.2	-	
56 3 Minutes	11.34 72	.8	6.17	0.57	-51.1	-	
5 <sup>r</sup> 6 Minutes	11.28 77	R	6.97	c.56	-81.3		
9 Minutes			/				
12 Minutes							
15 Minutes							
18 Minutes							
21 Minutes							
24 Minutes							
27 Minutes			······				
. 30 Minutes	:						
33 Minutes	:						
Stabilization Rate	+	/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time: $O'O'$	Sampl	ling End Tir	me:				
Field Observations (turbidity, recharge	rate, odor, sheens, PID/F	ID readings	s):	<u>, , , , , , , , , , , , , , , , , , , </u>			
Purge Water Status (containerized & #	of containers, filtered and	d discharge	d w/discharg	e location):			
			-, assenting				
Containerized on site in 55-gallon drun	1.						
Commonte			······································				
comments.							
IL							

	Forensic 1	Environm Well Samp	ental Servi	ces, Inc.			
Date: 12/11-7			Sampler:	Bryan J. Mache	lla		
Project/Site:	SGP	P - Watervliet	Location:	Watervliet, Nev	v York		
Well ID: 56, 183					<u>,</u>		
Inner Casing diameter:		inches	Casing Materia	1: 55 ·	PVC		
Weather Conditions: elevely							
Total Depth of Well (from top inner cas	ing): 1)				feet		
Depth to Water (DTW) (from top inner	casing): NM				feet		
Well Screened Interval: 11-13					feet		
Linear feet of water in well:							
Is DTW included in a complete round of	f pre-sampling syno	ptic water level	I measurements'	?		yes	no
Thickness of floating product (if any):	N	000			feet	Time:	
Description of floating product:	<del>}</del>	one					
Purge Method: Peristaltic pump	~		(1)	n n -			
Total Volume Purced 0.25	Pi	arge End Time	1.2	Purge Rate (gal	s/minute):		
	Temperature	Spec. Cond	nH	Diss Oxugen	Reday	Depth to	
	°C	(us/cm)	(pHunits)	(npm)		Water (ft)	
Gillo Initial	25/ 1		$(\mathbf{p}_{11}, \mathbf{m}_{12})$			water (II)	
1.16 miliai.	1.)6	171	112	0.03	-41.K		
3 Minutes:	753 1	145	1.20	16.66	-36.7		
6 Minutes:	Lill let e	Tharp	SANJE				
9 Minutes:							
12 Minutes:							
15 Minutes:						1	
18 Minutes:							
21 Minutes	<u> </u>						
24 Minutes.					+		
		+					
27 Minutes:							
30 Minutes:							
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time: 1:3 C	S	ampling End T	ìme:				
Field Observations (turbidity, recharge	rate, odor, sheens. P	PID/FID readin	gs):				
	., ==0., 0.100110, 1	iouum	D~//				
		••••••••••••••••••••••••••••••••••••••					
Purge Water Status (containerized & # o	of containers, filtere	d and discharg	ed, w/discharge	e location):			
Containerized on site in 55-gallon drum	. ·						
Comments:	11 .	,				e1	
Slar pursing	- Lell Net	seins d/	y, RU u	1772 com	y 12 V9/	1 JICW	
		~ /					
<u>L</u>							

	Forensic	Environm Well Samp	ental Serv ling Form	ices, Inc.			
			······································				
Date: 14110			Sampler:	Bryan J. Machel	la		
Project/Site: 5 1/ 18 1	SC	GPP - Watervliet	Location:	Watervliet, New	York		
Well ID:			Contraction New Y				
Weather Conditions: File My	······································	menes	Casing Materi		<b>F</b> VC		
Total Depth of Well (from top inner cas	ing). 15				feet		
Depth to Water (DTW) (from top inner	casing): NM				feet		
Well Screened Interval: 11-1 5	J		•		feet		
Linear feet of water in well:					1001		
Is DTW included in a complete round o	f pre-sampling syr	noptic water leve	el measurements	s?		Ves	no
Thickness of floating product (if any):		None			feet	Time:	
Description of floating product:	-	None					
Purge Method: Peristaltic pump				· · · · · · · · · · · · · · · · · · ·			
Purge Start Time: C		Purge End Time	3	Purge Rate (gals	s/minute):		
Total Volume Purged:	gallons		1				
	remperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	<u> </u>	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initial	:						
S Minutes							
Development 6 Minutes							
WALL DOLL NOV 9 Minutes	:						
12 Minutes	·						
15 Minutes	:						
NU 1020 18 Minutes							
Coll 21 Minutes							
24 Minutes							
24 Minutes							
27 Minutes					1		
30 Minutes							
33 Minutes							
Stabilization Rat	e	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Flow Sampling Start Time:		Sampling End	Time:				
Field Observations (turbidity, recharge	rate, odor, sheens	, PID/FID readin	ıgs):				
Purge Water Status (containerized & #	of containers, filt	ered and dischar	ged, w/ dischar	ge location):			
Containerized on site in 55-gallon drui	n.						
Comments: Veny 5, Hy	eva ntto	- purs 1-45	/				
		0					

	Forensic	e Environm Well Samp	ental Servi ling Form	ices, Inc.			
Date: 17/7 65			Sampler:	Bryan I. Mach	-11a		
Project/Site:	S	GPP - Watervliet	Location:	Watervliet Nev	w Vork		
Well ID: 53-185				Water vilet, ive	w TOIK		
Inner Casing diameter:	and the second	inches	Casing Materia	al: 55	PYC		
Weather Conditions: Curl							
Total Depth of Well (from top inner casi	ing): 1				feet		
Depth to Water (DTW) (from top inner of	casing):				feet		
Well Screened Interval: 11-15			•		feet		
Linear feet of water in well:	-						
Is DTW included in a complete round of	pre-sampling syn	noptic water leve	l measurements	?		yes	no
Thickness of floating product (if any):	-	None			feet	Time:	
Purge Method: Peristellic pump		None					
Purge Start Time:		Purge End Time	:	Purge Rate (as	ls/minute).		
Total Volume Purged:	gallons	- arbo ma runo	•	, mgo raio (ga	iorinnutoj.		
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initial:					·		
SC A Minutes							
K DE DE Similares.							
6 Minutes:							
9 Minutes:							
JOINT 12 Minutes:							
Gald 1							
IS Minutes:							
18 Minutes:							
21 Minutes:							
24 Minutes	·····						
27 Minutes							
30 Minutes			ļ				
33 Minutes							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		1
Sampling Method: Low Flow Sampling Start Time:		Sampling End 7	Fime:				
Field Observations (turbidity, recharge	rate, odor, sheens	, PID/FID readin	gs):				at (103) (203)
Purge Water Status (containerized & #	of containers, filte	ered and discharg	ged, w/ discharg	e location):			
Containerized on site in 55-gallon drun	1.						
$\frac{P}{P} = Z_{c}$	j - d1	TAR					

	Forensic	Environm Well Sampl	ental Serv	ices, Inc.			
		<b>-</b>	۳ ۲				
Date: 171-7/05			Complan	Deven 1 March	. 11 .	·····	
Project/Site:	SGI	DD Waterwhiet	Location:	Weterwhiet New	an Monk		
Well ID: 513-188				water vilet, nev	w YOIK		
Inner Casing diameter:		inches	Casing Materia	al: 55	PVC	······································	
Weather Conditions: Clarky			1		<u></u>		
Total Depth of Well (from top inner casing	<sub>2):</sub> 15				feet		
Depth to Water (DTW) (from top inner cas	sing): NM				feet		
Well Screened Interval: 11-15			•		feet		
Linear feet of water in well:							
Is DTW included in a complete round of particular particular and the second of particular particula	re-sampling sync	optic water level	l measurements	s?		yes	no
Thickness of floating product (if any):		lone >			feet	Time:	
Description of floating product:		lone					
Purge Method: Peristaltic pump	•		2:41	n ~ .			
Total Volume Purged: $(2 - 3)^{10}$	$\sim$ gallons $^{P}$	urge End Time		Purge Rate (ga	Is/minute): 🗸 4		
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
2:34 Initial:	9.47	720	7.07	0.19	-68.1		
43 3 Minutes:	922	704	7.03	0.16	-64.3		
6 Minutes:	5.96	204	Dil	0.15	157		
9 Minutes:		<u> </u>	1.07		-01.1		
12 Minutes:							
15 Minutes:							
18 Minutes							
21 Minutes:							
24 Minutes							
24 Minutes				+			
30 Minutes:							
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv	****	L
Sampling Start Time: 2:47	C	Sampling End T	îme:				
Field Observations (turbidity, recharge rat	e, odor, sheens, l	PID/FID readin	gs):				
Purge Water Status (containerized & # of	containers, filter	ed and discharg	ed, w/ discharg	ge location):			
Contain arian dia materia 55 March			_	·			
containerized on site in 55-gallon drum.							
Comments:				······			
Ver little with							
v)							

Well Sampling Form

Date: 12/7/05		Sampler:	Bryan J. Macho	ella		
Project/Site:	SGPP - Watervli	et Location:	Watervliet, Nev	w York		
Well ID: 5B-190	аналанан тараалан тар Р					
Inner Casing diameter:	inch	es Casing Mater	ial: 🗲 🗸	DVC		
Weather Conditions: Clarky						
Total Depth of Well (from top inner casir	g): 15			feet		
Depth to Water (DTW) (from top inner ca	asing): MM			feet		
Well Screened Interval: 11-15				feet		
Linear feet of water in well:	<b>1</b>					
Is DTW included in a complete round of	pre-sampling synoptic water le	vel measurement	s?		yes	no
Inickness of floating product (if any):	None			teet	Time:	
Purge Method: Berietaltic pump	Jone					
Purge Start Time: 11:25' Total Volume Purged:	Purge End Tir gallons	ne://`-36	Purge Rate (ga	ls/minute):		
	Temperature Spec. Cond	рН	Diss. Oxygen	Redox	Depth to	
(1.70)	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
11.5 Initial:	11.35 618	763	0.28	-115		
جکے 3 Minutes:	11.56 615	7.56	6.27	-1112	2	
6 Minutes:	11.56 615	155	0.27	-110.8	·	
ך אוnutes:	······································			<u> </u>		
12 Minutes:						
15 Minutes:					<u> </u>	
18 Minutes:						
21 Minutes:						
24 Minutes:						
27 Minutes:						
30 Minutes:					-	
33 Minutes:				-	-	
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	Sampling En	d Time:				
Field Observations (turbidity, recharge r	ate, odor, sheens, PID/FID read	lings):				
Purge Water Status (containerized & # o	f containers filtered and disch-	arged w/ dischar	ge location):			
	somamors, morea and disen-	ngeu, w/ uiseliai	ge iocacionj.			
Containerized on site in 55-gallon drum.						
Comments:						

		Forensic	Environm Well Sampl	e <b>ntal Servi</b> ing Form	ices, Inc.			
Date: 1727105				Sampler	Bryan I Mache	-11a		
Project/Site:		SC	SPP - Waterwliet	Location:	Watervliet Nev	w Vork	·····	
Well ID: 56.19				Docution.	water viter, iver	V TOIK		
Inner Casing diameter:			inches	Casing Materia	al: 55	exc		
Weather Conditions: Clarky	-cold							
Total Depth of Well (from top in	nner casin	g): 15				feet		
Depth to Water (DTW) (from top	p inner ca	$_{\rm using):} NM$				feet		
Well Screened Interval:	15					feet		
Linear feet of water in well:								
Is DTW included in a complete r	round of j	pre-sampling syr	noptic water level	measurements	?		yes	no
Thickness of floating product (if	`any):		None			feet	Time:	
Description of floating product:			None					
Purge Method: Peristaltic pump	G		Purge End Time		Purge Rate (as)	ls/minute).		
Total Volume Purged:	0	J gallons	i uge Liid i iiite		i uige Naie (gal	iammute).		
	<u> </u>	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
		с	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1.03	Initial:	9.91	743	2.28	0.09	910		
	Ainutes:	201	1:05	/ -0				
	vinitutes.	prey						
6 N	Minutes:							
9 N	Minutes:							
12 M	Minutes:							
15 M	Minutes							
191				<u> </u>				
185	vinutes:			<u> </u>				
21 M	Minutes:							
24 1	Minutes:							
27.1	Minutes:							
30 1	Minutes:	······································						
33 1	Minutes:							4
Stabilizat	ion Rate	****	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time:	Ġ		Sampling End 7	Fime:				
Field Observations (turbidity, re	echarge r	ate, odor, sheens	s, PID/FID readin	gs):				
Purge Water Status (containeriz	zed & # 0	t containers, filt	ered and discharg	ged, w/ discharg	ge location):			
Containerized on site in 55-gall	lon drum							
Comments:	εcί	い) _	ΞĴv	ρ	• •			

		Forensic	E Environm Well Samp	ental Serv	ices, Inc.			
			-					
Date: n/1/05				Complan	Drugen 1 March			
Project/Site:			3DD Wateruliet	Location:	Bryan J. Mach	Nork		
Well ID: 53-19	ζ	)(	JPP - Water viict		watervnet, no	ew Y OFK		
Inner Casing diameter:	/		inches	Casing Materi	al· <b>55</b>	PVC		
Weather Conditions:		·····		<u>Britten</u>				
Total Depth of Well (from	top inner casir	ng): 15				feet		
Depth to Water (DTW) (fr	om top inner c	asing): NM	. )			feet		
Well Screened Interval:	1-15 (	Gropicas S	pmp) ~n ]			feet		
Linear feet of water in wel	1:	v	• )					
Is DTW included in a com	plete round of	pre-sampling syr	noptic water leve	l measurements	\$?		yes	no
Thickness of floating prod	uct (if any):	-	None			feet	Time:	
Description of floating pro	oduct:	-	None					
Purge Method: Peristaltic	pump	-	Purce End Time	s.	Durge Date /-	alc/minuta):		
Total Volume Purged:	0.	25 gallons	r urge End Tille	· .	ruige Rate (g	ais/initiute):		
<u>C</u>	T	Temperature	Spec. Cond.	pH	Diss. Oxyger	n Redox	Depth to	
		с	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
	Initial:							
• X	3 Minutes:							
, war	6 Minutes:	· · · · · · · · · · · · · · · · · · ·						
1 -rell	9 Minutes:	<u></u>						
Dry Ind	12 Minutes:							
Nervis	15 Minutes:							
Nº has	18 Minutes:							
1 x Nection	21 Minutes:							
L' SAMP	24 Minutes:			-				-
+ >' '	27 Minutes:							-
	30 Minutes:							
	33 Minutes:							1
Stal	oilization Rate	Par	+/- 3%	+/- 0.1	+/- 10%	+/- 10 my		-
Sampling Method: Low F Sampling Start Time:	237		Sampling End	Time:				
In real Coser varions (turbic	my, reenarge r	ate, ouor, sneens	, rid/rid readir	igsj:				
Durge Water Status (acet	incrized 0. 4 -	foontainan 54	anad and d'=-1	nod within the	a leastin N			
In arge water status (conta		or containers, filte	ered and dischar	gea, w/ discharg	ge location):			
Containerized on site in 5	5-gallon drum							
Comments:						*****		
			•					

		Forensi	e Environm Well Samp	ental Serv ling Form	ices, Inc.			
				r				
Date: 191103	49-14-14-1-1			Sampler:	Bryan J. Mache	ella		
Project/Site:	į	S	GPP - Watervliet	Location:	Watervliet, Nev	w York		
Well ID: 35-19								
Inner Casing diameter:	<u> </u>		inches	Casing Materi	al: <u>55</u>	JPVC		
Total Depth of Wall (from		15				0		
Depth to Water (DTW) (fr	top inner cash					feet		
Well Screened Interval:	$11 - 1 \leq$	asing).		•		feet		
Linear feet of water in well						Teet		
Is DTW included in a com	plete round of	pre-sampling sv	nontic water leve	measurements	:7		Vec	
Thickness of floating produ	uct (if any):	pre sampling sy	None	i mottau omont.		feet	Time:	10
Description of floating prod	duct:		None			1001	r mie.	
Purge Method: Peristaltic	pump			17.6				
Purge Start Time: // . 4	5	0/	Purge End Time	10.1	Purge Rate (ga	ls/minute):		
Total Volume Purged:	<u>U</u>	<u> </u>	T	<u></u>			·/·····	
		1 emperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
12.0		C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
169	Initial:	10.45	JEZ	5.40		-82.0		
Cb	3 Minutes:	11-11	570	121	0.18	-87.1		
09	6 Minutes:	120	570	h''''	0.13	-577	-	
- (	0.1/	(1.)0	5 /	<u>  ^. ) [</u>		0 /. 3		
	9 Minutes:							
	12 Minutes:							
	15 Minutes:						1	
	19 Minuton			+				
	to minutes.							
	21 Minutes:							
	24 Minutes:							
	27 Minutes:							
	27 Minutes.							
	30 Minutes:							
	33 Minutes:		-					
Stab	ilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low F Sampling Start Time:	7:10		Sampling End T	lime:				
Field Observations (turbid	ity recharge :	ate odor cheen	PID/FID madin	00).				
	ny, romaige i	are, ouor, sheelis		Ro).				
								·····
Purge Water Status (contai	inerized & # c	of containers, filt	ered and discharg	ed, w/discharg	ge location):			
Containerized on site in 54	S-gallon drum							
in the second second second second	sanon urum							
Comments:								

	Forensi	c Environm Well Samp	ental Serv ling Form	ices, Inc.			
Date: LAC			Sampler:	Bryan J. Mache	ella	*****	
Project/Site:	S	GPP - Watervliet	Location:	Watervliet, Nev	v York		
Well ID: 515-146	•	-					
Inner Casing diameter:	· · · · · · · · · · · · · · · · · · ·	inches	Casing Materi	al: 55	PWC		
Weather Conditions: Clark, - Col	1,15		0				
Depth to Weter (DTW) (from top inner case	ng): I				feet		
Well Screened Interval:	casing):	O SCAPN SA	support		feet		
Linear feet of water in well:	L62pron				feet		
Is DTW included in a complete round of	pre-campling ou	nontic water lave		-0			)
Thickness of floating product (if any):	pro-sampning sy	None NM	i measurements	5?	frant	yes	no
Description of floating product:	•	None NM			Teel	1 me:	
Purge Method: Peristaltic pump							
Purge Start Time: 3:4/ Total Volume Purged:	/ gallons	Purge End Time	: 4:0f*	Purge Rate (gal	s/minute):		
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
U.A	<u>°C</u>	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
7 C Initial:	911	640	7.42	0.27	6		
3 Minutes:	8.90	142	211	0.78	11		
6 Minutes:	878	117	1.71	0.25			
9 Minutes:	0.00	bic	- 1.47				
12 Minutes:							
15 Minutes:							
10 Minutes.							
18 Minutes:				<u> </u>	1		
21 Minutes:							
24 Minutes:							
27 Minutes:							
30 Minutes:				and the second sec			
33 Minutes:				· · · · · · · · · · · · · · · · · · ·	1		
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 my		
Sampling Method: Low Flow Sampling Start Time: 4.		Sampling End T	ime:				
Field Observations (turbidity, recharge r	ate, odor, sheens	, PID/FID reading	gs):	······			
Purge Water Status (containerized & # c	of containers, filt	ered and discharg	ed, w/ discharg	e location):			
Containerized on site in 55-gallon drum							
Comments: ERANSt'S EB							

F	orensic Env	v <b>ironme</b> Vell Sampli	ental Servi ing Form	ces, Inc.			
10:1173106			Sampler:	Bryan J. Machell	a		
niect/Site:	SGPP -	Watervliet	Location:	Watervliet, New	York		
ell ID: $SB = 1$							
ner Casing diameter:		inches	Casing Materia	al:	PVC		
eather Conditions:					faat		
otal Depth of Well (from top inner casing):					feet		
epth to Water (DTW) (from top inner casing)	):	•			feet		
Vell Screened Interval:							
inear feet of water in well:	moling synoptic	water level	l measurements	;?		yes	no
DTW included in a complete round of pre-sa	None	) , aler 1070.			feet	Time:	
hickness of floating product (if any).	None	-					
urge Method: Peristaltic nump							
urge Start Time:	Purg	e End Time	:	Purge Rate (gal	s/minute):		
otal Volume Purged:	gallons			Dice Ovugan	Redov	Depth to	
Ter	nperature Sp	ec. Cond.	pH (nU surita)	(nnm)	(mV)	Water (ft)	
	C	(µs/cm)	(pH units)		20.11		
MERC Initial:		ML	17.15	0.38	50.0		
3 Minutes:	1.69	19]	7.07	<u>G.32</u>	-32		
6 Minutes:	1.65	190	7.06	0.51	SO		
9 Minutes:		<b>S</b>					
12 Minutes:							
15 Minutes:							
18 Minutes:							
21 Minutes:							
24 Minutes:							
27 Minutes							
20 Minutes:							
50 Williacos.							1
33 Minutes:		1/ 20/	+/ 0.1	+/_ 10%	+/- 10 mv		-
Stabilization Rate		+1- 3%0	<u></u> , −, 0, 1	1 17-1070	1 1 10 111		
Sampling Method: Low Flow	Sa	mpling End	Time:				
					<u></u>		
Field Observations (turbidity, recharge rate,	odor, sheens, PI	D/FID read	ings):				
Purge Water Status (containerized & # of co	ontainers, filtered	l and discha	arged, w/ discha	arge location):			
Containerized <b>answe</b> in 55-gallon drum.							
Commonte							
Comments.							

	Forensic	Environme Well Sampli	ntal Servi ng Form	ices, Inc.			
		L		Pryon I. Machelli	3		
ate: 1/23/06			Sampler:	Waterwliet New	York		
oject/Site:	SG	PP - Watervliet	Location:	watervitet, New	TOIK		
/ell ID: 33-191		i h	Coging Materi	al.	PVC		
mer Casing diameter:		inches	Casing Mater				
/eather Conditions:				f	eet		
otal Depth of Well (from top inner casing	g):			t	feet		
bepth to Water (DTW) (from top inner ca	sing):			1	feet		
Vell Screened Interval: 3-13							
inear feet of water in well:	no compling syr	ontic water level	measuremen	ts?		yes	no
s DTW included in a complete round of p	ne-sampning sys	None			feet	fime:	
Thickness of floating product (II any).		None					
Description of floating product:							
Purge Method. Peristance pump		Purge End Time	;	Purge Rate (gals	s/minute):		
Total Volume Purged:	gallons			Dies Ovugen	Redox	Depth to	
<u> </u>	Temperature	Spec. Cond.	pH	DISS. UXYgell	(mV)	Water (ft)	
	С	(µs/cm)	(pH units)				
$[C]$ . $\mathcal{F}$ Initial:	11 01	ISEV	1.69	10.57	1000		
Con 2 Minuter	FC2	1-62	n ks	1082	10000	······	
5 Minutes.	a set i	510	1211		1(7)		
6 Minutes:	3.00	<u>56°</u>	1.60	<u> </u>	1 ).1		
9 Minutes:							
12 Minutes:							
15 Minutes:							4
18 Minutes:							4
21 Minutes:							4
24 Minutes							4
27 Minutes							-
30 Minutes	:						_
33 Minutes	·	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Stabilization Rat	e	1-570					
Sampling Method: Low Flow		Sampling End	l Time:				
l (	rate odor shee	ns, PID/FID read	lings):				
Field Observations (turbidity, recharge	140, 0401, 0100	2	-				
		-1. 1 1 1 1 1	aread my dias	harge location).			
Purge Water Status (containerized & #	of containers, f	iltered and disch	argeu, w/ uisc	marge ioeanon).			
	177						
Containerized and in 55-gallon dru	111.						
Comments:							

Å

Fore	ensic Environme	ental Servi	ices, Inc.			
,	wen Sampi	mg rorm	$\cap$	2		
2/11.			R17	,		
Date: 2716		Sampler: -	Bryan J. Machel	<del>ha</del>		
Project/Site: MD /	SGPP New Haven	Location:	New Haven, CT			
Well ID:	. 1	Carina Matari	- l.	DVC	,	
nner Casing diameter:	inches	Casing Materi	21:			
Weather Conditions:				feet		
Depth to Water (DTW) (from top inner casing):	721			feet		
Well Screened Interval:	1.07			feet		
Linear feet of water in well:						
Is DTW included in a complete round of pre-samp	ling synoptic water lev	el measuremer	nts?		yes	no
Thickness of floating product (if any):	None			feet	Time:	
Description of floating product:	None					
Purge Method: Peristaltic pump			Duma Data (cal	alminuta).		
Purge Start Time:	Purge End Time	401	rurge kate (gal	simmute):		
Total volume Fulged. Total volume Fulged. Total volume Fulged.	ature Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
MOGE Initial: OI	7 110	1.92	0.26	-728	909	
A Minutes: A 7	7 410	$\left( \begin{array}{c} 0.0 \end{array} \right)$	0.20	-701	1.01	
John Minutes. 9.2	<u>C 418</u>	6.17	0.17	70.7		
6  Minutes: 9.3	9425	6.75	0.16	-78.9	9.11	
$\mu$ Minutes: $0.5$	8 423	6.74	0.22	-79.7	9-13	
17 Minutes: 9.6	8 432	6.73	0.19	-83.2	9.14	
713 Minutes: $Q$	11 440	6.73	0.15	-86.9	9.15	
128 Minutes:	10 460	1.73	013	4 82-		-
All Minutes Q	n lei	1-2	0.12	801	015.	
A vinitutes. 4. 9	1426	6-13	0.15	-01.1	9.13 V	
$2^2 \P$ Minutes:						
27 Minutes:						
30 Minutes:						
33 Minutes						
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Plow	<u> </u>			V		
Sampling Start Time	Sampling End	Time:	720	•		
0121)	1 TO TEX / FOR TAX		<u> </u>	·····		
Field Observations (turbidity, recharge rate, odo	r, sheens, PID/FID read	ings):				
						,
Purge Water Status (containerized & # of contai	ners, filtered and discha	arged, w/ disch	arge location):			
Comments:			0-14.	Duo		
		וח	r = /// ·	- 7		
I MAN. MAZ						
$\square D(-1, 1, 1)$						

	Forensic I	Environme	ntal.Servi	ces, Inc.			
1		Well Sampli	ing Form	~			
I will al.				o(2)			
0/14/00			Compler	Bryan Hache	la		
ate: // //		SCDD Warma	Sampler.	Wayne, New Je	Sev		
roject/Site: 1		SQL ayne		11 a), 7			
		inches	Casing Materi	al:	PVC		
her Casing diameter:		menea	<u>oum</u> g				
Vealner Conditions.		maa					
Total Depth of Well (from ton inner ca	sing):				feet		
Nenth to Water (DTW) (from top inner	casing)	$\gamma$			feet		
Vell Screened Interval:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	71			feet		
inear feet of water in well:							
s DTW included in a complete round	of pre-sampling	synoptic water	level measurer	nents?		yes	no
hickness of floating product (if any):		None			feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pump		ירסי כו כד		Durge Data (co	(minute).		
Purge Start Time: 1513	collogo	Furge End 1 im	°.  547	i nige ivaie (ga	iorininaioj.		
otal Volume Purged:	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1530	702	~ 1	1 59	ms4	-776	891	
	1.42	164	6.51	0.01	27.5	0.71	
3 3 Minutes:	7.91	810	6.59	0.10	-26.0	8.72	
<b>3</b> 6 Minutes:	807	538	6.60	0.67	-37.0	8.92	
<b>2</b> 9 Minutes:	021	637	110	05/0	-42.7	8.92	
lles et al	8.23	0.7	6.0	0.50	-452	G (12	
ul 2 Minutes:	8.61	810	6.60	0.50	13.5	000	
Q15 Minutes	8.40	881	6.61	0.30	-46.2	3:12	/
18 Minutes	640	689	Valal	0.48	-4:5	3:921	
★1 Minutes	3.10	001	prove -				
· jer windles	·				+		
g4 Minutes	:						
27 Minutes	:						
30 Minutes							
33 Minutes	S:	1/ 20/	+/- 0.1	+/- 10%	+/- 10 my		4
Stabilization Kat	<u>cp</u>	-7-370	17-0.1				
Sampling Method. Low 100	$q \rightarrow$	Sampling En	d Time:	50			
0/3·7		-					
Field Observations (turbidity, rechar	ge rate, odor, sl	heens, PID/FID	readings):				
Purge Water Status (containerized &	& # of container	s, filtered and d	ischarged, w/ c	lischarge locatio	n):		
Purge water was processed through	a 5-gallon carb	on bucket and d	ischarged to th	ne surface adjace	nt to the well.		
Comments:							
Commonds.					<u> </u>	And Contract Contractor	
			0	1.1 ~ -	723		
1 MP-15:	/X/		MP	16:	1. シー		
g . W	$\cdot \circ \cdot$			,			

		Forensic	Environm	ental Serv	rices, Inc.			
			Well Samp	ling Form	•			
	1,							
-2/14/0	06			Complant	Davon I. Mooh		,	
Project/Site:			SCPI-Warne	Location:	Wayne Mawh			
Well ID:	P-la		i <u>iiii, maj</u> ne	Location.				
Inner Casing diameter	:		inches	Casing Mater	ial:	PVC		
Weather Conditions:								
PID/FID reading from	well:		ppm					
Total Depth of Well (f	rom top inner c	asing):				feet		
Depth to Water (DTW	) (from top inne	r casing): ⊘	02			feet		
Well Screened Interva	1:	0-				feet		
Linear feet of water in	well:							
Is DTW included in a	complete round	of pre-sampling	g synoptic water	level measurer	ments?		yes	no
Thickness of floating j	product (if any):		None			feet	Time:	
Description of floating	g product:		None					
r urge iviethod: Perista Purge Start Time:	1250		Purge End Tim	e.	Purge Rate (as	ls/minute).		
Total Volume Purged:	2	gallons	- area run run		i urge ivale (ga			
<u> </u>	<u></u>	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
		°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
	1305 Initial:	401	577	101	051	117 1	800	301
	12 Alimentary	0.01	210	0.21		100	0.00	e
	Minufies:	0.01	247	6.51	0.7/	-78.2	X.OZ	
	Minutes:	8.109	555	6.53	0.4/	-5/.6	8.02	
	14 Minutes:							TAR
RESTART	15 Minutes							5/00
1405				100	A //	111.0		
1410		8.01	604	6.34	61/4	-46.5	8.01	
านไป		8.19	1003	6.58	0.79	-50.7	8.03	
1117	26 Minutes:	8.14	611	157	050	510	\$03	
14.7	261	0 10	1011	6	0.50	011-	0~/	2
		8.28	604	6.51	0.50	-)4.6	8.03	
	C23Minutes.	8.18	612	6.57	0.52	-56.0	5.03	+
	) Minutes:	070	1.17	1.50	650	-570	ECRI	
	33 Minuteer	<u>o.                                     </u>	1010	10.20	<u> </u>	01-1	1	
C4	abilization Data		+/ 20/	+/ 0.1	+/ 100/	+/ 10 mm		
Sampling Method: Lo	ow Flow	1	1 7- 370	τ/- 0.1	<u> </u>	1. 17-10 mV		L
Sampling Start Time:	11177		Sampling End	Time:],17	Q V			
	1761		_	172	1			
Field Observations (tu	urbidity, recharg	e rate, odor, she	eens, PID/FID re	eadings):				
Purge Water Status (c	containerized &	# of containers,	filtered and disc	charged, w/ dis	charge location)	):		
Purge water was proc	essed through a	5-gallon carbor	n bucket and disc	charged to the	surface adjacent	t to the well.		
Comments:	0.01-0	^					····	
10	(UFI)	DINA #	-0	12	2n -	1	INC	
		r 7100	a	120		7 ['	700	

