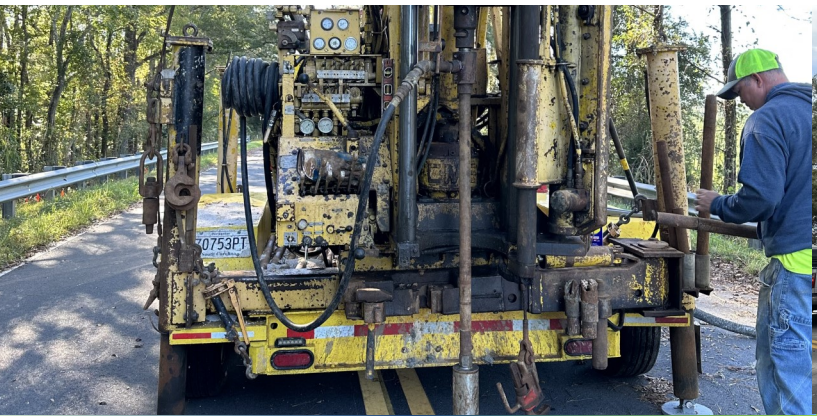
GEOTECHNICAL BASELINE REPORT

US 21/US 17A Bridge Replacement over CSX Railroad
Hampton/Beaufort County, South Carolina



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SCDOT Project ID: P042942
FME Project No.: G6400.20

November 15, 2023

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Mr. Trapp Harris, PE
SCDOT – Office of Alternative Delivery Geotechnical Engineer
955 Park Street
Columbia, South Carolina 29201

Re: Geotechnical Baseline Report
US 21/US 17A Bridge Replacement over CSX Railroad
Hampton/Beaufort County, South Carolina
SCDOT Project ID: P042942
FME Project No.: G6400.20

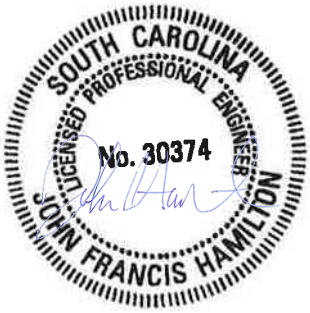
Mr. Harris:

Submitted herein is F&ME Consultants, Inc's (FME) Geotechnical Baseline Report for the US 21/US 17A bridge replacement over CSX Railroad. Included is a summary of the subsurface data, the soil laboratory test results, and our conceptual geotechnical assessment of the assumed bridge foundation systems and bridge/roadway embankments.

Please notify us if there are any questions or if we can be of further assistance.

Sincerely,

F&ME CONSULTANTS



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John F. Hamilton, PE
Geotechnical Design Manager

Attachments

JFH/rl:jfh

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APPENDIX

1. PROJECT DESCRIPTION

The project site is located near the Yemassee, South Carolina on the border of Hampton County and Beaufort County. The project consists of replacing the existing, damaged bridge structure with a new bridge. The existing bridge was damaged from a derailment of a railcar.

We assume that the proposed bridge substructure elements will consist of driven pile foundations at the end bents and drilled shaft foundations at the interior bents. Foundation sizes typical for SCDOT bridge structures of this magnitude are expected. We understand that the proposed roadway grade will be raised approximately six (6) feet relative to the existing grade at the roadway centerline.

The geotechnical subsurface investigation was performed in general accordance with the 2022 SCDOT Geotechnical Design Manual (GDM). The conceptual bridge foundation analyses and the development of conceptual design recommendations, provided herein, were performed in general accordance with the GDM and/or the AASHTO LRFD Bridge Design Specifications.

2. SUBSURFACE EXPLORATION

From October 10-25, 2023, nine (9) Soil Test Borings (STB), seven (7) Electro-Piezocone Soundings (CPT), two (2) Auger Borings, and three (3) Bulk Samples were performed at the site. The soils were visually classified in the field based upon the Unified Soil Classification System (USCS) in general accordance with ASTM D2488.

STBs were performed with a CME 45B trailer-mounted drill rig. Rotary wash drilling techniques were used to maintain a stable borehole. Standard Penetration Testing (SPT) was performed in general accordance with ASTM D1586 to determine the relative densities and consistencies of the subsurface soils and to collect subsurface soil samples. SPTs were continuously sampled in the top ten (10) feet. In soil boring B-4, SPTs were continuously sampled in the top fifty (50) feet to calibrate the adjacent CPT to the site soils. Following the continuous sampling, SPTs were performed on standard five (5) foot intervals, thereafter, to the boring termination depths. An automatic hammer with a calibrated Energy Transfer Ratio was used to perform the SPTs. The SPT hammer's calibrated Energy Transfer Ratio value is provided on the boring logs in the Appendix.

The Electro-Piezocone Soundings were advanced with the CME 45B rig. CPT tests were generally performed at 5-centimeter intervals. The CPTs were advanced to a depth where a maximum reaction force was encountered. At CPT-3, a maximum reaction force was encountered at approximately thirty-three (33) feet. At this depth, CPT testing was paused, and drilling techniques were implemented to provide a conduit beyond this hard layer. Following the drilling, CPT-3 testing continued from thirty-six (36) feet to a termination depth of approximately seventy-three (73) feet. Copies of the Electro-Piezocone Sounding Logs are contained within Section 4 in the Appendix.

A piston sampler was utilized to collect intact Shelby tube samples within Auger Borings B-1U and RW-1U. The Auger Borings were offset approximately five (5) feet from its corresponding STB. Within each Auger Boring, two (2) back-to-back Shelby tube samples were collected. The samples were collected in a (3) inch diameter, thirty (30) inch long Shelby tube. The Auger Boring logs are provided within Section 4 of the Appendix. The UD Prep Logs are provided in Section 5 of the Appendix.

Three (3) Bulk Soil Samples were collected with Manual Auger Boring equipment from the soil material just below the existing pavement. The bulk samples were primarily collected for the purpose of re-molded, laboratory shear strength testing and California Bearing Ratio (CBR) testing.

The locations, depths, and elevations of the tests performed during the geotechnical exploration are provided in the following table.

Geotechnical Exploration Summary Table

Test ID	Test Type	Test Depth (ft)	Station	Offset	Latitude	Longitude	Elevation (ft-MSL)
B-1/DH-1	STB/DHT	120	1107+42	4.2 R	32.67365689	-80.8584493	43.9
B-1U	Auger Boring	32	1107+37	3.6 R	32.6736673	-80.85845985	43.9
B-2	STB	120	1106+96	5.5 L	32.67378274	-80.8585198	44.3
B-3	STB	120	1105+64	5.3 R	32.67404255	-80.85882159	44.1
B-4	STB	120	1104+87	8.4 L	32.67421507	-80.85894779	43.1
C-1	STB	30	1116+81	11.1 R	32.67167576	-80.85651415	13.9
E-1	STB	60	1107+92	3.2 L	32.67356276	-80.85832757	43.7
E-2	STB	70	1104+38	2.1 R	32.67430186	-80.8590783	42.5
RW-1	STB	15	1111+91	5.3 L	32.67273853	-80.85749185	28.4
RW-1U	Auger Boring	17	1111+86	8.9 L	32.67274921	-80.85750251	28.4
RW-2	STB	15	1100+64	5.7 R	32.67512098	-80.85981885	29.4
CPT-1	CPT	54	1107+96	9.5 R	32.67354542	-80.85834969	43.4
CPT-2	CPT	61	1107+46	5.6 L	32.6736789	-80.85841585	43.9
CPT-3	CPT	73	1106+94	2.3 R	32.67377488	-80.85854522	44.4
CPT-4	CPT	60	1105+70	6.6 L	32.67405415	-80.85878172	44.1
CPT-5	CPT	72	1104+92	6.8 R	32.67419471	-80.85897637	43.4
CPT-6	CPT	61	1104+42	8.0 L	32.67432564	-80.85904229	41.7
CPT-7	CPT	30	1116+84	7.3 L	32.6717005	-80.85646091	13.8
BS-1 @ RW-1	Bulk Sample	4	1100+63	5.5 L	32.67272615	-80.85751557	28.6
BS-2 @ B-2	Bulk Sample	4	1106+91	11.0 L	32.67379383	-80.85851979	44.2
BS-3 @ RW-2	Bulk Sample	4	1111+90	3.1 R	32.67513301	-80.85979563	28.9

DHT = Downhole Geophysical Test

The soil samples collected from the final subsurface investigation were examined and logged in the field by F&ME personnel, sealed in plastic bags, and transported to our laboratory for further examination and analyses. The soils were visually classified in the field based upon the Unified Soil Classification System.

We have provided a boring location plan in Section 2 of the Appendix displaying the locations of the borings performed during the final subsurface investigation. A generalized Subsurface Profile is presented within Section 3 of the Appendix.

3. LABORATORY TESTING SUMMARY

Following completion of the geotechnical exploration, soil samples were selected by FME personnel for laboratory testing. The tests were conducted in an AASHTO certified laboratory in accordance with applicable ASTM/AASHTO standards.

The laboratory testing performed on the soil samples collected from the Soil Test Borings is summarized in the table below. The data sheets containing the results from this testing are provided in Section 5A of the Appendix.

Laboratory Testing Summary Table – Soil Test Boring (Split-Spoon) Samples

Type of Test	Quantity	Procedure
Moisture Content	38	AASHTO T265 (ASTM D2216)
Atterberg Limits	38	AASHTO T89/T90 (ASTM D4318)
Grain-Size Distribution w/ Wash 200	38	ASTM D6913/AASHTO T11 (ASTM D1140)
pH	1	AASHTO T289/ASTM G51
Resistivity	1	AASHTO T288
Chloride	1	AASHTO T291
Sulfate	1	AASHTO T290 (ASTM C1580)

The laboratory testing performed on the Undisturbed Shelby Tube Samples are summarized in the table below. The data sheets containing the results from this testing are provided in Section 5B of the Appendix of this report.

Laboratory Testing Summary Table – UD Samples

Type of Test	Quantity	Procedure
Moisture Content	3	AASHTO T265 (ASTM D2216)
Atterberg Limits	4	AASHTO T89/T90 (ASTM D4318)
Grain-size Distribution w/ Wash 200	4	ASTM D6913/AASHTO T11 (ASTM D1140)
Consolidated-Undrained Triaxial	2	AASHTO T297 (ASTM D4767)
Consolidation	2	AASHTO T216 (ASTM D2435)

The laboratory testing performed on the Bulk Soil Samples are summarized in the table below. The data sheets containing the results from this testing are provided in Section 5C of the Appendix of this report.

Laboratory Testing Summary Table – Bulk Soil Samples

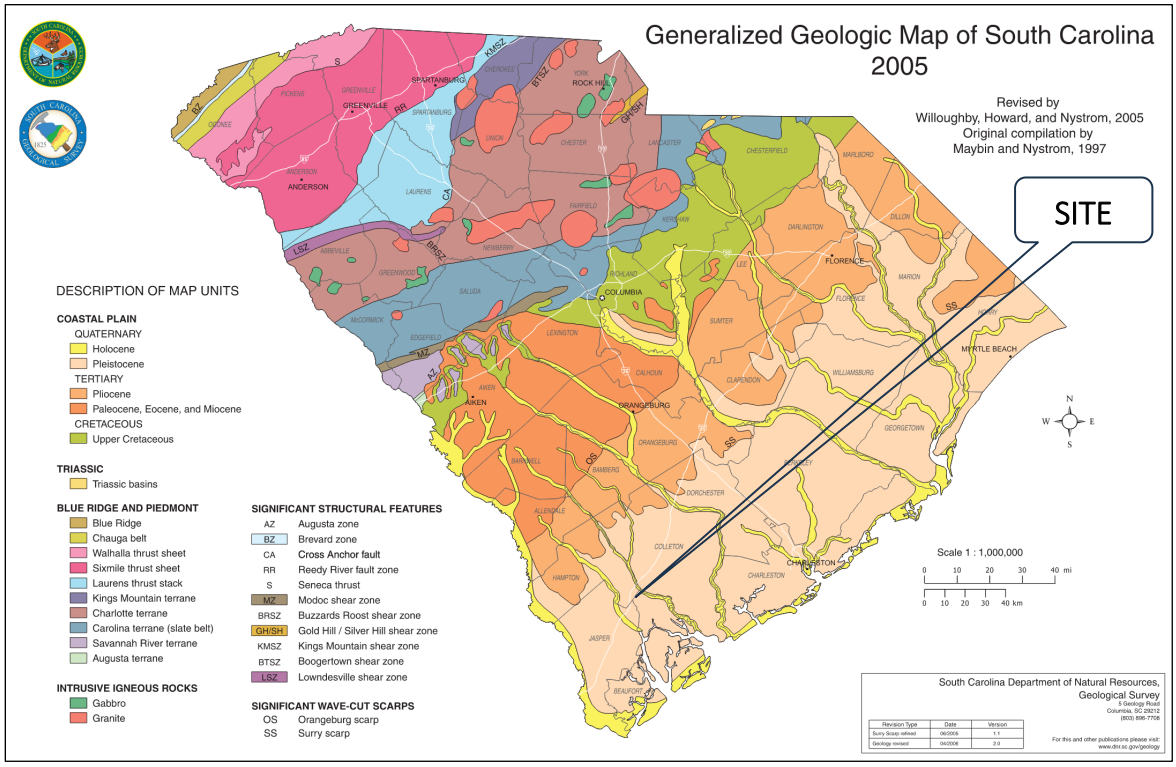
Type of Test	Quantity	Procedure
Moisture Content	6	AASHTO T265 (ASTM D2216)
Atterberg Limits	6	AASHTO T89/T90 (ASTM D4318)
Grain-size Distribution w/ Wash 200	6	ASTM D6913/AASHTO T11 (ASTM D1140)
Standard Proctor	3	AASHTO T99 (ASTM D698)
Direct Shear	3	AASHTO T236 (ASTM D3080)
Consolidated-Undrained Triaxial	1	AASHTO T297 (ASTM D4767)
California Bearing Ratio	2	AASHTO T193 (ASTM D1883)

4. SUBSURFACE CONDITIONS

4.1. SITE GEOLOGY

The bridge site is located in the Lower Coastal Plain geologic unit of South Carolina. The Coastal Plain unit has a gently dipping topography towards the ocean and is comprised of several geologic formations, which represent sedimentary sequences believed to have been formed during periods of eustatic sea level rise/fall or tectonic uplift/subsidence over geologic time.

The following figure displays the location of the site relative to the Generalized Geologic Map of South Carolina.



The following geologic strata were encountered in the geotechnical exploration. The strata are presented in descending order relative to their age (youngest to oldest).

- Existing Embankment Fill
- Pamlico Formation (Pleistocene)
- Undifferentiated Miocene
- Limestone (Eocene)

The existing embankment fill is comprised of mainly medium to high plasticity clayey sand and medium plasticity to high plasticity clay. The relative densities in this material are generally loose to medium dense and firm to stiff.

Below the existing fill, the Pleistocene-aged Pamlico Formation was encountered. The soil composition of the Pamlico Formation is variable. In general, the soil composition consists of varying layers of loose to medium dense sand and firm to stiff clay. The thickness of the Pamlico Formation is approximately forty (40) feet.

Below the Pamlico Formation, undifferentiated deposits of Miocene-age were encountered. The soil composition of these Miocene deposits is similarly variable to the overlying Pleistocene deposits. In general, the soil composition consists of varying layers of medium dense sand and stiff to very stiff silt and clay. The thickness of the Miocene deposits is approximately twenty (20) feet.

Below the Miocene deposits, Eocene-aged Limestone was encountered. The soil composition of the limestone generally consists of non-plastic to medium plasticity sand. The field HCl testing generally indicated a strong reactivity. The limestone material was only encountered in the deeper bridge borings, and these borings were terminated within the limestone.

4.2. SOIL STRATIGAPHY

The soil test borings indicate four (4) geologic strata at the site. The following table summarizes the geologic stratigraphy.

Soil Stratification Table

Geology	[1]Elevation of Top of Layer (ft-MSL)	USCS Soil Type	SPT N-Values (bpf)	Average CPT Tip Resistance (tsf)
Existing Fill	+44	SC, SC-SM, CL, CL-ML	1 to 24	28
Pamlico Formation (Pleistocene)	+19	SP, SM, SC, SC-SM, ML, CL-ML, CL, CH	0 to 28	47
Undifferentiated Miocene	-22	SM, SC, ML, CL	7 to 100+	47
Limestone (Eocene)	-43	SP, SM, SC	26 to 100+	N/A

[1] Elevations are generalized from the totality of subsurface information collected

4.3. LIMESTONE CONDITIONS

At the deeper STB's, the material is classified as 'limestone', which is a common geologic unit encountered in this region of the South Carolina coastal plain. The term 'limestone' is somewhat of a misnomer, given that the material is not a true rock formation. In the coastal plain of South Carolina, limestone is considered a soil deposit with varying degrees of cementation. The cementation creates a resemblance to weak bedrock characteristics.

Typically, within this limestone formation there is a hard, cemented, rock-like cap at the upper contact of the formation. This hard cap feature was not observed in the soil borings performed during our geotechnical exploration. Coring operations within the limestone were not performed as part of this geotechnical exploration. There was some appreciable recovery from the STB's that allowed the field and lab personnel to test for HCl reactivity. In addition, soil classification laboratory test was also conducted within select limestone samples.

4.4. GROUNDWATER

Groundwater tables measurements were recorded immediately following completion of the borings/soundings and/or 24-hours following completion of the boring/sounding. The groundwater table was generally encountered near elevation +16 ft-MSL, which lies just below the natural ground line (ie. below the existing fill). Any excavations performed (muck or otherwise) for the purpose of subgrade preparation would likely encounter groundwater. The groundwater table will fluctuate with climactic conditions. Following periods of rainfall, the groundwater table could be encountered at higher elevations than indicated on the soil boring logs.

5. REGIONAL SEISMICITY

Most of the seismic research and discussion in the United States is confined to the western part of the country, but there are historical records that indicate major seismic events have occurred in the Central and Eastern United States (CEUS). In 1886, the largest historic seismic event in the southeastern United States occurred near Charleston, South Carolina. This event had an estimated moment magnitude (M_w) of 7.3. This seismic event has dominated the development of the design seismic accelerations in South Carolina. The following sections globally discuss the field investigation procedures used to aid in the development of the design seismic accelerations and the resulting estimated seismic hazard potential at the project site.

5.1. SUBSURFACE SHEAR WAVE VELOCITY

Following completion of the SPT testing in soil boring B-1, the borehole was prepared for downhole geophysical testing. Seismic data for the downhole testing was collected by recording seismic shear-wave and compression wave velocities directly with a downhole geophone receiver. A 24-channel Geometrics Geode seismograph along with a three-component GeoStuff BHG-3 borehole geophone and control box were used to record seismic waves generated from a sixteen-pound sledgehammer

horizontally striking an 8.5-foot long shear beam with aluminum strike plates affixed to the ends. Measurements were taken starting at the bottom of the borehole (maximum of 114 feet for our testing due to downhole tool configuration) and continued at downhole seismic shear wave investigation 3-foot intervals as the geophone was raised to the ground surface. Each interval included two separate recordings from energy sources designed to enhance specific properties of the secondary wave: 1) positive shear (south end of beam hammer blow), and 2) negative shear (north end of beam hammer blow). Additionally, a third compression wave recording was collected for the compression (P or primary) wave.

From the downhole geophysical test data performed at the site, a subsurface shear wave velocity profile was developed for the top 114 feet. The weighted average shear wave velocity within the top 100 feet of the site is 876 fps. Below the site-specific shear wave velocity data, shear wave velocity results from the US 21 bridge over Harbor River site were used to extrapolate the profile to a depth where the shear wave velocity is consistently above 2,500 ft/sec. The Harbor River site is the nearest deep-hole resource to the project site. Using this constructed shear wave velocity profile, SCDOT generated the 3-point Acceleration Design Response Spectra (ADRS) for the site.

We note that at a depth of approximately 88 feet, the Vs measurements collected at the project site were consistently above the 2,500 fps threshold for the remaining depth of the borehole. We do not interpret this to be the location of the Site Class B and Site Class C boundary. As such, the Vs profile used for development of the ADRS curves extended beyond this depth.

5.2. ACCELERATION DESIGN RESPONSE SPECTRA

The following table summarizes the seismic design accelerations from the ADRS curves that were selected for this project. The ADRS curves were developed by SCDOT using their proprietary software.

Acceleration Design Response Spectra			
Design Event	PGA	S_{DS}	S_{D1}
FEE	0.19	0.38	0.16
SEE	0.45	0.99	0.59

5.3. GEOTECHNICAL SEISMIC HAZARD POTENTIAL

Geotechnical seismic hazards consist of a loss in a soil's shear strength through cyclic ground motions induced by earthquakes. The GDM considers this phenomena with the term soil Shear Strength Loss (SSL). Liquefaction is the traditional term used to describe SSL in sand-like soils. Cyclic-softening is the typical terminology for clay-like soils. Liquefaction and cyclic softening are considered the most devastating seismically induced geotechnical hazards.

Liquefaction is the loss of a soil's shear strength due to a rapid increase in pore water pressure resulting from seismic shaking. The seismic shaking causes the soil particles to dilate within the soil matrix. The result is that the soil particles are suspended in the groundwater and the relative strength of the soil is greatly reduced. Soils most susceptible to liquefaction generally consist of saturated, loose sands.

Cyclic strain-softening from seismic shaking occurs in clay-like soils. The softening effect occurs when seismic-induced shear stresses exceed the soil's cyclic shear resistance, which causes an accumulation of micro-deformations and, thus, strain softening. Soils most susceptible to strain softening generally consists of saturated, sensitive, moderate to high plasticity silts and clays.

Screening for potential SSL soils was performed based on the results from the soil borings, CPTs, and laboratory test results. The SSL screening process was performed in accordance with the GDM. Based on the SSL screening process, sand-like and clay-like SSL of the Pleistocene-aged soils are predicted. The SSL layer thickness is variable across the site. The effects of the predicted sand-like liquefaction and clay-like softening are globally discussed in the proceeding sections of the report.

6. CONCEPTUAL GEOTECHNICAL ASSESSMENT FOR BRIDGE & ROADWAY DESIGN

Based on our understanding of the project, the elements considered for the conceptual geotechnical design consist of the following:

- Bridge foundations;
- Bridge and Roadway embankments; and,
- Drainage Structures (box culvert)

A global discussion of the conceptual geotechnical design of the elements noted above is provided in the proceeding sections. Other elements such as earth retaining structures, miscellaneous structures (sign foundations, light pole foundations, etc.), and sound barrier walls are not expected to be included with this project and are not discussed, herein.

6.1. EMBANKMENTS

The GDM separates embankments into two (2) categories: bridge embankments and roadway embankments. The GDM defines the bridge embankments as *"The portion of the approach embankment that requires an Extreme Event limit state global stability check, unless indicated otherwise within the GDM. The longitudinal length of Bridge Embankment shall be based on the specified mitigation method (either geotechnical or structural) that is required to achieve satisfactory global stability for the Extreme Event limit state check."* At a minimum, the bridge embankment consists of the front slope and extends to 3.25 times the height of the abutment, measured from the end of the approach slab (refer to Figure 2-1 & 2-2 of the GDM).

The GDM defines the roadway embankments as *"The portion of the embankment that extends beyond the bridge embankment and extends between the toes of the slopes on either side"*.

In general, the GDM requires a static and seismic evaluation of the bridge embankments. Only a static evaluation is required for the roadway embankments. As such, static and seismic settlement analyses and static and seismic slope stability analyses should be performed for the bridge embankments. Static

settlement and static slope stability analyses should be performed for the roadway embankments. Each of these analyses is globally discussed in the following sections.

6.1.1. EMBANKMENT SUBGRADE PREPARATION

Based on the subsurface conditions as encountered in the soil borings, the near surface soils below the planned widened embankment areas consists of low to medium plasticity, clay-like soils. In addition, the groundwater table is located near the natural ground surface. Based on the site conditions at the time of embankment construction, these subgrade soils may be unstable and may require corrective action prior to embankment fill placement. For un-stable subgrades, the corrective actions may consist of the following: waiting for the soils to dry and become stable, mucking, select fill placement (ie. bridge lift), bi-axial geogrid placement, and/or chemical (lime or cement) treatment.

Temporary and permanent site drainage should be established as soon as possible to promote drainage away from the proposed embankment subgrade locations. Establishing good site drainage prior to construction and maintaining it thereafter can minimize the effects of surface run-off and shallow and/or fluctuating groundwater. Permanent site drainage should be established to prevent soils at and below the embankment subgrade from becoming saturated and to minimize fluctuations in moisture contents. The shear strength of soils typically decreases with increasing moisture content and saturation. Therefore, site drainage is the single most critical factor impacting construction and the long-term performance of the embankments.

6.1.2. EMBANKMENT SETTLEMENT

Bridge and roadway embankment settlements are separated into two (2) categories: static settlement as a result of fill placement and seismic settlement as a result of re-distribution effects following liquefaction of sand-like soils. Each of these conditions is globally discussed in the following sections.

6.1.2.1. STATIC SETTLEMENT

Based on our understanding of the proposed roadway design, fill heights on the order of six (6) feet relative to the roadway centerline are expected. At the side slope locations, the fill heights will be larger as the side slopes tie down to the existing grade.

The proposed bridge and roadway embankment subgrade soils consist of interbedded layers of loose to medium dense sand-like soils and firm to stiff clay-like soils. Any fill placement at this site will result in deformation of these subgrade soils. We expect that a majority of the deformation would occur rapidly as fill is placed. We expect that some consolidation settlement in clay-like soils would also occur. Based on the results of the performed laboratory consolidation testing, we would anticipate that the consolidation settlements would complete prior to completion of the bridge construction.

We do not anticipate that ground improvements, such as wick drains or soil surcharges, would be required to expedite static settlements for this project. The timing of pile driving relative to the completion of the consolidation settlement should be addressed in the geotechnical design to account for the potential development of static downdrag loads on the bridge foundations.

6.1.2.2. SEISMIC SETTLEMENT

For the assumed SSL conditions, a subsequent deformation analysis was qualitatively performed to estimate the vertical settlement from the sand-like soil's redistribution effects. Seismic settlement is generally confined to only sand-like soils.

Based on the conceptual SSL screening, the seismic induced deformations are anticipated to meet the GDM performance limits and performance objectives without ground improvement. The seismic settlement may induce downdrag loadings on the foundations, which should be accounted for in the geotechnical design of the bridge foundations.

6.1.3. EMBANKMENT SLOPE STABILITY

Static and seismic slope stability analyses should be performed on the bridge embankments. Only static slope stability analyses are required for the roadway embankments. The GDM requires that Spencer's method of slope stability be used for determining stability. The conceptual static and seismic slope stability analyses are qualitatively discussed in the following sections.

6.1.3.1. STATIC SLOPE STABILITY

From reviewing the results of the geotechnical exploration, we anticipate that the static slope stability analyses will generate resistance factors that meet the GDM design criteria without ground improvement. As a worst-case condition, the embankment may require soil reinforcement to add resistance and decrease the resistance factor to allowable levels. The static slope stability analyses are governed by the Strength Limit State.

6.1.3.2. SEISMIC SLOPE STABILITY

The GDM requires that pseudo-static, limit equilibrium slope stability analyses be performed at bridge embankments. The inertial driving forces from the design seismic event in addition to the inclusion of the residual soil strength parameters shall be included in the seismic slope stability analyses. In accordance with the GDM, the seismic slope stability analyses should also include both circular and non-circular surfaces.

From the SSL screening process, SSL is predicted at the site. We would expect SSL would occur for both the FEE and SEE events, with the SEE event having more appreciable SSL layer thickness. The residual soil strength parameters determined from the SSL calculations should be applied in the seismic slope stability analyses. For the estimated SSL conditions, we would expect the slope stability resistance factors would be in excess of 1.00. For situations where slope stability resistance factors over 1.00 are observed, a Newmark displacement analysis should be performed in accordance with the GDM. The calculated Newmark displacements

should be included in the lateral bridge foundation analyses to determine compliance in accordance with the GDM Performance Objectives.

The GEOR and SEOR shall determine if geotechnical mitigation (ie. ground improvement) or structural mitigation is needed at the site. We note that the GDM performance objective for bridge embankments under the Extreme Event I limit state is that the bridge embankment does not adversely affect the bridge structure. As such, there are no performance limits provided, and the bridge embankments are allowed to move so long as the bridge design includes sufficient structural mitigation to resist the movements relative to the Performance Objectives of the bridge.

6.1.4. GROUND IMPROVEMENT

Seismic induced SSL was identified at this site, and both geotechnical mitigation and structural mitigation appear feasible. Geotechnical mitigation may consist of in-situ ground improvements, additional embankment excavation, and/or embankment reinforcement. Structural mitigation may consist of structure excavation and/or larger bridge foundations.

6.2. BRIDGE FOUNDATIONS

Deep foundations are anticipated for support of the new bridge structure. We assume typical, steel HP pile foundations will be used at the end bents and drilled shaft foundations will be used at the interior bents. A conceptual geotechnical assessment of these foundation elements is globally discussed in the following sections.

6.2.1. SUBSURFACE STEEL CORROSION & CONCRETE DETERIORATION

In accordance with AASHTO LRFD Bridge Design Specifications, the following soil or site conditions are considered indicative of a potential for steel and/or concrete deterioration or corrosion.

- Resistivity less than 2,000 ohm-cm;
- pH less than 5.5;
- Chloride concentrations greater than 500 mg/kg;
- Sulfate concentrations greater than 1,000 mg/kg;

The results from the performed electro-chemical laboratory testing are summarized in the following table.

Corrosion Series Laboratory Test Result Summary

Test ID	Depth (ft)	Resistivity (ohm-cm)	pH	Chloride (mg/kg)	Sulfate (mg/kg)
B-1	18.5-25.0	1,612	3.48	10	50

Based on the results from the electro-chemical laboratory testing, subsurface steel corrosion is expected at the site, and steel corrosion mitigation will likely be required. Subsurface sulfate attack on concrete elements is not expected at the site. We note that additional corrosion series laboratory testing is recommended for the final bridge design.

6.2.2. DRIVEN PILE FOUNDATIONS

Driven pile foundations are anticipated for support of the bridge end bents. Specific elements of a driven pile design concept are discussed in the following sections.

6.2.2.1. AXIAL RESISTANCE

The Strength limit state axial loading conditions are expected to govern the geotechnical driven pile design. Driven piles are expected to develop the required driving resistance through predominantly skin friction in the Coastal Plain soils below the existing embankment fill. If a large pile hammer is needed to mobilize the required driving resistance, these hammers may more easily penetrate the dense/hard layers indicated on the boring logs, and a lower resistance than originally predicted may be observed. As is typical with driving piles in the coastal plain, the required driving resistance will likely not be observed during the initial pile driving. A prescribed wait period may be required for development of pile freeze following the initial pile driving.

6.2.2.2. LATERAL RESISTANCE

For the Strength limit state, the driven piles will develop the required lateral stability in the embankment fill and the upper Pleistocene soils. We do not anticipate that pre-drilling operations will be required to extend the pile foundations to the minimum tip elevation required for lateral stability under Strength limit state loadings.

For the Extreme Event I limit state, the driven piles will also develop the required lateral stability in the embankment fill and the upper Pleistocene soils. In accordance with the GDM, the available bridge abutment backwall passive pressure is on the order of 1.0 ksf for a 5.5 foot high backwall and an assumed sandy, cohesionless backfill material. The remaining lateral resistance, following use of the bridge abutment backwall resistance, will have to be carried by the piles. If the bridge design is such that the end bents are responsible for absorbing a significant amount of the lateral loads, then we anticipate that large piles and/or multiple rows of piles may be required.

6.2.2.3. DRIVABILITY

The driven piles will likely use an impact, diesel pile hammer. We anticipate the piles will extend into the limestone formation. Based on the anticipated pile length and the assumed construction logistics, we expect that the piles may be driven in at least two (2) sequences to allow for pile splices. For the assumed pile length, we anticipate that a relatively large pile hammer (D30 or similar) will be required to effectively mobilize the required driving resistance. Based on the soil conditions encountered and assuming a non-displacement pile, we anticipate that the initial pile driving will occur without much noticeable resistance. Once penetration in

the Miocene deposits and limestone has occurred, appreciable pile freeze is expected following any pause in the pile driving operations.

In general, we do not anticipate pile driving issues in the subsurface soils encountered at the site. Pile driving compressive and tensile stresses are expected to conform to the SCDOT criteria.

6.2.3. DRILLED SHAFT FOUNDATIONS

Drilled shafts are anticipated for support of the bridge interior bents. We anticipate that drilled shaft sizes could range from 36 inch to 60 inch diameter shafts. Specific elements of the drilled shaft design are discussed in the following sections.

6.2.3.1. AXIAL RESISTANCE

The Strength limit state axial loading conditions are expected to govern the geotechnical drilled shaft designs. We anticipate the drilled shafts will develop the required axial resistance through skin friction and tip resistance in the coastal plain soils and through end bearing in the limestone. Permanent construction casing is required for the drilled shaft construction on SCDOT projects. The wet method for drilled shaft construction should be utilized to maintain a stable excavation. A polymer slurry or a mineral slurry is recommended. In general, the drilled shaft excavation should be advanced through the Pleistocene soils and Miocene deposits with relative ease. Hard drilling in the limestone is expected, and rock excavation equipment may be needed to penetrate the limestone.

6.2.3.2. LATERAL RESISTANCE

For the Strength limit state and Extreme Event I limit state, the drilled shafts will develop the required lateral stability in the various coastal plain soils. We anticipate that the drilled shaft lengths needed to develop the required axial resistance would also satisfy the lateral resistance requirements.

6.3. DRAINAGE STRUCTURES

An existing reinforced concrete box culvert is located towards the southeastern end of the project. Based on our understanding of the proposed roadway design, the existing culvert will either be extended or replaced.

One (1) STB and one (1) CPT test were performed at the existing culvert location. The subgrade soils below the culvert are predominantly sandy. The bearing resistance and the resulting static settlements of these soils will be mobilized rapidly as they are loaded. We do not anticipate that mucking, beyond the amounts typical for a box culvert, will be required for acceptable performance. For a culvert extension, differential settlements between the existing structure and the extension are a concern and should be carefully evaluated.

Our understanding of the seismic design requirements for drainage structures is that the structure shall perform adequately in the opinion of the HEOR following the design seismic event. As such, the estimated deformations, as a result of the design seismic event, should be reported to the HEOR. If the HEOR determines the deformations to be excessive, then ground improvement should be implemented to the extent where the deformations are considered acceptable.

The embankments surrounding the culvert are considered roadway embankments and do not require seismic evaluation.

6.4. PAVEMENT DESIGN

To facilitate the STB and CPT testing, pavement cores were extracted from the existing asphalt pavement. In total, nine (9) pavement cores were collected at the site. At most locations, a concrete base material was observed below the existing asphalt pavement material. The concrete base material was not observed at the soil boring B-2 location. The asphalt pavement core thickness ranged from six (6) inches to eighteen (18) inches. The underlying concrete base thickness ranged from five (5) inches to seven (7) inches

Shallow soil borings were performed to collect bulk soil samples of the subgrade material below the pavement cores. These tests were performed within the existing paved travel lanes. From two (2) of the bulk samples, CBR testing was performed on the recovered material. We note that the quality of the subgrade material below the existing paved shoulders is considered satisfactory relative to primary route pavements.

The following table summarizes the existing pavement structure.

Existing Pavement Data

Boring ID	Asphalt Thickness (in)	Concrete Thickness (in)	CBR @ 95% Compaction
B-1	7.0	6.0	N/A
B-2	18.0	0	N/A
B-3	9.0	7.0	N/A
B-4	7.0	6.0	N/A
E-1	8.0	5.5	N/A
E-2	9.5	6.0	N/A
RW-1/BS-1	8.0	6.0	11.1
RW-2/BS-3	12.0	6.0	5.5
C-1	6.0	7.0	N/A

7. LIMITATIONS OF REPORT

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to the referenced project. The conclusions and recommendations contained herein are based upon the provided test borings and test result data, contained within, and applicable standards in this geographic area at the time this report was prepared. No other warranty, expressed or implied, is made.

APPENDIX

APPENDIX

SECTION 1 SITE LOCATION PLAN

1:58,000

0 0.4 0.8 1.6 mi

0 0.5 1 2 km

F&ME CONSULTANTS, INC.
COLUMBIA, SC

REV.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOPO. _____ DATE _____
DWG. CTC DATE 10.25.23 GROUP ____ – _____
R/W _____ DATE _____

US 21 / US 17A OVER CSX RR
HAMPTON/BEAUFORT COUNTY, SOUTH CAROLINA

SITE LOCATION PLAN

SCDOT PROJECT ID: P042942

SCALE: AS NOTED

FIGURE 1

APPENDIX

SECTION 2 BORING LOCATION PLAN

SUBSURFACE TESTING LOCATIONS							
Boring ID	Test Type	Northing	Easting	Latitude	Longitude	Test Elevation (MSL)	Total Depth (ft)
C-1	SPT	305065.441	2044153.213	32.67167576	-80.85651415	13.9	30.0
CPT-7	CPT	305074.464	2044169.583	32.67170050	-80.85646091	13.8	30.2
RW-1	SPT	305451.681	2043851.825	32.67273853	-80.85749185	28.4	15.0
RW-1U	Shelby Tube	305455.562	2043848.537	32.67274921	-80.85750251	28.4	17.0
BS-1	Bulk Sample	305447.168	2043844.532	32.67272615	-80.85751557	28.6	4.0

LEGEND:

- SOIL TEST BORING LOCATION
- BULK SAMPLE TEST LOCATION
- CONE PENETRATION TEST LOCATION
- SHELBY TUBE TEST LOCATION

REV.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

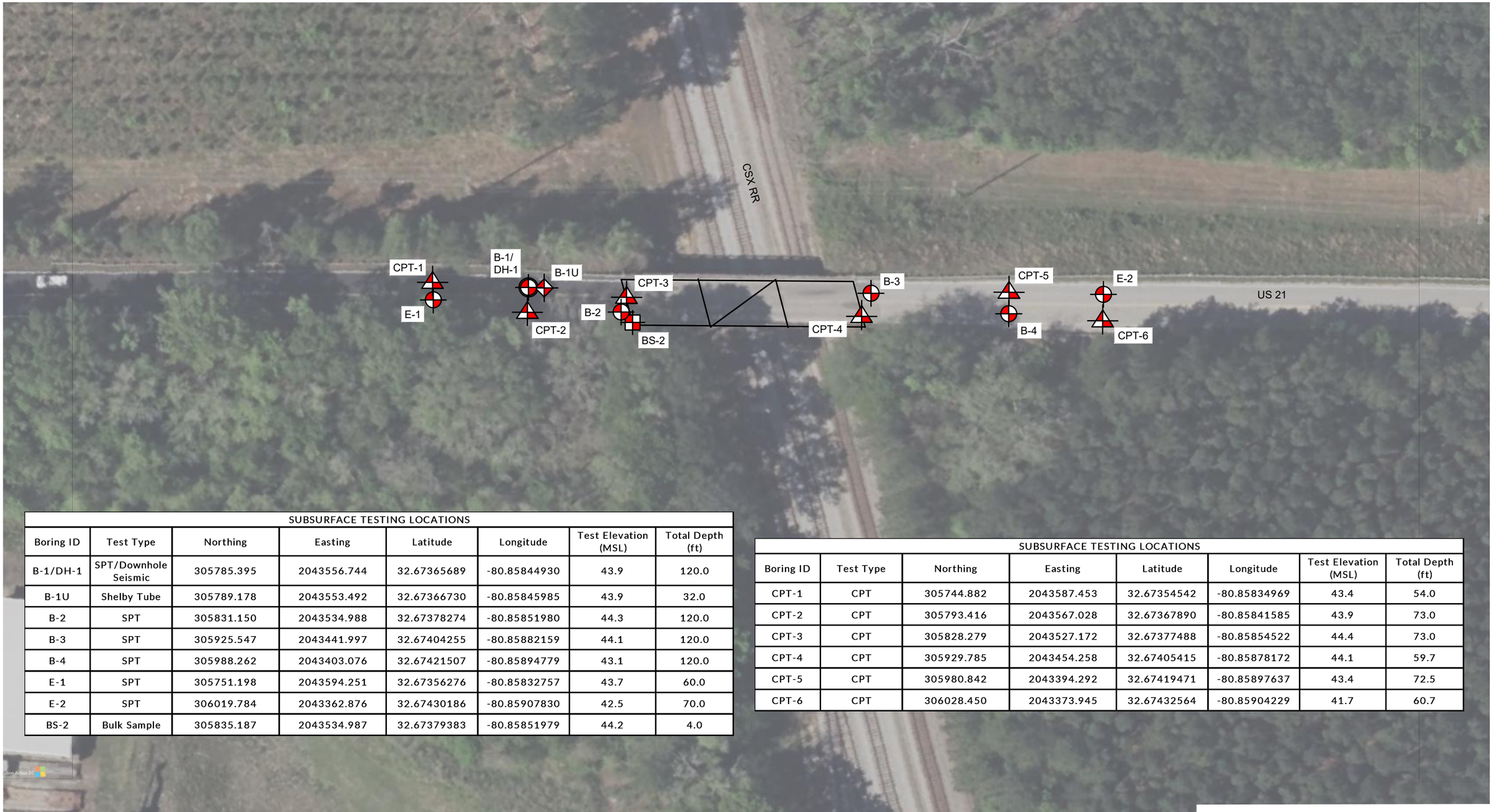
TOPO. _____ DATE _____
DWG. CTC DATE 11.7.23 GROUP ____ – _____
R/W _____ DATE _____

F&ME CONSULTANTS, INC.
COLUMBIA, SC

US 21 / US 17A OVER CSX RR
HAMPTON/BEAUFORT COUNTY, SOUTH CAROLINA

BORING LOCATION PLAN

SCDOT PROJECT ID: P042942	FME JOB NO. G6400.200
SCALE: 1" = 50'	FIGURE 2



SUBSURFACE TESTING LOCATIONS

Boring ID	Test Type	Northing	Easting	Latitude	Longitude	Test Elevation (MSL)	Total Depth (ft)
B-1/DH-1	SPT/Downhole Seismic	305785.395	2043556.744	32.67365689	-80.85844930	43.9	120.0
B-1U	Shelby Tube	305789.178	2043553.492	32.67366730	-80.85845985	43.9	32.0
B-2	SPT	305831.150	2043534.988	32.67378274	-80.85851980	44.3	120.0
B-3	SPT	305925.547	2043441.997	32.67404255	-80.85882159	44.1	120.0
B-4	SPT	305988.262	2043403.076	32.67421507	-80.85894779	43.1	120.0
E-1	SPT	305751.198	2043594.251	32.67356276	-80.85832757	43.7	60.0
E-2	SPT	306019.784	2043362.876	32.67430186	-80.85907830	42.5	70.0
BS-2	Bulk Sample	305835.187	2043534.987	32.67379383	-80.85851979	44.2	4.0

SUBSURFACE TESTING LOCATIONS

Boring ID	Test Type	Northing	Easting	Latitude	Longitude	Test Elevation (MSL)	Total Depth (ft)
CPT-1	CPT	305744.882	2043587.453	32.67354542	-80.85834969	43.4	54.0
CPT-2	CPT	305793.416	2043567.028	32.67367890	-80.85841585	43.9	73.0
CPT-3	CPT	305828.279	2043527.172	32.67377488	-80.85854522	44.4	73.0
CPT-4	CPT	305929.785	2043454.258	32.67405415	-80.85878172	44.1	59.7
CPT-5	CPT	305980.842	2043394.292	32.67419471	-80.85897637	43.4	72.5
CPT-6	CPT	306028.450	2043373.945	32.67432564	-80.85904229	41.7	60.7

LEGEND:

- SOIL TEST BORING LOCATION
- CONE PENETRATION TEST LOCATION
- BULK SAMPLE TEST LOCATION
- SHELBY TUBE TEST LOCATION

REV.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOPO. _____ DATE _____
DWG. CTC DATE 11.7.23 GROUP ____ – ____
R/W _____ DATE _____

F&ME CONSULTANTS, INC.
COLUMBIA, SC

US 21 / US 17A OVER CSX RR
HAMPTON/BEAUFORT COUNTY, SOUTH CAROLINA

BORING LOCATION PLAN

SCDOT PROJECT ID: P042942	FME JOB NO. G6400.200
SCALE: 1" = 50'	FIGURE 3

SUBSURFACE TESTING LOCATIONS							
Boring ID	Test Type	Northing	Easting	Latitude	Longitude	Test Elevation (MSL)	Total Depth (ft)
RW-2	SPT	306317.486	2043134.598	32.67512098	-80.85981885	29.4	15.0
BS-3	Bulk Sample	306321.871	2043141.736	32.67513301	-80.85979563	28.9	4.0

LEGEND:

- SOIL TEST BORING LOCATION
- BULK SAMPLE TEST LOCATION
- CONE PENETRATION TEST LOCATION
- SHELBY TUBE TEST LOCATION

REV.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOPO. _____ DATE _____
DWG. CTC DATE 11.7.23 GROUP ____ – _____
R/W _____ DATE _____

F&ME CONSULTANTS, INC.
COLUMBIA, SC

US 21 / US 17A OVER CSX RR
HAMPTON/BEAUFORT COUNTY, SOUTH CAROLINA

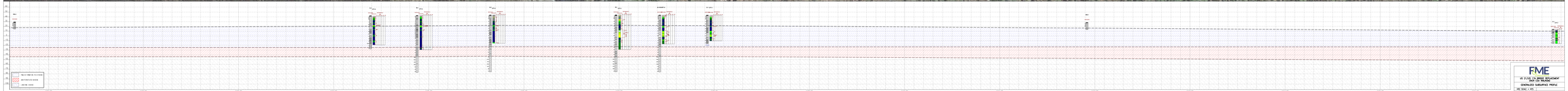
BORING LOCATION PLAN

SCDOT PROJECT ID: P042942	FME JOB NO. G6400.200
SCALE: 1" = 50'	FIGURE 4

APPENDIX

SECTION 3 GENERALIZED SUBSURFACE PROFILE


BS-3
RW-2
CPT-6
B-4
E-2
CPT-5
CPT-4
B-3
BS-2
B-2
B-1U
CPT-3
CPT-2
E-1
B-1/
DH-1
CPT-1
RW-1U
RW-1
BS-1
CPT-7
C-1


FME
GRADED SURFACE PROFILE

APPENDIX

SECTION 4 GEOTECHNICAL EXPLORATION LOGS

Soil Test Boring Log Descriptors

Correlation of Penetration Resistance with Relative Density and Consistency

Coarse Grained Soils (Sands/Gravel)		Fine Grained Soils (Silt/Clay)	
SPT Blow Count	Relative Density	SPT Blow Count	Consistency
≤ 4	Very Loose	≤ 2	Very Soft
5 – 10	Loose	3 – 4	Soft
11 – 30	Medium Dense	5 – 8	Firm
31 – 50	Dense	9 – 15	Stiff
≥ 51	Very Dense	16 – 30	Very Stiff
		≥ 31	Hard

Particle Size Identification

Gravel	Sieve Size
Fine	#4 to ¾ inch
Coarse	¾ inch to 3 inch

Sand	Sieve Size
Fine	#200 to #40
Medium	#40 to #10
Coarse	#10 to #4

Gravel	Sieve Size
Fines Content	< #200

SYMBOL	gINT CODE*	TYPICAL DESCRIPTION
	SCCT	*CONCRETE*
	SCAT	*ASPHALT*
	SCTS	*TOPSOIL/PEAT*
	SCSAND	*SAND*
	SCSTSAND	*SILTY SAND/SANDY SILT*
	SCCLSAND	*CLAYEY SAND/SANDY CLAY*
	SCCLAY	*CLAY*
	SCSILT	*SILT*
	SCSTCLAY	*SILTY CLAY/CLAYEY SILT*
	SCSAP	*SAPROLITE*
	SCLS	*LIMESTONE*
	SCBR	*GRANITE (BEDROCK)*
	SCMARL	*MARL*

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS: GRAPH	SYMBOLS: LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE)	GRAVEL AND GRAVELLY SOILS (MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE)	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS (MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE)	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE)	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1/DH-1		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+42	**Offset:**	4.2 R	**Alignment:**	Mainline
Elev.:	43.9 ft	**Latitude:**	32.67365689	**Longitude:**	-80.8584493	**Date Started:**	10/10/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/11/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 27 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0									
	0.6	**ASPHALT ROADWAY (7.0-in.)** (US 21)								
	1.1	**CONCRETE (6.0-in.)**		1.0						
		EXISTING FILL		2.0	SS-1	1	2			
		Loose, Moist, Light Olive Brown, Medium Plasticity, Clayey Fine SAND (SC-SM/A-4), No HCl Reaction, 2.5Y5/6			SS-2	4	3	5	7	8
38.9		@2.0-ft.: Gray/Olive Yellow/Red (Mottled), 2.5Y6/1 & 2.5Y6/6 & 10R4/8		4.0	SS-3	3	4	4	5	8
		@4.0-ft.: Olive Brown, 2.5Y4/3		6.0	SS-4	2	4	4	5	8
		@SS-4: Grayish Brown/Light Olive Brown 2.5Y5/2 & 2.5Y5/3, LL=22, PL=17, PI=5, NMC=19.7, %200=41.9		8.0	SS-5	3	4	5	6	9
33.9		@8.0-ft.: Olive Brown, 2.5Y4/3								
	12.0									
		Loose, Moist, Grayish Brown, High Plasticity, Sandy Lean CLAY (CL/A-7-6), No HCl Reaction, 2.5Y 5/2		13.5	SS-6	1	2	4		6
		@SS-6: LL=42, PL=15, PI=27, NMC=25.3, %200=60.2								
28.9				18.5						
		@18.5-ft.: Olive Brown, 2.5Y4/3			SS-7	2	4	6		10
23.9										
	22.0									
		PAMLICO FORMATION (PLEISTOCENE)		23.5						
		Medium Dense, Moist, Dark Grayish Brown/Black, Medium Plasticity to High Plasticity, Clayey Fine SAND (SC/A-2-6), No HCl Reaction, 2.5Y4/2 & 2.5Y2.5/1			SS-8	2	6	6		12
18.9										
	27.0 ▽									
		Stiff, Moist, Gray/Olive Yellow/Red (Mottled), High Plasticity, Sandy Lean CLAY (CL/A-7-6), No HCl Reaction, 2.5Y6/1 & 2.5Y6/6 & 10R4/8		28.5	SS-9	2	4	7		11
13.9		@SS-9: LL=45, PL=18, PI=27, NMC=26.0, %200=63.1								

SPT N VALUE ● PL × MC ○ LL ×
▲ FINES CONTENT (%)
✿ RQD (%) ■ REC (%)
0 10 20 30 40 50 60 70 80 90

LEGEND

Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-1/DH-1
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+42	**Offset:**	4.2 R	**Alignment:**	Mainline
Elev.:	43.9 ft	**Latitude:**	32.67365689	**Longitude:**	-80.8584493	**Date Started:**	10/10/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/11/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 27 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	32.0	Medium Dense, Moist, Gray/Red, Mottled, Non-Plastic, Silty Fine SAND (SM/A-2-4), No HCl Reaction, 2.5Y6/1 & 2.5YR4/8	33.5	SS-10	4	6	9		15
8.9									
		@SS-11: Olive Yellow, 2.5Y6/6, LL=NP, PL=NP, PI=NP, NMC=26.6, %200=17.9	38.5	SS-11	5	6	7		13
3.9	42.0	Medium Dense, Moist, Light Gray, Non-Plastic, Fine Poorly Graded SAND (SP/A-3), No HCl Reaction, 2.5Y7/2	43.5	SS-12	7	11	13		24
-1.1	47.0	Very Loose, Moist, Dark Greenish Gray/Brownish Yellow, Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), No HCl Reaction, 10GY4/1 & 10YR6/6	48.5	SS-13	1	1	1		2
-6.1		@SS-13: LL=27, PL=15, PI=12, NMC=35.1, %200=38.3							
	52.0	Loose to Medium Dense, Moist, Greenish Black, Low Plasticity, Silty Clayey Fine to Medium SAND (SC-SM/A-6), No HCl Reaction, 5GY 2.5/1	53.5	SS-14	3	3	5		8
-11.1		@SS-14: LL=23, PL=16, PI=7, NMC=40.0, %200=28.9							
		@58.5-ft.: Dark Greenish Gray, Fine Sand Particles, No HCl Reaction, 10Y4/1	58.5	SS-15	4	7	9		16
-16.1									
	62.0								

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1/DH-1		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+42	**Offset:**	4.2 R	**Alignment:**	Mainline
Elev.:	43.9 ft	**Latitude:**	32.67365689	**Longitude:**	-80.8584493	**Date Started:**	10/10/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/11/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 27 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		Stiff, Moist, Dark Greenish Gray, Medium Plasticity to High Plasticity, Sandy Lean CLAY (CL/A-6), No HCl Reaction, 10Y4/1		63.5	SS-16	4	6	9		15
-21.1	67.0	**UNDIFFERENTIATED MIOCENE**								
		Medium Dense, Moist, Dark Greenish Gray, Medium Plasticity, Silty Fine SAND (SM/A-7-5), No HCl Reaction, 10Y4/1		68.5	SS-17	4	5	9		14
-26.1										
		@SS-18: LL=41, PL=30, PI=11, NMC=45.4, %200=46.7		73.5	SS-18	4	6	7		13
-31.1										
				78.5	SS-19	4	6	8		14
-36.1										
		@83.5-ft.: Very Dark Greenish Gray, 10Y3/1		83.5	SS-20	5	7	9		16
-41.1	87.0	**LIMESTONE (EOCENE)**								
		Hard, Moist, Dark Greenish Gray, Medium Plasticity to High Plasticity, Lean CLAY (CL/A-6) with Sand, No HCl Reaction, 10Y4/1		88.5	SS-21	50/4.5"				100+
-46.1										

SPT N VALUE ● PL × MC ○ LL × ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

Continued Next Page

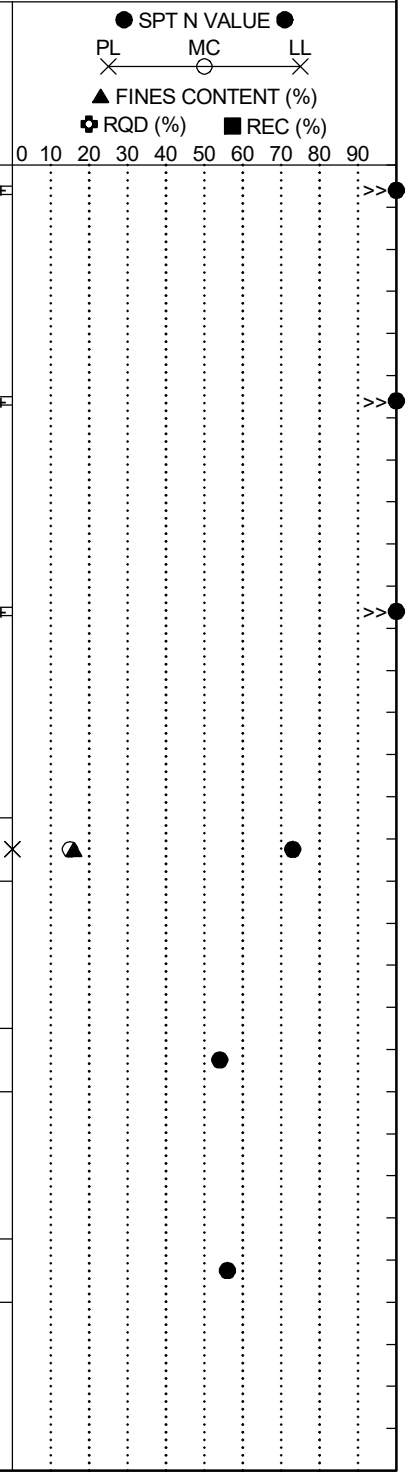
LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-1/DH-1
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+42	**Offset:**	4.2 R	**Alignment:**	Mainline
Elev.:	43.9 ft	**Latitude:**	32.67365689	**Longitude:**	-80.8584493	**Date Started:**	10/10/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/11/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 27 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		@93.5-ft.: with Trace of Gravel		93.5	SS-22	50/2"				100+
-51.1										
	97.0	Very Dense, Moist, Light Gray, Non-Plastic, Silty Medium to Coarse SAND (SM/A-1-b) with Trace of Shell Fragments, Cemented, Weak HCl Reaction, N7/		98.5	SS-23	50/2"				100+
-56.1										
		@103.5-ft.: White, with Limestone Mud, N8/		103.5	SS-24	50/2.5"				100+
-61.1										
		@SS-25: with Decreased Mud, LL=NP, PL=NP, PI=NP, NMC=14.9, %200=16.3		108.5	SS-25	31	33	40		73
-66.1										
				113.5	SS-26	25	24	30		54
-71.1										
				118.5	SS-27	27	26	30		56
-76.1	120.0	Boring Terminated 120.0-ft. Below Existing Roadway Surface. Target Depth Achieved.								



LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+37	**Offset:**	3.6 R	**Alignment:**	Mainline
Elev.:	43.9 ft	**Latitude:**	32.6736673	**Longitude:**	-80.85845985	**Date Started:**	10/16/2023
Total Depth:	32 ft	**Soil Depth:**	32 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/16/2023
Bore Hole Diameter (in):	3	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 27 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6" / 2nd 6" / 3rd 6" / 4th 6"	N Value
	0.0						
	0.6	**ASPHALT ROADWAY (7.0-in.)** (US 21)					
	1.1	**CONCRETE (6.0-in.)**					
		Drilled to 30.0-ft.					
38.9							
33.9							
28.9							
23.9							
18.9							
		▽					
13.9	30.0	@ST-1: See Shelby Tube UD Prep Log		30.0	ST-1		
	32.0	@ST-2: %REC=100%, Tube was not pushed to save excess material for potential retesting.		32.0	ST-2		
	34.0						
8.9		Boring Terminated at 34.0-ft. Below the Existing Ground Surface					

● SPT N VALUE ●
PL MC LL
▲ FINES CONTENT (%)
✿ RQD (%) ■ REC (%)
0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SC_DOT G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/9/23

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1106+96	**Offset:**	5.5 L	**Alignment:**	Mainline
Elev.:	44.3 ft	**Latitude:**	32.67378274	**Longitude:**	-80.8585198	**Date Started:**	10/11/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/13/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 37.5 ft	**24HR**	37.5 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0	**ASPHALT ROADWAY (1.5-ft.)** (US 21)								
	1.5	**EXISTING FILL** Loose to Medium Dense, Moist, Yellowish Red, High Plasticity to Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), 5YR4/6		2.0	SS-1	2	3	5	5	8
				4.0	SS-2	3	4	5	6	9
39.3		@SS-3: Dark Red/Grayish Brown, Mottled, Fine to Medium Sand Particles, 10R3/6 & 10YR5/2, LL=36, PL=15, PI=21, NMC=16.8, %200=36.7		6.0	SS-3	6	9	11	12	20
		@6.0-ft.: Red, 2.5YR4/6		8.0	SS-4	10	12	12	14	24
34.3		@8.0-ft.: Dark Yellowish Brown/Dark Red/Pale Brown, with Trace of Gravel, 10YR4/6 & 10R3/6 & 10YR6/3								
		@13.5-ft.: Redidsh Yellow/Light Gray/Red, 7.5YR6/8 & 10YR7/1 & 2.5YR4/8		13.5	SS-5	4	6	10		16
29.3										
		@SS-6: LL=31, PL=12, PI=19, NMC=18.6, %200=44.3		18.5	SS-6	4	6	8		14
24.3										
	22.0	**PAMLICO FORMATION (PLEISTOCENE)** Loose, Moist, Pale Olive/Black (Mottled), Low Plasticity to Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), 5Y 6/3 & 5Y 2.5/1		23.5	SS-7	3	5	5		10
19.3										
	27.0	Firm, Moist, Gray, Medium Plasticity, Sandy Lean CLAY (CL/A-6), 5Y5/1		28.5	SS-8	3	3	5		8
		@SS-8: LL=34, PL=16, PI=18, NMC=27.4, %200=57.7								
14.3										

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

Continued Next Page

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1106+96	**Offset:**	5.5 L	**Alignment:**	Mainline
Elev.:	44.3 ft	**Latitude:**	32.67378274	**Longitude:**	-80.8585198	**Date Started:**	10/11/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/13/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 37.5 ft	**24HR**	37.5 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	32.0									
		Firm, Moist, Pale Olive/Black (Mottled), Medium Plasticity, Sandy Lean CLAY (CL/A-7-6), 5Y6/3 & 5Y2.5/1		33.5	SS-9	3	4	3		7
9.3		@SS-9: LL=46, PL=17, PI=29, NMC=25.2, %200=63.0								
	37.0									
		▼Medium Dense, Moist, Greenish Gray, Non-Plastic, Silty Fine SAND (SM/A-2-4), 10Y6/1		38.5	SS-10	8	9	9		18
4.3		@SS-10: LL=NP, PL=NP, PI=NP, NMC=25.7, %200=20.4								
		@43.5-ft.: Light Gray, 5Y7/2		43.5	SS-11	7	12	16		28
-0.7										
	47.0									
		Very Loose, Moist, Dark Greenish Gray/Light Yellowish Brown, Medium Plasticity, Clayey Fine to Coarse SAND (SC/A-2-6), 5GY4/1 & 2.5Y6/3		48.5	SS-12	1	1	1		2
-5.7		@SS-12: LL=27, PL=16, PI=11, NMC=29.4, %200=20.1								
	52.0									
		Medium Dense, Moist, Gray, Non-Plastic, Silty Fine to Coarse SAND (SM/A-2-4) with Clay, N5/		53.5	SS-13	2	5	9		14
-10.7		@SS-13: LL=NP, PL=NP, PI=NP, NMC=33.3, %200=21.1								
	57.0									
		Medium Dense, Moist, Very Dark Greenish Gray, Low Plasticity to Medium Plasticity, Clayey Fine SAND (SC/A-2-6), 10Y3/1		58.5	SS-14	3	6	8		14
-15.7										
	62.0									

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

Continued Next Page

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1106+96	**Offset:**	5.5 L	**Alignment:**	Mainline
Elev.:	44.3 ft	**Latitude:**	32.67378274	**Longitude:**	-80.8585198	**Date Started:**	10/11/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/13/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 37.5 ft	**24HR**	37.5 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		Medium Dense, Moist, Dark Greenish Gray, High Plasticity, Clayey Fine SAND (SC/A-7-6), 10Y4/1		63.5						
		@SS-15: LL=61, PL=25, PI=36, NMC=39.2, %200=41.2			SS-15	4	8	10		18
-20.7										
	67.0	**UNDIFFERENTIATED MIOCENE**								
		Medium Dense, Moist, Dark Greenish Gray, Medium Plasticity, Silty Fine SAND (SM/A-7-6) with Sand, 10Y4/1		68.5						
					SS-16	3	6	9		15
-25.7										
				73.5						
		@SS-17: LL=46, PL=28, PI=18, NMC=43.0, %200=48.7			SS-17	3	6	8		14
-30.7										
	77.0	Stiff, Moist, Very Dark Greenish Gray, Low Plasticity to Medium Plasticity, Sandy Lean CLAY (CL/A-6), 10Y3/1		78.5						
					SS-18	4	6	8		14
-35.7										
	82.0	Medium Dense, Moist, Dark Greenish Gray, Low Plasticity, Clayey Fine SAND (SC/A-2-6), 10Y4/1		83.5						
					SS-19	5	6	9		15
-40.7										
	87.0	Very Stiff, Moist, Dark Greenish Gray, Medium Plasticity to No Plasticity, Lean CLAY (CL/A-6), No HCl Reaction, 10Y4/1		88.5						
	88.9	**LIMESTONE (EOCENE)**			SS-20	13	13	11		24
-45.7		Medium Dense, Moist, White, Medium Plasticity, Clayey Medium to Coarse SAND (SC/A-2-6) with Trace Shell Fragments, Weak HCl Reaction, N8/								

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-2
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1106+96	**Offset:**	5.5 L	**Alignment:**	Mainline
Elev.:	44.3 ft	**Latitude:**	32.67378274	**Longitude:**	-80.8585198	**Date Started:**	10/11/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/13/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 37.5 ft	**24HR**	37.5 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		@SS-21: LL=32, PL=20, PI=12, NMC=35.2, %200=27.1		93.5	SS-21	32	50/1"			100+
-50.7										
		@SS-22: No Recovery		98.5	SS-22	50/1.5"				100+
-55.7										
	102.0	Very Dense, Moist, White, Non-Plastic, Coarse Poorly Graded SAND (SP/A-1-b) with Trace Gravel, Strong HCl Reaction, N8/		103.5	SS-23	29	50/4.5"			100+
-60.7										
		@SS-24: No Recovery		108.5	SS-24	50/1.5"				100+
-65.7										
		@113.5-ft.: Light Greenish Gray, Medium to Coarse Sand Particles, with Trace of Shell Fragments, Strong HCl Reaction, 10GY8/1		113.5	SS-25	23	45	50/3"		100+
-70.7										
		@118.5-ft.: with Trace of Gravel		118.5	SS-26	23	30	26		56
-75.7	120.0	Boring Terminated 120.0-ft. Below Existing Roadway Surface. Target Depth Achieved.								

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-3		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1105+64	**Offset:**	5.3 R	**Alignment:**	Mainline
Elev.:	44.1 ft	**Latitude:**	32.67404255	**Longitude:**	-80.85882159	**Date Started:**	10/22/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/23/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	10/24/2023	**Groundwater:**	**TOB** 24 ft	**24HR**	28 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0								
	0.8	**ASPHALT ROADWAY (9.0-in.)** (US 21)							
	1.3	**CONCRETE (7.0-in.)**	1.0						
		EXISTING FILL	2.0	SS-1	1	2			
		Moist, Grayish Brown, Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), 2.5Y5/2		SS-2	2	3	3	4	6
39.1		@2.0-ft.: Loose, White/Light Olive Brown/ Red (Mottled), 2.5Y8/1, 2.5Y5/4 & 2.5YR4/6	4.0	SS-3	3	5	4	5	9
		@SS-3: White/ Light Yellowish Brown/ Red/ Strong Brown, 2.5Y8/1, 2.5Y9/4, 2.5YR4/8 & 7.5YR5/8	6.0	SS-4	3	4	5	5	9
	8.0	LL=29, PL=13, PI=16, NMC=19.5%, %200=43.4	8.0	SS-5	2	6	7	8	13
34.1		@6.0-ft.: Fine Sand Particles							
		Medium Dense to Loose, Moist, Dark Gray/ Black/ White/ Stong Brown (Mottled), Low Plasticity, Silty Clayey Fine to Medium SAND (SC-SM/A-4), 2.5Y4/1 & 2.5Y2.5/1 & 7.5YR5/8 & 2.5YR4/6	13.5	SS-6	2	2	4		6
		@SS-6.: with Trace of Organic Matter							
29.1		LL=21, PL=16, PI=5, NMC=20.5%, %200=45.1							
		@18.5-ft.: Dark Gray/ White/ Red, 2.5Y4/1, 2.5Y8/1 & 2.5YR5/8	18.5	SS-7	2	3	4		7
24.1									
	22.0	**PAMLICO FORMATION (PLEISTOCENE)**							
		Medium Dense to Loose, Moist, Grayish Brown, Low Plasticity to Medium Plasticity, Clayey Fine to Medium SAND (SC/A-2-6), 2.5YR4/6	23.5	SS-8	3	7	8		15
19.1									
		@28.5-ft.: Light Gray/ Strong Brown/ Red, 2.5Y7/1, 7.5YR5/8 & 2.5YR4/8	28.5	SS-9	2	3	5		8
14.1									

SPT N VALUE ● PL × MC ○ LL × ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-3		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1105+64	**Offset:**	5.3 R	**Alignment:**	Mainline
Elev.:	44.1 ft	**Latitude:**	32.67404255	**Longitude:**	-80.85882159	**Date Started:**	10/22/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/23/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	10/24/2023	**Groundwater:**	**TOB** 24 ft	**24HR**	28 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	32.0									
		Very Stiff, Moist, Light Gray/ Yellowish Brown, Medium Plasticity to High Plasticity, Fine Sandy Lean CLAY (CL/A-6), 10YR7/1 & 10YR5/8		33.5	SS-10	3	4	12		16
9.1										
	37.0									
		Stiff, Moist, Gray, Very Plastic, Fat CLAY (CH/A-7-6), 10YR5/1 @SS-11: LL=62, PL=19, PI=43, NMC=34.3%, %200=92.6		38.5	SS-11	2	4	5		9
4.1										
	42.0									
		Stiff, Moist, Olive, Non-Plastic to Low Plasticity, SILT (ML/A-4), 5Y5/3		43.5	SS-12	3	4	5		9
-0.9										
	47.0									
		Firm, Moist, Dark Gray, Medium Plasticity to High Plasticity, Lean CLAY (CL/A-6) with Sand (Occasional Sand Lenses), 5Y4/1		48.5	SS-13	1	2	4		6
-5.9										
	52.0									
		Very Soft, Moist, Dark Greenish Gray, Very Plastic, Fat CLAY (CH/A-7-6), 10GY4/1 @SS-14: LL=71, PL=29, PI=42, NMC=78.2%, %200=88.9		53.5	SS-14	WOH/12"		1		1
-10.9										
	58.5			58.5						
		Soft, Moist, Greenish Black, Medium Plasticity, Lean CLAY (CL/A-6), 5GY2.5/1 @SS-15: LL=31, PL=13, PI=18, NMC=83.1%, %200=85.8			SS-15	WOH	1	2		3
-15.9										
	62.0									

SPT N VALUE ● PL × MC ○ LL ×
▲ FINES CONTENT (%)
✿ RQD (%) ■ REC (%)
0 10 20 30 40 50 60 70 80 90

Continued Next Page

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-3		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1105+64	**Offset:**	5.3 R	**Alignment:**	Mainline
Elev.:	44.1 ft	**Latitude:**	32.67404255	**Longitude:**	-80.85882159	**Date Started:**	10/22/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/23/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	10/24/2023	**Groundwater:**	**TOB** 24 ft	**24HR**	28 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		Very Soft, Moist, Dark Greenish gray, Medium Plasticity to High Plasticity, Fine to Medium Sandy CLAY (CL/A-6), 5GY4/1		63.5	SS-16	1	1	1		2
-20.9	67.0	**UNDIFFERENTIATED MIOCENE** Stiff, Moist, Very Dark Grayish Olive, Non-Plastic to Low Plasticity, SILT (ML/A-4) with Fine Sand, 10Y3/2		68.5	SS-17	2	4	5		9
-25.9	72.0	Very Stiff to Hard, Moist, Very Dark Grayish Olive, Non-Plastic to Low Plasticity, SILT (ML/A-4), 10Y3/2		73.5	SS-18	6	9	12		21
-30.9				78.5	SS-19	7	12	20		32
-35.9	82.0	Stiff, Moist, Very Dark Grayish Olive, Non-Plastic to Low Plasticity, SILT (ML/A-4) with Fine to Medium Sand (Sand Lenses), No HCl Reaction 10Y3/2		83.5	SS-20	4	5	8		13
-40.9	87.0	**LIMESTONE (EOCENE)** Medium Dense, Moist, White, Non-Plastic, Silty Fine to Medium SAND (SM/A-1-b) with Little Gravel, Stong HCl Reaction, GLEY18/N @SS-21: LL=NP, PL=NP, PI=NP, NMC=22.1%, %200=15.3		88.5	SS-21	5	7	19		26
-45.9										

SPT N VALUE ● PL × MC ○ LL × ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-3
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1105+64	**Offset:**	5.3 R	**Alignment:**	Mainline
Elev.:	44.1 ft	**Latitude:**	32.67404255	**Longitude:**	-80.85882159	**Date Started:**	10/22/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/23/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	10/24/2023	**Groundwater:**	**TOB** 24 ft	**24HR**	28 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		@SS-22: No Recovery		93.5	SS-22	50/2.5"				100+
-50.9										
		@SS-23: No Recovery		98.5	SS-23	50/2.0"				100+
-55.9										
		@103.5-ft.: Medium to Coarse Sand Particles, with Trace of Shells & Gravel, Strong HCL Reaction		103.5	SS-24	35	50/2.5"			100+
-60.9										
		@SS-25: No Recovery		108.5	SS-25	50/2.5"				100+
-65.9										
				113.5	SS-26	18	26	32		58
-70.9										
				118.5	SS-27	16	16	25		41
-75.9	120.0	Boring Terminated 120.0-ft. Below Existing Roadway Surface. Target Depth Achieved.								

SPT N VALUE ● PL × MC ○ LL ×
▲ FINES CONTENT (%)
✿ RQD (%) ■ REC (%)
0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SC_DOT G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/9/23

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-4
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0									
	0.6	**ASPHALT ROADWAY (7.0-in.)** (US 21)								
	1.1	**CONCRETE (6.0-in.)**		1.0						
		EXISTING FILL			SS-1	1	2			
		Loose, Moist, Dark Grayish Brown/Light Olive Brown/Yellowish Red, Mottled, Low Plasticity to Medium Plasticity, Clayey Fine SAND (SC/A-2-6), 2.5Y4/2 & 2.5Y5/4 & 5YR4/6		2.0	SS-2	2	4	6	6	10
		@2.0-ft.: Black/Olive Gray, 5Y2.5/2 & 5Y5/2		4.0	SS-3	2	4	4	5	8
38.1	6.0	@4.0-ft.: Black/Olive/Light Gray/Yellowish Red, with Trace Organics (Large Root), 5Y2.5/2 & 5Y4/4 & 5Y7/2 & 5YR4/6		6.0	SS-4	3	3	4	4	7
	8.0	Firm, Moist, Gray/Light Olive Brown, Mottled, Medium Plasticity to High Plasticity, Lean CLAY (CL/A-6) with Sand, 5Y6/1 & 2.5Y5/3		8.0	SS-5	1	3	4	6	7
33.1		Loose to Very Loose, Moist, Dark Yellowish Brown, Mottled, Medium Plasticity, Clayey Fine SAND (SC/A-6), 10YR4/4		10.0	SS-6	1	1	3	7	4
		@SS-5: LL=35, PL=16, PI=19, NMC=21.0%, %200=48.9		12.0	SS-7	3	3	3	4	6
		@10.0-ft.: Black/Olive Gray/Yellowish Red, 5Y2.5/2 & 5Y5/2 & 5YR4/6		14.0	SS-8	2	3	4	6	7
		@SS-7: Light Gray/Black/Dark Red, 2.5Y7/1 & 2.5Y2.5/1 & 2.5YR3/6 LL=26, PL=15, PI=11, NMC=23.5%, %200=43.0		16.0	SS-9	4	6	7	9	13
28.1		@14.0-ft.: Black/Light Olive Gray/Yellowish Red, 2.5Y2.5/1 & 5Y6/2 & 5YR4/6		18.0	SS-10	2	4	7	12	11
		@16.0-ft.: Medium Dense, Black/Light Gray/Dark Red, 2.5Y2.5/1 & 2.5Y7/1 & 2.5YR3/6		20.0	SS-11	8	8	7	8	15
		@18.0-ft.: Red/Light Reddish Gray, 2.5YR4/8 & 2.5YR7/1		22.0						
23.1	20.0	Stiff, Moist, Black/Light Gray/Yellowish Brown/Red, Mottled, Medium Plasticity to High Plasticity, Silty CLAY (CL-ML/A-4), 5Y2.5/2 & 5Y7/1 & 10YR5/8 & 2.5YR4/8								
	22.0									

SPT N VALUE ● PL × MC ○ LL × ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

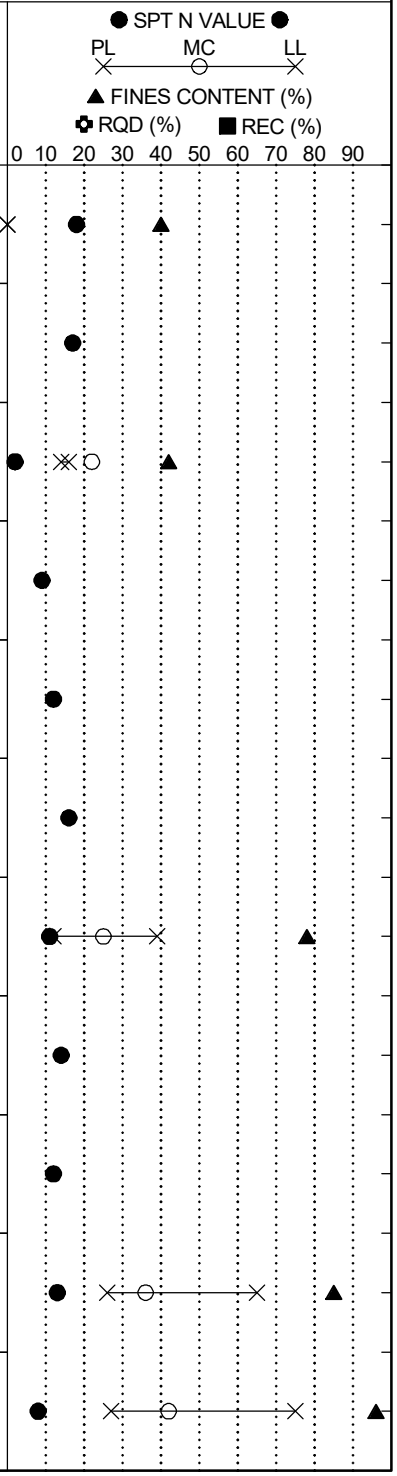
Continued Next Page

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-4		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		PAMLICO FORMATION (PLEISTOCENE)							
		Medium Dense, Moist, Light Gray/Olive Gray/Black, Non-Plastic, Silty Fine SAND (SM/A-4) with Trace of Organics (Roots), 5Y7/1 & 5Y4/2 & 5Y2.5/1		SS-12	1	10	8	9	18
	24.0	@SS-12: LL=NP, PL=NP, PI=NP, NMC=17.9%, %200=39.8	24.0						
18.1				SS-13	7	10	7	5	17
	26.0	Medium Dense, Moist, Black/Gray, Mottled, Low Plastiicty to Medium Plasticity, Clayey Fine to Medium SAND (SC/A-2-6) with Trace of Organics, 5Y2.5/1 & 5Y6/1	26.0						
				SS-14	2	1	1	3	2
	28.0	Very Loose, Gray, Mottled, Low Plasticity, Silty Fine SAND (SM/A-4), 5Y6/1	28.0						
		@SS-14: LL=16, PL=14, PI=2, NMC=21.6%, %200=42.3		SS-15	1	4	5	6	9
13.1	30.0	Stiff, Moist, Gray/Red, Mottled, Low Plasticity, Silty CLAY (CL-ML/A-4) with Sand, 2.5Y6/1 & 2.5YR4/8	30.0						
				SS-16	2	5	7	11	12
	32.0	Stiff, Moist, Gray/Red, Mottled, Low Plasticity, Silty CLAY (CL-ML/A-4), 2.5Y6/1 & 2.5YR4/8	32.0						
		Very Stiff, Moist, Gray/Strong Brown/Light Red, Mottled, Medium Plasticity to High Plasticity, Lean CLAY (CL/A-6) with Sand, 2.5Y6/1 & 7.5YR5/8 & 2.5YR6/8		SS-17	11	6	10	10	16
	34.0		34.0						
8.1		Stiff, Moist, Black/Light Gray, High Plasticity to Very Plastic, Lean CLAY (CL/A-6) with Sand, 5Y2.5/1 & 5Y7/1		SS-18	3	5	6	9	11
		@SS-18: LL=39, PL=12, PI=27, NMC=24.7%, %200=77.7	36.0						
				SS-19	9	7	7	8	14
		@36.0-ft.: Very Dark Gray/Strong Brown, Mottled, with Trace Organics, 10YR3/1 & 7.5YR4/6	38.0						
				SS-20	2	7	5	7	12
		@38.0-ft.: Dark Gray, 7.5YR4/1							
3.1	40.0		40.0						
		Stiff to Firm, Moist, Grayish Brown, High Plasticity, Fat CLAY (CH/A-7-6), 2.5Y5/2		SS-21	6	6	7	6	13
		@SS-21: LL=65, PL= 26, PI=39, NMC=35.9%, %200=85.3	42.0						
				SS-22	1	2	6	7	8
		@42.0-ft.: Gray/Light Olive Brown (Mottled), 5Y6/1 & 2.5Y5/6							
		@SS-22: LL=75, PL=27, PI=48, NMC=42.4%, %200=96.3	44.0						



LEGEND

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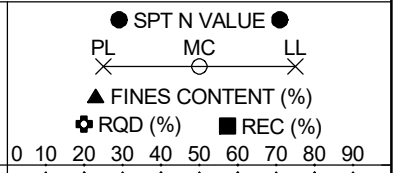
SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-4		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
-1.9	46.0	@44.0-ft.: Very Stiff, Light Greenish Gray/Light Olive Brown/Yellowish Red (Mottled), with SandLense at Bottom of Spoon, 10Y7/1 & 2.5Y5/6 & 5YR4/6	46.0	SS-23	6	8	9	9	17
		Loose, Moist, Light Greenish Gray/Olive, High Plasticity, Clayey Fine to Medium SAND (SC/A-7-6), 10Y7/1 & 5Y5/4		SS-24	2	4	4	5	8
		@SS-24: LL=42, PL=15, PI=27, NMC=37.2%, %200=46.2	48.0						
		@48.0-ft.: Olive/Dark Yellowish Brown, 5Y5/3 & 10YR4/6		SS-25	3	6	4	5	10
-6.9	52.0								
		Firm, Moist, Very Dark Greenish Gray, High Plasticity, Lean CLAY (CL/A-7-6) with Sand, 5GY3/1	53.5	SS-26	2	2	3		5
-11.9									
		@SS-27: Soft, Dark Greenish Gray, 10GY4/1	58.5	SS-27	WOH/12"		2		2
-16.9		LL=48, PL=22, PI=26, NMC=84.4%, %200=82.8							
	62.0								
		Very Loose, Moist, Very Dark Greneish Gray, Medium Plasticity, Silty Fine to Medium SAND (SM/A-7-6), 5G3/1	63.5	SS-28	WOH/12"		1		1
		@SS-28: LL=41, PL=27, PI=14, NMC=51.4%, %200=47.2							
-21.9									



LEGEND

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SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-4		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	67.0	**UNDIFFERENTIATED MIOCENE**								
		Firm to Stiff, Moist, Very Dark Grayish Olive, Low Plasticity, Lean CLAY (CL/A-4) with Sand, 10Y3/2		68.5	SS-29	1	3	4		7
-26.9		@SS-29: LL=26, PL=17, PI=9, NMC=82.9%, %200=84.5								
				73.5	SS-30	4	5	7		12
-31.9										
				78.5	SS-31	3	5	7		12
-36.9										
	83.5	Loose, Moist, Very Dark Grayish Olive, Very Plastic, Clayey Fine SAND (SC/A-7-6), 10Y3/2		83.5	SS-32	3	4	5		9
-41.9		@SS-32: LL=73, PL=26, PI=47, NMC=53.0%, %200=47.1								
	87.0									

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

Continued Next Page

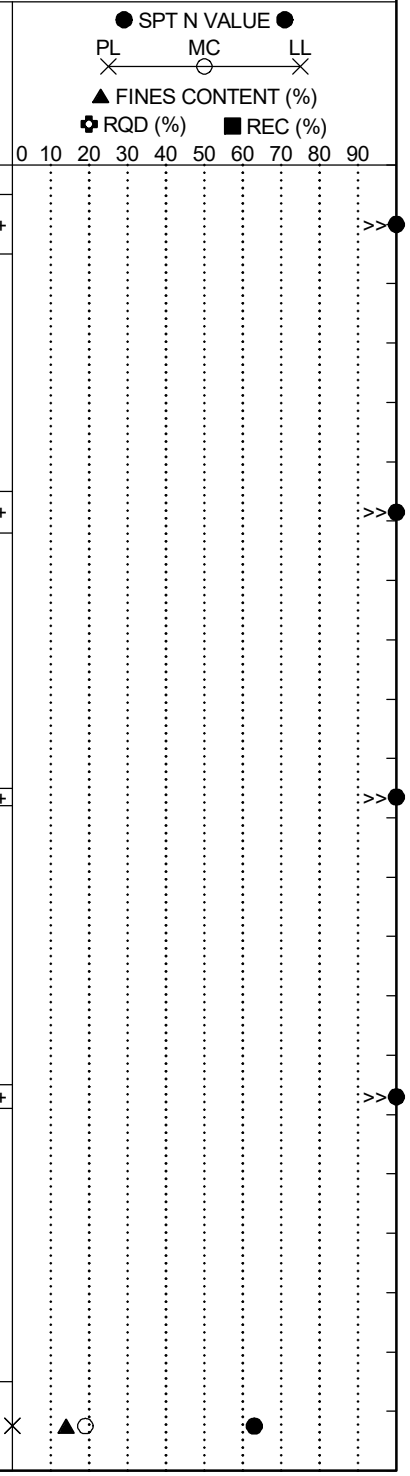
LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-4		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		LIMESTONE (EOCENE)		88.5						
		Very Dense, Moist, White, Non-Plastic, Medium to Coarse Poorly Graded SAND (SP/A-1-b) with Trace of Shell Fragments, Strong HCl Reaction, N8/			SS-33	15	50/6"			100+
-46.9										
		@93.5-ft.: Strong HCl Reaction		93.5	SS-34	42	50/2.5"			100+
-51.9										
		@SS-36: No Recovery		98.5	SS-35	50/3"				100+
-56.9										
	102.0	Very Dense to Dense, Moist, White, Non-Plastic, Silty Medium to Coarse SAND (SM/A-1-b) with Trace of Shell fragments, Strong HCl Reaction, N8/		103.5	SS-36	50/4.5"				100+
-61.9										
		@SS-37: Strong HCl Reaction		108.5						
		LL=NP, PL=NP, PI=NP, NMC=18.5%, %200=14.0			SS-37	25	31	32		63



LEGEND

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SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	B-4
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+87	**Offset:**	8.4 L	**Alignment:**	Mainline
Elev.:	43.1 ft	**Latitude:**	32.67421507	**Longitude:**	-80.85894779	**Date Started:**	10/18/2023
Total Depth:	120 ft	**Soil Depth:**	120 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/19/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 21 ft	**24HR**	26 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		@113.5-ft.: Strong HCl Reaction		113.5						
					SS-38	22	27	34		61
-71.9										
				118.5						
		@118.5-ft.: Decreased Gravel & Shell Content, Strong HCl Reaction			SS-39	15	19	29		48
-76.9	120.0	Boring Terminated 120.0-ft. Below Existing Roadway Surface. Target Depth Achieved.								
-81.9										
-86.9										

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

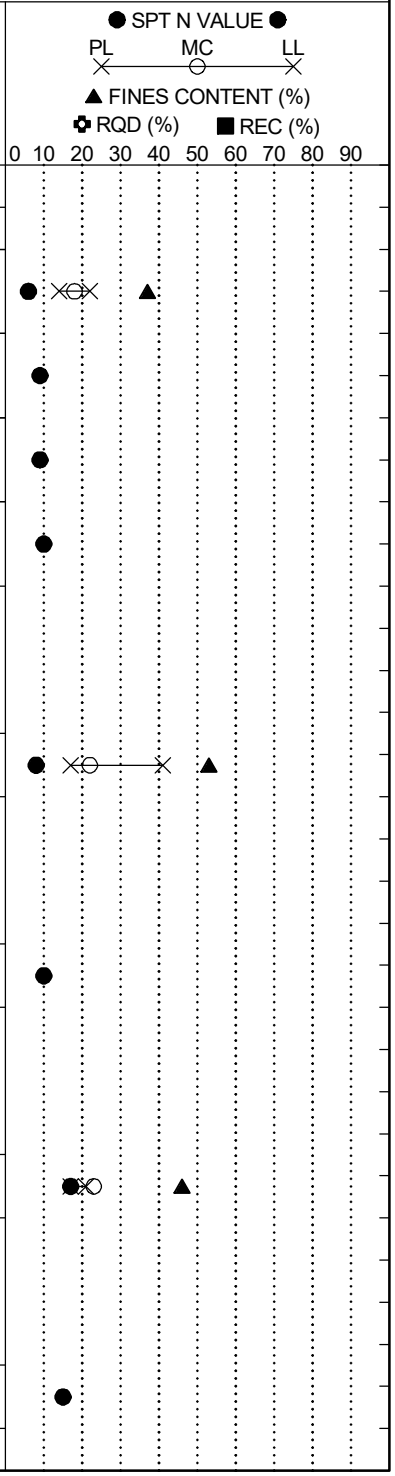
SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SC_DOT G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/9/23

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	E-1		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+92	**Offset:**	3.2 L	**Alignment:**	Mainline
Elev.:	43.7 ft	**Latitude:**	32.67356276	**Longitude:**	-80.85832757	**Date Started:**	10/17/2023
Total Depth:	60 ft	**Soil Depth:**	60 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/17/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 22.5 ft	**24HR**	21.3 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0								
	0.7	**ASPHALT ROADWAY (8.0-in.)** (US 21)							
	1.1	**CONCRETE (5.5-in.)**	1.0						
		EXISTING FILL	2.0	SS-1	1	3			
		Loose, Moist, Red/Very Dark Gray, Low Plasticity, Clayey Fine SAND (SC/A-4), 2.5YR4/8 & 2.5Y3/1		SS-2	3	2	4	6	6
38.7		@SS-2: Light Olive Brown, 2.5Y5/4, LL=22, PL=14, PI=8, NMC=18.0%, %200=37.0	4.0	SS-3	3	4	5	6	9
		@4.0-ft.: Dark Gray, 5Y4/1	6.0	SS-4	3	4	5	5	9
		@8.0-ft.: Red/Light Reddish Gray/Olive, Mottled, 2.5YR4/8 & 2.5YR7/1 & 5Y5/3	8.0	SS-5	4	4	6	4	10
33.7									
	12.0								
		Firm to Stiff, Moist, Gray/Dark Red (Mottled), Low Plasticity, Sandy Lean CLAY (CL/A-7-6), 2.5Y6/1 & 10R3/6	13.5	SS-6	2	3	5		8
28.7		@SS-6: LL=41, PL=17, PI=24, NMC=21.5%, %200=53.4							
			18.5						
		@18.5-ft.: Dark Red/Very Dark Gray (Mottled), 10R3/6 & 5Y3/1		SS-7	3	4	6		10
23.7									
	22.0	**PAMLICO FORMATION (PLEISTOCENE)**							
		Medium Dense, Moist, Low Plasticity, Dark Gray (Mottled), Silty Clayey SAND (SC-SM/A-4), 5Y4/1	23.5	SS-8	3	6	11		17
18.7		@SS-8: LL=21, PL=17, PI=4, NMC=23.2, %200=46.2							
	27.0								
		Stiff to Firm, Moist, Gray/Yellow/Red (Mottled), Medium Plasticity to High Plasticity, Lean CLAY (CL/A-6) with Silt, 5Y6/1 & 5Y7/6 & 2.5YR4/8	28.5	SS-9	4	6	9		15
13.7									



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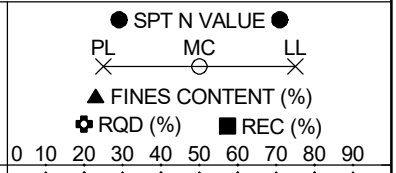
LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	E-1
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1107+92	**Offset:**	3.2 L	**Alignment:**	Mainline
Elev.:	43.7 ft	**Latitude:**	32.67356276	**Longitude:**	-80.85832757	**Date Started:**	10/17/2023
Total Depth:	60 ft	**Soil Depth:**	60 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/17/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 22.5 ft	**24HR**	21.3 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		@33.5-ft.: Light Gray/Light Olive Brown (Mottled), 2.5Y7/1 & 2.5Y5/6	33.5	SS-10	3	4	6		10
8.7	37.0	Loose to Medium Dense, Moist, Light Gray, Low Plasticity, Silty Fine to Medium SAND (SM/A-2-4), 2.5Y7/2							
		@SS-11: LL=24, PL=21, PI=3, NMC=29.0, %200=26.2	38.5	SS-11	2	3	5		8
3.7									
		@43.5-ft.: Pale Yellow, 5Y8/2	43.5	SS-12	3	4	9		13
-1.3	47.0	Very Loose, Moist, Very Dark Greenish Gray, Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), 5GY3/1							
		@SS-13: LL=27, PL=14, PI=13, NMC=46.2%, %200=44.4	48.5	SS-13	WOH/12"		2		2
-6.3	52.0	Very Stiff to Stiff, Moist, Very Dark Grayish Olive, Low Plasticity, Silty Lean CLAY (CL-ML/A-6) with Sand, 10Y3/2							
			53.5	SS-14	4	8	10		18
-11.3									
			58.5	SS-15	4	6	8		14
-16.3	60.0	Boring Terminated 60.0-ft. Below Existing Roadway Surface. Target Depth Achieved.							



LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	E-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+38	**Offset:**	2.1 R	**Alignment:**	Mainline
Elev.:	42.5 ft	**Latitude:**	32.67430186	**Longitude:**	-80.8590783	**Date Started:**	10/24/2023
Total Depth:	70 ft	**Soil Depth:**	70 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/24/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 14 ft	**24HR**	15 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0									
	0.8	**ASPHALT ROADWAY (9.5-in.)** (US 21)								
	1.3	**CONCRETE (6-in.)**		1.3						
		EXISTING FILL		2.0	SS-1	WOH	1			
		Loose to Medium Dense, Moist, Light Olive Brown/Gray/Red, Medium Plasticity, Clayey Fine to Medium SAND (SC/A-6), 2.5Y5/3 & 6/1 & 2.5YR4/8			SS-2	3	3	4	6	7
37.5				4.0						
		@2.0-ft.: Grayish Brown, 2.5Y5/2			SS-3	5	7	8	5	15
		@ 4.0-ft.: Light Olive Brown/Yellowish Brown/Light Gray (Mottled), 2.5Y5/4 & 10YR5/8 & 5Y7/1		6.0						
					SS-4	3	5	5	5	10
		@ 6.0-ft.: White/Strong Brown/Red/Yellowish Brown (Mottled), 7.5YR8/1 & 7.5YR5/8 & 7.5R4/6 & 10YR5/4		8.0						
					SS-5	2	3	5	6	8
32.5		@SS-5: Olive Brown/Very Dark Gray (Mottled), 2.5Y4/3 & 2.5Y3/1								
		LL=26, PL=14, PI=12, NMC=17.6%, %200=47.1								
		@ 13.5-ft.: Dark Red/Olive Yellow/Gray (Mottled), 7.5R3/6 & 2.5Y6/6 & 2.5Y5/1		13.5						
					SS-6	1	3	4		7
27.5										
	17.0	Stiff, Moist, Red/Gray/Strong Brown, Medium Plasticity to High Plasticity, Fine Sandy Lean CLAY (CL/A-6), 2.5Y5/3 & 6/1 & 2.5YR4/8		18.5						
					SS-7	4	6	4		10
22.5										
	22.0	**PAMLICO FORMATION (PLEISTOCENE)**		23.5						
		Loose, Moist, Brown, Low Plasticity, Silty Fine to Medium SAND (SM/A-2-4), 7.5YR4/4			SS-8	2	3	3		6
17.5		@SS-8: LL=21, PL=18, PI=3, NMC=22.0%, %200=22.4								
		@24.3-ft.: Black, 5Y2.5/1								
	28.5			28.5						
		Loose, Moist, Light Greenish Gray/Red/Light Yellowish Brown, Low Plasticity, Silty Clayey Fine to Medium SAND (SC-SM/A-2-4), 10Y7/1 & 2.5YR4/8 & 2.5Y6/4			SS-9	2	3	4		7
12.5										
	32.0	@SS-9: LL=26, PL=19, PI=7, NMC=23.6%,								

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

Continued Next Page

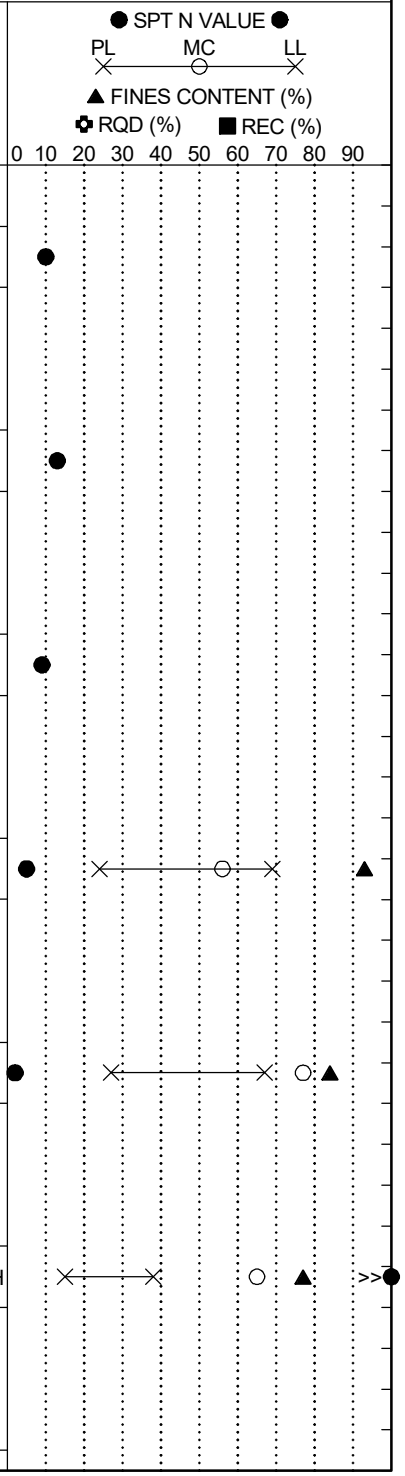
LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	E-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+38	**Offset:**	2.1 R	**Alignment:**	Mainline
Elev.:	42.5 ft	**Latitude:**	32.67430186	**Longitude:**	-80.8590783	**Date Started:**	10/24/2023
Total Depth:	70 ft	**Soil Depth:**	70 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/24/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 14 ft	**24HR**	15 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
		%200=34.5								
7.5		Loose, Moist, Dark Grayish Brown, Medium Plasticity to High Plasticity Lean CLAY (CL/A-6), 2.5Y4/2		33.5	SS-10	1	4	6		10
	37.0									
2.5		Medium Dense, Moist, Olive, Low Plasticity SILT (ML/A-4), 5Y4/4		38.5	SS-11	2	6	7		13
	42.0									
-2.5		Loose, Moist, Olive Gray, Low Plasticity to Medium Plasticity, Fine Sandy Lean CLAY (Alternating Fine to Medium Sand & Clay Layers), 5Y5/2		43.5	SS-12	3	5	4		9
	47.0									
-7.5		Firm, Moist, Dark Greenish Gray, Very Plastic, Fat CLAY (CH/A-7-6), 5GY4/1 @SS-13: LL=69, PL=24, PI=45, NMC=55.8%, %200=92.8		48.5	SS-13	1	2	3		5
	52.0									
-12.5		Very Soft, Moist, Dark Greenish Gray, High Plasticity, Fat CLAY (CH/A-7-6) with Sand, 5GY4/1 @SS-15: LL=67, PL=27, PI=40, NMC=76.7%, %200=84.2		53.5	SS-14	WOH	1	1		2
	58.5			58.5						
-17.5		Very Soft to Soft, Moist, Dark Greenish Gray, High Plasticity, Lean CLAY (CL/A-6) with Sand, 5GY4/1 @SS-15: LL=38, PL=15, PI=23, NMC=65.1%, %200=77.0			SS-15	WOH/18"				WOH
				63.5						



LEGEND

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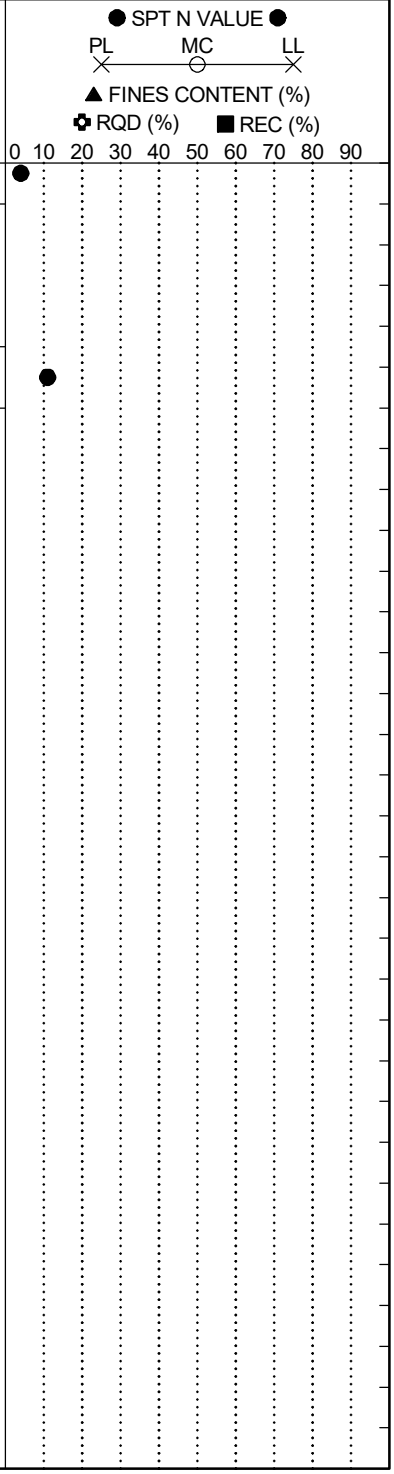
SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	E-2		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1104+38	**Offset:**	2.1 R	**Alignment:**	Mainline
Elev.:	42.5 ft	**Latitude:**	32.67430186	**Longitude:**	-80.8590783	**Date Started:**	10/24/2023
Total Depth:	70 ft	**Soil Depth:**	70 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/24/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 14 ft	**24HR**	15 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
-22.5					SS-16	1	2	2		4
	67.0	**UNDIFFERENTIATED MIOCENE**		68.5						
		Stiff, Moist Very Dark Grayish Olive, Low Plasticity, SILT (ML/A-4), 10Y3/2			SS-17	2	4	7		11
-27.5	70.0	Boring Terminated 70.0-ft. Below Existing Roadway Surface. Boring Extended Beyond Proposed Target Depth (60.0-ft.) Due to Soft/Cohesive Soils Encountered at to Anticipated Termination Depth.								
-32.5										
-37.5										
-42.5										
-47.5										
-52.5										



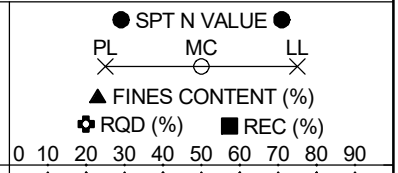
LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	RW-1
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1111+91	**Offset:**	5.3 L	**Alignment:**	Mainline
Elev.:	28.4 ft	**Latitude:**	32.67273853	**Longitude:**	-80.85749185	**Date Started:**	10/17/2023
Total Depth:	15 ft	**Soil Depth:**	15 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/17/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 1.8 ft	**24HR**	1 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0	**ASPHALT ROADWAY (8.0-in.)** (US 21)							
	0.7	**CONCRETE (6.0-in.)**							
	1.2	**EXISTING FILL** Moist, Light Olive Brown, Low Plasticity to Medium Plasticity, Clayey Fine SAND (SC/A-6), 2.5Y5/3	1.0	SS-1	2	4			2
		@SS-2: Medium Dense to Loose, Dark Red/Yellowish Brown (Mottled), 2.5Y3/6 & 10YR5/6	2.0	SS-2	5	7	10	17	17
		@SS-3: Gray/Yellowish Brown/Very Dark Gray (Mottled), 10YR5/1 & 10YR5/8 & 10YR3/1 LL=31, PL=14, PI=17, NMC=17.3%, %200=43.4	4.0	SS-3	3	4	4	5	8
23.4		@6.0-ft.: Dark Greenish Brown/Pale Yellow, 2.5Y4/2 & 2.5Y7/4	6.0	SS-4	4	6	6	6	12
		@8.0-ft.: Gray/Dark Red (Mottled), 2.5Y5/1 & 2.5YR3/6	8.0	SS-5	5	5	5	7	10
18.4									
	12.0	**PAMLICO FORMATION (PLEISTOCENE)** Firm, Moist, Gray/Dark Gray (Mottled), Medium Plasticity, Sandy Lean CLAY (CL/A-6), 5Y5/1 & 5Y4/1 LL=35, PL=17, PI=18, NMC=24.9%, %200=54.9	13.5	SS-6	2	2	5		7
13.4	15.0	Boring Terminated 15.0-ft. Below Existing Roadway Surface. Target Depth Achieved.							



LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1111+86	**Offset:**	8.9 L	**Alignment:**	Mainline
Elev.:	28.4 ft	**Latitude:**	32.67274921	**Longitude:**	-80.85750251	**Date Started:**	10/25/2023
Total Depth:	17 ft	**Soil Depth:**	17 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/25/2023
Bore Hole Diameter (in):	3	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 1.8 ft	**24HR**	1 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6" / 2nd 6" / 3rd 6" / 4th 6"	N Value
	0.0						
	0.7	**ASPHALT ROADWAY (8.0-in.)** (US 21)					
	1.2	**CONCRETE (6.0-in.)**					
		Drilled to 13.0-ft.					
23.4							
18.4							
	13.0	@ST-1: See Shelby Tube UD Prep Log		13.0	ST-1		
13.4	15.0	@ST-2: See Shelby Tube UD Prep Log		15.0	ST-2		
	17.0	Boring Terminated at 17.0-ft. Below the Existing Ground Surface					

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SC_DOT G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/9/23

SCDOT Soil Test Log

Project ID:	P042942			**County:**	Hampton/Beaufort	**Boring No.:**	RW-2
Site Description:	US 21/US 17A over CSX RR					**Route:**	US 21
Eng./Geo.:	G. Cantele	**Boring Location:**	1100+64	**Offset:**	5.7 R	**Alignment:**	Mainline
Elev.:	29.4 ft	**Latitude:**	32.67512098	**Longitude:**	-80.85981885	**Date Started:**	10/25/2023
Total Depth:	15 ft	**Soil Depth:**	15 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/25/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 2 ft	**24HR**	Backfilled

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0	**ASPHALT ROADWAY (12.0-in.)** (US 21)								
	1.0									
	1.5	**CONCRETE (6.0-in.)**								
		EXISTING FILL		1.5						
		Moist, Light Olive Brown (Mottled), Medium Plasticity to High Plasticity, Silty Clayey Fine to Medium SAND (SC-SM/A-4), 2.5Y 5/4, 2.5YR4/8 & 2.5Y6/8		2.0	SS-1	2				
		LL=22, PL=15, PI=7, NMC=15.3%, %200=37.7			SS-2	3	3	5	5	8
		@2.0-ft.: Loose to Medium Dense, Light Brownish Gray/ Yellowish Brown (Mottled), 2.5Y6/2 & 10YR5/6		4.0	SS-3	8	9	7	8	16
24.4		@4.0-ft.: Dark Grayish Brown/ Very Dark Grayish Brown (Mottled), with Trace of Organics (Roots), 2.5Y4/2 & 2.5Y3/2		6.0	SS-4	5	10	9	9	19
		@6.0-ft.: Grayish Brown/ Yellowish Brown/ Red (Mottled), with Trace of Organics (Sandy Roots), 5T 5/2 & 10YR 5/6 & 10YR 4/8		8.0	SS-5	7	7	9	11	16
19.4										
	12.0	**PAMLICO FORMATION (PLEISTOCENE)**								
		Loose, Moist, Light Gray/ Red/ Light Olive Brown, Low Plasticity, Silty Clayey Fine to Medium SAND (SC-SM/A-4), GLEY1-7/N, 2.5YR4/8 & 2.5Y5/6		13.5	SS-6	2	3	5		8
		@SS-6: LL=24, PL=18, PI=6, NMC=20.8%, %200=36.6								
14.4	15.0	Boring Terminated at 15.0-ft. Below Existing Ground Surface. Boring Acheived Target Depth.								

SPT N VALUE ● PL MC LL ▲ FINES CONTENT (%) ✿ RQD (%) ■ REC (%)

0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SCDOT Soil Test Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	C-1		
Site Description:	US 21/US 17A over CSX RR			**Route:**	US 21		
Eng./Geo.:	G. Cantele	**Boring Location:**	1116+81	**Offset:**	11.1 R	**Alignment:**	Mainline
Elev.:	13.9 ft	**Latitude:**	32.67167576	**Longitude:**	-80.85651415	**Date Started:**	10/24/2023
Total Depth:	30 ft	**Soil Depth:**	30 ft	**Core Depth:**	N/A ft	**Date Completed:**	10/24/2023
Bore Hole Diameter (in):	4	**Sampler Configuration**		**Liner Required:**	Y (N)	**Liner Used:**	Y (N)
Drill Machine:	CME 45B	**Drill Method:**	RW	**Hammer Type:**	Automatic	**Energy Ratio:**	84%
Core Size:	N/A	**Driller:**	D. Harris	**Groundwater:**	**TOB** 3 ft	**24HR**	4 ft

Elevation (ft)	Depth (ft)	MATERIAL DESCRIPTION	Sample Depth (ft)	Sample No./Type	1st 6"	2nd 6"	3rd 6"	4th 6"	N Value
	0.0								
	0.5	**ASPHALT ROADWAY (6.0-in.)** (US 21)							
	1.1	**CONCRETE (7.0-in.)**	1.0						
		EXISTING FILL	2.0	SS-1	1	4			
		Moist, Black, Low Plasticity to Medium Plasticity, Clayey Fine to Medium SAND (SC/A-2-6), 5Y 2.5/2		SS-2	3	4	4	4	8
	4.0		4.0						
8.9		@2.0-ft.: Loose, Dark Olive Gray/Gray/Red (Mottled), 5Y3/2, 5Y6/1 & 2.5YR4/8		SS-3	2	2	2	2	4
	6.0		6.0						
		PAMLICO FORMATION (PLEISTOCENE)		SS-4	2	2	5	4	7
	8.0	Loose, Moist, Black, Low Plasticity, Silty Clayey fine to Medium SAND (SC-SM/A-4), 5Y 2.5/2	8.0						
		@SS-3: LL=22, PL=15, PI=7, NMC=28.1%, %200=48.0		SS-5	3	5	8	7	13
3.9									
		Firm, Moist, Dark Gray, Low Plasticity to High Plasticity, Silty CLAY (CL-ML/A-4), GLEY1 4/N							
			13.5						
		Medium Dense to Loose, Moist, Greenish Gray, Low Plasticity, Clayey Fine to Medium SAND (SC/A-2-4), 10Y 6/1		SS-6	WOH/12"		2		2
-1.1		@SS-6: Very Loose							
		LL=27, PL=19, PI=8, NMC=32.6%, %200=31.9							
	17.0								
		Loose, Wet, Light Greenish Gray, Non-Plastic, Fine to Medium Poorly Graded SAND (SP/A-3), 10Y 7/1	18.5	SS-7	3	6	4		10
-6.1									
	22.0								
		Loose, Moist, Greenish Gray, Non-Plastic, Silty Fine to Medium SAND (SM/A-2-4), 5GY 6/1	23.5						
		@SS-8: LL=NP, PL=NP, PI=NP, NMC=44.9%, %200=35.3		SS-8	WOH	2	3		5
-11.1									
	27.0								
		Very Stiff, Moist, Very Dark Grayish Olive, Non-Plastic to Low Plasticity, SILT (ML/A-4) with Fine Sand, 10Y 3/2	28.5						
				SS-9	4	8	10		18
-16.1	30.0								
		Boring Terminated 30.0-ft. Below Existing Roadway Surface. Target Depth Achieved.							

