

*NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT*

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***SUBSURFACE INVESTIGATION***

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*APPENDIX B  
BORE LOGS*

*REFERENCE: I-5987B*

*PROJECT: 47533*

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 0		TIP I-5987B		COUNTY ROBESON		GEOLOGIST SWARTLEY, J.										
SITE DESCRIPTION N/A							GROUND WTR (ft)									
BORING NO. L_80060RT		STATION 800+58		OFFSET 55 ft RT		ALIGNMENT -L-										
COLLAR ELEV. 146.3 ft		TOTAL DEPTH 20.2 ft		NORTHING 403,226		EASTING 2,010,323										
DRILL RIGHAMMER EFF./DATE SME9403 CME-550X 80% 12/03/2020				DRILL METHOD Mud Rotary		HAMMER TYPE Automatic										
DRILLER N/A		START DATE 10/01/21		COMP. DATE 10/01/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	L O G	SOIL AND ROCK DESCRIPTION			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV. (ft)	DEPTH (ft)		
150																
	146.3	0.0												146.3	GROUND SURFACE	0.0
145			2	2	2							M		144.3	ROADWAY EMBANKMENT VERY SOFT ORANGE TAN SANDY CLAY (A-6), MOIST	2.0
	142.6	3.7														
	140.6	5.7	2	1	1							Sat.		140.8	ALLUVIAL VERY LOOSE TAN CLAYEY SAND, SAT.	5.5
140																
	137.6	8.7	3	2	1							Sat.			NO RECOVERY	
	135.6	10.7												137.8	VERY LOOSE GRAY SILTY SAND (A-2-4), SAT.	8.5
135			4	3	1							Sat.		135.8	SAT.	10.5
	132.6	13.7												134.3	LOOSE GRAY FINE SAND (A-3), SAT.	12.0
130			4	5	6							Sat.			UNDIVIDED COASTAL PLAIN LOOSE GRAY FINE SAND (A-3)	
	127.6	18.7	3	3	4							Sat.		126.1	Boring Terminated at Elevation 126.1 ft LOOSE SAND	20.2

NCDOT BORE DOUBLE I5987B\_GEO\_RDWY\_SEC3.GPJ NC\_DOT.GDT 12/16/21

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
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GEOTECHNICAL ENGINEERING UNIT  
SUBSURFACE INVESTIGATION  
APPENDIX C  
LABORATORY RESULTS

REFERENCE: I-5987B

PROJECT: 47533

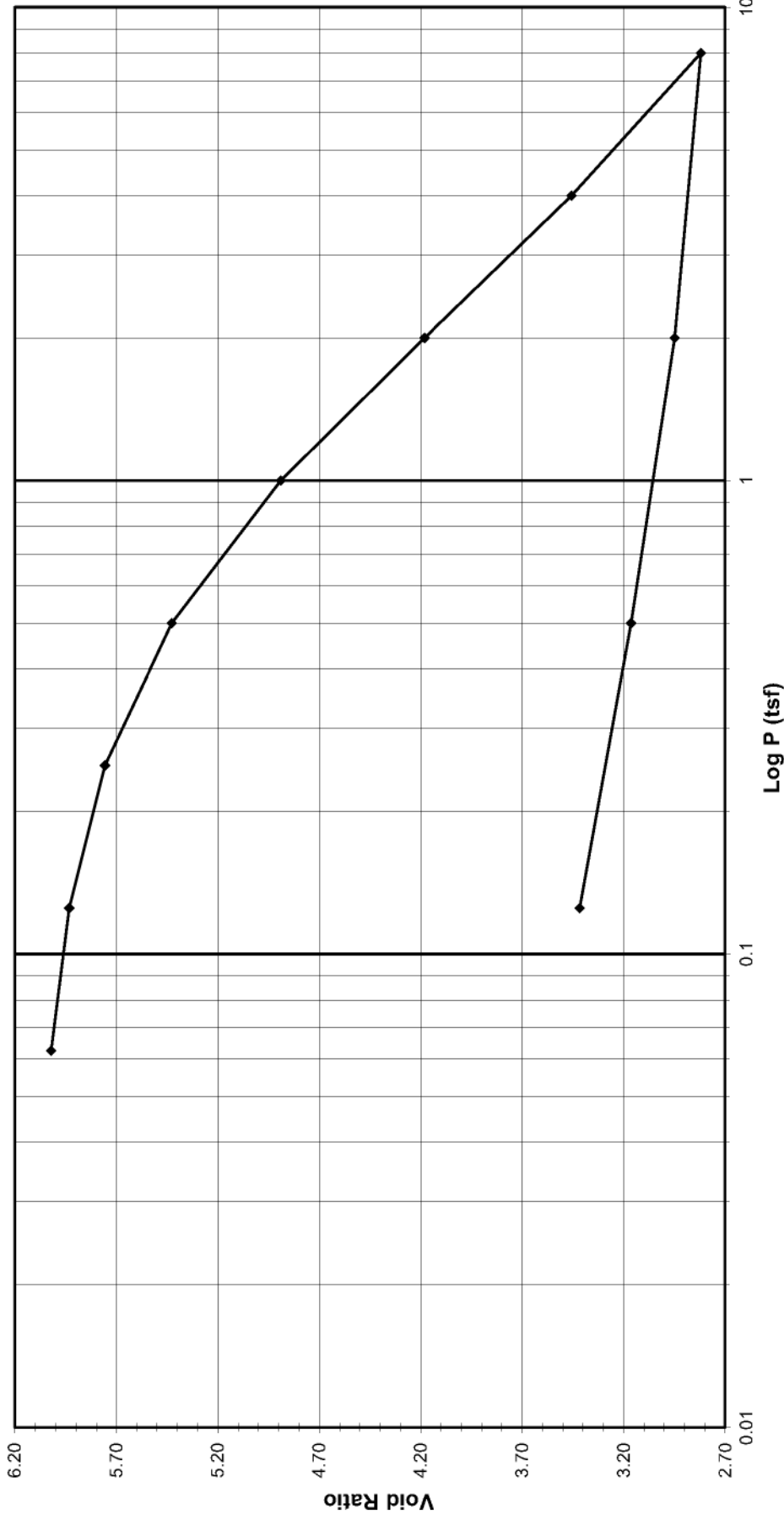
### ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client S&ME, Inc.  
 Client Reference 6235-20-008 (01)  
 Project No. R-2021-262-001  
 Lab ID R-2021-262-001-001

Boring No. L\_79800 LT 2  
 Depth (ft) 5.7-5.8  
 Sample No. **ST-G1**  
 Visual Description Dk Brown Sand with Organics

**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



page 1 of 4 DCN: CT-24E Date: 5/3/12 Revision: 6 Tested By 129-07-0411 Date 10/5/2021 Approved By MPS Date 10/22/2021  
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### ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

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 Client Reference 6235-20-008 (01)  
 Project No. R-2021-262-001  
 Lab ID R-2021-262-001-001

Boring No. L\_79800 LT 2  
 Depth (ft) 5.7-5.8  
 Sample No. **ST-G1**  
 Visual Description Dk Brown Sand with Organics

**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R554

1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
Water Content		
Tare Number	CR-5	482
Wt. Tare & WS (g)	73.03	165.17
Wt. Tare & DS (g)	39.41	129.77
Wt. Water (g)	33.62	35.40
Wt. Tare (g)	22.92	97.58
Wt. DS (g)	16.49	32.19
Water Content (%)	203.88	109.97
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.6248
Sample Volume (cc)	80.44	50.26
Wt. Wet Sample + Ring (g)	196.99	168.35
Wt. of Ring (g)	104.32	104.32
Wt. of Wet Sample (g)	92.67	64.03
Wet Density (pcf)	71.89	79.51
Wet Density (g/cc)	1.15	1.27
Water Content (%)	203.88	109.97
Wt. of Dry Sample (g)	30.50	30.50
Dry Density (pcf)	23.66	37.87
Dry Density (g/cc)	0.38	0.61
Void Ratio	6.0692	3.4165
Saturation (%)	90.03	86.26
Specific Gravity	2.68	Assumed

Test Data Summary						
Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	0.37911	6.06920
0.0625	66.8	-0.3	67.2	25.229	0.38167	6.02172
0.125	194.1	0.6	193.5	24.908	0.38659	5.93241
0.25	446.6	4.7	441.9	24.278	0.39664	5.75681
0.5	919.7	11.3	908.3	23.093	0.41699	5.42709
1	1690.4	21.8	1668.7	21.162	0.45504	4.88958
2	2716.3	43.4	2672.9	18.611	0.51740	4.17969
4	3762.0	65.1	3696.8	16.010	0.60146	3.45583
8	4687.5	92.0	4595.6	13.727	0.70148	2.82051
2	4471.2	57.6	4413.6	14.190	0.67863	2.94916
0.5	4138.5	29.0	4109.5	14.962	0.64360	3.16411
0.125	3764.8	12.4	3752.4	15.869	0.60681	3.41653

page 2 of 4 DCN: CT-24E Date: 5/3/12 Revision: 6 Tested By 129-07-0411 Date 10/5/2021 Input Checked By GEM Date 10/22/2021  
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 Visual Description Dk Brown Sand with Organics

**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Coefficient of Consolidation (cm<sup>2</sup>/sec)**

— First Cycle Up

Tested By 129-07-0411 Date 10/5/2021 Input Checked By GEM Date 10/22/2021

DCN: CT-24E Date: 5/3/12 Revision: 6

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### ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client S&ME, Inc.  
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**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED

**Consolidometer No.** R554

**1 Division** = 0.0001 (in.)

**Sample Properties**

	Initial	Final
Water Content	CR-5	482
Tare Number	73.03	165.17
Wt. Tare & WS (g)	39.41	129.77
Wt. Tare & DS (g)	33.62	35.40
Wt. Water (g)	22.92	97.58
Wt. Tare (g)	16.49	32.19
Wt. DS (g)	203.88	109.97
Water Content (%)		

Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.625
Sample Volume (cc)	80.44	50.26
Wt. of Wet Sample + Ring (g)	196.99	168.35
Wt. of Ring (g)	104.32	104.32
Wt. of Wet Sample (g)	92.67	64.03
Wet Density (pcf)	71.89	79.51
Wet Density (g/cc)	1.15	1.27
Water Content (%)	203.88	109.97
Wt. of Dry Sample (g)	30.50	30.50
Dry Density (pcf)	23.66	37.87
Dry Density (g/cc)	0.38	0.61
Void Ratio	6.0692	3.4165
Saturation (%)	90.03	86.26
Specific Gravity	2.68	Assumed

Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	C <sub>v</sub> Test Data Summary	
			Corrected Dial Reading @ t <sub>50</sub> (cm)	Sample Height @ t <sub>50</sub> (cm)
0 - 0.0625	39.5	-0.3	39.8	2.530
0.0625 - 0.125	134.7	0.6	134.1	2.506
0.125 - 0.25	322.1	4.7	317.3	2.459
0.25 - 0.5	627.0	11.3	615.6	2.384
0.5 - 1.0	1272.1	21.8	1250.3	2.222
1.0 - 2.0	2080.7	43.4	2037.3	2.023
2.0 - 4.0	3162.0	65.1	3096.9	1.753
4.0 - 8.0	4157.6	92.0	4065.6	1.507
8.0 - 2.0	NA	57.6	NA	NA
2.0 - 0.5	NA	29.0	NA	NA
0.5 - 0.125	NA	12.4	NA	NA

Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
2.60	0.00202
5.00	0.00103
7.00	0.00071
10.00	0.00047
18.00	0.00023
14.00	0.00024
18.00	0.00014
17.50	0.00011
NA	NA
NA	NA
NA	NA

DCN: CT-24E Date: 5/3/12 Revision: 6

Tested By 129-07-0411

Date 10/5/2021 Input Checked By GEM

Date 10/22/2021

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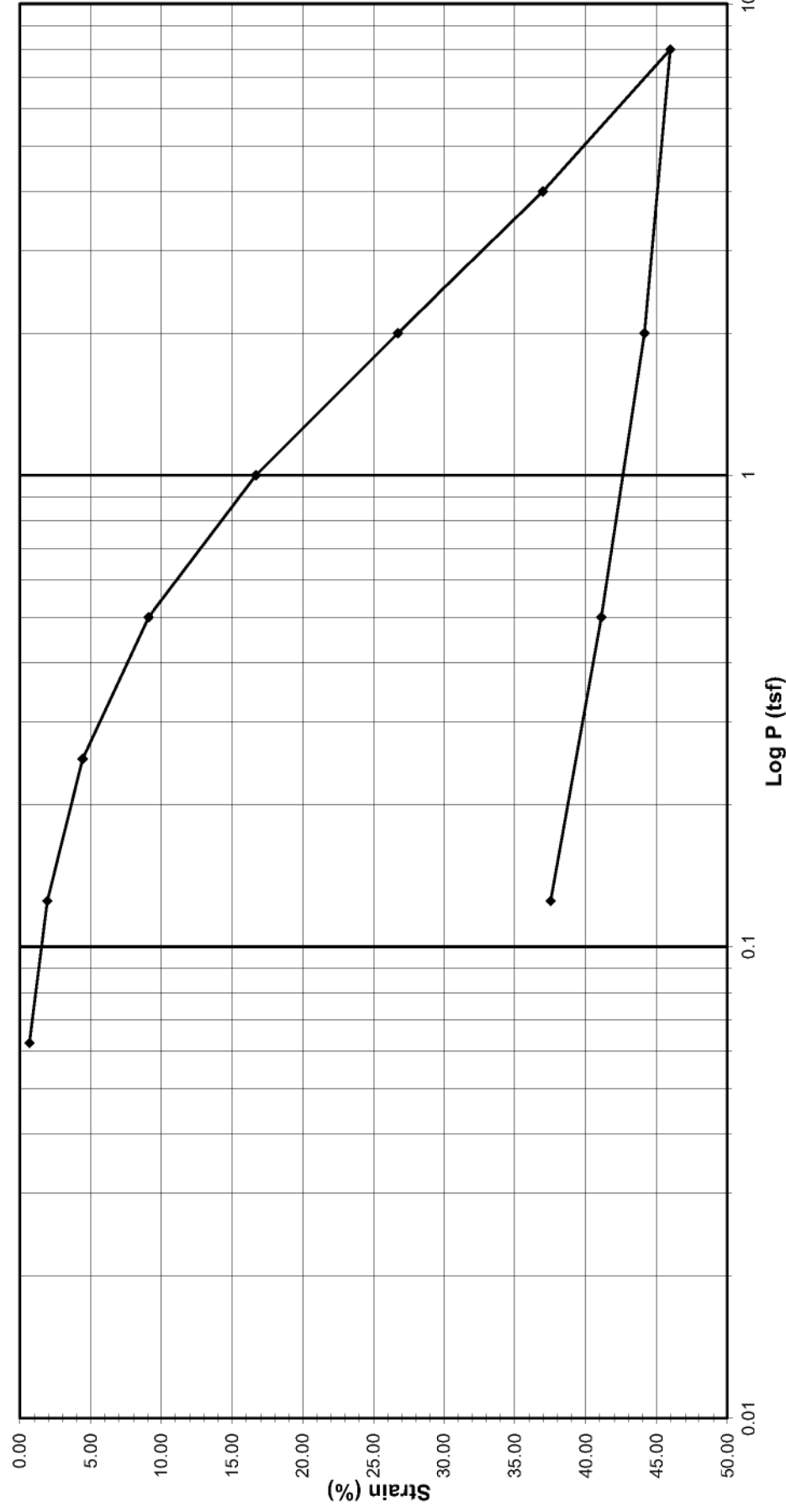
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Consolidometer No. R554

1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
<i>Water Content</i>		
Tare Number	CR-5	482
Wt. Tare & WS (g)	73.03	165.17
Wt. Tare & DS (g)	39.41	127.95
Wt. Water (g)	33.62	37.22
Wt. Tare (g)	22.92	97.58
Wt. DS (g)	16.49	30.37
Water Content (%)	203.88	122.56
<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	1.0000
Sample Volume (cc)	80.44	80.44
Wt. Wet Sample + Ring (g)	196.99	172.19
Wt. of Ring (g)	104.32	104.32
Wt. of Wet Sample (g)	92.67	67.87
Wet Density (pcf)	71.89	52.65
Wet Density (g/cc)	1.15	0.84
Water Content (%)	203.88	122.56
Wt. of Dry Sample (g)	30.50	30.50
Dry Density (pcf)	23.66	23.66
Dry Density (g/cc)	0.38	0.38
Void Ratio	6.0692	6.0692
Saturation (%)	90.03	54.12
Specific Gravity	2.68	Assumed

Test Data Summary						
Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Dry Density (g/cc)	Strain (%)
Seating	0	0	0	25.400	0.37911	0.00000
0.0625	66.8	-0.3	67.2	25.229	0.38167	0.67168
0.125	194.1	0.6	193.5	24.908	0.38659	1.93504
0.25	446.6	4.7	441.9	24.278	0.39664	4.41901
0.5	919.7	11.3	908.3	23.093	0.41699	9.08329
1	1690.4	21.8	1668.7	21.162	0.45504	16.68684
2	2716.3	43.4	2672.9	18.611	0.51740	26.72872
4	3762.0	65.1	3696.8	16.010	0.60146	36.96846
8	4687.5	92.0	4595.6	13.727	0.70148	45.95561
2	4471.2	57.6	4413.6	14.190	0.67863	44.13568
0.5	4138.5	29.0	4109.5	14.962	0.64360	41.09511
0.125	3764.8	12.4	3752.4	15.869	0.60681	37.52433

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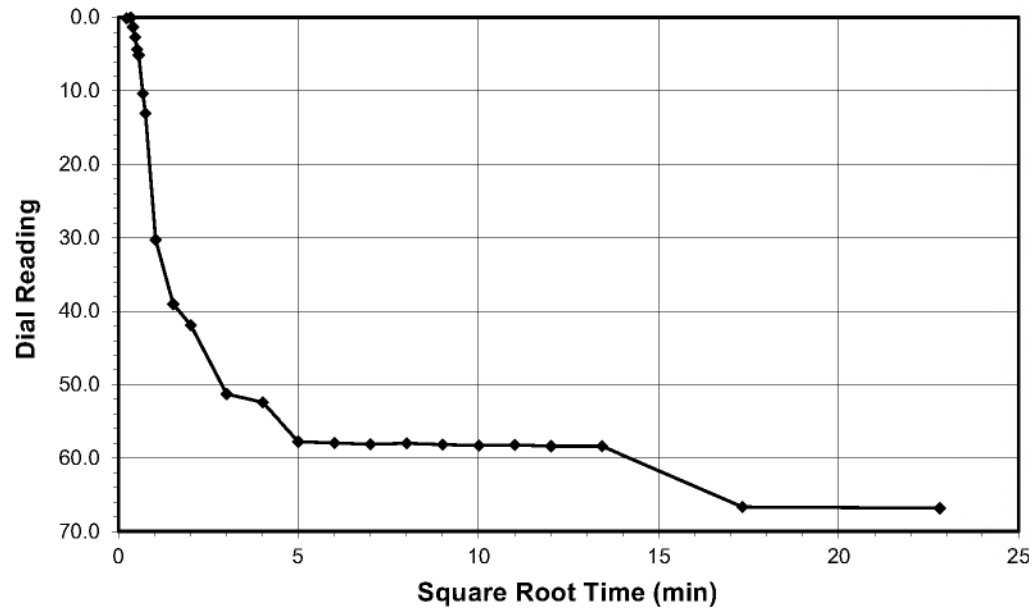
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**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client: S&ME, Inc. Boring No.: L\_79800 LT 2  
 Client Project: 6235-20-008 (01) Depth (ft): 5.7-5.8  
 Project No.: R-2021-262-001 Sample No.: **ST-G1**  
 Lab ID: R-2021-262-001-001 Visual Description: Dk Brown Sand with Organics

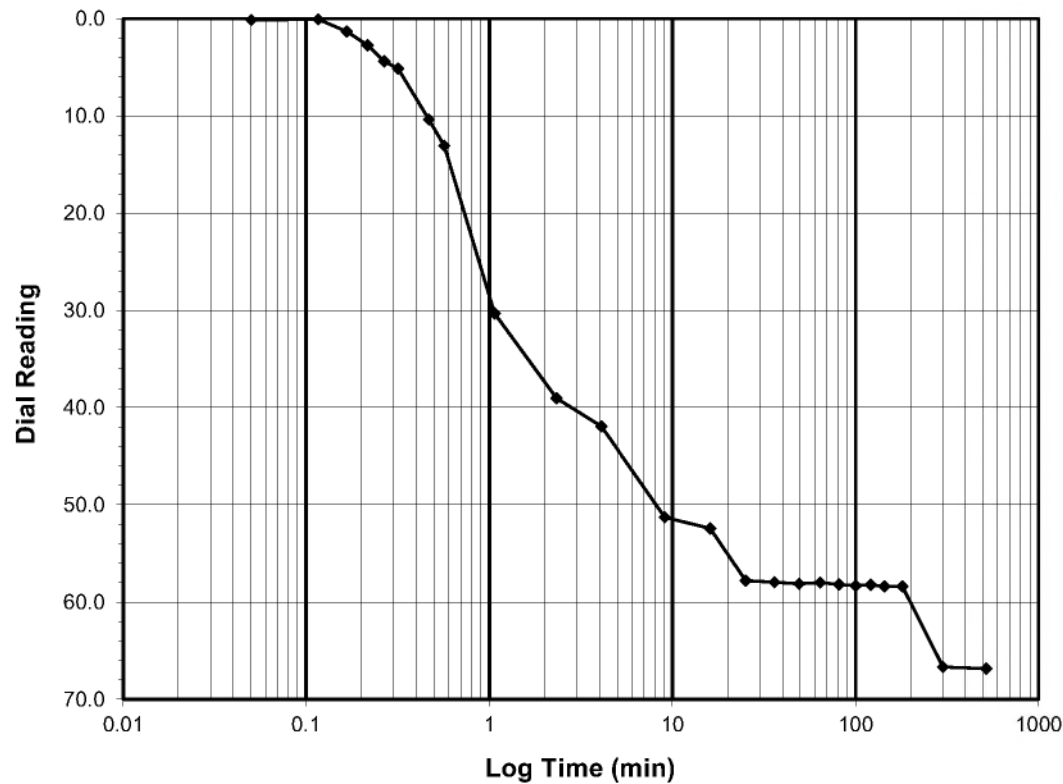
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0 - 0.0625**  
 Final Reading (div) **66.8**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 10/5/2021  
 Start Time 7:43:01

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	0.1
0.12	0.1
0.17	1.3
0.22	2.7
0.27	4.4
0.32	5.1
0.47	10.4
0.57	13.1
1.07	30.3
2.32	39.0
4.07	41.9
9.07	51.3
16.07	52.4
25.07	57.8
36.08	58.0
49.08	58.1
64.08	58.0
81.08	58.2
100.08	58.3
121.08	58.2
144.08	58.4
180.08	58.4
300.08	66.7
520.08	66.8



