

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03												
LOG OF: Boring B-1702			Location: Sta. 9+90.9, 70.5 ft. LT of CR 184 CL			Date Drilled: 06/12/07 to 06/13/07												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 13.5' (includes drilling water0)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay					
DESCRIPTION																		
0	907.9						Medium dense brown SANDY SILT (A-4a), little gravel; damp.											
		6 8 9	17			1												
-3.5	904.4	42 50/2	15			2	Severely weathered yellowish brown SILTSTONE.											
-5.0	902.9						Medium hard brown SANDSTONE interbedded with SILTSTONE; very fine to fine grained, highly weathered, argillaceous, medium bedded to massive, moderately to highly fractured.											
		Core 48"	Rec 48"			RQD 75%	R-1	@ 9.0'-9.8', broken.										
10								@ 10.8', 11.7', 12.6', 14.6', 14.9', 17.1', low angle fractures. @ 11.7'-12.3', partly formed high angle fracture.										
		Core 120"	Rec 120"			RQD 82%	R-2	@ 14.0'-14.2', high angle fracture.										
15																		
20								@ 20.8', 21.4', 21.8', 22.9', 24.7', 26.0', 26.7', 26.6', 27.0', low angle fractures.										
		Core 120"	Rec 120"			RQD 82%	R-3	@ 23.3'-24.1', high angle fracture.										
25																		
30								@ 29.0'-29.8', high angle fracture and broken zone.										

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring B-1702 Location: Sta. 9+90.9, 70.5 ft. LT of CR 184 CL Date Drilled: 06/12/07 to 06/13/07

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 13.5' (includes drilling water0)	GRADATION						STANDARD PENETRATION (N)				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	PL	LL			
30.0	877.8 877.9						<p><b>DESCRIPTION</b></p> <p>@ 30.0', 33.1', 33.7', 35.6', 48.3', 46.0', low angle fractures.</p> <p>Soft to medium hard brown and gray SANDSTONE; very fine to fine grained, highly weathered, medium bedded to massive, moderately fractured, contains few argillaceous laminations.</p> <p>@ 30.3'-30.5', decomposed argillaceous zone.</p> <p>@ 33.7'-34.3', high angle fracture.</p> <p>@ 34.6'-34.9', decomposed broken zone.</p> <p>@ 37.0'-37.6', 40.0'-40.1', 42.6'-42.7', decomposed argillaceous zones.</p> <p>@ 41.1'-42.1', broken zone.</p> <p>@ 46.2', 48.9', 49.2', 49.3', 49.5', 49.9', 50.5', 52.3', 52.5', 53.2', 54.2', low angle fractures.</p> <p>Soft to medium hard gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, thinly laminated to medium bedded, slightly fractured, formation prone to parting; contains moderate argillaceous laminations.</p> <p>@ 49.3'-49.5', 50.0'-50.5', high angle rust stained fractures.</p> <p>Soft to medium hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, thinly laminated to thinly bedded, moderately to highly fractured, formation prone to parting.</p> <p>@ 54.3'- 59.7', numerous low angle fractures.</p>											
35		Core 120"	Rec 120"	RQD 81%	R-4													
40																		
45		Core 120"	Rec 116"	RQD 78%	R-5													
46.8	861.1																	
50																		
54.2	853.7	Core 120"	Rec 120"	RQD 69%	R-6													
55																		
60																		

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Client: TranSystems, Inc.			Project: SCI-823-0.00				Job No. 0121-3070.03										
LOG OF: Boring B-1702			Location: Sta. 9+90.9, 70.5 ft. LT of CR 184 CL				Date Drilled: 06/12/07 to 06/13/07										
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 13.5' (includes drilling water0)	GRADATION									
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40			
DESCRIPTION																	
847.8																	
65		Core 120"	Rec 120"	RQD 80%	R-7		Soft to medium hard SANDSTONE interbedded with SILTSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, arenaceous, micaceous, thinly laminated to thinly bedded, moderately to highly fractured, formation prone to parting. @ 60.0'-74.2', numerous low angle fractures. @ 65.0'-65.3', high angle fracture.										
70		Core 72"	Rec 72"	RQD 90%	R-8												
75.0	832.9						Bottom of Boring - 75.0'										
80																	
85																	
90																	

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Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03												
LOG OF: Boring B-1704			Location: Sta. 13+76.8, 49.1 ft. LT of CR 184 CL			Date Drilled: 06/13/07												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 6.8' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay					
DESCRIPTION																		
0	950.5																	
		4				1												
		4	9	16														
		22				2												
		24	48	21														
5																		
6.0	944.5	45				3												
7.0	943.5	50/3		18														
		Core 30"	Rec 30"		RQD 70%	R-1												
		Core 60"	Rec 60"		RQD 63%	R-2												
12.7	937.8																	
		Core 120"	Rec 120"		RQD 96%	R-3												
		Core 120"	Rec 120"		RQD 100%	R-4												
30																		

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Client: TranSystems, Inc.

Project: SCI-823-0.00

Job No. 0121-3070.03

**LOG OF: Boring B-1704**

Location: Sta. 13+76.8, 49.1 ft. LT of CR 184 CL

Date Drilled: 06/13/07

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 6.8' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
	920.5						DESCRIPTION  Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations.  @ 37.0'-48.9', few to moderate argillaceous laminations. @ 37.8'-38.2', high angle fracture. @ 39.0', 40.5', 43.4', 45.7', 46.7', 47.8', 50.5', low angle fractures.							
35														
40		Core 120"	Rec 120"	RQD 97%	R-5									
45														
50		Core 120"	Rec 120"	RQD 97%	R-6									
55.0	895.5	Core 6"	Rec 6"	RQD 100%	R-7		Bottom of Boring - 55.0'							
60														

