Client:	TranSy	stems	s, Inc.				Project: SCI-823-0.00								Job No	. 0121	-3070	.03
LOG C)F: Bo	oring	B-170)2	L	ocation: Sta	a. 9+90.9, 70.5 ft. LT of CR 184 CL Date Drilled: 06	5/12	2/07	7		to		06/13/0)7			
Depth (ft)	Elev. (ft) 907.9	Blows per 6"	Recovery (in)	Sam, No		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 13.5' (includes drilling water0 DESCRIPTION	% Aggregate	% C. Sand D	M. Sand	<u>ц</u> .	% Silt 0	% Clay	Natu P	NDARD ral Moist L ⊢−−−− Blows p 0 2	ure Cor	ntent, % ──↓ L - ○	-
-		6 8 9		1			Medium dense brown SANDY SILT (A-4a), little gravel; damp.								Ó	, / . 	······································	
- 0.0	001.1	42 50/2	15	2			Severely weathered yellowish brown SILTSTONE.										/	50+0
5.0 	902.9-	Core 48"	Rec 48"	RQD 75%	R-1		Medium hard brown SANDSTONE interbedded with SILTSTONE; very fine to fine grained, highly weathered, argillaceous, medium bedded to massive, moderately to highly fractured.											
		Core 120"	Rec 120"	RQD 82%	R-2		 @ 9.0'-9.8', broken. @ 10.8', 11.7', 12.6', 14.6', 14.9', 17.1', low angle fractures. @ 11.7'-12.3', partly formed high angle fracture. @ 14.0'-14.2', high angle fracture. 											
20 — - - 25 — - - -	· · · ·	Core 120"	Rec 120"	RQD 82%	R-3		 @ 20.8', 21.4', 21.8', 22.9', 24.7', 26.0', 26.7', 26.6', 27.0', low angle fractures. @ 23.3'-24.1', high angle fracture. 											
30							@ 29.0'-29.8', high angle fracture and broken zone.	1									::::	

	FranSy				_		Project: SCI-823-0.00								Job No	. 0121	1-3070).03
<u>-0G 0</u>	F: Bo	ring	B-170			ocation: Sta	a. 9+90.9, 70.5 ft. LT of CR 184 CL Date Drilled: 00	5/12				to	(06/13/0	7			
			(in)	Samı No		Hand Penetro-	WATER OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 13.5' (includes drilling water0		GI	RAD	DATIO			OTA	10400			
Depth (ft)	Elev. (ft) 877.8	Blows per 6"	Recovery (ii	Drive	Press / Core	meter (tsf)	DESCRIPTION	% Aggregate	% C. Sand	N.	Ľ.	% Silt	% Clay	Natur PL	al Moisi I Blows p	ure Co per foot	TRATIC ntent, % 	6 -
- <u>30.0</u>	<u>\877.9</u>	Core	Rec	RQD	R-4		 @ 30.0', 33.1', 33.7', 35.6', 48.3', 46.0', low angle fractures. 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. @ 30.3'-30.5', decomposed argillaceous zone. 											
35 — — —		120"	120"	81%	n-4		 @ 33.7'-34.3', high angle fracture. @ 34.6'-34.9', decomposed broken zone. @ 37.0'-37.6', 40.0'-40.1', 42.6'-42.7', decomposed argillaceous 											
40		Core 120"	Rec 116"	RQD 78%	R-5		zones. @ 41.1'-42.1', broken zone.											
45 — -46.8 — 	-861.1-						 @ 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. 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 											
50		Core	Rec	RQD	R-6		to parting; contains moderate argillaceous laminations. @ 49.3'-49.5', 50.0'-50.5', high angle rust stained fractures.											
54.2 55 	-853.7-	120"	120"	69%	0-0		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. @ 54.3'- 59.7', numerous low angle fractures.											
60														:::				

	Client: -	TranSy	stems	s, Inc.				Project: SCI-823-0.00							Job No	o. 0121	-3070	.03
	LOG C)F: Bo	ring	B-170	2	L	<i>ocation:</i> St	a. 9+90.9, 70.5 ft. LT of CR 184 CL Date Drilled: 06	5/12			to		06/13/	07			
ſ					Sam No			WATER OBSERVATIONS: Water seepage at: Not Reported		GF	RADA		/					
	Depth (ft)	<i>Elev.</i> (ft) 847.8	Blows per 6"	Recovery (in)	Drive	Press / Core	Hand Penetro- meter (tsf)	Water level at completion: 13.5' (includes drilling water0 DESCRIPTION	% Aggregate	% C. Sand	ΣI	% F. Sand % Silt	% Clav	Natu F	ral Moisi L ⊢ Blows µ	PENET	ntent, % ──	-
			Core 120" Core 72"	Rec 120" Rec 72"	RQD 80% RQD 90%			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.	2									
┢	7 5.0	-832.9-						Bottom of Boring - 75.0'	{									
FILE: 0121-3070-03 [5/23/2014 3:55 PM]								Bottom of Boring - 75.0'										

	ranSy				_		Project: SCI-823-0.00								Job No	. 0121	-3070).03
<u>.0G 0</u>	F: Bo	ring	B-170			ocation: Sta	a. 13+76.8, 49.1 ft. LT of CR 184 CL Date Drilled: 06	5/13 T			DATI							
Depth	Elev.	per 6"	ery (in)	Samı No		Hand Penetro- meter	OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 6.8' (includes drilling water)	regate		Sand				Natu	NDARD ral Moisi	ture Coi	ntent, %	% -
(ft)	<i>(ft)</i> 950.5	Blows	Recovery	Drive	Press /	(tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. S	% F. S	Si	% Clay		L	oer foot		LL 40
0		4 4 9	16	1			Medium dense to very dense yellowish brown and light gray SANDY SILT (A-4a), little fine sand, trace gravel, trace silty clay; dry to damp.								,, j			
_ _ 5		22 24 48	21	2											2	/		10
6.0	-944.5-	45 50/3	18	3			Severely weathered brown SILTSTONE.	-										
7.0	-943.5-	50/3 Core 30"	Rec 30"	RQD 70%	R-1		Medium hard brown SANDSTONE; very fine to fine grained, highly weathered to decomposed, argillaceous, massive, highly											
10					-		fractured to broken.											
_ 12.7 	-937.8-	Core 60"	Rec 60"	RQD 63%	R-2		Medium hard to hard gray SANDSTONE; very fine to fine grained											
_ 15 					-		moderately weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations. @ 13.0', 14.8', 23.4', low angle fractures.											
-		Carra	Dec	DOD														
20 —		Core 120"	Rec 120"	RQD 96%	R-3													
_																		
_ 25 —					-													
_																		
-		Core	Rec 120"	RQD			@ 28.7', 29.2', low angle fractures.											

Client:	TranS	ystems	, Inc.				Project: SCI-823-0.00								Job No	o. 0121	-3070	.03
LOG	OF: B	oring	B-170	4	L	ocation: Sta	a. 13+76.8, 49.1 ft. LT of CR 184 CL Date Drilled: 06	5/1:	3/0	7								
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: Not Reported		G	RAI	DAT	10N	/	_				
Depth (ft)	<i>Elev.</i> (ft) 920.5	smoj	Recovery (in)	Drive	Press / Core	Ponotro-	Water level at completion: 6.8' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	i S	L	5	% Clav	Natu F		ture Cor	ntent, % ──↓ L - ○	- ●
35 - 40 - 45 - 50 -		Core 120" Core 120"	Rec 120" Rec 120"	RQD 97% 97%			 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. 	7										
² -55.0-	895.5 [.] 	Core 6"	Rec 6"	RQD 100%	<u>R-7</u>		Bottom of Boring - 55.0'	-										
: : : : : : : : : : : : : : : : : : :	_																	

Client:					_		Project: SCI-823-0.00							Job No. 0121-3070.03
LOG C)F: Bo	pring	B-170			Location: St	a. 17+36.8, 25.2 ft. RT of CR 184 CL Date Drilled: 04	5/31			ATI	<u></u>		r
				Sam No		Hand	OBSERVATIONS: Water seepage at: Not Reported Water level at completion: 4.7' (includes drilling water)		G					
Depth (ft)	Elev. (ft) 952.3	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	DESCRIPTION	% Aggregate	% C. Sand	Σ.	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (I Natural Moisture Content, % - PL ⊢ LL Blows per foot - ○ 10 20 30 40
-0.3	952.3						Topsoil - 4"		0	0、			0	
_		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.							φ.
5		2 3 3	15	2										
_		2 2 2	14	3			@ 6.0'-12.5', orangeish brown.							
		3 7 14	18	4										
10		11 18		5										5, 7, 7,
13.5	-938.8-	9 38		6			Severely weathered orangeish gray SANDSTONE.	-						Ŕ
15 —		38 50/4 50/5	16 5	7										
_		44												
20 —		44 50/3	9	8										
21.5	-930.8-	50/3	3	9	-		Medium hard to hard gray and brown SANDSTONE; very fine to	-						
_		Core	Rec	RQD 75%	B-1		fine grained, highly weathered, argillaceous, thinly laminated to medium bedded, highly fractured.							
25 —		60"	60"	75%										
26.5 	-925.8-						Bottom of Boring - 26.5'							
30														

