DDO	IECT

 ELEVATION
 686ft
 Lat/Long
 (36°37'47",-79°32'50")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. TP-1
PROJECT NO. R210356.01
PAGE 1 OF 1

		1			Γ	
DEPTH (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	согоя	MATERIAL CLASSIFICATION	REMARKS*	
	1.0	1.0	Yellow orange	Sand, some Gravel, little Silt, trace Clay, Cobbles encountered, blocky, heterogeneous		
1.0	100%		10YR 7/8	dry, stiff,non to low plastic fines, colluvium, a-1-b/sp (0.0' - 6.0')		
	1.0			Roots from 0.0' - 1.0'		
2.0	100%			Leachate zone present at 1.0'		
	1.0				No presence of seasonal high	
3.0	100%				groundwater table within	
	1.0	6.0			the test pit.	
4.0	100%					
	1.0					
5.0	100%					
	1.0					
6.0	100%			Pit terminated at 6.0 ft		
	Test pits were completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9/10/24.					

DDO	IECT

 ELEVATION
 681ft
 Lat/Long
 (36°37'47".-79°32'50")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. TP-2
PROJECT NO. R210356.01
PAGE 1 OF 1

57112	Onto the state of					
				DESCRIPTION		
DEРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	COLOR	MATERIAL CLASSIFICATION	REMARKS*	
	1.0		Light yellowish	Sand, some Silt, litte Clay, dry to damp, blocky, flat to elongated, heterogeneous		
1.0	100%		2.5YR 7/6	low to non-plastic fines, collivium, a-1-b/sp, (0.0' - 6.1')	No presence of seasonal high	
	1.0					groundwatertable
2.0	100%				present.	
	1.0					
3.0	100%	6.1				
	1.0					
4.0	100%					
	1.0					
5.0	100%					
	1.0					
6.0	100%			Pit terminated at 6.1 ft		
			Test pits were c	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on s	······································	

DDO	IECT	

 ELEVATION
 686ft
 Lat/Long
 (36°37'47".-79°32'49")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO.
PROJECT NO. **R210356.01**

TP-3

DATE	09/10/24	•	CLASSIFIED BY	PAGE 1 OF1	
				DESCRIPTION	
DEPTH (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	COLOR	MATERIAL CLASSIFICATION	REMARKS*
	1.0		Dull orange	Sand, some Gravel, trace Silt, blocky, dry, heterogeneous, non-plastic fines,	
1.0	100%		7.5YR 4/7	colluvium, a-1-b/sm (0.0' - 2.5')	
	1.0			0.0' - 3.0' Roots present	
2.0	100%			2.5' Leachate zone present	
	1.0				Potential presence of seasonal
3.0	100%				high groundwater table within
	1.0	6.2	10YR 6/6	Sand, some Silt, trace Clay, dry to damp, homogeneous, rounded, colluvium,	the test pit.
4.0	100%		Bright brown	low plastic fines, a-2-4/sm, leachate zone present throughout	
	1.0		with light gray	a-1-b/sm (2.5' - 6.2')	
5.0	100%		5R 7/1		
	1.0				
6.0	100%			Pit terminated at 6.2 ft	
			Test pits were o	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on t	

DDO	IECT	

 ELEVATION
 686ft
 Lat/Long
 (36°37'48".-79°32'49")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. PROJECT NO. **R210356.01**PAGE **1** OF **1**

TP-4

DESCRIPTION MATERIAL CLASSIFICATION RECOVERY IN FEET/ % RECOVERY REMARKS* DEPTH (FEET) COLOR Dull orange 1.0 Sand, some Gravel, trace Silt, blocky, heterogeneous, dry, angular to sub-angular 1.0 100% 7.5 YR 4/7 non-plastic fines, colluvium, a-1-b/sp (0.0' - 3.0') 1.0 1.0 100% 2.0 1.0 Potential presence of seasonal 100% high groundwater table within 3.0 1.0 10 YR 6/6 Sand, some Silt, little Clay, rounded, dry to damp, rounded, low plastic fines, the test pit. 6.0 Bright brown 100% residuum, a-1-b/sm (3.0' - 6.0') 4.0 Leachate zone present (2.5' - 6.0') 1.0 with 100% Light Red Gray 5.0 1.0 5R 7/1 100% Pit terminated at 6.0 ft 6.0 $Test\ pits\ were\ completed\ by\ Southeast\ Connections, LLC\ .\ using\ a\ Cat\ 305E2\ CR\ Mini\ Excavator\ with\ a\ 2\ ft\ bucket\ on\ 9/10/24.$

DDO	IECT	

 ELEVATION
 689ft
 Lat/Long
 (36°37'46".-79°32'50")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. PROJECT NO. **R210356.01** TP-5

PAGE **1** OF **1** DESCRIPTION MATERIAL CLASSIFICATION RECOVERY IN FEET/ % RECOVERY REMARKS* DEPTH (FEET) COLOR 1.0 Dull orange Sand, some Clay, some Silt, trace Gravel, blocky, heterogeneous, dry 7.5YR 4/7 100% low to non-plastic fines, sub-rounded to angular, colluvium, a-2-6/sc (0.0' - 6.0') 1.0 1.0 Roots to 3.5' 100% 2.0 1.0 No presence of seasonal high 100% groundwater table 3.0 6.0 1.0 present. 100% 4.0 1.0 100% 5.0 1.0 100% Pit terminated at 6.0 ft 6.0 Test pits were completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9/10/24.

DDO	IECT	

 ELEVATION
 688ft
 Lat/Long
 (36°37'46":-79°32'49")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO.

PROJECT NO. **R210356.01**PAGE **1** OF **1**

TP-6

	00/10/24	•	OLAGOII ILD DI			
				DESCRIPTION		
DEРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	согов	MATERIAL CLASSIFICATION	REMARKS*	
	1.0		Brown yellow	Sand, some Silt, little Clay, trace Gravel, blocky, heterogeneous, dry		
1.0	100%		2.5YR 7/4	low to non-plastic fines, angular, colluvium, a-1-b/sm (0.0' - 6.8')		
	1.0					
2.0	100%					
	1.0					
3.0	100%				No presence of seasonal high	
	1.0	6.8			groundwater table	
4.0	100%				present.	
	1.0					
5.0	100%					
	1.0					
6.0	100%					
				Pit terminated at 6.8 ft		
			Test pits were c	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on s	3/10/24.	

PROJECT	Williams SSE Project - MP 1394.69

 ELEVATION
 688ft
 Lat/Long
 (36°37'46".-79°32'49")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. TP-7
PROJECT NO. R210356.01
PAGE 1 OF 1

DATE	09/10/24	-	CLASSIFIED BY	KK PAGE 1 0F1	HAAVAVAVA
				DESCRIPTION	
DЕРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	00108	MATERIAL CLASSIFICATION	REMARKS*
	1.0		Brown yellow	Sand, some Silt, little Clay, little Gravel, blocky, heterogeneous, dry	
1.0	100%		2.5YR 7/4	low to non-plastic fines, angular, colluvium, a-1-b/sm (0.0' - 7.6')	
	1.0				
2.0	100%				
	1.0				
3.0	100%				No presence of seasonal high
	1.0				groundwater table
4.0	100%	7.6			present.
	1.0				
5.0	100%				
	1.0				
6.0	100%				
	1.0				
7.0	100%				
			Test pits were co	Pit terminated at 7.6 ft Pit terminated by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket o	n 9/10/24.

DDO	IECT

 ELEVATION
 690ft
 Lat/Long
 (36°37'46".-79°32'50")

 ELEVATION
 GW
 Dry

 DATE
 09/10/24
 CLASSIFIED BY
 KK

BORING NO. PROJECT NO. **R210356.01**PAGE **1** OF **1**

TP-8

DESCRIPTION MATERIAL CLASSIFICATION RECOVERY IN FEET/ % RECOVERY REMARKS* DEPTH (FEET) COLOR 1.0 Brown yellow Sand, some Silt, little Clay, little Gravel, blocky, heterogeneous, dry 7.5YR 4/7 100% low to non-plastic fines, flat to angular, colluvium, a-1-b/sm (0.0' - 6.0') 1.0 1.0 Roots from 1' - 2' 100% 2.0 1.0 No presence of seasonal high 100% groundwater table 3.0 6.0 1.0 present. 100% 4.0 1.0 100% 5.0 1.0 100% Pit terminated at 6.0 ft Test pits were completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9/10/24.

PROJECT	Williams SSE Project – MP 1405.
	•

 ELEVATION
 731ft
 Lat/Long
 (36°44′51″.-79°25′44″)

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

BORING NO. TP-1
PROJECT NO. R210356.01
PAGE 1 OF 1

				DESCRIPTION	
DEPTH (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	согов	MATERIAL CLASSIFICATION	REMARKS*
	1.0	1.0	Dull yellow orange	Sand, some Gravel, some Silt, cobbles and boulders encountered, heterogeneous	
1.0	100%		10YR 6/4	non-plastic fines, flat to angular, colluvium, roots 0.0' - 1.5' a-1-b/sp, (0.0' - 2.0')	No presence of seasonal high
	1.0	2.0			groundwater table within
2.0	100%	2.0		Pit terminated at 2.0 ft	the test pit.
	-		Test pits were	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9	/9/24.

PROJECT	Williams SSE Project - MP 1405.25

 ELEVATION
 732ft
 Lat/Long
 (36°44′52″.-79°25′46″)

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

BORING NO. TP-2
PROJECT NO. R210356.01
PAGE 1 OF 1

				DESCRIPTION	
DЕРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	согов	MATERIAL CLASSIFICATION	REMARKS*
	1.0	1.0	Dull orange	Sand, some Gravel, litte Silt, dry,	
1.0	100%	1.0	7.5YR 6/4	homogeneous, flat to angular, non-plastic fines, residuum, a-1-b/sp, (0.0' - 2.0')	No presence of seasonal high
	1.0	2.0		Roots 0.0' - 2.0'	groundwatertable
2.0	100%	2.0		Pit terminated at 2.0 ft	present.
			Test pits were	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9	9/24.

DATE <u>09/09/24</u>

 ELEVATION
 734ft
 Lat/Long
 (36°44′52″.-79°25′44″)

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

BORING NO.
PROJECT NO. **R210356.01**PAGE 1 OF 1 TP-3

				DESCRIPTION	
DЕРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	color	MATERIAL CLASSIFICATION	REMARKS*
	1.0		Orange	Sand, some Gravel, trace Silt, trace Clay, blocky, heterogeneous, dry, angular to flat,	
1.0	100%		5YR 6/8	non plastic fines, colluvium, a-1-b/sm (0.0' - 3.0')	
	1.0				
2.0	100%				
	1.0				No presence of seasonal high
3.0	100%	6.0			groundwater table within
	1.0	0.0	5YR 6/8	Sand, some Silt, some Clay, dry to damp, homogeneous, rounded, residuum,	the test pit.
4.0	100%		Orange	low plastic fines, a-2-4/sm (3.0' - 6.0')	
	1.0				
5.0	100%				
	1.0				
6.0	100%		T	Pit terminated at 6.0 ft	
			i est pits werd	e completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9	1 9] 24.

DD	\cap I	EC	١т

 ELEVATION
 736ft
 Lat/Long
 (36°44′52″.-79°25′44″)

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

BORING NO. TP-4
PROJECT NO. R210356.01
PAGE 1 OF 1

				DESCRIPTION	
DЕРТН (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	зогоо	MATERIAL CLASSIFICATION	REMARKS*
	1.0	1.0	Yellow brown	Sand, some Gravel, trace Silt, blocky, heterogeneous, dry,	
1.0	100%		10YR 7/6	non-plastic fines, colluvium, a-1-b/sp (0.0' - 3.0')	
	1.0				
2.0	100%				
	1.0				No presence of seasonal high
3.0	100%				groundwater table within
	1.0	6.0	5YR 6/8	Sand, some Silt, trace Gravel, homogeneous, dry to damp, rounded, low plastic fines,	the test pit.
4.0	100%		Orange	residuum, a-1-b/sm (3.0' - 6.0')	
	1.0				
5.0	100%				
	1.0				
6.0	100%			Pit terminated at 6.0 ft	
			Test pits were	e completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on 9.	19/24.

Williams SSE Project – MP 1405.

 ELEVATION
 739ft
 Lat/Long
 (36°44′53°.-79°25′44″)

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

PROJECT

BORING NO. TP-5
PROJECT NO. R210356.01
PAGE 1 OF1

				DESCRIPTION	
DEPTH (FEET)	RECOVERY IN FEET/ % RECOVERY	PROFILE	согов	MATERIAL CLASSIFICATION	REMARKS*
	1.0	1.0	Yellow brown	Sand, some Gravel, some Silt, Boulders and Cobbles encountered, blocky,	
1.0	100%		10YR 7/6	heterogeneous, dry to damp,non-plastic fines, colluvium, a-1-b/sp (0.0' - 0.8')	
	1.0				
2.0	100%		10YR 6/6	Sand, some Gravel, some Silt, Boulders and Cobbles encountered, damp, non-plastic,	
	1.0		Bright Brown	colluvium, a-1-b/sm (0.8° - 2.0°)	No presence of seasonal high
3.0	100%				groundwater table within
	1.0	6.0	10YR 6/6	Sand, some Silt, little Clay, homogeneous, damp, rounded, low plastic fines,	the test pit.
4.0	100%		Bright Brown	residuum, a-2-4/sc (2.0' - 7.0')	
	1.0				
5.0	100%				
	1.0				
6.0	100%				
	1.0		10YR 6/6	Sand and gravel, rounded, heterogeneous, dry, non-plastic fines, colluvium,	
7.0	100%	7.8	Bright Brown	a-1-b/sm, (7.0' - 7.8')	
	1.0			Pit terminated at 7.8 ft	
			Test pits were	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on	9/9/24.