SPT N VALUE ● PL × MC ○ LL ×
▲ FINES CONTENT (%)
✿ RQD (%) ■ REC (%)
0 10 20 30 40 50 60 70 80 90

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SC_DOT G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/9/23

Cone Penetration Test

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

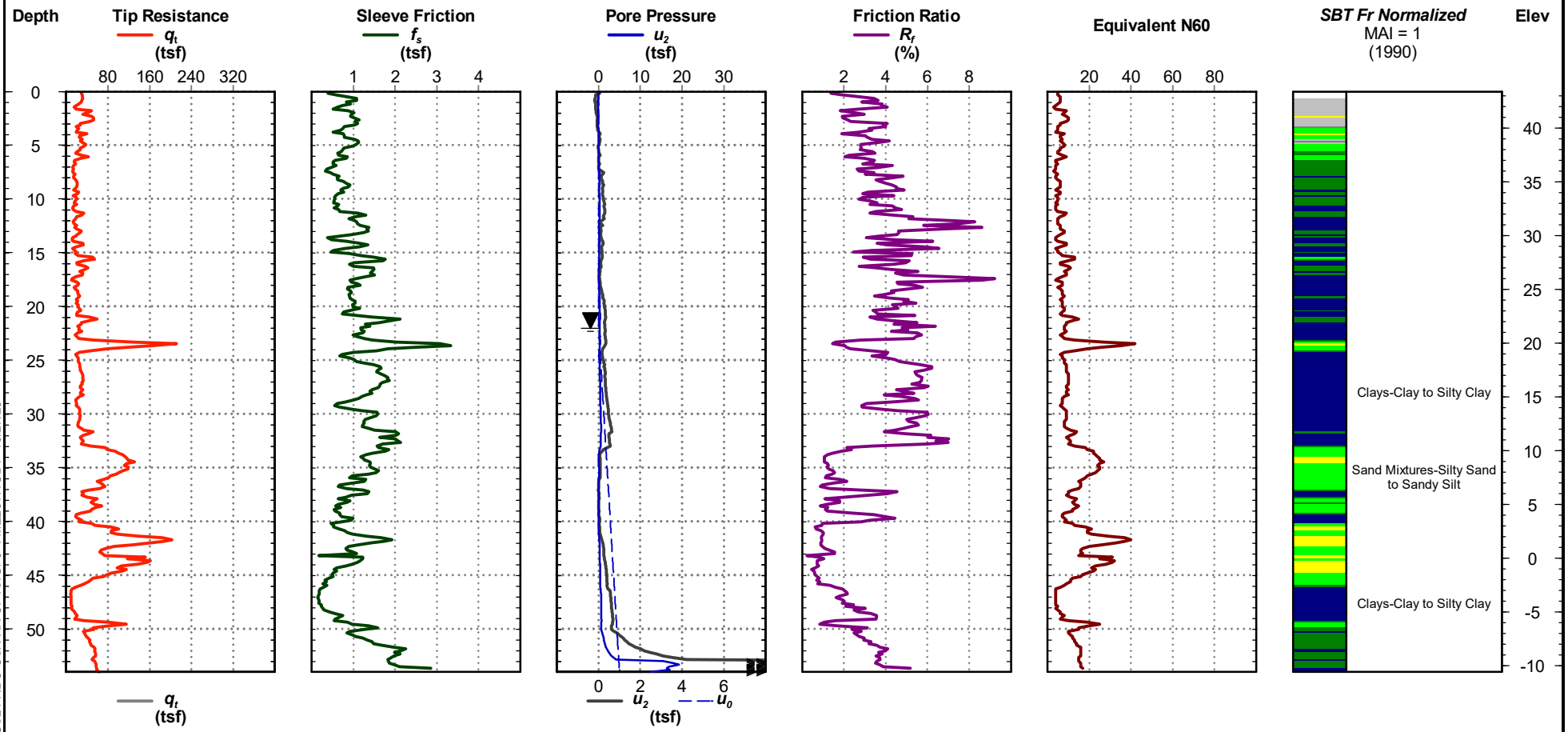
Project Number :P042942

CPT-1

Date: Oct. 26, 2023
Estimated Water Depth: 22 ft
Rig/Operator: M. Brewer

Northing: 305744.9
Easting: 2043587.5
Elevation: 43.4 ft-MSL

Total Depth: 54.0 ft
Termination Criteria: Maximum Reaction Force
CPT Probe ID: DDG1534



CPT REPORT - STANDARD G6400.20 - US21 RBO CSX RR CPTS.GPJ FME2017.GDT 10/27/23

Electronic File Name: CPT-1.cpt

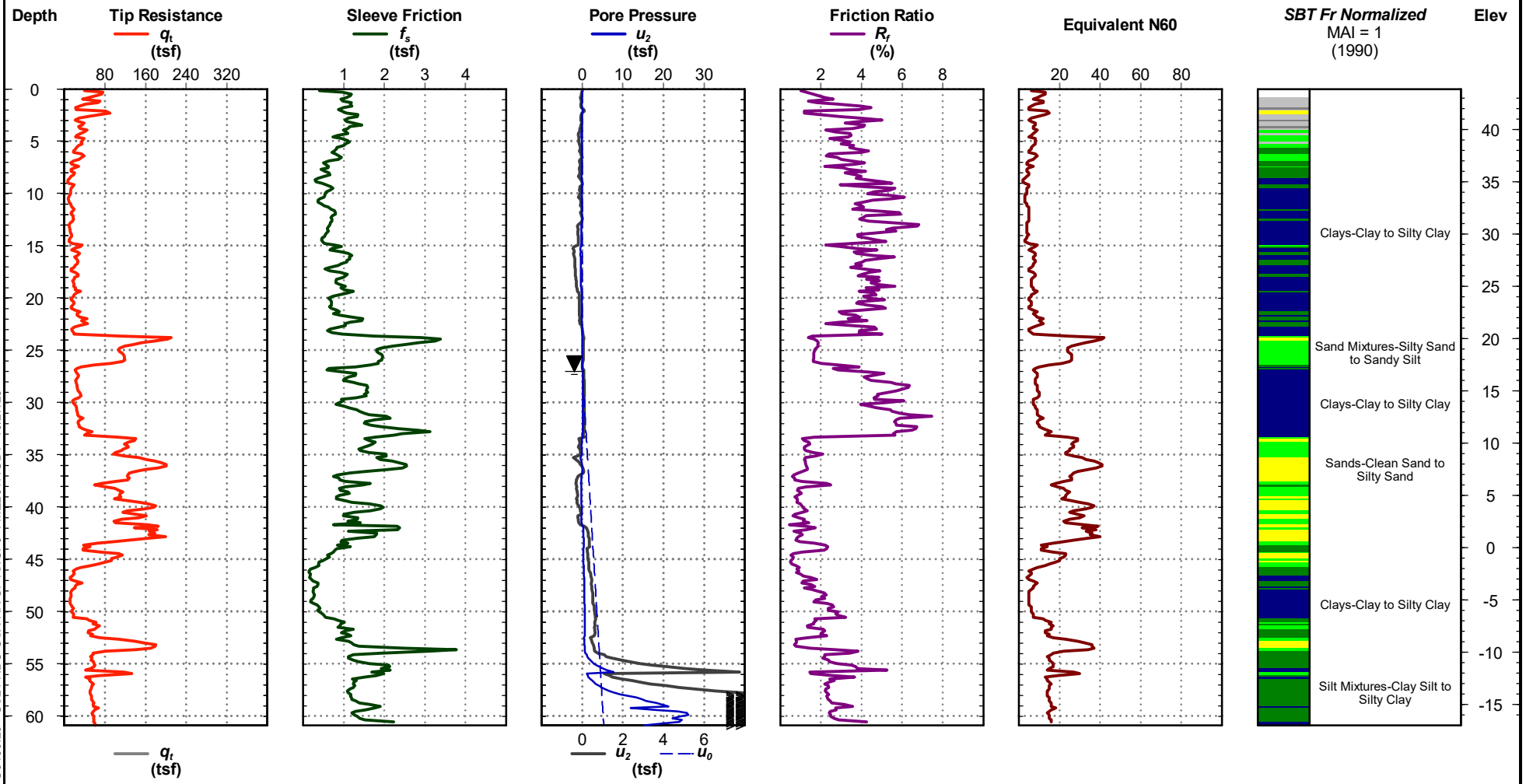
CPT-1

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

Project Number :P042942

CPT-2

Date:	Oct. 26, 2023	**Northing:**	305793.4	**Total Depth:**	60.9 ft
Estimated Water Depth:	27 ft	**Easting:**	2043567.0	**Termination Criteria:**	Maximum Reaction Force
Rig/Operator:	M. Brewer	**Elevation:**	43.9 ft-MSL	**CPT Probe ID:**	DDG1534



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CPT-2

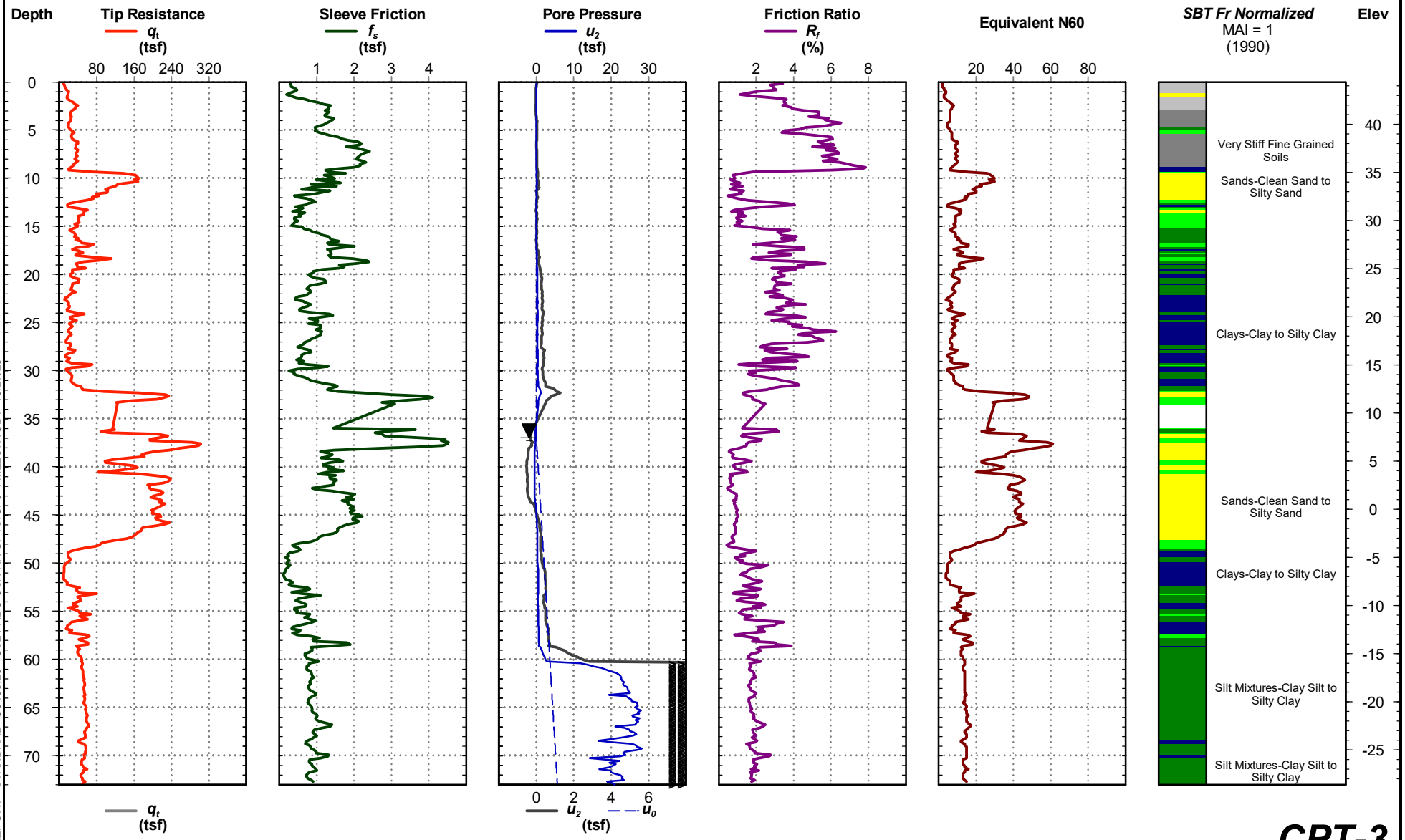
Cone Penetration Test

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

Project Number :P042942

CPT-3

Date:	Oct. 25, 2023	**Northing:**	305828.3	**Total Depth:**	73.0 ft
Estimated Water Depth:	37 ft	**Easting:**	2043527.2	**Termination Criteria:**	Maximum Reaction Force
Rig/Operator:	M. Brewer	**Elevation:**	44.4 ft-MSL	**CPT Probe ID:**	DDG1534



CPT-3

Electronic File Name: CPT-3.cpt

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

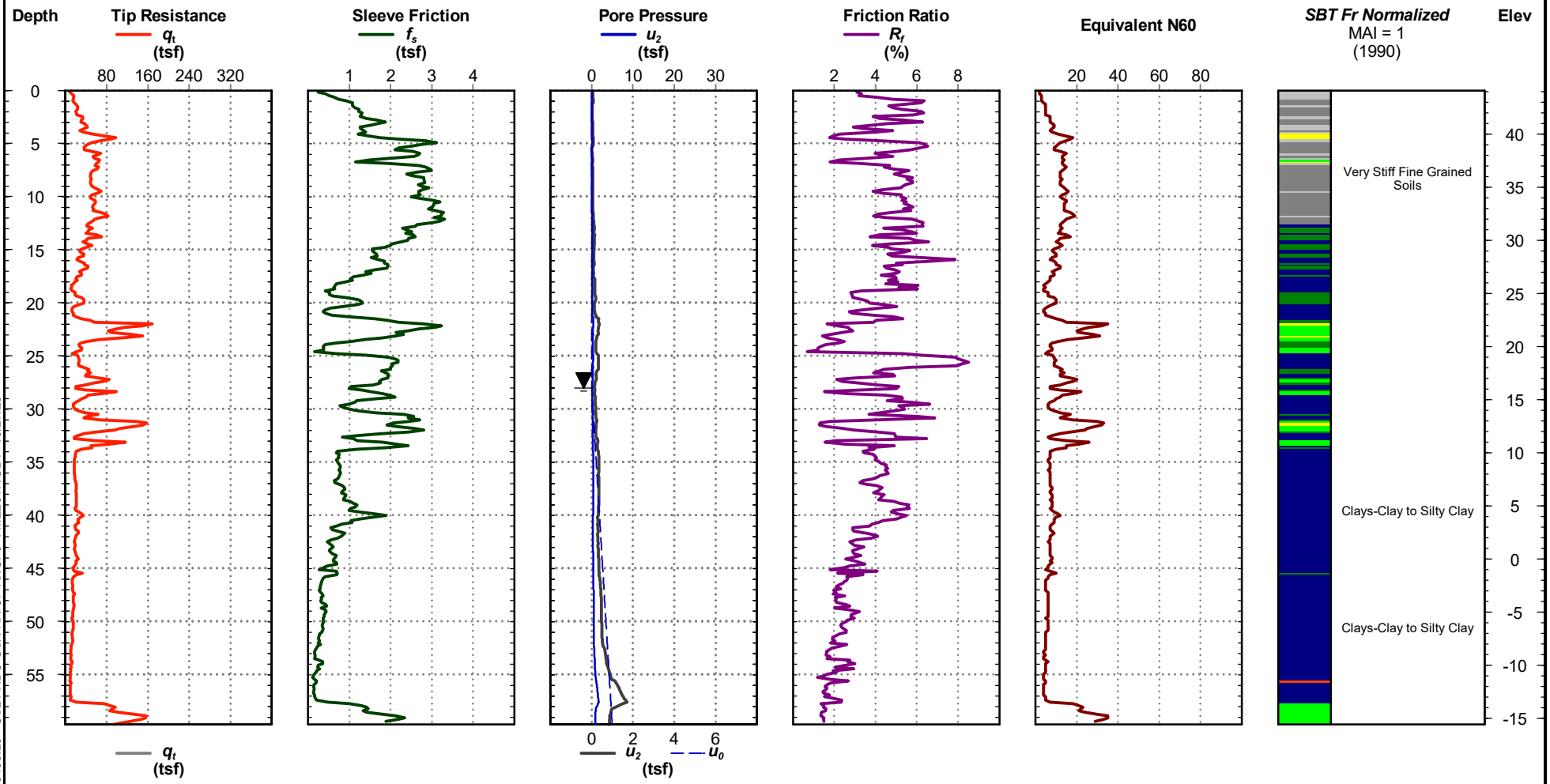
Project Number :P042942

CPT-4

Date: Oct. 25, 2023
Estimated Water Depth: 28 ft
Rig/Operator: M. Brewer

Northing: 305929.8
Easting: 2043454.3
Elevation: 44.1 ft-MSL

Total Depth: 59.7 ft
Termination Criteria: Maximum Reaction Force
CPT Probe ID: DDG1534



CPT REPORT - STANDARD G6400.20 - US21 RBO CSX RR CPTS.GPJ FME2017.GDT 10/27/23

Electronic File Name: CPT-4.cpt

CPT-4

Cone Penetration Test

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

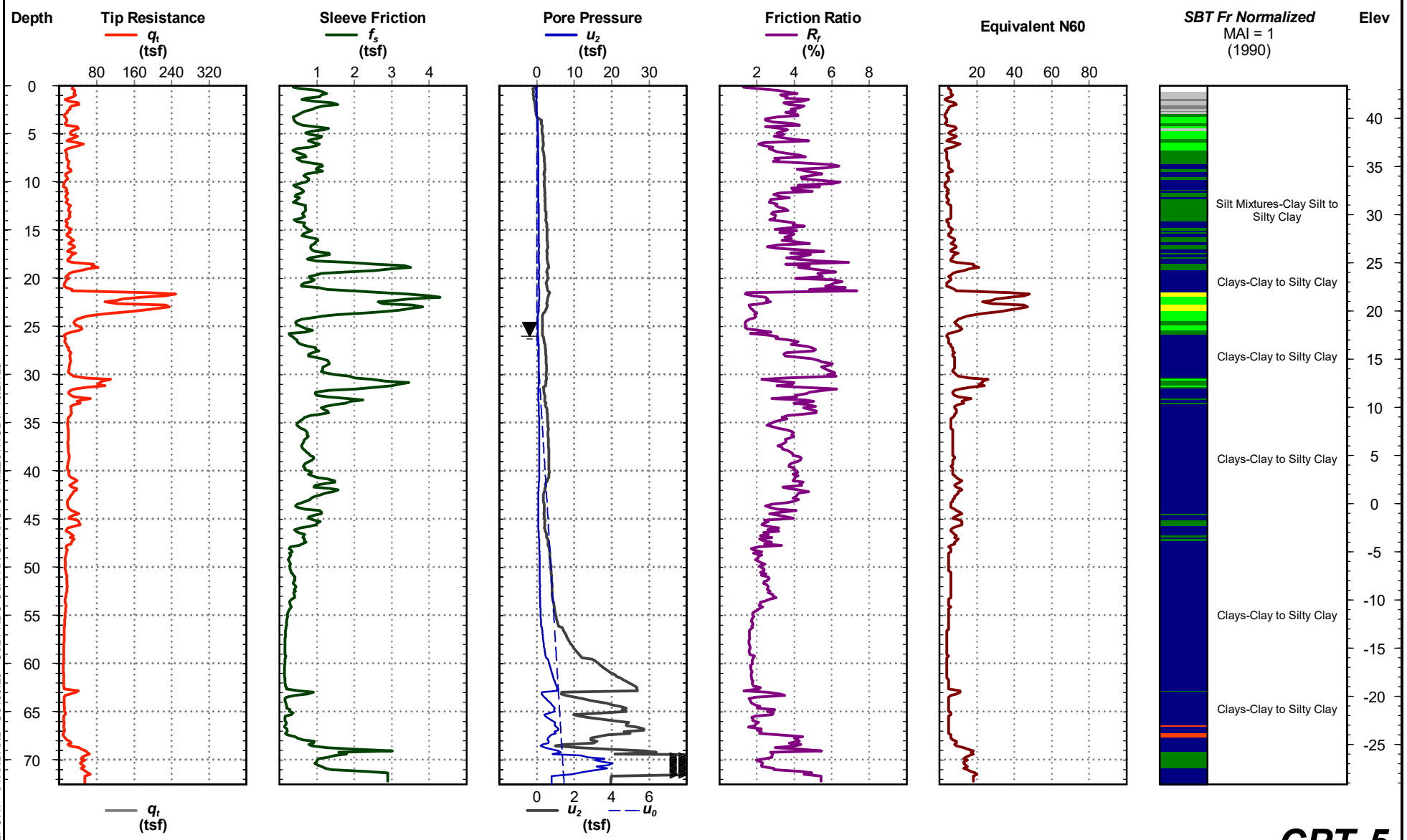
Project Number :P042942

CPT-5

Date: Oct. 25, 2023
Estimated Water Depth: 26 ft
Rig/Operator: M. Brewer

Northing: 305980.8
Easting: 2043394.3
Elevation: 43.4 ft-MSL

Total Depth: 72.5 ft
Termination Criteria: Maximum Reaction Force
CPT Probe ID: DDG1534



CPT REPORT - STANDARD G6400.20 - US21 RBO CSX RR CPTS.GPJ FME2017.GDT 10/27/23

Electronic File Name: CPT-5.cpt

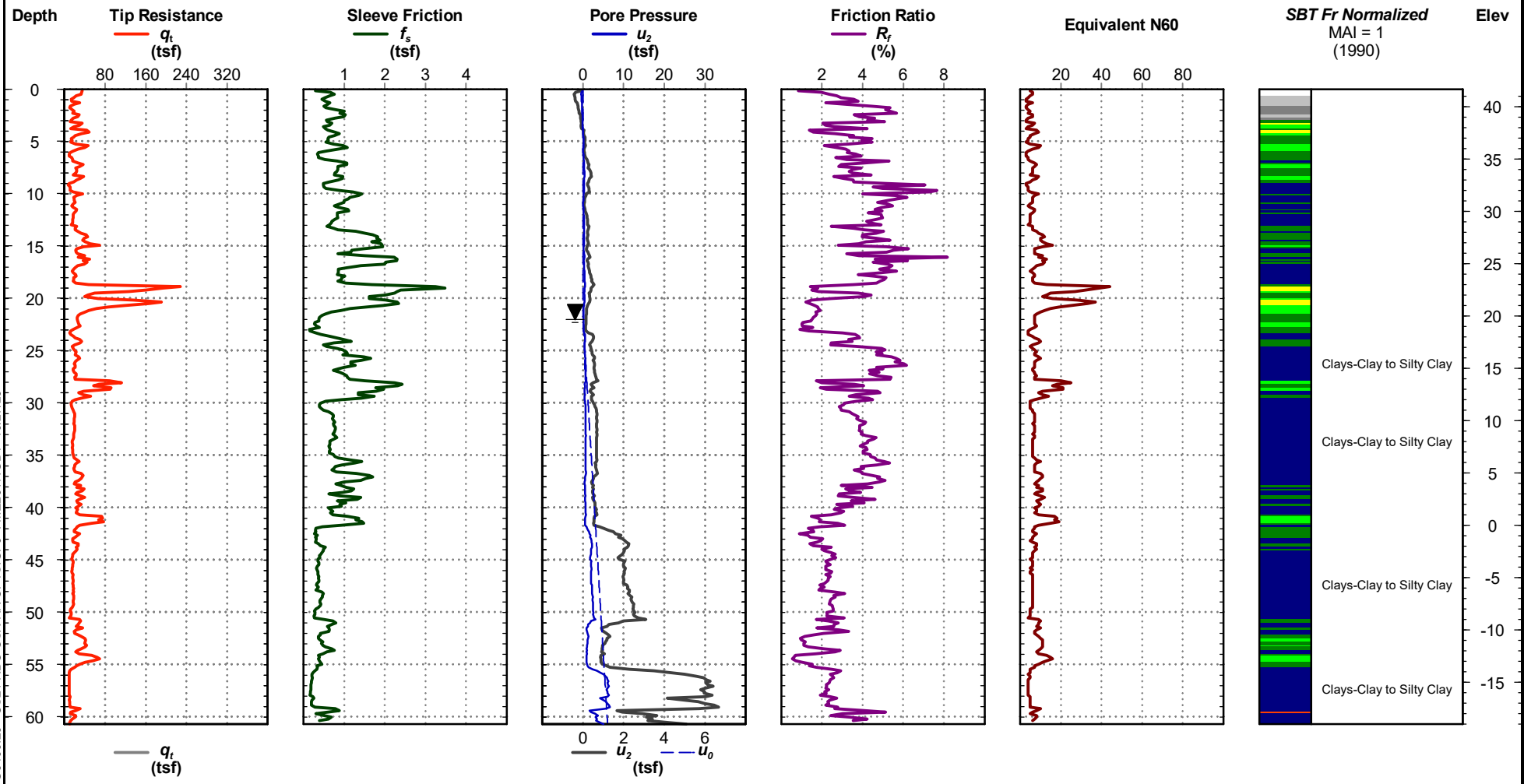
CPT-5

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

Project Number :P042942

CPT-6

Date:	Oct. 25, 2023	**Northing:**	306028.5	**Total Depth:**	60.7 ft
Estimated Water Depth:	22 ft	**Easting:**	2043373.9	**Termination Criteria:**	Maximum Reaction Force
Rig/Operator:	M. Brewer	**Elevation:**	41.7 ft-MSL	**CPT Probe ID:**	DDG1534



CPT REPORT - STANDARD G6400.20 - US21 RBO CSX RR CPTS.GPJ FME2017.GDT 10/27/23

Electronic File Name: CPT-6.cpt

CPT-6

US 21/US 17A Bridge over CSX RR
(Hampton/Beaufort County,South Carolina)

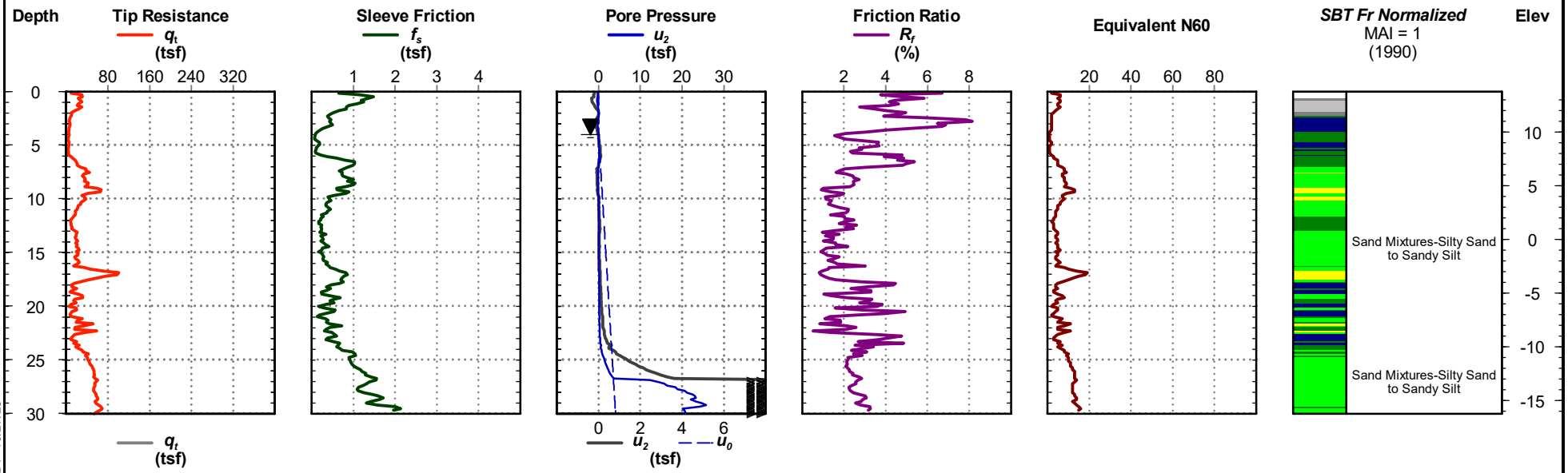
Project Number :P042942

CPT-7

Date: Oct. 25, 2023
Estimated Water Depth: 4 ft
Rig/Operator: M. Brewer

Northing: 305074.5
Easting: 2044169.6
Elevation: 13.8 ft-MSL

Total Depth: 30.0 ft
Termination Criteria: Maximum Reaction Force
CPT Probe ID: DDG1534



Electronic File Name: CPT-7.cpt

CPT-7

APPENDIX

SECTION 5 LABORATORY TEST RESULTS

APPENDIX

SECTION 5 LABORATORY TEST RESULTS

SECTION 5A SPLIT-SPOON SAMPLES

SUMMARY OF LABORATORY RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Class-ification	Water Content (%)	Dry Density (pcf)	Satur-ation (%)	Void Ratio
B-1/DH-1	8.0	22	17	5	9.51	42	SC-SM	19.7			
B-1/DH-1	15.0	42	15	27	9.51	60	CL	25.3			
B-1/DH-1	30.0	45	18	27	4.76	63	CL	26.0			
B-1/DH-1	40.0	NP	NP	NP	4.76	18	SM	26.6			
B-1/DH-1	50.0	27	15	12	4.76	38	SC	35.1			
B-1/DH-1	55.0	23	16	7	19	29	SC-SM	40.0			
B-1/DH-1	75.0	41	30	11	4.76	47	SM	45.4			
B-1/DH-1	110.0	NP	NP	NP	19	16	SM	14.9			
B-2	6.0	36	15	21	4.76	37	SC	16.8			
B-2	20.0	31	12	19	19	44	SC	18.6			
B-2	30.0	34	16	18	4.76	58	CL	27.4			
B-2	35.0	46	17	29	9.51	63	CL	25.2			
B-2	40.0	NP	NP	NP	9.51	20	SM	25.7			
B-2	50.0	27	16	11	9.51	20	SC	29.4			
B-2	55.0	NP	NP	NP	4.76	21	SM	33.3			
B-2	65.0	61	25	36	4.76	41	SC	39.2			
B-2	75.0	46	28	18	2	49	SM	43.0			
B-2	90.0	32	20	12	19	27	SC	35.2			
B-3	6.0	29	13	16	9.51	43	SC	19.5			
B-3	15.0	21	16	5	9.51	45	SC-SM	20.5			
B-3	40.0	62	19	43	4.76	93	CH	34.3			
B-3	55.0	71	29	42	4.76	89	CH	78.2			
B-3	60.0	31	13	18	4.76	86	CL	83.1			
B-3	90.0	NP	NP	NP	19	15	SM	22.1			
B-4	10.0	35	16	19	4.76	49	SC	21.0			
B-4	14.0	26	15	11	9.51	43	SC	23.5			
B-4	24.0	NP	NP	NP	4.76	40	SM	17.9			
B-4	28.0	16	14	2	4.76	42	SM	21.6			
B-4	36.0	39	12	27	2	78	CL	24.7			
B-4	42.0	65	26	39	4.76	85	CH	35.9			
B-4	44.0	75	27	48	4.76	96	CH	42.4			
B-4	48.0	42	15	27	9.51	46	SC	37.2			
B-4	60.0	48	22	26	4.76	83	CL	84.4			
B-4	65.0	41	27	14	4.76	47	SM	51.4			
B-4	70.0	26	17	9	4.76	85	CL	82.9			
B-4	85.0	73	26	47	4.76	47	SC	53.0			
B-4	110.0	NP	NP	NP	19	14	SM	18.5			
C-1	6.0	22	15	7	19	48	SC-SM	28.1			
C-1	15.0	27	19	8	2	32	SC	32.6			
C-1	25.0	NP	NP	NP	4.76	35	SM	44.9			
E-1	4.0	22	14	8	19	37	SC	18.0			
E-1	15.0	41	17	24	4.76	53	CL	21.5			
E-1	25.0	21	17	4	4.76	46	SC-SM	23.2			

SUMMARY OF LABORATORY RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Class-ification	Water Content (%)	Dry Density (pcf)	Satur-ation (%)	Void Ratio
E-1	40.0	24	21	3	0.841	26	SM	29.0			
E-1	50.0	27	14	13	9.51	44	SC	46.2			
E-2	10.0	26	14	12	4.76	47	SC	17.6			
E-2	25.0	21	18	3	9.51	22	SM	22.0			
E-2	30.0	26	19	7	4.76	34	SC-SM	23.6			
E-2	50.0	69	24	45	2	93	CH	55.8			
E-2	55.0	67	27	40	4.76	84	CH	76.7			
E-2	60.0	38	15	23	4.76	77	CL	65.1			
RW-1	6.0	31	14	17	4.76	43	SC	17.3			
RW-1	15.0	35	17	18	4.76	55	CL	24.9			
RW-2	4.0	22	15	7	4.76	38	SC-SM	15.3			
RW-2	15.0	24	18	6	4.76	37	SC-SM	20.8			

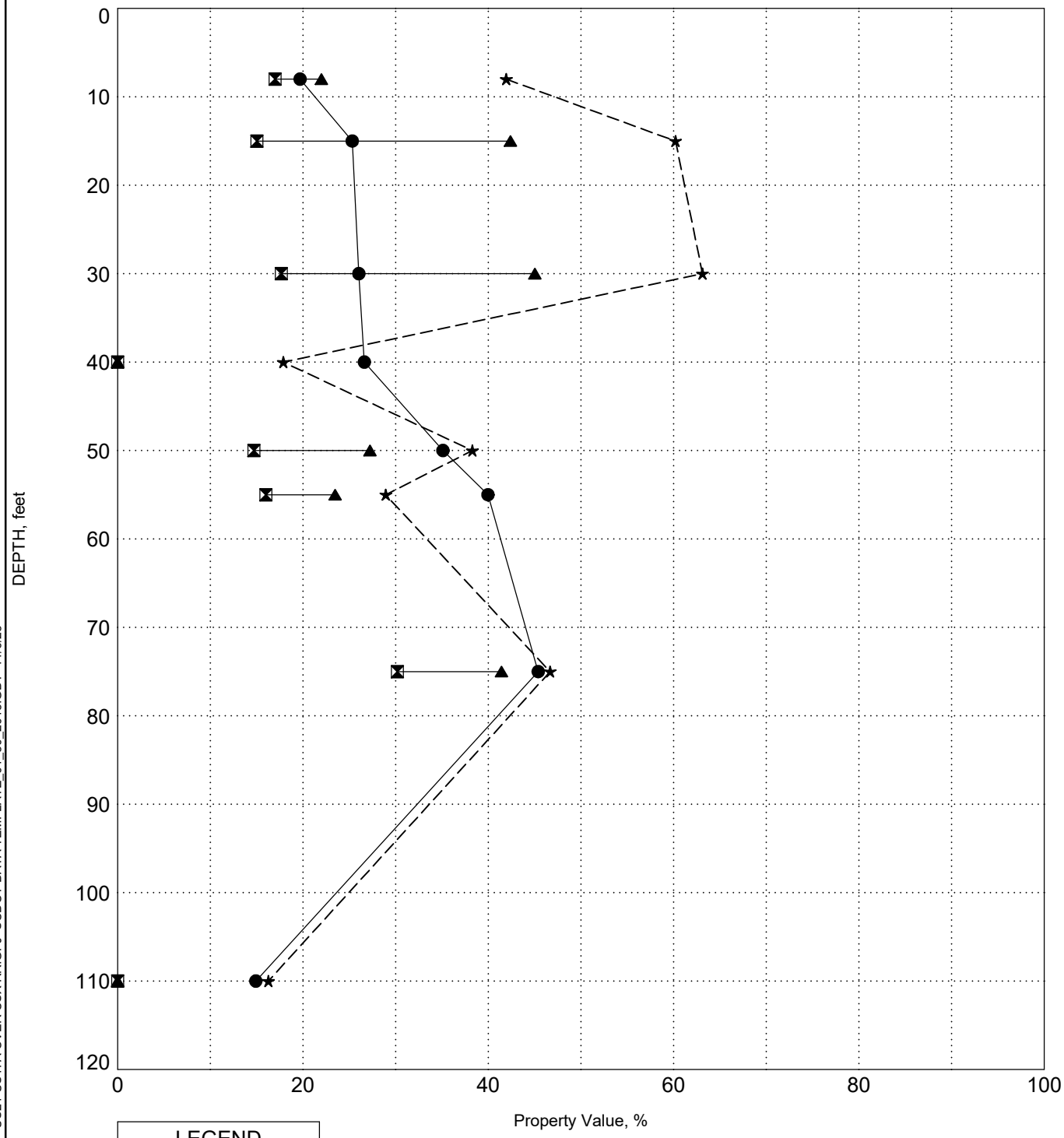
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING B-1/DH-1

SURFACE ELEVATION: 43.9



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3407	**DATE SAMPLE RECEIVED:**	10/16/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	TW/KB	**DATE SETUP:**	10/16/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/17/2023

BORING NO.	B-1	B-1	B-1	B-1	B-1
SAMPLE NO.	SS-4	SS-6	SS-9	SS-11	SS-13
SAMPLE DEPTH (FT.)	6.0 - 8.0	13.5 - 15.0	28.5 - 30.0	38.5 - 40.0	48.5 - 50.0
WATER CONTENT, W%	19.7	25.3	26.0	26.6	35.1

BORING NO.	B-1	B-1	B-1		
SAMPLE NO.	SS-14	SS-18	SS-25		
SAMPLE DEPTH (FT.)	53.5 - 55.0	73.5 - 75.0	108.5 - 110.0		
WATER CONTENT, W%	40.0	45.4	14.9		

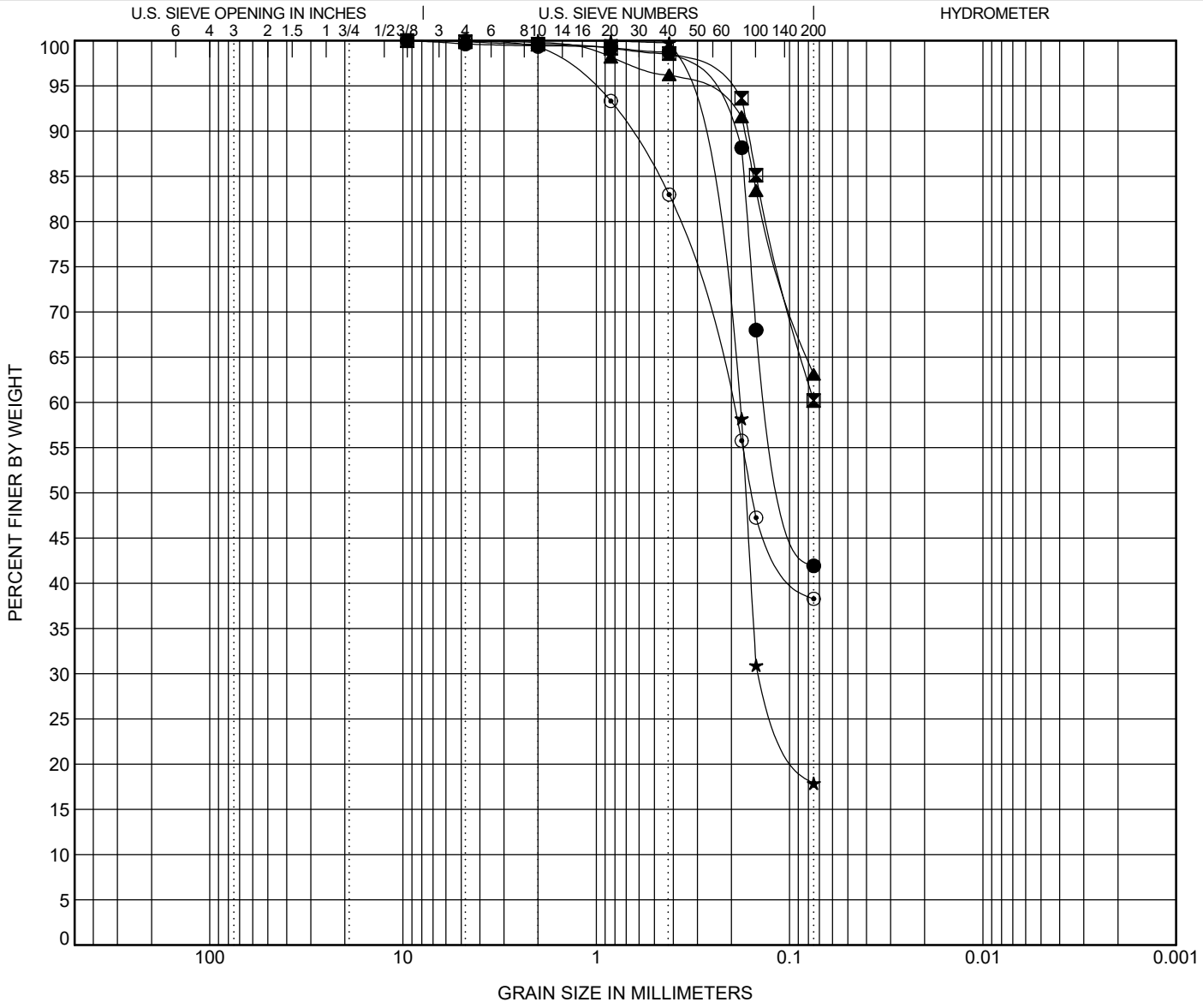
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

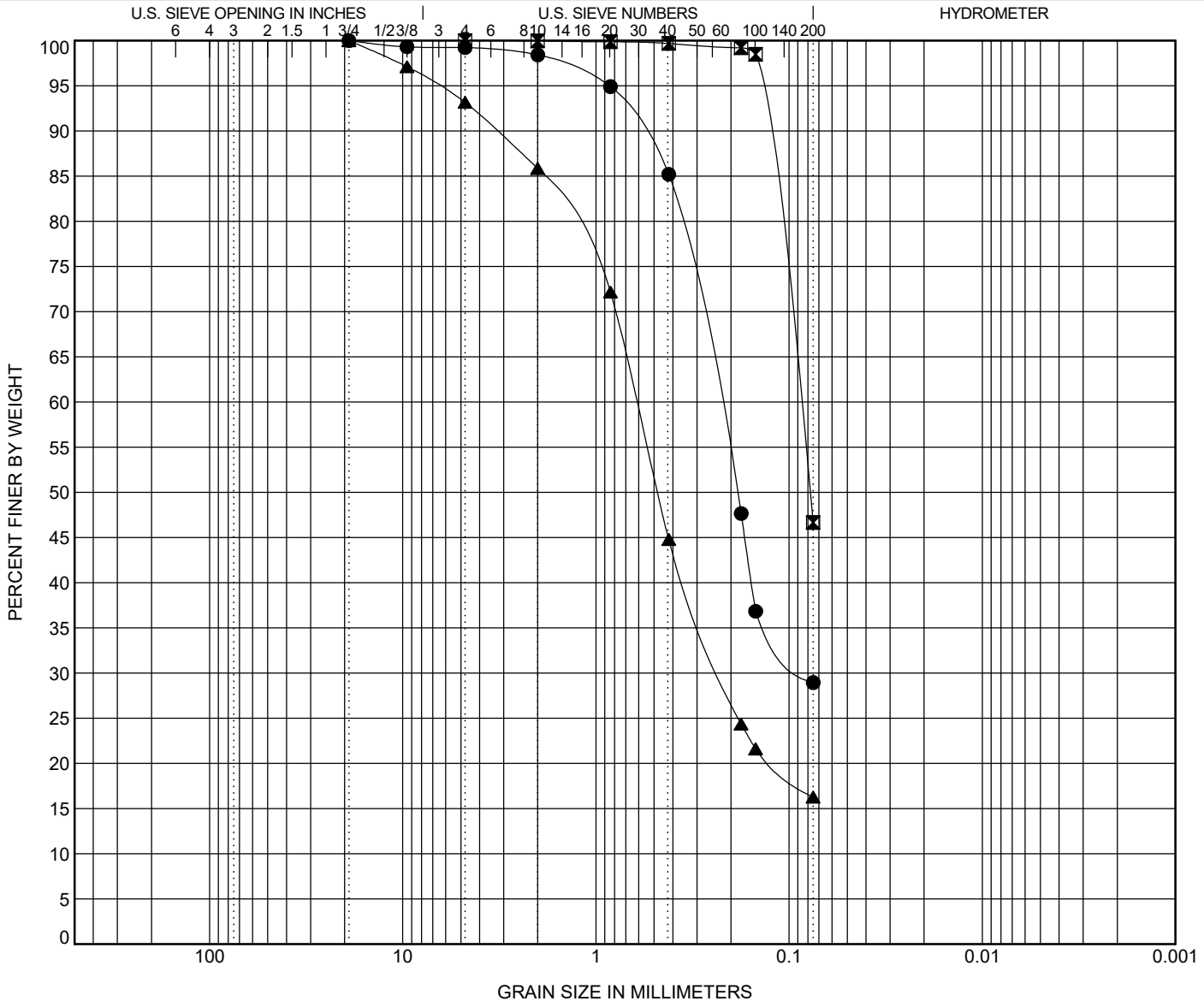
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	B-1	8.0	SILTY, CLAYEY SAND (SC-SM/A-4)	22	17	5		
⊠	B-1	15.0	SANDY LEAN CLAY (CL/A-7-6)	42	15	27		
▲	B-1	30.0	SANDY LEAN CLAY (CL/A-7-6)	45	18	27		
★	B-1	40.0	SILTY SAND (SM/A-2-4)	NP	NP	NP		
⊙	B-1	50.0	CLAYEY SAND (SC/A-6)	27	15	12		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-1	8.0	9.51	0.121			0.4	57.7	41.9	
⊠	B-1	15.0	9.51				0.1	39.7	60.2	
▲	B-1	30.0	4.76				0.0	36.9	63.1	
★	B-1	40.0	4.76	0.184	0.142		0.0	82.1	17.9	
⊙	B-1	50.0	4.76	0.202			0.0	61.7	38.3	

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-1**	**55.0**	**SILTY, CLAYEY SAND (SC-SM/A-2-4)**	**23**	**16**	**7**		
⊠	**B-1**	**75.0**	**SILTY SAND (SM/A-7-5)**	**41**	**30**	**11**		
▲	**B-1**	**110.0**	**SILTY SAND (SM/A-1-b)**	**NP**	**NP**	**NP**		

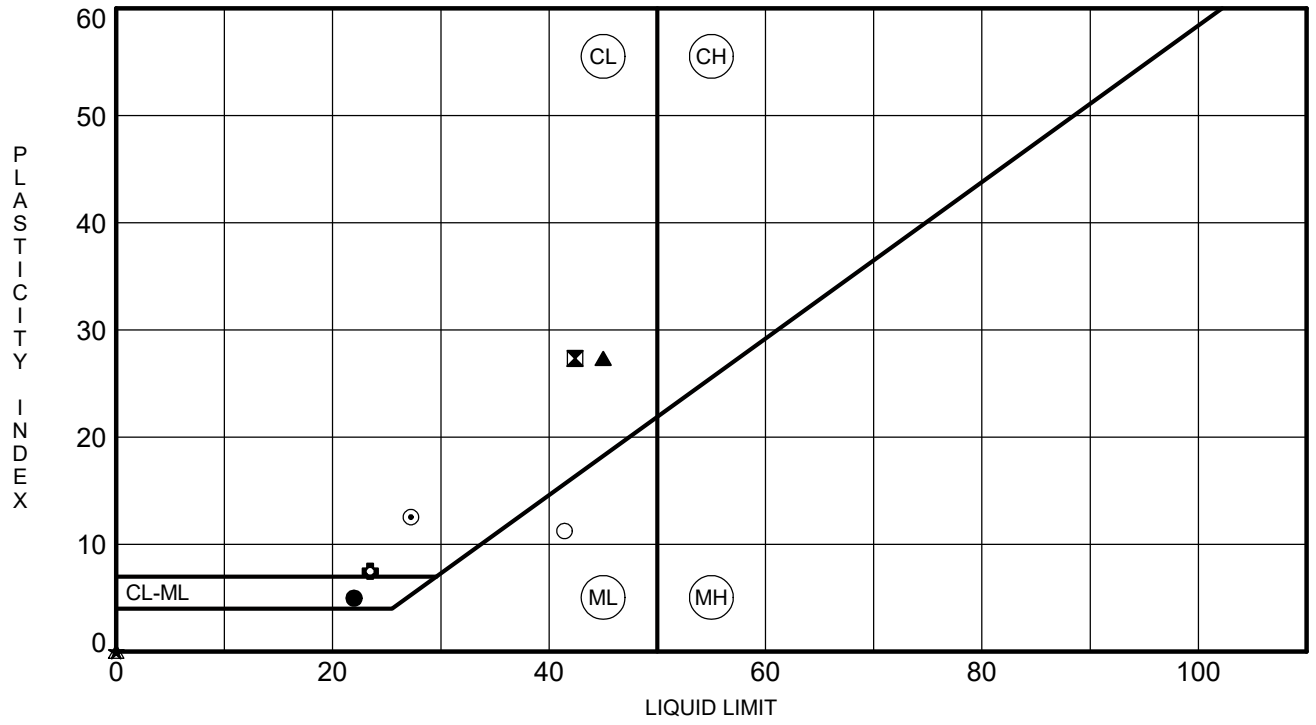
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-1**	**55.0**	**19**	**0.235**	**0.082**		**0.8**	**70.3**	**28.9**	
⊠	**B-1**	**75.0**	**4.76**	**0.089**			**0.0**	**53.3**	**46.7**	
▲	**B-1**	**110.0**	**19**	**0.618**	**0.225**		**6.8**	**76.9**	**16.3**	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/24/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**B-1**	**8.0**	**22**	**17**	**5**	**42**	**SILTY, CLAYEY SAND (SC-SM/A-4)**
⊠	**B-1**	**15.0**	**42**	**15**	**27**	**60**	**SANDY LEAN CLAY (CL/A-7-6)**
▲	**B-1**	**30.0**	**45**	**18**	**27**	**63**	**SANDY LEAN CLAY (CL/A-7-6)**
★	**B-1**	**40.0**	**NP**	**NP**	**NP**	**18**	**SILTY SAND (SM/A-2-4)**
⊙	**B-1**	**50.0**	**27**	**15**	**12**	**38**	**CLAYEY SAND (SC/A-6)**
✿	**B-1**	**55.0**	**23**	**16**	**7**	**29**	**SILTY, CLAYEY SAND (SC-SM/A-2-4)**
○	**B-1**	**75.0**	**41**	**30**	**11**	**47**	**SILTY SAND (SM/A-7-5)**
△	**B-1**	**110.0**	**NP**	**NP**	**NP**	**16**	**SILTY SAND (SM/A-1-b)**

F&ME CONSULTANTS
3112 Devine Street
Columbia, South Carolina 29205

pH Determination
(AASHTO T289)

Project Name:	US 21/US 17A over CSX RR	SCDOT Project No.:	P042942
Sample Location:	B-1	Sample Elevation/Depth:	18.5' - 25.0'
Description of Sample:	SANDY LEAN CLAY (CL/A-7-6)	Date Sampled:	10/16/2023
Tested By:	LH	Date Tested:	10/17/2023

FME Lab ID No.	23-3407			
Sample ID	B-1/DH-1			
Depth (ft.)	18.5 - 25.0			
pH Value	3.48			
Temperature (˚C)	21.1			

Date Reviewed: 10/24/2023 Reviewed By: J. Hiers

REV 09/2022

SOIL RESISTIVITY
(AASHTO T288)

Project Name:	US 21/US 17A over CSX RR	SCDOT Project ID:	P0422942
Location:	B-1	FME Lab ID No.:	23-3407
Sampled By:	GC	Date Sampled:	10/16/2023
Soil Description:	SANDY LEAN CLAY (CL/A-7-6)	Date Received:	10/16/2023
Tested By:	LG	Date Tested:	10/17/2023

Boring No.	Sample Depth (ft.)	Minimum Soil Resistivity, Ω-cm
B-1	18.5 - 25.0	1,612

Date Reviewed: 10/24/2023 Reviewed By: J. Hiers

CHLORIDE ION CONTENT IN SOILS

AASHTO T 291 - 94 (2018) (*Method B*)

Client:	F&ME Consultants, Inc.	Boring No.:	B-1
Client Reference:	US21/US17A G6400.20	Depth (ft):	18.5-25.0'
Project No.:	2023-644-001	Sample No.:	SS-7/SS-8
Lab ID:	2023-644-001-001	Description:	Brown Soil

(- # 10 Sieve material)

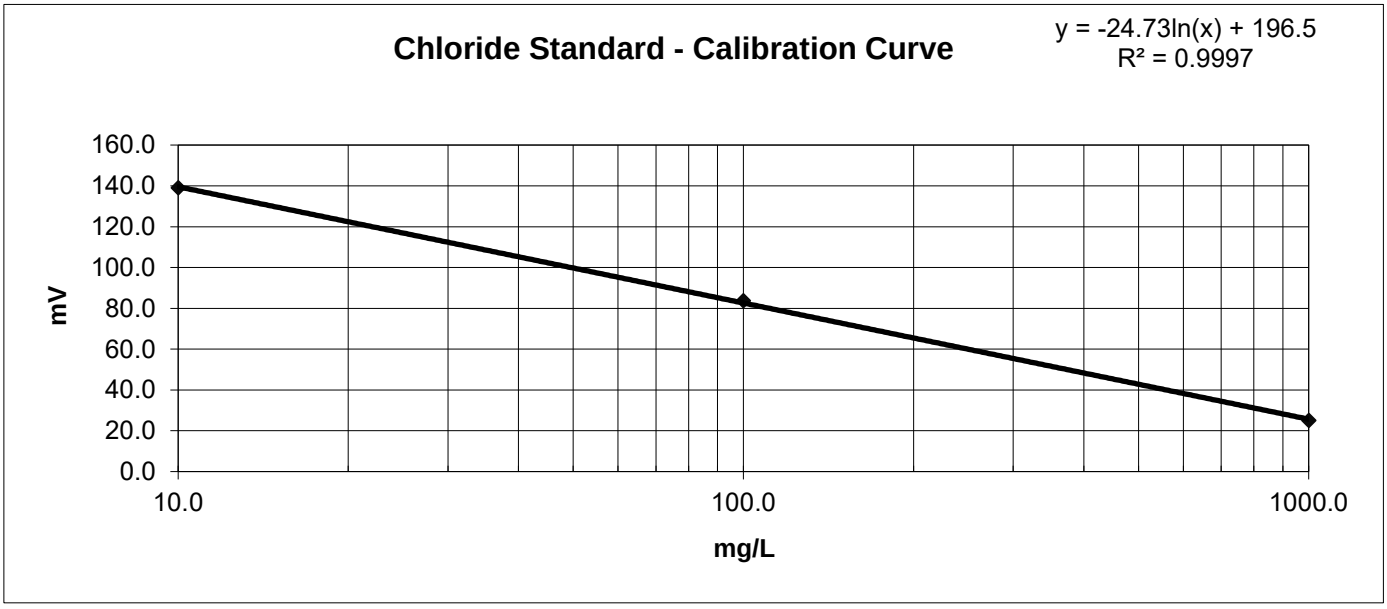
CHLORIDE STANDARD: CALIBRATION CURVE

STANDARD		MILLIVOLTS (mV)
10.0	mg/L	139.0
100.0	mg/L	83.7
1000.0	mg/L	25.1

MEASUREMENT OF CHLORIDES

		CONCENTRATION (mg/L)	CONCENTRATION (mg/kg)
Sample Weight (g):	100.0		
Water added to Sample (ml):	100.0		
Size of Sample Aliquot (ml):	25.0		
Sample Reading (mV):	139.0	10.22	10.22

Notes: 1) Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO_3 solution (1:1 volume).
2) Samples were dried for a minimum of 12 hours at 110 $^{+}/_{-}$ 5^{o}C.



Notes:

Tested By	JAM	Date	10/24/23	Checked By	BRB	Date	10/24/23

DCN: CT-S63A DATE: 6/2/14 REVISION: 1

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Water-Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2020)

Client:	F&ME Consultants, Inc.	Boring No.:	B-1
Client Reference:	US21/US17A G6400.20	Depth (ft):	18.5-25.0'
Project No.:	2023-644-001	Sample No.:	SS-7/SS-8
Lab ID:	2023-644-001-001	Soil Description:	Brown Soil

Sulfate Standard - Calibration Curve Spectrophotometer Readings

Sulfate Ion Concentrations (mg/L)

0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0

Spectrophotometer Readings (FAU)

Underrange	Underrange	6	17	35	58	107	166	229

Measurement of Barium Chloride Turbidity

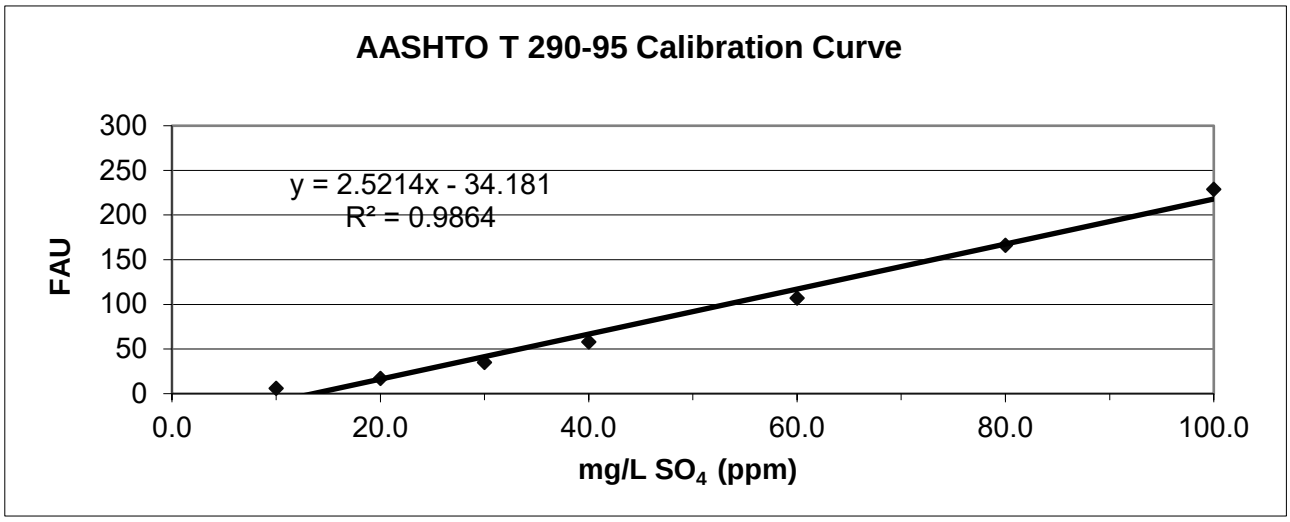
(Sample contains 5.0 mL NaCl solution and 0.3 g $BaCl_2 \cdot 2H_2O$)

Sample Weight (g):	100.0
Water added to Sample (mL):	300.0
Size of Sample Aliquot (mL):	50.0
Sample Reading (FAU):	9
Sample Diluted:	No
Sulfate Solution Added (ml):	5

Sample Moisture Content

Tare Number:	872
Weight of Tare & Wet Sample (g):	293.41
Weight of Tare & Dry Sample (g):	291.62
Weight of Tare (g):	109.86
Weight of Water (g):	1.79
Weight of Dry Sample (g):	181.76
Moisture Content (%):	0.98

Sample Sulfate Ion Concentration:	16.63	**mg/L SO_4 (ppm)**
Sample Sulfate Ion Content:	49.9	**mg/Kg SO_4 (not corrected for moisture)**
Sample Sulfate Ion Content:	50.4	**mg/Kg SO4 (corrected for moisture)**



Tested by: JAM Date: 10/24/23 Checked by: BRB Date: 10/24/2023

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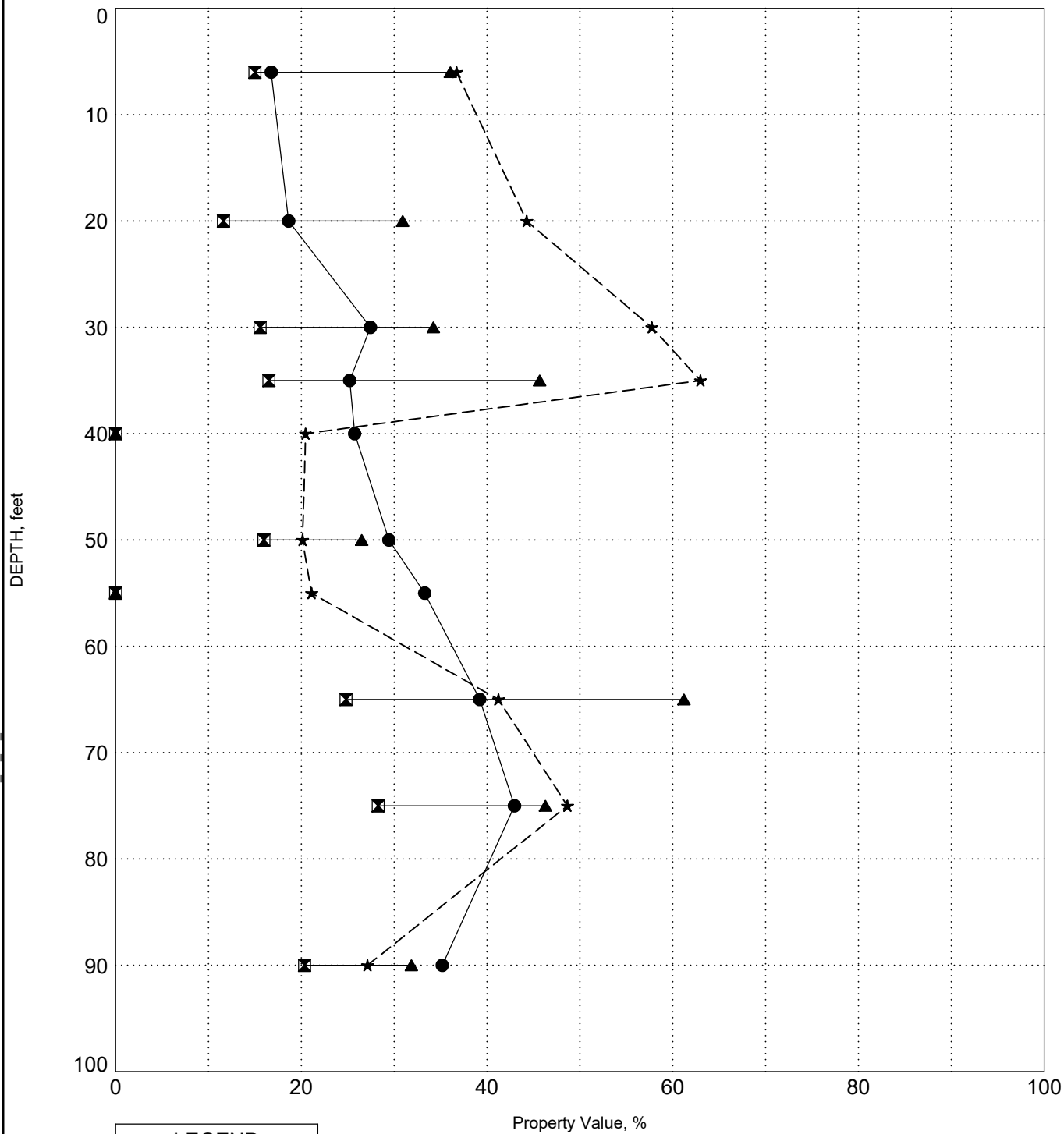
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING B-2

SURFACE ELEVATION: 44.3



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3408	**DATE SAMPLE RECEIVED:**	10/16/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	LG/TW	**DATE SETUP:**	10/16/2023
WEIGHED BY:	TP	**DATE OF WEIGHING:**	10/17/2023

BORING NO.	B-2	B-2	B-2	B-2	B-2
SAMPLE NO.	SS-2	SS-6	SS-8	SS-9	SS-10
SAMPLE DEPTH (FT.)	4.0 - 6.0	18.5 - 20.0	28.5 - 30.0	33.5 - 35.0	38.5 - 40.0
WATER CONTENT, W%	16.8	18.6	27.4	25.2	25.7

BORING NO.	B-2	B-2	B-2	B-2	B-2
SAMPLE NO.	SS-12	SS-13	SS-15	SS-17	SS-20
SAMPLE DEPTH (FT.)	48.5 - 50.0	53.5 - 55.0	63.5 - 65.0	73.5 - 75.0	88.5 - 90.0
WATER CONTENT, W%	29.4	33.3	39.2	43.0	35.2

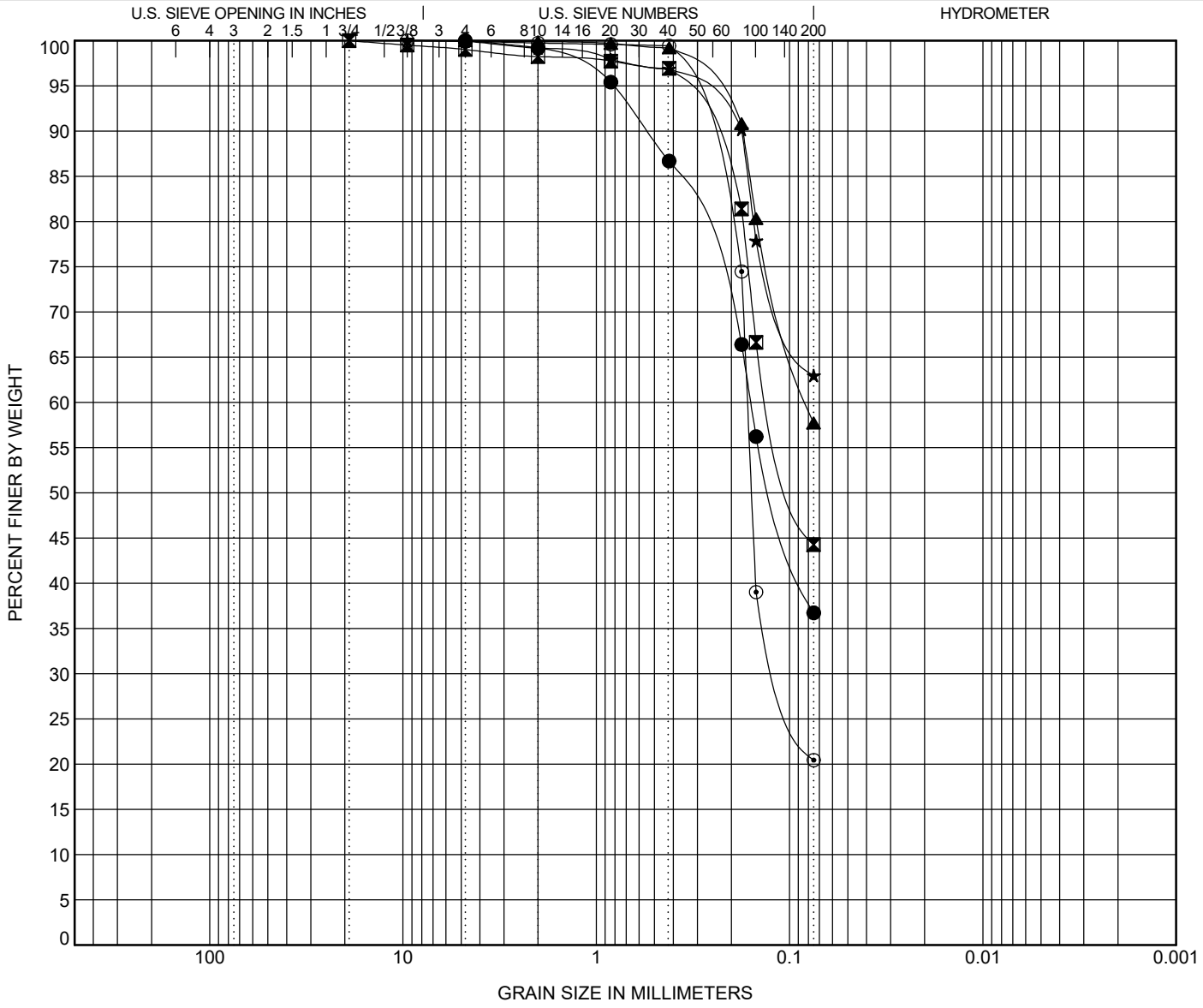
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

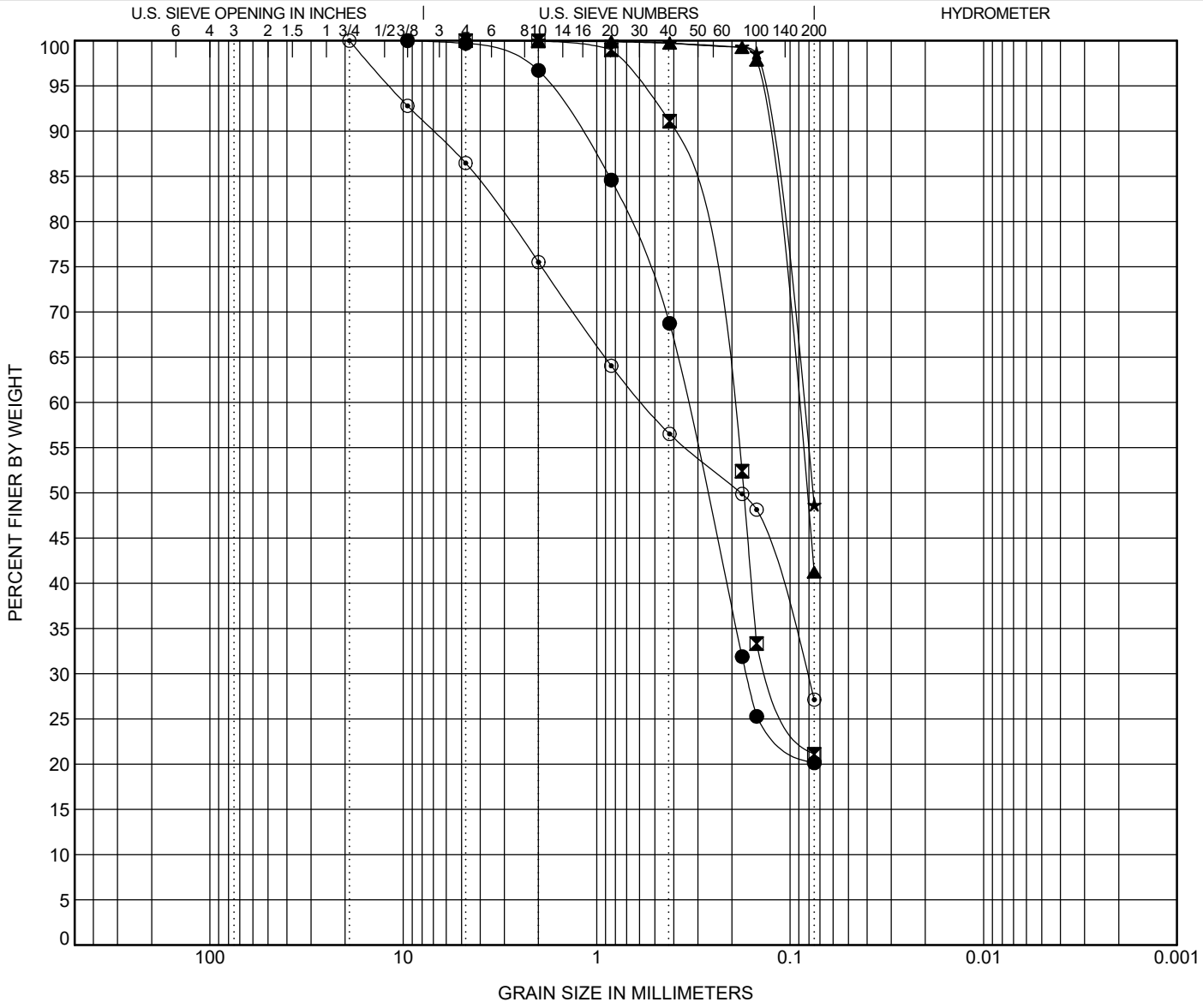
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	B-2	6.0	CLAYEY SAND (SC/A-6)	36	15	21		
⊠	B-2	20.0	CLAYEY SAND (SC/A-6)	31	12	19		
▲	B-2	30.0	SANDY LEAN CLAY (CL/A-6)	34	16	18		
★	B-2	35.0	SANDY LEAN CLAY (CL/A-7-6)	46	17	29		
⊙	B-2	40.0	SILTY SAND (SM/A-2-4)	NP	NP	NP		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-2	6.0	4.76	0.159			0.0	63.3	36.7	
⊠	B-2	20.0	19	0.122			1.0	54.7	44.3	
▲	B-2	30.0	4.76	0.08			0.0	42.3	57.7	
★	B-2	35.0	9.51				0.1	37.0	63.0	
⊙	B-2	40.0	9.51	0.165	0.107		0.1	79.5	20.4	

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE		DEPTH	Classification	LL	PL	PI	Cc	Cu
●	B-2	50.0	CLAYEY SAND (SC/A-2-6)	27	16	11		
⊠	B-2	55.0	SILTY SAND (SM/A-2-4)	NP	NP	NP		
▲	B-2	65.0	CLAYEY SAND (SC/A-7-6)	61	25	36		
★	B-2	75.0	SILTY SAND (SM/A-7-6)	46	28	18		
⊙	B-2	90.0	CLAYEY SAND (SC/A-2-6)	32	20	12		

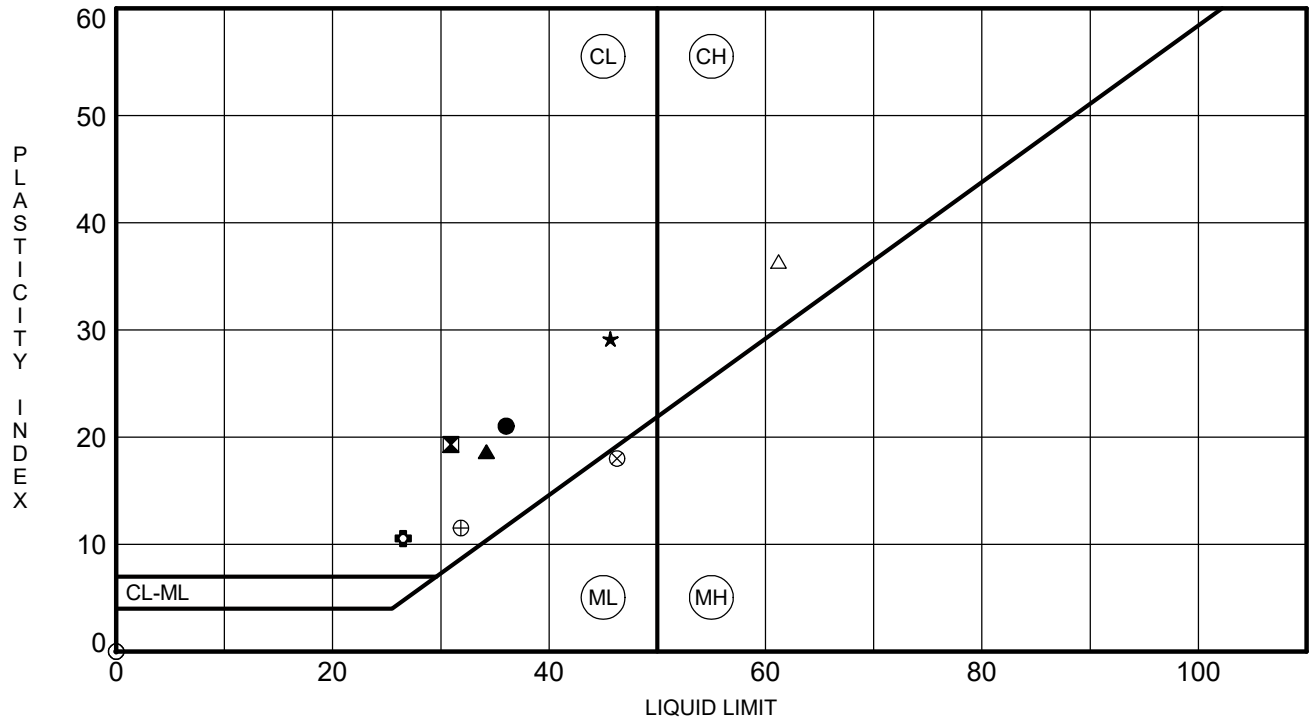
BOREHOLE		DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-2	50.0	9.51	0.342	0.168		0.3	79.6	20.1	
⊠	B-2	55.0	4.76	0.21	0.124		0.0	78.9	21.1	
▲	B-2	65.0	4.76	0.094			0.0	58.8	41.2	
★	B-2	75.0	2	0.088			0.0	51.3	48.7	
⊙	B-2	90.0	19	0.579	0.082		13.6	59.3	27.1	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/24/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**B-2**	**6.0**	**36**	**15**	**21**	**37**	**CLAYEY SAND (SC/A-6)**
⊠	**B-2**	**20.0**	**31**	**12**	**19**	**44**	**CLAYEY SAND (SC/A-6)**
▲	**B-2**	**30.0**	**34**	**16**	**18**	**58**	**SANDY LEAN CLAY (CL/A-6)**
★	**B-2**	**35.0**	**46**	**17**	**29**	**63**	**SANDY LEAN CLAY (CL/A-7-6)**
⊙	**B-2**	**40.0**	**NP**	**NP**	**NP**	**20**	**SILTY SAND (SM/A-2-4)**
✿	**B-2**	**50.0**	**27**	**16**	**11**	**20**	**CLAYEY SAND (SC/A-2-6)**
○	**B-2**	**55.0**	**NP**	**NP**	**NP**	**21**	**SILTY SAND (SM/A-2-4)**
△	**B-2**	**65.0**	**61**	**25**	**36**	**41**	**CLAYEY SAND (SC/A-7-6)**
⊗	**B-2**	**75.0**	**46**	**28**	**18**	**49**	**SILTY SAND (SM/A-7-6)**
⊕	**B-2**	**90.0**	**32**	**20**	**12**	**27**	**CLAYEY SAND (SC/A-2-6)**

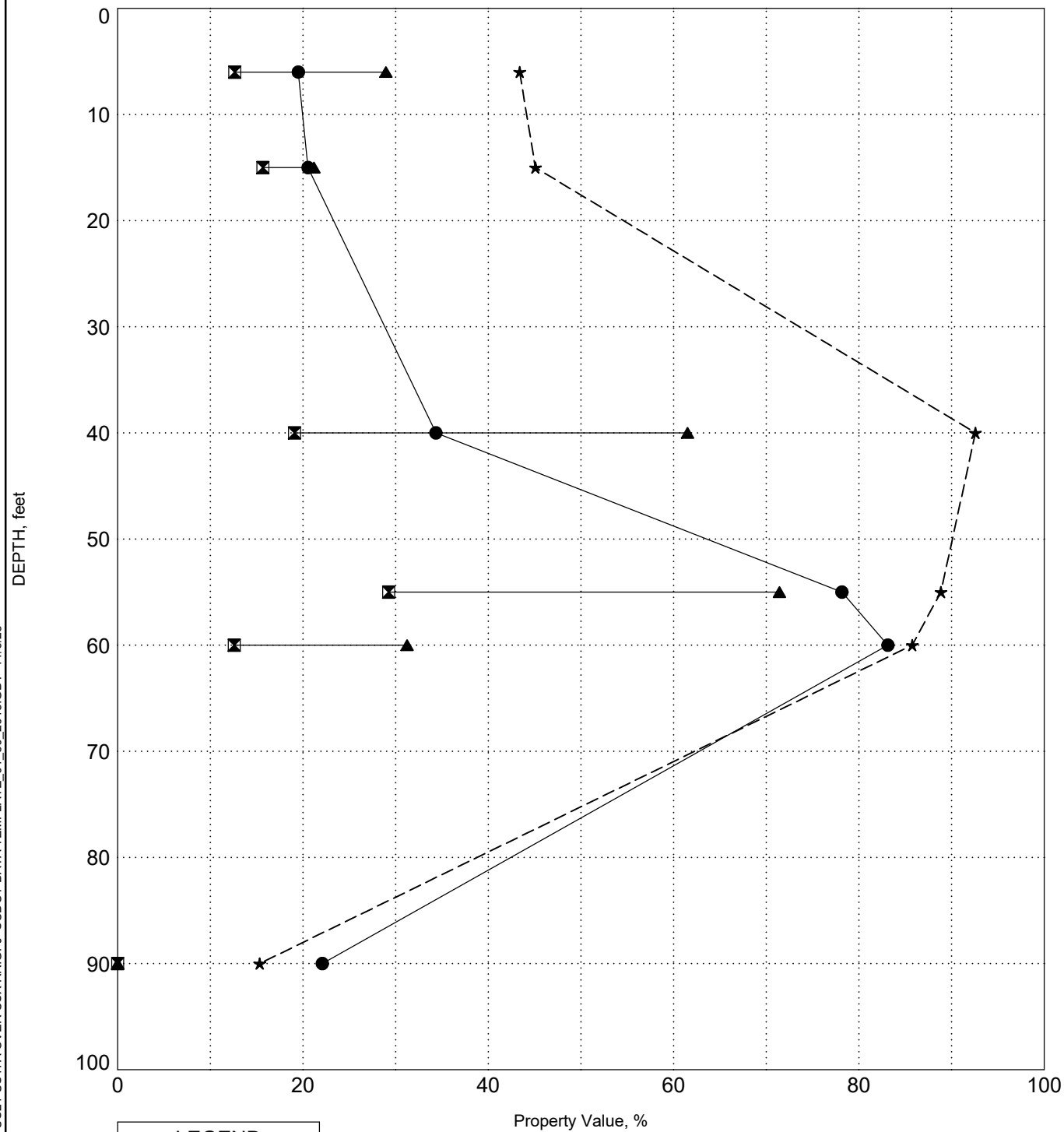
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING B-3

SURFACE ELEVATION: 44.1



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3533	**DATE SAMPLE RECEIVED:**	10/26/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	LG/TW	**DATE SETUP:**	10/26/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/27/2023

BORING NO.	B-3	B-3	B-3	B-3	B-3
SAMPLE NO.	SS-3	SS-6	SS-11	SS-14	SS-15
SAMPLE DEPTH (FT.)	4.0 - 6.0	13.5 - 15.0	38.5 - 40.0	53.5 - 55.0	58.5 - 60.0
WATER CONTENT, W%	19.5	20.5	34.3	78.2	83.1

BORING NO.	B-3				
SAMPLE NO.	SS-21				
SAMPLE DEPTH (FT.)	88.5 - 90.0				
WATER CONTENT, W%	22.1				

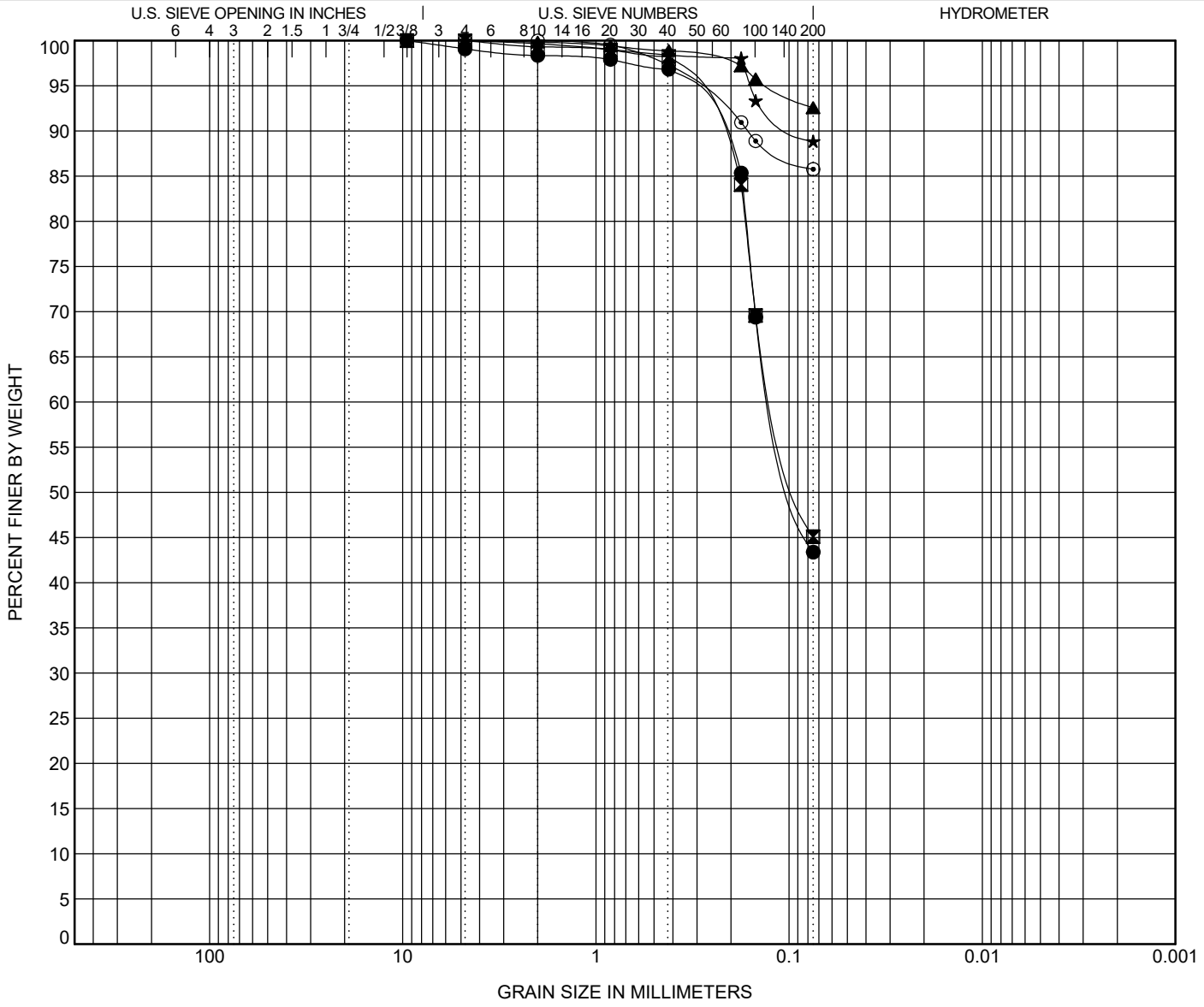
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	B-3	6.0	CLAYEY SAND (SC/A-6)	29	13	16		
⊠	B-3	15.0	SILTY, CLAYEY SAND (SC-SM/A-4)	21	16	5		
▲	B-3	40.0	FAT CLAY (CH/A-7-6)	62	19	43		
★	B-3	55.0	FAT CLAY (CH/A-7-6)	71	29	42		
⊙	B-3	60.0	LEAN CLAY (CL/A-6)	31	13	18		

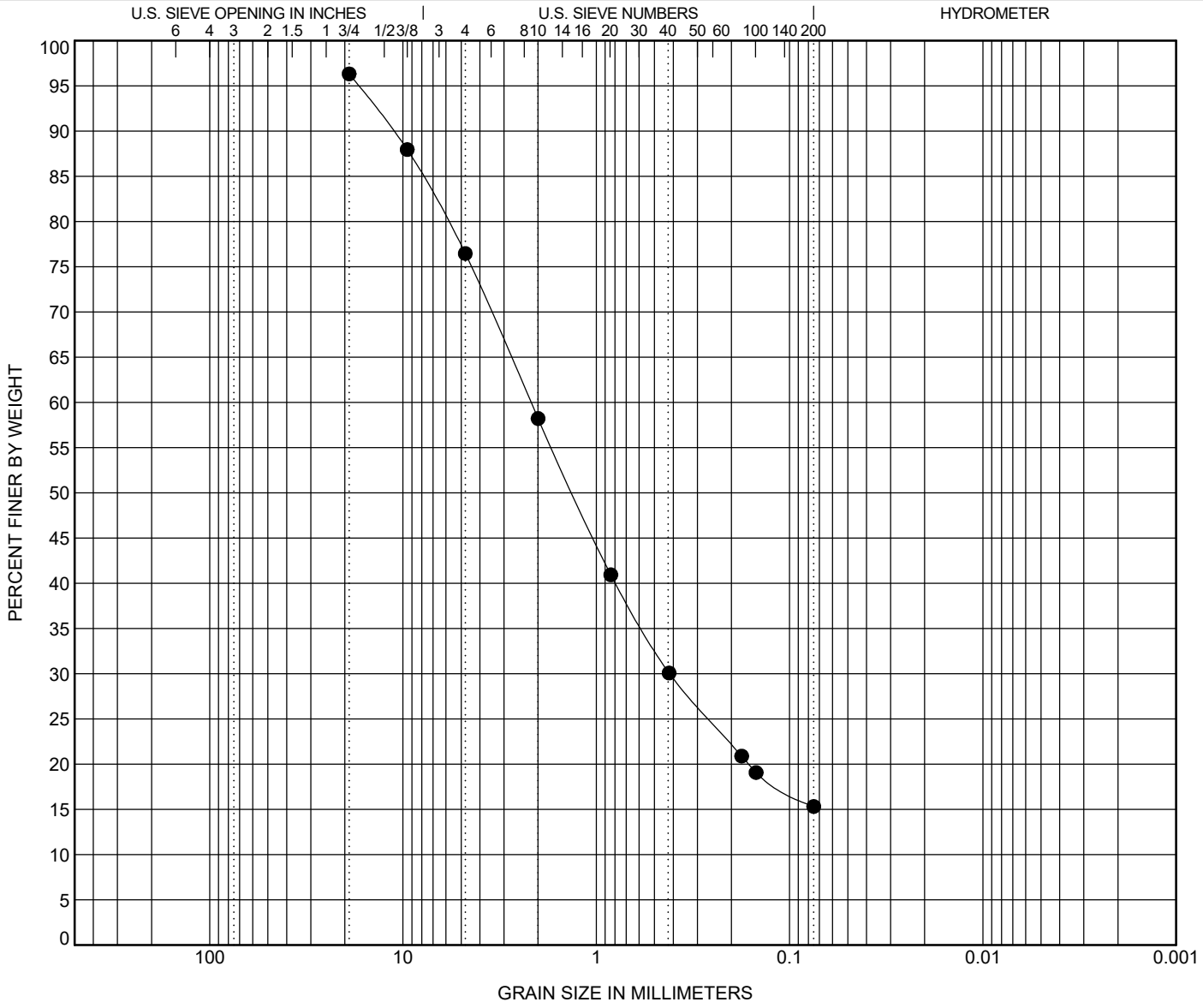
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-3	6.0	9.51	0.116			0.9	55.7	43.4	
⊠	B-3	15.0	9.51	0.114			0.0	54.9	45.1	
▲	B-3	40.0	4.76				0.0	7.4	92.6	
★	B-3	55.0	4.76				0.0	11.1	88.9	
⊙	B-3	60.0	4.76				0.0	14.2	85.8	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/2/23

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

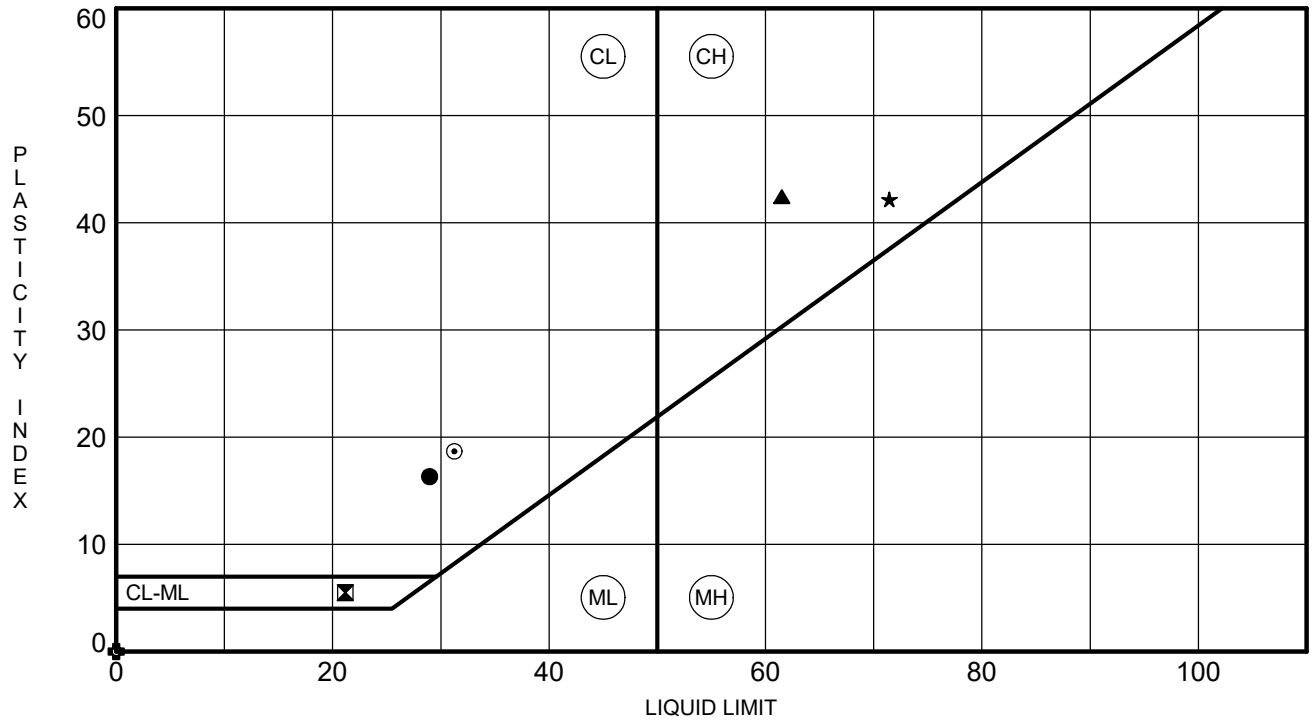
BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● **B-3**	**90.0**	**SILTY SAND with GRAVEL (SM/A-1-b)**	**NP**	**NP**	**NP**		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **B-3**	**90.0**	**19**	**2.177**	**0.417**		**19.9**	**61.1**	**15.3**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**B-3**	**6.0**	**29**	**13**	**16**	**43**	**CLAYEY SAND (SC/A-6)**
⊠	**B-3**	**15.0**	**21**	**16**	**5**	**45**	**SILTY, CLAYEY SAND (SC-SM/A-4)**
▲	**B-3**	**40.0**	**62**	**19**	**43**	**93**	**FAT CLAY (CH/A-7-6)**
★	**B-3**	**55.0**	**71**	**29**	**42**	**89**	**FAT CLAY (CH/A-7-6)**
⊙	**B-3**	**60.0**	**31**	**13**	**18**	**86**	**LEAN CLAY (CL/A-6)**
✿	**B-3**	**90.0**	**NP**	**NP**	**NP**	**15**	**SILTY SAND with GRAVEL (SM/A-1-b)**

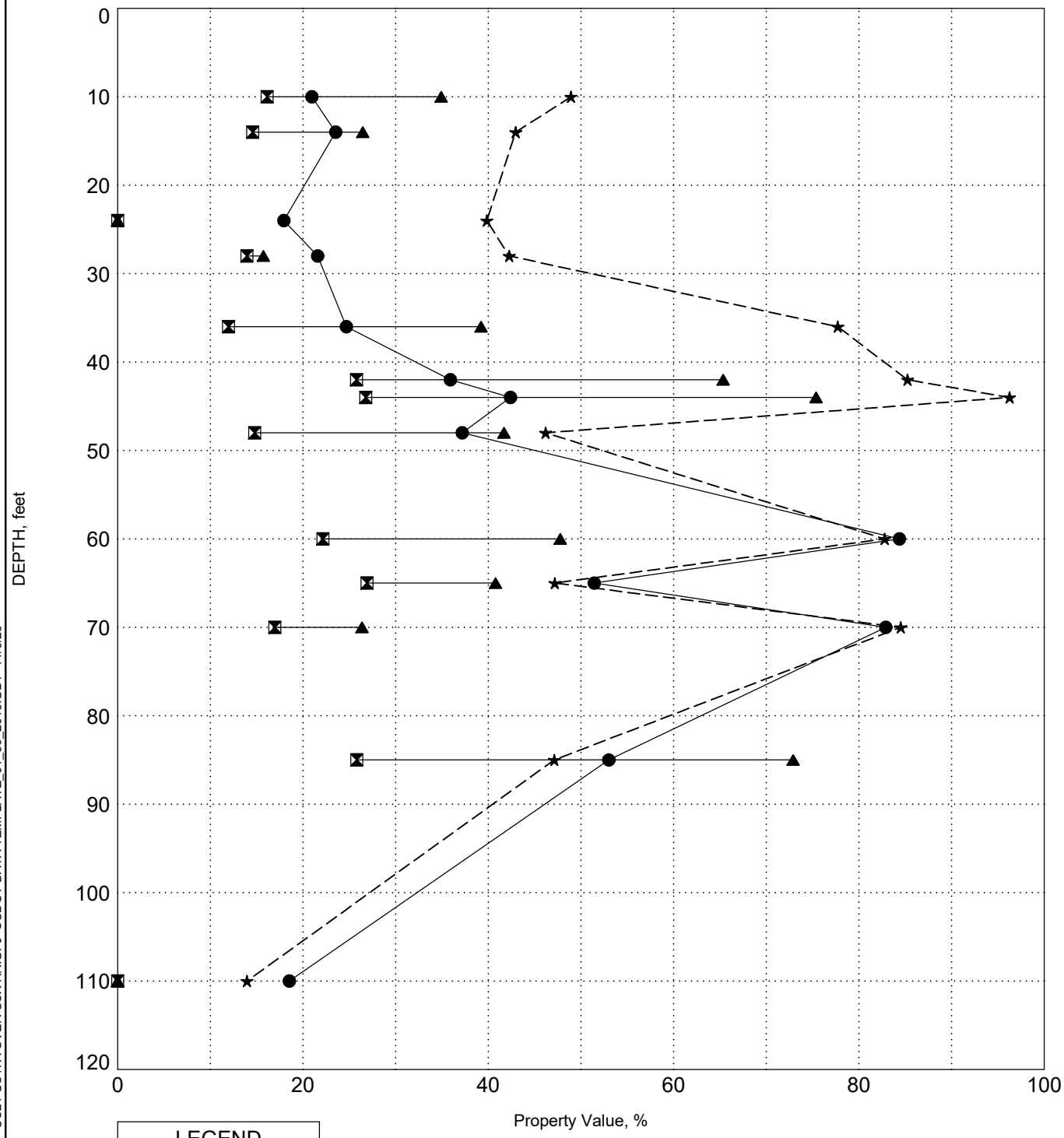
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING B-4

SURFACE ELEVATION: 43.1



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3481	**DATE SAMPLE RECEIVED:**	10/20/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	LG/TW	**DATE SETUP:**	10/26/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/27/2023

BORING NO.	B-4	B-4	B-4	B-4	B-4
SAMPLE NO.	SS-5	SS-7	SS-12	SS-14	SS-18
SAMPLE DEPTH (FT.)	8.0 - 10.0	12.0 - 14.0	22.0 - 24.0	26.0 - 28.0	34.0 - 36.0
WATER CONTENT, W%	21.0	23.5	17.9	21.6	24.7

BORING NO.	B-4	B-4	B-4	B-4	B-4
SAMPLE NO.	SS-21	SS-22	SS-24	SS-27	SS-28
SAMPLE DEPTH (FT.)	40.0 - 42.0	42.0 - 44.0	46.0 - 48.0	58.5 - 60.0	63.5 - 65.0
WATER CONTENT, W%	35.9	42.4	37.2	84.4	51.4

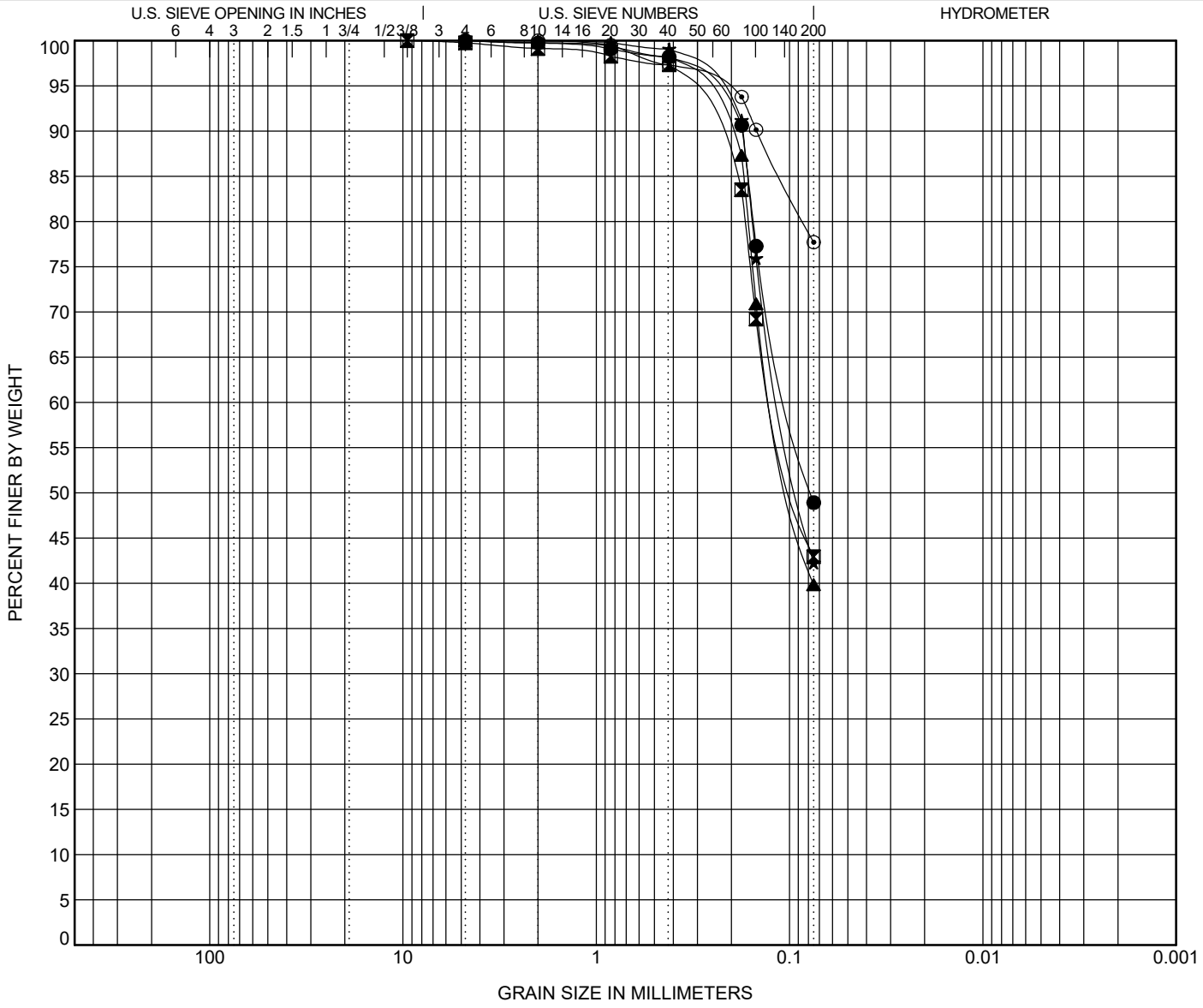
BORING NO.	B-4	B-4	B-4		
SAMPLE NO.	SS-29	SS-32	SS-37		
SAMPLE DEPTH (FT.)	68.5 - 70.0	83.5 - 85.0	108.5 - 110.0		
WATER CONTENT, W%	82.9	53	18.5		

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

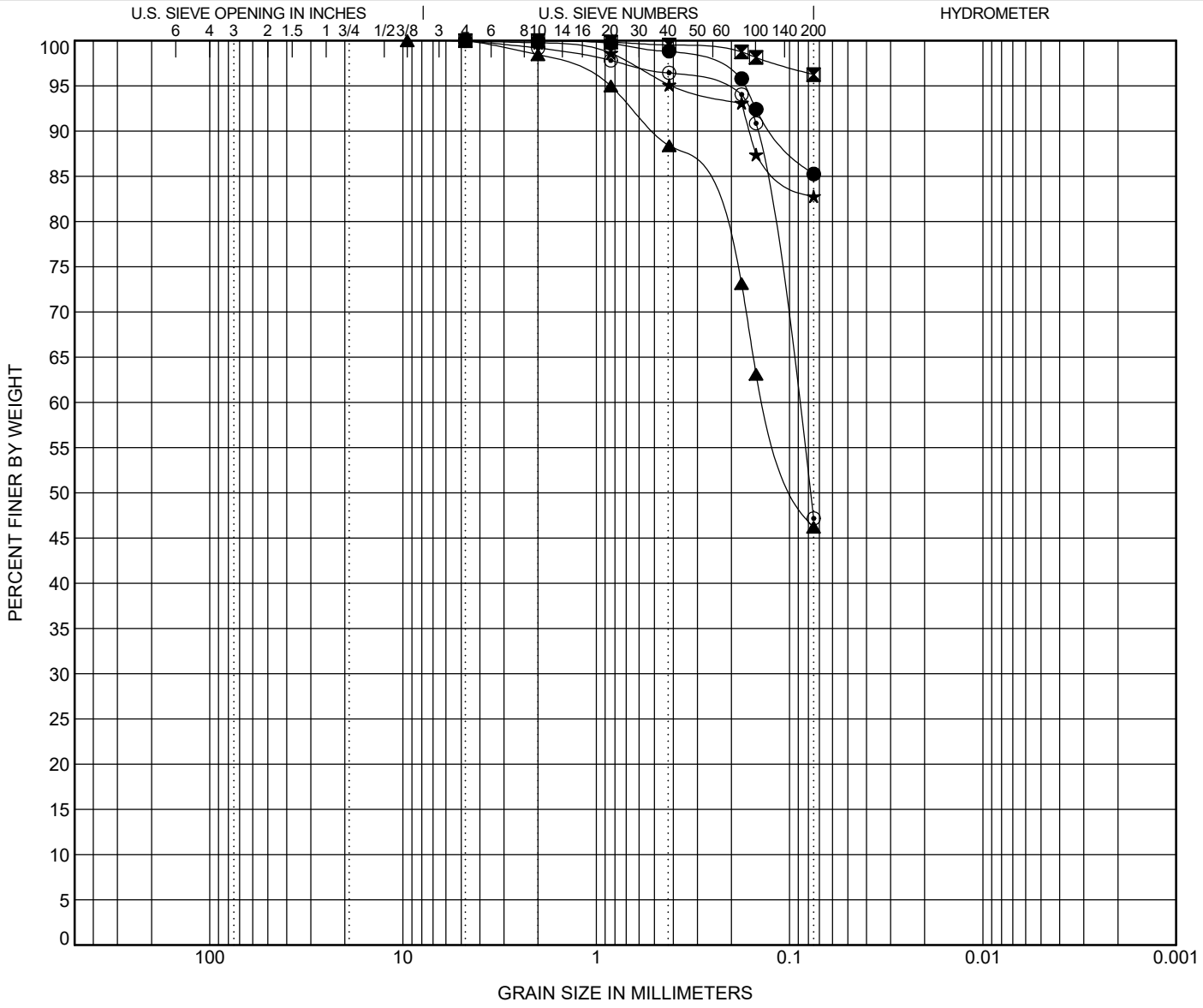
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-4**	**10.0**	**CLAYEY SAND (SC/A-6)**	**35**	**16**	**19**		
⊠	**B-4**	**14.0**	**CLAYEY SAND (SC/A-6)**	**26**	**15**	**11**		
▲	**B-4**	**24.0**	**SILTY SAND (SM/A-4)**	**NP**	**NP**	**NP**		
★	**B-4**	**28.0**	**SILTY SAND (SM/A-4)**	**16**	**14**	**2**		
⊙	**B-4**	**36.0**	**LEAN CLAY with SAND (CL/A-6)**	**39**	**12**	**27**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-4**	**10.0**	**4.76**	**0.098**			**0.0**	**51.1**	**48.9**	
⊠	**B-4**	**14.0**	**9.51**	**0.117**			**0.2**	**56.8**	**43.0**	
▲	**B-4**	**24.0**	**4.76**	**0.117**			**0.0**	**60.2**	**39.8**	
★	**B-4**	**28.0**	**4.76**	**0.108**			**0.0**	**57.7**	**42.3**	
⊙	**B-4**	**36.0**	**2**				**0.0**	**22.3**	**77.7**	

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

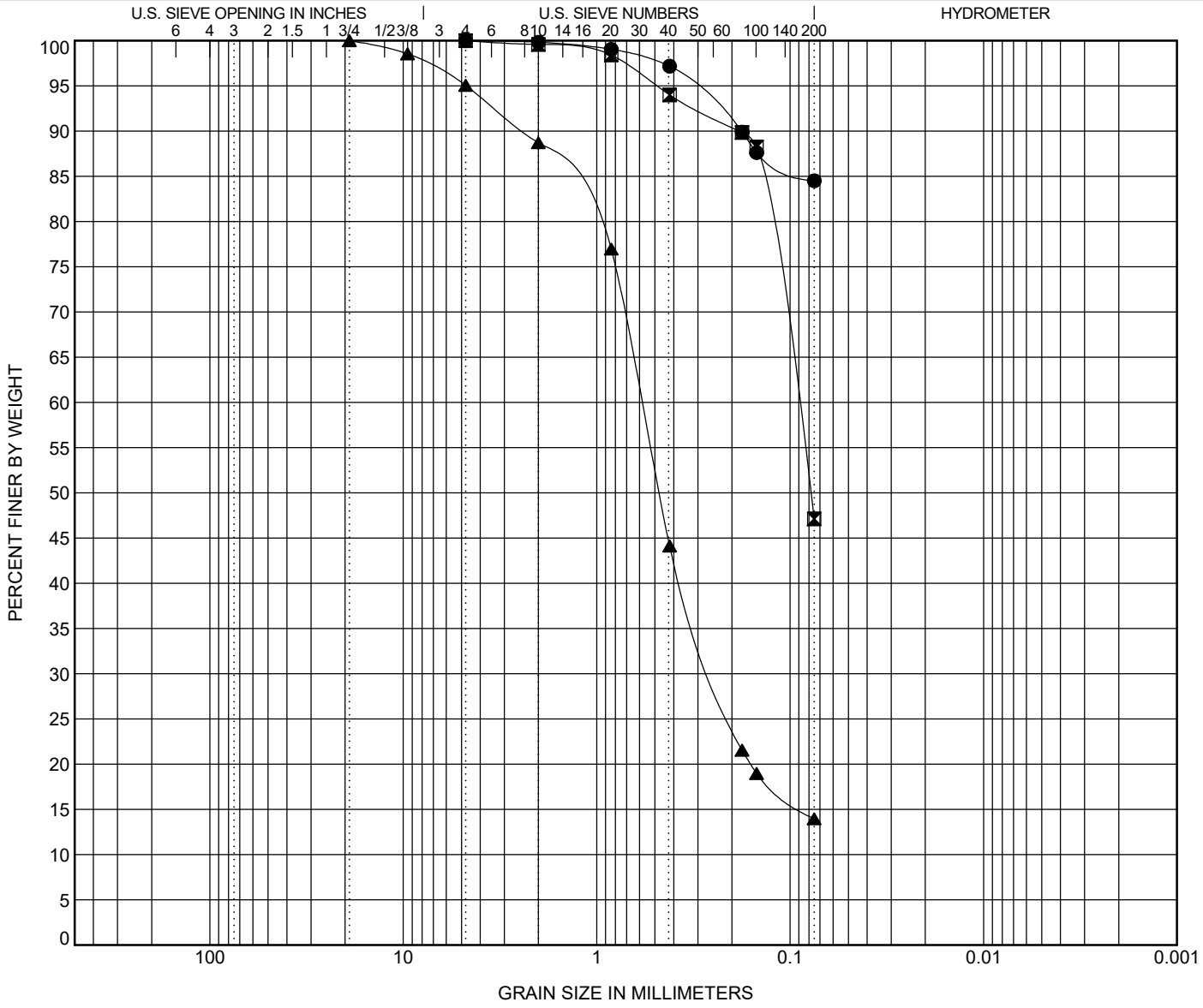
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-4**	**42.0**	**FAT CLAY (CH/A-7-6)**	**65**	**26**	**39**		
⊠	**B-4**	**44.0**	**FAT CLAY (CH/A-7-6)**	**75**	**27**	**48**		
▲	**B-4**	**48.0**	**CLAYEY SAND (SC/A-7-6)**	**42**	**15**	**27**		
★	**B-4**	**60.0**	**LEAN CLAY with SAND (CL/A-7-6)**	**48**	**22**	**26**		
⊙	**B-4**	**65.0**	**SILTY SAND (SM/A-7-6)**	**41**	**27**	**14**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-4**	**42.0**	**4.76**				**0.0**	**14.7**	**85.3**	
⊠	**B-4**	**44.0**	**4.76**				**0.0**	**3.7**	**96.3**	
▲	**B-4**	**48.0**	**9.51**	**0.131**			**0.0**	**53.8**	**46.2**	
★	**B-4**	**60.0**	**4.76**				**0.0**	**17.2**	**82.8**	
⊙	**B-4**	**65.0**	**4.76**	**0.092**			**0.0**	**52.8**	**47.2**	

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**B-4**	**70.0**	**LEAN CLAY with SAND (CL/A-4)**	**26**	**17**	**9**		
⊠	**B-4**	**85.0**	**CLAYEY SAND (SC/A-7-6)**	**73**	**26**	**47**		
▲	**B-4**	**110.0**	**SILTY SAND (SM/A-1-b)**	**NP**	**NP**	**NP**		

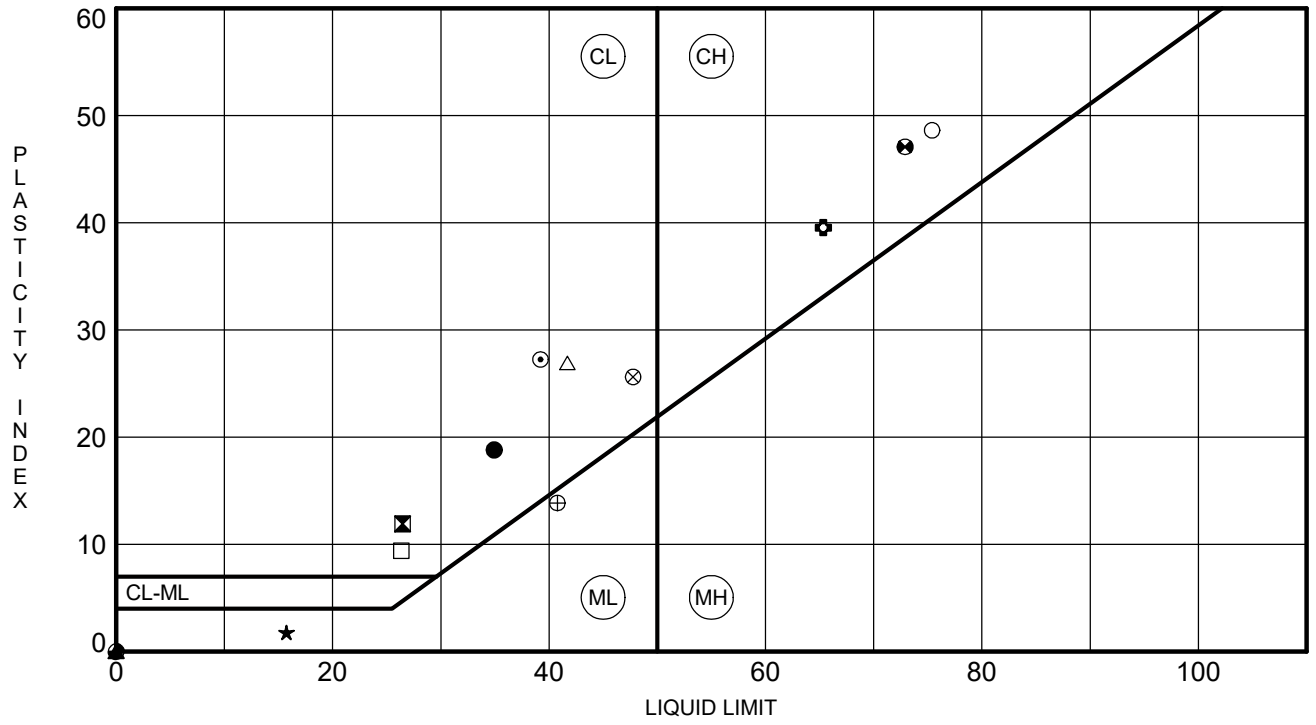
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**B-4**	**70.0**	**4.76**				**0.0**	**15.5**	**84.5**	
⊠	**B-4**	**85.0**	**4.76**	**0.093**			**0.0**	**52.9**	**47.1**	
▲	**B-4**	**110.0**	**19**	**0.588**	**0.245**		**5.0**	**81.1**	**14.0**	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/1/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	B-4	10.0	35	16	19	49	CLAYEY SAND (SC/A-6)
⊠	B-4	14.0	26	15	11	43	CLAYEY SAND (SC/A-6)
▲	B-4	24.0	NP	NP	NP	40	SILTY SAND (SM/A-4)
★	B-4	28.0	16	14	2	42	SILTY SAND (SM/A-4)
⊙	B-4	36.0	39	12	27	78	LEAN CLAY with SAND (CL/A-6)
✿	B-4	42.0	65	26	39	85	FAT CLAY (CH/A-7-6)
○	B-4	44.0	75	27	48	96	FAT CLAY (CH/A-7-6)
△	B-4	48.0	42	15	27	46	CLAYEY SAND (SC/A-7-6)
⊗	B-4	60.0	48	22	26	83	LEAN CLAY with SAND (CL/A-7-6)
⊕	B-4	65.0	41	27	14	47	SILTY SAND (SM/A-7-6)
□	B-4	70.0	26	17	9	85	LEAN CLAY with SAND (CL/A-4)
⊛	B-4	85.0	73	26	47	47	CLAYEY SAND (SC/A-7-6)
◕	B-4	110.0	NP	NP	NP	14	SILTY SAND (SM/A-1-b)

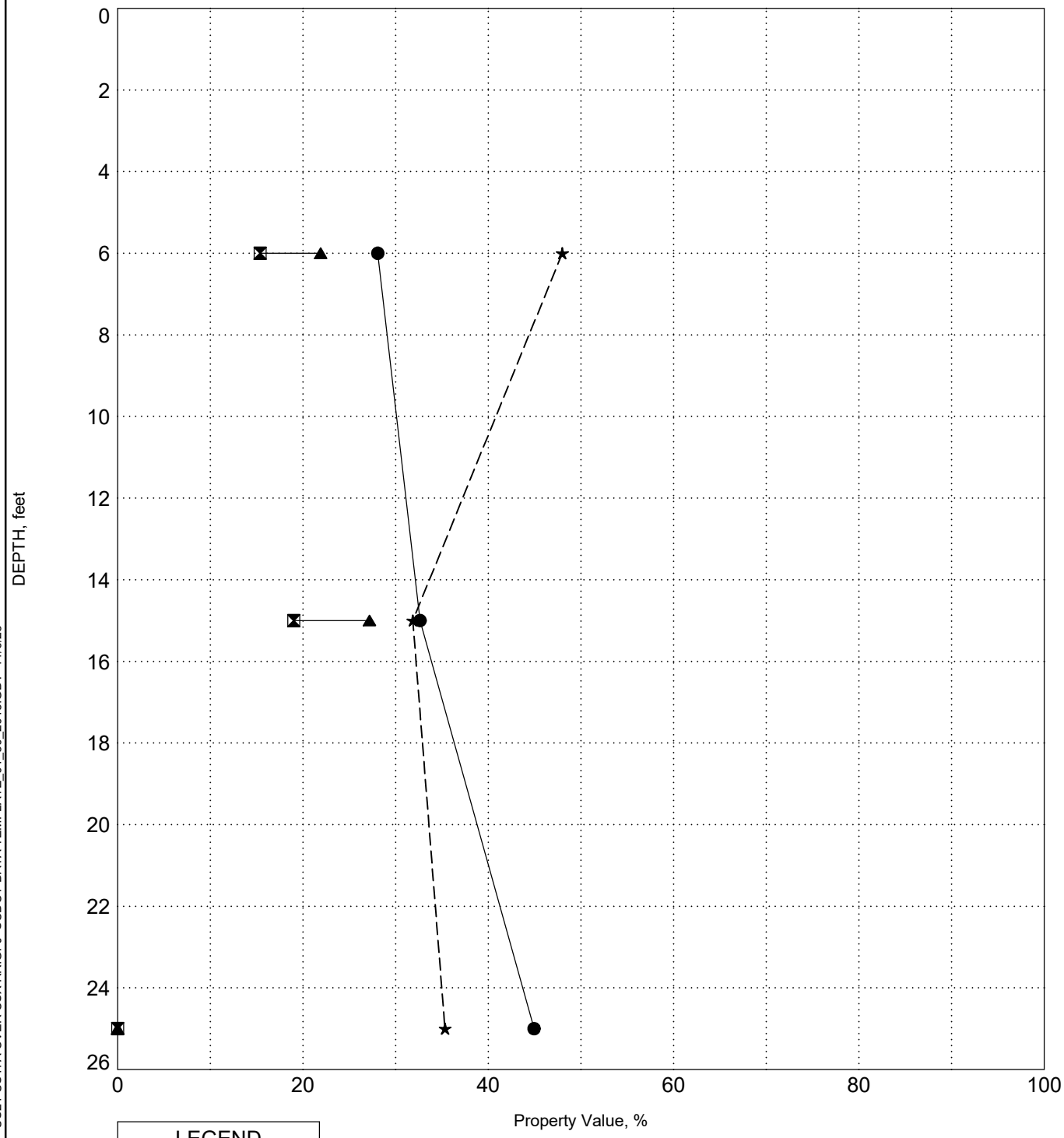
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING C-1

SURFACE ELEVATION: 13.9



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3536	**DATE SAMPLE RECEIVED:**	10/26/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	LG/TW	**DATE SETUP:**	10/26/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/27/2023

BORING NO.	C-1	C-1	C-1		
SAMPLE NO.	SS-3	SS-6	SS-8		
SAMPLE DEPTH (FT.)	4.0 - 6.0	13.5 - 15.0	23.5 - 25.0		
WATER CONTENT, W%	28.1	32.6	44.9		

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

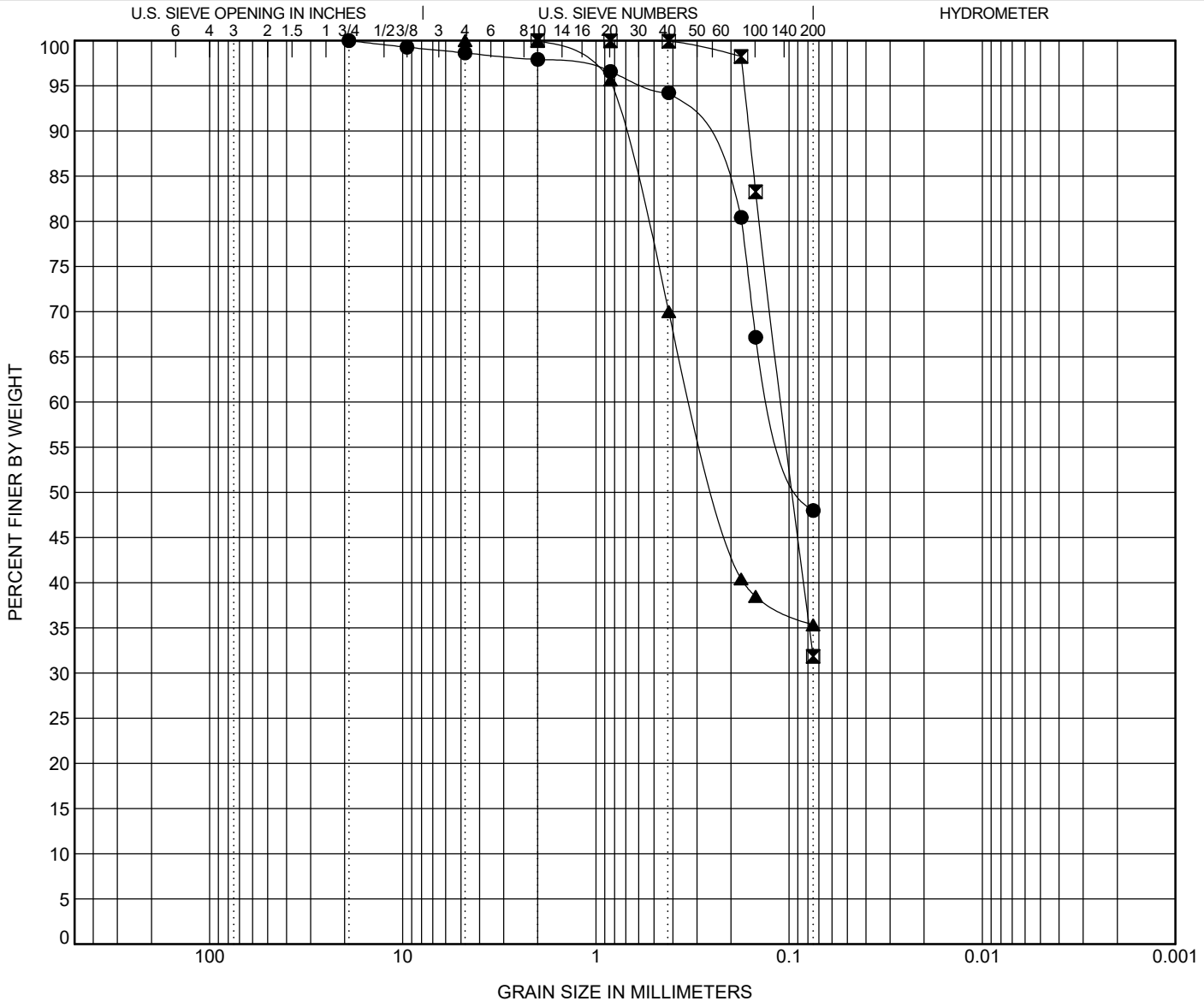
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

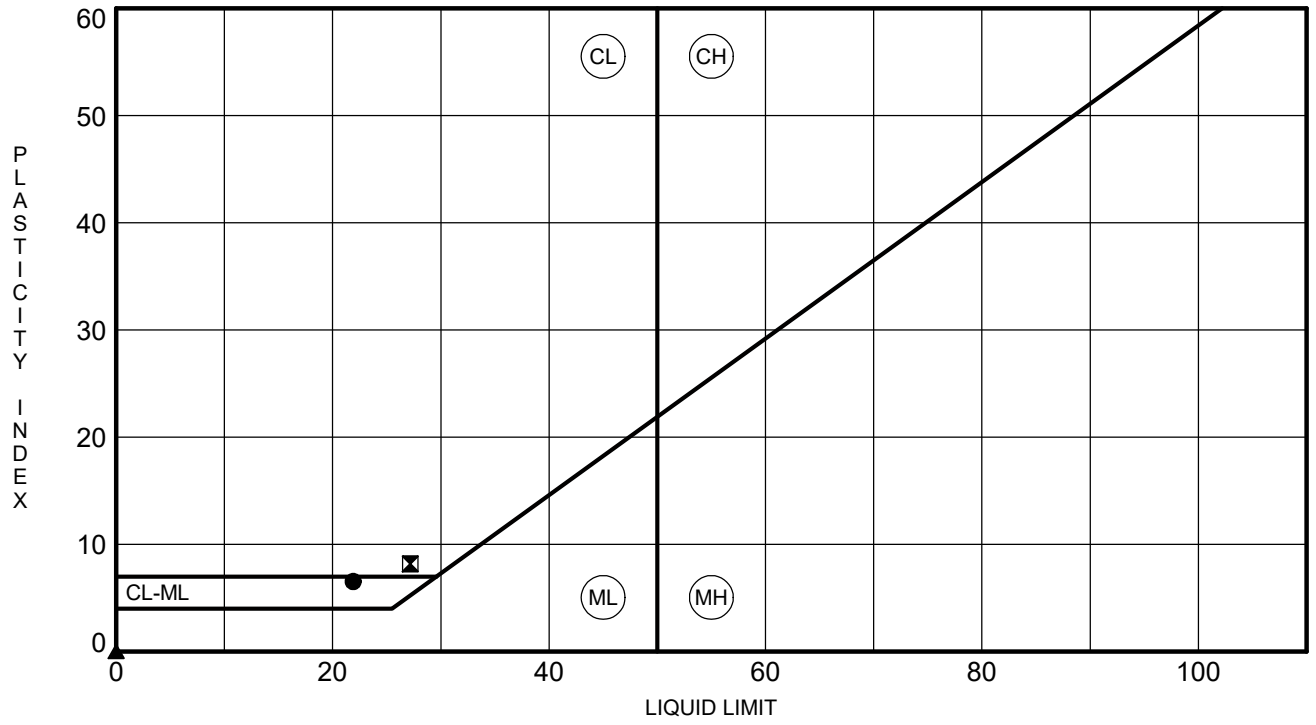
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**C-1**	**6.0**	**SILTY, CLAYEY SAND (SC-SM/A-4)**	**22**	**15**	**7**		
⊠	**C-1**	**15.0**	**CLAYEY SAND (SC/A-2-4)**	**27**	**19**	**8**		
▲	**C-1**	**25.0**	**SILTY SAND (SM/A-2-4)**	**NP**	**NP**	**NP**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**C-1**	**6.0**	**19**	**0.115**			**1.4**	**50.6**	**48.0**	
⊠	**C-1**	**15.0**	**2**	**0.109**			**0.0**	**68.1**	**31.9**	
▲	**C-1**	**25.0**	**4.76**	**0.314**			**0.0**	**64.7**	**35.3**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**C-1**	**6.0**	**22**	**15**	**7**	**48**	**SILTY, CLAYEY SAND (SC-SM/A-4)**
⧓	**C-1**	**15.0**	**27**	**19**	**8**	**32**	**CLAYEY SAND (SC/A-2-4)**
▲	**C-1**	**25.0**	**NP**	**NP**	**NP**	**35**	**SILTY SAND (SM/A-2-4)**

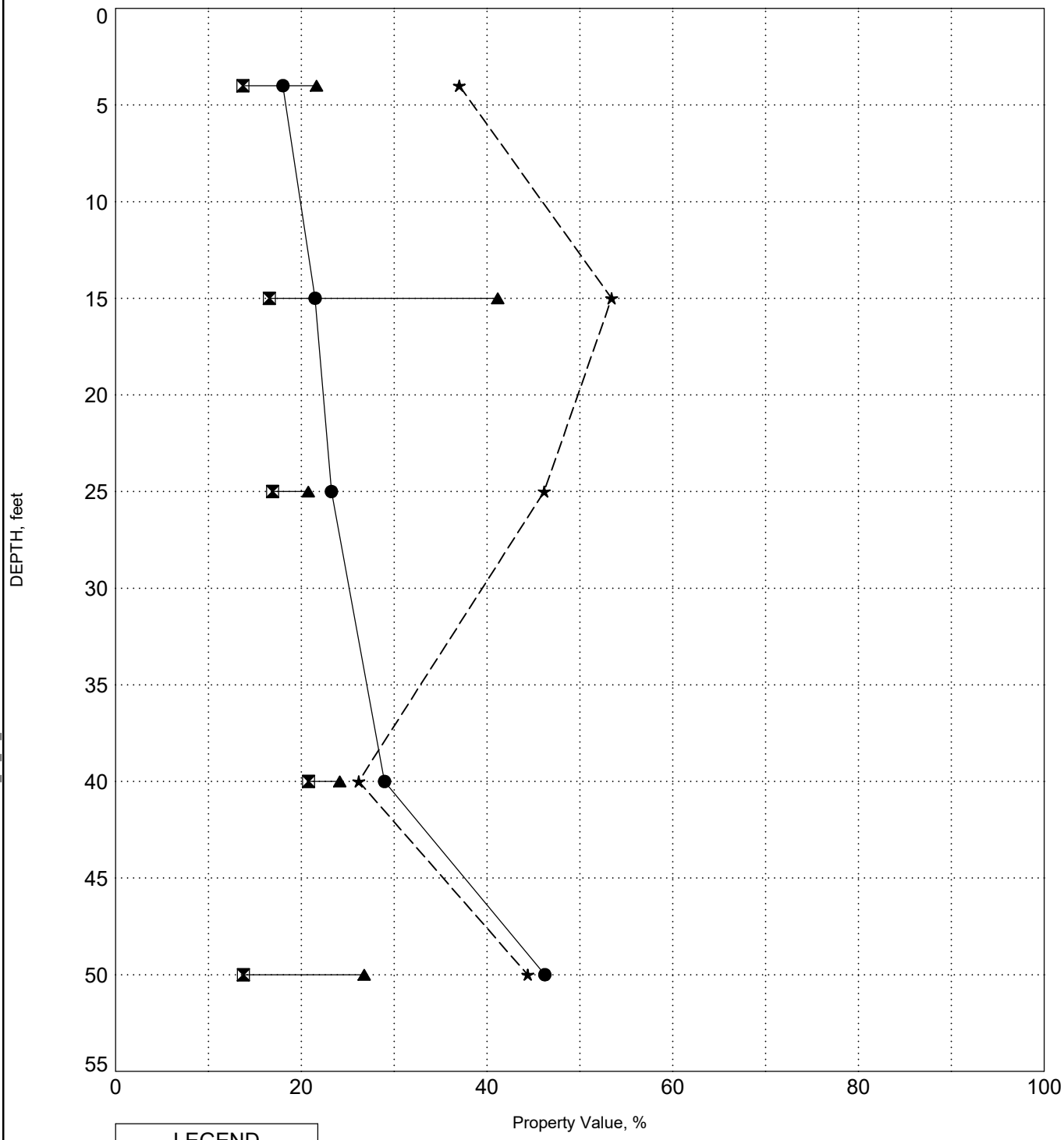
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING E-1