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03														
LOG OF: Boring B-1705			Location: Sta. 17+36.8, 25.2 ft. RT of CR 184 CL			Date Drilled: 05/31/07														
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 4.7' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay							
DESCRIPTION																				
0.3	952.3 952.0																			
		4				1	Topsoil - 4"													
		4	3	15			Loose to medium dense dark brown SANDY SILT (A-4a), some fine to coarse sand, little to some gravel, trace clay; damp.													
		2	3	15		2														
5		2	2	14		3	@ 6.0'-12.5', orangeish brown.													
		3	7	18		4														
		11	18	22		5														
13.5	938.8	9	38	16		6	Severely weathered orangeish gray SANDSTONE.													
		50/4																		
15		50/5		5		7														
		44	50/3	9		8														
20		50/3		3		9														
21.5	930.8		Core 60"	Rec 60"	RQD 75%	R-1	Medium hard to hard gray and brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, thinly laminated to medium bedded, highly fractured.													
25																				
26.5	925.8						Bottom of Boring - 26.5'													
30																				

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03								
LOG OF: Boring B-1706			Location: Sta. 17+07.6, 121.9 ft. RT of CR 184 CL			Date Drilled: 06/11/07								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: Not Reported	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
0	912.6						Medium dense to dense yellowish brown SANDY SILT (A-4a), little gravel, trace silty clay; contains rock fragments; damp.							
5		5 10 10	17	1										
		8 12 16	18	2										
		8 15 20	18	3										
		7 17 33	18	4										
11.0	901.6	26 50/3	9	5			Severely weathered gray SILTSTONE.							
13.0	899.6						Soft to medium hard brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, massive, highly fractured. @ 13.9'-14.8', decomposed high angle fracture with infilling.  @ 16.1'-16.7', high angle fracture.							
15		Core 60"	Rec 60"		R-1									
18.0	894.6						Bottom of Boring - 18.0'							
20														
25														
30														

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Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03								
LOG OF: Boring R-558			Location: Sta. 629+24.7, 118.1 ft. RT of SR 823 CL			Date Drilled: 05/26/05 to 05/31/05								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 8.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
0.2	984.1													
	983.9						Topsoil - 2"							
		2				1	2.5							
		3												
		5	14											
		11				2	2.25							
		16												
5		30	15				@ 3.5'-5.0', contains rock fragments.							
6.0	978.1	15				3	4.5+							
		50/4	10				Severely weathered brownish gray SHALE.							
		50/4	3			4								
10														
		34				5								
		50/4	9											
		15				6								
		35					@ 13.5'-15.0', gray.							
15		50	18											
16.0	968.1	50/4	3			7								
							Brownish gray SANDSTONE fragments.							
17.5	966.6													
20		Core 54"	Rec 41"	RQD 20%	R-1	*77	Medium hard brown SANDSTONE; very fine to fine grained, decomposed to highly weathered, argillaceous, micaceous, laminated to medium bedded, highly fractured to broken, iron stained fractures, contains few to moderate argillaceous laminations.							
							@ 22.0'-30.0', brownish gray.							
25							@ 24.5',26.7',27.3', high angle fractures.							
		Core 120"	Rec 120"	RQD 91%	R-2	*88								
30														



Client: TranSystems, Inc.		Project: SCI-823-0.00				Job No. 0121-3070.03										
LOG OF: Boring R-558			Location: Sta. 629+24.7, 118.1 ft. RT of SR 823 CL			Date Drilled: 05/26/05 to 05/31/05										
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 8.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40		
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay			
DESCRIPTION																
954.0																
							Medium hard brown SANDSTONE; very fine to fine grained, decomposed to highly weathered, argillaceous, micaceous, laminated to medium bedded, highly fractured to broken, iron stained fractures; contains few to moderate argillaceous laminations.									
35							@ 38.1', high angle rust stained fracture.									
41.3	942.8						Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, thinly bedded to thickly bedded, slightly fractured; contains few argillaceous laminations.									
45																
		Core 120"	Rec 120"	RQD 89%	R-3	*184										
51.5	932.6						Very hard brownish orange SANDSTONE; very fine to fine grained, highly weathered, calcareous, fossiliferous, thickly bedded, slightly fractured.									
55.0	929.1						Hard gray SANDSTONE; highly to slightly weathered, micaceous, very thickly bedded, slightly fractured, contains iron staining.									
		Core 120"	Rec 120"	RQD 98%	R-4	*435										
		Core 120"	Rec 120"	RQD 95%	R-5	*220										
60																

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Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-558 Location: Sta. 629+24.7, 118.1 ft. RT of SR 823 CL Date Drilled: 05/26/05 to 05/31/05

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 8.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N)			
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ●		Blows per foot - ○	
DESCRIPTION																	
	924.0																
62.0	922.1						Hard gray SANDSTONE; slightly weathered, micaceous, very thickly bedded, slightly fractured, contains iron staining.										
							Bottom of Boring - 62.0'										
65																	
70																	
75																	
80																	
85																	
90																	

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-560			Location: Sta. 630+08.0, 162.3 ft. LT of SR 823 CL			Date Drilled: 05/26/05													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
DESCRIPTION																			
0.2	973.1																		
	972.9						Topsoil - 2"												
		2	4	7	14	1	2.25	Very stiff to hard brown SANDY SILT (A-4a), little clay, little gravel; contains rock fragments; damp.											
		7	50/5		10	2	4.5+												
6.0	967.1	12	50/5		11	3		Severely weathered brown SHALE.											
		12	29	37	16	4													
		22	46	50/3	15	5													
		33	50/5		11	6		@ 13.5'-19.4', gray.											
		50/5			5	7													
		50	50/3		9	8													
		36	50/4		10	9		@ 21.0'-21.8', brown, contains rust stains.											
22.5	950.6							Soft to medium hard brownish gray SANDSTONE; very fine to fine grained, highly weathered to decomposed, argillaceous, micaceous, thinly laminated to thinly bedded, highly fractured. @ 23.5', 24.9', high angle fractures.											
		Core 120"	Rec 107"			RQD 65%	R-1	*321											
29.1	944.0							Medium hard gray SANDSTONE; very fine to fine grained.											
30																			