D	DO	IIC	0	г

 ELEVATION
 727ft
 Lat/Long
 (36°44′52".-79°25′46")

 ELEVATION
 GW
 Dry

 DATE
 09/09/24
 CLASSIFIED BY
 Konstantin Kasamias

BORING NO. TP-6
PROJECT NO. R210356.01
PAGE 1 OF1

				DESCRIPTION	
DEPTH (FEET) RECOVERY IN FEET/ % RECOVERY PROFILE COLOR			80700	MATERIAL CLASSIFICATION	REMARKS*
	1.0	1.0	Bright brown	Sand and Gravel, rounded, heterogeneous, dry, non-plastic fines,	
1.0	100%	6.0	10YR 6/6	colluvium, a-1-b/sp (0.0' - 0.8')	
			Test pits were	completed by Southeast Connections, LLC . using a Cat 305E2 CR Mini Excavator with a 2 ft bucket on	9/9/24.

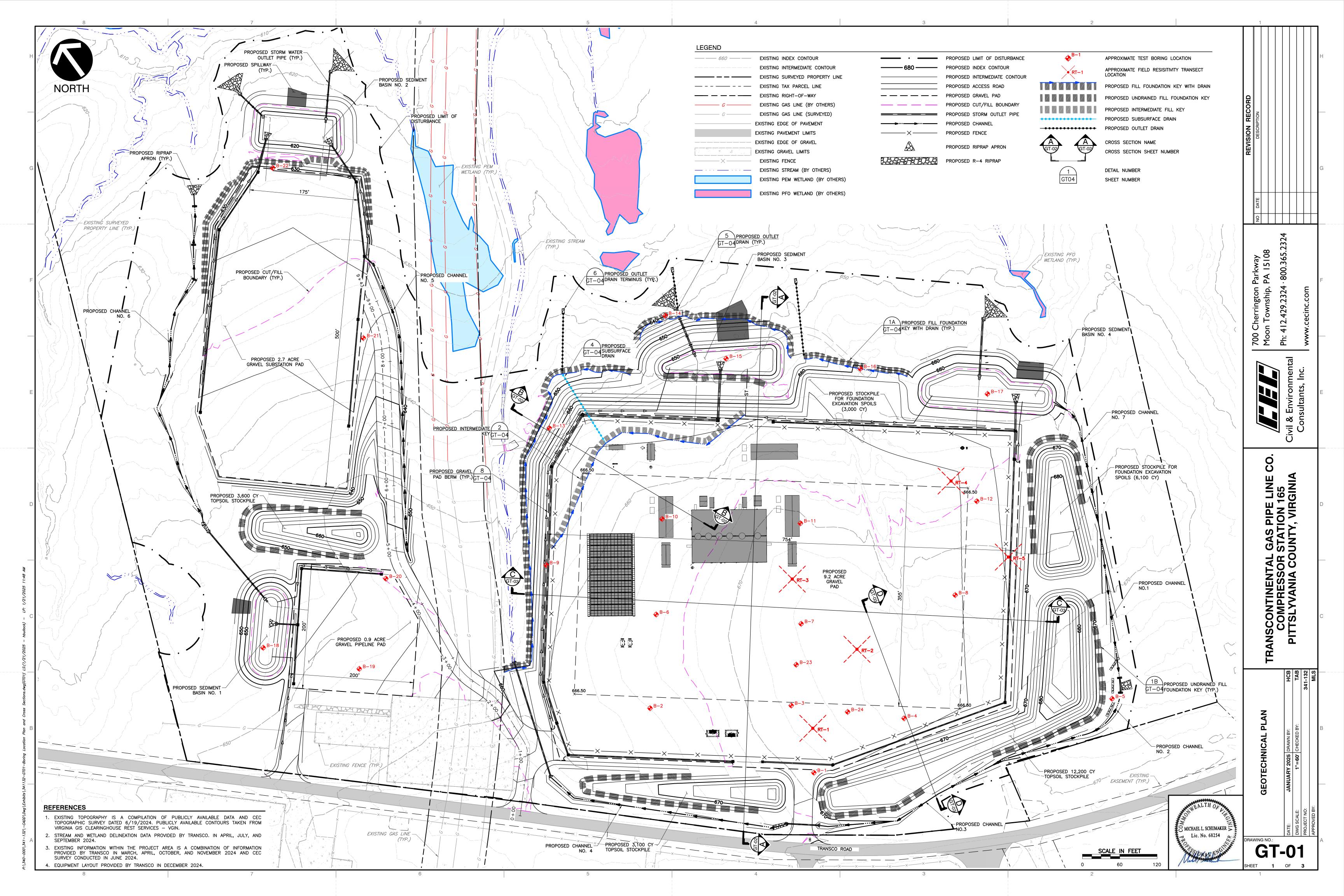


Table 1 **Subsurface Investigation Summary**

Notes:

- Not Obtained / Not Encountered

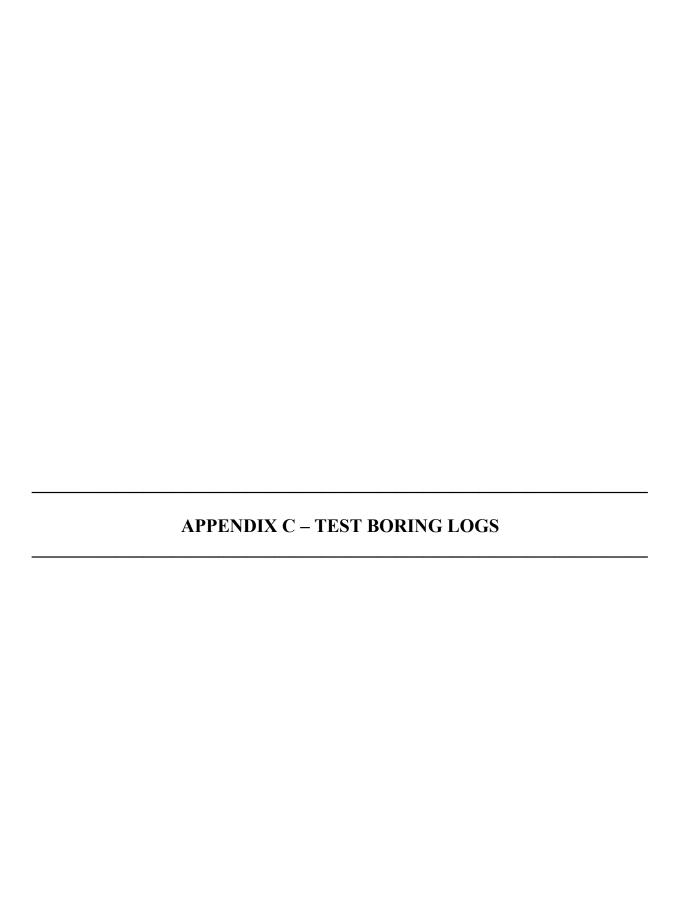
 All thicknesses, depths, and elevations recorded are approximate.

 Water level readings were recorded at the completion of soil sampling, at the completion of rock coring, or after at least 24-hours.

 Bedrock sampling occurred via Hollow Stem Auger and/or Split-Spoon Sampler with the exception of Test Borign B-12 where coring took place via NQ rock coring methods.

 Average values are italicized, and summed values are bolded.

BORING	GINFORMA	ATION (1)		SOIL THI	CKNESS (1)		BEDR	OCK ⁽¹⁾	WA	ATER LEVELS	(1)(2)
Test Boring	Existing Ground Elevation (ft)	Boring Depth (ft bgs)	Topsoil (ft)	Residuum (ft)	Weathered Bedrock Sampling (ft)	Soil Total (ft)	Bedrock Sampling ⁽³⁾ (ft)	Top of Bedrock Elevation (ft)	After Soil Sampling (ft bgs)	After Rock Coring (ft bgs)	≥ 24 Hours (ft bgs)
B-1	671	10.5	0.8	9.7		10.5			Dry		Dry
B-2	664	45.9	0.8	38.2	6.9	45.9		618.2	38.2		35.6
B-3	673	22.6	0.3	20.7	0.6	21.6	1.0	651.0	Dry		Dry
B-4	677	12.1	0.8	11.2	0.1	12.1		664.7	Dry		Dry
B-5	664	16.5	0.4	16.1		16.5			14.1		Backfilled Immediately
B-6	665	31.5	0.3	31.2		31.5			27.5		25.5
B-7	674	48.3	0.4	35.6	6.4	42.4	5.9	631.9	33.0		Backfilled Immediately
B-8	673	16.5	0.4	16.1		16.5			Dry	Dry	
B-9	656	16.5	0.4	16.1		16.5			Dry		Dry
B-10	663	16.5	0.6	15.9		16.5			Dry		Dry
B-11	670	31.5	0.5	31.0		31.5			28.4		28.0
B-12	665	38.1		33.0	0.1	33.1	5.0	632.3	Dry	7.5	Backfilled Immediately
B-13	649	19.5		19.5		19.5			16.9		16.4
B-14	638	16.5	0.3	16.2		16.5			Dry		Backfilled Immediately
B-15	649	10.0	0.3	9.7		10.0			Dry		Dry
B-16	658	16.5	0.2	16.3		16.5			Dry		Backfilled Immediately
B-17	658	10.5	0.3	10.2		10.5			Dry		Backfilled Immediately
B-18	648	10.5	0.8	9.7		10.5			Dry		Backfilled Immediately
B-19	652	16.5	0.4	16.1		16.5			Dry		Backfilled Immediately
B-20	653	10.5	0.5	10.0		10.5			Dry		Backfilled Immediately
B-21	637	16.5	0.4	16.1		16.5			14.5		Backfilled Immediately
B-22	626	19.5	0.4	19.1		19.5			Dry		Backfilled Immediately
B-23	673	16.5	0.8	15.7		16.5			Dry		Dry
B-24	674	16.5	0.4	16.1		16.5			Dry		Dry
Total or Avg	660	486.0	0.5	18.7	2.8	474.1	11.9	639.6	24.7		26.4



Rock Types

	ROCK TYPES	
Rock Name	<u>Characteristics</u>	<u>Symbol</u>
Claystone	Clay sized particles that are consolidated, lacking fissility.	
Coal	Black and shiny, can break into cubes or conchoidally.	
Conglomerate	Gravel sized grains and larger held together by finer material, called a breccia if clasts are angular.	
Limestone	Effervesses w/ diluted HCl, can be composed of clay up to gravel particles (fossils).	
Sandstone	Primarily sand sized particles modified w/ the descriptor fine, medium, or coarse.	
Shale	Clay sized particles, shale has fissility which is a horizontal sheet-like or laminated feature.	
Siltstone	Composed of silt, normally breaks as irregular chunks.	$\times \times \times$

Rock Quality Descriptions

Weathering

Completely Weathered: All rock material is decomposed and/or disintegrated. The original rock structure may still be intact.

Highly Weathered: More than half of the rock material is decomposed. Fresh rock is present only as a discontinuous framework or as corestones.

Moderately Weathered: Less than half of the rock material is decomposed. Fresh rock is present at a discontinuous framework or as corestones.

Slightly Weathered: Discoloration or staining indicates weathering of rock material on discontinuity surfaces. Rock may be discolored and softened.

Fresh: No visible signs of rock material weathering.