	Environmo Well Sampl	ental Servi ling Form	ces, Inc.			
,	•	0	20			
2/11/1/			1/5	1.		
e: 2/17/00		Sampler:	Bryan J. Machel			
ject/Site:	SGPP, Wayne	Location:	wayne, new le			
11 ID: ////-/	inches	Cecino Materi	al·	PVC		
er Casing diameter:	menes	Casing Materi	u1.			
ather Conditions:	מממ					
(a) Depth of Well (from top inner casing):	- 0			feet		
pth to Water (DTW) (from top inner casing):	10			feet		
ell Screened Interval:				feet		
near feet of water in well:						120
DTW included in a complete round of pre-sampling	g synoptic water	r level measure	ments?	faat	yes Time:	110
ickness of floating product (if any):	None			leet	j mio.	
scription of floating product:	None					
rge Method: Peristanic pump	Purge End Tin	ne:1507	Purge Rate (ga	ls/minute):		
tal Volume Purged: 140 2.25 gallons		1		<u> </u>		
Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
c °C	(µs/cm)	(pH units)	(ppm)			
1447 initial: 7.95	367	6.57	021	51.3	1.1/	
11 \$ Minutes: 7.15	372	6.58	0.21	49.4	7.71	
A Minutes 773	200	10.00	a 22	35.10	7.71	
Su Minutes. 7.72	15/18	10.07	0.20	272		
59(Minutes: 7.6/	418	6.01	V.L	100	1. 11	9
512/Minutes: 7,24/0	437	6.73	0.Z/	12.6	7.73	
Minutes: 72/	450	10.77	6.26	4.8	7.71	
Medinutes 720		1.00	0 24	-14	7.72	
15° Jimaies. 1.38	460	0.00	0.20	20	istrict in	
abMinutes: 7.40	412	6.82	0.20	-2.0	1.10	ſ
O St Minutes:						
27 Minutes:						
30 Minutes						
						1
33 Minutes:		+/ 0 2	+/- 10%	+/- 10 mv		-
Stabilization Rate	+/- 3%	V V	V	-		
Sampling Start Time:	Sampling E	nd Time: 13	10			
1.30 /			· /			
Sampling Start Time: 1307 Field Observations (turbidity, recharge rate, odor, s	Sampling Ei	preadings):	9			
	re filtered and	lischarged w/	lischarpe locatio	n):		
Purge Water Status (containenzed & # of container Purge water was processed through a 5-gallon cart	on bucket and	discharged to th	ne surface adjace	ant to the well.		
Turge water was processed in a grant g						
	150					
Al non V/ or 1'	430				*******	
Comments: Award PN 7						
Comments: Adjustice Phy Phy	70		^ ~			
Comments: Augustus program	78	ML	270.	7.81		
Comments: Adjustice program	78	MF	20:	7.8/		<u></u>
Comments: Adjustice program Pr	78	MF	220:	7.81	7	<u></u>

	Forensic E	Invironme	ental Servi	ices, Inc.			
		Well Sampli	ing Form				
	1			nP			
4	0		Sampler:	Bryan J. Machel	lla		
3:		GPP Weyne	Lecation:	Wayne, New Jer	rsey		
lectione:						1	
ar Casina diameter:		inches	Casing Materi	al:	PVC		
ather Conditions'		l					
VFID reading from well:		ppm					
al Depth of Well (from top inner cas	ing):				feet		
oth to Water (DTW) (from top inner	casing): 9./	4			feet		
Il Screened Interval:	/				feet		
near feet of water in well:							
DTW included in a complete round c	of pre-sampling :	synoptic water	level measurer	ments?		yes	no
ickness of floating product (if any):	1	None			feet	I ime:	
scription of floating product:	ر	None					
rge Method: Peristaltic pump		Dunne E- 4 Ti	171	Durge Rate (09	ls/minute):		
rge Start Time: 10 7 5	arallone	rurge End 1 m	···// //	i uigo itato (ga			
tal Volume Purged:	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
, .	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1105	1111	OTA	1 71	a 111	-0/1-	918	2
	14.69	010	6.11	0.71	01.0	171	
<b>O</b> SMinutes:	14.61	815	6.74	0.38	-85.0	9.21	/
Minutes:	14.72	\$13	6.75	6.34	-88.7	4/12/	
Minutes:	11170	017	1. 71-	033	272	× 4. C/	
joininuos.	19.14	012	0.10	0.02	9124	021	
112 Minutes:	1-1.19	810	0.11	0.32	-75.1	17.0	
J 179 Minutes:	14.80	212	6.77	6.33	-94.0	1.00	
178 Minutes:	1 1			T -			
							1
120 <sup>Minutes:</sup>		<u> </u>					-
24 Minutes:							-
27 Minutes							
30 Minutes.							1
33 Minutes	:				1/ 10 may		4
Stabilization Rate	÷	+/- 3%	+/- 0.1	+/- 10%	+/- 10 111	1	
Sampling Method: Low Flow	1100	Samulang Fin	nd Time		V		
Sampling Start Time	1120	Samping Di	la i my		•		
Field Observations (turbidity, rechar	ge rate, odor, sh	eens, PID/FID	readings):				
	-						
	<u> </u>	Elfored and d	iccharged w/	discharge locatio	on):		
Purge Water Status (containerized &	a 5-gallon carbo	on bucket and d	lischarged to th	he surface adjace	ent to the well.		
Durge motor was proceed through	a barron curbo			<u>.</u> .			
Purge water was processed through							
Purge water was processed through							
Purge water was processed through							
Purge water was processed through				<u></u>		<u></u>	
Purge water was processed through							

		Forensic I	Environme	ntal Servi	ices, Inc.			
			Well Sampli	ng Form				
	_11				$\cap 2$			
<b>0</b> +	- ZIIL	5		Sampler:	Blyan Machel	la		
e:			SGPP, Wayne	Jocation:	Wayne, New Jo	scy		
il ID.	nO-11							
er Casing diameter:			inches	Casing Materi	al:	PVC		
eather Conditions:								
D/FID reading from	well:		ppm					
tal Depth of Well (fr	om top inner ca	sing):				feet		
pth to Water (DTW	) (from top inner	casing):	7			feet		
ell Screened Interval	:	φ.	C			feet		
near feet of water in	well:				_			
DTW included in a	complete round	of pre-sampling	synoptic water	level measure	ments?	<b>C</b> /	yes	no
ickness of floating p	product (if any):		None			icet	I mie.	
scription of floating	product:		None					
rge Method: Perista	ltic pump	-	Dunce End Tim	1705	Purce Rate (09	ls/minute):		
rge Start Time:		anilons	rurge End 11m	100	i uige Maie (ga			
stal Volume Purged	- 2.4	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
	_	°C	(µs/cm)	(pH units)	(ppm)	· (mV)	Water (ft)	
	1146 Juitin	12 01	20-	170	291	-3012	10 00	•
	i innai.	15.71	105	6.33	20	201	10.00	/
	<b>U</b> 3 Minutes:	1391	783	6.36	2.41	-2016	10.04	
	6 Minutes:	13.77	777	6.35	281	-28.3	005	
	<ul> <li>Ninutes:</li> </ul>	UT NI	510	1,22	2-11	-719	1000	-
	U = Minutes.	14.00	103	1. 22	280	-241	KAD	
	$\mathcal{G}_2$ Minutes:	14.00	751	9.36	2.50	C1.0	00	
	15 Minutes:	14.06	735	6.31	4.38	-200	10.08	
	18 Minutes	14.06	715	630	226	-11.7	10ha	
	All Minutes	111 11	702	630	120	11-7		
1	201 Minutes	14.04	103	0.00	200	195	Inp	. /
	<sup>4</sup> Minutes	14.00	109	6.30	(.3)	-/20	10.0	4
ļ	7 Minutes	:						ľ
			+					
	30 Minutes	••						1
	33 Minutes	s:				1/ 10		-
	Stabilization Rat	e	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		<u> </u>
Sampling Method:	Low Flow		Sompling Fn	d Time: 17				
Sampling Start Time	1205		Sampning En		07			
Field Observations	turbidity, recha	rge rate, odor, s	heens, PID/FID	readings):				
Field Observations	(1110/01/),	8						
	-	-		·	discharge locatio	<u>, , , , , , , , , , , , , , , , , , , </u>		
Purge Water Status	(containerized &	& # of container	s, filtered and d	ischarged, w/	he surface adjace	ent to the well.		
Purge water was pr	ocessed through	a p-ganon carb	on oucket and t	naonai gou io i	*			
Comments:								
Comments:		<u></u>					j.	

Fo	orensic Environme	ental Serv	ices, Inc.			
	Well Sampl	ing Form		$\cap$	7	
2/16/06				145		
ite:		Sampler:	Bryan J. Machell			
oject/Site: MO 17	SGPP, Wayne	Location:	Wayne, New Jer	sey		
ell ID: mp-) C			• • • •			
ner Casing diameter:	inches	Casing Mater	ial: P	· v C		
eather Conditions:						
D/FID reading from well:	ppm		f	eet		
otal Depth of Well (from top inner casing)			ſ	èet		
epth to Water (DTW) (from top inner cash			ſ	eet		
ell Screened Interval:						
DTW included in a complete round of pr	e-sampling synoptic water	level measure	ements?		yes	no
bickness of floating product (if any):	None		t	feet	Time:	
escription of floating product:	None					
urge Method: Peristaltic pump		10-0				
urge Start Time: 1275	Purge End Tim	1e:[257]	Purge Rate (gal	s/minute):		
otal Volume Purged:	gallons	H.	Diss Oxygen	Redox	Depth to	
[ 10]	°C (us/cm)	(nH units)	(ppm)	(mV)	Water (ft)	
12110				121	(f)	7
Continitial:	5.04 465	6.66	0.40	70.0	2	/
<b>4</b> 3 Minutes: <b>1</b>	310 754	6.08	0.37	-640	1-12	
d 6 Minutes:	LOS 143	66	0.27	- 646	9.19	
	1.00 (122)	1 50	1001	ICL		
U 9 Minutes.	3.18 122	6.10	V.30	620	010	
S12 Minutes:	3.18 421	6-11	0.35	65.8	4.14	
5 Minutes:	220073	6.70	1.35	-Ida I		
Ka Minutes:	3.11070	6.72	AZK	-Un In	12:00	
	51110	- 0.72		- 40.V		
301 Minutes:		_				
30 <sup>4</sup> Minutes:					+	
27 Minutes:						
30 Minutes						
, 30 Minutes,						1
33 Mmutes:		+/ 01	+/- 10%	+/-10 mv		-
Stabilization Rate	+7- 370	1/20.1	1 1/- 10/0	1 1 10 111		
Sampling Start Time: 1	Sampling Er	id Time:				
	·					
Field Observations (turbidity, recharge ra	ate, odor, sheens, PID/FID	readings):				
Purge Water Status (containcrized & # o	f containers, filtered and d	ischarged, w/	discharge location	n):		
Purge water was processed through a 5-	gallon carbon bucket and o	lischarged to t	he surface adjace	nt to the well.		
Comments						
	}			1		
	$n \cap \neg$	ſ	ND.	- 1		
Dane ()	$\mu - 2$	•	mc-i	>		

•

Forensic Environmental Services, Inc.						
Well Sampling Form						
1-1-1-1	$\rho \rho$					
7/15/01	Complex Hypella					
Date:	Sampler: Biyan Amachena					
Project/Site: SGPP, wayne	Location. • Wayne, Hern Here's					
Well ID: inches	Casine Material: PVC					
Inner Casing diameter:						
PID/FID reading from well:	n					
Total Depth of Well (from ton inner casing):	feet					
Depth to Water (DTW) (from top inner casing):	feet					
Well Screened Interval:	feet					
Linear feet of water in well:						
Is DTW included in a complete round of pre-sampling synoptic wate	r level measurements? yes no					
Thickness of floating product (if any): None	feet Time:					
Description of floating product: None						
Purge Method: Peristaltic pump	mail 102 Durge Rate (gals/minute).					
Purge Start Time: 1429 - F Purge End In						
Temperature Spec. Cond.	pH Diss. Oxygen Redox Depth to					
°C (μs/cm)	(pH units) (ppm) (mV) Water (ft)					
1435 Initial 11 12 1 20	709 1.46 22.4 9.72					
10, 11, 10, 10, 10, 10, 10, 10, 10, 10,	7.07 170 182					
Se Minutes: 11.21 666	1.0/ 1.10 10.8					
4/6 Minutes: 11.12 6010	7.01. 3.20 21.8 9.14					
14 Minutes: 11-13 601	7.043.00 12.6					
17 Minuter 41 00 0 50	270300142 4.97					
12 Minutes. 11. 08 65 2	100 - 112 - 211					
$50^{\text{Minutes:}}$ //. 03 58/	6.18 0 4.00 24.1					
53 Minutes: 10.98 <660	6.97 4.67 25.1 (18)					
F11 Minutes: 10 95 512	6.90 179257 1.83					
	10 415 219 981					
50 Minutes. 11-06 361	0.90 1.05 21.7 1.04					
1502 Minutes: 11.0( 55()	6.45 A.19 D.C 4.84					
Minutes:						
33 Minutes:						
Stabilization Rate +/- 3%	+/- 0.1 +/- 10% +/- 10 mv					
Sampling Method: Low Flow						
Sampling Start Time: Sampling E	nd Time: 505					
	) readings):					
Field Observations (turbidity, recharge rate, odd), sheens, i turn te	, loudings).					
Purge Water Status (containerized & # of containers, filtered and	discharged, w/ discharge location):					
Purge water was processed through a 5-gallon caroon-outeker and dischargence the sinace adjuster to the west						
- IN other and Addition						
	S MMMA					
Comments:						
	9.26					
1) - 4 - 10 - 10 - 10						
L	Well Sampli	ing Form	,			
---	---------------------------------	------------------	------------------	----------------------	------------	----------
$1 \rightarrow 1$			NR			
2/15/06		Sampler: I	Bryan J. Machel	lla		
I/Site:	SGPP, Wayne	Location: 🔎	Vayne, New Jei	isey		
$D: \qquad n = n = 10$		O i Mataria	1.	PNC		
Casing diameter:	inches	Casing Materia	1: 1	FVC		
ID reading from well:	ppm					
Depth of Well (from top inner casing	):1		:	feet		
to Water (DTW) (from top inner cas	ing):			feet		
Screened Interval: r feet of water in well	·					
W included in a complete round of p	re-sampling synoptic water	level measuren	nents?		yes	no
ness of floating product (if any):	None			feet	lime:	
iption of floating product:	None					
e Start Time: 1345	Purge End Tim	e:	Purge Rate (ga	ls/minute):		
Volume Purged:	gallons	На	Diss. Oxvgen	Redox	Depth to	
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
140 Qnitial: 1	095 1093	7.32	4.32	111. Z	11.58	8
1473 Minutes:	107, 1092	737	4.13	114.4	12.57	7
A Minutes: //	1.01 1004	7 32	400	115.6	13.23	\$
A 9 Minutes: 1	13 1004	727	401	118 0		
19 0 9 Minutes: 11	$\frac{1}{1}$	1.70	14.01			-   .
12 Minutos.		$\Lambda - /$	$\backslash$	$\lambda$	1/t	
14 15 Minutes:	$- \mathbf{q} \cdot \mathbf{v}$	$+ \vee -$		$+$ $\checkmark$ $-$		Ī
18 Minutes:			1			
21 Minutes:						-
24 Minutes:						-
27 Minutes:						4
30 Minutes:						-
33 Minutes:			100/	+/ 10 mv		4
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
npling Start Time: 13/	Sampling En	d Time:				
J / / recharge	rate odor sheens PID/FID	readings):				
In Observations quiptinty, recharge						
rge Water Status (containerized & #	of containers, filtered and d	ischarged, w/ d	ischarge locatio	on):		
rge water was processed through a 5	-gallon carbon bucket and c	lischarged to th	e surface adjace	ent to the well.		
		£	0		: 	
omments:	$\sim$	,40	19-			
Pull	w/r	/ /	'			
Ing	$\Lambda \subseteq$	ML	1-13:	5.93		
	<u> </u>		<u> </u>			
1 1 1						

Forensic Environmental Services, Inc.									
		wen Samp	ling Form						
2/14				00					
Date:			Sampler:	Bryan Mache	lla				
Project/Site:	SOL	P - New Haven	Location: -	New Haven (					
Well ID: MP-17	·····								
Inner Casing diameter:		inches	Casing Materi	al:	PVC				
Weather Conditions:			1						
Total Depth of Well (from top inner cas	ing):				feet				
Depth to Water (DTW) (from top inner	casing): 🔗 🕹	12			feet				
Well Screened Interval:					feet				
Linear feet of water in well:									
Is DTW included in a complete round o	f pre-sampling sy	noptic water lev	el measuremen	nts?		yes	no		
Thickness of floating product (if any):		None			feet	Time:			
Description of floating product:		None							
Purge Method: Peristaltic pump		o		~ ~					
Total Volume Purged: 1		Purge End Time		Purge Rate (gal	s/minute):				
		Spec Cond	nH	Disc Ovugen	Dedev	Donth to	1		
	°C	(us/cm)	(nHunite)	DISS. OXYgell	(mV)	Water (ft)			
1/3 Amitial	1010	020		(ppin)		water (11)			
	10.15	100	1.07	0.57	-161.4	8.49	:		
//33 Minutes:	10.04	942	6.17	0.34	-121.2	8.49			
<b>3</b> 6 Minutes:	999	944	6.89	0.31	-1214	\$50			
3 9 Minutes:	9.57	941	1.85	041	-1160	650			
$\mathcal{U}_{12 \text{ Minutes:}}$	1000	<b>a</b> 41	1.84	0.33	-115 5	6.50			
$U_{5 \text{ Minutes:}}$	1001	049	401	027	~100		/		
L 8 Minutes:	10.01	9///	0.8	0.52	11.0	8.50	Luna		
21 Minutes:									
24 Minutes.									
24 Millutes.									
27 Minutes:									
30 Minutes:									
33 Minutes:									
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv				
Sampling Method: Low Flow Sampling Start Time: //46	rate odor sheep	Sampling End 7	Fime: 114	2					
Purge Water Status (containerized & #	of containers, filt	ered and dischar	rged, w/ discha	rge location):					
Black Dollar	MIN	Us; drog	lene, c	AC.		1990			
commonto.									
VP-1: - V	p.2:-	••••	NA	西北	mp-14:	7.96			

Sample: Bryant Machella VV scripte: Scripte: Market Location: Wayne, New Jeney. D: $MP-1/8$ Casing dameter: inches Casing Material: PVC Casing dameter: inches Casing Material: PVC ther Conditions: FID reading from well: ppm Depth of Well (from top inner casing): P42 feet a feet of water (DTW) (from top inner casing): P42 feet a feet of water in well: TW included in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product: None feet Time: Wincluded in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product: None feet Time: Wincluded in a complete round of pre-sampling synoptic water level measurements? Well (from top inner casing): None feet Time: Wincluded in a complete round of pre-sampling synoptic water level measurements? Well (from top inner casing): None feet Time: Water (fi) Water (fi) Wa	Sampler: Bryan J. M E Location: Wayne, N S Casing Material:	Aachella // //	
et/Site: SCIP_Wayne Location: Wayne How Jackey The model of the sector of the secto	s Casing Material:	DVC	
D: $1112 - 128$ inches Casing Material: PVC Casing diameter: inches Casing Material: PVC inches Casing form well: ppm Depth of Well (from top inner casing): $3.42$ feet Screened Interval: feet ar feet of water in well: None feet Time: reasons proptic water level measurements? yes no kness of floating product (if any): None feet Time: response for the feet of the form of floating product (if any): None feet Time: response for the feet of the feet of the feet of the feet of floating product (if any): None feet Time: $1222$ gallons Purge End Time: $1222$ gallons Purge End Time: $1122$ Purge Rate (gals/minute): it volume Purged: $11222$ gallons $112222$ gallons $1122222$ gallons $1122222$ gallons $1122222$ gallons $1122222$ gallons $1122222$ gallons $1122222$ gallons $112222222$ gallons $11222222$	s Casing Material:	DVC	11
Casing drameter: Inclus Classing Matchine in the second item is inclus. Casing Matchine in the conditions: Inclus Classing Matchine in the second item is inclused item is inclused in the second item is inclused item is inclused in the second item is inclused item item is inclused item item is inclused item item item item is inclused item item item item item item item item		PVC	
her Conditions: FDD reading from well: ppm IDepth of Well (from top inner casing): D, 41/2 feet IS created Interval: feet a feet of water (DTW) (from top inner casing): D, 41/2 feet IS created Interval: feet a feet of water in well: TW included in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product: None feet Time: We included in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product: None feet Time: We included in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product: None feet Time: We float = firstillic pump ge Start Time: /04 5 / 2 / gallons I / 04 5 / 2 / gallons I / 04 5 / 2 / gallons I / 05 / 4 / 7.4 5 / 4 / 5 / 7.2 2 / .8 / 3 9.3 8 .4 / 2 //06 Minutes: II.7 0 5 / 4 / 7.2 1 / .9 / 6 / 4 / 7.6 / 8 .4 / 2 //0 6 Minutes: II.7 0 5 / 4 / 7.2 1 / .9 / 6 / 4 / 7.6 / 8 .4 / 2 //0 6 Minutes: II.7 0 5 / 4 / 7.2 / .9 / .9 / 5 / 8 .5 .4 / 4 //1 2 Minutes: II.7 0 5 / 4 / 7.1 / 9 / 5 / 8 .5 .4 / 4 //1 2 Minutes: II.7 0 5 / 4 / 7.1 / 9 / 7 5 / 8 .5 .4 / 4 //1 2 Minutes: II.6 / 5 / 4 / 7.1 / 9 / 7 / 6 / 6 .3 / 8 .4 / 4 //1 2 Minutes: II.6 / 5 / 4 / 7.1 / 5 .2 / 9 / .4 .3 / 8 .4 / 4 //1 2 Minutes: II.6 / 5 / 4 / 7.1 / 5 .2 / 9 / .4 .3 / 8 .4 / 4 //2 / Minutes: II.6 / 5 / 4 / 7.1 / 5 .2 / 9 / .4 .3 / 8 .4 / 4 //2 / Minutes: II.6 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 .3 / 8 .4 / 4 //2 / Minutes: II.5 / 5 / 4 / 7.1 / 5 .2 / 7 / 6 / 6 / 6 / 6 / 6 / 6 / 6 / 6 / 6			
The real problem from terms and the set of	n		
h to Water (DTW) (from top inner casing):       8.42       feet         IS creened Interval:       feet         ar feet of water in well:       yes         TW included in a complete round of pre-sampling synoptic water level measurements?       yes       no         writes of floating product (if any):       None       feet       Time:         ription of floating product       None       feet       Time:       no         ge Method:       Peristatic pump       Purge End Time:       Purge Rate (gals/minute):       no         id volume Purged:       2.2       gallons       Purge End Time:       Purge Rate (gals/minute):         1       1       1       7.4       5.45       7.22       1.8       9.3       8.47         1/03 Minutes:       11.70       5.45       7.21       1.916       47.6       9.42         1/0 9 Minutes:       11.07       5.43       7.20       1.97       6.6.3       8.444         1/12 Minutes:       11.07       5.42       7.19       1.87       6.6.3       8.444         1/12 Minutes:       11.07       5.44       7.15       2.17       7.6.0       9.444         1/13 Minutes:       11.170       5.44       7.15       2.17       7.6.		feet	
IScreened Interval:       C. T		feet	
ar feet of water in well: TW included in a complete round of pre-sampling synoptic water level measurements? yes no kness of floating product (if any): None feet Time: Time: None Purge End Time: // 25 Purge End Time: // 26 Purge Rate (gals/minute): Temperature Spec. Cond. pH Diss. Oxygen Redox Depth to (µs/cm) (pH units) (ppm) (mV) Water (ft) // 74 545 7.22 /.87 3.9.3 8.472 //03 Minutes: 1/03 Minutes: 1/04 Minutes: 1/04 Minutes: 1/04 Minutes: 1/05 Minutes: 1/05 Minutes: 1/05 Minutes: 1/05 Minutes: 1/05 Minutes: 1/105 M		feet	
TW included in a complete round of pre-sampling synoptic water feel massionnents:         where so floating product:       None       feet       Time:         ription of floating product:       None       feet       Time:         ge Method:       Peristaltic pump get       Purge End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get End Time:       Purge Rate (gals/minute):         11 Volume Purged:       Yer get Time:       Yer get Time:         10 9 Minutes:       Yer get Time:       Yer get Time:         11 Purge Set	r lovel measurements?	ves	no
Knose       None         eription of floating product (I) any).       None         peription of floating product (I) any).       None         ge Method: Peristalic pump       Purge End Time: // 25       Purge End Time: // 25         gellons       Temperature       Spec. Cond.       pH         1 / Okukl:       //.74       54/5       7.22       /.87       39.3       8.42.         1//03 Minutes:       //.74       54/5       7.22       /.87       39.3       8.42.         1//03 Minutes:       //.74       54/5       7.22       /.87       39.3       8.42.         1//04 Minutes:       //.74       54/5       7.22       /.97       5.42         1/06 Minutes:       //.77       54/3       7.20       /.99       52.7       8.44         1/12 Minutes:       //.1.69       54/3       7.18       /.97       66.3       8.44/         1/15 Minutes:       //.1.69       54/3       7.18       /.97       66.3       8.44/         1/18 Minutes:       //.57       54/4       7.15       2.17       7/6.0       2.44         1/21 Minutes:       //.57       54/4       7.15       2.17       7/6.0       2.44         1/27 Mi	er level measurements:	feet Time:	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			
Purge End Time: // 29 Purge Rate (gals/minute): al Volume Purged: $2.25$ gallons Temperature Spec. Cond. pH Diss. Oxygen Redox Depth to (µs/cm) (pH units) (ppm) (mV) Water (ft) // $2.25$ (µs/cm) (pH units) (ppm) (mV) Water (ft) // $2.15$ (µs/cm) (µs/cm) (mV) Water (ft) // $2.15$ (µs/cm)	-6		
I Volume Purged: $2.25$ gallons       gallons       pH       Diss. Oxygen       Redox       Depth to $1$ $1$ $1$ $1$ $74$ $545$ $7.22$ $1.87$ $39.3$ $8.412$ $1/03$ Minutes: $11.70$ $545$ $7.22$ $1.87$ $39.3$ $8.412$ $1/03$ Minutes: $11.70$ $545$ $7.22$ $1.916$ $417.6$ $5.422$ $1/06$ Minutes: $11.77$ $543$ $7.20$ $1.994$ $47.6$ $5.422$ $1/06$ Minutes: $11.77$ $543$ $7.20$ $1.994$ $52.78$ $433$ $1/09$ Minutes: $11.77$ $543$ $7.20$ $1.997$ $58.5$ $8.444$ $1/12$ Minutes: $11.77$ $542$ $7.19$ $1.87$ $62.1$ $8.444$ $1/15$ Minutes: $11.67$ $5443$ $7.18$ $1.97$ $66.3$ $8.444$ $1/121$ Minutes: $11.57$ $5444$ $7.15$ $2.19$ $74.3$ $8.444$ $1/24$ Minutes: $11.58$ $5422$ $7$	me://79 Purge Ra	te (gals/minute):	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	pH Diss. Ox	ygen Redox Depth	to
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(pH units) (ppm	n) (mV) Water (	(ft)
$\frac{11.77}{11.70} = \frac{17.74}{7.21} = \frac{17.7}{7.21} = \frac{17.07}{7.21} = \frac{17.07}{7.21} = \frac{17.0}{7.00} = \frac{17.12}{7.12}$ $\frac{110}{100} = \frac{11.77}{100} = \frac{545}{7.21} = \frac{17.9}{7.90} = \frac{17.0}{2.78} = \frac{17.7}{8.43}$ $\frac{110}{100} = \frac{11.107}{11.20} = \frac{547}{7.12} = \frac{17.9}{7.19} = \frac{17.9}{7.97} = \frac{58.5}{8.44}$ $\frac{11.100}{11.100} = \frac{547}{7.19} = \frac{7.19}{7.19} = \frac{17.9}{7.19} = \frac{54.7}{7.19} = \frac{17.9}{7.19} = \frac{54.7}{7.19} = \frac{17.9}{7.19} = \frac{17.12}{7.19} = \frac{17.12}$	777 18	739384	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	122110	1 101 0.1	7
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.611.9	6 41.6 2.4	12
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.20 1.40	4 52.78.7	3
$\frac{11}{12 \text{ Minutes:}} = \frac{11.70}{1.5 \text{ Minutes:}} = \frac{11.70}{1.69} = \frac{5472}{7.19} = \frac{7.19}{1.87} = \frac{52.1}{66.3} = \frac{544}{11.69} = \frac{543}{7.18} = \frac{7.19}{1.97} = \frac{52.1}{66.3} = \frac{544}{11.697} = \frac{5472}{7.19} = \frac{7.19}{7.19} = 7.1$	7.191.9	7 585 8.44	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.19 1.8	7 67.1 8.44	/
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	71819	711384	4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7 - 10 7.7	14 767 64	14
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 1. No C.	$\frac{11}{10}$ $\frac{10.1}{3}$ $\frac{11}{3}$	
124 Minutes:       11.58       542       7.15       2.17       76.0       5.04       1         127 Minutes:       30 Minutes:       30 Minutes:       33 Minutes:       33 Minutes:       33 Minutes:       33 Minutes:       33 Minutes:       33 Minutes:       34 Minutes:       35 Minutes:       36 Minutes:       36 Minutes:       37 Minutes:       37 Minutes:       38 Minutes:       38 Minutes:       39 Minutes:       30 Minutes:	1.15 2.1	19 14.3 8.4	9
11 27 Minutes:	2 7.15 2.1	7 76.0 8-00	14
30 Minutes:			
33 Minutes:	·		
Stabilization Rate     +/- 3%     +/- 0.1     +/- 10 mv       umpling Method: Low Flow umpling Start Time:     Impling End Time:     //27			
umpling Method: Low Flow umpling Start Time: 1/25 Sampling End Time: //27 El Ol	+/- 0.1 +/-	10% +/- 10 mv	
ampling Start Time: 1/25 Sampling End Time: //2/			
I Classica ( - Lidio, moheree rate odor sheeps PID/FID readings):	End Time:		
	D readings):		
		ocation):	
eld Observations (turbicity, recharge rate, odor, sheens, ribh h		er level measurements? me: $1179$ Purge Ra pH Diss. Ox (pH units) (ppn 7.22 1.8 7.21 1.9 7.20 1.9 7.20 1.9 7.19 1.9 7.19 1.8 7.19 1.8 7.19 1.8 7.19 2.1 7.15 2.1 7.15 2.1 4.7.15 2.1 7.15 2.1 D readings):	feet feet feet feet feet feet $Time:me: // 25$ Purge Rate (gals/minute): me: // 25 Purge Rate (gals/minute): pH Diss. Oxygen Redox Depth (pH units) (ppm) (mV) Water ( 7.22 1.87 39.3 8.4 7.21 1.91 47.6 5.4 7.20 1.99 5 2.7 8.4 7.19 1.97 58.5 8.44 7.19 1.87 62.1 8.44 7.19 1.87 62.1 8.44 7.19 1.87 62.1 8.44 7.19 1.87 62.1 8.44 7.19 2.14 76.7 8.4 7.15 2.19 7.4.3 8.4 2 7.15 2.17 76.0 5.41 7.15 7.15 7.15 7.15 7.15 7.15 7.15 7.15

	Forensic Environ	mental Ser	vices, Inc.			
	Well Sa	mpling Form				
0/15				d4	2	
te: 2/15		Sampler:	Bryan I. Machel		/	
oject/Site:	SG <del>PP, Wa</del>	yne Location:	Wayne, New Je	rsey		
ell ID:	$n_{W} - 12$					
ner Casing diameter:	inc	hes Casing Mate	erial:	PVC		
eather Conditions:						
D/FID reading from well:	ina):	յու		feet		
anth to Weter (DTW) (from top inner cas	(asino): 7 14			feet		
ell Screened Interval:				feet		
near feet of water in well:						
DTW included in a complete round of	f pre-sampling synoptic w	ater level measur	rements?		yes	no
nickness of floating product (if any):	None			feet	Time:	
escription of floating product:	None					
urge Method: Peristaltic pump	D	Time: AACC	Purce Rate (ma	ls/minute)		
urge Start Time: 0723	eallons		i uigo ivaio (ga			
	Temperature Spec. Co	nd. pH	Diss. Oxygen	Redox	Depth to	
	°C (µs/cm	) (pH units	) (ppm)	(mV)	Water (ft)	
<b>O940</b> Initial:	804 1.0	57.04	1039	-77.9	-	
4 3 Minutes	0.01 000	2 702	2024	-21	717	
	7.06 688	1.05		-17.6 DIE	7,0	
<b>7</b> 6 Minutes:	8.37 610	4 1.00	2 0.30	813	7.77	
$\mathcal{U}_{9 \text{ Minutes:}}$	8.42 700	9 7.0Z	0.30	-81.5	1.17	
42 Minutes:	4912 1094	701	0.28	-87.5	7.18	
45 Minutes:	97517	0170	1078	-838	718	
	1.20 20-		0.20	010	75-1	
$3^{8 \text{ Minutes:}}$	9.20 10	/ 1.0/	0.28	-87.1	1.18 )	ſ
0 01 Minutes:						-
1004 Minutes:						
007 Minutes:						
						1
30 Minutes:						4
33 Minutes:			1/ 108/	1/ 10 may		-
Stabilization Rate	+/- 3	% +/- 0.1	+/- 10%	+/- 10 mV	1	<u> </u>
Sampling Method: Low Flow	2 Sampling	End Time: /	da			
	/	10	00			
Field Observations (turbidity, recharg	ge rate, odor, sheens, PID/I	FID readings):				
Purge Water Status (containerized &	# of containers, filtered ar	nd discharged, w	discharge locatio	n):	. <u></u>	
Purge water was processed through a	15-gallon carbon bucket an	nd discharged 10	the surface adjace	nt to the well.		
Comments:						
Comments.						
1						