	Client: -	FranSy	stems	s, Inc.				Project: SCI-823-0.00								Job No	. 0121	-3070	.03
	LOG C)F: Bo	oring	B-170	6	L	ocation: Sta	a. 17+07.6, 121.9 ft. RT of CR 184 CL Date Drilled: 06	5/1·	1/07	7								
					Sam No		Hand	WATER OBSERVATIONS: Water seepage at: Not Reported		G	RAD	ATI	ON						
			<i>e</i> "	(in)		e	Penetro-	Water level at completion: Not Reported	le l						STA	NDARD	PENET	RATIOI	N (N)
	Depth	Elev.	per 6"	'ery		/ C0	meter		Aggregate	Sand	Sand	Sand				ıral Mois ⁰L ⊢——	ture Con	tent, % ── L	
	(ft)	<i>(ft)</i> 912.6	Blows ,	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION	% Ago		Σ	Ľ.	Si l	% Clay		Blows	per foot	- 0	יר ו∩
	0 —	012.0						Medium dense to dense yellowish brown SANDY SILT (A-4a),											
	_		5 10 10	17	1			little gravel, trace silty clay; contains rock fragments; damp.											
	_		8																
	5—		12 16	18	2												Ŕ		
	_		8 15 20	18	3														
	_		7															9	
			17 33		4														
ŀ	—11.0— _	-901.6-	26 50/3	9	5			Severely weathered gray SILTSTONE.	1										50+0
┢	-13.0					-		Soft to medium hard brown SANDSTONE; very fine to fine											
	- 15 —							grained, highly weathered, argillaceous, massive, highly fractured. @ 13.9'-14.8', decomposed high angle fracture with infilling.											
	-		Core 60"	Rec 60"		R-1		@ 16.1'-16.7', high angle fracture.											
		-894.6-																	
[]	-10.0	094.0						Bottom of Boring - 18.0'											
3:55 PM	20 —																		
14 3	_																		
23/20	_																		
[5/	_																		
0-03	25 —																		
0121-3070-03	_																		
5: 012	_																		
FILE:	30																		

	TranSy				-		Project: SCI-823-0.00	- /								b. 012 ⁻	1-3070).03
.0G C	DF: Bo	oring	R-558			ocation: Sta	a. 629+24.7, 118.1 ft. RT of SR 823 CL Date Drilled: 0	5/26				to	(05/31/0)5			
		=	(in)	Sam No		Hand Penetro-	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 8.0' (Includes drilling water)							STA	NDARD	PENE	TRATIO)))))))
Depth (ft)	Elev. (ft)	vs per 6"	Recovery (Q	ss / Core	meter (tsf)		% Aggregate	% C. Sand	1. Sand	. Sand	Silt	Clay	Natu	ral Mois	ture Co	ntent, %	6 -
<u>^</u>	984.1	Blows	Rec	Drive	Press.		DESCRIPTION	% A	% 0	% M.	% F.	% S	% 0	1		per foot 20		40
-0.2	-983.9-							_										:
-	-	2 3 5	14	1		2.5	Very stiff brown SILT AND CLAY (A-6a), some fine to coarse sand, little gravel; damp.							С О				
_	-	11 16 30	15	2		2.25	@ 3.5'-5.0', contains rock fragments.									, ,	/ /	
5—	070.1		10															
6.0	-978.1-	15 50/4	10	3		4.5+	Severely weathered brownish gray SHALE.											
_		50/4	3	4														
10 —	-																	
_	_	34 50/4	9	5														
_																		
-	-	15 35 50	18	6			@ 13.5'-15.0', gray.											C
16.0—	-968.1-	50/4	3	7			Brownish gray SANDSTONE fragments.	-										
_	966.6-																	
- 20		Core	Rec	RQD	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											
20		54"	41"	20%			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	1																	

Client:					_		Project: SCI-823-0.00							ob No.	0121	-3070	0.03
LOG C	DF: Bo	ring	R-558	Sam		<i>ocation:</i> Sta	a. 629+24.7, 118.1 ft. RT of SR 823 CL Date Drilled: 05	5/26 T		ATI	to		05/31/05 I				
Depth (ft)	<i>Elev. (ft)</i> 954.0	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 8.0' (Includes drilling water) DESCRIPTION	% Aggregate	Sand	F. Sand	% Silt	% Clay	Natura PL B	DARD F I Moistu ⊢−−−−− Blows pe 20	ire Cor er foot	ntent, %	6 -
	942.8-	Core 120"	Rec 120"	RQD 89%	-	*184	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. @ 38.1', high angle rust stained fracture. 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.										
 50 —		Core 120"	Rec 120"	RQD 98%	R-4	*435											
-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-	Core 120"	Rec 120"	RQD 95%	R-5	*220	Hard gray SANDSTONE; highly to slightly weathered, micaceous, very thickly bedded, slightly fractured, contains iron staining.										

Client:	TranSy	stems	s, Inc.				Project: SCI-823-0.00							Job No. 0121-3070.03
LOG C)F: Bo	ring	R-558		L	ocation: Sta	a. 629+24.7, 118.1 ft. RT of SR 823 CL Date Drilled:	05/20	6/0	5		to		05/31/05
			-	Sam No	ole	Hand	WATER OBSERVATIONS: Water seepage at: None		G	RAI	DAT	ION		-
Depth	Elev.	oer 6"	(ni) yre		/ Core	Penetro- meter	Water level at completion: None (Prior to coring) 8.0' (Includes drilling water)	eaate	Sand	and	Sand			STANDARD PENETRATION (N) Natural Moisture Content, % - ●
(ft)	(ft) 924.0	Blows per 6"	Recovery	Drive	Press /	(tsf)	DESCRIPTION	% Aaareaate	% C. S	N	% F. S	- S	% Clav	PL → LL Blows per foot - ○ 10 20 30 40
	-922.1-						Hard gray SANDSTONE; slightly weathered, micaceous, very thickly bedded, slightly fractured, contains iron staining.							
- 02.0	922.1						Bottom of Boring - 62.0'							
65 —	•													
-	-													
70 —	-													
_	-													
75 —	-													
-	-													
- 80	-													
	-													
_	-													
85 —	-													
-	-													
 90	-													

Client:	TranS	/stems	s, Inc.				Project: SCI-823-0.00								Job No	. 0121	-3070	.03
LOG	OF: B	oring	R-560		L	Location: Sta	a. 630+08.0, 162.3 ft. LT of SR 823 CL Date Drilled: 0	5/2	6/0	5								
				Sam No			WATER OBSERVATIONS: Water seepage at: None		- 0	RA	DAT	ION		-				
			(iii)	///). 	Hand Penetro-	Water level at completion: None (Prior to coring)											
		r 6"			Core	meter		1 ato		2 2	a s				NDARD Iral Mois			
Depth (ft)	Elev. (ft)	ed s	ven		0/0	(tsf)			Sand	Sand	Sand	.	∑		nan wons ℃ ←		+L	
(11)		Blows per 6"	Recovery	Drive	Press / ((101)	DESCRIPTION	% Annranata			% F.					per foot		10
0.2	973.1 972.9				\uparrow		Topsoil - 2"				<u>` </u>		0		<u>10 2</u>	0 3	<u>0 4</u>	
		2 4		-		2.25	Very stiff to hard brown SANDY SILT (A-4a), little clay, little											
		7	14	- '		2.25	gravel; contains rock fragments; damp.								þ.			
		7				4.5+										/ /	/	
5 —		50/5	10	2		4.5+												50+0
-6.0-		10																
0.0		12 50/5	11	3			Severely weathered brown SHALE.											50+
	_																	
	_	12 29		4														
10 —	-	37	16															66 →
	-	22																
	-	22 46 50/3	15	5														50+
		33					@ 13.5'-19.4', gray.											
45	-	33 50/5	11	6			@ 13.3-13.4, gray.											50+0
15 —																		
		50/5	5	7														50+0
	_	50 50/3	9	8														
ма 90 —	_	00/0	Ŭ															50+0
m m	_	36 50/4		9			@ 21.0'-21.8', brown, contains rust stains.											
22.5- 22.5-	950.6-		10	9														50+0
/23/							Soft to medium hard brownish gray SANDSTONE; very fine to											
[2							fine grained, highly weathered to decomposed, argillaceous, micaceous, thinly laminated to thinly bedded, highly fractured.											
е 0-1 25 —	1						@ 23.5', 24.9', high angle fractures.											
-3070	1																	
)121-		Core 120"	Rec 107"	RQD 65%	R-1	*321												
29.1– 30	944.0-						Medium hard gray SANDSTONE; very fine to fine grained.	1										

