
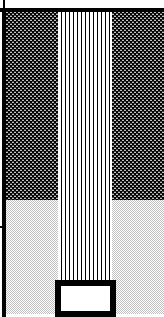


Appendix B

Soil Vapor Boring Logs


FIELD BORING LOG FORM

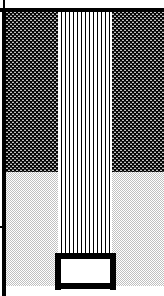
 <p>EA Engineering, P.C. EA Science and Technology</p> <p style="text-align: center;">LOG OF SOIL BORING</p> <p>Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____</p>	Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: NCR Sewer - Ithaca NY																							
	Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-02																							
	Sampling Method: Macrocore		Sheet 1 of _____																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">Water Lev.</th> <th style="width: 10%;">Time</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th colspan="2" style="text-align: center;">Drilling</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">Start</td> <td style="text-align: center;">Finish</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">0900</td> <td style="text-align: center;">1000</td> </tr> </table>		Water Lev.	Time					Drilling								Start	Finish							0900	1000
Water Lev.	Time					Drilling																				
						Start	Finish																			
						0900	1000																			

Blow Counts (140-lb)	Feet Drvn/ Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions:	
						Weather:	Temperature:
				0		0-1.5 ft: Topsoil, organics	
			1		1.5-5.5 ft: Weathered bedrock		
			2				
			3		2 ft: Sand, granular bentonite to ground surface		
			4				
			5				
			6				
			7				
			8				
			9				
			10				
			11				
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
		20					

Logged by: Robert Casey Date: 9/19/07
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer

FIELD BORING LOG FORM

 <p>EA Engineering, P.C. EA Science and Technology</p> <p style="text-align: center;">LOG OF SOIL BORING</p> <p>Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____</p>	Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: NCR Sewer - Ithaca NY																							
	Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-05																							
	Sampling Method: Macrocore		Sheet 1 of _____																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">Water Lev.</th> <th style="width: 10%;">Time</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th colspan="2" style="text-align: center;">Drilling</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">Start</td> <td style="text-align: center;">Finish</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">1200</td> <td style="text-align: center;">1300</td> </tr> </table>		Water Lev.	Time					Drilling								Start	Finish							1200	1300
Water Lev.	Time					Drilling																				
						Start	Finish																			
						1200	1300																			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
				0		0-0.5 ft: Topsoil
				1		0.5-5.2 ft Fill material
				2		
				3		2 ft: Sand, granular bentonite to ground surface
				4		
				5		
				6		
				7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
			20			

Logged by: Robert Casey Date: 9/19/07
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer



EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: NCR Sewer - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-06
Sampling Method: Macrocore		Sheet 1 of 1
		Drilling
Water Lev.		Start
Time		Finish
		10:30
		10:40

Blow Counts (140-lb)	Feet		Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions:
	Drvn/Ft.	Recvr'd					Snow Covered Brush Area
							Weather:
							Temperature:
					0		0-4.5ft: Brown gravelly silty sand (fill)
							Bedrock at 4.5ft
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Logged by: David Crandall

Date: 12/5/07

Drilling Contractor: Nothnagle Drilling

Driller: Jeff Schweitzer



EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job No. 14368.19	Client: New York State Department of Environmental Conservation	Location: NCR Sewer - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-07
Sampling Method: Macrocore		Sheet 1 of 1
		Drilling
Water Lev.		Start
Time		Finish
		10:10
		10:25

Blow Counts (140-lb)	Feet		Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:	
	Drvn/Ft.	Recvr'd						
	4/4				0		0-4.5ft: Brown gravelly silty sand (fill) Bedrock at 4.5 ft. bgs Sampler set at 4.5 ft. bgs	
					1			
					2			
					3			
					4			
	.5/.5				5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			
					13			
					14			
					15			
					16			
					17			
					18			
					19			
				20				

Logged by: David Crandall Date: 12/5/07
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer



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LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: NCR Sewer - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-10
Sampling Method: Macrocore		Sheet 1 of 1
		Drilling
Water Lev.		Start
Time		Finish
		12:30
		12:40

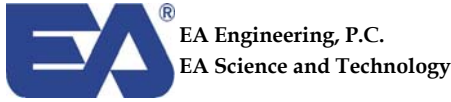
Blow Counts (140-lb)	Feet		Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions:
	Drvn./Ft.	Recvr'd					Snow Covered Brush Area
							Weather:
							Temperature:
					0		0-4ft: Brown gravelly silty sand (fill)
							Bedrock at 4ft
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Logged by: David Crandall

