DLZ OHIO INC. * 6121 HUNTLEY ROAD, COLUMBUS, OHIO 43229 * (614)888-0040

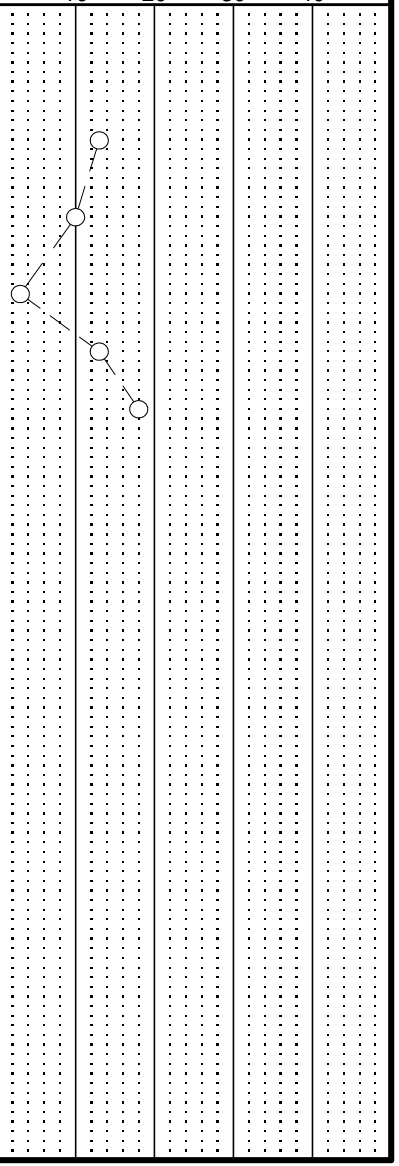
Client: TranSystems, Inc. | *Project:* SCI-823-0.00 | *Job No.* 0121-3070.03

LOG OF: Boring B-1403 | *Location:* | *Date Drilled:* 01/26/06

WATER OBSERVATIONS: Water seepage at:
Water level at completion: 9.0'

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0							Asphalt Concrete Pavement- 14"						
		9 9 4 3	19	1									
5		4 5 5 4		2									
		2 1 2		3									
		3 6 7 28	14	4									
10		2 18	8	5									
10.5							Bottom of Boring - 10.5'						
15													
20													
25													
30													

STANDARD PENETRATION (N)
Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40



FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring B-1405 | *Location:* | *Date Drilled:* 01/26/06

WATER OBSERVATIONS: Water seepage at:
Water level at completion: 10.0' (Including drill water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
0							Asphalt Concrete- 11", Brick - 2", Portland Cement Concrete - 4"							Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
		6 8 6 6	10	1										
5		3 3 1 4	10	2										
		14 45 45 50/5		3										90
7.5							Medium hard brown and gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, medium to massive bedding, moderately to highly fractured. @ 8.2', 9.3', 10.5', 12.0'; decomposed argillaceous zone.							
10		Core 60"	Rec 55"	RQD 45%	R-1									
12.5							Bottom of Boring - 12.5'							
15														
20														
25														
30														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring B-1533 | *Location:* Sta. 9+86.2, 28.4 ft. LT of US 52 CL | *Date Drilled:* 8/16/06

WATER OBSERVATIONS: Water seepage at: 3.0'-9.5'
Water level at completion: 8.9'

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
0	542.6						Asphalt Concrete - 7" Portland Cement Concrete - 9"							
1.3	541.3	8 16 27	18	1A 1B		--	FILL: Medium stiff brown SILT AND CLAY (A-6a), some fine to coarse sand, trace gravel; damp.	8	14	--	22	28	28	Natural Moisture Content, % - ● PL ⊢—⊣ LL Blows per foot - ○ 10 20 30 40 Non-Plastic
3.0	539.6	30 32 39	14	2			@ 2.8'-3.0', sand seam.	13	28	--	53	6		
4.5	538.1	20 24 29	18	3			FILL: Very dense brown GRAVEL WITH SAND (A-1-b), trace silty clay; damp.	27	30	--	34	6	3	Non-Plastic ○71 →
6.0	536.6	21 28 14	18	4			FILL: Very dense brown GRAVEL WITH SAND AND SILT (A-2-4), little silty clay; damp.	25	23	--	35	11	6	Non-Plastic ○53 →
8.5	534.1	12 4 6	18	5A 5B		2.0	FILL: Dense brown GRAVEL WITH SAND (A-1-b), trace silty clay; damp.	36	31	--	26	7		Non-Plastic
9.5	533.1						POSSIBLE FILL: Medium dense brown COARSE AND FINE SAND (A-3a); damp.							
10.0	532.6						POSSIBLE FILL: Stiff to very stiff brown SILT AND CLAY (A-6a), trace fine sand; damp.							
							Bottom of Boring - 10.0'							