Client:	TranSy	stems	, Inc.		_		Project: SCI-823-0.00							Job No.	0121-3	070.03
LOG C)F: Bo	ring	R-560			ocation: Sta	a. 630+08.0, 162.3 ft. LT of SR 823 CL Date Drilled: 05	/26								
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None		Gł	RAD	DATIO					
		.9	(in)		ø	Penetro-	Water level at completion: None (Prior to coring)	ate		_				STANDARD F		
Depth	Elev.	oer	very		Co v	meter		gregá	C. Sand	Sanc	Sand		2	Natural Moistu PL ⊢	re Contei	nt, % - ● ⊣ LL
(ft)	<i>(ft)</i> 943.0	Blows ,	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION	% Aggregate	% C.	% M. Sand	% F.	% Silt	% Clay	Blows pe 10 20	r foot - 30	0 40
_							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 —																
-	-															
	-935.6-	Core 120"	Rec 120"	RQD 93%	R-2	*143	Soft gray SHALE interbedded with SANDSTONE; very fine									
	-934.4-	120	120	0070			grained, highly weathered, micaceous, thinly laminated,									
40 —	-						\moderately fractured. Medium hard brown SANDSTONE; very fine to fine grained,									
-	-						highly weathered, argillaceous, micaceous, medium bedded to thickly bedded, slightly fractured, iron stained.									
-	-				$\left \right $		@ 38.7' to 41.5', contains calcareous bands.									
-																
45 —																
_	-	Core	Rec	RQD												
-	-	120"	116"	93%	R-3	*353										
50 —	-						@ 49.0'-52.5', gray, interbedded with siltstone, micaceous, pyritic,									
	-						argillaceous, laminated.									
	920.6-															
_							Bottom of Boring - 52.5'									
55 —	-															
-																
-																
-																
60														:::: :::: :	::: :	::: :::

		stems			_		Project: SCI-823-0.00							Job No. 0121-3070.03
<u>-0G 0</u>	F: Bo	oring	R-598	Sam		ocation: Sta	a. 657+37.3, 1.0 ft. LT of SR 823 CL Date Drilled: 6/	21/(T			ATIO			
			(1	No No		Hand	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring)		Gi					
Depth (ft)	Elev. (ft) 782.0	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	12.2' (includes drilling water)	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N Natural Moisture Content, % - PL ⊢ LL Blows per foot - ○ 10 20 30 40
-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.							
5		8 9 11	13	2										
5		0												
_		6 8 8	7	3			@ 8.5'-8.9', severely weathered brown and gray SHALE fragments.							
-9.0	-773.0-	50/5	5	4										
10 — 							Soft brown SHALE; very fine grained, decomposed weathered, highly fractured.							
-13.5 15	-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.							
-					-									
20 —														
 25		Core 120"	Rec 120"	RQD 66%	R-2									
_	-755.5-						Hard gray SANDSTONE; fine grained, highly to moderately weathered, argillaceous, micaceous, laminated to thickly bedded, slightly fractured.							

Client:	TranSy	stems	s, Inc.				Project: SCI-823-0.00								Job No.	0121	-3070.	.03
LOG C)F: Bo	oring	R-598			ocation: Sta	a. 657+37.3, 1.0 ft. LT of SR 823 CL Date Drilled: 6/	21/	05									
Depth (ft)	<i>Elev. (ft)</i> 751.9	Blows per 6"	Recovery (in)	Sam No Prive		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 12.2' (includes drilling water) DESCRIPTION	% Aggregate		N.	F. Sand	t	Clay	Natu F	NDARD Irral Moist PL ⊢−−−− Blows p 10 20	ure Cor per foot	ntent, % ──	- •
- - 	-748.5-	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. Bottom of Boring - 33.5'											
35 — - - -																		
40 — 																		
45 — 	-																	
50 — - - -																		
55 — - - - - 60																		

Client: T					_		Project: SCI-823-0.00							Job No. 0121-3070.03
LOG O	DF: Bo	oring	R-764	Sam		ocation: ST	a. 822+46.7, 107.9 ft. RT of SR 823 CL Date Drilled: 0	8/16 T			ATIC	21/		
			_	No		Hand	OBSERVATIONS: Water seepage at: None	\vdash						
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	Water level at completion:None (prior to coring) 8.0' (inside hollowstem augers) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	, –
0.3	780.4 780.1-		4		<u> </u>		Topsoil - 4" / 6" soil removed before drilling.	<u>~</u>	0	0	0	6	0	<u>10 20 30 40</u>
_		21 29 35	10	1			Very dense brown SILT (A-4b), little clay, trace fine sand; slightly organic; damp.	1						
	-777.4-	18 22		2		4.5+	Hard brown SILTY CLAY (A-6b), trace fine sand; damp.	1						
5 — 5.5	-774.9-	40	13			4.5+								06
-		29 37 45	18	3			Severely weathered brown SHALE, arenaceous.							08
		12 21 50/5	17	4										
-		14 15 21	18	5										
_		49 50/2	8	6										Q, N
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.							
	-757.1-													
-23.3	-/5/.1-						Soft gray SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated,]						
_							mechanical fractures.							
		Core	Rec	RQD										

	TranSy				_		Project: SCI-823-0.00							Job No. 0121-	3070.03
<u>-0G C</u>	DF: Bo	oring	R-764	Sam		<i>.ocation:</i> ST	a. 822+46.7, 107.9 ft. RT of SR 823 CL Date Drilled: 0	8/16 1			ΟΑΤΙ	ON			
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 8.0' (inside hollowstem augers) DESCRIPTION	% Aggregate			Sand	t	% Clay	· · · · · · · · · · · · · · · · · · ·	ent, % - → LL ○
-	750.4	120"	120"	91%			Soft gray SHALE; very fine grained, highly weathered to decomposed, arenaceous, thinly laminated to laminated, mechanical fractures.		~	8	~	8	~		40
35 — — — 40 —		Core 120"	Rec 120"	RQD 81%	R3										
 45 	-				-										
50 — 	-	Core 120"	Rec 120"	RQD 51%	R4										
 55 	-														
60	1	Core	Rec	RQD											

Client: -	TranSy	stems	s, Inc.				Project: SCI-823-0.00								Job N	o. 0121	-3070	.03
LOG C)F: Bo	oring	R-76 4		L	.ocation: ST	a. 822+46.7, 107.9 ft. RT of SR 823 CL Date Drilled: 04	8/16	6/05	;								
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None		G	RAD	DATI 	ON	Γ					
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)		s / Core	Penetro- meter (tsf)	Water level at completion: None (prior to coring) 8.0' (inside hollowstem augers)	% Aggregate	Sand	% M. Sand	Sand	t	ay	Nati	ural Mois	D PENET sture Col	ntent, %	- •
(17)	720.3			Drive	Press		DESCRIPTION	% Ag	% C.	% M.	% F.	% Silt	% Clay			per foot <u>20 3</u>		40
	-	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'	1										
-	-																	
-																		
-																		
_																		
-	-																	
75 —	-																	
_																		
-																		
80 —	1																	
-	-																	
_	-																	
-	-																	
85 —																		
-	-																	
-	-																	
90																		

	TranSy				-		Project: SCI-823-0.00	/0.4	105						Job No	o. 0121	1-3070).03
LOG C	DF: Bo	oring	R-790	Sam		ocation: Sta	a. 858+21.5, 130.5 ft. LT of SR 823 CL Date Drilled: 08 WATER	/31			ATI	ON						
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 19.5' (Includes drilling water) DESCRIPTION	% Aggregate	Sand	M. Sand		t	% Clay	Natur PL	al Mois . ⊢—— Blows	ture Co per foot	TRATIO ntent, % ────↓ L	6 - 0
-0.3 -	657.9 657.6-	-	<u> </u>		<u> </u>		∖Topsoil - 3"	0	0	0	0	01	0	1) 2	<u>20 3</u>	30 4	40
_	-	7 14 33	12	1			Hard brown SILTY CLAY (A-6b), some fine to coarse sand, little gravel; damp.	11	13		15	6	 1		•			
-3.0	-654.9-	14 50/6	10	2			Hard brown CLAY (A-7-6), "and" silt, trace fine to coarse sand; damp.	0	2		4	49	45		•	 		+•
-5.5 	-652.4-	24 50/5	9	3			Hard brown SILTY CLAY (A-6b), trace fine to coarse sand; damp.	0	1		2	48	49		•	 		+
-8.5	-649.4-	Core	Dee				Soft to medium hard greenish brown SHALE; very fine grained,											
	-	Core 18" Core 60"	Rec 18" Rec 60"	RQD 25% RQD 73%			 Soli to medium hard greenish brown SHALE; very line grained, highly weathered, argillaceous, thinly laminated to laminated, highly fractured. @ 10.3', 12.0', 12.1', 12.3', 14.4', high angle fractures. @ 12.7'-12.9', sandstone beds with iron staining. 											
14.2 15 	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.											
20 — — — —	-	Core 120"	Rec 120"	RQD 73%	R3		@ 20.5'-25.0', sandstone of varying color, pitted in some areas.											
-25.0 30	- 632.9- - -	Core	Bec	RQD	-		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.											

