



Unconfined Compressive Strength Test
AASHTO T 208
ODOT - Office of Geotechnical Engineering

Lab No.	OGE Geotechnical Lab
Report Date:	5/1/25
Tech:	awillis

Site Name	VIN-278-2.79	Soil Description	A-4a	Sample No.	4
Job Ref	vin-278-2.79~pid120337	Top Depth (ft)	8.00	Sample Type	ST
Borehole/Pit No.	B-002-0-25	Bottom Depth (ft)	10.00	KeyLAB ID	OGEL202505018
Specimen Reference	2025-006-080	Ground Elevation (ft)	704.4	Latitude	39.274852
Specimen Depth (ft)	8.7	Date started	5/1/25	Longitude	-82.389457

Specimen Description	sandy silt, stiff, grayish brown, some clay, trace stone fragments, slightly organic, moist.
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Initial Conditions

Height	in	5.77
Diameter	in	2.81
Bulk Density	pcf	116.98
Water Content	%	29
Dry Density	pcf	93.45
Void Ratio		0.783
Degree of Saturation	%	86

Rate of Strain applied		1.0
At failure	Axial Strain	% - 7.4
	Maximum Stress	psf 714.7

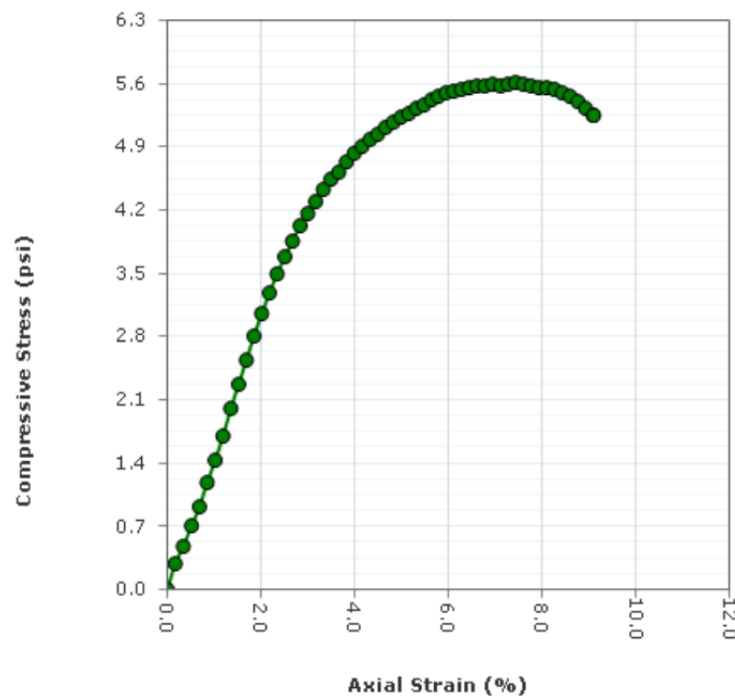
Front



Side



Stress-Strain Graph



Remarks

Approved

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Unconfined Compressive Strength Test
AASHTO T 208
ODOT - Office of Geotechnical Engineering

Lab No.	OGE Geotechnical Lab
Report Date:	5/1/25
Tech:	awillis

Site Name	VIN-278-2.79	Soil Description	A-6a	Sample No.	3
Job Ref	vin-278-2.79~pid120337	Top Depth (ft)	6.00	Sample Type	ST
Borehole/Pit No.	B-003-0-25	Bottom Depth (ft)	8.00	KeyLAB ID	OGE202505012
Specimen Reference	2025-006-084	Ground Elevation (ft)	704.9	Latitude	39.274905
Specimen Depth (ft)	7.2	Date started	5/1/25	Longitude	-82.389507

Specimen Description	silt and clay, stiff, some sand, trace stone fragments
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Initial Conditions

Height	in	5.77
Diameter	in	2.88
Bulk Density	pcf	126.29
Water Content	%	19
Dry Density	pcf	103.80
Void Ratio		0.605
Degree of Saturation	%	96