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Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-560			Location: Sta. 630+08.0, 162.3 ft. LT of SR 823 CL			Date Drilled: 05/26/05													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
DESCRIPTION																			
943.0																			
							Medium hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, medium bedded to thinly bedded, moderately fractured, contains moderate argillaceous laminations. @ 30.7', interbedded shale.												
35																			
37.5	935.6	Core 120"	Rec 120"	RQD 93%	R-2	*143	Soft gray SHALE interbedded with SANDSTONE; very fine grained, highly weathered, micaceous, thinly laminated, moderately fractured.												
38.7	934.4						Medium hard brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, micaceous, medium bedded to thickly bedded, slightly fractured, iron stained. @ 38.7' to 41.5', contains calcareous bands.												
40																			
45																			
		Core 120"	Rec 116"	RQD 93%	R-3	*353	@ 49.0'-52.5', gray, interbedded with siltstone, micaceous, pyritic, argillaceous, laminated.												
50																			
52.5	920.6						Bottom of Boring - 52.5'												
55																			
60																			

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03								
LOG OF: Boring R-598			Location: Sta. 657+37.3, 1.0 ft. LT of SR 823 CL			Date Drilled: 6/21/05								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 12.2' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
0	782.0													
0.4	781.6						Topsoil - 5"							
		13 14 18	15	1		--	Very stiff brown SANDY SILT (A-4a), little gravel, trace clay; contains rock fragments; damp.							
		8 9 11	13	2		--								
5		6 8 8	7	3		--								
		50/5	5	4			@ 8.5'-8.9', severely weathered brown and gray SHALE fragments.							
9.0	773.0						Soft brown SHALE; very fine grained, decomposed weathered, highly fractured.							
13.5	768.5	Core 120"	Rec 120"	RQD 47%	R-1		Medium hard gray SHALE interbedded with gray fine grained SANDSTONE; very fine to fine grained, decomposed to highly weathered, micaceous, laminated to thinly bedded, highly fractured.							
26.5	755.5	Core 120"	Rec 120"	RQD 66%	R-2		Hard gray SANDSTONE; fine grained, highly to moderately weathered, argillaceous, micaceous, laminated to thickly bedded, slightly fractured.							

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03										
LOG OF: Boring R-598				Location: Sta. 657+37.3, 1.0 ft. LT of SR 823 CL			Date Drilled: 6/21/05									
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 12.2' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40		
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay			
DESCRIPTION																
751.9		Core 54"	Rec 54"	RQD 94%	R-3		Hard gray SANDSTONE; fine grained, highly to moderately weathered, argillaceous, micaceous, laminated to thickly bedded, slightly fractured.									
33.5	748.5						Bottom of Boring - 33.5'									
35																
40																
45																
50																
55																
60																

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03									
LOG OF: Boring R-764			Location: STa. 822+46.7, 107.9 ft. RT of SR 823 CL			Date Drilled: 08/16/05									
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 8.0' (inside hollowstem augers)	GRADATION						STANDARD PENETRATION (N)	
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40	
DESCRIPTION															
0	780.4														
0.3	780.1						Topsoil - 4" / 6" soil removed before drilling.								
3.0	777.4	21 29 35	10	1		4.5+	Very dense brown SILT (A-4b), little clay, trace fine sand; slightly organic; damp.								64
5.5	774.9	18 22 40	13	2			Hard brown SILTY CLAY (A-6b), trace fine sand; damp.								62
5.5		29 37 45	18	3			Severely weathered brown SHALE, arenaceous.								82
10		12 21 50/5	17	4											50+
		14 15 21	18	5											
		49 50/2	8	6											50+
15.0	765.4						Soft brown SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated, highly fractured to broken.								
20		Core 120"	Rec 120"		RQD 65%	R1	@ 18.8'-19.1', 20.2'-20.6', 20.8'-21.7', iron stained high angle fractures.								
23.3	757.1						Soft gray SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated, mechanical fractures.								
25															
30		Core	Rec		RQD										

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-764 Location: STa. 822+46.7, 107.9 ft. RT of SR 823 CL Date Drilled: 08/16/05

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 8.0' (inside hollowstem augers)	GRADATION						STANDARD PENETRATION (N)				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
750.4		120"	120"	91%	R2		Soft gray SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated, mechanical fractures.											
35																		
40		Core 120"	Rec 120"	RQD 81%	R3													
45																		
50		Core 120"	Rec 120"	RQD 51%	R4													
55																		
60		Core	Rec	RQD														



Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-764 Location: STa. 822+46.7, 107.9 ft. RT of SR 823 CL Date Drilled: 08/16/05

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 8.0' (inside hollowstem augers)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
	720.3	120"	120"	59%	R5		Soft gray SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated, mechanical fractures.							
65.0	715.4							Bottom of Boring - 65.0'						
70														
75														
80														
85														
90														

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03												
LOG OF: Boring R-790				Location: Sta. 858+21.5, 130.5 ft. LT of SR 823 CL				Date Drilled: 08/31/05												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 19.5' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
				Drive	Press / Core			DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt		% Clay					
0	657.9																			
0.3	657.6						Topsoil - 3"													
		7 14 33	12			1	Hard brown SILTY CLAY (A-6b), some fine to coarse sand, little gravel; damp.	11	13	--	15	61								
3.0	654.9					2	Hard brown CLAY (A-7-6), "and" silt, trace fine to coarse sand; damp.	0	2	--	4	49	45							
		14 50/6	10																	
5.5	652.4					3	Hard brown SILTY CLAY (A-6b), trace fine to coarse sand; damp.	0	1	--	2	48	49							
		24 50/5	9																	
8.5	649.4			Core 18"	Rec 18"	RQD 25%	Soft to medium hard greenish brown SHALE; very fine grained, highly weathered, argillaceous, thinly laminated to laminated, highly fractured. @ 10.3', 12.0', 12.1', 12.3', 14.4', high angle fractures.													
10				Core 60"	Rec 60"	RQD 73%	@ 12.7'-12.9', sandstone beds with iron staining.													
14.2	643.7						Hard to very hard light to dark brown, gray SANDSTONE; fine grained, highly weathered, micaceous, medium bedded to thickly bedded, moderately to highly fractured. @ 15.0'-15.3', 17.2', 17.4'- 17.7', 21.6'-21.9', high angle fractures. @ 16.6', clay seam. @ 17.7'-20.5', light brown sandstone with interbedded shale.													
15																				
20				Core 120"	Rec 120"	RQD 73%	@ 20.5'-25.0', sandstone of varying color, pitted in some areas.													
25.0	632.9						Hard to very hard light gray SANDSTONE; very fine to fine grained, slightly weathered, micaceous, thickly bedded, moderately to highly fractured. @ 25.6', 28.0', 29.9', low angle fractures. @ 26.2'-26.4', 27.0'-27.2', high angle fractures. @ 26.8'-27.5', 28.2'-28.8', moderate argillaceous laminations.													
30				Core	Rec	RQD														