15 20 25 30

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0	763.0						No Topsoil						
		3 6 6	18	1		4.5+	Hard brown and orange SANDY SILT (A-4a), little clay; damp.						
3.5	759.5	3 6 13	18	2		4.5+	Hard gray SILTY CLAY (A-6b), little fine to coarse sand, trace gravel; damp.						
5		50/2	2	3		4.5+	@ 6.0'-6.2', light brown.						
7.0	756.0	Core 72"	Rec 72"	RQD 100%	R-1	*69	Soft to medium hard brownish gray SANDSTONE; very fine to fine grained, highly weathered, argillaceous, thinly bedded to thickly bedded, moderately fractured with typical low angle iron stained fractures. @ 7.0'-9.5', reddish gray, decomposed.						
10													
15							@ 13.9'-14.3', high angle iron stained fracture. @ 14.8'-15.1', 16.4'-16.8', IRONSTONE.						
18.1	744.9	Core 120"	Rec 120"	RQD 83%	R-2	*239	Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, thinly bedded to thickly bedded, slighty fractured to unfractured, contains few argillaceous laminations. @ 19.0', 20.3', low angle iron stained fractures.						
20													
25							@ 24.6', 26.3', low angle fractures.						
		Core 120"	Rec 120"	RQD 100%	R-3	*500							
30													

STANDARD PENETRATION (N)
Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40
50+

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	733.0						Medium hard to hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, thinly bedded to thickly bedded, slightly fractured to unfractured; contains few argillaceous laminations.						
35		Core 120"	Rec 120"	RQD 100%	R-4	*519							
40							@ 42.4'-43.6', light brown weathered zone.						
45		Core 120"	Rec 120"	RQD 100%	R-5	*292							
50													
55							@ 56.7'-56.9', IRONSTONE.						
60		Core 120"	Rec 120"	RQD 100%	R-6	*596	@ 59.5', low angle clay filled fracture. @ 59.5'-60.3', thinly laminated shale bed. @ 59.5'-59.7', interbedded shale.						

STANDARD PENETRATION (N)
Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
60.0	702.9 ~~703.0~~						Hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, thinly bedded to thickly bedded, slightly fractured to unfractured; contains few argillaceous laminations.							
65		Core 120"	Rec 120"	RQD 79%	R-7	*557								
70							@ 73.0', light gray.							
75		Core 120"	Rec 120"	RQD 100%	R-8	*551								
80														
85		Core 120"	Rec 120"	RQD 100%	R-9	*304	@ 87.8', low angle clay filled fracture.							
90														

Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N) / Natural Moisture Content, % - ● / PL — LL / Blows per foot - ○ (10 20 30 40)
	672.9						Hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, argillaceous, micaceous, thinly bedded to thickly bedded, slightly fractured to unfractured; contains few argillaceous laminations.							
95		Core 120"	Rec 120"	RQD 100%	R10	*379								
100														
102.6	660.4						Medium hard to hard gray SANDSTONE; moderately weathered, argillaceous, micaceous, thinly laminated to thinly bedded, slightly fractured; contains few to moderate argillaceous laminations, few SHALE laminations. @ 105.6', low angle clay filled fracture.							
105		Core 120"	Rec 120"	RQD 100%	R11	*138								
110														
111.3	651.7						Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, thickly bedded, slightly to unfractured; contains few argillaceous laminations. @ 116.5'-117.8', high angle fractures, calcareous. @ 117.2'-117.4', fossiliferous. @ 119.2'-120.2', calcareous.							
115		Core 120"	Rec 120"	RQD 100%	R12	*416								
120														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
	642.8						Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, thickly bedded, slightly fractured to unfractured; contains few argillaceous laminations.							Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
125		Core 120"	Rec 120"	RQD 100%	R13	*339	@ 128.0', pyritic.							
130														
135		Core 120"	Rec 120"	RQD 100%	R14	*394								
140														
145		Core 120"	Rec 120"	RQD 100%	R15	*477								
150														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-69 | *Location:* Sta. 140+14.7, 249.2 ft. LT of SR 823 CL | *Date Drilled:* 3/9/05 to 3/9/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 22.0' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
	612.8						Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, thickly bedded, slightly fractured to unfractured; contains few argillaceous laminations.							Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
		Core 24"	Rec 24"	RQD 100%	R16	*443								
155.0	608.0						Bottom of Boring - 155.0'							
160														
165														
170														
175														
180														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-159 | *Location:* Sta. 291+62.5, 220.4 ft. RT of SR 823 CL | *Date Drilled:* 9/29/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
3.3' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0	738.3												
0.6	737.7						Topsoil - 7"/1.9' soil removed before drilling						
		4 3 5	18	1			Loose to medium dense brown SANDY SILT (A-4a), trace clay; contains sandstone fragments; damp to moist.						
		50/1	1	2			@ 3.5'-7.5', dense to very dense.						
5		18 25 17	18	3									
		12 13 15	18	4									
10		27 35 40	18	5			@ 11.0'-12.5', very dense.						
12.5	725.8						Medium hard gray and brown SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, thinly bedded to thickly bedded, highly fractured, with typical high angle clay filled fractures.						
15							@ 14.7',16.9', low angle clay filled fractures.						
17.6	720.7	Core 120"	Rec 118"	RQD 65%	R-1	*468	Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, thinly bedded to thickly bedded.						
20							@ 19.8', low angle clay filled fracture.						
22.5	715.8						Bottom of Boring - 22.5'						
25													
30													