Well Sampling Form         Well Sampling Form         and colspan="2">Sampler:         oject/Site:         SGPP, Wayne         Location:         ell ID:         MP-19         inches         casing diameter:         eather Conditions:         D/FID reading from well:       ppm         otal Depth of Well (from top inner casing):       7. 98         Peth to Water (DTW) (from top inner casing):       Peth to Water val:	Bryan J. Machella PB Wayne, New Jersey rial: PVC feet
te: 2/15/06 Sampler: ject/Site: SGPP, Wayne Location: ell ID: MP-19 her Casing diameter: inches Casing Mater eather Conditions: D/FID reading from well: tal Depth of Well (from top inner casing): 7.98 ppm ppm ppm ppm ppm	Bryan J. Machella Wayne, New Jersey rial: PVC feet
te: 2 15/06 Sampler: pject/Site: SGPP, Wayne Location: Ell ID: MP-19 her Casing diameter: inches Casing Mater eather Conditions: D/FID reading from well: tal Depth of Well (from top inner casing): 7, 98 ppm ppm ppm ppm ppm ppm	Bryan J. Machella Wayne, New Jersey rial: PVC feet
bject/Site: <u>SGPP, Wayne</u> Location: ell ID: <u>MP-/9</u> her Casing diameter: inches Casing Mater eather Conditions: D/FID reading from well: tal Depth of Well (from top inner casing): <b>7</b> . <b>98</b> ppm ppm ppm ppm ppm ppm	Wayne, New Jersey rial: PVC feet
ell ID: <b>MP-19</b> her Casing diameter: inches Casing Mater eather Conditions: D/FID reading from well: that Depth of Well (from top inner casing): <b>7</b> . <b>98</b> ppm ppm ppm ppm ppm ppm ppm pp	rial: PVC feet
ner Casing diameter: eather Conditions: D/FID reading from well: tal Depth of Well (from top inner casing): ppm ppm ppm ppm ppm ppm ppm epth to Water (DTW) (from top inner casing): ell Screened Interval:	rial: PVC feet
eather Conditions: D/FID reading from well: that Depth of Well (from top inner casing): 7. 78 Popth to Water (DTW) (from top inner casing): ell Screened Interval:	fcet
D/FID reading from well: tal Depth of Well (from top inner casing): <b>7</b> . <b>28</b> opth to Water (DTW) (from top inner casing): ell Screened Interval:	feet
tal Depth of Well (from top inner casing): pth to Water (DTW) (from top inner casing): ell Screened Interval:	feet
ell Screened Interval:	,
	feet
near feet of water in well:	
DTW included in a complete round of pre-sampling synoptic water level measure	ements? yes no
nickness of floating product (if any): None	feet Time:
escription of floating product: None	
Irge Method: Peristaltic pump	Purge Rate (gals/minute):
arge Start Time: C S S S S S S S S S S S S S S S S S S	, u.go .tato (gana error)
Temperature Spec. Cond. pH	Diss. Oxygen Redox Depth to
°C (µs/cm) (pH units)	) (ppm) (mV) Water (ft)
853 Initial: 0.02 930 7.0	3 4.38 99.1 7.98
(BMinutes: 903 873 707	3.52 148 8.01
901 Minutes: <b>A</b> 01 016 7.07	2.92 44.7 8.01
904 Minutes: C Q4 209 701	7 93 438 8.01
1017 Minutes: 0 95 9 700 701	237 709 801
9/10 Minutes: 5201 771 70	1709 732 8.01
9/3 Minutes: 7 91/ 71 9 7 0	1 7 14 211 8 08
0 Having 0 84 711 700	777717 6021
9 10 Minutes 8.86 169 1.00	6.20 21.2 8.03
<b>7/2</b> Minutes:	
27 Minutes:	
30 Minutes:	
33 Minutes:	
Stabilization Rate +/- 3% +/- 0.1	+/- 10% +/- 10 mv
Sampling Method: Low Flow	- 0
	$\alpha N$
Sampling Start Time: Sampling End Time:	4/7

7/18		Forensic <b>E</b>	<b>Invironme</b>	ntal Servi	ces, Inc.			
7/13			Well Sampli	ng rorm	~ /	)		
-///5					O(I)	/		
e. 6/15				Sampler:	Bryan Much	ella		
viect/Site:			SGPP, Wayne	Location:	Wayne, New J	ersey		
ell ID: Mh	7-19							
er Casing diameter:			inches	Casing Materi	al:	PVC		
eather Conditions:								
D/FID reading from well	:		ppm			<b>A</b>		
tal Depth of Well (from	top inner cas	ing):	1-1			feet		
pth to Water (DTW) (fro	om top inner	casing):	9/			feet		
ell Screened Interval:		/ ·	1			leet		
near feet of water in well	:	C		lovel measure	ments?		ves	no
DTW included in a com	plete round c	י pre-sampling	synoplic water	icver measurer	inents:	feet	Time:	
ickness of floating prod	JCI (11 any):	ر ۱	None				•	
escription of floating pro			Volic					
inge Start Time: 10	105-	/	Purge End Tim	1n21.	Purge Rate (g	als/minute):		
otal Volume Purged:	175	gallons				- n-J	Danth to	
	1-19	Temperature	Spec. Cond.	pH	Diss. Oxyge	n Redox	Water (ft)	
		°C	(µs/cm)	(pH units)	(ppm)	(mv)	water (It)	
14	129 Initial:	10.16	292	7.04	0.33	-67.3	1.98	
2	3 Minutes:	10 09	597	705	0.30	1-708		
-	Chlinutar	10.01	600	7.00	120	-774	798	
(	6 Minutes:	10.24	789	1.04	0.50	7 710	~10 ~10	
2	9 Minutes:	10.19	590	7.05	0.2	1-14.2	0.00	
-	2 Minutes:	10.30	589	7.010	0.27	1-74.7	8.00	
	5 Minutes	100	109	7.06	0 27	-744		and the second s
	<b>1</b>	10.65	201	1.05	0.61			
	<b>)</b> 8 Minutes:							
	1 Minutes:							
	24 Minutes:							
	07.16							
	27 Minutes:							
	30 Minutes:							
	33 Minutes	:						
	ilization Rate	2	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Stabi								
Stabi Sampling Method: Low	Flow							
Stabi Sampling Method: Low Sampling Start Time:	rlow		Sampling En		; 3 %			

Forensic Environmental Services, Inc. Well Sampling Form									
		C							
2/14/06		0	Y> 1 1 4 1	$- \bigcirc A$					
Date: / / /		Sampler:	Bryan J. Mache	++ KO					
Well ID: $D = 72$	- ILL - HOW FILVOH-		New Haven, CI						
Inner Casing diameter:	inches	Casino Materi	al·	PVC					
Weather Conditions:	monos	Cusing Materi		110					
Total Depth of Well (from top inner casing):	A			feet					
Depth to Water (DTW) (from top inner casing):	9.23			feet					
Well Screened Interval:	l l			feet					
Linear feet of water in well:									
Is DTW included in a complete round of pre-sa	mpling synoptic water lev	el measuremer	nts?		yes	no			
Thickness of floating product (if any):	None			feet	Time:				
Description of floating product:	None								
Purge Method: Peristaltic pump			<b>n n</b> (1						
Total Volume Purged: 7	Purge End Time		Purge Rate (gal	s/minute):					
Temp	erature Spec. Cond.	nH	Diss Oxygen	Redox	Depth to				
	C (us/cm)	(pH units)	(maa)	(mV)	Water (ft)				
1040 Initial: @	77 1110	772	7.54	122 8	0 71				
	1 460	1.30	1.86	133.8	9.20				
43 Minutes: 8	19 412	7.20	1.80	145.0	1.28				
46 Minutes: 8.3	512473	7.10	781	137.8	9.78				
$4_{9 \text{ Minutes:}} \checkmark$	112 4175	7.07	777	1111 7	0.70				
To Minute 57	76 7/5	7.07	1.13	146-2	Y-20				
	20 786	1.01	1.56	158.1	1.28				
$5^{5}$ Minutes: $8$ .	24 490	7.01	7.49	1621	1.28				
48 Minutes:	25 488	700	740	110108	170	1			
101 Minutes		1.00		1040	1-40	-			
// <b>0</b> 4 Minutes:									
27 Minutes:									
30 Minutes									
33 Minutes:									
Stabilization Rate		+/- 0.1	+/- 10%	+/- 10 my		]			
Sampling Start Time: 1058	Sampling End 7	<sup>Гіте:</sup> //0Ĉ		V					
Field Observations (turbidity, recharge rate, od	or, sheens, PID/FID readi	ngs):							
	Q.								
	- minun	M							
Purge Water Status (containerized & # of containerized & # of containeri	ainers filtered and discha	roed w/discha	ree location):						
	and dischal		age (deat(in)).						
Commonto									
	~								
-Well (m	+ 1 mer.	7							
	· · · · · · · · · · · · · · · · · · ·								
	U								

Forensic Environmental Services, Inc.									
		Well Sampli	ng Form						
<12/c/a									
Date: 700 4			Sampler:	Rvan Bower					
Project/Site:	Watervliet		Location:	Watervliet, NY					
Well ID: MARTIN									
Inner Casing diameter:		inches	Casing Materi	al:	PVC				
Weather Conditions:									
Total Depth of Well (from top inner casir	<sup>ng):</sup>	1			feet				
Depth to Water (DTW) (from top inner ca	asing): (/ C	1			feet				
Well Screened Interval:	Υ.				feet				
Linear feet of water in well:									
Is DTW included in a complete round of pre-sampling synoptic water level measurements? yes no									
Thickness of floating product (if any):					feet	Time:			
Description of floating product:									
Purge Start Time: 11 4 0		Purge End Time	1215	Duras Data (mal	distantia 6	$\Delta I$			
Total Volume Purged: <b>7</b>	gallons	Fulge End Time		Purge Rate (gai	s/minute):	· O Galr	$\sim$		
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Denth to			
	°C	(µs/cm)	(pH units)	(mad)	(mV)	Water (ft)			
1/55 Initial	12 00-	2011		A 27	DUC	027			
58	$\frac{1}{12}$	547	670	0.2	- 14.5	4.66			
Minutes:	12.02	401	6-11	6.36	- 16.6	0.9.21			
206 Minutes:	13.05	405	6-73	0.27	-78.2	8.23			
(209 Minutes:	12 19	416		1. 75	-710	0.72			
	12.07	11710	0.15	6.20		4.67			
	1204 Minutes: $13.03 - 729 - 4.16 - 0.07$								
Minutes:	12-96	427	6.76	0.23	-80.9	9.24			
7 18 Minutes:	12 97	424	1.71	0.72	-81.6	924			
17 1 Minutes	10.15	• •	<u>(9-1 %</u>	0.03		F.C.			
1 ZFQ									
24 Minutes:									
27 Minutes:									
30 Minutes:				····		+			
22 Minuton						+			
Stabilization Date									
Sampling Method: Low Flow		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv				
Sampling Start Time: / 24 4		Sampling End T	ime: 1215	<b>`</b>					
Field Observations (turbidity, recharge ra	te, odor, sheens, P	ID/FID readings):							
	, , , ,								
Purge Water Status (containarized & # of	containers filte	loud dis-1. 1							
in ange mater status (containerized & # 01	containers, Interec	and discharged,	w/ aischarge lo	ocation):					
Comments:		$\sim$	$\sim$						
		nP-2	΄	\					
	1 1	· /	1/121	5			:		
				· )					

Forensic Environmental Services, Inc.									
		Well Sampli	ng Form						
512/010									
Date:			Sampler:	Rvan Bower	······································				
Project/Site: W	atervliet		Location:	Watervliet NY		·			
Well ID: MP-6									
Inner Casing diameter:		inches	Casing Materia	al:	PVC				
Weather Conditions:	<u></u>		LU			······································			
Total Depth of Well (from top inner casing	):				feet				
Depth to Water (DTW) (from top inner cas	ing): $\eta \neg q$	I			feet				
Well Screened Interval:	1. / /				feet				
Linear feet of water in well:									
Is DTW included in a complete round of pr	e-sampling syno	ptic water level m	easurements?			yes	no		
Thickness of floating product (if any):					feet	Time:			
Description of floating product:									
Purge Method: Peristaltic pump			11 11			001			
Total Volume Purged: 7 0	collona	Purge End Time	:/60 (a	Purge Rate (gal	s/minute): () .	USg/M			
	Temperature	Spec Cond	рН	Diss Oxygen	Redox	Depth to			
	°C	(us/cm)	(nH unite)	(ppm)	(mV)	Weter (ft)			
1540	0.00	(μο/ σιτι)				water (II)			
	9.98	35 6	6.43	0.41	26.0	8			
3 Minutes:	9-98	369	6.44	0.36	22	8.01			
4 6 Minutes:	10.04	409	6-29	0.25	10-9	8.01			
U 9 Minutes:	10.03	458	1.52	0.23	-09	50.0			
512 Minutes:	10.02	483	1.53	0.24	-4.2	5.02			
35 Minutes:	4.99	501	6,53	0.23	-8.2	802			
Z18 Minutes:	9.99	518	6.55	0.21	-13.5	807			
<b>bd</b> 1 Minutes:	9.97	521	6.56	0.21	-14.6	50.8			
/6 <b>6</b> 4 Minutes:	9.43	577.	1.51	A 21	-152	8.02			
27 Minutes:			0.50	0.0.	1.5.				
30 Minutes:									
33 Minutes:									
Stabilization Rate	#	+/- 3%	+/- 0.1	+/ 10%	+/ 10 m)/				
Sampling Method: Low Flow		1 17 570	1/2 0.1	1 1/2 1078	1/- 10 IIIv				
Sampling Start Time: 1605		Sampling End T	<sup>ime:</sup> /606						
Field Observations (turbidity, recharge rate	, odor, sheens, P	ID/FID readings)	:						
		2,							
Purgo Water Status (containaviored & # of a	catain	1							
ruige water status (containenzed & # of c	ontainers, filtere	a and discharged,	w/ discharge lo	ocation):					
	······································								
Comments:									

S/C/Uly			1				
Project/Site	Wateruliet	······	Sampler:	Ryan Bower			
Well ID: $MP - 10$	waterviter		Location:	watervliet, NY		······	
Inner Casing diameter:		inches	Casing Materi	ial:	PVC		
Weather Conditions:							
Total Depth of Well (from top inner casi	ng):				feet		
Depth to water (D1W) (from top inner c	$\frac{\text{asing}}{2}$ 9.0	$\supset$			feet		
Linear feet of water in well:	1	/			feet		
Is DTW included in a complete round of	pre-sampling syno	ptic water level n	neasurements?			yes	no
Thickness of floating product (if any):					feet	Time:	
Description of floating product:							
Purge Start Time: // $\Delta O$		Purge End Time	:1/28	Purge Rate (gal	s/minute) 🔨	1.20	
Total Volume Purged: 1.5	gallons			<u>B</u> (Bui		. O s gum	
	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	
1115 mitical			(pH units)	(ppm)	(mV)	Water (ft)	
11 (Q	19.80	200	6.80	0.21	-82.4	1.05	
i i o Minutes:	14.83	1410	6.83	0.36	-821	80-1	
<b>∠</b> ∳ Minutes:	14.84	297	6.84	0,35	-85,0	9.08	
Minutes:	14.84	796	6.85	6.34	-89.7	608	
Z12/Minutes:	14.84	796	6.84	0,34	-839	9080	
3 DMinutes:					0,0.		
18 Minutes:		· · · · · · · · · · · · · · · · · · ·					
21 Minutes:							
24 Minutes							
27 Minutes.							
27 Minutes:							
30 Minutes:							
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Start Time: 1/27		Sampling End T	ime: / , , ,	~			
Field Observations (to bidity of 1			1120	2			
Field Observations (turbidity, recharge ra	te, odor, sheens, P	ID/FID readings)	:				
Purge Water Status (containerized & # at	C14	1 1 1 1 1 1					
i urge water Status (containenzeu & # or	containers, intered	and discharged,	w/ discharge lo	ocation):			
Commente	······································					······	

Forensic Environmental Services, Inc.										
		Well Sampli	ng Form							
5/3/06										
Date:			Sampler:	Ryan Bower	***************************************					
Project/Site:	Watervliet		Location:	Watervliet, NY	······					
Well ID: MP-14										
Inner Casing diameter:		inches	Casing Materi	al:	PVC	· · · · · · · · · · · · · · · · · · ·				
Weather Conditions:										
Total Depth of Well (from top inner casin	ng):				feet					
Depth to Water (DTW) (from top inner c	asing): 7.42				feet					
Well Screened Interval:					feet					
Linear feet of water in well:										
Is DTW included in a complete round of pre-sampling synoptic water level measurements? yes no										
Description of floating product (if any):					feet	Time:				
Purge Method: Peristaltic pump										
Purge Start Time: 082		Purge End Time	:0910	Purge Rate (gal	s/minute): 🧥	. 06g/m	m			
Total Volume Purged: 725	gallons					$\sigma$				
	Temperature	Spec. Cond.	рН	Diss. Oxygen	Redox	Depth to				
100	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)				
08 56 Initial:	10.38	2237	6.83	0.37	-46.6	7.93				
53 Minutes:	10.36	2621	6.84	55.0	-41.3	7.93				
56 Minutes:	10.36	81845	6-85	0.76	-515	7.93				
59 Minutes:	10.37	1799	6.85	45.0	-53.4	7.97				
0902 Minutes:	10.36	1714	6.85	0.23	-564	7.94				
<b>()</b> 5 Minutes:	10.36	11070	6.85	0,23	-675	793				
<b>Ø</b> 8 Minutes:	10.37	1672	6. 8 la	0.22	-522	797				
∫) <b>( µ</b> Minutes:			47.0.0							
24 Minutes:										
27 Minutes:										
30 Minutes:										
33 Minutes:	www.unitstan.co.co.co.co.co.co.co.co.co.co.co.co.co.									
Stabilization Rate		+/ 39/	+/ 0.1	1/ 100/	1/ 10					
Sampling Method: Low Flow			[+/0.]	+/- 10%	+/- 10 mV					
Sampling Start Time:		Sampling End T	<sup>ime:</sup> 09/	0						
Field Observations (turbidity, recharge ra	ate, odor, sheens, P	ID/FID readings)	- / ( ) :	~						
		0,								
Purge Water Status (containerized & # o	f containers filters	1 and discharged	w/ disaharan 1	opation):						
		and discharged,	w/ uischarge li	ocation).						
Comments										
Commente.										

Forensic Environmental Services, Inc.									
,		Well Sampli	ng Form						
12/01									
Date: 5/ 9/00			Sampler:	Rvan Bower					
Project/Site:	Waterviel 1	······	Location:	Watervliet, NY		· · · · · · · · · · · · · · · · · · ·			
Well ID:	7 (1310	)							
Inner Casing diameter:		inches	Casing Materi	al:	PVC				
Weather Conditions:			••••••••••••••••••••••••••••••••••••••						
Total Depth of Well (from top inner casi	ng):				feet				
Depth to Water (DTW) (from top inner c	asing): GUA				feet				
Well Screened Interval:	8,70				feet				
Linear feet of water in well:									
Is DTW included in a complete round of	pre-sampling synop	otic water level n	neasurements?			yes	no		
Thickness of floating product (if any):					feet	Time:			
Description of floating product:									
Purge Method: Peristaltic pump		Dunce End Time	ADUS		1: 1 G.	06.1	7		
Total Volume Purged: 7	gallons	Purge End Time	.0 4 4 5	Purge Rate (gal	s/minute):	o le	min		
	Temperature	Spec. Cond.	Ha	Diss. Oxygen	Redox	Depth to			
	°C	$(\mu s/cm)$	(pH units)	(ppm)	(mV)	Water (ft)			
0425 Initiali	. 1 1/	605			-(57	$O \parallel l$			
	11.16	881	6-84	0.23	8216	8-90			
<b>Z</b> Minutes:	11.16	880	685	0.2	-864	8-48			
36 Minutes:	11.10	634	10.85	0.10	-8F.7	8.48			
26 Minutes:	11 26	577	1. 2.1	A 10	-502	CUA			
Jan Martines.	11-20	810	0.00	0-14	- 04/(	erto			
212 Minutes:	11.23	8)(	6.83	0.18	- 40.2	8-40			
μημιστική μηματική	-								
18 Minutes:	······································			1					
21 Minutes:									
24 Minutes:									
27 Minutes:									
30 Minutes:									
33 Minutes:									
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv				
Sampling Method: Low Flow									
Sampling Start Time:	+028	Sampling End 7	<sup>Γime:</sup> ΟΨ4	5					
Field Observations (turbidity, recharge r	ate odor sheens P	ID/FID readings	).						
riena e ober ranons (taronany, reenarge r	ate, odor, sneens, r	ibii ib readings,	).						
Purge Water Status (containerized & # c	of containers, filtered	d and discharged	, w/ discharge l	ocation):					
		1.0 h	Nedina	int					
1 Jugia	and ,	that	Harry						
	J								
Comments:		*****	<u> </u>						
	$T_{\rm ext}$	A <	$\overline{)}$						
T.	e 128	~							
IL.									

		Forensic	Environme	ntal Servi	ces, Inc.			
			Well Sampli	ng Form				
13/06								
Date:				Sampler:	Ryan Bower			
Project/Site: An O 16	5	Watervliet		Location:	Watervliet, NY			
Well ID:	5							
Inner Casing diameter:			inches	Casing Materia	al:	PVC		
Weather Conditions:								
Total Depth of Well (from t	top inner casir	ng):	2			feet		
Depth to Water (DTW) (fro	om top inner ca		feet					
well Screened Interval:						feet		
Is DTW included in a comm	: plete round of	pre compling synor	tio water lovel m	an auromanta <sup>0</sup>				
Thickness of floating produ	ict (if any)	pre-sampling synop	blic water level m	easurements?		foot	yes	no
Description of floating prod	duct					ieet	Time:	
Purge Method: Peristaltic t	pump				******			
Purge Start Time: 130	2		Purge End Time:	1312	Purge Rate (gals	s/minute): 🕥	Ola Imi	
Total Volume Purged:	<u> 7.0</u>	gallons				· · · ·		
		Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
170	20	C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
18	L'Unitial:	1343	$\leq 1$	7.24	3.36	53.8	8.20	
13	23 Minutes:	13,31	072	7.70	3.45	CUG	8.70	
	2 Minutes:	12 27	576	- 10	2 57	5-1-0		
	) dyr	12.50	5 /0	7-14	2.50	56.	8.00	
	$\frac{31}{100}$ Minutes:	12.00	266	1.1)	3.54	57.5	8.24	
SE SE	2 Minutes:	13.48	567	7.16	3.51	5,3	5.21	
3	13 Minutes:	13.47	564	7.15	3,72	51.5	C.20	
	1 1/8 Minutes:	12 4 6	<u> </u>	511	271	60.9	c 7 9	
1	12	12.30	5.62	1-17	- 2.11	59-1	8101	
۲ ۲	2 <sup>minutes:</sup>							
	24 Minutes:							
	27 Minutes:							
	30 Minutes:							
	33 Minutes							
Stabi	ilization Rate	****	+/- 3%	+/- 0 1	+/ 10%	+/ 10 my		
Sampling Method: Low Fl	low			1 17-0.1	1/-1078	17-10 IIIv		
Sampling Start Time:	342		Sampling End T	ime: By?	3			
Field Observations (turbidi	ty, recharge ra	ate, odor, sheens, PI	D/FID readings):					
Purge Water Status (contain	nerized & # of	containers, filtered	and discharged.	w/ discharge lo	cation).		·	
		,			, outron).			
Comments:			· · · · · · · · · · · · · · · · · · ·	······			·····	
L								

	Forensic	: Environme	ntal Servio	ces, Inc.			
		Well Sampli	ng Form				
12/01							
Date: 5/2/0			Sampler:	Rvan Bower	·····		
Project/Site:	Watervliet	***	Location:	Watervliet NV	· <u>····································</u>		
Well ID: MP-19			Sociation	Water vilet, NT			
Inner Casing diameter:	······································	inches	Casing Materia	al:	PVC		
Weather Conditions:	· · · · · · · · · · · · · · · · · · ·		8				
Total Depth of Well (from top inner casir	ng):				feet		
Depth to Water (DTW) (from top inner c	asing):	7			feet		
Well Screened Interval:	- /, Y	/			feet		
Linear feet of water in well:							
Is DTW included in a complete round of	pre-sampling sync	ptic water level m	easurements?			yes	no
Thickness of floating product (if any):					feet	Time:	
Description of floating product:							
Purge Method: Peristaltic pump			o (		~	- 1 1	<del>ر</del>
Purge Start Time: 075		Purge End Time	:[03 (	Purge Rate (gal	s/minute): 🌰 ,	Obg/N	m
Total Volume Purged: Z.O	gallons	5	-				
	l'emperature	Spec. Cond.	рН	Diss. Oxygen	Redox	Depth to	
ha/A	С	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$\Theta$ Initial:	11.36	989	6.97	1.46	28.6	7.98	
3 Minutes:	11,27	900	1. 07	1 111	275	<u>۶</u>	
				1.44	67:3		
( o winutes:	11.35	1000	6- 411	1.1	15.8		
9 Minutes:	11.30	1061	7.00	0.87	10.5	7.98	
712 Minutes:	(1.33	1075	707	0.87	-21	705	
700	11.02	1.000	7.00	6 65	710	1-10	
	11-32	1028	1.00	0.0/	- 7.8	7.98	
18 Minutes:	11.32	1036	7.03	0.88	-7.0	7.98	
<b>2</b> 1 Minutes:							
24 Minutes:							
27 Minutes:							
30 Minutes:							
33 Minutes:							
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Start Time:		Sampling End T	ime: / -	,			
1024		Sampling End 1	M. 1931	/			
Field Observations (turbidity, recharge ra	ate, odor, sheens, H	PID/FID readings)					
Durge Weter Status (contained & #	C	1 1 1 1 1					
ruige water Status (containenzed & # o	containers, filtere	ed and discharged,	, w/ discharge lo	ocation):			
Comments:						<u></u>	
L							

Forensic Environmental Services, Inc. Well Sampling Form									
Date: 5/2/0 C			Sampler	Ryan Bower					
Project/Site:	Watervliet		Location:	Watervliet NY					
Well ID: MP-22									
Inner Casing diameter:		inches	Casing Materi	al:	PVC		······		
Weather Conditions:						·····			
Total Depth of Well (from top inner casin	<sup>ng):</sup>	~			feet				
Depth to Water (DTW) (from top inner c	asing): $4.20$	<u>ر</u>			feet				
Well Screened Interval: feet									
Linear feet of water in well:	1.		. 0						
Thickness of floating product (if any):	pre-sampling sync	optic water level n	neasurements?		fr at	yes	no		
Description of floating product (If any):					ieet	Time:			
Purge Method: Peristaltic pump						. 1			
Purge Start Time: 1438		Purge End Time	:15P	Purge Rate (gal	s/minute): C	D.069/m	IN IN		
Total Volume Purged: 1.15	gallons	S	1 11			<u> </u>			
	remperature	Spec. Cond.	pH (nU smits)	Diss. Oxygen	Redox	Depth to			
1453	<u> </u>	(µs/cm)		(ppm)		water (It)			
i ( ) _ Initial:	10.7	485	1.12	8.48	84.6	1.23			
5(2 Minutes:	10.84	473	7.00	8-94	95.2	0.23			
5@Minutes:	10.87	465	7.07	18.2	100.0	123			
562-Minutes:	10.80	468	7.06	8.40	1041	9,73			
15 as Minutes:	18.01	ury	7.4	8.87	109.3	173			
$\sqrt{50}$ Minutes:	10.77	41.4	705	8.88	111.9	122			
15 8 Minutes:			1.0						
21 Minutes:			1						
24 Minutes:									
27 Minutes:						+			
30 Minutes:			1						
33 Minutes:									
Stabilization Rate		+/- 3%	+/- 0 1	+/ 10%	±/ 10 my				
Sampling Method: Low Flow		17- 370	1 17-0.1	1 1/2 1070	<u></u>				
Sampling Start Time: 1509		Sampling End T	<sup>Fime:</sup> 1 570						
Field Observations (turbidity, recharge r	ate odor sheens I	DID/FID readings	- ( \.						
i leid observations (tarolatty, reenarge i	ate, ouor, sheelis, r	ID/IID readings,	).						
x									
Purge Water Status (containerized & # o	f containers, filtere	ed and discharged	, w/ discharge l	ocation):					
					·····				
Comments:									

Forensic Environmental Services, Inc.									
		Well Sampli	ng Form						
612/06									
Date:			Sampler:	Ryan Bower					
Project/Site:	Watervliet		Location:	Watervliet, NY	····				
Well ID:									
Inner Casing diameter:		inches	Casing Materi	al:	PVC				
Weather Conditions:				<u> </u>	······································				
Total Depth of Well (from top inner casi	ng):				feet				
Depth to Water (DTW) (from top inner c	asing): (/_ 7U				feet				
Well Screened Interval:	γ• / (				feet				
Linear feet of water in well:									
Is DTW included in a complete round of	pre-sampling synor	ptic water level m	neasurements?			yes	no		
Thickness of floating product (if any):					feet	Time:			
Description of floating product:									
Purge Start Time: /0/5		Dunce End Time	VED	D		15			
Total Volume Purged: 1,75,	gallons	Purge End Time	:030	Purge Rate (gal	s/minute):	J.U.S.J			
	Temperature	Spec. Cond.	Ha	Diss. Oxygen	Redox	Depth to			
	°C	(us/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
$103 Q_{\text{nitial}}$	12 90	1.6/		A 110					
7 Jintai.	12.19	606	1.3	0.47	-106.7	4.16			
<i>2</i> 3 Minutes:	12.41	606	7.3	0.41	-(1)	8.76			
<b>3</b> 6 Minutes:	12 00	80-2	729	0.20	-111 1	076			
39 Minutes	12 01	500			-1412	1-1-5-			
11 a a si		202	1. 4	0.0/	114.2	K-1/			
<b>Y</b> <sup>2</sup> Minutes:	13.02	561	1.17	0.15	-111.4	4221			
U 5 Minutes:	13.01	651	7,26	6.73	-109.6	977			
U 8 Minutes:	12 01		514	10 23	-1003	1			
	12.01	<u> </u>	7.11	0.25	-104.2	¥-1/			
31 Minutes:									
24 Minutes:									
27 Minutes:									
30 Minutes:									
50 Windles.									
33 Minutes:									
Stabilization Rate	4. tr	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv				
Sampling Method: Low Flow		Communication Condition							
5 ampring Start Time. 1048		Sampling End 1	<sup>ime:</sup> 1050	$\mathcal{O}$					
Field Observations (turbidity, recharge ra	ate, odor, sheens, Pl	ID/FID readings)	:						
		0.7							
Burge Water Status (containerized & # a	<u><u> </u></u>	1 1 1 1 1							
ruige water Status (containenzed & # 0	containers, filtered	and discharged,	w/ discharge lo	ocation):					
Comments:									