SURFACE ELEVATION: 43.7



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3480	**DATE SAMPLE RECEIVED:**	10/20/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	TW	**DATE SETUP:**	10/20/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/22/2023

BORING NO.	E-1	E-1	E-1	E-1	E-1
SAMPLE NO.	SS-2	SS-6	SS-8	SS-11	SS-13
SAMPLE DEPTH (FT.)	2.0 - 4.0	13.5 - 15.0	23.5 - 25.0	38.5 - 40.0	48.5 - 50.0
WATER CONTENT, W%	18.0	21.5	23.2	29.0	46.2

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

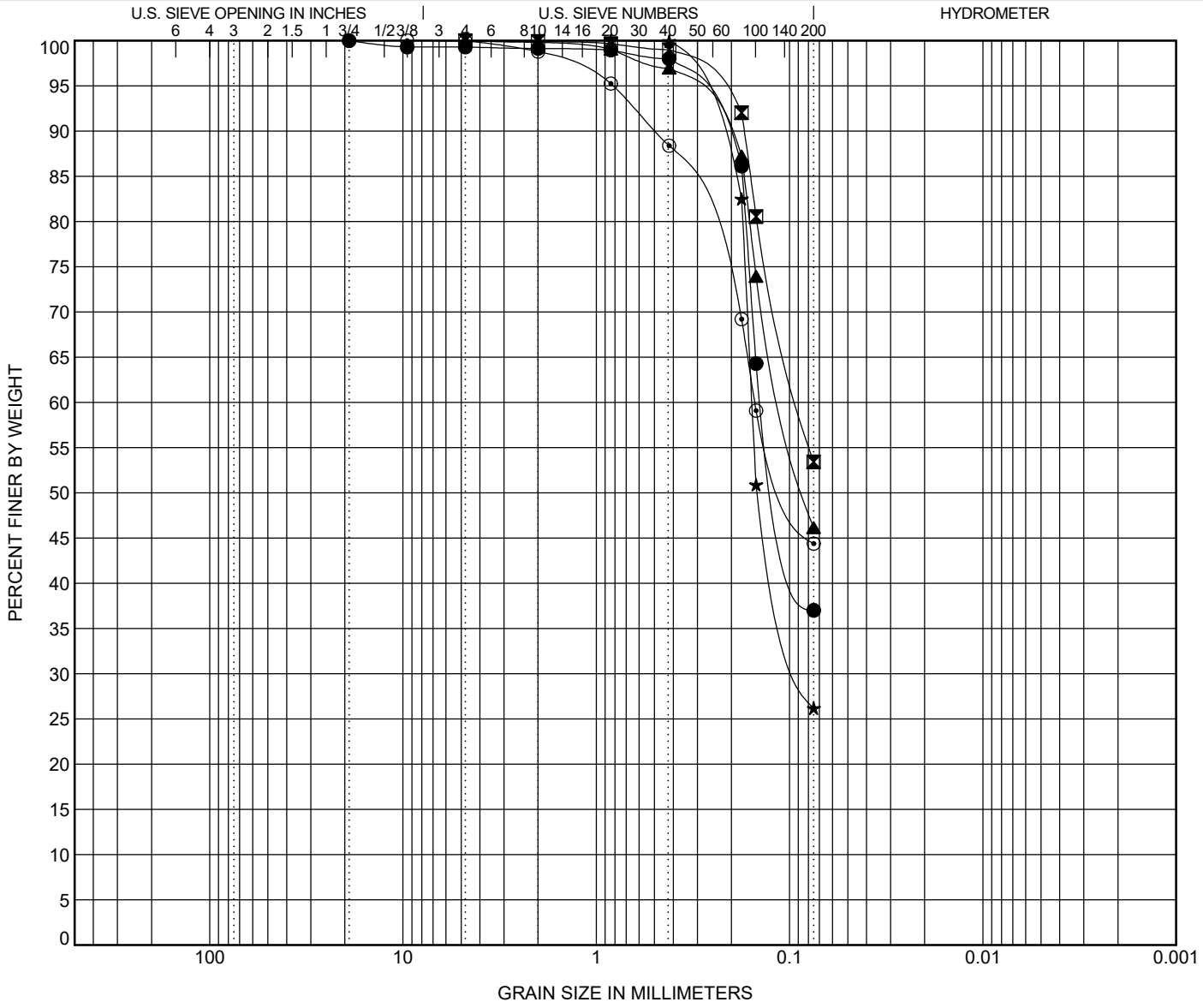
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	E-1	4.0	CLAYEY SAND (SC/A-4)	22	14	8		
⊠	E-1	15.0	SANDY LEAN CLAY (CL/A-7-6)	41	17	24		
▲	E-1	25.0	SILTY, CLAYEY SAND (SC-SM/A-4)	21	17	4		
★	E-1	40.0	SILTY SAND (SM/A-2-4)	24	21	3		
⊙	E-1	50.0	CLAYEY SAND (SC/A-6)	27	14	13		

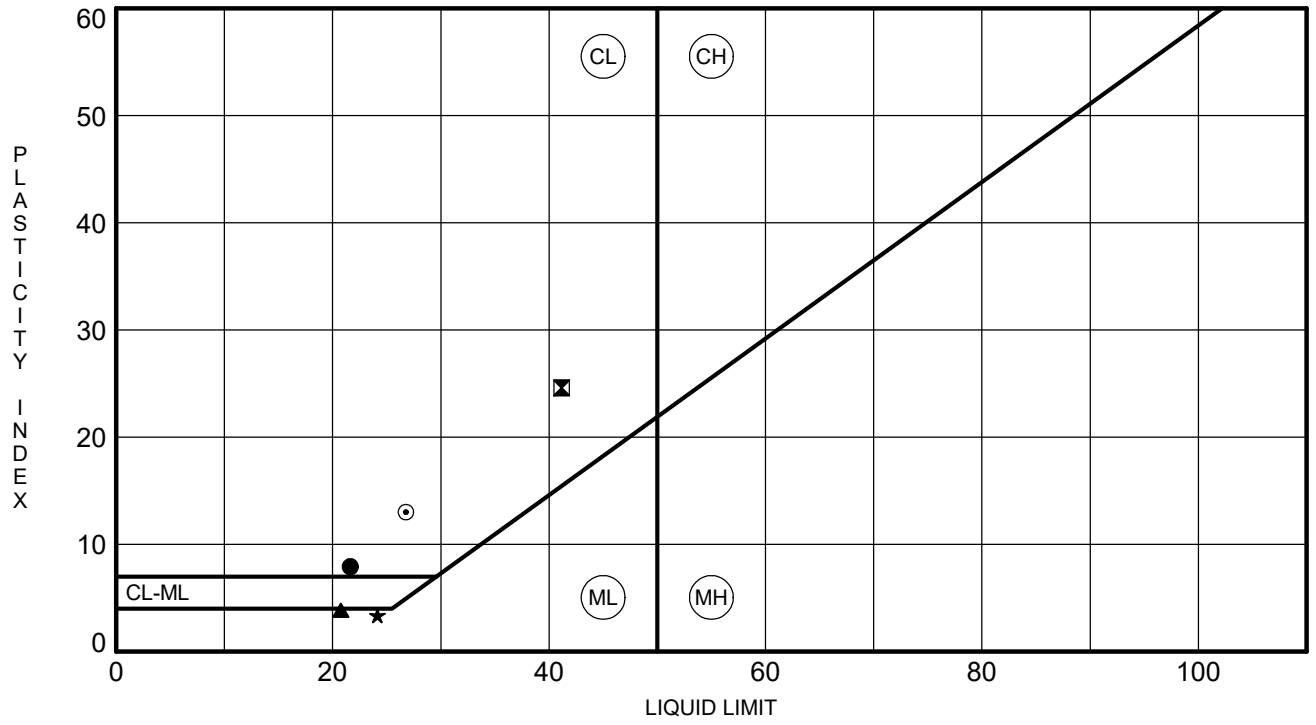
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	E-1	4.0	19	0.134			0.7	62.3	37.0	
⊠	E-1	15.0	4.76	0.089			0.0	46.6	53.4	
▲	E-1	25.0	4.76	0.106			0.0	53.8	46.2	
★	E-1	40.0	0.841	0.157	0.083		0.0	73.8	26.2	
⊙	E-1	50.0	9.51	0.151			0.1	55.5	44.4	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/26/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**E-1**	**4.0**	**22**	**14**	**8**	**37**	**CLAYEY SAND (SC/A-4)**
⊠	**E-1**	**15.0**	**41**	**17**	**24**	**53**	**SANDY LEAN CLAY (CL/A-7-6)**
▲	**E-1**	**25.0**	**21**	**17**	**4**	**46**	**SILTY, CLAYEY SAND (SC-SM/A-4)**
★	**E-1**	**40.0**	**24**	**21**	**3**	**26**	**SILTY SAND (SM/A-2-4)**
⊙	**E-1**	**50.0**	**27**	**14**	**13**	**44**	**CLAYEY SAND (SC/A-6)**

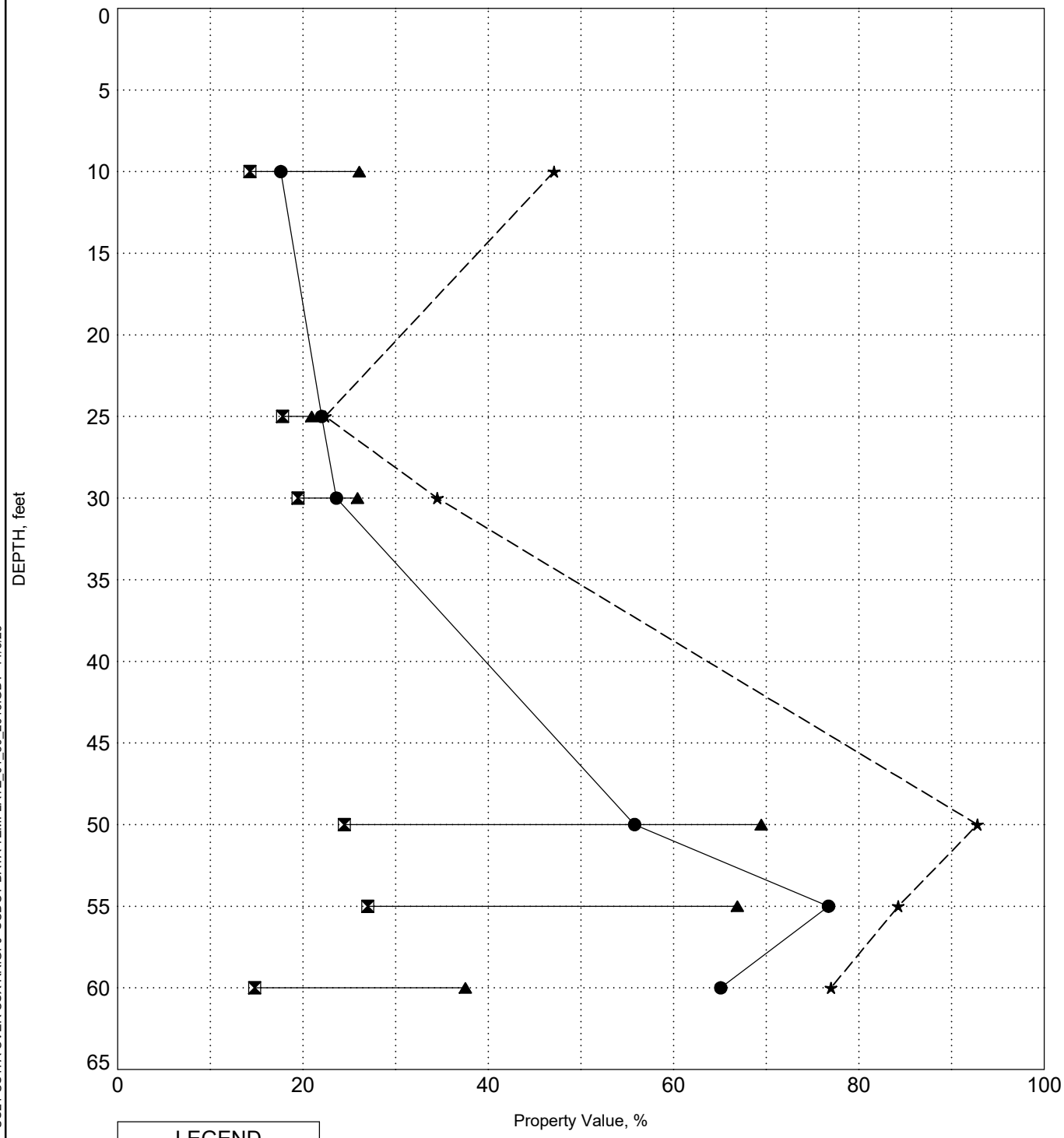
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING E-2

SURFACE ELEVATION: 42.5



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3534	**DATE SAMPLE RECEIVED:**	10/26/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	LG/TW	**DATE SETUP:**	10/26/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/27/2023

BORING NO.	E-2	E-2	E-2	E-2	E-2
SAMPLE NO.	SS-5	SS-8	SS-9	SS-13	SS-14
SAMPLE DEPTH (FT.)	8.0 - 10.0	23.5 - 25.0	28.5 - 30.0	48.5 - 50.0	53.5 - 55.0
WATER CONTENT, W%	17.6	22.0	23.6	55.8	76.7

BORING NO.	E-2				
SAMPLE NO.	SS-15				
SAMPLE DEPTH (FT.)	58.5 - 60.0				
WATER CONTENT, W%	65.1				

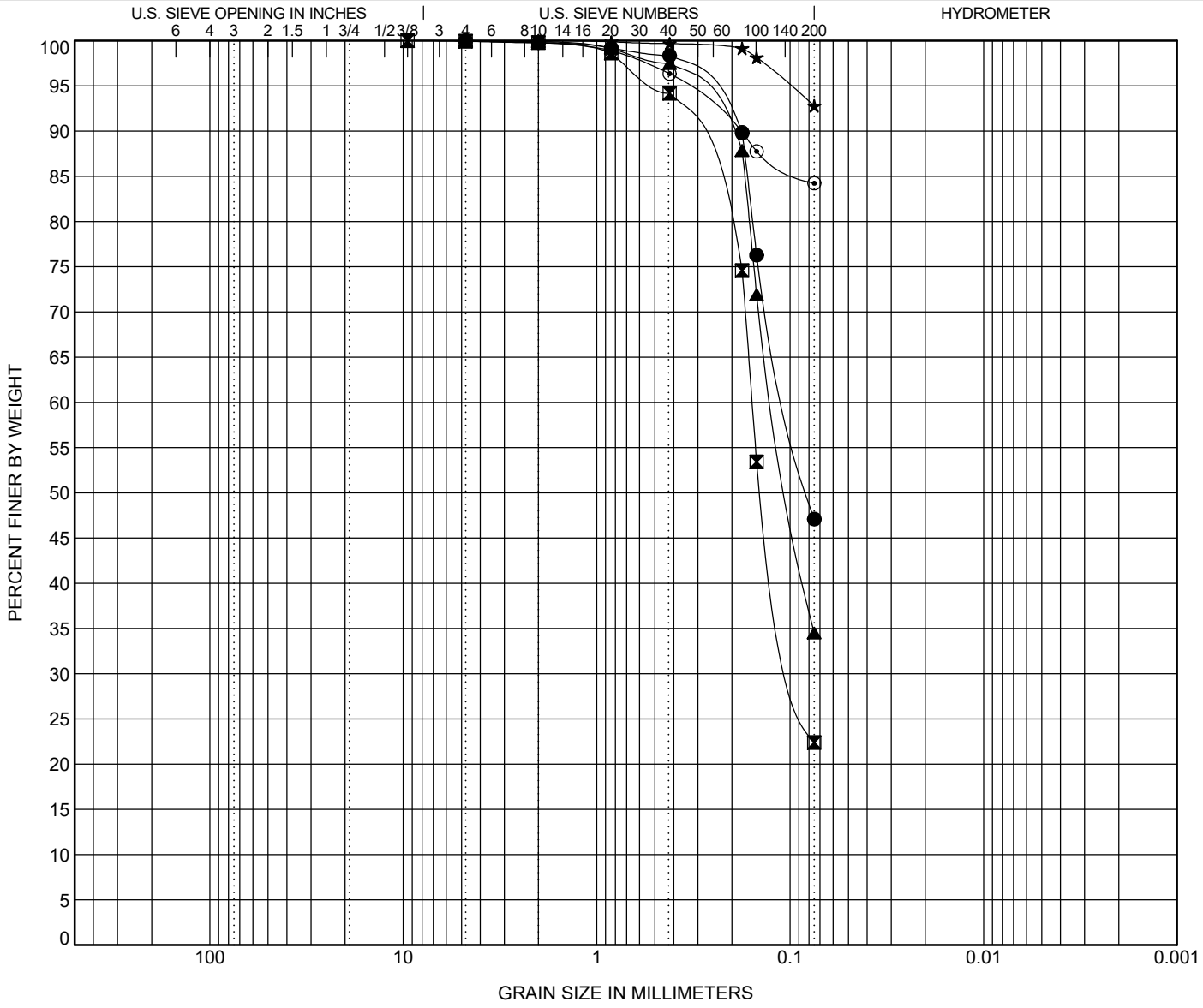
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● E-2	10.0	CLAYEY SAND (SC/A-6)	26	14	12		
⊠ E-2	25.0	SILTY SAND (SM/A-2-4)	21	18	3		
▲ E-2	30.0	SILTY, CLAYEY SAND (SC-SM/A-2-4)	26	19	7		
★ E-2	50.0	FAT CLAY (CH/A-7-6)	69	24	45		
⊙ E-2	55.0	FAT CLAY with SAND (CH/A-7-6)	67	27	40		

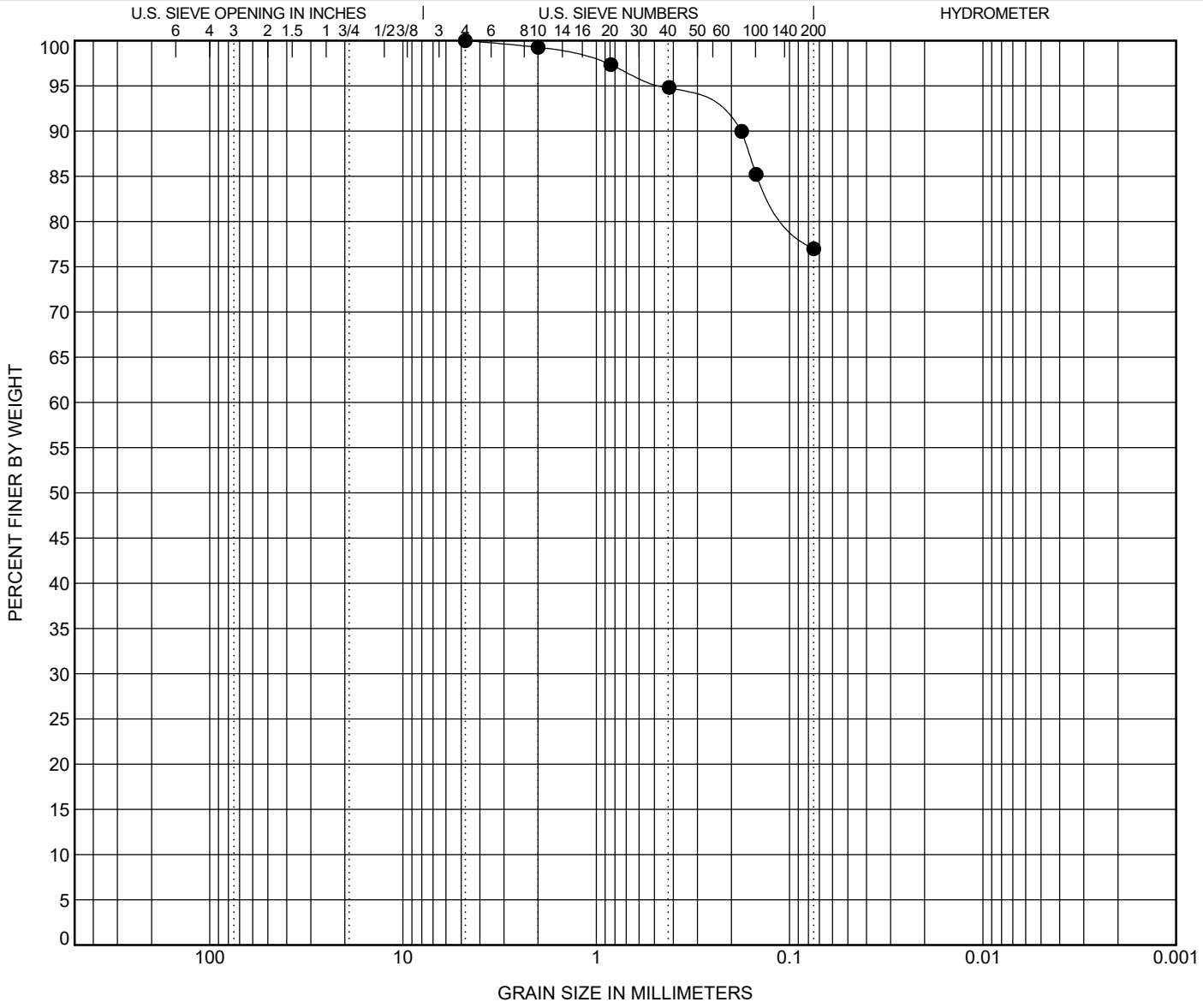
BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● E-2	10.0	4.76	0.102			0.0	52.9	47.1	
⊠ E-2	25.0	9.51	0.157	0.089		0.1	77.5	22.4	
▲ E-2	30.0	4.76	0.12			0.0	65.5	34.5	
★ E-2	50.0	2				0.0	7.2	92.8	
⊙ E-2	55.0	4.76				0.0	15.8	84.2	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/2/23

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

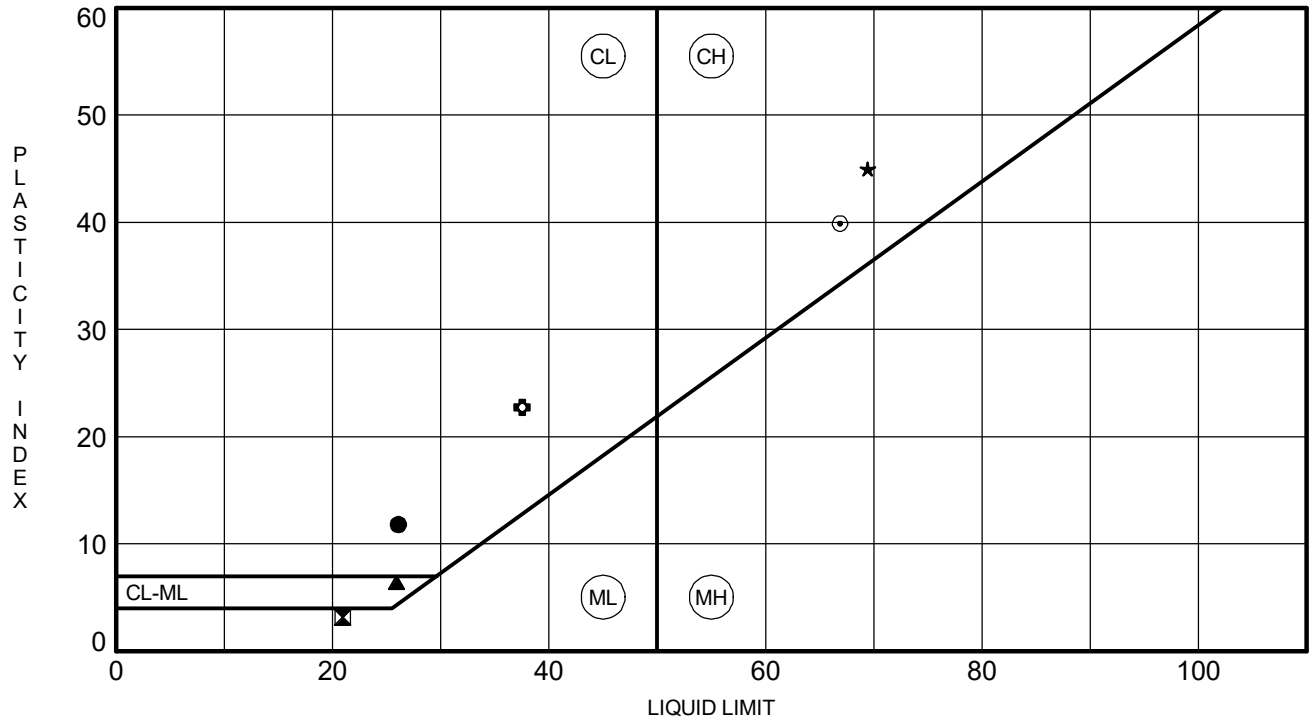
BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● **E-2**	**60.0**	**LEAN CLAY with SAND (CL/A-6)**	**38**	**15**	**23**		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **E-2**	**60.0**	**4.76**				**0.0**	**23.0**	**77.0**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**E-2**	**10.0**	**26**	**14**	**12**	**47**	**CLAYEY SAND (SC/A-6)**
⊠	**E-2**	**25.0**	**21**	**18**	**3**	**22**	**SILTY SAND (SM/A-2-4)**
▲	**E-2**	**30.0**	**26**	**19**	**7**	**34**	**SILTY, CLAYEY SAND (SC-SM/A-2-4)**
★	**E-2**	**50.0**	**69**	**24**	**45**	**93**	**FAT CLAY (CH/A-7-6)**
⊙	**E-2**	**55.0**	**67**	**27**	**40**	**84**	**FAT CLAY with SAND (CH/A-7-6)**
✿	**E-2**	**60.0**	**38**	**15**	**23**	**77**	**LEAN CLAY with SAND (CL/A-6)**

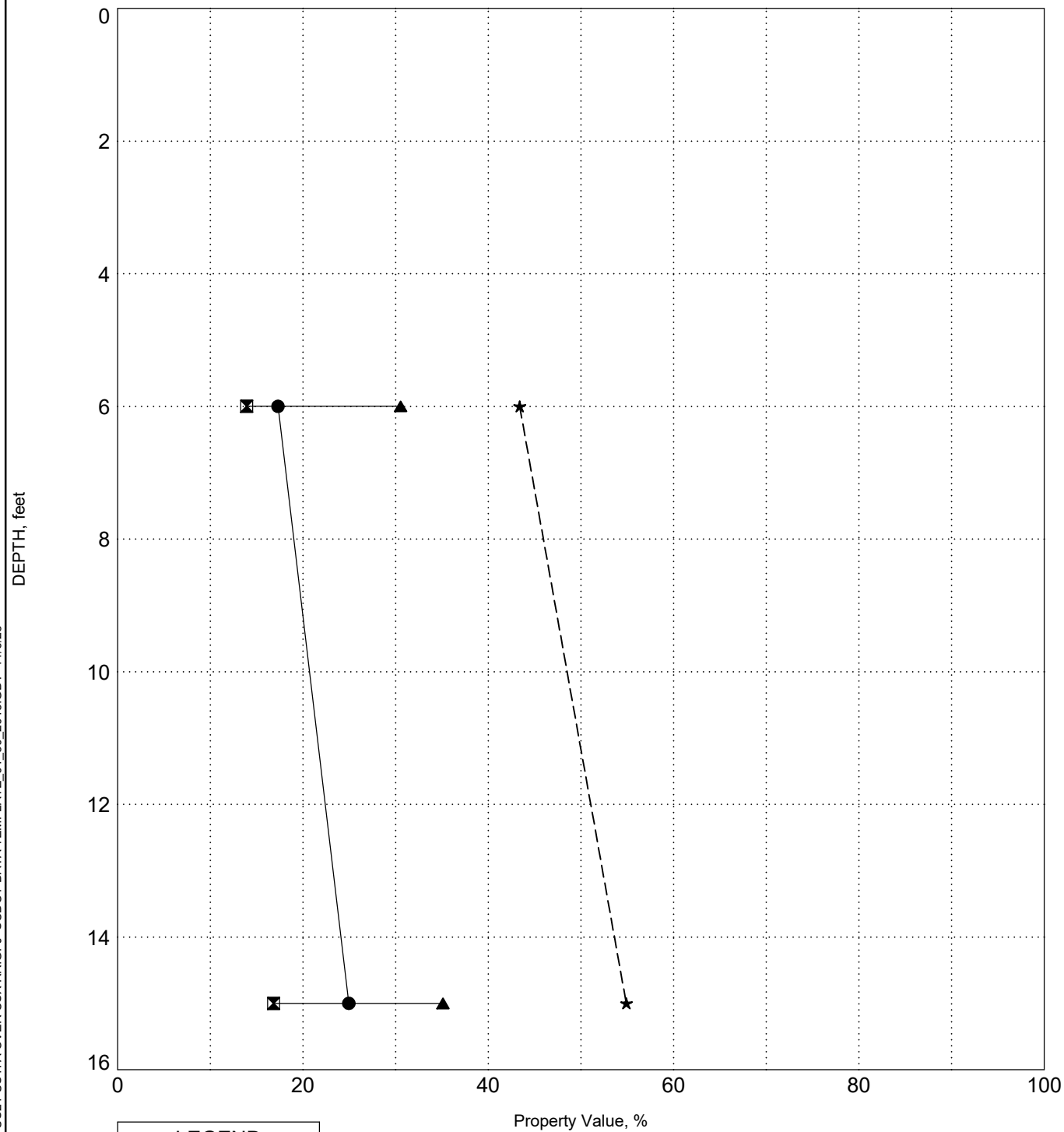
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING RW-1

SURFACE ELEVATION: 28.4



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT: US 21/US 17A over CSX RR   **SCDOT PROJECT No.:** P042942

SAMPLE NUMBER: 23-3479   **DATE SAMPLE RECEIVED:** 10/20/2023

DESCRIPTION OF SOIL: VARIOUS

TESTED BY: TW   **DATE SETUP:** 10/20/2023

WEIGHED BY: TW   **DATE OF WEIGHING:** 10/22/2023

BORING NO.	RW-1	RW-1			
SAMPLE NO.	SS-3	SS-6			
SAMPLE DEPTH (FT.)	4.0 - 6.0	13.5 - 15.0			
WATER CONTENT, W%	17.3	24.9			

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

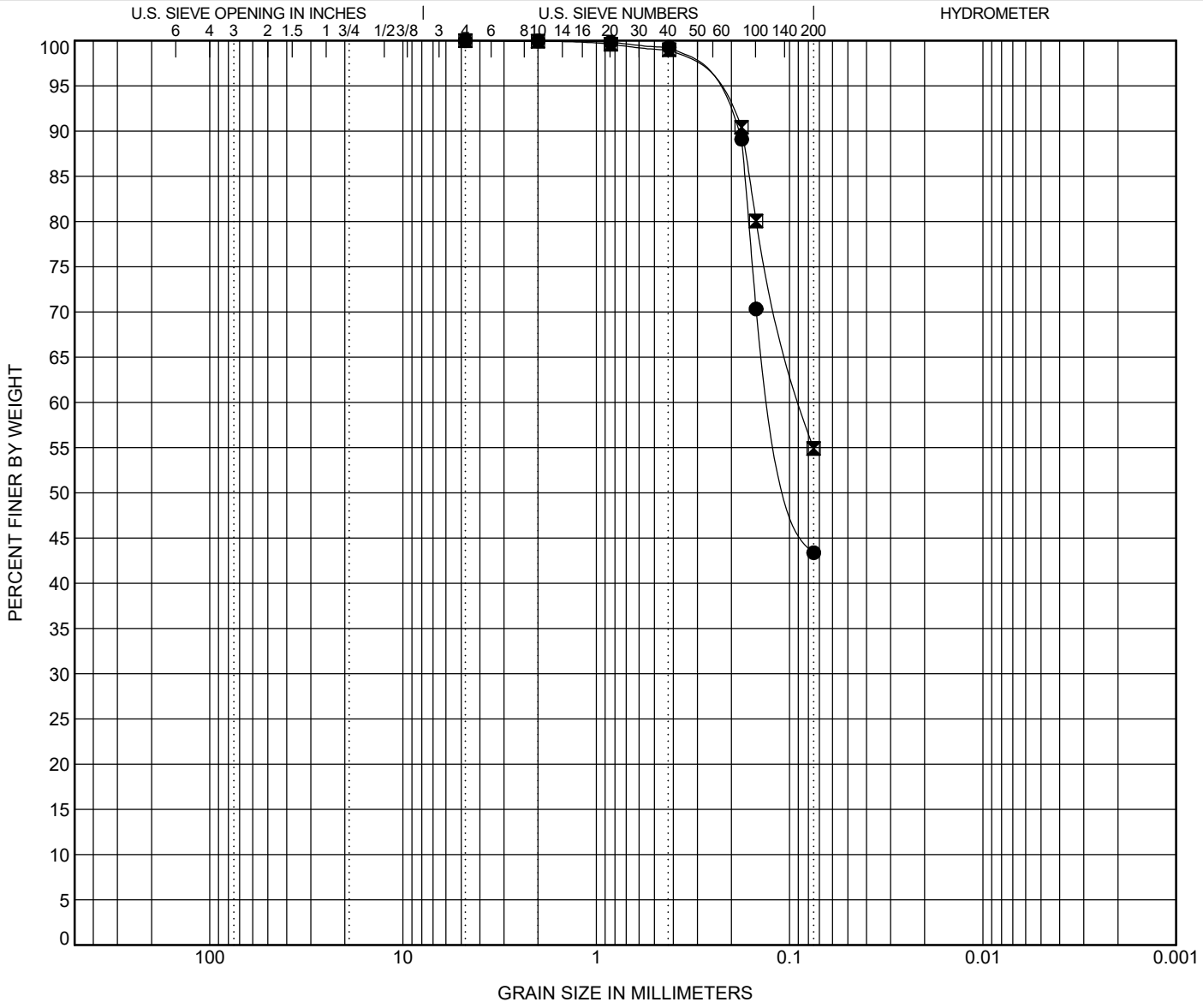
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**RW-1**	**6.0**	**CLAYEY SAND (SC/A-6)**	**31**	**14**	**17**		
⊠	**RW-1**	**15.0**	**SANDY LEAN CLAY (CL/A-6)**	**35**	**17**	**18**		

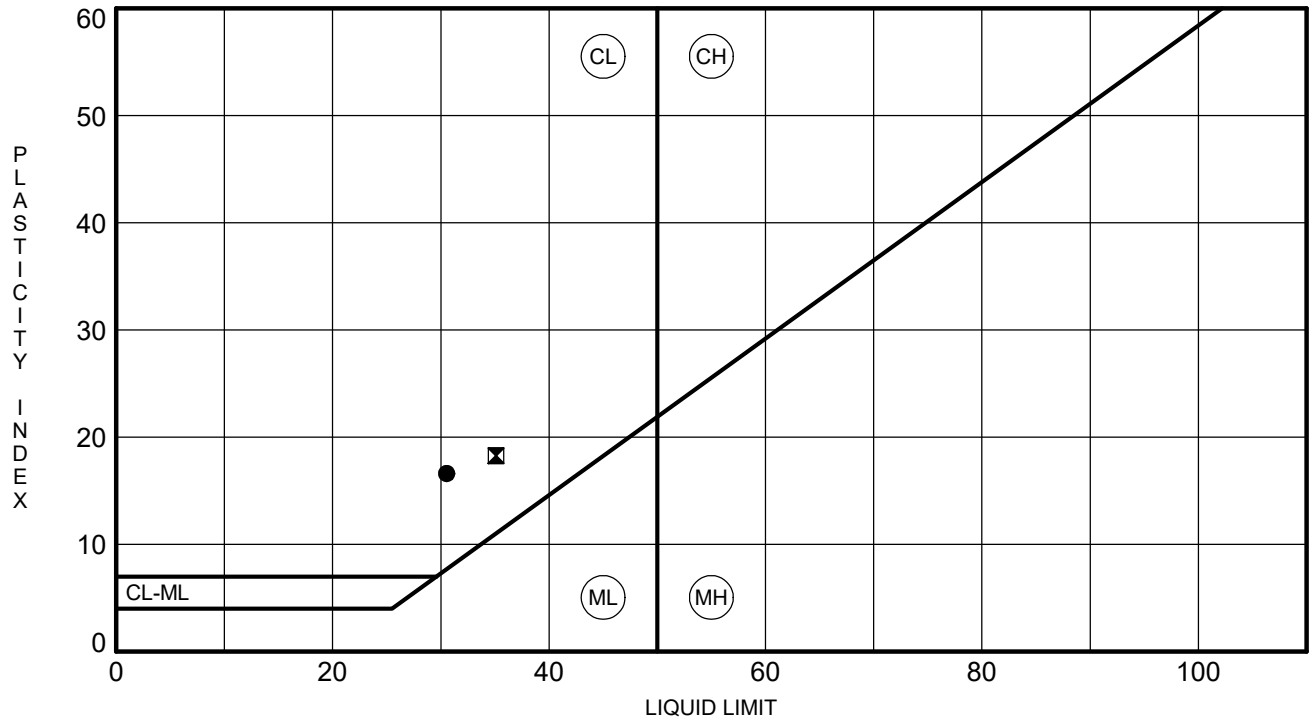
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**RW-1**	**6.0**	**4.76**	**0.115**			**0.0**	**56.6**	**43.4**	
⊠	**RW-1**	**15.0**	**4.76**	**0.086**			**0.0**	**45.1**	**54.9**	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/26/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**RW-1**	**6.0**	**31**	**14**	**17**	**43**	**CLAYEY SAND (SC/A-6)**
⊠	**RW-1**	**15.0**	**35**	**17**	**18**	**55**	**SANDY LEAN CLAY (CL/A-6)**

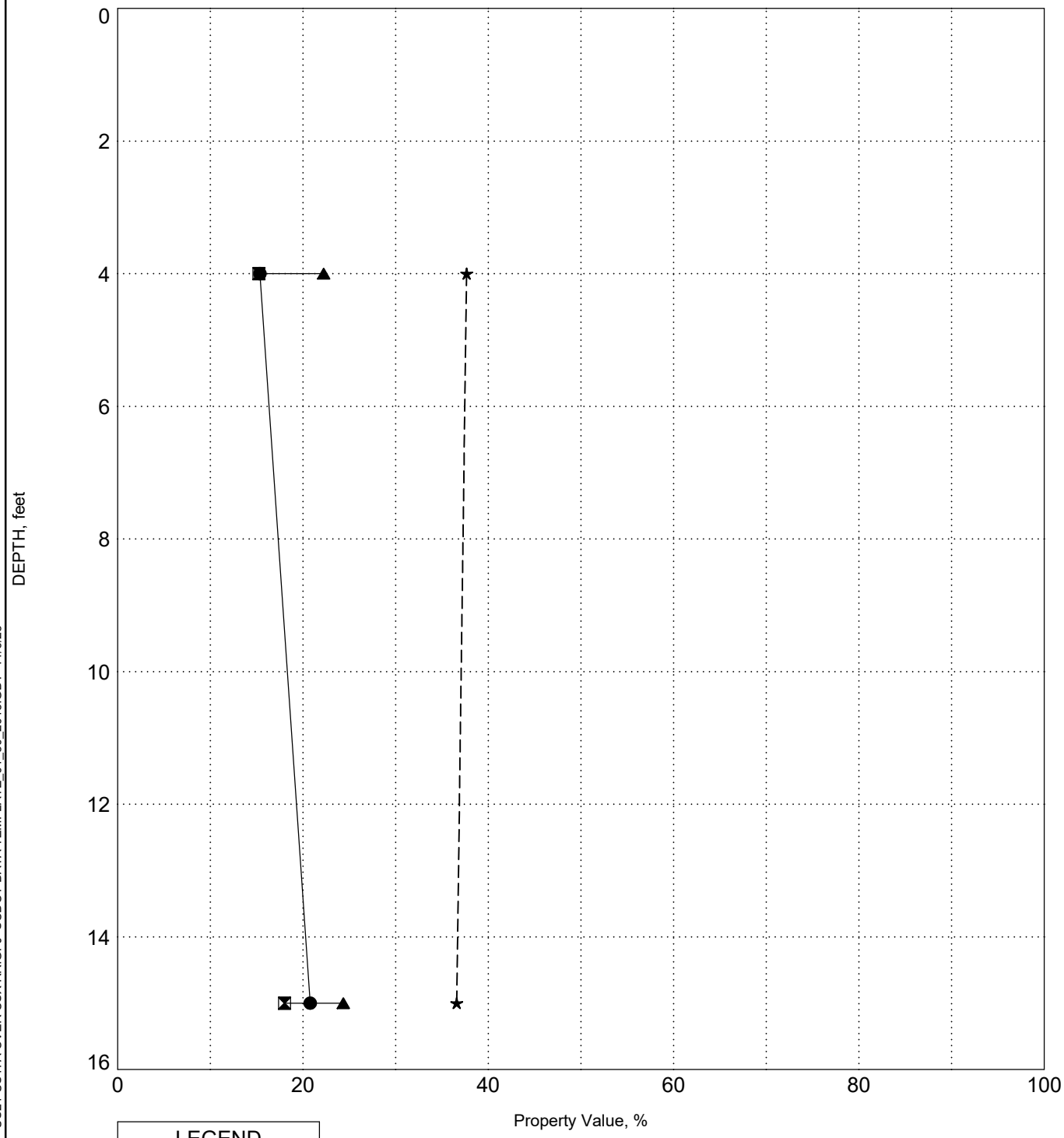
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING RW-2

SURFACE ELEVATION: 29.4



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT: US 21/US 17A over CSX RR | **SCDOT PROJECT No.:** P042942

SAMPLE NUMBER: 23-3535 | **DATE SAMPLE RECEIVED:** 10/26/2023

DESCRIPTION OF SOIL: VARIOUS

TESTED BY: LG/TW | **DATE SETUP:** 10/26/2023

WEIGHED BY: TW | **DATE OF WEIGHING:** 10/27/2023

BORING NO.	RW-2	RW-2			
SAMPLE NO.	SS-2	SS-6			
SAMPLE DEPTH (FT.)	2.0 - 4.0	13.5 - 15.0			
WATER CONTENT, W%	15.3	20.8			

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

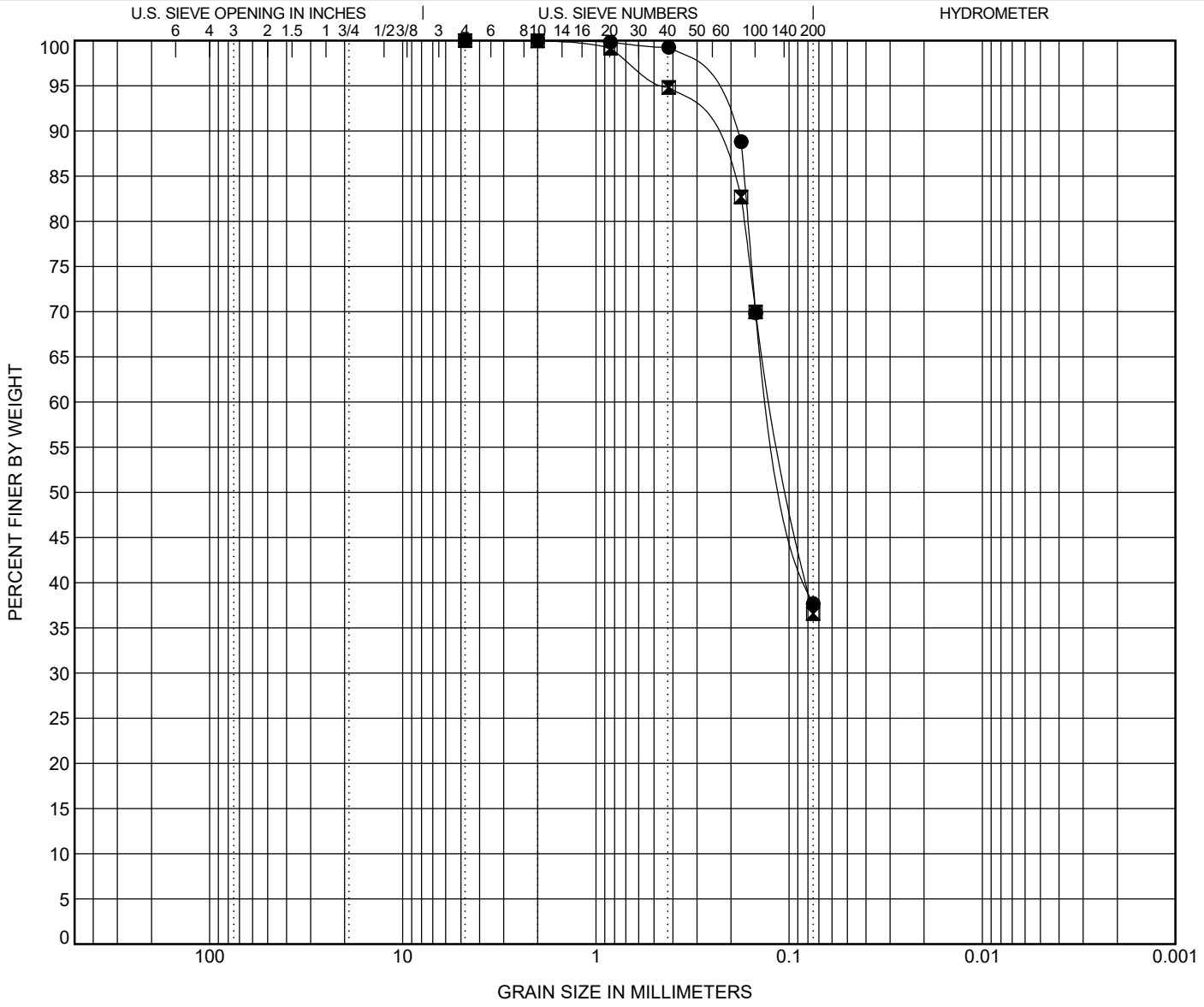
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

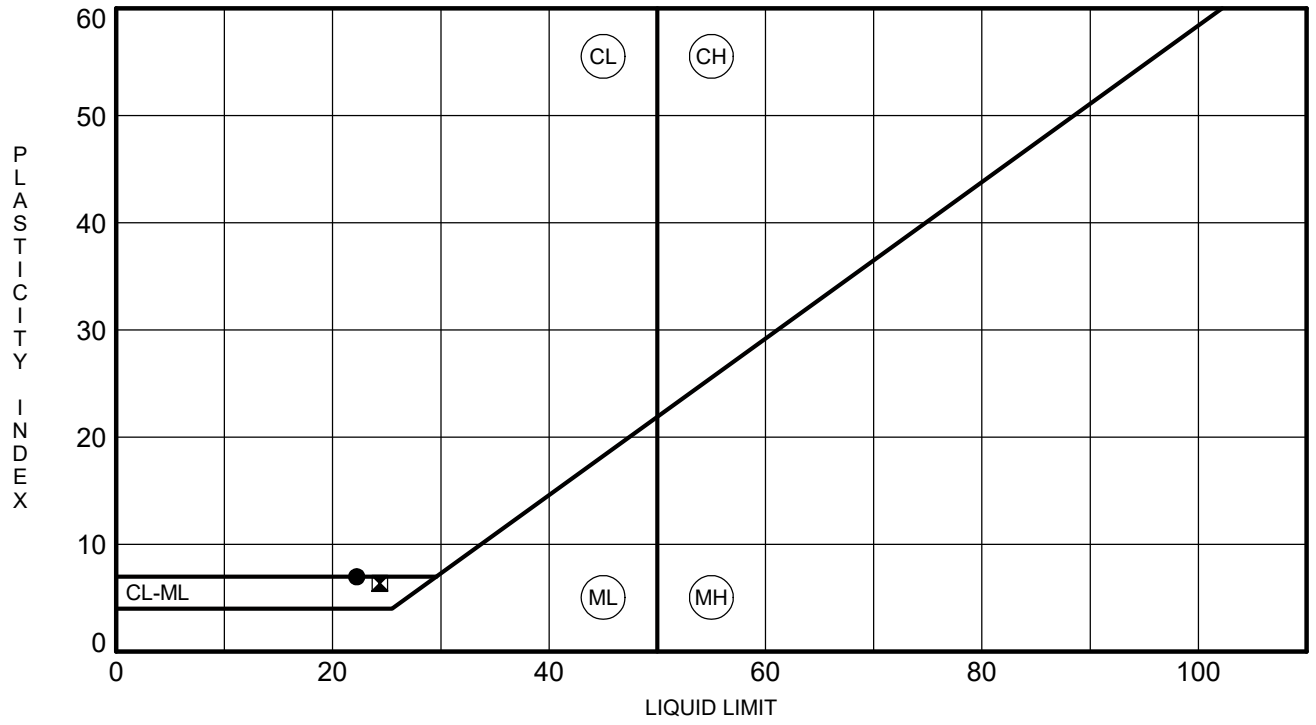
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**RW-2**	**4.0**	**SILTY, CLAYEY SAND (SC-SM/A-4)**	**22**	**15**	**7**		
⊠	**RW-2**	**15.0**	**SILTY, CLAYEY SAND (SC-SM/A-4)**	**24**	**18**	**6**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**RW-2**	**4.0**	**4.76**	**0.121**			**0.0**	**62.3**	**37.7**	
⊠	**RW-2**	**15.0**	**4.76**	**0.121**			**0.0**	**63.4**	**36.6**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**RW-2**	**4.0**	**22**	**15**	**7**	**38**	**SILTY, CLAYEY SAND (SC-SM/A-4)**
⊠	**RW-2**	**15.0**	**24**	**18**	**6**	**37**	**SILTY, CLAYEY SAND (SC-SM/A-4)**

ATTERBERG LIMITS G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/2/23

APPENDIX

SECTION 5 LABORATORY TEST RESULTS

SECTION 5B UD SAMPLES

SUMMARY OF LABORATORY RESULTS

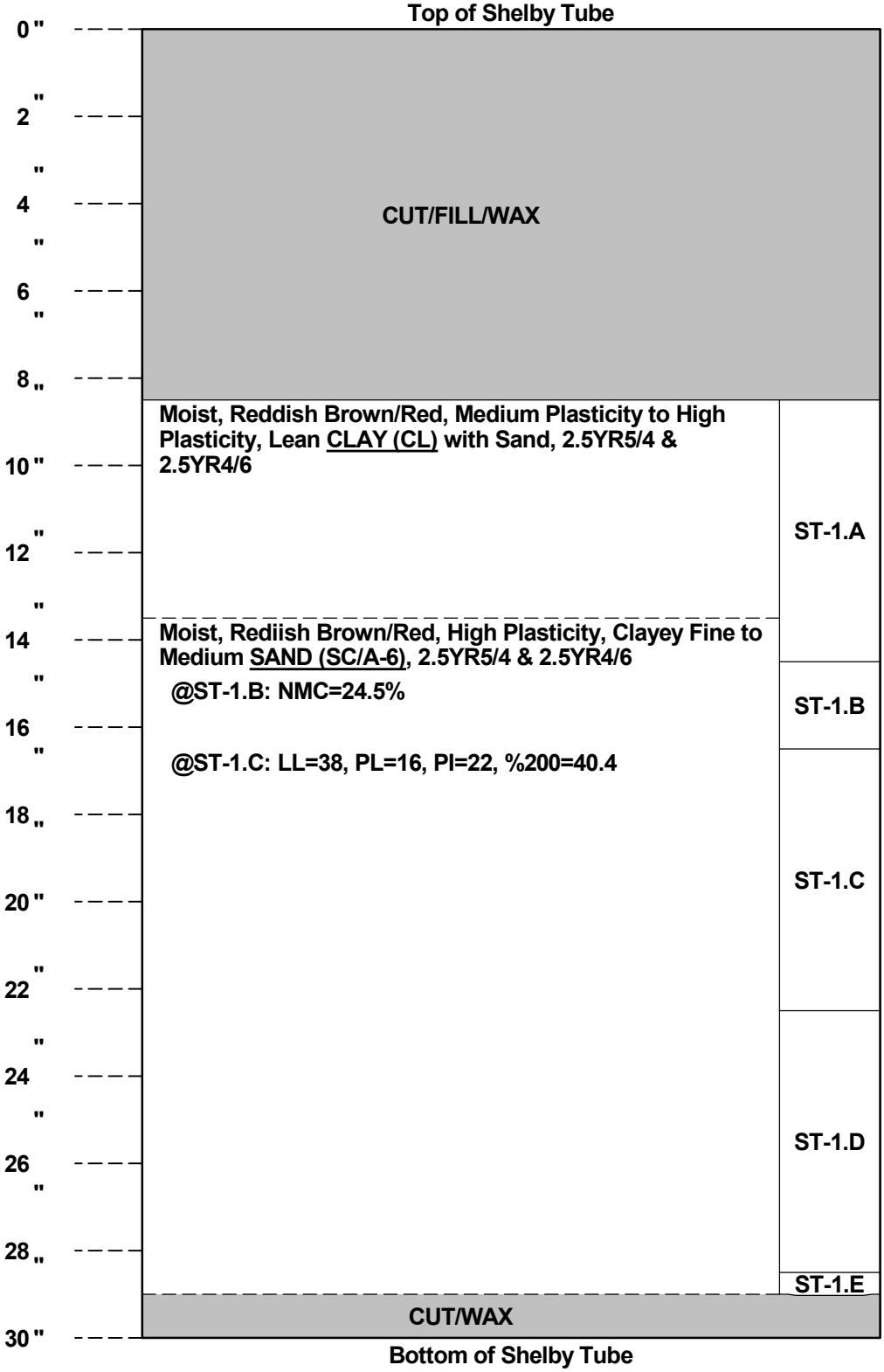
PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

Boring No.	Sample Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index	%<#200 Sieve	Soil Classification	Moisture Content (%)	C (psi)	ϕ (Degrees)	C' (psi)	ϕ' (Degrees)
B-1U	30.5 – 30.7	N/A	N/A	N/A	N/A	N/A	24.5	1.0	19.7	2.0	29.0
B-1U	31.4 – 31.7	38	16	22	40.4	SC	24.5	1.0	19.7	2.0	29.0
RW-1U	13.0 – 13.2	N/A	N/A	N/A	N/A	N/A	28.8	0.0	25.0	1.2	31.5
RW-1U	14.6 – 14.8	43	21	22	61.3	CL	23.6	0.0	25.0	1.2	31.5
RW-1U	15.5 – 16.0	30	15	15	38.7	SC	19.6	0.0	25.0	1.2	31.5
RW-1U	16.0 – 16.5	18	17	1	32.9	SM	N/A	0.0	25.0	1.2	31.5

SCDOT Shelby Tube Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

SC_DOT_SHELBY_TUBE_LOG_PICTURES G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/6/23

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.A

Specimen No. ST-1.A

Undisturbed Sample Pictures

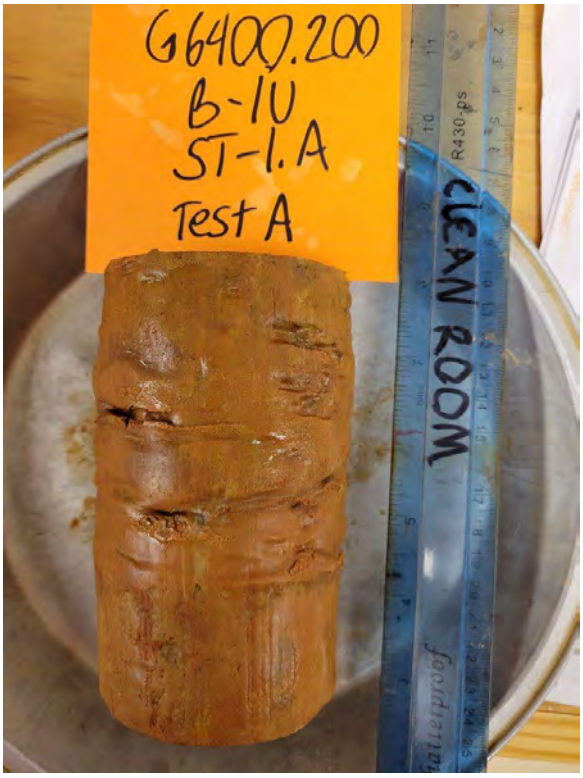
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.A

Specimen No. ST-1.A

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-1.A

Specimen No. ST-1.A

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.B

Specimen No. ST-1.B

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

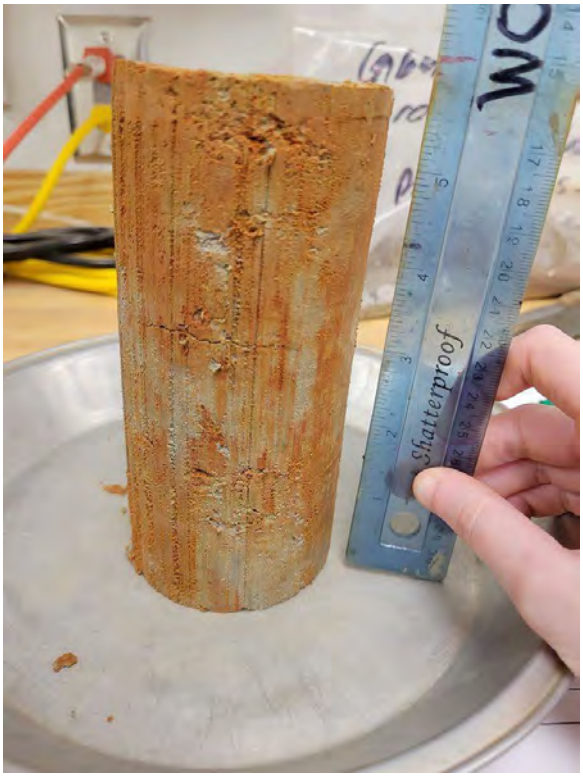
Specimen No. ST-1.B

Specimen No. ST-1.B

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.C



Specimen No. ST-1.C

Undisturbed Sample Pictures

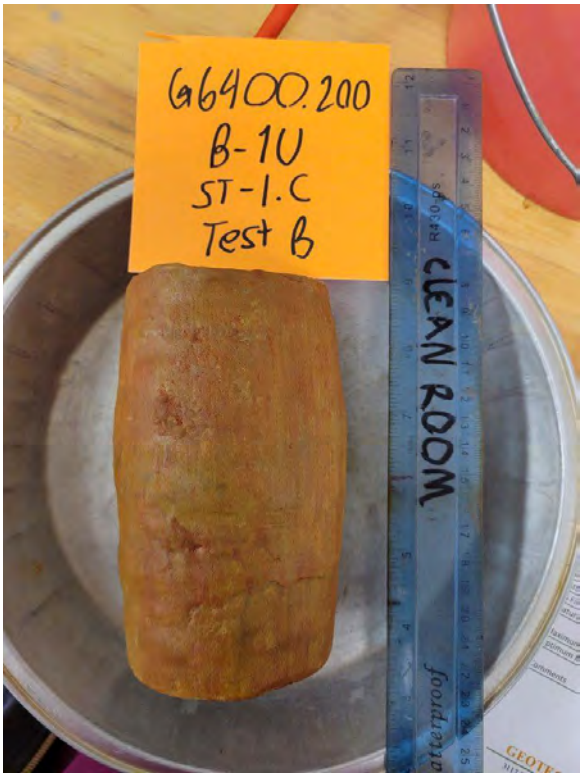
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.C

Specimen No. ST-1.C

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



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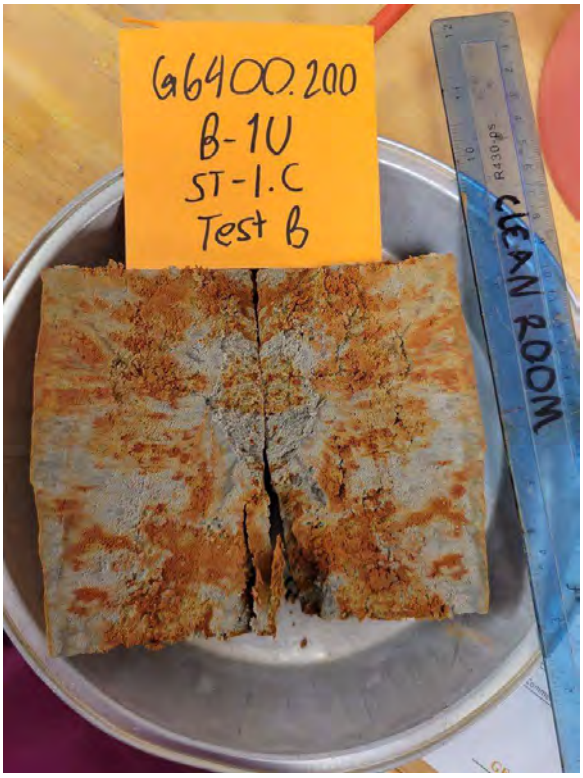


Specimen No. ST-1.C

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.D

Specimen No. ST-1.D

SCDOT Undisturbed Sample Pictures

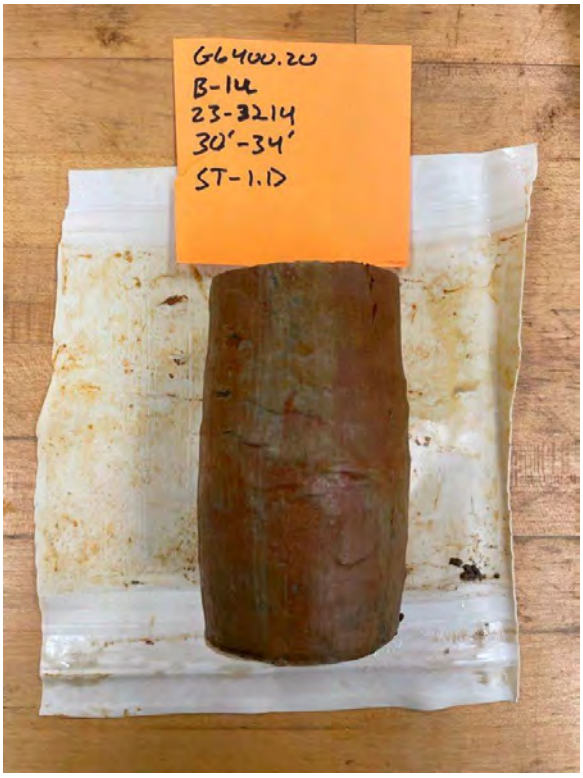
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.D

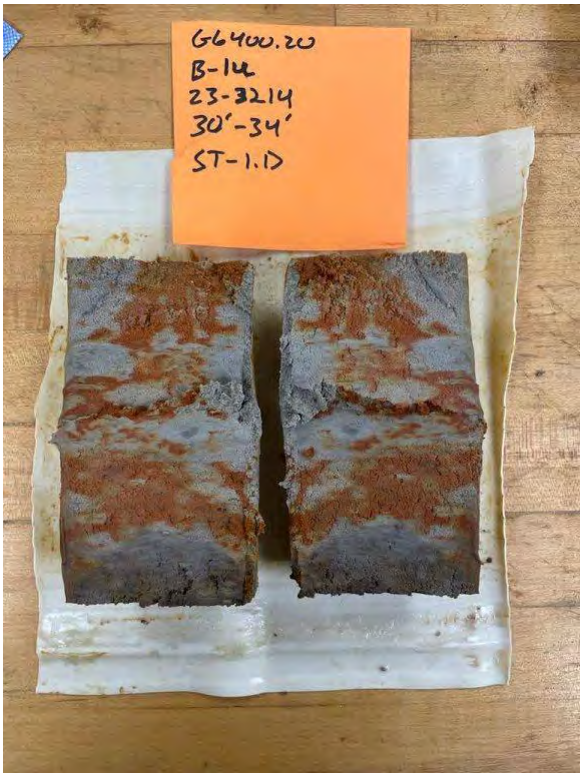
Specimen No. ST-1.D

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-1.D



Specimen No. ST-1.D

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	B-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	30' - 32'		
Date Sampled:	10/13/2023	**Date Extracted:**	10/17/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.E

Specimen No. ST-1.E

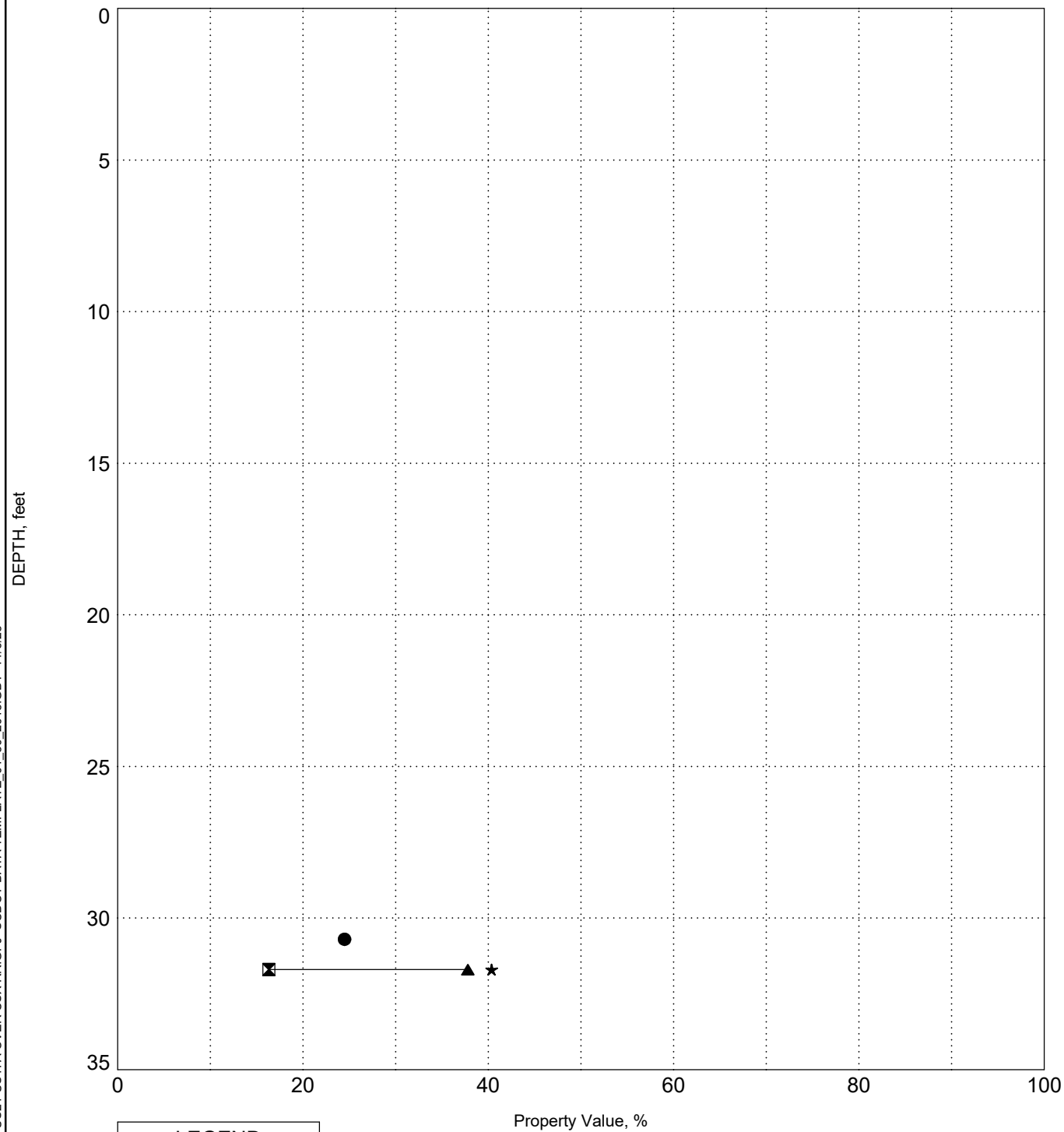
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING B-1U

SURFACE ELEVATION: 43.9



LEGEND
● Water Content
⊠ Plastic Limit
▲ Liquid Limit
★ Fines

F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT: US 21/US 17A over CSX RR **SCDOT PROJECT No.:** P042942

SAMPLE NUMBER: 23-3214 **DATE SAMPLE RECEIVED:** 10/16/2023

DESCRIPTION OF SOIL: CLAYEY SAND (SC/A-6)

TESTED BY: TW/KB **DATE SETUP:** 10/16/2023

WEIGHED BY: TW **DATE OF WEIGHING:** 10/17/2023

BORING NO.	B-1U				
SAMPLE NO.	ST-1.B				
SAMPLE DEPTH (FT.)	30.5 - 30.7				
WATER CONTENT, W%	24.5				

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

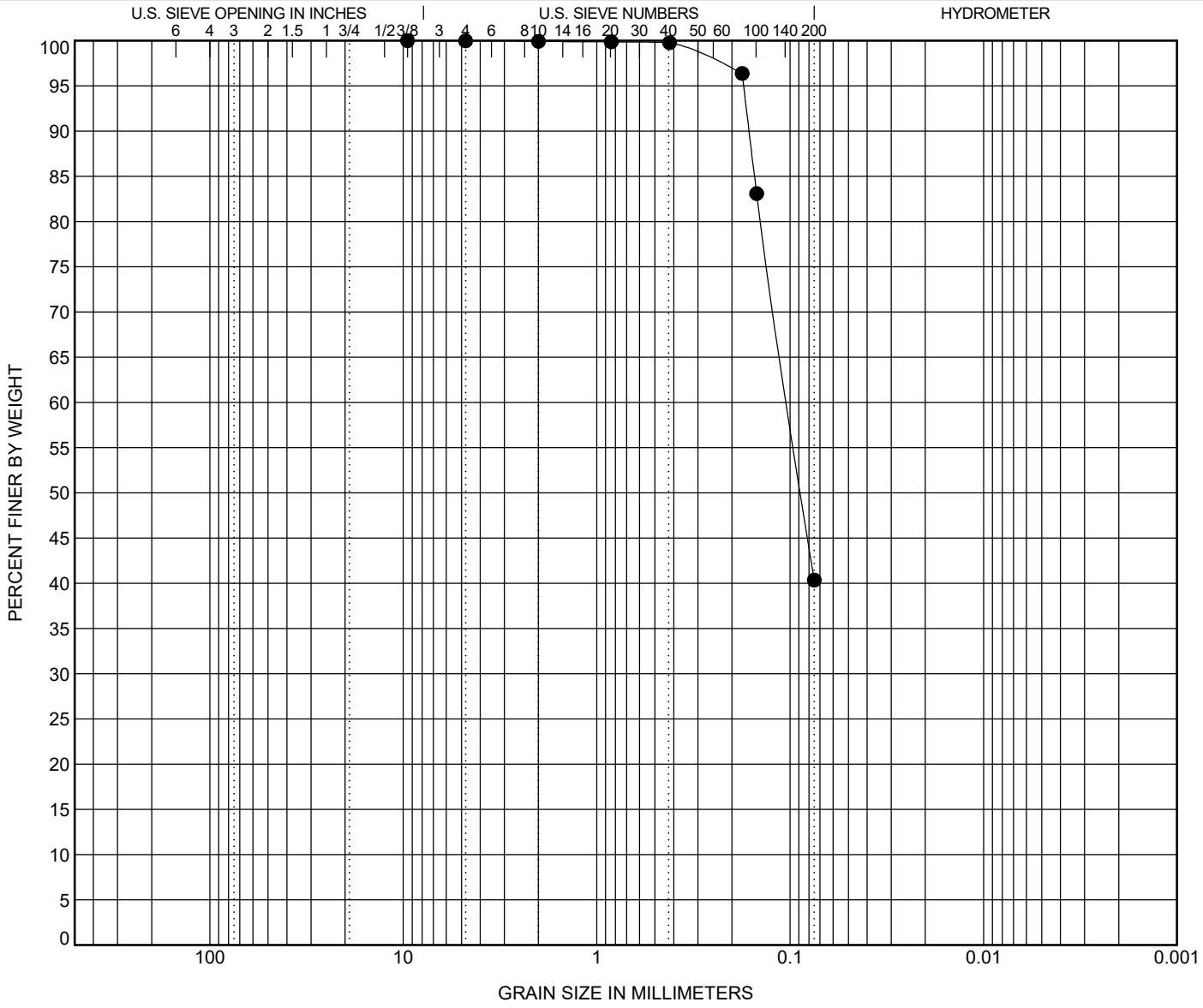
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

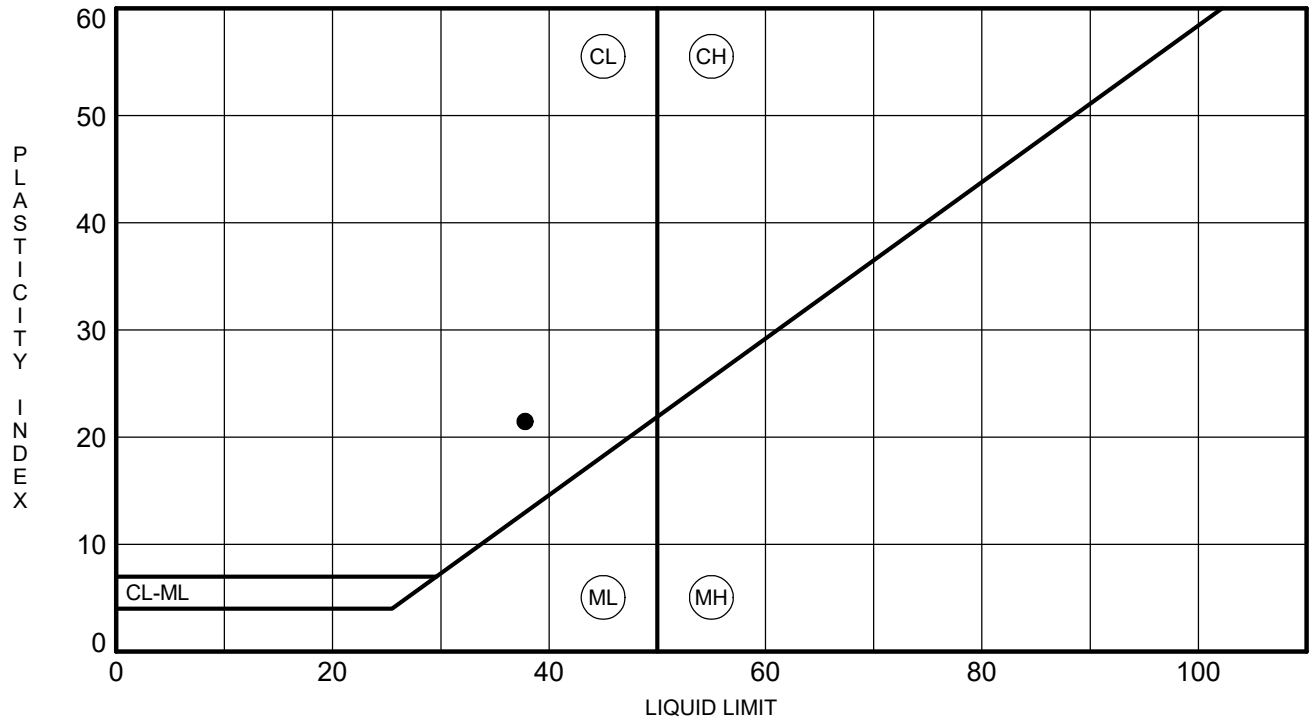
BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● **B-1U**	**31.7**	**CLAYEY SAND (SC/A-6)**	**38**	**16**	**22**		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **B-1U**	**31.7**	**9.51**	**0.103**			**0.0**	**59.6**	**40.4**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

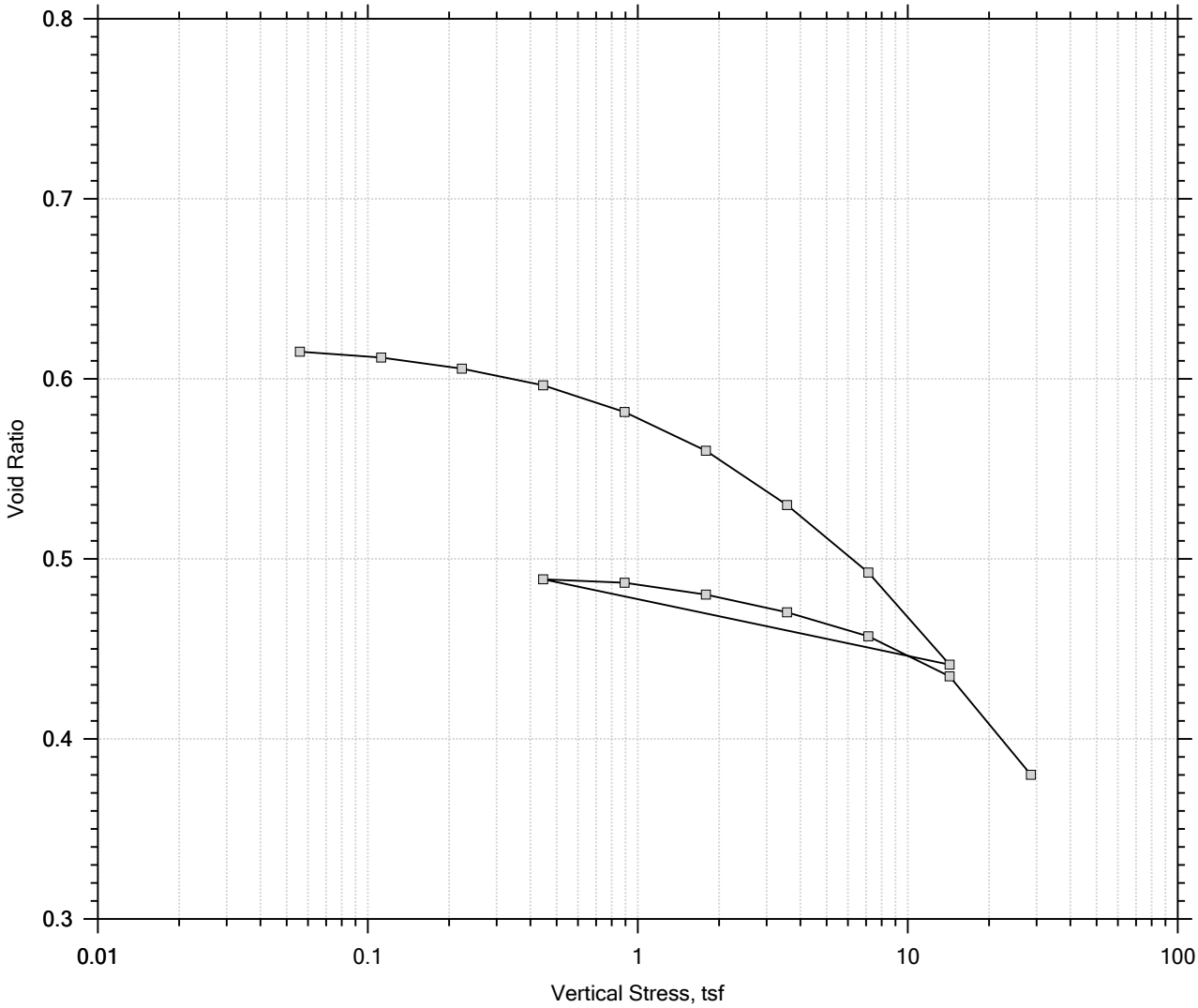
PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**B-1U**	**31.7**	**38**	**16**	**22**	**40**	**CLAYEY SAND (SC/A-6)**

One-Dimensional Consolidation by ASTM D2435 - Method B

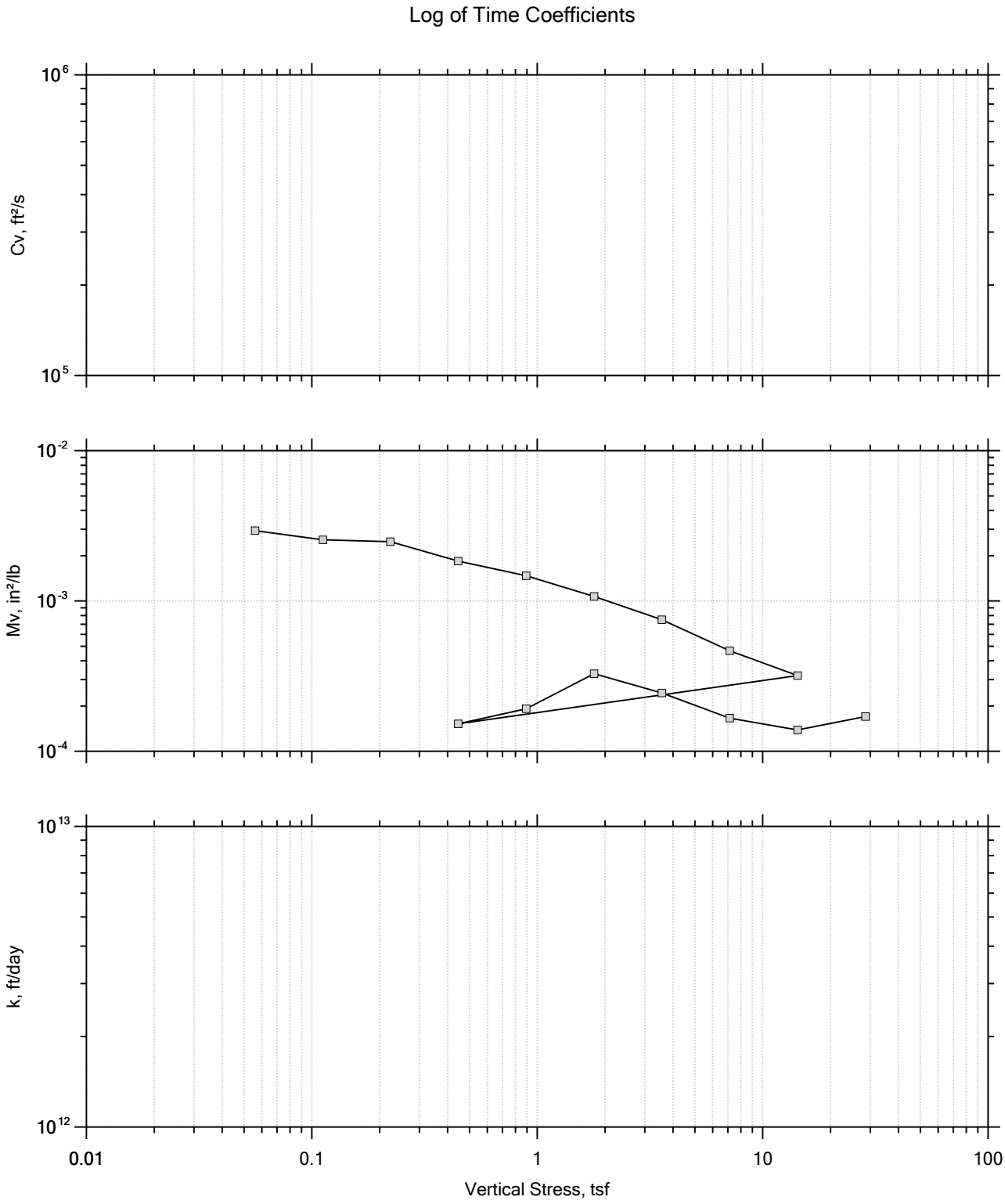
Summary Report



					Before Test	After Test
Current Vertical Effective Stress: 0 tsf				Water Content, %	21.67	18.26
Preconsolidation Stress: 0 tsf				Dry Unit Weight, pcf	102.2	112.8
Compression Ratio: 0				Saturation, %	92.81	103.71
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.62	0.47
LL: 0	PL: 0	PI: 0	GS: 2.65			

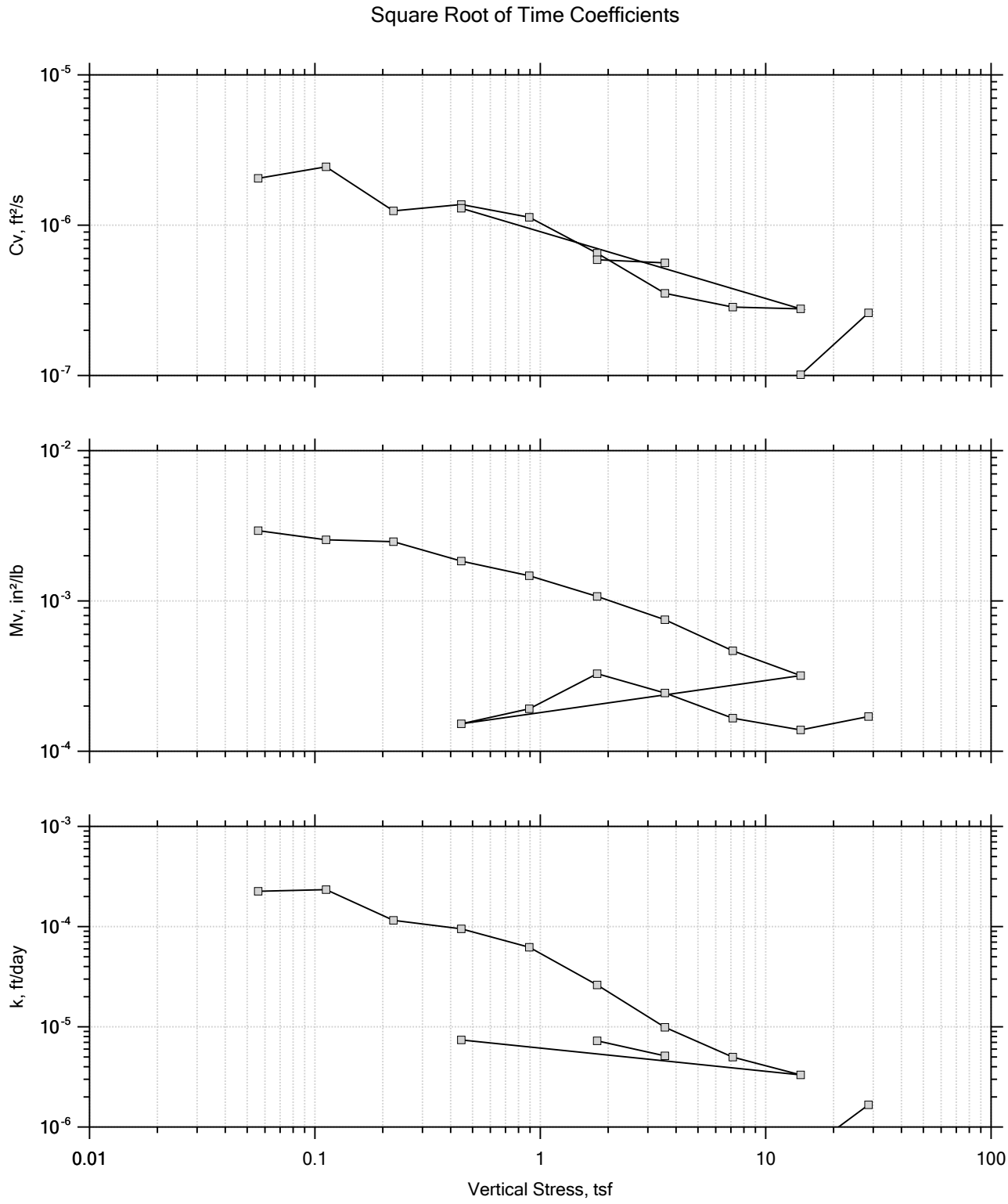
F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
	Remarks:		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B



Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

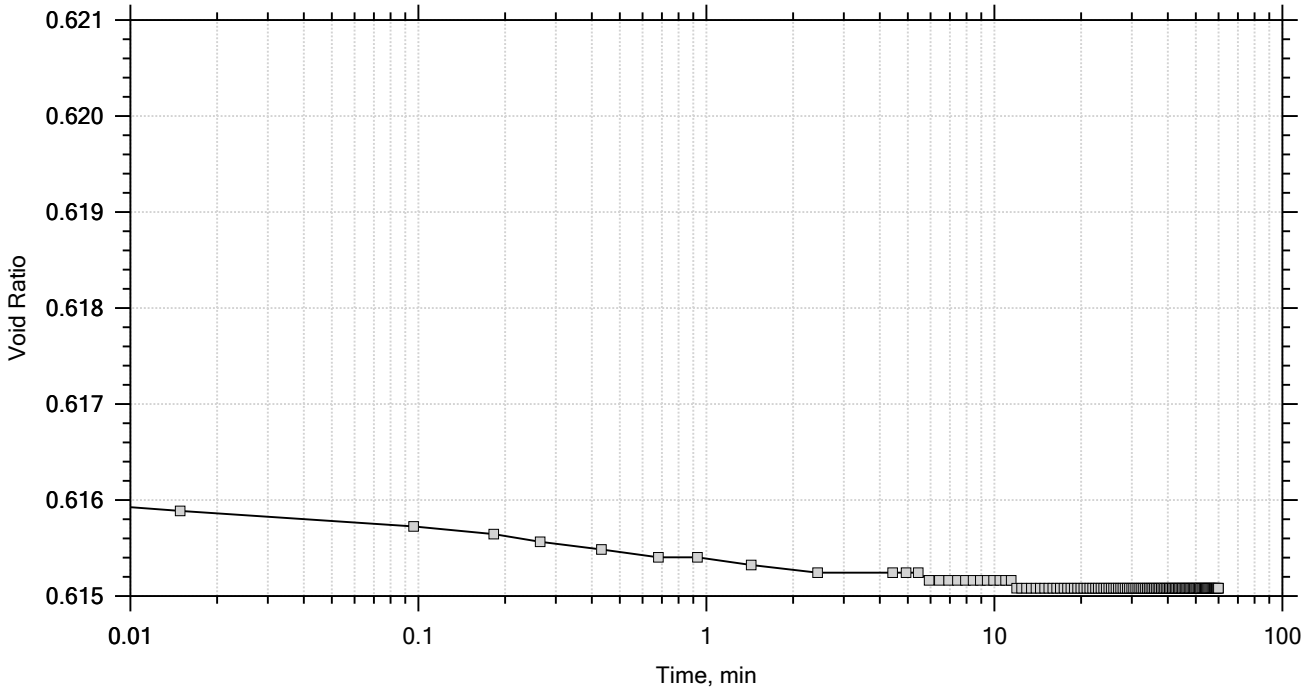
One-Dimensional Consolidation by ASTM D2435 - Method B