Field Criterion

ROD

<u>Descriptor</u>	<u>%</u>
Very Poor Poor Fair Good Excellent	<25 25-50 50-75 75-90 >90

Descriptor

Brokenness

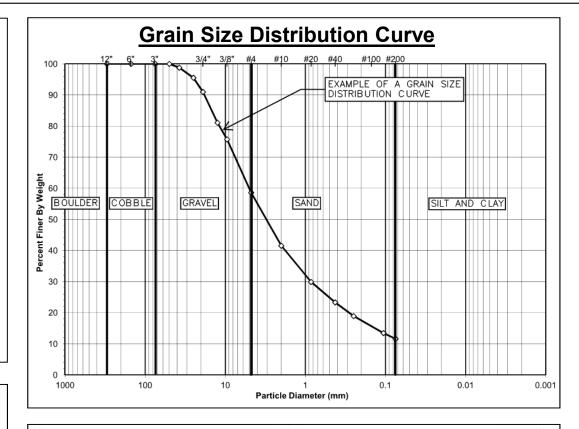
Descriptor	Fracture Spacing (in & ft)
Very Broken	<1 (<0.08)
Broken	1-3 (0.08-0.25)
Moderately Broken	3-6 (0.25-0.5)
Slightly Broken	>6 (>0.5)

Relative Unconfined

Compressive Strength

Rock Hardness

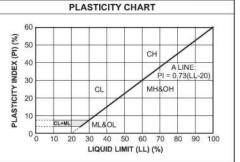
Very Hard	Difficult to break w/ Hammer	> 30,000 psi
Hard	Hand-held sample breaks w/ Hammer	8,000 to 30,000 ps
Medium Hard	Cannot scrape surface w/ knife	2,000 to 8,000 psi
Soft	Cutting or scraping w/ knife difficult	500 to 2,000 psi
Very Soft	Can be cut w/ knife	< 500 psi



UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.) Clean Gravels (Less than 5% fines) GW Well-graded gravels, gravel-sand mixtures, little or no fines GRAVELS Poorly-graded gravels, gravel-sand More than 50% GP mixtures, little or no fines of coarse fraction larger Gravels with fines (More than 12% fines) sieve size GM Silty gravels, gravel-sand-silt mixtures Clayey gravels, gravel-sand-clay Clean Sands (Less than 5% fines) Well-graded sands, gravelly sands, SW little or no fines SANDS Poorly graded sands, gravelly sands, little or no fines 50% or more of coarse fraction smalle Sands with fines (More than 12% fines) than No. 4 SM Silty sands, sand-silt mixtures sieve size SC Clayey sands, sand-clay mixtures FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.) Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey SILTS silts with slight plasticity CLAYS Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays Liquid limit less than Organic silts and organic silty clays of OL Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, SILTS CLAYS Inorganic clays of high plasticity, fat CH Liquid limit 50% or greate Organic clavs of medium to high OH plasticity, organic silts Peat and other highly organic soils

$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3 GP Not meeting all gradation requirements for GW Atterberg limits below "A" line or P.I. less than 4 Above "A" line with P.I. betwee 4 and 7 are borderline cases Above "A" line with P.I. between Atterberg limits above "A" requiring use of dual symbols line with P.I. greater than 7 $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3 Not meeting all gradation requirements for GW Atterberg limits below "A" Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use Atterberg limits above "A" borderline cases of dual symbols. Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows: Less than 5 percent . More than 12 percent 5 to 12 percent . .. Borderline cases requiring dual symbol

LABORATORY CLASSIFICATION CRITERIA



Glossary

Alluvial Soil or Alluvium: Soil deposited by water in a river, stream, floodplain, or delta.

Bedrock: Materials underlying soil or other unconsolidated surficial materials in which refusal is consistently encountered on lithified, undisturbed, natural bedrock.

Colluvial Soil or Colluvium: Incoherent soil on or at the base of a slope deposited by gravity or slope movement.

Fill: Soil derived from natural soil, rock, or processed materials that was placed by artificial methods, such as construction, waste disposal, or dumping.

Glacial Outwash: Soil, typically sand and gravel, deposited by glacial streams or meltwater in a preexisting valley

Glacial Till: Soil deposited by and underneath a glacier, generally consisting of a heterogeneous, unstratified mixture of clay, sand, gravel, and boulders.

<u>N-Value</u>: The blow count representation of the penetration resistance of the soil determined by the Standard Penetration Test (SPT). It is the sum of the number of blows required to drive the sampler the second and third 6inch increments (sample depth interval of 6 to 18 inches) and is recorded in blows per foot (bpf). The N-value is considered to be an indication of the relative density of coarse-grained soils (sand and gravel) or consistency of fine-

Pocket Pen (PP): Field penetration test performed using a hand-held penetrometer that estimates unconfined compressive strength of cohesive soil in tons per square foot (tsf).

Recovery %: Total length of rock core or soil sample retrieved divided by the total length of the core run or sample interval, expressed as a percentage.

Refusal: The depth at which greater than 50 SPT hammer blows are required to drive the sampling spoon 6 inches or less.

Residual Soil or Residuum: Soil derived from the physical or chemical weathering of the underlying parent bedrock, generally with N-values less than 30 and 50 bpf in cohesive and cohesionless materials, respectively.

Rock Quality Designation (RQD): The sum of the length of intact rock core pieces longer than 4 inches (excluding mechanical breaks) divided by the total length of the core run, expressed as a percentage.

Shelby Tube: A 2" to 3" diameter, thin walled sampling tube that is pushed into the soil to obtain a relatively undisturbed soil sample for geotechnical laboratory tests.

Split Spoon Sampler: A soil sampling tube which is driven, retrieved, and split-open lengthwise for removal and visual inspection, and testing of the soil obtained.

Standard Penetration Test (SPT) ASTM D1586: Field penetration test consisting of driving a 2-inch outside diameter split-spoon sampler 18 inches using a 140-pound hammer free falling a distance of 30 inches. The number of blows required to advance the spoon through successive 6-inch increments is recorded to determine the

Weathered Rock: Materials derived from lithified, undisturbed, natural bedrock which are able to be sampled with a split-spoon. Cohesive and cohesionless materials generally have N-values greater than 30 and 50 bpf, respectively.

N-Value Rating

Fine-Grained Soils (Silt and Clay) Consistency Blows/ft PP (tsf) Very Soft <0.25 Soft 3-4 0.25-0.5 Medium Stiff 5-8 0.5-1 Stiff 9-15 1-2 Very Stiff 16-32 2-4

Coarse-Grained Soils (Sand and Gravel)

>32

Hard

Relative Density	Blows/ft							
Very Loose	0-4							
Loose	5-10							
Medium Dense	11-30							
Dense	31-50							
Very Dense	>50							

Unconsolidated Material

Approximate Example Size

l	Clay and Silt	<.075	can't see grains to barely visib
l	Fine Sand	0.075-0.4	table salt to sugar
	Med. Sand	0.4-2.0 (~<1/16)	openings in a window screen
l	Coarse Sand	2.0-4.75 (~1/16-1/8)	sidewalk salt
l	Gravel	4.75-75 (~1/8-3)	pea to tennis ball
l	Cobble	75-300 (3-12)	tennis ball to basketball
	Boulder	>300 (>12)	larger than a basketball
ı			

Other Features – Used to describe other identifiable, pertinent features (e.g., angularity of coarse-grained soils, organics, construction debris, etc.)

Term Trace < 5 Few 5-15 15-45

Moisture Content

Dry: Sample is dusty or obviously dry. Moist: Anything that does not fit the definition of dry or wet.

Wet: Sample contains free water.



Definitions of Standard Terms and Symbols

BORING NUMBER B-1 PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	Transcontinental Gas Pipeline Company				PROJECT NAME Compressor Station 165									
PROJ	ECT N	UMBER 341-132			PROJECT LOCATION Pittsylvania County, Virginia									
DATE	STAR	TED 6/25/24	COMPLETED	6/25/24	GROU	ND ELE\	/ATION	671 ft		BACK	FILL _	Auger C	uttings	
SOIL	SAMPI	LING CONTRACTOR	Test Boring Services,	Inc.	WATE	R LEVEL	.S:							
SOIL	SAMPI	LING METHOD HSA	A & SPT			AT END	OF SOIL	SAMPI	LING [Ory				
CEC F	REP _C	QPB	CHECKED BY	HCB	AT END OF CORING Not Applicable									
NOTE	S Ele	vation obtained from	CEC survey.		:	24hrs AF	TER DR	ILLING	Dry					
			MATERIAL DESCRI	PTION			111				▲ SPT N VALUE ▲			
ELEVATION (ft)	೦	Soil classifications	were derived using the gener	al methodologies present	ed in	_	SAMPLE TYPE NUMBER	% .	ς Ω E	POCKET PEN. (tsf)	20	40	60	80
E)	GRAPHIC LOG	ASTM D2488, ex	were derived using the gener cept where capitalized USCS italized USCS group names of	group names are indicated the classifications.	ed were	DEPTH (ft)	1 H H	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	(tsf)	F	PL N	MC ∣	LL - I
Ë,	GR/ L	derived using	the general methodologies pr	esented in ASTM D2487			MA	SS R	B COU	SK SK	20		60	80
ш						0	S	뿝	•	M	□ FIN 20		NTENT 60	"(%) □ 80
070	7 <u>1 1</u> 7 . 7	Topsoil - 0.8 feet				"	√ ss	400	1-5-5	1.0	. :		- 00	:
670		Reddish Brown, S	Sandy Lean Clay, CL, M	loist, Stiff (RESIDUL	JM)	╄ -	1	100	(10)	4.0	1		:	:
						-	-							
						-				_			:	:
_							SS 2	87	5-5-6 (11)		 	i	:	i
						5	/ \ _		(11)	+			i	:
 665														•
000						-	√ ss	100	8-5-4	1				į
		Trace fat clay no	dules observed through	nout sample SS-3.		-	3	100	(9)		1			
						-							÷	:
				((DECIDIUM)		┷				_			i	:
		Readish Brown, S	Sandy Silt, ML, Moist, S	Off (RESIDUUM)		_ 10	SS 4	100	2-2-2 (4)		A			
			Bottom of boring at	10.5 feet.			/ V ·		(1)	1		:	i	:
			-										i	
												i	i	
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BORING NUMBER B-2 PAGE 1 OF 2

CLIEN	CLIENT Transcontinental Gas Pipeline Company				PROJECT NAME Compressor Station 165								
PROJ	ECT N	JMBER <u>341-132</u>		PROJECT LOCATION Pittsylvania County, Virginia									
DATE	STAR	TED 6/25/24	COMPLETED 6/25/24	GROUN	ID ELE	VATION	664 ft		BACK	FILL A	uger Cu	uttings	
SOIL	SAMPL	ING CONTRACTOR _	est Boring Services, Inc.										
SOIL	SAMPL	ING METHOD HSA &	SPT	AT END OF SOIL SAMPLING 38.2 ft / Elev 625.8 ft									
CEC F	REP _C	QPB	CHECKED BY HCB	AT END OF CORING Not Applicable									
NOTE	S Ele	vation obtained from CE	C survey.	▼ 24hrs AFTER DRILLING 35.6 ft / Elev 628.4 ft									
z		1			8	'PE	v (ii	z.	▲ SPT N VALUE ▲				
ELEVATION (ft)	GRAPHIC LOG	hereon, if any. Capitali	e derived using the general methodologies presi t where capitalized USCS group names are indi- zed USCS group names denote the classificatio general methodologies presented in ASTM D24	ns were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	20 P 20	40	60 80 C LL 60 80 NTENT (%)	
	12. ·×1. 12.	Topsoil - 0.8 feet			0	√ ss		1-5-3		20	40	60 80	
		<u> </u>	Clay, CL, Moist, Medium Stiff (RESID	UUM)	- - -	1 1	100	(8)	4.5				
660		Brown, SANDY LEA (RESIDUUM)	N CLAY, CL, Moist, Stiff to Medium S	 tiff		SS 2	100	2-5-7 (12)		+			
					_ 5	√ ss		2-3-4					
						3	100	(7)					
655 		Brown And Light Gr Some carbonaceou	ay, Silty Sand, SM, Moist, Loose (RES s material observed throughout sampl	IDUUM) e.	10	SS 4	100	3-3-4 (7)	_	A			
 		Brown, Clayey Sand	, SC, Moist, Very Loose to Loose (RES	SIDUUM)		SS 5	100	1-1-3 (4)		A			
650					15	√ ss		1-2-4					
 						6	100	(6)					
645		Brown, Silty Sand w	ith Gravel, SM, Wet, Very Loose (RES	IDUUM)		SS 7	100	1-1-1 (2)					
 		Brown, SILTY SANI	D, SM, Wet, Loose (RESIDUUM)		-	SS 8	100	1-2-4 (6)		A	• []	
640			ith Gravel, SM, Wet to Moist, Very Loc SIDUUM) Some fat clay nodules obse			SS 9	100	1-2-1 (3)					
						SS	100	1-2-1	_				
635					30	10		(3)					

PAGE 2 OF 2

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

PROJECT NAME Compressor Station 165 CLIENT Transcontinental Gas Pipeline Company PROJECT NUMBER 341-132 PROJECT LOCATION Pittsylvania County, Virginia MATERIAL DESCRIPTION SAMPLE TYPE NUMBER ▲ SPT N VALUE ▲ POCKET PEN. (tsf) ELEVATION (ft) BLOW COUNTS (N VALUE) RECOVERY (RQD) 20 GRAPHIC LOG 40 60 Soil classifications were derived using the general methodologies presented in ASTM D2488, except where capitalized USCS group names are indicated hereon, if any. Capitalized USCS group names denote the classifications were DEPTH (ft) MC 20 40 60 80 derived using the general methodologies presented in ASTM D2487 ☐ FINES CONTENT (%) ☐ 30 60 Brown, Silty Sand with Gravel, SM, Wet to Moist, Very Loose to Medium Dense (**RESIDUUM**) Some fat clay nodules observed SS 2-3-7 100 11 (10)throughout stratum. (continued) Samples observed to transition from wet to moist at approximately 33 SS 5-9-13 630 100 feet bgs. 12 (22)35 6-12-14 SS 100 13 (26)∷|∇ 625 Orangish Brown, Completely Weathered, Micaceous Sandstone, Very Soft (WEATHERED BEDROCK) SS 6-13-18 40 100 14 (31)5-16-37 100 (53)15 620 SS Light Grayish Brown, Completely Weathered, Micaceous 100 38-50/0.4 50/0 4 Sandstone, Very Soft (WEATHERED BEDROCK) Bottom of boring at 45.9 feet.