	Forensic	Environme	ental Servi	ces, Inc.			
		Well Sampli	ing Form				
elola			-				
5/2/06			T				
		·	Sampler:	Ryan Bower			
Well ID: Main 11	Watervliet		Location:	Watervliet, NY			
Inner Casing diameter:	<b></b>			1	2110		
Weather Conditions:		inches	Casing Materi	al:	РУС		
Total Depth of Well (from top inner casi	na).				fast		
Depth to Water (DTW) (from top inner c	(asing): 6 1				feet		
Well Screened Interval:	1. · 8 · 1				feet		
Linear feet of water in well:					leet		
Is DTW included in a complete round of	pre-sampling syno	ptic water level n	reasurements?			VAC	<b>n</b> 0
Thickness of floating product (if any):	1 1 0 - 9	F	ionou omonto.		feet	Time:	10
Description of floating product:					lott	Time.	
Purge Method: Peristaltic pump						. <b>.</b>	~~~~~
Purge Start Time: 1225		Purge End Time	1300	Purge Rate (gal	s/minute): 🔿	, Obaln	win
Total Volume Purged: 2.0	gallons	-			······	04.	
$\neg$	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
17116	C	(μs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
1249Initial:	11.51	630	6.54	0.25	1-538	·	
$\mathcal{A}_{3 \text{ Minutes:}}$	11 11 5	621	1. 50	A.20	-67	C47	1
H E Minutes	11.40	127		0:01	-55.1	DIC	-
• ( o minutes:	11.45	636	6.65	0.27	- 28.5	8.43	
$\mathbf{V}$ 9 Minutes:	11.43	632	10,54	0.20	-60.6	8.48	
J <sub>2 Minutes:</sub>	143	1.37	1.84		-173	211.2	1
S Minutes:			0.51	0.0	-127	0.90	1
G S Williades.	11.92	635	6.64	0.17	7 .50	8.48	
S Minutes:	11.43	633	6.54	0.17	1-(,3.4	8.48	
$\lambda \hat{Q}$ 1 Minutes:							
24 Minutes:						1	
24 minutes.							
27 Minutes:							
30 Minutes:							1
33 Minutes:						1	{
Stabilization Pate	+	1/ 20/					
Sampling Method: Low Flow		+/- 3%	+/- 0.1	+/- 10%	1 +/- 10 mv	#* NK A#	
Sampling Start Time:		Sampling End T	ime:				
1634			1300				
Field Observations (turbidity, recharge ra	ite, odor, sheens, Pl	ID/FID readings)					
	parl						
	V .						
Purge Water Status (containerized & # of	f containers, filtered	d and discharged.	w/ discharge lo	ocation):			<u></u>
		<b>U</b> ,	U	,			
Comments:							
Λ	1 1 - f.		d t				
	and bl	, of b	veluer				
•	_	$\cup$ (					

Forensic Environmental Services, Inc.									
1 1		wen Sampn	ng form						
5206									
Date:	·····		Sampler:	Ryan Bower					
Wall ID: MIAL 1	Watervliet		Location:	Watervliet, NY					
Inner Casing diameter:		inchoo	Cosing Motori	alı	DVC				
Weather Conditions:		inches	Casing Materi	ai:	PVC				
Total Depth of Well (from top inner casi	ng):				feet				
Depth to Water (DTW) (from top inner c	asing				feet				
Well Screened Interval:	1. (				feet				
Linear feet of water in well:									
Is DTW included in a complete round of	pre-sampling syno	ptic water level m	neasurements?			yes	no		
Thickness of floating product (if any):					feet	Time:			
Description of floating product:									
Purge Start Time: $/ < x < >$		Purge End Time	1000	Purge Rate (gal	(minute):	~~ A	7		
Total Volume Purged: 0.24	> gallons	Targe Dia Time	1522	i uige Rate (gal	$\mathcal{O}$	recar	min		
5	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to	]		
1713	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
>   >   >   Initial:	12.80	1041	7-10	1.84	-728	\$58			
/ (Deminutes:	12.65	1085	7 22		-11-	805			
Minutes:	12.61	1032	7.29	1.55	-522	<b>R</b> . 99			
22 Minutes:						<u> </u>	-		
<b>Z</b> Minutes:							-		
15 Minutes:									
18 Minutes:									
21 Minutes:									
24 Minutes:									
27 Minutes:									
30 Minutes:									
33 Minutes:									
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/-10  mv		-		
Sampling Method: Low Flow					1				
Sampling Start Time: 1405		Sampling End T	"imer 406						
Field Observations (turbidity, recharge ra	ate, odor, sheens, Pl	ID/FID readings)	:						
Weah	Flors	-							
Purge Water Status (containerized & # o	f containers filtered	and discharged	w/ discharge k	action).		· · · · · · · · · · · · · · · · · · ·			
	. containers, intelet	and discharged,	w/ usenarge f	scation).					
Comments:				·····					
$M \sim 2$		<b>`</b>	0.046	1 1 2 -	$\sim$ -	_			
	Nedrys	)	WY C	130	-4 /.				
-	Ĭ		1	$\Delta$	mple (14	(05)			
1				, , ,	<u> </u>				

	Forensic	Environme	ntal Servi	ces, Inc.			
		Well Sampli	ng Form				
\$/3/06							
Date:			Sampler:	Ryan Bower		·····	
Project/Site:	Watervliet		Location:	Watervliet, NY			
Well ID: $MW - 8$				·····			
Inner Casing diameter:		inches	Casing Materi	al:	PVC		
Weather Conditions:							
Total Depth of Well (from top inner casi	ng):				feet		
Depth to Water (DTW) (from top inner c	casing):				feet		
Well Screened Interval:	1.1				feet		
Is DTW included in a complete round of	pre compling cure	ntio water level -					
Thickness of floating product (if any):	pre-sampring sync	optic water level if	leasurements?		fact	yes	no
Description of floating product:					leet	i me:	
Purge Method: Peristaltic pump							
Purge Start Time: 1130		Purge End Time	:De E	Purge Rate (gal	s/minute): 🖒	201	
Total Volume Purged: 1.75	gallons	3	, ,				
	Temperature	Spec. Cond.	рН	Diss. Oxygen	Redox	Depth to	
1145	C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
Initial:	12.01	782	7.02	0.5(1	1.58-	7-1	
Minutes:	12.00	783	7.03	0.27	-82.7	7-11	
56 Minutes:	11.92	784	7.01	0.24	-83.2	2-11	
54 Minutes:	11.80	784	7.04	0.22	-83,4	7.11	
512 Minutes:	11-72	785	7.02	6.21	-83.7	$\gamma_{\rm N}$	
7. (1) Minutes:	11.62	786	7.02	0.19	-83.8		
Zei 3 Minutes:	11.59	785	7.02	0.18	-83.7		
ZO Minutes:	·····						
24 Minutes:							
27 Minutes:							
30 Minutes:							
22 Minutes							
Stabilization Pate		1/ 20/					
Sampling Method: Low Flow	1	+/- 3%	+/- 0.1	+/- 10%	1 + - 10  mv		
Sampling Start Time 204		Sampling End T	<sup>ime:</sup> /205				
Field Observations (turbidity, recharge r	ate, odor, sheens, F	PID/FID readings)		····			••••••
Purge Water Status (containerized & # o	f containers filtere	d and discharged	w/ discharge le	oration):			
	· containers, intere	a una alsonargoa,	w/ uischarge it	ication).			
Comments:			·····				
	$2\varepsilon$						
$(-1)/  $	70/						

Forensic Environmental Services, Inc.									
		Well Sampl	ing Form						
	$\langle \rangle$	<b>`</b>							
Date: $\gamma \gamma	$-(\dot{B})$	<u>}</u>							
Project/Site:	Watervliet	/	Sampler:	Ryan Bower		·····			
Well ID:	water vilet /	-	Location:	Watervliet, NY					
Inner Casing diameter:		inchos	Cocing Mater	al.	DVG				
Weather Conditions:		menes	Casing Mater		PVC				
Total Depth of Well (from top inner casi	ng):			×	faat				
Depth to Water (DTW) (from top inner c	asing):	_			feet				
Well Screened Interval:	· · / · Y S				feet				
Linear feet of water in well:					leet				
Is DTW included in a complete round of	pre-sampling syno	ptic water level n	neasurements?			Vec	no		
Thickness of floating product (if any):					feet	Time <sup>.</sup>	110		
Description of floating product:									
Purge Method: Peristaltic pump						,	1		
Purge Start Time:/ 0 4 3		Purge End Time	: 1/25	Purge Rate (gal	s/minute): 🍸	. OSalm	m		
Total volume Purged: 2-0	gallons		T		·				
	remperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to			
1058		(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
( Initial:	11.36	660	7.16	0.44	1-41.7	7.97			
( ( <sup>0</sup> Minutes:	11.28	653	516	ARC	-1150	5 05			
$\mathcal{O}\mathcal{U}_{\text{Minutes:}}$	11 70		1.10	20.10	70/1	1.11			
	11.41	644	7.16	0.25	-98.8	7.47			
Minutes:	11.32	647	7.16	0.36	-49.5	7.97			
10 Minutes:	11.2.7	646	7.1	122	573	207			
B Minutes:	11.78	1. 41.	8.12	0.0	- 2 0	7.17			
1 & Minutes:	11 71		7.6	0.31	-53.0	[.4]			
<b>D</b> Minutes:	11.26	646	1-1-11	0-51	-22.3	7.97			
7 74 Minutes:									
27 Minutes:									
30 Minutes:							-		
33 Minutes:									
Stabilization Rate	F#2	+/- 3%	+/- 0.1	+/- 10%	+/- 10 my				
Sampling Method: Low Flow		<b>a</b>	1.50			<u></u>			
		Sampling End T	$\frac{1}{2}$						
Field Observations (hurbidity, recharge ra	te, odor, sheens, PI	D/FID readings):							
		Bri iD readings).							
Purgo Wotor Status (contained a 1.0.11.0									
runge water Status (containerized & $\#$ of	containers, filtered	and discharged,	w/ discharge lo	cation):					
Comments:	1								
Fo Ton	t_ \		110						
		15 -	210						

	Forensic	Environmo Well Sampl	ental Servi	ices, Inc.			
		wen Sampi	ung rorm				
stantial				***	1		
Date: 4/0400			Sampler:	Bryan J. Machel			
	<u> </u>	JPP - Watervliet	Location:	Watervliet, New	YOTK		
pper Casing diameter:		< inches	Casing Materia	alt	PVC		
Weather Conditions:	<i>L</i>		Casing Match	<u></u>	Ĵ		
Total Depth of Well (from top inner casir	12):	-			feet		
Depth to Water (DTW) (from top inner ca	asing):	5			feet		
Well Screened Interval:	<i>e,</i> <b>v</b> -				feet		
_inear feet of water in well:						:	
s DTW included in a complete round of	pre-sampling syr	noptic water leve	l measurements	?		(yes	no
Thickness of floating product (if any):		None			feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pump	4		8.20		1		15
Purge Start Time: 7, 00		Purge End Time	:1	Purge Rate (gal	s/minute): //		
Iotal Volume Purged:	Temperature	Spec Cond	nH	Diss Oxygen	Redox	Depth to	ĺ
	°C	(us/cm)	(nH units)	(ppm)	(mV)	Water (ft)	
S.OX minut	11150		( il	0.57	-64.7	Successive Contraction (11)	
	19.56	11.5	6.00		I SC V	8-76	
J 3 Minutes:	14.46	10	6.67	0.49	5.07	8.46	
6 Minutes:	14.45	107	6.63	0.45	-58.6	8.96	
() 9 Minutes:	14,44	699	6.62	10.42	-58.9	8.44	
7.6 12 Minutes:	14.49	699	6.62	0.41	-58.8	8.46	
15 Minutes:							
18 Minutes:							
21 Minutes:							
24 Minutes:							
27 Minutes:							
30 Minutes:							
33 Minutes:						-	-
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		4
Sampling Method: Low Flow Sampling Start Time:		Sampling End 7	Гime:				
Field Observations (turbidity, recharge n	ate, odor, sheens	s, PID/FID readir	igs):	<u> </u>		· · · · · · · · · · · · · · · · · · ·	
Purge Water Status (containerized & # o	of containers, filt	ered and dischar	ged, w/ dischar	ge location):			
Containerized on site in 55-gallon drum	I.						
2							
Comments:		*****					*******

	Forensic	Environme Well Sampl	ental Servi	ces, Inc.			
Data: 8121/06			Sampler	Brvan I. Machel	la		
Project/Site:	S(	GPP - Watervliet	Location:	Watervliet, New	York	······	
Well ID: M Part()				11 4201 11101, 1101	$\overline{\mathbf{O}}$		
Inner Casing diameter:	1.5	inches	Casing Materia	d: (	PV¢		
Weather Conditions:	<i>f</i>				~		
Total Depth of Well (from top inne	r casing):	) i 1			feet		
Depth to Water (DTW) (from top in	nner casing): 1	, , ,			feet		
Well Screened Interval:	1				feet		
Linear feet of water in well:							
Is DTW included in a complete rou	ind of pre-sampling sy	noptic water level	measurements	?	_	yes	no
Thickness of floating product (if an	іу):	None			feet	Time:	
Description of floating product:		None					
Purge Method: Peristaltic pump Purge Start Time: 2:37 Total Volume Purged:	$2_{gallons}$	Purge End Time	3:57	Purge Rate (gal	s/minute): Y	148 - 62 ey	Í
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
20ì I	nitial: 17,96	867	6.73	0.36	-60.6	9.52	
64 3 Mi	nutes: 17.97	PKP	6.73	Gizs	-60.4	9.57	
67 000	1701	CLE	6.72	0.25	denk	6 57	
6 Mi		3.00		<u> </u>	Forno		
9 Mi	nutes:						
13 12 Mi	nutes:						
15 M	nutes:						
13 18 M	nutes:						
21 M	inutes:						
24 M	inutes:		-				
27 M	inutes:						
30 M	inutes:						
33 M	inutes:						
Stabilizatio	n Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv		
Sampling Method: Low Flow Sampling Start Time: 3:10		Sampling End	Time:				
Field Observations (turbidity, rec	harge rate, odor, sheer	ns, PID/FID readi	ngs):				
Purge Water Status (containerize	d & # of containers, fi	Itered and dischar	ged, w/ dischar	ge location):			
Containerized on site in 55-gallo	n drum.						
Comments		. <u> </u>					
MS/MS.	n calloe						

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# Forensic Environmental Services, Inc. Well Sampling Form

A						
Date: 812406		Sampler:	Bryan J. Mache	lla		
Project/Site:	SGPP - Watervliet	Location:	Watervliet New	/ York		
Well ID: M F-14			Water Met, New			
Inner Casing diameter:	inches	Casing Materi	al:	PVC		
Weather Conditions: 50MAy - 76-80		18				
Total Depth of Well (from top inner casing):				feet		
Depth to Water (DTW) (from top inner casin	B): 8.21			feet		
Well Screened Interval:				feet		
Linear feet of water in well:						
Is DTW included in a complete round of pre-	-sampling synoptic water leve	I measurements	:?		ves	(not
Thickness of floating product (if any):	None			feet	Time:	G
Description of floating product:	None					
Purge Method: Peristaltic nump		A. (10			i .	
Purge Start Time: 8	Purge End Time	8.49	Purge Rate (gal	s/minute): 1. J	5/32	25
Total Volume Purged:	gallons			-	<b>.</b>	
Te	emperature Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to	
	°C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)	
$\mathbf{X}:\mathbf{Y}^{\mathcal{O}}$ Initial: [6	.08 957	6.67	0.44	-51.7	831	
43 214	03 936	1 + 5	In uit	-1775-	0. 5/	
n 6 S Minutes: 16		6.01	0.71	128	5.51	
6 Minutes: 16	- 1 134	6 67	0.4/	-54.6	531	
4 9 9 Minutes: 16	0.0% 024	6.09	0.41	-54 L	821	
5] 1010			- C	- 1.0	0 ( )/	
/ 12 Minutes:						
55 15 Minutes:						
57 18 Minutes:						
21 Minutes:						
24 Minutes:						
27 Minutes:						-
30 Minutes:		1				
33 Minutes						-
Stabilization Pate		+/ 0.1	+/ 109/	+/ 10 mail		4
Sampling Method: Low Flow	1 77- 576	1 +7- 0.1	+/-10%	1 +7- 10 mV		1
Sampling Start Time: 8750	Sampling End <sup>*</sup>	Гіme:				
Field Observations (turbidity, recharge rate,	odor, sheens, PID/FID readir	igs):				······
	· · · · · · · · · · · · · · · · · · ·					
prurge water Status (containerized & # of co	ontainers, filtered and discharg	ged, w/ discharg	ge location):			
Containerized on site in 55-patton drum						
entermetree on site in 55-galon ululi.						
Comments:						

IL

Forensic Environmental Services, Inc. Well Sampling Form									
			0						
etartob						******			
Date: 3 [ Vi]	~		Sampler:	Bryan J. Mache	lla				
Wall ID: AAP 18	v York								
Inner Casing diameter:		inahaa	Casina Matari		DVC				
Weather Conditions:		menes	Casing Materi	al:	PVC				
Total Depth of Well (from top inner casi	na).				feet				
Depth to Water (DTW) (from top inner casing): $G(\mathcal{O})$ feet									
Well Screened Interval:									
Linear feet of water in well:									
Is DTW included in a complete round of	pre-sampling sy	noptic water leve	I measurements	;?		Ves	no		
Thickness of floating product (if any):	1	None			feet	Time:	no		
Description of floating product:		None							
Purge Method: Peristaltic pump			0.75		1 -	1-11	- 1 <i>(</i>		
Purge Start Time: $5709$	15	Purge End Time	۱ د · ر	Purge Rate (gal	s/minute): トン	152 2020			
Total Volume Purged:	) gallons	r	·····		·		/		
/	Temperature	Spec. Cond.	pH	Diss. Oxygen	Redox	Depth to			
	Č	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
5727 Initial:	18-54	1485	7.B	0.83	154.6	9.05			
$27^{\prime}$ 3 Minutes:	18.45	487-	h	0.93	154d	905			
50 00	10-01	100	5.15	3 11/	1010				
o Minutes:	18.30	411	1.08	1/11	1260	7.02			
9 Minutes:	18-51	475	7.05	11-31	1522	9.05			
$3^{6}$ 12 Minutes:	18.51	477,	7.04	1.20	100.9	9.05			
79 15 Minutes:	IDEL	477	5 1/5	176	150-	C U1			
		110	1.05	$\left( \left( \cdot \right) \right)$	10 . 1				
18 Minutes:									
21 Minutes:									
24 Minutes:									
27 Minutes:					-				
30 Minutes:									
33 Minutes:									
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv				
Sampling Method: Low Flow Sampling Start Time: 5. 40		Sampling End T	ime:						
Field Observations (turbidity, recharge r	ate, odor, sheens	, PID/FID reading	gs):			****			
Purge Water Status (containerized & # c	of containers, filte	ered and discharg	ed, w/ discharg	e location):					
			-						
Containerized on site in 55-gallon drum									
Comments:									

Forensic Environmental Services, Inc.									
Well Sampling Form									
Date: 814/06			Sampler	Bryan I Mache	lla				
Project/Site:	cct/Site: SGPP - Watervliet Location: Watervliet Ne				v York				
Well ID: MP-27									
Inner Casing diameter:	1.5	inches (	Casing Materi	al:	PVC		·····		
Weather Conditions:				****	·····	Managa da			
Total Depth of Well (from top inner casi	ng):				feet				
Depth to Water (DTW) (from top inner of	casing): $9, 3$				feet				
Well Screened Interval:					feet				
Linear feet of water in well:						$\sim$			
Is DTW included in a complete round of	pre-sampling synoptic w	ater level	measurements	s?		(yes)	no		
Thickness of floating product (if any):	None				feet	Time			
Description of floating product:	None								
Purge Start Time: 4 2		and Time:	4:54	Duras Data (cal	numinuta) 17	11-0-05	•		
Total Volume Purged:	gallons	snu i nne:	1.21	Purge Rate (gai	s/minute):				
<u> </u>	Temperature Spec.	. Cond.	pН	Diss. Oxygen	Redox	Depth to			
	°C (μs	s/cm)	(pH units)	(ppm)	(mV)	Water (ft)			
4:48 Initial:	1872 639	5	1.74	295	1<57	922			
sí origina	10.00	<u>/</u>	$\frac{6.1}{100}$	3.0	1337	(			
3 J 3 Minutes:	18.20 641		6-14	5.14	12711	4.3)			
6 Minutes:	18.80 641		6-50	13.94	154	9,77			
5 > 9 Minutes:				1	-1				
00									
12 Minutes:									
15 Minutes:									
0.2 18 Minutes:									
< 5 21 Minutes					1				
e 21 Minutes.									
24 Minutes:				e,					
27 Minutes:									
30 Minutes				-					
jo windes.				-					
33 Minutes:									
Stabilization Rate	+/	- 3%	+/- 0.1	+/- 10%	+/- 10 mv	]			
Sampling Start Time: / / /	Sampli	ing End Ti	m.e.						
	Sampi	ing Enu Ti	me.						
Field Observations (turbidity, recharge n	rate, odor, sheens, PID/FI	D reading	s):						
		U							
Durge Water Status (containaning 4.9. //	footoinen Ek-1	l dia-l-	a						
in the water status (containenzed & # (	prurge water Status (containerized & # of containers, filtered and discharged, w/ discharge location):								
Containerized on site in 55-gallon drum	l.								
Comments:									
MOVED - IND OF MUTTI									
1	l V								
/~ x/	)								
es.a	,e 								

Forensic Environmental Services, Inc.

Forensic Environmental Services, Inc.								
Well Sampling Form								
Date: 3/21/00			Sampler:	Bryan J. Machel	lla			
Project/Site:	SG	PP - Watervliet	Location:	Watervliet, New	/ York			
Well ID: MW-12				,				
Inner Casing diameter:	·····	2 inches	Casing Materi	al:	PVC/			
Weather Conditions:				t				
Total Depth of Well (from top inner casing):								
Depth to Water (DTW) (from top inner c	asing): 🗲 8 🕻				feet			
Well Screened Interval:					feet			
Linear feet of water in well:								
Is DTW included in a complete round of	pre-sampling sync	optic water leve	l measurements	?		yes	no	
Thickness of floating product (if any):	λ	lone			feet	Time		
Description of floating product:	· N	lone						
Purge Method: Peristaltic pump			7:20		~ /	1.11.00	5	
Purge Start Time:	7 - F	Purge End Time		Purge Rate (gal	s/minute): 2/	90,0.0		
i otal volume Furged.	Temperature	Spec Cond	DH DH	Dice Ovugan	Dedex	Dopth to		
	°C	(us/cm)	(nH unite)	Diss. Oxygen	(mV)	Weter (ft)		
7:06	2017					water (It)		
initial:	5000	64/	1.09	$\left  L \right\rangle$	243	7.40		
3 Minutes:	20.85	6705	1.03	1.83	224,5	4.4)		
6 Minutes:	10.2	609	2.00	2.27	223.5	1002		
9 Minutes:	20.36	598	6.42	2.55	2229	10.05		
1 12 Minutes:	20.80	593	69	2-67	viai	10.07		
<sup>1</sup> 7 15 Minutes:	20-67	574	6.99	2.87	217.9	10:10		
18 Minutes:	20.61	572	6.97	3.00	2123	16.13		
づ 21 Minutes:	20.67	566	6.54	3.04	201.3	ICIT		
34 Z4 Minutes:	20.69	564	6.94	3,06	207.)	101)		
27 Minutes:								
30 Minutes:								
33 Minutes:								
Stabilization Rate		+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv			
Sampling Method: Low Flow Sampling Start Time: 7:3/		Sampling End 7	Гime:	nadarna - Annien en Trib Deuren			·	
Field Observations (turbidity racheres	ate odor obser-				····			
ir leid Observations (turbidity, recharge r	ale, odor, sneens,	PID/FID readin	igs):					
Purge Water Status (containerized & # of containers, filtered and discharged, w/ discharge location):								
Containerized on site in 55-gallon drum.								
Comments:								
Commonis.								

Forensic Environmental Services, Inc.								
Well Sampling Form								
Date: 8/21/06			Sampler:	Bryan J. Mache	lla			
Project/Site:		SGPP - Watervliet	Location:	Watervliet, New	v York			
Well ID: 1 W W - 16					$\bigcirc$			
nner Casing diameter:		inches inches	Casing Materia	<u>ւl:</u> (	PVC/	****		
Weather Conditions: SUNNY - S	<u>ze s</u>			·				
Contract Depth of well (from top inno	er casing):	55			feet			
Well Screened Interval:	inner casing). V				feet			
Linear feet of water in well-					Icci			
s DTW included in a complete rou	and of pre-sampling	synoptic water leve	I measurements	?		Nes!	no	
Thickness of floating product (if a	ny):	None			feet	Time:		
Description of floating product:		None						
Purge Method: Peristaltic nump			1.77		. 1-	14-00	U.	
Purge Start Time: 00		Purge End Time	:/.)	Purge Rate (gal	ls/minute): //	15 0.0	/	
Total Volume Fulged.	Temperature	Spec. Cond.	рН	Diss. Oxygen	Redox	Depth to		
_	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)		
1:12	nitial: 72-05	1377	769	0.90	717	985		
1`N 3 Mi	nutes: 72.29		7 27	0.74	2,24	11.91		
6 Mi	nutes: 77.21	1108	724	125	1107	17.74		
V 9 Mi	nutes: 22.37	1087	7.20	175	7190	13.00		
3/ 12 Mi	nutes: 22-35	1081	720	2 01	27.5.0	1395		
ЭЙ 15 Mi	nutes: DNY (	0/137	13			12.12		
۲) 18 Mi	nutes: $(\sim 1)$	H Acek		1.				
۲ ل 21 Mi	nutes:	round	1 - 2011					
∨3 <sub>24 Mi</sub>	nutes:							
27 Mi	nutes:							
30 Mi	nutes:							
33 Mi	inutes:	······						
Stabilizatio	n Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv			
Sampling Method: Low Flow							•	
Sampling Start Time: 4 - 5		Sampling End 7	lime:					
Field Observations (turbidity, recl	harge rate, odor, shee	ns PID/FID readin	ac).					
, , , , , , , , , , , , , , , , , , ,			65).					
Purge Water Status (containerized	1 & # of containers f	iltered and dischard	red w/ dischara	e location):				
ange and characterized		interete une trisenta g	500, 117 01301101 <u>E</u>	,e toeanon).				
Containerized on site in 55-gallon drum.								
Comments: 1 10	alle inte	lane 1	1 A			· ·		
Julight	sing at	- ragingi	m)					
0.			U					

Forensic Environmental Services, Inc. Well Sampling Form							
	·	0					
Date: 8/01/06		Commission	David I. Marsha	11			
Project/Site:	SGPP - Watervliet	L ocation:	Wotamiliat Nach			·····	
Well ID: MN-18	SUIT - Walci Viici	Location.	waterviiet, inev	N YOFK			
Inner Casing diameter:	inches	Casino Materi	ial· (	PVC			
Weather Conditions:		Cusing Mator	1				
Total Depth of Well (from top inner casi	ng):			feet			
Depth to Water (DTW) (from top inner c	asing): 7, 37			feet			
Well Screened Interval:				feet			
Linear feet of water in well:							
Is DTW included in a complete round of	pre-sampling synoptic water level	l measurements	s?		ves	no	
Thickness of floating product (if any):	None			feet	Time:		
Description of floating product:	None					•	
Purge Method: Peristaltic pump			,	. 1	C C		
Purge Start Time: $(0,0)$ Total Volume Purged:	Purge End Time gallons	: /0: 63	Purge Rate (gal	s/minute): ) /	18:1 0.0	6	
	Temperature Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to		
	C (µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)		
16:11 Initial:	17.82 719	6.89	0.56	-73.7	729		
20 3 Minutes:	17.97 719	6.89	0-53	-74.7	5.39		
C Minutes:	18,00 719	6.59	0.53	-74.5	7.35		
The 9 Minutes:			+				
12 Minutes:							
37 15 Minutes:							
35 18 Minutes:							
3 2 21 Minutes:				1			
24 Minutes:							
27 Minutes:							
30 Minutes:							
So Minutes.							
33 Minutes:							
Stabilization Rate	+/- 3%	+/- 0.1	+/- 10%	+/- 10 mv			
Sampling Start Time: 10:25	Sampling End T	ìme:					
Field Observations (turbidity, recharge r	ate, odor, sheens, PID/FID reading	gs):					
Purge Water Status (containerized & # o	f containers filtered and dischara	ed w/ dischars	a location).				
	, containers, intered and discharg	eu, w/ uischarg	c location):				
Containerized on site in 55-gallon drum							
Comments:							

Forensic Environmental Services, Inc.								
Well Sampling Form								
- hailth								
Date: Stort			Sampler:	Bryan J. Mache	lla			
Project/Site:	S	GPP - Watervliet	Location:	Watervliet, Nev	v York			
Lanar Casing diamatan								
Weather Conditions:		inches	Casing Mater	ial:	PVC			
Total Depth of Well (from top inper casi	no).				<u> </u>			
Depth to Water (DTW) (from top inner of	ng).	CI			feet			
Well Screened Interval:					feet			
Linear feet of water in well:					Teet			
Is DTW included in a complete round of	pre-sampling sy	noptic water leve	1 measurement	s?		( NAP )	no	
Thickness of floating product (if any):		None			feet	Time.	10	
Description of floating product:		None			1001	i mic.		
Purge Method: Peristalfic pump			0.19					
Purge Start Time: 27 , 50 Total Volume Purged:	1.5 gallons	Purge End Time	: 9.51	Purge Rate (gal	s/minute): 1	5/29:50.	(v)	
	Temperature	Spec. Cond.	pН	Diss. Oxygen	Redox	Depth to		
	°C	(µs/cm)	(pH units)	(ppm)	(mV)	Water (ft)		
9.'53 Initial:	16.49	697	2.00	0.45	- 57.1	PAR		
5 3 Minutes:	16.50	6915	201	CUV	-545	827		
5 G Minutes:	10 10	191		10.11	57.2	2.2		
	165	076	1.61	10.93	-54.4	8.2)		
C 9 Minutes:								
<sup>6</sup> 12 Minutes:								
َنْ 15 Minutes:								
18 Minutes:								
21 Minutes:								
24 Minutes:	······································							
27 Minutes:								
30 Minutes:								
33 Minutes:	······································							
Stabilization Rate		+/- 30/2	+/ 0.1	1/ 109/				
Sampling Method: Low Flow			1 17- 0.1	1 +/- 10%	+/- 10 mv			
Sampling Start Time:		Sampling End T	ime:				-	
Field Observations (turbidity, recharge r	ate, odor, sheens	PID/FID reading	25):					
	, , , , , , , , , , , , , , , , , , , ,	,,	50/1					
Purge Water Status (containerized & # o	f containers filte	red and dischara	ed w/disahana	o lo potion \;				
Containerized on site in 55-gallon drum.								
Comments:								
L								

APPENDIX D

**GRAIN SIZE DISTRIBUTION GRAPHS** 

### APPENDIX D - GRAIN SIZE ANALYSIS SB-124



### APPENDIX D - GRAIN SIZE ANALYSIS SB-125



APPENDIX D - GRAIN SIZE ANALYSIS SB-126



# APPENDIX D - GRAIN SIZE ANALYSIS SB-197



# APPENDIX D - SOIL GRAIN SIZE ANALYSIS SB-199



#### APPENDIX E

#### GROUND-WATER CONCENTRATION REGRESSION ANALYSES




















#### **APPENDIX F**

#### HYDRAULIC CONDUCTIVITY TESTING DATA, GRAPHS AND TABLE

#### Appendix F Table Summary of Hydraulic Conductivity Testing Results Former Norton/Nashua Facility Watervliet, NY

								0
	Depth to	Total Well	Standing	Saturated	Casing	Well	Screen	
Well	Water	Depth	Water (L <sub>w</sub> )	Thickness (H)	Radius (r <sub>c</sub> )	Radius (r <sub>w</sub> )	Length (L <sub>e</sub> )	
Designation	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	$L_e/r_w$
DGC-6	10.12	15.0	4.88	20	0.17	0.42	10	24
DGC-9	5.57	15.0	9.43	10	0.17	0.42	10	24

Well	Α	В		Уo	y <sub>t</sub>	t		K
Designation	Parameter	Parameter	ln(R <sub>e</sub> /r <sub>w</sub> )	(feet)	(feet)	(minutes)	$[\ln(y_o/y_t)]/t$	(ft/day)
DGC-6	2.20	0.35	1.692	0.07	0.02	2.0	0.567	1.92
DGC-9	2.20	0.35	2.228	3.01	0.30	8.0	0.288	1.28

#### **BOUWER & RICE UNCONFINED SLUG TEST METHOD**

Notes:

- 1.  $L_w$  = Standing water elevation in well.
- 2. H = Saturated aquifer thickness (estimated).
- 3.  $r_c =$  Well radius.
- 4.  $r_w$  = Well radius plus gravel pack.
- 5.  $L_e = Length$  of screened interval.
- 6.  $L_e/r_w =$  Value used to determine A and B parameters.
- 7. A and B Parameter values (from The Bower and Rice Slug Test An Update, Figure 2).
- 8.  $\ln(R_e/r_w) = [[1.1/\ln(L_w/r_w)] + [A + B\ln[(H-L_w)/r_w]]/L_e/r_w]-1.$
- 9. t = Time.
- 10.  $y_0$  = Drawdown at time "zero",  $y_t$  = drawdown at time "t", values obtained from test plots.
- 11. K =Hydraulic Conductivity =  $[(rc^2 \ln(R_e/r_w))2L_e]*[\ln(y_0/y_t)]/t.$

Forensic Environmental Services, Inc.