Rate of Strain applied

At failure	Axial Strain	%	8.9
	Maximum Stress	psf	2210.4

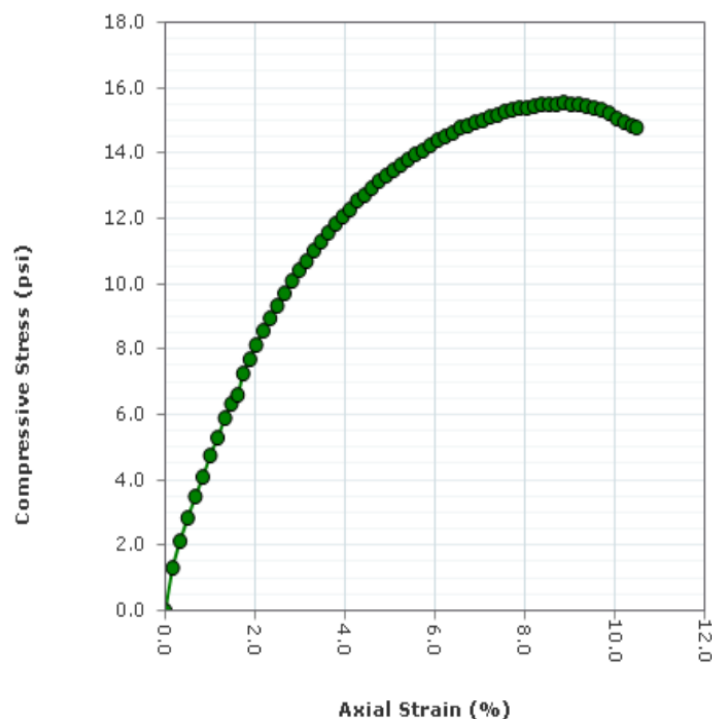
Front



Side



Stress-Strain Graph



Remarks

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Lab Sheet Reference :

WILDCAT DYNAMIC CONE LOG

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The Ohio Department of Transportation
Office of Geotechnical Engineering
1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 120337
DATE STARTED: 04-28-2025
DATE COMPLETED: 04-28-2025

HOLE #: D-001-0-25
CREW: M. Lewis, S. Daley, J. Kolberg
PROJECT: VIN-278-2.79
LAT/LONG: 39.275003, -82.389148
LOCATION: Vinton County

SURFACE ELEVATION: 705.0
WATER ON COMPLETION: Dry
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	3	13.3	•••	3	VERY LOOSE	SOFT
-	8	35.5	••••••••	10	LOOSE	STIFF
- 3 ft	2	8.9	••	2	VERY LOOSE	SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 4 ft	5	19.3	••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	••••	5	LOOSE	MEDIUM STIFF
-	15	57.9	••••••••••	16	MEDIUM DENSE	VERY STIFF
- 5 ft	9	34.7	••••••••	9	LOOSE	STIFF
-	15	57.9	••••••••••	16	MEDIUM DENSE	VERY STIFF
-	9	34.7	••••••••	9	LOOSE	STIFF
- 6 ft	5	19.3	••••	5	LOOSE	MEDIUM STIFF
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 2 m	5	19.3	••••	5	LOOSE	MEDIUM STIFF
- 7 ft	8	27.4	••••••	7	LOOSE	MEDIUM STIFF
-	21	71.8	••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	25	85.5	••••••••••••••	24	MEDIUM DENSE	VERY STIFF
- 8 ft						
-						
- 9 ft						
-						
- 3 m 10 ft						
-						
-						
- 11 ft						
-						
- 12 ft						
-						
- 4 m 13 ft						

NOTES: Latitude/Longitude/Elevation from District survey grade instruments.

PROJECT: VIN-278-2.79	DRILLING FIRM/OPERATOR: ODOT/M. Lewis	DRILL RIG: CME 75 Truck NWJ	STATION/OFFSET: 148+23, 6' Rt.	EXPLORATION ID B-002-0-25
TYPE: Culvert	LOGGING FIRM/LOGGER: ODOT/J. Kolberg	HAMMER: Automatic	ALIGNMENT: CL SR 278	
PID: 120337 CFN: 1998491 (P)	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 05/23/2024	ELEVATION: 713.1 (ft.) EOB: 21.5 ft.	PAGE
START: 04/28/2025 END: 04/28/2025	SAMPLING METHOD: SPT/NQ2	ENERGY RATIO (%): 89	LAT/LONG: 39.274852, -82.389457	1 OF 1