BORING NUMBER B-3 PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

		· · · · · · · · · · · · · · · · · · ·												
							ania Count							
			GRO	UND ELEV	/ATION _	673 ft		BACK	FILL A	uger Cuttin	gs			
SOIL	SAMP	LING CONTRACTOR Test Boring Services, Inc.	WATI	ER LEVEL	.S:									
SOIL	SAMP	LING METHOD HSA & SPT		AT END	OF SOIL	SAMPL	[)ry						
CEC F	REP _	QPB CHECKED BY HCB	AT END OF CORING Not Applicable											
NOTE	S Ele	evation obtained from CEC survey.	24hrs AFTER DRILLING Dry											
		MATERIAL DESCRIPTION							A 9	SPT N VAI	UE ▲			
Z	C	College is a firm of the college is a firm of		1_	SAMPLE TYPE NUMBER	% >	ωΩ	POCKET PEN. (tsf)	20		0 80			
ATI(PHI 3G	Soil classifications were derived using the general methodologies presented ASTM D2488, except where capitalized USCS group names are indicated to the control of the contr	1	H €	E T B E	ÆR)	MC	(tsf)	PL	. MC	LL			
ELEVATION (ft)	GRAPHIC LOG	hereon, if any. Capitalized USCS group names denote the classifications we derived using the general methodologies presented in ASTM D2487	ere	DEPTH (ft)	실	SE	BLOW COUNTS (N VALUE)	NA 5	20	40 6	0 80			
ᆸ	0				SAN	RECOVERY (RQD)	02	NO.	□FINE	ES CONTE	ENT (%) □			
		Topsoil - 0.3 feet		0	1				20	40 6	0 80			
		Reddish Brown, Lean Clay with Sand, CL, Moist, Medium Stiff	:	/	SS 1	100	2-4-4 (8)	4.5	A :					
		(RESIDUUM)			<u> </u>		(0)	1	\					
670									\					
070		Reddish Brown, Poorly-Graded Sand with Silt, SP-SM, Moist,		+ -	√ ss		4-7-6		\					
		Medium Dense to Loose (RESIDUUM)		-	2	100	(13)		↑					
				5				1	<u> </u>					
_														
					√ ss	100	3-3-5							
				_	3		(8)		T					
665				-	-									
		Brown, Sandy Silt, ML, Moist, Medium Stiff (RESIDUUM) Trac		+ -	1			-						
		elastic silt nodules observed throughout sample.	æ	10	SS 4	100	2-2-3 (5)		A :					
					/ \ ·		(0)	1						
		Brown, Sandy Silt with Gravel, ML, Moist, Medium Stiff		-† -	√ ss		2-2-4							
660		(RESIDUUM)		-	5	100	(6)		↑ :					
				15										
		Brown, Silty Sand, SM, Moist, Loose (RESIDUUM)			√ ss	100	2-4-3							
				_	6		(7)	-	IT :					
				-	-									
655_				-	1 00			1						
		Trace carbonaceous material observed throughout SS-7		-	SS 7	100	2-3-3 (6)		<u> </u>					
_				_ 20 _			. ,	1						
		Reddish Brown, Completely To Highly Weathered, Sandstone,	Very		⊠ ss	100	47-50/0.1				50/0.1			
		Soft to Soft (WEATHERED BEDROCK) Auger refusal encountered at approximately 21.5 feet bgs.	1	/	. 8						:			
		Brown, Completely To Highly Weathered, Sandstone, Very Sof	ft to	П	SS 9	100	50/0.1	1			50/0.1			
		Soft (BEDROCK) Bottom of boring at 22.6 feet.		'										
		Bottom of boiling at 22.0 feet.												
											:			
											:			
											:			
											:			

BORING NUMBER B-4 PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	T _Tr	anscontinental Gas Pi	peline Company	PRO	PROJECT NAME _Compressor Station 165									
PROJI	ECT N	IUMBER 341-132		PRO	PROJECT LOCATION Pittsylvania County, Virginia									
DATE	STAF	RTED 6/25/24	COMPLETED 6/2	5/24 GRC	OUND ELE	VATION	677 ft		BACK	FILL A	uger Cutti	ngs		
SOIL	SAMP	LING CONTRACTOR	Test Boring Services, Inc	WA1	TER LEVE	LS:								
SOIL	SAMP	LING METHOD HS/	A & SPT		AT END	OF SOIL	SAMPI	_ING [ry					
CEC F	REP _	QPB	CHECKED BY HO	В	AT END	OF CORI	NG	Not Applic	able					
NOTE	S Ele	evation obtained from	CEC survey.		24hrs A	FTER DR	ILLING	Dry						
_			MATERIAL DESCRIPTION	N		Й	%		Ž.	A :	SPT N VA		`	
ELEVATION (ft)	GRAPHIC LOG	Soil classifications	were derived using the general me cept where capitalized USCS grou	thodologies presented in	ᆂ	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN (tsf)	20 PL		80 <u>8</u> LL	0	
EVAT (ft)	Z Z Z Z Z Z	hereon, if any. Cap	italized USCS group names denot the general methodologies presen	e the classifications were	DEPTH (ft)	PLE	OVE (RQI	BLO OUN VAL	KET (tsf)	. F 20	•	-	80	
	Ö		3 7			NAW Z	ZEC (_os	200		ES CONT			
	74 1× . 74	Tanadi 0.0 fast			0), 1			_	20	40 6	8 08	0	
	 //////	·	Sandy Lean Clay, CL, Dry,	Very Stiff	<u> </u>		100	3-10-6 (16)	4.5	^ :		:		
675		(RESIDUUM)	Oandy Lean Clay, OL, Dry,	very Still				(10)						
_		Reddish Brown,	Sandy Lean Clay, CL, Moist) Trace fat clay nodules ob	, Very Stiff to Medium		V ss	100	5-7-10			:	:		
		stratum.	j Trace lat clay floudies ob	serveu tiliougilout	F	2	100	(17)		T:	į	:	:	
		Bulk sample of a feet bgs.	uger cuttings obtained from	approximately 0 to 10	5	1					- 	:		
		Auger cuttings	classified as SANDY LEA	N CLAY, CL		√ ss		2-2-3						
670		16.0%	ensity = 110.3 pcf; Optim			3	100	(5)		†	:	:		
		Effective Cohes CBR = 2.5	ion = 475.2 psf; Angle of	Friction = 26.7 degre	es _						i	:		
_			Olles O and ONA Maint I am	(DECIDI II III)								:		
		, Readish Brown, S	Silty Sand, SM, Moist, Loos	e (RESIDUUM)	10	SS 4	100	3-3-3 (6)						
_		:				<u> </u>		(0)						
665										i	:			
	', ('. l	Brownish Gray, F	lighly Weathered Sandston	e, Soft (WEATHERED		SS 5		50/0.1	1	i		:	50/0.1	
		(BEDROCK)	Bottom of boring at 12.1	feet.	J		1							
										i	:	:		
										Ė	i	:	:	
												:		
												:		
										i	i	:	:	
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										:	:	:	:	

BORING NUMBER B-5 PAGE 1 OF 1

inia KFILL Auger Cuttings lev 649.9 ft mmediately
lev 649.9 ft
ımediately
nmediately
▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐ 20 40 60 80
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- / ! ! ! ! !
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BORING NUMBER B-6 PAGE 1 OF 2

CLIENT _T	ranscontinental Gas Pipe	eline Company	PROJECT NA	PROJECT NAME Compressor Station 165						
PROJECT I	NUMBER 341-132		PROJECT LO	PROJECT LOCATION Pittsylvania County, Virginia						
DATE STA	RTED 6/25/24	COMPLETED 6/25/24	GROUND ELE	GROUND ELEVATION 665 ft BACKFILL Auger Cuttings						
SOIL SAME	PLING CONTRACTOR _	Test Boring Services, Inc.	WATER LEVE	LS:						
SOIL SAME	PLING METHOD HSA	& SPT	✓ AT END OF SOIL SAMPLING 27.5 ft / Elev 637.5 ft							
CEC REP	QPB	CHECKED BY HCB	AT END	OF CO	ORING	Not A	pplicable			
NOTES E	evation obtained from C	EC survey.	Y 24hrs A	FTER	DRILLING	25.5	ft / Elev 63	9.5 ft		
		MATERIAL DESCRIPTION			111	.0		▲ SPT	Γ N VALUE ▲	
ELEVATION (ft) GRAPHIC LOG	Soil classifications we	ere derived using the general methodologies p	resented in	_	SAMPLE TYPE NUMBER	۲۲ %)	_ S (E)		10 60 80	
(#)	ASTM D2488, exce hereon, if any. Capita	pt where capitalized USCS group names are i	ndicated	DEPTH (ft)	HE H	VEF	ALL ALL	PL I—	MC LL	
(ft) GRAPHIC LOG	derived using the	e general methodologies presented in ASTM D	02487	<u> </u>	M M M M M M M M M M M M M M M M M M M	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)		60 80	
665				0	8/	8			CONTENT (%) [10 60 80	
7777	Topsoil - 0.3 feet			-	√ ss	100	1-5-5		<u> </u>	
	Brown, Sandy Lear	n Clay, CL, Moist, Stiff (RESIDUUM)		-	1	100	(10)	1		
<i>- []]]]</i>				-	_					
				-	\ /					
- <i>- </i>					SS 2	100	8-6-9 (15)	 		
660				5	<u> </u>		(10)			
	Brown, Silty Sand,	SM, Moist, Loose (RESIDUUM)		- -	√ ss	100	2-4-5			
- + 1	∴ Shelby tube obtain	ed from offset boring from approxima	ately 6 to 8 feet bgs.	-	3	100	(9)] 🕈 🛉 [P	
	Recovery = 1.7 fee	et; Downward pressure ranged from	approximately 0 to							
- 411		sified as SILTY SAND, SM			1					
655				10	SS 4	100	2-2-3 (5)	A :		
					\ \ \ .		(0)	-		
		nd, SM, Moist to Wet, Loose to Very I		_	√ ss	100	2-3-3			
	Shelby tube obtain	e elastic silt nodules observed through the elastic silt nodules observed through the elastic silt in the	ately 12 to 14 feet	-	5	100	(6)	<u></u> ∮↑ ;•••	1	
	bgs. Řecovery = 2. to 400 psi.	.0 feet; Downward pressure ranged t	from approximately 0	' - -						
650		sified as SILTY SAND, SM		15						
						100	2-2-2 (4)	 		
							(· /	1		
		to transition from moist to wet at app	proximately 18 feet	-	√ ss	100	1-2-1			
†	bgs.				7	100	(3)			
645				_ 20	1			 \ 		
-	Pod Clavey Creve	LCC Moist Modium Dance (BECID)	IIIIM) Sama		1			\.		
		I, GC, Moist, Medium Dense (RESID) rerial observed throughout sample.	OUIVI) SUITIE	L -	SS 8	100	5-11-11 (22)	*		
							(/	/		
								/		
640		andy Silt with Gravel, ML, Wet, Soft	to Medium Stiff	25	√ ss	100	1-1-2	/		
640	(RESIDUUM)			_ 25	9	100	(3)	T:		
	<u>:</u>			-	1					
- 4:[1]				-	1			-		
	: :			L .	SS 10	100	1-1-5 (6)	📥		
	:]				Y 10		(0)	1		
-	:			30						
000 1.1-1.	•.1			_ JU	1	1		ш:		

PAGE 2 OF 2

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIENT Transcontinental Gas Pipeline Company PROJECT NAME Compressor Station 165 PROJECT NUMBER 341-132 PROJECT LOCATION Pittsylvania County, Virginia MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ SAMPLE TYPE NUMBER ELEVATION (ft) BLOW COUNTS (N VALUE) GRAPHIC LOG RECOVERY (RQD) 20 40 60 Soil classifications were derived using the general methodologies presented in ASTM D2488, except where capitalized USCS group names are indicated hereon, if any. Capitalized USCS group names denote the classifications were derived using the general methodologies presented in ASTM D2487 DEPTH (ft) MC LL 80 20 40 60 \square FINES CONTENT (%) \square 635 30 60 Orangish Brown, Sandy Silt with Gravel, ML, Wet, Soft to Medium Stiff SS 1-3-4 100 (RESIDUUM) (continued) 11 (7) Bottom of boring at 31.5 feet.