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In-Situ Inc.	MiniTroll Pro	)	
Report generated: Report from file: DataMgr Version	3/1/2004 C:∖Win-Situ∖ 3.71	12:44:10 Data\SN01584 2004-03-01	120419 dgc-6.bin
Serial number: Firmware Version Unit name:	1584 3.09		
Test name:		dgc-6	
Test defined on: Test started on: Test stopped on: Test extracted on: N/A	2/20/2004 3/1/2004 3/1/2004	14:35:46 12:04:19 12:44:21	
Data gathered using Logarithmic testing Maximum time between data points: Number of data samples:	60.0000 125		Minutes. 109
TOTAL DATA SAMPLES	125		
Channel number [1] Measurement type: Channel name:	Temperature	9	recovery = 99.73%
Channel number [2] Measurement type: Channel name: Sensor Bange:	Pressure 30 PSI		static 4.523
Specific gravity:	1.00		8 gallons

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
3/1/2004	12:04	0	16.63	4.427	0.096
3/1/2004	12:04	0.0048	16.64	4.429	0.094
3/1/2004	12:04	0.0098	16.64	4.431	0.092
3/1/2004	12:04	0.015	16.64	4.431	0.092
3/1/2004	12:04	0.0198	16.66	4.414	0.109
3/1/2004	12:04	0.025	16.66	4.392	0.131
3/1/2004	12:04	0.03	16.66	4.325	0.198
3/1/2004	12:04	0.035	16.66	4.232	0.291
3/1/2004	12:04	0.0398	16.66	4.293	0.230
3/1/2004	12:04	0.045	16.66	4.302	0.221
3/1/2004	12:04	0.05	16.66	4.251	0.272
3/1/2004	12:04	0.0548	16.66	4.447	0.076
3/1/2004	12:04	0.06	16.66	4.452	0.071
3/1/2004	12:04	0.0648	16.66	4.458	0.065

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
3/1/2004	12:04	0.07	16.66	4.458	0.065
3/1/2004	12:04	0.075	16.66	4.458	0.065
3/1/2004	12.04	0 0798	16.66	4 456	0.067
3/1/2004	12.04	0.0848	16.67	4 455	0.068
3/1/2004	12.04	0.09	16.67	4 455	0.068
3/1/2004	12.04	0.095	16.67	4 455	0.068
3/1/2004	12.04	0.1	16.67	4 455	0.068
3/1/2004	12.04	0 1057	16.67	4 455	0.068
3/1/2004	12:04	0.1118	16.67	4.457	0.066
3/1/2004	12:04	0.1185	16.67	4.457	0.066
3/1/2004	12:04	0.1255	16.67	4.457	0.066
3/1/2004	12:04	0.1327	16.67	4.457	0.066
3/1/2004	12:04	0.1405	16.67	4.459	0.064
3/1/2004	12:04	0.1488	16.67	4.457	0.066
3/1/2004	12:04	0.1578	16.67	4.459	0.064
3/1/2004	12:04	0.167	16.67	4.462	0.061
3/1/2004	12:04	0.1768	16.66	4.462	0.061
3/1/2004	12:04	0.1875	16.66	4.462	0.061
3/1/2004	12:04	0.1985	16.66	4.462	0.061
3/1/2004	12:04	0.21	16.66	4.462	0.061
3/1/2004	12:04	0.2225	16.66	4.464	0.059
3/1/2004	12:04	0.2358	16.66	4.464	0.059
3/1/2004	12:04	0.2498	16.66	4.464	0.059
3/1/2004	12:04	0.2647	16.66	4.464	0.059
3/1/2004	12:04	0.2803	16.66	4.466	0.057
3/1/2004	12:04	0.297	16.66	4.466	0.057
3/1/2004	12:04	0.3145	16.66	4.466	0.057
3/1/2004	12:04	0.3333	16.66	4.468	0.055
3/1/2004	12:04	0.3532	16.66	4.468	0.055
3/1/2004	12:04	0.374	16.66	4.468	0.055
3/1/2004	12:04	0.3963	16.66	4.471	0.052
3/1/2004	12:04	0.4198	16.66	4.471	0.052
3/1/2004	12:04	0.4445	16.66	4.471	0.052
3/1/2004	12:04	0.4695	16.66	4.471	0.052
3/1/2004	12:04	0.4963	16.66	4.473	0.050
3/1/2004	12:04	0.5247	16.66	4.473	0.050
3/1/2004	12:04	0.5547	16.66	4.475	0.048
3/1/2004	12:04	0.5862	16.66	4.475	0.048
3/1/2004	12:04	0.6213	16.66	4.475	0.048
3/1/2004	12:04	0.6578	16.66	4.477	0.046
3/1/2004	12:05	0.6963	16.66	4.477	0.046
3/1/2004	12:05	0.738	16.66	4.477	0.046
3/1/2004	12:05	0.7813	16.66	4.477	0.046
3/1/2004	12:05	0.8278	16.66	4.479	0.044
3/1/2004	12:05	0.8762	16.66	4.479	0.044
3/1/2004	12:05	0.9278	16.66	4.481	0.042
3/1/2004	12:05	0.9828	16.66	4.481	0.042
3/1/2004	12:05	1.0412	16.66	4.481	0.042
3/1/2004	12:05	1.103	16.64	4.484	0.039

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
3/1/2004	12.05	1 1678	16 66	4 483	0.040
3/1/2004	12:05	1.238	16.66	4,483	0.040
3/1/2004	12:05	1.3113	16.64	4,484	0.039
3/1/2004	12:05	1 3895	16.64	4 488	0.035
3/1/2004	12:05	1 4728	16.64	4 486	0.037
3/1/2004	12:05	1 5613	16.64	4 486	0.037
3/1/2004	12:05	1 6547	16.64	4 488	0.035
3/1/2004	12:06	1 753	16.64	4 488	0.035
3/1/2004	12:06	1.858	16.64	4,488	0.035
3/1/2004	12:06	1.9678	16.64	4.488	0.035
3/1/2004	12:06	2.0845	16.64	4.49	0.033
3/1/2004	12:06	2.2097	16.64	4.49	0.033
3/1/2004	12:06	2.3412	16.64	4.49	0.033
3/1/2004	12:06	2.4812	16.63	4.491	0.032
3/1/2004	12:06	2.6297	16.62	4.491	0.032
3/1/2004	12:07	2.7863	16.62	4.491	0.032
3/1/2004	12:07	2.953	16.61	4.492	0.031
3/1/2004	12:07	3.1297	16.59	4.493	0.030
3/1/2004	12:07	3.3162	16.58	4.493	0.030
3/1/2004	12:07	3.5145	16.57	4.494	0.029
3/1/2004	12:08	3.7245	16.57	4.494	0.029
3/1/2004	12:08	3.9463	16.55	4.497	0.026
3/1/2004	12:08	4.1812	16.54	4.497	0.026
3/1/2004	12:08	4.4295	16.53	4.498	0.025
3/1/2004	12:09	4.6928	16.53	4.496	0.027
3/1/2004	12:09	4.9728	16.52	4.498	0.025
3/1/2004	12:09	5.2697	16.52	4.496	0.027
3/1/2004	12:09	5.583	16.52	4.498	0.025
3/1/2004	12:10	5.9145	16.52	4.498	0.025
3/1/2004	12:10	6.2663	16.5	4.499	0.024
3/1/2004	12:10	6.6395	16.5	4.499	0.024
3/1/2004	12:11	7.0345	16.49	4.5	0.023
3/1/2004	12:11	7.453	16.48	4.5	0.023
3/1/2004	12:12	7.8962	16.48	4.5	0.023
3/1/2004	12:12	8.3663	16.47	4.501	0.022
3/1/2004	12:13	8.8645	16.44	4.5	0.023
3/1/2004	12:13	9.3913	16.43	4.501	0.022
3/1/2004	12:14	9.9497	16.42	4.501	0.022
3/1/2004	12:14	10.5413	16.4	4.502	0.021
3/1/2004	12:15	11.168	16.39	4.5	0.023
3/1/2004	12:16	11.8312	16.38	4.503	0.020
3/1/2004	12:16	12.5347	16.36	4.504	0.019
3/1/2004	12:17	13.2795	16.35	4.502	0.021
3/1/2004	12:18	14.0695	16.34	4.503	0.020
3/1/2004	12:19	14.9062	16.33	4.503	0.020
3/1/2004	12:20	15./913	16.31	4.504	0.019
3/1/2004	12:21	10./295	16.3	4.505	0.010
3/1/2004	12:22	10.723	16.3	4.505	0.018
3/1/2004	12.23	18.7762	16.29	4.505	0.018

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
3/1/2004	12·24	19 8913	16.28	4 506	0.017
3/1/2004	12:25	21 073	16.28	4 504	0.019
3/1/2004	12:26	22.3247	16.28	4.508	0.015
3/1/2004	12:27	23.6497	16.28	4.506	0.017
3/1/2004	12:29	25.0545	16.26	4.506	0.017
3/1/2004	12:30	26.5428	16.26	4.506	0.017
3/1/2004	12:32	28.1178	16.25	4.505	0.018
3/1/2004	12:34	29.7863	16.24	4.505	0.018
3/1/2004	12:35	31.5545	16.24	4.505	0.018
3/1/2004	12:37	33.428	16.23	4.506	0.017
3/1/2004	12:39	35.4112	16.23	4.506	0.017
3/1/2004	12:41	37.513	16.23	4.508	0.015
3/1/2004	12:44	39.7397	16.21	4.511	0.012

In-Situ Inc.			MiniTroll Pro	)		
Report generated: Report from file: DataMgr Version			2/20/2004 C:∖Win-Situ∖ 3.71	0.488 Data\SN0158	4 2004-02-20	112627 dgc-9.bin
Serial number: Firmware Version Unit name:			1584 3.09			
Test name:				dgc-9		
Test defined on: Test started on: Test stopped on: Test extracted on: N/A			2/20/2004 2/20/2004 2/20/2004	10:13 11:26 11:42		
Data gathered using Logarit Maximum time between da Number of data samples:	hmic testing ata points:	I	60.0000 109			Minutes. 109
TOTAL DATA SAMPLES			109			recovery =
Channel number [1] Measurement type: Channel name:			Temperature	Ģ		90.90 %
Channel number [2] Measurement type: Channel name: Sensor Range: Specific gravity:			Pressure 30 PSI. 1.00			static 5.668 8 gallons
	Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
	2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004 2/20/2004	11:26 11:26 11:26 11:26 11:26 11:26 11:26 11:26 11:26 11:26 11:26 11:26	0.0000 0.0048 0.0098 0.0150 0.0198 0.0250 0.0300 0.0350 0.0398 0.0450	9.660 9.670 9.680 9.680 9.680 9.680 9.690 9.690 9.690 9.690	1.869 1.841 1.880 1.904 1.923 1.940 1.954 1.954 1.967 1.983 1.996	3.789 3.817 3.778 3.754 3.735 3.718 3.704 3.691 3.675 3.662

0.0500

0.0548

0.0600

0.0648

9.690

9.690

9.690

9.690

2.009

2.024

2.036

2.047

3.649

3.634

3.622

3.611

2/20/2004 11:26

2/20/2004 11:26

2/20/2004 11:26

2/20/2004 11:26

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
2/20/2004	11.26	0.0700	9 690	2 060	3 598
2/20/2004	11.26	0.0750	9 690	2 072	3 586
2/20/2004	11.20	0.0798	9 690	2 083	3 575
2/20/2004	11.20	0.0730	9 690	2.000	3 562
2/20/2004	11.20	0.0040	9.090	2.000	3 552
2/20/2004	11.20	0.0300	9.090	2.100	3 5/1
2/20/2004	11.20	0.000	9.090	2.117	3 531
2/20/2004	11.20	0.1057	9 710	2 139	3 519
2/20/2004	11.20	0.1037	9.710	2.153	3 506
2/20/2004	11.20	0.1185	9.710	2.152	3 193
2/20/2004	11.20	0.1755	9.710	2.100	3 478
2/20/2004	11.20	0.1200	9.710	2.100	3.466
2/20/2004	11.20	0.1327	9.710	2.132	3.400
2/20/2004	11.20	0.1403	9.710	2.207	3 434
2/20/2004	11.20	0.1400	9.710	2.224	3 / 17
2/20/2004	11.20	0.1670	9.710	2.241	3 397
2/20/2004	11.20	0.1768	9.090	2.201	3 381
2/20/2004	11.20	0.1700	9.090	2.277	3 361
2/20/2004	11.20	0.1075	9.090	2.237	3 342
2/20/2004	11.20	0.1905	9.090	2.310	3 202
2/20/2004	11.20	0.2100	9.090	2.000	3 300
2/20/2004	11.20	0.2225	9.090	2.330	3.300
2/20/2004	11.20	0.2330	9.090	2.379	3.275
2/20/2004	11.20	0.2490	9.090	2.402	3.230
2/20/2004	11.20	0.2047	9.090	2.420	3.230
2/20/2004	11.20	0.2003	9.090	2.431	3 180
2/20/2004	11.20	0.2370	9.090	2.470	3.160
2/20/2004	11.20	0.3145	9.090	2.504	3 1 2 7
2/20/2004	11.20	0.3533	9.090	2.551	3.127
2/20/2004	11.20	0.3332	9.090	2.501	3.057
2/20/2004	11.20	0.3740	9.090	2.001	3.007
2/20/2004	11.20	0.3903	9.090	2.022	3.000
2/20/2004	11.20	0.4130	9.090	2.000	2 968
2/20/2004	11.20	0.4445	9.090	2.030	2.300
2/20/2004	11.20	0.4055	9.090	2.724	2.304
2/20/2004	11.20	0.5247	9 690	2.700	2.000
2/20/2004	11.20	0.5547	9 690	2.704	2.004
2/20/2004	11.27	0.5862	9 690	2.863	2 795
2/20/2004	11.27	0.6213	9 690	2 904	2 754
2/20/2004	11.27	0.6578	9 690	2 939	2 719
2/20/2004	11.27	0.6963	9 690	2 975	2 683
2/20/2004	11.27	0.7380	9 690	3 013	2.600
2/20/2004	11.27	0.7813	9 690	3 052	2.606
2/20/2004	11.27	0.8278	9 690	3 092	2.566
2/20/2004	11.27	0.8762	9 690	3 136	2 522
2/20/2004	11.27	0.9278	9 690	3 183	2 475
2/20/2004	11.27	0.9828	9 690	3 231	2 427
2/20/2004	11:27	1.0412	9,690	3,282	2.376
2/20/2004	11:27	1.1030	9.690	3.333	2.325

Date	Time	ET (min)	Chan[1] Celsius	Chan[2] Feet H2O	Calculated Feet DD
2/20/2004	11:27	1.1678	9.690	3.388	2.270
2/20/2004	11:27	1.2380	9.690	3.441	2.217
2/20/2004	11:27	1.3113	9.690	3.500	2.158
2/20/2004	11:27	1.3895	9.690	3.555	2.103
2/20/2004	11:27	1.4728	9.690	3.612	2.046
2/20/2004	11:28	1.5613	9.690	3.667	1.991
2/20/2004	11:28	1.6547	9.690	3.718	1.940
2/20/2004	11:28	1.7530	9.690	3.764	1.894
2/20/2004	11:28	1.8580	9.690	3.815	1.843
2/20/2004	11:28	1.9678	9.690	3.862	1.796
2/20/2004	11:28	2.0845	9.690	3.921	1.737
2/20/2004	11:28	2.2097	9.690	3.978	1.680
2/20/2004	11:28	2.3412	9.690	4.037	1.621
2/20/2004	11:28	2.4812	9.690	4.105	1.553
2/20/2004	11:29	2.6297	9.690	4.174	1.484
2/20/2004	11:29	2.7863	9.710	4.237	1.421
2/20/2004	11:29	2.9530	9.710	4.307	1.351
2/20/2004	11:29	3.1297	9.710	4.377	1.281
2/20/2004	11:29	3.3162	9.710	4.449	1.209
2/20/2004	11:29	3.5145	9.720	4.518	1.140
2/20/2004	11:30	3.7245	9.720	4.586	1.072
2/20/2004	11:30	3.9463	9.730	4.655	1.003
2/20/2004	11:30	4.1812	9.750	4.724	0.934
2/20/2004	1 1 1 . 0 1	4.4295	9.760	4.793	0.865
2/20/2004	+ 11:31	4.6928	9.760	4.863	0.795
2/20/2004	+    .3	4.9720	9.770	4.934	0.724
2/20/2004	1 1 1 . 2 2	5.2097	9.760	4.999	0.609
2/20/2004	1 1 1 . 22	5.0000	9.760	5.050	0.002
2/20/2004	1 11.32	6 2663	9.800	5.104	0.554
2/20/2004	1 11.32	6 6395	9.800	5 195	0.463
2/20/200-	1 11.33	7 0345	9.000	5 241	0.403
2/20/2004	1 11:33	7.0040	9.810	5 288	0.370
2/20/2004	111:34	7 8962	9 820	5 331	0.327
2/20/2004	111:34	8 3663	9 820	5 378	0.280
2/20/2004	11:35	8 8645	9 830	5 417	0.241
2/20/2004	11:35	9.3913	9.830	5.453	0.205
2/20/2004	11:36	9.9497	9.830	5.485	0.173
2/20/2004	11:37	10.5413	9.850	5.514	0.144
2/20/2004	11:37	11.1680	9.850	5.535	0.123
2/20/2004	11:38	11.8312	9.850	5.554	0.104
2/20/2004	11:38	12.5347	9.850	5.571	0.087
2/20/2004	11:39	13.2795	9.860	5.583	0.075
2/20/2004	11:40	14.0695	9.860	5.594	0.064
2/20/2004	11:41	14.9062	9.860	5.602	0.056
2/20/2004	11:42	15.7913	9.860	5.609	0.049

#### APPENDIX G

#### GEOPHYSICAL INVESTIGATION REPORT – QUANTUM GEOPHYSICS, INC.





December 6, 2004

Bob Zei Forensic Environmental Services, Inc. 113 John Robert Thomas Drive Exton, PA 19341

Re: Final Report Geophysical Investigation Former Norton/Nashua Tape Products Facility Alden Street and Craig Street Watervliet, New York

Bob,

This report presents the findings of Quantum Geophysics, Inc.'s geophysical investigation in Watervliet, New York. The investigation focused on the northern perimeter of the former Norton/Nashua Tape Products facility, and the adjacent Alden Street and Craig Street. The investigation included a 2-D electrical resistivity imaging (ERI) survey, an EM61 metal detector survey, and a ground penetrating radar survey to identify a potential conduit in the vicinity of MP-6. This potential conduit could be a buried pipe or a permeable channel deposit of sands and gravels in the underlying till, and is suspected as a pathway for the migration of elevated toluene observed in Alden Street. The conduit, if present, would be located within the overburden soils (as opposed to rock).

The surveys were carried-out October 25 and 26, 2004 by Quantum's principal Richard Lee and technicians Justin Dietrich and Dan Stiansen. The ERI survey included a total of 4 lines designated A-A', B-B', C-C', and D-D'. A-A' is located in Alden Street, B-B' is located in Craig Street, C-C' is located just south of the Delaware & Hudson RR track, and D-D' is located just north of the Lands N/F Consolidated RR track on the former Norton/Nashua property. The EM61 was run only along A-A', inaccessibility and interference from underground utilities and parked vehicles precluded using EM61 on other lines. The GPR was run along lines A-A', C-C', and D-D'. No GPR data were acquired along B-B' because of extensive brush cover.



Zei, B. Forensic Environmental Services, Inc. Page 2

Forensic Environmental Services, Inc. provided an electronic copy of a sitemap (Craig-St.dwg) for the purpose of plotting the geophysical findings.

## TECHNICAL APPROACH

A. 2-D ERI Survey

The survey was conducted using an Advanced Geoscience Inc. (AGI) SuperSting R8 earth resistivity imaging system and 34 18" stainless steel, non-polarizing stakes (electrodes). Data were acquired using the Dipole-Dipole Array with electrodes spaced 3 meters apart. The relative elevation along each line was measured using a 2X handlevel and stadia rod, and recorded in a fieldbook so that the electrical resistivity profile can be constructed with respect to ground surface. Contact resistance measurements (conducted prior to data collection as a means of gauging electrode-to-earth coupling) were generally less than 1,000 ohms ( $\Omega$ ). Good quality data can be expected when contact resistance is less than about 1,000  $\Omega$ .

In the office, the electrical resistivity data were downloaded onto a PC, elevations were incorporated into the data files and then the data were inverted into a model of true electrical resistivity using the AGI software program *EarthImager 2D*. *EarthImager 2D* divides the subsurface into a number of rectangular blocks and determines the resistivities of the rectangular blocks that will produce an apparent resistivity pseudosection that agrees with the actual measurements. Several iterations of modeling are conducted to reduce the difference between the calculated and measured apparent resistivity values by adjusting the resistivity of the model blocks.

The processed data were entered into the surface applications program Surfer for Windows, gridded using the Kriging Method with an octant search, contoured at an interval of 50 ohm-feet, annotated, and then printed at a scale of 1" = 50 feet.



Zei, B. Forensic Environmental Services, Inc. Page 3

B. EM61 Survey

The EM61 was operated in the "wheel-mode" whereby data were automatically acquired every 0.86 feet of traverse. In the office, a profile of the data was constructed using Grapher for Windows and printed at a scale of 1" = 40 feet.

C. Ground Penetrating Radar (GPR) Survey

The GPR survey was conducted using a Geophysical Survey Systems, Inc. SIR2 subsurface radar system and a 400 MHz antenna. Radar data were acquired at 8-bits/sample, 512 samples/scan, and 32 scans/second, with a recording period of 60 nanoseconds (nsec). The system was configured to explore to a depth of roughly 6 feet below ground surface (based upon an approximate velocity of 1-foot/10 nsec 2-way travel-time). The antenna was hand-towed along the ground surface at a rate of approximately 2 feet per second.

### FINDINGS

A sitemap with the 4 geophysical survey lines is shown in Figure 1. Fully annotated electrical resistivity profiles for A-A', B-B', C-C' and D-D' are provided in Figures 2, 3, 4, and 5, respectively. The EM61 profile along A-A' is shown in Figure 6. The GPR profile along A-A' through the section of elevated toluene is shown in Figure 7. The GPR profile along C-C' through the section of elevated toluene (and potential conduit) is shown in Figure 8.

The center portion of the ERI profile along A-A' (from station 140 to 200) is impacted by buried utilities/piping, monitoring wells, and/or other identified man-made structures, and all of D-D' is impacted by buried utilities/piping. Buried metal piping attracts electrical current. In so doing, it creates a low current density field which leads to very low, *artificial* electrical resistivity measurements.



Zei, B. Forensic Environmental Services, Inc. Page 4

Based upon the geophysical data:

- No linear electrical resistivity anomaly suggestive of a buried channel deposit was observed in the overburden soils trending from the former plant facility to Alden Street. No Gaussian-shaped anomaly in the EM61 data suggestive of a buried pipe was observed on A-A' where elevated toluene is reported. Lastly, no linear trend of high-amplitude, parabolic-shaped radar anomalies was observed between the former facility and Alden Street.
- Two (2) parabolic-shaped GPR targets suggestive of buried pipes were observed on A-A', specifically at stations 137 and 142 (Figure 7), which are located at least 10 to 15 feet west of the area of elevated toluene. It appears that they are not pipes because similar GPR responses that would form a linear trend from the former Norton/Nashua property to Alden Street are not observed on profile C-C'. The EM61 data (see Figure 6) indicate these GPR targets are not constructed of metal.
- Fracture-like anomalies were identified on profiles B-B' and C-C'. They are
  observed in the ERI data as a thin, near-vertical zone of relatively low electrical
  resistivity measurements. The potential fracture trend projects into a portion of
  profile A-A' where the data is impacted by buried utilities/piping.

Quantum is pleased to be of service to Forensic Environmental Services, Inc. Please call if you have any questions or if we can be of further assistance.

Sincerely,

Quantum Geophysics, Inc.

Lichard K. See

Richard K. Lee, P.G., R. GP. President and Principal Geophysicist

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#### **APPENDIX H**

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING CHARACTERISTICS INVENTORY FORMS APPENDIX H Table

# Product Inventory Information Alden Street Residential Indoor Air Sampling Former Norton/Nashua Tape Products Facility Watervliet, New York

Page 1 of 2 Photo Yes Yes Yes Yes Yes Yes Yes Ν No **PID Reading** (qdd) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 MN trimethylpentanediol monoisobutyrate, Solvents, surfactant, ammonia, water Thanium dioxide, ethylene glycol, **Chemical Ingredients** Pyethrins, piperonyl butoxide No Ingredient Information vinyl acrylic resin, 223 Aliphatic hydrocarbon Petroleum distillates VOC <200 g/L VOC <35 g/L Sulfuric acid NA Condition Empty Good Good Good Good Good Good Good NA 9.3 oz. 10 oz. 32 oz. 14 oz. 11 oz. 10 oz. 10 oz. Size 2 gal. NA Tru-Value Latex Semi-Gloss Paint **Product Description** GE Silicone Rubber Sealant (2) S-T Drain Opener Plumbers Putty Scotch Guard Raid (2) Windex WD-40 Windex Back Porch Basement Unknown Location **21** Alden 23 Alden Address

Forensic Environmental Services, Inc.
Former Norton/Nashua Tape Products Facility **Residential Indoor Air Sampling Product Inventory Information** APPENDIX H Table

Watervliet, New York

age 2 of 2		Photo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	 Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
	<b>PID Reading</b>	(ddd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Chemical Ingredients	NA	NA	NA	NA	NA	NA	NA	AA	NA	VA	VA	2(2-butoxyethoxy) ethanol	2(2-butoxyethoxy) ethanol	Vo Ingredient Information	Mineral spirits, alkyd polymer	Vo Ingredient Information	Motor Oil	Aliphatic hydrocarbons
		Condition	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good 2	Good 2	Good	Good	Deteriorated N	Good	Good
		Size	22 oz.	24 oz.	75 oz.	22 oz.	24 oz.	32 oz.	32 oz.	32 oz.	64 oz.	30 oz.	40 oz.	l gal.	2 gal.	l gal.	1 gal.	NA	5 qts.	1 qt.
		Product Description	Lysol Anti-Bacterial Kitchen cleaner	Ortho Home Defense Insect Killer	Cascade	Orange Clean	Easy Off BAM	Windex	Febreze	Murphy's Oil Soap	Lysol Floor Cleaner	Lysol Mildew Remover	Mr. Clean antibacterial	Easy Living White Paint	Sherwin Williams Semi-Gloss Enamel	Joint Compound	Sherwin Williams SWP External Gloss	Bix Stripper	10W-30 Motor Oil	Kilz Sealer/Primer
		Location	Kitchen											Basement						
		Address	25 Alden											h				****		

Notes:

1. NA = not available; NM = not measured.

PID = photoionization detector; g/L = grams per liter; ppb = parts per billion; oz. = ounce; gal. = gallon; qt. = quart.
 A detailed product inventory could not be conducted at 23 Alden St.

This form must be completed for each residence involved in indoor air testing.

Preparer's Name BRYAN MAChella	2/13/06 Date/Time Prepared
Preparer's Affiliation FES	Phone No. 610-594-3940
Purpose of Investigation Inducer Air SAMplin	5 SULUTY
1. OCCUPANT:	
Interviewed: Ø/N Last Name: Holupko First Name: Address: ZI Alden St. Wateruliet,	Mike NY
County: <u>MRANY</u> Home Phone: <u>518-273-2131</u> Office Phone:	NA
Number of Occupants/persons at this location 2. OWNER OR LANDLORD: (Check if same as occup	Age of Occupants Milker (37) Mother (09)
Interviewed: Y / N	
Last Name: First Name:	
Address:	
County:	
Home Phone: Office Phone:	
3. BUILDING CHARACTERISTICS	
Type of Building: (Circle appropriate response)	
Residential School Commer Industrial Church Other	cial/Multi-use

If the property is residential,	type? (Circle app	ropriate respons	e)	
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment Hous Log Home	3-Famil Colonia Mobile se Townho Other:	ly Il Home ouses/Condos SINGIE FAMIL	¥
If multiple units, how many?			,	
If the property is commercia	ll, type?			
Business Type(s)				
Does it include residences	s (i.e., multi-use)?	Y / N	If yes, how man	ny?
Other characteristics:		<b>(</b>	100.46	150 5 ON Dead?
Number of floors		Building age_		(1)
Is the building insulated	Y/N	How air tight?	Tight / Average	e / Not Tight
Airflow between floors المحاصلة Airflow near source				
Outdoor air infiltration Under Front door	<i></i>			
windows - tight				
Infiltration into air ducts				

2

# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick				
b. Basement type:	full	crawlspace	slab	other				
c. Basement floor:	concrete	dirt	stone	other				
d. Basement floor:	uncovered	covered	covered with	l				
e. Concrete floor:	unsealed	sealed	sealed with _					
f. Foundation walls:	(poured)	block,	stone	other				
g. Foundation walls:	ansealed	sealed	sealed with					
h. The basement is:	wet	damp	dry	moldy				
i. The basement is:	finished	unfinished	partially fini	shed				
j. Sump present?	YN							
k. Water in sump? Y	/ N / not applicable	)						
Basement/Lowest level depth below grade: <u>(feet</u> )								

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Basement is part slag, part dirt (weathered concrete)

### 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other FURNACE						
The primary type of fuel u	ised is:								
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar							
Domestic hot water tank fueled by: <u>FURNACE - SAS</u>									
Boiler/furnace located in:	Basement Outdoors	Main Floor	Other						



#### 7. OCCUPANCY

Is basement	t/lowest level occupied? Full-time	Occasionally	Seldom	AlmostNever
Level	General Use of Each Floor (e.g., fam	ilyroom, bedro	oom, laundry, '	workshop, storage)
Basement	NO OCCUPANCY			
1 <sup>st</sup> Floor	LIVING SPACE			
2 <sup>nd</sup> Floor	NO OCCUPANCY			
3 <sup>rd</sup> Floor	NA Not Applicansle			
4 <sup>th</sup> Floor	NA			
8. FACTO	RS THAT MAY INFLUENCE INDOOR re an attached garage?	AIR QUALIT	Y Y (N)	
b. Does t	he garage have a separate heating unit?		Y/N(NA	
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)			Y / N NA Please speci	fy
d. Has th	ne building ever had a fire?		y 🐼 Who	en?
e. Is a ke	erosene or unvented gas space heater pres	ent?	Y (N) Who	ere?
f. Is ther	e a workshop or hobby/craft area?	Y (N	Where & Ty	/pe?
g. Is the	re smoking in the building?	(Y)/ N	How freque	ntly? 1 pAck/c
h. Have	cleaning products been used recently?	Y K	When & Ty	pe?