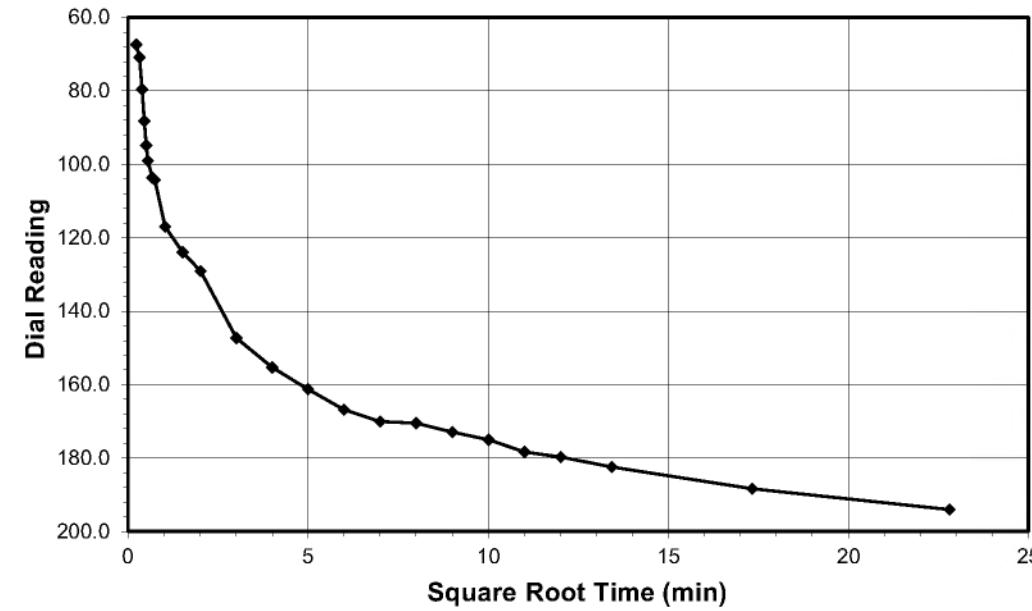
Tested By 129-07-0411 Date 10/5/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client: S&ME, Inc. Boring No.: L\_79800 LT 2  
 Client Project: 6235-20-008 (01) Depth (ft): 5.7-5.8  
 Project No.: R-2021-262-001 Sample No.: **ST-G1**  
 Lab ID: R-2021-262-001-001 Visual Description: Dk Brown Sand with Organics

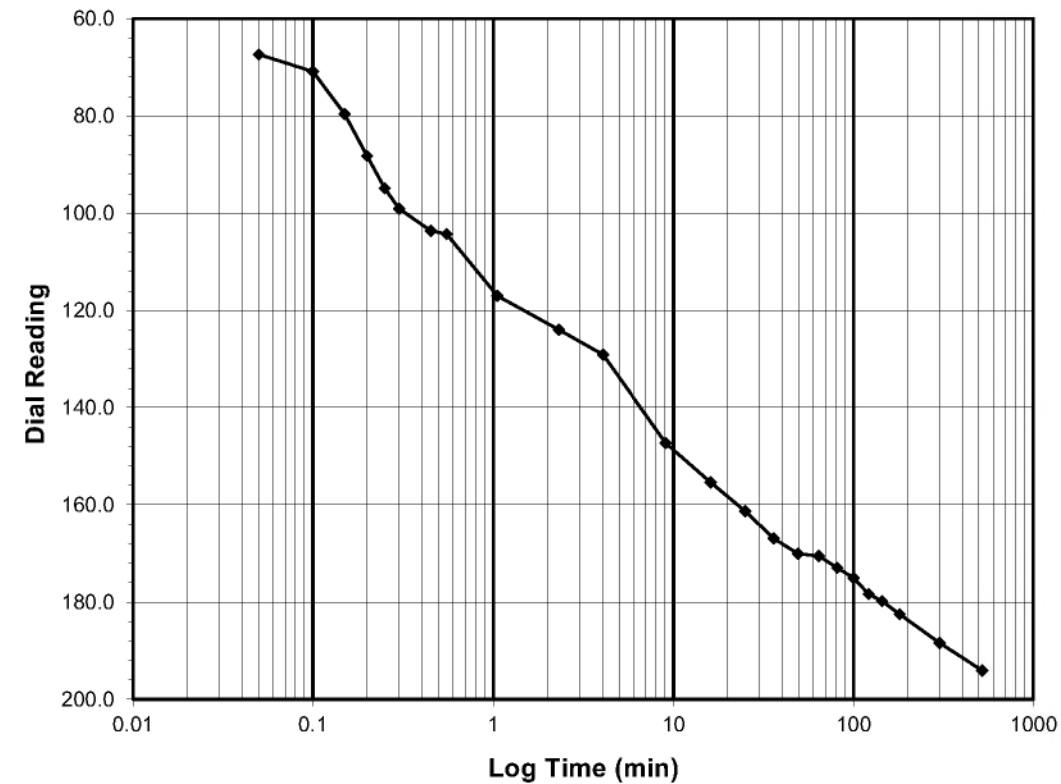
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.0625 - 0.125**  
 Final Reading (div) **194.1**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 10/5/2021  
 Start Time 16:43:11

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>66.8</b>
0.05	67.4
0.10	70.9
0.15	79.6
0.20	88.2
0.25	94.9
0.30	99.1
0.45	103.7
0.55	104.3
1.05	117.0
2.30	124.0
4.05	129.1
9.05	147.3
16.05	155.4
25.05	161.3
36.05	166.9
49.05	170.1
64.05	170.6
81.07	172.9
100.07	175.1
121.07	178.4
144.07	179.8
180.07	182.5
300.07	188.4
520.07	194.1



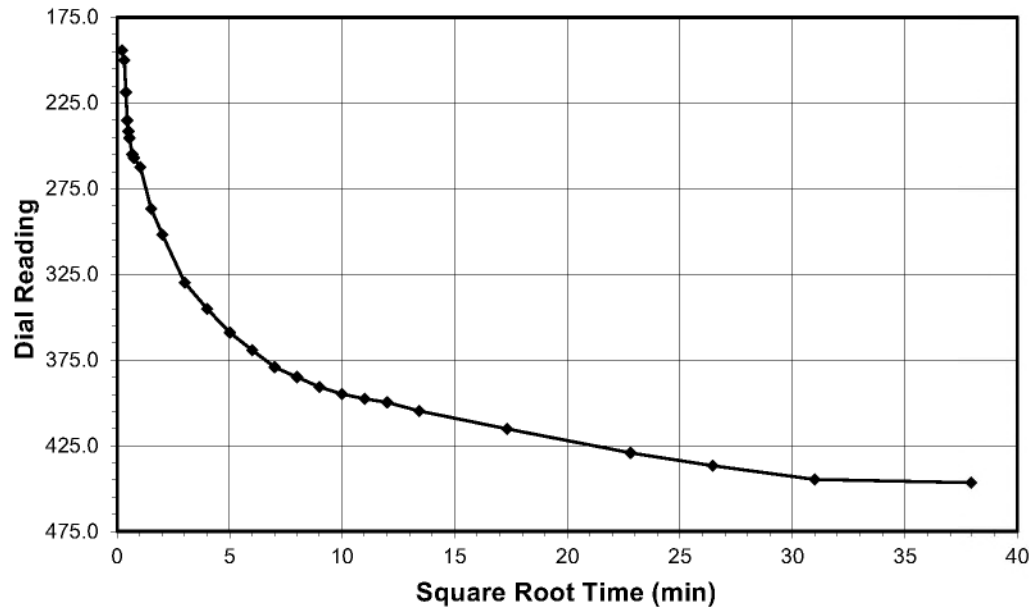
Tested By 129-07-0411 Date 10/5/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client: S&ME, Inc. Boring No.: L\_79800 LT 2  
 Client Project: 6235-20-008 (01) Depth (ft): 5.7-5.8  
 Project No.: R-2021-262-001 Sample No.: **ST-G1**  
 Lab ID: R-2021-262-001-001 Visual Description: Dk Brown Sand with Organics

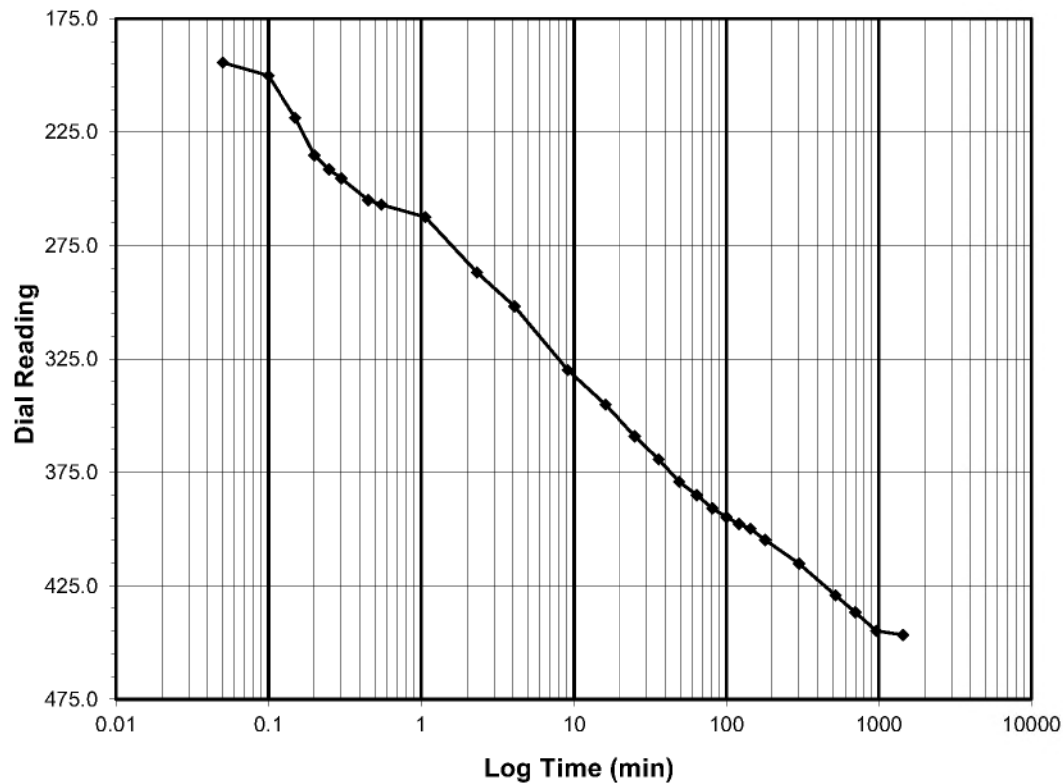
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.125 - 0.25  
 Final Reading (div) 446.6  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 10/6/2021  
 Start Time 1:43:19

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>194.1</b>
0.05	194.3
0.10	200.1
0.15	218.7
0.20	235.2
0.25	241.4
0.30	245.4
0.45	255.0
0.55	257.0
1.07	262.5
2.32	286.8
4.07	301.9
9.07	329.9
16.07	345.1
25.07	359.1
36.07	369.2
49.07	379.1
64.07	385.0
81.07	390.8
100.07	394.8
121.07	397.7
144.07	399.8
180.07	404.8
300.08	415.2
520.08	429.2
700.08	436.7
960.08	444.8
1440.08	446.6