STANDARD PENETRATION (N)
Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40
50+
75

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-162 | *Location:* Sta. 295+52.6, 311.8 ft. RT of SR 823 CL | *Date Drilled:* 9/30/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 1.9' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
0	794.7	4 5 5	18	1		2.5	No topsoil Very stiff brown SILT (A-4b), trace fine to coarse sand, trace gravel, trace clay; contains sandstone fragments; damp.							
4.0	790.7	13 50/4	10	2			Severely weathered brown SANDSTONE, argillaceous.							50+
5		50/1	1	3										50+
7.0	787.7	Core 72"	Rec 65"	RQD 58%	R-1	*99	Medium hard to hard brown SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, thinly bedded to thickly bedded, moderately fractured, with typical low angle fractures. @ 9.5'-10.0', IRONSTONE layer. @ 10.0'-10.4', lost recovery, possible void.							
15		Core 120"	Rec 120"	RQD 98%	R-2	*268								
24.0	770.7													
25		Core 120"	Rec 120"	RQD 74%	R-3	*90	Soft to medium hard dark gray SANDSTONE; highly weathered, argillaceous, thinly bedded, highly fractured, with typical low angle clay filled fractures; contains moderate to abundant argillaceous laminations. @ 27.1'-27.7', shale bed. @ 28.3'-29.3', few argillaceous laminations.							
30														

Natural Moisture Content, % - ●
PL ⊢——⊣ *LL*
Blows per foot - ○
10 20 30 40

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-162 | *Location:* Sta. 295+52.6, 311.8 ft. RT of SR 823 CL | *Date Drilled:* 9/30/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: 1.9' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
	764.7						Soft to medium hard dark gray SANDSTONE; highly weathered, argillaceous, thinly bedded, highly fractured, with typical low angle clay filled fractures; contains moderate to abundant argillaceous laminations.							Natural Moisture Content, % - ● PL ⊢—⊣ LL Blows per foot - ○ 10 20 30 40
33.6	761.1						Very soft to medium hard gray SHALE, highly weathered to decomposed, arenaceous, thinly laminated to laminated, highly fractured; contains few to moderate arenaceous laminations.							
35							@ 30.7'-33.0', abundant argillaceous laminations.							
38.2	756.5	Core 120"	Rec 120"	RQD 76%	R-4	*298	Medium hard to hard gray and brown SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, thinly bedded to thickly bedded, moderately fractured.							
40														
45		Core 120"	Rec 120"	RQD 100%	R-5	*466	@ 43.7'-43.8', argillaceous zone. @ 38.5',39.8', low angle rust stained fractures. @ 47.0'-47.1', 50.2'-50.3', argillaceous zones with fractures.							
50														
55.0	739.7	Core 24"	Rec 24"	RQD 100%	R-6	*451	Bottom of Boring - 55.0'							
60														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-181 | *Location:* Sta. 315+09.2, 403.8 ft. RT of SR 823 CL | *Date Drilled:* 9/27/04 to 09/28/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
10.8' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0	797.1						Topsoil - 12"						
1.0	796.1	2 2 4	8	1		2.5	Very stiff to hard brown and gray CLAY (A-7-6), little fine to coarse sand, trace gravel; damp to moist.	4	4	--	7	30	55
		2 6 11	12	2		4.5+							
5		11 20 27	18	3		4.5+							
		7 20 30	18	4		4.5+		4	5	--	8	31	52
10		12 19 31	18	5		4.5+							
13.0	784.1	9 22 42	18	6			Severely weathered brown and gray SHALE, arenaceous.						
15		13 50/3	6	7									
17.0	780.1	Core 108"	Rec 108"	RQD 83%	R-1	*265	Medium hard to hard brown and gray SANDSTONE; fine grained, highly weathered, slightly fractured.						
20							@ 22.4'-23.4', IRONSTONE band. @ 22.4', 22.8', 23.4', 23.8', rust stained fractures.						
25							@ 24.7'-24.8', clay filled fracture.						
30													