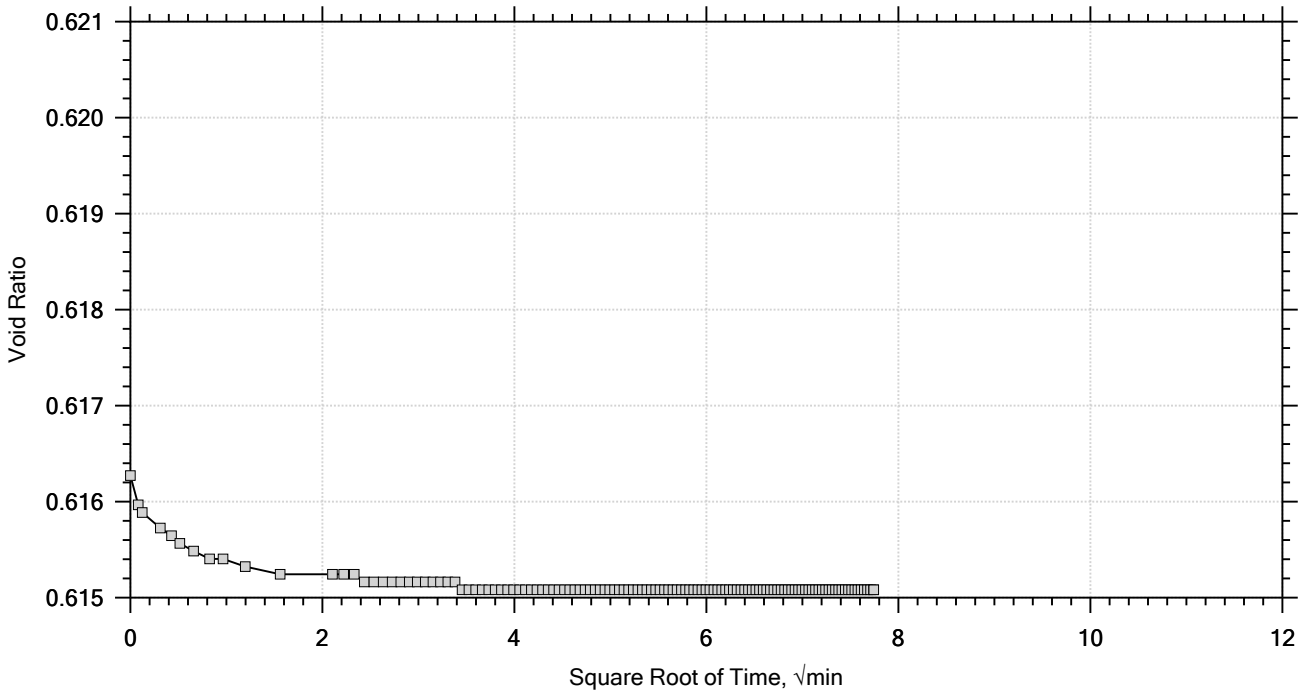


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

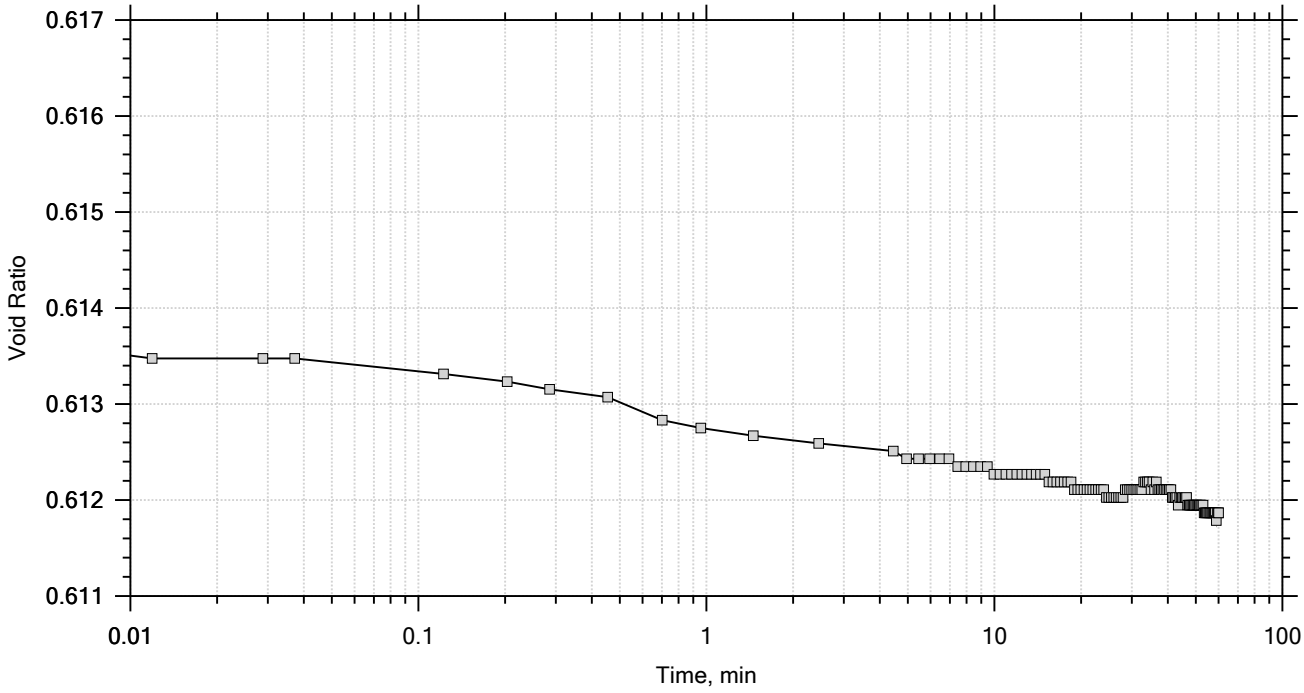


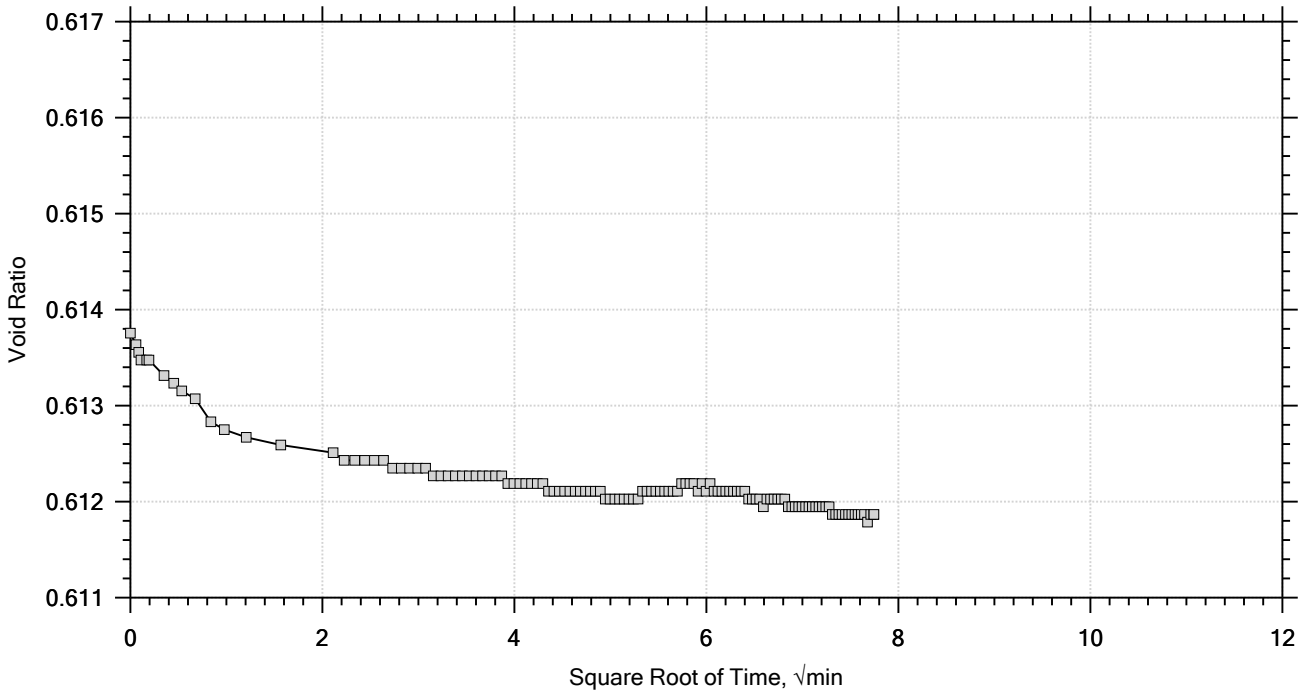


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

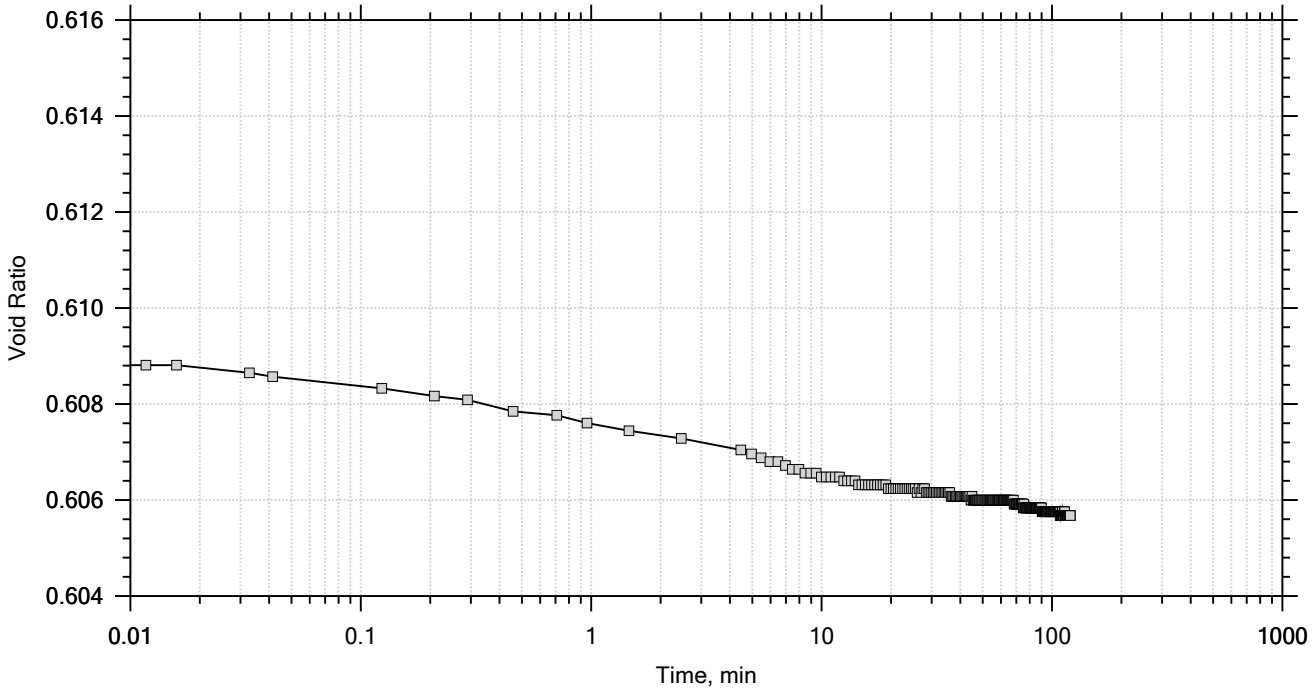


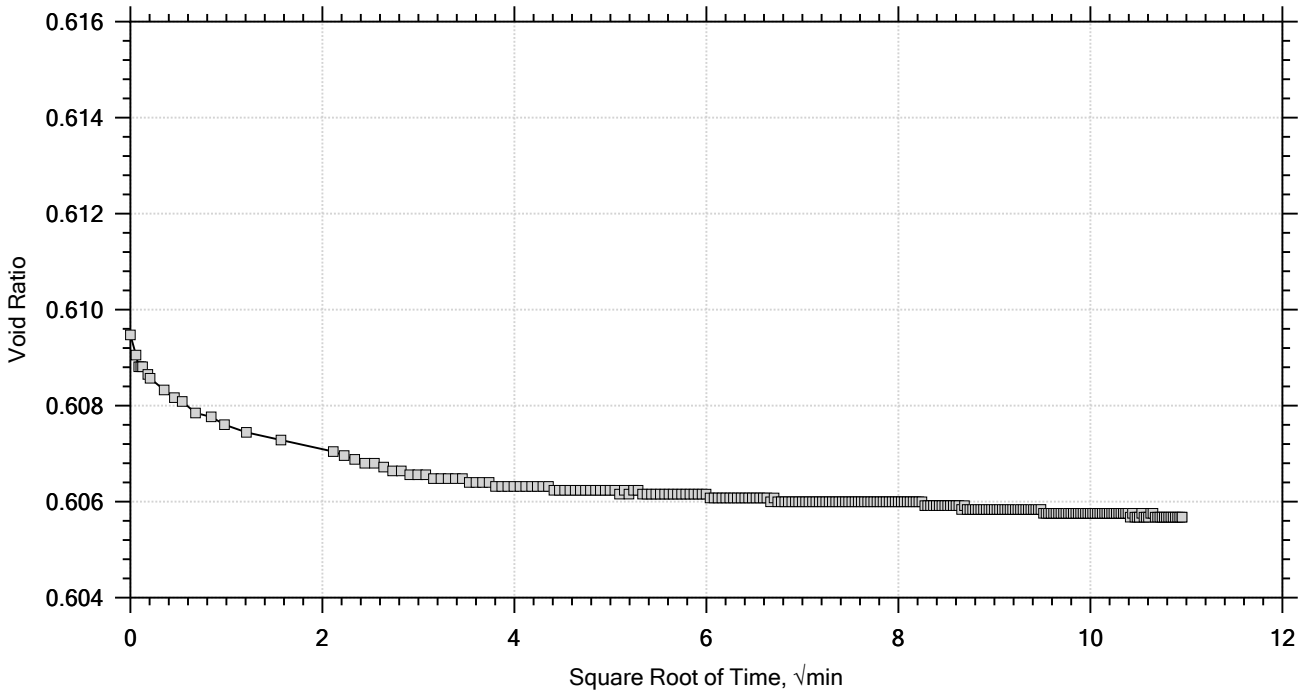


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

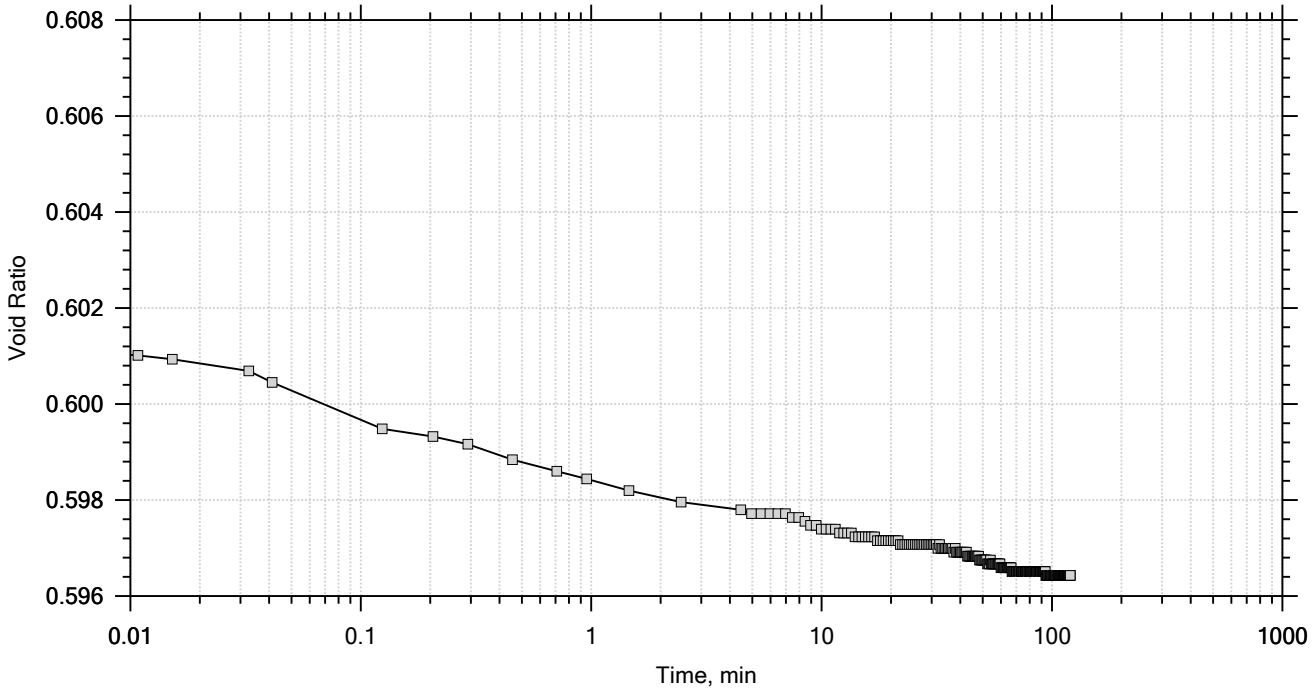


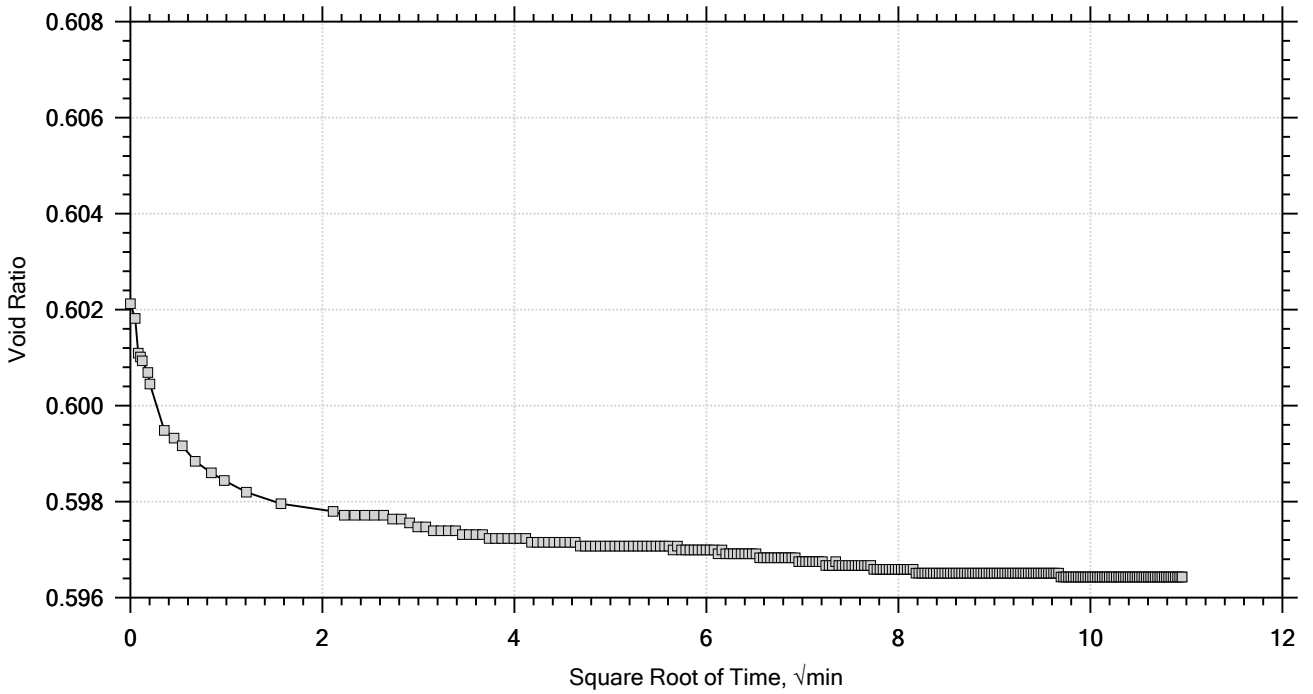


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

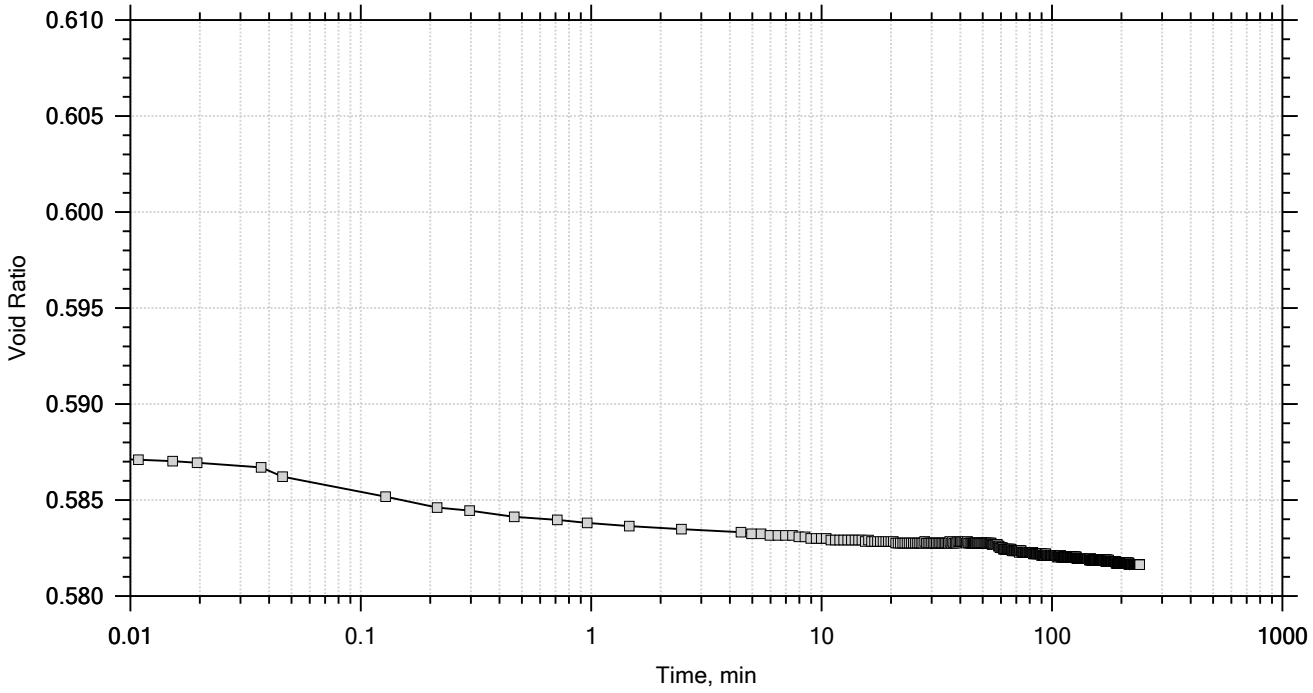


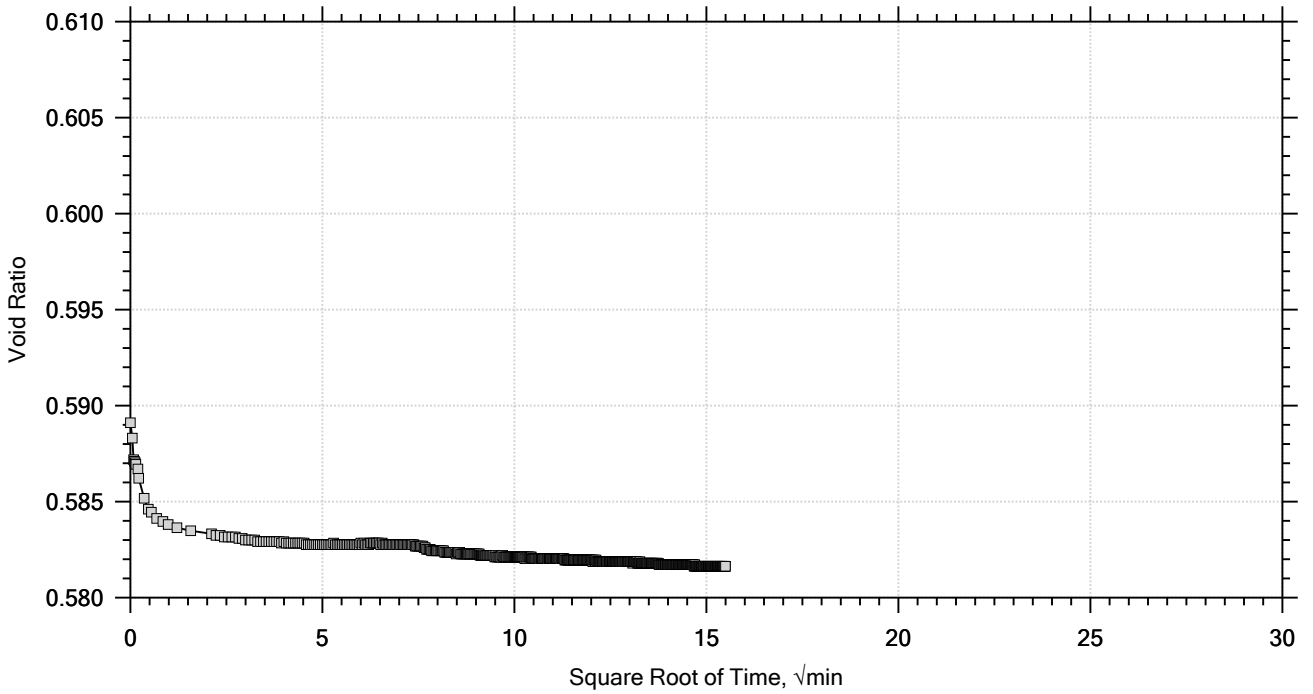


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

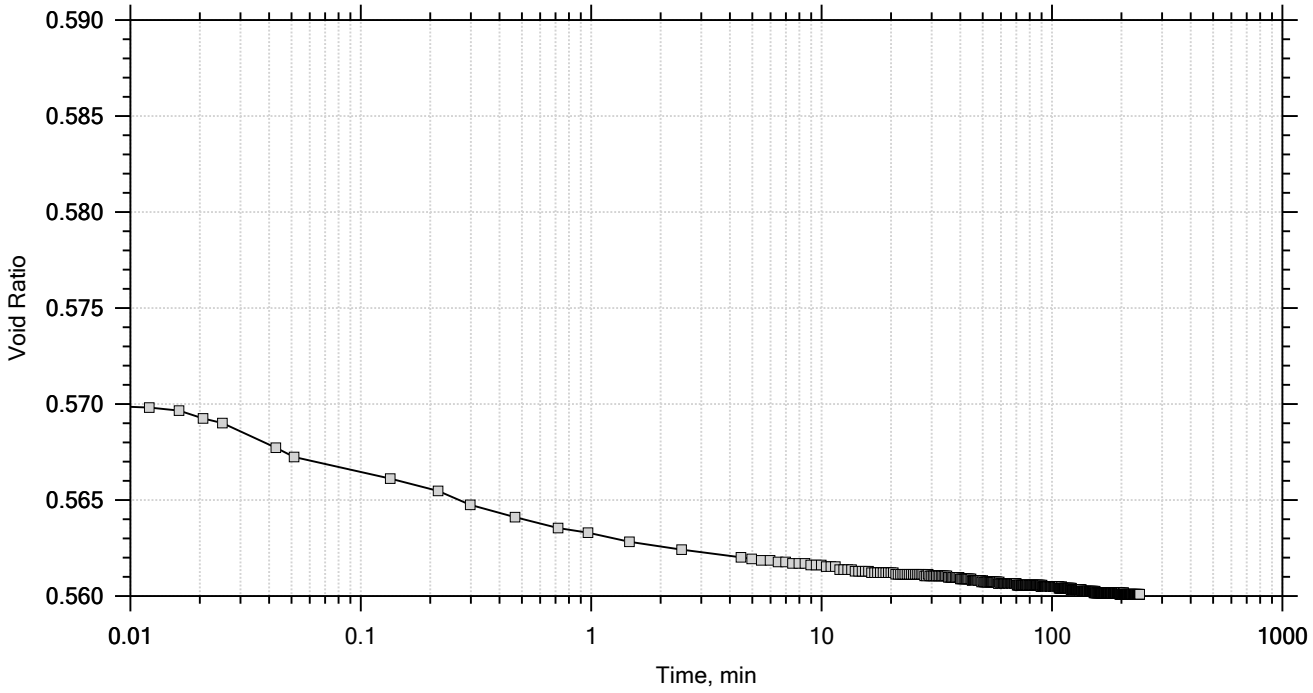


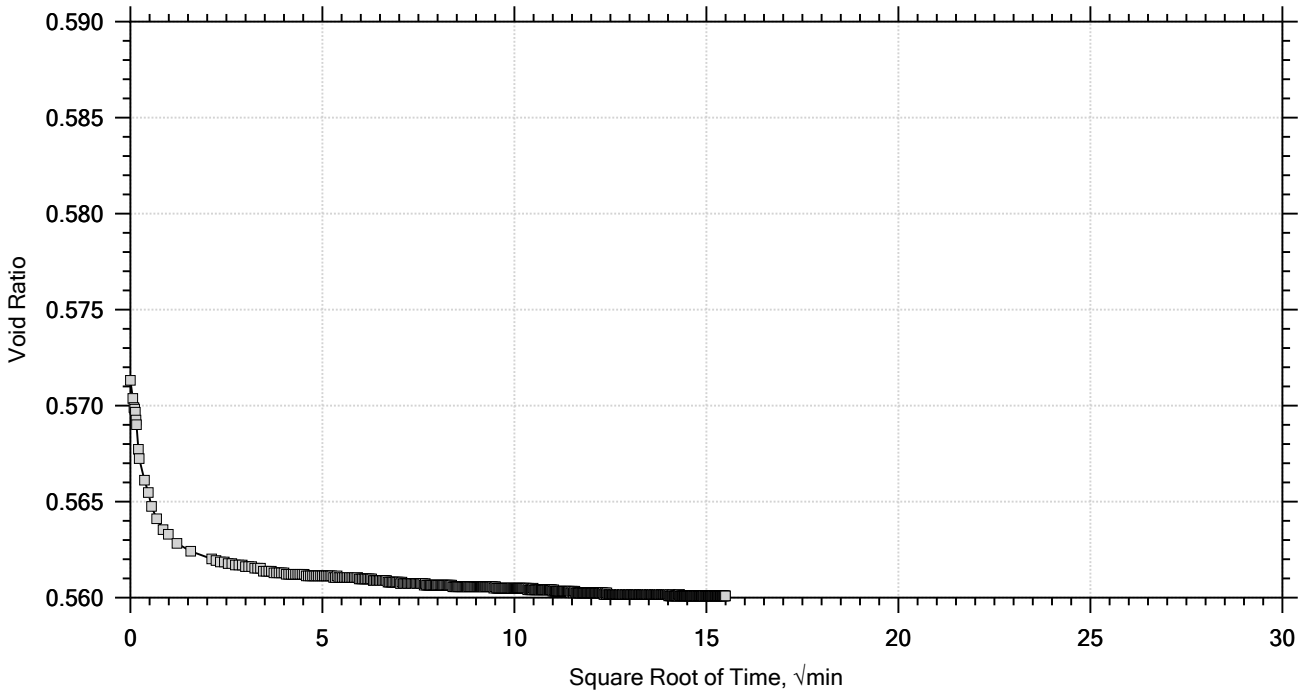


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

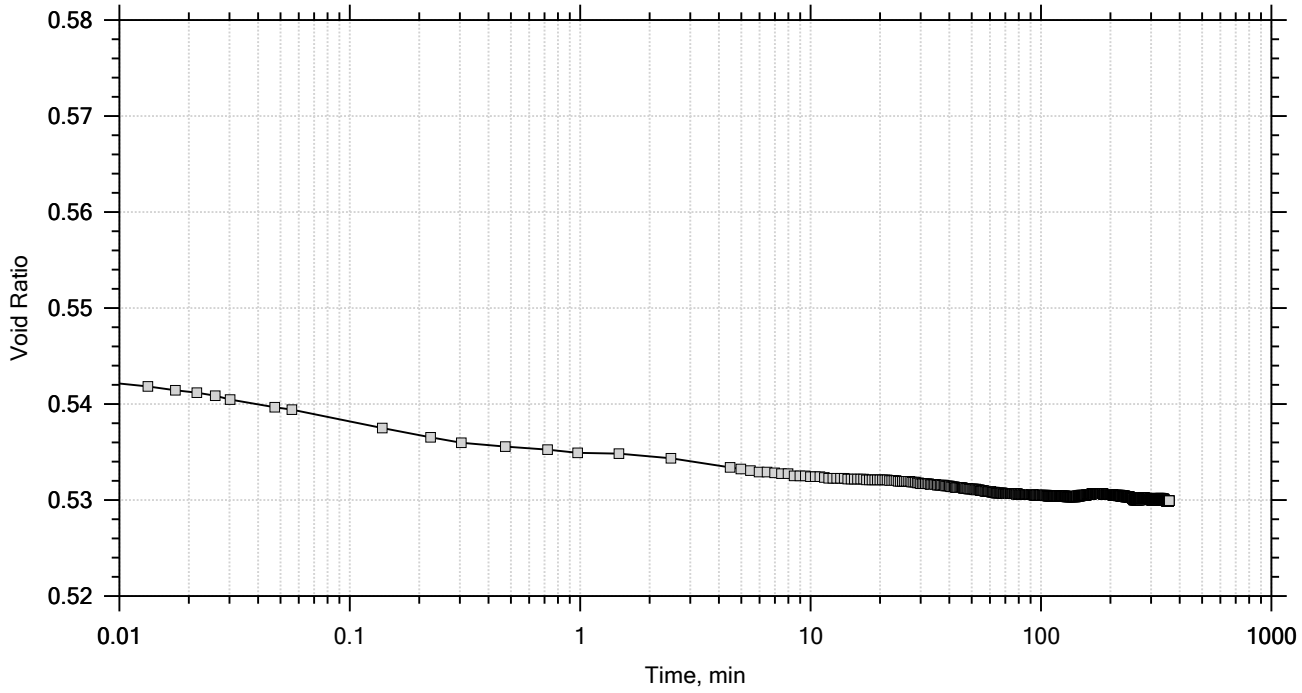


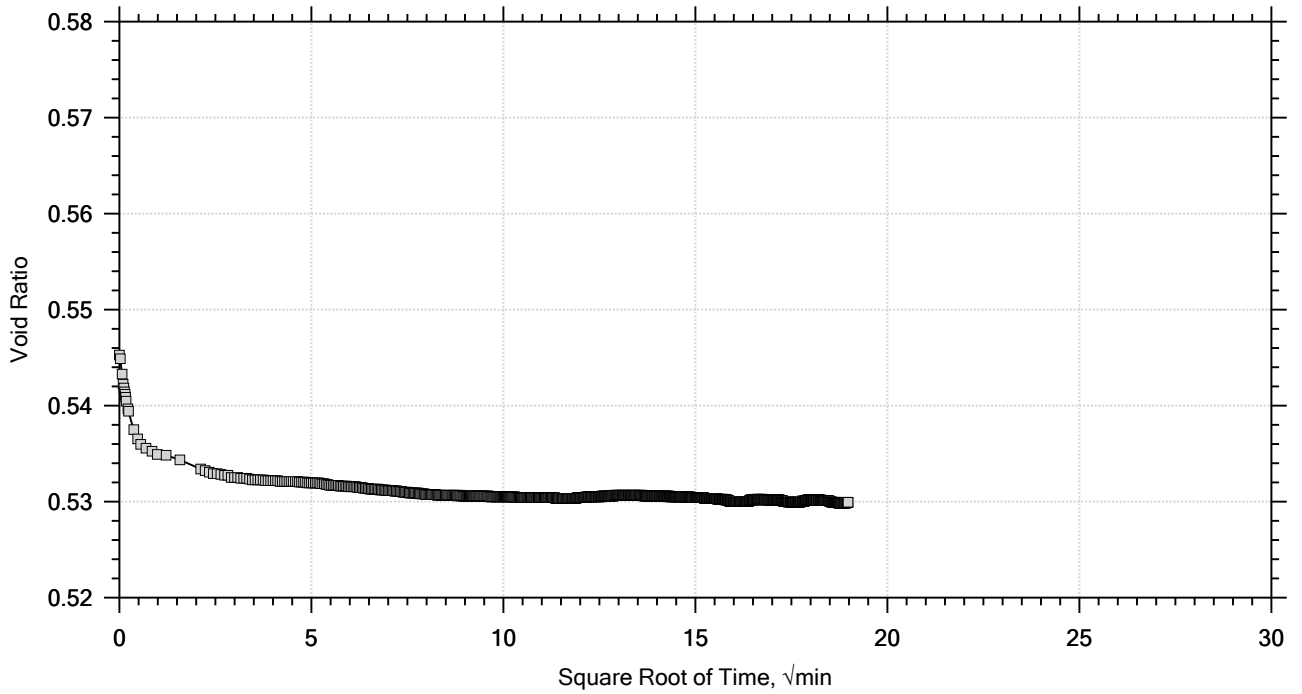


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

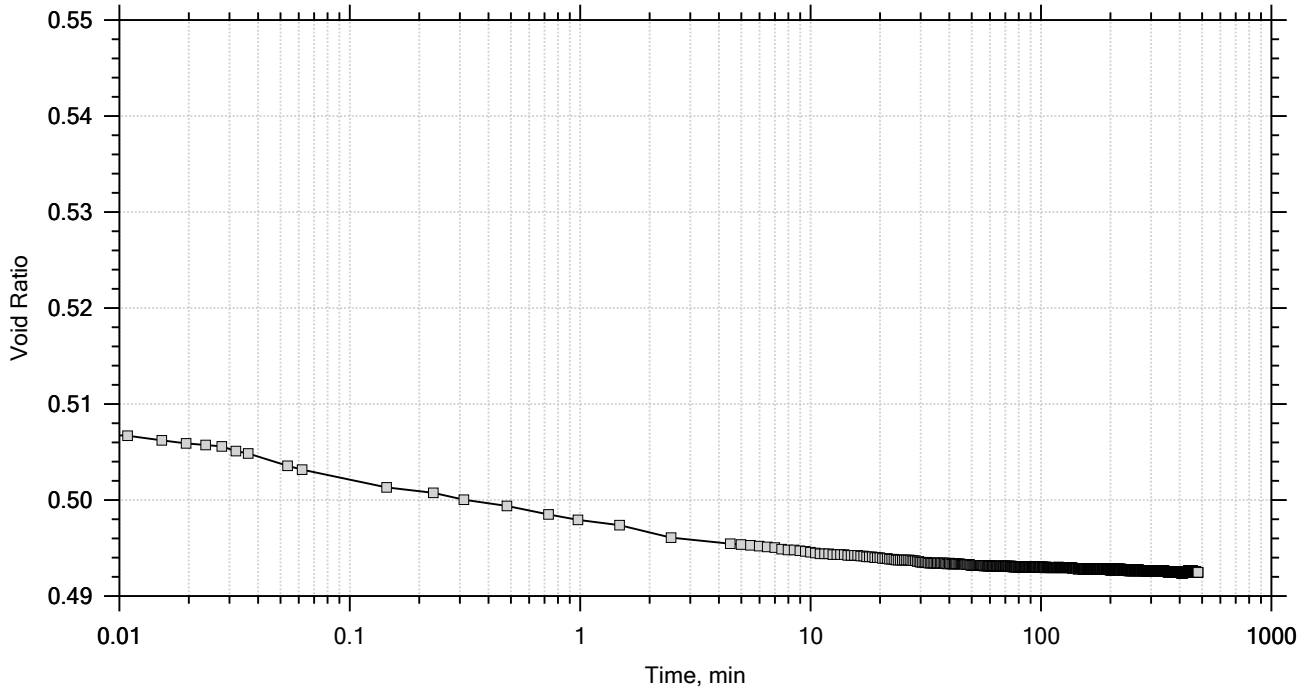


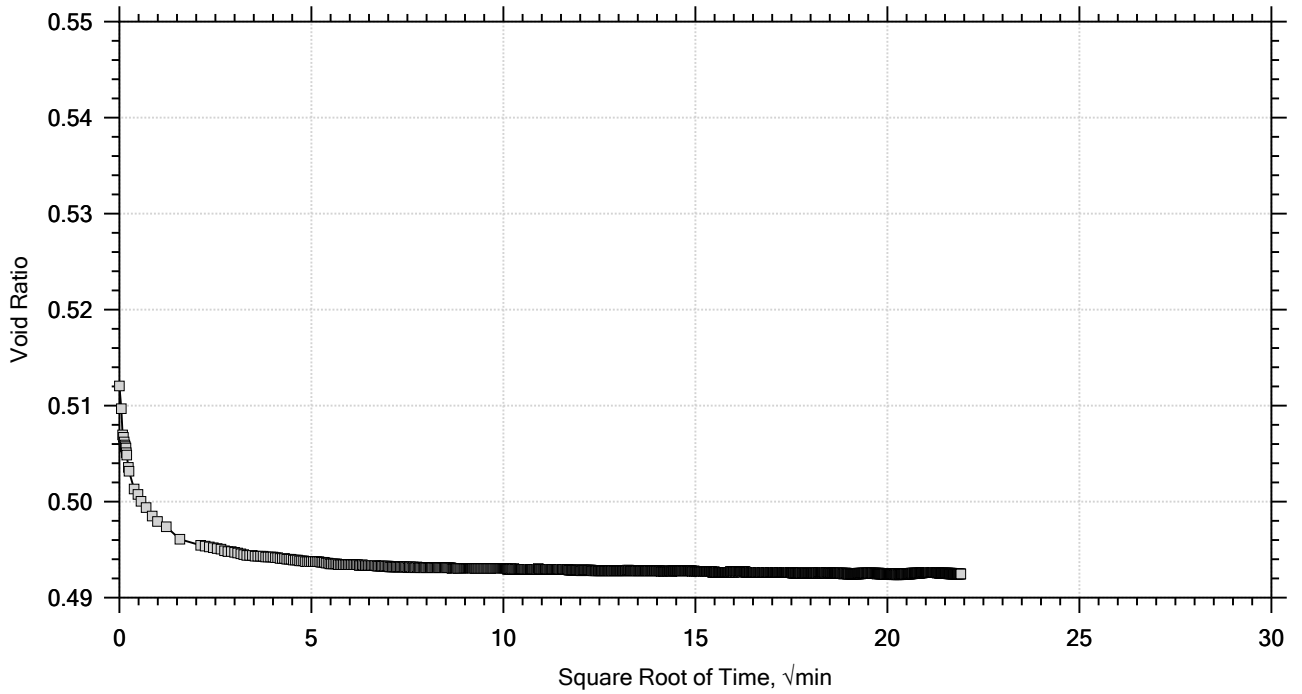


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

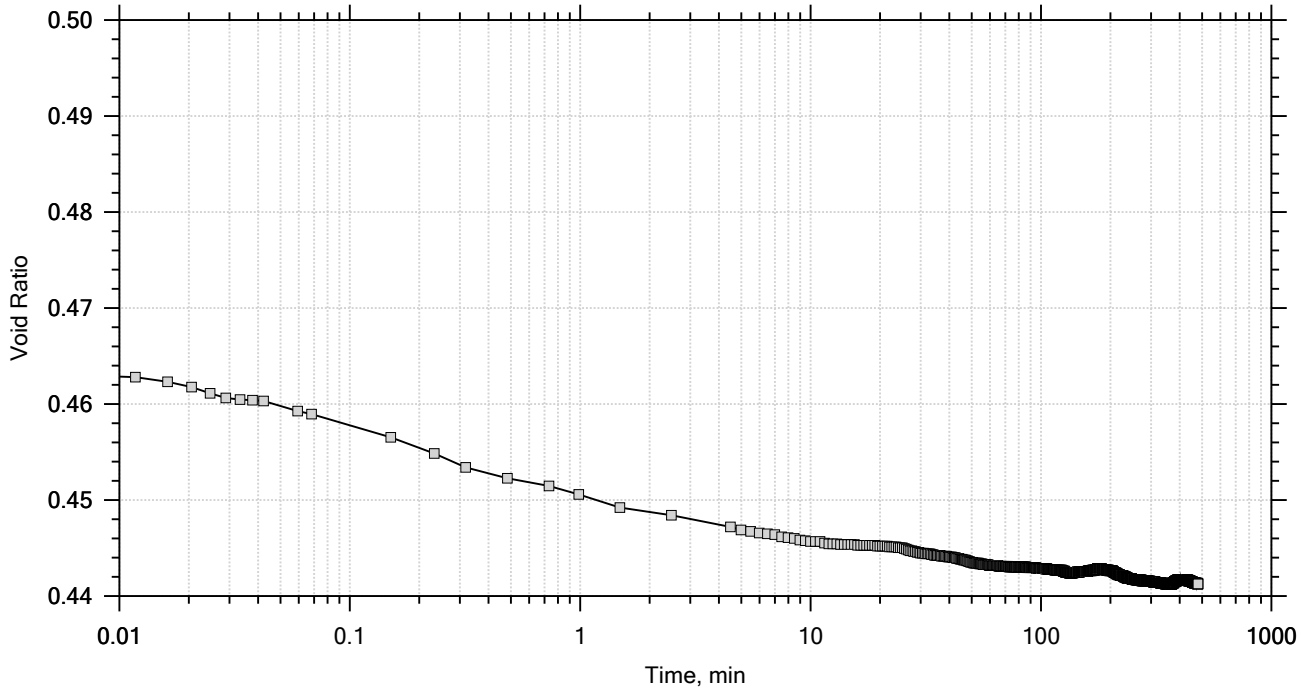


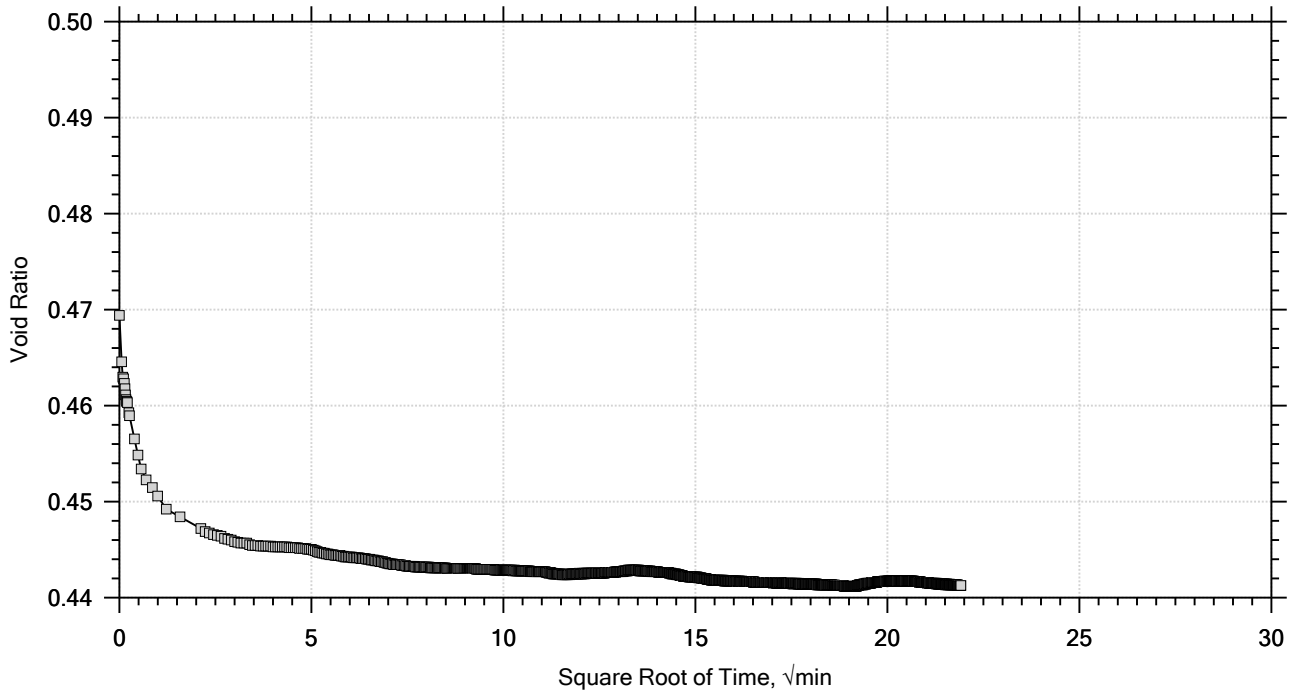


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

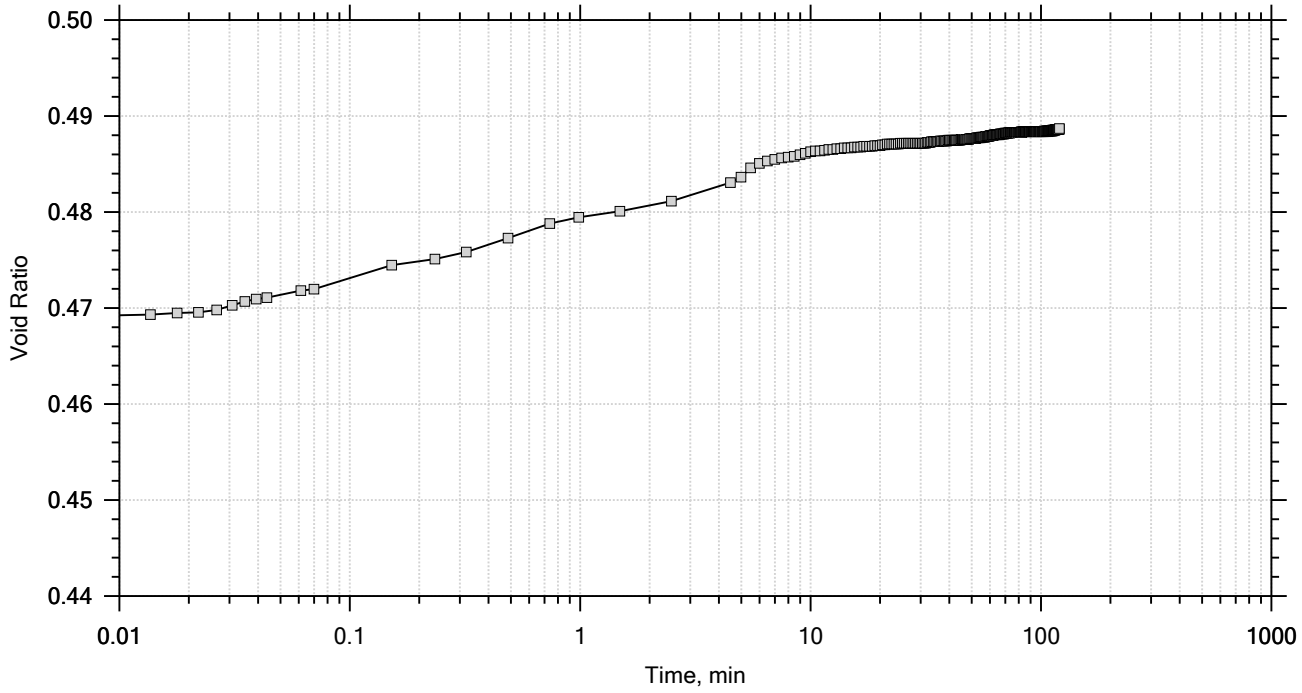


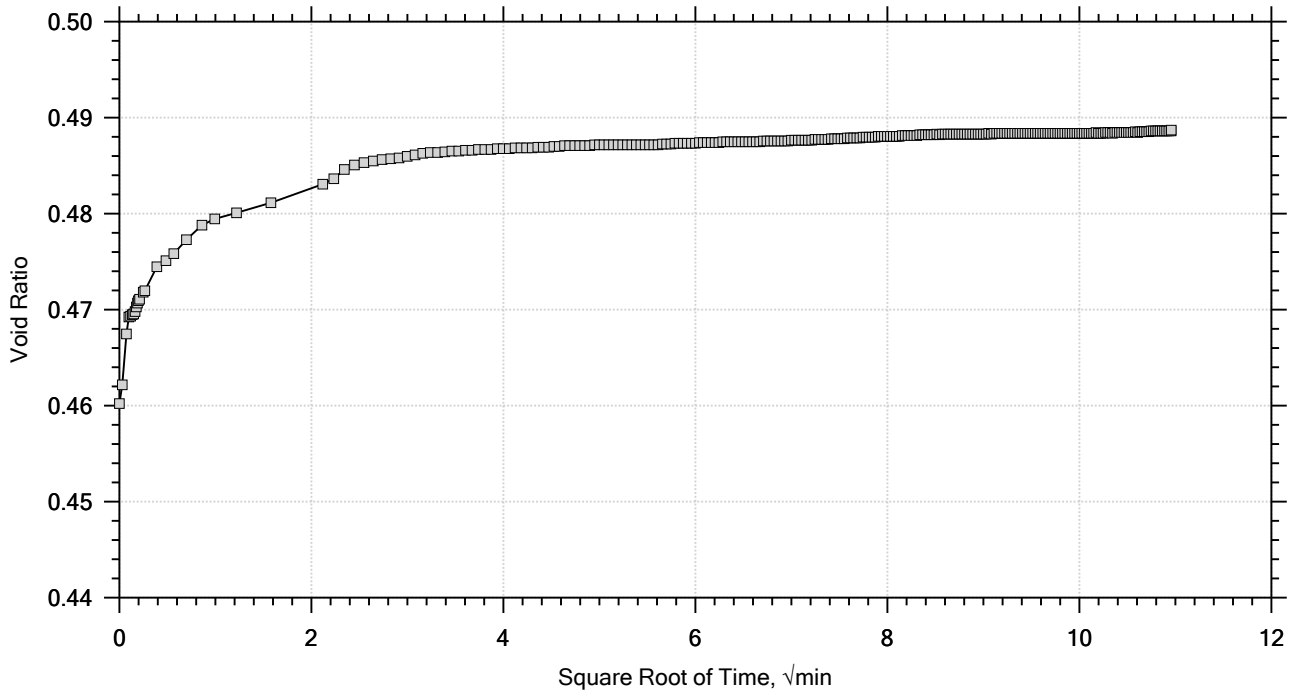


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

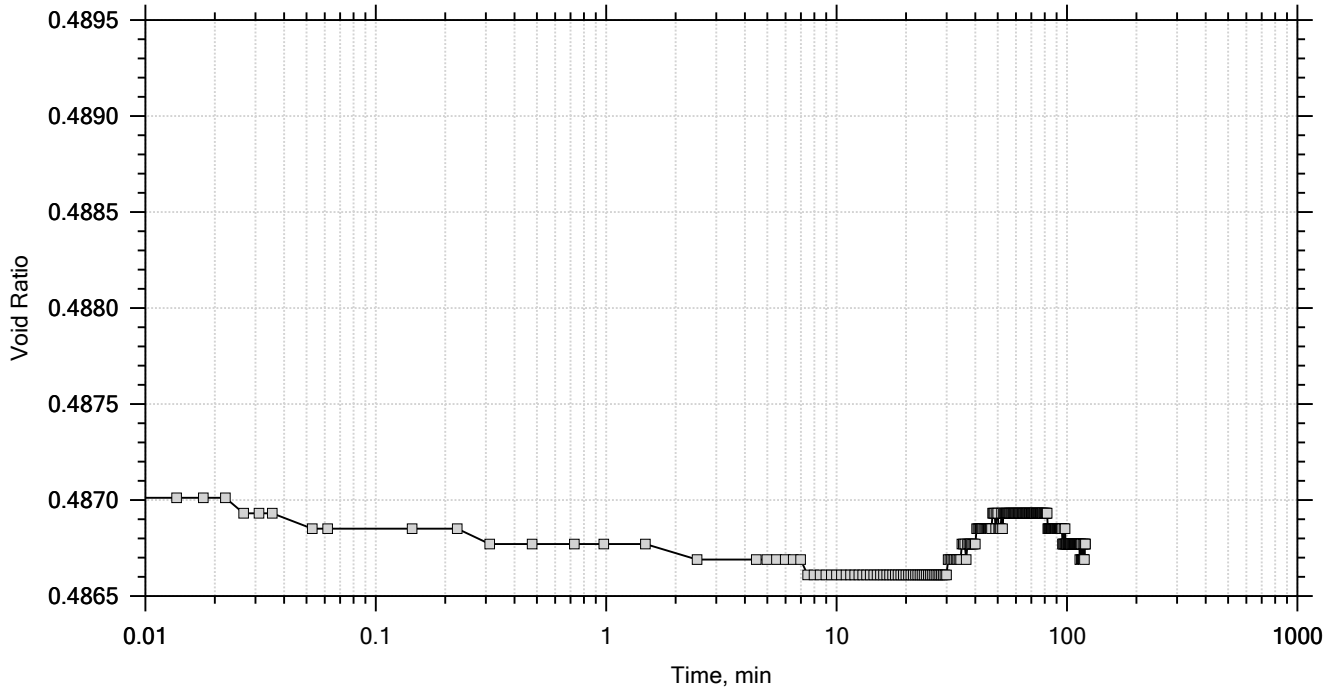


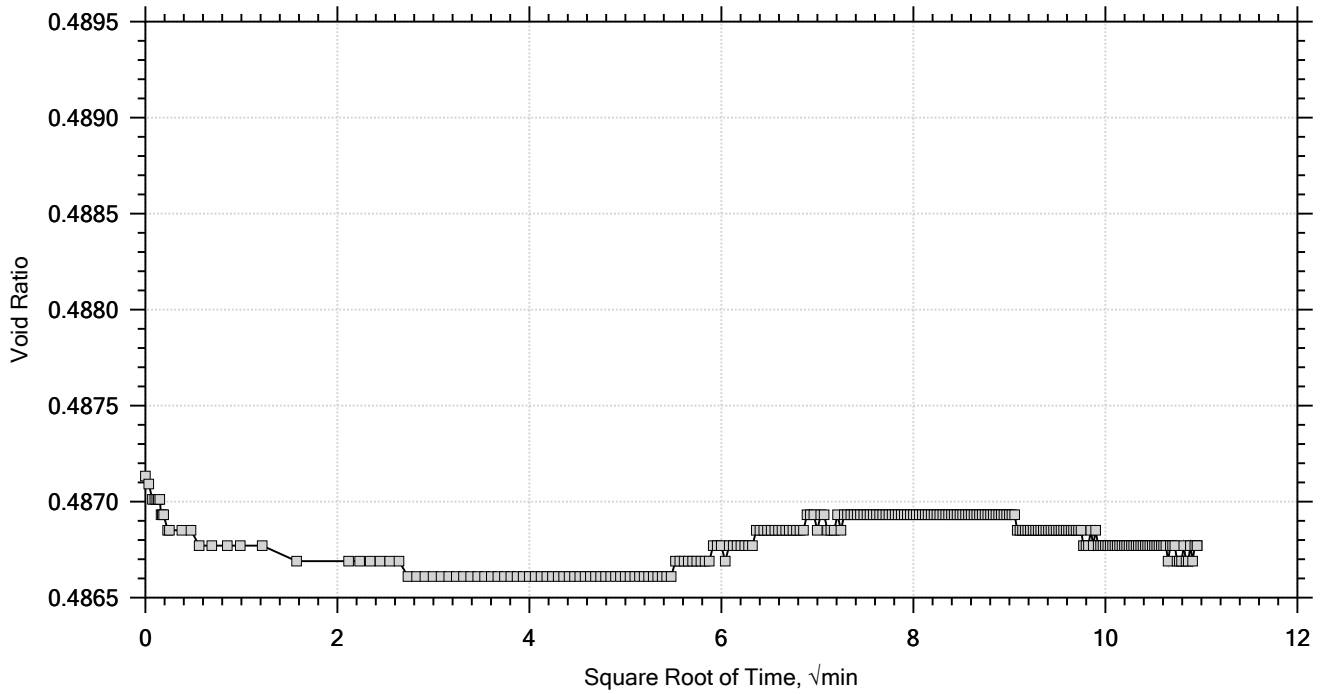


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

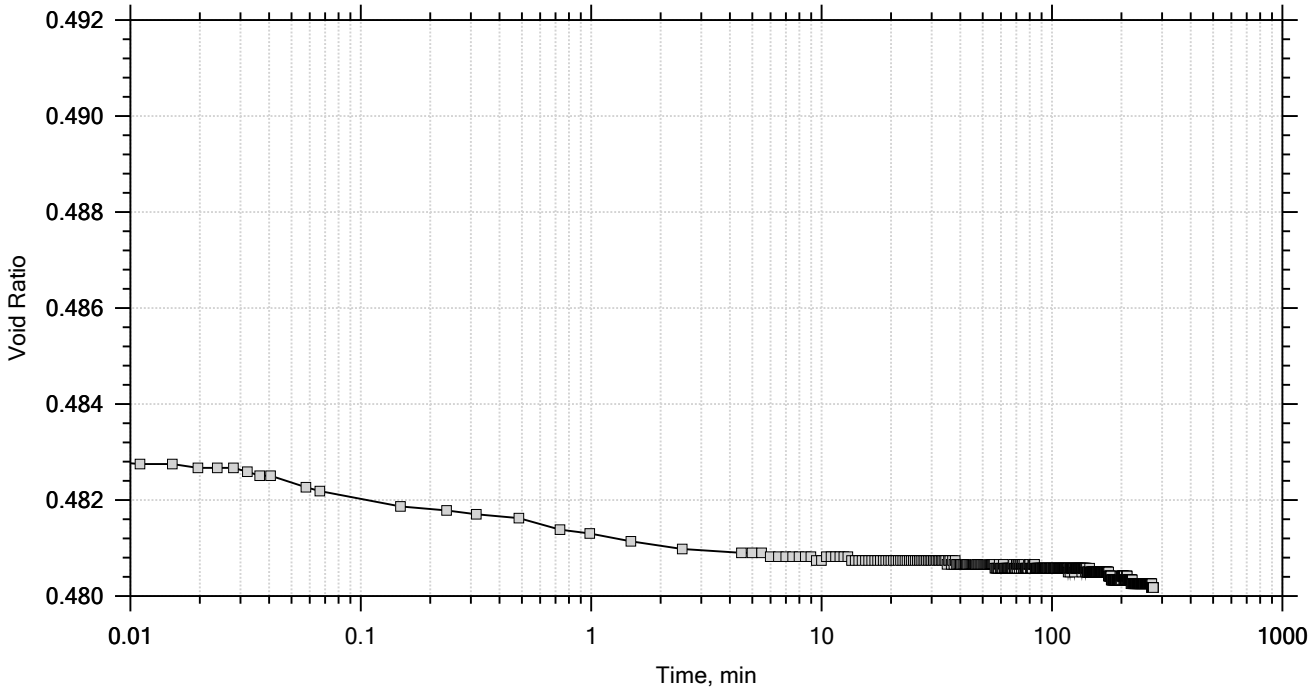


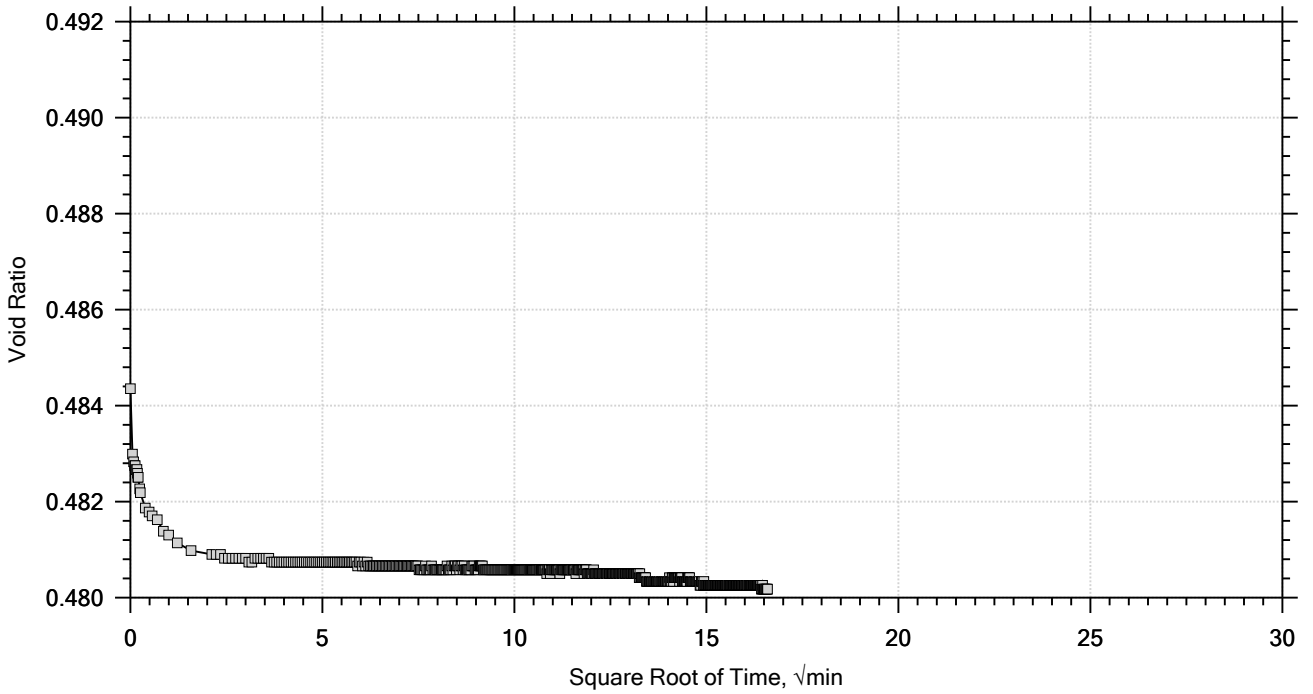


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 16
Constant Load Step
Stress: 1.79 tsf

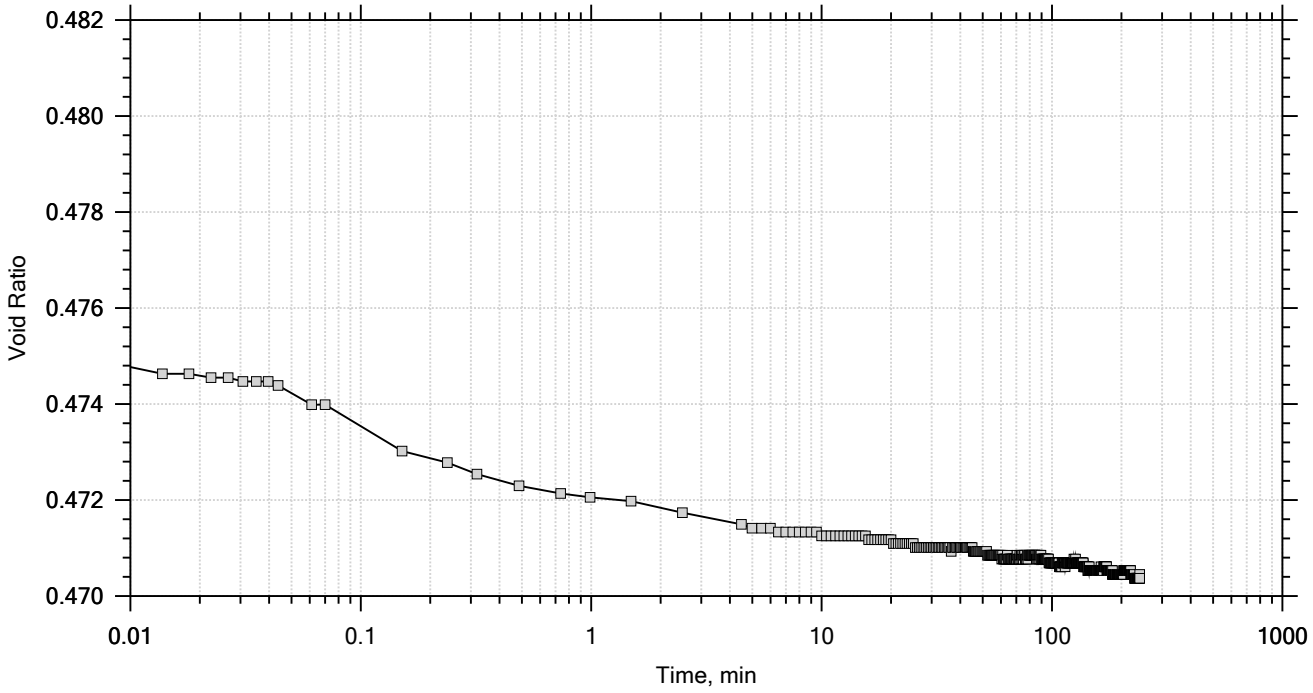


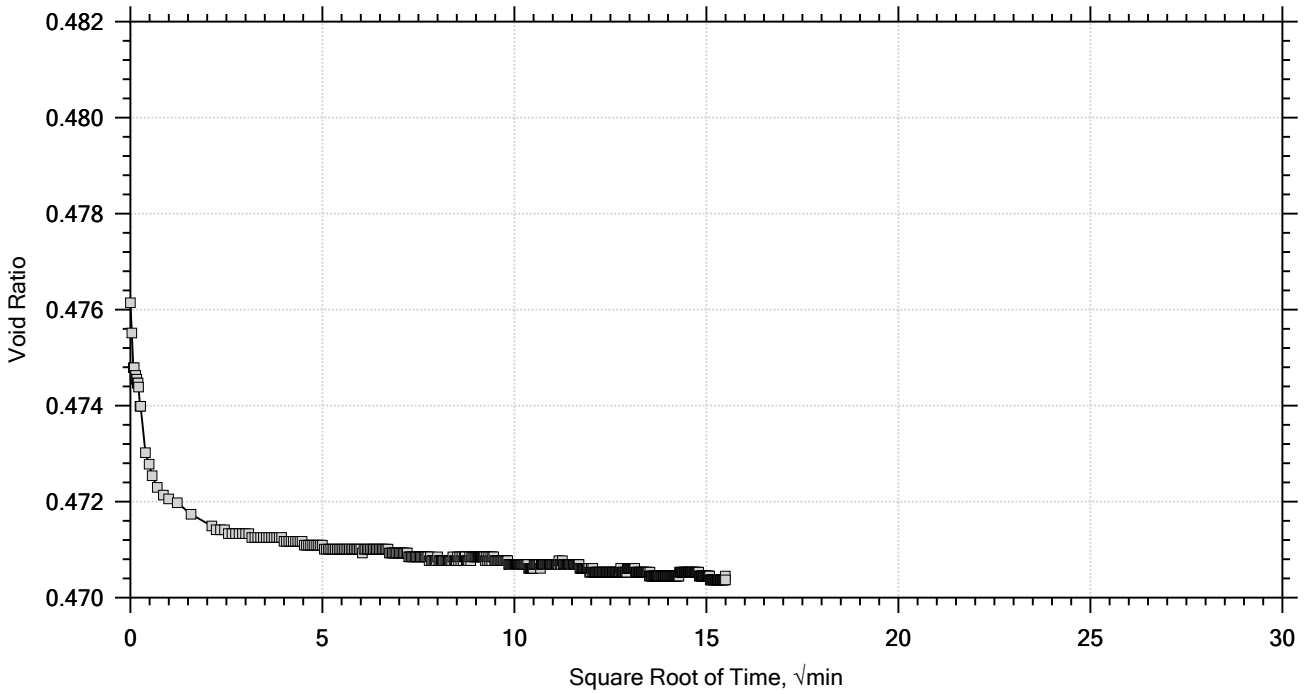


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 16
Constant Load Step
Stress: 3.57 tsf

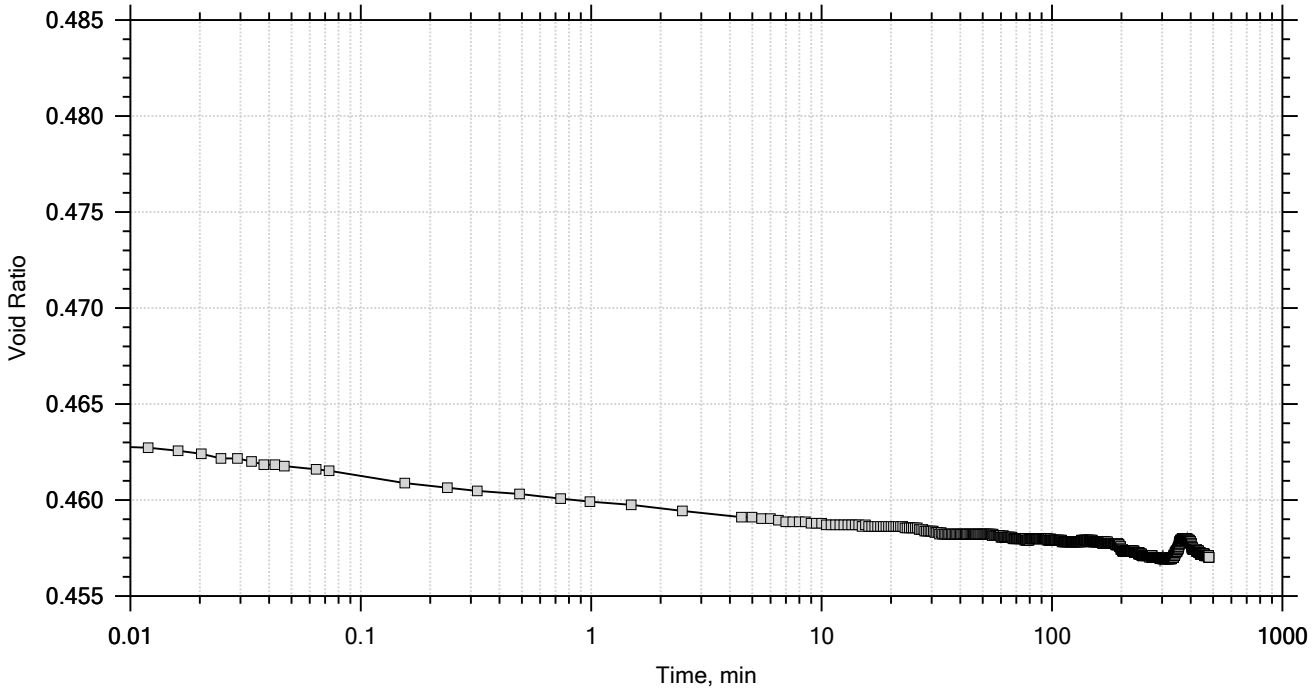


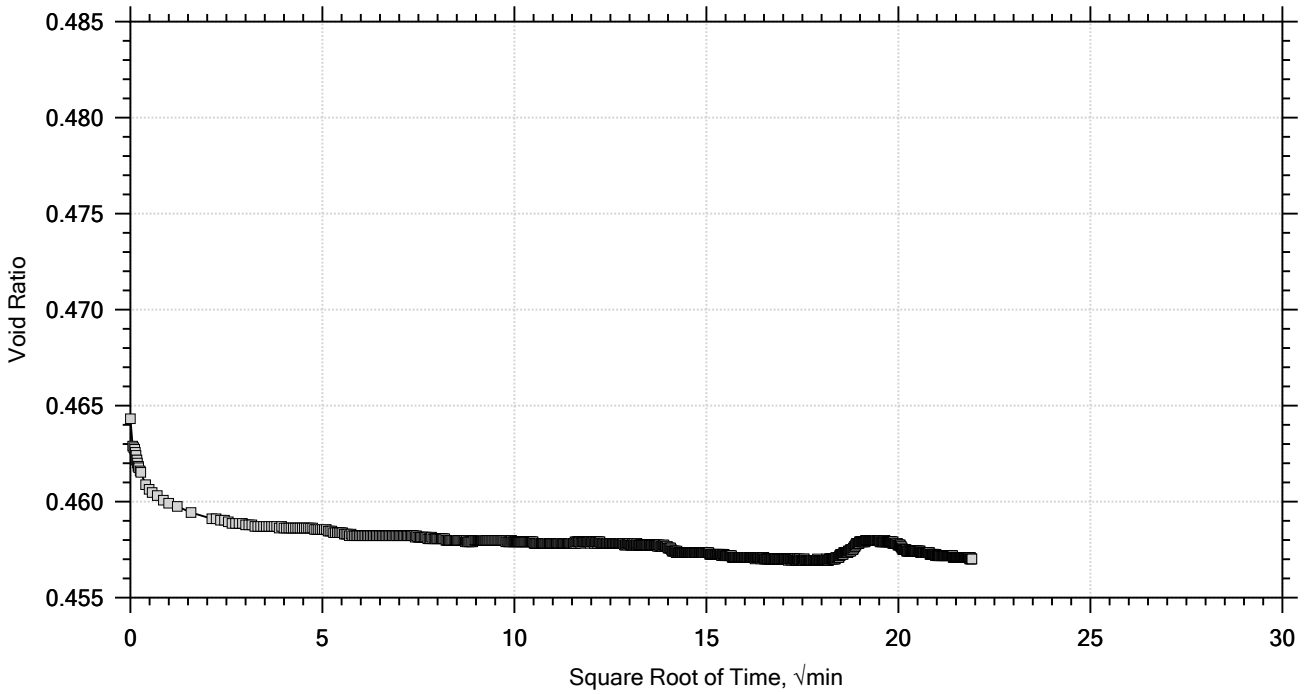


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 16
Constant Load Step
Stress: 7.14 tsf

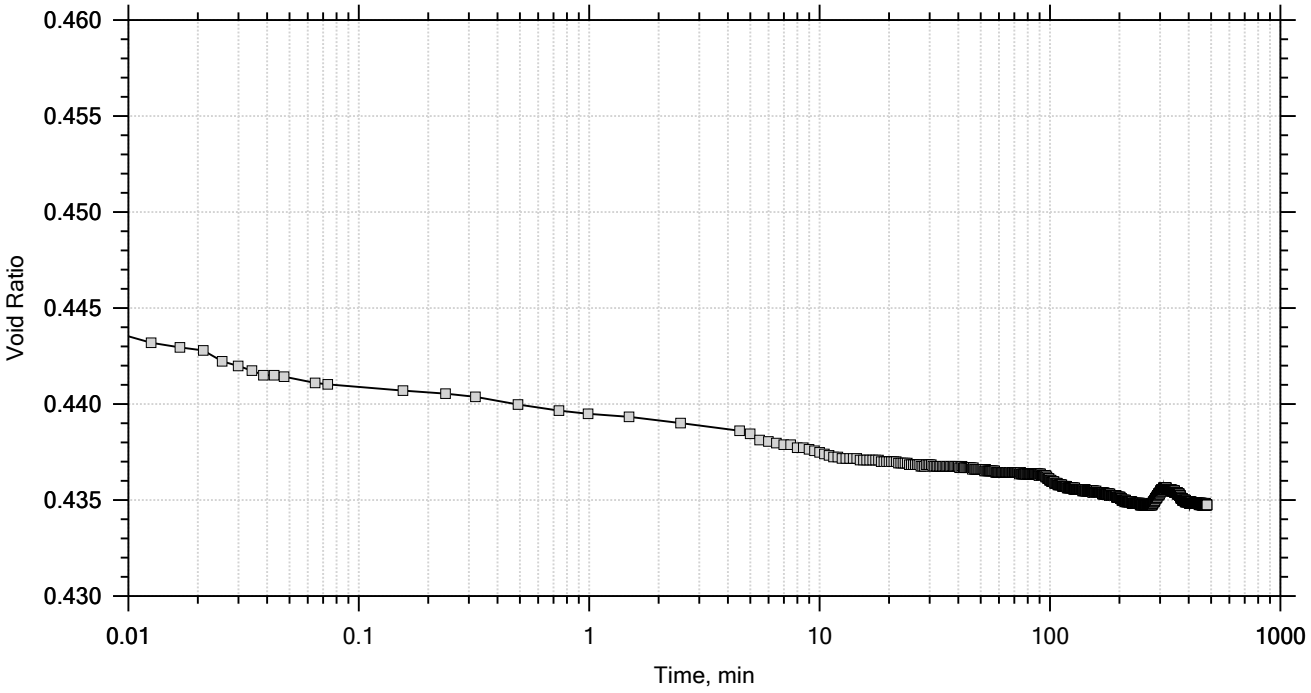


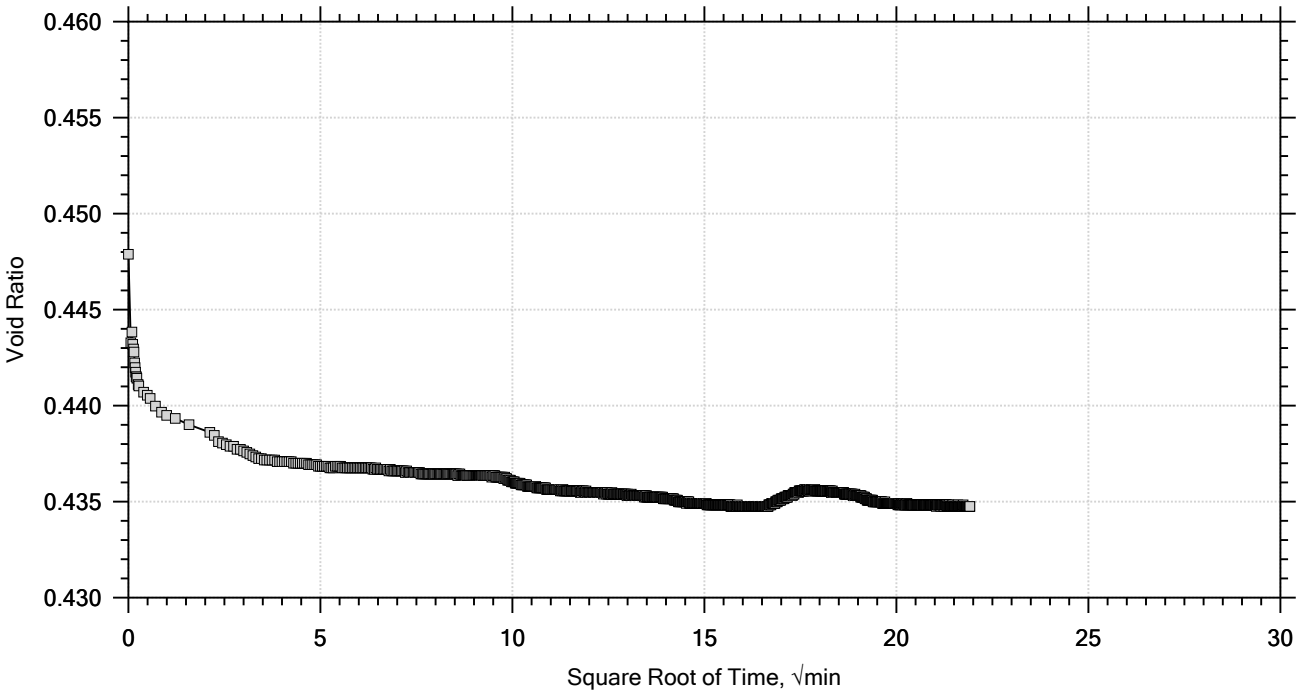


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 15 of 16
Constant Load Step
Stress: 14.3 tsf

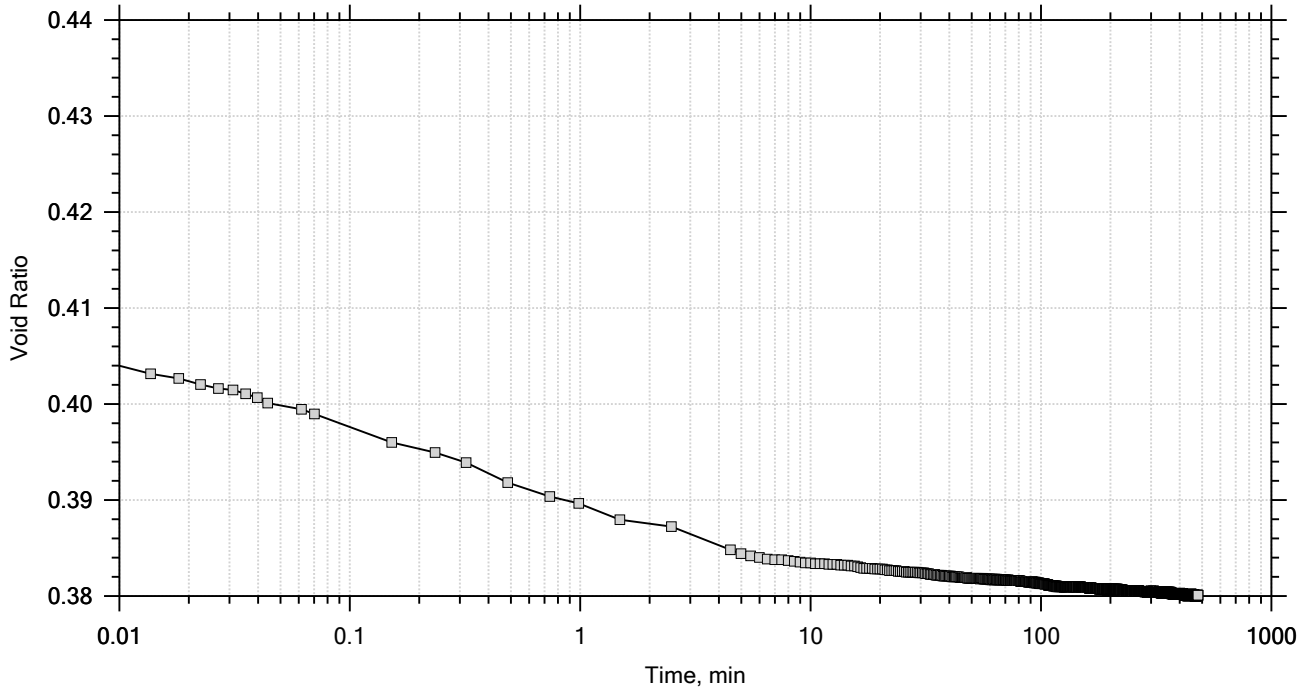


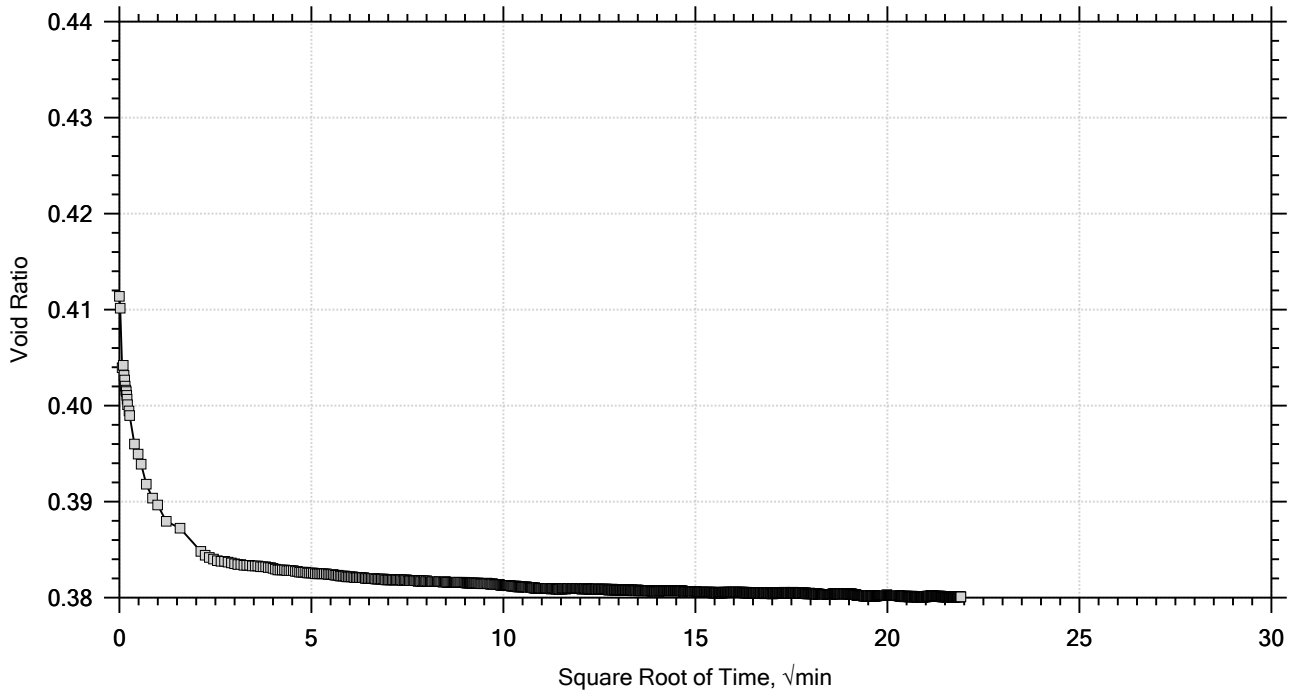


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 16 of 16
Constant Load Step
Stress: 28.6 tsf





Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Specimen Diameter: 2.50 in	Estimated Specific Gravity: 2.65	Liquid Limit: 0
Initial Height: 1.00 in	Initial Void Ratio: 0.619	Plastic Limit: 0
Final Height: 0.91 in	Final Void Ratio: 0.467	Plasticity Index: 0

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID	M237	RING		2010
Mass Container, gm	6.89	108.74	108.74	6.75
Mass Container + Wet Soil, gm	132.21	268.96	264.47	160.49
Mass Container + Dry Soil, gm	107.56	240.42	240.42	136.75
Mass Dry Soil, gm	100.67	131.68	131.68	130
Water Content, %	24.49	21.67	18.26	18.26
Void Ratio	---	0.62	0.47	---
Degree of Saturation, %	---	92.81	103.71	---
Dry Unit Weight, pcf	---	102.2	112.8	---

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients

Step	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	Log T50 min	Cv ft²/s	Mv 1/tsf	k ft/day	Ca %
1	0.0560	0.002285	0.615	0.228	0.000	0.00e+00	4.08e-02	0.00e+00	0.00e+00
2	0.112	0.004271	0.612	0.427	0.000	0.00e+00	3.55e-02	0.00e+00	0.00e+00
3	0.223	0.008095	0.606	0.810	0.000	0.00e+00	3.45e-02	0.00e+00	0.00e+00
4	0.446	0.01381	0.596	1.38	0.000	0.00e+00	2.56e-02	0.00e+00	0.00e+00
5	0.893	0.02295	0.582	2.29	0.000	0.00e+00	2.04e-02	0.00e+00	0.00e+00
6	1.79	0.03626	0.560	3.63	0.000	0.00e+00	1.49e-02	0.00e+00	0.00e+00
7	3.57	0.05488	0.530	5.49	0.000	0.00e+00	1.04e-02	0.00e+00	0.00e+00
8	7.14	0.07802	0.492	7.80	0.000	0.00e+00	6.48e-03	0.00e+00	0.00e+00
9	14.3	0.1097	0.441	11.0	0.000	0.00e+00	4.43e-03	0.00e+00	0.00e+00
10	0.446	0.08036	0.489	8.04	0.000	0.00e+00	2.12e-03	0.00e+00	0.00e+00
11	0.893	0.08155	0.487	8.15	0.000	0.00e+00	2.67e-03	0.00e+00	0.00e+00
12	1.79	0.08562	0.480	8.56	0.000	0.00e+00	4.56e-03	0.00e+00	0.00e+00
13	3.57	0.09168	0.470	9.17	0.000	0.00e+00	3.39e-03	0.00e+00	0.00e+00
14	7.14	0.09993	0.457	9.99	0.000	0.00e+00	2.31e-03	0.00e+00	0.00e+00
15	14.3	0.1137	0.435	11.4	0.000	0.00e+00	1.93e-03	0.00e+00	0.00e+00
16	28.6	0.1475	0.380	14.7	0.000	0.00e+00	2.36e-03	0.00e+00	0.00e+00

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
	Remarks:		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Square Root of Time Coefficients

Step	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	Sq.Rt. T90 min	Cv ft²/s	Mv 1/tsf	k ft/day
1	0.0560	0.002285	0.615	0.228	11.932	2.05e-06	4.08e-02	2.26e-04
2	0.112	0.004271	0.612	0.427	9.952	2.45e-06	3.55e-02	2.34e-04
3	0.223	0.008095	0.606	0.810	19.456	1.25e-06	3.45e-02	1.16e-04
4	0.446	0.01381	0.596	1.38	17.457	1.37e-06	2.56e-02	9.50e-05
5	0.893	0.02295	0.582	2.29	20.951	1.13e-06	2.04e-02	6.22e-05
6	1.79	0.03626	0.560	3.63	35.466	6.52e-07	1.49e-02	2.62e-05
7	3.57	0.05488	0.530	5.49	63.471	3.52e-07	1.04e-02	9.91e-06
8	7.14	0.07802	0.492	7.80	74.978	2.85e-07	6.48e-03	4.98e-06
9	14.3	0.1097	0.441	11.0	72.482	2.78e-07	4.43e-03	3.32e-06
10	0.446	0.08036	0.489	8.04	15.486	1.30e-06	2.12e-03	7.41e-06
11	0.893	0.08155	0.487	8.15	0.000	0.00e+00	2.67e-03	0.00e+00
12	1.79	0.08562	0.480	8.56	34.985	5.89e-07	4.56e-03	7.24e-06
13	3.57	0.09168	0.470	9.17	36.296	5.61e-07	3.39e-03	5.14e-06
14	7.14	0.09993	0.457	9.99	0.000	0.00e+00	2.31e-03	0.00e+00
15	14.3	0.1137	0.435	11.4	193.527	1.01e-07	1.93e-03	5.25e-07
16	28.6	0.1475	0.380	14.7	70.986	2.61e-07	2.36e-03	1.67e-06

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
	Remarks:		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.071		0.00572	0.0000	0.0000	0.000	0.619
2	-0.067		0.00572	0.0000	0.0000	0.000	0.619
3	-0.062		0.00686	0.0000	4.966e-05	0.00497	0.619
4	-0.058		0.00915	0.0000	9.933e-05	0.00993	0.619
5	-0.054		0.0103	0.0000	0.0001490	0.0149	0.619
6	-0.050		0.0126	0.0000	0.0001987	0.0199	0.618
7	-0.045		0.0149	0.0000	0.0002483	0.0248	0.618
8	-0.041		0.0172	0.0000	0.0003477	0.0348	0.618
9	-0.037		0.0194	0.0000	0.0003973	0.0397	0.618
10	-0.033		0.0229	0.0000	0.0005463	0.0546	0.618
11	-0.028		0.0263	0.0000	0.0006456	0.0646	0.618
12	-0.024		0.0309	0.0000	0.0007946	0.0795	0.617
13	-0.019		0.0332	0.0000	0.0008940	0.0894	0.617
14	-0.015		0.0377	0.0000	0.001093	0.109	0.617
15	-0.011		0.0412	0.0000	0.001242	0.124	0.617
16	0.000	0.000	0.0504	0.0000	0.001550	0.155	0.616
17	0.007	0.081	0.0560	0.0000	0.001738	0.174	0.616
18	0.015	0.122	0.0526	0.0000	0.001788	0.179	0.616
19	0.096	0.310	0.0549	0.0000	0.001887	0.189	0.616
20	0.183	0.427	0.0549	0.0000	0.001937	0.194	0.616
21	0.264	0.514	0.0538	0.0000	0.001987	0.199	0.616
22	0.432	0.657	0.0549	0.0000	0.002036	0.204	0.615
23	0.681	0.825	0.0549	0.0000	0.002086	0.209	0.615
24	0.931	0.965	0.0549	0.0000	0.002086	0.209	0.615
25	1.431	1.196	0.0549	0.0000	0.002136	0.214	0.615
26	2.431	1.559	0.0560	0.0000	0.002185	0.219	0.615
27	4.430	2.105	0.0549	0.0000	0.002185	0.219	0.615
28	4.933	2.221	0.0549	0.0000	0.002185	0.219	0.615
29	5.433	2.331	0.0538	0.0000	0.002185	0.219	0.615
30	5.930	2.435	0.0549	0.0000	0.002235	0.223	0.615
31	6.433	2.536	0.0560	0.0000	0.002235	0.223	0.615
32	6.930	2.633	0.0549	0.0000	0.002235	0.223	0.615
33	7.433	2.726	0.0560	0.0000	0.002235	0.223	0.615
34	7.931	2.816	0.0549	0.0000	0.002235	0.223	0.615
35	8.433	2.904	0.0560	0.0000	0.002235	0.223	0.615
36	8.930	2.988	0.0549	0.0000	0.002235	0.223	0.615
37	9.431	3.071	0.0560	0.0000	0.002235	0.223	0.615
38	9.932	3.151	0.0549	0.0000	0.002235	0.223	0.615
39	10.433	3.230	0.0560	0.0000	0.002235	0.223	0.615
40	10.930	3.306	0.0549	0.0000	0.002235	0.223	0.615
41	11.430	3.381	0.0538	0.0000	0.002235	0.223	0.615
42	11.932	3.454	0.0549	0.0000	0.002285	0.228	0.615
43	12.430	3.526	0.0549	0.0000	0.002285	0.228	0.615
44	12.932	3.596	0.0549	0.0000	0.002285	0.228	0.615
45	13.432	3.665	0.0549	0.0000	0.002285	0.228	0.615
46	13.933	3.733	0.0549	0.0000	0.002285	0.228	0.615
47	14.432	3.799	0.0549	0.0000	0.002285	0.228	0.615
48	14.933	3.864	0.0549	0.0000	0.002285	0.228	0.615
49	15.433	3.928	0.0549	0.0000	0.002285	0.228	0.615
50	15.932	3.991	0.0560	0.0000	0.002285	0.228	0.615

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.432	4.054	0.0549	0.0000	0.002285	0.228	0.615
52	16.932	4.115	0.0549	0.0000	0.002285	0.228	0.615
53	17.432	4.175	0.0549	0.0000	0.002285	0.228	0.615
54	17.931	4.235	0.0549	0.0000	0.002285	0.228	0.615
55	18.431	4.293	0.0549	0.0000	0.002285	0.228	0.615
56	18.930	4.351	0.0549	0.0000	0.002285	0.228	0.615
57	19.433	4.408	0.0549	0.0000	0.002285	0.228	0.615
58	19.931	4.464	0.0549	0.0000	0.002285	0.228	0.615
59	20.433	4.520	0.0549	0.0000	0.002285	0.228	0.615
60	20.932	4.575	0.0549	0.0000	0.002285	0.228	0.615
61	21.433	4.630	0.0549	0.0000	0.002285	0.228	0.615
62	21.932	4.683	0.0560	0.0000	0.002285	0.228	0.615
63	22.433	4.736	0.0549	0.0000	0.002285	0.228	0.615
64	22.931	4.789	0.0549	0.0000	0.002285	0.228	0.615
65	23.430	4.840	0.0549	0.0000	0.002285	0.228	0.615
66	23.931	4.892	0.0549	0.0000	0.002285	0.228	0.615
67	24.433	4.943	0.0549	0.0000	0.002285	0.228	0.615
68	24.931	4.993	0.0549	0.0000	0.002285	0.228	0.615
69	25.432	5.043	0.0549	0.0000	0.002285	0.228	0.615
70	25.933	5.092	0.0549	0.0000	0.002285	0.228	0.615
71	26.430	5.141	0.0549	0.0000	0.002285	0.228	0.615
72	26.930	5.189	0.0538	0.0000	0.002285	0.228	0.615
73	27.430	5.237	0.0549	0.0000	0.002285	0.228	0.615
74	27.933	5.285	0.0549	0.0000	0.002285	0.228	0.615
75	28.432	5.332	0.0549	0.0000	0.002285	0.228	0.615
76	28.932	5.379	0.0549	0.0000	0.002285	0.228	0.615
77	29.433	5.425	0.0549	0.0000	0.002285	0.228	0.615
78	29.932	5.471	0.0549	0.0000	0.002285	0.228	0.615
79	30.432	5.517	0.0549	0.0000	0.002285	0.228	0.615
80	30.933	5.562	0.0549	0.0000	0.002285	0.228	0.615
81	31.433	5.606	0.0549	0.0000	0.002285	0.228	0.615
82	31.933	5.651	0.0549	0.0000	0.002285	0.228	0.615
83	32.430	5.695	0.0549	0.0000	0.002285	0.228	0.615
84	32.933	5.739	0.0549	0.0000	0.002285	0.228	0.615
85	33.430	5.782	0.0549	0.0000	0.002285	0.228	0.615
86	33.931	5.825	0.0549	0.0000	0.002285	0.228	0.615
87	34.433	5.868	0.0549	0.0000	0.002285	0.228	0.615
88	34.930	5.910	0.0549	0.0000	0.002285	0.228	0.615
89	35.433	5.953	0.0549	0.0000	0.002285	0.228	0.615
90	35.933	5.994	0.0549	0.0000	0.002285	0.228	0.615
91	36.433	6.036	0.0549	0.0000	0.002285	0.228	0.615
92	36.932	6.077	0.0549	0.0000	0.002285	0.228	0.615
93	37.431	6.118	0.0549	0.0000	0.002285	0.228	0.615
94	37.931	6.159	0.0549	0.0000	0.002285	0.228	0.615
95	38.430	6.199	0.0560	0.0000	0.002285	0.228	0.615
96	38.931	6.239	0.0549	0.0000	0.002285	0.228	0.615
97	39.432	6.279	0.0549	0.0000	0.002285	0.228	0.615
98	39.932	6.319	0.0549	0.0000	0.002285	0.228	0.615
99	40.433	6.359	0.0538	0.0000	0.002285	0.228	0.615
100	40.931	6.398	0.0549	0.0000	0.002285	0.228	0.615

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.431	6.437	0.0549	0.0000	0.002285	0.228	0.615
102	41.932	6.476	0.0549	0.0000	0.002285	0.228	0.615
103	42.433	6.514	0.0549	0.0000	0.002285	0.228	0.615
104	42.932	6.552	0.0549	0.0000	0.002285	0.228	0.615
105	43.433	6.590	0.0549	0.0000	0.002285	0.228	0.615
106	43.932	6.628	0.0549	0.0000	0.002285	0.228	0.615
107	44.432	6.666	0.0549	0.0000	0.002285	0.228	0.615
108	44.933	6.703	0.0549	0.0000	0.002285	0.228	0.615
109	45.431	6.740	0.0549	0.0000	0.002285	0.228	0.615
110	45.933	6.777	0.0549	0.0000	0.002285	0.228	0.615
111	46.432	6.814	0.0549	0.0000	0.002285	0.228	0.615
112	46.933	6.851	0.0549	0.0000	0.002285	0.228	0.615
113	47.432	6.887	0.0549	0.0000	0.002285	0.228	0.615
114	47.933	6.923	0.0549	0.0000	0.002285	0.228	0.615
115	48.430	6.959	0.0549	0.0000	0.002285	0.228	0.615
116	48.930	6.995	0.0549	0.0000	0.002285	0.228	0.615
117	49.431	7.031	0.0549	0.0000	0.002285	0.228	0.615
118	49.931	7.066	0.0549	0.0000	0.002285	0.228	0.615
119	50.430	7.101	0.0549	0.0000	0.002285	0.228	0.615
120	50.933	7.137	0.0549	0.0000	0.002285	0.228	0.615
121	51.432	7.172	0.0549	0.0000	0.002285	0.228	0.615
122	51.932	7.206	0.0549	0.0000	0.002285	0.228	0.615
123	52.430	7.241	0.0549	0.0000	0.002285	0.228	0.615
124	52.933	7.276	0.0549	0.0000	0.002285	0.228	0.615
125	53.431	7.310	0.0549	0.0000	0.002285	0.228	0.615
126	53.930	7.344	0.0549	0.0000	0.002285	0.228	0.615
127	54.431	7.378	0.0560	0.0000	0.002285	0.228	0.615
128	54.932	7.412	0.0549	0.0000	0.002285	0.228	0.615
129	55.430	7.445	0.0549	0.0000	0.002285	0.228	0.615
130	55.930	7.479	0.0549	0.0000	0.002285	0.228	0.615
131	56.431	7.512	0.0549	0.0000	0.002285	0.228	0.615
132	56.929	7.545	0.0549	0.0000	0.002285	0.228	0.615
133	57.429	7.578	0.0549	0.0000	0.002285	0.228	0.615
134	57.930	7.611	0.0549	0.0000	0.002285	0.228	0.615
135	58.433	7.644	0.0549	0.0000	0.002285	0.228	0.615
136	58.932	7.677	0.0549	0.0000	0.002285	0.228	0.615
137	59.430	7.709	0.0549	0.0000	0.002285	0.228	0.615
138	59.931	7.741	0.0549	0.0000	0.002285	0.228	0.615
139	59.939	7.742	0.0549	0.0000	0.002285	0.228	0.615

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.049		0.0549	0.0000	0.002285	0.228	0.615
2	-0.044		0.0549	0.0000	0.002285	0.228	0.615
3	-0.040		0.0572	0.0000	0.002285	0.228	0.615
4	-0.036		0.0663	0.0000	0.002285	0.228	0.615
5	-0.032		0.0732	0.0000	0.002334	0.233	0.615
6	-0.027		0.0789	0.0000	0.002384	0.238	0.615
7	-0.023		0.0846	0.0000	0.002434	0.243	0.615
8	-0.019		0.0881	0.0000	0.002583	0.258	0.615
9	-0.014		0.0926	0.0000	0.002682	0.268	0.614
10	-0.010		0.0961	0.0000	0.002781	0.278	0.614
11	-0.006		0.101	0.0000	0.002980	0.298	0.614
12	-0.001		0.105	0.0000	0.003079	0.308	0.614
13	0.000	0.000	0.106	0.0000	0.003105	0.310	0.614
14	0.003	0.057	0.110	0.0000	0.003179	0.318	0.614
15	0.007	0.086	0.111	0.0000	0.003228	0.323	0.614
16	0.012	0.109	0.109	0.0000	0.003278	0.328	0.613
17	0.029	0.170	0.108	0.0000	0.003278	0.328	0.613
18	0.037	0.193	0.108	0.0000	0.003278	0.328	0.613
19	0.122	0.350	0.110	0.0000	0.003377	0.338	0.613
20	0.203	0.451	0.111	0.0000	0.003427	0.343	0.613
21	0.285	0.534	0.110	0.0000	0.003477	0.348	0.613
22	0.454	0.674	0.111	0.0000	0.003526	0.353	0.613
23	0.702	0.838	0.111	0.0000	0.003675	0.368	0.613
24	0.955	0.977	0.111	0.0000	0.003725	0.372	0.613
25	1.454	1.206	0.112	0.0000	0.003775	0.377	0.613
26	2.454	1.566	0.111	0.0000	0.003824	0.382	0.613
27	4.455	2.111	0.111	0.0000	0.003874	0.387	0.613
28	4.954	2.226	0.112	0.0000	0.003924	0.392	0.612
29	5.454	2.335	0.112	0.0000	0.003924	0.392	0.612
30	5.954	2.440	0.111	0.0000	0.003924	0.392	0.612
31	6.453	2.540	0.111	0.0000	0.003924	0.392	0.612
32	6.952	2.637	0.111	0.0000	0.003924	0.392	0.612
33	7.455	2.730	0.111	0.0000	0.003973	0.397	0.612
34	7.954	2.820	0.112	0.0000	0.003973	0.397	0.612
35	8.454	2.908	0.111	0.0000	0.003973	0.397	0.612
36	8.955	2.992	0.111	0.0000	0.003973	0.397	0.612
37	9.452	3.074	0.111	0.0000	0.003973	0.397	0.612
38	9.952	3.155	0.112	0.0000	0.004023	0.402	0.612
39	10.455	3.233	0.111	0.0000	0.004023	0.402	0.612
40	10.953	3.309	0.111	0.0000	0.004023	0.402	0.612
41	11.454	3.384	0.112	0.0000	0.004023	0.402	0.612
42	11.953	3.457	0.111	0.0000	0.004023	0.402	0.612
43	12.453	3.529	0.112	0.0000	0.004023	0.402	0.612
44	12.953	3.599	0.111	0.0000	0.004023	0.402	0.612
45	13.453	3.668	0.111	0.0000	0.004023	0.402	0.612
46	13.954	3.735	0.111	0.0000	0.004023	0.402	0.612
47	14.454	3.802	0.111	0.0000	0.004023	0.402	0.612
48	14.954	3.867	0.111	0.0000	0.004023	0.402	0.612
49	15.455	3.931	0.112	0.0000	0.004072	0.407	0.612
50	15.955	3.994	0.111	0.0000	0.004072	0.407	0.612

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.455	4.056	0.111	0.0000	0.004072	0.407	0.612
52	16.955	4.118	0.111	0.0000	0.004072	0.407	0.612
53	17.452	4.178	0.111	0.0000	0.004072	0.407	0.612
54	17.952	4.237	0.110	0.0000	0.004072	0.407	0.612
55	18.454	4.296	0.111	0.0000	0.004072	0.407	0.612
56	18.953	4.354	0.111	0.0000	0.004122	0.412	0.612
57	19.455	4.411	0.111	0.0000	0.004122	0.412	0.612
58	19.952	4.467	0.111	0.0000	0.004122	0.412	0.612
59	20.453	4.522	0.111	0.0000	0.004122	0.412	0.612
60	20.955	4.578	0.111	0.0000	0.004122	0.412	0.612
61	21.454	4.632	0.111	0.0000	0.004122	0.412	0.612
62	21.954	4.686	0.111	0.0000	0.004122	0.412	0.612
63	22.455	4.739	0.111	0.0000	0.004122	0.412	0.612
64	22.953	4.791	0.111	0.0000	0.004122	0.412	0.612
65	23.453	4.843	0.110	0.0000	0.004122	0.412	0.612
66	23.954	4.894	0.111	0.0000	0.004122	0.412	0.612
67	24.454	4.945	0.111	0.0000	0.004172	0.417	0.612
68	24.953	4.995	0.111	0.0000	0.004172	0.417	0.612
69	25.453	5.045	0.111	0.0000	0.004172	0.417	0.612
70	25.952	5.094	0.111	0.0000	0.004172	0.417	0.612
71	26.453	5.143	0.111	0.0000	0.004172	0.417	0.612
72	26.954	5.192	0.111	0.0000	0.004172	0.417	0.612
73	27.455	5.240	0.111	0.0000	0.004172	0.417	0.612
74	27.954	5.287	0.112	0.0000	0.004172	0.417	0.612
75	28.455	5.334	0.111	0.0000	0.004122	0.412	0.612
76	28.951	5.381	0.111	0.0000	0.004122	0.412	0.612
77	29.453	5.427	0.111	0.0000	0.004122	0.412	0.612
78	29.952	5.473	0.111	0.0000	0.004122	0.412	0.612
79	30.455	5.519	0.111	0.0000	0.004122	0.412	0.612
80	30.953	5.564	0.111	0.0000	0.004122	0.412	0.612
81	31.453	5.608	0.111	0.0000	0.004122	0.412	0.612
82	31.955	5.653	0.111	0.0000	0.004122	0.412	0.612
83	32.455	5.697	0.111	0.0000	0.004122	0.412	0.612
84	32.952	5.740	0.111	0.0000	0.004072	0.407	0.612
85	33.452	5.784	0.111	0.0000	0.004072	0.407	0.612
86	33.954	5.827	0.111	0.0000	0.004072	0.407	0.612
87	34.452	5.870	0.111	0.0000	0.004072	0.407	0.612
88	34.952	5.912	0.111	0.0000	0.004122	0.412	0.612
89	35.452	5.954	0.111	0.0000	0.004072	0.407	0.612
90	35.952	5.996	0.111	0.0000	0.004122	0.412	0.612
91	36.454	6.038	0.111	0.0000	0.004072	0.407	0.612
92	36.952	6.079	0.111	0.0000	0.004122	0.412	0.612
93	37.453	6.120	0.111	0.0000	0.004122	0.412	0.612
94	37.951	6.160	0.111	0.0000	0.004122	0.412	0.612
95	38.455	6.201	0.111	0.0000	0.004122	0.412	0.612
96	38.955	6.241	0.111	0.0000	0.004122	0.412	0.612
97	39.452	6.281	0.111	0.0000	0.004122	0.412	0.612
98	39.952	6.321	0.112	0.0000	0.004122	0.412	0.612
99	40.454	6.360	0.111	0.0000	0.004122	0.412	0.612
100	40.953	6.399	0.111	0.0000	0.004122	0.412	0.612

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.455	6.439	0.111	0.0000	0.004172	0.417	0.612
102	41.955	6.477	0.111	0.0000	0.004172	0.417	0.612
103	42.456	6.516	0.111	0.0000	0.004172	0.417	0.612
104	42.954	6.554	0.111	0.0000	0.004172	0.417	0.612
105	43.453	6.592	0.113	0.0000	0.004221	0.422	0.612
106	43.954	6.630	0.111	0.0000	0.004172	0.417	0.612
107	44.452	6.667	0.111	0.0000	0.004172	0.417	0.612
108	44.953	6.705	0.111	0.0000	0.004172	0.417	0.612
109	45.453	6.742	0.111	0.0000	0.004172	0.417	0.612
110	45.954	6.779	0.111	0.0000	0.004172	0.417	0.612
111	46.452	6.816	0.111	0.0000	0.004172	0.417	0.612
112	46.952	6.852	0.111	0.0000	0.004221	0.422	0.612
113	47.452	6.889	0.111	0.0000	0.004221	0.422	0.612
114	47.954	6.925	0.111	0.0000	0.004221	0.422	0.612
115	48.452	6.961	0.111	0.0000	0.004221	0.422	0.612
116	48.952	6.997	0.112	0.0000	0.004221	0.422	0.612
117	49.455	7.032	0.111	0.0000	0.004221	0.422	0.612
118	49.952	7.068	0.111	0.0000	0.004221	0.422	0.612
119	50.454	7.103	0.111	0.0000	0.004221	0.422	0.612
120	50.952	7.138	0.111	0.0000	0.004221	0.422	0.612
121	51.454	7.173	0.111	0.0000	0.004221	0.422	0.612
122	51.953	7.208	0.111	0.0000	0.004221	0.422	0.612
123	52.455	7.243	0.111	0.0000	0.004221	0.422	0.612
124	52.955	7.277	0.111	0.0000	0.004221	0.422	0.612
125	53.455	7.311	0.111	0.0000	0.004271	0.427	0.612
126	53.955	7.345	0.111	0.0000	0.004271	0.427	0.612
127	54.455	7.379	0.111	0.0000	0.004271	0.427	0.612
128	54.955	7.413	0.111	0.0000	0.004271	0.427	0.612
129	55.455	7.447	0.111	0.0000	0.004271	0.427	0.612
130	55.954	7.480	0.111	0.0000	0.004271	0.427	0.612
131	56.452	7.513	0.111	0.0000	0.004271	0.427	0.612
132	56.953	7.547	0.112	0.0000	0.004271	0.427	0.612
133	57.455	7.580	0.111	0.0000	0.004271	0.427	0.612
134	57.954	7.613	0.111	0.0000	0.004271	0.427	0.612
135	58.454	7.646	0.111	0.0000	0.004271	0.427	0.612
136	58.954	7.678	0.112	0.0000	0.004321	0.432	0.612
137	59.455	7.711	0.111	0.0000	0.004271	0.427	0.612
138	59.955	7.743	0.111	0.0000	0.004271	0.427	0.612
139	59.964	7.744	0.111	0.0000	0.004271	0.427	0.612

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.044		0.111	0.0000	0.004271	0.427	0.612
2	-0.040		0.111	0.0000	0.004271	0.427	0.612
3	-0.036		0.111	0.0000	0.004271	0.427	0.612
4	-0.031		0.112	0.0000	0.004321	0.432	0.612
5	-0.027		0.136	0.0000	0.004519	0.452	0.611
6	-0.023		0.153	0.0000	0.004619	0.462	0.611
7	-0.019		0.167	0.0000	0.004917	0.492	0.611
8	-0.014		0.180	0.0000	0.005264	0.526	0.610
9	-0.010		0.189	0.0000	0.005413	0.541	0.610
10	-0.006		0.199	0.0000	0.005562	0.556	0.610
11	-0.001		0.209	0.0000	0.005662	0.566	0.610
12	0.000	0.000	0.212	0.0000	0.005750	0.575	0.609
13	0.003	0.057	0.220	0.0000	0.006009	0.601	0.609
14	0.007	0.087	0.220	0.0000	0.006158	0.616	0.609
15	0.012	0.108	0.214	0.0000	0.006158	0.616	0.609
16	0.016	0.126	0.212	0.0000	0.006158	0.616	0.609
17	0.033	0.181	0.215	0.0000	0.006258	0.626	0.609
18	0.041	0.203	0.217	0.0000	0.006307	0.631	0.609
19	0.123	0.351	0.222	0.0000	0.006456	0.646	0.608
20	0.209	0.457	0.221	0.0000	0.006556	0.656	0.608
21	0.290	0.539	0.221	0.0000	0.006605	0.661	0.608
22	0.458	0.677	0.221	0.0000	0.006754	0.675	0.608
23	0.708	0.842	0.221	0.0000	0.006804	0.680	0.608
24	0.959	0.979	0.223	0.0000	0.006903	0.690	0.608
25	1.458	1.208	0.222	0.0000	0.007003	0.700	0.607
26	2.456	1.567	0.223	0.0000	0.007102	0.710	0.607
27	4.459	2.112	0.222	0.0000	0.007251	0.725	0.607
28	4.958	2.227	0.222	0.0000	0.007301	0.730	0.607
29	5.458	2.336	0.222	0.0000	0.007350	0.735	0.607
30	5.958	2.441	0.222	0.0000	0.007400	0.740	0.607
31	6.458	2.541	0.222	0.0000	0.007400	0.740	0.607
32	6.959	2.638	0.222	0.0000	0.007450	0.745	0.607
33	7.457	2.731	0.223	0.0000	0.007499	0.750	0.607
34	7.957	2.821	0.221	0.0000	0.007499	0.750	0.607
35	8.459	2.908	0.221	0.0000	0.007549	0.755	0.607
36	8.960	2.993	0.221	0.0000	0.007549	0.755	0.607
37	9.459	3.076	0.222	0.0000	0.007549	0.755	0.607
38	9.956	3.155	0.222	0.0000	0.007599	0.760	0.606
39	10.460	3.234	0.222	0.0000	0.007599	0.760	0.606
40	10.956	3.310	0.224	0.0000	0.007599	0.760	0.606
41	11.457	3.385	0.222	0.0000	0.007599	0.760	0.606
42	11.958	3.458	0.222	0.0000	0.007599	0.760	0.606
43	12.458	3.530	0.222	0.0000	0.007648	0.765	0.606
44	12.956	3.599	0.223	0.0000	0.007648	0.765	0.606
45	13.457	3.668	0.221	0.0000	0.007648	0.765	0.606
46	13.956	3.736	0.222	0.0000	0.007648	0.765	0.606
47	14.456	3.802	0.222	0.0000	0.007698	0.770	0.606
48	14.958	3.868	0.222	0.0000	0.007698	0.770	0.606
49	15.457	3.932	0.222	0.0000	0.007698	0.770	0.606
50	15.957	3.995	0.222	0.0000	0.007698	0.770	0.606

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.459	4.057	0.222	0.0000	0.007698	0.770	0.606
52	16.958	4.118	0.222	0.0000	0.007698	0.770	0.606
53	17.460	4.178	0.222	0.0000	0.007698	0.770	0.606
54	17.956	4.237	0.222	0.0000	0.007698	0.770	0.606
55	18.459	4.296	0.222	0.0000	0.007698	0.770	0.606
56	18.959	4.354	0.222	0.0000	0.007698	0.770	0.606
57	19.456	4.411	0.222	0.0000	0.007748	0.775	0.606
58	19.957	4.467	0.222	0.0000	0.007748	0.775	0.606
59	20.459	4.523	0.222	0.0000	0.007748	0.775	0.606
60	20.957	4.578	0.222	0.0000	0.007748	0.775	0.606
61	21.457	4.632	0.222	0.0000	0.007748	0.775	0.606
62	21.958	4.686	0.222	0.0000	0.007748	0.775	0.606
63	22.460	4.739	0.222	0.0000	0.007748	0.775	0.606
64	22.959	4.792	0.222	0.0000	0.007748	0.775	0.606
65	23.459	4.843	0.222	0.0000	0.007748	0.775	0.606
66	23.959	4.895	0.222	0.0000	0.007748	0.775	0.606
67	24.459	4.946	0.222	0.0000	0.007748	0.775	0.606
68	24.958	4.996	0.223	0.0000	0.007748	0.775	0.606
69	25.458	5.046	0.222	0.0000	0.007748	0.775	0.606
70	25.956	5.095	0.222	0.0000	0.007797	0.780	0.606
71	26.457	5.144	0.222	0.0000	0.007748	0.775	0.606
72	26.957	5.192	0.223	0.0000	0.007797	0.780	0.606
73	27.459	5.240	0.222	0.0000	0.007748	0.775	0.606
74	27.956	5.287	0.222	0.0000	0.007748	0.775	0.606
75	28.458	5.335	0.222	0.0000	0.007797	0.780	0.606
76	28.959	5.381	0.222	0.0000	0.007797	0.780	0.606
77	29.457	5.427	0.222	0.0000	0.007797	0.780	0.606
78	29.958	5.473	0.221	0.0000	0.007797	0.780	0.606
79	30.457	5.519	0.222	0.0000	0.007797	0.780	0.606
80	30.956	5.564	0.222	0.0000	0.007797	0.780	0.606
81	31.457	5.609	0.222	0.0000	0.007797	0.780	0.606
82	31.959	5.653	0.223	0.0000	0.007797	0.780	0.606
83	32.456	5.697	0.222	0.0000	0.007797	0.780	0.606
84	32.956	5.741	0.223	0.0000	0.007797	0.780	0.606
85	33.460	5.784	0.222	0.0000	0.007797	0.780	0.606
86	33.956	5.827	0.221	0.0000	0.007797	0.780	0.606
87	34.456	5.870	0.222	0.0000	0.007797	0.780	0.606
88	34.960	5.913	0.222	0.0000	0.007797	0.780	0.606
89	35.459	5.955	0.223	0.0000	0.007797	0.780	0.606
90	35.960	5.997	0.222	0.0000	0.007797	0.780	0.606
91	36.457	6.038	0.223	0.0000	0.007847	0.785	0.606
92	36.958	6.079	0.223	0.0000	0.007847	0.785	0.606
93	37.458	6.120	0.222	0.0000	0.007847	0.785	0.606
94	37.957	6.161	0.222	0.0000	0.007847	0.785	0.606
95	38.459	6.202	0.222	0.0000	0.007847	0.785	0.606
96	38.959	6.242	0.221	0.0000	0.007847	0.785	0.606
97	39.456	6.281	0.223	0.0000	0.007847	0.785	0.606
98	39.958	6.321	0.222	0.0000	0.007847	0.785	0.606
99	40.458	6.361	0.223	0.0000	0.007847	0.785	0.606
100	40.959	6.400	0.222	0.0000	0.007847	0.785	0.606

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.458	6.439	0.222	0.0000	0.007847	0.785	0.606
102	41.959	6.478	0.222	0.0000	0.007847	0.785	0.606
103	42.456	6.516	0.222	0.0000	0.007847	0.785	0.606
104	42.958	6.554	0.222	0.0000	0.007847	0.785	0.606
105	43.457	6.592	0.222	0.0000	0.007847	0.785	0.606
106	43.956	6.630	0.222	0.0000	0.007847	0.785	0.606
107	44.459	6.668	0.222	0.0000	0.007897	0.790	0.606
108	44.956	6.705	0.222	0.0000	0.007847	0.785	0.606
109	45.458	6.742	0.222	0.0000	0.007897	0.790	0.606
110	45.959	6.779	0.223	0.0000	0.007897	0.790	0.606
111	46.456	6.816	0.222	0.0000	0.007897	0.790	0.606
112	46.958	6.853	0.222	0.0000	0.007897	0.790	0.606
113	47.458	6.889	0.222	0.0000	0.007897	0.790	0.606
114	47.959	6.925	0.222	0.0000	0.007897	0.790	0.606
115	48.459	6.961	0.222	0.0000	0.007897	0.790	0.606
116	48.960	6.997	0.222	0.0000	0.007897	0.790	0.606
117	49.460	7.033	0.222	0.0000	0.007897	0.790	0.606
118	49.959	7.068	0.222	0.0000	0.007897	0.790	0.606
119	50.458	7.103	0.222	0.0000	0.007897	0.790	0.606
120	50.958	7.138	0.223	0.0000	0.007897	0.790	0.606
121	51.458	7.173	0.222	0.0000	0.007897	0.790	0.606
122	51.959	7.208	0.222	0.0000	0.007897	0.790	0.606
123	52.456	7.243	0.222	0.0000	0.007897	0.790	0.606
124	52.959	7.277	0.222	0.0000	0.007897	0.790	0.606
125	53.459	7.312	0.223	0.0000	0.007897	0.790	0.606
126	53.959	7.346	0.222	0.0000	0.007897	0.790	0.606
127	54.458	7.380	0.222	0.0000	0.007897	0.790	0.606
128	54.959	7.413	0.222	0.0000	0.007897	0.790	0.606
129	55.458	7.447	0.222	0.0000	0.007897	0.790	0.606
130	55.958	7.480	0.222	0.0000	0.007897	0.790	0.606
131	56.458	7.514	0.222	0.0000	0.007897	0.790	0.606
132	56.958	7.547	0.222	0.0000	0.007897	0.790	0.606
133	57.458	7.580	0.222	0.0000	0.007897	0.790	0.606
134	57.959	7.613	0.222	0.0000	0.007897	0.790	0.606
135	58.458	7.646	0.222	0.0000	0.007897	0.790	0.606
136	58.958	7.678	0.222	0.0000	0.007897	0.790	0.606
137	59.458	7.711	0.222	0.0000	0.007897	0.790	0.606
138	59.958	7.743	0.222	0.0000	0.007897	0.790	0.606
139	60.460	7.776	0.222	0.0000	0.007897	0.790	0.606
140	60.958	7.808	0.222	0.0000	0.007897	0.790	0.606
141	61.458	7.839	0.223	0.0000	0.007897	0.790	0.606
142	61.958	7.871	0.222	0.0000	0.007897	0.790	0.606
143	62.457	7.903	0.222	0.0000	0.007897	0.790	0.606
144	62.958	7.935	0.222	0.0000	0.007897	0.790	0.606
145	63.456	7.966	0.222	0.0000	0.007897	0.790	0.606
146	63.958	7.997	0.222	0.0000	0.007897	0.790	0.606
147	64.458	8.029	0.222	0.0000	0.007897	0.790	0.606
148	64.959	8.060	0.222	0.0000	0.007897	0.790	0.606
149	65.459	8.091	0.222	0.0000	0.007897	0.790	0.606
150	65.956	8.121	0.222	0.0000	0.007897	0.790	0.606

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.456	8.152	0.222	0.0000	0.007897	0.790	0.606
152	66.958	8.183	0.223	0.0000	0.007897	0.790	0.606
153	67.459	8.213	0.222	0.0000	0.007897	0.790	0.606
154	67.960	8.244	0.222	0.0000	0.007897	0.790	0.606
155	68.459	8.274	0.222	0.0000	0.007946	0.795	0.606
156	68.957	8.304	0.222	0.0000	0.007946	0.795	0.606
157	69.459	8.334	0.222	0.0000	0.007946	0.795	0.606
158	69.957	8.364	0.222	0.0000	0.007946	0.795	0.606
159	70.456	8.394	0.222	0.0000	0.007946	0.795	0.606
160	70.959	8.424	0.222	0.0000	0.007946	0.795	0.606
161	71.457	8.453	0.222	0.0000	0.007946	0.795	0.606
162	71.957	8.483	0.222	0.0000	0.007946	0.795	0.606
163	72.458	8.512	0.222	0.0000	0.007946	0.795	0.606
164	72.960	8.542	0.222	0.0000	0.007946	0.795	0.606
165	73.459	8.571	0.222	0.0000	0.007946	0.795	0.606
166	73.957	8.600	0.222	0.0000	0.007946	0.795	0.606
167	74.459	8.629	0.222	0.0000	0.007946	0.795	0.606
168	74.958	8.658	0.223	0.0000	0.007996	0.800	0.606
169	75.460	8.687	0.222	0.0000	0.007946	0.795	0.606
170	75.958	8.715	0.223	0.0000	0.007996	0.800	0.606
171	76.459	8.744	0.222	0.0000	0.007996	0.800	0.606
172	76.960	8.773	0.222	0.0000	0.007996	0.800	0.606
173	77.459	8.801	0.221	0.0000	0.007996	0.800	0.606
174	77.958	8.829	0.223	0.0000	0.007996	0.800	0.606
175	78.456	8.858	0.222	0.0000	0.007996	0.800	0.606
176	78.957	8.886	0.222	0.0000	0.007996	0.800	0.606
177	79.456	8.914	0.223	0.0000	0.007996	0.800	0.606
178	79.957	8.942	0.222	0.0000	0.007996	0.800	0.606
179	80.457	8.970	0.222	0.0000	0.007996	0.800	0.606
180	80.958	8.998	0.222	0.0000	0.007996	0.800	0.606
181	81.458	9.025	0.222	0.0000	0.007996	0.800	0.606
182	81.959	9.053	0.222	0.0000	0.007996	0.800	0.606
183	82.459	9.081	0.222	0.0000	0.007996	0.800	0.606
184	82.960	9.108	0.223	0.0000	0.007996	0.800	0.606
185	83.458	9.136	0.222	0.0000	0.007996	0.800	0.606
186	83.959	9.163	0.223	0.0000	0.007996	0.800	0.606
187	84.457	9.190	0.223	0.0000	0.007996	0.800	0.606
188	84.960	9.217	0.222	0.0000	0.007996	0.800	0.606
189	85.456	9.244	0.223	0.0000	0.007996	0.800	0.606
190	85.958	9.271	0.222	0.0000	0.007996	0.800	0.606
191	86.457	9.298	0.222	0.0000	0.007996	0.800	0.606
192	86.957	9.325	0.223	0.0000	0.007996	0.800	0.606
193	87.457	9.352	0.222	0.0000	0.007996	0.800	0.606
194	87.958	9.379	0.222	0.0000	0.007996	0.800	0.606
195	88.458	9.405	0.222	0.0000	0.007996	0.800	0.606
196	88.957	9.432	0.222	0.0000	0.007996	0.800	0.606
197	89.457	9.458	0.222	0.0000	0.007996	0.800	0.606
198	89.959	9.485	0.223	0.0000	0.007996	0.800	0.606
199	90.458	9.511	0.222	0.0000	0.008046	0.805	0.606
200	90.960	9.537	0.222	0.0000	0.008046	0.805	0.606

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.456	9.563	0.222	0.0000	0.008046	0.805	0.606
202	91.960	9.590	0.222	0.0000	0.008046	0.805	0.606
203	92.459	9.616	0.222	0.0000	0.008046	0.805	0.606
204	92.960	9.642	0.222	0.0000	0.008046	0.805	0.606
205	93.459	9.667	0.222	0.0000	0.008046	0.805	0.606
206	93.959	9.693	0.222	0.0000	0.008046	0.805	0.606
207	94.456	9.719	0.222	0.0000	0.008046	0.805	0.606
208	94.957	9.745	0.222	0.0000	0.008046	0.805	0.606
209	95.459	9.770	0.222	0.0000	0.008046	0.805	0.606
210	95.959	9.796	0.222	0.0000	0.008046	0.805	0.606
211	96.459	9.821	0.222	0.0000	0.008046	0.805	0.606
212	96.960	9.847	0.222	0.0000	0.008046	0.805	0.606
213	97.460	9.872	0.222	0.0000	0.008046	0.805	0.606
214	97.960	9.897	0.222	0.0000	0.008046	0.805	0.606
215	98.456	9.923	0.222	0.0000	0.008046	0.805	0.606
216	98.958	9.948	0.222	0.0000	0.008046	0.805	0.606
217	99.459	9.973	0.222	0.0000	0.008046	0.805	0.606
218	99.956	9.998	0.222	0.0000	0.008046	0.805	0.606
219	100.457	10.023	0.222	0.0000	0.008046	0.805	0.606
220	100.956	10.048	0.222	0.0000	0.008046	0.805	0.606
221	101.459	10.073	0.222	0.0000	0.008046	0.805	0.606
222	101.956	10.097	0.223	0.0000	0.008046	0.805	0.606
223	102.459	10.122	0.222	0.0000	0.008046	0.805	0.606
224	102.960	10.147	0.222	0.0000	0.008046	0.805	0.606
225	103.457	10.171	0.223	0.0000	0.008046	0.805	0.606
226	103.956	10.196	0.222	0.0000	0.008046	0.805	0.606
227	104.458	10.220	0.222	0.0000	0.008046	0.805	0.606
228	104.959	10.245	0.222	0.0000	0.008046	0.805	0.606
229	105.458	10.269	0.223	0.0000	0.008046	0.805	0.606
230	105.959	10.294	0.222	0.0000	0.008046	0.805	0.606
231	106.456	10.318	0.222	0.0000	0.008046	0.805	0.606
232	106.957	10.342	0.222	0.0000	0.008046	0.805	0.606
233	107.456	10.366	0.222	0.0000	0.008046	0.805	0.606
234	107.956	10.390	0.222	0.0000	0.008046	0.805	0.606
235	108.457	10.414	0.222	0.0000	0.008095	0.810	0.606
236	108.959	10.438	0.222	0.0000	0.008046	0.805	0.606
237	109.458	10.462	0.222	0.0000	0.008095	0.810	0.606
238	109.957	10.486	0.222	0.0000	0.008095	0.810	0.606
239	110.456	10.510	0.222	0.0000	0.008095	0.810	0.606
240	110.958	10.534	0.222	0.0000	0.008046	0.805	0.606
241	111.459	10.557	0.222	0.0000	0.008095	0.810	0.606
242	111.957	10.581	0.222	0.0000	0.008095	0.810	0.606
243	112.456	10.605	0.222	0.0000	0.008095	0.810	0.606
244	112.960	10.628	0.222	0.0000	0.008046	0.805	0.606
245	113.459	10.652	0.222	0.0000	0.008046	0.805	0.606
246	113.956	10.675	0.222	0.0000	0.008095	0.810	0.606
247	114.456	10.698	0.222	0.0000	0.008095	0.810	0.606
248	114.958	10.722	0.222	0.0000	0.008095	0.810	0.606
249	115.459	10.745	0.222	0.0000	0.008095	0.810	0.606
250	115.960	10.768	0.223	0.0000	0.008095	0.810	0.606

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.458	10.792	0.222	0.0000	0.008095	0.810	0.606
252	116.956	10.815	0.222	0.0000	0.008095	0.810	0.606
253	117.456	10.838	0.222	0.0000	0.008095	0.810	0.606
254	117.956	10.861	0.222	0.0000	0.008095	0.810	0.606
255	118.457	10.884	0.223	0.0000	0.008095	0.810	0.606
256	118.959	10.907	0.222	0.0000	0.008095	0.810	0.606
257	119.459	10.930	0.222	0.0000	0.008095	0.810	0.606
258	119.958	10.953	0.223	0.0000	0.008095	0.810	0.606
259	119.980	10.954	0.223	0.0000	0.008095	0.810	0.606

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.045		0.223	0.0000	0.008095	0.810	0.606
2	-0.041		0.223	0.0000	0.008095	0.810	0.606
3	-0.037		0.250	0.0000	0.008195	0.819	0.606
4	-0.032		0.284	0.0000	0.008344	0.834	0.605
5	-0.028		0.311	0.0000	0.008443	0.844	0.605
6	-0.024		0.334	0.0000	0.008592	0.859	0.605
7	-0.019		0.349	0.0000	0.008741	0.874	0.605
8	-0.015		0.366	0.0000	0.008840	0.884	0.604
9	-0.011		0.385	0.0000	0.009287	0.929	0.604
10	-0.006		0.403	0.0000	0.009784	0.978	0.603
11	-0.002		0.417	0.0000	0.01013	1.01	0.602
12	0.000	0.000	0.424	0.0000	0.01029	1.03	0.602
13	0.002	0.049	0.431	0.0000	0.01048	1.05	0.602
14	0.007	0.081	0.447	0.0000	0.01093	1.09	0.601
15	0.011	0.104	0.430	0.0000	0.01098	1.10	0.601
16	0.015	0.123	0.424	0.0000	0.01103	1.10	0.601
17	0.033	0.181	0.429	0.0000	0.01117	1.12	0.601
18	0.041	0.203	0.435	0.0000	0.01132	1.13	0.600
19	0.124	0.352	0.445	0.0000	0.01192	1.19	0.599
20	0.206	0.453	0.441	0.0000	0.01202	1.20	0.599
21	0.291	0.540	0.445	0.0000	0.01212	1.21	0.599
22	0.455	0.675	0.444	0.0000	0.01232	1.23	0.599
23	0.709	0.842	0.446	0.0000	0.01247	1.25	0.599
24	0.955	0.977	0.445	0.0000	0.01257	1.26	0.598
25	1.457	1.207	0.445	0.0000	0.01271	1.27	0.598
26	2.456	1.567	0.444	0.0000	0.01286	1.29	0.598
27	4.455	2.111	0.446	0.0000	0.01296	1.30	0.598
28	4.959	2.227	0.447	0.0000	0.01301	1.30	0.598
29	5.456	2.336	0.444	0.0000	0.01301	1.30	0.598
30	5.958	2.441	0.446	0.0000	0.01301	1.30	0.598
31	6.457	2.541	0.444	0.0000	0.01301	1.30	0.598
32	6.957	2.638	0.445	0.0000	0.01301	1.30	0.598
33	7.456	2.731	0.445	0.0000	0.01306	1.31	0.598
34	7.956	2.821	0.445	0.0000	0.01306	1.31	0.598
35	8.456	2.908	0.449	0.0000	0.01311	1.31	0.598
36	8.955	2.993	0.446	0.0000	0.01316	1.32	0.597
37	9.457	3.075	0.444	0.0000	0.01316	1.32	0.597
38	9.957	3.155	0.446	0.0000	0.01321	1.32	0.597
39	10.457	3.234	0.445	0.0000	0.01321	1.32	0.597
40	10.959	3.310	0.444	0.0000	0.01321	1.32	0.597
41	11.459	3.385	0.444	0.0000	0.01321	1.32	0.597
42	11.959	3.458	0.448	0.0000	0.01326	1.33	0.597
43	12.458	3.530	0.446	0.0000	0.01326	1.33	0.597
44	12.956	3.599	0.446	0.0000	0.01326	1.33	0.597
45	13.455	3.668	0.445	0.0000	0.01326	1.33	0.597
46	13.959	3.736	0.445	0.0000	0.01331	1.33	0.597
47	14.458	3.802	0.445	0.0000	0.01331	1.33	0.597
48	14.957	3.867	0.445	0.0000	0.01331	1.33	0.597
49	15.457	3.932	0.446	0.0000	0.01331	1.33	0.597
50	15.955	3.994	0.445	0.0000	0.01331	1.33	0.597

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.456	4.057	0.445	0.0000	0.01331	1.33	0.597
52	16.956	4.118	0.445	0.0000	0.01331	1.33	0.597
53	17.457	4.178	0.445	0.0000	0.01336	1.34	0.597
54	17.958	4.238	0.445	0.0000	0.01336	1.34	0.597
55	18.456	4.296	0.446	0.0000	0.01336	1.34	0.597
56	18.959	4.354	0.445	0.0000	0.01336	1.34	0.597
57	19.459	4.411	0.446	0.0000	0.01336	1.34	0.597
58	19.958	4.467	0.447	0.0000	0.01336	1.34	0.597
59	20.459	4.523	0.448	0.0000	0.01336	1.34	0.597
60	20.955	4.578	0.444	0.0000	0.01336	1.34	0.597
61	21.455	4.632	0.445	0.0000	0.01336	1.34	0.597
62	21.956	4.686	0.444	0.0000	0.01341	1.34	0.597
63	22.456	4.739	0.445	0.0000	0.01341	1.34	0.597
64	22.956	4.791	0.445	0.0000	0.01341	1.34	0.597
65	23.457	4.843	0.445	0.0000	0.01341	1.34	0.597
66	23.957	4.895	0.446	0.0000	0.01341	1.34	0.597
67	24.456	4.945	0.446	0.0000	0.01341	1.34	0.597
68	24.955	4.996	0.446	0.0000	0.01341	1.34	0.597
69	25.458	5.046	0.445	0.0000	0.01341	1.34	0.597
70	25.956	5.095	0.445	0.0000	0.01341	1.34	0.597
71	26.458	5.144	0.445	0.0000	0.01341	1.34	0.597
72	26.956	5.192	0.446	0.0000	0.01341	1.34	0.597
73	27.458	5.240	0.445	0.0000	0.01341	1.34	0.597
74	27.958	5.288	0.445	0.0000	0.01341	1.34	0.597
75	28.458	5.335	0.445	0.0000	0.01341	1.34	0.597
76	28.957	5.381	0.445	0.0000	0.01341	1.34	0.597
77	29.458	5.427	0.445	0.0000	0.01341	1.34	0.597
78	29.959	5.474	0.445	0.0000	0.01341	1.34	0.597
79	30.455	5.519	0.445	0.0000	0.01341	1.34	0.597
80	30.956	5.564	0.445	0.0000	0.01341	1.34	0.597
81	31.457	5.609	0.446	0.0000	0.01341	1.34	0.597
82	31.957	5.653	0.447	0.0000	0.01346	1.35	0.597
83	32.457	5.697	0.444	0.0000	0.01341	1.34	0.597
84	32.957	5.741	0.446	0.0000	0.01346	1.35	0.597
85	33.459	5.784	0.444	0.0000	0.01346	1.35	0.597
86	33.957	5.827	0.445	0.0000	0.01346	1.35	0.597
87	34.458	5.870	0.445	0.0000	0.01346	1.35	0.597
88	34.956	5.912	0.445	0.0000	0.01346	1.35	0.597
89	35.455	5.954	0.445	0.0000	0.01346	1.35	0.597
90	35.956	5.996	0.445	0.0000	0.01346	1.35	0.597
91	36.455	6.038	0.444	0.0000	0.01346	1.35	0.597
92	36.956	6.079	0.445	0.0000	0.01346	1.35	0.597
93	37.458	6.120	0.447	0.0000	0.01351	1.35	0.597
94	37.959	6.161	0.445	0.0000	0.01346	1.35	0.597
95	38.455	6.201	0.445	0.0000	0.01351	1.35	0.597
96	38.956	6.241	0.445	0.0000	0.01351	1.35	0.597
97	39.458	6.282	0.445	0.0000	0.01351	1.35	0.597
98	39.955	6.321	0.445	0.0000	0.01351	1.35	0.597
99	40.459	6.361	0.444	0.0000	0.01351	1.35	0.597
100	40.958	6.400	0.445	0.0000	0.01351	1.35	0.597

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.458	6.439	0.445	0.0000	0.01351	1.35	0.597
102	41.957	6.477	0.445	0.0000	0.01351	1.35	0.597
103	42.458	6.516	0.445	0.0000	0.01351	1.35	0.597
104	42.956	6.554	0.445	0.0000	0.01356	1.36	0.597
105	43.456	6.592	0.446	0.0000	0.01356	1.36	0.597
106	43.958	6.630	0.445	0.0000	0.01356	1.36	0.597
107	44.455	6.667	0.445	0.0000	0.01356	1.36	0.597
108	44.957	6.705	0.445	0.0000	0.01356	1.36	0.597
109	45.458	6.742	0.445	0.0000	0.01356	1.36	0.597
110	45.958	6.779	0.445	0.0000	0.01356	1.36	0.597
111	46.456	6.816	0.445	0.0000	0.01356	1.36	0.597
112	46.955	6.852	0.445	0.0000	0.01356	1.36	0.597
113	47.455	6.889	0.446	0.0000	0.01356	1.36	0.597
114	47.956	6.925	0.444	0.0000	0.01356	1.36	0.597
115	48.456	6.961	0.445	0.0000	0.01361	1.36	0.597
116	48.956	6.997	0.446	0.0000	0.01361	1.36	0.597
117	49.456	7.032	0.445	0.0000	0.01361	1.36	0.597
118	49.959	7.068	0.445	0.0000	0.01361	1.36	0.597
119	50.458	7.103	0.445	0.0000	0.01361	1.36	0.597
120	50.958	7.138	0.445	0.0000	0.01361	1.36	0.597
121	51.457	7.173	0.446	0.0000	0.01361	1.36	0.597
122	51.957	7.208	0.445	0.0000	0.01361	1.36	0.597
123	52.457	7.243	0.445	0.0000	0.01366	1.37	0.597
124	52.956	7.277	0.445	0.0000	0.01366	1.37	0.597
125	53.458	7.311	0.446	0.0000	0.01366	1.37	0.597
126	53.958	7.346	0.444	0.0000	0.01361	1.36	0.597
127	54.455	7.379	0.445	0.0000	0.01366	1.37	0.597
128	54.956	7.413	0.445	0.0000	0.01366	1.37	0.597
129	55.456	7.447	0.445	0.0000	0.01366	1.37	0.597
130	55.957	7.480	0.445	0.0000	0.01366	1.37	0.597
131	56.458	7.514	0.445	0.0000	0.01366	1.37	0.597
132	56.959	7.547	0.445	0.0000	0.01366	1.37	0.597
133	57.457	7.580	0.444	0.0000	0.01366	1.37	0.597
134	57.956	7.613	0.445	0.0000	0.01366	1.37	0.597
135	58.458	7.646	0.445	0.0000	0.01366	1.37	0.597
136	58.958	7.678	0.445	0.0000	0.01366	1.37	0.597
137	59.456	7.711	0.444	0.0000	0.01366	1.37	0.597
138	59.957	7.743	0.445	0.0000	0.01371	1.37	0.597
139	60.456	7.775	0.445	0.0000	0.01371	1.37	0.597
140	60.958	7.808	0.445	0.0000	0.01371	1.37	0.597
141	61.457	7.839	0.445	0.0000	0.01371	1.37	0.597
142	61.959	7.871	0.445	0.0000	0.01371	1.37	0.597
143	62.456	7.903	0.445	0.0000	0.01371	1.37	0.597
144	62.956	7.934	0.445	0.0000	0.01371	1.37	0.597
145	63.458	7.966	0.445	0.0000	0.01371	1.37	0.597
146	63.956	7.997	0.445	0.0000	0.01371	1.37	0.597
147	64.457	8.028	0.446	0.0000	0.01371	1.37	0.597
148	64.957	8.060	0.445	0.0000	0.01371	1.37	0.597
149	65.456	8.090	0.447	0.0000	0.01371	1.37	0.597
150	65.959	8.122	0.445	0.0000	0.01371	1.37	0.597

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.458	8.152	0.445	0.0000	0.01371	1.37	0.597
152	66.957	8.183	0.445	0.0000	0.01376	1.38	0.597
153	67.458	8.213	0.445	0.0000	0.01376	1.38	0.597
154	67.958	8.244	0.445	0.0000	0.01376	1.38	0.597
155	68.458	8.274	0.445	0.0000	0.01376	1.38	0.597
156	68.958	8.304	0.445	0.0000	0.01376	1.38	0.597
157	69.458	8.334	0.445	0.0000	0.01376	1.38	0.597
158	69.957	8.364	0.445	0.0000	0.01376	1.38	0.597
159	70.456	8.394	0.445	0.0000	0.01376	1.38	0.597
160	70.956	8.424	0.445	0.0000	0.01376	1.38	0.597
161	71.458	8.453	0.445	0.0000	0.01376	1.38	0.597
162	71.959	8.483	0.445	0.0000	0.01376	1.38	0.597
163	72.458	8.512	0.445	0.0000	0.01376	1.38	0.597
164	72.956	8.541	0.445	0.0000	0.01376	1.38	0.597
165	73.457	8.571	0.445	0.0000	0.01376	1.38	0.597
166	73.957	8.600	0.445	0.0000	0.01376	1.38	0.597
167	74.458	8.629	0.446	0.0000	0.01376	1.38	0.597
168	74.958	8.658	0.445	0.0000	0.01376	1.38	0.597
169	75.459	8.687	0.446	0.0000	0.01376	1.38	0.597
170	75.959	8.715	0.445	0.0000	0.01376	1.38	0.597
171	76.458	8.744	0.445	0.0000	0.01376	1.38	0.597
172	76.956	8.772	0.445	0.0000	0.01376	1.38	0.597
173	77.457	8.801	0.445	0.0000	0.01376	1.38	0.597
174	77.956	8.829	0.445	0.0000	0.01376	1.38	0.597
175	78.456	8.858	0.445	0.0000	0.01376	1.38	0.597
176	78.956	8.886	0.445	0.0000	0.01376	1.38	0.597
177	79.456	8.914	0.445	0.0000	0.01376	1.38	0.597
178	79.955	8.942	0.447	0.0000	0.01376	1.38	0.597
179	80.458	8.970	0.445	0.0000	0.01376	1.38	0.597
180	80.957	8.998	0.445	0.0000	0.01376	1.38	0.597
181	81.457	9.025	0.445	0.0000	0.01376	1.38	0.597
182	81.958	9.053	0.445	0.0000	0.01376	1.38	0.597
183	82.456	9.081	0.445	0.0000	0.01376	1.38	0.597
184	82.957	9.108	0.445	0.0000	0.01376	1.38	0.597
185	83.459	9.136	0.446	0.0000	0.01376	1.38	0.597
186	83.959	9.163	0.445	0.0000	0.01376	1.38	0.597
187	84.456	9.190	0.446	0.0000	0.01376	1.38	0.597
188	84.956	9.217	0.445	0.0000	0.01376	1.38	0.597
189	85.458	9.244	0.446	0.0000	0.01376	1.38	0.597
190	85.958	9.271	0.445	0.0000	0.01376	1.38	0.597
191	86.458	9.298	0.445	0.0000	0.01376	1.38	0.597
192	86.955	9.325	0.445	0.0000	0.01376	1.38	0.597
193	87.456	9.352	0.445	0.0000	0.01376	1.38	0.597
194	87.958	9.379	0.445	0.0000	0.01376	1.38	0.597
195	88.457	9.405	0.445	0.0000	0.01376	1.38	0.597
196	88.958	9.432	0.446	0.0000	0.01376	1.38	0.597
197	89.458	9.458	0.445	0.0000	0.01376	1.38	0.597
198	89.958	9.485	0.445	0.0000	0.01376	1.38	0.597
199	90.459	9.511	0.446	0.0000	0.01376	1.38	0.597
200	90.957	9.537	0.445	0.0000	0.01376	1.38	0.597

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.456	9.563	0.445	0.0000	0.01376	1.38	0.597
202	91.956	9.589	0.445	0.0000	0.01376	1.38	0.597
203	92.457	9.615	0.445	0.0000	0.01376	1.38	0.597
204	92.956	9.641	0.445	0.0000	0.01376	1.38	0.597
205	93.458	9.667	0.445	0.0000	0.01376	1.38	0.597
206	93.958	9.693	0.446	0.0000	0.01381	1.38	0.596
207	94.459	9.719	0.445	0.0000	0.01381	1.38	0.596
208	94.957	9.745	0.445	0.0000	0.01381	1.38	0.596
209	95.456	9.770	0.445	0.0000	0.01381	1.38	0.596
210	95.956	9.796	0.445	0.0000	0.01381	1.38	0.596
211	96.455	9.821	0.446	0.0000	0.01381	1.38	0.596
212	96.958	9.847	0.445	0.0000	0.01381	1.38	0.596
213	97.457	9.872	0.445	0.0000	0.01381	1.38	0.596
214	97.955	9.897	0.446	0.0000	0.01381	1.38	0.596
215	98.457	9.923	0.445	0.0000	0.01381	1.38	0.596
216	98.955	9.948	0.445	0.0000	0.01381	1.38	0.596
217	99.455	9.973	0.445	0.0000	0.01381	1.38	0.596
218	99.958	9.998	0.445	0.0000	0.01381	1.38	0.596
219	100.457	10.023	0.445	0.0000	0.01381	1.38	0.596
220	100.959	10.048	0.445	0.0000	0.01381	1.38	0.596
221	101.457	10.073	0.445	0.0000	0.01381	1.38	0.596
222	101.957	10.097	0.445	0.0000	0.01381	1.38	0.596
223	102.458	10.122	0.445	0.0000	0.01381	1.38	0.596
224	102.957	10.147	0.446	0.0000	0.01381	1.38	0.596
225	103.457	10.171	0.446	0.0000	0.01381	1.38	0.596
226	103.957	10.196	0.445	0.0000	0.01381	1.38	0.596
227	104.458	10.220	0.446	0.0000	0.01381	1.38	0.596
228	104.958	10.245	0.445	0.0000	0.01381	1.38	0.596
229	105.459	10.269	0.445	0.0000	0.01381	1.38	0.596
230	105.955	10.293	0.446	0.0000	0.01381	1.38	0.596
231	106.458	10.318	0.445	0.0000	0.01381	1.38	0.596
232	106.959	10.342	0.446	0.0000	0.01381	1.38	0.596
233	107.455	10.366	0.445	0.0000	0.01381	1.38	0.596
234	107.959	10.390	0.445	0.0000	0.01381	1.38	0.596
235	108.459	10.414	0.446	0.0000	0.01381	1.38	0.596
236	108.959	10.438	0.445	0.0000	0.01381	1.38	0.596
237	109.458	10.462	0.445	0.0000	0.01381	1.38	0.596
238	109.958	10.486	0.446	0.0000	0.01381	1.38	0.596
239	110.456	10.510	0.445	0.0000	0.01381	1.38	0.596
240	110.956	10.534	0.444	0.0000	0.01381	1.38	0.596
241	111.456	10.557	0.445	0.0000	0.01381	1.38	0.596
242	111.955	10.581	0.445	0.0000	0.01381	1.38	0.596
243	112.455	10.605	0.445	0.0000	0.01381	1.38	0.596
244	112.956	10.628	0.446	0.0000	0.01381	1.38	0.596
245	113.457	10.652	0.445	0.0000	0.01381	1.38	0.596
246	113.956	10.675	0.445	0.0000	0.01381	1.38	0.596
247	114.458	10.698	0.446	0.0000	0.01381	1.38	0.596
248	114.957	10.722	0.446	0.0000	0.01381	1.38	0.596
249	115.455	10.745	0.445	0.0000	0.01381	1.38	0.596
250	115.959	10.768	0.446	0.0000	0.01381	1.38	0.596

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.455	10.791	0.445	0.0000	0.01381	1.38	0.596
252	116.956	10.815	0.445	0.0000	0.01381	1.38	0.596
253	117.459	10.838	0.446	0.0000	0.01381	1.38	0.596
254	117.959	10.861	0.445	0.0000	0.01381	1.38	0.596
255	118.458	10.884	0.446	0.0000	0.01381	1.38	0.596
256	118.959	10.907	0.445	0.0000	0.01381	1.38	0.596
257	119.459	10.930	0.445	0.0000	0.01381	1.38	0.596
258	119.958	10.953	0.446	0.0000	0.01381	1.38	0.596
259	119.992	10.954	0.445	0.0000	0.01381	1.38	0.596