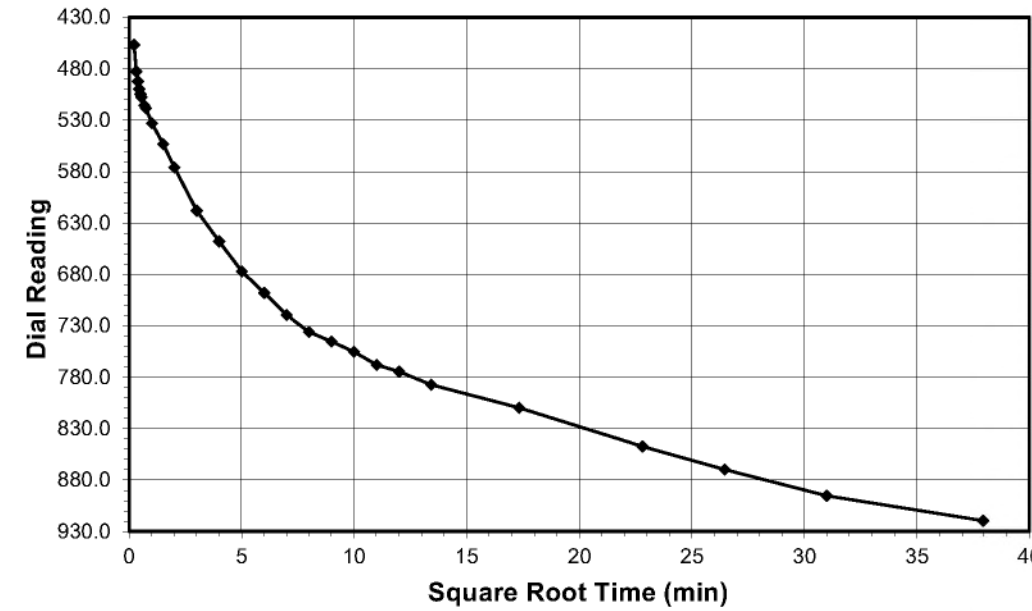
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AASHTO T-216



Client: S&ME, Inc. Boring No.: L\_79800 LT 2  
 Client Project: 6235-20-008 (01) Depth (ft): 5.7-5.8  
 Project No.: R-2021-262-001 Sample No.: **ST-G1**  
 Lab ID: R-2021-262-001-001 Visual Description: Dk Brown Sand with Organics

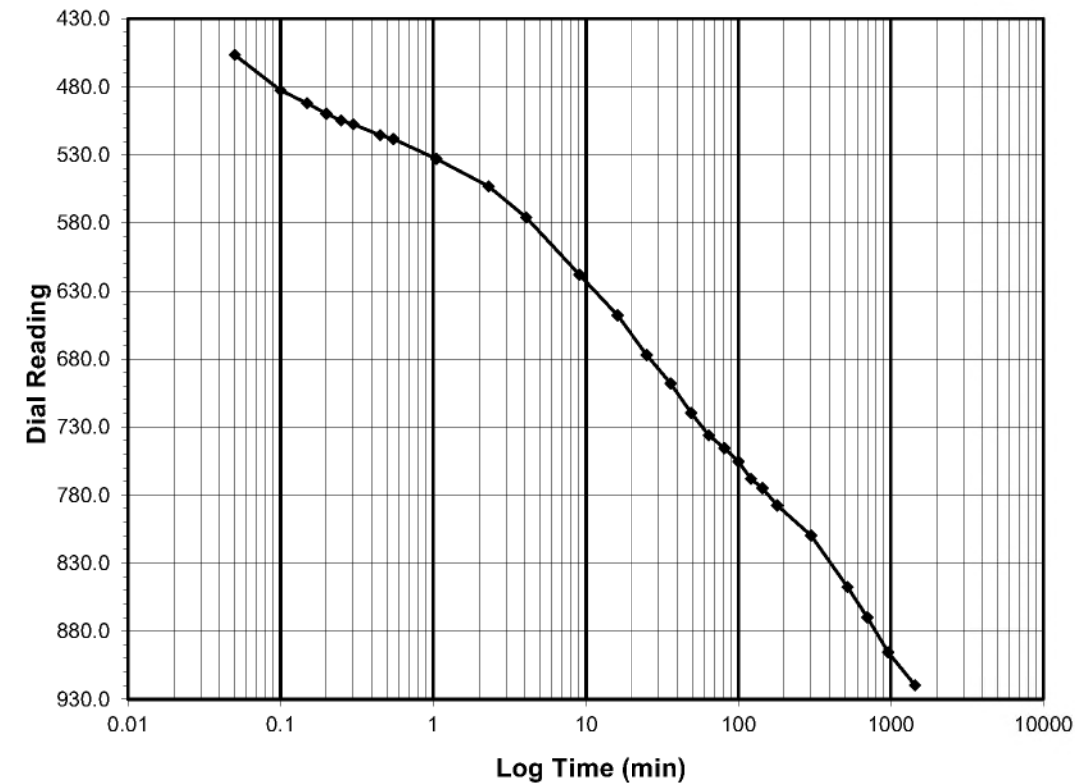
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25 - 0.5  
 Final Reading (div) 919.7  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 10/7/2021  
 Start Time 1:43:45

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>446.6</b>
0.05	456.7
0.10	482.7
0.15	492.2
0.20	499.9
0.25	504.8
0.30	507.6
0.45	515.5
0.55	518.4
1.05	533.0
2.30	553.2
4.05	575.9
9.05	618.2
16.05	647.9
25.05	677.1
36.07	697.9
49.07	719.6
64.07	736.0
81.07	745.4
100.07	755.5
121.07	768.1
144.07	774.8
180.08	787.5
300.08	809.7
520.08	847.6
700.08	869.9
960.08	895.4
1440.08	919.7



Tested By 129-07-0411 Date 10/7/2021 Checked By GEM Date 10/22/2021

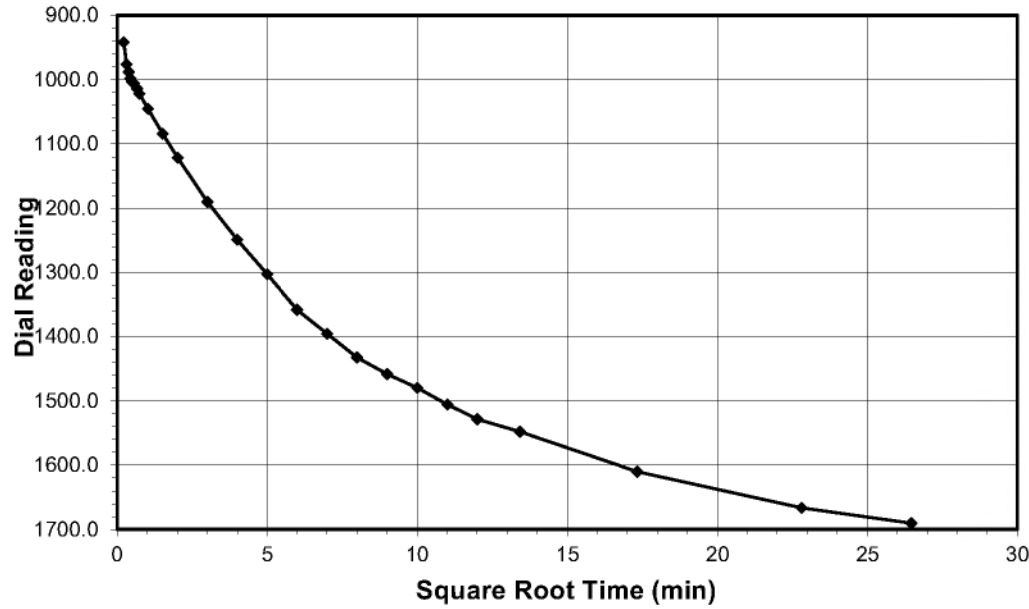


**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. ST-G1  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

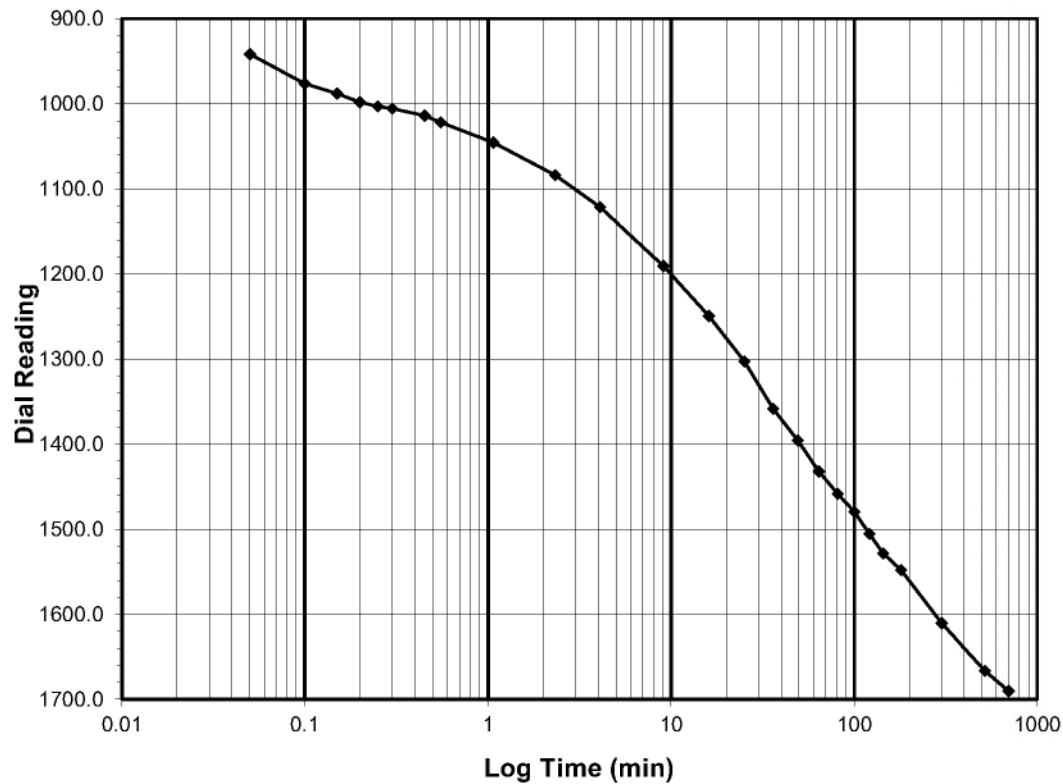
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5 - 1.0  
 Final Reading (div) 1690.4  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 10/8/2021  
 Start Time 1:44:08

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>919.7</b>
0.05	941.7
0.10	976.4
0.15	988.2
0.20	998.2
0.25	1003.1
0.30	1005.7
0.45	1013.9
0.55	1022.1
1.07	1045.7
2.32	1084.1
4.07	1121.7
9.07	1190.6
16.07	1249.3
25.07	1303.0
36.07	1358.4
49.07	1395.6
64.07	1432.3
81.07	1458.5
100.07	1479.8
121.07	1505.7
144.07	1528.7
180.07	1548.3
300.07	1610.4
520.07	1666.6
700.07	1690.4