Client: -	FranSy	stems	s, Inc.				Project: S	SCI-823-0.00								J	ob No. 01	21-307	0.03
LOG C	F: Bo	ring	R-790		L	ocation: Sta	. 858+21.5, 130.5 ft. L	T of SR 823 CL	Date Drilled: 08	8/31	/05								
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sam No	/ Core	Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Wate Water level a	er seepage at: None at completion: None (Prior to co 19.5' (Includes dr	ring) illing water)	% Aggregate	Sand	Sand	Sand DITY		Clay	Natural PL	DARD PEN Moisture (Content,	% - ●
	627.9			Drive	Press.			DESCRIPTION		% A	% C.	% M.	% F.	% S	% C	В 10	lows per fo 20	ot - 〇 30	40
-		120"	120"	83%	R4			urbidity weathering. ngle fracture.											
35.0	-622.9-				+			Bottom of Boring - 35.0'											
 40 45							J	bollom of boring - 33.0											
50 — 																			
55 — 																			
-																			
60						1													<u>. </u>

	TranSy				-		Project: SCI-823-0.00		10 5					Job No. 0121-3070.03
.0G C	DF: Bo	ring	K-794	Sam		<i>ocation:</i> Sta	a. 862+28.7, 6.5 ft. RT of SR 823 CL Date Drilled: 08 WATER	3/30 T		RAD	ATI	ON		
			(in)	No		Hand Penetro-	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 5.8' (Includes drilling water)	te						STANDARD PENETRATION (I
Depth (ft)	<i>Elev. (ft)</i> 676.9	Blows per 6"	Recovery	Drive	Press / Core	meter (tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - PL ⊢ LL Blows per foot - ○ 10 20 30 40
0 — -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-	16 19	10	2		4.5	Hard brown CLAY (A-7-6), little fine to coarse sand; damp to moist.	0	1		12	40	47	•
5 — 5.5—	_ 671.4_	22	18											, p
_	-	14 14 19	18	3		3.5	Very stiff brown SANDY SILT (A-4a), some clay; damp to moist.	0	0		28	47	25	• · · · · · · · · · · · · · · · · · · ·
_		6 8		4		2.0								
10 — 10.5—	-666.4-	8	16	4		2.0								
	- 000.4	4 6 6	18	5		1.5	Stiff brown SILT (A-4b), some fine sand, some clay; damp to moist.	0	0		27	51	22	
-		7												
15 — 15.5—	-661.4-	10 11	17	6		1.0								Q.,
	001.4	24 26	10	7		4.5+	Hard brown SANDY SILT (A-4a), little gravel, little clay; damp to moist.	14	18		16	40	12	● Non-F
	_	29												
18.5— 	-658.4-	32 32 39	18	8			Severely weathered brown SANDSTONE argillaceous.							
_		50/1	1	9										
_	-654.9- -652.4-						Soft to medium hard gray SHALE interbedded with SANDSTONE; very fine grained, highly weathered, micaceous, laminated to thinly bedded, moderately fractured. @ 22.2', 22.5', 23.0', 23.6', low angle fractures.							
_	-	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														

Client:	TranSy	rstems	s, Inc.				Project: SCI-823-0.00								Job No	. 0121	-3070	.03
LOG	OF: Bo	oring	R-794			Location: Sta	a. 862+28.7, 6.5 ft. RT of SR 823 CL Date Drilled: 08	8/30)/05	5								
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None		G	RAL	DATI	ION		-				
Depth (ft)	<i>Elev.</i> (ft) 646.9	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	Water level at completion: None (Prior to coring) 5.8' (Includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	Σ.	L.	l is	% Clay	Natu F		ture Cor	ntent, % ──	-
	 	Core 60"	Rec 60"	RQD 73%			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. 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'											

LOG OF: Boring R-2570 Location: State 384-00.0, 5.8 ft. LT of SR 823 CL Date Diffect V201706 to O20206 Deptin Image: Sample Value of the separation of		ranSy				_		Project: SCI-823-0.00									. 0121	-3070	.03
Depth Ew. No. Hand Peneto- res CBSERVATIONS:: Water seepage at: None Water level at completion: None (Pior to coring) 75.0' (Includes drilling water) STANDARD PENETR. Natural Mosture Conte PL. 0.9 98.4.4 Image: Standard PL 98.4.4	<u>G OF</u>	F: Bo	ring	R-257			<i>ocation:</i> Sta		2/01				to		02/02/0)6			
-0.3 694.4 Topsoil - 4" -0.3 694.4	oth	Elev.	oer 6"				Penetro-	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring)	egate						Natu	al Mois	ture Co	ntent, %	6 - 🗨
10 3 1 5.0 689.7 14 2 6.0 888.7 50/3 14 10 Core Rec RGD R1 10 Rec RGD R2 T11 20 Core Rec Rec R2 21 T19 RGD R2<	ft)	(ft) 894.7	f smola	Весоче	Drive	Press /	(tsf)		% Aggi	% C. S	% M. S	% F. S	% Silt	% Clay		Blows	oer foot		1L 40
-5.0 #889.7 14 - -6.0 888.7 20.3 14 - -6.0 888.7 50.3 14 - -6.0 888.7 50.3 14 - -6.0 888.7 50.3 14 - -6.0 888.7 50.3 14 - -6.0 888.7 60.3 14 - -6.0 888.7 60.3 14 - -6.0 888.7 60.3 16 - -6.0 108" 108" 51% R1 "365 -6.1 -6.0 880.6 - - - -14.1 -880.6 - - - - -15.7 - - - - - -14.1 - - - - - - -14.1 - - - - - - -14.1 - - - - - - -15.7 16.6': 23.0'; 23.2'; 23.3'; lo	.3	-894.4-	3					Hard brown SILT AND CLAY (A-6a), trace fine to coarse sand;											
10 Core 108" Rec 109" ROD 51% R1 -365 -14.1 -880.6	.0	-889.7-	4					Soverely weathered brown SANDSTONE argillacoous							6	, /	/		
20 - Core Rec 108" 108" 81 4365 20 - Core 120" 119" 80% R2 *111 20 - Core 120" 119" 80% R2 *111	0. 	-888.7-	<u>20</u> 50/3	14	2	-		Medium hard light brown SANDSTONE; fine grained, highly weathered, micaceous, thickly bedded, argillaceous, highly											5
-14.1 -880.6 -	- 0			Rec 108"	RQD 51%	R1	*365												
15 Image: Core 120" Rec 120" RQD R2 *111 fine grained, moderately to highly weathered, argillaceous, micaceous, massive, moderately fractured. 20 Image: Core 120" Rec 119" RQD R2 *111 @ 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. 25 Image: Core 120" R19" R2 *111 Image: Core 120" *111	- - 4.1 -= -	-880.6-						decomposed.											
20 Core 120" Rec 119" RQD 86% R2 *111 - - - - - - - - - - - - - - - - - - - - - - - - 25 - - - - - - - - - -	5 — — —					-		fine grained, moderately to highly weathered, argillaceous,											
						R2	*111	@ 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.											
	-																		
@ 25.9'-26.2', high angle fracture.	25 — _					-													
30 Core Rec RQD	_							@ 25.9'-26.2', high angle fracture.											