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03											
LOG OF: Boring R-790				Location: Sta. 858+21.5, 130.5 ft. LT of SR 823 CL				Date Drilled: 08/31/05											
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 19.5' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
	627.9	120"	120"	83%	R4		Hard brown SANDSTONE; medium grained, moderately to highly weathered, micaceous, medium bedded, moderately fractured. @ 30.2', 30.9', 31.8', low angle fractures. @ 31.9'-33.0', gray, turbidity weathering. @ 33.0'-33.2', high angle fracture. @ 34.3'-35.0', gray, broken.												
35.0	622.9							Bottom of Boring - 35.0'											
40																			
45																			
50																			
55																			
60																			

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03								
LOG OF: Boring R-794			Location: Sta. 862+28.7, 6.5 ft. RT of SR 823 CL			Date Drilled: 08/30/05								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 5.8' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
0	676.9													
0.5	676.4						Topsoil - 6"							
		16 18 18	17	1		4.5+	Hard brown SILT AND CLAY (A-6a), trace fine to coarse sand; damp.	0	2	--	4	62	32	
3.0	673.9						Hard brown CLAY (A-7-6), little fine to coarse sand; damp to moist.	0	1	--	12	40	47	
		16 19 22	18	2		4.5								
5							Very stiff brown SANDY SILT (A-4a), some clay; damp to moist.	0	0	--	28	47	25	
5.5	671.4													
		14 14 19	18	3		3.5								
		6 8 8	16	4		2.0								
10							Stiff brown SILT (A-4b), some fine sand, some clay; damp to moist.	0	0	--	27	51	22	
10.5	666.4													
		4 6 6	18	5		1.5								
		7 10 11	17	6		1.0								
15							Hard brown SANDY SILT (A-4a), little gravel, little clay; damp to moist.	14	18	--	16	40	12	
15.5	661.4													
		24 26 29	10	7		4.5+								
		32 32 39	18	8			Severely weathered brown SANDSTONE argillaceous.							
18.5	658.4													
20														
		50/1	1	9										
22.0	654.9						Soft to medium hard gray SHALE interbedded with SANDSTONE; very fine grained, highly weathered, micaceous, laminated to thinly bedded, moderately fractured.							
24.5	652.4						@ 22.2', 22.5', 23.0', 23.6', low angle fractures.							
25		Core 96"	Rec 96"	RQD 94%	R1		Soft to medium hard gray SHALE; highly weathered, micaceous, arenaceous, thinly laminated to laminated, moderately fractured.							
							@ 27.6', 30.0', low angle fractures.							
30														

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03							
LOG OF: Boring R-794				Location: Sta. 862+28.7, 6.5 ft. RT of SR 823 CL				Date Drilled: 08/30/05							
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 5.8' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40	
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay		
DESCRIPTION															
646.9															
32.5	644.4	Core 60"	Rec 60"	RQD 73%	R2		Soft to medium hard gray SHALE; highly weathered, micaceous, arenaceous, thinly laminated to laminated, moderately fractured. @ 30.3', 31.3', 32.1', 32.4', low angle fractures. @ 31.6'-31.9', 34.0'-34.3', broken zones, high angle fractures.								
35.0	641.9						Hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, thickly bedded. @ 33.0', low angle fracture. @ 34.0'-34.2', argillaceous bed.								
							Bottom of Boring - 35.0'								
40															
45															
50															
55															
60															

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-2570			Location: Sta. 639+00.0, 5.8 ft. LT of SR 823 CL			Date Drilled: 02/01/06 to 02/02/06													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 75.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
0.3	894.4						Topsoil - 4" Hard brown SILT AND CLAY (A-6a), trace fine to coarse sand; contains sandstone fragments; dry to damp.												
		3	4	13		1													
5.0	889.7	14					Severely weathered brown SANDSTONE, argillaceous.  Medium hard light brown SANDSTONE; fine grained, highly weathered, micaceous, thickly bedded, argillaceous, highly fractured to broken, clay infilled seams.												
6.0	888.7	20	14			2													
		50/3					@ 12.8'-13.3', argillaceous laminations, highly weathered to decomposed.												
10		Core 108"	Rec 108"	RQD 51%	R1	*365													
14.1	880.6						Medium hard to hard brown and gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, massive, moderately fractured.  @ 15.3', 16.6', 23.0', 23.2', 23.3', low angle fractures. @ 16.9'-17.2', 17.7'-17.8', 19.3' 21.1'-21.3', high angle fractures.												
15																			
20		Core 120"	Rec 119"	RQD 86%	R2	*111	@ 25.9'-26.2', high angle fracture.												
25																			
30		Core	Rec	RQD															

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03												
LOG OF: Boring R-2570				Location: Sta. 639+00.0, 5.8 ft. LT of SR 823 CL				Date Drilled: 02/01/06 to 02/02/06												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 75.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay							
DESCRIPTION																				
864.6		120"	120"	98%	R3	*940	Medium hard to hard brown and gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, massive, moderately fractured.													
35							@ 41.0'-41.3', healed high angle fracture.													
40		Core 120"	Rec 120"	RQD 100%	R4	*1004														
42.7	852.0						Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, slightly pyritic, massive, slightly fractured.													
45							@ 51.2'-51.5', high angle fracture, rust stained. @ 53.7', 53.9', low angle fractures, rust stained.													
50		Core 120"	Rec 120"	RQD 100%	R5	*914														
55							@ 56.2'-56.5', 57.0'-59.1', iron staining. @ 57.5'-57.7' high angle fracture.													
60		Core	Rec	RQD																