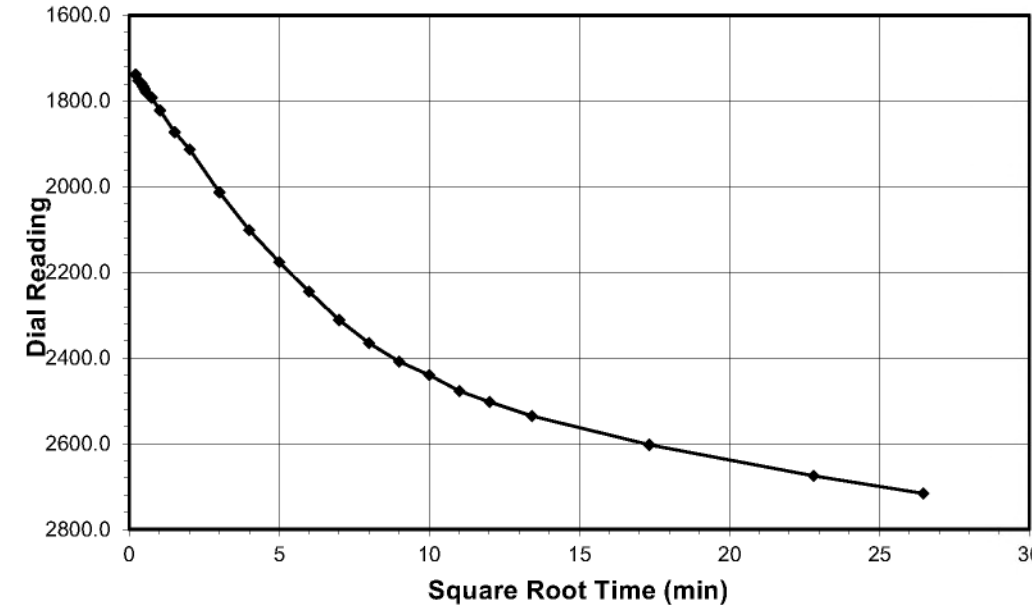


**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. ST-G1  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

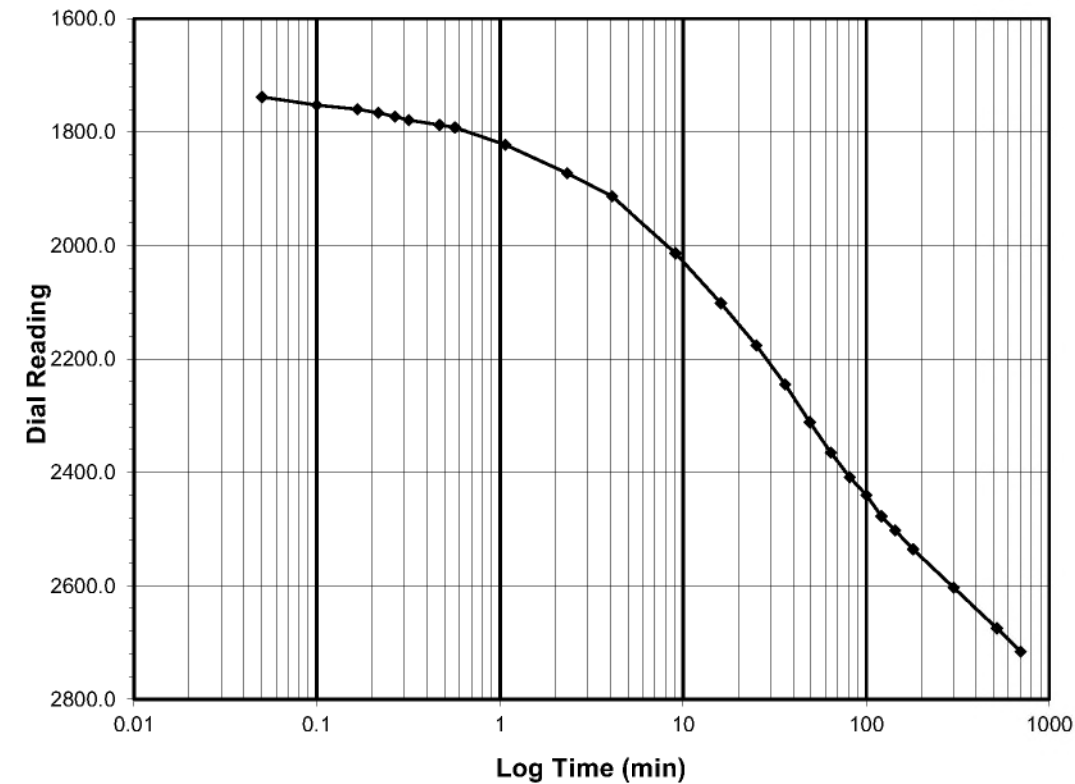
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0 - 2.0  
 Final Reading (div) 2716.3  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 10/8/2021  
 Start Time 13:44:24

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1690.4</b>
0.05	1738.0
0.10	1752.4
0.17	1759.5
0.22	1765.9
0.27	1772.5
0.32	1779.0
0.47	1787.3
0.57	1792.1
1.07	1822.1
2.32	1872.6
4.07	1912.9
9.07	2013.3
16.07	2101.4
25.07	2176.0
36.07	2245.2
49.07	2311.3
64.08	2365.1
81.08	2408.2
100.08	2440.0
121.08	2477.3
144.08	2502.4
180.08	2535.5
300.08	2603.0
520.08	2675.0
700.08	2716.3



Tested By 129-07-0411 Date 10/8/2021 Checked By GEM Date 10/22/2021

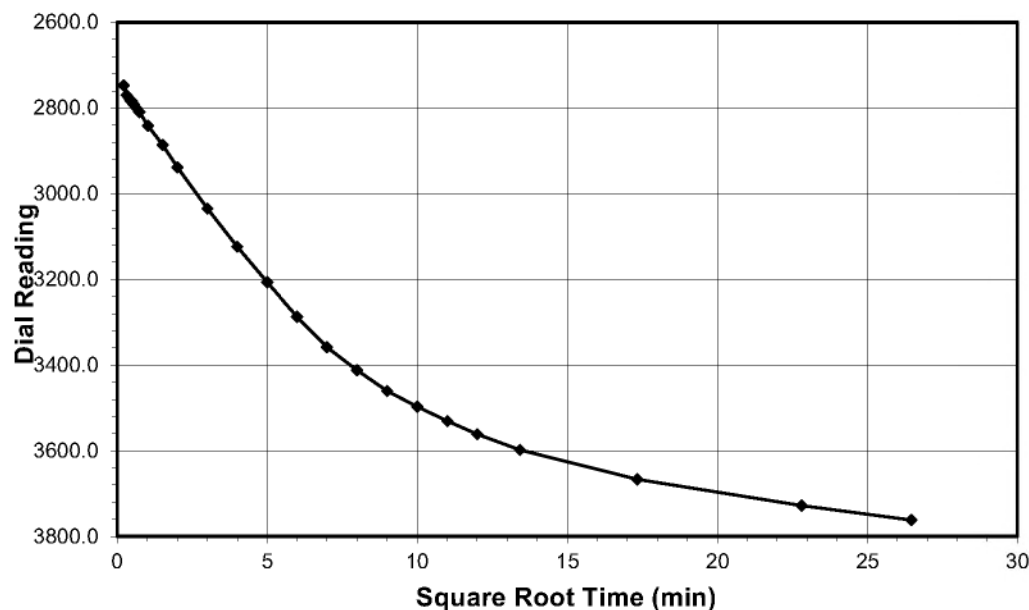
Tested By 129-07-0411 Date 10/8/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



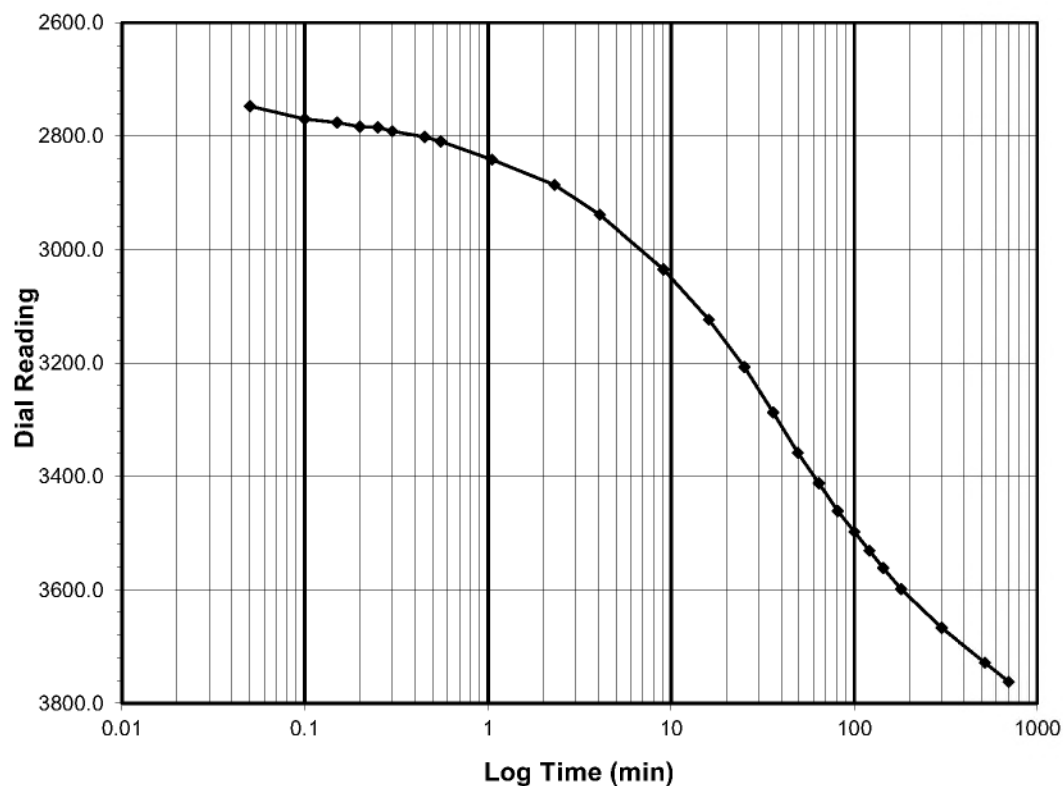
Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. ST-G1  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0 - 4.0  
 Final Reading (div) 3762.0  
 Consolidometer No. R554  
 1 Division (in) 0.0001  
 Start Date 10/9/2021  
 Start Time 1:44:37

Elapsed Time (min)	Dial Reading (div)
Initial	2716.3
0.05	2747.3
0.10	2769.8
0.15	2776.3
0.20	2783.3
0.25	2784.5
0.30	2791.0
0.45	2801.6
0.55	2809.2
1.05	2841.6
2.30	2886.0
4.05	2938.8
9.05	3035.0
16.05	3123.6
25.05	3206.9
36.05	3287.4
49.05	3358.2
64.07	3412.0
81.07	3460.9
100.07	3497.4
121.07	3530.7
144.07	3561.5
180.07	3598.4
300.07	3667.0
520.07	3728.2
700.07	3762.0