Y/N When & Type? \_

h. Have cleaning products been used recently?

i. Have cosmetic products been used recently?	(y)/N	When & Type?	After shair portume deudor ANt	
5 j. Has painting/staining been done in the last 6 mon	ths? $(Y)$ N	Where & Whe	n? JAN 06	Downstairs Bath Room
k. Is there new carpet, drapes or other textiles?	Y/N	Where & Whe	n?	
l. Have air fresheners been used recently?	<b>()</b> / №	When & Type	Spray type	-Drily
m. Is there a kitchen exhaust fan?	Y / 🕑	If yes, where w	rented?	
n. Is there a bathroom exhaust fan?	Y / 😡	If yes, where v	vented?	
o. Is there a clothes dryer?	<b>()</b> /N	If yes, is it ver	ted outside? Y	)
p. Has there been a pesticide application?	Y N	When & Type	?	
Are there odors in the building? If yes, please describe:	Y D			
<b>Do any of the building occupants use solvents at worl</b> (e.g., chemical manufacturing or laboratory, auto mecha- boiler mechanic, pesticide application, cosmetologist If ves, what types of solvents are used? NA	k? $\sqrt{y}/N$ nic or auto body	shop, painting	fuel oil delivery,	
If yes, are their clothes washed at work?	Y / N			
Do any of the building occupants regularly use or wo response) Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or Yes, work at a dry cleaning service	ork at a dry-cle less)	No Unknown	(Circle appropriate	
Is there a radon mitigation system for the building/set Is the system active or passive? Active/Passive	tructure? Y	Date of Instal	lation:	
9. WATER AND SEWAGE				
Water Supply: Public Water Drilled Well	Driven Well	Dug Well	Other:	-
Sewage Disposal: Public Sewer Septic Tank	Leach Field	Dry Well	Other:	-
10. RELOCATION INFORMATION (for oil spill re	esidential emer	gency)		
a. Provide reasons why relocation is recommend	led:			_
<b>b. Residents choose to:</b> remain in home relocation relocati relocation relocation reloc	ate to friends/fa	nily reloc	ate to hotel/motel	

- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

6

#### **11. FLOOR PLANS**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.



#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Attached Fisure - WINDS 115HI/VAVINOR

7



#### **13. PRODUCT INVENTORY FORM**

PPB RAC

Make & Model of field instrument used:

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition <sup>*</sup>	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
BRIJEN	wB-40	9.30	Geri	Pote-leur disdollats	Ó	Y
	L1NJ+> =	1002	fe-1	Solvants, suffortant, American	0	/ <u>}</u>
	St BROKOPO	206	e premi	Suifun Reid	C/	7
(2)	GE Sileon RUBBL	1002	5001	Voc 2 35 5/L	0	Ϋ́Υ
	Flump Puty	14 n	Sec'	NN	0	Ϊ <u>Υ</u>
	Silton numeral)	10.102	gen	635 516 Va	$\bigcirc$	$\sim$
	noid (2)	102	800	plethins/ piperinyl Butoria		J'
	Sector jun of .	ing ty	emph	Rilphotic hydricom	C	1'Y

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)

\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

This form must be completed for each residence involved in indoor air testing.

Prenarer's Name BRYAN	MACHellA	Doto/Time Properted	115/06
Preparer's Affiliation FES		_ Date/Time Frepared Phone No. 616 - 594- 3	3940
Purpose of Investigation	door Air Sampling	Survey	
1. OCCUPANT:			
Interviewed Y N	J		
Last Name: ECUT	First Name:	JEILN	
Address: <u>23</u> Alden St	t Watervliet, NJ	/	
County: MIBANY	·		
Home Phone: 518-273-27	6 Office Phone: NH	ł	
Number of Occupants/persons at	t this location Ag	e of Occupants <u>F5</u>	
2. OWNER OR LANDLORD:	(Check if same as occupant		
Interviewed: Y / N			
Last Name:	First Name:		_
Address:			
County:			
Home Phone:	Office Phone:		
3. BUILDING CHARACTER	ISTICS		
Type of Building: (Circle appro	opriate response)		
Residential	School Commercia	ul/Multi-use	

Other: \_\_\_\_\_

Industrial

Church

If the property is residential	, type? (Circle appropria	te response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other: <u>Single FAmily</u>
If multiple units, how many	?	l.
If the property is commercia	al, type?	
Business Type(s)		
Does it include residence	s (i.e., multi-use)? Y / N	If yes, how many?
Other characteristics: Number of floors Is the building insulated	Build	ing age air tight? Tight Average / Not Tight
<ul> <li><b>4. AIRFLOW</b></li> <li><b>Use air current tubes or tra</b></li> <li>Airflow between floors</li> </ul>	cer smoke to evaluate a	irflow patterns and qualitatively describe:
Airflow near source		
Outdoor air infiltration		
Infiltration into air ducts		

\_\_\_\_\_

### 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade constructi	ion: wood frame	concrete	stone	brick	Reservents Stop
b. Basement type:	full	crawlspace	slab	other PArtiAl	py roar wall
c. Basement floor:	concrete	dirt	stone	other	
d. Basement floor:	uncovered	covered	covered with _		
e. Concrete floor:	unsealed	sealed	sealed with		
f. Foundation walls:	poured	block	stone	other	, frating pound
g. Foundation walls:	unsealed	sealed	sealed with <u>U</u>	INKNOWR - M	=25 years Age
h. The basement is:	wet	damp	dry	moldy	
i. The basement is:	finished	unfinished	partially finish	ned	
j. Sump present?	Y (N)				
k. Water in sump?	Y / N / not applicable				
Basement/Lowest level depth	below grade: <u>E</u> b	_(feet)			

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

NONE

#### 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other						
The primary type of fuel used	is:								
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar							
Domestic hot water tank fueled by: <u>3</u> A5									
Boiler/furnace located in:	Basement Outdoors	Main Floor	Other						

Air conditioning:

None FANS

Are there air distribution ducts present?

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Could Not Access for complete inspection

#### 7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occas				Seldom	Almost Never
Level	General Use of Each l	Floor (e.g., fa	nilyroom, bedroo	om, laundry, wo	orkshop, storage)
Basement	NONE				
1 <sup>st</sup> Floor	LIVINS SPACE				
2 <sup>nd</sup> Floor	NON				
3 <sup>rd</sup> Floor					
4 <sup>th</sup> Floor					
8. FACTORS	THAT MAY INFLUE	NCE INDOOI	R AIR QUALITY	7	
a. Is there a	n attached garage?			Y R	
b. Does the	garage have a separate	heating unit?		Y/N/NA	
c. Are petro stored in	leum-powered machin the garage (e.g., lawnm	<b>es or vehicles</b> lower, atv, car)		Y / N NA Please specify_	
d. Has the b	uilding ever had a fire	?		Y When?	?
e. Is a keros	ene or unvented gas sp	ace heater pre	sent?	Y Where	?
f. Is there a	workshop or hobby/cr	aft area?	Y (N)	Where & Type	
g. Is there s	moking in the building	?	(Y) N	How frequentl	y?
h. Have clea	aning products been us	ed recently?	Y (N	When & Type	?

(YVN When & Type? Avon Perfore

i.	Have	cosmetic	products	been	used	recently?
			1			

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hs? Y/₨ Y/₨ Y/₨ Y/₨	Where & Whe Where & Whe When & Type	n? n?
¥ /€ ¥ /€ ¥ /&	Where & Whe When & Type	n?
Y /₨ Y /&	When & Type	0
Y/8	*^ -	?
	If yes, where v	/ented?
YN	If yes, where v	/ented?
(y)/ N	If yes, is it ver	nted outside? Y / N
YN	When & Type	?
Y (Ŋ		
? Y N ic or auto body	) shop, painting	, fuel oil delivery,
Y / N		
ck at a dry-clea	aning service?	(Circle appropriate
ess)	No Unknown	
ructure? Y	Date of Instal	lation:
Driven Well	Dug Well	Other:
Leach Field	Dry Well	Other:
sidential emerg	gency)	
e r	ess) Fucture? Y N Driven Well Leach Field Sidential emerg	ess) No Unknown ructure? Y N Date of Instal Driven Well Dug Well Leach Field Dry Well sidential emergency) ed:

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained?	Y/N
d. Relocation package provided and explained to residents?	Y/N
6	

#### **11. FLOOR PLANS**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

**Basement:** 



#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

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#### **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used: MINI MAL- PPB RAR

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition <sup>*</sup>	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
inknow	Windep	NN	AG	NA	NM	NO
	A Detailed pro.	lut	IN JONITORY	Cevid not 30 conducted		
						-

\* Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D) \*\* Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
<b>CENTER FOR ENVIRONMENTAL HEALTH</b>

This form must be completed for each residence involved in indoor air testing.

Preparer's Name BRYAN MACHellA Date/Time Prepared 2/15/06	10.20	pm
Preparer's Affiliation FES Phone No. 614-594-3940	-	
Purpose of Investigation Indear An SAMP Twy Survey		
1. OCCUPANT:		
Interviewed: Y/O		
Last Name: Petry First Name:		
Address: 25/29 Alden St.		
County: MIRANY		
Home Phone: 518-274-8389 Office Phone: 518-598-3357	- )	
Number of Occupants/persons at this location $2$ Age of Occupants $MArit(m)$ J	õr (29)	
2. OWNER OR LANDLORD: (Check if same as occupant)		
Interviewed: (V)/N		

intervieweu. 17/19	
Last Name: Lose	First Name: FRANK
Address: 3 South Grandview	Drive CAthAM, NY 12110
County: NIKANY	
Home Phone: SK-7FS-6253 Off	ice Phone:

## **3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

Residential Industrial School Church

Commercial/Multi-use
Other: \_\_\_\_\_

Ranch Raised Ranch Cape Cod Duplex	Split Level Contemporary Apartment House	3-Famil Colonia Mobile Townho	y 1 Home ouses/Condos	
Modular	Log Home	Other:		
If multiple units, how m	any?			
If the property is comm Business Type(s)	ercial, type? √ A			
Does it include resid	ences (i.e., multi-use)?	Y / N	If yes, how many?	
Other characteristics: Number of floors	E	Suilding age	100	
Is the building insula $S^2$	ted Or/N H	Iow air tight?	Tight Average / Not Tig	;ht
4. AIRFLOW $F$	iberslass upstairs			

If the property is residential, type? (Circle appropriate response)

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration Front door All windows have storm windows

Infiltration into air dycts Yes - close A Used to be forced hat AIT

# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick		
b. Basement type:	fyll	crawlspace	slab	other		
c. Basement floor:	concrete	dirt	stone	other		
d. Basement floor:	uncovered	<b>A</b>	covered with	h		
e. Concrete floor:	unsealed	sealed	sealed with	PAINted		
f. Foundation walls:	poured	block	stone	other		
g. Foundation walls:	unsealed	sealed	sealed with			
h. The basement is:	wet	damp	dry	moldy		
i. The basement is:	finished	unfinished	partially fin	ished		
j. Sump present?	O/N					
k. Water in sump? O/ N / not applicable						
Basement/Lowest level depth below grade:(feet)						
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)						

No cracks		 
SUMP		

### 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other		
The primary type of fuel use	d is:				
Natural Gas	Fuel Oil	Kerosene			
Electric	Propane	Solar			
Wood	Coal				
Domestic hot water tank fueled by: $\frac{NN}{5}$					
Boiler/furnace located in:	Basement Outdoors	Main Floor	Other		

Air conditioning:	Central Air	Window mits Open Windows	None
		4	
Are there air distribution d	lucts present?	YOR Closed off	
Describe the supply and co	ld air return duc	twork and its condition where vi	sible including wheth

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY				$\frown$
Is basement/lowest level occupi	ed? Full-time	Occasionally	Seldom	Almost Neve
Level General Use of	Each Floor (e.g., fai	nilyroom, bedro	om, laundry, w	orkshop, storage)
Basement Storm				
1st Floor Living Spn.				
2nd Floor Living Sp	na			
3 <sup>rd</sup> Floor				
4 <sup>th</sup> Floor				-
8. FACTORS THAT MAY IN	FLUENCE INDOOI	R AIR QUALITY	Z	
a. Is there an attached garag	e?		Y (N)	
b. Does the garage have a se	parate heating unit?		Y / N NA	
c. Are petroleum-powered m stored in the garage (e.g.,	achines or vehicles lawnmower, atv, car)		Y / N /NA Please specify	
d. Has the building ever had	a fire?		Y/ When	?
e. Is a kerosene or unvented	gas space heater pre	sent?	Y R Where	?
f. Is there a workshop or hol	oby/craft area?	YN	Where & Type	e?
g. Is there smoking in the bu	ilding?	ч®	How frequent	y?
h. Have cleaning products b	een used recently?	чĞ	When & Type	?

i. Have cosmetic products been used recently?	(Y)/ N	When & Type	BASIC
5	Ŭ		
j. Has painting/staining been done in the last 6 months?	Y N	Where & Whe	n?
k. Is there new carpet, drapes or other textiles?	Y/€	Where & Whe	n?
l. Have air fresheners been used recently?	Y N	When & Type	?
m. Is there a kitchen exhaust fan?	Y 🕟	If yes, where v	vented?
n. Is there a bathroom exhaust fan?	(Y)/ N	If yes, where v	vented? outside
o. Is there a clothes dryer? Z	- (Y)/ N	If yes, is it ver	nted outside (Y/ N
p. Has there been a pesticide application?	(¥/ N	When & Type	? Ant treatment
Are there odors in the building? If yes, please describe:	Y(N)	/	
<b>Do any of the building occupants use solvents at work?</b> (e.g., chemical manufacturing or laboratory, auto mechanic o boiler mechanic, pesticide application, cosmetologist If yes, what types of solvents are used?	Y /N r auto body	shop, painting,	fuel oil delivery,
If yes, are their clothes washed at work?	Y / N		
Do any of the building occupants regularly use or work at response)	t a dry-clea	ning service? (	(Circle appropriate
Yes, use dry-cleaning regularly (weekly) (es, be dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service		No Unknown	
Is there a radon mitigation system for the building/struct Is the system active or passive? Active/Passive	ure? Y/N	Date of Instal	lation:
9. WATER AND SEWAGE			
Water Supply: Public Water Drilled Well Dri	ven Well	Dug Well	Other:
Sewage Disposal: Public Sewer Septic Tank Lea	ich Field	Dry Well	Other:
10. RELOCATION INFORMATION (for oil spill resider	ntial emerg	ency)	
a. Provide reasons why relocation is recommended: _			
b. Residents choose to: remain in home relocate to	friends/fam	ily reloca	ate to hotel/motel

- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

6

#### **11. FLOOR PLANS**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:



Bedroom	BACK porch 0.0	
0.0	LAUMARY 0.0	
BATHROOM C-U LAUNDRY O.C office 0.0	Kitchen Q.C	
	LIVING ROOM 0.0	
	LIVING ROCK	FDoc

#### **12. OUTDOOR PLOT**

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

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#### **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used: \_\_\_\_\_

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition <sup>*</sup>	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
	Usel	111	soud	NN	0.0	NO
	See phol-					
	NOPIU					
Kitchon	Lysol A.t. Bart. Kitch cle	nan	5001		0.0	1/
	Nort charter 110-	Zya	5001		0,0	11
	CASCADE	Bor	such		0.0	Y
	orange clean	22	Soci		Q. (	Y
	Ensy off-BAM	2402	Sucol		0.0	4/
	WINde y	32	5000		0.0	M
	FABAME	32	5001		e.0	1Y
	MULPHY ON SOND	32	500-7		0.0	1
	Lysel How Clepher	64 00	sood		0.0	1
	4501 Milder NAMUN	30 02	Seen		0-0	У
	Mr Clenn Antisatory	140	g1		0.0	1 y

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)** \*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

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APPENDIX I

NYSDEC DATA VALIDATION QA/QC REVIEWS

# New York State Department of Environmental Conservation

## **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us



# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section
From:	John Miller, Chemistry and Laboratory Services Section
Subject:	Kendall/Norton, Final Lab Data Package: Feb. 4 <sup>th</sup> , 2004, Mobilization, Groundwater and Sewer Sediment/Water
Date:	April 29 <sup>th</sup> , 2004

The Kendall/Norton Final Lab Data Package, Feb. 4<sup>th</sup>, 2004 has been reviewed and was found to be sufficiently precise and accurate and can be used for it's intended purpose. The VOC and SVOC data was found to be free from bias with the exception of the two SVOC acid extractables, namely, 2-methylphenol and 4-methylphenol which were detected in some samples at low levels as well as in the field blank. Comments are listed below.

It should be noted here that the laboratory, Adirondack Environmental, did not submit lab control sample data which is required by the 8260b and 8270c methods. However, in light of the high sample concentrations of the analytes of concern, this omission was not problematic.

## SDG: DGC-1 Volatiles by SW-846 Method 8260b

### **Holding Times and Sample Preservation**

All samples were analyzed for VOCs within the EPA's 14 day maximum. The cooler temperature was recorded on the laboratory chain of custody at 4 °C which is within the  $4 \pm 2$  °C control limits.

### **System Monitoring Compound Recoveries**

All system monitoring compounds (SMC) were recovered from the samples with their respective control limits. No data qualifications were necessary due to any SMC recovery exceedences.

### Volatile Matrix Spike and Matrix Spike Duplicate Recoveries and Relative Percent Differences

All spike recoveries from the matrix spike sample were within their respective control limits.

The toluene spike recovery from the MS duplicate sample was reported to be 0%, however, the concentration in the original sample (MW-17) was very high at 33,000  $\mu$ g/L. The duplicate result should have reflected the original 33,000  $\mu$ g/L plus the spike amount of 10,000  $\mu$ g/L for a total of 44,000  $\mu$ g/L, but, only the original 33,000  $\mu$ g/L was reported so the recovery of the spike amount was 0%. No data was qualified as a result of the toluene MS/MSD RPD exceedence. This exceedence is clearly the result of the high level toluene concentration in the original sample.

#### Water Volatile Matrix Spike Blank Recoveries

All spike recoveries were a little high, but, within their respective control limits. The recoveries ranged from trichloroethene at 115% with control limits between 71% and 120% to 1,2-dichloroethene at 133% with control limits between 61% and 145%.

#### **Volatile Method Blank**

With the exception of methylene chloride, all targets were non-detect in the method blank samples. Methylene chloride is a common laboratory contaminant and the level detected in the blanks were trace. No data qualifications are necessary due to the trace amounts of methylene chloride found in the method blanks 3, 4, and 8  $\mu$ g/L.

#### Volatile Internal Standard Are Counts and Retention Times Summary

All internal standard area counts and retention times fell within the control limits<sup>1</sup>.

#### Volatiles Instrument Performance Check

All mass spectrometer BFB abundance tune criteria were met indicating adequate mass resolution and sensitivity for the VOC analysis.

#### Volatile Initial and Continuing Calibration Results

The relative response factors for the two analytes of concern, heptane and toluene, were calculated correctly and were above the 0.05 control limit minimum indicating adequate detector sensitivity. The %RSDs across the calibration range for the analytes of concern fell under the 30% control limit maximum indicating adequate detector response linearity.

All continuing calibration response factors were above the 0.05 control limit minimum and the percent differences between the average initial calibration RRFs and the continuing calibration RRFs fell below the 25% control limit maximum.

## SDG: DGC-1 Semi-Volatiles by SW-846 Method 8270c

#### Semi-Volatile Surrogate Recoveries

The following samples had poor surrogate recoveries with two or more acid surrogates which triggers the qualification of acid fractions targets: MP-6, DGC-5, MW-15 and MP-9. The following table lists the proper data qualification scheme.

<sup>&</sup>lt;sup>1</sup> Area Counts: 12-Hr average  $x/\div 2$ . Retention Times: 12-Hr average  $\pm 0.5$  minutes.

Sample	Surrogate	% R	Control Limits	Actions
MP-6	Phenol-d5 2-fluorophenol 2,4,6-tribromophenol	0 1 5	10-110 21-110 10-123	All non-detect phenolics and phthalates are to be qualified as unuseable with the "R" designation.
DGC-5	Phenol-d5 2-fluorophenol	7 3	10-110 21-110	All non-detect phenolics and phthalates are to be qualified as unuseable with the "R" designation
MW-15	Phenol-d5 2-fluorophenol	9 8	10-110 21-110	All non-detect phenolics and phthalates are to be qualified as unuseable with the "R" designation. All detected same are to be qualified as estimated (biased low) with the "J".
MP-9	Phenol-d5 2-fluorophenol	6 3	10-110 21-110	All non-detect phenolics and phthalates are to be qualified as unuseable with the "R" designation.

#### Semi-Volatile Matrix Spike and Matrix Spike Duplicate Recoveries and RPDs

All spikes were recovered from the matrix spike sample within their respective control limits.

With the exception of 4-chloro-3-methylphenol (%R=102, control limits = 23 - 97) and pentachlorophenol (%R=108, control limits = 9 - 103), all spikes were recovered within their respective control limits. Due to the slightly high recoveries, no data requires qualification. As per the EPA's National Functional Guidelines, the qualification of data is not performed on MS/MSD results alone and is up to the discretion of the data reviewer. Furthermore, since the semi-volatile concentrations in the samples are quite low, there is no need to qualify the data due to the MS/MSD exceedences.

#### Semi-Volatile Water Matrix Spike Blank Recoveries

All spiked compounds were recovered from the matrix spike blank sample within their respective control limits. Recoveries ranged from 36% for phenol (control limits = 12 - 110) to 97% for pyrene (control limits = 26 - 127).

#### Semi-Volatile Blank Sample Results

All blank sample results were non-detect which indicates that there was no systemic contamination of the analytical system which could bias sample results.

#### Semi-Volatile Internal Standard Area Counts and Retention Time Summary

All internal standard area counts and retention times fell within the control limits.

#### Semi-Volatile Instrument Performance Check

All decafluorotriphenylphosphene mass spectrometer ion abundance criteria were met indicating adequate mass assignment and sensitivity for the 8270c back end.

Please feel free to ask me any questions regarding this data review. I can be reached by phone or by e-mail at the following:

John A. Miller

(518) 402-8802 jamiller@gw.dec.state.ny.us

# New York State Department of Environmental Conservation

## **Division of Solid and Hazardous Materials**

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Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us



## Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section
From:	John Miller, Chemistry and Laboratory Services Section
Subject:	Kendall (Nashua), 03/29/04, QA/QC Lab Data Package - Enhanced RFA Sampling
Date:	April 30 <sup>th</sup> , 2004

The SUMMA canister data for the Kendall (Nashua) Enhanced RFA project has been reviewed and was found to be sufficiently accurate and precise and useable for it's intended purpose. In general, the QC sample results fell within their respective control limits indicating that the data was not biased in any significant way. Specific comments regarding QC sample results follow below.

### **General Comments**

The following table lists the toluene and heptane concentrations found in each SUMMA canister sample. The concentrations were relatively low (parts-per-billion by volume), however, the sample MW-11 had the highest concentrations indicating that this area was likely impacted by the tolusol spill.

Sample	Toluene (ppbv)	Heptane (ppbv)
MW-11	22	12
MW-12	2	ND
DGC-12	2	ND
Ambient Air	2	ND
MW-13	1	5
Blank	ND	ND

The laboratory, Lancaster Laboratories, Lancaster, PA, was not consistent when reporting the VOC butene. The chromatograms clearly showed peaks, however, the butene ion abundances were not consistent with those found in their onboard mass spectrum library. Their inconsistent reporting stems from their reporting some butene results while deleting others. The mass spectrums were all similar. They should have either deleted them all or reported them all. An actual mass spectrum from a butene standard would have cleared this up because they may have found that their instrument gave them the irregular mass spectrum for butene.

### **Sample Holding Time and Preservation**

Air samples were collected in SUMMA canisters. All samples were analyzed within the 30 day holding time.

### **Instrument Performance Check**

All BFB mass spectrometer ion abundance criteria were met which indicates sufficient mass selectivity and sensitivity for the analysis.

### **Blank Results**

All target concentrations in the blank sample were non-detect indicating that there is no system contamination present which can bias the analytical results.

### Laboratory Control Sample

All LCS recoveries fell within their respective control limits indicating sufficient data accuracy at the low ppbv level. Recoveries ranged from 55% for 1,4-dichlorobenzene (control limits = 37-149) to 103% for trichloroethene (control limits = 65-144).

### Internal Standard Area Counts And Retention Time Summary

All internal standard area counts and retention times fell within the respective control limits<sup>1</sup> indicating adequate identification and quantification.

### **Initial Calibration Verification**

It appears that all relative response factors for the analytes of concern, heptane and toluene, were calculated correctly and their respective %RSD across the calibration range fell below the 30% control limit maximum. It follows that the calibration curve is sufficiently linear.

With the exception of 1,2,4-trichlorobenzene, where the RRF at 2 ppbv was 0.039, all RRFs fell above the 0.05 control limit minimum. No 1,2,4-trichlorobenzene data was qualified as a result of the low sensitivity at that concentration, however, because all other calibration criteria were met and the peak is fairly well resolved and free from interference from all other targets. It is not expected that there would be any problems with the identification and quantification of that compound.

Please feel free to ask me any questions regarding this data review. I can be reached by phone or by e-mail at the following:

John A. Miller

(518) 402-8802 jamiller@gw.dec.state.ny.us

<sup>&</sup>lt;sup>1</sup>Area Counts: 12-Hr Average  $x/\div 2$ ; Retention Times: 12-Hr Average  $\pm 0.5$  Minutes.

# New York State Department of Environmental Conservation

## **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section
From:	John Miller, Chemistry and Laboratory Services Section
Subject:	Kendall (Nashua), 03/29/04, QA/QC Lab Data Package - Enhanced RFA Sampling
Date:	May 7th, 2004

The groundwater and soil data for the Kendall (Nashua) Enhanced RFA project has been reviewed. In general, the sample results that showed significant impact from tolusol or fuel oil contamination was found to be sufficiently accurate and precise and useable for it's intended purpose. Due to poor acid fraction surrogate recoveries, the non-detect phenolic and phthalate results for the water samples MP-2 and MP-5 are regarded as unuseable. For many of the SVOC samples, PAH concentrations were very high so qualifying the data, other than to find a low bias, was not necessary.

#### **Sample Holding Times and Preservation**

The Laboratory's Chain-Of-Custody pages and Sample Preparation and Analysis Summary pages indicate that all samples were analyzed within the method holding times and the cooler temperatures upon their receipt at the lab were 3 °C and 4 °C which is within the  $4 \pm 2$  °C control limits.

#### VOCs in Groundwater and Sediment Samples by SW-846 8260b

The following samples had significant amounts of toluene contamination which should be regarded as accurate and precise and, in some cases where they were flagged with the "E" qualifier, biased low. The solubility of toluene in water is close to 500 ppm (500,000  $\mu$ g/L), depending on the reference, and the "E" qualifier is used when the concentration is above the calibration range of the method.

Sample	Matrix	Toluene (µg/L)	Heptane (µg/L)	Notes
DGC-8	Water	200,000	ND	
MP-1	Water	35,000	ND	
MP-3	Water	410,000	ND	Water saturated. Free product likely.
MW-14	Water	540,000 E	ND	Water saturated. Free product likely.
MW-14	Water	590,000 E	ND	MW-14 re-run? Free product likely.

#### Water VOC System Monitoring Compounds

All system monitoring compounds were recovered within their respective control limits indicating that the targets were sufficiently recovered as well. The recoveries ranged from 90% (several SMCs from several samples) to 115% for BFB from the Trip Blank.

#### Water VOC Matrix Spike and Matrix Spike Recoveries and RPDs

All MS and MSD recoveries fell within their respective control limits as did the RPs between them. This indicates that the water sample VOC data is reproducible and is not biased due to a matrix interferant.

#### Water VOC Matrix Spike Blank Recoveries

All compounds were recovered from the MS blank sample within their respective control limits.

#### **VOC Blank Sample Results**

With the exception of acetone, methylene chloride and chloroform which were detected at a couple of parts-perbillion, all target results were non-detect. It does not appear that any sample data was biased due to contamination.

#### Volatile Internal Standard Area Counts and Retention Time Summary

All internal standard peak area counts and retention times were within their respective control limits<sup>1</sup> indicating that the target compound concentrations are not biased as a result of poor internal standard recoveries.

#### **VOC Instrument Performance Check**

All BFB tune criteria were met. All relative abundances of the BFB fragments were within their respective control limits.

### **VOC Initial and Continuing Calibration Relative Response Factors**

The toluene and heptane relative response factors were calculated correctly as were the %RSDs across the calibration range. The response factors were above the 0.05 control limit minimum and the %RSDs fell below the 30% control limit maximum indicating that the analytical system had adequate detector sensitivity and the response was linear across the calibration range.

Four continuing calibrations were performed and some %Ds between the initial and continuing calibration RRFs exceeded the 25% control limit maximum, however, they were not site-specific analytes of concern nor were they detected in any of the samples. These exceedences were for the following: bromomethane (%D = 30.1%, 32.4% and 29.2%) and carbon tetrachloride (%D = 27.0%, 25.1%). The %Ds for the two analytes of concern fell under the 25% control limit maximum at: Toluene - 13.5%, 13.6%, 12.9%, 8.4% and 10.7%; Heptane - 1.2%, 9.4%, 6.0%, 5.1% and 2.2%.

<sup>&</sup>lt;sup>1</sup>Area Counts: 12-Hr Average  $x/\div 2$  Retention Time: 12-Hr Average  $\pm 0.5$  minutes.
#### SVOCs in Groundwater and Sediment Samples by SW-846 8270c

The following sediment and groundwater samples contained significant levels of polycyclic aromatic hydrocarbons (PAHs) which appear to be from an anthropogenic origin such as fuel oil. The levels are higher than what one would expect from natural sources:

•	MH-2.5 (SED)
•	MH-3.5 (SED)
•	MH-13 (SED)
•	MH-14 (SED)
•	MH-21 (SED)
•	MH-13 (W)
•	MH-14 (W)

The two tables on page 5 list the PAH concentrations in these samples as well as a reference to a cleanup standard where available.

#### Water SVOC Surrogate Recoveries

Two water samples, MP-2 and MP-5, had the same two acid surrogate recoveries fall low and outside of their respective control limits. These results are listed in the following table.

Sample	Phenol-d5 %R	2-fluorophenol %R	Action
MP-2	7	8	All non-detected phenolics and phthalates are assumed to be biased low and unuseable "R".
MP-5	9	5	All non-detected phenolics and phthalates are assumed to be biased low and unuseable "R".
Control Limits	10 - 110	21 - 110	

No other water samples results required qualification as a result of surrogate recovery problems.

#### **Soil SVOC Surrogate Recoveries**

All surrogates were recovered from the soil samples within their respective control limits. No soil data was qualified as a result of any surrogate recovery problems.

#### Water SVOC Matrix Spike and Matrix Spike Duplicate Results

All compounds were recovered from the water matrix spike sample within their respective control limits. Two compound recoveries from the matrix spike duplicate sample were a little high and outside of their respective control limits, namely, 4-chloro-3-methylphenol @ 102% with control limits of 23% - 97%, and pentachlorophenol @ 108% with control limits of 9% - 103%. As per the EPA's data review guidelines, data qualifications are not performed on MS/MSD results alone and are up to the professional judgement of the data reviewer. No data qualifications were made as a result of the two aforementioned MSD recovery exceedences.

All relative percent differences between the MS and MSD recoveries were within their respective control limits indicating adequate data precision.

#### Soil SVOC Matrix Spike and Matrix Spike Duplicate Results

There were significant problems with the MS and MSD recoveries of the compounds acenaphthene and pyrene, however, this was primarily due to the significant level of contamination of those two compounds in the original sample, where the acenaphthene concentration was 190,000  $\mu$ g/Kg and that of pyrene was 1,500,000  $\mu$ g/Kg.

Since the original sample was significantly contaminated with these two compounds, and the purpose of this data review is to make judgements on data precision, accuracy, etc..., it is in the opinion of this reviewer that qualifying the data as a result of these MS/MSD exceedences does not change the quality of the data in any way.

#### Soil SVOC Matrix Spike Blank Results

All compounds spiked into the blank soil sample were recovered within their respective control limits.

#### Water SVOC Matrix Spike Blank Results

All compounds spiked into the blank water sample were recovered within their respective control limits.