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03											
LOG OF: Boring R-2570				Location: Sta. 639+00.0, 5.8 ft. LT of SR 823 CL				Date Drilled: 02/01/06 to 02/02/06											
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 75.0' (Includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
DESCRIPTION																			
	834.6	120"	117"	95%	R6	*687	Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, slightly pyritic, massive, slightly fractured. @ 60.0', low angle fracture. @ 61.5'-61.8', broken zone with core loss, possible decomposed shale. @ 61.8'-62.3', high angle fracture.												
65.0	829.7						Medium hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, laminated to thinly bedded, moderately fractured. @ 65.4'-65.7', high angle fracture. @ 66.5'-66.8', 69.9'-70.0', calcareous. @ 69.8'-70.2', 71.0'-71.7', broken zones. @ 67.0', 70.4', 70.6', 70.7', low angle fractures.												
70		Core 120"	Rec 100"	RQD 87%	R7	*612													
75																			
		Core 60"	Rec 60"	RQD 100%	R8	*812	@ 79.3', low angle fracture.												
80.0	814.7						Bottom of Boring - 80.0'												
85																			
90																			



Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03								
LOG OF: Boring R-2571			Location: Sta. 638+93.1, 105.2 ft. RT of SR 823 CL			Date Drilled: 2/1/06 to 2/1/06								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
0.3	926.2						Topsoil - 4" / 6" soil removed before drilling							
3.0	923.5	4 3 5 14		1			Loose brown SILT (A-4b), little fine to coarse sand, trace gravel, trace clay; contains sandstone fragments; dry.							
5.0		33 35 25 18		2			Very dense brown and gray SANDY SILT (A-4a), little gravel, trace clay; contains sandstone fragments; damp to moist.							
7.0	919.5	17 50/5	11	3			Medium hard to hard brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, massive, slightly to highly fractured. @ 8.0'-8.3', 8.8'-8.9', 10.4'- 10.5', broken zones.  @ 12.3'-12.4', high angle fracture.  @ 14.4', 15.4', 17.7', low angle fractures. @ 14.7'-15.0', 17.1'-17.2', high angle fractures.							
10.0		Core 84"	Rec 84"	RQD 85%	R1	*342								
20.0		Core 120"	Rec 120"	RQD 93%	R2	*1000								
21.6	904.9						Hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, massive, slightly fractured.							
25.0														
30.0		Core 120"	Rec 120"	RQD 100%	R3	*899								

Client: TranSystems, Inc.

Project: SCI-823-0.00

Job No. 0121-3070.03

**LOG OF: Boring R-2571**

Location: Sta. 638+93.1, 105.2 ft. RT of SR 823 CL

Date Drilled: 2/1/06

to 2/1/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ●	
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	PL	LL
	896.5						<b>DESCRIPTION</b>								Blows per foot - ○ 10 20 30 40
35							@ 34.9'-35.9' rust stained. @ 35.2', 35.5', low angle fractures.								
40		Core 120"	Rec 120"	RQD 100%	R4	*1352	@ 39.2', low angle fracture, argillaceous zone.								
45							@ 45.1'-45.2', rust stained, vuggy layer.								
50		Core 120"	Rec 120"	RQD 100%	R5	*876									
55							@ 55.0'-55.3', 55.8'-56.2', rust stained. @ 55.0', iron stained low angle fracture. @ 55.8', 55.9', low angle fractures.								
60		Core 120"	Rec 120"	RQD 98%	R6	*1172	@ 59.3', argillaceous band.								

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2571 Location: Sta. 638+93.1, 105.2 ft. RT of SR 823 CL Date Drilled: 2/1/06 to 2/1/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay					
866.5							<p><b>DESCRIPTION</b></p> <p>Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, massive, slightly fractured.                      @ 61.5'-66.9', rust stained.                      @ 62.1'-62.3', 62.7'-63.0'; calcareous.                      @ 62.4', low angle fracture.</p> <p>@ 65.8'-66.5'; high angle fracture.</p> <p>@ 69.7'-70.1'; calcareous.                      @ 70.1', low angle fracture.                      @ 71.4'-75.3', rust stained.                      @ 71.5', 75.3', rust stained low angle fractures.</p>											
65																		
70		Core 120"	Rec 120"	RQD 93%	R7	*371												
75																		
80		Core 120"	Rec 120"	RQD 100%	R8	*1211												
85																		
90		Core 120"	Rec 120"	RQD 100%	R9	*1358												

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.

Project: SCI-823-0.00

Job No. 0121-3070.03

**LOG OF: Boring R-2571**

Location: Sta. 638+93.1, 105.2 ft. RT of SR 823 CL

Date Drilled: 2/1/06 to 2/1/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40		
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay			
	836.4						DESCRIPTION Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, unfractured to slightly fractured.  Medium hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, laminated to medium bedded, slightly fractured. @ 93.7'-93.8', calcareous, coarse grained. @ 95.5'-97.1', calcareous. @ 96.1'-96.2', high angle fracture.									
93.7	832.8															
95		Core 120"	Rec 120"	RQD 98%	R10	*612										
100																
105		Core 72"	Rec 72"	RQD 100%	R11	*722										
110.0	816.5						Bottom of Boring - 110.0'									
115																
120																

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-2612			Location: Sta. 669+11.2, 51.4 ft. LT of SR 823 CL			Date Drilled: 08/15/06 to 08/16/06													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
0	883.7						Topsoil - 5" / 1.7' soil removed before drilling Loose brown SILT (A-4b), little fine to coarse sand, little clay; contains rock fragments; dry.												
0.4	883.3	3	3	16	1														
		5	14	18	2														
5		10	10	18	3														
6.0	877.7	16	36	18	3		Severely weathered brown SANDSTONE.												
		32	15	11	4														
10.0	873.7	50/5					Medium hard to hard brown and gray SANDSTONE; very fine to fine grained, highly weathered, argillaceous, micaceous, massive, moderately fractured to broken. @ 10.0'-15.7', highly fractured to broken.  @ 20.0',25.1', low angle fractures.  @ 23.1'-23.5', high angle fracture.												
15		Core 108"	Rec 108"	RQD 70%	R-1														
20																			
25		Core 120"	Rec 120"	RQD 91%	R-2														
30																			