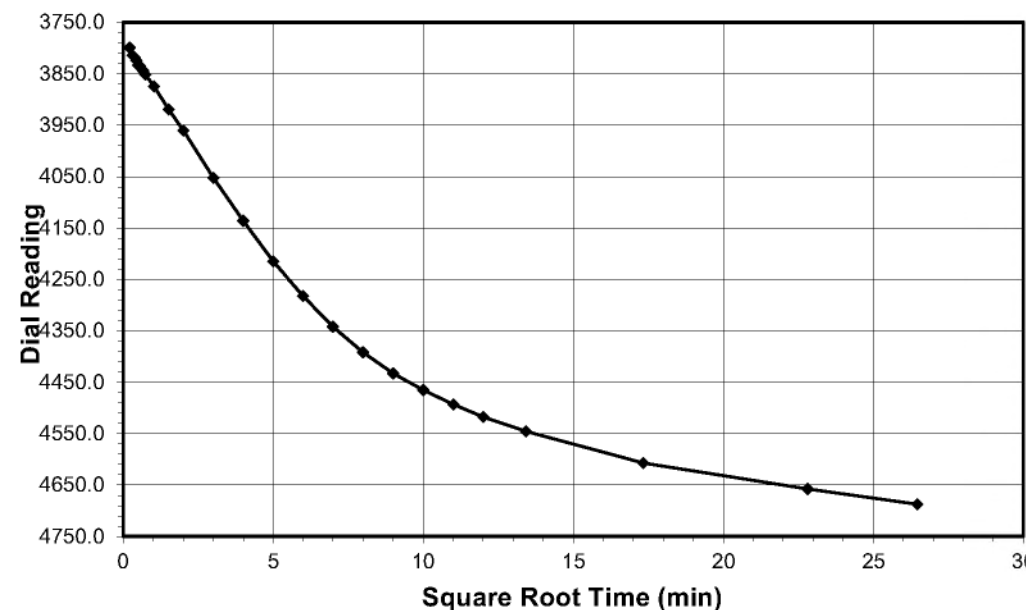
Tested By 129-07-0411 Date 10/9/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



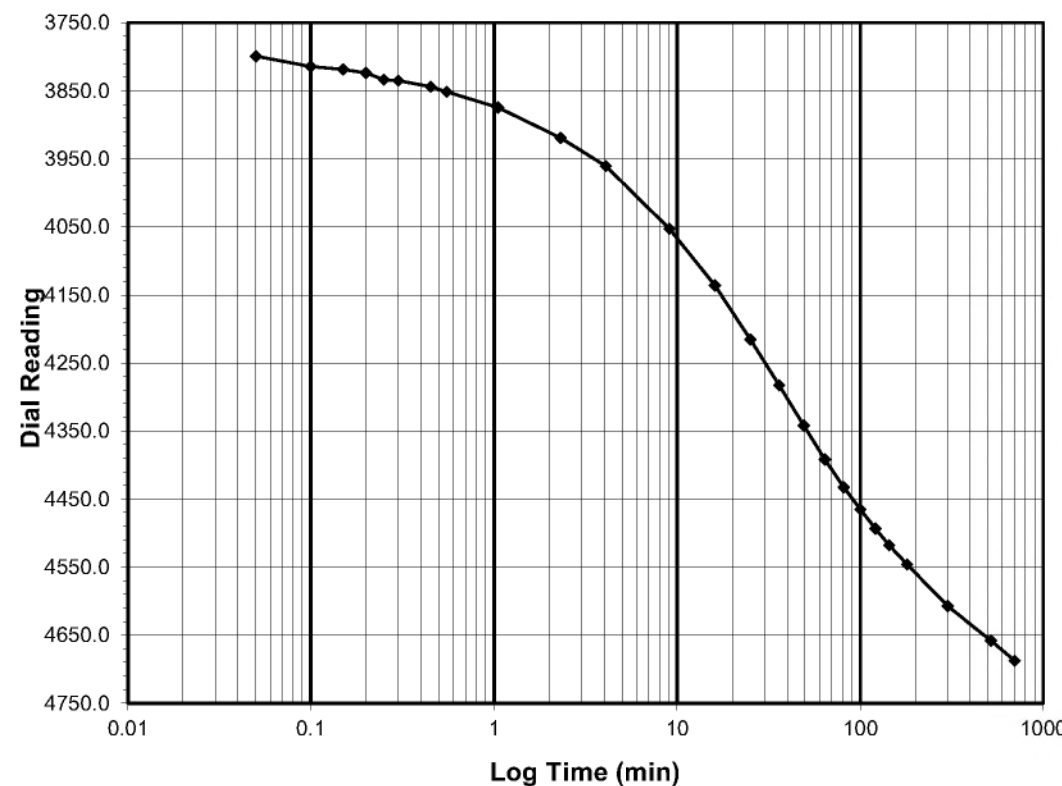
Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. ST-G1  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0 - 8.0  
 Final Reading (div) 4687.5  
 Consolidometer No. R554  
 1 Division (in) 0.0001  
 Start Date 10/9/2021  
 Start Time 13:44:53

Elapsed Time (min)	Dial Reading (div)
Initial	3762.0
0.05	3799.2
0.10	3814.4
0.15	3818.6
0.20	3823.8
0.25	3833.7
0.30	3834.9
0.45	3844.1
0.55	3851.8
1.05	3874.7
2.30	3919.1
4.05	3960.6
9.05	4052.6
16.05	4136.1
25.05	4215.3
36.05	4282.5
49.05	4341.9
64.05	4391.7
81.07	4432.9
100.07	4465.1
121.07	4493.3
144.07	4517.8
180.07	4545.9
300.07	4607.2
520.07	4657.9
700.07	4687.5



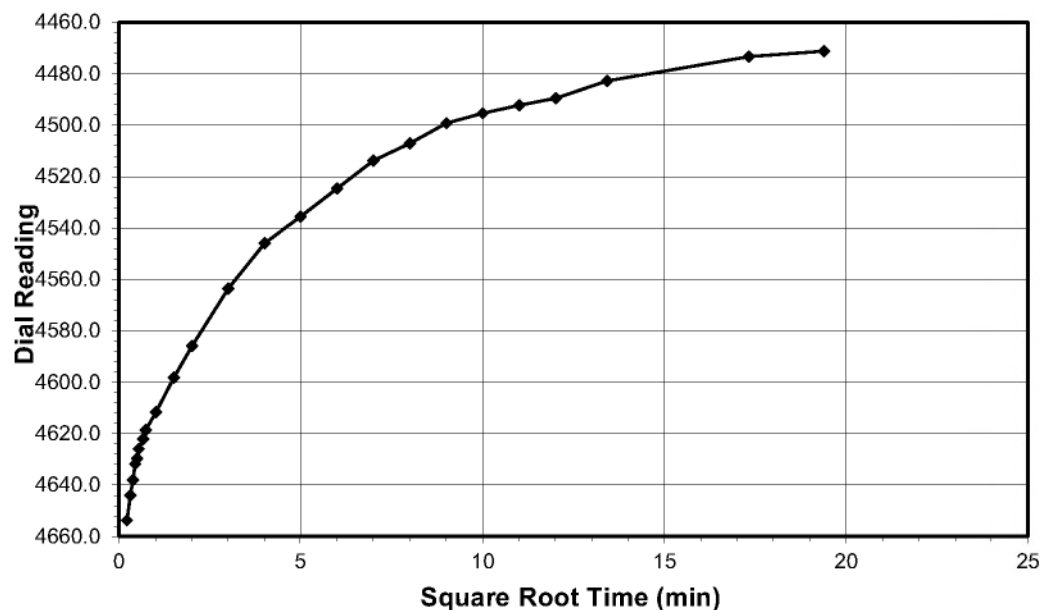
Tested By 129-07-0411 Date 10/9/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. **ST-G1**  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

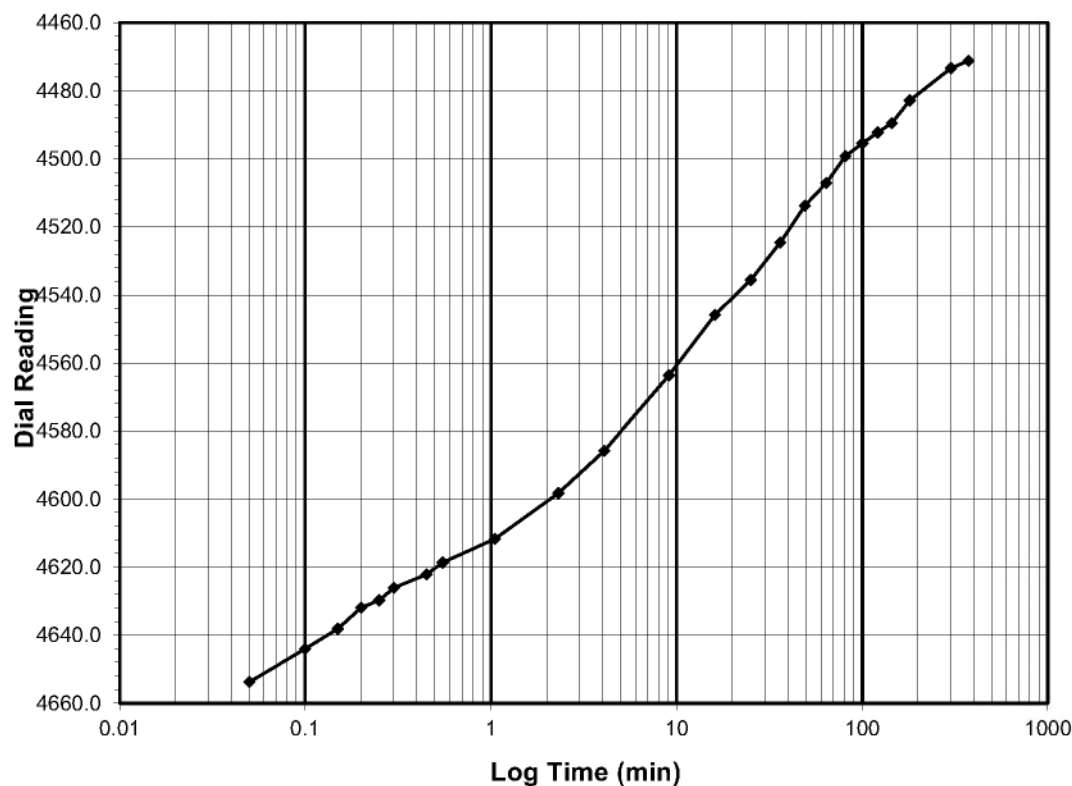
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 8.0 - 2.0**  
**Final Reading (div) 4471.2**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 10/10/2021  
 Start Time 1:45:09

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>4687.5</b>
0.05	4653.7
0.10	4644.0
0.15	4638.1
0.20	4631.9
0.25	4629.8
0.30	4626.0
0.45	4622.1
0.55	4618.7
1.05	4611.7
2.30	4598.2
4.05	4585.8
9.07	4563.6
16.07	4545.9
25.07	4535.6
36.07	4524.6
49.07	4513.8
64.07	4507.1
81.07	4499.2
100.07	4495.4
121.08	4492.2
144.08	4489.5
180.08	4482.9
300.08	4473.4
375.95	4471.2