	[ranSy				-	_	Project: SCI-823-0.00							Job No. 0121-3070.03
	F: Bo	ring	R-257	0 Samp		ocation: Sta	a. 639+00.0, 5.8 ft. LT of SR 823 CL Date Drilled: 02	2/01 T			ATI	to	(02/02/06
Depth (ft)	<i>Elev.</i> (ft) 864.6	Blows per 6"	Recovery (in)	Drive No.		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 75.0' (Includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	M. Sand	F. Sand	t	% Clay	STANDARD PENETRATION (I Natural Moisture Content, % - PL ⊢ LL Blows per foot - ○ 10 20 30 40
-		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 — _ 12.7 —	-852.0-	Core 120"	Rec 120"	RQD 100%	R4	*1004	Medium hard to hard gray SANDSTONE; very fine to fine grained,							
_ 45 — _							slightly weathered, argillaceous, micaceous, slightly pyritic, massive, slightly fractured.							
 50 		Core 120"	Rec 120"	RQD 100%	R5	*914	 @ 51.2'-51.5', high angle fracture, rust stained. @ 53.7', 53.9', low angle fractures, rust stained. 							
 55														
_							@ 56.2'-56.5', 57.0'-59.1', iron staining.							
60		Core	Rec	RQD			@ 57.5'-57.7' high angle fracture.							

	FranSy				_		Project: SCI-823-0.00							Job No. 0121-3070.03
<u>-0G 0</u>	F: Bo	oring	R-257	' 0 Sam		ocation: Sta	a. 639+00.0, 5.8 ft. LT of SR 823 CL Date Drilled: 02	2/01 			ATI	to ON	(02/02/06
Depth (ft)	<i>Elev.</i> (ft) 834.6	Blows per 6"	Recovery (in)	Drive	Press / Core	Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (Prior to coring) 75.0' (Includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	M. Sand	F. Sand	% Silt	% Clay	STANDARD PENETRATION (I Natural Moisture Content, % - PL ⊢───── LL Blows per foot - ○ 10 20 30 40
_ _ 	-829.7-	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.							
05.0 - - - 70 - - - - -	-829.7-	Core 120"	Rec 100"	RQD 87%	R7	*612	 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. 							
75 — 		Core 60"	Rec 60"	RQD 100%	R8	*812	@ 79.3', low angle fracture.							
80.0 -	-814.7-						Bottom of Boring - 80.0'							
90														

	TranSy				_		Project: SCI-823-0.00								Job No	. 0121	-3070).03
LOG C)F: Bo	ring	R-257			<i>ocation:</i> Sta	a. 638+93.1, 105.2 ft. RT of SR 823 CL Date Drilled: 2/	1/0				to	2	2/1/06				
		per 6"	y (in)	Sam No		Hand Penetro- meter	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	gate			ATIC				NDARD al Moist			• • •
Depth (ft)	Elev. (ft) 926.5	Blows pe	Recovery	Drive	Press / ((tsf)	DESCRIPTION	% Aggregate	% C. Sand	Σ	% F. Sand	% Silt	% Clay		Blows p	per foot	- 0	
-0.3	-926.2-	4 3 5	14	1			Topsoil - 4" / 6" soil removed before drilling Loose brown SILT (A-4b), little fine to coarse sand, trace gravel, trace clay; contains sandstone fragments; dry.							0				
-3.0	-923.5-	33 35 25	18	2			Very dense brown and gray SANDY SILT (A-4a), little gravel, trace clay; contains sandstone fragments; damp to moist.								/	/	, /	\()6
	919.5-	17 50/5	11	3	_													
 10	-	Core 84"	Rec 84"	RQD 85%	R1	*342	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											
15 — _ _	-						@ 14.4', 15.4', 17.7', low angle fractures. @ 14.7'-15.0', 17.1'-17.2', high angle fractures.											
 20	-	Core 120"	Rec 120"	RQD 93%		*1000												
21.6 <u> </u>	-904.9-				_		Hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, massive, slightly fractured.											
25 — 	-																	
	-	Core 120"	Rec 120"	RQD 100%	R3	*899												

Client:					_		Project: SCI-823-0.00						Job No. 0121-3070.03
LOG C)F: Bo	ring	R-257			<i>ocation:</i> Sta	a. 638+93.1, 105.2 ft. RT of SR 823 CL Date Drilled: 2/	1/06	040	<u> </u>	to	2	2/1/06
Depth (ft)	Elev. (ft) 896.5	Blows per 6"	Recovery (in)	Sam No Prive		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water) DESCRIPTION	% Aggregate	M. Sand	% F. Sand	t	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ⊢ LL Blows per foot - ○ 10 20 30 40
-							Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, massive, slightly fractured.						
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 — 		0			_		@ 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:					_		Project: SCI-823-0.00							Job No. 0121-3070.03
LOG C	F: Bo	ring l	R-257			ocation: Sta	a. 638+93.1, 105.2 ft. RT of SR 823 CL Date Drilled: 2/	1/06				to	2	2/1/06
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sam No Drive		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water) DESCRIPTION	% Aggregate	C. Sand	M. Sand	F. Sand	Silt	Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ⊢ LL Blows per foot - ○
	866.5	Ta Core 120"	Ϋ́ζ Rec 120"	RQD 93%		*371	 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. @ 65.8'-66.5'; high angle fracture. @ 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. 	~	%	%	%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	%	
		Core 120"	Rec 120"	RQD 100%	R8	*1211								
85		Core 120"	Rec 120"	RQD 100%	R9	*1358								

	TranSy				_		Project: SCI-823-0.00								<i>No.</i> 012	21-307	0.03
LOG O	DF: Bo	oring	R-257	' 1 Sam		<i>ocation:</i> Sta	a. 638+93.1, 105.2 ft. RT of SR 823 CL Date Drilled: 2/	1/0		DAF	DATIO	to	2	2/1/06			
Depth (ft)	<i>Elev. (ft)</i> 836.4	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	<i>DESCRIPTION</i> : Water seepage at: None Water level at completion: None (prior to coring) 62.5' (includes drilling water)	% Aggregate	C. Sand	M. Sand		Silt	% Clay	Natural I PL +	ARD PENI Noisture C ws per foo 20	ontent, s	% -
 	-832.8-				_		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	- -									
95 — 	-						 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. 										
 	-	Core 120"	Rec 120"	RQD 98%	R10	*612											
 	-	Core 72"	Rec 72"	RQD 100%	R11	*722											
110.0 <u>-</u> - -	-816.5-						Bottom of Boring - 110.0'										

С	lient:	FranSy	stems	, Inc.				Project: SCI-823-0.00							Jol	No. 012 ⁻	-3070	.03
	OG C)F: Bo	oring	R-261	2	L	ocation: St	a. 669+11.2, 51.4 ft. LT of SR 823 CL Date Drilled: 04	8/1	5/0	6		to		08/16/06			
	Depth	Elev.	per 6"	ieny (in)	Sam No		Hand Penetro- meter	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	Aggregate					\ \ \	Natural N	NRD PENE ⁻ Noisture Co	ntent, %	5 - •
	(ft)	(ft) 883.7	Blows	Recovery	Drive	Press	(tsf)	DESCRIPTION	% Age		i z	L	: !S	% Clay	Blo	ws per foot	- ()	40
	-0.4	-883.3-	3 3 5	16	1			Topsoil - 5" / 1.7' soil removed before drilling Loose brown SILT (A-4b), little fine to coarse sand, little clay; contains rock fragments; dry.							9			
	5		3 14 10		2											\sim	· · · · · · · · · · · · /	
	-6.0 	-877.7-	16 36 32	18	3			Severely weathered brown SANDSTONE.) / / ⊖68→
	_		15 50/5	11	4													50+0
	10.0 15 	-873.7-	Core 108"	Rec 108"	RQD 70%	R-1		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.	,									
ILE: 0121-3070-03 [5/23/2014 3:55 PM	20 — - - 25 — - - - -		Core 120"	Rec 120"	RQD 91%	R-2		@ 20.0',25.1', low angle fractures. @ 23.1'-23.5', high angle fracture.										
. т Бч	30														::: ::	:: ::::	::::	<u> :::</u>

Client: 7							Project: SCI-823-0.00									<u>, 012</u>	1-3070).03
LOG O	F: Bo	oring	R-261			ocation: Sta	a. 669+11.2, 51.4 ft. LT of SR 823 CL Date Drilled: 08	3/15				to	()8/16/)6			
Depth (ft)	Elev. (ft) 853.7	Blows per 6"	Recovery (in)	Sam No		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	Sand	% F. Sand	% Silt	% Clay	Natu P		ture Co per foot	ntent, %	% -
	833.7	Core 120"	Rec 120"	RQD 96%			Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately to highly weathered, argillaceous, micaceous, massive, slightly fractured. @ 33.9'-34.2', high angle fracture.											+0
40 — 45 — 	-837.0-	Core 120"	Rec 120"	RQD 100%	R-4		 @ 40.5'-46.7', contains few argillaceous laminations. @ 41.7', pyritic. Medium hard to hard gray SANDSTONE; very fine to fine grained, 											
		Core 120"	Rec 120"	RQD 96%	R-5		moderately weathered, argillaceous, micaceous, pyritic, thinly laminated to thinly bedded, slightly fractured, contains moderate to abundant argillaceous laminations. @ 49.2'-49.3', filled fracture.											
-57.6	-826.1-						Medium hard to hard gray SILTSTONE interbedded with SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, micaceous, pyritic.											