BORING NUMBER B-7 PAGE 1 OF 2

CLIENT Tra	anscontinental Gas Pipeline (Company	PROJECT NA	PROJECT NAME Compressor Station 165							
PROJECT N	UMBER 341-132		PROJECT LO	PROJECT LOCATION Pittsylvania County, Virginia							
DATE STAR	TED 6/25/24	COMPLETED 6/25/24	GROUND ELE	EVATIO	N <u>674 ft</u>		BACK	KFILL A	uger C	uttings	
SOIL SAMPL	ING CONTRACTOR Test	Boring Services, Inc.									
SOIL SAMPL	ING METHOD HSA & SPT	Γ	\overline{Y} AT END OF SOIL SAMPLING 33.0 ft / Elev 641.0 ft								
CEC REP _C	QPB	CHECKED BY HCB	AT END	OF CC	ring	Not A	pplicable				
NOTES Ele	vation obtained from CEC su	ırvey.	24hrs <i>A</i>	AFTER [ORILLING	B	ackfilled Im	mediately	/		
	M	IATERIAL DESCRIPTION			Щ	%		A	SPT N	VALUE	A
ELEVATION (ft) GRAPHIC LOG	Soil classifications were der	ived using the general methodologies pre	sented in	ĮΞ	SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	20 Pl	40	<u>60</u> //С	80 LL
CEVATION (ft) GRAPHIC LOG	hereon, if any. Capitalized U	ere capitalized USCS group names are in ISCS group names denote the classificat ral methodologies presented in ASTM D2	ions were	DEPTH (ft)	PLE JMB	SVE	NAL VAL	20		•—	-∐
	derived daing the gene	rai methodologica presented in Ao IW Dz	.407		N N	(ECC	⊞0'z				 「(%) □
				0	σ	IL.		20	40	60	80
	Topsoil - 0.4 feet	LEAN CLAV CL Maiet Madium	- Stiff	1	∭ ss	87	2-2-4	A .	_i	.: □:	
	(RESIDUUM)	LEAN CLAY, CL, Moist, Mediur	ii Suii	_	1		(6)	-			i
				-				\			
		nd, SM, Moist, Medium Dense to	Loose	+ -	√ ss		4-7-7	\		!	Ė
670	(RESIDUUM)	, , ,		-	2	100	(14)	 			
				5						↓ <u>i</u> .	
					∭ ss	100	4-3-5				į
					3		(8)		:		
				-					:		
665	Reddish Brown Sandy S	Silt, ML, Moist, Medium Stiff (RE	SIDUUM)	+ -	1 00		0.4.4	-			
	riodalon Brown, carray c	siit, ME, Moiot, Modiam our (NE	5.500m,	10	SS 4	100	2-4-4 (8)	A			
				L _			. ,			i	
										i	•
	Brown, SILTY SAND, SI	M, Moist, Loose (RESIDUUM)		T -	√ ss	100	2-3-4		1	i	
				-	5	100	(7)	17	:		
660				-					#		
				15	\			 	- :		
- 4.63					SS 6	100	4-4-6 (10)	 ★ :			
					<u> </u>		(- /	1 1			į
									:	:	:
655	Brown, Silty Sand, SM, I	Moist, Loose (RESIDUUM)		_	√ ss	100	3-4-5		:	:	:
				-	SS 7	100	(9)] 🗍 🗄	:	:	
				_ 20				H :		- :	- :
- 4:100				-							
				L -	SS 8	100	2-4-5 (9)	📥 📗			Ė
				L	Y V		(0)				
650											
- 000					√ ss	400	3-3-5	1		į	
- <u>- 1</u>				_ 25	9	100	(8)		- -		
				-							
- 	Duratura Complete Otto Ball 1	Mat Madisus Oliff (BEODINA)		↓ -	1						
	Brown, Sandy Silt, ML, V	Wet, Medium Stiff (RESIDUUM)		L _	SS 10	73	1-4-4 (8)	📥 🞚	:	i	
645					Y 10		(0)		:	i	
				30				\	:	i	Ė
				30	1	1		<u> </u>			

PAGE 2 OF 2

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

PROJECT NAME Compressor Station 165 CLIENT Transcontinental Gas Pipeline Company PROJECT NUMBER 341-132 PROJECT LOCATION Pittsylvania County, Virginia MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ SAMPLE TYPE NUMBER ELEVATION (ft) BLOW COUNTS (N VALUE) GRAPHIC LOG 20 40 60 RECOVERY (RQD) Soil classifications were derived using the general methodologies presented in ASTM D2488, except where capitalized USCS group names are indicated hereon, if any. Capitalized USCS group names denote the classifications were DEPTH (ft) LL MC 20 40 60 80 derived using the general methodologies presented in ASTM D2487 ☐ FINES CONTENT (%) ☐ 30 60 Brown, Poorly-Graded Sand with Silt, SP-SM, Wet, Medium Dense 3-7-7 SS 100 (RESIDUUM) 11 (14)Brown, Silty Sand, SM, Wet to Moist, Medium Dense (RESIDUUM) SS 1-3-11 640 100 12 (14)35 Brown, Completely To Highly Weathered, Sandstone, Very Soft to Soft 18-20-23 SS 67 (WEATHERED BEDROCK) 13 (43)Sample classified as SILTY SAND, SM according to USCS 甴 635 SS 11-18-24 40 100 14 (42)SS 50/0.4 100 50/0.4 Brown, Completely To Highly Weathered, Sandstone, Very Soft to Soft 15 (BEDROCK) 630 45 100 SS 50/0.2 :50/0.2 16 100 50/0.3 SS :50/0.3 Bottom of boring at 48.3 feet. 17

BORING NUMBER B-8 PAGE 1 OF 1

CLIENT Transcontinental Gas Pipeline Company					PROJECT NA	ME _C	ompresso	r Statio	n 165			
PROJE	PROJECT NUMBER 341-132					PROJECT LOCATION Pittsylvania County, Virginia						
DATE	STAR	FED 6/26/24	COMPLETED 6/26	6/24	GROUND ELEVATION 673 ft BACKFILL Auger Cuttings							
SOIL S	SAMPL	ING CONTRACTOR	Test Boring Services, Inc.	·	WATER LEVE	LS:						
SOIL S	SAMPL	ING METHOD HS/	A & SPT		AT END	OF SC	OIL SAMP	LING	Dry			
CEC R	EP Q	PB	CHECKED BY HC	:B	AT END OF CORING Not Applicable							
NOTE	S Elev	vation obtained from	CEC survey.		24hrs A	FTER	DRILLING	<u> B</u>	ackfilled Im	mediately		
			MATERIAL DESCRIP	TION			111	,,		▲ SF	PT N VAL	UE 📤
O	ତ	Soil classifications	were derived using the general me	thodologies present	ed in	_	l Y P.	% % (%)	_ S (E)	20	40 60	
ELEVATION (ft)	GRAPHIC LOG	hereon, if any. Cap	were derived using the general me scept where capitalized USCS grou pitalized USCS group names denote	e the classifications	ed were	DEPTH (ft)	LE	S S S S S S	BLOW COUNTS (N VALUE)	PL —	MC	
	R	derived using	the general methodologies present	ted in ASTM D2487		ā	SAMPLE TYPE NUMBER	RECOVERY (RQD)	m O Z		40 60) 80 NT (%) □
_						0	Š	<u>~</u>		20	40 60	
	7////	Topsoil - 0.4 feet					V ss	100	4-7-12			
.		Brown, Sandy Le	ean Clay, CL, Moist, Very Sti	ff to Stiff (RESI	DUUM)	-	1		(19)	ļ <u>T</u>		
						-						
670						-	√ ss		5-5-8			
		Bulk sample of a	uger cuttings obtained from	0 to 10 feet bgs	S.	-	2	100	(13)	★ :		
		Auger cuttings Maximum Dry D	classified as SANDY LEA Density = 120.5 pcf: Optimi	N CLAY, CL um Moisture C	ontent = 11.7%	5					1. 🗆 .	
		Effective Cohes	ensity = 120.5 pcf; Optimi sion = 72.0 psf; Angle of F	riction = 31.3 d	egrees							
_]			, Clayey Sand, SC, Moist, M	edium Dense (F	RESIDUUM)	L.	SS 3	100	4-8-9 (17)	🗼		
665		•		•	•		/ \ \ \		(17)			
						-						
		Greenish Gray, S	Sandy Lean Clay, CL, Moist,	Stiff (RESIDUU	M)		√ ss	100	3-5-9	1]		
						10	4	100	(14)	†		
] / :		:
		Ones siele Descou	City Cond CM Maist Land	- (DECIDIUM)		-	1					:
660		Orangish Brown,	Silty Sand, SM, Moist, Loos	se (RESIDUUM)		L -	SS 5	100	4-3-4 (7)	 		i
						L .			(.,			
						15						
_ 7		Trace carbonace	eous material and fat clay no	odules observed	l in SS-6.		√ ss	100	2-2-4			
						-	6	100	(6)	_		
			Bottom of boring at 10	6.5 feet.								:
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												:
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												i
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												:
											: :	:

BORING NUMBER B-9 PAGE 1 OF 1

CLIE	NT Tra	anscontinental Gas F	Pipeline Company	PROJECT NA	ME _C	ompresso	r Statio	n 165				
PRO.	JECT N	UMBER 341-132		PROJECT LOCATION Pittsylvania County, Virginia								
DATI	E STAR	TED 6/25/24	COMPLETED _6/25/24	GROUND ELE	VATIO	N 656 ft		BACK	FILL _A	uger (Cuttings	
SOIL	SAMPL	ING CONTRACTOR	Test Boring Services, Inc.	WATER LEVE	ELS:							
SOIL	SAMPL	ING METHOD HS	A & SPT	AT END	OF SC	OIL SAMP	LING	Dry				
CEC	REP _C	QPB	CHECKED BY HCB	AT END	OF CO	ORING	- Not A	Applicable				
NOTI	ES Ele	vation obtained from	CEC survey.	24hrs A	FTER	DRILLING	<u> D</u>)ry				
			MATERIAL DESCRIPTION			Й	%		_	SPT N	N VALU	E▲
ELEVATION (ft)	을,,	Soil classifications	s were derived using the general methodologies pres	ented in	E	SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	N TS UE)	20 P		60 MC	80 LL
(£)	GRAPHIC LOG	hereon, if any. Ca	pitalized USCS group names denote the classifications the general methodologies presented in ASTM D24	ons were	DEPTH (ft)	PLE	NS IS	BLOW COUNTS (N VALUE)	20		•	-i -80
==	9		-		NAW N	ÆC)	_ gs_				T (%) □	
	17. 18. 17.	T 1 0 4 6			0	0,	<u> </u>		20	40		80
655		Topsoil - 0.4 fee Reddish Brown.	t Lean Clay, CL, Moist, Medium Stiff to Ver	v Stiff	1.	SS 1	100	1-3-5 (8)	A :		i	
		(RESIDUUM)	,,,,	,		<u> </u>		(0)	\		i	
						√ ss	100	2-6-10				
					5	2	100	(16)	T:	i	i	
-					5				 	- :	- :	-
650		Dark Red, Sand	y Lean Clay, CL, Moist, Medium Stiff (RES	SIDUUM) Trace	+ -	√ ss		3-4-4				
-		fat clay nodules	observed throughout sample.	,	-	33	100	(8)	†			
-						,				i	i	:
<u> </u>					ļ.					i	i	
		Dark Reddish Bi	rown, Sandy Silt, ML, Moist, Soft (RESIDL	JUM)	10	SS 4	100	1-2-2 (4)	A :		<u> </u>	
645						/ \ -		(+)				
	71111											
-					-	√ ss	100	1-1-3			:	
		Trace fat clay no	odules observed in SS-5		-	5	100	(4)	7 :	i	i	i
F	-: :				-							
-		Reddish Brown.	Sandy Silt with Gravel, ML, Moist, Stiff (R	ESIDUUM)	15	√ ss		4-4-5		- :		
640	-		, , , , , ,	•	-	6	100	(9)	A	i	i	
			Bottom of boring at 16.5 feet.			,						
									:	i	i	:
									i	i	i	
/14/24										i	į	
5												
:: :::												
5 7									:		i	:
SS.G.									i	i	i	
2100										:		
41-13											i	
90 90												
M L												
CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24									:	i	÷	:
000										:		
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/HHH	Civil & Environmental Consultants, Inc. 700 Cherrington Parkway
	Moon Township, PA 15108

CLIEN	CLIENT Transcontinental Gas Pipeline Company			PROJECT NAME Compressor Station 165								
PROJI	ECT NU	IMBER 341-132		PROJECT LOCATION Pittsylvania County, Virginia								
DATE	START	FED 6/25/24	COMPLETED 6/25/24	GROUND ELEVATION 663 ft BACKFILL Auger Cuttings								
SOIL	SAMPL	ING CONTRACTOR _	Test Boring Services, Inc.	WATER LEVE	LS:							
SOIL	SAMPL	ING METHOD HSA &	SPT	AT END OF SOIL SAMPLING Dry								
CEC F	REP Q	PB	CHECKED BY HCB	AT END OF CORING Not Applicable								
NOTE	S Elev	ration obtained from CE	C survey.									
			MATERIAL DESCRIPTION				. 0		_	SPT N VALU	JE 🛦	
ELEVATION (ft)	ಲ	Soil classifications wen	e derived using the general methodologies pre	sented in	_	SAMPLE TYPE NUMBER	۲۲ %)		20	40 60	80	
(f)	GRAPHIC LOG	ASTM D2488, except hereon, if any. Capitalize	t where capitalized USCS group names are inc zed USCS group names denote the classificati	dicated ions were	DEPTH (ft)	LE J	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	PI FI		LL ⊢	
HE HE	GR.	derived using the	general methodologies presented in ASTM D2	487	ä	M M	SE.		20	40 60	80	
"					0	/S	쮼		20	ES CONTEN 40 60	11 (%) ⊔ 80	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Topsoil - 0.6 feet				√ ss	100	2-7-6	A :			
F -		Brown, Sandy Lean	Clay, CL, Moist, Stiff (RESIDUUM)		-	1	100	(13)] 🕇			
-					-	1					:	
660		Poddish Brown San	ndy Lean Clay with Gravel, CL, Moist,		-	1			-			
ļ _		(RESIDUUM)	icy Lean Clay With Graver, CL, Moist,	Juli		SS 2	100	2-5-7 (12)	★ :			
					5			,				
		Brown, Silty Sand, S	SM, Moist, Loose (RESIDUUM)		_	ss	100	2-4-4				
-					-	3	100	(8)	↓ 7			
655					-	1						
		Brown Sandy Silt M	//L, Moist, Soft (RESIDUUM)			1						
<u> </u>		Brown, Sandy Sitt, N	IL, MOISI, SOIT (INESIDOOM)		10	SS 4	100	2-2-2 (4)	A :			
								,	1\			
									\			
650		White, Silty Sand, S	M, Moist, Loose (RESIDUUM)		_	√ ss	100	2-5-5				
030					-	5	100	(10)	↓ T			
-					-	1						
-	-	Brown Silty Sand w	ith Gravel, SM, Moist, Loose (RESID		15	1 00		0.4.4				
-		elastic silt nodules o	observed throughout sample.	20 111, 77400		SS 6	100	2-4-4 (8)	▲			
			Bottom of boring at 16.5 feet.		1	V N			1			
											:	
4/24												
10/14/24												
CEC.GDT												
CEC												
GPJ												
341-132 LOGS.GPJ									:		:	
132 L												
									:			
									:		:	
MOL									:			
CEC CUSTOM LOG									:			
CEC											:	