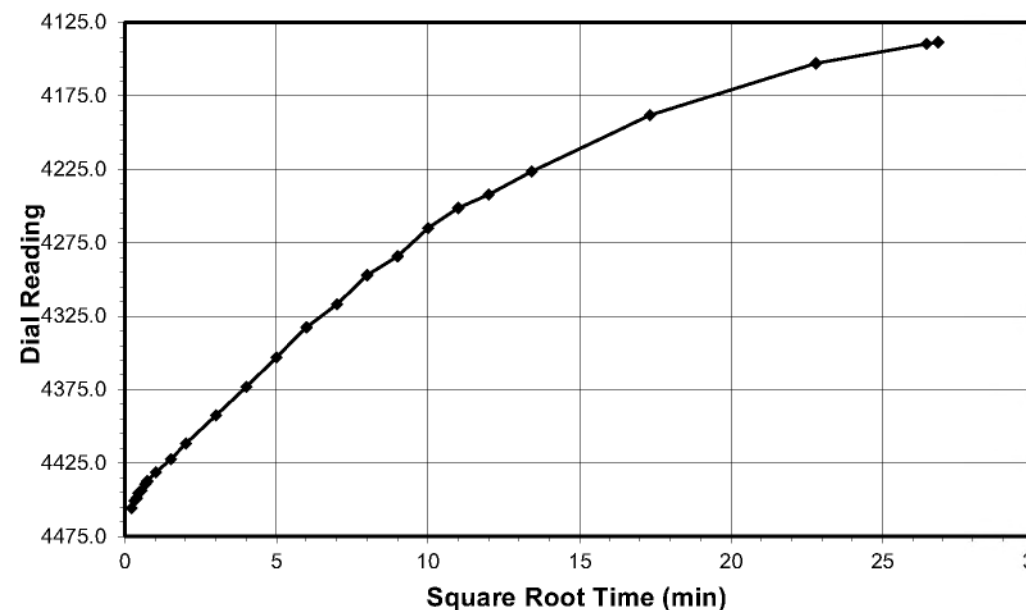
Tested By 129-07-0411 Date 10/10/2021 Checked By GEM Date 10/22/2021

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216



Client S&ME, Inc. Boring No. L\_79800 LT 2  
 Client Project 6235-20-008 (01) Depth (ft) 5.7-5.8  
 Project No. R-2021-262-001 Sample No. **ST-G1**  
 Lab ID R-2021-262-001-001 Visual Description Dk Brown Sand with Organics

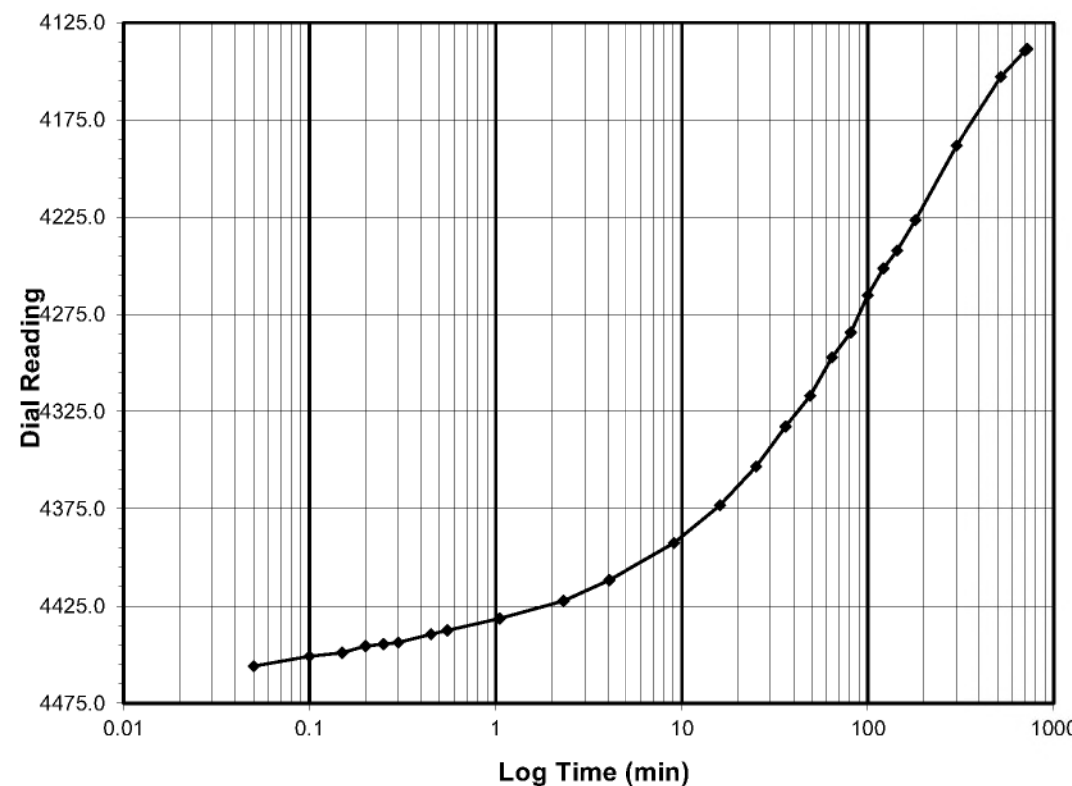
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 2.0 - 0.5**  
**Final Reading (div) 4138.5**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 10/10/2021  
 Start Time 8:01:07

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>4471.2</b>
0.05	4455.9
0.10	4450.9
0.15	4449.1
0.20	4445.6
0.25	4444.6
0.30	4443.7
0.45	4439.5
0.55	4437.5
1.05	4431.4
2.30	4422.4
4.07	4411.7
9.07	4392.5
16.07	4373.1
25.07	4353.3
36.07	4332.7
49.07	4316.9
64.07	4297.1
81.07	4284.2
100.07	4265.2
121.07	4251.3
144.07	4242.2
180.08	4226.6
300.08	4188.1
520.08	4152.8
700.08	4139.6
720.17	4138.5



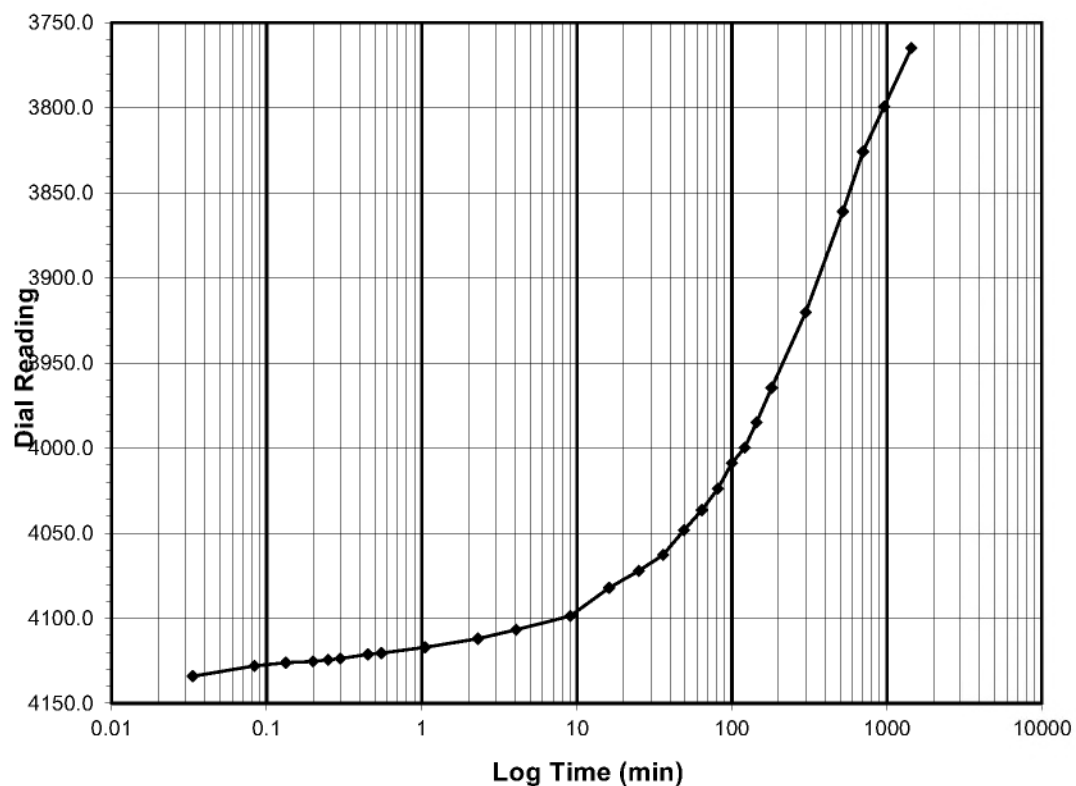
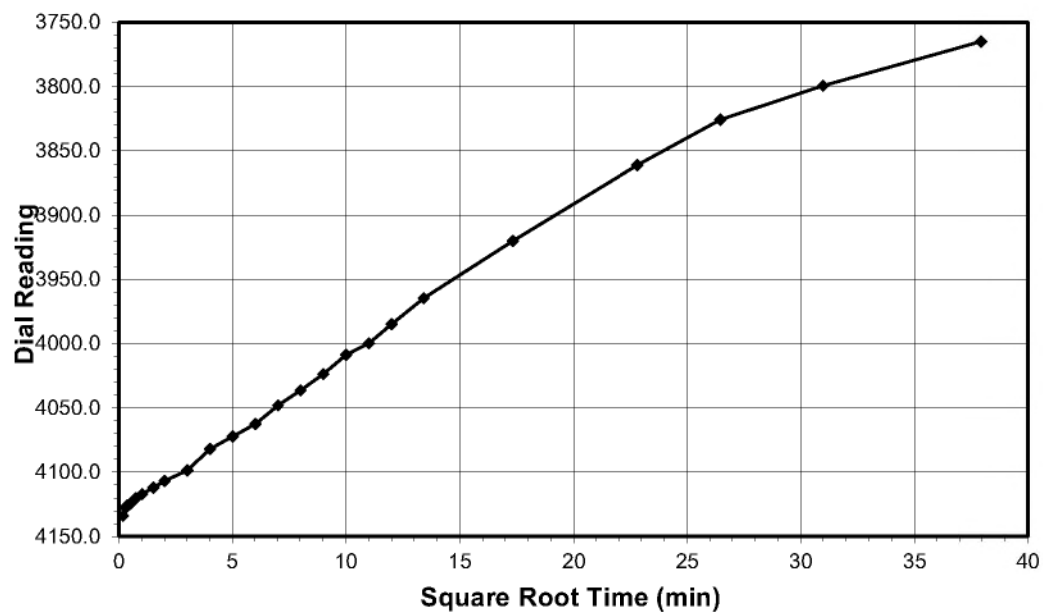
Tested By 129-07-0411 Date 10/10/2021 Checked By GEM Date 10/22/2021

### ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	S&ME, Inc.	Boring No.	L_79800 LT 2
Client Project	6235-20-008 (01)	Depth (ft)	5.7-5.8
Project No.	R-2021-262-001	Sample No.	ST-G1
Lab ID	R-2021-262-001-001	Visual Description	Dk Brown Sand with Organics

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5 - 0.125  
 Final Reading (div) 3764.8  
 Consolidometer No. R554  
 1 Division (in) 0.0001