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2612 Location: Sta. 669+11.2, 51.4 ft. LT of SR 823 CL Date Drilled: 08/15/06 to 08/16/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N)						
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
853.7							<p>DESCRIPTION</p> <p>Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, massive, slightly fractured.</p> <p>@ 33.9'-34.2', high angle fracture.</p> <p>@ 40.5'-46.7', contains few argillaceous laminations.</p> <p>@ 41.7', pyritic.</p>													
35		Core 120"	Rec 120"	RQD 96%	R-3															
40																				
45		Core 120"	Rec 120"	RQD 100%	R-4															
46.7	837.0						<p>Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, pyritic, thinly laminated to thinly bedded, slightly fractured, contains moderate to abundant argillaceous laminations.</p> <p>@ 49.2'-49.3', filled fracture.</p>													
50																				
55		Core 120"	Rec 120"	RQD 96%	R-5															
57.6	826.1						<p>Medium hard to hard gray SILTSTONE interbedded with SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, pyritic.</p>													
60																				

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03															
LOG OF: Boring R-2612				Location: Sta. 669+11.2, 51.4 ft. LT of SR 823 CL				Date Drilled: 08/15/06 to 08/16/06															
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40									
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay										
DESCRIPTION																							
823.6																							
65		Core 120"	Rec 120"	RQD 100%	R-6		Medium hard to hard gray SILTSTONE interbedded with SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, pyritic, thinly laminated to thinly bedded, slightly fractured.																
							@ 65.3', low angle fracture.																
70																							
75		Core 120"	Rec 120"	RQD 100%	R-7																		
80																							
85		Core 120"	Rec 120"	RQD 100%	R-8																		
90.0	793.7	Core 12"	Rec 12"	RQD 100%	R-9		Bottom of Boring - 90.0'																

Client: TranSystems, Inc.			Project: SCI-823-0.00				Job No. 0121-3070.03							
LOG OF: Boring R-2612			Location: Sta. 669+11.2, 51.4 ft. LT of SR 823 CL				Date Drilled: 08/15/06 to 08/16/06							
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
DESCRIPTION														
793.6														
95														
100														
105														
110														
115														
120														



Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2620 Location: Sta. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08/23/06 to 08/24/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay							
0.1	957.3						Topsoil - 1" Medium dense brown SANDY SILT (A-4a), little to some clay, trace gravel; dry.													
	957.2	8				1														
		9	4	18																
3.5	953.8	12				2	Severely weathered brown SANDSTONE.													
		13																		
		50/3		15																
6.0	951.3	50/3		2		3	Medium hard to hard brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, micaceous, massive, slightly to moderately fractured. @ 6.6',6.7',9.8', low angle, iron stained fractures.													
			Core 96"	Rec 96"	RQD 100%	R-1														
10							Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations.													
			Core 120"	Rec 120"	RQD 100%	R-2														
21.6	935.7						Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations.													
			Core 120"	Rec 120"	RQD 100%	R-3														
25																				
30																				

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.	Project: SCI-823-0.00	Job No. 0121-3070.03
<b>LOG OF: Boring R-2620</b>		
Location: Sta. 676+80.6, 115.7 ft. LT of SR 823 CL		Date Drilled: 08/23/06 to 08/24/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40						
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay							
927.3							DESCRIPTION  Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations.  @ 34.1'-35.0', high angle fracture. @ 34.1'-35.3', iron stained zone.													
35																				
40		Core 120"	Rec 120"	RQD 90%	R-4															
45																				
50		Core 120"	Rec 120"	RQD 100%	R-5															
55																				
60		Core 120"	Rec 120"	RQD 100%	R-6															

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2620 Location: Sta. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08/23/06 to 08/24/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	
89.4	867.9						DESCRIPTION  Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, massive, unfractured to slightly fractured, contains few argillaceous laminations. @ 60.2',74.5',74.6, thin pyrite bands.  @ 74.8'-88.4', pyritic.  @ 81.6'-83.8', iron stained.  Medium hard to hard brown and gray SANDSTONE: very fine to							
		Core 120"	Rec 120"	RQD 100%	R-7									
		Core 120"	Rec 120"	RQD 100%	R-8									
		Core 120"	Rec 120"	RQD 96%	R-9									

Client: **TranSystems, Inc.** Project: **SCI-823-0.00** Job No. **0121-3070.03**

**LOG OF: Boring R-2620** Location: **Sta. 676+80.6, 115.7 ft. LT of SR 823 CL** Date Drilled: **08/23/06** to **08/24/06**

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40			
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay				
867.2							<b>DESCRIPTION</b>										
							fine grained, argillaceous, micaceous, massive, slightly fractured, iron stained.  @ 92.9',93.7',94.4', low angle fractures.										
95																	
100		Core 120"	Rec 120"	RQD 90%	R10		@ 101.6'-102.6', 109.3'-109.7', 112.1'-112.3', high angle fractures with iron staining.										
105																	
110		Core 120"	Rec 120"	RQD 94%	R11		@ 110.9'-111.2', reworked sandstone conglomerate.  @ 113.6'-115.1', pyritic.										
115																	
117.4	839.9						@ 117.4', low angle fracture.										
120		Core 120"	Rec 120"	RQD 95%	R12		Medium hard to hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, micaceous, thinly laminated to medium bedded, slightly fractured.										