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6) LL=38, PL=16, PI=22, %200=40.4		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.040		0.445	0.0000	0.01381	1.38	0.596
2	-0.036		0.445	0.0000	0.01381	1.38	0.596
3	-0.032		0.495	0.0000	0.01391	1.39	0.596
4	-0.027		0.573	0.0000	0.01435	1.44	0.596
5	-0.023		0.626	0.0000	0.01500	1.50	0.595
6	-0.019		0.664	0.0000	0.01574	1.57	0.593
7	-0.014		0.705	0.0000	0.01624	1.62	0.592
8	-0.010		0.753	0.0000	0.01684	1.68	0.592
9	-0.006		0.796	0.0000	0.01728	1.73	0.591
10	-0.002		0.834	0.0000	0.01798	1.80	0.590
11	0.000	0.000	0.848	0.0000	0.01833	1.83	0.589
12	0.002	0.050	0.869	0.0000	0.01882	1.88	0.588
13	0.007	0.081	0.887	0.0000	0.01952	1.95	0.587
14	0.011	0.104	0.855	0.0000	0.01957	1.96	0.587
15	0.015	0.123	0.852	0.0000	0.01962	1.96	0.587
16	0.019	0.140	0.853	0.0000	0.01967	1.97	0.587
17	0.037	0.192	0.877	0.0000	0.01982	1.98	0.587
18	0.046	0.214	0.886	0.0000	0.02011	2.01	0.586
19	0.128	0.358	0.885	0.0000	0.02076	2.08	0.585
20	0.214	0.463	0.886	0.0000	0.02111	2.11	0.585
21	0.296	0.544	0.891	0.0000	0.02121	2.12	0.584
22	0.463	0.681	0.887	0.0000	0.02141	2.14	0.584
23	0.712	0.844	0.892	0.0000	0.02150	2.15	0.584
24	0.960	0.980	0.893	0.0000	0.02160	2.16	0.584
25	1.461	1.209	0.894	0.0000	0.02170	2.17	0.584
26	2.464	1.570	0.894	0.0000	0.02180	2.18	0.583
27	4.461	2.112	0.897	0.0000	0.02190	2.19	0.583
28	4.963	2.228	0.894	0.0000	0.02195	2.20	0.583
29	5.461	2.337	0.893	0.0000	0.02195	2.20	0.583
30	5.963	2.442	0.892	0.0000	0.02200	2.20	0.583
31	6.461	2.542	0.892	0.0000	0.02200	2.20	0.583
32	6.963	2.639	0.892	0.0000	0.02200	2.20	0.583
33	7.464	2.732	0.890	0.0000	0.02200	2.20	0.583
34	7.961	2.822	0.891	0.0000	0.02205	2.21	0.583
35	8.463	2.909	0.892	0.0000	0.02205	2.21	0.583
36	8.962	2.994	0.893	0.0000	0.02210	2.21	0.583
37	9.461	3.076	0.891	0.0000	0.02210	2.21	0.583
38	9.962	3.156	0.891	0.0000	0.02210	2.21	0.583
39	10.461	3.234	0.892	0.0000	0.02210	2.21	0.583
40	10.963	3.311	0.892	0.0000	0.02215	2.22	0.583
41	11.460	3.385	0.895	0.0000	0.02215	2.22	0.583
42	11.964	3.459	0.893	0.0000	0.02215	2.22	0.583
43	12.462	3.530	0.892	0.0000	0.02215	2.22	0.583
44	12.962	3.600	0.891	0.0000	0.02215	2.22	0.583
45	13.460	3.669	0.892	0.0000	0.02215	2.22	0.583
46	13.961	3.736	0.892	0.0000	0.02215	2.22	0.583
47	14.460	3.803	0.891	0.0000	0.02215	2.22	0.583
48	14.960	3.868	0.892	0.0000	0.02215	2.22	0.583
49	15.464	3.932	0.892	0.0000	0.02220	2.22	0.583
50	15.964	3.995	0.892	0.0000	0.02215	2.22	0.583

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.462	4.057	0.891	0.0000	0.02220	2.22	0.583
52	16.964	4.119	0.892	0.0000	0.02220	2.22	0.583
53	17.463	4.179	0.893	0.0000	0.02220	2.22	0.583
54	17.963	4.238	0.893	0.0000	0.02220	2.22	0.583
55	18.461	4.297	0.892	0.0000	0.02220	2.22	0.583
56	18.961	4.354	0.892	0.0000	0.02220	2.22	0.583
57	19.462	4.412	0.892	0.0000	0.02220	2.22	0.583
58	19.963	4.468	0.892	0.0000	0.02220	2.22	0.583
59	20.463	4.524	0.893	0.0000	0.02220	2.22	0.583
60	20.964	4.579	0.892	0.0000	0.02225	2.22	0.583
61	21.462	4.633	0.892	0.0000	0.02225	2.22	0.583
62	21.963	4.686	0.892	0.0000	0.02225	2.22	0.583
63	22.461	4.739	0.892	0.0000	0.02225	2.22	0.583
64	22.963	4.792	0.892	0.0000	0.02225	2.22	0.583
65	23.461	4.844	0.894	0.0000	0.02225	2.22	0.583
66	23.961	4.895	0.892	0.0000	0.02225	2.22	0.583
67	24.460	4.946	0.892	0.0000	0.02225	2.22	0.583
68	24.964	4.996	0.893	0.0000	0.02225	2.22	0.583
69	25.461	5.046	0.892	0.0000	0.02225	2.22	0.583
70	25.960	5.095	0.892	0.0000	0.02225	2.22	0.583
71	26.463	5.144	0.892	0.0000	0.02225	2.22	0.583
72	26.962	5.193	0.892	0.0000	0.02225	2.22	0.583
73	27.462	5.240	0.892	0.0000	0.02225	2.22	0.583
74	27.961	5.288	0.892	0.0000	0.02220	2.22	0.583
75	28.462	5.335	0.892	0.0000	0.02225	2.22	0.583
76	28.960	5.381	0.892	0.0000	0.02225	2.22	0.583
77	29.463	5.428	0.892	0.0000	0.02225	2.22	0.583
78	29.962	5.474	0.892	0.0000	0.02225	2.22	0.583
79	30.463	5.519	0.892	0.0000	0.02225	2.22	0.583
80	30.964	5.564	0.892	0.0000	0.02225	2.22	0.583
81	31.463	5.609	0.892	0.0000	0.02225	2.22	0.583
82	31.961	5.653	0.892	0.0000	0.02225	2.22	0.583
83	32.464	5.698	0.892	0.0000	0.02225	2.22	0.583
84	32.962	5.741	0.892	0.0000	0.02225	2.22	0.583
85	33.462	5.785	0.892	0.0000	0.02225	2.22	0.583
86	33.962	5.828	0.892	0.0000	0.02225	2.22	0.583
87	34.462	5.870	0.892	0.0000	0.02225	2.22	0.583
88	34.962	5.913	0.892	0.0000	0.02225	2.22	0.583
89	35.461	5.955	0.892	0.0000	0.02225	2.22	0.583
90	35.961	5.997	0.892	0.0000	0.02220	2.22	0.583
91	36.461	6.038	0.892	0.0000	0.02225	2.22	0.583
92	36.964	6.080	0.892	0.0000	0.02220	2.22	0.583
93	37.460	6.120	0.892	0.0000	0.02225	2.22	0.583
94	37.962	6.161	0.892	0.0000	0.02225	2.22	0.583
95	38.461	6.202	0.892	0.0000	0.02225	2.22	0.583
96	38.962	6.242	0.893	0.0000	0.02220	2.22	0.583
97	39.462	6.282	0.892	0.0000	0.02220	2.22	0.583
98	39.963	6.322	0.892	0.0000	0.02220	2.22	0.583
99	40.462	6.361	0.892	0.0000	0.02220	2.22	0.583
100	40.963	6.400	0.891	0.0000	0.02220	2.22	0.583

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.462	6.439	0.892	0.0000	0.02220	2.22	0.583
102	41.963	6.478	0.892	0.0000	0.02220	2.22	0.583
103	42.464	6.516	0.893	0.0000	0.02225	2.22	0.583
104	42.962	6.555	0.892	0.0000	0.02220	2.22	0.583
105	43.461	6.593	0.893	0.0000	0.02225	2.22	0.583
106	43.963	6.630	0.892	0.0000	0.02225	2.22	0.583
107	44.462	6.668	0.892	0.0000	0.02225	2.22	0.583
108	44.963	6.705	0.893	0.0000	0.02225	2.22	0.583
109	45.464	6.743	0.893	0.0000	0.02225	2.22	0.583
110	45.961	6.779	0.892	0.0000	0.02225	2.22	0.583
111	46.460	6.816	0.892	0.0000	0.02225	2.22	0.583
112	46.962	6.853	0.892	0.0000	0.02225	2.22	0.583
113	47.463	6.889	0.891	0.0000	0.02225	2.22	0.583
114	47.964	6.926	0.892	0.0000	0.02225	2.22	0.583
115	48.461	6.961	0.891	0.0000	0.02225	2.22	0.583
116	48.961	6.997	0.892	0.0000	0.02225	2.22	0.583
117	49.461	7.033	0.892	0.0000	0.02225	2.22	0.583
118	49.962	7.068	0.892	0.0000	0.02225	2.22	0.583
119	50.463	7.104	0.893	0.0000	0.02225	2.22	0.583
120	50.964	7.139	0.892	0.0000	0.02225	2.22	0.583
121	51.462	7.174	0.893	0.0000	0.02225	2.22	0.583
122	51.963	7.209	0.892	0.0000	0.02225	2.22	0.583
123	52.461	7.243	0.892	0.0000	0.02225	2.22	0.583
124	52.963	7.278	0.893	0.0000	0.02225	2.22	0.583
125	53.461	7.312	0.895	0.0000	0.02225	2.22	0.583
126	53.962	7.346	0.892	0.0000	0.02225	2.22	0.583
127	54.461	7.380	0.892	0.0000	0.02225	2.22	0.583
128	54.963	7.414	0.892	0.0000	0.02230	2.23	0.583
129	55.462	7.447	0.891	0.0000	0.02230	2.23	0.583
130	55.962	7.481	0.893	0.0000	0.02230	2.23	0.583
131	56.463	7.514	0.891	0.0000	0.02230	2.23	0.583
132	56.961	7.547	0.891	0.0000	0.02230	2.23	0.583
133	57.463	7.580	0.892	0.0000	0.02230	2.23	0.583
134	57.963	7.613	0.892	0.0000	0.02230	2.23	0.583
135	58.463	7.646	0.893	0.0000	0.02235	2.23	0.583
136	58.961	7.679	0.892	0.0000	0.02235	2.23	0.583
137	59.460	7.711	0.892	0.0000	0.02240	2.24	0.583
138	59.964	7.744	0.892	0.0000	0.02240	2.24	0.583
139	60.463	7.776	0.892	0.0000	0.02240	2.24	0.583
140	60.963	7.808	0.892	0.0000	0.02240	2.24	0.583
141	61.463	7.840	0.893	0.0000	0.02245	2.24	0.582
142	61.964	7.872	0.891	0.0000	0.02245	2.24	0.582
143	62.462	7.903	0.892	0.0000	0.02245	2.24	0.582
144	62.961	7.935	0.892	0.0000	0.02245	2.24	0.582
145	63.462	7.966	0.892	0.0000	0.02245	2.24	0.582
146	63.960	7.998	0.891	0.0000	0.02245	2.24	0.582
147	64.460	8.029	0.893	0.0000	0.02245	2.24	0.582
148	64.960	8.060	0.892	0.0000	0.02245	2.24	0.582
149	65.460	8.091	0.892	0.0000	0.02245	2.24	0.582
150	65.962	8.122	0.892	0.0000	0.02245	2.24	0.582

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.463	8.153	0.892	0.0000	0.02245	2.24	0.582
152	66.960	8.183	0.892	0.0000	0.02250	2.25	0.582
153	67.462	8.214	0.892	0.0000	0.02250	2.25	0.582
154	67.964	8.244	0.891	0.0000	0.02250	2.25	0.582
155	68.461	8.274	0.892	0.0000	0.02250	2.25	0.582
156	68.961	8.304	0.892	0.0000	0.02250	2.25	0.582
157	69.464	8.335	0.892	0.0000	0.02250	2.25	0.582
158	69.960	8.364	0.892	0.0000	0.02250	2.25	0.582
159	70.460	8.394	0.892	0.0000	0.02250	2.25	0.582
160	70.961	8.424	0.893	0.0000	0.02250	2.25	0.582
161	71.464	8.454	0.893	0.0000	0.02250	2.25	0.582
162	71.961	8.483	0.891	0.0000	0.02255	2.25	0.582
163	72.462	8.512	0.891	0.0000	0.02250	2.25	0.582
164	72.961	8.542	0.891	0.0000	0.02250	2.25	0.582
165	73.463	8.571	0.892	0.0000	0.02250	2.25	0.582
166	73.961	8.600	0.892	0.0000	0.02255	2.25	0.582
167	74.463	8.629	0.891	0.0000	0.02255	2.25	0.582
168	74.964	8.658	0.892	0.0000	0.02255	2.25	0.582
169	75.463	8.687	0.892	0.0000	0.02255	2.25	0.582
170	75.964	8.716	0.892	0.0000	0.02255	2.25	0.582
171	76.463	8.744	0.892	0.0000	0.02255	2.25	0.582
172	76.963	8.773	0.892	0.0000	0.02255	2.25	0.582
173	77.460	8.801	0.892	0.0000	0.02255	2.25	0.582
174	77.963	8.830	0.892	0.0000	0.02255	2.25	0.582
175	78.460	8.858	0.892	0.0000	0.02255	2.25	0.582
176	78.964	8.886	0.892	0.0000	0.02255	2.25	0.582
177	79.463	8.914	0.892	0.0000	0.02255	2.25	0.582
178	79.964	8.942	0.892	0.0000	0.02255	2.25	0.582
179	80.464	8.970	0.892	0.0000	0.02255	2.25	0.582
180	80.963	8.998	0.893	0.0000	0.02255	2.25	0.582
181	81.463	9.026	0.893	0.0000	0.02255	2.25	0.582
182	81.964	9.053	0.893	0.0000	0.02255	2.25	0.582
183	82.461	9.081	0.892	0.0000	0.02255	2.25	0.582
184	82.962	9.108	0.891	0.0000	0.02260	2.26	0.582
185	83.462	9.136	0.892	0.0000	0.02260	2.26	0.582
186	83.962	9.163	0.893	0.0000	0.02260	2.26	0.582
187	84.462	9.190	0.891	0.0000	0.02260	2.26	0.582
188	84.960	9.217	0.893	0.0000	0.02260	2.26	0.582
189	85.461	9.244	0.893	0.0000	0.02260	2.26	0.582
190	85.961	9.272	0.891	0.0000	0.02260	2.26	0.582
191	86.461	9.298	0.892	0.0000	0.02260	2.26	0.582
192	86.962	9.325	0.892	0.0000	0.02260	2.26	0.582
193	87.462	9.352	0.892	0.0000	0.02260	2.26	0.582
194	87.961	9.379	0.892	0.0000	0.02260	2.26	0.582
195	88.464	9.406	0.892	0.0000	0.02260	2.26	0.582
196	88.963	9.432	0.892	0.0000	0.02260	2.26	0.582
197	89.462	9.458	0.892	0.0000	0.02260	2.26	0.582
198	89.964	9.485	0.892	0.0000	0.02265	2.26	0.582
199	90.461	9.511	0.893	0.0000	0.02260	2.26	0.582
200	90.963	9.537	0.892	0.0000	0.02265	2.26	0.582

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.462	9.564	0.892	0.0000	0.02265	2.26	0.582
202	91.963	9.590	0.892	0.0000	0.02265	2.26	0.582
203	92.462	9.616	0.892	0.0000	0.02265	2.26	0.582
204	92.961	9.642	0.893	0.0000	0.02265	2.26	0.582
205	93.461	9.668	0.892	0.0000	0.02260	2.26	0.582
206	93.964	9.693	0.892	0.0000	0.02260	2.26	0.582
207	94.463	9.719	0.892	0.0000	0.02265	2.26	0.582
208	94.960	9.745	0.893	0.0000	0.02265	2.26	0.582
209	95.461	9.770	0.892	0.0000	0.02265	2.26	0.582
210	95.960	9.796	0.892	0.0000	0.02265	2.26	0.582
211	96.460	9.821	0.893	0.0000	0.02265	2.26	0.582
212	96.961	9.847	0.891	0.0000	0.02265	2.26	0.582
213	97.463	9.872	0.892	0.0000	0.02265	2.26	0.582
214	97.964	9.898	0.892	0.0000	0.02265	2.26	0.582
215	98.464	9.923	0.892	0.0000	0.02265	2.26	0.582
216	98.964	9.948	0.892	0.0000	0.02265	2.26	0.582
217	99.462	9.973	0.892	0.0000	0.02265	2.26	0.582
218	99.963	9.998	0.892	0.0000	0.02265	2.26	0.582
219	100.460	10.023	0.893	0.0000	0.02265	2.26	0.582
220	100.962	10.048	0.893	0.0000	0.02265	2.26	0.582
221	101.463	10.073	0.892	0.0000	0.02265	2.26	0.582
222	101.964	10.098	0.892	0.0000	0.02265	2.26	0.582
223	102.462	10.122	0.892	0.0000	0.02265	2.26	0.582
224	102.964	10.147	0.892	0.0000	0.02265	2.26	0.582
225	103.464	10.172	0.892	0.0000	0.02265	2.26	0.582
226	103.961	10.196	0.893	0.0000	0.02265	2.26	0.582
227	104.461	10.221	0.892	0.0000	0.02265	2.26	0.582
228	104.961	10.245	0.892	0.0000	0.02265	2.26	0.582
229	105.460	10.269	0.892	0.0000	0.02270	2.27	0.582
230	105.962	10.294	0.893	0.0000	0.02265	2.26	0.582
231	106.463	10.318	0.892	0.0000	0.02270	2.27	0.582
232	106.963	10.342	0.892	0.0000	0.02265	2.26	0.582
233	107.463	10.366	0.892	0.0000	0.02265	2.26	0.582
234	107.963	10.391	0.893	0.0000	0.02265	2.26	0.582
235	108.462	10.414	0.891	0.0000	0.02265	2.26	0.582
236	108.963	10.439	0.892	0.0000	0.02265	2.26	0.582
237	109.463	10.462	0.893	0.0000	0.02270	2.27	0.582
238	109.962	10.486	0.892	0.0000	0.02270	2.27	0.582
239	110.462	10.510	0.893	0.0000	0.02270	2.27	0.582
240	110.962	10.534	0.892	0.0000	0.02270	2.27	0.582
241	111.463	10.558	0.893	0.0000	0.02270	2.27	0.582
242	111.963	10.581	0.892	0.0000	0.02270	2.27	0.582
243	112.460	10.605	0.892	0.0000	0.02270	2.27	0.582
244	112.963	10.628	0.892	0.0000	0.02270	2.27	0.582
245	113.460	10.652	0.892	0.0000	0.02270	2.27	0.582
246	113.964	10.675	0.893	0.0000	0.02270	2.27	0.582
247	114.464	10.699	0.892	0.0000	0.02270	2.27	0.582
248	114.962	10.722	0.893	0.0000	0.02270	2.27	0.582
249	115.463	10.745	0.893	0.0000	0.02270	2.27	0.582
250	115.960	10.768	0.892	0.0000	0.02270	2.27	0.582

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.462	10.792	0.892	0.0000	0.02270	2.27	0.582
252	116.962	10.815	0.892	0.0000	0.02270	2.27	0.582
253	117.461	10.838	0.892	0.0000	0.02270	2.27	0.582
254	117.963	10.861	0.892	0.0000	0.02270	2.27	0.582
255	118.463	10.884	0.892	0.0000	0.02270	2.27	0.582
256	118.963	10.907	0.892	0.0000	0.02270	2.27	0.582
257	119.461	10.930	0.892	0.0000	0.02270	2.27	0.582
258	119.964	10.953	0.893	0.0000	0.02270	2.27	0.582
259	120.462	10.976	0.892	0.0000	0.02270	2.27	0.582
260	120.962	10.998	0.892	0.0000	0.02270	2.27	0.582
261	121.460	11.021	0.892	0.0000	0.02270	2.27	0.582
262	121.963	11.044	0.892	0.0000	0.02270	2.27	0.582
263	122.460	11.066	0.892	0.0000	0.02270	2.27	0.582
264	122.963	11.089	0.892	0.0000	0.02270	2.27	0.582
265	123.464	11.111	0.891	0.0000	0.02270	2.27	0.582
266	123.961	11.134	0.892	0.0000	0.02270	2.27	0.582
267	124.460	11.156	0.892	0.0000	0.02270	2.27	0.582
268	124.961	11.179	0.893	0.0000	0.02270	2.27	0.582
269	125.464	11.201	0.892	0.0000	0.02270	2.27	0.582
270	125.961	11.223	0.892	0.0000	0.02270	2.27	0.582
271	126.461	11.245	0.891	0.0000	0.02270	2.27	0.582
272	126.961	11.268	0.892	0.0000	0.02270	2.27	0.582
273	127.460	11.290	0.892	0.0000	0.02270	2.27	0.582
274	127.963	11.312	0.892	0.0000	0.02275	2.27	0.582
275	128.464	11.334	0.892	0.0000	0.02275	2.27	0.582
276	128.961	11.356	0.892	0.0000	0.02275	2.27	0.582
277	129.463	11.378	0.892	0.0000	0.02275	2.27	0.582
278	129.960	11.400	0.892	0.0000	0.02275	2.27	0.582
279	130.464	11.422	0.892	0.0000	0.02275	2.27	0.582
280	130.962	11.444	0.892	0.0000	0.02275	2.27	0.582
281	131.462	11.466	0.893	0.0000	0.02275	2.27	0.582
282	131.960	11.487	0.892	0.0000	0.02275	2.27	0.582
283	132.462	11.509	0.892	0.0000	0.02275	2.27	0.582
284	132.963	11.531	0.893	0.0000	0.02275	2.27	0.582
285	133.461	11.553	0.892	0.0000	0.02275	2.27	0.582
286	133.963	11.574	0.892	0.0000	0.02275	2.27	0.582
287	134.462	11.596	0.892	0.0000	0.02275	2.27	0.582
288	134.962	11.617	0.892	0.0000	0.02275	2.27	0.582
289	135.463	11.639	0.892	0.0000	0.02275	2.27	0.582
290	135.963	11.660	0.892	0.0000	0.02275	2.27	0.582
291	136.460	11.682	0.891	0.0000	0.02275	2.27	0.582
292	136.963	11.703	0.892	0.0000	0.02275	2.27	0.582
293	137.463	11.724	0.892	0.0000	0.02275	2.27	0.582
294	137.963	11.746	0.892	0.0000	0.02275	2.27	0.582
295	138.464	11.767	0.892	0.0000	0.02275	2.27	0.582
296	138.963	11.788	0.891	0.0000	0.02275	2.27	0.582
297	139.462	11.809	0.892	0.0000	0.02275	2.27	0.582
298	139.960	11.830	0.892	0.0000	0.02275	2.27	0.582
299	140.463	11.852	0.892	0.0000	0.02275	2.27	0.582
300	140.960	11.873	0.892	0.0000	0.02275	2.27	0.582

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.462	11.894	0.892	0.0000	0.02275	2.27	0.582
302	141.963	11.915	0.892	0.0000	0.02275	2.27	0.582
303	142.462	11.936	0.892	0.0000	0.02275	2.27	0.582
304	142.964	11.957	0.893	0.0000	0.02275	2.27	0.582
305	143.464	11.978	0.891	0.0000	0.02275	2.27	0.582
306	143.962	11.998	0.893	0.0000	0.02275	2.27	0.582
307	144.462	12.019	0.892	0.0000	0.02275	2.27	0.582
308	144.960	12.040	0.892	0.0000	0.02280	2.28	0.582
309	145.461	12.061	0.892	0.0000	0.02275	2.27	0.582
310	145.960	12.081	0.892	0.0000	0.02275	2.27	0.582
311	146.461	12.102	0.892	0.0000	0.02280	2.28	0.582
312	146.961	12.123	0.892	0.0000	0.02275	2.27	0.582
313	147.461	12.143	0.892	0.0000	0.02280	2.28	0.582
314	147.962	12.164	0.892	0.0000	0.02280	2.28	0.582
315	148.460	12.184	0.892	0.0000	0.02280	2.28	0.582
316	148.961	12.205	0.893	0.0000	0.02280	2.28	0.582
317	149.463	12.226	0.892	0.0000	0.02280	2.28	0.582
318	149.961	12.246	0.893	0.0000	0.02280	2.28	0.582
319	150.461	12.266	0.893	0.0000	0.02280	2.28	0.582
320	150.963	12.287	0.892	0.0000	0.02280	2.28	0.582
321	151.462	12.307	0.892	0.0000	0.02280	2.28	0.582
322	151.964	12.327	0.892	0.0000	0.02280	2.28	0.582
323	152.461	12.348	0.892	0.0000	0.02280	2.28	0.582
324	152.963	12.368	0.893	0.0000	0.02280	2.28	0.582
325	153.460	12.388	0.892	0.0000	0.02280	2.28	0.582
326	153.961	12.408	0.893	0.0000	0.02280	2.28	0.582
327	154.462	12.428	0.892	0.0000	0.02280	2.28	0.582
328	154.963	12.448	0.892	0.0000	0.02280	2.28	0.582
329	155.464	12.469	0.892	0.0000	0.02280	2.28	0.582
330	155.964	12.489	0.892	0.0000	0.02280	2.28	0.582
331	156.460	12.508	0.893	0.0000	0.02280	2.28	0.582
332	156.964	12.529	0.892	0.0000	0.02280	2.28	0.582
333	157.464	12.548	0.892	0.0000	0.02280	2.28	0.582
334	157.960	12.568	0.893	0.0000	0.02280	2.28	0.582
335	158.461	12.588	0.892	0.0000	0.02280	2.28	0.582
336	158.961	12.608	0.893	0.0000	0.02280	2.28	0.582
337	159.464	12.628	0.892	0.0000	0.02280	2.28	0.582
338	159.962	12.648	0.892	0.0000	0.02280	2.28	0.582
339	160.462	12.667	0.892	0.0000	0.02280	2.28	0.582
340	160.964	12.687	0.892	0.0000	0.02280	2.28	0.582
341	161.463	12.707	0.892	0.0000	0.02280	2.28	0.582
342	161.963	12.726	0.892	0.0000	0.02280	2.28	0.582
343	162.461	12.746	0.892	0.0000	0.02280	2.28	0.582
344	162.960	12.766	0.892	0.0000	0.02280	2.28	0.582
345	163.462	12.785	0.893	0.0000	0.02280	2.28	0.582
346	163.963	12.805	0.892	0.0000	0.02280	2.28	0.582
347	164.461	12.824	0.893	0.0000	0.02280	2.28	0.582
348	164.962	12.844	0.892	0.0000	0.02280	2.28	0.582
349	165.461	12.863	0.893	0.0000	0.02280	2.28	0.582
350	165.960	12.883	0.892	0.0000	0.02280	2.28	0.582

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.460	12.902	0.892	0.0000	0.02280	2.28	0.582
352	166.962	12.921	0.892	0.0000	0.02280	2.28	0.582
353	167.463	12.941	0.892	0.0000	0.02280	2.28	0.582
354	167.962	12.960	0.892	0.0000	0.02280	2.28	0.582
355	168.460	12.979	0.892	0.0000	0.02280	2.28	0.582
356	168.963	12.999	0.892	0.0000	0.02280	2.28	0.582
357	169.463	13.018	0.892	0.0000	0.02280	2.28	0.582
358	169.964	13.037	0.892	0.0000	0.02280	2.28	0.582
359	170.460	13.056	0.892	0.0000	0.02280	2.28	0.582
360	170.961	13.075	0.893	0.0000	0.02285	2.28	0.582
361	171.464	13.094	0.892	0.0000	0.02280	2.28	0.582
362	171.962	13.113	0.892	0.0000	0.02280	2.28	0.582
363	172.462	13.132	0.892	0.0000	0.02280	2.28	0.582
364	172.961	13.151	0.892	0.0000	0.02280	2.28	0.582
365	173.462	13.170	0.892	0.0000	0.02280	2.28	0.582
366	173.962	13.189	0.892	0.0000	0.02280	2.28	0.582
367	174.462	13.208	0.892	0.0000	0.02285	2.28	0.582
368	174.964	13.227	0.893	0.0000	0.02285	2.28	0.582
369	175.464	13.246	0.892	0.0000	0.02285	2.28	0.582
370	175.960	13.265	0.892	0.0000	0.02280	2.28	0.582
371	176.461	13.284	0.892	0.0000	0.02285	2.28	0.582
372	176.962	13.303	0.892	0.0000	0.02285	2.28	0.582
373	177.461	13.321	0.892	0.0000	0.02285	2.28	0.582
374	177.964	13.340	0.892	0.0000	0.02285	2.28	0.582
375	178.460	13.359	0.892	0.0000	0.02285	2.28	0.582
376	178.963	13.378	0.893	0.0000	0.02285	2.28	0.582
377	179.461	13.396	0.892	0.0000	0.02285	2.28	0.582
378	179.964	13.415	0.892	0.0000	0.02285	2.28	0.582
379	180.464	13.434	0.892	0.0000	0.02285	2.28	0.582
380	180.960	13.452	0.892	0.0000	0.02285	2.28	0.582
381	181.461	13.471	0.892	0.0000	0.02285	2.28	0.582
382	181.963	13.489	0.892	0.0000	0.02285	2.28	0.582
383	182.463	13.508	0.892	0.0000	0.02285	2.28	0.582
384	182.960	13.526	0.892	0.0000	0.02285	2.28	0.582
385	183.463	13.545	0.892	0.0000	0.02285	2.28	0.582
386	183.964	13.563	0.892	0.0000	0.02285	2.28	0.582
387	184.463	13.582	0.892	0.0000	0.02285	2.28	0.582
388	184.963	13.600	0.892	0.0000	0.02285	2.28	0.582
389	185.463	13.618	0.892	0.0000	0.02285	2.28	0.582
390	185.961	13.637	0.892	0.0000	0.02285	2.28	0.582
391	186.462	13.655	0.892	0.0000	0.02285	2.28	0.582
392	186.963	13.673	0.892	0.0000	0.02285	2.28	0.582
393	187.462	13.692	0.892	0.0000	0.02285	2.28	0.582
394	187.962	13.710	0.892	0.0000	0.02285	2.28	0.582
395	188.462	13.728	0.893	0.0000	0.02285	2.28	0.582
396	188.963	13.746	0.892	0.0000	0.02285	2.28	0.582
397	189.463	13.765	0.893	0.0000	0.02290	2.29	0.582
398	189.964	13.783	0.892	0.0000	0.02290	2.29	0.582
399	190.463	13.801	0.892	0.0000	0.02290	2.29	0.582
400	190.961	13.819	0.892	0.0000	0.02290	2.29	0.582

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.463	13.837	0.892	0.0000	0.02290	2.29	0.582
402	191.964	13.855	0.892	0.0000	0.02290	2.29	0.582
403	192.460	13.873	0.892	0.0000	0.02290	2.29	0.582
404	192.962	13.891	0.892	0.0000	0.02290	2.29	0.582
405	193.462	13.909	0.893	0.0000	0.02290	2.29	0.582
406	193.960	13.927	0.892	0.0000	0.02290	2.29	0.582
407	194.460	13.945	0.893	0.0000	0.02290	2.29	0.582
408	194.964	13.963	0.892	0.0000	0.02290	2.29	0.582
409	195.464	13.981	0.892	0.0000	0.02290	2.29	0.582
410	195.961	13.999	0.892	0.0000	0.02290	2.29	0.582
411	196.464	14.017	0.892	0.0000	0.02290	2.29	0.582
412	196.960	14.034	0.893	0.0000	0.02290	2.29	0.582
413	197.461	14.052	0.892	0.0000	0.02290	2.29	0.582
414	197.961	14.070	0.892	0.0000	0.02290	2.29	0.582
415	198.464	14.088	0.892	0.0000	0.02290	2.29	0.582
416	198.961	14.105	0.893	0.0000	0.02290	2.29	0.582
417	199.463	14.123	0.892	0.0000	0.02290	2.29	0.582
418	199.963	14.141	0.892	0.0000	0.02290	2.29	0.582
419	200.461	14.158	0.891	0.0000	0.02290	2.29	0.582
420	200.962	14.176	0.893	0.0000	0.02290	2.29	0.582
421	201.464	14.194	0.892	0.0000	0.02290	2.29	0.582
422	201.961	14.211	0.892	0.0000	0.02290	2.29	0.582
423	202.462	14.229	0.892	0.0000	0.02290	2.29	0.582
424	202.963	14.247	0.893	0.0000	0.02290	2.29	0.582
425	203.461	14.264	0.892	0.0000	0.02290	2.29	0.582
426	203.963	14.282	0.893	0.0000	0.02290	2.29	0.582
427	204.464	14.299	0.892	0.0000	0.02290	2.29	0.582
428	204.963	14.317	0.892	0.0000	0.02290	2.29	0.582
429	205.463	14.334	0.892	0.0000	0.02290	2.29	0.582
430	205.960	14.351	0.892	0.0000	0.02290	2.29	0.582
431	206.462	14.369	0.893	0.0000	0.02290	2.29	0.582
432	206.962	14.386	0.892	0.0000	0.02290	2.29	0.582
433	207.462	14.404	0.892	0.0000	0.02290	2.29	0.582
434	207.962	14.421	0.893	0.0000	0.02290	2.29	0.582
435	208.462	14.438	0.892	0.0000	0.02290	2.29	0.582
436	208.960	14.455	0.892	0.0000	0.02290	2.29	0.582
437	209.462	14.473	0.892	0.0000	0.02290	2.29	0.582
438	209.961	14.490	0.891	0.0000	0.02290	2.29	0.582
439	210.463	14.507	0.892	0.0000	0.02290	2.29	0.582
440	210.964	14.525	0.892	0.0000	0.02290	2.29	0.582
441	211.462	14.542	0.892	0.0000	0.02290	2.29	0.582
442	211.964	14.559	0.892	0.0000	0.02290	2.29	0.582
443	212.460	14.576	0.892	0.0000	0.02290	2.29	0.582
444	212.964	14.593	0.892	0.0000	0.02290	2.29	0.582
445	213.461	14.610	0.892	0.0000	0.02290	2.29	0.582
446	213.963	14.627	0.892	0.0000	0.02290	2.29	0.582
447	214.463	14.645	0.892	0.0000	0.02290	2.29	0.582
448	214.962	14.662	0.892	0.0000	0.02290	2.29	0.582
449	215.463	14.679	0.893	0.0000	0.02295	2.29	0.582
450	215.964	14.696	0.892	0.0000	0.02290	2.29	0.582

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.461	14.713	0.893	0.0000	0.02295	2.29	0.582
452	216.961	14.730	0.892	0.0000	0.02295	2.29	0.582
453	217.461	14.747	0.892	0.0000	0.02295	2.29	0.582
454	217.963	14.764	0.893	0.0000	0.02295	2.29	0.582
455	218.461	14.780	0.892	0.0000	0.02295	2.29	0.582
456	218.962	14.797	0.892	0.0000	0.02295	2.29	0.582
457	219.462	14.814	0.892	0.0000	0.02295	2.29	0.582
458	219.961	14.831	0.892	0.0000	0.02295	2.29	0.582
459	220.463	14.848	0.892	0.0000	0.02295	2.29	0.582
460	220.961	14.865	0.892	0.0000	0.02295	2.29	0.582
461	221.463	14.882	0.892	0.0000	0.02295	2.29	0.582
462	221.963	14.898	0.892	0.0000	0.02295	2.29	0.582
463	222.463	14.915	0.892	0.0000	0.02295	2.29	0.582
464	222.962	14.932	0.892	0.0000	0.02295	2.29	0.582
465	223.463	14.949	0.892	0.0000	0.02295	2.29	0.582
466	223.963	14.965	0.892	0.0000	0.02295	2.29	0.582
467	224.461	14.982	0.892	0.0000	0.02295	2.29	0.582
468	224.960	14.999	0.892	0.0000	0.02295	2.29	0.582
469	225.461	15.015	0.892	0.0000	0.02295	2.29	0.582
470	225.961	15.032	0.892	0.0000	0.02295	2.29	0.582
471	226.464	15.049	0.892	0.0000	0.02295	2.29	0.582
472	226.962	15.065	0.892	0.0000	0.02295	2.29	0.582
473	227.461	15.082	0.892	0.0000	0.02295	2.29	0.582
474	227.962	15.098	0.892	0.0000	0.02295	2.29	0.582
475	228.463	15.115	0.892	0.0000	0.02295	2.29	0.582
476	228.964	15.132	0.892	0.0000	0.02295	2.29	0.582
477	229.461	15.148	0.892	0.0000	0.02295	2.29	0.582
478	229.963	15.165	0.892	0.0000	0.02295	2.29	0.582
479	230.460	15.181	0.892	0.0000	0.02295	2.29	0.582
480	230.964	15.198	0.892	0.0000	0.02295	2.29	0.582
481	231.461	15.214	0.892	0.0000	0.02295	2.29	0.582
482	231.960	15.230	0.892	0.0000	0.02295	2.29	0.582
483	232.462	15.247	0.892	0.0000	0.02295	2.29	0.582
484	232.962	15.263	0.892	0.0000	0.02295	2.29	0.582
485	233.463	15.279	0.892	0.0000	0.02295	2.29	0.582
486	233.963	15.296	0.892	0.0000	0.02295	2.29	0.582
487	234.460	15.312	0.892	0.0000	0.02295	2.29	0.582
488	234.961	15.328	0.893	0.0000	0.02295	2.29	0.582
489	235.463	15.345	0.892	0.0000	0.02295	2.29	0.582
490	235.963	15.361	0.891	0.0000	0.02295	2.29	0.582
491	236.460	15.377	0.892	0.0000	0.02295	2.29	0.582
492	236.961	15.394	0.892	0.0000	0.02295	2.29	0.582
493	237.461	15.410	0.892	0.0000	0.02295	2.29	0.582
494	237.962	15.426	0.892	0.0000	0.02295	2.29	0.582
495	238.462	15.442	0.892	0.0000	0.02295	2.29	0.582
496	238.963	15.458	0.892	0.0000	0.02295	2.29	0.582
497	239.462	15.475	0.892	0.0000	0.02295	2.29	0.582
498	239.961	15.491	0.892	0.0000	0.02295	2.29	0.582
499	240.000	15.492	0.892	0.0000	0.02295	2.29	0.582

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.035		0.892	0.0000	0.02295	2.29	0.582
2	-0.031		0.892	0.0000	0.02295	2.29	0.582
3	-0.026		1.07	0.0000	0.02359	2.36	0.581
4	-0.022		1.22	0.0000	0.02443	2.44	0.579
5	-0.018		1.32	0.0000	0.02528	2.53	0.578
6	-0.014		1.42	0.0000	0.02657	2.66	0.576
7	-0.010		1.51	0.0000	0.02791	2.79	0.574
8	-0.005		1.60	0.0000	0.02846	2.85	0.573
9	-0.001		1.68	0.0000	0.02920	2.92	0.572
10	0.000	0.000	1.70	0.0000	0.02932	2.93	0.571
11	0.003	0.059	1.77	0.0000	0.02990	2.99	0.570
12	0.008	0.089	1.73	0.0000	0.03020	3.02	0.570
13	0.012	0.110	1.71	0.0000	0.03025	3.02	0.570
14	0.016	0.127	1.71	0.0000	0.03035	3.03	0.570
15	0.021	0.144	1.72	0.0000	0.03059	3.06	0.569
16	0.025	0.158	1.73	0.0000	0.03074	3.07	0.569
17	0.043	0.207	1.78	0.0000	0.03154	3.15	0.568
18	0.051	0.227	1.77	0.0000	0.03183	3.18	0.567
19	0.134	0.366	1.79	0.0000	0.03253	3.25	0.566
20	0.216	0.465	1.78	0.0000	0.03293	3.29	0.565
21	0.298	0.546	1.78	0.0000	0.03337	3.34	0.565
22	0.467	0.683	1.79	0.0000	0.03377	3.38	0.564
23	0.718	0.847	1.78	0.0000	0.03412	3.41	0.564
24	0.968	0.984	1.78	0.0000	0.03427	3.43	0.563
25	1.465	1.210	1.78	0.0000	0.03457	3.46	0.563
26	2.465	1.570	1.79	0.0000	0.03481	3.48	0.562
27	4.466	2.113	1.78	0.0000	0.03506	3.51	0.562
28	4.968	2.229	1.78	0.0000	0.03511	3.51	0.562
29	5.467	2.338	1.78	0.0000	0.03516	3.52	0.562
30	5.967	2.443	1.79	0.0000	0.03516	3.52	0.562
31	6.467	2.543	1.78	0.0000	0.03521	3.52	0.562
32	6.968	2.640	1.79	0.0000	0.03521	3.52	0.562
33	7.465	2.732	1.78	0.0000	0.03526	3.53	0.562
34	7.965	2.822	1.79	0.0000	0.03526	3.53	0.562
35	8.465	2.909	1.79	0.0000	0.03526	3.53	0.562
36	8.965	2.994	1.79	0.0000	0.03531	3.53	0.562
37	9.465	3.077	1.78	0.0000	0.03531	3.53	0.562
38	9.967	3.157	1.78	0.0000	0.03531	3.53	0.562
39	10.466	3.235	1.79	0.0000	0.03536	3.54	0.562
40	10.967	3.312	1.79	0.0000	0.03536	3.54	0.562
41	11.466	3.386	1.79	0.0000	0.03536	3.54	0.562
42	11.969	3.460	1.79	0.0000	0.03546	3.55	0.561
43	12.468	3.531	1.79	0.0000	0.03546	3.55	0.561
44	12.965	3.601	1.79	0.0000	0.03546	3.55	0.561
45	13.465	3.670	1.79	0.0000	0.03546	3.55	0.561
46	13.965	3.737	1.79	0.0000	0.03551	3.55	0.561
47	14.467	3.804	1.79	0.0000	0.03551	3.55	0.561
48	14.966	3.869	1.79	0.0000	0.03551	3.55	0.561
49	15.469	3.933	1.78	0.0000	0.03551	3.55	0.561
50	15.968	3.996	1.78	0.0000	0.03551	3.55	0.561

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.468	4.058	1.78	0.0000	0.03556	3.56	0.561
52	16.968	4.119	1.78	0.0000	0.03556	3.56	0.561
53	17.469	4.180	1.78	0.0000	0.03556	3.56	0.561
54	17.966	4.239	1.78	0.0000	0.03556	3.56	0.561
55	18.468	4.297	1.79	0.0000	0.03556	3.56	0.561
56	18.967	4.355	1.79	0.0000	0.03556	3.56	0.561
57	19.467	4.412	1.79	0.0000	0.03556	3.56	0.561
58	19.966	4.468	1.79	0.0000	0.03556	3.56	0.561
59	20.469	4.524	1.79	0.0000	0.03556	3.56	0.561
60	20.966	4.579	1.79	0.0000	0.03561	3.56	0.561
61	21.467	4.633	1.78	0.0000	0.03561	3.56	0.561
62	21.968	4.687	1.78	0.0000	0.03561	3.56	0.561
63	22.466	4.740	1.79	0.0000	0.03561	3.56	0.561
64	22.966	4.792	1.79	0.0000	0.03561	3.56	0.561
65	23.469	4.844	1.79	0.0000	0.03561	3.56	0.561
66	23.965	4.895	1.79	0.0000	0.03561	3.56	0.561
67	24.468	4.946	1.79	0.0000	0.03561	3.56	0.561
68	24.968	4.997	1.78	0.0000	0.03561	3.56	0.561
69	25.467	5.047	1.79	0.0000	0.03561	3.56	0.561
70	25.968	5.096	1.78	0.0000	0.03561	3.56	0.561
71	26.468	5.145	1.79	0.0000	0.03561	3.56	0.561
72	26.969	5.193	1.79	0.0000	0.03561	3.56	0.561
73	27.466	5.241	1.78	0.0000	0.03561	3.56	0.561
74	27.966	5.288	1.79	0.0000	0.03566	3.57	0.561
75	28.465	5.335	1.79	0.0000	0.03566	3.57	0.561
76	28.965	5.382	1.79	0.0000	0.03561	3.56	0.561
77	29.466	5.428	1.78	0.0000	0.03566	3.57	0.561
78	29.965	5.474	1.79	0.0000	0.03566	3.57	0.561
79	30.466	5.520	1.79	0.0000	0.03566	3.57	0.561
80	30.966	5.565	1.79	0.0000	0.03566	3.57	0.561
81	31.467	5.610	1.79	0.0000	0.03566	3.57	0.561
82	31.966	5.654	1.79	0.0000	0.03566	3.57	0.561
83	32.466	5.698	1.78	0.0000	0.03566	3.57	0.561
84	32.967	5.742	1.79	0.0000	0.03566	3.57	0.561
85	33.468	5.785	1.79	0.0000	0.03566	3.57	0.561
86	33.966	5.828	1.79	0.0000	0.03566	3.57	0.561
87	34.465	5.871	1.79	0.0000	0.03566	3.57	0.561
88	34.967	5.913	1.79	0.0000	0.03566	3.57	0.561
89	35.466	5.955	1.79	0.0000	0.03571	3.57	0.561
90	35.967	5.997	1.79	0.0000	0.03571	3.57	0.561
91	36.468	6.039	1.79	0.0000	0.03571	3.57	0.561
92	36.968	6.080	1.79	0.0000	0.03571	3.57	0.561
93	37.465	6.121	1.79	0.0000	0.03571	3.57	0.561
94	37.966	6.162	1.78	0.0000	0.03571	3.57	0.561
95	38.466	6.202	1.79	0.0000	0.03571	3.57	0.561
96	38.966	6.242	1.79	0.0000	0.03571	3.57	0.561
97	39.467	6.282	1.78	0.0000	0.03571	3.57	0.561
98	39.967	6.322	1.79	0.0000	0.03576	3.58	0.561
99	40.465	6.361	1.79	0.0000	0.03576	3.58	0.561
100	40.967	6.401	1.78	0.0000	0.03576	3.58	0.561

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.469	6.440	1.79	0.0000	0.03576	3.58	0.561
102	41.965	6.478	1.79	0.0000	0.03576	3.58	0.561
103	42.466	6.517	1.79	0.0000	0.03576	3.58	0.561
104	42.965	6.555	1.79	0.0000	0.03576	3.58	0.561
105	43.466	6.593	1.79	0.0000	0.03576	3.58	0.561
106	43.966	6.631	1.78	0.0000	0.03576	3.58	0.561
107	44.467	6.668	1.79	0.0000	0.03576	3.58	0.561
108	44.966	6.706	1.79	0.0000	0.03581	3.58	0.561
109	45.468	6.743	1.78	0.0000	0.03581	3.58	0.561
110	45.969	6.780	1.79	0.0000	0.03581	3.58	0.561
111	46.465	6.817	1.79	0.0000	0.03581	3.58	0.561
112	46.966	6.853	1.79	0.0000	0.03581	3.58	0.561
113	47.466	6.890	1.79	0.0000	0.03581	3.58	0.561
114	47.968	6.926	1.79	0.0000	0.03581	3.58	0.561
115	48.468	6.962	1.79	0.0000	0.03581	3.58	0.561
116	48.969	6.998	1.79	0.0000	0.03581	3.58	0.561
117	49.466	7.033	1.79	0.0000	0.03586	3.59	0.561
118	49.965	7.069	1.79	0.0000	0.03581	3.58	0.561
119	50.469	7.104	1.79	0.0000	0.03586	3.59	0.561
120	50.968	7.139	1.79	0.0000	0.03586	3.59	0.561
121	51.467	7.174	1.79	0.0000	0.03586	3.59	0.561
122	51.967	7.209	1.79	0.0000	0.03586	3.59	0.561
123	52.468	7.243	1.79	0.0000	0.03586	3.59	0.561
124	52.966	7.278	1.79	0.0000	0.03586	3.59	0.561
125	53.468	7.312	1.79	0.0000	0.03586	3.59	0.561
126	53.967	7.346	1.79	0.0000	0.03586	3.59	0.561
127	54.468	7.380	1.79	0.0000	0.03586	3.59	0.561
128	54.967	7.414	1.79	0.0000	0.03586	3.59	0.561
129	55.467	7.448	1.79	0.0000	0.03586	3.59	0.561
130	55.966	7.481	1.79	0.0000	0.03586	3.59	0.561
131	56.466	7.514	1.79	0.0000	0.03586	3.59	0.561
132	56.967	7.548	1.79	0.0000	0.03586	3.59	0.561
133	57.468	7.581	1.79	0.0000	0.03586	3.59	0.561
134	57.968	7.614	1.79	0.0000	0.03586	3.59	0.561
135	58.466	7.646	1.79	0.0000	0.03591	3.59	0.561
136	58.967	7.679	1.79	0.0000	0.03586	3.59	0.561
137	59.465	7.711	1.79	0.0000	0.03591	3.59	0.561
138	59.966	7.744	1.78	0.0000	0.03591	3.59	0.561
139	60.466	7.776	1.79	0.0000	0.03591	3.59	0.561
140	60.968	7.808	1.79	0.0000	0.03591	3.59	0.561
141	61.468	7.840	1.79	0.0000	0.03591	3.59	0.561
142	61.965	7.872	1.79	0.0000	0.03591	3.59	0.561
143	62.465	7.903	1.79	0.0000	0.03591	3.59	0.561
144	62.968	7.935	1.79	0.0000	0.03591	3.59	0.561
145	63.467	7.967	1.79	0.0000	0.03591	3.59	0.561
146	63.966	7.998	1.79	0.0000	0.03591	3.59	0.561
147	64.465	8.029	1.79	0.0000	0.03591	3.59	0.561
148	64.968	8.060	1.79	0.0000	0.03591	3.59	0.561
149	65.467	8.091	1.79	0.0000	0.03591	3.59	0.561
150	65.965	8.122	1.79	0.0000	0.03591	3.59	0.561

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.465	8.153	1.79	0.0000	0.03591	3.59	0.561
152	66.965	8.183	1.79	0.0000	0.03591	3.59	0.561
153	67.469	8.214	1.79	0.0000	0.03591	3.59	0.561
154	67.968	8.244	1.79	0.0000	0.03591	3.59	0.561
155	68.466	8.274	1.79	0.0000	0.03591	3.59	0.561
156	68.965	8.305	1.79	0.0000	0.03591	3.59	0.561
157	69.466	8.335	1.79	0.0000	0.03591	3.59	0.561
158	69.965	8.365	1.79	0.0000	0.03591	3.59	0.561
159	70.468	8.395	1.79	0.0000	0.03596	3.60	0.561
160	70.968	8.424	1.79	0.0000	0.03596	3.60	0.561
161	71.468	8.454	1.79	0.0000	0.03596	3.60	0.561
162	71.969	8.483	1.79	0.0000	0.03596	3.60	0.561
163	72.468	8.513	1.79	0.0000	0.03596	3.60	0.561
164	72.967	8.542	1.79	0.0000	0.03596	3.60	0.561
165	73.465	8.571	1.79	0.0000	0.03596	3.60	0.561
166	73.968	8.600	1.78	0.0000	0.03596	3.60	0.561
167	74.466	8.629	1.79	0.0000	0.03596	3.60	0.561
168	74.965	8.658	1.79	0.0000	0.03596	3.60	0.561
169	75.466	8.687	1.79	0.0000	0.03596	3.60	0.561
170	75.965	8.716	1.79	0.0000	0.03596	3.60	0.561
171	76.468	8.745	1.79	0.0000	0.03596	3.60	0.561
172	76.967	8.773	1.79	0.0000	0.03596	3.60	0.561
173	77.467	8.802	1.79	0.0000	0.03596	3.60	0.561
174	77.966	8.830	1.79	0.0000	0.03596	3.60	0.561
175	78.469	8.858	1.79	0.0000	0.03596	3.60	0.561
176	78.969	8.886	1.79	0.0000	0.03596	3.60	0.561
177	79.465	8.914	1.79	0.0000	0.03596	3.60	0.561
178	79.968	8.942	1.79	0.0000	0.03596	3.60	0.561
179	80.465	8.970	1.79	0.0000	0.03596	3.60	0.561
180	80.969	8.998	1.79	0.0000	0.03596	3.60	0.561
181	81.469	9.026	1.79	0.0000	0.03596	3.60	0.561
182	81.967	9.054	1.79	0.0000	0.03596	3.60	0.561
183	82.465	9.081	1.79	0.0000	0.03596	3.60	0.561
184	82.968	9.109	1.79	0.0000	0.03596	3.60	0.561
185	83.466	9.136	1.79	0.0000	0.03596	3.60	0.561
186	83.967	9.163	1.79	0.0000	0.03596	3.60	0.561
187	84.466	9.191	1.79	0.0000	0.03596	3.60	0.561
188	84.966	9.218	1.79	0.0000	0.03596	3.60	0.561
189	85.468	9.245	1.79	0.0000	0.03596	3.60	0.561
190	85.965	9.272	1.79	0.0000	0.03596	3.60	0.561
191	86.466	9.299	1.79	0.0000	0.03596	3.60	0.561
192	86.968	9.326	1.79	0.0000	0.03596	3.60	0.561
193	87.466	9.352	1.79	0.0000	0.03596	3.60	0.561
194	87.966	9.379	1.78	0.0000	0.03596	3.60	0.561
195	88.467	9.406	1.79	0.0000	0.03596	3.60	0.561
196	88.969	9.432	1.79	0.0000	0.03596	3.60	0.561
197	89.468	9.459	1.79	0.0000	0.03601	3.60	0.560
198	89.967	9.485	1.79	0.0000	0.03596	3.60	0.561
199	90.466	9.511	1.79	0.0000	0.03596	3.60	0.561
200	90.966	9.538	1.79	0.0000	0.03601	3.60	0.560

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.466	9.564	1.79	0.0000	0.03601	3.60	0.560
202	91.969	9.590	1.79	0.0000	0.03601	3.60	0.560
203	92.469	9.616	1.78	0.0000	0.03601	3.60	0.560
204	92.965	9.642	1.79	0.0000	0.03601	3.60	0.560
205	93.466	9.668	1.79	0.0000	0.03601	3.60	0.560
206	93.968	9.694	1.79	0.0000	0.03601	3.60	0.560
207	94.467	9.719	1.79	0.0000	0.03601	3.60	0.560
208	94.968	9.745	1.79	0.0000	0.03601	3.60	0.560
209	95.466	9.771	1.79	0.0000	0.03601	3.60	0.560
210	95.966	9.796	1.79	0.0000	0.03601	3.60	0.560
211	96.465	9.822	1.79	0.0000	0.03601	3.60	0.560
212	96.967	9.847	1.79	0.0000	0.03601	3.60	0.560
213	97.468	9.873	1.79	0.0000	0.03601	3.60	0.560
214	97.965	9.898	1.79	0.0000	0.03601	3.60	0.560
215	98.465	9.923	1.79	0.0000	0.03601	3.60	0.560
216	98.966	9.948	1.79	0.0000	0.03601	3.60	0.560
217	99.466	9.973	1.79	0.0000	0.03601	3.60	0.560
218	99.968	9.998	1.79	0.0000	0.03601	3.60	0.560
219	100.469	10.023	1.79	0.0000	0.03601	3.60	0.560
220	100.965	10.048	1.79	0.0000	0.03601	3.60	0.560
221	101.468	10.073	1.79	0.0000	0.03601	3.60	0.560
222	101.967	10.098	1.79	0.0000	0.03601	3.60	0.560
223	102.469	10.123	1.79	0.0000	0.03601	3.60	0.560
224	102.966	10.147	1.79	0.0000	0.03601	3.60	0.560
225	103.466	10.172	1.79	0.0000	0.03601	3.60	0.560
226	103.967	10.196	1.79	0.0000	0.03601	3.60	0.560
227	104.468	10.221	1.79	0.0000	0.03601	3.60	0.560
228	104.968	10.245	1.79	0.0000	0.03601	3.60	0.560
229	105.467	10.270	1.79	0.0000	0.03601	3.60	0.560
230	105.968	10.294	1.79	0.0000	0.03601	3.60	0.560
231	106.465	10.318	1.79	0.0000	0.03601	3.60	0.560
232	106.965	10.342	1.79	0.0000	0.03606	3.61	0.560
233	107.466	10.367	1.79	0.0000	0.03601	3.60	0.560
234	107.968	10.391	1.79	0.0000	0.03606	3.61	0.560
235	108.469	10.415	1.79	0.0000	0.03606	3.61	0.560
236	108.969	10.439	1.79	0.0000	0.03606	3.61	0.560
237	109.467	10.463	1.79	0.0000	0.03606	3.61	0.560
238	109.966	10.486	1.79	0.0000	0.03601	3.60	0.560
239	110.468	10.510	1.79	0.0000	0.03606	3.61	0.560
240	110.965	10.534	1.79	0.0000	0.03606	3.61	0.560
241	111.466	10.558	1.79	0.0000	0.03606	3.61	0.560
242	111.968	10.582	1.79	0.0000	0.03606	3.61	0.560
243	112.468	10.605	1.79	0.0000	0.03606	3.61	0.560
244	112.967	10.629	1.79	0.0000	0.03606	3.61	0.560
245	113.468	10.652	1.79	0.0000	0.03606	3.61	0.560
246	113.968	10.676	1.79	0.0000	0.03606	3.61	0.560
247	114.468	10.699	1.79	0.0000	0.03606	3.61	0.560
248	114.965	10.722	1.79	0.0000	0.03606	3.61	0.560
249	115.469	10.746	1.79	0.0000	0.03606	3.61	0.560
250	115.969	10.769	1.79	0.0000	0.03606	3.61	0.560

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.465	10.792	1.79	0.0000	0.03606	3.61	0.560
252	116.969	10.815	1.79	0.0000	0.03606	3.61	0.560
253	117.466	10.838	1.79	0.0000	0.03606	3.61	0.560
254	117.969	10.861	1.79	0.0000	0.03606	3.61	0.560
255	118.468	10.884	1.79	0.0000	0.03606	3.61	0.560
256	118.969	10.907	1.79	0.0000	0.03606	3.61	0.560
257	119.468	10.930	1.79	0.0000	0.03606	3.61	0.560
258	119.967	10.953	1.79	0.0000	0.03606	3.61	0.560
259	120.467	10.976	1.79	0.0000	0.03606	3.61	0.560
260	120.965	10.998	1.79	0.0000	0.03611	3.61	0.560
261	121.469	11.021	1.79	0.0000	0.03606	3.61	0.560
262	121.965	11.044	1.79	0.0000	0.03611	3.61	0.560
263	122.466	11.066	1.79	0.0000	0.03611	3.61	0.560
264	122.967	11.089	1.79	0.0000	0.03611	3.61	0.560
265	123.467	11.112	1.79	0.0000	0.03611	3.61	0.560
266	123.966	11.134	1.79	0.0000	0.03611	3.61	0.560
267	124.466	11.156	1.79	0.0000	0.03611	3.61	0.560
268	124.965	11.179	1.79	0.0000	0.03611	3.61	0.560
269	125.465	11.201	1.79	0.0000	0.03611	3.61	0.560
270	125.968	11.224	1.79	0.0000	0.03611	3.61	0.560
271	126.465	11.246	1.79	0.0000	0.03611	3.61	0.560
272	126.965	11.268	1.79	0.0000	0.03611	3.61	0.560
273	127.468	11.290	1.79	0.0000	0.03611	3.61	0.560
274	127.966	11.312	1.79	0.0000	0.03611	3.61	0.560
275	128.466	11.334	1.79	0.0000	0.03611	3.61	0.560
276	128.967	11.356	1.79	0.0000	0.03611	3.61	0.560
277	129.467	11.378	1.79	0.0000	0.03611	3.61	0.560
278	129.968	11.400	1.79	0.0000	0.03611	3.61	0.560
279	130.466	11.422	1.79	0.0000	0.03611	3.61	0.560
280	130.968	11.444	1.79	0.0000	0.03611	3.61	0.560
281	131.468	11.466	1.79	0.0000	0.03616	3.62	0.560
282	131.969	11.488	1.79	0.0000	0.03611	3.61	0.560
283	132.468	11.509	1.79	0.0000	0.03611	3.61	0.560
284	132.969	11.531	1.79	0.0000	0.03616	3.62	0.560
285	133.466	11.553	1.79	0.0000	0.03611	3.61	0.560
286	133.967	11.574	1.79	0.0000	0.03611	3.61	0.560
287	134.466	11.596	1.79	0.0000	0.03616	3.62	0.560
288	134.969	11.618	1.79	0.0000	0.03616	3.62	0.560
289	135.467	11.639	1.79	0.0000	0.03616	3.62	0.560
290	135.966	11.660	1.79	0.0000	0.03616	3.62	0.560
291	136.465	11.682	1.79	0.0000	0.03616	3.62	0.560
292	136.966	11.703	1.79	0.0000	0.03616	3.62	0.560
293	137.469	11.725	1.79	0.0000	0.03616	3.62	0.560
294	137.965	11.746	1.79	0.0000	0.03616	3.62	0.560
295	138.469	11.767	1.79	0.0000	0.03616	3.62	0.560
296	138.968	11.788	1.79	0.0000	0.03616	3.62	0.560
297	139.466	11.810	1.79	0.0000	0.03616	3.62	0.560
298	139.966	11.831	1.79	0.0000	0.03616	3.62	0.560
299	140.465	11.852	1.79	0.0000	0.03616	3.62	0.560
300	140.965	11.873	1.79	0.0000	0.03616	3.62	0.560

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.468	11.894	1.79	0.0000	0.03616	3.62	0.560
302	141.969	11.915	1.79	0.0000	0.03616	3.62	0.560
303	142.469	11.936	1.79	0.0000	0.03616	3.62	0.560
304	142.967	11.957	1.79	0.0000	0.03616	3.62	0.560
305	143.466	11.978	1.79	0.0000	0.03616	3.62	0.560
306	143.967	11.999	1.79	0.0000	0.03616	3.62	0.560
307	144.467	12.019	1.79	0.0000	0.03616	3.62	0.560
308	144.967	12.040	1.79	0.0000	0.03616	3.62	0.560
309	145.465	12.061	1.79	0.0000	0.03616	3.62	0.560
310	145.968	12.082	1.79	0.0000	0.03616	3.62	0.560
311	146.467	12.102	1.79	0.0000	0.03616	3.62	0.560
312	146.966	12.123	1.79	0.0000	0.03616	3.62	0.560
313	147.467	12.144	1.79	0.0000	0.03616	3.62	0.560
314	147.965	12.164	1.79	0.0000	0.03616	3.62	0.560
315	148.469	12.185	1.79	0.0000	0.03616	3.62	0.560
316	148.968	12.205	1.79	0.0000	0.03616	3.62	0.560
317	149.465	12.226	1.79	0.0000	0.03616	3.62	0.560
318	149.968	12.246	1.79	0.0000	0.03616	3.62	0.560
319	150.469	12.267	1.79	0.0000	0.03616	3.62	0.560
320	150.967	12.287	1.79	0.0000	0.03616	3.62	0.560
321	151.467	12.307	1.79	0.0000	0.03616	3.62	0.560
322	151.969	12.328	1.79	0.0000	0.03621	3.62	0.560
323	152.466	12.348	1.79	0.0000	0.03621	3.62	0.560
324	152.968	12.368	1.79	0.0000	0.03616	3.62	0.560
325	153.467	12.388	1.79	0.0000	0.03621	3.62	0.560
326	153.967	12.408	1.79	0.0000	0.03616	3.62	0.560
327	154.467	12.428	1.79	0.0000	0.03621	3.62	0.560
328	154.968	12.449	1.79	0.0000	0.03621	3.62	0.560
329	155.467	12.469	1.79	0.0000	0.03621	3.62	0.560
330	155.969	12.489	1.79	0.0000	0.03621	3.62	0.560
331	156.468	12.509	1.79	0.0000	0.03621	3.62	0.560
332	156.966	12.529	1.79	0.0000	0.03621	3.62	0.560
333	157.468	12.549	1.79	0.0000	0.03621	3.62	0.560
334	157.967	12.568	1.79	0.0000	0.03621	3.62	0.560
335	158.466	12.588	1.79	0.0000	0.03621	3.62	0.560
336	158.968	12.608	1.79	0.0000	0.03621	3.62	0.560
337	159.468	12.628	1.79	0.0000	0.03621	3.62	0.560
338	159.968	12.648	1.79	0.0000	0.03621	3.62	0.560
339	160.465	12.667	1.79	0.0000	0.03621	3.62	0.560
340	160.966	12.687	1.79	0.0000	0.03621	3.62	0.560
341	161.468	12.707	1.79	0.0000	0.03621	3.62	0.560
342	161.966	12.727	1.79	0.0000	0.03621	3.62	0.560
343	162.467	12.746	1.79	0.0000	0.03621	3.62	0.560
344	162.965	12.766	1.79	0.0000	0.03621	3.62	0.560
345	163.469	12.785	1.79	0.0000	0.03621	3.62	0.560
346	163.969	12.805	1.79	0.0000	0.03621	3.62	0.560
347	164.467	12.824	1.79	0.0000	0.03621	3.62	0.560
348	164.967	12.844	1.79	0.0000	0.03621	3.62	0.560
349	165.467	12.863	1.79	0.0000	0.03621	3.62	0.560
350	165.968	12.883	1.79	0.0000	0.03621	3.62	0.560

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.466	12.902	1.79	0.0000	0.03621	3.62	0.560
352	166.966	12.922	1.79	0.0000	0.03621	3.62	0.560
353	167.468	12.941	1.79	0.0000	0.03621	3.62	0.560
354	167.969	12.960	1.79	0.0000	0.03621	3.62	0.560
355	168.468	12.980	1.79	0.0000	0.03621	3.62	0.560
356	168.969	12.999	1.79	0.0000	0.03621	3.62	0.560
357	169.469	13.018	1.79	0.0000	0.03621	3.62	0.560
358	169.965	13.037	1.79	0.0000	0.03621	3.62	0.560
359	170.467	13.056	1.79	0.0000	0.03621	3.62	0.560
360	170.967	13.075	1.79	0.0000	0.03621	3.62	0.560
361	171.466	13.094	1.79	0.0000	0.03621	3.62	0.560
362	171.965	13.114	1.79	0.0000	0.03621	3.62	0.560
363	172.468	13.133	1.79	0.0000	0.03621	3.62	0.560
364	172.965	13.152	1.79	0.0000	0.03621	3.62	0.560
365	173.468	13.171	1.79	0.0000	0.03621	3.62	0.560
366	173.965	13.190	1.79	0.0000	0.03621	3.62	0.560
367	174.465	13.209	1.79	0.0000	0.03621	3.62	0.560
368	174.969	13.228	1.79	0.0000	0.03621	3.62	0.560
369	175.467	13.246	1.79	0.0000	0.03621	3.62	0.560
370	175.966	13.265	1.79	0.0000	0.03621	3.62	0.560
371	176.469	13.284	1.79	0.0000	0.03621	3.62	0.560
372	176.967	13.303	1.79	0.0000	0.03621	3.62	0.560
373	177.469	13.322	1.79	0.0000	0.03621	3.62	0.560
374	177.965	13.340	1.79	0.0000	0.03621	3.62	0.560
375	178.467	13.359	1.79	0.0000	0.03621	3.62	0.560
376	178.967	13.378	1.79	0.0000	0.03621	3.62	0.560
377	179.469	13.397	1.78	0.0000	0.03621	3.62	0.560
378	179.966	13.415	1.79	0.0000	0.03621	3.62	0.560
379	180.468	13.434	1.79	0.0000	0.03621	3.62	0.560
380	180.966	13.452	1.79	0.0000	0.03621	3.62	0.560
381	181.467	13.471	1.79	0.0000	0.03621	3.62	0.560
382	181.965	13.489	1.79	0.0000	0.03621	3.62	0.560
383	182.467	13.508	1.79	0.0000	0.03621	3.62	0.560
384	182.968	13.527	1.79	0.0000	0.03621	3.62	0.560
385	183.466	13.545	1.79	0.0000	0.03621	3.62	0.560
386	183.968	13.563	1.79	0.0000	0.03621	3.62	0.560
387	184.465	13.582	1.79	0.0000	0.03621	3.62	0.560
388	184.967	13.600	1.79	0.0000	0.03621	3.62	0.560
389	185.468	13.619	1.79	0.0000	0.03621	3.62	0.560
390	185.966	13.637	1.79	0.0000	0.03621	3.62	0.560
391	186.468	13.655	1.79	0.0000	0.03621	3.62	0.560
392	186.965	13.674	1.79	0.0000	0.03621	3.62	0.560
393	187.468	13.692	1.79	0.0000	0.03621	3.62	0.560
394	187.965	13.710	1.79	0.0000	0.03621	3.62	0.560
395	188.466	13.728	1.79	0.0000	0.03621	3.62	0.560
396	188.966	13.746	1.79	0.0000	0.03621	3.62	0.560
397	189.466	13.765	1.79	0.0000	0.03621	3.62	0.560
398	189.968	13.783	1.79	0.0000	0.03621	3.62	0.560
399	190.467	13.801	1.79	0.0000	0.03621	3.62	0.560
400	190.966	13.819	1.78	0.0000	0.03621	3.62	0.560

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.466	13.837	1.79	0.0000	0.03621	3.62	0.560
402	191.965	13.855	1.79	0.0000	0.03621	3.62	0.560
403	192.465	13.873	1.79	0.0000	0.03621	3.62	0.560
404	192.967	13.891	1.79	0.0000	0.03621	3.62	0.560
405	193.465	13.909	1.79	0.0000	0.03621	3.62	0.560
406	193.966	13.927	1.79	0.0000	0.03621	3.62	0.560
407	194.467	13.945	1.79	0.0000	0.03621	3.62	0.560
408	194.966	13.963	1.79	0.0000	0.03621	3.62	0.560
409	195.467	13.981	1.78	0.0000	0.03621	3.62	0.560
410	195.968	13.999	1.79	0.0000	0.03621	3.62	0.560
411	196.469	14.017	1.79	0.0000	0.03626	3.63	0.560
412	196.967	14.035	1.79	0.0000	0.03621	3.62	0.560
413	197.468	14.052	1.79	0.0000	0.03626	3.63	0.560
414	197.969	14.070	1.79	0.0000	0.03626	3.63	0.560
415	198.468	14.088	1.79	0.0000	0.03626	3.63	0.560
416	198.969	14.106	1.79	0.0000	0.03626	3.63	0.560
417	199.466	14.123	1.79	0.0000	0.03621	3.62	0.560
418	199.967	14.141	1.79	0.0000	0.03626	3.63	0.560
419	200.467	14.159	1.79	0.0000	0.03626	3.63	0.560
420	200.965	14.176	1.79	0.0000	0.03626	3.63	0.560
421	201.468	14.194	1.79	0.0000	0.03626	3.63	0.560
422	201.969	14.212	1.79	0.0000	0.03626	3.63	0.560
423	202.467	14.229	1.79	0.0000	0.03626	3.63	0.560
424	202.966	14.247	1.79	0.0000	0.03626	3.63	0.560
425	203.468	14.264	1.79	0.0000	0.03621	3.62	0.560
426	203.969	14.282	1.79	0.0000	0.03621	3.62	0.560
427	204.469	14.299	1.79	0.0000	0.03621	3.62	0.560
428	204.966	14.317	1.79	0.0000	0.03626	3.63	0.560
429	205.468	14.334	1.79	0.0000	0.03626	3.63	0.560
430	205.966	14.352	1.79	0.0000	0.03626	3.63	0.560
431	206.465	14.369	1.79	0.0000	0.03626	3.63	0.560
432	206.965	14.386	1.79	0.0000	0.03626	3.63	0.560
433	207.465	14.404	1.79	0.0000	0.03626	3.63	0.560
434	207.968	14.421	1.79	0.0000	0.03626	3.63	0.560
435	208.469	14.438	1.79	0.0000	0.03626	3.63	0.560
436	208.967	14.456	1.79	0.0000	0.03626	3.63	0.560
437	209.467	14.473	1.79	0.0000	0.03626	3.63	0.560
438	209.966	14.490	1.79	0.0000	0.03626	3.63	0.560
439	210.468	14.508	1.79	0.0000	0.03626	3.63	0.560
440	210.965	14.525	1.79	0.0000	0.03626	3.63	0.560
441	211.465	14.542	1.79	0.0000	0.03626	3.63	0.560
442	211.966	14.559	1.79	0.0000	0.03626	3.63	0.560
443	212.468	14.576	1.79	0.0000	0.03626	3.63	0.560
444	212.968	14.593	1.79	0.0000	0.03626	3.63	0.560
445	213.468	14.611	1.79	0.0000	0.03626	3.63	0.560
446	213.967	14.628	1.79	0.0000	0.03626	3.63	0.560
447	214.466	14.645	1.79	0.0000	0.03626	3.63	0.560
448	214.967	14.662	1.79	0.0000	0.03626	3.63	0.560
449	215.468	14.679	1.79	0.0000	0.03626	3.63	0.560
450	215.965	14.696	1.79	0.0000	0.03626	3.63	0.560

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.468	14.713	1.79	0.0000	0.03626	3.63	0.560
452	216.967	14.730	1.79	0.0000	0.03626	3.63	0.560
453	217.466	14.747	1.79	0.0000	0.03626	3.63	0.560
454	217.966	14.764	1.79	0.0000	0.03626	3.63	0.560
455	218.465	14.781	1.79	0.0000	0.03626	3.63	0.560
456	218.968	14.798	1.79	0.0000	0.03626	3.63	0.560
457	219.466	14.814	1.79	0.0000	0.03626	3.63	0.560
458	219.968	14.831	1.79	0.0000	0.03626	3.63	0.560
459	220.466	14.848	1.79	0.0000	0.03626	3.63	0.560
460	220.969	14.865	1.79	0.0000	0.03626	3.63	0.560
461	221.465	14.882	1.79	0.0000	0.03626	3.63	0.560
462	221.966	14.899	1.79	0.0000	0.03626	3.63	0.560
463	222.465	14.915	1.79	0.0000	0.03626	3.63	0.560
464	222.967	14.932	1.79	0.0000	0.03626	3.63	0.560
465	223.468	14.949	1.79	0.0000	0.03626	3.63	0.560
466	223.966	14.965	1.79	0.0000	0.03626	3.63	0.560
467	224.469	14.982	1.79	0.0000	0.03626	3.63	0.560
468	224.967	14.999	1.79	0.0000	0.03626	3.63	0.560
469	225.465	15.015	1.79	0.0000	0.03626	3.63	0.560
470	225.965	15.032	1.79	0.0000	0.03626	3.63	0.560
471	226.469	15.049	1.79	0.0000	0.03626	3.63	0.560
472	226.968	15.065	1.79	0.0000	0.03626	3.63	0.560
473	227.468	15.082	1.79	0.0000	0.03626	3.63	0.560
474	227.968	15.099	1.79	0.0000	0.03626	3.63	0.560
475	228.466	15.115	1.79	0.0000	0.03626	3.63	0.560
476	228.968	15.132	1.79	0.0000	0.03626	3.63	0.560
477	229.466	15.148	1.79	0.0000	0.03626	3.63	0.560
478	229.965	15.165	1.79	0.0000	0.03626	3.63	0.560
479	230.468	15.181	1.79	0.0000	0.03626	3.63	0.560
480	230.968	15.198	1.79	0.0000	0.03626	3.63	0.560
481	231.466	15.214	1.79	0.0000	0.03626	3.63	0.560
482	231.965	15.230	1.79	0.0000	0.03626	3.63	0.560
483	232.466	15.247	1.79	0.0000	0.03626	3.63	0.560
484	232.966	15.263	1.78	0.0000	0.03626	3.63	0.560
485	233.466	15.280	1.79	0.0000	0.03626	3.63	0.560
486	233.968	15.296	1.79	0.0000	0.03626	3.63	0.560
487	234.467	15.312	1.79	0.0000	0.03626	3.63	0.560
488	234.967	15.329	1.79	0.0000	0.03626	3.63	0.560
489	235.467	15.345	1.79	0.0000	0.03626	3.63	0.560
490	235.968	15.361	1.79	0.0000	0.03626	3.63	0.560
491	236.468	15.378	1.79	0.0000	0.03626	3.63	0.560
492	236.968	15.394	1.79	0.0000	0.03626	3.63	0.560
493	237.468	15.410	1.79	0.0000	0.03626	3.63	0.560
494	237.967	15.426	1.79	0.0000	0.03626	3.63	0.560
495	238.465	15.442	1.79	0.0000	0.03626	3.63	0.560
496	238.968	15.459	1.79	0.0000	0.03626	3.63	0.560
497	239.469	15.475	1.79	0.0000	0.03626	3.63	0.560
498	239.966	15.491	1.79	0.0000	0.03626	3.63	0.560
499	240.006	15.492	1.79	0.0000	0.03626	3.63	0.560

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.030		1.79	0.0000	0.03626	3.63	0.560
2	-0.026		1.79	0.0000	0.03626	3.63	0.560
3	-0.021		2.19	0.0000	0.03695	3.70	0.559
4	-0.017		2.56	0.0000	0.03859	3.86	0.556
5	-0.012		2.78	0.0000	0.03958	3.96	0.555
6	-0.008		2.98	0.0000	0.04192	4.19	0.551
7	-0.004		3.21	0.0000	0.04375	4.38	0.548
8	0.000	0.000	3.39	0.0000	0.04541	4.54	0.545
9	0.001	0.023	3.42	0.0000	0.04564	4.56	0.545
10	0.005	0.070	3.60	0.0000	0.04664	4.66	0.543
11	0.009	0.096	3.44	0.0000	0.04728	4.73	0.542
12	0.013	0.115	3.44	0.0000	0.04753	4.75	0.542
13	0.017	0.132	3.46	0.0000	0.04778	4.78	0.541
14	0.022	0.147	3.49	0.0000	0.04793	4.79	0.541
15	0.026	0.161	3.51	0.0000	0.04812	4.81	0.541
16	0.030	0.174	3.54	0.0000	0.04837	4.84	0.540
17	0.047	0.217	3.51	0.0000	0.04887	4.89	0.540
18	0.056	0.237	3.53	0.0000	0.04902	4.90	0.539
19	0.138	0.372	3.56	0.0000	0.05021	5.02	0.538
20	0.224	0.473	3.57	0.0000	0.05081	5.08	0.537
21	0.305	0.552	3.57	0.0000	0.05115	5.12	0.536
22	0.473	0.688	3.57	0.0000	0.05140	5.14	0.536
23	0.721	0.849	3.57	0.0000	0.05160	5.16	0.535
24	0.974	0.987	3.57	0.0000	0.05180	5.18	0.535
25	1.471	1.213	3.57	0.0000	0.05185	5.18	0.535
26	2.473	1.572	3.57	0.0000	0.05215	5.21	0.534
27	4.471	2.114	3.57	0.0000	0.05274	5.27	0.533
28	4.973	2.230	3.57	0.0000	0.05284	5.28	0.533
29	5.474	2.340	3.57	0.0000	0.05294	5.29	0.533
30	5.971	2.444	3.57	0.0000	0.05304	5.30	0.533
31	6.471	2.544	3.57	0.0000	0.05304	5.30	0.533
32	6.970	2.640	3.57	0.0000	0.05309	5.31	0.533
33	7.472	2.733	3.58	0.0000	0.05314	5.31	0.533
34	7.972	2.823	3.57	0.0000	0.05314	5.31	0.533
35	8.473	2.911	3.57	0.0000	0.05329	5.33	0.533
36	8.972	2.995	3.57	0.0000	0.05329	5.33	0.533
37	9.474	3.078	3.57	0.0000	0.05329	5.33	0.533
38	9.972	3.158	3.57	0.0000	0.05334	5.33	0.532
39	10.474	3.236	3.57	0.0000	0.05334	5.33	0.532
40	10.970	3.312	3.57	0.0000	0.05334	5.33	0.532
41	11.473	3.387	3.57	0.0000	0.05339	5.34	0.532
42	11.974	3.460	3.57	0.0000	0.05344	5.34	0.532
43	12.472	3.532	3.57	0.0000	0.05344	5.34	0.532
44	12.971	3.602	3.57	0.0000	0.05344	5.34	0.532
45	13.474	3.671	3.57	0.0000	0.05344	5.34	0.532
46	13.970	3.738	3.57	0.0000	0.05344	5.34	0.532
47	14.470	3.804	3.57	0.0000	0.05349	5.35	0.532
48	14.972	3.869	3.57	0.0000	0.05349	5.35	0.532
49	15.473	3.934	3.57	0.0000	0.05349	5.35	0.532
50	15.972	3.997	3.57	0.0000	0.05349	5.35	0.532

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.471	4.058	3.57	0.0000	0.05349	5.35	0.532
52	16.972	4.120	3.57	0.0000	0.05349	5.35	0.532
53	17.472	4.180	3.57	0.0000	0.05354	5.35	0.532
54	17.973	4.239	3.57	0.0000	0.05354	5.35	0.532
55	18.471	4.298	3.57	0.0000	0.05354	5.35	0.532
56	18.973	4.356	3.57	0.0000	0.05354	5.35	0.532
57	19.473	4.413	3.57	0.0000	0.05354	5.35	0.532
58	19.974	4.469	3.57	0.0000	0.05354	5.35	0.532
59	20.473	4.525	3.57	0.0000	0.05354	5.35	0.532
60	20.973	4.580	3.57	0.0000	0.05354	5.35	0.532
61	21.474	4.634	3.57	0.0000	0.05354	5.35	0.532
62	21.971	4.687	3.57	0.0000	0.05359	5.36	0.532
63	22.471	4.740	3.57	0.0000	0.05359	5.36	0.532
64	22.970	4.793	3.57	0.0000	0.05359	5.36	0.532
65	23.470	4.845	3.57	0.0000	0.05359	5.36	0.532
66	23.972	4.896	3.57	0.0000	0.05364	5.36	0.532
67	24.473	4.947	3.57	0.0000	0.05364	5.36	0.532
68	24.970	4.997	3.57	0.0000	0.05364	5.36	0.532
69	25.472	5.047	3.57	0.0000	0.05364	5.36	0.532
70	25.974	5.096	3.57	0.0000	0.05364	5.36	0.532
71	26.471	5.145	3.57	0.0000	0.05364	5.36	0.532
72	26.972	5.193	3.57	0.0000	0.05364	5.36	0.532
73	27.473	5.241	3.57	0.0000	0.05369	5.37	0.532
74	27.974	5.289	3.57	0.0000	0.05369	5.37	0.532
75	28.473	5.336	3.57	0.0000	0.05369	5.37	0.532
76	28.971	5.382	3.57	0.0000	0.05374	5.37	0.532
77	29.473	5.429	3.57	0.0000	0.05374	5.37	0.532
78	29.973	5.475	3.57	0.0000	0.05379	5.38	0.532
79	30.473	5.520	3.57	0.0000	0.05379	5.38	0.532
80	30.970	5.565	3.57	0.0000	0.05379	5.38	0.532
81	31.472	5.610	3.57	0.0000	0.05379	5.38	0.532
82	31.971	5.654	3.57	0.0000	0.05379	5.38	0.532
83	32.473	5.698	3.57	0.0000	0.05379	5.38	0.532
84	32.974	5.742	3.57	0.0000	0.05384	5.38	0.532
85	33.471	5.785	3.57	0.0000	0.05384	5.38	0.532
86	33.973	5.829	3.57	0.0000	0.05384	5.38	0.532
87	34.470	5.871	3.57	0.0000	0.05384	5.38	0.532
88	34.972	5.914	3.57	0.0000	0.05384	5.38	0.532
89	35.472	5.956	3.57	0.0000	0.05389	5.39	0.532
90	35.973	5.998	3.57	0.0000	0.05389	5.39	0.532
91	36.470	6.039	3.57	0.0000	0.05389	5.39	0.532
92	36.973	6.081	3.57	0.0000	0.05389	5.39	0.532
93	37.474	6.122	3.57	0.0000	0.05389	5.39	0.532
94	37.973	6.162	3.57	0.0000	0.05389	5.39	0.532
95	38.471	6.202	3.57	0.0000	0.05394	5.39	0.531
96	38.973	6.243	3.57	0.0000	0.05394	5.39	0.531
97	39.471	6.283	3.57	0.0000	0.05394	5.39	0.531
98	39.974	6.322	3.57	0.0000	0.05394	5.39	0.531
99	40.472	6.362	3.57	0.0000	0.05399	5.40	0.531
100	40.970	6.401	3.57	0.0000	0.05399	5.40	0.531

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.470	6.440	3.57	0.0000	0.05399	5.40	0.531
102	41.971	6.478	3.57	0.0000	0.05399	5.40	0.531
103	42.471	6.517	3.57	0.0000	0.05404	5.40	0.531
104	42.973	6.555	3.57	0.0000	0.05404	5.40	0.531
105	43.472	6.593	3.57	0.0000	0.05404	5.40	0.531
106	43.974	6.631	3.57	0.0000	0.05404	5.40	0.531
107	44.471	6.669	3.57	0.0000	0.05404	5.40	0.531
108	44.971	6.706	3.57	0.0000	0.05404	5.40	0.531
109	45.474	6.743	3.57	0.0000	0.05404	5.40	0.531
110	45.973	6.780	3.57	0.0000	0.05408	5.41	0.531
111	46.474	6.817	3.57	0.0000	0.05408	5.41	0.531
112	46.974	6.854	3.57	0.0000	0.05408	5.41	0.531
113	47.472	6.890	3.57	0.0000	0.05408	5.41	0.531
114	47.974	6.926	3.57	0.0000	0.05408	5.41	0.531
115	48.470	6.962	3.57	0.0000	0.05413	5.41	0.531
116	48.973	6.998	3.57	0.0000	0.05413	5.41	0.531
117	49.470	7.033	3.57	0.0000	0.05413	5.41	0.531
118	49.973	7.069	3.57	0.0000	0.05413	5.41	0.531
119	50.473	7.104	3.57	0.0000	0.05413	5.41	0.531
120	50.972	7.139	3.57	0.0000	0.05413	5.41	0.531
121	51.473	7.174	3.57	0.0000	0.05418	5.42	0.531
122	51.972	7.209	3.57	0.0000	0.05413	5.41	0.531
123	52.473	7.244	3.57	0.0000	0.05418	5.42	0.531
124	52.971	7.278	3.57	0.0000	0.05418	5.42	0.531
125	53.472	7.312	3.57	0.0000	0.05418	5.42	0.531
126	53.970	7.346	3.57	0.0000	0.05418	5.42	0.531
127	54.474	7.381	3.57	0.0000	0.05423	5.42	0.531
128	54.972	7.414	3.57	0.0000	0.05423	5.42	0.531
129	55.473	7.448	3.57	0.0000	0.05423	5.42	0.531
130	55.970	7.481	3.57	0.0000	0.05423	5.42	0.531
131	56.472	7.515	3.57	0.0000	0.05423	5.42	0.531
132	56.973	7.548	3.57	0.0000	0.05428	5.43	0.531
133	57.470	7.581	3.57	0.0000	0.05428	5.43	0.531
134	57.972	7.614	3.57	0.0000	0.05428	5.43	0.531
135	58.473	7.647	3.57	0.0000	0.05428	5.43	0.531
136	58.972	7.679	3.57	0.0000	0.05428	5.43	0.531
137	59.473	7.712	3.57	0.0000	0.05428	5.43	0.531
138	59.970	7.744	3.57	0.0000	0.05428	5.43	0.531
139	60.473	7.776	3.57	0.0000	0.05428	5.43	0.531
140	60.971	7.808	3.57	0.0000	0.05433	5.43	0.531
141	61.471	7.840	3.57	0.0000	0.05433	5.43	0.531
142	61.973	7.872	3.57	0.0000	0.05433	5.43	0.531
143	62.471	7.904	3.57	0.0000	0.05433	5.43	0.531
144	62.973	7.936	3.57	0.0000	0.05433	5.43	0.531
145	63.471	7.967	3.57	0.0000	0.05438	5.44	0.531
146	63.970	7.998	3.57	0.0000	0.05438	5.44	0.531
147	64.470	8.029	3.57	0.0000	0.05438	5.44	0.531
148	64.974	8.061	3.57	0.0000	0.05438	5.44	0.531
149	65.471	8.091	3.57	0.0000	0.05438	5.44	0.531
150	65.973	8.122	3.57	0.0000	0.05438	5.44	0.531

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.471	8.153	3.57	0.0000	0.05438	5.44	0.531
152	66.970	8.184	3.57	0.0000	0.05438	5.44	0.531
153	67.474	8.214	3.57	0.0000	0.05438	5.44	0.531
154	67.974	8.245	3.57	0.0000	0.05438	5.44	0.531
155	68.470	8.275	3.57	0.0000	0.05443	5.44	0.531
156	68.972	8.305	3.57	0.0000	0.05443	5.44	0.531
157	69.474	8.335	3.57	0.0000	0.05443	5.44	0.531
158	69.973	8.365	3.57	0.0000	0.05443	5.44	0.531
159	70.474	8.395	3.57	0.0000	0.05443	5.44	0.531
160	70.970	8.424	3.57	0.0000	0.05443	5.44	0.531
161	71.473	8.454	3.57	0.0000	0.05443	5.44	0.531
162	71.972	8.484	3.57	0.0000	0.05443	5.44	0.531
163	72.473	8.513	3.57	0.0000	0.05443	5.44	0.531
164	72.971	8.542	3.57	0.0000	0.05443	5.44	0.531
165	73.470	8.571	3.57	0.0000	0.05443	5.44	0.531
166	73.974	8.601	3.57	0.0000	0.05443	5.44	0.531
167	74.471	8.630	3.57	0.0000	0.05443	5.44	0.531
168	74.971	8.659	3.57	0.0000	0.05443	5.44	0.531
169	75.473	8.687	3.57	0.0000	0.05443	5.44	0.531
170	75.970	8.716	3.57	0.0000	0.05443	5.44	0.531
171	76.473	8.745	3.57	0.0000	0.05443	5.44	0.531
172	76.971	8.773	3.57	0.0000	0.05443	5.44	0.531
173	77.474	8.802	3.57	0.0000	0.05443	5.44	0.531
174	77.970	8.830	3.57	0.0000	0.05448	5.45	0.531
175	78.474	8.859	3.57	0.0000	0.05443	5.44	0.531
176	78.972	8.887	3.57	0.0000	0.05443	5.44	0.531
177	79.471	8.915	3.57	0.0000	0.05448	5.45	0.531
178	79.974	8.943	3.57	0.0000	0.05448	5.45	0.531
179	80.471	8.971	3.57	0.0000	0.05448	5.45	0.531
180	80.973	8.999	3.57	0.0000	0.05448	5.45	0.531
181	81.473	9.026	3.57	0.0000	0.05448	5.45	0.531
182	81.974	9.054	3.57	0.0000	0.05448	5.45	0.531
183	82.471	9.081	3.57	0.0000	0.05448	5.45	0.531
184	82.971	9.109	3.57	0.0000	0.05448	5.45	0.531
185	83.473	9.136	3.57	0.0000	0.05448	5.45	0.531
186	83.972	9.164	3.57	0.0000	0.05448	5.45	0.531
187	84.473	9.191	3.57	0.0000	0.05448	5.45	0.531
188	84.972	9.218	3.57	0.0000	0.05448	5.45	0.531
189	85.472	9.245	3.57	0.0000	0.05448	5.45	0.531
190	85.970	9.272	3.57	0.0000	0.05448	5.45	0.531
191	86.471	9.299	3.57	0.0000	0.05448	5.45	0.531
192	86.974	9.326	3.57	0.0000	0.05448	5.45	0.531
193	87.472	9.353	3.57	0.0000	0.05448	5.45	0.531
194	87.971	9.379	3.57	0.0000	0.05448	5.45	0.531
195	88.470	9.406	3.57	0.0000	0.05448	5.45	0.531
196	88.974	9.433	3.57	0.0000	0.05448	5.45	0.531
197	89.474	9.459	3.57	0.0000	0.05448	5.45	0.531
198	89.971	9.485	3.57	0.0000	0.05448	5.45	0.531
199	90.473	9.512	3.57	0.0000	0.05448	5.45	0.531
200	90.971	9.538	3.57	0.0000	0.05448	5.45	0.531

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.470	9.564	3.57	0.0000	0.05448	5.45	0.531
202	91.973	9.590	3.57	0.0000	0.05448	5.45	0.531
203	92.473	9.616	3.57	0.0000	0.05448	5.45	0.531
204	92.970	9.642	3.57	0.0000	0.05453	5.45	0.531
205	93.471	9.668	3.57	0.0000	0.05453	5.45	0.531
206	93.971	9.694	3.57	0.0000	0.05453	5.45	0.531
207	94.471	9.720	3.57	0.0000	0.05453	5.45	0.531
208	94.972	9.745	3.57	0.0000	0.05453	5.45	0.531
209	95.474	9.771	3.57	0.0000	0.05453	5.45	0.531
210	95.973	9.797	3.57	0.0000	0.05453	5.45	0.531
211	96.473	9.822	3.57	0.0000	0.05453	5.45	0.531
212	96.970	9.847	3.57	0.0000	0.05453	5.45	0.531
213	97.472	9.873	3.57	0.0000	0.05453	5.45	0.531
214	97.973	9.898	3.57	0.0000	0.05453	5.45	0.531
215	98.474	9.923	3.57	0.0000	0.05453	5.45	0.531
216	98.970	9.948	3.57	0.0000	0.05453	5.45	0.531
217	99.474	9.974	3.57	0.0000	0.05453	5.45	0.531
218	99.971	9.999	3.57	0.0000	0.05453	5.45	0.531
219	100.470	10.023	3.57	0.0000	0.05453	5.45	0.531
220	100.972	10.048	3.57	0.0000	0.05453	5.45	0.531
221	101.470	10.073	3.57	0.0000	0.05453	5.45	0.531
222	101.971	10.098	3.57	0.0000	0.05453	5.45	0.531
223	102.474	10.123	3.57	0.0000	0.05453	5.45	0.531
224	102.971	10.147	3.57	0.0000	0.05453	5.45	0.531
225	103.471	10.172	3.57	0.0000	0.05453	5.45	0.531
226	103.974	10.197	3.57	0.0000	0.05453	5.45	0.531
227	104.471	10.221	3.57	0.0000	0.05453	5.45	0.531
228	104.972	10.246	3.57	0.0000	0.05453	5.45	0.531
229	105.470	10.270	3.57	0.0000	0.05453	5.45	0.531
230	105.970	10.294	3.57	0.0000	0.05453	5.45	0.531
231	106.472	10.319	3.57	0.0000	0.05458	5.46	0.530
232	106.974	10.343	3.57	0.0000	0.05458	5.46	0.530
233	107.474	10.367	3.57	0.0000	0.05458	5.46	0.530
234	107.972	10.391	3.57	0.0000	0.05458	5.46	0.530
235	108.471	10.415	3.57	0.0000	0.05458	5.46	0.530
236	108.974	10.439	3.57	0.0000	0.05458	5.46	0.530
237	109.470	10.463	3.57	0.0000	0.05458	5.46	0.530
238	109.970	10.487	3.57	0.0000	0.05458	5.46	0.530
239	110.473	10.511	3.57	0.0000	0.05458	5.46	0.530
240	110.972	10.534	3.57	0.0000	0.05458	5.46	0.530
241	111.472	10.558	3.57	0.0000	0.05458	5.46	0.530
242	111.972	10.582	3.57	0.0000	0.05458	5.46	0.530
243	112.471	10.605	3.57	0.0000	0.05458	5.46	0.530
244	112.971	10.629	3.57	0.0000	0.05458	5.46	0.530
245	113.470	10.652	3.57	0.0000	0.05458	5.46	0.530
246	113.972	10.676	3.57	0.0000	0.05458	5.46	0.530
247	114.473	10.699	3.57	0.0000	0.05458	5.46	0.530
248	114.972	10.723	3.57	0.0000	0.05458	5.46	0.530
249	115.473	10.746	3.57	0.0000	0.05458	5.46	0.530
250	115.971	10.769	3.57	0.0000	0.05458	5.46	0.530

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.473	10.792	3.57	0.0000	0.05458	5.46	0.530
252	116.974	10.815	3.57	0.0000	0.05458	5.46	0.530
253	117.474	10.839	3.57	0.0000	0.05458	5.46	0.530
254	117.972	10.861	3.57	0.0000	0.05458	5.46	0.530
255	118.473	10.885	3.57	0.0000	0.05458	5.46	0.530
256	118.972	10.907	3.57	0.0000	0.05458	5.46	0.530
257	119.474	10.930	3.57	0.0000	0.05458	5.46	0.530
258	119.970	10.953	3.57	0.0000	0.05458	5.46	0.530
259	120.473	10.976	3.57	0.0000	0.05458	5.46	0.530
260	120.971	10.999	3.57	0.0000	0.05458	5.46	0.530
261	121.472	11.021	3.57	0.0000	0.05458	5.46	0.530
262	121.971	11.044	3.57	0.0000	0.05458	5.46	0.530
263	122.473	11.067	3.57	0.0000	0.05458	5.46	0.530
264	122.973	11.089	3.57	0.0000	0.05458	5.46	0.530
265	123.472	11.112	3.57	0.0000	0.05458	5.46	0.530
266	123.971	11.134	3.57	0.0000	0.05458	5.46	0.530
267	124.472	11.157	3.57	0.0000	0.05458	5.46	0.530
268	124.973	11.179	3.57	0.0000	0.05458	5.46	0.530
269	125.473	11.201	3.57	0.0000	0.05458	5.46	0.530
270	125.971	11.224	3.57	0.0000	0.05458	5.46	0.530
271	126.470	11.246	3.57	0.0000	0.05458	5.46	0.530
272	126.971	11.268	3.57	0.0000	0.05458	5.46	0.530
273	127.470	11.290	3.57	0.0000	0.05458	5.46	0.530
274	127.972	11.312	3.57	0.0000	0.05458	5.46	0.530
275	128.471	11.335	3.57	0.0000	0.05458	5.46	0.530
276	128.971	11.357	3.57	0.0000	0.05463	5.46	0.530
277	129.472	11.379	3.57	0.0000	0.05463	5.46	0.530
278	129.973	11.401	3.57	0.0000	0.05463	5.46	0.530
279	130.473	11.422	3.57	0.0000	0.05463	5.46	0.530
280	130.971	11.444	3.57	0.0000	0.05463	5.46	0.530
281	131.471	11.466	3.57	0.0000	0.05463	5.46	0.530
282	131.970	11.488	3.57	0.0000	0.05463	5.46	0.530
283	132.472	11.510	3.57	0.0000	0.05463	5.46	0.530
284	132.972	11.531	3.57	0.0000	0.05463	5.46	0.530
285	133.471	11.553	3.57	0.0000	0.05463	5.46	0.530
286	133.972	11.575	3.57	0.0000	0.05463	5.46	0.530
287	134.473	11.596	3.57	0.0000	0.05463	5.46	0.530
288	134.973	11.618	3.57	0.0000	0.05463	5.46	0.530
289	135.472	11.639	3.57	0.0000	0.05463	5.46	0.530
290	135.972	11.661	3.57	0.0000	0.05463	5.46	0.530
291	136.472	11.682	3.57	0.0000	0.05463	5.46	0.530
292	136.972	11.703	3.57	0.0000	0.05463	5.46	0.530
293	137.473	11.725	3.57	0.0000	0.05463	5.46	0.530
294	137.970	11.746	3.57	0.0000	0.05463	5.46	0.530
295	138.473	11.767	3.57	0.0000	0.05463	5.46	0.530
296	138.971	11.789	3.57	0.0000	0.05463	5.46	0.530
297	139.474	11.810	3.57	0.0000	0.05463	5.46	0.530
298	139.972	11.831	3.57	0.0000	0.05463	5.46	0.530
299	140.474	11.852	3.57	0.0000	0.05463	5.46	0.530
300	140.971	11.873	3.57	0.0000	0.05463	5.46	0.530

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.471	11.894	3.57	0.0000	0.05463	5.46	0.530
302	141.972	11.915	3.57	0.0000	0.05458	5.46	0.530
303	142.473	11.936	3.57	0.0000	0.05458	5.46	0.530
304	142.974	11.957	3.57	0.0000	0.05458	5.46	0.530
305	143.474	11.978	3.57	0.0000	0.05458	5.46	0.530
306	143.972	11.999	3.57	0.0000	0.05458	5.46	0.530
307	144.470	12.020	3.57	0.0000	0.05458	5.46	0.530
308	144.970	12.040	3.57	0.0000	0.05458	5.46	0.530
309	145.473	12.061	3.57	0.0000	0.05458	5.46	0.530
310	145.971	12.082	3.57	0.0000	0.05458	5.46	0.530
311	146.471	12.103	3.57	0.0000	0.05458	5.46	0.530
312	146.973	12.123	3.57	0.0000	0.05458	5.46	0.530
313	147.473	12.144	3.57	0.0000	0.05453	5.45	0.531
314	147.970	12.164	3.57	0.0000	0.05458	5.46	0.530
315	148.474	12.185	3.57	0.0000	0.05453	5.45	0.531
316	148.974	12.205	3.57	0.0000	0.05453	5.45	0.531
317	149.473	12.226	3.57	0.0000	0.05453	5.45	0.531
318	149.971	12.246	3.57	0.0000	0.05453	5.45	0.531
319	150.472	12.267	3.57	0.0000	0.05453	5.45	0.531
320	150.974	12.287	3.57	0.0000	0.05453	5.45	0.531
321	151.470	12.307	3.57	0.0000	0.05453	5.45	0.531
322	151.972	12.328	3.57	0.0000	0.05453	5.45	0.531
323	152.470	12.348	3.57	0.0000	0.05453	5.45	0.531
324	152.972	12.368	3.57	0.0000	0.05453	5.45	0.531
325	153.473	12.388	3.57	0.0000	0.05453	5.45	0.531
326	153.972	12.409	3.57	0.0000	0.05453	5.45	0.531
327	154.471	12.429	3.57	0.0000	0.05453	5.45	0.531
328	154.970	12.449	3.57	0.0000	0.05453	5.45	0.531
329	155.474	12.469	3.57	0.0000	0.05453	5.45	0.531
330	155.974	12.489	3.57	0.0000	0.05453	5.45	0.531
331	156.472	12.509	3.57	0.0000	0.05453	5.45	0.531
332	156.971	12.529	3.57	0.0000	0.05453	5.45	0.531
333	157.471	12.549	3.57	0.0000	0.05453	5.45	0.531
334	157.970	12.569	3.57	0.0000	0.05448	5.45	0.531
335	158.473	12.589	3.57	0.0000	0.05448	5.45	0.531
336	158.973	12.608	3.57	0.0000	0.05448	5.45	0.531
337	159.473	12.628	3.57	0.0000	0.05448	5.45	0.531
338	159.973	12.648	3.57	0.0000	0.05448	5.45	0.531
339	160.472	12.668	3.57	0.0000	0.05448	5.45	0.531
340	160.971	12.687	3.57	0.0000	0.05448	5.45	0.531
341	161.473	12.707	3.57	0.0000	0.05448	5.45	0.531
342	161.972	12.727	3.57	0.0000	0.05448	5.45	0.531
343	162.474	12.747	3.57	0.0000	0.05448	5.45	0.531
344	162.972	12.766	3.57	0.0000	0.05448	5.45	0.531
345	163.474	12.786	3.57	0.0000	0.05448	5.45	0.531
346	163.971	12.805	3.57	0.0000	0.05448	5.45	0.531
347	164.471	12.825	3.57	0.0000	0.05448	5.45	0.531
348	164.974	12.844	3.57	0.0000	0.05448	5.45	0.531
349	165.474	12.864	3.57	0.0000	0.05448	5.45	0.531
350	165.974	12.883	3.57	0.0000	0.05443	5.44	0.531

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.470	12.902	3.57	0.0000	0.05443	5.44	0.531
352	166.971	12.922	3.57	0.0000	0.05443	5.44	0.531
353	167.472	12.941	3.57	0.0000	0.05443	5.44	0.531
354	167.971	12.960	3.57	0.0000	0.05443	5.44	0.531
355	168.473	12.980	3.57	0.0000	0.05443	5.44	0.531
356	168.973	12.999	3.57	0.0000	0.05443	5.44	0.531
357	169.474	13.018	3.57	0.0000	0.05443	5.44	0.531
358	169.970	13.037	3.57	0.0000	0.05443	5.44	0.531
359	170.471	13.056	3.57	0.0000	0.05443	5.44	0.531
360	170.972	13.076	3.57	0.0000	0.05443	5.44	0.531
361	171.473	13.095	3.57	0.0000	0.05443	5.44	0.531
362	171.971	13.114	3.57	0.0000	0.05443	5.44	0.531
363	172.474	13.133	3.57	0.0000	0.05443	5.44	0.531
364	172.973	13.152	3.57	0.0000	0.05443	5.44	0.531
365	173.473	13.171	3.57	0.0000	0.05443	5.44	0.531
366	173.974	13.190	3.57	0.0000	0.05443	5.44	0.531
367	174.472	13.209	3.57	0.0000	0.05443	5.44	0.531
368	174.973	13.228	3.57	0.0000	0.05443	5.44	0.531
369	175.472	13.247	3.57	0.0000	0.05443	5.44	0.531
370	175.972	13.265	3.57	0.0000	0.05443	5.44	0.531
371	176.470	13.284	3.57	0.0000	0.05443	5.44	0.531
372	176.974	13.303	3.57	0.0000	0.05443	5.44	0.531
373	177.472	13.322	3.57	0.0000	0.05443	5.44	0.531
374	177.971	13.341	3.57	0.0000	0.05443	5.44	0.531
375	178.473	13.359	3.57	0.0000	0.05443	5.44	0.531
376	178.972	13.378	3.57	0.0000	0.05443	5.44	0.531
377	179.473	13.397	3.57	0.0000	0.05443	5.44	0.531
378	179.970	13.415	3.57	0.0000	0.05443	5.44	0.531
379	180.474	13.434	3.57	0.0000	0.05443	5.44	0.531
380	180.971	13.453	3.57	0.0000	0.05443	5.44	0.531
381	181.471	13.471	3.57	0.0000	0.05443	5.44	0.531
382	181.972	13.490	3.57	0.0000	0.05443	5.44	0.531
383	182.470	13.508	3.57	0.0000	0.05443	5.44	0.531
384	182.974	13.527	3.57	0.0000	0.05443	5.44	0.531
385	183.471	13.545	3.57	0.0000	0.05443	5.44	0.531
386	183.972	13.564	3.57	0.0000	0.05443	5.44	0.531
387	184.473	13.582	3.57	0.0000	0.05443	5.44	0.531
388	184.970	13.600	3.57	0.0000	0.05443	5.44	0.531
389	185.471	13.619	3.57	0.0000	0.05443	5.44	0.531
390	185.973	13.637	3.57	0.0000	0.05443	5.44	0.531
391	186.470	13.655	3.57	0.0000	0.05448	5.45	0.531
392	186.970	13.674	3.57	0.0000	0.05448	5.45	0.531
393	187.472	13.692	3.57	0.0000	0.05448	5.45	0.531
394	187.974	13.710	3.57	0.0000	0.05448	5.45	0.531
395	188.472	13.729	3.57	0.0000	0.05448	5.45	0.531
396	188.973	13.747	3.57	0.0000	0.05448	5.45	0.531
397	189.473	13.765	3.57	0.0000	0.05448	5.45	0.531
398	189.972	13.783	3.57	0.0000	0.05448	5.45	0.531
399	190.473	13.801	3.57	0.0000	0.05448	5.45	0.531
400	190.973	13.819	3.57	0.0000	0.05448	5.45	0.531

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.471	13.837	3.57	0.0000	0.05448	5.45	0.531
402	191.973	13.855	3.57	0.0000	0.05448	5.45	0.531
403	192.470	13.873	3.57	0.0000	0.05448	5.45	0.531
404	192.972	13.891	3.57	0.0000	0.05448	5.45	0.531
405	193.472	13.909	3.57	0.0000	0.05448	5.45	0.531
406	193.970	13.927	3.57	0.0000	0.05448	5.45	0.531
407	194.474	13.945	3.57	0.0000	0.05448	5.45	0.531
408	194.973	13.963	3.57	0.0000	0.05448	5.45	0.531
409	195.470	13.981	3.57	0.0000	0.05448	5.45	0.531
410	195.970	13.999	3.57	0.0000	0.05448	5.45	0.531
411	196.472	14.017	3.57	0.0000	0.05448	5.45	0.531
412	196.970	14.035	3.57	0.0000	0.05448	5.45	0.531
413	197.472	14.052	3.57	0.0000	0.05448	5.45	0.531
414	197.974	14.070	3.57	0.0000	0.05448	5.45	0.531
415	198.474	14.088	3.57	0.0000	0.05448	5.45	0.531
416	198.972	14.106	3.57	0.0000	0.05448	5.45	0.531
417	199.470	14.123	3.57	0.0000	0.05448	5.45	0.531
418	199.972	14.141	3.57	0.0000	0.05448	5.45	0.531
419	200.474	14.159	3.57	0.0000	0.05448	5.45	0.531
420	200.971	14.176	3.57	0.0000	0.05448	5.45	0.531
421	201.472	14.194	3.57	0.0000	0.05448	5.45	0.531
422	201.972	14.212	3.57	0.0000	0.05448	5.45	0.531
423	202.474	14.229	3.57	0.0000	0.05448	5.45	0.531
424	202.972	14.247	3.57	0.0000	0.05448	5.45	0.531
425	203.473	14.264	3.57	0.0000	0.05448	5.45	0.531
426	203.971	14.282	3.57	0.0000	0.05453	5.45	0.531
427	204.470	14.299	3.57	0.0000	0.05448	5.45	0.531
428	204.974	14.317	3.57	0.0000	0.05448	5.45	0.531
429	205.474	14.334	3.57	0.0000	0.05453	5.45	0.531
430	205.973	14.352	3.57	0.0000	0.05453	5.45	0.531
431	206.471	14.369	3.57	0.0000	0.05453	5.45	0.531
432	206.971	14.386	3.57	0.0000	0.05453	5.45	0.531
433	207.471	14.404	3.57	0.0000	0.05453	5.45	0.531
434	207.972	14.421	3.57	0.0000	0.05453	5.45	0.531
435	208.470	14.438	3.57	0.0000	0.05453	5.45	0.531
436	208.970	14.456	3.57	0.0000	0.05453	5.45	0.531
437	209.471	14.473	3.57	0.0000	0.05453	5.45	0.531
438	209.974	14.490	3.57	0.0000	0.05453	5.45	0.531
439	210.470	14.508	3.57	0.0000	0.05453	5.45	0.531
440	210.974	14.525	3.57	0.0000	0.05453	5.45	0.531
441	211.473	14.542	3.57	0.0000	0.05453	5.45	0.531
442	211.972	14.559	3.57	0.0000	0.05453	5.45	0.531
443	212.473	14.576	3.57	0.0000	0.05453	5.45	0.531
444	212.970	14.593	3.57	0.0000	0.05453	5.45	0.531
445	213.471	14.611	3.57	0.0000	0.05453	5.45	0.531
446	213.971	14.628	3.57	0.0000	0.05453	5.45	0.531
447	214.474	14.645	3.57	0.0000	0.05453	5.45	0.531
448	214.972	14.662	3.57	0.0000	0.05453	5.45	0.531
449	215.474	14.679	3.57	0.0000	0.05453	5.45	0.531
450	215.971	14.696	3.57	0.0000	0.05453	5.45	0.531

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.474	14.713	3.57	0.0000	0.05453	5.45	0.531
452	216.973	14.730	3.57	0.0000	0.05458	5.46	0.530
453	217.474	14.747	3.57	0.0000	0.05453	5.45	0.531
454	217.971	14.764	3.57	0.0000	0.05453	5.45	0.531
455	218.471	14.781	3.57	0.0000	0.05453	5.45	0.531
456	218.972	14.798	3.57	0.0000	0.05453	5.45	0.531
457	219.472	14.815	3.57	0.0000	0.05453	5.45	0.531
458	219.974	14.832	3.57	0.0000	0.05453	5.45	0.531
459	220.473	14.848	3.57	0.0000	0.05458	5.46	0.530
460	220.972	14.865	3.57	0.0000	0.05458	5.46	0.530
461	221.473	14.882	3.57	0.0000	0.05453	5.45	0.531
462	221.971	14.899	3.57	0.0000	0.05458	5.46	0.530
463	222.474	14.916	3.57	0.0000	0.05458	5.46	0.530
464	222.972	14.932	3.57	0.0000	0.05458	5.46	0.530
465	223.470	14.949	3.57	0.0000	0.05458	5.46	0.530
466	223.974	14.966	3.57	0.0000	0.05458	5.46	0.530
467	224.473	14.982	3.57	0.0000	0.05458	5.46	0.530
468	224.970	14.999	3.57	0.0000	0.05458	5.46	0.530
469	225.472	15.016	3.57	0.0000	0.05458	5.46	0.530
470	225.974	15.032	3.57	0.0000	0.05458	5.46	0.530
471	226.470	15.049	3.57	0.0000	0.05458	5.46	0.530
472	226.972	15.066	3.57	0.0000	0.05458	5.46	0.530
473	227.473	15.082	3.57	0.0000	0.05458	5.46	0.530
474	227.974	15.099	3.57	0.0000	0.05458	5.46	0.530
475	228.471	15.115	3.57	0.0000	0.05458	5.46	0.530
476	228.970	15.132	3.57	0.0000	0.05458	5.46	0.530
477	229.474	15.148	3.57	0.0000	0.05458	5.46	0.530
478	229.971	15.165	3.57	0.0000	0.05458	5.46	0.530
479	230.470	15.181	3.57	0.0000	0.05458	5.46	0.530
480	230.970	15.198	3.57	0.0000	0.05458	5.46	0.530
481	231.472	15.214	3.57	0.0000	0.05458	5.46	0.530
482	231.971	15.231	3.57	0.0000	0.05463	5.46	0.530
483	232.474	15.247	3.57	0.0000	0.05463	5.46	0.530
484	232.971	15.263	3.57	0.0000	0.05463	5.46	0.530
485	233.474	15.280	3.57	0.0000	0.05463	5.46	0.530
486	233.971	15.296	3.57	0.0000	0.05463	5.46	0.530
487	234.472	15.312	3.57	0.0000	0.05463	5.46	0.530
488	234.974	15.329	3.57	0.0000	0.05463	5.46	0.530
489	235.472	15.345	3.57	0.0000	0.05463	5.46	0.530
490	235.971	15.361	3.57	0.0000	0.05463	5.46	0.530
491	236.470	15.378	3.57	0.0000	0.05463	5.46	0.530
492	236.973	15.394	3.57	0.0000	0.05463	5.46	0.530
493	237.473	15.410	3.57	0.0000	0.05463	5.46	0.530
494	237.970	15.426	3.57	0.0000	0.05463	5.46	0.530
495	238.474	15.443	3.57	0.0000	0.05463	5.46	0.530
496	238.974	15.459	3.57	0.0000	0.05463	5.46	0.530
497	239.473	15.475	3.57	0.0000	0.05463	5.46	0.530
498	239.972	15.491	3.57	0.0000	0.05463	5.46	0.530
499	240.472	15.507	3.57	0.0000	0.05463	5.46	0.530
500	240.973	15.523	3.57	0.0000	0.05463	5.46	0.530

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.473	15.539	3.57	0.0000	0.05463	5.46	0.530
502	241.971	15.555	3.57	0.0000	0.05463	5.46	0.530
503	242.471	15.571	3.57	0.0000	0.05468	5.47	0.530
504	242.973	15.588	3.57	0.0000	0.05468	5.47	0.530
505	243.472	15.604	3.57	0.0000	0.05468	5.47	0.530
506	243.971	15.620	3.57	0.0000	0.05468	5.47	0.530
507	244.474	15.636	3.57	0.0000	0.05468	5.47	0.530
508	244.973	15.652	3.57	0.0000	0.05468	5.47	0.530
509	245.474	15.668	3.57	0.0000	0.05468	5.47	0.530
510	245.974	15.684	3.57	0.0000	0.05468	5.47	0.530
511	246.470	15.699	3.57	0.0000	0.05468	5.47	0.530
512	246.970	15.715	3.57	0.0000	0.05468	5.47	0.530
513	247.472	15.731	3.57	0.0000	0.05468	5.47	0.530
514	247.973	15.747	3.57	0.0000	0.05468	5.47	0.530
515	248.474	15.763	3.57	0.0000	0.05473	5.47	0.530
516	248.973	15.779	3.57	0.0000	0.05473	5.47	0.530
517	249.473	15.795	3.57	0.0000	0.05473	5.47	0.530
518	249.974	15.811	3.57	0.0000	0.05473	5.47	0.530
519	250.470	15.826	3.57	0.0000	0.05473	5.47	0.530
520	250.971	15.842	3.57	0.0000	0.05478	5.48	0.530
521	251.473	15.858	3.57	0.0000	0.05478	5.48	0.530
522	251.972	15.874	3.57	0.0000	0.05478	5.48	0.530
523	252.471	15.889	3.57	0.0000	0.05483	5.48	0.530
524	252.972	15.905	3.57	0.0000	0.05483	5.48	0.530
525	253.472	15.921	3.57	0.0000	0.05483	5.48	0.530
526	253.974	15.937	3.57	0.0000	0.05483	5.48	0.530
527	254.474	15.952	3.57	0.0000	0.05483	5.48	0.530
528	254.971	15.968	3.57	0.0000	0.05483	5.48	0.530
529	255.472	15.984	3.57	0.0000	0.05483	5.48	0.530
530	255.972	15.999	3.57	0.0000	0.05483	5.48	0.530
531	256.471	16.015	3.57	0.0000	0.05483	5.48	0.530
532	256.972	16.030	3.57	0.0000	0.05483	5.48	0.530
533	257.472	16.046	3.57	0.0000	0.05483	5.48	0.530
534	257.973	16.062	3.57	0.0000	0.05483	5.48	0.530
535	258.471	16.077	3.57	0.0000	0.05483	5.48	0.530
536	258.973	16.093	3.57	0.0000	0.05483	5.48	0.530
537	259.472	16.108	3.57	0.0000	0.05483	5.48	0.530
538	259.973	16.124	3.57	0.0000	0.05483	5.48	0.530
539	260.472	16.139	3.57	0.0000	0.05483	5.48	0.530
540	260.970	16.155	3.57	0.0000	0.05483	5.48	0.530
541	261.473	16.170	3.57	0.0000	0.05483	5.48	0.530
542	261.972	16.186	3.57	0.0000	0.05483	5.48	0.530
543	262.472	16.201	3.57	0.0000	0.05483	5.48	0.530
544	262.970	16.216	3.57	0.0000	0.05483	5.48	0.530
545	263.474	16.232	3.57	0.0000	0.05483	5.48	0.530
546	263.973	16.247	3.57	0.0000	0.05483	5.48	0.530
547	264.474	16.263	3.57	0.0000	0.05483	5.48	0.530
548	264.974	16.278	3.57	0.0000	0.05483	5.48	0.530
549	265.474	16.293	3.57	0.0000	0.05483	5.48	0.530
550	265.974	16.309	3.57	0.0000	0.05483	5.48	0.530

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.470	16.324	3.57	0.0000	0.05483	5.48	0.530
552	266.974	16.339	3.57	0.0000	0.05483	5.48	0.530
553	267.473	16.355	3.57	0.0000	0.05483	5.48	0.530
554	267.970	16.370	3.57	0.0000	0.05483	5.48	0.530
555	268.471	16.385	3.57	0.0000	0.05483	5.48	0.530
556	268.970	16.400	3.57	0.0000	0.05478	5.48	0.530
557	269.470	16.416	3.57	0.0000	0.05478	5.48	0.530
558	269.974	16.431	3.57	0.0000	0.05473	5.47	0.530
559	270.471	16.446	3.57	0.0000	0.05473	5.47	0.530
560	270.970	16.461	3.57	0.0000	0.05473	5.47	0.530
561	271.472	16.476	3.57	0.0000	0.05473	5.47	0.530
562	271.974	16.492	3.57	0.0000	0.05473	5.47	0.530
563	272.470	16.507	3.57	0.0000	0.05473	5.47	0.530
564	272.973	16.522	3.57	0.0000	0.05473	5.47	0.530
565	273.473	16.537	3.57	0.0000	0.05473	5.47	0.530
566	273.973	16.552	3.57	0.0000	0.05473	5.47	0.530
567	274.473	16.567	3.57	0.0000	0.05473	5.47	0.530
568	274.972	16.582	3.57	0.0000	0.05468	5.47	0.530
569	275.471	16.597	3.57	0.0000	0.05468	5.47	0.530
570	275.972	16.612	3.57	0.0000	0.05468	5.47	0.530
571	276.473	16.627	3.57	0.0000	0.05468	5.47	0.530
572	276.973	16.642	3.57	0.0000	0.05473	5.47	0.530
573	277.473	16.658	3.57	0.0000	0.05468	5.47	0.530
574	277.972	16.672	3.57	0.0000	0.05468	5.47	0.530
575	278.470	16.687	3.57	0.0000	0.05473	5.47	0.530
576	278.972	16.702	3.57	0.0000	0.05468	5.47	0.530
577	279.472	16.717	3.57	0.0000	0.05468	5.47	0.530
578	279.971	16.732	3.57	0.0000	0.05468	5.47	0.530
579	280.473	16.747	3.57	0.0000	0.05468	5.47	0.530
580	280.973	16.762	3.57	0.0000	0.05468	5.47	0.530
581	281.474	16.777	3.57	0.0000	0.05473	5.47	0.530
582	281.970	16.792	3.57	0.0000	0.05473	5.47	0.530
583	282.474	16.807	3.57	0.0000	0.05473	5.47	0.530
584	282.973	16.822	3.57	0.0000	0.05473	5.47	0.530
585	283.472	16.837	3.57	0.0000	0.05473	5.47	0.530
586	283.972	16.851	3.57	0.0000	0.05473	5.47	0.530
587	284.472	16.866	3.57	0.0000	0.05473	5.47	0.530
588	284.970	16.881	3.57	0.0000	0.05473	5.47	0.530
589	285.473	16.896	3.57	0.0000	0.05473	5.47	0.530
590	285.974	16.911	3.57	0.0000	0.05473	5.47	0.530
591	286.472	16.925	3.57	0.0000	0.05473	5.47	0.530
592	286.974	16.940	3.57	0.0000	0.05473	5.47	0.530
593	287.473	16.955	3.57	0.0000	0.05473	5.47	0.530
594	287.974	16.970	3.57	0.0000	0.05473	5.47	0.530
595	288.473	16.984	3.57	0.0000	0.05473	5.47	0.530
596	288.973	16.999	3.57	0.0000	0.05473	5.47	0.530
597	289.473	17.014	3.57	0.0000	0.05473	5.47	0.530
598	289.974	17.029	3.57	0.0000	0.05473	5.47	0.530
599	290.474	17.043	3.57	0.0000	0.05473	5.47	0.530
600	290.971	17.058	3.57	0.0000	0.05473	5.47	0.530