Please feel free to ask me any questions regarding this data review. I can be reached by phone or by e-mail at the following:

John A. Miller

(518) 402-8802 jamiller@gw.dec.state.ny.us New York State Department of Environmental Conservation Division of Solid & Hazardous Materials Bureau of Hazardous Waste & Radiation Management 625 Broadway, Albany, NY 12233-7258 Phone:(518) 402-8594 · FAX:(518) 402-9025 Website: www.dec.state.ny.us



May 26, 2004

Ms. Lauren P. Alterman Senior Council Saint-Gobain Corporation 750 E. Swedesford Road Valley Forge, PA 19482

Dear Ms. Alterman:

Re: Kendall/Former Norton/Nashua Tape Products Facility Watervliet, New York, EPA ID No. NYD 066829599

The following Laboratory Data Packages (submitted by your consultant, Forensic Environmental Services) have been reviewed by the NYSDEC Chemistry and Laboratory Services Section and the sampling data has been found sufficiently precise and accurate and can be used for drafting the RFI Report:

<u>Date Submitted</u>	Sample Collection Date	
October 30, 2003 January 20, 2004	August, September 2003 November, December	
	2003	
February 17, 2004	January 2004	
March 23, 2004	February 2004	
March 29, 2004	February 2004	

The Consent Order gives a 60 calendar day time frame after the Respondent receives the validated analytical data for the submittal of the RFI Final Report. Since the RFI is being conducted in phases, this 60 day time frame is interpreted to mean that the RFI Final Report is due within 60 calendar days after validation of the data generated in the final phase of the RFI.

A meeting has been requested by Forensic Environmental to discuss the RFI results. It is anticipated that during this meeting, it will be decided whether or not additional RFI sampling is required. If no additional sampling is required, the RFI Final Report will be due within 60 calendar days of the date of this meeting. If additional RFI sampling is required, the report submittal date will be within 60 calendar days of receipt of validation of the data generated during the last phase of the RFI.

If there are any questions, or additional information is needed, please contact me at (518) 402-8594.

Sincerely,

/s/

Victor A. Valaitis, P.E. Environmental Engineer II Hazardous Waste Engineering Eastern Section Bureau of Hazardous Waste & Radiation Mgmt.

cc: S. Hamilton
D. Evans
J. Miller
L. Rosenmann
R. Zei, Forensic Env. Svc.
C. VanGuilder, Reg. 4

#### **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section Larry Rosenmann, Engineering Geology Section
From:	John Miller, Chemistry and Laboratory Services Section
Subject:	RFI Sampling, Former Norton/Nashua, Tape Products Facility, Data Review
Date:	August 12 <sup>th</sup> , 2004

The data from the RFI Sampling event at the former Norton/Nashue tape facility in Watervliet, NY have been reviewed. Due to toluene matrix spike and matrix spike duplicate recoveries (both 130%) which exceeded the control limits (76% to 125%), the toluene results from the sample set listed in the first table below should be regarded as biased slightly high. Due to traces of toluene (4  $\mu$ g/L) which were detected in two blank samples, results which have trace levels of toluene should be regarded as false positives and due to analytical system contamination.

In general, the data can be regarded as sufficiently accurate and precise and useable for it's intended purpose. Specific comments are listed below in the order that they appear in the files which were submitted for review: 040616048 SDG 1.pdf and 040616048 SDG 2.pdf.

#### **Sample Preservation and Holding Times**

All samples were received by the lab at 4°C which is within the  $4 \pm 2$ °C control limits. All sample holding times were met.



NYSDEC Sample ID	Adirondack Sample ID	Targets/Method	Matrix
MH-1 (W)	040616048-001	VOCs/8260b	Groundwater
MH-20 (W)	040616048-002	VOCs/8260b	Groundwater
MP-5	040616048-003	VOCs/8260b	Groundwater
MP-6	040616048-004	VOCs/8260b	Groundwater
MP-7	040616048-005	VOCs/8260b	Groundwater
MW-13	040616048-006	VOCs/8260b	Groundwater
DGC-10	040616048-007	VOCs/8260b	Groundwater
DGC-9	040616048-008	VOCs/8260b	Groundwater
MW-12	040616048-009	VOCs/8260b	Groundwater
MW-15	040616048-010	VOCs/8260b	Groundwater
DGC-8	040616048-011	VOCs/8260b	Groundwater
DGC-11	040616048-012	VOCs/8260b	Groundwater
MP-9	040616048-013	VOCs/8260b	Groundwater
FB	040616048-014	VOCs/8260b	DI Water
MW-17	040616048-015	VOCs/8260b	Groundwater
MP-10	040616048-016	VOCs/8260b	Groundwater
MW-11	040616048-017	VOCs/8260b	Groundwater
DGC-6	040616048-018	VOCs/8260b	Groundwater
MW-16	040616048-019	VOCs/8260b	Groundwater
Decon Water	040616048-020	VOCs/8260b	Groundwater

Adirondack Data File: 040616048 SDG 1.pdf This part of the review covers the following samples:

#### **VOC - System Monitoring Compound Recoveries**

All SMCs were recovered within their respective control limits indicating that the target analytes should also have been recovered at adequate levels.

#### Matrix Spike and Matrix Spike Duplicate Recoveries

The toluene recoveries from the matrix spike and the matrix spike duplicate samples exceeded the 76 - 125% control limits at 130% and 130%, respectively, with the relative percent difference at 0%. Although this indicates adequate data precision, the MS and MSD recoveries are biased slightly high and, as a result, the corresponding sample data

should be regarded as biased slightly high and qualified as estimated. All other spiked compounds were recovered within their respective control limits.

### **VOC - Matrix Spike Blank Recoveries**

All spike recoveries fell within their respective control limits.

#### **VOC - Blank Sample Results**

Four blank samples were analyzed and one (VBLK02) showed a trace level of toluene at 4  $\mu$ g/L. Some of the samples that were analyzed with this blank also showed a trace of toluene so it is reasonable to conclude that this was due to system contamination and the samples have false positive results. The following table lists the samples affected and their toluene concentrations. The B qualification simply means that toluene was found in the QC blank VBLK02.

Sample ID	[Toluene] μg/L	Qualification	Finding
MP-7	3	BJ	False Positive
MP-9	5	BJ	False Positive
MW-11	ND	U	
MW-13	ND	U	
MW-16	2	BJ	False Positive
DGC-6	ND	U	
Field Blank	3	BJ	False Positive

The common laboratory contaminants acetone, dichloromethane and 2-butanone were also detected in some blank samples, but, this finding is inconsequential to this data.

### **VOC - Internal Standard Area Counts and Retention Time Summary**

All VOC internal standard area counts and retention times fell within their respective control limits<sup>1</sup> indicating acceptable analytical repeatability regarding sample handling, spiking, chromatography and detector sensitivity, and thus, data precision.

### **VOC - Instrument Performance Check**

All mass spectrometer tune data indicate that the detector was functioning properly. All mass assignments were correct as were their relative abundances.

### **VOC - Initial and Continuing Calibration Verification**

All initial calibration (ICV) and continuing calibration (CCV) relative response factors (RRF) for Toluene and Heptane were calculated correctly and fell above the 0.05 control limit minimum which indicates an acceptable level of detector sensitivity. The RRF percent relative standard

<sup>&</sup>lt;sup>1</sup>Control Limits: Area Counts - 12 Hr Avg.  $x/\div$  2; Retention Times - 12 Hr Avg.  $\pm$  30 sec.

deviations (%RSD) across the calibration range fell below the 30% control limit maximum indicating acceptable calibration linearity across that range. All percent differences between the CCV RRFs and the average ICV RRF fell below the 25% control limit maximum indicating sufficient analytical repeatability as well as data accuracy and precision. The percent differences for toluene ranged from 5.7% to 7.6%, absolute, while the heptane %Ds ranged from 4.9% to 11%, absolute.

This part of the review covers the following samples:						
NYSDEC Sample ID	Adirondack Sample ID	Matrix				
MH-1 (W)	040616048-001	SVOCs/8270c	Groundwater			
MH-20 (W)	040616048-020	SVOCs/8270c	Groundwater			
MW-16	040616048-016	SVOCs/8270c	Groundwater			
MW-17	040616048-017	SVOCs/8270c	Groundwater			
FB	040616048-014	SVOCs/8270c	DI Water			

# Adirondack Data File: 040616048 SDG 1 pdf

#### **SVOC - Surrogate Recoveries**

All surrogates were recovered within their respective control limits indicating that the corresponding target compounds were sufficiently recovered and the data should not be biased as a result of target recovery problems.

#### SVOC - Matrix Spike and Matrix Spike Duplicate Results

All MS and MSD compounds were recovered within their respective control limits indicating that the sample matrix should not have presented a bias to the sample results. With the exception of 4-nitrophenol, all RPDs between the MS and MSD recoveries fell under their respective control limit maximums. Although, the 4-nitrophenol recoveries fell within the 10 - 80% control limits indicating sufficient accuracy, the 57% RPD for 4-nitrophenol is above the 50% control limit maximum and, as a result, all positive 4-nitrophenol data should be regarded as estimated due to problems with data precision.

#### **SVOC - Blank Spike Results**

All spike recoveries from the blank sample fell within their respective control limits.

#### **SVOC - Instrument Performance Check**

All mass spectrometer tune data indicate that the detector was functioning properly. All mass assignments were correct as were their relative abundances.

#### **SVOC - Internal Standard Area Counts and Retention Time Summary**

All SVOC internal standard area counts and retention times fell within their respective control limits<sup>2</sup> indicating acceptable analytical repeatability regarding sample handling, spiking, chromatography and detector sensitivity and thus, data precision...

<sup>&</sup>lt;sup>2</sup>Control Limits: Area Counts - 12 Hr Avg.  $x/\div$  2; Retention Times - 12 Hr Avg.  $\pm$  30 sec.

#### SVOC - Initial and Continuing Calibration Verification

All RRFs were above the 0.05 control limit minimum indicating adequate detector sensitivity and all %RSDs for the RRFs across the calibration range fell below the 30% control limit maximum indicating sufficient linearity across the range. All percent differences between the CCV RRFs and the average ICV RRF fell below the 25% control limit maximum indicating sufficient analytical repeatability as well as data accuracy and precision.

Adirondack Data File: 040616048 SDG 2.pdf This part of the review covers the following samples:						
NYSDEC Sample IDAdirondack Sample IDTargets/MethodMatrix						
P/D Water	040616048-021	VOCs/8260b	Groundwater			
Soil Comp 1	040616048-021	VOCs/8260b	Soil			
Soil Comp 2	040616048-021	VOCs/8260b	Soil			
Trip Blank 040616048-021 VOCs/8260b Groundwater						
DGC-7	040616048-021	VOCs/8260b	DI Water			

#### **VOCs - System Monitoring Compound Recoveries**

All system monitoring compounds were recovered within their respective control limits which indicates that the recoveries for the target compounds should be acceptable.

#### VOCs - Groundwater Sample Matrix Spike and Matrix Spike Duplicate Results

All groundwater MS and MSD recoveries fell within their respective control limits indicating that the analytes of concern were as well. The toluene RPD between the MS and MSD recoveries exceeded the 13% control limit maximum at 14%. Although this does indicate limits to the precision of toluene data, it should be regarded as inconsequential.

#### **VOCs - Soil Sample Matrix Spike and Matrix Spike Duplicate Results**

All soil MS/MSD recoveries and corresponding RPDs fell within their respective control limits indicating that the soil data is not biased by any matrix affects such as interfering substances. The %Rs and RPD also indicates sufficient data precision.

#### **VOCs - Groundwater Blank Spike Recoveries**

All spiked compounds were recovered within their respective control limits from the water blank sample. Recoveries ranged from 102% for trichloroethene to 121% for 1,1-dichloroethene. The toluene recovery was 107% with control limits at 76% to 125%. Heptane was not used as a spiked compound.

#### **VOCs - Soil Blank Spike Recoveries**

All spiked compounds were recovered within their respective control limits from the water blank sample. Recoveries ranged from 118% for benzene to 132% for 1,1-dichloroethene.

#### **VOCs - Internal Standard and Retention Time Summary**

All internal standard area counts and retention times fell within their respective control limits<sup>3</sup> indicating acceptable analytical repeatability regarding sample handling, spiking, chromatography and detector sensitivity, and thus, data precision.

#### **VOCs - Initial and Continuing Calibration Verification**

All initial and continuing relative response factors (RRF) fell above the 0.05 minimum indicating adequate detector sensitivity and the percent relative standard deviations (%RSD) for the RRFs across the calibration range fell below their respective control limit maximums indicating that the calibration was sufficiently linear across the range.

#### **VOC - Blank Sample Results**

Three blank samples were analyzed and one (VBLK01) showed a trace level of toluene at  $4 \mu g/L$ . One of the samples that were analyzed with this blank also showed a trace of toluene so it is reasonable to conclude that this was due to system contamination and the samples have false positive results. The following table lists the affected sample and it's toluene concentration.

Sample ID	[Toluene] μg/L	Qualification	Finding
DG-7	1.0	BJ	False Positive

The common laboratory contaminants acetone, dichloromethane and 2-butanone were also detected in some blank samples, but, this finding is inconsequential to this data.

All questions regarding this review can be directed via telephone or email at the following number and/or address:

John A. Miller

Environmental Chemist 1 Chemistry and Laboratory Services Section Bureau of Pesticides Management Division of Solid and Hazardous Materials

(518) 402-8802 jamiller@gw.dec.state.ny.us

<sup>3</sup>Control Limits: Area Counts - 12 Hr Avg.  $x/\div$  2; Retention Times - 12 Hr Avg.  $\pm$  30 sec.



**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section
	Larry Rosenmann, Engineering Geology Section

From: John A. Miller, Chemistry and Laboratory Support Section

Subject: Kendal (Norton) Groundwater Sample: MP-17

Date: November 8<sup>th</sup>, 2004

The SDG MP-17 data, which consisted of two samples: the groundwater sample MP-17 and a corresponding trip blank, was reviewed and found to be sufficiently accurate, but, not sufficiently precise. As a consequence, the toluene result of 68,000  $\mu$ g/L (ppb) should be regarded as an estimated concentration. The problem with the toluene result is indicated by the RPD exceedence for toluene between the matrix spike and matrix spike duplicate recoveries. Comments follow below in the order that they appear in the SDG package.

This part of the review will cover the following samples and analytes:

Sample ID	Matrix	Collection Date	Analysis Date	Method	Analytes	Toluene Results
MP-17	Groundwater	08/12/2004	08/17/2004	8260b	Volatiles	68,000 μg/L - "J" - Imprecise

#### **VOC - Sample Holding Time and Preservation**

The sample was delivered to the lab approximately 23 minutes after it was collected so the sample should be considered adequately preserved.

#### **VOC - System Monitoring Compound Recoveries**

All SMCs were recovered within their respective control limits indicating that all VOC targets should have been as well. The toluene-d8 surrogate was recovered at 107% with control limits between 88% and 110%.

#### VOC - Matrix Spike and Matrix Spike Duplicate Results

The recoveries of toluene from the MS and MSD samples was 88% and 116%, respectively which is within the 76% to 125% control limits indicating sufficient data accuracy in the presence of the sample matrix. However, the relative percent difference (RPD) between the two recoveries was 27% which falls above the laboratory's 13% control limit maximum indicating that the toluene result for sample MP-17 should be considered estimated and not sufficiently precise.

#### **VOC - Matrix Spike Blank Recovery**

The toluene recovery from the MSB was 98% which falls within the 76% to 125% control limits. All other MSB compounds fell within their respective control limits as well.

#### **VOC - Instrument Performance Check**

All mass assignments and abundances fell within their respective control limits indicating that the detector was able to properly identify target compounds reliably.

#### VOC - Internal Standard Area Counts and Retention Time Summary

All internal standard peak areas and retention times fell within their respective control limits indicating that the chromatography was reliable over time as was the detector sensitivity.

#### **VOC - Initial and Continuing Calibration Verification**

All initial calibration relative response factors (RRF) fell above the 0.05 control limit minimum indicating sufficient detector sensitivity and all percent relative standard deviations (%RSD) fell under the 30% control limit maximum indicating sufficient detector linearity across the calibration range. The toluene and heptane RRFs were calculated correctly as were the corresponding %RSDs.

The percent differences between the initial and continuing calibration RRFs for toluene and heptane fell below the 25% control limit maximum at 10.1% and 19.5%, respectively, indicating that the analyses were consistent over time with no appreciable drop in GC/MS performance which, in turn, indicates acceptable data precision.

#### VOC - Internal Standard Area Count and Retention Time Summary

All internal standard peak area counts and retention times fell within their respective control limits<sup>1</sup> indicating that the chromatography and detector systems operated as per method specifications.

#### **VOC - Blank Results**

With the exception of the common laboratory contaminant acetone, which was detected at 25  $\mu$ g/L in the trip blank, all target compounds were reported as non-detect indicating that no data was positively biased as a result of laboratory and/or system contamination.

<sup>&</sup>lt;sup>1</sup>Area Counts: 12-Hr Average  $x/\div 2$ . Retention Times: 12-Hr Average  $\pm 0.5$  minutes.

Sample ID	Matrix	Collection Date	Analysis Date	Method	Analytes	Toluene Result
MP-17	Groundwater	09/07/2004	09/09/2004	8260b	Volatiles	10,000 μg/L - "J" - Biased Low
MP-13	Groundwater	09/09/2004	09/13/2004	8260b	Volatiles	Non-detect - 10 μg/L - "U"
MP-14	Groundwater	09/09/2004	09/16/2004	8260b	Volatiles	850 μg/L - "J" - Biased Low
MP-15	Groundwater	09/09/2004	09/13/2004	8260b	Volatiles	Non-detect - 10 μg/L - "U"
MP-16	Groundwater	09/09/2004	09/15/2004	8260b	Volatiles	Non-detect - 10 μg/L - "U"
MP-30	Groundwater	09/09/2004	09/13/2004	8260b	Volatiles	Non-detect - 10 μg/L - "U"
SB-173 (3-3.5')	Soil	09/10/2004	09/13/2004	8260b	Volatiles	Non-detect - 11 μg/kg - "U"

This part of the review will cover the following samples and analytes:

#### **VOC - Sample Holding Time and Preservation**

All holding times and sample preservation steps were met. The samples were analyzed within one week from the date of their collection and the chain of custody records indicate that the two cooler temperatures were maintained at 1 °C and 3 °C which is within the  $4 \pm 2$  °C control limits.

#### **VOC - Surrogate Recoveries**

All surrogates were recovered from the samples within their respective control limits. Recoveries ranged from 90% for bromofluorobenzene (control limits 59% to 113%) from the soil sample SB-173 (3-3.5') to 111% for bromofluorobenzene from the water sample MP-13.

#### VOC - Water Matrix Spike and Matrix Spike Duplicate Recoveries and RPDs

The water sample MP-17 was used for the MS/MSD experiment and the toluene recoveries from the MS and MSD samples were both 60% which fall below the 76% - 125% control limits. This indicates a low bias in the sample results. All RPDs fell under their respective control limit maximums indicating sufficient data precision.

The soil sample SB-173 (3-3.5') was used for the MS/MSD experiment and all recoveries and RPDs fell within their respective control limits indicating adequate data precision and accuracy.

#### **VOC - Water Matrix Spike Blank Recoveries**

All spike recoveries from the water blank fell within their respective control limits as did the soil results.

#### **VOC - Blank Results**

With the exception of the common laboratory contaminant acetone and methylene chloride, all target results were non-detect in the various blank samples. A trace level of chloroform, bromodichloromethane and toluene was found in the Field Blank sample, but, these findings are insignificant and can be ignored.

#### **VOC - Internal Standard Area Count and Retention Time Summary**

All internal standard peak area counts and retention times fell within their respective control limits indicating that the chromatography and detector systems operated as per method specifications.

#### **VOC - Instrument Performance Check**

All mass assignments and abundances fell within their respective control limits indicating that the detector was able to properly identify target compounds reliably.

#### **VOC - Initial and Continuing Calibration Verification**

All initial calibration relative response factors (RRF) fell above the 0.05 control limit minimum indicating sufficient detector sensitivity and all percent relative standard deviations (%RSD) fell under the 30% control limit maximum indicating sufficient detector linearity across the calibration range. The toluene and heptane RRFs were calculated correctly as were the corresponding %RSDs.

The percent differences between the initial and continuing calibration RRFs for toluene and heptane fell below the 25% control limit maximum. The toluene %Ds were 3.5%, 3.2%, 0.9%, 6.3%, and 8.3% while the heptane %Ds were 16.3%, 3.0%, 1.5%, 2.7% and 21.2% indicating that the analyses were consistent over time with no appreciable drop in GC/MS performance which, in turn, indicates acceptable data precision.

If there are any questions on this review, I can be reached by email or phone at the following:

John A. Miller

Environmental Chemist 1 Chemistry and Laboratory Support Section Bureau of Pesticides Management Division of Sold and Hazardous Materials

(518) 402-8802 jamiller@gw.dec.state.ny.us

# **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To: Vic Valaitis, Hazardous Waste Engineering, Eastern Section Larry Rosenmann, Engineering Geology Section

From: John A. Miller, Chemistry and Laboratory Support Section

Subject: Kendall (Norton) Lab QA/QC, Five  $H_20$  & Six Soil Samples Collected 10/25, 10/26 & 10/27/04 and Nine  $H_20$  Samples Collected 10/27 & 10/28/04.

Date: December 20<sup>th</sup>, 2004

The data for twenty nine environmental samples were submitted for quality review and were packaged in two sample delivery groups. The sample matrix breakdown is as follows: for those samples which were collected on 10/25/04: three soil and two water; for those which were collected on 10/26/04: three soil and three water; for those which were collected on 10/26/04: three soil and three water; for those which were collected on 10/28/04: seven water.

The toluene results from the water samples SB-178, MP-17, MP-6 and MP-50 should be regarded as estimated due to problems with precision and accuracy as indicated by the low matrix spike duplicate recovery and corresponding MS/MSD recovery percent difference. All other data should be regarded as sufficiently accurate and precise.

By reviewing the chromatograms for samples MW-14 and MP-9, it is apparent that there were some detected compounds in the sample that were not reported as TICs. No library searches were made on their mass spectrums.

The compound methylcyclohexane was detected in samples MW-14 and MW-15. This compound is a fingerprint for petroleum contamination.

The non-detect heptane results for all samples should be considered as suspect for all diluted samples due to problems with the laboratory's reporting practices. Based on a handwritten laboratory record made by

the analyst, it appears that there was a positive detection of heptane in sample MP-17 prior to it's 100-fold dilution. In an effort to bring the high toluene concentration down into the calibration range of the instrument, heptane was diluted out and reported as non-detect. The raw data from the undiluted sample analysis was not provided for review. A similar handwritten notation was made for sample MW-15.

Sample ID	Matrix	Analytes/Method	Date Collected	Date Analyzed	Data Results and Qualifications
SB-176 (7.5-8)	Soil	VOCs/SW8260b	10/25/2004	10/27/2004	
SB-176	Water	VOCs/SW8260b	10/25/2004	10/27/2004	
SB-177 (8.5-9)	Soil	VOCs/SW8260b	10/25/2004	10/27/2004	
SB-178 (9-10)	Soil	VOCs/SW8260b	10/25/2004	10/27/2004	
SB-178	Water	VOCs/SW8260b	10/25/2004	10/27/2004	Toluene @ 1 μg/L estimated - "J"
SB-179 (7.5-8)	Soil	VOCs/SW8260b	10/26/2004	10/27/2004	
SB-179	Water	VOCs/SW8260b	10/26/2004	10/27/2004	
SB-180 (8-9)	Soil	VOCs/SW8260b	10/26/2004	10/27/2004	
SB-180A (20- 25)	Soil	VOCs/SW8260b	10/26/2004	10/27/2004	
SB-180	Water	VOCs/SW8260b	10/26/2004	10/27/2004	
Trip Blank	Water	VOCs/SW8260b	10/26/2004	10/27/2004	
MP-21	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MP-20	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MP-19	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MP-17	Water	VOCs/SW8260b	10/27/2004	11/03/2004	Toluene @ 4800 µg/L estimated - "J"
MP-18	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
FB	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MP-5	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MP-6	Water	VOCs/SW8260b	10/27/2004	11/01/2004	Toluene @ 120 μg/L estimated - "J"
MP-50	Water	VOCs/SW8260b	10/27/2004	11/01/2004	Toluene @ 150 µg/L estimated - "J"

# This part of the review will cover the following samples and matrices:

#### **VOC - Sample Holding Times and Preservation**

All sample holding times fell within the 7-day NYSDEC ASP maximum for un-preserved samples.

The laboratories Chain-Of-Custody Records indicate that two coolers were received and the temperatures were recorded at 8 and 3 °C. The 8 °C temperature is slightly above the  $4 \pm 2$  °C control limits, however, this exceedence should be regarded as inconsequential in light of the short holding times as indicated in the table above.

#### **VOC - Water System Monitoring Compound Recoveries**

All SMC recoveries fell within their respective control limits indicating that the laboratory performed the analyses according to method specifications. No data were qualified as a result of any SMC recovery problems.

#### **VOC - Soil System Monitoring Compound Recoveries**

All SMC recoveries fell within their respective control limits indicating that the laboratory performed the analyses according to method specifications. No data were qualified as a result of any SMC recovery problems.

#### VOC - Water Matrix Spike and Matrix Spike Duplicate Recoveries and RPDs

With the exception of toluene, all MS and MSD recoveries and RPDs fell within their respective control limits.

In regards to toluene, the MSD recovery fell below the 76-125% control limits at 48%. The toluene recovery from the MS sample was 80% translating to a 50% RPD which falls above the 13% control limit maximum. As a result, all toluene results from the analyses of water samples should be regarded as estimated due to problems with data accuracy (%R) and precision (RPD).

#### VOC - Soil Matrix Spike and Matrix Spike Duplicate Recoveries and RPDs

All MS/MSD recoveries fell within their respective control limits as did the corresponding RPDs indicating sufficient data accuracy and precision providing that all other QC criteria are met.

#### **VOC - Water Volatile Matrix Spike Blank Recoveries**

All MS compound recoveries from the water blank fell within their respective control limits indicating that the laboratory was capable of performing the analyses using a clean matrix.

#### **VOC - Soil Volatile Matrix Spike Blank Recoveries**

All MS compound recoveries from the water blank fell within their respective control limits indicating that the laboratory was capable of performing the analyses using a clean matrix.

#### **VOC - Blank Results**

All target compounds were non-detect in all blank samples. However, it is important to note that two TICs were detected in many samples, including the field blank and the trip blank. One TIC was reported to be hexane while the other as an unknown compound which eluted at/around 3.38 minutes. These two compounds appear to be due to laboratory contamination and should be disregarded in all environmental sample results.

#### VOC - Internal Standard Area Count and Retention Time Summery

All internal standard area counts and retention times fell within their respective control limits<sup>1</sup> indicating that the analytical system's sensitivity and chromatography was stable and reliable.

#### **VOC - Instrument Performance Check**

All mass spectrometer tune criteria were met which insured that target fragments had the correct mass assignments and relative abundances. This is necessary to maintain adequate sensitivity for the target analytes and for their correct identification.

#### **Initial and Continuing Calibration Verification Results**

All toluene relative response factors (RRFs) were calculated correctly and fell two orders of magnitude above the 0.05 control limit minimum indicating sufficient detector sensitivity. The percent relative standard deviation (%RSD) of the RRFs across the calibration was 9.9% which falls below the 30% control limit maximum indicating adequate detector linearity across the calibration range.

The percent differences (%Ds) between the average ICV RRF and the CCV RRFs for toluene fell below the 25% control limit maximum at 9.3%, 16.3% and 7.3%. This indicates that the analytical system's performance was reliable over time and no significant drift in sensitivity was observed.

<sup>&</sup>lt;sup>1</sup> Area Counts: 12-Hr average  $x/\div 2$ ;

Sample ID	Matrix	Analytes/Metho Date d Collected		Date Analyzed	Data Results and Qualifications
MP-7	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
DGC-7	Water	VOCs/SW8260b	10/27/2004	11/01/2004	
MW-16	Water	VOCs/SW8260b	10/28/2004	11/02/2004	
MW-15	Water	VOCs/SW8260b	10/28/2004	11/03/2004	Toluene 3 µg/L Methylcyclohexane <sup>2</sup> 37 µg/L
MW-14	Water	VOCs/SW8260b	10/28/2004	11/04/2004	Toluene 16,000 µg/L Ethylbenzene 470 µg/L Total Xylenes 4700 µg/L Methylcyclohexane 430 µg/L Unreported peaks between 8 and 12 min.
MW-11	Water	VOCs/SW8260b	10/28/2004	11/03/2004	
DGC-6	Water	VOCs/SW8260b	10/28/2004	11/04/2004	
MP-9	Water	VOCs/SW8260b	10/28/2004	11/03/2004	Unreported peaks between 8.5 and 11 min.
Trip Blank	Water	VOCs/SW8260b	10/28/2004	11/03/2004	

This part of the review will cover the following samples and matrices:

#### **VOC - Sample Holding Times and Preservation**

All samples were analyzed within the NYSDEC ASP 7-day holding time for non-preserved samples and the cooloer temperature was recorded to be 3 °C which falls within the  $4 \pm 2$  °C control limits.

#### **VOC - Water Sample System Monitoring Compounds**

All SMC recoveries for the water samples fell within their respective control limits indicating that the laboratory performed the analyses according to method specifications. No data were qualified as a result of any SMC recovery problems.

#### VOC - Soil Sample System Monitoring Compound Recoveries

<sup>&</sup>lt;sup>2</sup>Methylcyclohexane is a fingerprint for petroleum. The unreported TICs that show up in the chromatograms of samples MW-14 and MP-9 may be due to petroleum contamination.

All SMC recoveries for the soil samples fell within their respective control limits indicating that the laboratory performed the analyses according to method specifications. No data were qualified as a result of any SMC recovery problems.

#### VOC - Water Matrix Spike and Matrix Spike Duplicate Recoveries and RPDs

All MS/MSD recoveries fell within their respective control limits as did the corresponding RPDs indicating sufficient data accuracy and precision providing that all other QC criteria are met.

#### VOC - Water Volatile Matrix Spike Blank Recoveries

With the exception of trace levels of the common laboratory contaminants methylene chloride and acetone, all blank results were non-detect. Any trace amounts of either compound detected in the environmental samples should be regarded as inconsequential and due to background laboratory contamination.

#### **VOC - Instrument Performance Check**

All mass spectrometer tune criteria were met which insured that target fragments had the correct mass assignments and relative abundances. This is necessary to maintain adequate sensitivity for the target analytes and for their correct identification.

#### VOC - Internal Standard Area Count and Retention Time Summery

All internal standard area counts and retention times fell within their respective control limits indicating that the analytical system's sensitivity and chromatography was stable and reliable.

#### **VOC - Initial and Continuing Calibration Verification**

All ICV RRFs fell above the 0.05 control limit minimum indicating adequate detector sensitivity. The %RSDs for the RRFs across the calibration range for benzene, toluene, heptane, ethylbenzene, m/p xylenes, o-xylene and methylcyclohexane fell below the 30% control limit maximum indicating adequate detector linearity across the calibration range.

The percent differences (%Ds) between the average ICV RRF and the CCV RRFs for the compounds listed in the preceding paragraph fell below the 25% control limit maximum indicating that the analytical system's performance was reliable over time and no significant drift in sensitivity was observed.

Please feel free to ask questions regarding this review. I can be reached at the following:

John A. Miller

Chemistry and Laboratory Services Section Bureau of Pesticides Management Division of Solid and Hazardous Materials (518) 402-8788 jamiller@gw.dec.state.ny.us



Bureau of Pesticides Management, 9<sup>th</sup> Floor 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section Larry Rosenmann, Engineering Geology Section				
From: John A. Miller, Chemistry and Laboratory Support Section					
Subject:	Kendall (Norton) Lab QA/QC, MP-22 Water Sample Taken On 11/15/04, Plus Trip Blank and Field Blank				
Date:	January 24 <sup>th</sup> , 2005				

The water sample, trip blank and field blank data were reviewed and found to be sufficiently accurate and precise and useable for their intended purpose. Details on the various QC results are discussed in the sections that follow.