Date: 12/5/07

Drilling Contractor: Nothnagle Drilling

Driller: Jeff Schweitzer



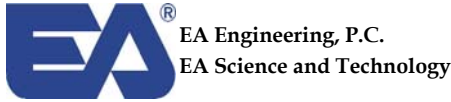
LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Axiohm OU2 - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-11
Sampling Method: Macrocore		Sheet 1 of 1
Drilling		
Water Lev. Time		Start 10:15
		Finish 10:30

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID	Depth	USCS Log	Surface Conditions:	Brush Area
			(ppm) HNu	in Feet		Weather:	Temperature:
				0		0-3ft: Brown gravelly clayey sand fill (fine, dense, moist)	
	3/2.5			1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: David Crandall Date: 4-18-08
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer



LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Axiohm OU2 - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-12
Sampling Method: Macrocore		Sheet 1 of 1
Drilling		
Water Lev. Time		Start Finish
		14:10 14:15

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions:	Brush Area
						Weather:	Temperature:
	2/1		0	0		0-2ft: Brown gravelly silty sand (fill)	Sunny 75F
			0	1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: David Crandall Date: 4-18-08
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer

FIELD BORING LOG FORM



EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

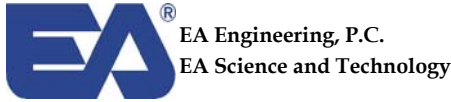
Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Axiohm OU2 - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-13
Sampling Method: Macrocore		Sheet 1 of 1
Water Lev. Time		Drilling Start Finish
		11:20 11:50

Blow Counts (140-lb)	Feet		Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions:	
	Drvn/Ft.	Recvrd					Apshalt Road	Sunny
				0	0		0-5ft: Asphalt	
				0	1		5-2ft: Brown gray gavelly sand (coarse, loose, dry)	
					2		2-4.5.ft: Brown gravelly silty sand (fine, medium dense, dry)	
					3			
					4			
					5			
					6			* Point moved after sewer line hit at 5.5 feet in initial boring. Depth provided by City of Ithaca of Invert pipe was off by ~2 feet
					7			
					8			
					9			
					10			
					11			
					12			
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			

Logged by: David Crandall
 Drilling Contractor: Nothnagle Drilling

Date: 4-18-08
 Driller: Jeff Schweitzer



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EA Science and Technology

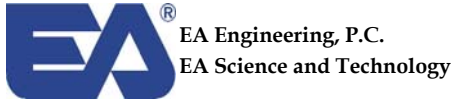
LOG OF SOIL BORING

Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Axiohm OU2 - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-14
Sampling Method: Macrocore		Sheet 1 of 1
Drilling		
Water Lev. Time		Start Finish
		11:55 12:00

Blow Counts (140-lb)	Feet Drvn/Ft. Recvr	Well Diagram	PID	Depth	USCS Log	Surface Conditions:
			(ppm) HNu	in Feet		Weather:
	2.2/1			0		Asphalt Road
				0		0-.5ft: Asphalt
				1		.5-2.2ft: Brown gray gavelly sand (coarse, loose, dry)
				2		
				3		
				4		
				5		
				6		
				7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: David Crandall Date: 4-18-08
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer



EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING


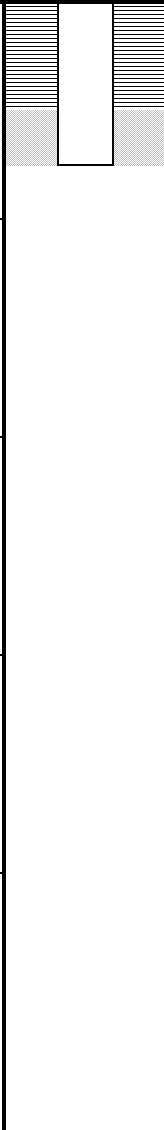
Coordinates: _____
 Surface Elevation: _____
 Casing Below Surface: _____
 Reference Elevation: _____
 Reference Description: _____

Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Axiohm OU2 - Ithaca NY
Drilling Method: 6610DT Geoprobe		Soil Boring Number: SV-15
Sampling Method: Macrocore		Sheet 1 of 1
Drilling		
Water Lev. Time		Start Finish
		12:30 12:35