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.470	17.073	3.57	0.0000	0.05473	5.47	0.530
602	291.972	17.087	3.57	0.0000	0.05473	5.47	0.530
603	292.470	17.102	3.57	0.0000	0.05473	5.47	0.530
604	292.971	17.116	3.57	0.0000	0.05473	5.47	0.530
605	293.470	17.131	3.57	0.0000	0.05473	5.47	0.530
606	293.970	17.146	3.57	0.0000	0.05473	5.47	0.530
607	294.471	17.160	3.57	0.0000	0.05473	5.47	0.530
608	294.970	17.175	3.57	0.0000	0.05473	5.47	0.530
609	295.473	17.189	3.57	0.0000	0.05473	5.47	0.530
610	295.972	17.204	3.57	0.0000	0.05478	5.48	0.530
611	296.473	17.218	3.57	0.0000	0.05478	5.48	0.530
612	296.974	17.233	3.57	0.0000	0.05478	5.48	0.530
613	297.470	17.247	3.57	0.0000	0.05478	5.48	0.530
614	297.972	17.262	3.57	0.0000	0.05478	5.48	0.530
615	298.473	17.276	3.57	0.0000	0.05478	5.48	0.530
616	298.973	17.291	3.57	0.0000	0.05483	5.48	0.530
617	299.473	17.305	3.57	0.0000	0.05483	5.48	0.530
618	299.971	17.320	3.57	0.0000	0.05483	5.48	0.530
619	300.472	17.334	3.57	0.0000	0.05483	5.48	0.530
620	300.973	17.349	3.57	0.0000	0.05483	5.48	0.530
621	301.471	17.363	3.57	0.0000	0.05483	5.48	0.530
622	301.974	17.377	3.57	0.0000	0.05483	5.48	0.530
623	302.473	17.392	3.57	0.0000	0.05483	5.48	0.530
624	302.973	17.406	3.57	0.0000	0.05483	5.48	0.530
625	303.470	17.420	3.57	0.0000	0.05488	5.49	0.530
626	303.973	17.435	3.57	0.0000	0.05483	5.48	0.530
627	304.473	17.449	3.57	0.0000	0.05483	5.48	0.530
628	304.972	17.463	3.57	0.0000	0.05488	5.49	0.530
629	305.471	17.478	3.57	0.0000	0.05488	5.49	0.530
630	305.973	17.492	3.57	0.0000	0.05488	5.49	0.530
631	306.471	17.506	3.57	0.0000	0.05488	5.49	0.530
632	306.971	17.521	3.57	0.0000	0.05488	5.49	0.530
633	307.470	17.535	3.57	0.0000	0.05488	5.49	0.530
634	307.972	17.549	3.57	0.0000	0.05488	5.49	0.530
635	308.473	17.563	3.57	0.0000	0.05488	5.49	0.530
636	308.974	17.578	3.57	0.0000	0.05488	5.49	0.530
637	309.474	17.592	3.57	0.0000	0.05488	5.49	0.530
638	309.970	17.606	3.57	0.0000	0.05488	5.49	0.530
639	310.471	17.620	3.57	0.0000	0.05488	5.49	0.530
640	310.971	17.634	3.57	0.0000	0.05488	5.49	0.530
641	311.472	17.649	3.57	0.0000	0.05488	5.49	0.530
642	311.971	17.663	3.57	0.0000	0.05488	5.49	0.530
643	312.473	17.677	3.57	0.0000	0.05488	5.49	0.530
644	312.971	17.691	3.57	0.0000	0.05488	5.49	0.530
645	313.472	17.705	3.57	0.0000	0.05488	5.49	0.530
646	313.971	17.719	3.57	0.0000	0.05488	5.49	0.530
647	314.470	17.733	3.57	0.0000	0.05483	5.48	0.530
648	314.972	17.747	3.57	0.0000	0.05483	5.48	0.530
649	315.472	17.762	3.57	0.0000	0.05483	5.48	0.530
650	315.972	17.776	3.57	0.0000	0.05483	5.48	0.530

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.473	17.790	3.57	0.0000	0.05478	5.48	0.530
652	316.971	17.804	3.57	0.0000	0.05483	5.48	0.530
653	317.470	17.818	3.57	0.0000	0.05483	5.48	0.530
654	317.971	17.832	3.57	0.0000	0.05483	5.48	0.530
655	318.474	17.846	3.57	0.0000	0.05478	5.48	0.530
656	318.973	17.860	3.57	0.0000	0.05478	5.48	0.530
657	319.472	17.874	3.57	0.0000	0.05478	5.48	0.530
658	319.970	17.888	3.57	0.0000	0.05478	5.48	0.530
659	320.473	17.902	3.57	0.0000	0.05478	5.48	0.530
660	320.970	17.916	3.57	0.0000	0.05473	5.47	0.530
661	321.471	17.930	3.57	0.0000	0.05473	5.47	0.530
662	321.970	17.944	3.57	0.0000	0.05473	5.47	0.530
663	322.473	17.958	3.57	0.0000	0.05473	5.47	0.530
664	322.972	17.971	3.57	0.0000	0.05473	5.47	0.530
665	323.472	17.985	3.57	0.0000	0.05473	5.47	0.530
666	323.971	17.999	3.57	0.0000	0.05473	5.47	0.530
667	324.471	18.013	3.57	0.0000	0.05473	5.47	0.530
668	324.972	18.027	3.57	0.0000	0.05473	5.47	0.530
669	325.471	18.041	3.57	0.0000	0.05473	5.47	0.530
670	325.970	18.055	3.57	0.0000	0.05473	5.47	0.530
671	326.473	18.069	3.57	0.0000	0.05473	5.47	0.530
672	326.972	18.082	3.57	0.0000	0.05473	5.47	0.530
673	327.471	18.096	3.57	0.0000	0.05473	5.47	0.530
674	327.971	18.110	3.57	0.0000	0.05473	5.47	0.530
675	328.470	18.124	3.57	0.0000	0.05473	5.47	0.530
676	328.974	18.138	3.57	0.0000	0.05473	5.47	0.530
677	329.473	18.151	3.57	0.0000	0.05473	5.47	0.530
678	329.973	18.165	3.57	0.0000	0.05473	5.47	0.530
679	330.472	18.179	3.57	0.0000	0.05473	5.47	0.530
680	330.972	18.193	3.57	0.0000	0.05473	5.47	0.530
681	331.472	18.206	3.57	0.0000	0.05473	5.47	0.530
682	331.974	18.220	3.57	0.0000	0.05473	5.47	0.530
683	332.473	18.234	3.57	0.0000	0.05473	5.47	0.530
684	332.974	18.248	3.57	0.0000	0.05478	5.48	0.530
685	333.472	18.261	3.57	0.0000	0.05473	5.47	0.530
686	333.972	18.275	3.57	0.0000	0.05478	5.48	0.530
687	334.473	18.289	3.57	0.0000	0.05478	5.48	0.530
688	334.970	18.302	3.57	0.0000	0.05478	5.48	0.530
689	335.471	18.316	3.57	0.0000	0.05478	5.48	0.530
690	335.970	18.329	3.57	0.0000	0.05478	5.48	0.530
691	336.474	18.343	3.57	0.0000	0.05478	5.48	0.530
692	336.970	18.357	3.57	0.0000	0.05478	5.48	0.530
693	337.474	18.370	3.57	0.0000	0.05478	5.48	0.530
694	337.972	18.384	3.57	0.0000	0.05478	5.48	0.530
695	338.473	18.398	3.57	0.0000	0.05478	5.48	0.530
696	338.974	18.411	3.57	0.0000	0.05478	5.48	0.530
697	339.473	18.425	3.57	0.0000	0.05478	5.48	0.530
698	339.973	18.438	3.57	0.0000	0.05478	5.48	0.530
699	340.471	18.452	3.57	0.0000	0.05478	5.48	0.530
700	340.973	18.465	3.57	0.0000	0.05478	5.48	0.530

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.471	18.479	3.57	0.0000	0.05478	5.48	0.530
702	341.973	18.493	3.57	0.0000	0.05483	5.48	0.530
703	342.473	18.506	3.57	0.0000	0.05483	5.48	0.530
704	342.974	18.520	3.57	0.0000	0.05483	5.48	0.530
705	343.473	18.533	3.57	0.0000	0.05483	5.48	0.530
706	343.970	18.546	3.57	0.0000	0.05488	5.49	0.530
707	344.473	18.560	3.57	0.0000	0.05488	5.49	0.530
708	344.972	18.573	3.57	0.0000	0.05488	5.49	0.530
709	345.472	18.587	3.57	0.0000	0.05488	5.49	0.530
710	345.972	18.600	3.57	0.0000	0.05488	5.49	0.530
711	346.471	18.614	3.57	0.0000	0.05488	5.49	0.530
712	346.974	18.627	3.57	0.0000	0.05488	5.49	0.530
713	347.471	18.641	3.57	0.0000	0.05488	5.49	0.530
714	347.972	18.654	3.57	0.0000	0.05488	5.49	0.530
715	348.473	18.667	3.57	0.0000	0.05488	5.49	0.530
716	348.974	18.681	3.57	0.0000	0.05488	5.49	0.530
717	349.474	18.694	3.57	0.0000	0.05488	5.49	0.530
718	349.973	18.708	3.57	0.0000	0.05488	5.49	0.530
719	350.471	18.721	3.57	0.0000	0.05493	5.49	0.530
720	350.974	18.734	3.57	0.0000	0.05493	5.49	0.530
721	351.473	18.748	3.57	0.0000	0.05493	5.49	0.530
722	351.973	18.761	3.57	0.0000	0.05493	5.49	0.530
723	352.474	18.774	3.57	0.0000	0.05493	5.49	0.530
724	352.971	18.788	3.57	0.0000	0.05493	5.49	0.530
725	353.473	18.801	3.57	0.0000	0.05493	5.49	0.530
726	353.970	18.814	3.57	0.0000	0.05493	5.49	0.530
727	354.471	18.827	3.57	0.0000	0.05493	5.49	0.530
728	354.974	18.841	3.57	0.0000	0.05493	5.49	0.530
729	355.474	18.854	3.57	0.0000	0.05488	5.49	0.530
730	355.974	18.867	3.57	0.0000	0.05493	5.49	0.530
731	356.474	18.881	3.57	0.0000	0.05493	5.49	0.530
732	356.973	18.894	3.57	0.0000	0.05493	5.49	0.530
733	357.472	18.907	3.57	0.0000	0.05493	5.49	0.530
734	357.971	18.920	3.57	0.0000	0.05493	5.49	0.530
735	358.473	18.933	3.57	0.0000	0.05488	5.49	0.530
736	358.972	18.947	3.57	0.0000	0.05488	5.49	0.530
737	359.471	18.960	3.57	0.0000	0.05488	5.49	0.530
738	359.971	18.973	3.57	0.0000	0.05488	5.49	0.530
739	360.006	18.974	3.57	0.0000	0.05488	5.49	0.530

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.023		3.57	0.0000	0.05488	5.49	0.530
2	-0.019		3.57	0.0000	0.05488	5.49	0.530
3	-0.015		4.32	0.0000	0.05562	5.56	0.529
4	-0.011		5.38	0.0000	0.05816	5.82	0.525
5	-0.006		5.99	0.0000	0.06213	6.21	0.518
6	-0.002		6.53	0.0000	0.06466	6.47	0.514
7	0.000	0.000	6.79	0.0000	0.06593	6.59	0.512
8	0.002	0.047	7.08	0.0000	0.06739	6.74	0.510
9	0.006	0.080	7.02	0.0000	0.06908	6.91	0.507
10	0.011	0.104	6.91	0.0000	0.06923	6.92	0.507
11	0.015	0.124	6.95	0.0000	0.06953	6.95	0.506
12	0.019	0.140	7.01	0.0000	0.06973	6.97	0.506
13	0.024	0.154	7.06	0.0000	0.06983	6.98	0.506
14	0.028	0.167	7.10	0.0000	0.06993	6.99	0.506
15	0.032	0.179	7.14	0.0000	0.07023	7.02	0.505
16	0.036	0.190	7.06	0.0000	0.07037	7.04	0.505
17	0.054	0.232	7.11	0.0000	0.07117	7.12	0.504
18	0.062	0.249	7.13	0.0000	0.07142	7.14	0.503
19	0.144	0.380	7.11	0.0000	0.07256	7.26	0.501
20	0.230	0.480	7.13	0.0000	0.07291	7.29	0.501
21	0.312	0.559	7.13	0.0000	0.07335	7.34	0.500
22	0.480	0.693	7.13	0.0000	0.07375	7.38	0.499
23	0.728	0.853	7.14	0.0000	0.07430	7.43	0.499
24	0.977	0.988	7.13	0.0000	0.07465	7.46	0.498
25	1.481	1.217	7.14	0.0000	0.07499	7.50	0.497
26	2.479	1.574	7.15	0.0000	0.07579	7.58	0.496
27	4.481	2.117	7.15	0.0000	0.07619	7.62	0.495
28	4.981	2.232	7.14	0.0000	0.07624	7.62	0.495
29	5.480	2.341	7.14	0.0000	0.07628	7.63	0.495
30	5.979	2.445	7.14	0.0000	0.07633	7.63	0.495
31	6.478	2.545	7.15	0.0000	0.07638	7.64	0.495
32	6.981	2.642	7.14	0.0000	0.07643	7.64	0.495
33	7.479	2.735	7.14	0.0000	0.07653	7.65	0.495
34	7.978	2.825	7.14	0.0000	0.07658	7.66	0.495
35	8.479	2.912	7.14	0.0000	0.07658	7.66	0.495
36	8.979	2.997	7.14	0.0000	0.07663	7.66	0.495
37	9.481	3.079	7.14	0.0000	0.07668	7.67	0.495
38	9.978	3.159	7.14	0.0000	0.07673	7.67	0.495
39	10.477	3.237	7.14	0.0000	0.07678	7.68	0.494
40	10.979	3.314	7.14	0.0000	0.07683	7.68	0.494
41	11.479	3.388	7.14	0.0000	0.07683	7.68	0.494
42	11.979	3.461	7.14	0.0000	0.07683	7.68	0.494
43	12.479	3.533	7.14	0.0000	0.07688	7.69	0.494
44	12.979	3.603	7.15	0.0000	0.07688	7.69	0.494
45	13.479	3.671	7.15	0.0000	0.07688	7.69	0.494
46	13.978	3.739	7.14	0.0000	0.07688	7.69	0.494
47	14.478	3.805	7.14	0.0000	0.07693	7.69	0.494
48	14.978	3.870	7.14	0.0000	0.07693	7.69	0.494
49	15.480	3.934	7.14	0.0000	0.07693	7.69	0.494
50	15.981	3.998	7.14	0.0000	0.07693	7.69	0.494

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.477	4.059	7.14	0.0000	0.07698	7.70	0.494
52	16.979	4.121	7.14	0.0000	0.07698	7.70	0.494
53	17.478	4.181	7.14	0.0000	0.07703	7.70	0.494
54	17.979	4.240	7.14	0.0000	0.07703	7.70	0.494
55	18.481	4.299	7.14	0.0000	0.07703	7.70	0.494
56	18.979	4.356	7.14	0.0000	0.07708	7.71	0.494
57	19.479	4.413	7.15	0.0000	0.07708	7.71	0.494
58	19.978	4.470	7.14	0.0000	0.07708	7.71	0.494
59	20.478	4.525	7.14	0.0000	0.07713	7.71	0.494
60	20.978	4.580	7.14	0.0000	0.07713	7.71	0.494
61	21.477	4.634	7.14	0.0000	0.07713	7.71	0.494
62	21.980	4.688	7.14	0.0000	0.07718	7.72	0.494
63	22.480	4.741	7.14	0.0000	0.07718	7.72	0.494
64	22.978	4.794	7.14	0.0000	0.07718	7.72	0.494
65	23.480	4.846	7.14	0.0000	0.07723	7.72	0.494
66	23.978	4.897	7.14	0.0000	0.07723	7.72	0.494
67	24.481	4.948	7.14	0.0000	0.07723	7.72	0.494
68	24.978	4.998	7.14	0.0000	0.07723	7.72	0.494
69	25.477	5.047	7.14	0.0000	0.07723	7.72	0.494
70	25.977	5.097	7.14	0.0000	0.07723	7.72	0.494
71	26.480	5.146	7.14	0.0000	0.07723	7.72	0.494
72	26.980	5.194	7.14	0.0000	0.07723	7.72	0.494
73	27.479	5.242	7.14	0.0000	0.07728	7.73	0.494
74	27.978	5.289	7.14	0.0000	0.07728	7.73	0.494
75	28.480	5.337	7.14	0.0000	0.07728	7.73	0.494
76	28.980	5.383	7.14	0.0000	0.07733	7.73	0.494
77	29.479	5.429	7.14	0.0000	0.07733	7.73	0.494
78	29.979	5.475	7.14	0.0000	0.07738	7.74	0.494
79	30.478	5.521	7.14	0.0000	0.07738	7.74	0.494
80	30.980	5.566	7.14	0.0000	0.07738	7.74	0.494
81	31.477	5.610	7.14	0.0000	0.07738	7.74	0.494
82	31.980	5.655	7.14	0.0000	0.07738	7.74	0.494
83	32.477	5.699	7.14	0.0000	0.07743	7.74	0.493
84	32.978	5.743	7.14	0.0000	0.07743	7.74	0.493
85	33.480	5.786	7.14	0.0000	0.07743	7.74	0.493
86	33.980	5.829	7.14	0.0000	0.07743	7.74	0.493
87	34.479	5.872	7.14	0.0000	0.07743	7.74	0.493
88	34.979	5.914	7.14	0.0000	0.07743	7.74	0.493
89	35.478	5.956	7.14	0.0000	0.07743	7.74	0.493
90	35.979	5.998	7.14	0.0000	0.07743	7.74	0.493
91	36.478	6.040	7.14	0.0000	0.07743	7.74	0.493
92	36.979	6.081	7.14	0.0000	0.07743	7.74	0.493
93	37.480	6.122	7.14	0.0000	0.07743	7.74	0.493
94	37.980	6.163	7.14	0.0000	0.07743	7.74	0.493
95	38.479	6.203	7.14	0.0000	0.07743	7.74	0.493
96	38.978	6.243	7.14	0.0000	0.07748	7.75	0.493
97	39.477	6.283	7.14	0.0000	0.07748	7.75	0.493
98	39.977	6.323	7.14	0.0000	0.07743	7.74	0.493
99	40.477	6.362	7.14	0.0000	0.07748	7.75	0.493
100	40.979	6.401	7.14	0.0000	0.07748	7.75	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.480	6.440	7.14	0.0000	0.07748	7.75	0.493
102	41.979	6.479	7.14	0.0000	0.07748	7.75	0.493
103	42.481	6.518	7.14	0.0000	0.07748	7.75	0.493
104	42.980	6.556	7.14	0.0000	0.07748	7.75	0.493
105	43.479	6.594	7.14	0.0000	0.07748	7.75	0.493
106	43.981	6.632	7.14	0.0000	0.07748	7.75	0.493
107	44.480	6.669	7.14	0.0000	0.07748	7.75	0.493
108	44.978	6.707	7.14	0.0000	0.07753	7.75	0.493
109	45.481	6.744	7.14	0.0000	0.07753	7.75	0.493
110	45.980	6.781	7.14	0.0000	0.07753	7.75	0.493
111	46.480	6.818	7.14	0.0000	0.07753	7.75	0.493
112	46.978	6.854	7.14	0.0000	0.07753	7.75	0.493
113	47.477	6.890	7.14	0.0000	0.07753	7.75	0.493
114	47.977	6.927	7.14	0.0000	0.07753	7.75	0.493
115	48.479	6.963	7.14	0.0000	0.07753	7.75	0.493
116	48.977	6.998	7.14	0.0000	0.07753	7.75	0.493
117	49.479	7.034	7.14	0.0000	0.07758	7.76	0.493
118	49.979	7.070	7.14	0.0000	0.07758	7.76	0.493
119	50.480	7.105	7.14	0.0000	0.07758	7.76	0.493
120	50.979	7.140	7.14	0.0000	0.07758	7.76	0.493
121	51.479	7.175	7.14	0.0000	0.07758	7.76	0.493
122	51.979	7.210	7.14	0.0000	0.07758	7.76	0.493
123	52.477	7.244	7.14	0.0000	0.07758	7.76	0.493
124	52.977	7.279	7.14	0.0000	0.07758	7.76	0.493
125	53.477	7.313	7.14	0.0000	0.07758	7.76	0.493
126	53.979	7.347	7.14	0.0000	0.07758	7.76	0.493
127	54.479	7.381	7.14	0.0000	0.07758	7.76	0.493
128	54.979	7.415	7.14	0.0000	0.07758	7.76	0.493
129	55.480	7.448	7.14	0.0000	0.07758	7.76	0.493
130	55.980	7.482	7.14	0.0000	0.07758	7.76	0.493
131	56.481	7.515	7.14	0.0000	0.07763	7.76	0.493
132	56.978	7.548	7.14	0.0000	0.07758	7.76	0.493
133	57.479	7.581	7.14	0.0000	0.07758	7.76	0.493
134	57.977	7.614	7.14	0.0000	0.07763	7.76	0.493
135	58.478	7.647	7.14	0.0000	0.07758	7.76	0.493
136	58.980	7.680	7.14	0.0000	0.07763	7.76	0.493
137	59.480	7.712	7.14	0.0000	0.07763	7.76	0.493
138	59.979	7.745	7.14	0.0000	0.07758	7.76	0.493
139	60.480	7.777	7.14	0.0000	0.07763	7.76	0.493
140	60.979	7.809	7.14	0.0000	0.07763	7.76	0.493
141	61.477	7.841	7.14	0.0000	0.07763	7.76	0.493
142	61.979	7.873	7.14	0.0000	0.07763	7.76	0.493
143	62.478	7.904	7.14	0.0000	0.07763	7.76	0.493
144	62.978	7.936	7.14	0.0000	0.07763	7.76	0.493
145	63.478	7.967	7.14	0.0000	0.07763	7.76	0.493
146	63.980	7.999	7.14	0.0000	0.07763	7.76	0.493
147	64.479	8.030	7.14	0.0000	0.07763	7.76	0.493
148	64.979	8.061	7.14	0.0000	0.07763	7.76	0.493
149	65.480	8.092	7.14	0.0000	0.07763	7.76	0.493
150	65.978	8.123	7.14	0.0000	0.07763	7.76	0.493

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.477	8.153	7.14	0.0000	0.07763	7.76	0.493
152	66.977	8.184	7.14	0.0000	0.07763	7.76	0.493
153	67.477	8.214	7.14	0.0000	0.07763	7.76	0.493
154	67.978	8.245	7.14	0.0000	0.07763	7.76	0.493
155	68.480	8.275	7.14	0.0000	0.07763	7.76	0.493
156	68.977	8.305	7.14	0.0000	0.07763	7.76	0.493
157	69.480	8.335	7.14	0.0000	0.07763	7.76	0.493
158	69.981	8.365	7.14	0.0000	0.07763	7.76	0.493
159	70.478	8.395	7.14	0.0000	0.07763	7.76	0.493
160	70.980	8.425	7.14	0.0000	0.07763	7.76	0.493
161	71.481	8.455	7.14	0.0000	0.07763	7.76	0.493
162	71.977	8.484	7.14	0.0000	0.07763	7.76	0.493
163	72.478	8.513	7.14	0.0000	0.07763	7.76	0.493
164	72.978	8.543	7.14	0.0000	0.07763	7.76	0.493
165	73.479	8.572	7.14	0.0000	0.07763	7.76	0.493
166	73.980	8.601	7.14	0.0000	0.07763	7.76	0.493
167	74.480	8.630	7.14	0.0000	0.07763	7.76	0.493
168	74.978	8.659	7.14	0.0000	0.07768	7.77	0.493
169	75.478	8.688	7.14	0.0000	0.07768	7.77	0.493
170	75.980	8.717	7.14	0.0000	0.07768	7.77	0.493
171	76.480	8.745	7.14	0.0000	0.07768	7.77	0.493
172	76.980	8.774	7.14	0.0000	0.07768	7.77	0.493
173	77.479	8.802	7.14	0.0000	0.07768	7.77	0.493
174	77.979	8.831	7.14	0.0000	0.07768	7.77	0.493
175	78.478	8.859	7.14	0.0000	0.07768	7.77	0.493
176	78.979	8.887	7.14	0.0000	0.07768	7.77	0.493
177	79.481	8.915	7.14	0.0000	0.07768	7.77	0.493
178	79.980	8.943	7.14	0.0000	0.07768	7.77	0.493
179	80.479	8.971	7.14	0.0000	0.07768	7.77	0.493
180	80.977	8.999	7.14	0.0000	0.07768	7.77	0.493
181	81.478	9.027	7.14	0.0000	0.07768	7.77	0.493
182	81.979	9.054	7.14	0.0000	0.07768	7.77	0.493
183	82.478	9.082	7.14	0.0000	0.07768	7.77	0.493
184	82.980	9.109	7.14	0.0000	0.07768	7.77	0.493
185	83.480	9.137	7.14	0.0000	0.07768	7.77	0.493
186	83.977	9.164	7.14	0.0000	0.07768	7.77	0.493
187	84.480	9.191	7.14	0.0000	0.07768	7.77	0.493
188	84.980	9.218	7.14	0.0000	0.07768	7.77	0.493
189	85.480	9.246	7.14	0.0000	0.07768	7.77	0.493
190	85.977	9.272	7.14	0.0000	0.07768	7.77	0.493
191	86.481	9.299	7.14	0.0000	0.07768	7.77	0.493
192	86.978	9.326	7.14	0.0000	0.07768	7.77	0.493
193	87.477	9.353	7.14	0.0000	0.07768	7.77	0.493
194	87.979	9.380	7.14	0.0000	0.07768	7.77	0.493
195	88.480	9.406	7.14	0.0000	0.07768	7.77	0.493
196	88.980	9.433	7.14	0.0000	0.07768	7.77	0.493
197	89.479	9.459	7.14	0.0000	0.07768	7.77	0.493
198	89.977	9.486	7.14	0.0000	0.07768	7.77	0.493
199	90.479	9.512	7.14	0.0000	0.07768	7.77	0.493
200	90.977	9.538	7.14	0.0000	0.07768	7.77	0.493

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.477	9.564	7.14	0.0000	0.07768	7.77	0.493
202	91.980	9.591	7.14	0.0000	0.07768	7.77	0.493
203	92.479	9.617	7.14	0.0000	0.07768	7.77	0.493
204	92.978	9.642	7.14	0.0000	0.07768	7.77	0.493
205	93.479	9.668	7.14	0.0000	0.07768	7.77	0.493
206	93.979	9.694	7.14	0.0000	0.07768	7.77	0.493
207	94.481	9.720	7.14	0.0000	0.07768	7.77	0.493
208	94.978	9.746	7.14	0.0000	0.07768	7.77	0.493
209	95.480	9.771	7.14	0.0000	0.07768	7.77	0.493
210	95.980	9.797	7.14	0.0000	0.07768	7.77	0.493
211	96.479	9.822	7.14	0.0000	0.07768	7.77	0.493
212	96.978	9.848	7.14	0.0000	0.07768	7.77	0.493
213	97.480	9.873	7.14	0.0000	0.07768	7.77	0.493
214	97.978	9.898	7.14	0.0000	0.07768	7.77	0.493
215	98.478	9.924	7.14	0.0000	0.07768	7.77	0.493
216	98.979	9.949	7.14	0.0000	0.07768	7.77	0.493
217	99.477	9.974	7.14	0.0000	0.07768	7.77	0.493
218	99.977	9.999	7.14	0.0000	0.07768	7.77	0.493
219	100.480	10.024	7.14	0.0000	0.07768	7.77	0.493
220	100.978	10.049	7.14	0.0000	0.07768	7.77	0.493
221	101.480	10.074	7.14	0.0000	0.07768	7.77	0.493
222	101.981	10.099	7.14	0.0000	0.07773	7.77	0.493
223	102.481	10.123	7.14	0.0000	0.07773	7.77	0.493
224	102.977	10.148	7.14	0.0000	0.07773	7.77	0.493
225	103.478	10.172	7.14	0.0000	0.07773	7.77	0.493
226	103.980	10.197	7.14	0.0000	0.07768	7.77	0.493
227	104.480	10.222	7.14	0.0000	0.07773	7.77	0.493
228	104.979	10.246	7.14	0.0000	0.07773	7.77	0.493
229	105.479	10.270	7.14	0.0000	0.07768	7.77	0.493
230	105.980	10.295	7.14	0.0000	0.07773	7.77	0.493
231	106.477	10.319	7.14	0.0000	0.07773	7.77	0.493
232	106.981	10.343	7.14	0.0000	0.07773	7.77	0.493
233	107.480	10.367	7.14	0.0000	0.07773	7.77	0.493
234	107.978	10.391	7.14	0.0000	0.07773	7.77	0.493
235	108.478	10.415	7.14	0.0000	0.07773	7.77	0.493
236	108.977	10.439	7.14	0.0000	0.07773	7.77	0.493
237	109.478	10.463	7.14	0.0000	0.07773	7.77	0.493
238	109.980	10.487	7.14	0.0000	0.07773	7.77	0.493
239	110.479	10.511	7.14	0.0000	0.07773	7.77	0.493
240	110.977	10.535	7.14	0.0000	0.07773	7.77	0.493
241	111.477	10.558	7.14	0.0000	0.07773	7.77	0.493
242	111.977	10.582	7.14	0.0000	0.07773	7.77	0.493
243	112.481	10.606	7.14	0.0000	0.07773	7.77	0.493
244	112.977	10.629	7.14	0.0000	0.07773	7.77	0.493
245	113.477	10.653	7.14	0.0000	0.07773	7.77	0.493
246	113.977	10.676	7.14	0.0000	0.07773	7.77	0.493
247	114.477	10.699	7.14	0.0000	0.07773	7.77	0.493
248	114.980	10.723	7.14	0.0000	0.07773	7.77	0.493
249	115.477	10.746	7.14	0.0000	0.07773	7.77	0.493
250	115.979	10.769	7.14	0.0000	0.07773	7.77	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.477	10.792	7.14	0.0000	0.07773	7.77	0.493
252	116.978	10.816	7.14	0.0000	0.07773	7.77	0.493
253	117.478	10.839	7.14	0.0000	0.07773	7.77	0.493
254	117.980	10.862	7.14	0.0000	0.07773	7.77	0.493
255	118.480	10.885	7.14	0.0000	0.07773	7.77	0.493
256	118.978	10.908	7.14	0.0000	0.07768	7.77	0.493
257	119.478	10.931	7.14	0.0000	0.07773	7.77	0.493
258	119.977	10.953	7.14	0.0000	0.07773	7.77	0.493
259	120.479	10.976	7.14	0.0000	0.07773	7.77	0.493
260	120.978	10.999	7.14	0.0000	0.07773	7.77	0.493
261	121.478	11.022	7.14	0.0000	0.07773	7.77	0.493
262	121.977	11.044	7.14	0.0000	0.07773	7.77	0.493
263	122.481	11.067	7.14	0.0000	0.07773	7.77	0.493
264	122.977	11.090	7.14	0.0000	0.07773	7.77	0.493
265	123.479	11.112	7.14	0.0000	0.07773	7.77	0.493
266	123.979	11.135	7.14	0.0000	0.07773	7.77	0.493
267	124.477	11.157	7.14	0.0000	0.07773	7.77	0.493
268	124.977	11.179	7.14	0.0000	0.07773	7.77	0.493
269	125.478	11.202	7.14	0.0000	0.07773	7.77	0.493
270	125.980	11.224	7.14	0.0000	0.07773	7.77	0.493
271	126.481	11.246	7.14	0.0000	0.07773	7.77	0.493
272	126.980	11.269	7.14	0.0000	0.07773	7.77	0.493
273	127.479	11.291	7.14	0.0000	0.07773	7.77	0.493
274	127.978	11.313	7.14	0.0000	0.07773	7.77	0.493
275	128.478	11.335	7.14	0.0000	0.07773	7.77	0.493
276	128.977	11.357	7.14	0.0000	0.07773	7.77	0.493
277	129.480	11.379	7.14	0.0000	0.07773	7.77	0.493
278	129.980	11.401	7.14	0.0000	0.07773	7.77	0.493
279	130.480	11.423	7.14	0.0000	0.07773	7.77	0.493
280	130.977	11.445	7.14	0.0000	0.07773	7.77	0.493
281	131.480	11.466	7.14	0.0000	0.07773	7.77	0.493
282	131.977	11.488	7.14	0.0000	0.07773	7.77	0.493
283	132.478	11.510	7.14	0.0000	0.07773	7.77	0.493
284	132.977	11.532	7.14	0.0000	0.07773	7.77	0.493
285	133.479	11.553	7.14	0.0000	0.07773	7.77	0.493
286	133.980	11.575	7.14	0.0000	0.07773	7.77	0.493
287	134.480	11.597	7.14	0.0000	0.07773	7.77	0.493
288	134.980	11.618	7.14	0.0000	0.07773	7.77	0.493
289	135.480	11.640	7.14	0.0000	0.07773	7.77	0.493
290	135.978	11.661	7.14	0.0000	0.07773	7.77	0.493
291	136.477	11.682	7.14	0.0000	0.07773	7.77	0.493
292	136.978	11.704	7.14	0.0000	0.07777	7.78	0.493
293	137.478	11.725	7.14	0.0000	0.07777	7.78	0.493
294	137.977	11.746	7.14	0.0000	0.07777	7.78	0.493
295	138.478	11.768	7.14	0.0000	0.07777	7.78	0.493
296	138.977	11.789	7.14	0.0000	0.07777	7.78	0.493
297	139.477	11.810	7.14	0.0000	0.07777	7.78	0.493
298	139.978	11.831	7.14	0.0000	0.07777	7.78	0.493
299	140.478	11.852	7.14	0.0000	0.07777	7.78	0.493
300	140.978	11.873	7.14	0.0000	0.07777	7.78	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.480	11.895	7.14	0.0000	0.07777	7.78	0.493
302	141.979	11.916	7.14	0.0000	0.07777	7.78	0.493
303	142.480	11.937	7.14	0.0000	0.07777	7.78	0.493
304	142.980	11.957	7.14	0.0000	0.07777	7.78	0.493
305	143.479	11.978	7.14	0.0000	0.07777	7.78	0.493
306	143.978	11.999	7.14	0.0000	0.07777	7.78	0.493
307	144.477	12.020	7.14	0.0000	0.07782	7.78	0.493
308	144.980	12.041	7.14	0.0000	0.07782	7.78	0.493
309	145.478	12.061	7.14	0.0000	0.07777	7.78	0.493
310	145.979	12.082	7.14	0.0000	0.07777	7.78	0.493
311	146.478	12.103	7.14	0.0000	0.07777	7.78	0.493
312	146.979	12.123	7.14	0.0000	0.07777	7.78	0.493
313	147.478	12.144	7.14	0.0000	0.07777	7.78	0.493
314	147.981	12.165	7.14	0.0000	0.07777	7.78	0.493
315	148.480	12.185	7.14	0.0000	0.07777	7.78	0.493
316	148.980	12.206	7.14	0.0000	0.07777	7.78	0.493
317	149.478	12.226	7.14	0.0000	0.07777	7.78	0.493
318	149.980	12.247	7.14	0.0000	0.07777	7.78	0.493
319	150.480	12.267	7.14	0.0000	0.07777	7.78	0.493
320	150.978	12.287	7.14	0.0000	0.07777	7.78	0.493
321	151.478	12.308	7.14	0.0000	0.07782	7.78	0.493
322	151.981	12.328	7.14	0.0000	0.07782	7.78	0.493
323	152.478	12.348	7.14	0.0000	0.07782	7.78	0.493
324	152.981	12.369	7.14	0.0000	0.07782	7.78	0.493
325	153.477	12.389	7.14	0.0000	0.07782	7.78	0.493
326	153.977	12.409	7.14	0.0000	0.07782	7.78	0.493
327	154.478	12.429	7.14	0.0000	0.07782	7.78	0.493
328	154.977	12.449	7.14	0.0000	0.07782	7.78	0.493
329	155.481	12.469	7.14	0.0000	0.07782	7.78	0.493
330	155.978	12.489	7.14	0.0000	0.07782	7.78	0.493
331	156.478	12.509	7.14	0.0000	0.07782	7.78	0.493
332	156.979	12.529	7.14	0.0000	0.07782	7.78	0.493
333	157.478	12.549	7.14	0.0000	0.07782	7.78	0.493
334	157.980	12.569	7.14	0.0000	0.07782	7.78	0.493
335	158.480	12.589	7.14	0.0000	0.07782	7.78	0.493
336	158.979	12.609	7.14	0.0000	0.07782	7.78	0.493
337	159.480	12.629	7.14	0.0000	0.07782	7.78	0.493
338	159.980	12.648	7.14	0.0000	0.07782	7.78	0.493
339	160.480	12.668	7.14	0.0000	0.07782	7.78	0.493
340	160.979	12.688	7.14	0.0000	0.07782	7.78	0.493
341	161.480	12.707	7.14	0.0000	0.07782	7.78	0.493
342	161.977	12.727	7.14	0.0000	0.07782	7.78	0.493
343	162.481	12.747	7.14	0.0000	0.07782	7.78	0.493
344	162.978	12.766	7.14	0.0000	0.07782	7.78	0.493
345	163.477	12.786	7.14	0.0000	0.07782	7.78	0.493
346	163.980	12.805	7.14	0.0000	0.07782	7.78	0.493
347	164.478	12.825	7.14	0.0000	0.07782	7.78	0.493
348	164.981	12.844	7.14	0.0000	0.07782	7.78	0.493
349	165.478	12.864	7.14	0.0000	0.07782	7.78	0.493
350	165.978	12.883	7.14	0.0000	0.07782	7.78	0.493

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.481	12.903	7.14	0.0000	0.07782	7.78	0.493
352	166.977	12.922	7.14	0.0000	0.07782	7.78	0.493
353	167.480	12.941	7.14	0.0000	0.07782	7.78	0.493
354	167.981	12.961	7.14	0.0000	0.07782	7.78	0.493
355	168.480	12.980	7.14	0.0000	0.07782	7.78	0.493
356	168.980	12.999	7.14	0.0000	0.07782	7.78	0.493
357	169.479	13.018	7.14	0.0000	0.07782	7.78	0.493
358	169.980	13.038	7.14	0.0000	0.07782	7.78	0.493
359	170.480	13.057	7.14	0.0000	0.07782	7.78	0.493
360	170.977	13.076	7.14	0.0000	0.07782	7.78	0.493
361	171.480	13.095	7.14	0.0000	0.07782	7.78	0.493
362	171.981	13.114	7.14	0.0000	0.07782	7.78	0.493
363	172.478	13.133	7.14	0.0000	0.07782	7.78	0.493
364	172.977	13.152	7.14	0.0000	0.07782	7.78	0.493
365	173.478	13.171	7.14	0.0000	0.07782	7.78	0.493
366	173.979	13.190	7.14	0.0000	0.07782	7.78	0.493
367	174.478	13.209	7.14	0.0000	0.07782	7.78	0.493
368	174.979	13.228	7.14	0.0000	0.07777	7.78	0.493
369	175.481	13.247	7.14	0.0000	0.07782	7.78	0.493
370	175.980	13.266	7.14	0.0000	0.07777	7.78	0.493
371	176.477	13.284	7.14	0.0000	0.07782	7.78	0.493
372	176.977	13.303	7.14	0.0000	0.07782	7.78	0.493
373	177.477	13.322	7.14	0.0000	0.07782	7.78	0.493
374	177.979	13.341	7.14	0.0000	0.07782	7.78	0.493
375	178.477	13.360	7.14	0.0000	0.07782	7.78	0.493
376	178.977	13.378	7.14	0.0000	0.07782	7.78	0.493
377	179.477	13.397	7.14	0.0000	0.07782	7.78	0.493
378	179.978	13.416	7.14	0.0000	0.07782	7.78	0.493
379	180.478	13.434	7.14	0.0000	0.07782	7.78	0.493
380	180.979	13.453	7.14	0.0000	0.07782	7.78	0.493
381	181.479	13.471	7.14	0.0000	0.07782	7.78	0.493
382	181.979	13.490	7.14	0.0000	0.07782	7.78	0.493
383	182.477	13.508	7.14	0.0000	0.07782	7.78	0.493
384	182.977	13.527	7.14	0.0000	0.07782	7.78	0.493
385	183.478	13.545	7.14	0.0000	0.07782	7.78	0.493
386	183.978	13.564	7.14	0.0000	0.07782	7.78	0.493
387	184.480	13.582	7.14	0.0000	0.07782	7.78	0.493
388	184.977	13.601	7.14	0.0000	0.07782	7.78	0.493
389	185.481	13.619	7.14	0.0000	0.07782	7.78	0.493
390	185.978	13.637	7.14	0.0000	0.07782	7.78	0.493
391	186.478	13.656	7.14	0.0000	0.07782	7.78	0.493
392	186.980	13.674	7.14	0.0000	0.07782	7.78	0.493
393	187.478	13.692	7.14	0.0000	0.07782	7.78	0.493
394	187.978	13.710	7.14	0.0000	0.07782	7.78	0.493
395	188.479	13.729	7.14	0.0000	0.07782	7.78	0.493
396	188.980	13.747	7.14	0.0000	0.07782	7.78	0.493
397	189.480	13.765	7.14	0.0000	0.07782	7.78	0.493
398	189.981	13.783	7.14	0.0000	0.07782	7.78	0.493
399	190.479	13.801	7.14	0.0000	0.07782	7.78	0.493
400	190.979	13.820	7.14	0.0000	0.07782	7.78	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.480	13.838	7.14	0.0000	0.07782	7.78	0.493
402	191.979	13.856	7.14	0.0000	0.07782	7.78	0.493
403	192.479	13.874	7.14	0.0000	0.07782	7.78	0.493
404	192.980	13.892	7.14	0.0000	0.07782	7.78	0.493
405	193.478	13.910	7.14	0.0000	0.07782	7.78	0.493
406	193.977	13.928	7.14	0.0000	0.07782	7.78	0.493
407	194.477	13.946	7.14	0.0000	0.07782	7.78	0.493
408	194.980	13.964	7.14	0.0000	0.07782	7.78	0.493
409	195.477	13.981	7.14	0.0000	0.07782	7.78	0.493
410	195.977	13.999	7.14	0.0000	0.07782	7.78	0.493
411	196.478	14.017	7.14	0.0000	0.07782	7.78	0.493
412	196.979	14.035	7.14	0.0000	0.07782	7.78	0.493
413	197.479	14.053	7.14	0.0000	0.07782	7.78	0.493
414	197.980	14.071	7.14	0.0000	0.07782	7.78	0.493
415	198.480	14.088	7.14	0.0000	0.07782	7.78	0.493
416	198.981	14.106	7.14	0.0000	0.07787	7.79	0.493
417	199.481	14.124	7.14	0.0000	0.07787	7.79	0.493
418	199.977	14.141	7.14	0.0000	0.07787	7.79	0.493
419	200.477	14.159	7.14	0.0000	0.07787	7.79	0.493
420	200.980	14.177	7.14	0.0000	0.07787	7.79	0.493
421	201.480	14.194	7.14	0.0000	0.07787	7.79	0.493
422	201.980	14.212	7.14	0.0000	0.07787	7.79	0.493
423	202.480	14.230	7.14	0.0000	0.07787	7.79	0.493
424	202.977	14.247	7.14	0.0000	0.07782	7.78	0.493
425	203.477	14.265	7.14	0.0000	0.07787	7.79	0.493
426	203.979	14.282	7.14	0.0000	0.07787	7.79	0.493
427	204.478	14.300	7.14	0.0000	0.07787	7.79	0.493
428	204.979	14.317	7.14	0.0000	0.07787	7.79	0.493
429	205.477	14.334	7.14	0.0000	0.07782	7.78	0.493
430	205.978	14.352	7.14	0.0000	0.07787	7.79	0.493
431	206.477	14.369	7.14	0.0000	0.07782	7.78	0.493
432	206.979	14.387	7.14	0.0000	0.07787	7.79	0.493
433	207.479	14.404	7.14	0.0000	0.07782	7.78	0.493
434	207.980	14.421	7.14	0.0000	0.07782	7.78	0.493
435	208.480	14.439	7.14	0.0000	0.07782	7.78	0.493
436	208.977	14.456	7.14	0.0000	0.07782	7.78	0.493
437	209.477	14.473	7.14	0.0000	0.07782	7.78	0.493
438	209.981	14.491	7.14	0.0000	0.07782	7.78	0.493
439	210.481	14.508	7.14	0.0000	0.07782	7.78	0.493
440	210.980	14.525	7.14	0.0000	0.07782	7.78	0.493
441	211.480	14.542	7.14	0.0000	0.07782	7.78	0.493
442	211.978	14.559	7.14	0.0000	0.07782	7.78	0.493
443	212.481	14.577	7.14	0.0000	0.07782	7.78	0.493
444	212.978	14.594	7.14	0.0000	0.07782	7.78	0.493
445	213.478	14.611	7.14	0.0000	0.07782	7.78	0.493
446	213.980	14.628	7.14	0.0000	0.07782	7.78	0.493
447	214.481	14.645	7.14	0.0000	0.07782	7.78	0.493
448	214.979	14.662	7.14	0.0000	0.07782	7.78	0.493
449	215.478	14.679	7.14	0.0000	0.07782	7.78	0.493
450	215.980	14.696	7.14	0.0000	0.07782	7.78	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.479	14.713	7.14	0.0000	0.07782	7.78	0.493
452	216.981	14.730	7.14	0.0000	0.07782	7.78	0.493
453	217.480	14.747	7.14	0.0000	0.07782	7.78	0.493
454	217.977	14.764	7.14	0.0000	0.07782	7.78	0.493
455	218.478	14.781	7.14	0.0000	0.07782	7.78	0.493
456	218.980	14.798	7.14	0.0000	0.07782	7.78	0.493
457	219.481	14.815	7.14	0.0000	0.07782	7.78	0.493
458	219.981	14.832	7.14	0.0000	0.07782	7.78	0.493
459	220.478	14.849	7.14	0.0000	0.07782	7.78	0.493
460	220.978	14.865	7.14	0.0000	0.07782	7.78	0.493
461	221.477	14.882	7.14	0.0000	0.07782	7.78	0.493
462	221.980	14.899	7.14	0.0000	0.07782	7.78	0.493
463	222.479	14.916	7.14	0.0000	0.07787	7.79	0.493
464	222.979	14.932	7.14	0.0000	0.07787	7.79	0.493
465	223.477	14.949	7.14	0.0000	0.07787	7.79	0.493
466	223.978	14.966	7.14	0.0000	0.07782	7.78	0.493
467	224.477	14.983	7.14	0.0000	0.07787	7.79	0.493
468	224.977	14.999	7.14	0.0000	0.07787	7.79	0.493
469	225.479	15.016	7.14	0.0000	0.07787	7.79	0.493
470	225.980	15.033	7.14	0.0000	0.07787	7.79	0.493
471	226.479	15.049	7.14	0.0000	0.07787	7.79	0.493
472	226.978	15.066	7.14	0.0000	0.07787	7.79	0.493
473	227.479	15.082	7.14	0.0000	0.07787	7.79	0.493
474	227.980	15.099	7.14	0.0000	0.07787	7.79	0.493
475	228.479	15.116	7.14	0.0000	0.07787	7.79	0.493
476	228.979	15.132	7.14	0.0000	0.07787	7.79	0.493
477	229.481	15.149	7.14	0.0000	0.07787	7.79	0.493
478	229.977	15.165	7.14	0.0000	0.07787	7.79	0.493
479	230.479	15.182	7.14	0.0000	0.07787	7.79	0.493
480	230.980	15.198	7.14	0.0000	0.07787	7.79	0.493
481	231.480	15.214	7.14	0.0000	0.07787	7.79	0.493
482	231.978	15.231	7.14	0.0000	0.07787	7.79	0.493
483	232.479	15.247	7.15	0.0000	0.07787	7.79	0.493
484	232.979	15.264	7.14	0.0000	0.07787	7.79	0.493
485	233.477	15.280	7.14	0.0000	0.07787	7.79	0.493
486	233.979	15.296	7.14	0.0000	0.07787	7.79	0.493
487	234.478	15.313	7.14	0.0000	0.07787	7.79	0.493
488	234.977	15.329	7.14	0.0000	0.07787	7.79	0.493
489	235.477	15.345	7.14	0.0000	0.07787	7.79	0.493
490	235.980	15.362	7.14	0.0000	0.07787	7.79	0.493
491	236.479	15.378	7.14	0.0000	0.07787	7.79	0.493
492	236.980	15.394	7.14	0.0000	0.07787	7.79	0.493
493	237.478	15.410	7.14	0.0000	0.07787	7.79	0.493
494	237.977	15.427	7.14	0.0000	0.07787	7.79	0.493
495	238.480	15.443	7.14	0.0000	0.07792	7.79	0.493
496	238.978	15.459	7.14	0.0000	0.07792	7.79	0.493
497	239.479	15.475	7.14	0.0000	0.07792	7.79	0.493
498	239.979	15.491	7.14	0.0000	0.07787	7.79	0.493
499	240.480	15.507	7.14	0.0000	0.07792	7.79	0.493
500	240.979	15.523	7.14	0.0000	0.07792	7.79	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.480	15.540	7.14	0.0000	0.07792	7.79	0.493
502	241.980	15.556	7.14	0.0000	0.07792	7.79	0.493
503	242.481	15.572	7.14	0.0000	0.07792	7.79	0.493
504	242.980	15.588	7.14	0.0000	0.07792	7.79	0.493
505	243.479	15.604	7.14	0.0000	0.07792	7.79	0.493
506	243.978	15.620	7.14	0.0000	0.07792	7.79	0.493
507	244.479	15.636	7.14	0.0000	0.07792	7.79	0.493
508	244.977	15.652	7.14	0.0000	0.07792	7.79	0.493
509	245.481	15.668	7.14	0.0000	0.07792	7.79	0.493
510	245.981	15.684	7.14	0.0000	0.07792	7.79	0.493
511	246.478	15.700	7.14	0.0000	0.07792	7.79	0.493
512	246.978	15.716	7.14	0.0000	0.07792	7.79	0.493
513	247.478	15.731	7.14	0.0000	0.07792	7.79	0.493
514	247.981	15.747	7.14	0.0000	0.07792	7.79	0.493
515	248.477	15.763	7.14	0.0000	0.07792	7.79	0.493
516	248.979	15.779	7.14	0.0000	0.07792	7.79	0.493
517	249.480	15.795	7.14	0.0000	0.07792	7.79	0.493
518	249.977	15.811	7.14	0.0000	0.07792	7.79	0.493
519	250.479	15.827	7.14	0.0000	0.07792	7.79	0.493
520	250.979	15.842	7.14	0.0000	0.07792	7.79	0.493
521	251.477	15.858	7.14	0.0000	0.07792	7.79	0.493
522	251.977	15.874	7.14	0.0000	0.07792	7.79	0.493
523	252.477	15.890	7.14	0.0000	0.07792	7.79	0.493
524	252.979	15.905	7.14	0.0000	0.07787	7.79	0.493
525	253.479	15.921	7.14	0.0000	0.07787	7.79	0.493
526	253.979	15.937	7.14	0.0000	0.07792	7.79	0.493
527	254.478	15.952	7.14	0.0000	0.07787	7.79	0.493
528	254.981	15.968	7.14	0.0000	0.07787	7.79	0.493
529	255.481	15.984	7.14	0.0000	0.07792	7.79	0.493
530	255.977	15.999	7.14	0.0000	0.07792	7.79	0.493
531	256.478	16.015	7.14	0.0000	0.07787	7.79	0.493
532	256.978	16.031	7.14	0.0000	0.07787	7.79	0.493
533	257.478	16.046	7.14	0.0000	0.07787	7.79	0.493
534	257.981	16.062	7.14	0.0000	0.07787	7.79	0.493
535	258.477	16.077	7.14	0.0000	0.07787	7.79	0.493
536	258.979	16.093	7.14	0.0000	0.07787	7.79	0.493
537	259.479	16.108	7.14	0.0000	0.07787	7.79	0.493
538	259.978	16.124	7.14	0.0000	0.07787	7.79	0.493
539	260.478	16.139	7.14	0.0000	0.07787	7.79	0.493
540	260.980	16.155	7.14	0.0000	0.07787	7.79	0.493
541	261.480	16.170	7.14	0.0000	0.07787	7.79	0.493
542	261.980	16.186	7.14	0.0000	0.07792	7.79	0.493
543	262.479	16.201	7.14	0.0000	0.07787	7.79	0.493
544	262.979	16.217	7.14	0.0000	0.07787	7.79	0.493
545	263.481	16.232	7.14	0.0000	0.07787	7.79	0.493
546	263.977	16.247	7.14	0.0000	0.07787	7.79	0.493
547	264.480	16.263	7.14	0.0000	0.07787	7.79	0.493
548	264.977	16.278	7.14	0.0000	0.07787	7.79	0.493
549	265.479	16.294	7.14	0.0000	0.07787	7.79	0.493
550	265.980	16.309	7.14	0.0000	0.07792	7.79	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.478	16.324	7.14	0.0000	0.07792	7.79	0.493
552	266.980	16.340	7.14	0.0000	0.07792	7.79	0.493
553	267.480	16.355	7.14	0.0000	0.07792	7.79	0.493
554	267.978	16.370	7.14	0.0000	0.07792	7.79	0.493
555	268.479	16.385	7.14	0.0000	0.07792	7.79	0.493
556	268.979	16.401	7.14	0.0000	0.07792	7.79	0.493
557	269.479	16.416	7.14	0.0000	0.07792	7.79	0.493
558	269.979	16.431	7.14	0.0000	0.07792	7.79	0.493
559	270.478	16.446	7.14	0.0000	0.07792	7.79	0.493
560	270.979	16.461	7.14	0.0000	0.07792	7.79	0.493
561	271.479	16.477	7.14	0.0000	0.07792	7.79	0.493
562	271.979	16.492	7.14	0.0000	0.07792	7.79	0.493
563	272.477	16.507	7.14	0.0000	0.07792	7.79	0.493
564	272.977	16.522	7.14	0.0000	0.07792	7.79	0.493
565	273.479	16.537	7.14	0.0000	0.07792	7.79	0.493
566	273.977	16.552	7.14	0.0000	0.07792	7.79	0.493
567	274.477	16.567	7.14	0.0000	0.07792	7.79	0.493
568	274.980	16.583	7.14	0.0000	0.07792	7.79	0.493
569	275.481	16.598	7.14	0.0000	0.07792	7.79	0.493
570	275.980	16.613	7.14	0.0000	0.07792	7.79	0.493
571	276.479	16.628	7.14	0.0000	0.07792	7.79	0.493
572	276.981	16.643	7.14	0.0000	0.07792	7.79	0.493
573	277.477	16.658	7.14	0.0000	0.07792	7.79	0.493
574	277.979	16.673	7.14	0.0000	0.07792	7.79	0.493
575	278.478	16.688	7.14	0.0000	0.07792	7.79	0.493
576	278.980	16.703	7.14	0.0000	0.07792	7.79	0.493
577	279.477	16.718	7.14	0.0000	0.07792	7.79	0.493
578	279.977	16.733	7.14	0.0000	0.07792	7.79	0.493
579	280.480	16.748	7.14	0.0000	0.07792	7.79	0.493
580	280.977	16.762	7.14	0.0000	0.07792	7.79	0.493
581	281.479	16.777	7.14	0.0000	0.07792	7.79	0.493
582	281.980	16.792	7.14	0.0000	0.07792	7.79	0.493
583	282.477	16.807	7.14	0.0000	0.07792	7.79	0.493
584	282.978	16.822	7.14	0.0000	0.07792	7.79	0.493
585	283.479	16.837	7.14	0.0000	0.07792	7.79	0.493
586	283.981	16.852	7.14	0.0000	0.07792	7.79	0.493
587	284.481	16.867	7.14	0.0000	0.07792	7.79	0.493
588	284.977	16.881	7.14	0.0000	0.07792	7.79	0.493
589	285.479	16.896	7.14	0.0000	0.07792	7.79	0.493
590	285.980	16.911	7.14	0.0000	0.07792	7.79	0.493
591	286.477	16.926	7.14	0.0000	0.07792	7.79	0.493
592	286.977	16.940	7.14	0.0000	0.07792	7.79	0.493
593	287.477	16.955	7.14	0.0000	0.07792	7.79	0.493
594	287.977	16.970	7.14	0.0000	0.07792	7.79	0.493
595	288.477	16.985	7.14	0.0000	0.07792	7.79	0.493
596	288.979	16.999	7.14	0.0000	0.07792	7.79	0.493
597	289.479	17.014	7.14	0.0000	0.07792	7.79	0.493
598	289.978	17.029	7.14	0.0000	0.07792	7.79	0.493
599	290.477	17.043	7.14	0.0000	0.07792	7.79	0.493
600	290.981	17.058	7.14	0.0000	0.07792	7.79	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.479	17.073	7.14	0.0000	0.07792	7.79	0.493
602	291.980	17.087	7.14	0.0000	0.07792	7.79	0.493
603	292.480	17.102	7.14	0.0000	0.07792	7.79	0.493
604	292.977	17.117	7.14	0.0000	0.07792	7.79	0.493
605	293.478	17.131	7.14	0.0000	0.07792	7.79	0.493
606	293.977	17.146	7.14	0.0000	0.07792	7.79	0.493
607	294.477	17.160	7.14	0.0000	0.07792	7.79	0.493
608	294.979	17.175	7.14	0.0000	0.07792	7.79	0.493
609	295.478	17.189	7.14	0.0000	0.07792	7.79	0.493
610	295.980	17.204	7.14	0.0000	0.07792	7.79	0.493
611	296.480	17.219	7.14	0.0000	0.07792	7.79	0.493
612	296.980	17.233	7.14	0.0000	0.07792	7.79	0.493
613	297.478	17.248	7.14	0.0000	0.07792	7.79	0.493
614	297.977	17.262	7.14	0.0000	0.07792	7.79	0.493
615	298.480	17.277	7.14	0.0000	0.07792	7.79	0.493
616	298.981	17.291	7.14	0.0000	0.07792	7.79	0.493
617	299.477	17.305	7.14	0.0000	0.07792	7.79	0.493
618	299.977	17.320	7.14	0.0000	0.07792	7.79	0.493
619	300.478	17.334	7.14	0.0000	0.07792	7.79	0.493
620	300.980	17.349	7.14	0.0000	0.07792	7.79	0.493
621	301.479	17.363	7.14	0.0000	0.07792	7.79	0.493
622	301.977	17.377	7.14	0.0000	0.07792	7.79	0.493
623	302.478	17.392	7.14	0.0000	0.07792	7.79	0.493
624	302.980	17.406	7.14	0.0000	0.07792	7.79	0.493
625	303.479	17.421	7.14	0.0000	0.07792	7.79	0.493
626	303.980	17.435	7.14	0.0000	0.07792	7.79	0.493
627	304.478	17.449	7.14	0.0000	0.07792	7.79	0.493
628	304.978	17.464	7.14	0.0000	0.07792	7.79	0.493
629	305.481	17.478	7.14	0.0000	0.07792	7.79	0.493
630	305.980	17.492	7.14	0.0000	0.07792	7.79	0.493
631	306.477	17.506	7.14	0.0000	0.07792	7.79	0.493
632	306.981	17.521	7.14	0.0000	0.07797	7.80	0.493
633	307.478	17.535	7.14	0.0000	0.07792	7.79	0.493
634	307.978	17.549	7.14	0.0000	0.07797	7.80	0.493
635	308.480	17.564	7.14	0.0000	0.07797	7.80	0.493
636	308.979	17.578	7.14	0.0000	0.07797	7.80	0.493
637	309.480	17.592	7.14	0.0000	0.07797	7.80	0.493
638	309.980	17.606	7.14	0.0000	0.07797	7.80	0.493
639	310.479	17.620	7.14	0.0000	0.07797	7.80	0.493
640	310.980	17.635	7.14	0.0000	0.07797	7.80	0.493
641	311.477	17.649	7.14	0.0000	0.07797	7.80	0.493
642	311.977	17.663	7.14	0.0000	0.07797	7.80	0.493
643	312.479	17.677	7.14	0.0000	0.07797	7.80	0.493
644	312.978	17.691	7.14	0.0000	0.07797	7.80	0.493
645	313.479	17.705	7.14	0.0000	0.07797	7.80	0.493
646	313.980	17.719	7.14	0.0000	0.07797	7.80	0.493
647	314.478	17.734	7.14	0.0000	0.07797	7.80	0.493
648	314.978	17.748	7.14	0.0000	0.07797	7.80	0.493
649	315.477	17.762	7.14	0.0000	0.07797	7.80	0.493
650	315.981	17.776	7.14	0.0000	0.07797	7.80	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.478	17.790	7.14	0.0000	0.07797	7.80	0.493
652	316.979	17.804	7.14	0.0000	0.07797	7.80	0.493
653	317.480	17.818	7.14	0.0000	0.07797	7.80	0.493
654	317.978	17.832	7.14	0.0000	0.07797	7.80	0.493
655	318.477	17.846	7.14	0.0000	0.07797	7.80	0.493
656	318.977	17.860	7.14	0.0000	0.07797	7.80	0.493
657	319.478	17.874	7.14	0.0000	0.07797	7.80	0.493
658	319.980	17.888	7.14	0.0000	0.07797	7.80	0.493
659	320.480	17.902	7.14	0.0000	0.07797	7.80	0.493
660	320.977	17.916	7.14	0.0000	0.07797	7.80	0.493
661	321.479	17.930	7.14	0.0000	0.07797	7.80	0.493
662	321.981	17.944	7.14	0.0000	0.07797	7.80	0.493
663	322.478	17.958	7.14	0.0000	0.07797	7.80	0.493
664	322.979	17.972	7.14	0.0000	0.07797	7.80	0.493
665	323.478	17.985	7.14	0.0000	0.07797	7.80	0.493
666	323.978	17.999	7.14	0.0000	0.07797	7.80	0.493
667	324.477	18.013	7.14	0.0000	0.07797	7.80	0.493
668	324.978	18.027	7.14	0.0000	0.07797	7.80	0.493
669	325.480	18.041	7.14	0.0000	0.07797	7.80	0.493
670	325.979	18.055	7.14	0.0000	0.07797	7.80	0.493
671	326.477	18.069	7.14	0.0000	0.07797	7.80	0.493
672	326.977	18.083	7.14	0.0000	0.07797	7.80	0.493
673	327.481	18.096	7.14	0.0000	0.07797	7.80	0.493
674	327.978	18.110	7.14	0.0000	0.07797	7.80	0.493
675	328.478	18.124	7.14	0.0000	0.07797	7.80	0.493
676	328.979	18.138	7.14	0.0000	0.07797	7.80	0.493
677	329.478	18.152	7.14	0.0000	0.07797	7.80	0.493
678	329.979	18.165	7.14	0.0000	0.07797	7.80	0.493
679	330.477	18.179	7.14	0.0000	0.07797	7.80	0.493
680	330.977	18.193	7.14	0.0000	0.07797	7.80	0.493
681	331.479	18.207	7.14	0.0000	0.07797	7.80	0.493
682	331.977	18.220	7.14	0.0000	0.07792	7.79	0.493
683	332.481	18.234	7.14	0.0000	0.07792	7.79	0.493
684	332.978	18.248	7.14	0.0000	0.07792	7.79	0.493
685	333.479	18.261	7.14	0.0000	0.07797	7.80	0.493
686	333.980	18.275	7.14	0.0000	0.07792	7.79	0.493
687	334.477	18.289	7.14	0.0000	0.07797	7.80	0.493
688	334.979	18.302	7.14	0.0000	0.07797	7.80	0.493
689	335.480	18.316	7.14	0.0000	0.07792	7.79	0.493
690	335.980	18.330	7.14	0.0000	0.07792	7.79	0.493
691	336.479	18.343	7.14	0.0000	0.07792	7.79	0.493
692	336.978	18.357	7.14	0.0000	0.07792	7.79	0.493
693	337.479	18.371	7.14	0.0000	0.07797	7.80	0.493
694	337.978	18.384	7.14	0.0000	0.07792	7.79	0.493
695	338.480	18.398	7.14	0.0000	0.07792	7.79	0.493
696	338.980	18.411	7.14	0.0000	0.07797	7.80	0.493
697	339.480	18.425	7.14	0.0000	0.07792	7.79	0.493
698	339.980	18.439	7.14	0.0000	0.07792	7.79	0.493
699	340.479	18.452	7.14	0.0000	0.07792	7.79	0.493
700	340.978	18.466	7.14	0.0000	0.07792	7.79	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.479	18.479	7.14	0.0000	0.07797	7.80	0.493
702	341.980	18.493	7.14	0.0000	0.07792	7.79	0.493
703	342.480	18.506	7.14	0.0000	0.07792	7.79	0.493
704	342.980	18.520	7.14	0.0000	0.07797	7.80	0.493
705	343.480	18.533	7.14	0.0000	0.07797	7.80	0.493
706	343.980	18.547	7.14	0.0000	0.07797	7.80	0.493
707	344.479	18.560	7.14	0.0000	0.07797	7.80	0.493
708	344.980	18.574	7.14	0.0000	0.07797	7.80	0.493
709	345.478	18.587	7.14	0.0000	0.07797	7.80	0.493
710	345.980	18.601	7.14	0.0000	0.07797	7.80	0.493
711	346.479	18.614	7.14	0.0000	0.07797	7.80	0.493
712	346.979	18.627	7.14	0.0000	0.07797	7.80	0.493
713	347.478	18.641	7.14	0.0000	0.07797	7.80	0.493
714	347.981	18.654	7.14	0.0000	0.07797	7.80	0.493
715	348.477	18.668	7.14	0.0000	0.07797	7.80	0.493
716	348.979	18.681	7.14	0.0000	0.07797	7.80	0.493
717	349.480	18.694	7.14	0.0000	0.07797	7.80	0.493
718	349.978	18.708	7.14	0.0000	0.07797	7.80	0.493
719	350.479	18.721	7.14	0.0000	0.07797	7.80	0.493
720	350.978	18.734	7.14	0.0000	0.07797	7.80	0.493
721	351.477	18.748	7.14	0.0000	0.07797	7.80	0.493
722	351.978	18.761	7.14	0.0000	0.07797	7.80	0.493
723	352.478	18.774	7.14	0.0000	0.07797	7.80	0.493
724	352.978	18.788	7.14	0.0000	0.07797	7.80	0.493
725	353.477	18.801	7.14	0.0000	0.07797	7.80	0.493
726	353.978	18.814	7.14	0.0000	0.07797	7.80	0.493
727	354.481	18.828	7.14	0.0000	0.07797	7.80	0.493
728	354.978	18.841	7.14	0.0000	0.07797	7.80	0.493
729	355.479	18.854	7.14	0.0000	0.07802	7.80	0.492
730	355.977	18.867	7.14	0.0000	0.07802	7.80	0.492
731	356.480	18.881	7.14	0.0000	0.07797	7.80	0.493
732	356.979	18.894	7.14	0.0000	0.07797	7.80	0.493
733	357.477	18.907	7.14	0.0000	0.07797	7.80	0.493
734	357.978	18.920	7.14	0.0000	0.07797	7.80	0.493
735	358.480	18.934	7.14	0.0000	0.07797	7.80	0.493
736	358.977	18.947	7.14	0.0000	0.07802	7.80	0.492
737	359.478	18.960	7.14	0.0000	0.07802	7.80	0.492
738	359.977	18.973	7.14	0.0000	0.07802	7.80	0.492
739	360.478	18.986	7.14	0.0000	0.07802	7.80	0.492
740	360.979	18.999	7.14	0.0000	0.07802	7.80	0.492
741	361.477	19.013	7.14	0.0000	0.07802	7.80	0.492
742	361.978	19.026	7.14	0.0000	0.07802	7.80	0.492
743	362.480	19.039	7.14	0.0000	0.07802	7.80	0.492
744	362.980	19.052	7.14	0.0000	0.07802	7.80	0.492
745	363.479	19.065	7.14	0.0000	0.07802	7.80	0.492
746	363.979	19.078	7.14	0.0000	0.07802	7.80	0.492
747	364.480	19.091	7.14	0.0000	0.07802	7.80	0.492
748	364.980	19.104	7.14	0.0000	0.07802	7.80	0.492
749	365.477	19.117	7.14	0.0000	0.07802	7.80	0.492
750	365.978	19.131	7.14	0.0000	0.07802	7.80	0.492

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
751	366.479	19.144	7.14	0.0000	0.07802	7.80	0.492
752	366.980	19.157	7.14	0.0000	0.07802	7.80	0.492
753	367.479	19.170	7.14	0.0000	0.07802	7.80	0.492
754	367.977	19.183	7.14	0.0000	0.07802	7.80	0.492
755	368.480	19.196	7.14	0.0000	0.07802	7.80	0.492
756	368.980	19.209	7.14	0.0000	0.07802	7.80	0.492
757	369.477	19.222	7.14	0.0000	0.07802	7.80	0.492
758	369.978	19.235	7.14	0.0000	0.07797	7.80	0.493
759	370.477	19.248	7.14	0.0000	0.07802	7.80	0.492
760	370.978	19.261	7.14	0.0000	0.07802	7.80	0.492
761	371.480	19.274	7.14	0.0000	0.07797	7.80	0.493
762	371.980	19.287	7.14	0.0000	0.07797	7.80	0.493
763	372.480	19.300	7.14	0.0000	0.07802	7.80	0.492
764	372.980	19.313	7.14	0.0000	0.07797	7.80	0.493
765	373.478	19.326	7.14	0.0000	0.07797	7.80	0.493
766	373.980	19.339	7.14	0.0000	0.07797	7.80	0.493
767	374.479	19.351	7.14	0.0000	0.07797	7.80	0.493
768	374.980	19.364	7.14	0.0000	0.07797	7.80	0.493
769	375.479	19.377	7.14	0.0000	0.07797	7.80	0.493
770	375.980	19.390	7.14	0.0000	0.07797	7.80	0.493
771	376.478	19.403	7.14	0.0000	0.07797	7.80	0.493
772	376.981	19.416	7.14	0.0000	0.07797	7.80	0.493
773	377.481	19.429	7.14	0.0000	0.07797	7.80	0.493
774	377.980	19.442	7.14	0.0000	0.07797	7.80	0.493
775	378.478	19.455	7.14	0.0000	0.07797	7.80	0.493
776	378.977	19.467	7.14	0.0000	0.07797	7.80	0.493
777	379.479	19.480	7.14	0.0000	0.07797	7.80	0.493
778	379.978	19.493	7.14	0.0000	0.07797	7.80	0.493
779	380.477	19.506	7.14	0.0000	0.07797	7.80	0.493
780	380.978	19.519	7.14	0.0000	0.07797	7.80	0.493
781	381.481	19.532	7.14	0.0000	0.07797	7.80	0.493
782	381.978	19.544	7.14	0.0000	0.07797	7.80	0.493
783	382.477	19.557	7.14	0.0000	0.07797	7.80	0.493
784	382.979	19.570	7.14	0.0000	0.07797	7.80	0.493
785	383.480	19.583	7.14	0.0000	0.07797	7.80	0.493
786	383.979	19.595	7.14	0.0000	0.07797	7.80	0.493
787	384.479	19.608	7.14	0.0000	0.07797	7.80	0.493
788	384.979	19.621	7.14	0.0000	0.07797	7.80	0.493
789	385.479	19.634	7.14	0.0000	0.07797	7.80	0.493
790	385.978	19.646	7.14	0.0000	0.07797	7.80	0.493
791	386.480	19.659	7.14	0.0000	0.07797	7.80	0.493
792	386.980	19.672	7.14	0.0000	0.07797	7.80	0.493
793	387.480	19.685	7.14	0.0000	0.07797	7.80	0.493
794	387.977	19.697	7.14	0.0000	0.07797	7.80	0.493
795	388.477	19.710	7.14	0.0000	0.07797	7.80	0.493
796	388.978	19.723	7.14	0.0000	0.07802	7.80	0.492
797	389.480	19.735	7.14	0.0000	0.07802	7.80	0.492
798	389.979	19.748	7.14	0.0000	0.07797	7.80	0.493
799	390.478	19.761	7.14	0.0000	0.07797	7.80	0.493
800	390.979	19.773	7.14	0.0000	0.07797	7.80	0.493

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
801	391.477	19.786	7.14	0.0000	0.07802	7.80	0.492
802	391.980	19.798	7.14	0.0000	0.07797	7.80	0.493
803	392.479	19.811	7.14	0.0000	0.07802	7.80	0.492
804	392.980	19.824	7.14	0.0000	0.07802	7.80	0.492
805	393.480	19.836	7.14	0.0000	0.07802	7.80	0.492
806	393.977	19.849	7.14	0.0000	0.07802	7.80	0.492
807	394.479	19.861	7.14	0.0000	0.07802	7.80	0.492
808	394.978	19.874	7.14	0.0000	0.07802	7.80	0.492
809	395.477	19.887	7.14	0.0000	0.07802	7.80	0.492
810	395.977	19.899	7.14	0.0000	0.07802	7.80	0.492
811	396.480	19.912	7.14	0.0000	0.07802	7.80	0.492
812	396.977	19.924	7.14	0.0000	0.07802	7.80	0.492
813	397.477	19.937	7.14	0.0000	0.07802	7.80	0.492
814	397.979	19.949	7.14	0.0000	0.07802	7.80	0.492
815	398.479	19.962	7.14	0.0000	0.07802	7.80	0.492
816	398.979	19.974	7.14	0.0000	0.07802	7.80	0.492
817	399.479	19.987	7.14	0.0000	0.07802	7.80	0.492
818	399.980	19.999	7.14	0.0000	0.07802	7.80	0.492
819	400.477	20.012	7.14	0.0000	0.07802	7.80	0.492
820	400.980	20.024	7.14	0.0000	0.07802	7.80	0.492
821	401.479	20.037	7.14	0.0000	0.07802	7.80	0.492
822	401.980	20.049	7.14	0.0000	0.07802	7.80	0.492
823	402.479	20.062	7.14	0.0000	0.07802	7.80	0.492
824	402.980	20.074	7.14	0.0000	0.07802	7.80	0.492
825	403.477	20.087	7.14	0.0000	0.07802	7.80	0.492
826	403.979	20.099	7.14	0.0000	0.07802	7.80	0.492
827	404.480	20.112	7.14	0.0000	0.07802	7.80	0.492
828	404.980	20.124	7.14	0.0000	0.07802	7.80	0.492
829	405.477	20.136	7.14	0.0000	0.07802	7.80	0.492
830	405.980	20.149	7.14	0.0000	0.07802	7.80	0.492
831	406.478	20.161	7.14	0.0000	0.07807	7.81	0.492
832	406.980	20.174	7.14	0.0000	0.07807	7.81	0.492
833	407.479	20.186	7.14	0.0000	0.07802	7.80	0.492
834	407.981	20.199	7.14	0.0000	0.07802	7.80	0.492
835	408.481	20.211	7.14	0.0000	0.07802	7.80	0.492
836	408.980	20.223	7.14	0.0000	0.07807	7.81	0.492
837	409.478	20.236	7.14	0.0000	0.07807	7.81	0.492
838	409.980	20.248	7.14	0.0000	0.07807	7.81	0.492
839	410.478	20.260	7.14	0.0000	0.07802	7.80	0.492
840	410.977	20.273	7.14	0.0000	0.07807	7.81	0.492
841	411.477	20.285	7.14	0.0000	0.07807	7.81	0.492
842	411.981	20.297	7.14	0.0000	0.07807	7.81	0.492
843	412.480	20.310	7.14	0.0000	0.07802	7.80	0.492
844	412.981	20.322	7.14	0.0000	0.07802	7.80	0.492
845	413.478	20.334	7.14	0.0000	0.07807	7.81	0.492
846	413.978	20.346	7.14	0.0000	0.07802	7.80	0.492
847	414.480	20.359	7.14	0.0000	0.07802	7.80	0.492
848	414.980	20.371	7.14	0.0000	0.07802	7.80	0.492
849	415.480	20.383	7.14	0.0000	0.07802	7.80	0.492
850	415.979	20.396	7.14	0.0000	0.07802	7.80	0.492

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
851	416.479	20.408	7.14	0.0000	0.07802	7.80	0.492
852	416.979	20.420	7.14	0.0000	0.07802	7.80	0.492
853	417.480	20.432	7.14	0.0000	0.07802	7.80	0.492
854	417.978	20.445	7.14	0.0000	0.07802	7.80	0.492
855	418.477	20.457	7.14	0.0000	0.07802	7.80	0.492
856	418.980	20.469	7.14	0.0000	0.07802	7.80	0.492
857	419.480	20.481	7.14	0.0000	0.07802	7.80	0.492
858	419.981	20.493	7.14	0.0000	0.07802	7.80	0.492
859	420.478	20.506	7.14	0.0000	0.07802	7.80	0.492
860	420.977	20.518	7.14	0.0000	0.07802	7.80	0.492
861	421.477	20.530	7.14	0.0000	0.07802	7.80	0.492
862	421.979	20.542	7.14	0.0000	0.07802	7.80	0.492
863	422.478	20.554	7.14	0.0000	0.07802	7.80	0.492
864	422.979	20.566	7.14	0.0000	0.07802	7.80	0.492
865	423.479	20.579	7.14	0.0000	0.07802	7.80	0.492
866	423.979	20.591	7.14	0.0000	0.07802	7.80	0.492
867	424.479	20.603	7.14	0.0000	0.07802	7.80	0.492
868	424.978	20.615	7.14	0.0000	0.07797	7.80	0.493
869	425.478	20.627	7.14	0.0000	0.07797	7.80	0.493
870	425.977	20.639	7.14	0.0000	0.07802	7.80	0.492
871	426.477	20.651	7.14	0.0000	0.07797	7.80	0.493
872	426.978	20.663	7.14	0.0000	0.07797	7.80	0.493
873	427.480	20.676	7.14	0.0000	0.07797	7.80	0.493
874	427.981	20.688	7.14	0.0000	0.07797	7.80	0.493
875	428.479	20.700	7.14	0.0000	0.07797	7.80	0.493
876	428.978	20.712	7.14	0.0000	0.07797	7.80	0.493
877	429.479	20.724	7.14	0.0000	0.07797	7.80	0.493
878	429.979	20.736	7.14	0.0000	0.07797	7.80	0.493
879	430.479	20.748	7.14	0.0000	0.07797	7.80	0.493
880	430.981	20.760	7.14	0.0000	0.07797	7.80	0.493
881	431.481	20.772	7.14	0.0000	0.07797	7.80	0.493
882	431.980	20.784	7.14	0.0000	0.07797	7.80	0.493
883	432.479	20.796	7.14	0.0000	0.07797	7.80	0.493
884	432.977	20.808	7.15	0.0000	0.07797	7.80	0.493
885	433.477	20.820	7.14	0.0000	0.07797	7.80	0.493
886	433.978	20.832	7.14	0.0000	0.07797	7.80	0.493
887	434.477	20.844	7.14	0.0000	0.07797	7.80	0.493
888	434.977	20.856	7.14	0.0000	0.07797	7.80	0.493
889	435.481	20.868	7.14	0.0000	0.07792	7.79	0.493
890	435.980	20.880	7.14	0.0000	0.07792	7.79	0.493
891	436.479	20.892	7.14	0.0000	0.07792	7.79	0.493
892	436.977	20.904	7.14	0.0000	0.07797	7.80	0.493
893	437.480	20.916	7.14	0.0000	0.07792	7.79	0.493
894	437.978	20.928	7.14	0.0000	0.07792	7.79	0.493
895	438.481	20.940	7.14	0.0000	0.07792	7.79	0.493
896	438.977	20.952	7.14	0.0000	0.07792	7.79	0.493
897	439.477	20.964	7.14	0.0000	0.07792	7.79	0.493
898	439.977	20.976	7.14	0.0000	0.07792	7.79	0.493
899	440.477	20.988	7.14	0.0000	0.07792	7.79	0.493
900	440.980	21.000	7.14	0.0000	0.07792	7.79	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
901	441.481	21.011	7.14	0.0000	0.07792	7.79	0.493
902	441.979	21.023	7.14	0.0000	0.07792	7.79	0.493
903	442.477	21.035	7.14	0.0000	0.07792	7.79	0.493
904	442.979	21.047	7.14	0.0000	0.07792	7.79	0.493
905	443.479	21.059	7.14	0.0000	0.07792	7.79	0.493
906	443.977	21.071	7.14	0.0000	0.07792	7.79	0.493
907	444.479	21.083	7.14	0.0000	0.07792	7.79	0.493
908	444.981	21.095	7.14	0.0000	0.07792	7.79	0.493
909	445.480	21.106	7.14	0.0000	0.07792	7.79	0.493
910	445.977	21.118	7.14	0.0000	0.07792	7.79	0.493
911	446.477	21.130	7.14	0.0000	0.07792	7.79	0.493
912	446.981	21.142	7.14	0.0000	0.07792	7.79	0.493
913	447.478	21.154	7.14	0.0000	0.07792	7.79	0.493
914	447.979	21.166	7.14	0.0000	0.07792	7.79	0.493
915	448.478	21.177	7.14	0.0000	0.07792	7.79	0.493
916	448.977	21.189	7.14	0.0000	0.07792	7.79	0.493
917	449.478	21.201	7.14	0.0000	0.07792	7.79	0.493
918	449.979	21.213	7.14	0.0000	0.07792	7.79	0.493
919	450.479	21.224	7.14	0.0000	0.07792	7.79	0.493
920	450.979	21.236	7.14	0.0000	0.07792	7.79	0.493
921	451.480	21.248	7.14	0.0000	0.07792	7.79	0.493
922	451.980	21.260	7.14	0.0000	0.07792	7.79	0.493
923	452.477	21.272	7.14	0.0000	0.07792	7.79	0.493
924	452.979	21.283	7.14	0.0000	0.07792	7.79	0.493
925	453.480	21.295	7.14	0.0000	0.07797	7.80	0.493
926	453.978	21.307	7.14	0.0000	0.07792	7.79	0.493
927	454.480	21.319	7.14	0.0000	0.07792	7.79	0.493
928	454.979	21.330	7.14	0.0000	0.07792	7.79	0.493
929	455.479	21.342	7.14	0.0000	0.07797	7.80	0.493
930	455.980	21.354	7.14	0.0000	0.07797	7.80	0.493
931	456.479	21.365	7.14	0.0000	0.07797	7.80	0.493
932	456.981	21.377	7.14	0.0000	0.07797	7.80	0.493
933	457.477	21.389	7.14	0.0000	0.07797	7.80	0.493
934	457.980	21.400	7.14	0.0000	0.07797	7.80	0.493
935	458.480	21.412	7.14	0.0000	0.07797	7.80	0.493
936	458.978	21.424	7.14	0.0000	0.07797	7.80	0.493
937	459.479	21.435	7.14	0.0000	0.07797	7.80	0.493
938	459.977	21.447	7.14	0.0000	0.07797	7.80	0.493
939	460.480	21.459	7.14	0.0000	0.07797	7.80	0.493
940	460.980	21.470	7.14	0.0000	0.07797	7.80	0.493
941	461.481	21.482	7.14	0.0000	0.07797	7.80	0.493
942	461.979	21.494	7.14	0.0000	0.07797	7.80	0.493
943	462.479	21.505	7.14	0.0000	0.07797	7.80	0.493
944	462.980	21.517	7.14	0.0000	0.07797	7.80	0.493
945	463.479	21.529	7.14	0.0000	0.07797	7.80	0.493
946	463.978	21.540	7.14	0.0000	0.07797	7.80	0.493
947	464.480	21.552	7.14	0.0000	0.07797	7.80	0.493
948	464.979	21.563	7.14	0.0000	0.07797	7.80	0.493
949	465.480	21.575	7.14	0.0000	0.07797	7.80	0.493
950	465.979	21.587	7.14	0.0000	0.07797	7.80	0.493

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
951	466.477	21.598	7.14	0.0000	0.07802	7.80	0.492
952	466.977	21.610	7.14	0.0000	0.07797	7.80	0.493
953	467.477	21.621	7.14	0.0000	0.07797	7.80	0.493
954	467.978	21.633	7.14	0.0000	0.07802	7.80	0.492
955	468.478	21.644	7.14	0.0000	0.07797	7.80	0.493
956	468.978	21.656	7.14	0.0000	0.07802	7.80	0.492
957	469.479	21.667	7.14	0.0000	0.07802	7.80	0.492
958	469.980	21.679	7.14	0.0000	0.07797	7.80	0.493
959	470.480	21.691	7.14	0.0000	0.07802	7.80	0.492
960	470.979	21.702	7.14	0.0000	0.07802	7.80	0.492
961	471.481	21.714	7.14	0.0000	0.07802	7.80	0.492
962	471.980	21.725	7.14	0.0000	0.07802	7.80	0.492
963	472.480	21.737	7.14	0.0000	0.07802	7.80	0.492
964	472.979	21.748	7.14	0.0000	0.07802	7.80	0.492
965	473.479	21.760	7.14	0.0000	0.07802	7.80	0.492
966	473.980	21.771	7.14	0.0000	0.07802	7.80	0.492
967	474.479	21.783	7.14	0.0000	0.07802	7.80	0.492
968	474.981	21.794	7.14	0.0000	0.07802	7.80	0.492
969	475.480	21.806	7.14	0.0000	0.07802	7.80	0.492
970	475.981	21.817	7.14	0.0000	0.07802	7.80	0.492
971	476.480	21.828	7.14	0.0000	0.07802	7.80	0.492
972	476.979	21.840	7.14	0.0000	0.07802	7.80	0.492
973	477.480	21.851	7.14	0.0000	0.07802	7.80	0.492
974	477.980	21.863	7.14	0.0000	0.07802	7.80	0.492
975	478.477	21.874	7.14	0.0000	0.07802	7.80	0.492
976	478.977	21.886	7.14	0.0000	0.07802	7.80	0.492
977	479.480	21.897	7.14	0.0000	0.07802	7.80	0.492
978	479.977	21.908	7.14	0.0000	0.07802	7.80	0.492
979	480.008	21.909	7.14	0.0000	0.07802	7.80	0.492

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.019		7.14	0.0000	0.07802	7.80	0.492
2	-0.015		7.14	0.0000	0.07802	7.80	0.492
3	-0.010		8.70	0.0000	0.07961	7.96	0.490
4	-0.006		11.4	0.0000	0.08552	8.55	0.480
5	-0.001		13.1	0.0000	0.09108	9.11	0.471
6	0.000	0.000	13.6	0.0000	0.09228	9.23	0.469
7	0.003	0.056	14.6	0.0000	0.09526	9.53	0.465
8	0.007	0.086	14.1	0.0000	0.09625	9.62	0.463
9	0.012	0.108	14.0	0.0000	0.09635	9.63	0.463
10	0.016	0.127	14.1	0.0000	0.09665	9.66	0.462
11	0.021	0.143	14.2	0.0000	0.09699	9.70	0.462
12	0.025	0.157	14.2	0.0000	0.09739	9.74	0.461
13	0.029	0.170	14.3	0.0000	0.09769	9.77	0.461
14	0.033	0.183	14.2	0.0000	0.09779	9.78	0.460
15	0.038	0.194	14.1	0.0000	0.09784	9.78	0.460
16	0.042	0.205	14.2	0.0000	0.09789	9.79	0.460
17	0.059	0.244	14.3	0.0000	0.09853	9.85	0.459
18	0.068	0.261	14.2	0.0000	0.09873	9.87	0.459
19	0.151	0.388	14.3	0.0000	0.1002	10.0	0.457
20	0.232	0.482	14.3	0.0000	0.1013	10.1	0.455
21	0.318	0.564	14.3	0.0000	0.1022	10.2	0.453
22	0.482	0.695	14.3	0.0000	0.1029	10.3	0.452
23	0.732	0.855	14.3	0.0000	0.1034	10.3	0.451
24	0.985	0.992	14.3	0.0000	0.1039	10.4	0.451
25	1.485	1.219	14.3	0.0000	0.1047	10.5	0.449
26	2.485	1.576	14.3	0.0000	0.1052	10.5	0.448
27	4.482	2.117	14.3	0.0000	0.1060	10.6	0.447
28	4.982	2.232	14.3	0.0000	0.1062	10.6	0.447
29	5.484	2.342	14.3	0.0000	0.1063	10.6	0.447
30	5.984	2.446	14.3	0.0000	0.1064	10.6	0.447
31	6.484	2.546	14.3	0.0000	0.1064	10.6	0.446
32	6.984	2.643	14.3	0.0000	0.1065	10.6	0.446
33	7.485	2.736	14.3	0.0000	0.1066	10.7	0.446
34	7.981	2.825	14.3	0.0000	0.1067	10.7	0.446
35	8.483	2.913	14.3	0.0000	0.1067	10.7	0.446
36	8.983	2.997	14.3	0.0000	0.1068	10.7	0.446
37	9.484	3.080	14.3	0.0000	0.1069	10.7	0.446
38	9.983	3.160	14.3	0.0000	0.1069	10.7	0.446
39	10.484	3.238	14.3	0.0000	0.1069	10.7	0.446
40	10.984	3.314	14.3	0.0000	0.1069	10.7	0.446
41	11.482	3.389	14.3	0.0000	0.1070	10.7	0.446
42	11.982	3.461	14.3	0.0000	0.1071	10.7	0.445
43	12.483	3.533	14.3	0.0000	0.1071	10.7	0.445
44	12.984	3.603	14.3	0.0000	0.1071	10.7	0.445
45	13.485	3.672	14.3	0.0000	0.1071	10.7	0.445
46	13.982	3.739	14.3	0.0000	0.1071	10.7	0.445
47	14.482	3.806	14.3	0.0000	0.1071	10.7	0.445
48	14.983	3.871	14.3	0.0000	0.1071	10.7	0.445
49	15.482	3.935	14.3	0.0000	0.1071	10.7	0.445
50	15.984	3.998	14.3	0.0000	0.1072	10.7	0.445

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.485	4.060	14.3	0.0000	0.1072	10.7	0.445
52	16.983	4.121	14.3	0.0000	0.1072	10.7	0.445
53	17.484	4.181	14.3	0.0000	0.1072	10.7	0.445
54	17.985	4.241	14.3	0.0000	0.1072	10.7	0.445
55	18.482	4.299	14.3	0.0000	0.1072	10.7	0.445
56	18.984	4.357	14.3	0.0000	0.1072	10.7	0.445
57	19.484	4.414	14.3	0.0000	0.1072	10.7	0.445
58	19.985	4.470	14.3	0.0000	0.1072	10.7	0.445
59	20.482	4.526	14.3	0.0000	0.1072	10.7	0.445
60	20.981	4.581	14.3	0.0000	0.1072	10.7	0.445
61	21.484	4.635	14.3	0.0000	0.1072	10.7	0.445
62	21.984	4.689	14.3	0.0000	0.1073	10.7	0.445
63	22.482	4.742	14.3	0.0000	0.1073	10.7	0.445
64	22.985	4.794	14.3	0.0000	0.1073	10.7	0.445
65	23.484	4.846	14.3	0.0000	0.1073	10.7	0.445
66	23.984	4.897	14.3	0.0000	0.1073	10.7	0.445
67	24.484	4.948	14.3	0.0000	0.1073	10.7	0.445
68	24.981	4.998	14.3	0.0000	0.1073	10.7	0.445
69	25.485	5.048	14.3	0.0000	0.1074	10.7	0.445
70	25.983	5.097	14.3	0.0000	0.1074	10.7	0.445
71	26.485	5.146	14.3	0.0000	0.1075	10.7	0.445
72	26.981	5.194	14.3	0.0000	0.1075	10.8	0.445
73	27.484	5.243	14.3	0.0000	0.1075	10.8	0.445
74	27.984	5.290	14.3	0.0000	0.1076	10.8	0.445
75	28.484	5.337	14.3	0.0000	0.1076	10.8	0.445
76	28.982	5.384	14.3	0.0000	0.1076	10.8	0.445
77	29.482	5.430	14.3	0.0000	0.1076	10.8	0.445
78	29.984	5.476	14.3	0.0000	0.1077	10.8	0.444
79	30.485	5.521	14.3	0.0000	0.1077	10.8	0.444
80	30.985	5.566	14.3	0.0000	0.1077	10.8	0.444
81	31.483	5.611	14.3	0.0000	0.1077	10.8	0.444
82	31.984	5.655	14.3	0.0000	0.1077	10.8	0.444
83	32.485	5.700	14.3	0.0000	0.1077	10.8	0.444
84	32.983	5.743	14.3	0.0000	0.1077	10.8	0.444
85	33.485	5.787	14.3	0.0000	0.1078	10.8	0.444
86	33.984	5.830	14.3	0.0000	0.1078	10.8	0.444
87	34.485	5.872	14.3	0.0000	0.1078	10.8	0.444
88	34.985	5.915	14.3	0.0000	0.1078	10.8	0.444
89	35.482	5.957	14.3	0.0000	0.1078	10.8	0.444
90	35.985	5.999	14.3	0.0000	0.1078	10.8	0.444
91	36.482	6.040	14.3	0.0000	0.1078	10.8	0.444
92	36.983	6.081	14.3	0.0000	0.1079	10.8	0.444
93	37.482	6.122	14.3	0.0000	0.1079	10.8	0.444
94	37.984	6.163	14.3	0.0000	0.1079	10.8	0.444
95	38.483	6.203	14.3	0.0000	0.1079	10.8	0.444
96	38.984	6.244	14.3	0.0000	0.1079	10.8	0.444
97	39.484	6.284	14.3	0.0000	0.1079	10.8	0.444
98	39.982	6.323	14.3	0.0000	0.1079	10.8	0.444
99	40.483	6.363	14.3	0.0000	0.1079	10.8	0.444
100	40.985	6.402	14.3	0.0000	0.1079	10.8	0.444

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.482	6.441	14.3	0.0000	0.1080	10.8	0.444
102	41.981	6.479	14.3	0.0000	0.1080	10.8	0.444
103	42.482	6.518	14.3	0.0000	0.1080	10.8	0.444
104	42.985	6.556	14.3	0.0000	0.1080	10.8	0.444
105	43.482	6.594	14.3	0.0000	0.1080	10.8	0.444
106	43.981	6.632	14.3	0.0000	0.1080	10.8	0.444
107	44.485	6.670	14.3	0.0000	0.1081	10.8	0.444
108	44.983	6.707	14.3	0.0000	0.1081	10.8	0.444
109	45.484	6.744	14.3	0.0000	0.1081	10.8	0.444
110	45.984	6.781	14.3	0.0000	0.1081	10.8	0.444
111	46.484	6.818	14.3	0.0000	0.1081	10.8	0.444
112	46.982	6.854	14.3	0.0000	0.1081	10.8	0.444
113	47.484	6.891	14.3	0.0000	0.1082	10.8	0.444
114	47.982	6.927	14.3	0.0000	0.1082	10.8	0.444
115	48.482	6.963	14.3	0.0000	0.1082	10.8	0.444
116	48.983	6.999	14.3	0.0000	0.1082	10.8	0.444
117	49.484	7.034	14.3	0.0000	0.1083	10.8	0.444
118	49.984	7.070	14.3	0.0000	0.1083	10.8	0.444
119	50.484	7.105	14.3	0.0000	0.1083	10.8	0.444
120	50.982	7.140	14.3	0.0000	0.1083	10.8	0.443
121	51.483	7.175	14.3	0.0000	0.1083	10.8	0.443
122	51.984	7.210	14.3	0.0000	0.1083	10.8	0.443
123	52.484	7.245	14.3	0.0000	0.1083	10.8	0.443
124	52.984	7.279	14.3	0.0000	0.1083	10.8	0.443
125	53.483	7.313	14.3	0.0000	0.1083	10.8	0.443
126	53.985	7.347	14.3	0.0000	0.1084	10.8	0.443
127	54.485	7.381	14.3	0.0000	0.1084	10.8	0.443
128	54.984	7.415	14.3	0.0000	0.1084	10.8	0.443
129	55.481	7.449	14.3	0.0000	0.1084	10.8	0.443
130	55.982	7.482	14.3	0.0000	0.1084	10.8	0.443
131	56.483	7.516	14.3	0.0000	0.1084	10.8	0.443
132	56.984	7.549	14.3	0.0000	0.1084	10.8	0.443
133	57.484	7.582	14.3	0.0000	0.1084	10.8	0.443
134	57.982	7.615	14.3	0.0000	0.1084	10.8	0.443
135	58.485	7.648	14.3	0.0000	0.1084	10.8	0.443
136	58.984	7.680	14.3	0.0000	0.1084	10.8	0.443
137	59.484	7.713	14.3	0.0000	0.1085	10.8	0.443
138	59.981	7.745	14.3	0.0000	0.1085	10.8	0.443
139	60.483	7.777	14.3	0.0000	0.1085	10.8	0.443
140	60.985	7.809	14.3	0.0000	0.1085	10.8	0.443
141	61.482	7.841	14.3	0.0000	0.1085	10.8	0.443
142	61.983	7.873	14.3	0.0000	0.1085	10.8	0.443
143	62.483	7.905	14.3	0.0000	0.1085	10.8	0.443
144	62.985	7.936	14.3	0.0000	0.1085	10.8	0.443
145	63.485	7.968	14.3	0.0000	0.1085	10.8	0.443
146	63.982	7.999	14.3	0.0000	0.1085	10.8	0.443
147	64.484	8.030	14.3	0.0000	0.1085	10.8	0.443
148	64.983	8.061	14.3	0.0000	0.1085	10.8	0.443
149	65.481	8.092	14.3	0.0000	0.1085	10.9	0.443
150	65.982	8.123	14.3	0.0000	0.1085	10.9	0.443

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.484	8.154	14.3	0.0000	0.1085	10.9	0.443
152	66.985	8.184	14.3	0.0000	0.1085	10.9	0.443
153	67.483	8.215	14.3	0.0000	0.1085	10.9	0.443
154	67.985	8.245	14.3	0.0000	0.1085	10.9	0.443
155	68.484	8.275	14.3	0.0000	0.1085	10.9	0.443
156	68.984	8.306	14.3	0.0000	0.1085	10.9	0.443
157	69.484	8.336	14.3	0.0000	0.1085	10.9	0.443
158	69.982	8.366	14.3	0.0000	0.1085	10.9	0.443
159	70.483	8.395	14.3	0.0000	0.1085	10.9	0.443
160	70.982	8.425	14.3	0.0000	0.1085	10.9	0.443
161	71.484	8.455	14.3	0.0000	0.1085	10.9	0.443
162	71.982	8.484	14.3	0.0000	0.1085	10.9	0.443
163	72.482	8.514	14.3	0.0000	0.1086	10.9	0.443
164	72.985	8.543	14.3	0.0000	0.1086	10.9	0.443
165	73.481	8.572	14.3	0.0000	0.1086	10.9	0.443
166	73.983	8.601	14.3	0.0000	0.1086	10.9	0.443
167	74.485	8.630	14.3	0.0000	0.1086	10.9	0.443
168	74.985	8.659	14.3	0.0000	0.1086	10.9	0.443
169	75.485	8.688	14.3	0.0000	0.1086	10.9	0.443
170	75.985	8.717	14.3	0.0000	0.1086	10.9	0.443
171	76.482	8.745	14.3	0.0000	0.1086	10.9	0.443
172	76.984	8.774	14.3	0.0000	0.1086	10.9	0.443
173	77.482	8.802	14.3	0.0000	0.1086	10.9	0.443
174	77.984	8.831	14.3	0.0000	0.1086	10.9	0.443
175	78.481	8.859	14.3	0.0000	0.1086	10.9	0.443
176	78.981	8.887	14.3	0.0000	0.1086	10.9	0.443
177	79.484	8.915	14.3	0.0000	0.1086	10.9	0.443
178	79.984	8.943	14.3	0.0000	0.1086	10.9	0.443
179	80.485	8.971	14.3	0.0000	0.1086	10.9	0.443
180	80.982	8.999	14.3	0.0000	0.1086	10.9	0.443
181	81.484	9.027	14.3	0.0000	0.1086	10.9	0.443
182	81.983	9.054	14.3	0.0000	0.1086	10.9	0.443
183	82.484	9.082	14.3	0.0000	0.1086	10.9	0.443
184	82.984	9.110	14.3	0.0000	0.1086	10.9	0.443
185	83.484	9.137	14.3	0.0000	0.1086	10.9	0.443
186	83.984	9.164	14.3	0.0000	0.1086	10.9	0.443
187	84.485	9.192	14.3	0.0000	0.1086	10.9	0.443
188	84.984	9.219	14.3	0.0000	0.1086	10.9	0.443
189	85.485	9.246	14.3	0.0000	0.1086	10.9	0.443
190	85.982	9.273	14.3	0.0000	0.1086	10.9	0.443
191	86.482	9.300	14.3	0.0000	0.1086	10.9	0.443
192	86.985	9.327	14.3	0.0000	0.1086	10.9	0.443
193	87.485	9.353	14.3	0.0000	0.1086	10.9	0.443
194	87.982	9.380	14.3	0.0000	0.1086	10.9	0.443
195	88.483	9.407	14.3	0.0000	0.1086	10.9	0.443
196	88.984	9.433	14.3	0.0000	0.1086	10.9	0.443
197	89.485	9.460	14.3	0.0000	0.1086	10.9	0.443
198	89.984	9.486	14.3	0.0000	0.1086	10.9	0.443
199	90.485	9.512	14.3	0.0000	0.1086	10.9	0.443
200	90.981	9.538	14.3	0.0000	0.1086	10.9	0.443

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.483	9.565	14.3	0.0000	0.1086	10.9	0.443
202	91.986	9.591	14.3	0.0000	0.1086	10.9	0.443
203	92.483	9.617	14.3	0.0000	0.1086	10.9	0.443
204	92.984	9.643	14.3	0.0000	0.1086	10.9	0.443
205	93.483	9.669	14.3	0.0000	0.1086	10.9	0.443
206	93.985	9.695	14.3	0.0000	0.1086	10.9	0.443
207	94.484	9.720	14.3	0.0000	0.1086	10.9	0.443
208	94.985	9.746	14.3	0.0000	0.1086	10.9	0.443
209	95.483	9.772	14.3	0.0000	0.1087	10.9	0.443
210	95.982	9.797	14.3	0.0000	0.1087	10.9	0.443
211	96.483	9.823	14.3	0.0000	0.1087	10.9	0.443
212	96.981	9.848	14.3	0.0000	0.1087	10.9	0.443
213	97.484	9.873	14.3	0.0000	0.1087	10.9	0.443
214	97.985	9.899	14.3	0.0000	0.1087	10.9	0.443
215	98.485	9.924	14.3	0.0000	0.1087	10.9	0.443
216	98.984	9.949	14.3	0.0000	0.1087	10.9	0.443
217	99.482	9.974	14.3	0.0000	0.1087	10.9	0.443
218	99.983	9.999	14.3	0.0000	0.1087	10.9	0.443
219	100.482	10.024	14.3	0.0000	0.1087	10.9	0.443
220	100.983	10.049	14.3	0.0000	0.1087	10.9	0.443
221	101.483	10.074	14.3	0.0000	0.1087	10.9	0.443
222	101.983	10.099	14.3	0.0000	0.1087	10.9	0.443
223	102.485	10.124	14.3	0.0000	0.1087	10.9	0.443
224	102.983	10.148	14.3	0.0000	0.1087	10.9	0.443
225	103.484	10.173	14.3	0.0000	0.1087	10.9	0.443
226	103.983	10.197	14.3	0.0000	0.1087	10.9	0.443
227	104.481	10.222	14.3	0.0000	0.1087	10.9	0.443
228	104.982	10.246	14.3	0.0000	0.1087	10.9	0.443
229	105.482	10.270	14.3	0.0000	0.1087	10.9	0.443
230	105.985	10.295	14.3	0.0000	0.1087	10.9	0.443
231	106.484	10.319	14.3	0.0000	0.1087	10.9	0.443
232	106.984	10.343	14.3	0.0000	0.1087	10.9	0.443
233	107.481	10.367	14.3	0.0000	0.1087	10.9	0.443
234	107.983	10.392	14.3	0.0000	0.1087	10.9	0.443
235	108.483	10.416	14.3	0.0000	0.1087	10.9	0.443
236	108.984	10.440	14.3	0.0000	0.1087	10.9	0.443
237	109.484	10.463	14.3	0.0000	0.1087	10.9	0.443
238	109.984	10.487	14.3	0.0000	0.1087	10.9	0.443
239	110.484	10.511	14.3	0.0000	0.1087	10.9	0.443
240	110.981	10.535	14.3	0.0000	0.1087	10.9	0.443
241	111.485	10.559	14.3	0.0000	0.1087	10.9	0.443
242	111.981	10.582	14.3	0.0000	0.1087	10.9	0.443
243	112.482	10.606	14.3	0.0000	0.1087	10.9	0.443
244	112.985	10.629	14.3	0.0000	0.1087	10.9	0.443
245	113.485	10.653	14.3	0.0000	0.1087	10.9	0.443
246	113.984	10.676	14.3	0.0000	0.1087	10.9	0.443
247	114.481	10.700	14.3	0.0000	0.1088	10.9	0.443
248	114.982	10.723	14.3	0.0000	0.1088	10.9	0.443
249	115.482	10.746	14.3	0.0000	0.1088	10.9	0.443
250	115.983	10.770	14.3	0.0000	0.1088	10.9	0.443

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.482	10.793	14.3	0.0000	0.1088	10.9	0.443
252	116.982	10.816	14.3	0.0000	0.1088	10.9	0.443
253	117.481	10.839	14.3	0.0000	0.1088	10.9	0.443
254	117.983	10.862	14.3	0.0000	0.1088	10.9	0.443
255	118.482	10.885	14.3	0.0000	0.1088	10.9	0.443
256	118.982	10.908	14.3	0.0000	0.1088	10.9	0.443
257	119.482	10.931	14.3	0.0000	0.1088	10.9	0.443
258	119.981	10.954	14.3	0.0000	0.1088	10.9	0.443
259	120.483	10.976	14.3	0.0000	0.1088	10.9	0.443
260	120.984	10.999	14.3	0.0000	0.1088	10.9	0.443
261	121.485	11.022	14.3	0.0000	0.1088	10.9	0.443
262	121.985	11.045	14.3	0.0000	0.1088	10.9	0.443
263	122.485	11.067	14.3	0.0000	0.1088	10.9	0.443
264	122.982	11.090	14.3	0.0000	0.1088	10.9	0.443
265	123.485	11.112	14.3	0.0000	0.1088	10.9	0.443
266	123.984	11.135	14.3	0.0000	0.1088	10.9	0.443
267	124.485	11.157	14.3	0.0000	0.1088	10.9	0.443
268	124.985	11.180	14.3	0.0000	0.1089	10.9	0.443
269	125.482	11.202	14.3	0.0000	0.1089	10.9	0.443
270	125.984	11.224	14.3	0.0000	0.1088	10.9	0.443
271	126.484	11.246	14.3	0.0000	0.1089	10.9	0.443
272	126.984	11.269	14.3	0.0000	0.1089	10.9	0.443
273	127.483	11.291	14.3	0.0000	0.1089	10.9	0.442
274	127.985	11.313	14.3	0.0000	0.1089	10.9	0.442
275	128.485	11.335	14.3	0.0000	0.1089	10.9	0.442
276	128.982	11.357	14.3	0.0000	0.1089	10.9	0.442
277	129.483	11.379	14.3	0.0000	0.1089	10.9	0.442
278	129.983	11.401	14.3	0.0000	0.1089	10.9	0.442
279	130.484	11.423	14.3	0.0000	0.1089	10.9	0.442
280	130.985	11.445	14.3	0.0000	0.1089	10.9	0.442
281	131.485	11.467	14.3	0.0000	0.1089	10.9	0.442
282	131.982	11.488	14.3	0.0000	0.1089	10.9	0.442
283	132.484	11.510	14.3	0.0000	0.1090	10.9	0.442
284	132.983	11.532	14.3	0.0000	0.1090	10.9	0.442
285	133.485	11.554	14.3	0.0000	0.1090	10.9	0.442
286	133.984	11.575	14.3	0.0000	0.1090	10.9	0.442
287	134.484	11.597	14.3	0.0000	0.1090	10.9	0.442
288	134.985	11.618	14.3	0.0000	0.1090	10.9	0.442
289	135.484	11.640	14.3	0.0000	0.1090	10.9	0.442
290	135.983	11.661	14.3	0.0000	0.1090	10.9	0.442
291	136.482	11.683	14.3	0.0000	0.1090	10.9	0.442
292	136.985	11.704	14.3	0.0000	0.1089	10.9	0.442
293	137.485	11.725	14.3	0.0000	0.1090	10.9	0.442
294	137.985	11.747	14.3	0.0000	0.1089	10.9	0.442
295	138.482	11.768	14.3	0.0000	0.1089	10.9	0.442
296	138.985	11.789	14.3	0.0000	0.1089	10.9	0.442
297	139.484	11.810	14.3	0.0000	0.1089	10.9	0.442
298	139.985	11.832	14.3	0.0000	0.1089	10.9	0.442
299	140.485	11.853	14.3	0.0000	0.1089	10.9	0.442
300	140.982	11.874	14.3	0.0000	0.1089	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.483	11.895	14.3	0.0000	0.1089	10.9	0.442
302	141.983	11.916	14.3	0.0000	0.1089	10.9	0.442
303	142.483	11.937	14.3	0.0000	0.1089	10.9	0.442
304	142.984	11.958	14.3	0.0000	0.1089	10.9	0.442
305	143.481	11.978	14.3	0.0000	0.1089	10.9	0.443
306	143.982	11.999	14.3	0.0000	0.1089	10.9	0.442
307	144.485	12.020	14.3	0.0000	0.1089	10.9	0.442
308	144.984	12.041	14.3	0.0000	0.1089	10.9	0.442
309	145.483	12.062	14.3	0.0000	0.1089	10.9	0.443
310	145.984	12.082	14.3	0.0000	0.1089	10.9	0.442
311	146.481	12.103	14.3	0.0000	0.1089	10.9	0.443
312	146.982	12.124	14.3	0.0000	0.1089	10.9	0.442
313	147.483	12.144	14.3	0.0000	0.1089	10.9	0.443
314	147.985	12.165	14.3	0.0000	0.1089	10.9	0.443
315	148.481	12.185	14.3	0.0000	0.1089	10.9	0.443
316	148.982	12.206	14.3	0.0000	0.1089	10.9	0.443
317	149.484	12.226	14.3	0.0000	0.1089	10.9	0.443
318	149.985	12.247	14.3	0.0000	0.1089	10.9	0.443
319	150.482	12.267	14.3	0.0000	0.1089	10.9	0.443
320	150.985	12.288	14.3	0.0000	0.1089	10.9	0.443
321	151.483	12.308	14.3	0.0000	0.1089	10.9	0.443
322	151.981	12.328	14.3	0.0000	0.1089	10.9	0.443
323	152.482	12.348	14.3	0.0000	0.1089	10.9	0.443
324	152.985	12.369	14.3	0.0000	0.1089	10.9	0.443
325	153.485	12.389	14.3	0.0000	0.1089	10.9	0.443
326	153.983	12.409	14.3	0.0000	0.1089	10.9	0.443
327	154.483	12.429	14.3	0.0000	0.1089	10.9	0.443
328	154.986	12.449	14.3	0.0000	0.1089	10.9	0.443
329	155.483	12.469	14.3	0.0000	0.1089	10.9	0.443
330	155.982	12.489	14.3	0.0000	0.1089	10.9	0.443
331	156.483	12.509	14.3	0.0000	0.1089	10.9	0.443
332	156.982	12.529	14.3	0.0000	0.1089	10.9	0.443
333	157.485	12.549	14.3	0.0000	0.1089	10.9	0.443
334	157.982	12.569	14.3	0.0000	0.1089	10.9	0.443
335	158.482	12.589	14.3	0.0000	0.1089	10.9	0.443
336	158.981	12.609	14.3	0.0000	0.1089	10.9	0.443
337	159.485	12.629	14.3	0.0000	0.1089	10.9	0.443
338	159.985	12.649	14.3	0.0000	0.1088	10.9	0.443
339	160.482	12.668	14.3	0.0000	0.1088	10.9	0.443
340	160.984	12.688	14.3	0.0000	0.1088	10.9	0.443
341	161.482	12.708	14.3	0.0000	0.1088	10.9	0.443
342	161.985	12.727	14.3	0.0000	0.1088	10.9	0.443
343	162.484	12.747	14.3	0.0000	0.1088	10.9	0.443
344	162.984	12.767	14.3	0.0000	0.1088	10.9	0.443
345	163.485	12.786	14.3	0.0000	0.1088	10.9	0.443
346	163.983	12.806	14.3	0.0000	0.1088	10.9	0.443
347	164.482	12.825	14.3	0.0000	0.1088	10.9	0.443
348	164.985	12.845	14.3	0.0000	0.1088	10.9	0.443
349	165.482	12.864	14.3	0.0000	0.1088	10.9	0.443
350	165.984	12.883	14.3	0.0000	0.1088	10.9	0.443

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.483	12.903	14.3	0.0000	0.1088	10.9	0.443
352	166.985	12.922	14.3	0.0000	0.1088	10.9	0.443
353	167.485	12.942	14.3	0.0000	0.1088	10.9	0.443
354	167.982	12.961	14.3	0.0000	0.1088	10.9	0.443
355	168.482	12.980	14.3	0.0000	0.1088	10.9	0.443
356	168.984	12.999	14.3	0.0000	0.1088	10.9	0.443
357	169.482	13.019	14.3	0.0000	0.1088	10.9	0.443
358	169.983	13.038	14.3	0.0000	0.1088	10.9	0.443
359	170.485	13.057	14.3	0.0000	0.1088	10.9	0.443
360	170.983	13.076	14.3	0.0000	0.1088	10.9	0.443
361	171.484	13.095	14.3	0.0000	0.1088	10.9	0.443
362	171.985	13.114	14.3	0.0000	0.1088	10.9	0.443
363	172.483	13.133	14.3	0.0000	0.1087	10.9	0.443
364	172.983	13.152	14.3	0.0000	0.1087	10.9	0.443
365	173.485	13.171	14.3	0.0000	0.1087	10.9	0.443
366	173.984	13.190	14.3	0.0000	0.1087	10.9	0.443
367	174.484	13.209	14.3	0.0000	0.1087	10.9	0.443
368	174.981	13.228	14.3	0.0000	0.1087	10.9	0.443
369	175.483	13.247	14.3	0.0000	0.1087	10.9	0.443
370	175.983	13.266	14.3	0.0000	0.1087	10.9	0.443
371	176.485	13.285	14.3	0.0000	0.1087	10.9	0.443
372	176.984	13.304	14.3	0.0000	0.1087	10.9	0.443
373	177.484	13.322	14.3	0.0000	0.1087	10.9	0.443
374	177.985	13.341	14.3	0.0000	0.1087	10.9	0.443
375	178.483	13.360	14.3	0.0000	0.1087	10.9	0.443
376	178.982	13.378	14.3	0.0000	0.1087	10.9	0.443
377	179.481	13.397	14.3	0.0000	0.1087	10.9	0.443
378	179.982	13.416	14.3	0.0000	0.1087	10.9	0.443
379	180.483	13.434	14.3	0.0000	0.1087	10.9	0.443
380	180.981	13.453	14.3	0.0000	0.1087	10.9	0.443
381	181.482	13.472	14.3	0.0000	0.1087	10.9	0.443
382	181.981	13.490	14.3	0.0000	0.1087	10.9	0.443
383	182.482	13.509	14.3	0.0000	0.1087	10.9	0.443
384	182.983	13.527	14.3	0.0000	0.1087	10.9	0.443
385	183.483	13.546	14.3	0.0000	0.1087	10.9	0.443
386	183.985	13.564	14.3	0.0000	0.1087	10.9	0.443
387	184.481	13.582	14.3	0.0000	0.1087	10.9	0.443
388	184.981	13.601	14.3	0.0000	0.1087	10.9	0.443
389	185.485	13.619	14.3	0.0000	0.1087	10.9	0.443
390	185.984	13.638	14.3	0.0000	0.1087	10.9	0.443
391	186.483	13.656	14.3	0.0000	0.1087	10.9	0.443
392	186.984	13.674	14.3	0.0000	0.1087	10.9	0.443
393	187.484	13.692	14.3	0.0000	0.1087	10.9	0.443
394	187.984	13.711	14.3	0.0000	0.1087	10.9	0.443
395	188.485	13.729	14.3	0.0000	0.1087	10.9	0.443
396	188.985	13.747	14.3	0.0000	0.1087	10.9	0.443
397	189.483	13.765	14.3	0.0000	0.1087	10.9	0.443
398	189.984	13.783	14.3	0.0000	0.1088	10.9	0.443
399	190.484	13.802	14.3	0.0000	0.1087	10.9	0.443
400	190.981	13.820	14.3	0.0000	0.1087	10.9	0.443