#### 1.0.0 SDG: MP-22

The part of the data review will cover the following environmental samples:

Sample ID	Matrix	Analytes/Method	Date Collected	Date Analyzed	Data Qualifications
MP-22	Water	VOCs/SW8260b	11/15/2004	11/18/2004	
Field Blank	Water	VOCs/SW8260b	11/15/2004	11/18/2004	
Trip Blank	Water	VOCs/SW8260b	11/15/2004	11/18/2004	



#### **1.0.1 VOCs - Sample Preservation and Holding Times**

A notation on the chain of custody indicated that the sample cooler was at 4 °C upon its receipt at the lab which falls within the  $4 \pm 2$  °C control limits. The 7-day un-preserved water sample holding time, as per the NYSDEC ASP, was met.

#### 1.0.2 VOCs - System Monitoring Compound Recoveries

All SMCs were recovered within their respective holding times indicating that the laboratory performed the analyses as per method specifications. The toluene-d8 recoveries ranged from 101% to 109%.

#### 1.0.3 VOCs - MS/MSD Recoveries and RPDs

All MS and MSD recoveries fell within their respective control limits indicating sufficient data accuracy. All RPDs between the MS and MSD recoveries fell within their respective control limits indicating acceptable data precision. The toluene MS/MSD recoveries were 84% and 82%, respectively, with a 2% RPD.

#### 1.0.4 VOCs - Matrix Spike Blank Recoveries

All MSB recoveries fell within their respective control limits indicating that the laboratory was able to perform the analyses as per method specifications using a clean matrix. Recoveries ranged from 64% for 1,1-dichloroethene to 94% for chlorobenzene.

#### **1.0.5 VOCs - Method Blank Results**

The method blank results were all reported as non-detects which indicates that the system was free from any contamination which can bias analytical results. One tentatively identified compound was detected at 3.33 minutes and this TIC also appears in other sample results indicating that it is not specific to the site samples.

#### 1.0.6 VOCs - Internal Standard Area Counts and Retention Time Summary

All internal standard area counts and retention times fell within their respective control limits<sup>1</sup> indicating that the chromatographic performance and detector sensitivity were reliable over the course of .

#### **1.0.7 VOCs - Instrument Performance Check**

All mass spectrometer tune criteria were met which indicates that the correct mass assignments and relative abundances were made to the bromofluorobenzene tune compound fragments.

#### 1.0.8 VOCs - Initial and Continuing Calibration Verification

Although it was, and often is, difficult to read the numbers submitted by Adirondack Labs., it did appear that the RRFs were calculated correctly. All response factors across the calibration range for toluene and heptane fell above the 0.05 control limit minimum indicating sufficient detector sensitivity and all %RSDs for the response factors fell below the 30% control limit maximum indicating sufficient calibration linearity across the calibration range.

All continuing calibration criteria were met indicating sufficient data accuracy on 11/18/2004.

<sup>&</sup>lt;sup>1</sup> Area Counts: 12-Hr Average  $x/\div 2$ ; Retention Times: 12-Hr Average  $\pm 0.50$  minutes.

Fell free to call or email if you have any questions regarding this review.

John A. Miller

Environmental Chemist 1 Chemistry and Laboratory Support Section Bureau of Pesticides Management Division of Solid and Hazardous Materials (518) 402-8802 jamiller@gw.dec.state.ny.us

# **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 9<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# Memorandum

To:	Vic Valaitis, Hazardous Waste Engineering, Eastern Section
	Larry Rosenmann, Engineering Geology Section

From: John A. Miller, Chemistry and Laboratory Support Section

Subject: Kendall (Norton), Lab QA/QC, Three Air Samples Collected In SUMMA Canisters and Analyzed By Method TO-15.

Date: February 4<sup>th</sup>, 2005

The soil vapor data which is covered by this review was found to be sufficiently accurate and precise and useable for it's intended purpose. Some results were qualified as estimated due to duplicate RPDs that exceeded the control limit of  $\leq 25\%$ . Details regarding the quality follow in the sections below.

#### **General Comments:**

Based on the laboratory's minimum detection limits which were provided in the package, many reporting limits for non-detected compounds appear to be too low.

The detection of methyl t-butyl ether (MTBE) at 110 ppbv in sample VMP-1, as well as the BTEX compounds and other non-chlorinated hydrocarbons, indicates that gasoline impacted the area where the sample was collected.

The presence of chlorinated hydrocarbons such as 1,1,1-trichloroethane at 29 ppbv, methylene chloride at 3 ppbv and 1,2-dichloroethane indicate that the site was impacted by chlorinated solvents. These were not found in the ambient air samples.

No duplicate sample results were submitted with this data package so the target results, when detected, from the analysis of the 10-fold dilution of sample VMP-1 were used to assess the data for precision.

Sample ID	Matrix	Analytes/Method	Date Collected	Date Analyzed	Data Qualifications
VMP-1 Grab	Soil Vapor	VOCs/TO-15	09/10/04	09/14/04	
VMP-2 Grab	Soil Vapor	VOCs/TO-15	09/10/04	09/14/04	
Ambient Grab	Air	VOCs/TO-15	09/10/04	09/14/04	

The data review will cover the following environmental samples:

#### Sample Preservation and Holding Time

All samples were analyzed within the 30 day holding time insuring that reactive target compounds did not degrade biasing their concentrations.

#### Method Blank Results

All blank results were non-detect indicating the absence of any system contamination.

#### Laboratory Control Sample Recoveries

All LCS recoveries fell within their respective control limits indicating that the laboratory performed the analysis as per method specifications and sample data should be regarded as accurate providing that all other QC criteria are met.

### Internal Standard Area Counts and Retention Time Summary

All internal standard area counts and retention times fell within their respective control limits<sup>1</sup> indicating that acceptable chromatographic performance and detector sensitivity for the sample analyses.

### **Duplicate Sample Results**

Sample VMP-1 was run twice, the second being at a 10-fold dilution. The detected compounds in the 10-fold dilution were used to calculate relative percent differences (RPDs) in order to assess the data precision. These results are found in the following table where the result from the 10-fold dilution was multiplied by 10 before RPDs were calculated (Corrected Dilution Result). An RPD control limit maximum of  $\leq 25\%$  was used for all results greater than 0.5 ppbv.

Compound	Original Result	Corrected Dilution Result	RPD	Data Qualification
Propene	34.977	28.19		

<sup>&</sup>lt;sup>1</sup> Area Counts: 24-Hr Average  $x/\div 2$ ;

Retention Time: 245-He Average  $\pm 0.5$  minutes

Division of Solid & Hazardous Materials Bureau of Hazardous Waste & Radiation Management 625 Broadway, Albany, NY 12233-7258 Phone:(518) 402-8594 · FAX:(518) 402-8646 Website: www.dec.state.ny.us



February 9, 2005

Mr. Robert Zei Senior Project Manager Forensic Environmental Services, Inc. 113 John Robert Thomas Drive The Commons At Lincoln Center Exton, PA 19341

Dear Mr. Zei:

#### Re: Kendall/Former Norton/Nashua Tape Products Facility Watervliet, New York, EPA ID No. NYD 066829599

The following Laboratory Data Packages have been reviewed by the NYSDEC Chemistry and Laboratory Services Section and comments on the data usability are as follows:

Chemist's Memo Date	Sampling Event	<u>Conclusion</u>	
August 12, 2004	June 2004 Mobilization	Data Useable	
November 8, 2004	MP-17 collected 8/12/04 MP-17 collected 9/7/04 MP-13,14,15,16, SB-173 collected 9/07-9/10/04	Regard as estimated Data Useable Data Useable	
December 20, 2004	29 Samples collected 10/2	5, See detailed	
	26,27 and 10/28/04	comments	
January 24, 2005	MP-22 collected 11/15/04 Data Useable		
February 4, 2005	SUMMA samples collectedData Useable 9/10/04		

Since some of the QA/QC comments are quite detailed, I am e-mailing you all of the Chemist's memos.

If there are any questions, or additional information is needed, please contact me at (518) 402-8594.

Sincerely,

/s/

Victor A. Valaitis, P.E. Environmental Engineer II Hazardous Waste Engineering Eastern Section Bureau of Hazardous Waste & Radiation Mgmt.

cc: L. Alterman, Saint-Gobain
S. Hamilton
D. Evans
J. Miller
L. Rosenmann
C. VanGuilder, Reg. 4



### **Division of Solid and Hazardous Materials**

**Bureau of Pesticides Management, 11<sup>th</sup> Floor** 625 Broadway, Albany, New York 12233-7254

Phone: (518) 402-8788 · FAX: (518) 402-9024

Website: www.dec.state.ny.us

# MEMORANDUM

- TO: Vic Valaitis, Hazardous Waste Engineering, Eastern Section
- **FROM:** John A. Miller, Chemistry and Laboratory Services Section, Bureau of Pesticides Management
- SUBJECT: Kendall (Norton/Nashua) QA/QC For 02/15/2006 Air Sampling Event, Private Houses @ Alden Street

**DATE:** May 17<sup>th</sup>, 2006

The SUMMA canister data from the Kendall (Norton/Nashua) QA/QC For 02/15/2006 Air Sampling Event were found to be sufficiently precise, accurate and useable for their intended purpose. Response factors and final concentrations appeared to have been calculated correctly. Details regarding the QC performance criteria are described below.

This review will cover the following samples:

Lab ID	Matrix	Target/Metho d	Date Collected	Date Analysis	Data Qualifiers
4712636	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712637	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712638	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712639	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712640	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712641	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712642	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712643	Air	VOCs/TO-15	02/15/2006	02/23/2006	None

Lab ID	Matrix	Target/Metho d	Date Collected	Date Analysis	Data Qualifiers
4712644	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712645	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712646	Air	VOCs/TO-15	02/15/2006	02/23/2006	None
4712647	Air	VOCs/TO-15	02/15/2006	02/23/2006	None

#### **Sample Preservation and Holding Times**

All samples were analyzed within the 30 day holding. No other steps need be taken in regards to sample preservation.

#### Laboratory Control Sample Recoveries

All LCS recoveries fell within their respective control limits indicating that the sample data should be regarded as sufficiently accurate providing all other QC criteria are met.

#### Mass Spectrometer Instrument Performance Check

All ion abundance criteria were met indicating that the detector was tuned properly for the TO-15 target list and sufficient analyte selectivity and detector sensitivity was achieved.

#### **Internal Standard Area Count and Retention Time Summary**

All internal standard area counts and retention times fell within their respective control limits indicating that the analytical system performance was maintained throughout the time-course of the analytical sequence.

#### Initial Calibration Verification Relative Response Factors and Corresponding %RSDs

All ICV relative response factors (RRFs) appeared to have been calculated correctly. All %RSDs for the RRFs fell below the 30% control limit maximum indicating sufficient initial calibration linearity.

#### **Continuing Calibration Percent Differences**

All percent differences (%Ds) between the average ICV RRF and the corresponding continuing calibration verification (CCV) RRF fell below the 30% control limit maximum indicating that the sample data should be regarded as sufficiently accurate and precise providing that all other QC criteria are met.

#### **Blank Sample Results**

The trip blank appeared to have traces of some target analytes, but toluene, which is a site analyte of concern, was non-detect indicating the lack of any source for toluene contamination. All method blank results showed the absence of any system contamination which could significantly bias the sample results.

All questions and/or comments can be made to the following:

John A. Miller

Environmental Chemist 2 Chemistry and Laboratory Services Section Bureau of Pesticides Management Division of Solid and Hazardous Materials Dept. Of Environmental Conservation jamiller@gw.dec.state.ny.us (518) 402-8802

#### APPENDIX J

#### NYSDEC COMMENTS ON DRAFT RFI REPORT AND SAINT-GOBAIN RESPONSE

Division of Solid and Hazardous Materials Bureau of Hazardous Waste and Radiation Management, 9<sup>th</sup> Floor 625 Broadway, Albany, New York 12233-7258 Phone: (518) 402-8594 • FAX: (518) 402-9024 Website: www.dec.ny.gov



Alexander B. Grannis Commissioner

August 21, 2007

Mr. Robert Zei Senior Project Manager Forensic Environmental Services, Inc. 113 John Robert Thomas Drive The Commons at Lincoln Center Exton, PA 19341

#### Re: Former Norton/Nashua Tape Products Facility, Watervliet, NY; NYSDEC Order on Consent No. 4-20001205-3375, USEPA ID No. NYD066829599; RFI Report/Preliminary Corrective Measures Study/Interim Groundwater Monitoring Plan, November 2006

The New York State Department of Environmental Conservation (Department) reviewed the draft report referenced above. The Department's comments are discussed below.

#### Miscellaneous Comments

- Figure 1-1, Site Location Map, should be a topographic map.
- In general, when discussing analytical results, the appropriate tables and figures should be referenced. Usually the table was referenced but not the figure, making it difficult to find the sampling locations. At times, only some of the sampling locations could be located on a figure, assuming it was the correct figure.

#### 4.3.1a Depth to Water/Groundwater Flow

- The Department does not concur with the conclusion that groundwater flow from the tank farm area is not an active transport mechanism for dissolved-phase toluene towards the Off-Site AOC. Water table elevations in the area of the former tank farm do not consistently show that flow in this area is moving towards the steep gradients in the northeastern corner of the site between MW-12 and MW-10. Furthermore, even if the steepest gradients are those towards the east, that does not preclude a portion of the flow from the tank farm area moving towards Alden Street. Therefore, the Department believes that groundwater flow from the tank farm area does move to the north, at least periodically.
- This information does provides additional impetus for continued monitoring of this off-

site area. In fact, because contaminants can be mobilized by certain remedial measures, monitoring will be especially important during the period when the measures are being implemented in the tank farm area.

- 4.5.3 Former Solvent Recovery Room AOC
- Figure 3-1 is not included in Volume 1. (This figure is also referenced in other sections.)
- 4.5.4 Former Filter Room AOC
- Specify which two borings are being discussed. It is assumed to be borings SB-13 and SB-14.
- 4.5.8 Former Solvent Line AOC
- Identify the soil borings that were sampled. Also, specify where the PAH results for these samples are located.
- 5.4 Supplemental Sewer Sediment Sampling
- Table 5-1 is confusing. The contents in Table 5-1 do not seem to follow the results described in the text of section 5.4.
- 5.6.2 <u>RFI Sewer Sampling Results Sewer Bedding Vapor</u>
- Sampling location DCG-12 cannot be located on any figures.
- In general, analytical results from sewer water that discharges to surface waters are not compared to groundwater standards. Instead, results should be compared to surface water standards found in 6 NYCRR Part 703.5, "Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations".
- 6.2 Groundwater Monitoring and Sampling
- Samples were collected from MP-17 and MW-19 in May 2006 and analyzed for electron acceptor and other natural attenuation parameters. Indicate where the results are located in this document.
- <u>6.3</u> <u>Groundwater Sampling Private Wells</u>
- Indicate where the results from the private well are located.
- 7.2.3 Geoprobe Borings Installed Adjacent to Alden & Craig Streets
- On page 7-5, Figure 4-17 is referenced. There is no Figure 4-17 included in this document. On this same page, it appears that Figure 7-2 is incorrectly referenced.

•

### 7.3.4 Groundwater Sampling - Private "Garden" Well

• The location of the private well at 32 Craig Street is not clearly marked on Figure 6-1.

# 8.1 Former Tank Farm SWMU

The following information is included on page 8-2: "There is no protocol currently in place to specifically prohibit excavation activities in the Former Tank Farm SWMU. To minimize this possible exposure pathway, Saint-Gobain will establish a formal agreement with the property owner, such that notice will be provided before any excavation work is performed, so appropriate plans to manage soils and limit exposure can be developed and implemented."

Site-wide control measures should be proposed in the CMS. Such measures typically include property deed restrictions and a Site Management Plan. The property deed restrictions may limit property uses and restrict the use of soil and groundwater (if necessary). The deed restrictions also notify future site owners of the existence and location of the Site Management Plan. The Site Management Plan includes, at a minimum:

- (1) The locations and extent of all impacted soils and groundwater remaining at the site;
- (2) Guidelines to be followed for the management of impacted soils should they be disturbed during future construction activities; and
- (3) Details for long-term maintenance and security at the site (including monitoring wells).

The property deed restriction and Site Management Plan must be referenced in an appropriate legal mechanism to ensure that they will be in place as long as necessary.

• In addition, a Community Air Monitoring Plan, as required by NYSDOH, must be developed for any on-site activities that may potentially expose downwind receptors to particulates, vapors and odors.

# 8.4 Evaluation of Sanitary & Storm Sewer SWMUs

• Explain what measures will be implemented to prevent contaminated sediments in the storm sewer lines from being discharged off-site.

### 9.0 Quality Assurance/Quality Procedures and Samples

• This entire section does not need to be included if it is covered in the approved QA/QC Plan. However, include any sections that pertain to a specific investigation. Also include any changes and modifications to the approved QA/QC Plan.

# 10.0 Preliminary CMS and Remedial Action Technology Screening

• The CMS should address all COCs present on-site and off-site, even if NFA or LTM is

the proposed remedy. A table which summarizes the COCs and the proposed remedies is useful and easy to reference.

#### <u>10.1</u> <u>Corrective Measures Performance Goals</u>

• Saint-Gobain proposes to contact the property owners in the off-site AOC and ask them to provide voluntary notification of activities. In order to keep the current property owners informed, Saint-Gobain should notify the owners in writing on an annual basis. In the written notification to the owners, it should be clear that Saint-Gobain is responsible for costs associated with sampling and analysis of soil and/or groundwater for such activities on their property.

#### <u>10.3</u> Target Treatment Areas

• Sediments in the storm sewer system are not addressed in this section.

#### <u>10.7</u> <u>Selected Corrective Measures Alternatives</u>

• The selected corrective measure alternatives are easier to follow if presented in table format.

During the conference call on March 28, 2007, options for disposal and treatment of soils around the tank farm were discussed with the Department. This issue was resolved through the granting of a "contained-in determination", which the Department approved on July 24, 2007. Saint-Gobain must meet the requirements set forth in the approval letter of July 24<sup>th</sup> in order to use the "contained-in determination".

Also, the New York State Department of Health (DOH) has determined that sampling for soil vapor intrusion will be required in the offices areas of the warehouse building. Sampling will not be required at this time in the warehouse areas.

Saint-Gobain must submit a revised RFI Report/Preliminary Corrective Measures Study/Interim Groundwater Monitoring Plan within forty-five (45) days of receipt of this letter, in accordance with the Order on Consent. If you have any questions, please contact me at (518) 402-8594.

Sincerely,

Aliene Barrow Ea

Alicia Barraza Environmental Engineer Hazardous Waste Engineering Eastern Section

cc: J. Reidy, USEPA Region 2 C. Bethony, NYSDOH

#### Forensic Environmental Services, Inc.

113 John Robert Thomas Drive The Commons at Lincoln Center Exton, Pennsylvania 19341

Telephone: (610) 594-3940

Telecopier: (610) 594-3943

October 12, 2007

Alicia Barraza NYS Dept. of Environmental Conservation Division of Solid & Hazardous Materials 625 Broadway, Albany, NY 12233-7252

Re: Former Norton Company/Nashua Tape Products Facility, Watervliet, NY; EPA ID No. NYD 066829599; RFI Report/Preliminary Corrective Measures Study/Interim Groundwater Monitoring Plan, November 2006

Dear Ms. Barraza:

The following is a response to August 21, 2007 comments from the New York State Department of Environmental Conservation (the Department) for the document referenced above.

Miscellaneous Comments

- Figure 1-1, Site Location Map, should be a topographic map.
- In general, when discussing analytical results, the appropriate tables and figures should be referenced. Usually the table was referenced but not the figure, making it difficult to find the sampling locations. At times, only some of the sampling locations could be located on a figure, assuming it was the correct figure.

Figure 1-1 has been modified accordingly, and references to appropriate tables and figures have been added throughout the text.

#### 4.3.1a Depth to Water/Groundwater Flow

• The Department does not concur with the conclusion that groundwater flow from the tank farm area is not an active transport mechanism for dissolved-phase toluene towards the Off-Site AOC. Water table elevations in the area of the former tank farm do not consistently show that flow in this area is moving towards the steep gradients in the northeastern corner of the site between MW-12 and MW-10. Furthermore, even if the steepest gradients are those towards the east, that does not preclude a portion of the flow from the tank farm area moving towards Alden Street. Possibly, the most conclusive evidence for northward flow is the fact that contamination is not shown in the wells moving towards the east but it is clearly shown in wells north of the tank farm. Therefore, the Department believes that groundwater flow from the tank farm area does move to the north, at least periodically.

Response to NYSDEC Comments on the RFI Report October 12, 2007 Page 2

This information does, provide additional impetus for continued monitoring of this off-site area. In fact, because contaminants can be mobilized by certain remedial measures, monitoring will be especially important during the period when the measures are being implemented in the tank farm area.

Saint-Gobain maintains that current dissolved toluene distribution reflect the remnant historical distribution, which most likely extended to Alden Street as a result of extensive dewatering performed during storm sewer installation in 1971. The text was modified to include a reference to Section 7.4 where this is discussed in more detail. During the past two years of ground-water monitoring, there has not been any evidence of any toluene migration towards Alden Street. Ground-water flow direction (see Figures 4-6 through 4-13 of the RFIR) from the former tank farm is consistently to the east, there is no current component of flow towards Alden Street, and the geophysical survey did not reveal any evidence of a preferred pathway from the former tank farm to the north (see Section 7.4 of the RFIR). The lack of toluene impact in the direction of current ground-water flow is further evidence that anything remaining from the historical toluene plume is relatively immobile and undergoing active degradation at its margins.

Ultimately, the ground-water flow interpretation does not make a difference in the proposed remedies. As noted in the RFIR, Saint-Gobain has always acknowledged the importance of off-site monitoring and fully intends to continue the program when corrective measures are being implemented in the former tank farm area.

#### 4.5.3 Former Solvent Recovery Room AOC

• Figure 3-1 is not included in Volume 1. (This figure is also referenced in other sections.)

The correct figure designation is Figure 2-1. This has been corrected at all locations in the text.

#### 4.5.4 Former Filter Room AOC

• Specify which two borings are being discussed. It is assumed to be borings SB-13 and SB-14.

The two soil borings are SB-13 and SB-14 (added to the text).

#### 4.5.8 Former Solvent Line AOC

• Identify the soil borings that were sampled. Also, specify where the PAH results for these samples are located.

Numerous soil borings were collected in this AOC. The text has been modified to reflect the key sample designations, cross-reference the appropriate figure, and identify the appropriate figure and table for PAH results.
### 5.4 Supplemental Sewer Sediment Sampling

• Table 5-1 is confusing. The contents in Table 5-1 do not seem to follow the results described in the text of section 5.4.

The text and table have been clarified to eliminate any inconsistencies.

### 5.6.2 RFI Sewer Sampling Results - Sewer Bedding Vapor

• Sampling location DCG-12 cannot be located on any figures.

Sample DGC-12 is a field duplicate of sample MW-12. There is a note on Table 5-2, and the text was modified to identify the duplicate sample.

# 5.6.4 RFI Sewer Sampling Results - Sewer Water

• In general, analytical results from sewer water that discharges to surface waters are not compared to groundwater standards. Instead, results should be compared to surface water standards found in 6 NYCRR Part 703.5, "Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations".

This change was made to the text and associated table. The text now states: "...Exceedances of NYSDEC Class C surface water (6 NYCRR Part 703) standards were limited to bis(2-ethylhexyl)phthalate in storm sewer samples MH-13 and MH-14...

All SVOC analytes were near or below detection limits in sanitary sewer water sample MH-1(San) except 4-methylphenol (concentration 29  $\mu$ g/L) and bis(2-ethylhexyl)phthalate (13  $\mu$ g/L), and exceedances of NYSDEC Class C surface water (6 NYCRR Part 703) standards were limited to these two compounds...

Phenols and bis(2-ethylhexyl)phthalate were detected in sanitary sewer water sample MH-1(San) at concentrations above their corresponding NYSDEC Class C surface water standard (see Table 5-4)...

#### 6.2 Groundwater Monitoring and Sampling

• Samples were collected from MP-17 and MW-19 in May 2006 and analyzed for electron acceptor and other natural attenuation parameters. Indicate where the results are located in this document.

The results are discussed in Section 7.3.3, and presented on Table 4-10. This additional cross-reference was added to the text at this location.

#### 6.3 Groundwater Sampling – Private Wells

• Indicate where the results from the private well are located.

The results are discussed in Section 7.3.4. and presented on Table 4-8. This additional cross-reference was added to the text at this location.

#### 7.2.3 Geoprobe Borings Installed Adjacent to Alden & Craig Streets

• On page 7-5, Figure 4-17 is referenced. There is no Figure 4-17 included in this document. On this same page, it appears that Figure 7-2 is incorrectly referenced.

These typos were corrected in the text (Figure 4-16: Figure 7-1).

#### 7.3.4 Groundwater Sampling – Private "Garden" Well

• The location of the private well at 32 Craig Street is not clear on Figure 6-1.

The location is presented on Figure 7-1 (text corrected).

#### 8.1 Former Tank Farm SWMU

The following information is included on page 8-2: "There is no protocol currently in place to specifically prohibit excavation activities in the Former Tank Farm SWMU. To minimize this possible exposure pathway, Saint-Gobain will establish a formal agreement with the property owner, such that notice will be provided before any excavation work is performed, so appropriate plans to manage soils and limit exposure can be developed and implemented."

Site-wide control measures should be proposed in the CMS. Such measures typically include property deed restrictions and a Site Management Plan. The property deed restrictions may limit property uses and restrict the use of soil and groundwater (if necessary). The deed restrictions also notify future site owners of the existence and location of the Site Management Plan. The Site Management Plan includes, at a minimum:

(1) The locations and extent of all impacted soils and groundwater remaining at the site;
(2) Guidelines to be followed for the management of impacted soils should they be disturbed during future construction activities; and

(3) Details for long-term maintenance and security at the site (including monitoring wells). The property deed restriction and Site Management Plan must be referenced in an appropriate legal mechanism to ensure that they will be in place as long as necessary.

# • In addition, a Community Air Monitoring Plan, as required by NYSDOH, must be developed of any on-site activities that may potentially expose downwind receptors to particulates, vapors and odors.

The text was modified to include: "Details, including a Soil Management Plan, a Community Air Monitoring Plan, and a deed restriction to restrict the use of soil and ground water following the completion of Corrective Measures, if necessary and acceptable to the property owner, will be discussed in the CMS."

#### 8.4 Evaluation of Sanitary & Storm Sewer SWMUs

# • Has it been determined from previous investigations that contaminated sediments in the storm sewer lines are not being discharged off-site?

No. "However, the removal of the existing storm sewer sediments will also eliminate the potential off-site migration of any sediments remaining from historical operations at the former Norton/Nashua Site" (added to text).

#### 9.0 Quality Assurance/Quality Procedures and Samples

• This section does not need to be included in this document is it is already covered in the approved QA/QC Plan. However, any changes and modifications to the approved QA/QC Plan should be summarized in this section.

Several paragraphs that were duplicative of the QA/QC Plan were deleted from the text. Portions of this section detailing the specific QA/QC samples collected during the investigation (and associated results), including changes and modifications to the approved QA/QC Plan, were retained.

#### 10.0 Preliminary CMS and Remedial Action Technology Screening

• The CMS should address all COCs present on-site and off-site, even if NFA or LTM is the proposed remedy. A table which summarizes the COCs and the proposed remedies is useful and easy to reference.

A table has been included.

#### 10.1 Corrective Measures Performance Goals

• Saint-Gobain is proposing to contact the property owners in the off-site AOC and ask them to provide voluntary notification of activities. In order to keep the current property owners informed, Saint-Gobain should notify the property owner/occupant in writing on an annual basis, as the owner/occupant may change over time. In the written notification to the owners, it should be clear that Saint-Gobain is also responsible for costs associated with sampling of soil and/or groundwater for such activities at the off-site AOC.

The text was modified to include: 'Saint-Gobain will contact the property owners in the Off-Site AOC (the four homes previously identified for subslab and indoor air sampling: see Figure 2-3) in writing annually and ask them to provide voluntary notification of such activities until DEC approves or provides closure for off-site issues. The notification will clearly state that if any additional soil and/or ground-water sampling is determined to be necessary in the Off-Site AOC, Saint-Gobain will perform these activities at no cost to the residents."

#### 10.3 Target Treatment Areas

• Sediments in the storm sewer system are not addressed in this section.

Potential treatment of the sewer SWMUs is considered separate from soil/ground-water issues and for that reason is addressed in 10.10. A cross-reference has been added to Section 10.3.

#### 10.7 Selected Corrective Measures Alternatives

• The selected corrective measure alternatives are easier to follow if presented in table format.

A table has been included.

# The August 21, 2007 comments letter also noted that the New York State Department of Health (DOH) will require sampling for potential soil vapor intrusion at the on-site offices.

The current property owner (Cloverleaf) has generally provided unrestricted access to Saint-Gobain for completion of the required investigation and associated tasks, but the offices have recently undergone extensive renovations, and Cloverleaf does not want borings installed into the floor. However, Cloverleaf will agree to the installation and sampling of a sub-slab monitoring point in the floor immediately outside the office wall (in the direction of the toluene plume), and the collection of one round of indoor air samples from selected office locations. Details will be presented in the CMS Workplan.

Cloverleaf also provided information on the facility's heating and cooling systems. The building is heated by a natural gas furnace located in the warehouse area. The offices are heated and cooled via forced air from ceiling vents. Saint-Gobain will schedule the sub-slab/indoor air sampling event (heating vs. non-heating season) per DOH recommendations.

FES is currently finalizing the draft RFIR to incorporate the changes discussed above and will submit an electronic copy to the NYSDEC concurrently with this correspondence. Saint-Gobain will submit and distribute final copies of the RFIR Report per Order on Consent Index No. CO: 4-20001205-3375 dated June 4, 2002 following final NYSDEC approval of the RFIR Report.

If you have any questions or comments on the information in this letter, please contact me at (610) 594-3940.

Sincerely,

FORENSIC ENVIRONMENTAL SERVICES, INC.

Kheit for

Robert W. Zei, Ph.D., CPG Sr. Project Manager

cc: Paul Rappleyea, Saint-Gobain Abrasives, Inc. Lauren Alterman, Esq., Saint-Gobain Corporation Russell Gregg, Esq. Liberty Mutual Insurance Co. Thomas S. West, Esq., The West Firm, PLLC Robert S. Amrein, Esq., Nashua Corporation Matthew Tanzer, Esq., Tyco International (U.S.), Inc. S. Joyner, Tyco International (U.S.), Inc. Brian K. Helf, Cloverleaf Distribution, LLC

## Forensic Environmental Services

From: To:	"Alicia Barraza" <aabarraz@gw.dec.state.ny.us> "Bob Zei" <forensic@chesco.com></forensic@chesco.com></aabarraz@gw.dec.state.ny.us>
Cc:	"Daniel Evans" <djevans.po3.domain3@gw.dec.state.ny.us>; "Larry Rosenmann" <larosenm.po3.domain3@gw.dec.state.ny.us></larosenm.po3.domain3@gw.dec.state.ny.us></djevans.po3.domain3@gw.dec.state.ny.us>
Sent:	Friday, November 02, 2007 1:28 PM
Attach:	6 NYCRR Part 375.pdf
Subject:	Former Norton/Nashua RFIR

Bob -

Larry and I have finished reviewing the responses and changes to the RFIR which you submitted on October 12th. Everything looks fine with one exception. This has to do with changes at DEC and DOH regarding soil cleanup objectives.

It should be noted that the Department\*s guidance for the soil cleanup objectives (SCO's) has changed. 6 NYCRR Part 375, Environmental Remediation Programs, became effective on December 14, 2006. Part 375-6 includes SCO's for restricted use, unrestricted use, protection of groundwater, and protection of ecological resources. The Department\*s RCRA Corrective Action Program is now using the SCO's found in Part 375-6. Specifically, Saint-Gobain should use the applicable SCO's found in Part 375-6.8(b), rather than the ones found in TAGM 4046. If Part 375-6.8(b) does not include a constituent of concern at this site, then Saint-Gobain should default to the SCO's found in TAGM 4046.

This means redoing Table 4-1, and other applicable tables, to show the appropriate SCO's. The SCO's for an industrial site would apply to the Norton site. In some case the SCO's will be lower and in some cases they will be higher. Attached below is a PDF file of the Part 375 regulations.

If you wish to discuss, please contact me or Larry to set up a time. Thanks.

Alicia