PAGE 1 OF 2

CLIENT Transcontinental Gas Pipeline Company	AME _Co	mpresso	r Statio	n 165						
PROJECT NUMBER 341-132	PROJECT LO	ROJECT LOCATION Pittsylvania County, Virginia								
DATE STARTED 6/25/24 COMPLETED 6/25/24			670 ft		BACK	FILL A	uger Cuttii	ngs		
SOIL SAMPLING CONTRACTOR Test Boring Services, Inc. SOIL SAMPLING METHOD HSA & SPT		VATER LEVELS:								
CEC REP QPB CHECKED BY HCB		D OF CO		_		20 04 1.0	ıL			
NOTES Elevation obtained from CEC survey.					ft / Elev 64	2.0 ft				
MATERIAL DESCRIPTION					, 2.0, 04		CDT NI \ /^			
			Y R	% >	ωΩ	20	SPT N VA 40 6	60 80		
Soil classifications were derived using the general methodolo ASTM D2488, except where capitalized USCS group name hereon, if any. Capitalized USCS group names denote the classifications were derived using the general methodologies presented in Astronomy.	es are indicated	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	Pl H	_	LL ——		
derived using the general methodologies presented in A	ASTM D2487	DE)	MPI	SR	R COR	20		80 80		
670		0	S	H		□ FIN		ENT (%) □ 60 80		
Topsoil - 0.5 feet			√ ss	100	4-3-6	A				
Reddish Brown, Sandy Lean Clay with Gravel, CL, (RESIDUUM)	, Moist, Stiff	-	/\ 1	100	(9)	. T				
		-								
Reddish Brown, Silty Sand, SM, Moist, Medium De	ense to Loose	+ -	√ ss		4-6-7	!				
(RESIDUUM)		-	X 2 2	100	(13)	†				
665 665		5				<u> </u>	:			
- - - - - - - - - -		-	\							
		-	SS 3	100	4-4-4 (8)	 				
			/ V							
660		10	SS 4	100	2-3-3 (6)	A				
			/\ 4		(0)					
Brown, Clayey Sand, SC, Moist, Loose (RESIDUU nodules observed throughout stratum.	M) Trace fat clay	_	√ ss	100	2-4-3					
		-	<u></u>	100	(7)	Ţ				
F		45					:			
655 /// Brown, Poorly-Graded Sand with Silt and Gravel, S	SP-SM, Moist, Loose	15	√ ss		3-4-5					
(RESIDUUM)		-	6	100	(9)	↑				
F - 19期		-					:			
Brown, Well-Graded Sand with Silt, SW-SM, Mois	t Loose (RESIDI IIIM)	+ -	\							
Solowit, vveii-Graded Sand with Sitt, Svv-Sivi, IVIOIS	i, Louse (I ALSIDUUIVI)	-	SS 7	100	2-3-4 (7)	 				
650		_ 20 _	/ N							
			SS 8	100	3-4-3 (7)	 	:			
			/ \		(1)					
Brown, Clayey Sand, SC, Moist, Loose (RESIDUU nodules observed throughout sample.	M) Trace fat clay	25	√ ss	100	3-3-3		:			
nodules observed throughout sample.		_ 23 _	9	100	(6)	T				
		-								
Brown, Silty Sand, SM, Wet, Loose to Medium De	nse (RESIDUUM)	+ -	√ ss		1-2-4		:			
F	,	-	10	100	(6)	†				
Brown, Clayey Sand, SC, Moist, Loose (RESIDUU nodules observed throughout sample. Brown, Silty Sand, SM, Wet, Loose to Medium De		-	•							
640		30				<u> </u>				

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Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIENT Transcontinental Gas Pipeline Company PROJECT NAME Compressor Station 165 PROJECT NUMBER 341-132 PROJECT LOCATION Pittsylvania County, Virginia MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ SAMPLE TYPE NUMBER ELEVATION (ft) BLOW COUNTS (N VALUE) GRAPHIC LOG RECOVERY (RQD) 20 40 60 Soil classifications were derived using the general methodologies presented in ASTM D2488, except where capitalized USCS group names are indicated hereon, if any. Capitalized USCS group names denote the classifications were derived using the general methodologies presented in ASTM D2487 DEPTH (ft) MC LL 80 20 40 60 \square FINES CONTENT (%) \square 640 30 60 Brown, Silty Sand, SM, Wet, Loose to Medium Dense (RESIDUUM) SS 6-9-10 100 (continued) 11 (19)Bottom of boring at 31.5 feet.

BORING NUMBER B-12 PAGE 1 OF 2

CLIENT _	Transcontinental Gas Pi	CLIENT Transcontinental Gas Pipeline Company PROJ					PROJECT NAME Compressor Station 165						
PROJECT	NUMBER <u>341-132</u>		PROJECT LC	PROJECT LOCATION Pittsylvania County, Virginia									
DATE STA	ARTED 6/26/24	COMPLETED 6/26/24											
SOIL SAM	IPLING CONTRACTOR	Test Boring Services, Inc.	WATER LEVELS:										
SOIL SAM	IPLING METHOD HSA	, SPT, and NQ-Core	AT END OF SOIL SAMPLING Dry										
CEC REP	QPB	CHECKED BY HCB	AT END OF CORING 7.5 ft / Elev 657.5 ft										
NOTES _	Elevation obtained from (CEC survey.	24hrs AFTER DRILLING Backfilled Immediately										
		MATERIAL DESCRIPTION			Ш	%		▲ SP	T N VALUE ▲				
ELEVATION (ft) (ft)	Soil classifications v	were derived using the general methodologies pr	resented in	Į	SAMPLE TYPE NUMBER	RY (V UE)	20 ⁴	40 60 80 MC LL				
(ft) GRAPHIC	ASTM D2488, exc hereon, if any. Capi	cept where capitalized USCS group names are in talized USCS group names denote the classifica the general methodologies presented in ASTM D	ations were	DEPTH (ft)	J.E.	Z Z Z Z Z	BLOW COUNTS (N VALUE)	-	MC LL 40 60 80				
	derived using t	The general methodologies presented in ASTM D	2401		AMA	RECOVERY (RQD)	mo s		CONTENT (%)				
665				0	S	Ľ.			40 60 80				
	Brown, Sandy Lea (RESIDUUM)	an Clay with Gravel, CL, Moist, Mediun	n Stiff		SS 1	93	2-2-5	A					
	(11201200111)				/ \ 1		(7)	\					
				-									
		And Gray, SANDY LEAN CLAY, CL, M		+ -	√ ss		4-7-9	1 \					
	Stiff (RESIDUUM)) Trace fat clay nodules observed thro	ughout stratum.	-	2	80	(16)	↑					
660				5					<u>: : : : : : : : : : : : : : : : : : : </u>				
·				-				5					
- <i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>				_		100	3-6-7 (13)	★ !					
	¥				/ \ •		(10)	-					
655	Orangish Brown	And Gray, Clayey Sand, SC, Moist to W	Vet, Loose to Very	10	√ ss	87	3-4-5	1] [
033 ///	Loose (RESIDUU	M) Some fat clay nodules observed the	rougnout stratum.	10	4	07	(9)] 					
				-									
	Trace carbonace	ous material observed in SS-5.		-	1								
·	Trace carbonace	ous material observed in 55-5.		_	SS 5	53	1-1-2 (3)	A					
					Y 1		(-)	1 :					
650				15									
	Light Brown, Silty	Sand, SM, Moist, Very Loose (RESIDI	JUM)		√ ss	80	2-2-1						
				-	6	80	(3)	.					
1:1:				-									
	∷ Brown Silty Sand	with Gravel, SM, Moist, Loose (RESID		+ -	1 00		0.00	-					
			,	-	SS 7	100	2-2-3 (5)	 ♦					
645				20									
] \					
	Brown, Poorly-Gr Dense (RESIDUU	aded Sand with Silt and Gravel, SP-SM IM)	I, Moist, Loose to		∭ ss	93	3-4-5						
	Dense (Redibo e	,			8		(9)	1 7 1					
				-									
				-	√ ss		5-6-9	1 \					
640				_ 25	9	93	(15)	\					
- 43				-] \!					
]					
					SS SS	73	3-8-10						
7.3					10		(18)	/					
				-									
635	1-1-1			30	<u> </u>				<u> </u>				

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Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

PROJECT NAME Compressor Station 165 CLIENT Transcontinental Gas Pipeline Company PROJECT NUMBER 341-132 PROJECT LOCATION Pittsylvania County, Virginia MATERIAL DESCRIPTION ▲ SPT N VALUE ▲ SAMPLE TYPE NUMBER ELEVATION (ft) RECOVERY (RQD) BLOW COUNTS (N VALUE) 20 GRAPHIC LOG 40 60 Soil classifications were derived using the general methodologies presented in ASTM D2488, except where capitalized USCS group names are indicated hereon, if any. Capitalized USCS group names denote the classifications were DEPTH (ft) LL H MC 20 40 60 80 derived using the general methodologies presented in ASTM D2487 \square FINES CONTENT (%) \square 30 635 60 Brown, Poorly-Graded Sand with Silt and Gravel, SP-SM, Moist, Loose to SS 12-12-20 Dense (RESIDUUM) (continued) 87 11 (32)Light Brown, Highly Weathered, Sandstone, Soft (WEATHERED SS 100 50/0.1 50/0. 12 BEDROCK) Light Brown, Sandstone, Moderately Weathered, Moderately Broken, 630 35 Medium Hard NQ 100 Unconfined Compressive Strength = 5,625 psi (36)Bottom of boring at 38.1 feet.

BORING NUMBER B-13 PAGE 1 OF 1

CLIENT Transcontinental Gas Pipeline Company			PROJECT NA	PROJECT NAME Compressor Station 165							
PROJECT NU	PROJECT NUMBER 341-132			PROJECT LOCATION _Pittsylvania County, Virginia							
DATE START	ED 6/25/24	COMPLETED 6/25/24	GROUND ELI	EVATIO	N 649 ft		BACK	KFILL Auge	er Cuttings		
SOIL SAMPLI	NG CONTRACTOR	Test Boring Services, Inc.	WATER LEVI	ELS:							
SOIL SAMPLI	NG METHOD HS/	A & SPT	$ar{igspace}$ at eni	$\underline{\qquad}$ AT END OF SOIL SAMPLING _16.9 ft / Elev 632.1 ft							
CEC REP QF	РВ	CHECKED BY HCB	AT ENI	AT END OF CORING Not Applicable							
NOTES Eleva	ation obtained from	CEC survey.	Y 24hrs <i>i</i>	AFTER	ORILLING	16.4	ft / Elev 63	32.6 ft			
		MATERIAL DESCRIPTION			111			▲ SP	T N VALUE	<u> </u>	
S ⊆	Soil classifications	were derived using the general methodologie:	s presented in	₊	l F.H.	% % (%)	_ S (E)		40 60	80	
CRAPHIC LOG	hereon, if any. Cap	were derived using the general methodologies scept where capitalized USCS group names a sitalized USCS group names denote the classi	ifications were	DEPTH (ft)	LET	N CE	AEN J	PL —		_L 1	
ELEVATION (ft) GRAPHIC LOG	derived using	the general methodologies presented in ASTI	M D2487	ä	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)		40 60	80	
"				0	/8	2			CONTENT 40 60	(%) L	
	Reddish Brown,	SANDY FAT CLAY, CH, Moist, Stiff	(RESIDUUM)		√ ss	100	2-6-7	A		:	
-				-	1	100	(13)	↓ Ţ . .		i	
///				-	-						
- ///	Reddish Brown	Sandy Silt, ML, Moist, Stiff (RESIDU	UM)	+ -	1 00		4.4.5	1 1			
645	riodaion Bronni,		,	-	SS 2	100	4-4-5 (9)	★ 🞚			
- 4144				_ 5					<u> </u>	<u></u>	
				╽.]		:	
	Reddish Brown T (RESIDUUM)	To Brown, Silty Sand, SM, Moist, Loo	se to Very Loose		SS 3	100	2-3-4				
	,	uger cuttings obtained from approxi	mately 0 to 15 feet has	.[/ \ 3		(7)	-			
640	buik sample of a	uger cultings obtained from approxit	matery of to 15 feet bgs	<u>'</u> -	1						
040				<u> </u>	√ ss		2-2-2	1			
				10	4	87	(4)			-	
				-]		:	
	Proven City Con	d with Croyal SM Maint to Wat Var		∔ -	1					į	
- 4	(RESIDUUM)	d with Gravel, SM, Moist to Wet, Ver	y Loose	ļ .		87	1-2-2 (4)	 		i	
635							(- /	1 !			
				15							
	,	ed to transition from moist to wet at a	approximately 15 feet		√ ss	100	2-1-2				
- 11111	bgs.			-	6	100	(3)	-∏ -		i	
	<u>/-</u>			-	-						
				-						:	
630				-	SS 7	100	2-1-1				
		Dettern of having at 40 F fact		_	/\ 7		(2)	Γ .			
		Bottom of boring at 19.5 feet.								:	
										:	
										i	
										:	
								 			