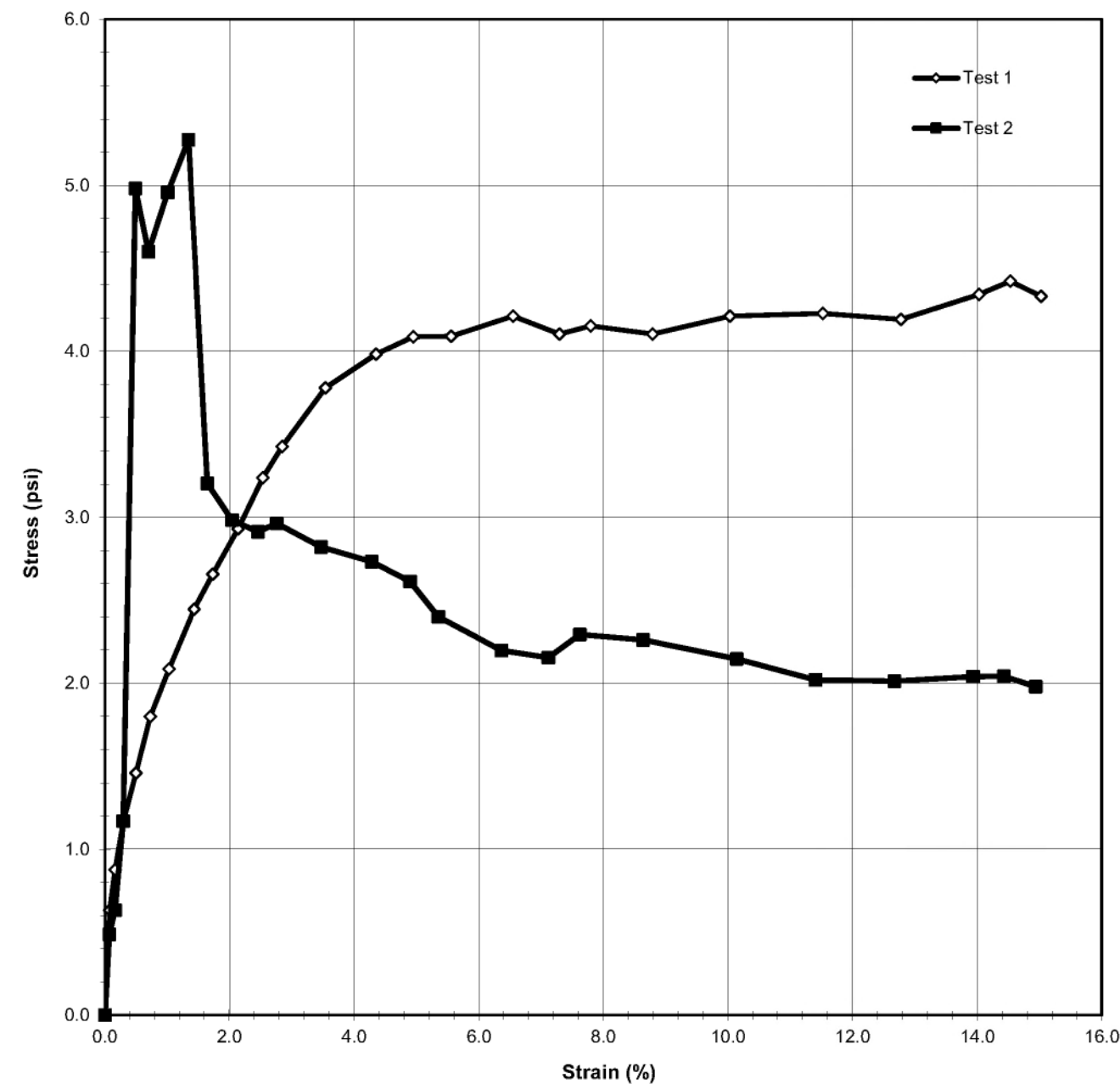
Start Date 10/10/2021  
 Start Time 20:01:17

Elapsed Time (min)	Dial Reading (div)
Initial	4138.5
0.03	4134.1
0.08	4128.0
0.13	4126.1
0.20	4125.4
0.25	4124.5
0.30	4123.7
0.45	4121.3
0.55	4120.4
1.05	4117.0
2.30	4112.0
4.05	4106.8
9.05	4098.7
16.05	4082.1
25.05	4072.2
36.05	4062.7
49.05	4048.2
64.07	4036.4
81.07	4023.8
100.07	4008.8
121.07	3999.8
144.07	3984.8
180.07	3964.6
300.07	3920.2
520.07	3861.0
700.07	3825.8
960.07	3799.3
1440.08	3764.8

### UNCONSOLIDATED UNDRAINED TRIAXIAL

AASHTO T-296-10

Client:	S&ME, Inc.	Boring No.:	L_79800 LT 2
Client Reference:	6235-20-008 (01)	Depth (ft):	4.0-6.0
Project No.:	R-2021-262-001	Sample No.:	ST-G1
Lab ID:	R-2021-262-001-001	Visual:	Dark Brown Clay with Organics



Tested By 129-07-0411 Date 10/10/2021 Checked By GEM Date 10/22/2021

Tested By 129-07-0411 Date 10/11/21 Input Checked By GEM Date 10/12/2021

**UNCONSOLIDATED UNDRAINED TRIAXIAL**  
AASHTO T-296-10



Client: S&ME, Inc.  
Client Reference: 6235-20-008 (01)  
Project No.: R-2021-262-001  
Lab ID: R-2021-262-001-001

Boring No.: L\_79800 LT 2  
Depth (ft): 4.0-6.0  
Sample No.: **ST-G1**  
Visual: Dark Brown Clay  
with Organics

INITIAL SAMPLE DIMENSIONS		
Length 1 (in):	6.315	Diameter 1 (in): 2.756
Length 2 (in):	6.345	Diameter 2 (in): 2.766
Length 3 (in):	6.355	Diameter 3 (in): 2.796
Length 4 (in):	6.331	Diameter 3 (in): 2.752
<b>Avg.Length (in):</b>	<b>6.337</b>	<b>Area (in<sup>2</sup>): 6.015</b>

WATER CONTENT (AFTER TEST)	
Total Weight of Sample (g):	922.82
Tare No.:	721
Weight of Tare & Wet Sample (g):	523.40
Weight of Tare & Dry Sample (g):	325.70
Weight of Tare (g):	89.98
% Moisture:	83.9

UNIT WEIGHT			
Undisturbed Sample			
Weight of Tube & Wet Sample (g):	924.9	Sample Volume (cm <sup>3</sup> ):	624.6
Weight of Tube (g):	0.00	Unit Wet Weight (g/cm <sup>3</sup> ):	1.48
Weight of Wet Sample (g):	924.9	Unit Wet Weight (pcf):	92.40
Diameter (in):	2.77	Moisture Content (%):	83.9
Length (in):	6.34	Unit Dry Weight (pcf):	50.3
Length (cm):	16.09		

<b>INITIAL CONFINING STRESS (psi)</b>	<b>2.1</b>	Initial Dial Reading (mil)	392
<b>ENDING CONFINING STRESS (psi)</b>	<b>2.2</b>	Dial Reading Before Shearing (mil)	388

DEFORMATION (in)	LOAD (lb)	ELAPSED TIME (min)	STRAIN (%)	STRESS (psi)
0.000	8.0	0.0	0.0	0.000
0.005	11.8	0.08	0.1	0.631
0.010	13.3	0.17	0.2	0.876
0.018	15.0	0.30	0.3	1.161
0.032	16.8	0.50	0.5	1.459
0.046	18.9	0.73	0.7	1.799
0.065	20.7	1.05	1.0	2.085
0.091	22.9	1.45	1.4	2.445
0.110	24.3	1.75	1.7	2.657
0.136	26.0	2.15	2.1	2.930
0.161	28.0	2.55	2.5	3.238
0.180	29.2	2.87	2.8	3.426
0.224	31.6	3.57	3.5	3.780
0.276	33.0	4.38	4.3	3.983
0.314	33.9	4.98	4.9	4.086
0.352	34.0	5.58	5.6	4.090
0.415	35.1	6.58	6.6	4.212
0.463	34.6	7.35	7.3	4.103
0.494	35.1	7.85	7.8	4.153
0.557	35.1	8.85	8.8	4.102
0.636	36.2	10.10	10.0	4.211
0.731	36.7	11.60	11.5	4.227
0.810	36.9	12.87	12.8	4.192
0.889	38.4	14.12	14.0	4.343
0.921	39.1	14.63	14.5	4.422
0.953	38.7	15.13	15.0	4.331

Tested By 129-07-0411 Date 10/11/21 Input Checked By GEM Date 10/12/2021

**UNCONSOLIDATED UNDRAINED TRIAXIAL**  
AASHTO T-296-10



Client: S&ME, Inc.  
Client Reference: 6235-20-008 (01)  
Project No.: R-2021-262-001  
Lab ID: R-2021-262-001-001

Boring No.: L\_79800 LT 2  
Depth (ft): 4.0-6.0  
Sample No.: **ST-G1**  
Visual: Dark Brown Clay  
with Organics

INITIAL SAMPLE DIMENSIONS		
Length 1 (in):	5.868	Diameter 1 (in): 2.789
Length 2 (in):	5.909	Diameter 2 (in): 2.770
Length 3 (in):	5.839	Diameter 3 (in): 2.772
Length 4 (in):	5.831	Diameter 3 (in): 2.749
<b>Avg.Length (in):</b>	<b>5.862</b>	<b>Area (in<sup>2</sup>): 6.026</b>

WATER CONTENT (AFTER TEST)	
Total Weight of Sample (g):	863.26
Tare No.:	710
Weight of Tare & Wet Sample (g):	517.95
Weight of Tare & Dry Sample (g):	332.75
Weight of Tare (g):	91.00
% Moisture:	76.6

UNIT WEIGHT			
Undisturbed Sample			
Weight of Tube & Wet Sample (g):	866.35	Sample Volume (cm <sup>3</sup> ):	578.9
Weight of Tube (g):	0.00	Unit Wet Weight (g/cm <sup>3</sup> ):	1.50
Weight of Wet Sample (g):	866.35	Unit Wet Weight (pcf):	93.39
Diameter (in):	2.77	Moisture Content (%):	76.6
Length (in):	5.87	Unit Dry Weight (pcf):	52.9
Length (cm):	14.89		

<b>INITIAL CONFINING STRESS (psi)</b>	<b>3.9</b>	Initial Dial Reading (mil)	369
<b>ENDING CONFINING STRESS (psi)</b>	<b>0.0</b>	Dial Reading Before Shearing (mil)	362

DEFORMATION (in)	LOAD (lb)	ELAPSED TIME (min)	STRAIN (%)	STRESS (psi)
0.000	12.9	0.0	0.0	0.000
0.004	15.9	0.1	0.1	0.486
0.009	16.7	0.2	0.2	0.631
0.017	20.0	0.3	0.3	1.169
0.029	43.1	0.5	0.5	4.981
0.041	40.8	0.7	0.7	4.598
0.059	43.1	1.0	1.0	4.956
0.079	45.1	1.3	1.3	5.273
0.097	32.6	1.7	1.6	3.203
0.120	31.3	2.1	2.0	2.982
0.144	30.9	2.5	2.5	2.911
0.162	31.3	2.8	2.8	2.963
0.204	30.5	3.5	3.5	2.820
0.251	30.1	4.3	4.3	2.732
0.287	29.5	4.9	4.9	2.612
0.314	28.2	5.3	5.3	2.399
0.373	27.1	6.3	6.4	2.196
0.418	26.9	7.1	7.1	2.154
0.447	27.9	7.6	7.6	2.292
0.507	27.8	8.6	8.6	2.261
0.595	27.3	10.1	10.1	2.146
0.670	26.7	11.4	11.4	2.019
0.744	26.8	12.6	12.7	2.012
0.818	27.2	13.9	13.9	2.040
0.847	27.3	14.4	14.4	2.041
0.877	26.9	14.9	14.9	1.979

Tested By 129-07-0411 Date 10/11/21 Input Checked By GEM Date 10/12/2021



**UNCONSOLIDATED UNDRAINED TRIAXIAL**  
AASHTO T-296-10

Client: S&ME, Inc.  
Client Reference: 6235-20-008 (01)  
Project No.: R-2021-262-001  
Lab ID: R-2021-262-001-001

Boring No.: L\_79800 LT 2  
Depth (ft): 4.0-6.0  
Sample No.: ST-G1  
Visual: Dark Brown Clay  
with Organics



Tested By 129-07-0411 Date 10/11/21 Input Checked By GEM Date 10/12/2021