Client:					_		Project: SCI-823-0.00								Job No.	0121	-3070	.03
LOG C)F: Bo	ring	R-261			ocation: Sta	a. 669+11.2, 51.4 ft. LT of SR 823 CL Date Drilled: 08	3/15				to	(08/16/0)6			
				Sam No			WATER OBSERVATIONS: Water seepage at: None		GF	RAD		ON						
Depth (ft)	<i>Elev.</i> (ft) 823.6	Blows per 6"	Recovery (in)	Drive	Press / Core	Hand Penetro- meter (tsf)	Water level at completion: None (prior to coring) 35.4' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natu P	NDARD ral Moist L ⊢−−−− Blows p 0 20	ure Cor er foot	ntent, % ──↓ L - ○	-
 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:	TranSy	stems	s, Inc.				Project: SCI-823-0.00								Job No.	0121	3070.	.03
LOG	OF: Bo	oring	R-261	2	L	ocation: Sta	a. 669+11.2, 51.4 ft. LT of SR 823 CL Date Drilled: 0	8/1	5/0	6		to		08/16/	06			
		5"	(in)	Sam No) <u>.</u> 	Hand Penetro-	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 35.4' (includes drilling water)	to			DAT			STA	NDARD	PENETI	RATIOI	N (N)
Depth (ft)	Elev. (ft) 793.6	Blows per 6"	Recovery	Drive	Press / Core	meter (tsf)	DESCRIPTION	% Annrena	% C Sand	≲ ∣ز	% F. Sand	: iŠ	% Clay	P	ral Moista L ⊢ Blows p 0 20	er foot		
95- 95- 100- 105- 105- 115- 115- 115- 120-																		

Client:	TranSy	rstems	, Inc.				Project: SCI-823-0.00								Job No	. 0121	-3070	.03
LOG	OF: Bo	oring	R-262	0	L	ocation: Sta	a. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 0	8/2				to		08/24/0	6			
Depth (ft)	<i>Elev.</i> (ft) 957.3	Blows per 6"	Recovery (in)	Samı No Drive		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water) DESCRIPTION		lyreyare Sand	U. Salid	% F. Sand	Silt	Clay	Natur PL	al Moist Blows p	ture Cor per foot		- •
-0.1- 		8 9 4	18 15 2	1			Topsoil - 1" Medium dense brown SANDY SILT (A-4a), little to some clay, trace gravel; dry. Severely weathered brown SANDSTONE.								d	/		50+
6.0 10 -		Core 96"	Rec 96"	RQD 100%	R-1		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.											50+0
15- [W3 3:22 BM] -21.6-	 935.7- 	Core 120"	Rec 120"	RQD 100%	R-2		Medium hard to hard gray SANDSTONE; very fine to fine grained moderately weathered, argillaceous, micaceous, massive, slight fractured, contains few argillaceous laminations.											
- 25 - 25 - 30	-	Core 120"	Rec 120"	RQD 100%	R-3													

Client:							Project: SCI-823-0.00						Job No. 0121-3070.03
LOG O	F: Bo	ring l	R-262			ocation: Sta	a. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08	8/23			to	(08/24/06
Depth (ft)	Elev. (ft) 927.3	Blows per 6"	Recovery (in)	Samı No		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water) DESCRIPTION	% Aggregate		% F. Sand	t	% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ⊢ LL Blows per foot - ○ 10 20 30 40
		Core 120"	Rec 120"	RQD 90%	R-4		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.						
45		Core 120"	Rec 120"	RQD 100%	R-5								
55 — — — — 60 —		Core 120"	Rec 120"	RQD 100%	R-6								

	TranSy						Project: SCI-823-0.00								o. 0121	-3070.0)3
<u>-OG C</u>	DF: Bo	oring	R-262	2 0 Sam		<i>location:</i> Sta	a. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08	3/23 T			DATIO	to ON	(08/24/06			_
Depth (ft)	<i>Elev.</i> (ft) 897.2	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	Sand	Silt	% Clay	STANDAR Natural Mol PL ⊢ Blows 10	sture Cor per foot	ntent, % - ─── LL	-
 65	-				-		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.										
	-	Core 120"	Rec 120"	RQD 100%	R-7												
		Core 120"	Rec 120"	RQD 100%	R-8		@ 74.8'-88.4', pyritic.										
80 — - - 85 —	-						@ 81.6'-83.8', iron stained.										********************
 	867.9-	Core 120"	Rec 120"	RQD 96%	R-9		Medium hard to hard brown and gray SANDSTONE: very fine to										

	TranSy			0		Charles Ch	Project: SCI-823-0.00	0/00	/0.0			to		00/04/		0. 012	1-307	0.03
OG C	DF: Bo	oring	R-262	Sam		Location: Sta	a. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08	5/23 			ATI	to ON		08/24/(16			
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water) DESCRIPTION	% Aggregate	C. Sand	% M. Sand	Sand	Silt	Clay	Natu P	ral Mois └_	sture Co per foo	TRATIC ontent, S 	% -
_	867.2	B	Ш		<u> </u>		fine grained, argillaceous, micaceous, massive, slightly fractured,	%	%	%	%	%	%	1	<u>0 2</u>	20	<u>30</u>	40
 95	-				-		iron stained. @ 92.9',93.7',94.4', low angle fractures.											
 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.											
_ 115							@ 113.6'-115.1', pyritic.											
117.4 	839.9-	Core 120"	Rec 120"	RQD 95%	R12	2	 @ 117.4', low angle fracture. Medium hard to hard gray SANDSTONE interbedded with SILTSTONE; very fine to fine grained, micaceous, thinly laminated to medium bedded, slightly fractured. 											
Client:				_	_	_	Project: SCI-823-0.00								<i>No.</i> 0)121-	3070	.03
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LOG O	DF: Bo	oring	R-262	2 0 Sam		<i>ocation:</i> Sta	a. 676+80.6, 115.7 ft. LT of SR 823 CL Date Drilled: 08 WATER	3/23 T			ATIO	to ON	(08/24/06				
Depth (ft)	Elev. (ft) 837.2	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 100.5' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand		t	% Clay	STANDA Natural M PL ⊢ Blo 10	oisture	e Cont	tent, % ──\ L - ○	- (
 125							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.											
 -130.0		Core 72"	Rec 72"	RQD 100%	R13		@ 127.6', low angle fracture.											
							Bottom of Boring - 130.0'											
135 — _ _ _	•																	
140 — — —																		
 145 — 																		
 150																		

	TranSy				_		Project: SCI-823-0.00									. 0121	-3070	0.03
LOG C	DF: Bo	oring	R-262			ocation: Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	3/17 T			AT1	to	()8/21/()6			
Depth (ft)	<i>Elev.</i> (ft) 1008.5	Blows per 6"	Recovery (in)	Sam, No		Hand Penetro- meter (tsf)	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water) DESCRIPTION	% Aggregate		% M. Sand	% F. Sand	t	% Clay	Natu P		ture Cor per foot	ntent, % ──↓ L - ○	6 -
-0.3 - -	-1008.2-	3 5 5	10	1			Topsoil - 3" / 2.5' soil removed before drilling Loose brown SANDY SILT (A-4a), trace clay; contains rock fragments; damp.	45	12		6	30	7	γ γ			Nor	n-Pla
- 5 -6.0	-1002.5-	⁷ 3 3 20 48 32		2		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	6.			 	Ŭ
-8.5 -9.0	- -1000.0- -999.5-	50/5	5	4			Severely weathered brown SANDSTONE argillaceous.	-										
10 - -		Core 60"	Rec 60"	RQD 73%	R1		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.											
15 —	-				-		@ 13.5'-14.2', high angle clay filled fracture.											
-	-	Core 120"	Rec 120"	RQD 65%	R2		@ 16.0'-16.9', 18.0'-19.5', broken zone with high angle fractures.											
20 —	-																	
-25.1 	-983.4-						Medium hard brown and gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, thinly											
- - 30	-	Core 120"	Rec 120"	RQD 30%			bedded, highly fractured to broken.											