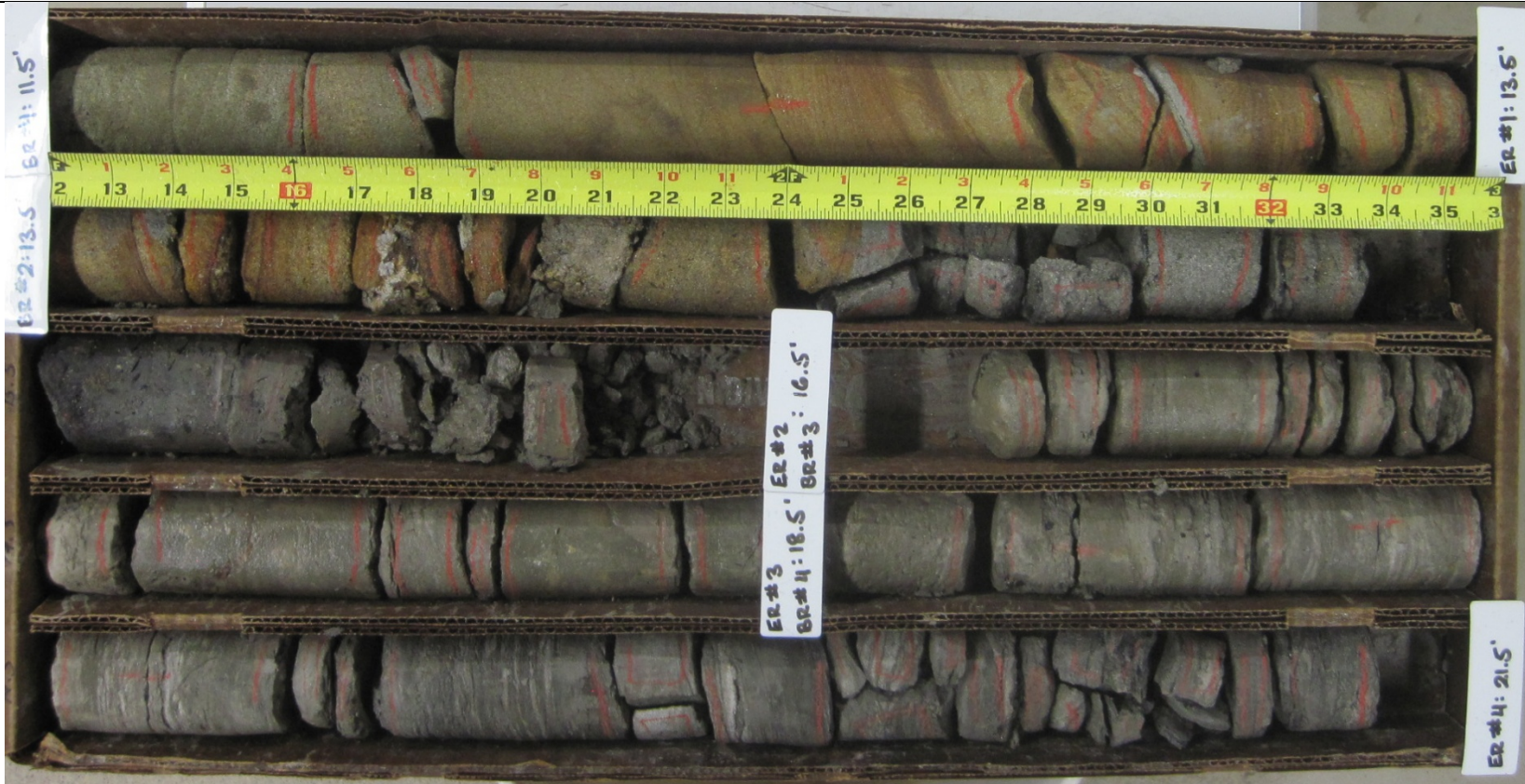
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NOTES: Latitude/Longitude/Elevation from District survey grade instruments.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: Collapsed to 7.7'; Auger cuttings mixed with 50 lbs. bentonite chips; Shoveled asphalt patch.