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.485	13.838	14.3	0.0000	0.1088	10.9	0.443
402	191.985	13.856	14.3	0.0000	0.1088	10.9	0.443
403	192.482	13.874	14.3	0.0000	0.1088	10.9	0.443
404	192.983	13.892	14.3	0.0000	0.1088	10.9	0.443
405	193.482	13.910	14.3	0.0000	0.1088	10.9	0.443
406	193.985	13.928	14.3	0.0000	0.1088	10.9	0.443
407	194.482	13.946	14.3	0.0000	0.1088	10.9	0.443
408	194.985	13.964	14.3	0.0000	0.1088	10.9	0.443
409	195.485	13.982	14.3	0.0000	0.1088	10.9	0.443
410	195.985	13.999	14.3	0.0000	0.1088	10.9	0.443
411	196.483	14.017	14.3	0.0000	0.1088	10.9	0.443
412	196.985	14.035	14.3	0.0000	0.1088	10.9	0.443
413	197.482	14.053	14.3	0.0000	0.1088	10.9	0.443
414	197.982	14.071	14.3	0.0000	0.1088	10.9	0.443
415	198.482	14.088	14.3	0.0000	0.1088	10.9	0.443
416	198.982	14.106	14.3	0.0000	0.1088	10.9	0.443
417	199.484	14.124	14.3	0.0000	0.1088	10.9	0.443
418	199.982	14.142	14.3	0.0000	0.1088	10.9	0.443
419	200.482	14.159	14.3	0.0000	0.1088	10.9	0.443
420	200.985	14.177	14.3	0.0000	0.1088	10.9	0.443
421	201.485	14.195	14.3	0.0000	0.1088	10.9	0.443
422	201.984	14.212	14.3	0.0000	0.1088	10.9	0.443
423	202.484	14.230	14.3	0.0000	0.1088	10.9	0.443
424	202.985	14.247	14.3	0.0000	0.1088	10.9	0.443
425	203.483	14.265	14.3	0.0000	0.1088	10.9	0.443
426	203.983	14.282	14.3	0.0000	0.1088	10.9	0.443
427	204.485	14.300	14.3	0.0000	0.1088	10.9	0.443
428	204.984	14.317	14.3	0.0000	0.1089	10.9	0.443
429	205.485	14.335	14.3	0.0000	0.1089	10.9	0.443
430	205.982	14.352	14.3	0.0000	0.1089	10.9	0.443
431	206.482	14.369	14.3	0.0000	0.1089	10.9	0.443
432	206.984	14.387	14.3	0.0000	0.1089	10.9	0.442
433	207.482	14.404	14.3	0.0000	0.1089	10.9	0.442
434	207.985	14.422	14.3	0.0000	0.1089	10.9	0.442
435	208.483	14.439	14.3	0.0000	0.1089	10.9	0.442
436	208.982	14.456	14.3	0.0000	0.1089	10.9	0.442
437	209.485	14.474	14.3	0.0000	0.1089	10.9	0.442
438	209.983	14.491	14.3	0.0000	0.1089	10.9	0.442
439	210.485	14.508	14.3	0.0000	0.1090	10.9	0.442
440	210.982	14.525	14.3	0.0000	0.1090	10.9	0.442
441	211.483	14.542	14.3	0.0000	0.1090	10.9	0.442
442	211.984	14.560	14.3	0.0000	0.1090	10.9	0.442
443	212.481	14.577	14.3	0.0000	0.1090	10.9	0.442
444	212.982	14.594	14.3	0.0000	0.1090	10.9	0.442
445	213.483	14.611	14.3	0.0000	0.1090	10.9	0.442
446	213.982	14.628	14.3	0.0000	0.1090	10.9	0.442
447	214.484	14.645	14.3	0.0000	0.1090	10.9	0.442
448	214.985	14.662	14.3	0.0000	0.1090	10.9	0.442
449	215.485	14.679	14.3	0.0000	0.1091	10.9	0.442
450	215.981	14.696	14.3	0.0000	0.1091	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.481	14.713	14.3	0.0000	0.1091	10.9	0.442
452	216.982	14.730	14.3	0.0000	0.1091	10.9	0.442
453	217.483	14.747	14.3	0.0000	0.1091	10.9	0.442
454	217.983	14.764	14.3	0.0000	0.1091	10.9	0.442
455	218.485	14.781	14.3	0.0000	0.1091	10.9	0.442
456	218.985	14.798	14.3	0.0000	0.1091	10.9	0.442
457	219.482	14.815	14.3	0.0000	0.1091	10.9	0.442
458	219.982	14.832	14.3	0.0000	0.1091	10.9	0.442
459	220.483	14.849	14.3	0.0000	0.1091	10.9	0.442
460	220.984	14.866	14.3	0.0000	0.1091	10.9	0.442
461	221.482	14.882	14.3	0.0000	0.1091	10.9	0.442
462	221.983	14.899	14.3	0.0000	0.1091	10.9	0.442
463	222.483	14.916	14.3	0.0000	0.1091	10.9	0.442
464	222.983	14.933	14.3	0.0000	0.1091	10.9	0.442
465	223.485	14.949	14.3	0.0000	0.1091	10.9	0.442
466	223.982	14.966	14.3	0.0000	0.1091	10.9	0.442
467	224.483	14.983	14.3	0.0000	0.1091	10.9	0.442
468	224.983	14.999	14.3	0.0000	0.1091	10.9	0.442
469	225.482	15.016	14.3	0.0000	0.1091	10.9	0.442
470	225.982	15.033	14.3	0.0000	0.1091	10.9	0.442
471	226.483	15.049	14.3	0.0000	0.1091	10.9	0.442
472	226.982	15.066	14.3	0.0000	0.1092	10.9	0.442
473	227.482	15.082	14.3	0.0000	0.1092	10.9	0.442
474	227.982	15.099	14.3	0.0000	0.1092	10.9	0.442
475	228.484	15.116	14.3	0.0000	0.1092	10.9	0.442
476	228.982	15.132	14.3	0.0000	0.1092	10.9	0.442
477	229.483	15.149	14.3	0.0000	0.1092	10.9	0.442
478	229.983	15.165	14.3	0.0000	0.1092	10.9	0.442
479	230.483	15.182	14.3	0.0000	0.1092	10.9	0.442
480	230.984	15.198	14.3	0.0000	0.1092	10.9	0.442
481	231.485	15.215	14.3	0.0000	0.1092	10.9	0.442
482	231.981	15.231	14.3	0.0000	0.1092	10.9	0.442
483	232.486	15.247	14.3	0.0000	0.1092	10.9	0.442
484	232.984	15.264	14.3	0.0000	0.1092	10.9	0.442
485	233.485	15.280	14.3	0.0000	0.1092	10.9	0.442
486	233.982	15.296	14.3	0.0000	0.1093	10.9	0.442
487	234.481	15.313	14.3	0.0000	0.1093	10.9	0.442
488	234.983	15.329	14.3	0.0000	0.1093	10.9	0.442
489	235.483	15.345	14.3	0.0000	0.1093	10.9	0.442
490	235.983	15.362	14.3	0.0000	0.1093	10.9	0.442
491	236.483	15.378	14.3	0.0000	0.1093	10.9	0.442
492	236.984	15.394	14.3	0.0000	0.1093	10.9	0.442
493	237.481	15.410	14.3	0.0000	0.1093	10.9	0.442
494	237.982	15.427	14.3	0.0000	0.1093	10.9	0.442
495	238.484	15.443	14.3	0.0000	0.1093	10.9	0.442
496	238.981	15.459	14.3	0.0000	0.1093	10.9	0.442
497	239.483	15.475	14.3	0.0000	0.1093	10.9	0.442
498	239.984	15.491	14.3	0.0000	0.1093	10.9	0.442
499	240.484	15.508	14.3	0.0000	0.1093	10.9	0.442
500	240.984	15.524	14.3	0.0000	0.1093	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.482	15.540	14.3	0.0000	0.1093	10.9	0.442
502	241.983	15.556	14.3	0.0000	0.1093	10.9	0.442
503	242.482	15.572	14.3	0.0000	0.1093	10.9	0.442
504	242.982	15.588	14.3	0.0000	0.1093	10.9	0.442
505	243.483	15.604	14.3	0.0000	0.1093	10.9	0.442
506	243.985	15.620	14.3	0.0000	0.1093	10.9	0.442
507	244.481	15.636	14.3	0.0000	0.1093	10.9	0.442
508	244.985	15.652	14.3	0.0000	0.1093	10.9	0.442
509	245.482	15.668	14.3	0.0000	0.1093	10.9	0.442
510	245.982	15.684	14.3	0.0000	0.1093	10.9	0.442
511	246.483	15.700	14.3	0.0000	0.1093	10.9	0.442
512	246.982	15.716	14.3	0.0000	0.1093	10.9	0.442
513	247.484	15.732	14.3	0.0000	0.1093	10.9	0.442
514	247.982	15.747	14.3	0.0000	0.1094	10.9	0.442
515	248.482	15.763	14.3	0.0000	0.1094	10.9	0.442
516	248.981	15.779	14.3	0.0000	0.1094	10.9	0.442
517	249.482	15.795	14.3	0.0000	0.1094	10.9	0.442
518	249.984	15.811	14.3	0.0000	0.1094	10.9	0.442
519	250.483	15.827	14.3	0.0000	0.1094	10.9	0.442
520	250.985	15.843	14.3	0.0000	0.1094	10.9	0.442
521	251.485	15.858	14.3	0.0000	0.1094	10.9	0.442
522	251.981	15.874	14.3	0.0000	0.1094	10.9	0.442
523	252.483	15.890	14.3	0.0000	0.1094	10.9	0.442
524	252.984	15.905	14.3	0.0000	0.1094	10.9	0.442
525	253.484	15.921	14.3	0.0000	0.1094	10.9	0.442
526	253.985	15.937	14.3	0.0000	0.1094	10.9	0.442
527	254.485	15.953	14.3	0.0000	0.1094	10.9	0.442
528	254.985	15.968	14.3	0.0000	0.1094	10.9	0.442
529	255.485	15.984	14.3	0.0000	0.1094	10.9	0.442
530	255.981	15.999	14.3	0.0000	0.1094	10.9	0.442
531	256.482	16.015	14.3	0.0000	0.1094	10.9	0.442
532	256.985	16.031	14.3	0.0000	0.1094	10.9	0.442
533	257.486	16.046	14.3	0.0000	0.1094	10.9	0.442
534	257.984	16.062	14.3	0.0000	0.1094	10.9	0.442
535	258.482	16.077	14.3	0.0000	0.1094	10.9	0.442
536	258.984	16.093	14.3	0.0000	0.1094	10.9	0.442
537	259.481	16.108	14.3	0.0000	0.1094	10.9	0.442
538	259.985	16.124	14.3	0.0000	0.1094	10.9	0.442
539	260.482	16.139	14.3	0.0000	0.1094	10.9	0.442
540	260.984	16.155	14.3	0.0000	0.1094	10.9	0.442
541	261.482	16.170	14.3	0.0000	0.1094	10.9	0.442
542	261.981	16.186	14.3	0.0000	0.1094	10.9	0.442
543	262.482	16.201	14.3	0.0000	0.1094	10.9	0.442
544	262.984	16.217	14.3	0.0000	0.1094	10.9	0.442
545	263.485	16.232	14.3	0.0000	0.1094	10.9	0.442
546	263.982	16.248	14.3	0.0000	0.1094	10.9	0.442
547	264.482	16.263	14.3	0.0000	0.1094	10.9	0.442
548	264.983	16.278	14.3	0.0000	0.1094	10.9	0.442
549	265.482	16.294	14.3	0.0000	0.1094	10.9	0.442
550	265.981	16.309	14.3	0.0000	0.1094	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.483	16.324	14.3	0.0000	0.1094	10.9	0.442
552	266.984	16.340	14.3	0.0000	0.1094	10.9	0.442
553	267.485	16.355	14.3	0.0000	0.1094	10.9	0.442
554	267.982	16.370	14.3	0.0000	0.1094	10.9	0.442
555	268.484	16.385	14.3	0.0000	0.1094	10.9	0.442
556	268.985	16.401	14.3	0.0000	0.1094	10.9	0.442
557	269.482	16.416	14.3	0.0000	0.1094	10.9	0.442
558	269.983	16.431	14.3	0.0000	0.1094	10.9	0.442
559	270.485	16.446	14.3	0.0000	0.1094	10.9	0.442
560	270.983	16.462	14.3	0.0000	0.1094	10.9	0.442
561	271.482	16.477	14.3	0.0000	0.1094	10.9	0.442
562	271.983	16.492	14.3	0.0000	0.1094	10.9	0.442
563	272.484	16.507	14.3	0.0000	0.1095	10.9	0.442
564	272.982	16.522	14.3	0.0000	0.1094	10.9	0.442
565	273.484	16.537	14.3	0.0000	0.1095	10.9	0.442
566	273.981	16.552	14.3	0.0000	0.1095	10.9	0.442
567	274.482	16.567	14.3	0.0000	0.1095	10.9	0.442
568	274.983	16.583	14.3	0.0000	0.1095	10.9	0.442
569	275.484	16.598	14.3	0.0000	0.1095	10.9	0.442
570	275.984	16.613	14.3	0.0000	0.1095	10.9	0.442
571	276.482	16.628	14.3	0.0000	0.1095	10.9	0.442
572	276.984	16.643	14.3	0.0000	0.1095	10.9	0.442
573	277.482	16.658	14.3	0.0000	0.1095	10.9	0.442
574	277.984	16.673	14.3	0.0000	0.1095	10.9	0.442
575	278.485	16.688	14.3	0.0000	0.1095	10.9	0.442
576	278.981	16.703	14.3	0.0000	0.1095	10.9	0.442
577	279.482	16.718	14.3	0.0000	0.1095	10.9	0.442
578	279.984	16.733	14.3	0.0000	0.1095	10.9	0.442
579	280.485	16.748	14.3	0.0000	0.1095	10.9	0.442
580	280.982	16.763	14.3	0.0000	0.1095	10.9	0.442
581	281.485	16.778	14.3	0.0000	0.1095	10.9	0.442
582	281.983	16.792	14.3	0.0000	0.1095	10.9	0.442
583	282.485	16.807	14.3	0.0000	0.1095	10.9	0.442
584	282.982	16.822	14.3	0.0000	0.1095	10.9	0.442
585	283.484	16.837	14.3	0.0000	0.1095	10.9	0.442
586	283.981	16.852	14.3	0.0000	0.1095	10.9	0.442
587	284.481	16.867	14.3	0.0000	0.1095	10.9	0.442
588	284.983	16.881	14.3	0.0000	0.1095	10.9	0.442
589	285.485	16.896	14.3	0.0000	0.1095	10.9	0.442
590	285.985	16.911	14.3	0.0000	0.1095	10.9	0.442
591	286.482	16.926	14.3	0.0000	0.1095	10.9	0.442
592	286.984	16.941	14.3	0.0000	0.1095	10.9	0.442
593	287.484	16.955	14.3	0.0000	0.1095	10.9	0.442
594	287.984	16.970	14.3	0.0000	0.1095	10.9	0.442
595	288.484	16.985	14.3	0.0000	0.1095	10.9	0.442
596	288.985	17.000	14.3	0.0000	0.1095	10.9	0.442
597	289.484	17.014	14.3	0.0000	0.1095	10.9	0.442
598	289.985	17.029	14.3	0.0000	0.1095	11.0	0.442
599	290.484	17.044	14.3	0.0000	0.1095	10.9	0.442
600	290.985	17.058	14.3	0.0000	0.1095	10.9	0.442

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.484	17.073	14.3	0.0000	0.1095	10.9	0.442
602	291.984	17.088	14.3	0.0000	0.1095	10.9	0.442
603	292.483	17.102	14.3	0.0000	0.1095	11.0	0.442
604	292.984	17.117	14.3	0.0000	0.1095	11.0	0.442
605	293.482	17.131	14.3	0.0000	0.1095	11.0	0.442
606	293.982	17.146	14.3	0.0000	0.1095	11.0	0.442
607	294.484	17.161	14.3	0.0000	0.1095	11.0	0.442
608	294.982	17.175	14.3	0.0000	0.1095	10.9	0.442
609	295.482	17.190	14.3	0.0000	0.1095	11.0	0.442
610	295.982	17.204	14.3	0.0000	0.1095	11.0	0.442
611	296.485	17.219	14.3	0.0000	0.1095	11.0	0.442
612	296.983	17.233	14.3	0.0000	0.1095	10.9	0.442
613	297.484	17.248	14.3	0.0000	0.1095	11.0	0.442
614	297.985	17.262	14.3	0.0000	0.1095	11.0	0.442
615	298.484	17.277	14.3	0.0000	0.1095	11.0	0.442
616	298.982	17.291	14.3	0.0000	0.1095	11.0	0.442
617	299.485	17.306	14.3	0.0000	0.1095	11.0	0.442
618	299.982	17.320	14.3	0.0000	0.1095	11.0	0.442
619	300.482	17.334	14.3	0.0000	0.1095	11.0	0.442
620	300.985	17.349	14.3	0.0000	0.1095	11.0	0.442
621	301.482	17.363	14.3	0.0000	0.1095	11.0	0.442
622	301.982	17.378	14.3	0.0000	0.1095	11.0	0.442
623	302.482	17.392	14.3	0.0000	0.1095	11.0	0.442
624	302.985	17.406	14.3	0.0000	0.1095	11.0	0.442
625	303.483	17.421	14.3	0.0000	0.1095	11.0	0.442
626	303.985	17.435	14.3	0.0000	0.1095	11.0	0.442
627	304.484	17.449	14.3	0.0000	0.1095	11.0	0.442
628	304.984	17.464	14.3	0.0000	0.1095	11.0	0.442
629	305.485	17.478	14.3	0.0000	0.1095	11.0	0.442
630	305.984	17.492	14.3	0.0000	0.1095	11.0	0.442
631	306.485	17.507	14.3	0.0000	0.1095	11.0	0.442
632	306.983	17.521	14.3	0.0000	0.1095	11.0	0.442
633	307.484	17.535	14.3	0.0000	0.1096	11.0	0.441
634	307.982	17.549	14.3	0.0000	0.1095	11.0	0.442
635	308.483	17.564	14.3	0.0000	0.1096	11.0	0.441
636	308.982	17.578	14.3	0.0000	0.1095	11.0	0.442
637	309.485	17.592	14.3	0.0000	0.1095	11.0	0.442
638	309.982	17.606	14.3	0.0000	0.1095	11.0	0.442
639	310.484	17.621	14.3	0.0000	0.1095	11.0	0.442
640	310.983	17.635	14.3	0.0000	0.1095	11.0	0.442
641	311.483	17.649	14.3	0.0000	0.1095	11.0	0.442
642	311.984	17.663	14.3	0.0000	0.1096	11.0	0.441
643	312.483	17.677	14.3	0.0000	0.1096	11.0	0.441
644	312.985	17.691	14.3	0.0000	0.1095	11.0	0.442
645	313.485	17.705	14.3	0.0000	0.1096	11.0	0.441
646	313.982	17.720	14.3	0.0000	0.1096	11.0	0.441
647	314.483	17.734	14.3	0.0000	0.1096	11.0	0.441
648	314.985	17.748	14.3	0.0000	0.1096	11.0	0.441
649	315.482	17.762	14.3	0.0000	0.1096	11.0	0.441
650	315.984	17.776	14.3	0.0000	0.1096	11.0	0.441

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.484	17.790	14.3	0.0000	0.1096	11.0	0.441
652	316.982	17.804	14.3	0.0000	0.1096	11.0	0.441
653	317.482	17.818	14.3	0.0000	0.1096	11.0	0.441
654	317.982	17.832	14.3	0.0000	0.1096	11.0	0.441
655	318.485	17.846	14.3	0.0000	0.1096	11.0	0.441
656	318.983	17.860	14.3	0.0000	0.1096	11.0	0.441
657	319.481	17.874	14.3	0.0000	0.1096	11.0	0.441
658	319.983	17.888	14.3	0.0000	0.1096	11.0	0.441
659	320.485	17.902	14.3	0.0000	0.1096	11.0	0.441
660	320.984	17.916	14.3	0.0000	0.1096	11.0	0.441
661	321.485	17.930	14.3	0.0000	0.1096	11.0	0.441
662	321.985	17.944	14.3	0.0000	0.1096	11.0	0.441
663	322.484	17.958	14.3	0.0000	0.1096	11.0	0.441
664	322.984	17.972	14.3	0.0000	0.1096	11.0	0.441
665	323.484	17.986	14.3	0.0000	0.1096	11.0	0.441
666	323.984	18.000	14.3	0.0000	0.1096	11.0	0.441
667	324.485	18.013	14.3	0.0000	0.1096	11.0	0.441
668	324.985	18.027	14.3	0.0000	0.1096	11.0	0.441
669	325.482	18.041	14.3	0.0000	0.1096	11.0	0.441
670	325.984	18.055	14.3	0.0000	0.1096	11.0	0.441
671	326.485	18.069	14.3	0.0000	0.1096	11.0	0.441
672	326.982	18.083	14.3	0.0000	0.1096	11.0	0.441
673	327.484	18.097	14.3	0.0000	0.1096	11.0	0.441
674	327.984	18.110	14.3	0.0000	0.1096	11.0	0.441
675	328.483	18.124	14.3	0.0000	0.1096	11.0	0.441
676	328.985	18.138	14.3	0.0000	0.1096	11.0	0.441
677	329.486	18.152	14.3	0.0000	0.1096	11.0	0.441
678	329.985	18.165	14.3	0.0000	0.1096	11.0	0.441
679	330.482	18.179	14.3	0.0000	0.1096	11.0	0.441
680	330.983	18.193	14.3	0.0000	0.1096	11.0	0.441
681	331.482	18.207	14.3	0.0000	0.1096	11.0	0.441
682	331.982	18.220	14.3	0.0000	0.1096	11.0	0.441
683	332.484	18.234	14.3	0.0000	0.1096	11.0	0.441
684	332.981	18.248	14.3	0.0000	0.1096	11.0	0.441
685	333.484	18.262	14.3	0.0000	0.1096	11.0	0.441
686	333.983	18.275	14.3	0.0000	0.1096	11.0	0.441
687	334.485	18.289	14.3	0.0000	0.1096	11.0	0.441
688	334.982	18.303	14.3	0.0000	0.1096	11.0	0.441
689	335.485	18.316	14.3	0.0000	0.1096	11.0	0.441
690	335.981	18.330	14.3	0.0000	0.1096	11.0	0.441
691	336.483	18.343	14.3	0.0000	0.1096	11.0	0.441
692	336.985	18.357	14.3	0.0000	0.1096	11.0	0.441
693	337.484	18.371	14.3	0.0000	0.1096	11.0	0.441
694	337.982	18.384	14.3	0.0000	0.1096	11.0	0.441
695	338.483	18.398	14.3	0.0000	0.1096	11.0	0.441
696	338.981	18.411	14.3	0.0000	0.1096	11.0	0.441
697	339.483	18.425	14.3	0.0000	0.1096	11.0	0.441
698	339.983	18.439	14.3	0.0000	0.1096	11.0	0.441
699	340.483	18.452	14.3	0.0000	0.1096	11.0	0.441
700	340.984	18.466	14.3	0.0000	0.1096	11.0	0.441

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.484	18.479	14.3	0.0000	0.1096	11.0	0.441
702	341.985	18.493	14.3	0.0000	0.1096	11.0	0.441
703	342.482	18.506	14.3	0.0000	0.1096	11.0	0.441
704	342.984	18.520	14.3	0.0000	0.1096	11.0	0.441
705	343.485	18.533	14.3	0.0000	0.1096	11.0	0.441
706	343.983	18.547	14.3	0.0000	0.1096	11.0	0.441
707	344.484	18.560	14.3	0.0000	0.1096	11.0	0.441
708	344.985	18.574	14.3	0.0000	0.1097	11.0	0.441
709	345.485	18.587	14.3	0.0000	0.1097	11.0	0.441
710	345.982	18.601	14.3	0.0000	0.1097	11.0	0.441
711	346.485	18.614	14.3	0.0000	0.1096	11.0	0.441
712	346.983	18.627	14.3	0.0000	0.1097	11.0	0.441
713	347.482	18.641	14.3	0.0000	0.1097	11.0	0.441
714	347.984	18.654	14.3	0.0000	0.1097	11.0	0.441
715	348.485	18.668	14.3	0.0000	0.1097	11.0	0.441
716	348.983	18.681	14.3	0.0000	0.1097	11.0	0.441
717	349.484	18.694	14.3	0.0000	0.1097	11.0	0.441
718	349.985	18.708	14.3	0.0000	0.1097	11.0	0.441
719	350.485	18.721	14.3	0.0000	0.1097	11.0	0.441
720	350.985	18.735	14.3	0.0000	0.1097	11.0	0.441
721	351.482	18.748	14.3	0.0000	0.1097	11.0	0.441
722	351.985	18.761	14.3	0.0000	0.1097	11.0	0.441
723	352.485	18.775	14.3	0.0000	0.1097	11.0	0.441
724	352.984	18.788	14.3	0.0000	0.1097	11.0	0.441
725	353.482	18.801	14.3	0.0000	0.1097	11.0	0.441
726	353.982	18.814	14.3	0.0000	0.1097	11.0	0.441
727	354.483	18.828	14.3	0.0000	0.1097	11.0	0.441
728	354.982	18.841	14.3	0.0000	0.1097	11.0	0.441
729	355.484	18.854	14.3	0.0000	0.1097	11.0	0.441
730	355.982	18.867	14.3	0.0000	0.1097	11.0	0.441
731	356.483	18.881	14.3	0.0000	0.1097	11.0	0.441
732	356.982	18.894	14.3	0.0000	0.1097	11.0	0.441
733	357.484	18.907	14.3	0.0000	0.1097	11.0	0.441
734	357.982	18.920	14.3	0.0000	0.1097	11.0	0.441
735	358.482	18.934	14.3	0.0000	0.1097	11.0	0.441
736	358.982	18.947	14.3	0.0000	0.1097	11.0	0.441
737	359.483	18.960	14.3	0.0000	0.1097	11.0	0.441
738	359.983	18.973	14.3	0.0000	0.1097	11.0	0.441
739	360.485	18.986	14.3	0.0000	0.1097	11.0	0.441
740	360.983	19.000	14.3	0.0000	0.1097	11.0	0.441
741	361.481	19.013	14.3	0.0000	0.1097	11.0	0.441
742	361.983	19.026	14.3	0.0000	0.1097	11.0	0.441
743	362.483	19.039	14.3	0.0000	0.1097	11.0	0.441
744	362.983	19.052	14.3	0.0000	0.1097	11.0	0.441
745	363.483	19.065	14.3	0.0000	0.1097	11.0	0.441
746	363.983	19.078	14.3	0.0000	0.1097	11.0	0.441
747	364.483	19.091	14.3	0.0000	0.1097	11.0	0.441
748	364.984	19.105	14.3	0.0000	0.1097	11.0	0.441
749	365.481	19.118	14.3	0.0000	0.1097	11.0	0.441
750	365.985	19.131	14.3	0.0000	0.1097	11.0	0.441

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
751	366.482	19.144	14.3	0.0000	0.1097	11.0	0.441
752	366.985	19.157	14.3	0.0000	0.1097	11.0	0.441
753	367.484	19.170	14.3	0.0000	0.1097	11.0	0.441
754	367.985	19.183	14.3	0.0000	0.1097	11.0	0.441
755	368.484	19.196	14.3	0.0000	0.1097	11.0	0.441
756	368.983	19.209	14.3	0.0000	0.1097	11.0	0.441
757	369.484	19.222	14.3	0.0000	0.1097	11.0	0.441
758	369.985	19.235	14.3	0.0000	0.1097	11.0	0.441
759	370.484	19.248	14.3	0.0000	0.1097	11.0	0.441
760	370.984	19.261	14.3	0.0000	0.1096	11.0	0.441
761	371.484	19.274	14.3	0.0000	0.1096	11.0	0.441
762	371.985	19.287	14.3	0.0000	0.1096	11.0	0.441
763	372.484	19.300	14.3	0.0000	0.1096	11.0	0.441
764	372.985	19.313	14.3	0.0000	0.1096	11.0	0.441
765	373.484	19.326	14.3	0.0000	0.1096	11.0	0.441
766	373.985	19.339	14.3	0.0000	0.1096	11.0	0.441
767	374.485	19.352	14.3	0.0000	0.1096	11.0	0.441
768	374.984	19.365	14.3	0.0000	0.1096	11.0	0.441
769	375.483	19.377	14.3	0.0000	0.1096	11.0	0.441
770	375.983	19.390	14.3	0.0000	0.1096	11.0	0.441
771	376.483	19.403	14.3	0.0000	0.1096	11.0	0.441
772	376.983	19.416	14.3	0.0000	0.1096	11.0	0.441
773	377.483	19.429	14.3	0.0000	0.1096	11.0	0.441
774	377.981	19.442	14.3	0.0000	0.1096	11.0	0.441
775	378.486	19.455	14.3	0.0000	0.1095	11.0	0.442
776	378.982	19.467	14.3	0.0000	0.1095	11.0	0.442
777	379.483	19.480	14.3	0.0000	0.1095	11.0	0.442
778	379.983	19.493	14.3	0.0000	0.1095	11.0	0.442
779	380.482	19.506	14.3	0.0000	0.1095	11.0	0.442
780	380.984	19.519	14.3	0.0000	0.1095	11.0	0.442
781	381.483	19.532	14.3	0.0000	0.1095	11.0	0.442
782	381.984	19.544	14.3	0.0000	0.1095	11.0	0.442
783	382.485	19.557	14.3	0.0000	0.1095	11.0	0.442
784	382.984	19.570	14.3	0.0000	0.1095	11.0	0.442
785	383.482	19.583	14.3	0.0000	0.1095	10.9	0.442
786	383.984	19.596	14.3	0.0000	0.1095	10.9	0.442
787	384.484	19.608	14.3	0.0000	0.1095	10.9	0.442
788	384.981	19.621	14.3	0.0000	0.1095	10.9	0.442
789	385.484	19.634	14.3	0.0000	0.1095	10.9	0.442
790	385.981	19.646	14.3	0.0000	0.1095	10.9	0.442
791	386.482	19.659	14.3	0.0000	0.1095	10.9	0.442
792	386.984	19.672	14.3	0.0000	0.1095	10.9	0.442
793	387.482	19.685	14.3	0.0000	0.1095	10.9	0.442
794	387.983	19.697	14.3	0.0000	0.1095	10.9	0.442
795	388.482	19.710	14.3	0.0000	0.1095	10.9	0.442
796	388.983	19.723	14.3	0.0000	0.1095	10.9	0.442
797	389.484	19.735	14.3	0.0000	0.1094	10.9	0.442
798	389.984	19.748	14.3	0.0000	0.1094	10.9	0.442
799	390.481	19.761	14.3	0.0000	0.1094	10.9	0.442
800	390.984	19.773	14.3	0.0000	0.1094	10.9	0.442

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
	Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
801	391.483	19.786	14.3	0.0000	0.1094	10.9	0.442
802	391.983	19.799	14.3	0.0000	0.1094	10.9	0.442
803	392.485	19.811	14.3	0.0000	0.1094	10.9	0.442
804	392.983	19.824	14.3	0.0000	0.1094	10.9	0.442
805	393.481	19.836	14.3	0.0000	0.1094	10.9	0.442
806	393.984	19.849	14.3	0.0000	0.1094	10.9	0.442
807	394.485	19.862	14.3	0.0000	0.1094	10.9	0.442
808	394.984	19.874	14.3	0.0000	0.1094	10.9	0.442
809	395.483	19.887	14.3	0.0000	0.1094	10.9	0.442
810	395.984	19.899	14.3	0.0000	0.1094	10.9	0.442
811	396.483	19.912	14.3	0.0000	0.1094	10.9	0.442
812	396.983	19.924	14.3	0.0000	0.1094	10.9	0.442
813	397.481	19.937	14.3	0.0000	0.1094	10.9	0.442
814	397.981	19.949	14.3	0.0000	0.1094	10.9	0.442
815	398.485	19.962	14.3	0.0000	0.1094	10.9	0.442
816	398.983	19.975	14.3	0.0000	0.1094	10.9	0.442
817	399.484	19.987	14.3	0.0000	0.1094	10.9	0.442
818	399.983	20.000	14.3	0.0000	0.1094	10.9	0.442
819	400.482	20.012	14.3	0.0000	0.1094	10.9	0.442
820	400.983	20.025	14.3	0.0000	0.1094	10.9	0.442
821	401.485	20.037	14.3	0.0000	0.1094	10.9	0.442
822	401.982	20.049	14.3	0.0000	0.1094	10.9	0.442
823	402.483	20.062	14.3	0.0000	0.1094	10.9	0.442
824	402.981	20.074	14.3	0.0000	0.1094	10.9	0.442
825	403.484	20.087	14.3	0.0000	0.1094	10.9	0.442
826	403.981	20.099	14.3	0.0000	0.1094	10.9	0.442
827	404.484	20.112	14.3	0.0000	0.1094	10.9	0.442
828	404.983	20.124	14.3	0.0000	0.1094	10.9	0.442
829	405.484	20.137	14.3	0.0000	0.1094	10.9	0.442
830	405.985	20.149	14.3	0.0000	0.1094	10.9	0.442
831	406.482	20.161	14.3	0.0000	0.1094	10.9	0.442
832	406.982	20.174	14.3	0.0000	0.1094	10.9	0.442
833	407.484	20.186	14.3	0.0000	0.1094	10.9	0.442
834	407.982	20.199	14.3	0.0000	0.1094	10.9	0.442
835	408.483	20.211	14.3	0.0000	0.1094	10.9	0.442
836	408.983	20.223	14.3	0.0000	0.1094	10.9	0.442
837	409.483	20.236	14.3	0.0000	0.1094	10.9	0.442
838	409.982	20.248	14.3	0.0000	0.1094	10.9	0.442
839	410.482	20.260	14.3	0.0000	0.1094	10.9	0.442
840	410.983	20.273	14.3	0.0000	0.1094	10.9	0.442
841	411.485	20.285	14.3	0.0000	0.1094	10.9	0.442
842	411.985	20.297	14.3	0.0000	0.1094	10.9	0.442
843	412.483	20.310	14.3	0.0000	0.1094	10.9	0.442
844	412.985	20.322	14.3	0.0000	0.1094	10.9	0.442
845	413.482	20.334	14.3	0.0000	0.1094	10.9	0.442
846	413.983	20.347	14.3	0.0000	0.1094	10.9	0.442
847	414.485	20.359	14.3	0.0000	0.1094	10.9	0.442
848	414.983	20.371	14.3	0.0000	0.1094	10.9	0.442
849	415.485	20.383	14.3	0.0000	0.1094	10.9	0.442
850	415.981	20.396	14.3	0.0000	0.1094	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
851	416.481	20.408	14.3	0.0000	0.1094	10.9	0.442
852	416.983	20.420	14.3	0.0000	0.1094	10.9	0.442
853	417.482	20.432	14.3	0.0000	0.1094	10.9	0.442
854	417.983	20.445	14.3	0.0000	0.1094	10.9	0.442
855	418.483	20.457	14.3	0.0000	0.1094	10.9	0.442
856	418.984	20.469	14.3	0.0000	0.1094	10.9	0.442
857	419.485	20.481	14.3	0.0000	0.1094	10.9	0.442
858	419.985	20.494	14.3	0.0000	0.1094	10.9	0.442
859	420.482	20.506	14.3	0.0000	0.1094	10.9	0.442
860	420.981	20.518	14.3	0.0000	0.1094	10.9	0.442
861	421.483	20.530	14.3	0.0000	0.1094	10.9	0.442
862	421.984	20.542	14.3	0.0000	0.1094	10.9	0.442
863	422.482	20.554	14.3	0.0000	0.1094	10.9	0.442
864	422.985	20.567	14.3	0.0000	0.1094	10.9	0.442
865	423.485	20.579	14.3	0.0000	0.1094	10.9	0.442
866	423.982	20.591	14.3	0.0000	0.1094	10.9	0.442
867	424.483	20.603	14.3	0.0000	0.1094	10.9	0.442
868	424.982	20.615	14.3	0.0000	0.1094	10.9	0.442
869	425.482	20.627	14.3	0.0000	0.1094	10.9	0.442
870	425.985	20.639	14.3	0.0000	0.1094	10.9	0.442
871	426.482	20.651	14.3	0.0000	0.1094	10.9	0.442
872	426.983	20.664	14.3	0.0000	0.1094	10.9	0.442
873	427.484	20.676	14.3	0.0000	0.1094	10.9	0.442
874	427.983	20.688	14.3	0.0000	0.1094	10.9	0.442
875	428.484	20.700	14.3	0.0000	0.1094	10.9	0.442
876	428.982	20.712	14.3	0.0000	0.1094	10.9	0.442
877	429.482	20.724	14.3	0.0000	0.1094	10.9	0.442
878	429.983	20.736	14.3	0.0000	0.1094	10.9	0.442
879	430.482	20.748	14.3	0.0000	0.1094	10.9	0.442
880	430.983	20.760	14.3	0.0000	0.1094	10.9	0.442
881	431.485	20.772	14.3	0.0000	0.1094	10.9	0.442
882	431.984	20.784	14.3	0.0000	0.1094	10.9	0.442
883	432.485	20.796	14.3	0.0000	0.1094	10.9	0.442
884	432.982	20.808	14.3	0.0000	0.1094	10.9	0.442
885	433.484	20.820	14.3	0.0000	0.1094	10.9	0.442
886	433.984	20.832	14.3	0.0000	0.1095	10.9	0.442
887	434.485	20.844	14.3	0.0000	0.1094	10.9	0.442
888	434.982	20.856	14.3	0.0000	0.1094	10.9	0.442
889	435.485	20.868	14.3	0.0000	0.1095	10.9	0.442
890	435.985	20.880	14.3	0.0000	0.1095	10.9	0.442
891	436.483	20.892	14.3	0.0000	0.1095	10.9	0.442
892	436.983	20.904	14.3	0.0000	0.1095	10.9	0.442
893	437.485	20.916	14.3	0.0000	0.1095	10.9	0.442
894	437.984	20.928	14.3	0.0000	0.1095	10.9	0.442
895	438.484	20.940	14.3	0.0000	0.1095	10.9	0.442
896	438.985	20.952	14.3	0.0000	0.1095	10.9	0.442
897	439.483	20.964	14.3	0.0000	0.1095	10.9	0.442
898	439.982	20.976	14.3	0.0000	0.1095	10.9	0.442
899	440.484	20.988	14.3	0.0000	0.1095	10.9	0.442
900	440.985	21.000	14.3	0.0000	0.1095	10.9	0.442

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
901	441.483	21.011	14.3	0.0000	0.1095	10.9	0.442
902	441.984	21.023	14.3	0.0000	0.1095	10.9	0.442
903	442.484	21.035	14.3	0.0000	0.1095	11.0	0.442
904	442.985	21.047	14.3	0.0000	0.1095	10.9	0.442
905	443.482	21.059	14.3	0.0000	0.1095	10.9	0.442
906	443.982	21.071	14.3	0.0000	0.1095	10.9	0.442
907	444.483	21.083	14.3	0.0000	0.1095	11.0	0.442
908	444.981	21.095	14.3	0.0000	0.1095	11.0	0.442
909	445.483	21.106	14.3	0.0000	0.1095	11.0	0.442
910	445.982	21.118	14.3	0.0000	0.1095	11.0	0.442
911	446.483	21.130	14.3	0.0000	0.1095	11.0	0.442
912	446.982	21.142	14.3	0.0000	0.1095	11.0	0.442
913	447.485	21.154	14.3	0.0000	0.1095	11.0	0.442
914	447.985	21.166	14.3	0.0000	0.1095	11.0	0.442
915	448.486	21.177	14.3	0.0000	0.1095	11.0	0.442
916	448.982	21.189	14.3	0.0000	0.1095	11.0	0.442
917	449.483	21.201	14.3	0.0000	0.1095	11.0	0.442
918	449.982	21.213	14.3	0.0000	0.1095	11.0	0.442
919	450.482	21.225	14.3	0.0000	0.1095	11.0	0.442
920	450.982	21.236	14.3	0.0000	0.1095	11.0	0.442
921	451.483	21.248	14.3	0.0000	0.1095	11.0	0.442
922	451.983	21.260	14.3	0.0000	0.1095	11.0	0.442
923	452.484	21.272	14.3	0.0000	0.1096	11.0	0.441
924	452.981	21.283	14.3	0.0000	0.1095	11.0	0.442
925	453.483	21.295	14.3	0.0000	0.1095	11.0	0.442
926	453.983	21.307	14.3	0.0000	0.1096	11.0	0.441
927	454.481	21.319	14.3	0.0000	0.1096	11.0	0.441
928	454.982	21.330	14.3	0.0000	0.1096	11.0	0.441
929	455.483	21.342	14.3	0.0000	0.1096	11.0	0.441
930	455.982	21.354	14.3	0.0000	0.1096	11.0	0.441
931	456.481	21.365	14.3	0.0000	0.1096	11.0	0.441
932	456.982	21.377	14.3	0.0000	0.1096	11.0	0.441
933	457.484	21.389	14.3	0.0000	0.1096	11.0	0.441
934	457.984	21.401	14.3	0.0000	0.1096	11.0	0.441
935	458.485	21.412	14.3	0.0000	0.1096	11.0	0.441
936	458.984	21.424	14.3	0.0000	0.1096	11.0	0.441
937	459.485	21.436	14.3	0.0000	0.1096	11.0	0.441
938	459.983	21.447	14.3	0.0000	0.1096	11.0	0.441
939	460.484	21.459	14.3	0.0000	0.1096	11.0	0.441
940	460.984	21.471	14.3	0.0000	0.1096	11.0	0.441
941	461.485	21.482	14.3	0.0000	0.1096	11.0	0.441
942	461.982	21.494	14.3	0.0000	0.1096	11.0	0.441
943	462.484	21.505	14.3	0.0000	0.1096	11.0	0.441
944	462.983	21.517	14.3	0.0000	0.1096	11.0	0.441
945	463.485	21.529	14.3	0.0000	0.1096	11.0	0.441
946	463.983	21.540	14.3	0.0000	0.1096	11.0	0.441
947	464.481	21.552	14.3	0.0000	0.1096	11.0	0.441
948	464.985	21.564	14.3	0.0000	0.1096	11.0	0.441
949	465.483	21.575	14.3	0.0000	0.1096	11.0	0.441
950	465.984	21.587	14.3	0.0000	0.1096	11.0	0.441

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
951	466.485	21.598	14.3	0.0000	0.1096	11.0	0.441
952	466.981	21.610	14.3	0.0000	0.1096	11.0	0.441
953	467.481	21.621	14.3	0.0000	0.1096	11.0	0.441
954	467.983	21.633	14.3	0.0000	0.1096	11.0	0.441
955	468.483	21.644	14.3	0.0000	0.1096	11.0	0.441
956	468.985	21.656	14.3	0.0000	0.1096	11.0	0.441
957	469.481	21.668	14.3	0.0000	0.1096	11.0	0.441
958	469.985	21.679	14.3	0.0000	0.1096	11.0	0.441
959	470.485	21.691	14.3	0.0000	0.1096	11.0	0.441
960	470.984	21.702	14.3	0.0000	0.1096	11.0	0.441
961	471.482	21.714	14.3	0.0000	0.1096	11.0	0.441
962	471.981	21.725	14.3	0.0000	0.1096	11.0	0.441
963	472.484	21.737	14.3	0.0000	0.1096	11.0	0.441
964	472.981	21.748	14.3	0.0000	0.1096	11.0	0.441
965	473.483	21.760	14.3	0.0000	0.1096	11.0	0.441
966	473.984	21.771	14.3	0.0000	0.1096	11.0	0.441
967	474.485	21.783	14.3	0.0000	0.1096	11.0	0.441
968	474.983	21.794	14.3	0.0000	0.1096	11.0	0.441
969	475.484	21.806	14.3	0.0000	0.1096	11.0	0.441
970	475.982	21.817	14.3	0.0000	0.1097	11.0	0.441
971	476.483	21.828	14.3	0.0000	0.1096	11.0	0.441
972	476.982	21.840	14.3	0.0000	0.1097	11.0	0.441
973	477.482	21.851	14.3	0.0000	0.1097	11.0	0.441
974	477.984	21.863	14.3	0.0000	0.1097	11.0	0.441
975	478.482	21.874	14.3	0.0000	0.1097	11.0	0.441
976	478.982	21.886	14.3	0.0000	0.1097	11.0	0.441
977	479.484	21.897	14.3	0.0000	0.1097	11.0	0.441
978	479.985	21.909	14.3	0.0000	0.1097	11.0	0.441
979	480.024	21.909	14.3	0.0000	0.1097	11.0	0.441

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.016		14.3	0.0000	0.1097	11.0	0.441
2	-0.012		14.3	0.0000	0.1097	11.0	0.441
3	-0.008		12.1	0.0000	0.1081	10.8	0.444
4	-0.003		4.61	0.0000	0.1028	10.3	0.452
5	0.000	0.000	1.83	0.0000	0.09795	9.80	0.460
6	0.001	0.029	1.13	0.0000	0.09675	9.67	0.462
7	0.005	0.072	0.250	0.0000	0.09347	9.35	0.467
8	0.009	0.097	0.327	0.0000	0.09238	9.24	0.469
9	0.014	0.117	0.453	0.0000	0.09233	9.23	0.469
10	0.018	0.133	0.523	0.0000	0.09223	9.22	0.469
11	0.022	0.148	0.571	0.0000	0.09218	9.22	0.470
12	0.026	0.163	0.567	0.0000	0.09203	9.20	0.470
13	0.031	0.176	0.547	0.0000	0.09173	9.17	0.470
14	0.035	0.187	0.523	0.0000	0.09148	9.15	0.471
15	0.039	0.198	0.500	0.0000	0.09133	9.13	0.471
16	0.044	0.209	0.481	0.0000	0.09123	9.12	0.471
17	0.061	0.248	0.491	0.0000	0.09079	9.08	0.472
18	0.070	0.264	0.495	0.0000	0.09069	9.07	0.472
19	0.152	0.390	0.462	0.0000	0.08915	8.91	0.474
20	0.234	0.483	0.451	0.0000	0.08875	8.88	0.475
21	0.320	0.566	0.455	0.0000	0.08830	8.83	0.476
22	0.486	0.697	0.445	0.0000	0.08741	8.74	0.477
23	0.737	0.859	0.451	0.0000	0.08647	8.65	0.479
24	0.984	0.992	0.449	0.0000	0.08607	8.61	0.479
25	1.486	1.219	0.447	0.0000	0.08567	8.57	0.480
26	2.487	1.577	0.447	0.0000	0.08503	8.50	0.481
27	4.486	2.118	0.446	0.0000	0.08383	8.38	0.483
28	4.987	2.233	0.445	0.0000	0.08349	8.35	0.484
29	5.487	2.342	0.446	0.0000	0.08289	8.29	0.485
30	5.987	2.447	0.447	0.0000	0.08259	8.26	0.485
31	6.487	2.547	0.445	0.0000	0.08244	8.24	0.485
32	6.988	2.643	0.446	0.0000	0.08234	8.23	0.485
33	7.484	2.736	0.446	0.0000	0.08224	8.22	0.486
34	7.988	2.826	0.446	0.0000	0.08219	8.22	0.486
35	8.485	2.913	0.445	0.0000	0.08215	8.21	0.486
36	8.987	2.998	0.446	0.0000	0.08205	8.20	0.486
37	9.486	3.080	0.446	0.0000	0.08195	8.19	0.486
38	9.985	3.160	0.445	0.0000	0.08185	8.18	0.486
39	10.487	3.238	0.446	0.0000	0.08180	8.18	0.486
40	10.988	3.315	0.446	0.0000	0.08180	8.18	0.486
41	11.485	3.389	0.445	0.0000	0.08175	8.17	0.486
42	11.986	3.462	0.445	0.0000	0.08170	8.17	0.487
43	12.486	3.534	0.446	0.0000	0.08170	8.17	0.487
44	12.986	3.604	0.446	0.0000	0.08165	8.16	0.487
45	13.487	3.672	0.445	0.0000	0.08165	8.16	0.487
46	13.986	3.740	0.446	0.0000	0.08160	8.16	0.487
47	14.487	3.806	0.446	0.0000	0.08160	8.16	0.487
48	14.985	3.871	0.445	0.0000	0.08160	8.16	0.487
49	15.486	3.935	0.444	0.0000	0.08155	8.15	0.487
50	15.985	3.998	0.446	0.0000	0.08155	8.15	0.487

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.488	4.061	0.445	0.0000	0.08155	8.15	0.487
52	16.987	4.122	0.445	0.0000	0.08150	8.15	0.487
53	17.487	4.182	0.445	0.0000	0.08150	8.15	0.487
54	17.985	4.241	0.446	0.0000	0.08150	8.15	0.487
55	18.487	4.300	0.447	0.0000	0.08150	8.15	0.487
56	18.987	4.357	0.441	0.0000	0.08145	8.14	0.487
57	19.486	4.414	0.446	0.0000	0.08145	8.14	0.487
58	19.988	4.471	0.446	0.0000	0.08145	8.14	0.487
59	20.485	4.526	0.448	0.0000	0.08140	8.14	0.487
60	20.986	4.581	0.443	0.0000	0.08140	8.14	0.487
61	21.485	4.635	0.444	0.0000	0.08135	8.14	0.487
62	21.986	4.689	0.444	0.0000	0.08135	8.14	0.487
63	22.487	4.742	0.444	0.0000	0.08135	8.14	0.487
64	22.987	4.794	0.443	0.0000	0.08135	8.14	0.487
65	23.486	4.846	0.444	0.0000	0.08135	8.14	0.487
66	23.988	4.898	0.444	0.0000	0.08135	8.14	0.487
67	24.487	4.948	0.443	0.0000	0.08130	8.13	0.487
68	24.986	4.999	0.443	0.0000	0.08130	8.13	0.487
69	25.484	5.048	0.443	0.0000	0.08130	8.13	0.487
70	25.988	5.098	0.447	0.0000	0.08130	8.13	0.487
71	26.486	5.146	0.446	0.0000	0.08130	8.13	0.487
72	26.984	5.195	0.446	0.0000	0.08130	8.13	0.487
73	27.485	5.243	0.445	0.0000	0.08130	8.13	0.487
74	27.987	5.290	0.445	0.0000	0.08130	8.13	0.487
75	28.487	5.337	0.445	0.0000	0.08130	8.13	0.487
76	28.988	5.384	0.445	0.0000	0.08130	8.13	0.487
77	29.488	5.430	0.443	0.0000	0.08130	8.13	0.487
78	29.984	5.476	0.445	0.0000	0.08130	8.13	0.487
79	30.488	5.522	0.445	0.0000	0.08130	8.13	0.487
80	30.984	5.566	0.447	0.0000	0.08130	8.13	0.487
81	31.488	5.611	0.445	0.0000	0.08130	8.13	0.487
82	31.984	5.655	0.446	0.0000	0.08125	8.13	0.487
83	32.485	5.700	0.444	0.0000	0.08125	8.13	0.487
84	32.987	5.743	0.447	0.0000	0.08125	8.13	0.487
85	33.486	5.787	0.444	0.0000	0.08120	8.12	0.487
86	33.987	5.830	0.446	0.0000	0.08120	8.12	0.487
87	34.487	5.873	0.445	0.0000	0.08120	8.12	0.487
88	34.985	5.915	0.445	0.0000	0.08120	8.12	0.487
89	35.484	5.957	0.445	0.0000	0.08120	8.12	0.487
90	35.985	5.999	0.445	0.0000	0.08120	8.12	0.487
91	36.488	6.041	0.445	0.0000	0.08115	8.12	0.487
92	36.985	6.082	0.446	0.0000	0.08115	8.12	0.487
93	37.487	6.123	0.445	0.0000	0.08115	8.12	0.487
94	37.987	6.163	0.446	0.0000	0.08115	8.12	0.487
95	38.484	6.204	0.445	0.0000	0.08115	8.12	0.487
96	38.988	6.244	0.444	0.0000	0.08115	8.12	0.487
97	39.486	6.284	0.445	0.0000	0.08110	8.11	0.487
98	39.986	6.323	0.445	0.0000	0.08110	8.11	0.487
99	40.487	6.363	0.445	0.0000	0.08110	8.11	0.487
100	40.986	6.402	0.446	0.0000	0.08110	8.11	0.487

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.486	6.441	0.445	0.0000	0.08110	8.11	0.487
102	41.988	6.480	0.445	0.0000	0.08110	8.11	0.487
103	42.488	6.518	0.446	0.0000	0.08110	8.11	0.487
104	42.985	6.556	0.446	0.0000	0.08110	8.11	0.487
105	43.487	6.594	0.446	0.0000	0.08110	8.11	0.487
106	43.984	6.632	0.445	0.0000	0.08110	8.11	0.487
107	44.486	6.670	0.446	0.0000	0.08110	8.11	0.487
108	44.986	6.707	0.445	0.0000	0.08105	8.11	0.488
109	45.485	6.744	0.446	0.0000	0.08105	8.11	0.488
110	45.988	6.781	0.446	0.0000	0.08105	8.11	0.488
111	46.485	6.818	0.446	0.0000	0.08105	8.11	0.488
112	46.986	6.855	0.445	0.0000	0.08105	8.11	0.488
113	47.485	6.891	0.445	0.0000	0.08105	8.11	0.488
114	47.986	6.927	0.445	0.0000	0.08105	8.11	0.488
115	48.487	6.963	0.445	0.0000	0.08105	8.11	0.488
116	48.987	6.999	0.444	0.0000	0.08100	8.10	0.488
117	49.488	7.035	0.445	0.0000	0.08100	8.10	0.488
118	49.986	7.070	0.445	0.0000	0.08100	8.10	0.488
119	50.485	7.105	0.445	0.0000	0.08100	8.10	0.488
120	50.985	7.140	0.446	0.0000	0.08100	8.10	0.488
121	51.484	7.175	0.446	0.0000	0.08100	8.10	0.488
122	51.987	7.210	0.445	0.0000	0.08100	8.10	0.488
123	52.486	7.245	0.445	0.0000	0.08095	8.10	0.488
124	52.988	7.279	0.446	0.0000	0.08095	8.10	0.488
125	53.486	7.313	0.445	0.0000	0.08095	8.10	0.488
126	53.988	7.348	0.446	0.0000	0.08095	8.10	0.488
127	54.488	7.382	0.446	0.0000	0.08095	8.10	0.488
128	54.987	7.415	0.446	0.0000	0.08090	8.09	0.488
129	55.486	7.449	0.445	0.0000	0.08090	8.09	0.488
130	55.986	7.482	0.446	0.0000	0.08090	8.09	0.488
131	56.487	7.516	0.445	0.0000	0.08090	8.09	0.488
132	56.988	7.549	0.444	0.0000	0.08090	8.09	0.488
133	57.487	7.582	0.446	0.0000	0.08085	8.09	0.488
134	57.985	7.615	0.446	0.0000	0.08085	8.09	0.488
135	58.487	7.648	0.445	0.0000	0.08085	8.09	0.488
136	58.984	7.680	0.445	0.0000	0.08085	8.09	0.488
137	59.488	7.713	0.445	0.0000	0.08085	8.09	0.488
138	59.987	7.745	0.445	0.0000	0.08080	8.08	0.488
139	60.484	7.777	0.446	0.0000	0.08080	8.08	0.488
140	60.986	7.809	0.446	0.0000	0.08080	8.08	0.488
141	61.485	7.841	0.445	0.0000	0.08080	8.08	0.488
142	61.988	7.873	0.444	0.0000	0.08080	8.08	0.488
143	62.485	7.905	0.445	0.0000	0.08075	8.08	0.488
144	62.987	7.936	0.445	0.0000	0.08075	8.08	0.488
145	63.487	7.968	0.446	0.0000	0.08075	8.08	0.488
146	63.985	7.999	0.445	0.0000	0.08075	8.08	0.488
147	64.485	8.030	0.444	0.0000	0.08075	8.08	0.488
148	64.987	8.061	0.446	0.0000	0.08075	8.08	0.488
149	65.486	8.092	0.446	0.0000	0.08075	8.08	0.488
150	65.988	8.123	0.446	0.0000	0.08075	8.08	0.488

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.487	8.154	0.445	0.0000	0.08070	8.07	0.488
152	66.986	8.185	0.446	0.0000	0.08070	8.07	0.488
153	67.486	8.215	0.446	0.0000	0.08070	8.07	0.488
154	67.984	8.245	0.445	0.0000	0.08070	8.07	0.488
155	68.484	8.276	0.445	0.0000	0.08070	8.07	0.488
156	68.986	8.306	0.446	0.0000	0.08070	8.07	0.488
157	69.485	8.336	0.445	0.0000	0.08066	8.07	0.488
158	69.986	8.366	0.446	0.0000	0.08066	8.07	0.488
159	70.488	8.396	0.445	0.0000	0.08066	8.07	0.488
160	70.986	8.425	0.445	0.0000	0.08066	8.07	0.488
161	71.485	8.455	0.446	0.0000	0.08066	8.07	0.488
162	71.986	8.484	0.446	0.0000	0.08066	8.07	0.488
163	72.485	8.514	0.444	0.0000	0.08061	8.06	0.488
164	72.986	8.543	0.446	0.0000	0.08066	8.07	0.488
165	73.488	8.572	0.446	0.0000	0.08061	8.06	0.488
166	73.985	8.601	0.445	0.0000	0.08061	8.06	0.488
167	74.487	8.631	0.445	0.0000	0.08061	8.06	0.488
168	74.987	8.659	0.445	0.0000	0.08061	8.06	0.488
169	75.488	8.688	0.445	0.0000	0.08061	8.06	0.488
170	75.985	8.717	0.446	0.0000	0.08061	8.06	0.488
171	76.485	8.746	0.445	0.0000	0.08061	8.06	0.488
172	76.985	8.774	0.446	0.0000	0.08061	8.06	0.488
173	77.488	8.803	0.445	0.0000	0.08061	8.06	0.488
174	77.988	8.831	0.445	0.0000	0.08061	8.06	0.488
175	78.485	8.859	0.446	0.0000	0.08061	8.06	0.488
176	78.987	8.887	0.445	0.0000	0.08061	8.06	0.488
177	79.486	8.915	0.445	0.0000	0.08061	8.06	0.488
178	79.987	8.944	0.446	0.0000	0.08061	8.06	0.488
179	80.487	8.971	0.445	0.0000	0.08061	8.06	0.488
180	80.988	8.999	0.446	0.0000	0.08061	8.06	0.488
181	81.485	9.027	0.446	0.0000	0.08061	8.06	0.488
182	81.986	9.055	0.445	0.0000	0.08056	8.06	0.488
183	82.487	9.082	0.446	0.0000	0.08061	8.06	0.488
184	82.987	9.110	0.445	0.0000	0.08056	8.06	0.488
185	83.487	9.137	0.445	0.0000	0.08056	8.06	0.488
186	83.988	9.164	0.445	0.0000	0.08056	8.06	0.488
187	84.485	9.192	0.446	0.0000	0.08056	8.06	0.488
188	84.985	9.219	0.446	0.0000	0.08056	8.06	0.488
189	85.484	9.246	0.445	0.0000	0.08056	8.06	0.488
190	85.985	9.273	0.446	0.0000	0.08056	8.06	0.488
191	86.487	9.300	0.445	0.0000	0.08056	8.06	0.488
192	86.985	9.327	0.445	0.0000	0.08056	8.06	0.488
193	87.486	9.353	0.446	0.0000	0.08056	8.06	0.488
194	87.985	9.380	0.445	0.0000	0.08056	8.06	0.488
195	88.484	9.407	0.445	0.0000	0.08056	8.06	0.488
196	88.984	9.433	0.445	0.0000	0.08056	8.06	0.488
197	89.484	9.460	0.446	0.0000	0.08056	8.06	0.488
198	89.985	9.486	0.445	0.0000	0.08056	8.06	0.488
199	90.484	9.512	0.446	0.0000	0.08056	8.06	0.488
200	90.988	9.539	0.446	0.0000	0.08056	8.06	0.488

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.485	9.565	0.444	0.0000	0.08056	8.06	0.488
202	91.987	9.591	0.445	0.0000	0.08056	8.06	0.488
203	92.487	9.617	0.445	0.0000	0.08056	8.06	0.488
204	92.988	9.643	0.445	0.0000	0.08056	8.06	0.488
205	93.487	9.669	0.445	0.0000	0.08056	8.06	0.488
206	93.987	9.695	0.445	0.0000	0.08056	8.06	0.488
207	94.488	9.720	0.446	0.0000	0.08056	8.06	0.488
208	94.987	9.746	0.445	0.0000	0.08056	8.06	0.488
209	95.487	9.772	0.445	0.0000	0.08056	8.06	0.488
210	95.988	9.797	0.444	0.0000	0.08056	8.06	0.488
211	96.485	9.823	0.446	0.0000	0.08056	8.06	0.488
212	96.987	9.848	0.445	0.0000	0.08056	8.06	0.488
213	97.484	9.873	0.444	0.0000	0.08056	8.06	0.488
214	97.985	9.899	0.445	0.0000	0.08056	8.06	0.488
215	98.488	9.924	0.445	0.0000	0.08056	8.06	0.488
216	98.987	9.949	0.446	0.0000	0.08056	8.06	0.488
217	99.488	9.974	0.446	0.0000	0.08056	8.06	0.488
218	99.985	9.999	0.446	0.0000	0.08056	8.06	0.488
219	100.485	10.024	0.445	0.0000	0.08056	8.06	0.488
220	100.987	10.049	0.445	0.0000	0.08056	8.06	0.488
221	101.487	10.074	0.445	0.0000	0.08056	8.06	0.488
222	101.985	10.099	0.445	0.0000	0.08056	8.06	0.488
223	102.485	10.123	0.445	0.0000	0.08056	8.06	0.488
224	102.985	10.148	0.446	0.0000	0.08056	8.06	0.488
225	103.487	10.173	0.445	0.0000	0.08051	8.05	0.488
226	103.986	10.197	0.446	0.0000	0.08056	8.06	0.488
227	104.485	10.222	0.445	0.0000	0.08056	8.06	0.488
228	104.987	10.246	0.446	0.0000	0.08056	8.06	0.488
229	105.484	10.271	0.445	0.0000	0.08051	8.05	0.488
230	105.988	10.295	0.446	0.0000	0.08051	8.05	0.488
231	106.486	10.319	0.445	0.0000	0.08051	8.05	0.488
232	106.988	10.343	0.446	0.0000	0.08056	8.06	0.488
233	107.484	10.367	0.445	0.0000	0.08051	8.05	0.488
234	107.987	10.392	0.445	0.0000	0.08051	8.05	0.488
235	108.484	10.416	0.446	0.0000	0.08051	8.05	0.488
236	108.987	10.440	0.445	0.0000	0.08051	8.05	0.488
237	109.486	10.464	0.445	0.0000	0.08051	8.05	0.488
238	109.986	10.487	0.444	0.0000	0.08051	8.05	0.488
239	110.488	10.511	0.446	0.0000	0.08051	8.05	0.488
240	110.986	10.535	0.445	0.0000	0.08051	8.05	0.488
241	111.487	10.559	0.445	0.0000	0.08051	8.05	0.488
242	111.984	10.582	0.445	0.0000	0.08046	8.05	0.489
243	112.485	10.606	0.446	0.0000	0.08051	8.05	0.488
244	112.984	10.629	0.446	0.0000	0.08046	8.05	0.489
245	113.485	10.653	0.446	0.0000	0.08046	8.05	0.489
246	113.984	10.676	0.446	0.0000	0.08046	8.05	0.489
247	114.484	10.700	0.445	0.0000	0.08046	8.05	0.489
248	114.985	10.723	0.446	0.0000	0.08046	8.05	0.489
249	115.488	10.747	0.446	0.0000	0.08041	8.04	0.489
250	115.988	10.770	0.446	0.0000	0.08041	8.04	0.489

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.488	10.793	0.445	0.0000	0.08041	8.04	0.489
252	116.988	10.816	0.445	0.0000	0.08041	8.04	0.489
253	117.485	10.839	0.445	0.0000	0.08041	8.04	0.489
254	117.987	10.862	0.445	0.0000	0.08041	8.04	0.489
255	118.484	10.885	0.445	0.0000	0.08041	8.04	0.489
256	118.987	10.908	0.445	0.0000	0.08041	8.04	0.489
257	119.485	10.931	0.446	0.0000	0.08041	8.04	0.489
258	119.988	10.954	0.446	0.0000	0.08041	8.04	0.489
259	120.014	10.955	0.446	0.0000	0.08036	8.04	0.489

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.025		0.446	0.0000	0.08041	8.04	0.489
2	-0.021		0.446	0.0000	0.08041	8.04	0.489
3	-0.016		0.453	0.0000	0.08051	8.05	0.488
4	-0.012		0.533	0.0000	0.08070	8.07	0.488
5	-0.008		0.659	0.0000	0.08115	8.12	0.487
6	-0.003		0.774	0.0000	0.08125	8.13	0.487
7	0.000	0.000	0.848	0.0000	0.08133	8.13	0.487
8	0.001	0.034	0.874	0.0000	0.08135	8.14	0.487
9	0.005	0.073	0.907	0.0000	0.08140	8.14	0.487
10	0.009	0.097	0.893	0.0000	0.08140	8.14	0.487
11	0.014	0.117	0.885	0.0000	0.08140	8.14	0.487
12	0.018	0.133	0.879	0.0000	0.08140	8.14	0.487
13	0.022	0.149	0.876	0.0000	0.08140	8.14	0.487
14	0.027	0.163	0.876	0.0000	0.08145	8.14	0.487
15	0.031	0.176	0.879	0.0000	0.08145	8.14	0.487
16	0.035	0.188	0.884	0.0000	0.08145	8.14	0.487
17	0.053	0.230	0.893	0.0000	0.08150	8.15	0.487
18	0.062	0.249	0.889	0.0000	0.08150	8.15	0.487
19	0.144	0.379	0.892	0.0000	0.08150	8.15	0.487
20	0.226	0.475	0.892	0.0000	0.08150	8.15	0.487
21	0.312	0.559	0.891	0.0000	0.08155	8.15	0.487
22	0.476	0.690	0.893	0.0000	0.08155	8.15	0.487
23	0.726	0.852	0.892	0.0000	0.08155	8.15	0.487
24	0.976	0.988	0.890	0.0000	0.08155	8.15	0.487
25	1.479	1.216	0.890	0.0000	0.08155	8.15	0.487
26	2.479	1.575	0.891	0.0000	0.08160	8.16	0.487
27	4.478	2.116	0.894	0.0000	0.08160	8.16	0.487
28	4.977	2.231	0.892	0.0000	0.08160	8.16	0.487
29	5.479	2.341	0.892	0.0000	0.08160	8.16	0.487
30	5.977	2.445	0.891	0.0000	0.08160	8.16	0.487
31	6.476	2.545	0.892	0.0000	0.08160	8.16	0.487
32	6.978	2.642	0.892	0.0000	0.08160	8.16	0.487
33	7.476	2.734	0.892	0.0000	0.08165	8.16	0.487
34	7.977	2.824	0.893	0.0000	0.08165	8.16	0.487
35	8.478	2.912	0.894	0.0000	0.08165	8.16	0.487
36	8.975	2.996	0.893	0.0000	0.08165	8.16	0.487
37	9.479	3.079	0.894	0.0000	0.08165	8.16	0.487
38	9.977	3.159	0.892	0.0000	0.08165	8.16	0.487
39	10.478	3.237	0.892	0.0000	0.08165	8.16	0.487
40	10.978	3.313	0.892	0.0000	0.08165	8.16	0.487
41	11.475	3.388	0.892	0.0000	0.08165	8.16	0.487
42	11.976	3.461	0.892	0.0000	0.08165	8.16	0.487
43	12.479	3.533	0.892	0.0000	0.08165	8.16	0.487
44	12.976	3.602	0.893	0.0000	0.08165	8.16	0.487
45	13.478	3.671	0.892	0.0000	0.08165	8.16	0.487
46	13.979	3.739	0.894	0.0000	0.08165	8.16	0.487
47	14.479	3.805	0.892	0.0000	0.08165	8.16	0.487
48	14.979	3.870	0.892	0.0000	0.08165	8.16	0.487
49	15.475	3.934	0.893	0.0000	0.08165	8.16	0.487
50	15.977	3.997	0.892	0.0000	0.08165	8.16	0.487

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.478	4.059	0.892	0.0000	0.08165	8.16	0.487
52	16.977	4.120	0.892	0.0000	0.08165	8.16	0.487
53	17.479	4.181	0.892	0.0000	0.08165	8.16	0.487
54	17.975	4.240	0.892	0.0000	0.08165	8.16	0.487
55	18.478	4.299	0.892	0.0000	0.08165	8.16	0.487
56	18.979	4.356	0.893	0.0000	0.08165	8.16	0.487
57	19.477	4.413	0.892	0.0000	0.08165	8.16	0.487
58	19.978	4.470	0.892	0.0000	0.08165	8.16	0.487
59	20.476	4.525	0.892	0.0000	0.08165	8.16	0.487
60	20.976	4.580	0.892	0.0000	0.08165	8.16	0.487
61	21.479	4.635	0.892	0.0000	0.08165	8.16	0.487
62	21.979	4.688	0.892	0.0000	0.08165	8.16	0.487
63	22.480	4.741	0.892	0.0000	0.08165	8.16	0.487
64	22.975	4.793	0.892	0.0000	0.08165	8.16	0.487
65	23.476	4.845	0.892	0.0000	0.08165	8.16	0.487
66	23.977	4.897	0.892	0.0000	0.08165	8.16	0.487
67	24.478	4.948	0.892	0.0000	0.08165	8.16	0.487
68	24.975	4.998	0.892	0.0000	0.08165	8.16	0.487
69	25.476	5.047	0.892	0.0000	0.08165	8.16	0.487
70	25.977	5.097	0.892	0.0000	0.08165	8.16	0.487
71	26.478	5.146	0.892	0.0000	0.08165	8.16	0.487
72	26.979	5.194	0.892	0.0000	0.08165	8.16	0.487
73	27.475	5.242	0.892	0.0000	0.08165	8.16	0.487
74	27.979	5.289	0.892	0.0000	0.08165	8.16	0.487
75	28.477	5.336	0.892	0.0000	0.08165	8.16	0.487
76	28.976	5.383	0.892	0.0000	0.08165	8.16	0.487
77	29.477	5.429	0.892	0.0000	0.08165	8.16	0.487
78	29.977	5.475	0.892	0.0000	0.08165	8.16	0.487
79	30.475	5.520	0.892	0.0000	0.08160	8.16	0.487
80	30.977	5.566	0.892	0.0000	0.08160	8.16	0.487
81	31.476	5.610	0.892	0.0000	0.08160	8.16	0.487
82	31.980	5.655	0.892	0.0000	0.08160	8.16	0.487
83	32.479	5.699	0.893	0.0000	0.08160	8.16	0.487
84	32.978	5.743	0.892	0.0000	0.08160	8.16	0.487
85	33.478	5.786	0.892	0.0000	0.08160	8.16	0.487
86	33.979	5.829	0.893	0.0000	0.08160	8.16	0.487
87	34.479	5.872	0.892	0.0000	0.08160	8.16	0.487
88	34.976	5.914	0.891	0.0000	0.08155	8.15	0.487
89	35.477	5.956	0.893	0.0000	0.08155	8.15	0.487
90	35.977	5.998	0.892	0.0000	0.08155	8.15	0.487
91	36.477	6.040	0.893	0.0000	0.08160	8.16	0.487
92	36.978	6.081	0.892	0.0000	0.08155	8.15	0.487
93	37.476	6.122	0.892	0.0000	0.08155	8.15	0.487
94	37.979	6.163	0.892	0.0000	0.08155	8.15	0.487
95	38.479	6.203	0.893	0.0000	0.08155	8.15	0.487
96	38.976	6.243	0.891	0.0000	0.08155	8.15	0.487
97	39.477	6.283	0.893	0.0000	0.08155	8.15	0.487
98	39.979	6.323	0.892	0.0000	0.08155	8.15	0.487
99	40.476	6.362	0.891	0.0000	0.08150	8.15	0.487
100	40.977	6.401	0.893	0.0000	0.08150	8.15	0.487

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.478	6.440	0.893	0.0000	0.08150	8.15	0.487
102	41.978	6.479	0.892	0.0000	0.08150	8.15	0.487
103	42.478	6.518	0.892	0.0000	0.08150	8.15	0.487
104	42.977	6.556	0.892	0.0000	0.08150	8.15	0.487
105	43.475	6.594	0.892	0.0000	0.08150	8.15	0.487
106	43.979	6.632	0.893	0.0000	0.08150	8.15	0.487
107	44.477	6.669	0.893	0.0000	0.08150	8.15	0.487
108	44.978	6.707	0.893	0.0000	0.08150	8.15	0.487
109	45.478	6.744	0.892	0.0000	0.08150	8.15	0.487
110	45.979	6.781	0.892	0.0000	0.08150	8.15	0.487
111	46.476	6.817	0.891	0.0000	0.08150	8.15	0.487
112	46.979	6.854	0.892	0.0000	0.08150	8.15	0.487
113	47.479	6.891	0.892	0.0000	0.08145	8.14	0.487
114	47.977	6.927	0.892	0.0000	0.08145	8.14	0.487
115	48.477	6.963	0.892	0.0000	0.08145	8.14	0.487
116	48.976	6.998	0.893	0.0000	0.08150	8.15	0.487
117	49.477	7.034	0.893	0.0000	0.08145	8.14	0.487
118	49.976	7.069	0.892	0.0000	0.08145	8.14	0.487
119	50.475	7.105	0.893	0.0000	0.08150	8.15	0.487
120	50.978	7.140	0.893	0.0000	0.08150	8.15	0.487
121	51.479	7.175	0.892	0.0000	0.08150	8.15	0.487
122	51.977	7.210	0.893	0.0000	0.08145	8.14	0.487
123	52.479	7.244	0.893	0.0000	0.08150	8.15	0.487
124	52.977	7.279	0.892	0.0000	0.08145	8.14	0.487
125	53.479	7.313	0.893	0.0000	0.08145	8.14	0.487
126	53.979	7.347	0.892	0.0000	0.08145	8.14	0.487
127	54.477	7.381	0.892	0.0000	0.08145	8.14	0.487
128	54.977	7.415	0.892	0.0000	0.08145	8.14	0.487
129	55.478	7.448	0.893	0.0000	0.08145	8.14	0.487
130	55.977	7.482	0.892	0.0000	0.08145	8.14	0.487
131	56.479	7.515	0.892	0.0000	0.08145	8.14	0.487
132	56.977	7.548	0.892	0.0000	0.08145	8.14	0.487
133	57.476	7.581	0.892	0.0000	0.08145	8.14	0.487
134	57.979	7.614	0.893	0.0000	0.08145	8.14	0.487
135	58.479	7.647	0.892	0.0000	0.08145	8.14	0.487
136	58.978	7.680	0.892	0.0000	0.08145	8.14	0.487
137	59.477	7.712	0.893	0.0000	0.08145	8.14	0.487
138	59.977	7.744	0.893	0.0000	0.08145	8.14	0.487
139	60.478	7.777	0.892	0.0000	0.08145	8.14	0.487
140	60.977	7.809	0.892	0.0000	0.08145	8.14	0.487
141	61.477	7.841	0.892	0.0000	0.08145	8.14	0.487
142	61.979	7.873	0.892	0.0000	0.08145	8.14	0.487
143	62.477	7.904	0.892	0.0000	0.08145	8.14	0.487
144	62.976	7.936	0.892	0.0000	0.08145	8.14	0.487
145	63.477	7.967	0.892	0.0000	0.08145	8.14	0.487
146	63.977	7.999	0.892	0.0000	0.08145	8.14	0.487
147	64.477	8.030	0.892	0.0000	0.08145	8.14	0.487
148	64.979	8.061	0.892	0.0000	0.08145	8.14	0.487
149	65.477	8.092	0.892	0.0000	0.08145	8.14	0.487
150	65.977	8.123	0.892	0.0000	0.08145	8.14	0.487

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.476	8.153	0.892	0.0000	0.08145	8.14	0.487
152	66.976	8.184	0.892	0.0000	0.08145	8.14	0.487
153	67.479	8.215	0.892	0.0000	0.08145	8.14	0.487
154	67.977	8.245	0.892	0.0000	0.08145	8.14	0.487
155	68.475	8.275	0.892	0.0000	0.08145	8.14	0.487
156	68.979	8.305	0.892	0.0000	0.08145	8.14	0.487
157	69.480	8.335	0.892	0.0000	0.08145	8.14	0.487
158	69.980	8.365	0.892	0.0000	0.08145	8.14	0.487
159	70.477	8.395	0.892	0.0000	0.08145	8.14	0.487
160	70.976	8.425	0.892	0.0000	0.08145	8.14	0.487
161	71.477	8.454	0.892	0.0000	0.08145	8.14	0.487
162	71.976	8.484	0.892	0.0000	0.08145	8.14	0.487
163	72.476	8.513	0.892	0.0000	0.08145	8.14	0.487
164	72.976	8.543	0.892	0.0000	0.08145	8.14	0.487
165	73.477	8.572	0.892	0.0000	0.08145	8.14	0.487
166	73.980	8.601	0.892	0.0000	0.08145	8.14	0.487
167	74.479	8.630	0.892	0.0000	0.08145	8.14	0.487
168	74.978	8.659	0.892	0.0000	0.08145	8.14	0.487
169	75.478	8.688	0.892	0.0000	0.08145	8.14	0.487
170	75.977	8.716	0.892	0.0000	0.08145	8.14	0.487
171	76.479	8.745	0.892	0.0000	0.08145	8.14	0.487
172	76.978	8.774	0.892	0.0000	0.08145	8.14	0.487
173	77.476	8.802	0.892	0.0000	0.08145	8.14	0.487
174	77.978	8.831	0.892	0.0000	0.08145	8.14	0.487
175	78.478	8.859	0.892	0.0000	0.08145	8.14	0.487
176	78.977	8.887	0.892	0.0000	0.08145	8.14	0.487
177	79.476	8.915	0.892	0.0000	0.08145	8.14	0.487
178	79.977	8.943	0.892	0.0000	0.08145	8.14	0.487
179	80.479	8.971	0.892	0.0000	0.08145	8.14	0.487
180	80.979	8.999	0.892	0.0000	0.08145	8.14	0.487
181	81.478	9.026	0.892	0.0000	0.08145	8.14	0.487
182	81.978	9.054	0.893	0.0000	0.08145	8.14	0.487
183	82.477	9.082	0.892	0.0000	0.08150	8.15	0.487
184	82.978	9.109	0.892	0.0000	0.08150	8.15	0.487
185	83.479	9.137	0.892	0.0000	0.08150	8.15	0.487
186	83.976	9.164	0.892	0.0000	0.08150	8.15	0.487
187	84.477	9.191	0.892	0.0000	0.08150	8.15	0.487
188	84.978	9.218	0.893	0.0000	0.08150	8.15	0.487
189	85.475	9.245	0.892	0.0000	0.08150	8.15	0.487
190	85.976	9.272	0.893	0.0000	0.08150	8.15	0.487
191	86.477	9.299	0.892	0.0000	0.08150	8.15	0.487
192	86.979	9.326	0.892	0.0000	0.08150	8.15	0.487
193	87.477	9.353	0.892	0.0000	0.08150	8.15	0.487
194	87.976	9.380	0.892	0.0000	0.08150	8.15	0.487
195	88.478	9.406	0.892	0.0000	0.08150	8.15	0.487
196	88.976	9.433	0.892	0.0000	0.08150	8.15	0.487
197	89.475	9.459	0.892	0.0000	0.08150	8.15	0.487
198	89.976	9.486	0.892	0.0000	0.08150	8.15	0.487
199	90.477	9.512	0.892	0.0000	0.08150	8.15	0.487
200	90.978	9.538	0.892	0.0000	0.08150	8.15	0.487

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.479	9.564	0.892	0.0000	0.08150	8.15	0.487
202	91.979	9.591	0.893	0.0000	0.08150	8.15	0.487
203	92.477	9.616	0.892	0.0000	0.08150	8.15	0.487
204	92.977	9.642	0.892	0.0000	0.08150	8.15	0.487
205	93.477	9.668	0.892	0.0000	0.08150	8.15	0.487
206	93.978	9.694	0.893	0.0000	0.08150	8.15	0.487
207	94.479	9.720	0.892	0.0000	0.08150	8.15	0.487
208	94.979	9.746	0.892	0.0000	0.08150	8.15	0.487
209	95.478	9.771	0.892	0.0000	0.08155	8.15	0.487
210	95.979	9.797	0.892	0.0000	0.08155	8.15	0.487
211	96.479	9.822	0.892	0.0000	0.08155	8.15	0.487
212	96.978	9.848	0.892	0.0000	0.08150	8.15	0.487
213	97.479	9.873	0.893	0.0000	0.08155	8.15	0.487
214	97.976	9.898	0.892	0.0000	0.08150	8.15	0.487
215	98.478	9.924	0.893	0.0000	0.08155	8.15	0.487
216	98.978	9.949	0.892	0.0000	0.08155	8.15	0.487
217	99.476	9.974	0.892	0.0000	0.08155	8.15	0.487
218	99.978	9.999	0.892	0.0000	0.08155	8.15	0.487
219	100.477	10.024	0.892	0.0000	0.08155	8.15	0.487
220	100.978	10.049	0.892	0.0000	0.08155	8.15	0.487
221	101.478	10.074	0.892	0.0000	0.08155	8.15	0.487
222	101.979	10.098	0.892	0.0000	0.08155	8.15	0.487
223	102.478	10.123	0.893	0.0000	0.08155	8.15	0.487
224	102.978	10.148	0.892	0.0000	0.08155	8.15	0.487
225	103.479	10.172	0.893	0.0000	0.08155	8.15	0.487
226	103.976	10.197	0.892	0.0000	0.08155	8.15	0.487
227	104.479	10.221	0.892	0.0000	0.08155	8.15	0.487
228	104.979	10.246	0.892	0.0000	0.08155	8.15	0.487
229	105.479	10.270	0.893	0.0000	0.08155	8.15	0.487
230	105.979	10.295	0.892	0.0000	0.08155	8.15	0.487
231	106.476	10.319	0.893	0.0000	0.08155	8.15	0.487
232	106.978	10.343	0.892	0.0000	0.08155	8.15	0.487
233	107.475	10.367	0.891	0.0000	0.08155	8.15	0.487
234	107.976	10.391	0.892	0.0000	0.08155	8.15	0.487
235	108.476	10.415	0.892	0.0000	0.08155	8.15	0.487
236	108.978	10.439	0.892	0.0000	0.08155	8.15	0.487
237	109.475	10.463	0.892	0.0000	0.08155	8.15	0.487
238	109.979	10.487	0.892	0.0000	0.08155	8.15	0.487
239	110.476	10.511	0.892	0.0000	0.08155	8.15	0.487
240	110.977	10.535	0.892	0.0000	0.08155	8.15	0.487
241	111.478	10.558	0.892	0.0000	0.08155	8.15	0.487
242	111.979	10.582	0.892	0.0000	0.08155	8.15	0.487
243	112.478	10.606	0.892	0.0000	0.08155	8.15	0.487
244	112.980	10.629	0.893	0.0000	0.08155	8.15	0.487
245	113.479	10.653	0.893	0.0000	0.08160	8.16	0.487
246	113.978	10.676	0.891	0.0000	0.08155	8.15	0.487
247	114.479	10.699	0.892	0.0000	0.08155	8.15	0.487
248	114.976	10.723	0.891	0.0000	0.08155	8.15	0.487
249	115.477	10.746	0.892	0.0000	0.08160	8.16	0.487
250	115.977	10.769	0.892	0.0000	0.08160	8.16	0.487

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.479	10.793	0.892	0.0000	0.08160	8.16	0.487
252	116.978	10.816	0.893	0.0000	0.08155	8.15	0.487
253	117.477	10.839	0.892	0.0000	0.08160	8.16	0.487
254	117.978	10.862	0.892	0.0000	0.08160	8.16	0.487
255	118.475	10.885	0.893	0.0000	0.08155	8.15	0.487
256	118.979	10.908	0.892	0.0000	0.08160	8.16	0.487
257	119.478	10.931	0.893	0.0000	0.08155	8.15	0.487
258	119.978	10.953	0.892	0.0000	0.08155	8.15	0.487
259	120.004	10.955	0.892	0.0000	0.08155	8.15	0.487

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

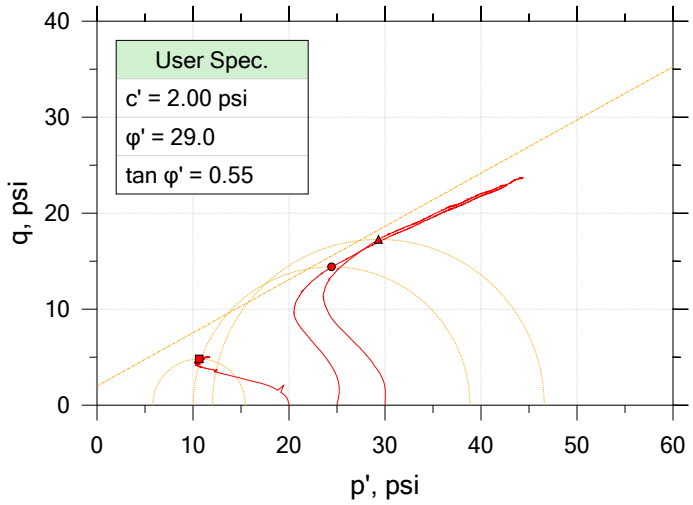
One-Dimensional Consolidation by ASTM D2435 - Method B

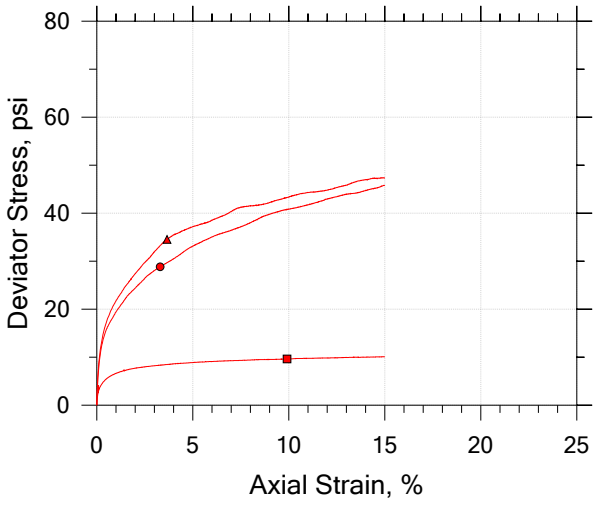
Time Curve 12 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.019		0.892	0.0000	0.08155	8.15	0.487
2	-0.015		0.892	0.0000	0.08155	8.15	0.487
3	-0.010		1.06	0.0000	0.08170	8.17	0.487
4	-0.006		1.38	0.0000	0.08210	8.21	0.486
5	-0.002		1.63	0.0000	0.08254	8.25	0.485
6	0.000	0.000	1.70	0.0000	0.08304	8.30	0.484
7	0.003	0.051	1.81	0.0000	0.08388	8.39	0.483
8	0.007	0.082	1.77	0.0000	0.08398	8.40	0.483
9	0.011	0.105	1.74	0.0000	0.08403	8.40	0.483
10	0.015	0.123	1.75	0.0000	0.08403	8.40	0.483
11	0.020	0.140	1.76	0.0000	0.08408	8.41	0.483
12	0.024	0.154	1.77	0.0000	0.08408	8.41	0.483
13	0.028	0.167	1.78	0.0000	0.08408	8.41	0.483
14	0.032	0.179	1.79	0.0000	0.08413	8.41	0.483
15	0.036	0.191	1.78	0.0000	0.08418	8.42	0.483
16	0.041	0.201	1.77	0.0000	0.08418	8.42	0.483
17	0.058	0.240	1.78	0.0000	0.08433	8.43	0.482
18	0.066	0.258	1.79	0.0000	0.08438	8.44	0.482
19	0.149	0.385	1.78	0.0000	0.08458	8.46	0.482
20	0.235	0.485	1.78	0.0000	0.08463	8.46	0.482
21	0.317	0.563	1.78	0.0000	0.08468	8.47	0.482
22	0.485	0.696	1.78	0.0000	0.08473	8.47	0.482
23	0.732	0.855	1.78	0.0000	0.08488	8.49	0.481
24	0.985	0.993	1.79	0.0000	0.08493	8.49	0.481
25	1.485	1.219	1.79	0.0000	0.08503	8.50	0.481
26	2.483	1.576	1.79	0.0000	0.08513	8.51	0.481
27	4.485	2.118	1.79	0.0000	0.08517	8.52	0.481
28	4.985	2.233	1.78	0.0000	0.08517	8.52	0.481
29	5.485	2.342	1.78	0.0000	0.08517	8.52	0.481
30	5.985	2.446	1.79	0.0000	0.08522	8.52	0.481
31	6.484	2.546	1.79	0.0000	0.08522	8.52	0.481
32	6.982	2.642	1.79	0.0000	0.08522	8.52	0.481
33	7.484	2.736	1.79	0.0000	0.08522	8.52	0.481
34	7.981	2.825	1.79	0.0000	0.08522	8.52	0.481
35	8.483	2.912	1.79	0.0000	0.08522	8.52	0.481
36	8.981	2.997	1.79	0.0000	0.08522	8.52	0.481
37	9.483	3.080	1.79	0.0000	0.08527	8.53	0.481
38	9.982	3.159	1.79	0.0000	0.08527	8.53	0.481
39	10.484	3.238	1.79	0.0000	0.08522	8.52	0.481
40	10.981	3.314	1.79	0.0000	0.08522	8.52	0.481
41	11.481	3.388	1.78	0.0000	0.08522	8.52	0.481
42	11.983	3.462	1.79	0.0000	0.08522	8.52	0.481
43	12.483	3.533	1.79	0.0000	0.08522	8.52	0.481
44	12.982	3.603	1.79	0.0000	0.08522	8.52	0.481
45	13.485	3.672	1.79	0.0000	0.08527	8.53	0.481
46	13.982	3.739	1.78	0.0000	0.08527	8.53	0.481
47	14.484	3.806	1.79	0.0000	0.08527	8.53	0.481
48	14.985	3.871	1.79	0.0000	0.08527	8.53	0.481
49	15.484	3.935	1.79	0.0000	0.08527	8.53	0.481
50	15.985	3.998	1.79	0.0000	0.08527	8.53	0.481

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: B-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test No.: ST-1.B	Sample Type: Undisturbed	Elevation: --
Description: CLAYEY SAND (SC/A-6)	LL=38, PL=16, PI=22, %200=40.4	
Remarks:		

Consolidated Undrained by AASHTO T297



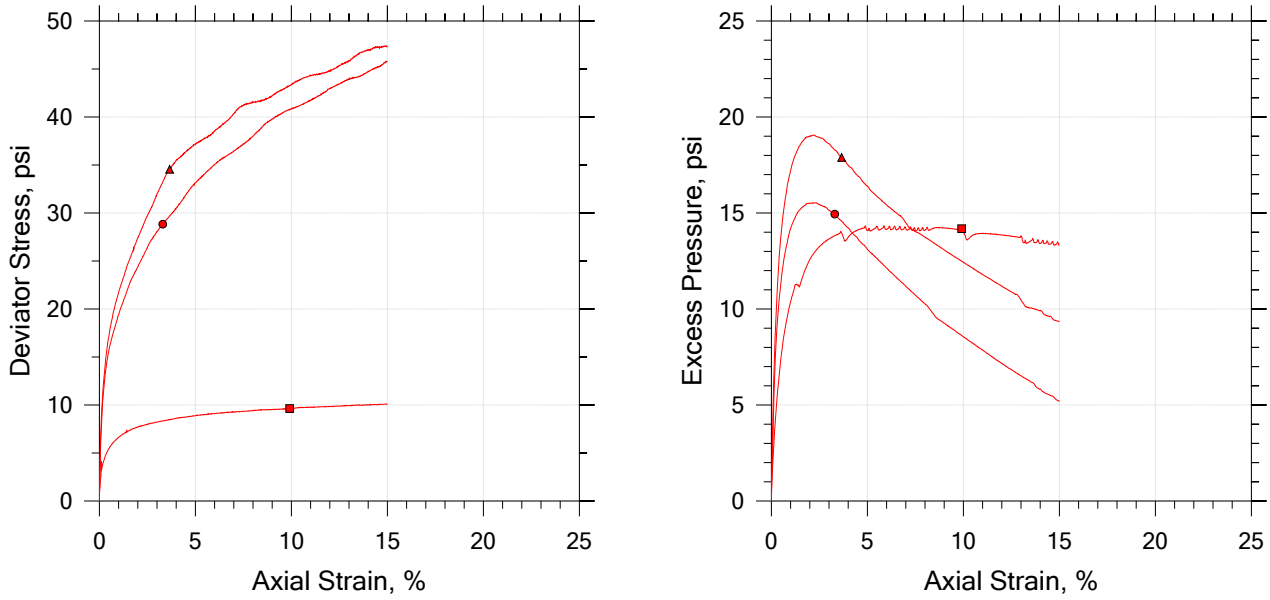


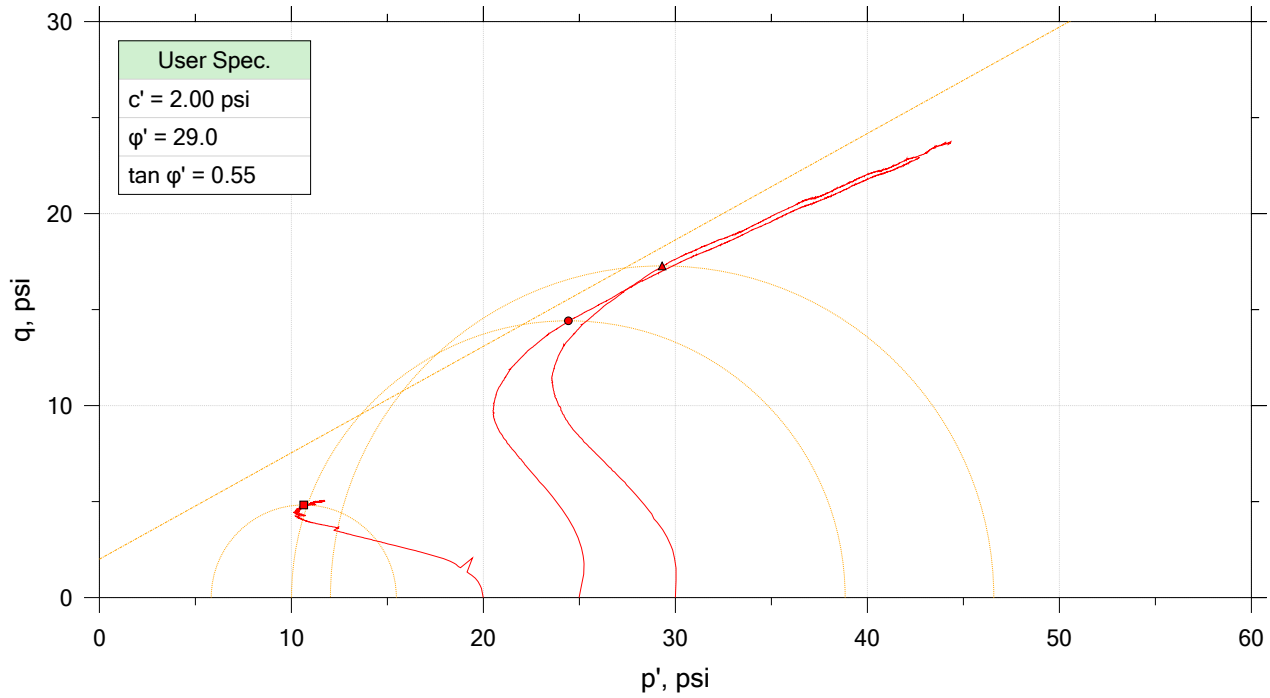
Symbol		■	●	▲	
Sample ID		23-3412	23-3412	23-3412	
Depth		30.0' - 34.0'	30.0' - 34.0'	30.0' - 34.0'	
Test Number		ST-1.A	ST-1.C	ST-1.D	
Initial	Height, in	6.015	6.113	6.153	
	Diameter, in	2.858	2.846	2.877	
	Moisture Content (from Cuttings), %	24.5	24.5	24.5	
	Dry Density, pcf	95.1	102.	100.	
	Saturation (Wet Method), %	86.4	101.5	97.8	
	Void Ratio	0.759	0.647	0.671	
Final	Moisture Content, %	22.8	22.9	22.7	
	Dry Density, pcf	104.	104.	104.	
	Cross-Sectional Area (Method A), in²	6.124	6.277	6.349	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	0.612	0.614	0.608	
	Back Pressure, psi	64.99	59.00	59.00	
Vertical Effective Consolidation Stress, psi		19.79	24.94	29.93	
Horizontal Effective Consolidation Stress, psi		20.00	24.99	29.99	
Vertical Strain after Consolidation, %		3.497	0.6255	1.335	
Volumetric Strain after Consolidation, %		6.914	1.811	3.417	
Time to 50% Consolidation, min		100.0	1.500	1.300	
Shear Strength, psi		4.821	14.42	17.27	
Strain at Failure, %		9.91	3.30	3.66	
Strain Rate, %/min		0.005600	0.01000	0.01000	
Deviator Stress at Failure, psi		9.642	28.84	34.55	
Effective Minor Principal Stress at Failure, psi		5.821	10.01	12.03	
Effective Major Principal Stress at Failure, psi		15.46	38.84	46.58	
B-Value		0.95	0.96	0.96	

Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

F&ME CONSULTANTS	Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
	Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
	Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test Number: ABC	Preparation: Undisturbed	Elevation:
	Description: VARIOUS, See Log		
	Remarks:		

Consolidated Undrained by AASHTO T297

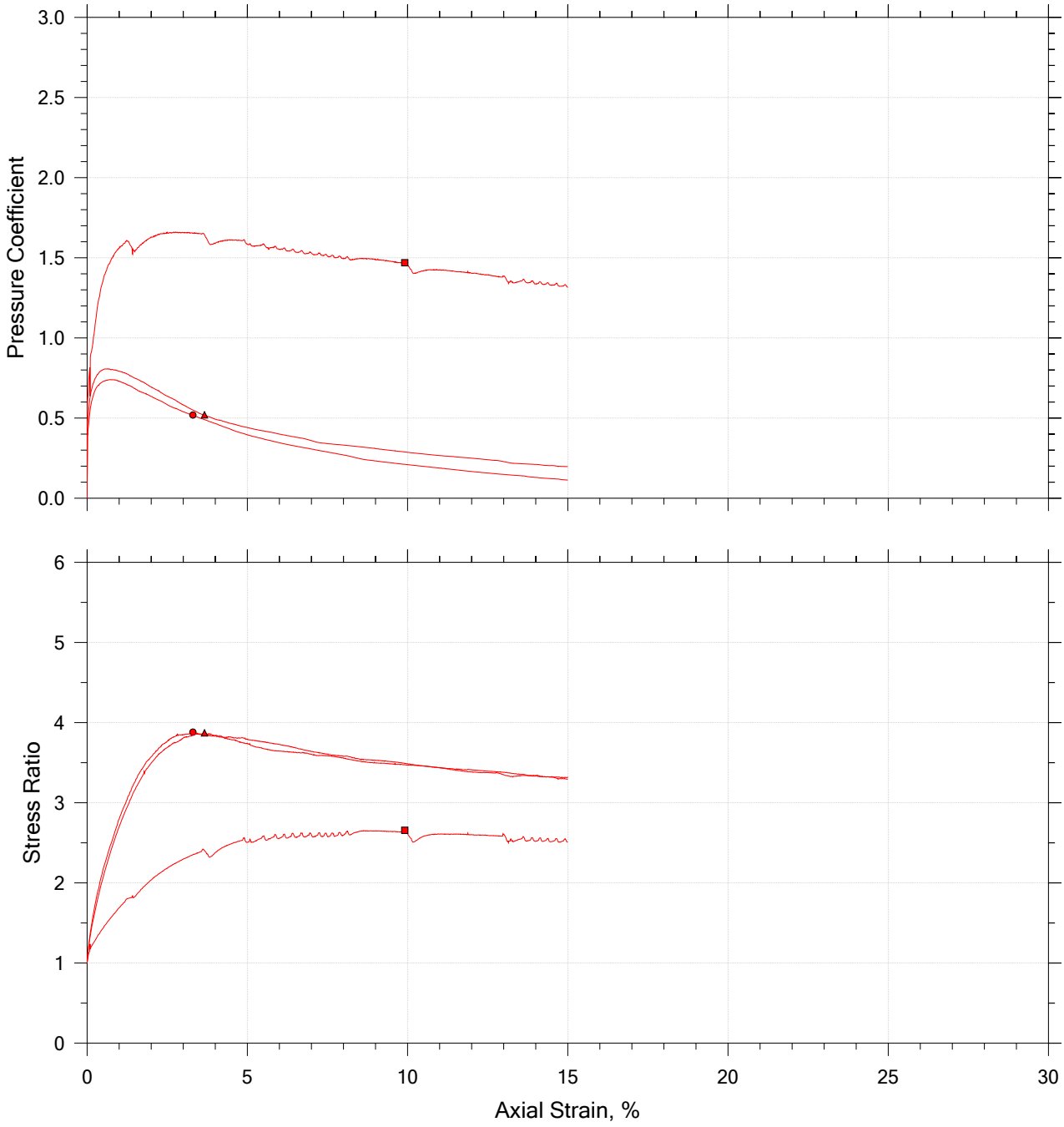




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3412	ST-1.A	30.0' - 34.0'	RMC	10/16/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.A_Test A.dat
●	23-3412	ST-1.C	30.0' - 34.0'	RMC	10/17/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.C_Test_B.dat
▲	23-3412	ST-1.D	30.0' - 34.0'	RMC	10/23/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.D_Test_C.dat

Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Log		
Remarks:		

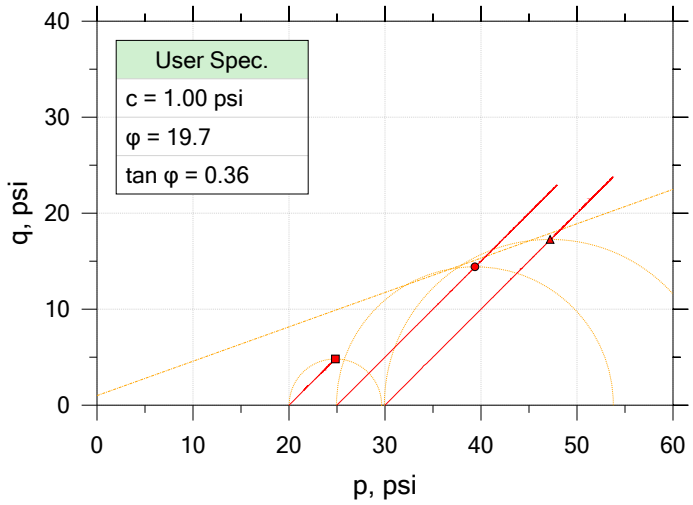
Consolidated Undrained by AASHTO T297

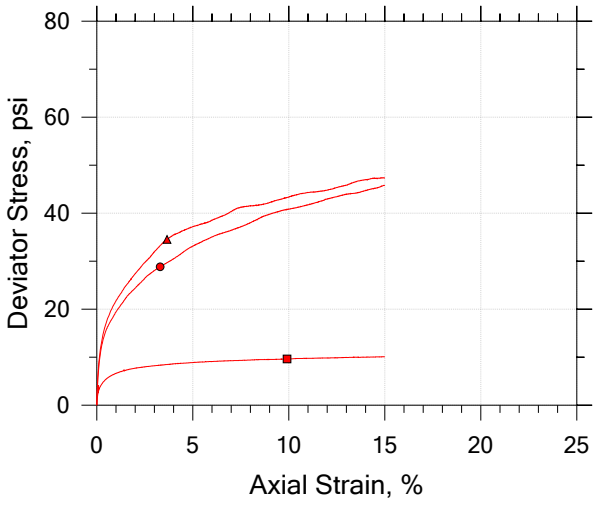


	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3412	ST-1.A	30.0' - 34.0'	RMC	10/16/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.A_Test A.dat
●	23-3412	ST-1.C	30.0' - 34.0'	RMC	10/17/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.C_Test_B.dat
▲	23-3412	ST-1.D	30.0' - 34.0'	RMC	10/23/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.D_Test_C.dat

Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Log		
Remarks:		

Consolidated Undrained by AASHTO T297





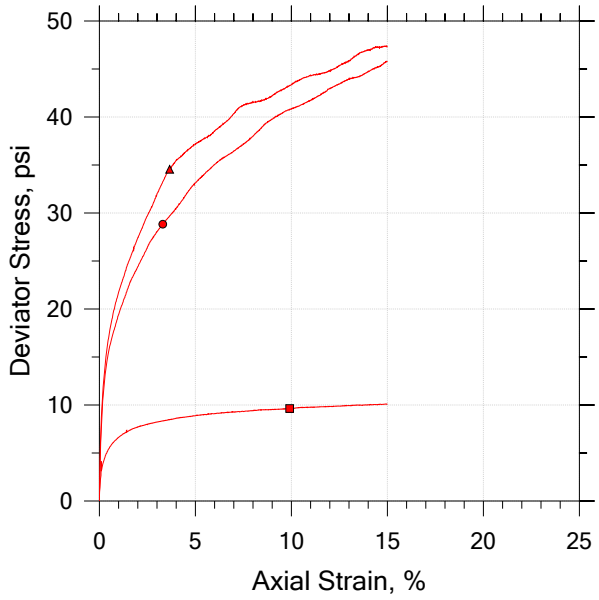
Symbol		■	●	▲	
Sample ID		23-3412	23-3412	23-3412	
Depth		30.0' - 34.0'	30.0' - 34.0'	30.0' - 34.0'	
Test Number		ST-1.A	ST-1.C	ST-1.D	
Initial	Height, in	6.015	6.113	6.153	
	Diameter, in	2.858	2.846	2.877	
	Moisture Content (from Cuttings), %	24.5	24.5	24.5	
	Dry Density, pcf	95.1	102.	100.	
	Saturation (Wet Method), %	86.4	101.5	97.8	
	Void Ratio	0.759	0.647	0.671	
Final	Moisture Content, %	22.8	22.9	22.7	
	Dry Density, pcf	104.	104.	104.	
	Cross-Sectional Area (Method A), in²	6.124	6.277	6.349	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	0.612	0.614	0.608	
	Back Pressure, psi	64.99	59.00	59.00	
Vertical Effective Consolidation Stress, psi		19.79	24.94	29.93	
Horizontal Effective Consolidation Stress, psi		20.00	24.99	29.99	
Vertical Strain after Consolidation, %		3.497	0.6255	1.335	
Volumetric Strain after Consolidation, %		6.914	1.811	3.417	
Time to 50% Consolidation, min		100.0	1.500	1.300	
Shear Strength, psi		4.821	14.42	17.27	
Strain at Failure, %		9.91	3.30	3.66	
Strain Rate, %/min		0.005600	0.01000	0.01000	
Deviator Stress at Failure, psi		9.642	28.84	34.55	
Effective Minor Principal Stress at Failure, psi		5.821	10.01	12.03	
Effective Major Principal Stress at Failure, psi		15.46	38.84	46.58	
B-Value		0.95	0.96	0.96	

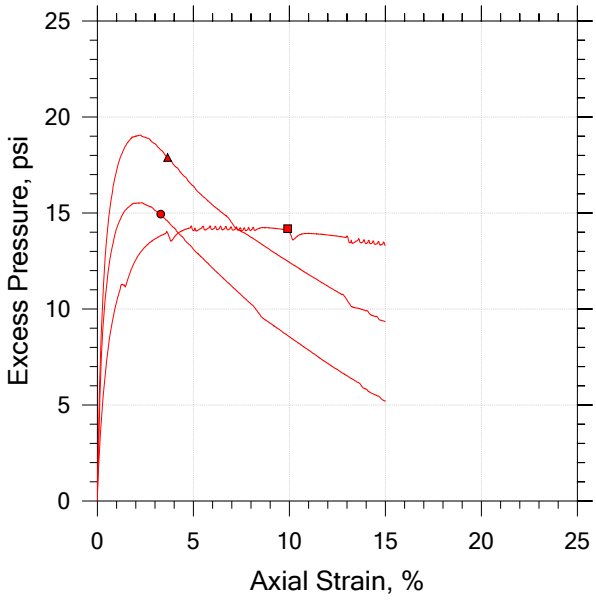
Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

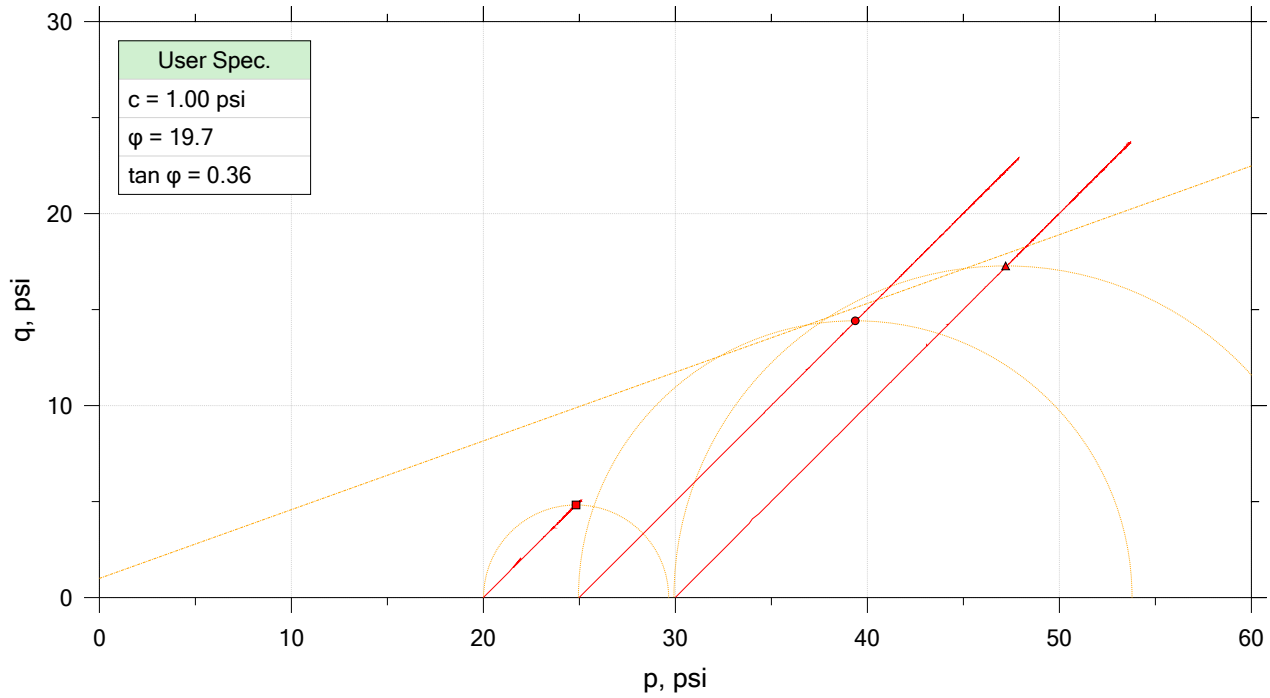
F&ME CONSULTANTS

Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Log		
Remarks:		

Consolidated Undrained by AASHTO T297



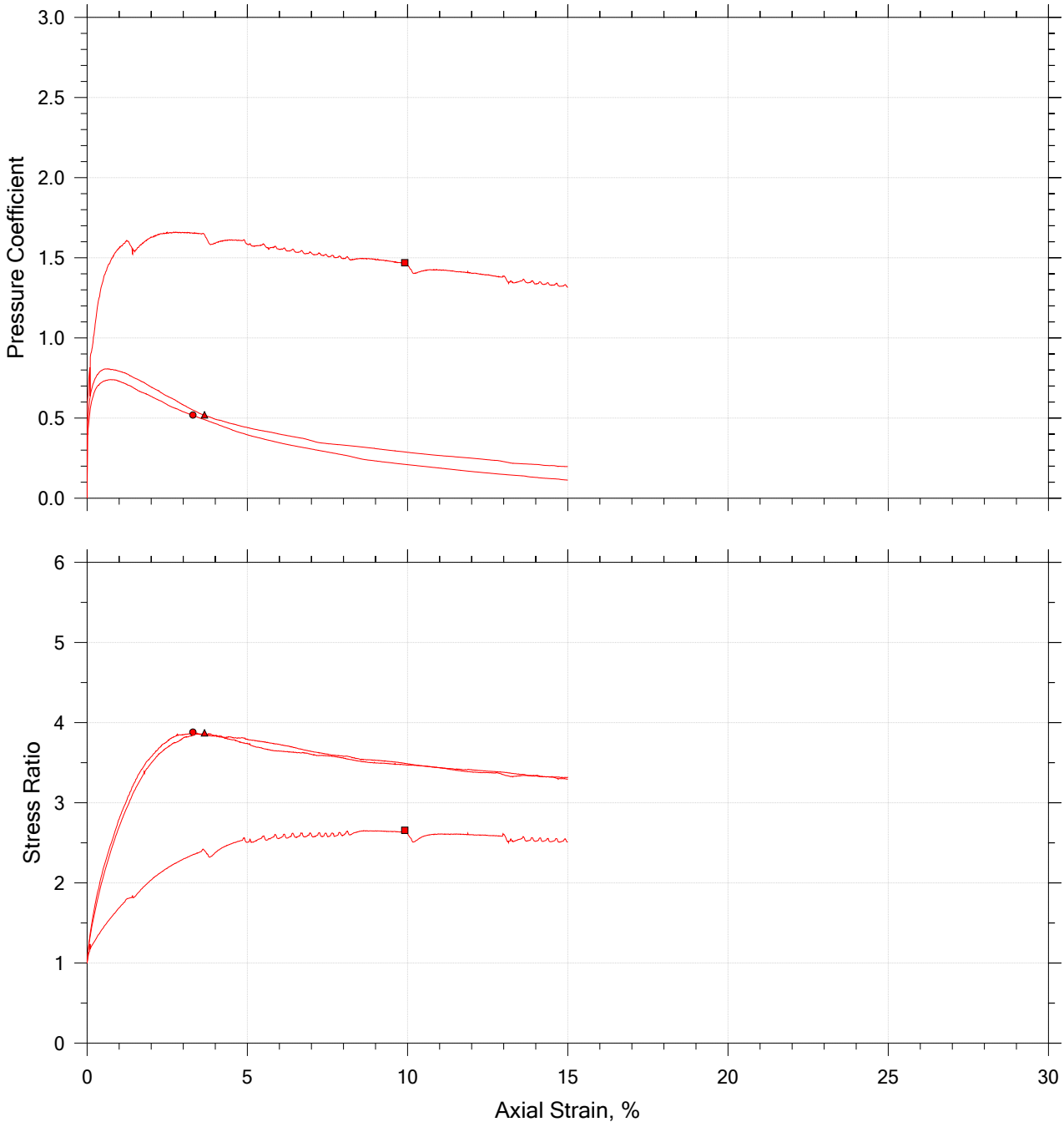




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3412	ST-1.A	30.0' - 34.0'	RMC	10/16/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.A_Test A.dat
●	23-3412	ST-1.C	30.0' - 34.0'	RMC	10/17/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.C_Test_B.dat
▲	23-3412	ST-1.D	30.0' - 34.0'	RMC	10/23/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.D_Test_C.dat

	Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
	Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
	Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
	Test Number: ABC	Preparation: Undisturbed	Elevation:
	Description: VARIOUS, See Log		
	Remarks:		

Consolidated Undrained by AASHTO T297

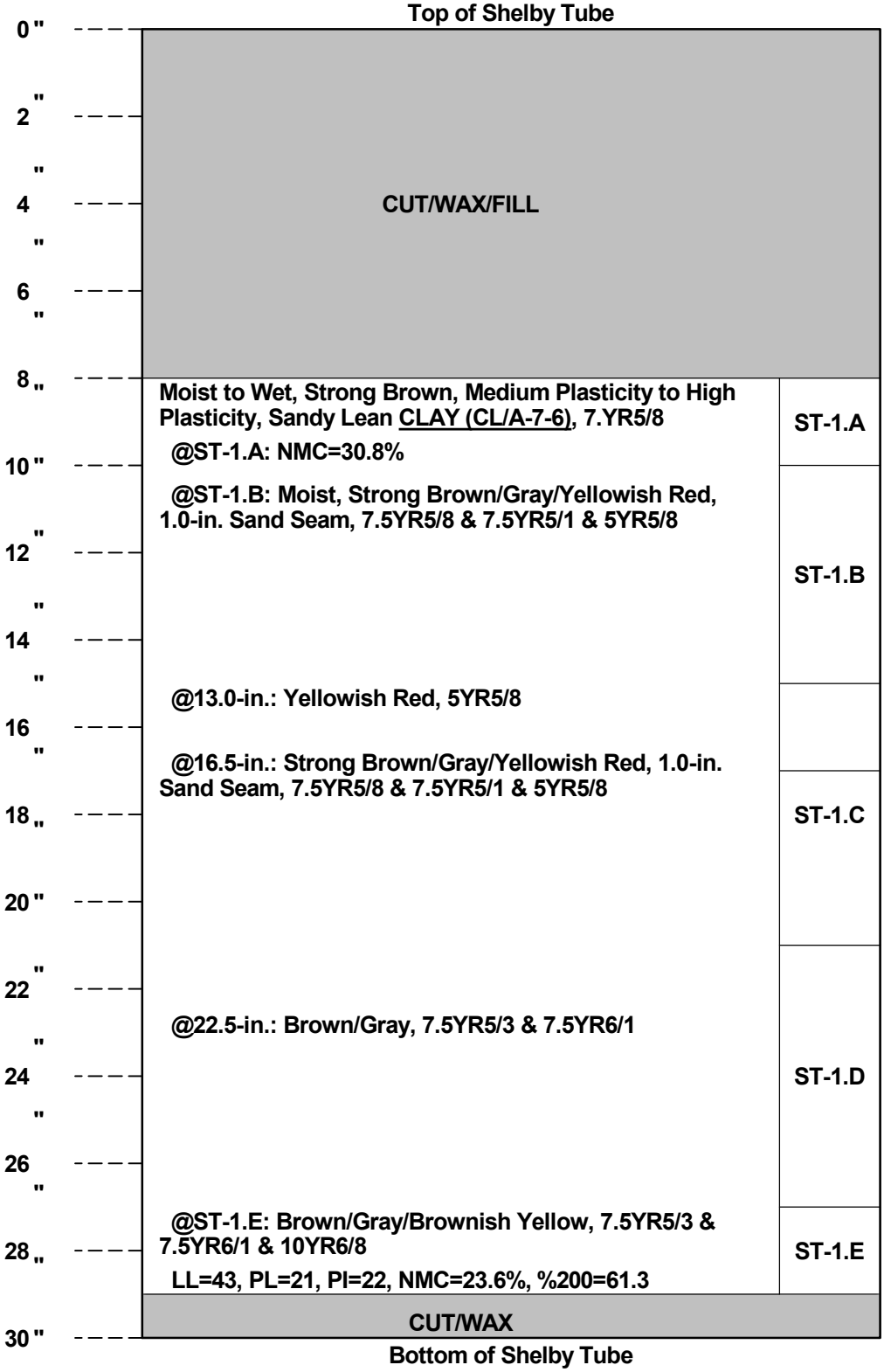


	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3412	ST-1.A	30.0' - 34.0'	RMC	10/16/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.A_Test A.dat
●	23-3412	ST-1.C	30.0' - 34.0'	RMC	10/17/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.C_Test_B.dat
▲	23-3412	ST-1.D	30.0' - 34.0'	RMC	10/23/2023	WAP/ WJG	10/27/2023	G6400.200_B-1U_ST-1.D_Test_C.dat

Project Name: SC 133 RBO Crowe Creek	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: B-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3412	Test Date: 10/16/2023	Depth: 30.0' - 34.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Log		
Remarks:		

SCDOT Shelby Tube Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



SC_DOT_SHELBY_TUBE_LOG_PICTURES G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/3/23

Undisturbed Sample Pictures

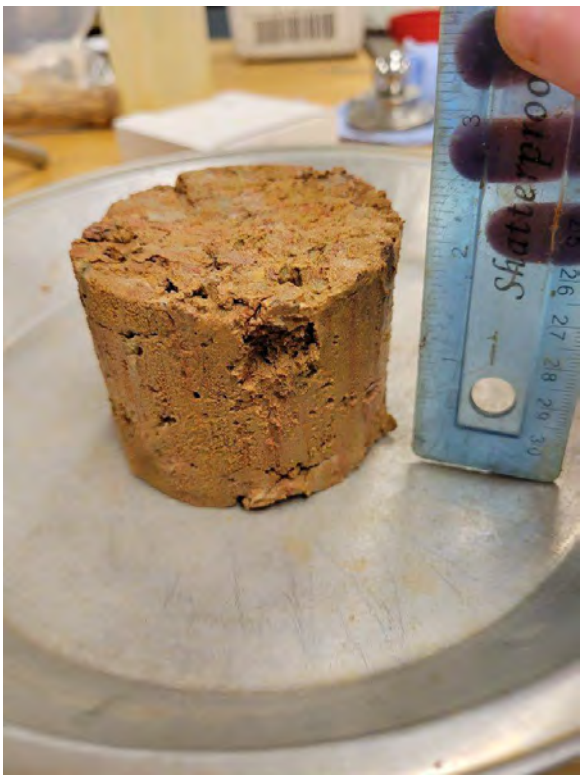
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.A

Specimen No. ST-1.A

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-1.A

Specimen No. ST-1.A

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.B

Specimen No. ST-1.B

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

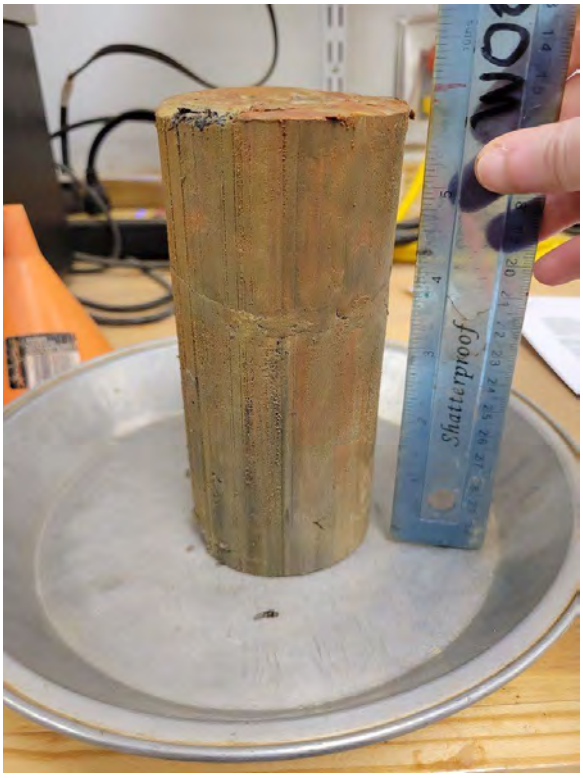
Specimen No. ST-1.B

Specimen No. ST-1.B

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

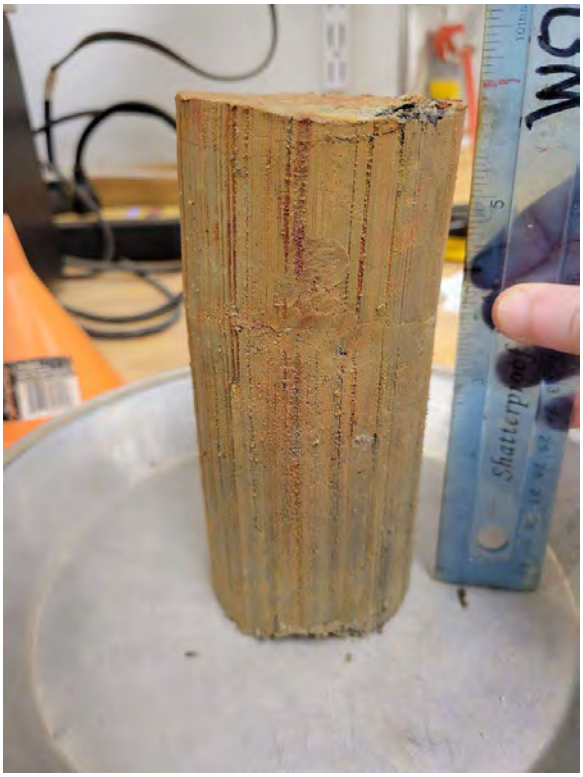
Specimen No. ST-1.C



Specimen No. ST-1.C

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

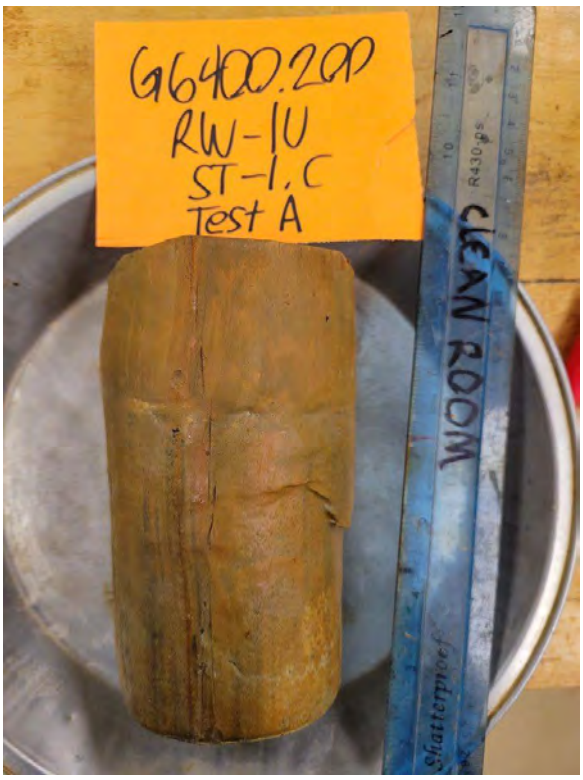


Specimen No. ST-1.C

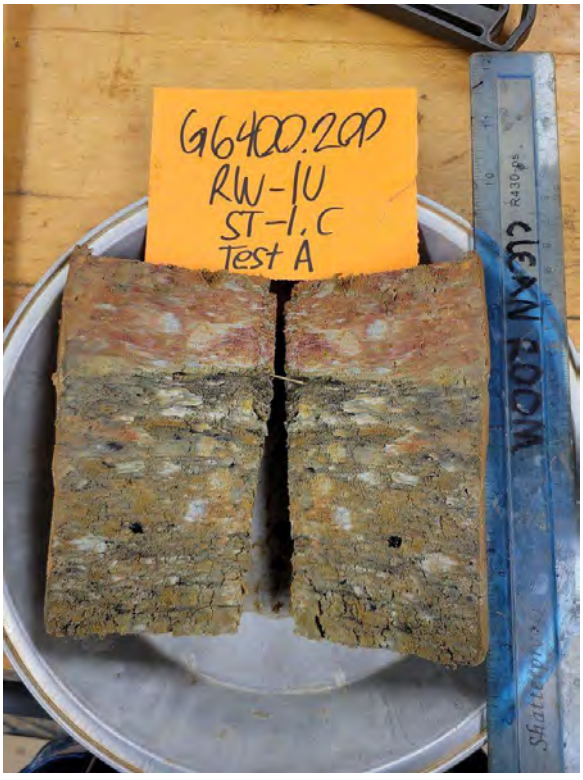
Specimen No. ST-1.C

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-1.C

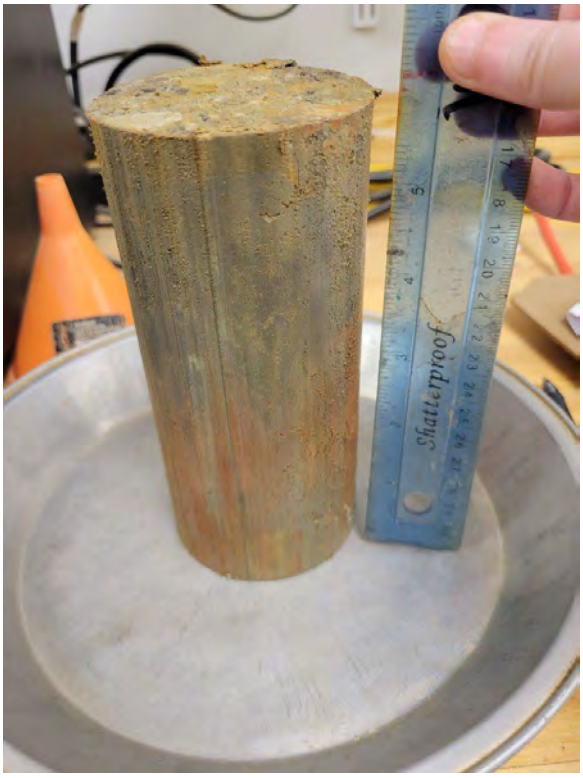


Specimen No. ST-1.C

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.D



Specimen No. ST-1.D

SCDOT Undisturbed Sample Pictures

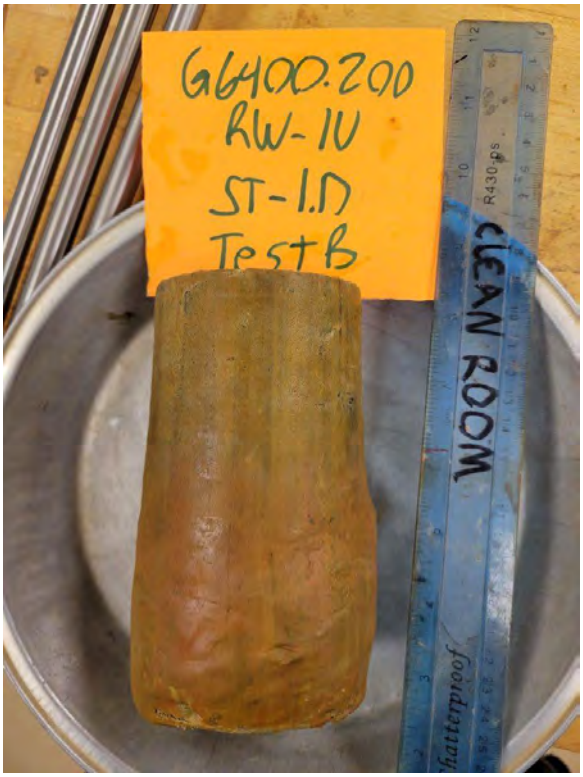
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.D