Client:	TranSy	stems	s, Inc.		_		Project: SCI-823-0.00							Job No. 0121-3070.03
LOG C)F: Bo	oring	R-262			<i>ocation:</i> Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	8/17				to		08/21/06
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring)	┝	GI	RAD	ATI			
Depth (ft)	<i>Elev.</i> (ft) 978.5	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	32.4' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand		% Clay	STANDARD PENETRATION (N) Natural Moisture Content, % - ● PL ⊢ LL Blows per foot - ○ 10 20 30 40
	976.1-						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.							
 35 —	-				-		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.							
	-	Core 120"	Rec 120"	RQD 96%	R4		@ 36.8'-37.0', high angle iron stained fracture.							
 45 47.0					-									
50 —	-	Core 120"	Rec 120"	RQD 100%	R5		Hard gray SANDSTONE; very fine to fine grained, slightly weathered, micaceous, argillaceous, pyritic, thinly laminated to massive, slightly fractured, contains few argillaceous laminations.							
 	- 						Hard brown SANDSTONE; fine grained, moderately to highly weathered, micaceous, calcareous, massive, slightly to moderately fractured. @ 56.3'-56.7', vuggy.	-						
60	-	Core 120"	Rec 120"	RQD 100%	R6									

	TranSy				_	_	Project: SCI-823-0.00						Job No. 0121-3070.03
.0G C	DF: Bo	oring	R-262	2 Sam		<i>location:</i> Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	3/17 T		DATIO	to ON	(08/21/06 I
Depth (ft)	<i>Elev. (ft)</i> 948.4	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water) DESCRIPTION	% Aggregate		Sand	t	% Clay	STANDARD PENETRATION (/ Natural Moisture Content, % - PL ⊢───── LL Blows per foot - ○ 10 20 30 40
	946.3-						Hard brown SANDSTONE; fine grained, moderately to highly weathered, micaceous, calcareous, massive, moderately fractured. Very hard gray SANDSTONE; very fine to fine grained, slightly						
65	-				-		weathered, micaceous, massive, slightly fractured.						
68.0— 70 — -	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.						
- - 75	-				-								
		Core 120"	Rec 120"	RQD 100%	R8								
	-				-								
 90		Core 120"	Rec 120"	RQD 100%	R9								

(Client: -	FranSy	stems	, Inc.				Project: SCI-823-0.00							Job	No. 0121	-3070.	.03
	_OG C	F: Bo	oring	R-262	2	L	ocation: Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	8/1				to		08/21/06			
Γ					Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None	\vdash	6	GRA	DAT	ION		-			
	Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	Water level at completion:None (prior to coring) 32.4' (includes drilling water) DESCRIPTION	Aggregate	C. Sand	5 Z	έL	: I is	Clay	Blow		ntent, % ── LI	-
		918.4	BI	Ъ	à	P L		Very hard gray SANDSTONE; very fine to fine grained, slightly	%	° %	\$ 6	%	2 %	%	10	<u>20</u> 3		1 <u>0</u>
	 95 							weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations .										
			Core 120"	Rec 120"	RQD 100%	R10												
/23/2014 3:55 PM]	105 — - - 110 — - - - -		Core 120"	Rec 120"	RQD 95%	R11		@ 112.0'-113.7', contains shale laminations and moderate argillaceous laminations.										
FILE: 0121-3070-03 [5/			Core 120"	Rec 120"	RQD 100%	R12		@ 113.5'-113.7', high angle fracture. @ 116.0'-120.0', slightly pyritic.										

	TranSy				_		Project: SCI-823-0.00							Job No. 0121-3070.03
LOG C	DF: Bo	oring	R-262	2 Sam		ocation: Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	3/17 T			ΑΤΙΟ	to ON	(08/21/06 I
Depth (ft)	<i>Elev. (ft)</i> 888.3	Blows per 6"	Recovery (in)	Drive		Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: None (prior to coring) 32.4' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	Sand	% Silt	% Clay	STANDARD PENETRATION (N, Natural Moisture Content, % - 0 PL ⊢ LL Blows per foot - ○ 10 20 30 40
 125							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.							
 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									

Client:	TranSy	stems	, Inc.				Project: SCI-823-0.00								Job No.	0121	-3070	.03
LOG	OF: Bo	oring	R-262	2	L	ocation: Sta	a. 676+93.1, 173.0 ft. RT of SR 823 CL Date Drilled: 08	3/17	7/06	;		to		08/21/0	6			
				Sam			WATER OBSERVATIONS: Water seepage at: None		G	RAD	ATI	ION						
Depth (ft)	<i>Elev. (ft)</i> 858.3	Blows per 6"	Recovery (in)	Drive	Press / Core	Hand Penetro- meter (tsf)	Water level at completion: None (prior to coring) 32.4' (includes drilling water) DESCRIPTION	% Aggregate	% C. Sand	Σ.	% F. Sand	Si	% Clay	Natur PL	NDARD al Moist	ure Cor per foot	ntent, % ──↓ L - ○	-
155 — - - - - - - - - - - - - - - - - - - -		Core 120"	Rec 120"	RQD 100%	,R16		Very hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, massive, slightly fractured, contains few argillaceous laminations .											
[Ma 222/2017		Core 120"	Rec 120"	RQD 100%	,R17		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.	-										
EITE: 0151-33 0151-3010-03 0.088	828.5	Core 72"	Rec 72"	RQD 100%	,R18		Bottom of Boring - 180.0'											

Client: Trar	nSyste	ems,	, Inc.				Project: SCI-823-0.00								Job No.	. 0121	-3070	.03
LOG OF:	Boriı	ng F	R-276			ocation: Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 0	8/30				to		09/01/0)6			
				Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None		G	RAL		ION		-				
		6"	(ii)		e l	Penetro-	Water level at completion: 112.1	ate		_					NDARD			
Depth El	lev.	oer	ery		S S	meter		regé	Sano	Sand	Sand				ral Moist L ⊢−−−−			
100	(ft) 08.2	Blows	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. 5	<u>ц</u>	Si	% Clay		Blows p 0 20	per foot	- 0	L 10
-0.3-100							∼Topsoil - 4"									<u></u>		
_	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.											
	04.7-50	/5		2			Severely weathered brown SANDSTONE.											50+
		ore	Rec	RQD			Medium hard brown SANDSTONE; fine grained, highly weathered, argillaceous, micaceous, massive, moderately fractured, iron stained. @ 5.0'-5.2', broken.											
10 <u> </u>		20"	120"	RQD 85%	R-1		@ 11.1'-11.2', clay seam.											
15 — — — _ 		ore	Rec	RQD 94%	R-2		@ 15.0', slightly fractured, moderately weathered.											
25 25		20"	120"	94%	_													
	30.7– C	ore	Bec	BOD			Hard gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, massive, slightly fractured. @ 28.5'-29.3', brown.											

С	lient: -	TranSy	stems	, Inc.				Project: SCI-823-0.00								Job No	o. 0121	-3070	.03
L	OG C)F: Bo	oring	R-276	7	L	.ocation: Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 04	8/3	0/0	6		to		09/01/	06			
					Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None	_	G	GRAI	DAT							
			5	(in)		e,	Penetro-	Water level at completion: 112.1	et te	2					STA	NDARD	PENET	RATIO	N (N)
Ľ	Depth	Elev.	per (Лı		Col	meter		ena	Sand	Sand	Sand				ral Mois			
	(ft)	(ft)	Blows per 6"	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION	% Addredate	S S			Silt	Clav		L H	per foot		.L
		978.1		Re					%	8	2 %	2 %	2 %	%					40
	_	-	120"	120"	100%	N-3		Hard gray SANDSTONE; very fine to fine grained, moderately weathered, micaceous, argillaceous, massive, slightly fractured, contains few argillaceous laminations.											
	_	-																	
	35 —					-													
	-	-																	
	-																		
	-																		
	40 —		Core	Rec	RQD 100%														
	40 _		120"	120"	100%) 													
	_																	::::	
	_																		
	_																		
	45 —					-													
	_	-																	
	_							@ 46.6'-50.8', slightly pyritic.											
_	-																		
55 PM]			Core	Rec	RQD 100%														
3:52	50 _		120"	120"	100%) 													
014	_	-																::::	
23/21	-	-																	
[5/	_	-																	
-03	55 —	-																	
3070-	-	1																	
121-3	-	1																	
	-	1																	
FILI	60		Core	Rec	RQD			@ 59.5'-59.6', high angle fracture.											