BORING NUMBER B-14 PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	IT _Tr	ranscontinental Gas Pi	PROJECT NAME Compressor Station 165									
PROJ	ECT N	IUMBER <u>341-132</u>		PROJECT LOCATION Pittsylvania County, Virginia								
DATE	STAF	RTED 6/26/24	COMPLETED 6/26/24	GROUN	ID ELE\	/ATION _	638 ft		BACK	KFILL Aug	er Cuttings	
SOIL	SAMP	LING CONTRACTOR	Test Boring Services, Inc.	WATER	LEVEL	_S:						
SOIL	SAMP	LING METHOD HSA	v & SPT	AT END OF SOIL SAMPLING Dry								
CEC I	REP _	QPB	CHECKED BY HCB		T END	OF CORII	NG	Not Applic	able			
NOTE	S Ele	evation obtained from (CEC survey.	_ 2	4hrs AF	TER DRI	LLING	Backfi	lled Im	mediately		
Z	O		MATERIAL DESCRIPTION			YPE 3	% \	w iii	PEN.	▲ SF 20	PT N VALU	E ▲ 80
ELEVATION (ft)	GRAPHIC LOG	ASTM D2488, exc hereon, if any. Capi derived using t	were derived using the general methodologies preser cept where capitalized USCS group names are indici- italized USCS group names denote the classification the general methodologies presented in ASTM D248	nted in ated is were 7	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET P (tsf)		MC 40 60 CONTEN	LL - H 80
					0	Ŋ	2		Δ.		40 60	80
		Topsoil - 0.3 feet Brown, Sandy Lea	an Clay, CL, Dry, Medium Stiff (RESIDUU	M)	-	ss 1	80	1-3-3 (6)	_	†		
635			SANDY LEAN CLAY, CL, Moist, Very Stiff	to Stiff	-	√ ss	100	4-7-9				
		(RESIDUUM)			5	2	100	(16)		•	-[
					-	SS 3	100	4-6-8 (14)		<u> </u>		
630		Dark Red, Lean C	Clay, CL, Moist, Soft (RESIDUUM) Trace for	at clay		ss	400	2-2-2				
		nodules observed	d throughout sample.		10	4	100	(4)	1.5			
625		Brown, Lean Clay (RESIDUUM) Tra	with Sand, CL, Moist to Wet, Very Soft ace fat clay nodules observed throughout s	sample.	-	SS 5	87	1-1-1 (2)				
					15	1				\		
		Brown, Sandy Lea	an Clay, CL, Wet, Medium Stiff (RESIDUL	JM)		SS 6	100	3-3-4 (7)		1		
			Bottom of boring at 16.5 feet.									

BORING NUMBER B-15 PAGE 1 OF 1

/HHH	Civil & Environmental Consultants, Inc. 700 Cherrington Parkway
	Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

		ranscontinental Gas Pipeline Company	PROJECT NAME Compressor Station 165										
PROJ	ECT N	IUMBER 341-132	PROJECT LOCATION Pittsylvania County, Virginia										
DATE	STAR	RTED 6/25/24 COMPLETED 6/25/24											
SOIL	SAMPI	LING CONTRACTOR Test Boring Services, Inc.	WATER	LEVEL	S:								
SOIL	SAMPI	LING METHOD HSA & SPT	AT END OF SOIL SAMPLING Dry										
CEC F	REP _	QPB CHECKED BY HCB	AT END OF CORING Not Applicable										
NOTE	S Ele	evation obtained from CEC survey.	24hrs AFTER DRILLING Dry										
Z	O	MATERIAL DESCRIPTION			rPE 3	٧ %	w III	Ä.	▲ SPT N VALUE ▲ 20 40 60 80				
ELEVATION (ft)	GRAPHIC LOG	Soil classifications were derived using the general methodologies present ASTM D2488, except where capitalized USCS group names are indical hereon, if any. Capitalized USCS group names denote the classifications derived using the general methodologies presented in ASTM D2487	were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	PL MC LL 20 40 60 80				
	14 /2· 1	Topogil 0.2 foot		0	1				20 40 60 80				
		Topsoil - 0.3 feet Brown To Orangish Brown, Sandy Lean Clay, CL, Moist, Veron to Stiff (RESIDUUM)	ry Stiff		SS 1	100	5-8-8 (16)	2.5	^				
					√ ss	400	2-6-7						
645				5	2	100	(13)	3.0	1				
		Reddish Brown, Lean Clay with Sand, CL, Moist, Stiff to Med Stiff (RESIDUUM)	 dium		SS 3	100	5-5-7 (12)	2.5	 				
 640					/ \		(12)						
_ 040 _		D. H 110 0 f 1		10	SS 4	100	3-5-4 (9)	2.5	A				
		Bottom of boring at 10.0 feet.											

BORING NUMBER B-16 PAGE 1 OF 1

		anscontinental Gas	PROJECT NA	PROJECT NAME Compressor Station 165										
PF	ROJECT N	JMBER <u>341-132</u>		PROJECT LO	PROJECT LOCATION Pittsylvania County, Virginia									
DA	ATE STAF	TED 6/26/24	COMPLETED 6/26/24	GROUND ELE	GROUND ELEVATION 658 ft BACKFILL Auger Cuttings									
so	OIL SAMP	ING CONTRACTO	Test Boring Services, Inc.	WATER LEVE	ELS:									
so	OIL SAMP	ING METHOD H	SA & SPT	AT END	OF SC	OIL SAMP	LING	Dry						
CE	EC REP _)PB	CHECKED BY HCB	AT END	AT END OF CORING Not Applicable									
N	OTES Ele	vation obtained fror	m CEC survey.	24hrs A	24hrs AFTER DRILLING Backfilled Immediately									
			MATERIAL DESCRIPTION						▲ SE	PT N VALUE ▲				
ELEVATION	(ft) GRAPHIC LOG	hereon, if anv. C	ns were derived using the general methodologies except where capitalized USCS group names are apitalized USCS group names denote the classifi ng the general methodologies presented in ASTM	cations were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	20 PL 20	40 60 80 MC LL 40 60 80				
	<u></u>			_	0	SAM	REC	_0 <u>S</u>		S CONTENT (%) 40 60 80				
-	-///// -/////	Topsoil - 0.2 fe Orangish Brow (RESIDUUM)	et n, Sandy Lean Clay with Gravel, CL, Mo	pist, Stiff		SS 1	87	5-9-6 (15)	•					
- 0:	55 /////	Reddish Brown	ı, Clayey Sand, SC, Moist, Medium Den	se (RESIDUUM)	5	SS 2	87	4-6-8 (14)	•					
- - 6	50	Light Brown, Si (RESIDUUM)	ilty Sand, SM, Moist, Medium Dense to	Loose		SS 3	100	4-5-7 (12)	+					
-					10	SS 4	100	3-3-4 (7)						
64	45					SS 5	100	3-4-5 (9)	A					
-					_ 15	\ss s	100	6-6-4						
			Bottom of boring at 16.5 feet.			6		(10)						
10/14/24														
20.000														
20.000 21.100 00														
CEC COS I OM LOG														

PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	IT _T	ranscontinental Gas Pip	PROJECT NAME Compressor Station 165											
PROJ	ECT N	NUMBER 341-132		PROJECT LOCATION Pittsylvania County, Virginia										
DATE	STAI	RTED <u>6/26/24</u>	COMPLETED 6/26/24	GROUND ELEVATION 658 ft BACKFILL Auger Cuttings										
SOIL	SAMF	LING CONTRACTOR	Test Boring Services, Inc.	WATER LEVELS:										
SOIL	SAMF	PLING METHOD HSA	& SPT	_ AT END	OF SC)IL S	SAMP	LING	Dry					
CEC F	REP _	QPB	CHECKED BY HCB	_ AT END	OF CC	RIN	IG	- Not A	pplicable					
NOTE	S <u>E</u>	evation obtained from (CEC survey.	24hrs AFTER DRILLING Backfilled Immediately										
			MATERIAL DESCRIPTION			L	Ц	%			▲ SPT	N VALU	JE 🛦	
ELEVATION (ft)	2	Soil classifications v	were derived using the general methodologies preser	nted in	l _	2	NUMBER	\ } (ZS(E)	2			80	
(£)	GRAPHIC LOG	ASTM D2488, exc hereon, if any. Capi	were derived using the general methodologies preser cept where capitalized USCS group names are indica- talized USCS group names denote the classifications the general methodologies presented in ASTM D248'	ated s were	DEPTH (ft)	إ	A BE	N S S	ALI ALI		PL —	MC as	LL ⊢	
Ë	GR J	derived using t	he general methodologies presented in ASTM D248	7	🖺		₽₽	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	2			80 IT (0()	
_					0	٥	ò	<u>~</u>		2		CONTEN 0 60	(%) 80	
		Topsoil 0.3 feet				V	SS	100	2-5-6				:	
		Brown, Sandy Lea	an Clay, CL, Moist, Stiff (RESIDUUM)		-		1	100	(11)	T		i	i	
					-	1						i		
655		Reddish Brown S	Sandy Lean Clay, CL, Moist, Medium Stiff	(RESIDUIUM)	-				0.00					
		Trace fat clay noo	dules observed throughout sample.	(11201200111)		ļΧ	SS 2	100	2-3-3 (6)	 				
					_ 5	Г								
					L .							:		
		Brown, Sandy Silt	t with Gravel, ML, Moist, Medium Stiff (RE	SIDUUM)		M	SS 3	100	2-3-4			:		
650						m m m m m m m m m m m m m	<u> </u>		(7)					
					-									
							SS	1.00	2-3-5					
					10	\triangle	4	100	(8)		:	- :	- :	
			Bottom of boring at 10.5 feet.									•		
												:		
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BORING NUMBER B-18 PAGE 1 OF 1

CLIEN	NT Tra	anscontinental Gas Pip	eline Company	PROJE	CT NAN	IE Com	Compressor Station 165							
PROJ	ECT N	UMBER 341-132		PROJE	CT LOC	ATION _	Pittsylv	ania County	y, Virgir	nia				
DATE	STAR	TED 6/26/24	COMPLETED 6/26/24	GROUN	ID ELE	VATION	648 ft		BACK	FILL Au	ger Cutt	ings		
SOIL	SAMPL	ING CONTRACTOR	Test Boring Services, Inc.	WATER	R LEVEI	LS:								
SOIL	SAMPL	ING METHOD HSA	& SPT		T END	OF SOIL	SAMPI	_ING D	ry					
CEC I	REP _C	QPB .	CHECKED BY HCB		T END	OF CORI	NG	Not Applic	able					
NOTE	S Ele	vation obtained from C	EC survey.	. 2	4hrs Al	TER DRI	LLING	Backfi	lled Imi	mediately				
			MATERIAL DESCRIPTION			111	٠,٥			▲ SPT N VALUE ▲				
O	ပ	Soil classifications w	ere derived using the general methodologies presen	ted in	_	<u>}</u> ∺	۲۲ %)	_s Е	PEN.	20	40	60 80		
E(E)	GRAPHIC LOG	hereon, if any. Capita	ere derived using the general methodologies presen ept where capitalized USCS group names are indica alized USCS group names denote the classifications	were	DEPTH (ft)	LET	VEF	ALL ALL	ET (PL -	MC			
ELEVATION (ft)	GR.	derived using th	e general methodologies presented in ASTM D2487		🛎	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET (tsf)	20		60 80		
ш					0	8	꿉		P(□ FINE 20		TENT (%) 60 80		
	71/2.71	Topsoil - 0.8 feet				√ ss	100	2-5-8						
		Brown, Sandy Lea	n Clay, CL, Moist, Stiff (RESIDUUM)		} .	1	100	(13)		Ť				
					-	-								
645		Orangiah Braum A	nd Cray Loan Claywith Sand Cl. Maiet		ļ .	1								
		(RESIDUUM)	nd Gray, Lean Clay with Sand, CL, Moist,	Sun	ļ.	SS 2	100	2-5-6 (11)	3.5	A				
					5			(,						
		Brown To Light Brown	own, Clayey Sand, SC, Moist to Wet, Loo	se to	† '	√ ss	100	3-4-5						
		Very Loose (RESII	DUUM)		-	3	100	(9)		T i				
640					-									
		Trace fot alove and	in a channed in CC 4		-									
		Trace fat clay floo	ules observed in SS-4.		10	SS 4	100	1-2-2 (4)		<u> </u>		<u>: :</u>		
	7.7.7.7.		Bottom of boring at 10.5 feet.		-	/ \		. ,						
										i				
										:				
											i			
										:	:	: :		

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CLIENT Transcontinental Gas Pipeline Company					PROJECT NAME Compressor Station 165								
PROJ	ECT NU	MBER <u>341-132</u>		PROJECT	PROJECT LOCATION _Pittsylvania County, Virginia								
DATE	START	ED 6/26/24	COMPLETED <u>6/26/24</u>	GROUND	GROUND ELEVATION 652 ft BACKFILL Auger Cuttings								
SOIL	SAMPLI	NG CONTRACTOR	Test Boring Services, Inc.	WATER L	EVELS:								
SOIL	SAMPLI	NG METHOD HSA	& SPT	AT	END OF SO	OIL SAMP	LING	Dry					
CEC	REP Q	РВ	CHECKED BY HCB	AT	END OF CO	DRING	Not A	pplicable					
NOTE	S Elev	ation obtained from	CEC survey.	24h	rs AFTER	DRILLING	<u> B</u>	ackfilled Im	mediately				
			MATERIAL DESCRIPTION				. 0		▲ SP	T N VALUE ▲			
ELEVATION (ft)	GRAPHIC LOG	hereon, if any. Cap	were derived using the general methodol cept where capitalized USCS group nam- italized USCS group names denote the c the general methodologies presented in A	lassifications were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	20 4 PL 20 4	MC LL 40 60 80			
Ш					0	SA	R			CONTENT (%) ☐ 40 60 80			
650		(RESIDUUM)	SAND, SC, Moist, Medium Dens			SS 1	100	7-6-8 (14)		! 🗆			
 		виік sample or a	uger cuttings from approximately	VU to 5 feet bgs.	_ 5	SS 2	100	3-4-5 (9)	•				
645		Orangish Brown, (RESIDUUM)	Clayey Sand with Gravel, SC, M	oist, Medium Dense		SS 3	100	5-10-8 (18)					
- 		Light Orangish B Trace fat clay no	rown, Clayey Sand, SC, Wet, Vei dules observed throughout strate	ry Loose (RESIDUUM) um.	10	SS 4	100	2-1-1 (2)					
640						SS 5	87	1-2-2 (4)					
-					15								
-		Brown, Clayey Gi (RESIDUUM)	ravel with Sand, GC, Moist, Medi	um Dense		SS 6	100	5-11-18 (29)					
			Bottom of boring at 16.5 fe	et.									