PROJECT: VIN-278-2.79		DRILLING FIRM/OPERATOR: ODOT/M. Lewis		DRILL RIG: CME 75 Truck NWJ		STATION/OFFSET: 148+44, 5' Lt.				EXPLORATION ID													
TYPE: Culvert		LOGGING FIRM/LOGGER: ODOT/S. Daley		HAMMER: Automatic		ALIGNMENT: CL SR 278				B-003-0-25													
PID: 120337 CFN: 1998491 (P)		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 05/23/2024		ELEVATION: 712.1 (ft.) EOB: 29.5 ft.				PAGE													
START: 04/29/2025 END: 04/29/2025		SAMPLING METHOD: SPT/NQ2		ENERGY RATIO (%): 89		LAT/LONG: 39.274905, -82.389507				1 OF 1													
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS		SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL		
ASPHALT 13.0 IN			711.0																				
BASE 5.0 IN			710.6																				
SILT AND CLAY, stiff, brown and gray, some stone fragments, little sand, wet.						5	4	3	10	28	SS-1	1.50	32	5	14	21	28	33	20	13	16	A-6a(4)	
@3.5'; moist																							
						2	2		6	33	SS-2	1.00	-	-	-	-	-	-	-	22	A-6a (V)		
@6.0'; stiff, some sand, trace stone fragments				▽ 705.1																			
@7.2 - 7.7'; QU = 2,210 PSF @ 8.9% STRAIN; γd = 103.80 PCF																							
			703.6							92	ST-3	1.50	8	3	19	28	42	34	19	15	19	A-6a(9)	
SILT AND CLAY, medium stiff, gray and brown, little sand, trace stone fragments, moderately organic (loi = 5.7%) with wood and roots, wet.						2	2		6	78	SS-4	0.50	1	1	14	46	38	35	22	13	36	A-6a(9)	
			701.1																				
SILT AND CLAY, medium stiff, grayish brown, some sand, trace stone fragments, moist to wet.				W 700.9																			
						2	2																
									7	78	SS-5	1.00	2	3	26	42	27	31	20	11	28	A-6a(7)	
			698.6																				
STONE FRAGMENTS WITH SAND AND SILT, medium dense, brown, little clay, wet.						3	4		13	50	SS-6	2.00	38	5	25	18	14	25	18	7	24	A-2-4(0)	
						5	3		12	44	SS-7	1.00	-	-	-	-	-	-	-	14	A-2-4 (V)		
			693.6	TR																			
SANDSTONE, Gray and black, highly weathered to moderately weathered, weak to slightly strong, fine grained to medium grained, laminated to very thin bedded, micaceous, argillaceous, carbonaceous, joint, highly fractured to fractured, narrow, slightly rough; blocky, fair, RQD 16%, REC 100%.						18			-		SS-8		-	-	-	-	-	-	-	7	Rock (V)		
@21.7 - 22.0'; coal						50/3"																	
						21																	
CLAYSTONE, Gray, highly weathered to moderately weathered, very weak, very thin to thin bedded, joint, highly fractured to fractured, narrow, slightly rough; blocky, poor, RQD 24%, REC 65%.			690.0							100	RC-1											Rock (V)	
@25.1 - 25.4'; δ = 153 pcf; Qu = 73 psi							0			19	RC-2											Rock (V)	
@25.1 - 26.2'; sandstone																							
@27.5 - 27.8'; sandstone																							
@29.0 - 29.5'; sandstone			682.6	EOB			22			100	RC-4											Rock (V)	
NOTES: Latitude/Longitude/Elevation from District survey grade instruments.																							
ABANDONMENT METHODS, MATERIALS, QUANTITIES: Collapsed to 14.8'; Auger cuttings mixed with 100 lbs. bentonite chips; Shoveled asphalt patch.																							

B-002-0-25



Run #:	Depth		Recovery		RQD	
RC-1	11.5'	13.5'	24/24	100%	14/24	58%
RC-2	13.5'	16.5'	31/36	86%	0/36	0%
RC-3	16.5'	18.5'	21/24	88%	4/24	17%
RC-4	18.5'	21.5'	34/36	94%	8/36	22%

VIN-278-2.79 PID 120337

B-003-0-25



Run #:	Depth		Recovery		RQD	
RC-1	19.5'	21.5'	24/24	100%	5/24	21%
RC-2	21.5'	24.5'	7/36	19%	0/36	0%
RC-3	24.5'	26.5'	22/24	92%	13/24	54%
RC-4	26.5'	29.5'	36/36	100%	8/36	22%

VIN-278-2.79 PID 120337