Clier	<i>nt:</i> Tr	ranSy	stems	, Inc.		_		Project: SCI-823-0.00								Job No	o. 0121	-3070).03
LOC	g of	: Bo	ring l	R-276	7	L	ocation: Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 08	8/3	0/0	6		to)	09/01/	/06			
					Sam No			WATER OBSERVATIONS: Water seepage at: None	F		<u>GRA</u>		TON	/	-				
				(ii)			Hand Penetro-	Water level at completion: 112.1											NA / / A /)
			er 6"			Sore	meter		nate	nd lair	2 7	<u>ع</u> ج	2			ANDARD ural Mois			
Dep (ft)		Elev. (ft)	vs per	Recovery	9	Press / Core	(tsf)		% Addredate	Ugreya Sand	0 0 1	Sand	Silt	Clav		₽L ⊢		— L	
		948.1	Blows		Drive			DESCRIPTION	% A	64 0 %) ~ % ~	% M.	. % %	5 0 % %			per foot 20 3		40
	_	-	120"	120"	94%	R-6		Hard gray SANDSTONE; very fine to fine grained, slightly	┓				T					<u>.</u>	
	_							weathered, micaceous, argillaceous, massive, slightly fractured, contains few argillaceous laminations.											
	_							@ 60.3'-60.6', 61.5'-62.1', high angle fractures.										1	
	-																		
65	;—					$\left \right $													
	-																	1	
70			Core	Rec	RQD 100%	R-7												1	
10	′		120"	120"	100%													1	
	_																		
	_																		
	-																		
75	;—					$\left \right $		@ 75.0', pyritic.										1	
	-																	1 : : : :	
	-																		
_																		1	
Md 00			Core	Rec	RQD													1	
3:55)		120"	120"	RQD 100%	' K-8		@ 79.7', calcareous, vuggy. @ 79.7'-79.8', high angle fracture.											
14								@ 80.3'-85.9', few to moderate argillaceous laminations. @ 81.0'-81.3', broken.										1	
3/20	_																	1	
5/2	_																		
84.0	<u>6</u>	923.6-			 	$\left \right $		Hard brown and gray SANDSTONE; very fine to fine grained,	-										
70-0	_							moderately to highly weathered, micaceous, argillaceous, very											
1-30	_							thinly bedded, slightly fractured, iron stained.											
013	-																	1	
90			Core	Rec	RQD														

4	Client: -	TranSy	stems	, Inc.				Project: SCI-823-0.00							Job I	vo. 0121	-3070	.03
	LOG C)F: Bo	oring	R-276	7	L	ocation: St	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 08	3/3				to		09/01/06			
				(Samp No		Hand	WATER OBSERVATIONS: Water seepage at: None Water level at completion: 112.1		G	RAL							
			.9	(ii)		ore	Penetro- meter		ate	1	7				STANDAF			
	Depth	Elev.	ber	/ery		/ Cć			Aggregate	Sand	Sand	Sand		<u> </u>	Natural Mo PL ⊢	isture Col	ntent, % ──┤ L	
	(ft)	<i>(ft)</i> 918.0	Blows per 6"	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION	% Add	°. 0	Σ.	1	S	% Clay		s per foot 20 3	- ()	10
	-	010.0	120"	120"	100%	R-9		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.										
	95 — _	-																
	-																	
	100 —		Core 120"	Rec 120"	RQD 100%	R10												
	_																	
	- 105 —																	
	-							@ 106.2',109.6',109.8', low angle clay filled fractures.										
:55 PM]	_ 110 	-	Core	Rec	RQD 91%	R11												
2014 3:5	_		120"	120"	91%			 @ 111.0'-111.3', vuggy zone. @ 111.7'-112.3', high angle rust stained fracture. 										
[5/23/2	_																	
0121-3070-03	115 -																	
	-																	
FILE:	120		Core	Rec	RQD													

	TranSy				_		Project: SCI-823-0.00						Job No. 0121-3070.03
-0G C)F: Bo	oring	R-276			ocation: Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 0	8/30 T		ATIO	to	(09/01/06
Depth (ft)	<i>Elev. (ft)</i> 888.0	Blows per 6"	Recovery (in)	Samı No Drive	Press / Core	Hand Penetro- meter (tsf)	OBSERVATIONS: Water seepage at: None Water level at completion: 112.1 DESCRIPTION	% Aggregate	M. Sand		% Silt	% Clay	STANDARD PENETRATION (I Natural Moisture Content, % - PL ⊢ LL Blows per foot - ○ 10 20 30 40
- - 125	-	120"	120"	100%	R12		Hard gray SANDSTONE; fine grained, slightly weathered, micaceous, argillaceous, thinly bedded, moderately fractured. @ 122.3'-124.0', vertical fracture.						
126.6 130 —		Core 120"	Rec 120"	RQD 100%	R13		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.						
							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.	-					
 	- - -	Core 120"	Rec 120"	RQD 100%	R14								
145 — 				RQD									

Clie	nt: T	TranSystems, Inc. Project: SCI-823-0.00									Job N	<i>lo.</i> 0121	-3070.	.03				
LO	LOG OF: Boring R-2767						<i>ocation:</i> Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 0	8/3				to		09/01/06			
					Sampl No.		Hand	WATER OBSERVATIONS: Water seepage at: None		(GRA	DAT	ION		-			
Deµ (fi	oth t)	Elev. (ft)	Blows per 6"	Recovery (in)	Drive	Press / Core	Penetro- meter (tsf)	Water level at completion: 112.1 DESCRIPTION	Vaccosoto	U Sand	0. 0aila	F. Sand	<u>i ið</u>	Clay			ntent, % ── L	-
		858.0				-			6	<pre></pre>	% %	%	%	%	10	<u>20 3</u>		0
15	_ _ 5 _		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.										
16			Core 120"	Rec 120"	RQD 100%	,R16												
16	- - 5 - -					-												
5/23/2014 3:55 PM]	 		Core 120"	Rec 120"	RQD 100%	,R17												
17: 17: 18: 18:			Core	Rec	RQD													

	Client:	TranSystems, Inc. Project: SCI-823-0.00										Job No.	. 0121	-3070.	.03				
	LOG OF: Boring R-2767						ocation: Sta	a. 831+34.8, 30.9 ft. RT of SR 823 CL	Date Drilled: 08	3/30/	′06		to)	09/01/	36			
					Sam No		Hand	WATER OBSERVATIONS: Water seepage at: None			GR	ADA	TION	'					
Dopth		r 6"	(in)		ore	Penetro- meter	Water level at completion: 112.1		jate	q	ז ק	5			NDARD Iral Moist				
	Depth (ft)	Elev. (ft)	Blows per 6"	Recovery	Drive	Press / Core	(tsf)	DESCRIPTION		% Aggregate	C. Sand	% M. Sand	Silt	Clay	P	L ⊢ Blows p		— L	
		827.9	<u>n</u> 120"	<u>م</u> 120"	ם 100%	-		Hard gray SILTSTONE; slightly to moderately weathe	ered.	%	%	% %	% %	2 %	1	1 <u>0 2</u> (<u>0 3</u> (24	0
	-	-						micaceous, arenaceous, very thinly bedded, slightly fr contains laminations and thin beds of SANDSTONE, fissile after dessication.	ractured,										
	185 — - -	-																	
	190 — - - 195 —	-	Core 120"	Rec 120"	RQD 100%	R19													
[5/23/2014 3:55 PM]			Core 120"	Rec 120"	RQD 100%	,R20													
FILE: 0121-3070-03		-	Core	Rec	RQD	R21													

	Client: -	TranSystems, Inc. Project: SCI-823-0.00													Job No	o. 0121	-3070	.03	
Ε	LOG C)F: Bo	oring	R-276	67	L	ocation: St	a. 831+34.8, 30.9 ft. RT of SR 823 CL Date Drilled: 0	8/3	80/0)6		to		09/01/	06			
					Sam No			WATER OBSERVATIONS: Water seepage at: None			GRA	DAT	ION		-				
				(ii)			Hand Penetro-	Water level at completion: 112.1											
			er 6"			Core	meter		1070	date		2 2	2			NDARD ral Mois			
	Depth (ft)	Elev. (ft)	ed si	Javer		Press / Core	(tsf)			<i>in di</i>	Sand	Sand	1	Clay		L —		— <i>L</i>	
	(14)	797.9	Blows per 6"	Recovery	Drive	Pres	()	DESCRIPTION	\ V	% Aggregate	% C.	% M.	% Silt	0 %			per foot 20		40
	_		120"	120"	100%			Hard gray SILTSTONE; slightly to moderately weathered,											Ŭ
	-	-						micaceous, arenaceous, very thinly bedded, slightly fractured, contains laminations and thin beds of SANDSTONE, becomes											
	_	-						fissile after dessication.											
	_																		
	215 —																		
	_																		
	_																		
	_	-																	
	220 —	-	Core 120"	Rec 120"	RQD 100%	R22													
	_	-	120	120	100 /6														
	-	-																	
	_																		
	-																		
	225 —																		
	_	_	Core	Rec	POD														
	_	-	60"	60"	RQD 100%	R23													
Ξ	_	-																	
55 PN	-230.0	-778.2-						Bottom of Boring - 230.0'	+										
э :	-																		
2014	_																		
5/23/	_																		
	235 —																		
0-03	_	-																	
-307	_	-																	
FILE: 0121-3070-03	_	-																	
: IE	-	-																	
Ц	240 —	-																::::	::::