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Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	T _Tra	anscontinental Gas Pip	PROJECT NAME Compressor Station 165											
PROJE	CT N	UMBER <u>341-132</u>		PROJECT LOCATION Pittsylvania County, Virginia										
DATE	STAR	TED <u>6/26/24</u>	COMPLETED 6/26/24	GROUND ELEVATION 653 ft BACKFILL Auger Cuttings										
SOIL S	SAMPI	ING CONTRACTOR	Test Boring Services, Inc.	WATER LEVELS:										
SOIL S	SAMPI	LING METHOD HSA	& SPT	AT ENI	O OF SC	OIL S	SAMP	LING	Dry					
CEC R	EP _C	QPB	CHECKED BY HCB	AT ENI	OF CC	ORIN	IG	- Not A	pplicable					
NOTES	S Ele	vation obtained from C	CEC survey.	24hrs AFTER DRILLING Backfilled Immediately										
Z	U	0.11.1.15.11	MATERIAL DESCRIPTION			Ĺ	- Κ Π	%	s îi		▲ SPT I			
ELEVATION (ft)	GRAPHIC LOG	ASTM D2488, exc hereon, if any. Capit derived using the	vere derived using the general methodologies pres the where capitalized USCS group names are indi- talized USCS group names denote the classification the general methodologies presented in ASTM D24	ented in cated ons were 87	DEPTH (ft)	Ĺ	SAMPLE 17PE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)		PL 20 40 INES C		LL 80	
					0	C	ñ	~		1	0 40		80	
		Topsoil - 0.5 feet Brown, Lean Clay Trace carbonaceo	with Sand, CL, Moist, Medium Stiff (RE pus material observed throughout sample)	SIDUUM) le.	- 	X	SS 1	80	3-3-5 (8)					
650		Brown, CLAYEY S (RESIDUUM) Trac	SAND, SC, Moist, Medium Dense to Loo ce fat clay nodules observed throughout	se t stratum.	+ - 	X	SS 2	100	4-7-8 (15)					
					5	M	SS	400	3-3-4		• []		
645							3	100	(7)					
		Reddish Brown, S	sandy Lean Clay, CL, Moist, Medium Stif	f (RESIDUUM)	10	X	SS 4	100	2-2-3 (5)			<u>:</u>	<u>:</u>	
	(5/1/1		Bottom of boring at 10.5 feet.		-				. ,	1		i	i	

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CLIENT Transcontinental Gas Pipeline Company					PROJECT NAME Compressor Station 165								
PROJ	ECT NU	MBER <u>341-132</u>		PROJECT LOCATION Pittsylvania County, Virginia									
DATE	STAR	ED 6/26/24	COMPLETE	D 6/26/24	GROUND ELEVATION 637 ft BACKFILL Auger Cuttings								
SOIL	SAMPL	ING CONTRACTO	R Test Boring Service	ces, Inc.									
SOIL	SAMPL	ING METHOD H							ING 14.5		ev 622.5 ft		
CEC	REP Q	PB	CHECKED I	BY HCB	AT END OF CORING Not Applicable								
NOTE	S Elev	ation obtained fror	n CEC survey.		24	4hrs AF	TER DRI	LLING	Backfi	lled Im	mediately		
7			MATERIAL DESC	CRIPTION			뭐	%		ż		PT N VALUE	
ELEVATION (ft)	GRAPHIC LOG	ASTM D2488, hereon, if any. C	except where capitalized Usapitalized USCS group nam	eneral methodologies presen SCS group names are indica les denote the classifications es presented in ASTM D2487	ted were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)		40 60 S CONTENT	
	1,4 1y11	─ Topsoil 0.4 feet	<u> </u>			0	√ ss		1-3-3		20	40 60	80
635		<u> </u>		oist, Medium Stiff to Stif	f		1 1	87	(6)			<u> </u>	
						_	SS 2	100	4-7-8 (15)	_			
630		Orangish Brow Soft (RESIDUU	n, Lean Clay with San	d, CL, Moist, Medium S	Etiff to		SS 3	100	2-3-3	2.0			
			,				3		(6)				
		Dark Red, Sand	dy Lean Clay, CL, Moi	st to Wet, Soft (RESID	JUM)	10	SS 4	53	1-1-1 (2)				
625		Samples obser feet bgs.	ved to transition from	moist to wet at approxi	mately 12	 	SS 5	47	1-1-1 (2)				
-		<u> </u>				15							
-		Dark Reddish E		SC, Moist, Loose (RESII	осим)		SS 6	100	1-2-3 (5)	-			
			Bottom of boring	at 16.5 feet.									

BORING NUMBER B-22 PAGE 1 OF 1

CLIENT Transcontinental Gas Pipeline Company					PROJECT NAME Compressor Station 165									
PROJ	ECT N	JMBER <u>341-132</u>		PROJECT LOCATION Pittsylvania County, Virginia										
DATE	STAR	TED <u>6/26/24</u>	COMPLETED 6/26/24	GROUND ELEVATION 626 ft BACKFILL Auger Cuttings										
SOIL	SAMPL	ING CONTRACTOR	Test Boring Services, Inc.	WATER	RLEVE	LS:								
SOIL	SAMPL	ING METHOD HS	A & SPT		T END	OF SOIL	SAMPI	_ING [Ory					
CEC I	REP _C	(PB	CHECKED BY HCB	A	AT END OF CORING Not Applicable									
NOTE	S Ele	vation obtained from	CEC survey.	2	4hrs A	FTER DR	LLING	Backf	illed Im	mediately				
			MATERIAL DESCRIPTION				.0			▲S	PT N VAL	.UE 🛦		
ELEVATION (ft)	GRAPHIC LOG	ASTM D2488, e hereon, if any. Ca	s were derived using the general methodologies pr xcept where capitalized USCS group names are in pitalized USCS group names denote the classificar	dicated tions were	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	(ET PEN. (tsf)	20 PL H	40 60 MC) 80 LL		
ELE	GR	derived usinç	the general methodologies presented in ASTM D2	2487	0	SAMF	RECC (F	S C B	POCKET F (tsf)	20 □ FINE 20	40 60 S CONTE 40 60	NT (%)		
625	7////	Topsoil - 0.4 fee			-	√ ss	100	2-2-3		A				
		Brown, Sandy L	ean Clay, CL, Moist, Medium Stiff (RES l	DUUM)		1	100	(5)						
- 			Lean Clay, CL, Moist, Very Stiff (RESID odules observed throughout sample.	UUM)	5	SS 2	100	4-6-13 (19)						
620					╽.									
- 		Reddish Brown,	CLAYEY SAND, SC, Moist, Loose (RES	SIDUUM)		SS 3	100	3-4-5 (9)			Н			
 615		Reddish Brown, Medium Stiff (RI throughout strat	Sandy Lean Clay, CL, Moist to Wet, Ver ESIDUUM) Trace fat clay nodules obserum.	y Soft to ved	10	SS 4	100	1-1-2 (3)	1.0					
 		Samples observ feet bgs.	red to transition from moist to wet at app	roximately 12	, -	SS 5	73	1-1-1 (2)	0.5					
 610					15	ss	100	2-2-4	1.0					
					-	6		(6)						
		Dark Reddish Bi (RESIDUUM)	rown, Clayey Sand, SC, Wet, Very Loose			SS 7	100	1-2-2 (4)						
			Bottom of boring at 19.5 feet.											

BORING NUMBER B-23 PAGE 1 OF 1

Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

CEC CUSTOM LOG 341-132 LOGS.GPJ CEC.GDT 10/14/24

CLIEN	TTra	anscontinental Gas Pi	PROJECT NAME Compressor Station 165										
PROJI	ECT N	UMBER 341-132		PROJECT LOCATION _Pittsylvania County, Virginia									
DATE	STAR	TED 6/25/24	COMPLETED 6/25/24	GROUND ELEVATION 673 ft BACKFILL Auger Cuttings									
SOIL S	SAMP	LING CONTRACTOR	Test Boring Services, Inc.	WATER LEVELS:									
SOIL	SAMP	LING METHOD HSA	\ & SPT	AT ENI	OF SC	IL SA	MPLING	Dry					
CEC F	REP _	QPB	CHECKED BY HCB	AT ENI	OF CC	RING	Not	Applicable					
NOTE	S Ele	evation estimated from	n existing topography.	24hrs /	AFTER I	DRILL	NG	Dry					
z			MATERIAL DESCRIPTION			H	%			SPT N VAL			
ELEVATION (ft)	GRAPHIC LOG	Soil classifications ASTM D2488, ex hereon, if any. Cap derived using	were derived using the general methodologies pres cept where capitalized USCS group names are indi italized USCS group names denote the classificatio the general methodologies presented in ASTM D24	ented in cated ins were 87	DEPTH (ft)	SAMPLE TYPE	RECOVERY (ROD)	BLOW COUNTS (N VALUE)	20 PL F 20	40 60 - MC 40 60 ES CONTE	LL 80		
	<u>1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1</u>	Topsoil - 0.8 feet	_		0	1			20	40 60			
		· · · · · · · · · · · · · · · · · · ·	ean Clay, CL, Dry to Moist, Stiff (RESIDU)	JM)			SS 100	2-6-5 (11)	1				
 670 					 5								
							SS 100	5-5-4 (9)	4				
665					10								
· -		Brown, Sandy Sil	it, ML, Moist, Medium Stiff (RESIDUUM)				SS 100	3-4-4 (8)					
660					15	-							
· -		Brown, Silty Sand	d, SM, Moist, Loose (RESIDUUM)				SS 100	2-3-5 (8)					
			Bottom of boring at 16.5 feet.										

BORING NUMBER B-24 PAGE 1 OF 1

CLIEN	CLIENT _Transcontinental Gas Pipeline Company				PROJECT NAME Compressor Station 165								
PROJ	ECT N	UMBER <u>341-132</u>	PROJECT LOCATION Pittsylvania County, Virginia										
DATE	STAR	TED 6/25/24	GROUND ELEVATION 674 ft BACKFILL Auger Cuttings										
SOIL	SAMPL	ING CONTRACTOR	WATER LEVELS:										
SOIL	SAMPL	ING METHOD HS	AT END OF SOIL SAMPLING Dry										
1	REP _C		AT END OF CORING Not Applicable										
NOTE	S Ele	vation estimated fron	m existing topography.	24hrs <i>A</i>	FTER I	DRILLING	<u> D</u>	ry					
				DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL					
ELEVATION (ft)	GRAPHIC LOG	Soil classifications ASTM D2488, ea	ated s were										
EVA]	P. P	hereon, if any. Cap derived using						20 40 60 80					
	lo							☐ FINES CONTENT (%) ☐					
	17. 14 14.	Topsoil 0.4 feet			0	1			20	40	60	80	
			ean Clay, CL, Dry, Stiff (RESIDUUM)			SS 1	100	2-6-5 (11)					
ļ .					L -						i	i	
L .													
670													
					5						i	i	
		Reddish Brown,	Sandy Silt, ML, Moist, Stiff to Very Stiff (F	RESIDUUM)		√ ss	100	4-4-5					
					-	2	100	(9)	T				
-					-	<u> </u>							
-					-					i	Ė		
_ 665					-	_			\		i		
-					10				\			<u>:</u>	
-							100	8-10-7 (17)	\				
								(11)					
											i	i	
660													
					15								
-					13	√ ss	400	4-6-6			-:-	÷	
-					-	4	100	(12)	^		Ė		
			Bottom of boring at 16.5 feet.										
										:	:		
4.									:		i	:	
0/14/2									i	i	i		
5													
5 5 1										•			
<u> </u>									i	i	i		
20											•		
32 LO													
7-1-1 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-													
5											:		
CEC COSTOMILOG 341-132 LOGS.GPJ CEC.GDI 10/14/24									:		:	:	
1800									:		i		
										i	Ė		