STANDARD PENETRATION (N)
Natural Moisture Content, % - ●
PL ⊢——⊣ *LL*
Blows per foot - ○
10 20 30 40
64
50+

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-181 | *Location:* Sta. 315+09.2, 403.8 ft. RT of SR 823 CL | *Date Drilled:* 9/27/04 to 09/28/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
10.8' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
	767.0	Core 120"	Rec 120"	RQD 88%	R-2	*220	Medium hard to hard brown and gray SANDSTONE; fine grained, highly weathered, slightly fractured. @ 31.2'-32.0' high angle rust stained fracture							
34.0	763.1						Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately to highly weathered, micaceous, argillaceous, slightly fractured; contains few to moderate argillaceous laminations. @ 35.6'-37.6', 38.0'-38.3', 40.4'-40.7', very fine grained, fissile.							
35														
40		Core 120"	Rec 120"	RQD 83%	R-3	*461	@ 42.1'-43.3', brown. @ 42.1',42.5',42.8',42.9', 43.1',43.2', rust stained fractures.							
43.3	753.8						Hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, micaceous, argillaceous, slightly fractured to unfractured.							
45							@ 46.5', 45° calcite healed fracture.							
50		Core 120"	Rec 120"	RQD 96%	R-4	*226								
55														
60														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-181 | *Location:* Sta. 315+09.2, 403.8 ft. RT of SR 823 CL | *Date Drilled:* 9/27/04 to 09/28/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
10.8' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
	737.0	Core 120"	Rec 120"	RQD 100%	R-5	*440	Hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, micaceous, argillaceous, slightly fractured to unfractured.							
65														
		Core 120"	Rec 120"	RQD 100%	R-6	*468								
70														
75														
		Core 120"	Rec 120"	RQD 100%	R-7	*423								
80														
85														
90														

Natural Moisture Content, % - ●
PL ⊢——⊣ LL
Blows per foot - ○
10 20 30 40

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-181 | *Location:* Sta. 315+09.2, 403.8 ft. RT of SR 823 CL | *Date Drilled:* 9/27/04 to 09/28/04

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
10.8' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
	706.9	Core 120"	Rec 120"	RQD 98%	R-8	*473	Hard gray SANDSTONE; very fine to fine grained, slightly to moderately weathered, micaceous, argillaceous, slightly fractured to unfractured. @ 90.8'-91.2', very fine grained, fissile.							Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
95							@ 96.0'-101.4', rust stained, highly weathered.							
100		Core 108"	Rec 108"	RQD 100%	R-9	*430								
105.0	692.1						Bottom of Boring - 105.0'							
110														
115														
120														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]

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

LOG OF: Boring R-2165 | *Location:* Sta. 299+76.9, 350.2 ft. LT of SR 823 CL | *Date Drilled:* 12/20/05

WATER OBSERVATIONS: Water seepage at: None
Water level at completion: None (prior to coring)
14.9' (includes drilling water)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetro-meter (tsf)	DESCRIPTION	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N)
0	617.9													Natural Moisture Content, % - ● PL — LL Blows per foot - ○ 10 20 30 40
0.3	617.6						Topsoil - 3"/1.5' soil removed before drilling							
		20 14 24	18	1			Severely weathered brown SANDSTONE, argillaceous, micaceous.							
5.0	612.9						Medium hard to hard brown SANDSTONE; very fine to fine grained, highly weathered, argillaceous, micaceous, massive, moderately fractured. @ 5.0'-5.4', high angle fracture. @ 7.2',10.0',10.3',10.5', 10.7',11.0', low angle fractures.							
10		Core 120"	Rec 119"	RQD 89%	R-1	*1123	@ 9.9'-11.1', interbedded shale.							
11.1	606.8						Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured.							
15		Core 60"	Rec 60"	RQD 87%	R-2	*1137	@ 17.4'-18.1', high angle fracture.							
20.0	597.9						Bottom of Boring - 20.0'							
25														
30														

FILE: 0121-3070-03 [5/23/2014 4:02 PM]