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID	Depth	USCS Log	Surface Conditions:	Brush Area
			(ppm) HNu	in Feet		Weather:	Temperature:
	2/1		0	0		0-2ft: Brown gravelly silty sand (fine, medium dense, moist)	
			0	1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: David Crandall Date: 4-18-08
 Drilling Contractor: Nothnagle Drilling Driller: Jeff Schweitzer


FIELD BORING LOG FORM

 <p>EA Engineering, P.C. EA Science and Technology</p> <p>LOG OF SOIL BORING</p> <p>Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____</p>			Job. No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Ithaca		
			Drilling Method: Hand Auger		Soil Boring Number: SV-16		
			Sampling Method: grab		Sheet 1 of 1		
			Water Lev. _____ Time _____		Drilling Start _____ Finish _____ 11/4/08; 14:00 11/4/08; 14:40		
Blow Counts (140-lb)	Feet Drvn/Ft. Recvr'd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: grass	
							Weather: partly sunny and cloudy Temperature: ~60 degrees
	3.5/3.5			0		(0-.5') TOPSOIL	
				1			(0.5-3.5) Dark Brown SILTY CLAY with GRAVEL, COBBLES and broken SHALE
					2		
					3		Set Temporary Vapor Point at 3'. Sand 3-2'.
					4		Bentonite Seal 2-grade.
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
				20		LT 98.7% / 100 ppm	

Logged by: _____ DC _____
 Drilling Contractor: _____ EA _____


Date: _____ 11/4/08 _____
 Driller: _____ Hand auger _____

FIELD BORING LOG FORM

 <p>EA Engineering, P.C. EA Science and Technology</p> <p>LOG OF SOIL BORING</p> <p>Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____</p>			Job No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Ithaca		
			Drilling Method: Augers / Air Rotary		Soil Boring Number: SV-01P		
			Sampling Method: grab		Sheet 1 of 1		
			Water Lev. _____ Time _____		Drilling Start _____ Finish _____ 11/4/08; 10:15 11/4/08; 13:00		
Blow Counts (140-lb)	Feet Drvn/Ft. Recvr'd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: grass Weather: partly sunny and cloudy Temperature: ~55 degrees	
							(0-3) Brown SILT, SAND and BEDROCK fragments
					0		
					1		
					2		
				0.0	3		(3') Peastone (3.5-8') Weathered BEDROCK
					4		
					5		
					6		
					7		
				10.0	8		(8-8.8') BEDROCK at 8'. Changed to Air Rotary at 8.8'. Grey BEDROCK (shale and limestone). Air rotary to 30'. No water. Backfilled boring to 15.3' and set soil vapor point.
					9		Sand 15.3 - 13.7'
					10		Bentonite Seal 13.7 - 12.1'
					11		Sand 12.1 - grade Flush mount
					12		
					13		
					14		
					15		
					16		
					17		
					18		
				19			
				20			

Logged by: _____ SN/DC _____ Date: _____ 11/4/08 _____
 Drilling Contractor: _____ Nothnangle _____ Driller: _____

FIELD BORING LOG FORM

 <p>EA Engineering, P.C. EA Science and Technology</p> <p>LOG OF SOIL BORING</p> <p>Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____</p>			Job No. 14368.19	Client: New York State Department of Environmental Conservation	Location: Ithaca		
			Drilling Method: Augers / Air Rotary		Soil Boring Number: SV-02P		
			Sampling Method: grab		Sheet 1 of 1		
			Water Lev. _____ Time _____		Drilling Start _____ Finish _____ 11/4/08; 14:00 11/4/08; 16:00		
Blow Counts (140-lb)	Feet Drvn/Ft. Recvr'd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: grass Weather: partly sunny and cloudy Temperature: ~60 degrees	
							(0-3) Brown SILT, SAND and BEDROCK fragments
					0		
					1		
					2		
				0.0	3		(3') Peastone (3.5-9.3') Weathered BEDROCK
					4		
					5		
					6		
					7		
					8		(9.3') BEDROCK at 9.3'. Changed to Air Rotary at 9.3'. Grey BEDROCK (shale and limestone). Air rotary to 25'. No water. Set soil vapor point at 24.7'.
				0.0	9		Sand 24.7 - 23' Bentonite Seal 23- 21.3'
					10		Sand 21.3 - grade Flush mount
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
				19			
				20			

Logged by: _____ SN/DC _____ Date: _____ 11/4/08 _____
 Drilling Contractor: _____ Nothnangle _____ Driller: _____