Client: TranSystems, Inc.			Project: SCI-823-0.00				Job No. 0121-3070.03												
LOG OF: Boring R-2620			Location: Sta. 676+80.6, 115.7 ft. LT of SR 823 CL				Date Drilled: 08/23/06 to 08/24/06												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
837.2							DESCRIPTION  Medium hard to hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, micaceous, thinly laminated to medium bedded, slightly fractured. @ 121.7'-122.1', high angle fracture.  @ 127.6', low angle fracture.												
125		Core 72"	Rec 72"	RQD 100%	R13														
130.0	827.3						Bottom of Boring - 130.0'												
135																			
140																			
145																			
150																			

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03												
LOG OF: Boring R-2622			Location: Sta. 676+93.1, 173.0 ft. RT of SR 823 CL			Date Drilled: 08/17/06 to 08/21/06												
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
				Drive	Press / Core			DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt		% Clay			
0	1008.5																	
0.3	1008.2						Topsoil - 3" / 2.5' soil removed before drilling											
		3	5	10	1		Loose brown SANDY SILT (A-4a), trace clay; contains rock fragments; damp.	45	12	--	6	30	7					Non-Plastic
		7	3	8	2													
5			3															
6.0	1002.5	20	48	18	3	4.5+	Hard brown SILT (A-4b), little clay, little fine to coarse sand, trace gravel; contains sandstone fragments; dry to damp.	7	6	--	11	58	18					
		32																
8.5	1000.0	50/5	5		4		Severely weathered brown SANDSTONE argillaceous.											
9.0	999.5						Medium hard brown SANDSTONE; very fine to fine grained, highly weathered, micaceous, argillaceous, thinly bedded, moderately to highly fractured, contains iron staining and few argillaceous laminations.											
							@ 13.5'-14.2', high angle clay filled fracture.											
		Core 60"	Rec 60"	RQD 73%	R1													
							@ 16.0'-16.9', 18.0'-19.5', broken zone with high angle fractures.											
		Core 120"	Rec 120"	RQD 65%	R2													
25.1	983.4						Medium hard brown and gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, thinly bedded, highly fractured to broken.											
		Core 120"	Rec 120"	RQD 30%	R3													
30																		

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03										
LOG OF: Boring R-2622			Location: Sta. 676+93.1, 173.0 ft. RT of SR 823 CL			Date Drilled: 08/17/06 to 08/21/06										
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40		
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay			
978.5							<p><b>DESCRIPTION</b></p> <p>Medium hard brown and gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, thinly bedded, highly fractured to broken. @ 31.5'-32.4', broken zone with lost recovery.</p> <p>Soft to medium hard gray SILTSTONE interbedded with SANDSTONE; very fine to fine grained, slightly to moderately weathered, micaceous, thinly laminated to thinly bedded, slightly fractured. @ 36.8'-37.0', high angle iron stained fracture.</p> <p>Hard gray SANDSTONE; very fine to fine grained, slightly weathered, micaceous, argillaceous, pyritic, thinly laminated to massive, slightly fractured, contains few argillaceous laminations.</p> <p>Hard brown SANDSTONE; fine grained, moderately to highly weathered, micaceous, calcareous, massive, slightly to moderately fractured. @ 56.3'-56.7', vuggy.</p>									
32.4	976.1															
35																
40		Core 120"	Rec 120"	RQD 96%	R4											
45																
47.0	961.5															
50		Core 120"	Rec 120"	RQD 100%	R5											
54.4	954.1															
55																
60		Core 120"	Rec 120"	RQD 100%	R6											

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

*Client:* TranSystems, Inc. *Project:* SCI-823-0.00 *Job No.* 0121-3070.03

**LOG OF: Boring R-2622** *Location:* Sta. 676+93.1, 173.0 ft. RT of SR 823 CL *Date Drilled:* 08/17/06 to 08/21/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	DESCRIPTION	GRADATION						STANDARD PENETRATION (N)					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ●		Blows per foot - ○			
948.4																			
62.2	946.3						Hard brown SANDSTONE; fine grained, moderately to highly weathered, micaceous, calcareous, massive, moderately fractured.												
65							Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, micaceous, massive, slightly fractured.												
68.0	940.5	Core 120"	Rec 120"	RQD 100%	R7		Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured.												
70																			
75																			
80		Core 120"	Rec 120"	RQD 100%	R8														
85																			
90		Core 120"	Rec 120"	RQD 100%	R9														

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]



Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2622 Location: Sta. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08/17/06 to 08/21/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N)				
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40				
	918.4						DESCRIPTION  Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations .  @ 112.0'-113.7', contains shale laminations and moderate argillaceous laminations. @ 113.5'-113.7', high angle fracture.  @ 116.0'-120.0', slightly pyritic.											
95																		
100		Core 120"	Rec 120"	RQD 100%	R10													
105																		
110		Core 120"	Rec 120"	RQD 95%	R11													
115																		
120		Core 120"	Rec 120"	RQD 100%	R12													

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.

Project: SCI-823-0.00

Job No. 0121-3070.03

**LOG OF: Boring R-2622**

Location: Sta. 676+93.1, 173.0 ft. RT of SR 823 CL

Date Drilled: 08/17/06 to 08/21/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N)			
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ●			
	888.3						DESCRIPTION										
							Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations . @ 120.0'-141.0', slightly pyritic.										
125																	
130		Core 120"	Rec 120"	RQD 100%	R13												
135																	
140		Core 120"	Rec 120"	RQD 95%	R14												
145							@ 144.6'-145.7', iron staining.										
150		Core 120"	Rec 120"	RQD 100%	R15												

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2622 Location: Sta. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08/17/06 to 08/21/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water)	GRADATION						STANDARD PENETRATION (N)					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
DESCRIPTION																			
	858.3						Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations .												
155																			
160		Core 120"	Rec 120"	RQD 100%	R16														
165							Hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, slightly weathered, massive, slightly fractured, turbidity, siltstone beds fissile after dessication. @ 170.4'-171.5', high angle fracture.												
169.5	839.0	Core 120"	Rec 120"	RQD 100%	R17														
170																			
175																			
180.0	828.5	Core 72"	Rec 72"	RQD 100%	R18														
							Bottom of Boring - 180.0'												

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-2767			Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL			Date Drilled: 08/30/06 to 09/01/06													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
0	1008.2																		
0.3	1007.9						Topsoil - 4"												
		10 15 50/5	17		1		Very dense brown SILT (A-4b), some fine to coarse sand, little clay; contains sandstone fragments; dry to damp.												50+
3.5	1004.7	50/5	5		2		Severely weathered brown SANDSTONE.												50+
5.0	1003.2						Medium hard brown SANDSTONE; fine grained, highly weathered, argillaceous, micaceous, massive, moderately fractured, iron stained. @ 5.0'-5.2', broken.												
10		Core 120"	Rec 120"		RQD 85%	R-1	@ 11.1'-11.2', clay seam.												
15							@ 15.0', slightly fractured, moderately weathered.												
20		Core 120"	Rec 120"		RQD 94%	R-2													
25																			
27.5	980.7						Hard gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, massive, slightly fractured. @ 28.5'-29.3', brown.												
30		Core	Rec		RQD														

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03													
LOG OF: Boring R-2767				Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL				Date Drilled: 08/30/06 to 09/01/06													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40							
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay								
DESCRIPTION																					
978.1		120"	120"	100%	R-3		Hard gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, massive, slightly fractured, contains few argillaceous laminations .														
35																					
40		Core 120"	Rec 120"	RQD 100%	R-4																
45																					
50		Core 120"	Rec 120"	RQD 100%	R-5		@ 46.6'-50.8', slightly pyritic.														
55																					
60		Core	Rec	RQD			@ 59.5'-59.6', high angle fracture.														

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03													
LOG OF: Boring R-2767			Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL			Date Drilled: 08/30/06 to 09/01/06													
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40					
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay						
DESCRIPTION																			
948.1		120"	120"	94%	R-6		Hard gray SANDSTONE; very fine to fine grained, slightly weathered, micaceous, argillaceous, massive, slightly fractured, contains few argillaceous laminations. @ 60.3'-60.6', 61.5'-62.1', high angle fractures.  @ 75.0', pyritic.  @ 79.7', calcareous, vuggy. @ 79.7'-79.8', high angle fracture. @ 80.3'-85.9', few to moderate argillaceous laminations. @ 81.0'-81.3', broken.												
65																			
70		Core 120"	Rec 120"	RQD 100%	R-7														
75																			
80		Core 120"	Rec 120"	RQD 100%	R-8														
84.6	923.6						Hard brown and gray SANDSTONE; very fine to fine grained, moderately to highly weathered, micaceous, argillaceous, very thin bedded, slightly fractured, iron stained.												
85																			
90		Core	Rec	RQD															

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.

Project: SCI-823-0.00

Job No. 0121-3070.03

**LOG OF: Boring R-2767**

Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL

Date Drilled: 08/30/06 to 09/01/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40			
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay				
918.0		120"	120"	100%	R-9		<p><b>DESCRIPTION</b></p> <p>Hard brown and gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, massive, slightly fractured, iron stained, contains few argillaceous laminations. @ 91.3', 92.8', 97.0', low angle fractures.</p> <p>@ 106.2', 109.6', 109.8', low angle clay filled fractures.</p> <p>@ 111.0'-111.3', vuggy zone. @ 111.7'-112.3', high angle rust stained fracture.</p>										
95																	
100		Core 120"	Rec 120"	RQD 100%	R10												
105																	
110		Core 120"	Rec 120"	RQD 91%	R11												
115																	
120		Core	Rec	RQD													

Client: TranSystems, Inc.			Project: SCI-823-0.00			Job No. 0121-3070.03												
LOG OF: Boring R-2767				Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL			Date Drilled: 08/30/06 to 09/01/06											
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION										
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ●				
DESCRIPTION							PL ————— LL Blows per foot - ○ 10   20   30   40											
888.0		120"	120"	100%	R12		Hard gray SANDSTONE; fine grained, slightly weathered, micaceous, argillaceous, thinly bedded, moderately fractured.  @ 122.3'-124.0', vertical fracture.											
125																		
126.6	881.6						Medium hard to hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, slightly weathered, micaceous, argillaceous, pyritic, very thinly bedded to thinly bedded, slightly fractured.											
130		Core 120"	Rec 120"	RQD 100%	R13													
135																		
135.5	872.7						Hard gray SILTSTONE; slightly to moderately weathered, micaceous, arenaceous, very thinly bedded, slightly fractured, contains laminations and thin beds of SANDSTONE, becomes fissile after dessication.											
140		Core 120"	Rec 120"	RQD 100%	R14													
145																		
150		Core	Rec	RQD	R15													

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]



Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03

LOG OF: Boring R-2767 Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 08/30/06 to 09/01/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40							
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay								
858.0							DESCRIPTION  Hard gray SILTSTONE; slightly to moderately weathered, micaceous, arenaceous, very thinly bedded, slightly fractured, contains laminations and thin beds of SANDSTONE, becomes fissile after dessication.														
155		120"	120"	100%																	
160		Core 120"	Rec 120"	RQD 100%	R16																
165																					
170		Core 120"	Rec 120"	RQD 100%	R17																
175																					
180		Core	Rec	RQD	R18																

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc. Project: SCI-823-0.00 Job No. 0121-3070.03  
**LOG OF: Boring R-2767** Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 08/30/06 to 09/01/06

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetro-meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION						STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ————— LL Blows per foot - ○ 10 20 30 40							
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay								
DESCRIPTION																					
827.9		120"	120"	100%			Hard gray SILTSTONE; slightly to moderately weathered, micaceous, arenaceous, very thinly bedded, slightly fractured, contains laminations and thin beds of SANDSTONE, becomes fissile after dessication.														
185																					
190		Core 120"	Rec 120"	RQD 100%	R19																
195																					
200		Core 120"	Rec 120"	RQD 100%	R20																
205																					
210		Core	Rec	RQD	R21																

FILE: 0121-3070-03 [ 5/23/2014 3:55 PM ]

Client: TranSystems, Inc.				Project: SCI-823-0.00				Job No. 0121-3070.03													
LOG OF: Boring R-2767			Location: Sta. 831+34.8, 30.9 ft. RT of SR 823 CL				Date Drilled: 08/30/06 to 09/01/06														
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No.		Hand Penetrometer (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1	GRADATION													
				Drive	Press / Core			% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ——— LL Blows per foot - ○ 10 20 30 40							
DESCRIPTION																					
797.9		120"	120"	100%			Hard gray SILTSTONE; slightly to moderately weathered, micaceous, arenaceous, very thinly bedded, slightly fractured, contains laminations and thin beds of SANDSTONE, becomes fissile after dessication.														
215		Core 120"	Rec 120"	RQD 100%	R22																
220																					
225		Core 60"	Rec 60"	RQD 100%	R23																
230.0	778.2						Bottom of Boring - 230.0'														
235																					
240																					