Specimen No. ST-1.D

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



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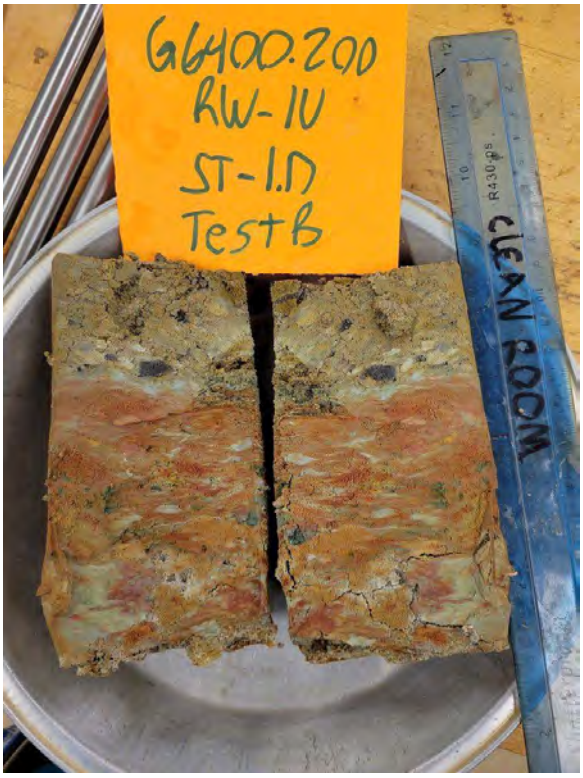
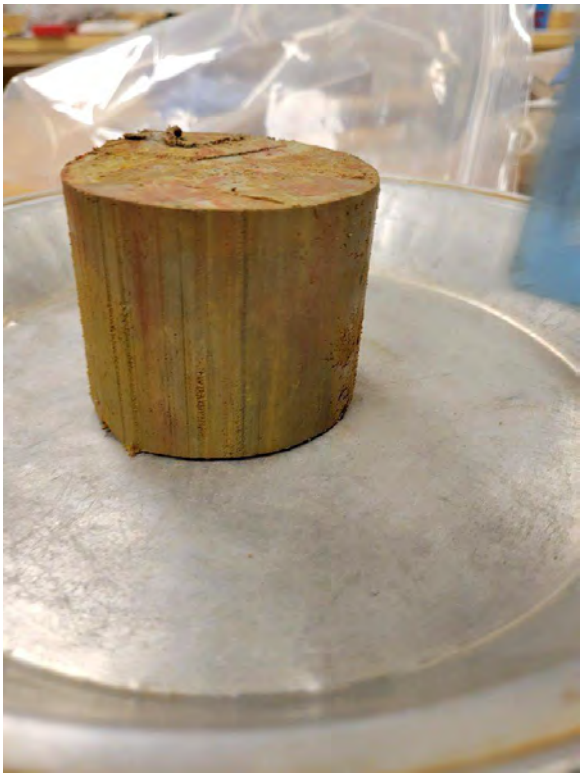


Specimen No. ST-1.D

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.E



Specimen No. ST-1.E

SCDOT Undisturbed Sample Pictures

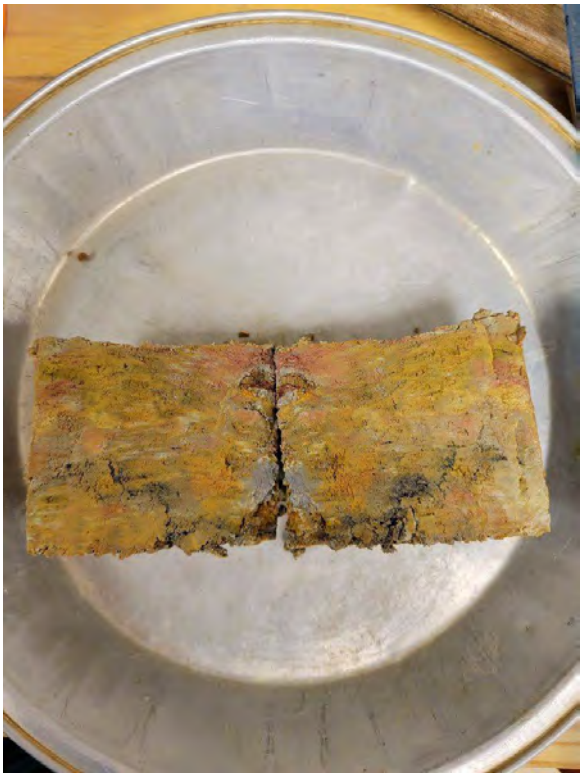
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-1.E

Specimen No. ST-1.E

SCDOT Undisturbed Sample Pictures

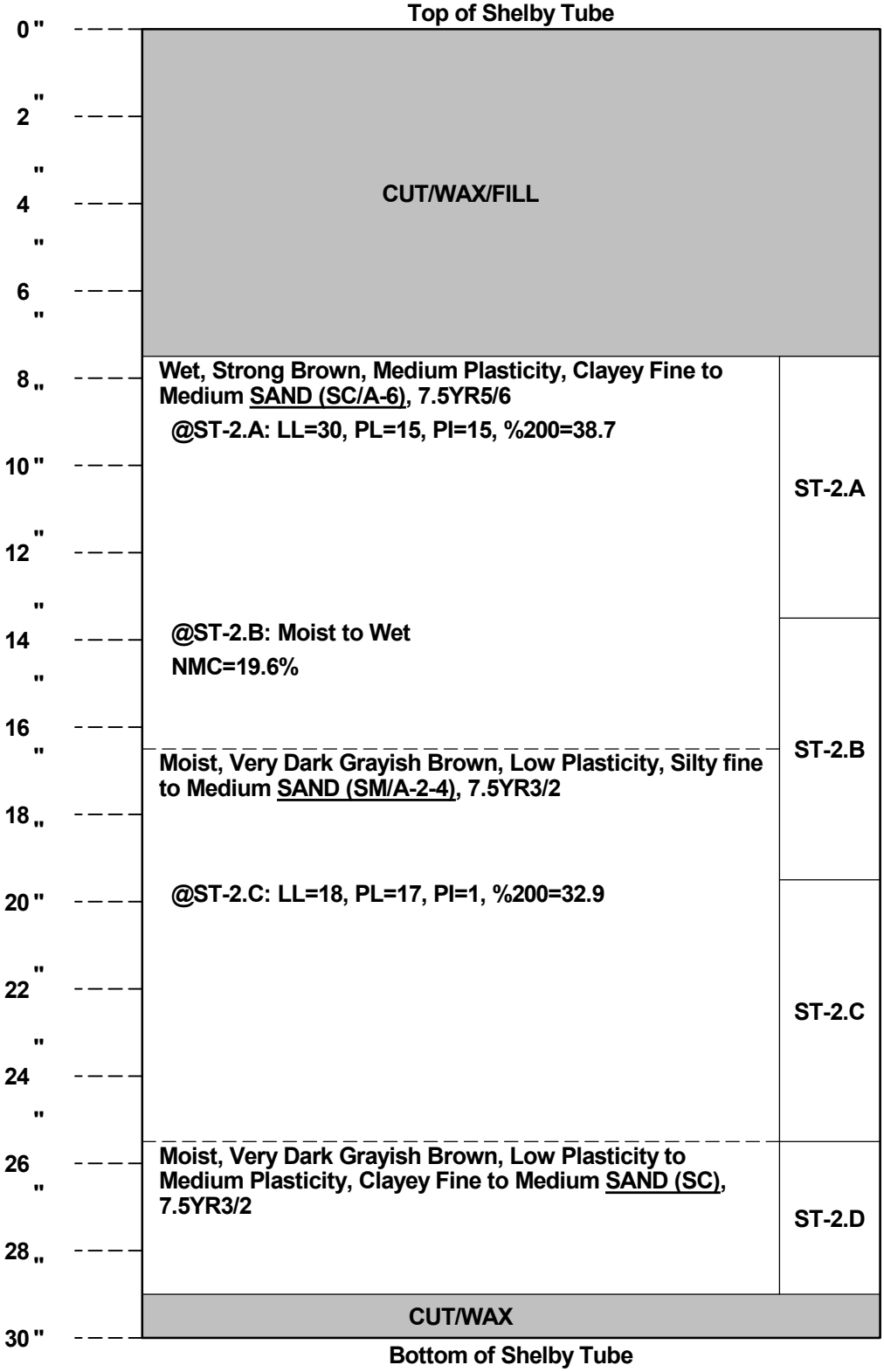
Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-1	**Depth:**	13' - 15'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/27/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-1.E

SCDOT Shelby Tube Log

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.A

Specimen No. ST-2.A

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.A

Specimen No. ST-2.B

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.B

Specimen No. ST-2.B

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.B

Specimen No. ST-2.B

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.C

Specimen No. ST-2.C

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

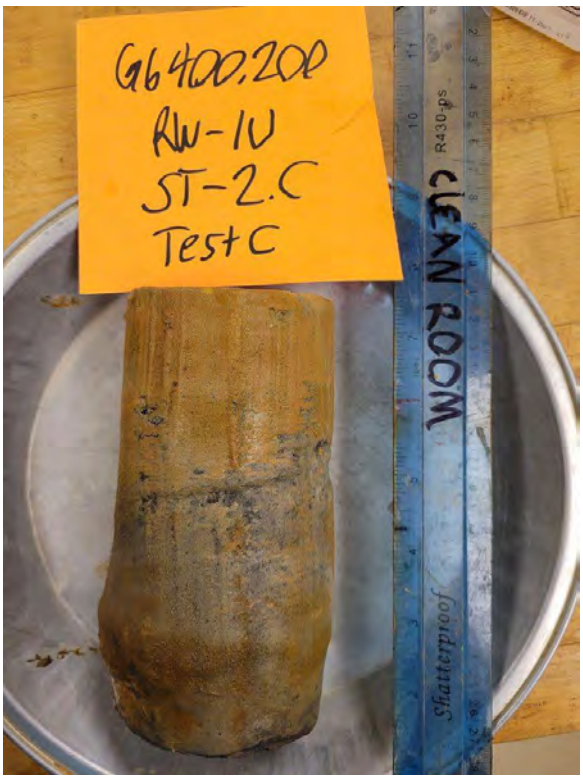
Specimen No. ST-2.C

Specimen No. ST-2.C

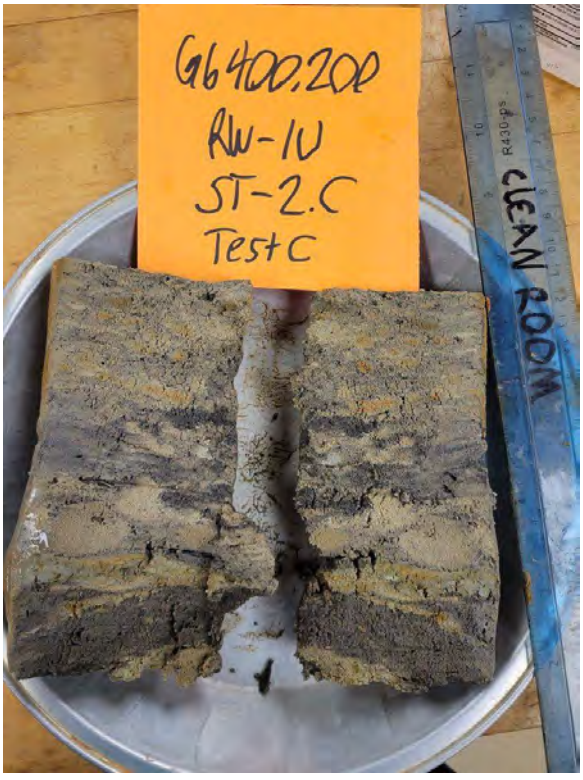
SC_DOT_SHELBY_TUBE_LOG_PICTURES G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT_DATATEMPLATE.GDT 11/6/23

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		



Specimen No. ST-2.C



Specimen No. ST-2.C

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.D

Specimen No. ST-2.D

SCDOT Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.D

Specimen No. ST-2.D

Undisturbed Sample Pictures

Project ID:	P042942	**County:**	Hampton/Beaufort	**Boring No.:**	RW-1U
Project Description:	US 21/US 17A over CSX RR			**Route:**	US 21
UD Sample No.:	ST-2	**Depth:**	15' - 17'		
Date Sampled:	10/25/2023	**Date Extracted:**	10/26/2023		
Extracted By:	R. Coldiron	**Eng. Firm:**	FME		

Specimen No. ST-2.D

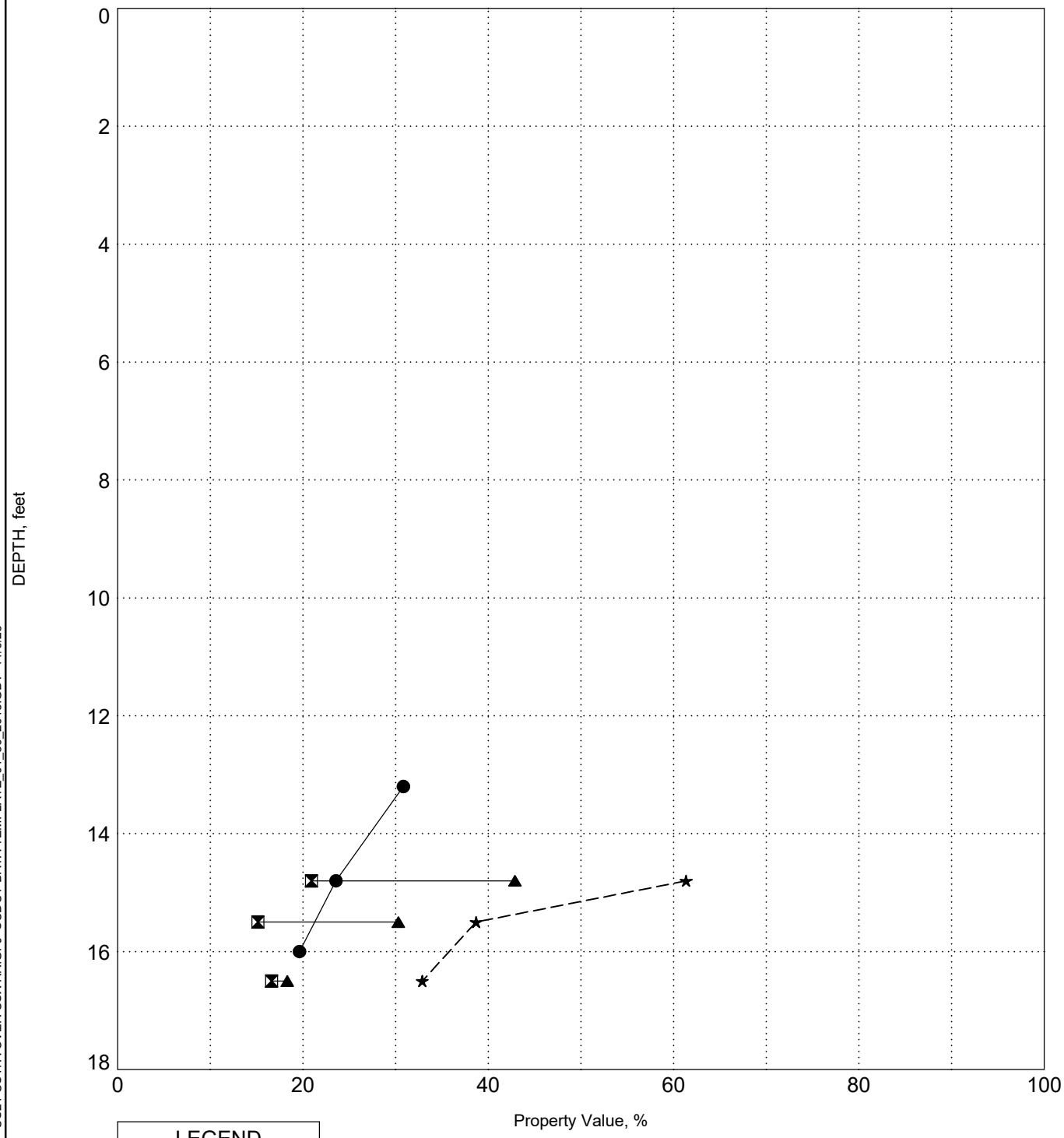
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING RW-1U

SURFACE ELEVATION: 28.4



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3537	**DATE SAMPLE RECEIVED:**	10/25/2023
DESCRIPTION OF SOIL:	VARIOUS		
TESTED BY:	RC	**DATE SETUP:**	10/28/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	11/2/2023

BORING NO.	RW-1U	RW-1U	RW-1U		
SAMPLE NO.	ST-1.A	ST-1.E	ST-2.B		
SAMPLE DEPTH (FT.)	13.0 - 13.2	14.6 - 14.8	15.5 - 16.0		
WATER CONTENT, W%	30.8	23.6	19.6		

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

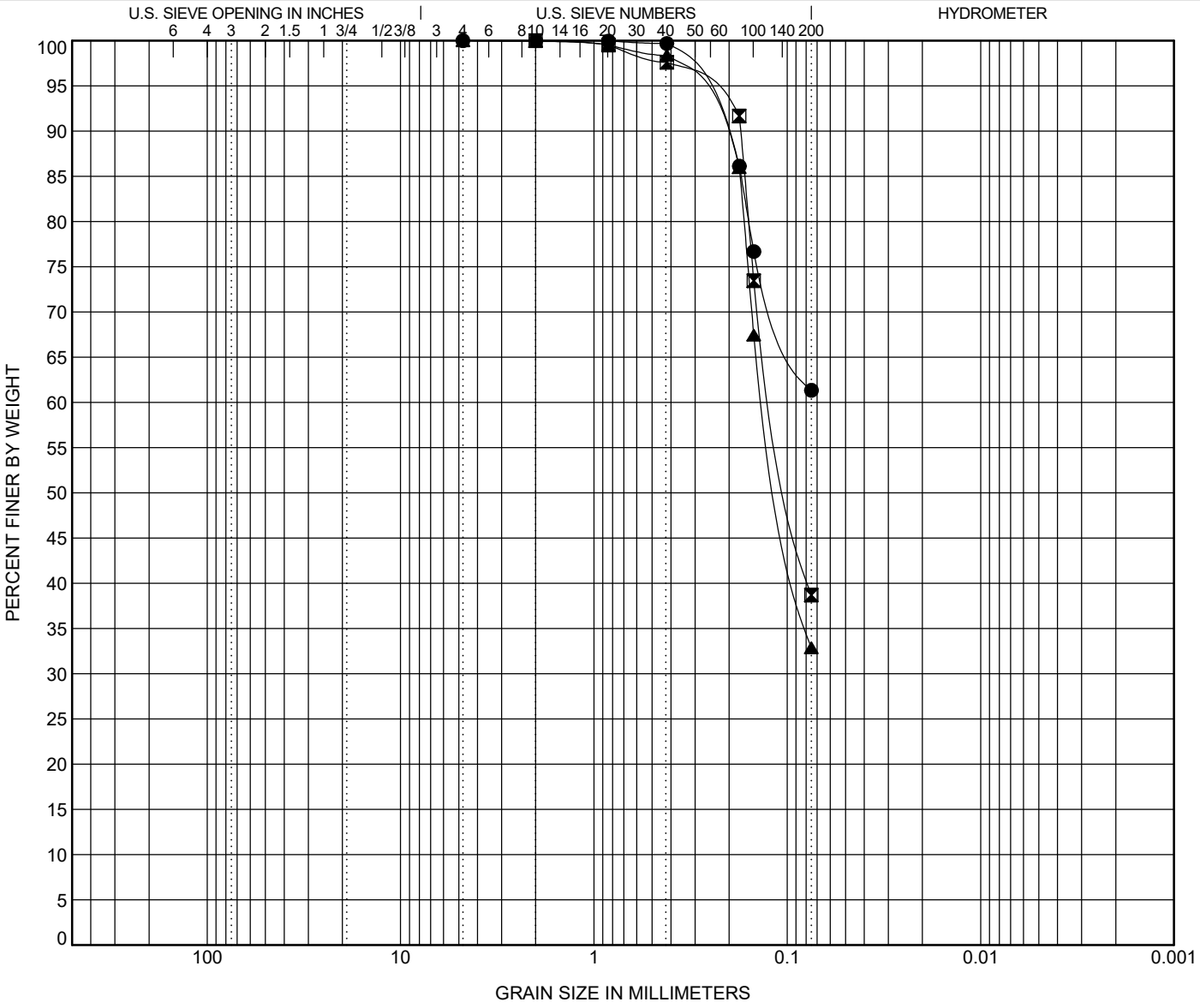
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

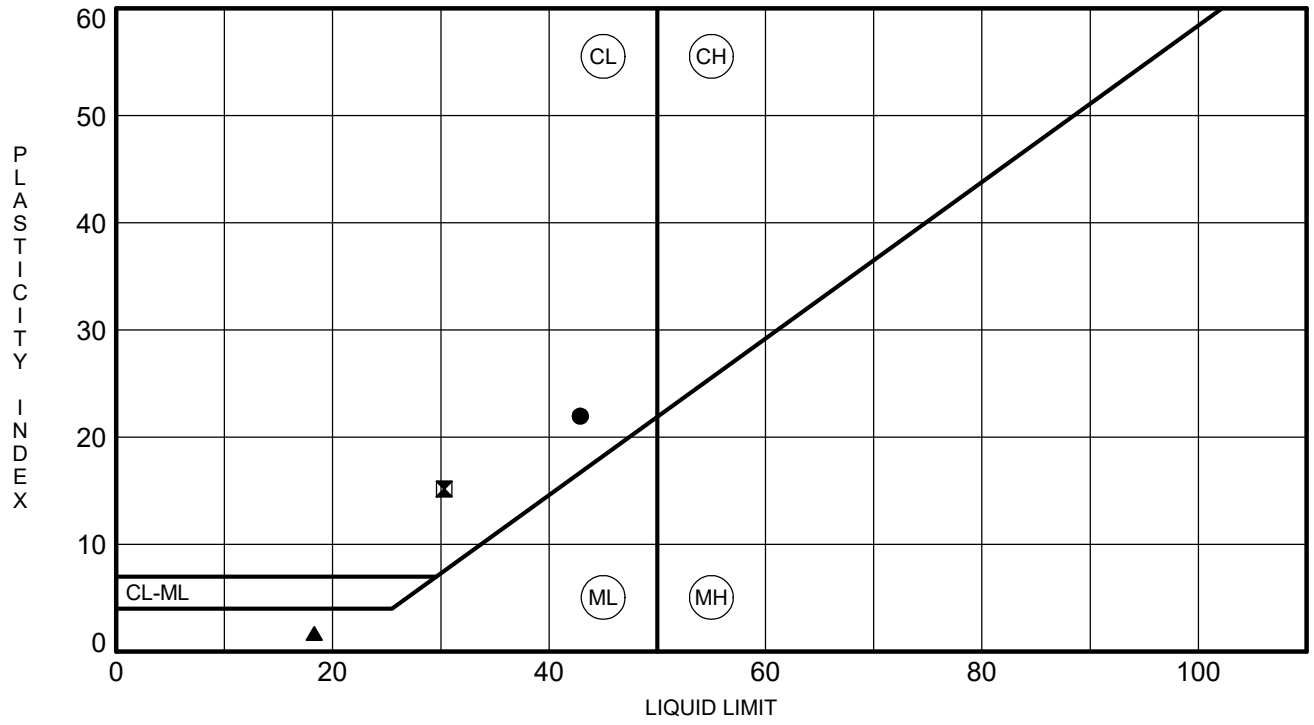
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**RW-1U**	**14.8**	**SANDY LEAN CLAY (CL/A-7-6)**	**43**	**21**	**22**		
⊠	**RW-1U**	**15.5**	**CLAYEY SAND (SC/A-6)**	**30**	**15**	**15**		
▲	**RW-1U**	**16.5**	**SILTY SAND (SM/A-2-4)**	**18**	**17**	**1**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**RW-1U**	**14.8**	**4.76**				**0.0**	**38.7**	**61.3**	
⊠	**RW-1U**	**15.5**	**2**	**0.114**			**0.0**	**61.3**	**38.7**	
▲	**RW-1U**	**16.5**	**4.76**	**0.129**			**0.0**	**67.1**	**32.9**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

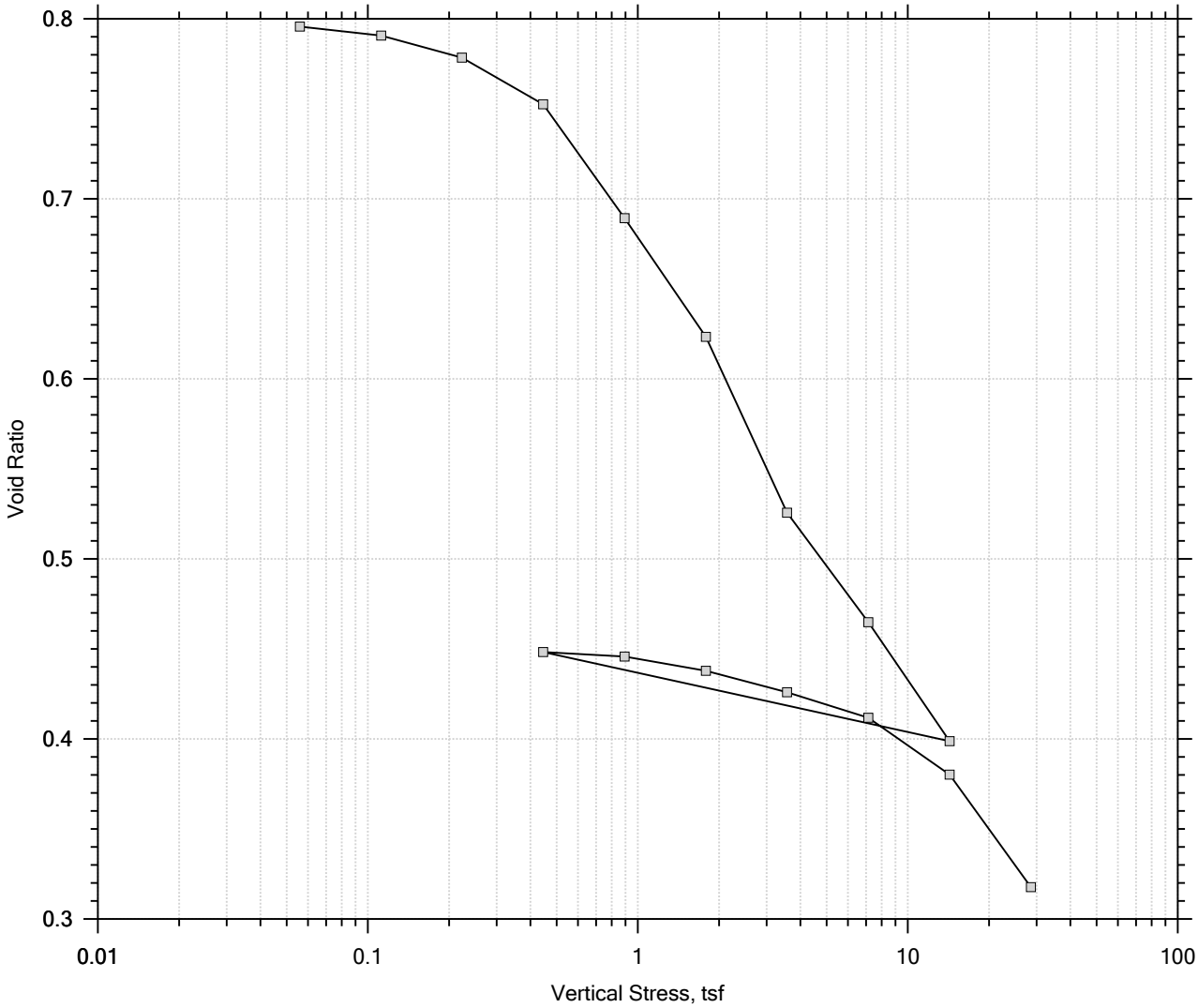
PROJECT COUNTY Hampton/Beaufort



	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**RW-1U**	**14.8**	**43**	**21**	**22**	**61**	**SANDY LEAN CLAY (CL/A-7-6)**
⊠	**RW-1U**	**15.5**	**30**	**15**	**15**	**39**	**CLAYEY SAND (SC/A-6)**
▲	**RW-1U**	**16.5**	**18**	**17**	**1**	**33**	**SILTY SAND (SM/A-2-4)**

One-Dimensional Consolidation by ASTM D2435 - Method B

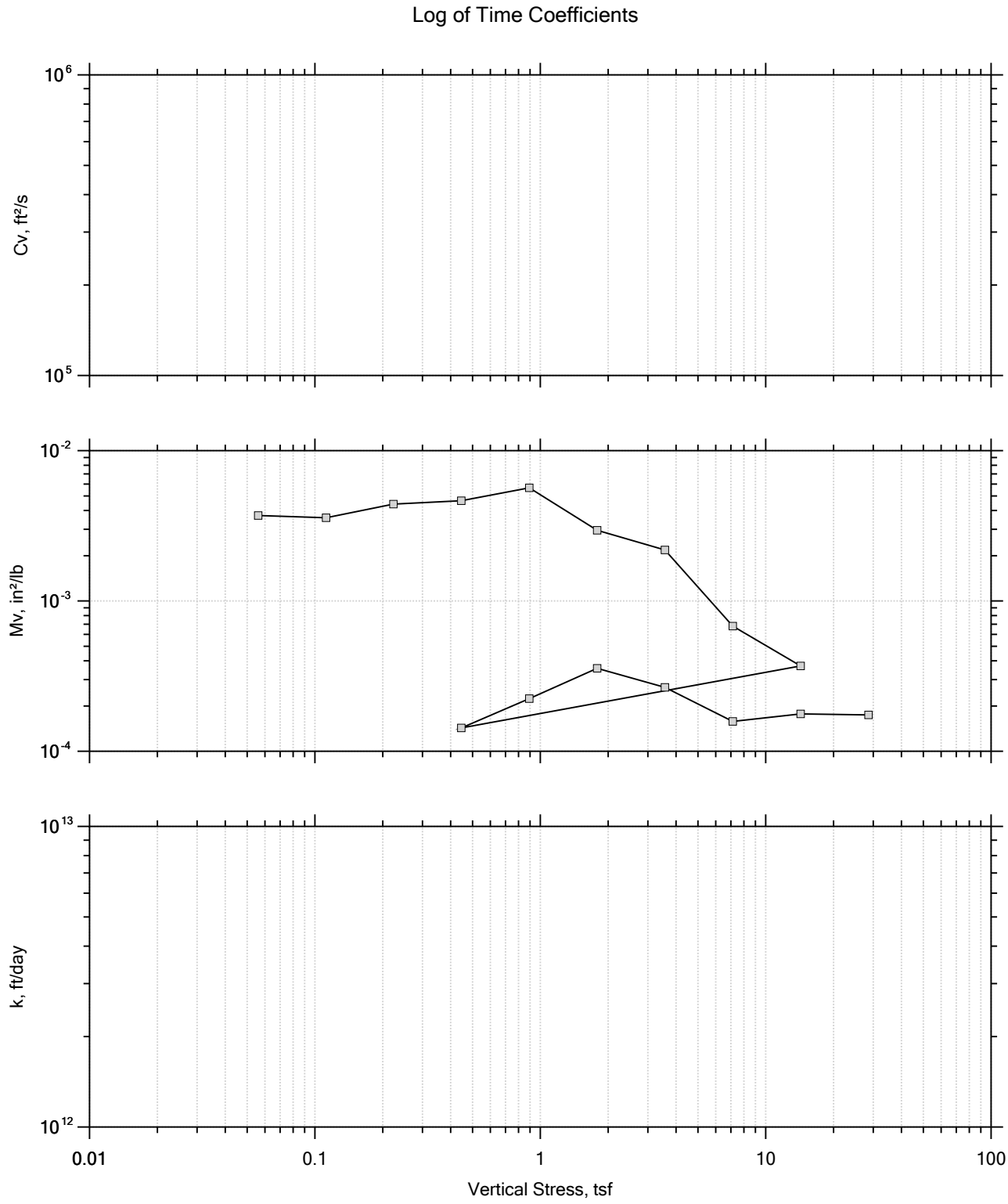
Summary Report



					Before Test	After Test
Current Vertical Effective Stress: 0 tsf				Water Content, %	30.14	15.79
Preconsolidation Stress: 0 tsf				Dry Unit Weight, pcf	90.822	119.19
Compression Ratio: 0				Saturation, %	98.60	111.16
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.80	0.37
LL: 43	PL: 21	PI: 22	GS: 2.62			

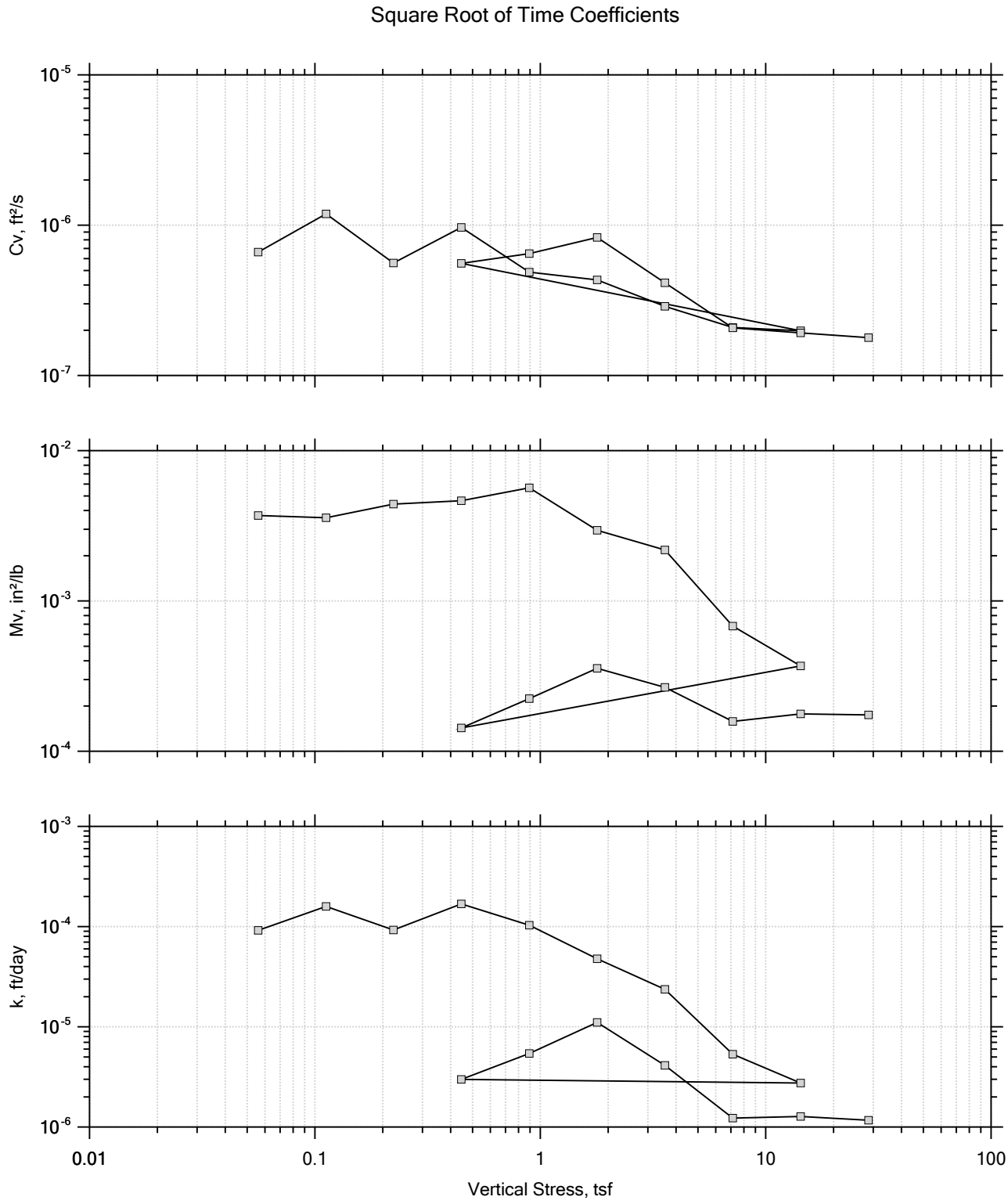
F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B



Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

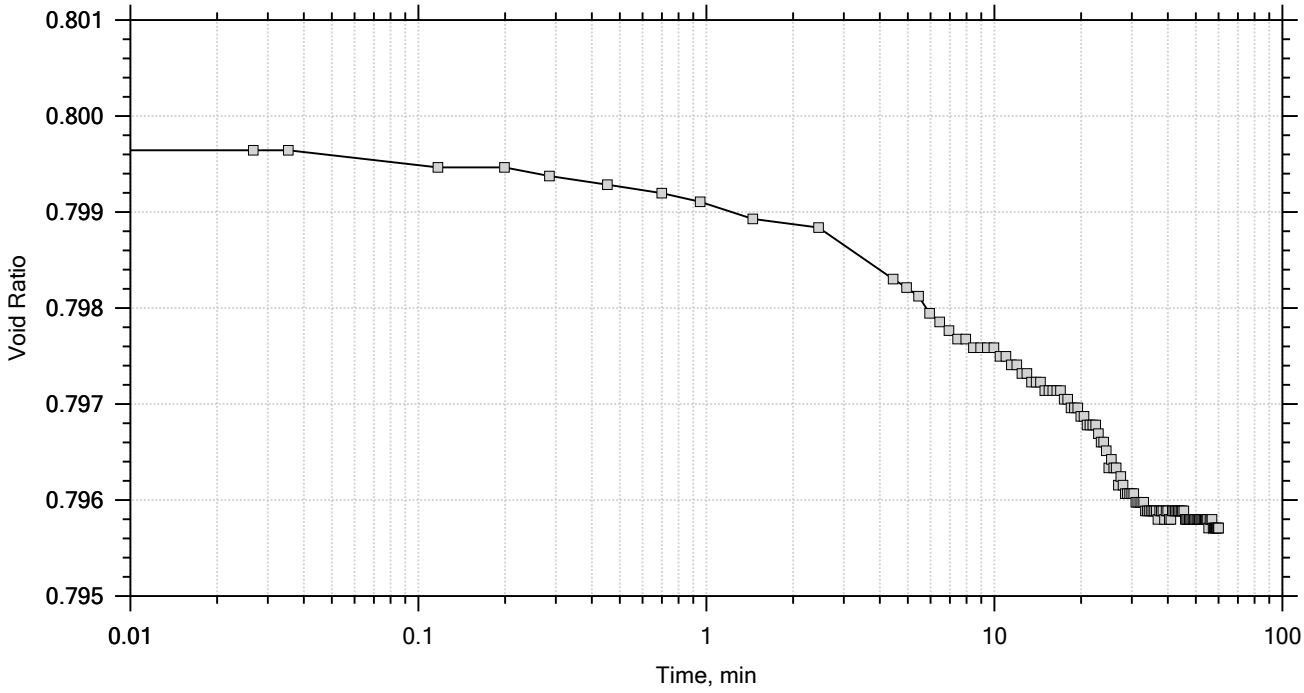
One-Dimensional Consolidation by ASTM D2435 - Method B

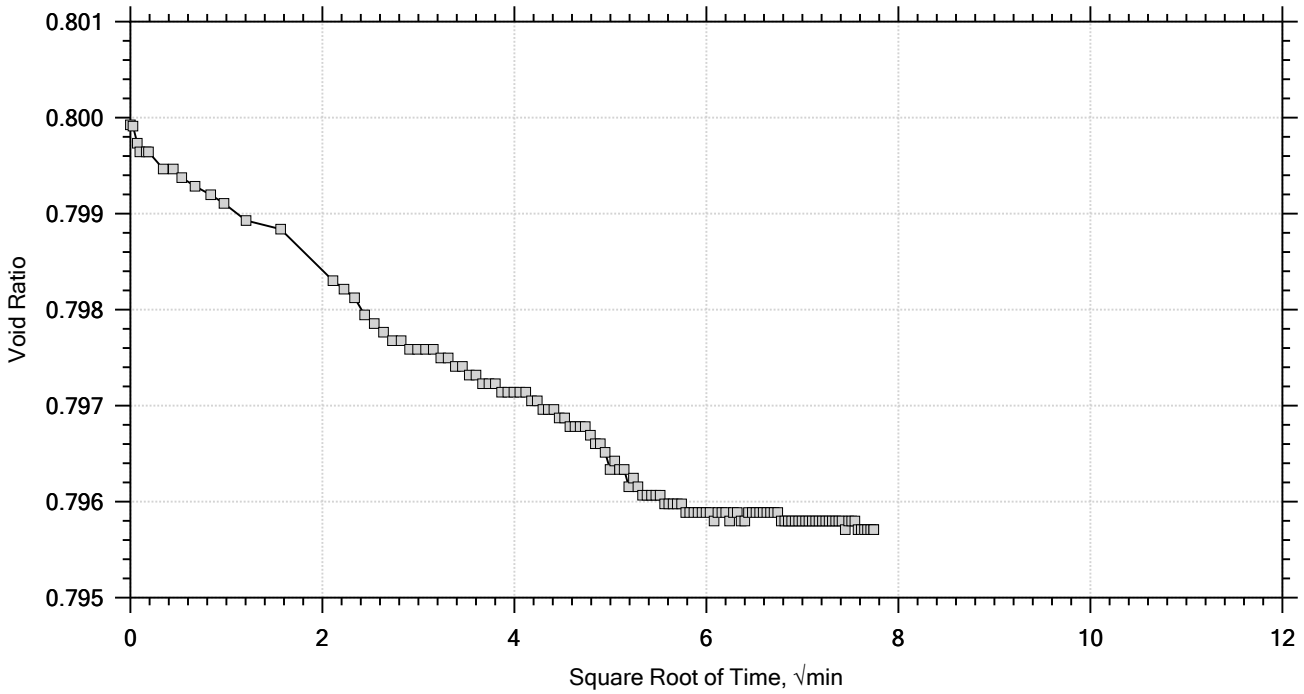


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

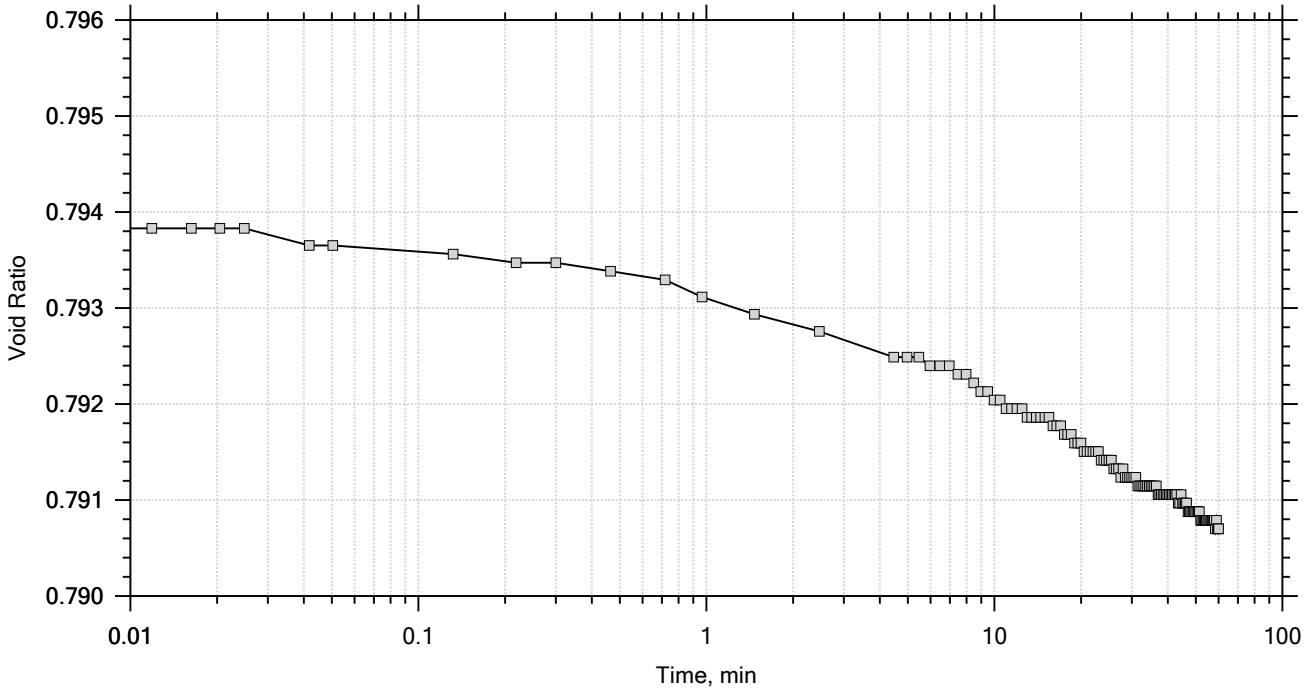


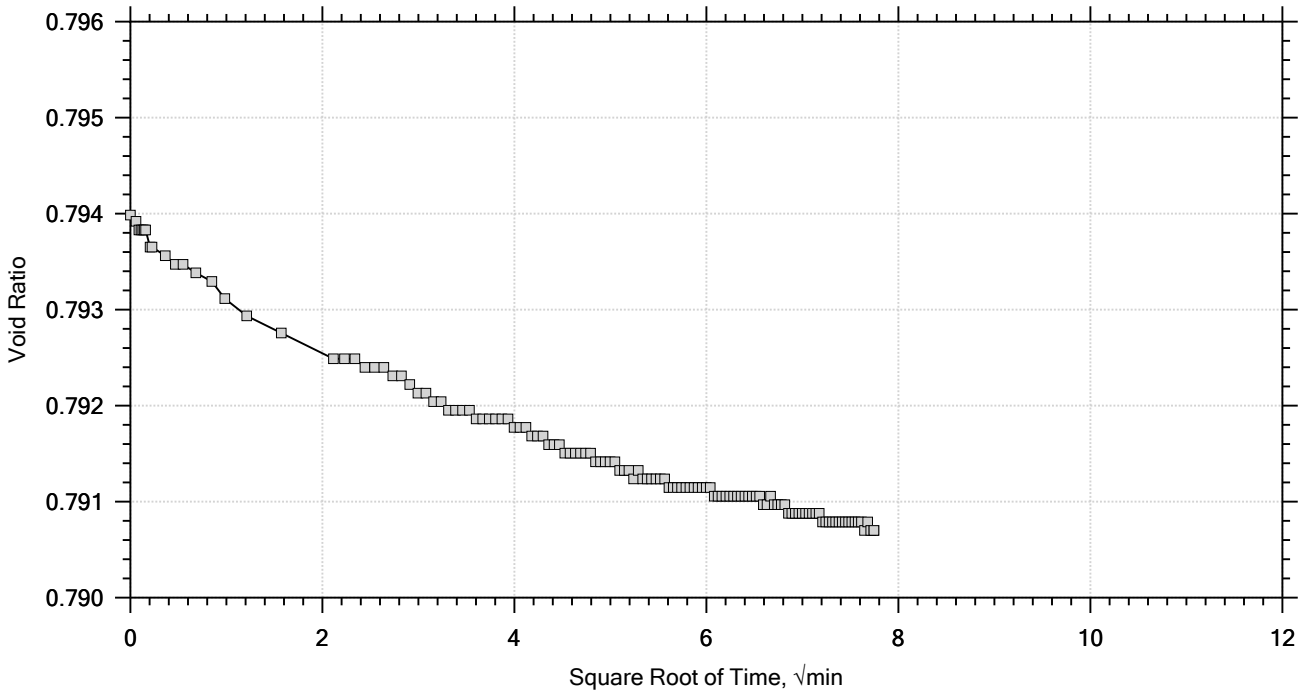


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

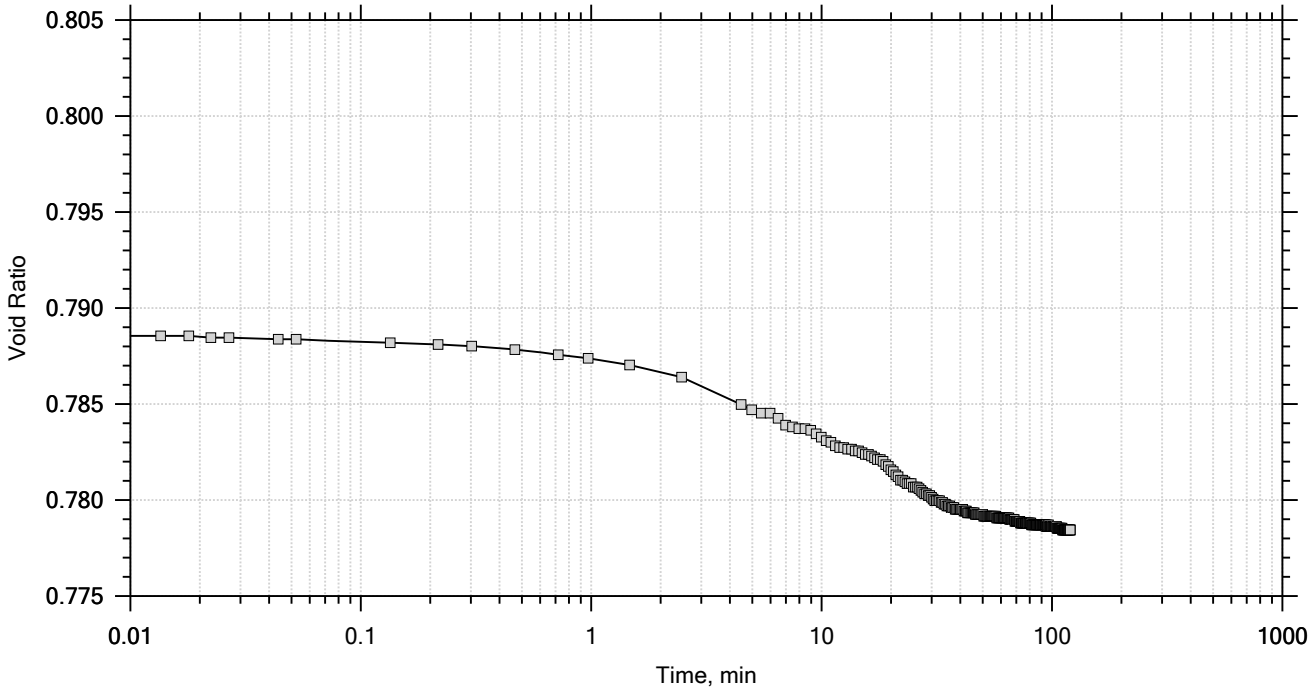


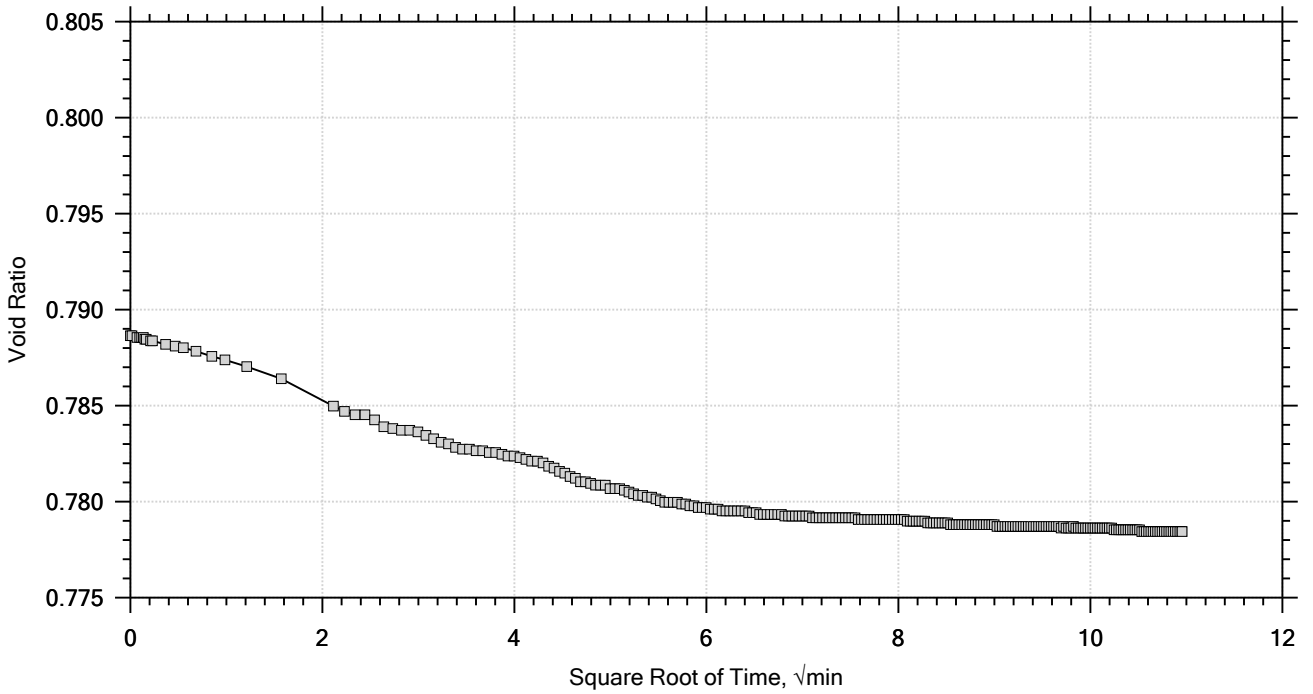


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

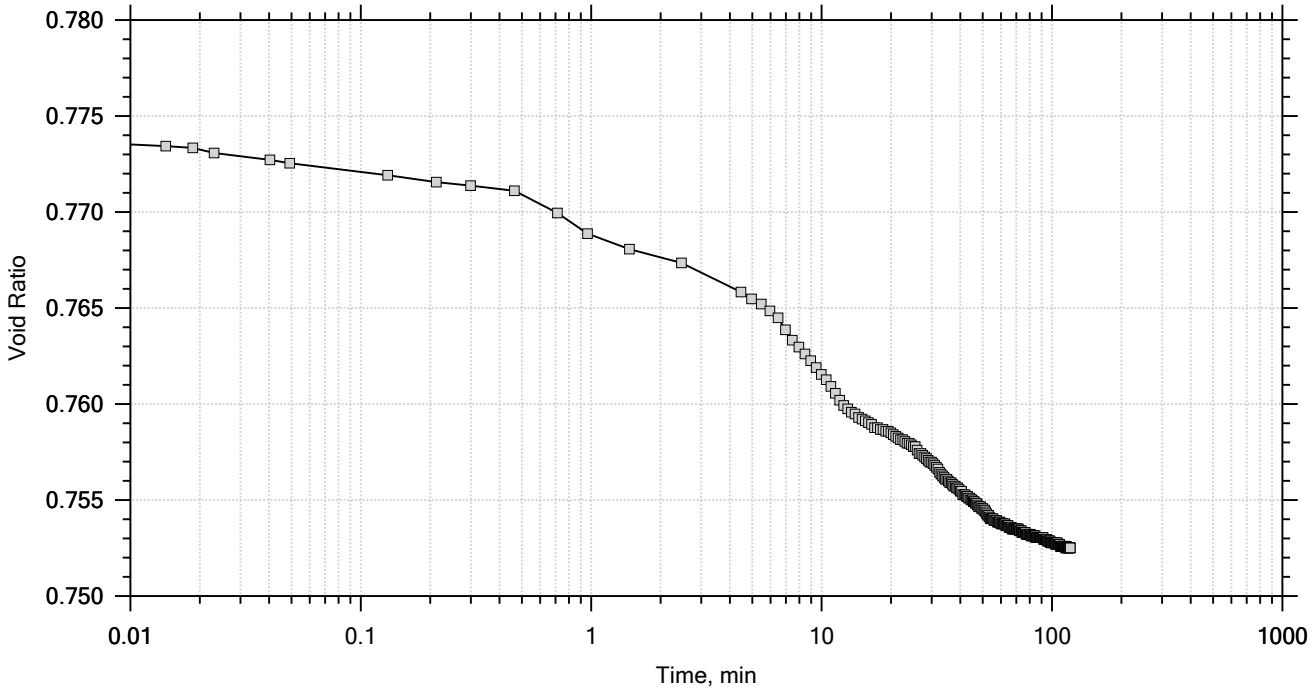


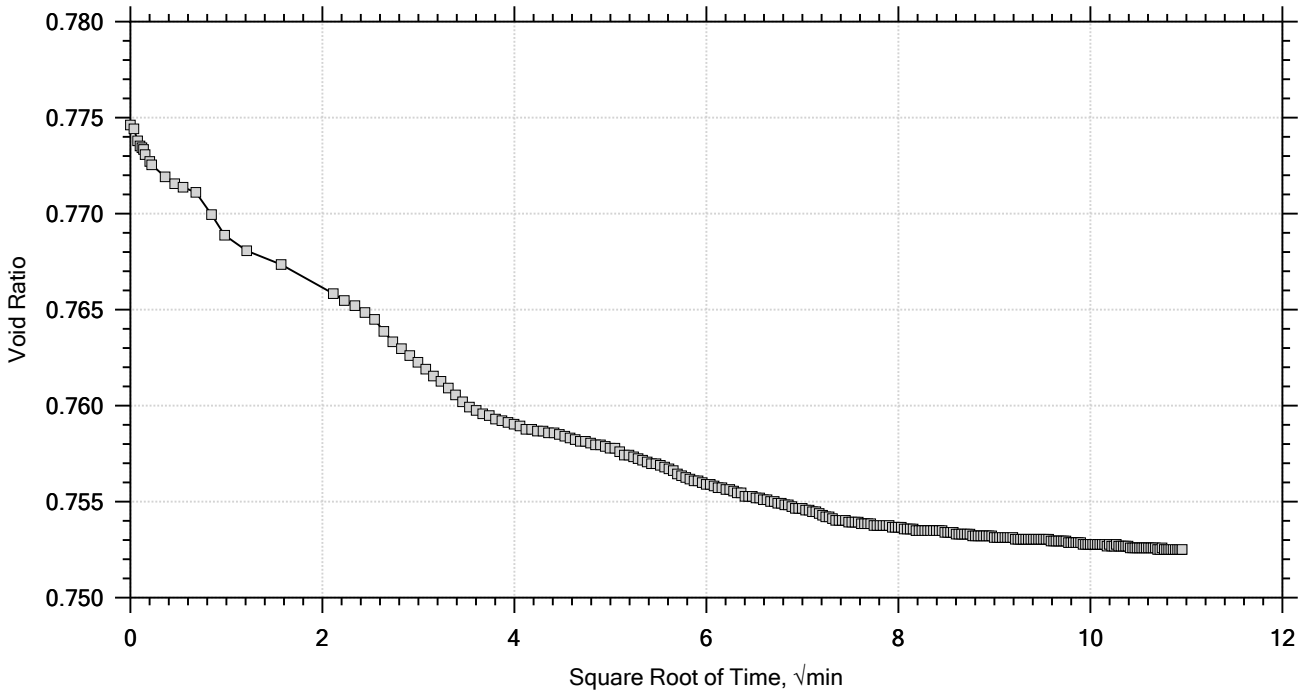


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

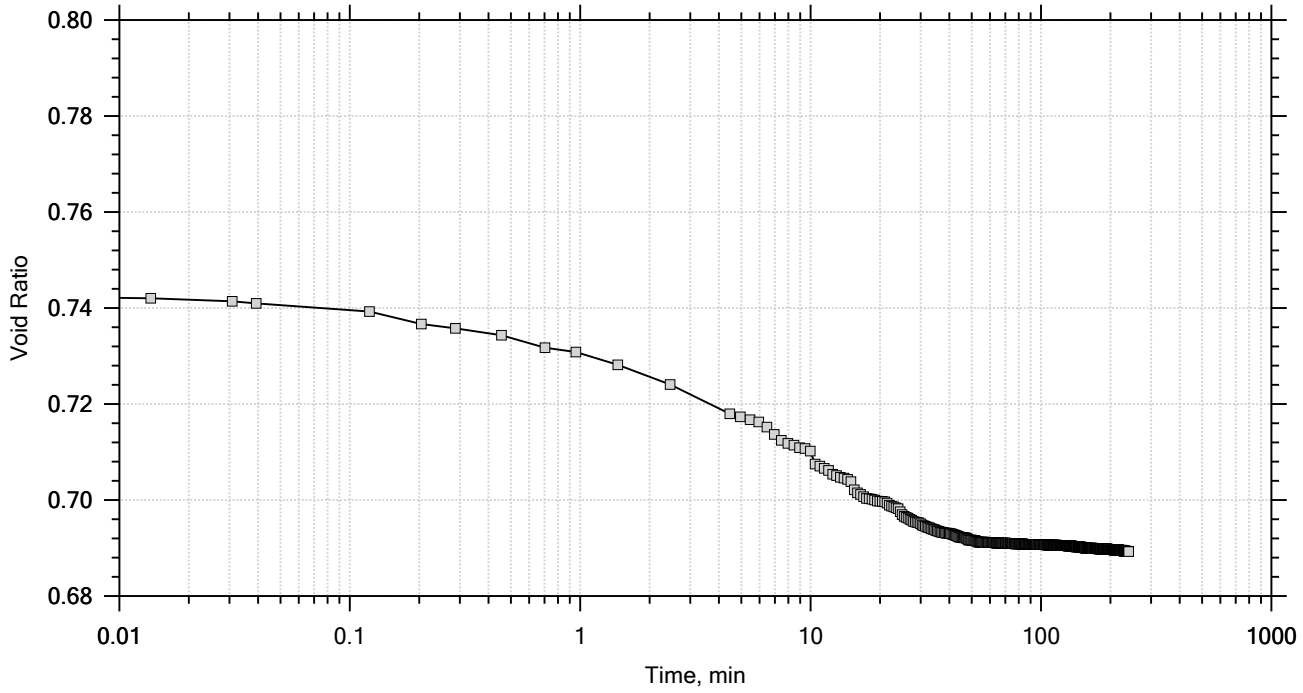


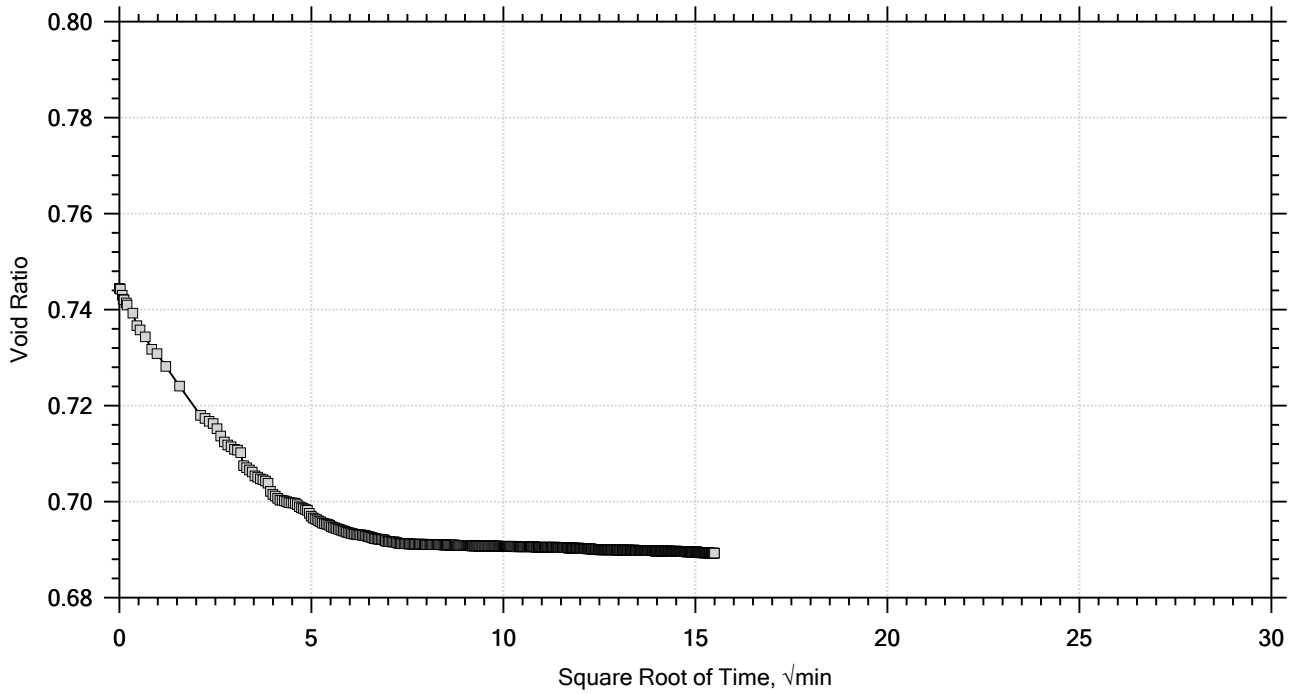


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

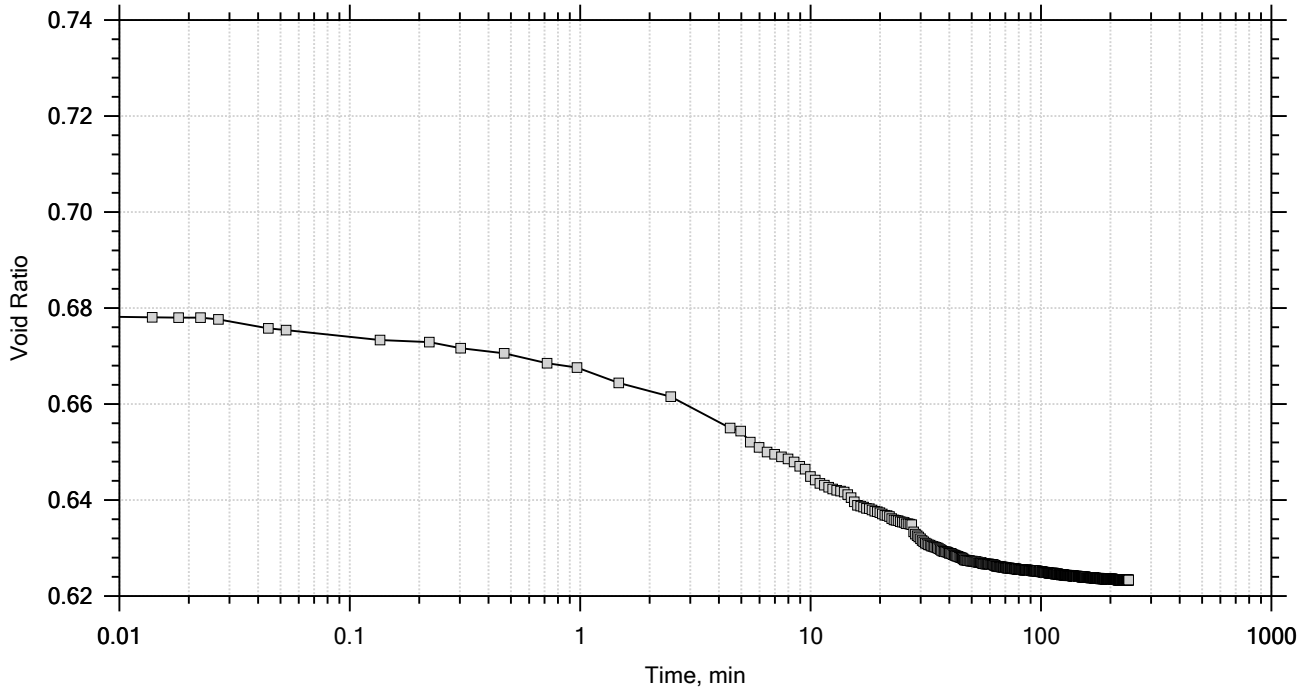


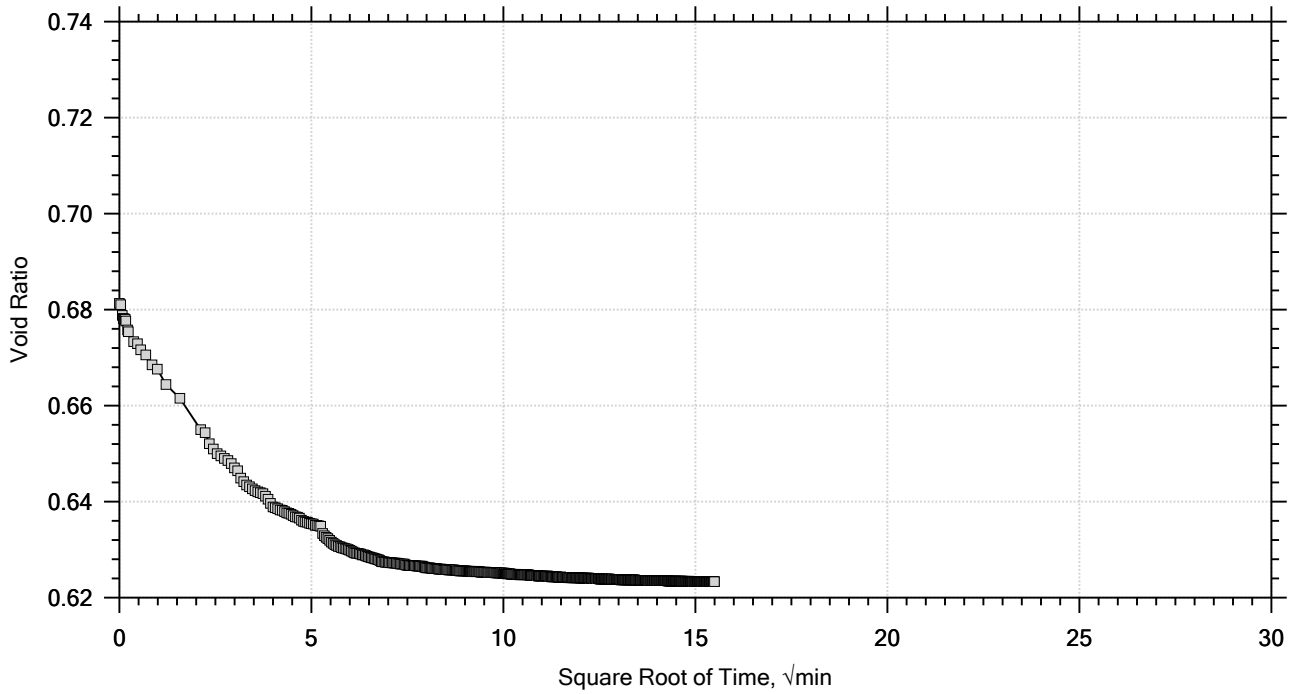


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

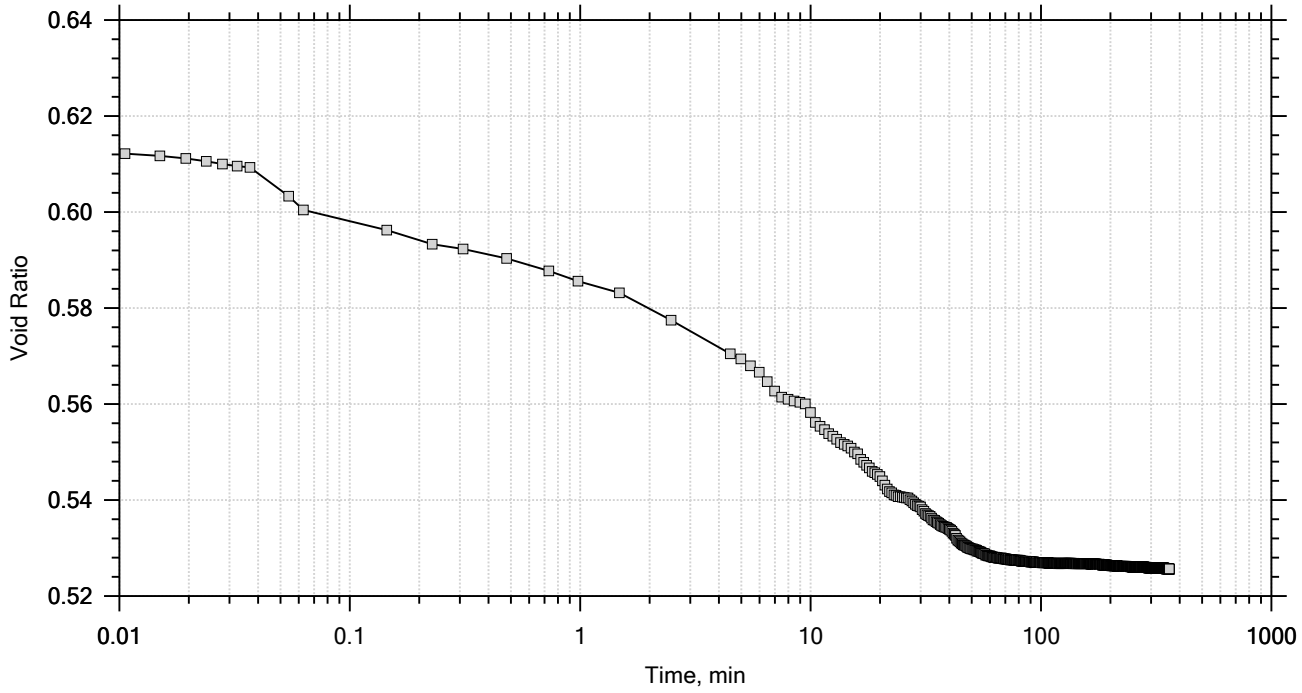


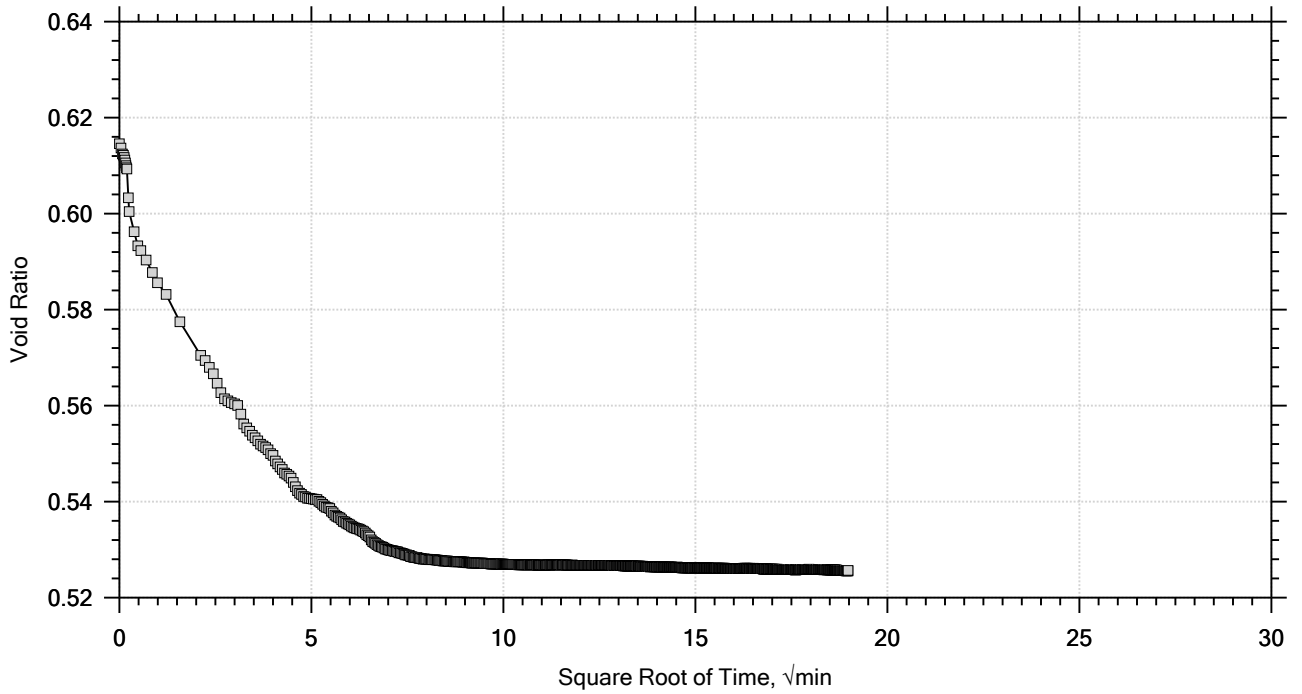


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

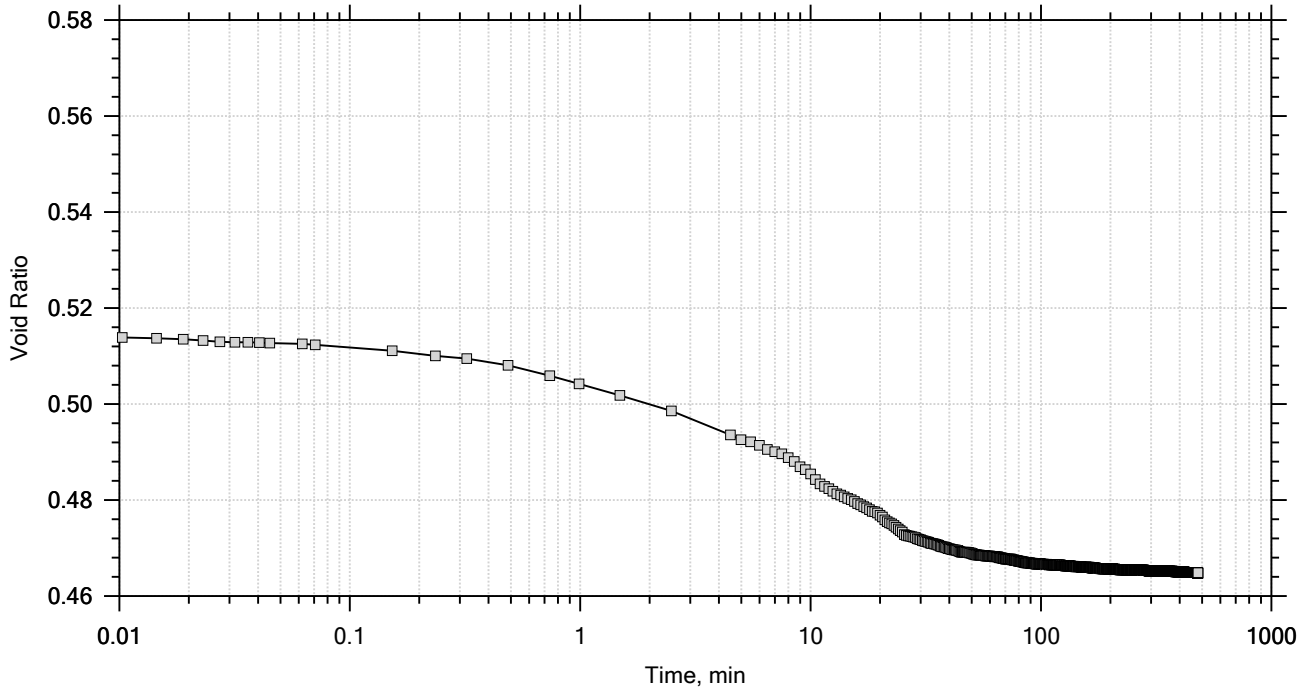


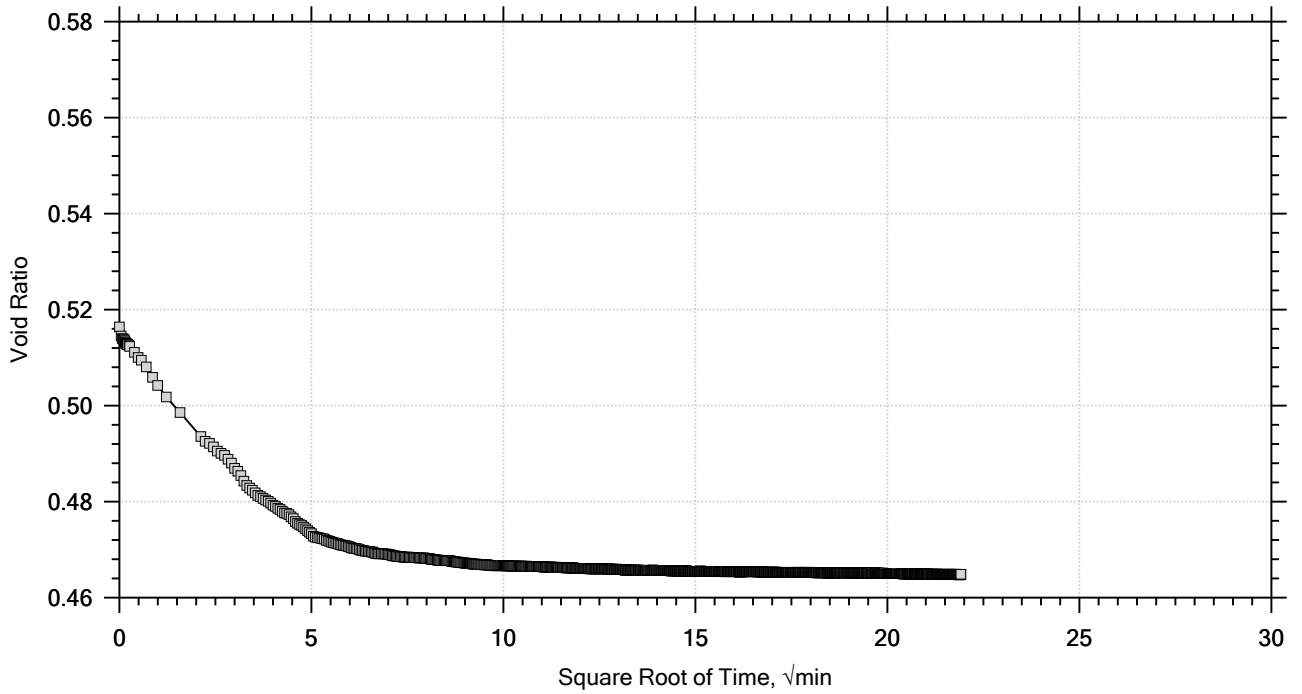


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

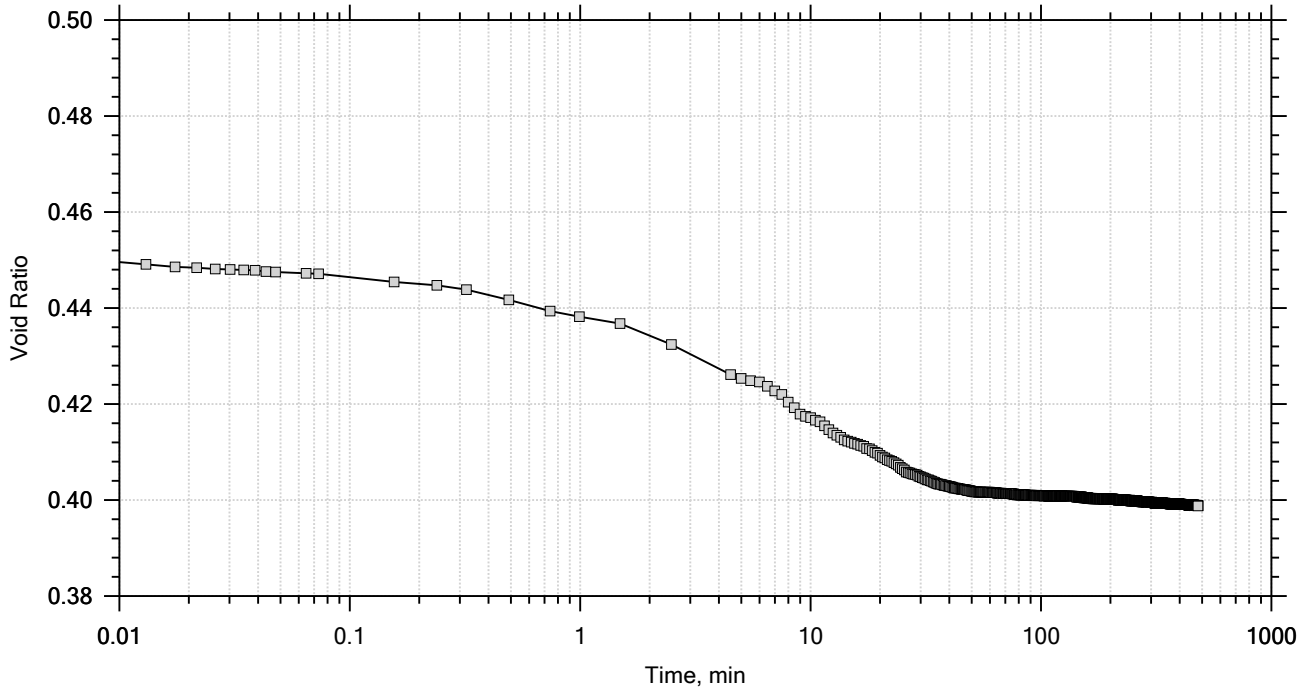


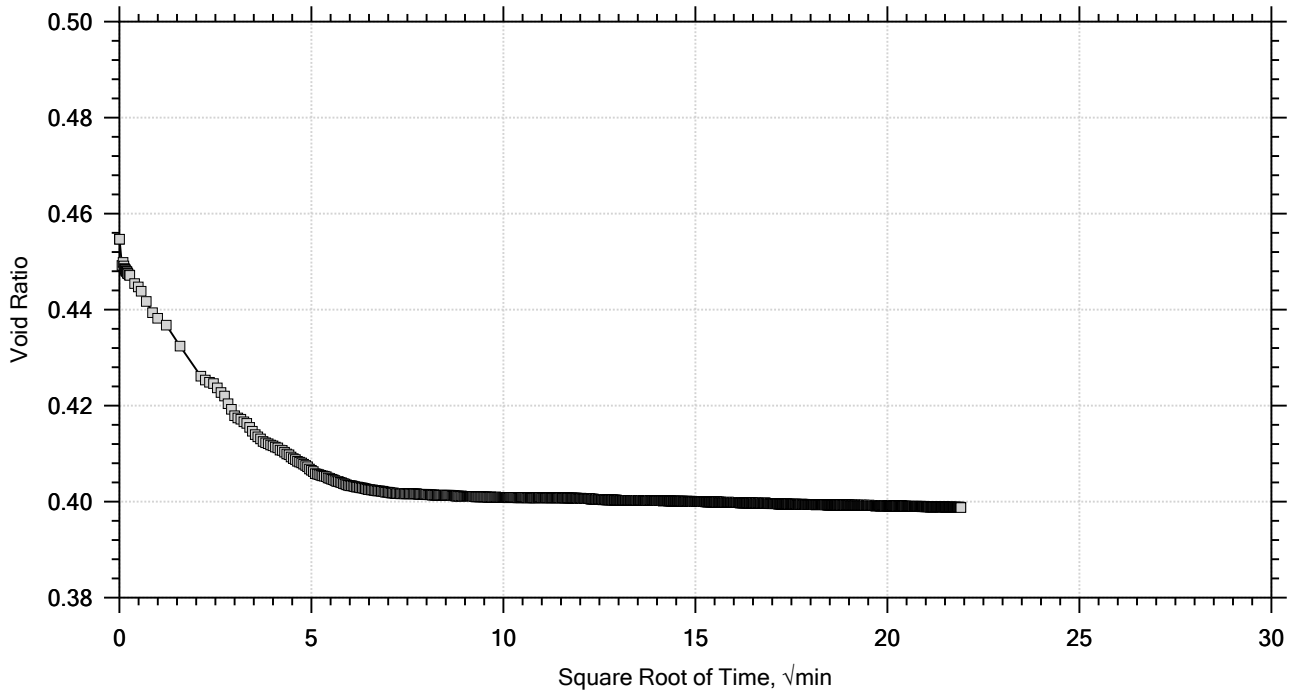


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

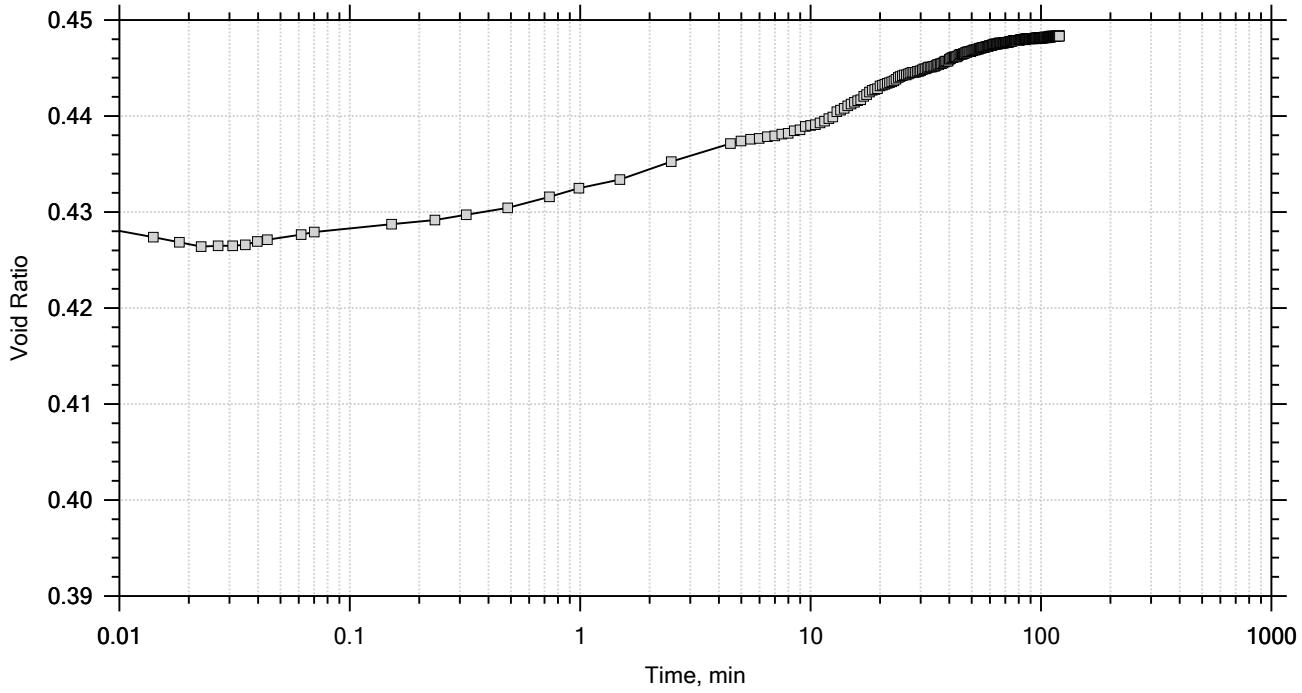


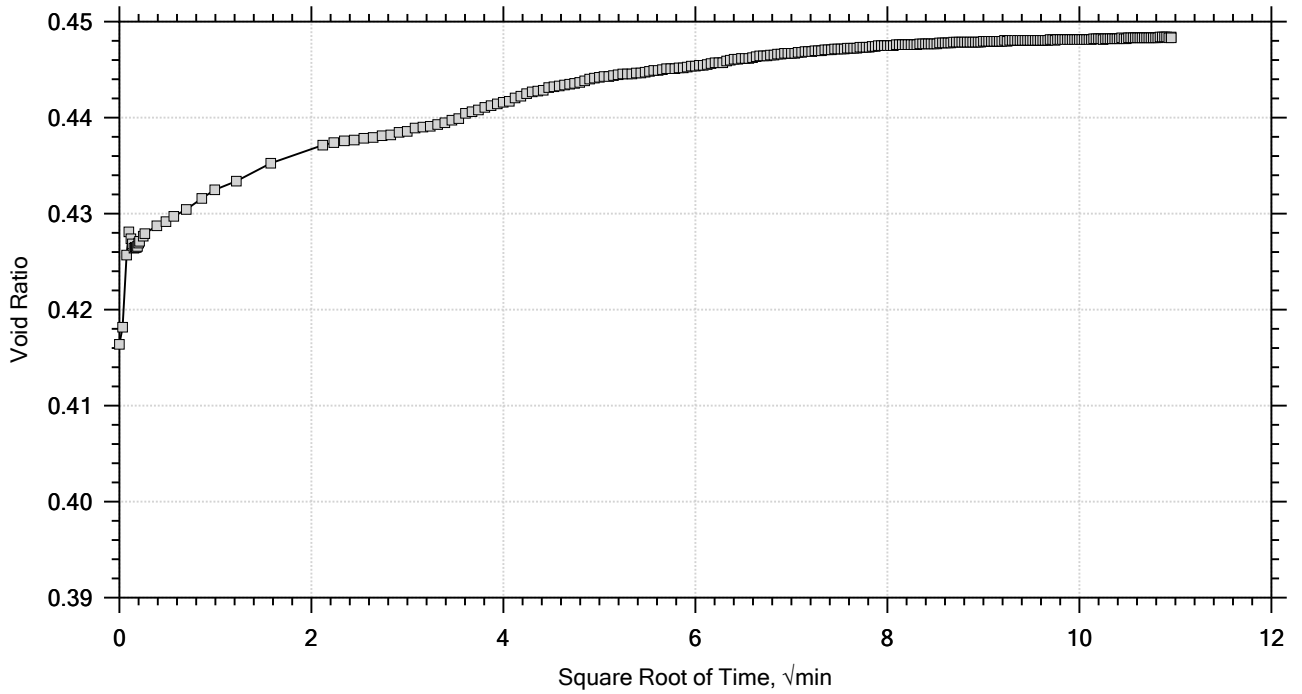


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

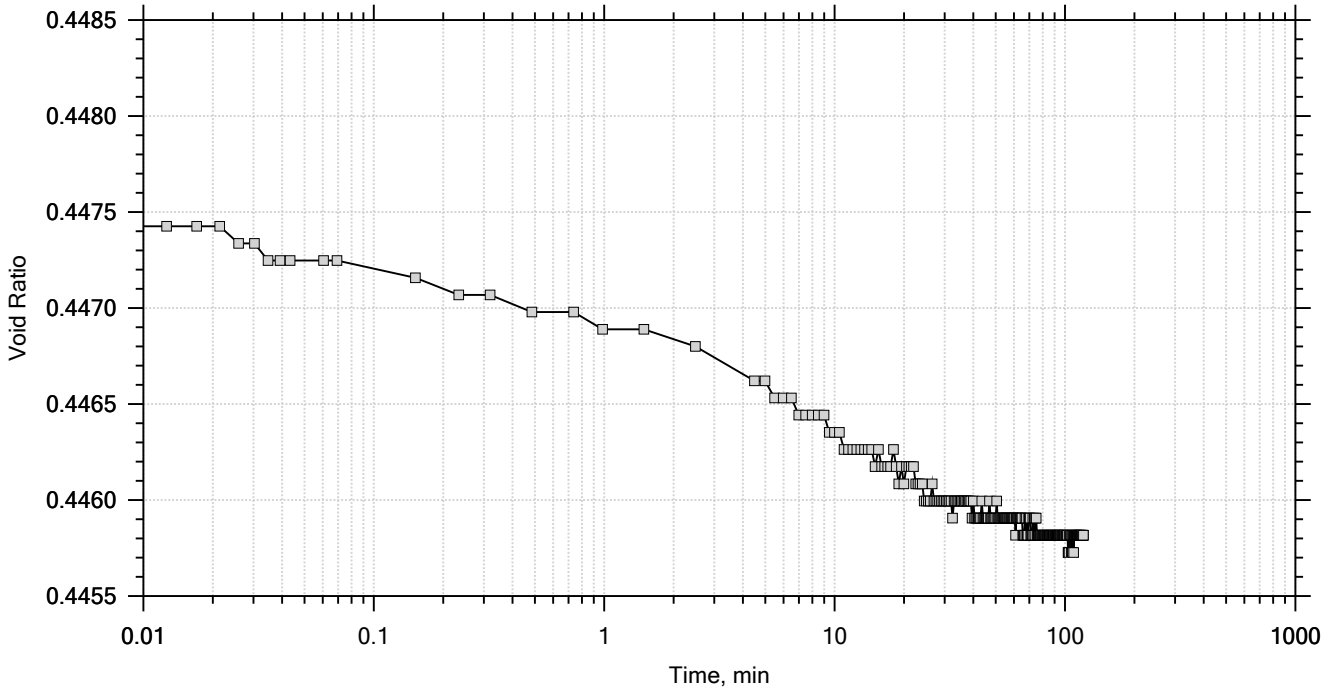


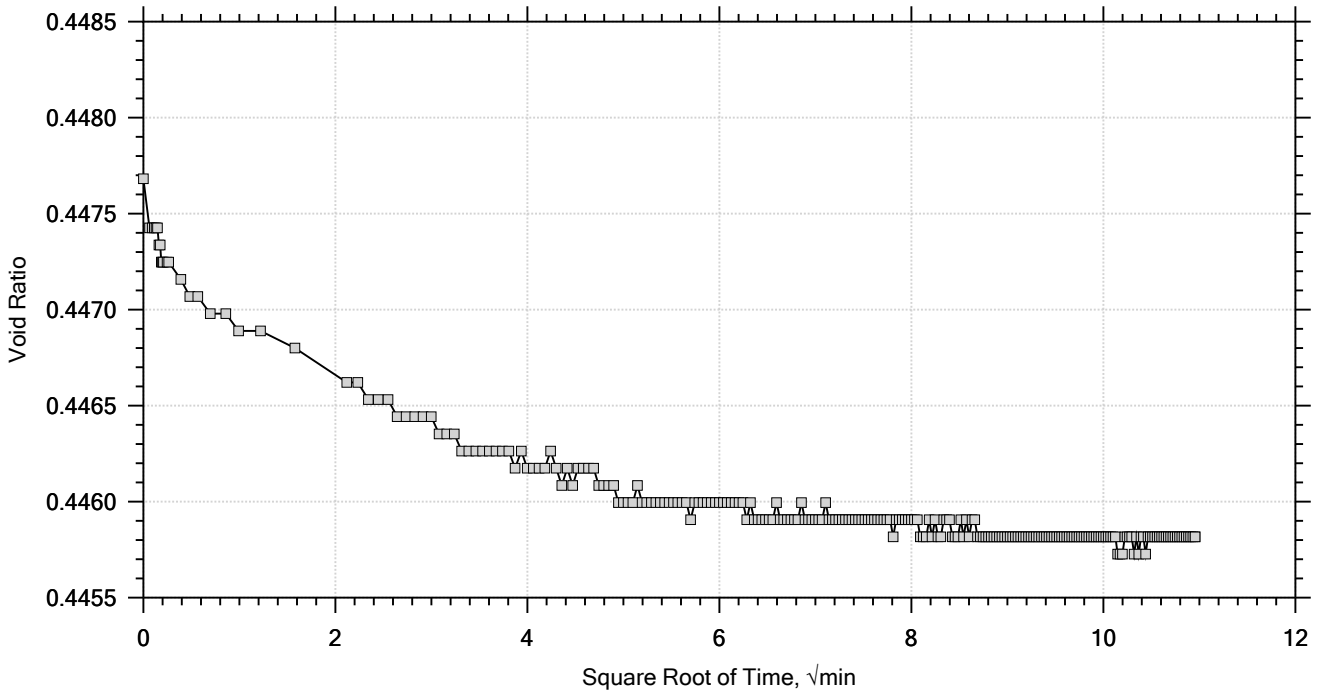


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

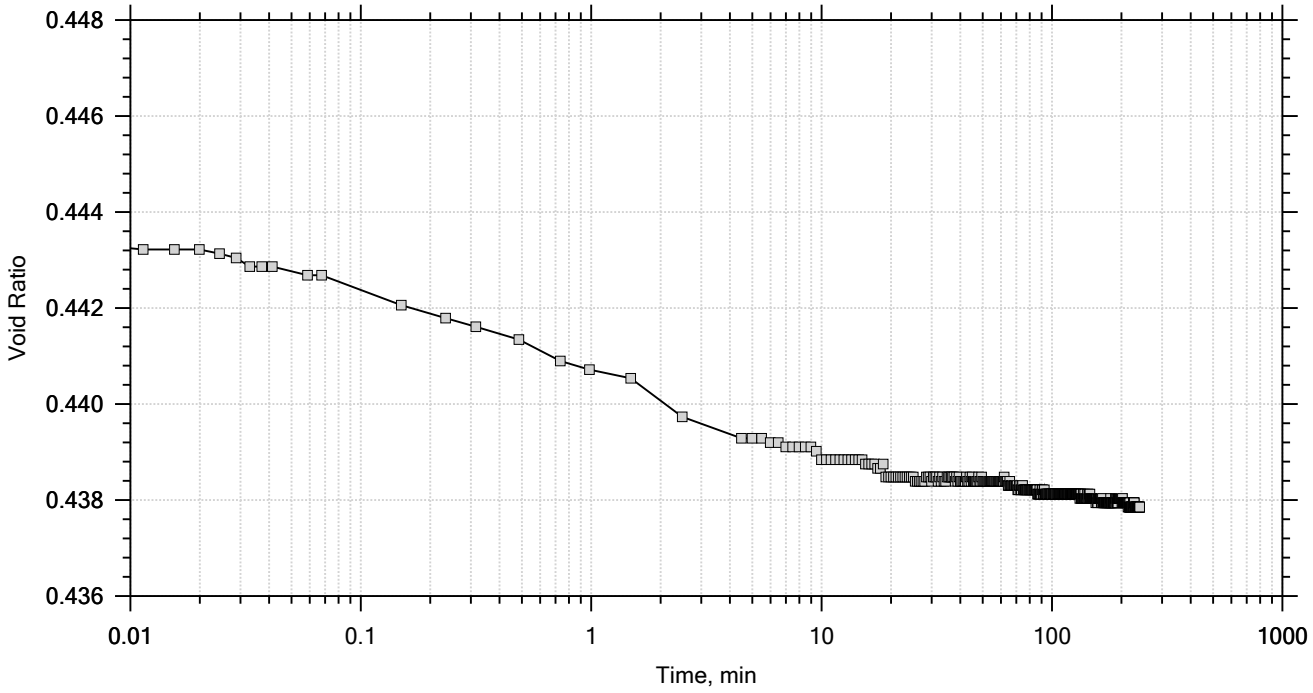


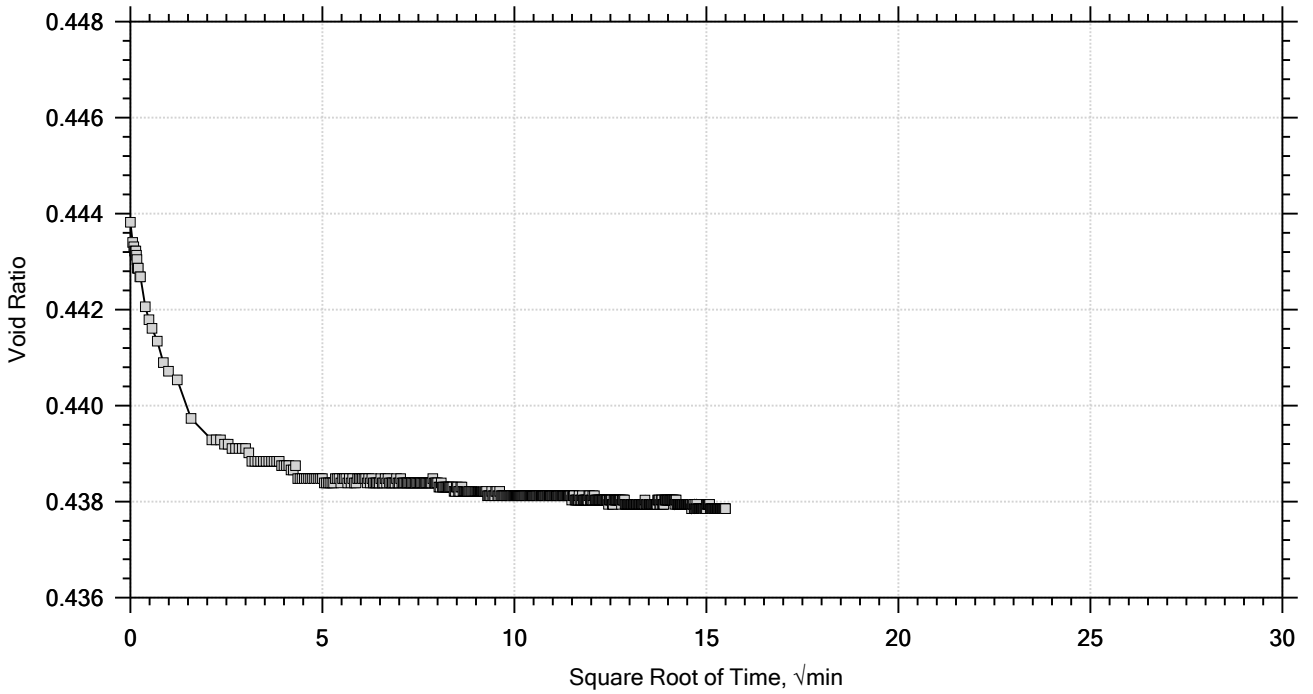


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 16
Constant Load Step
Stress: 1.79 tsf

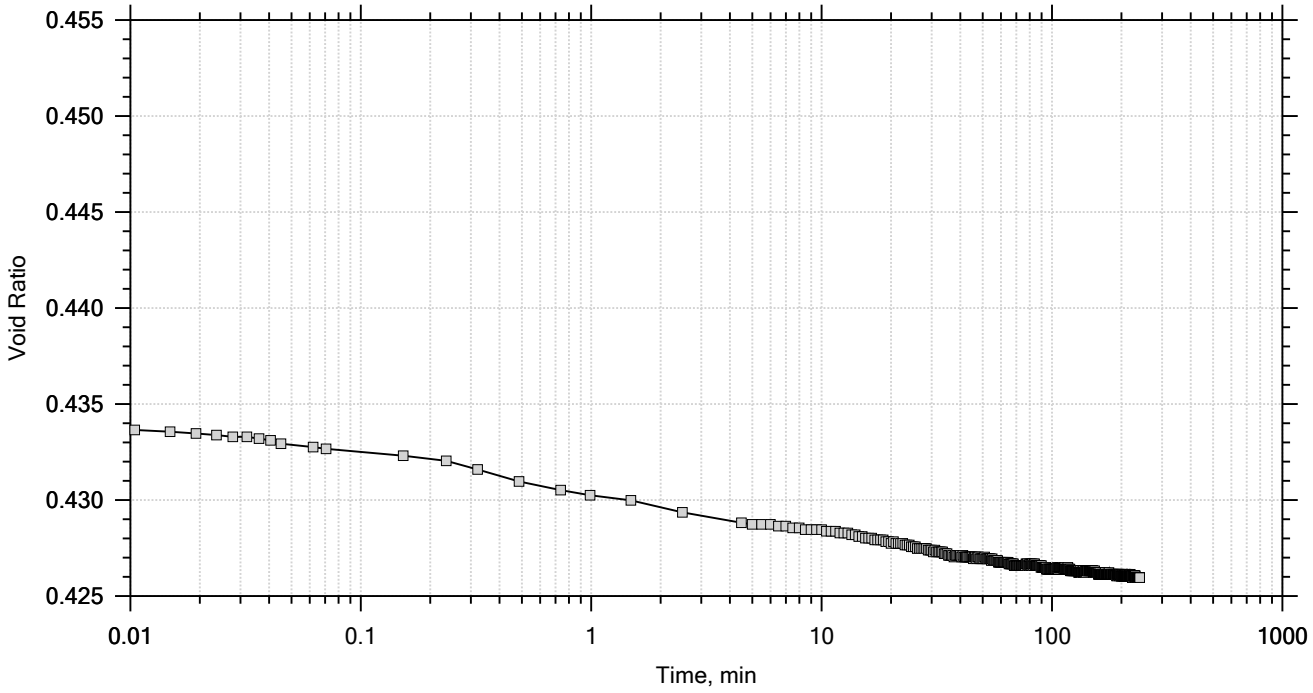


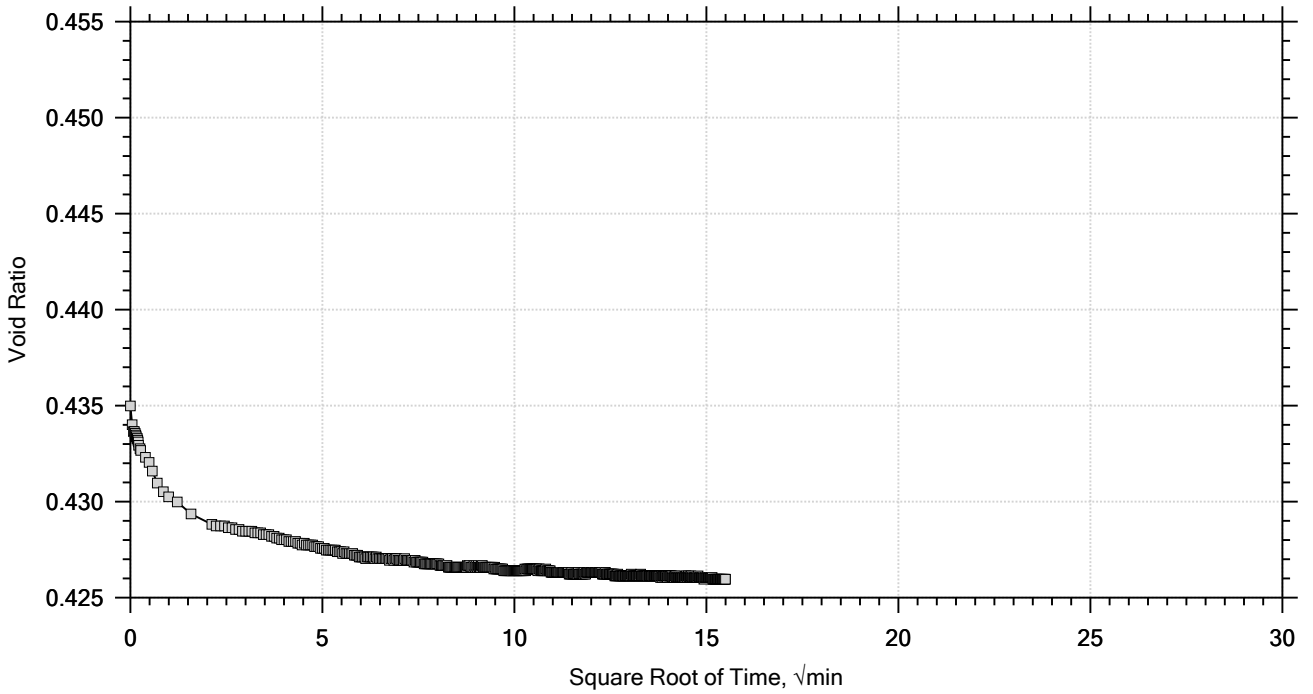


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 16
Constant Load Step
Stress: 3.57 tsf

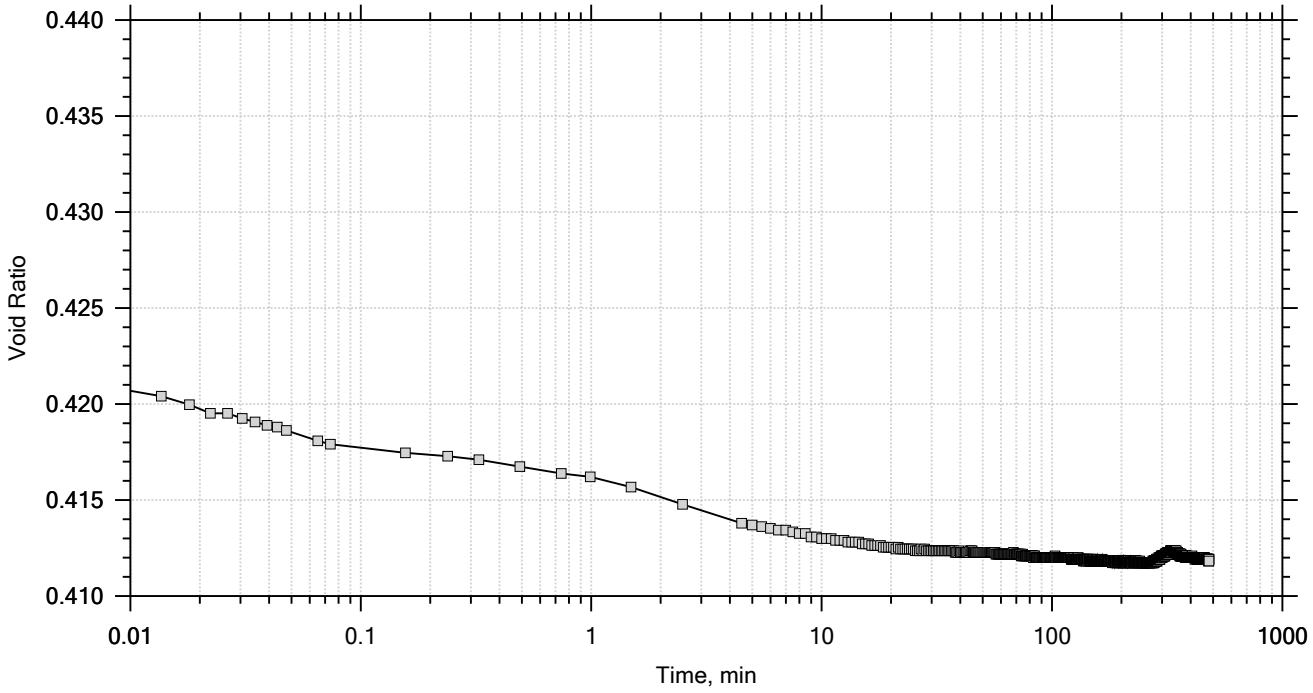


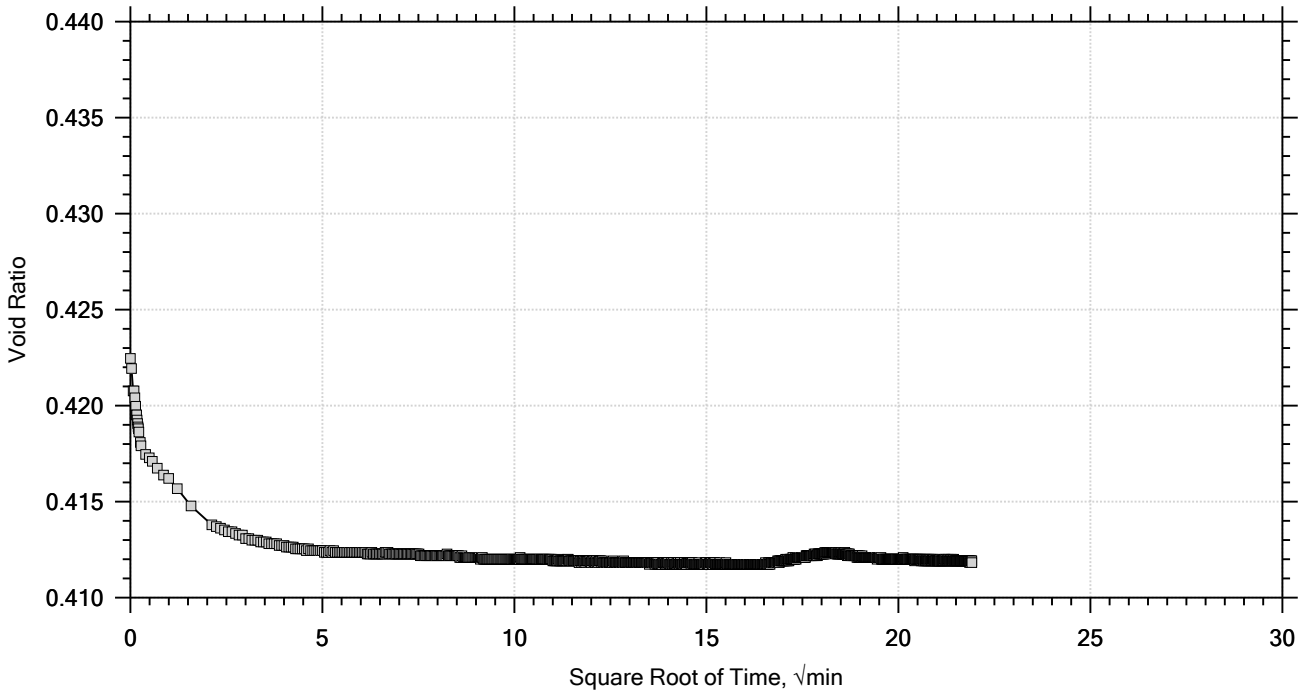


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 16
Constant Load Step
Stress: 7.14 tsf

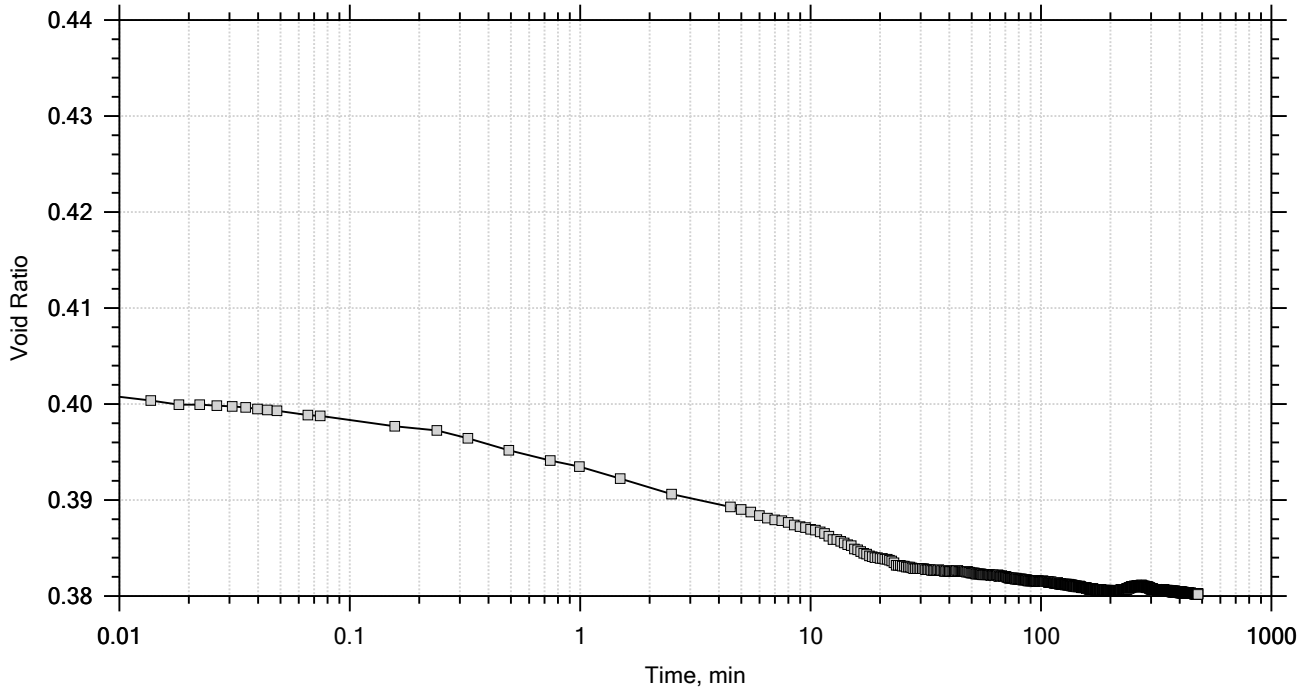


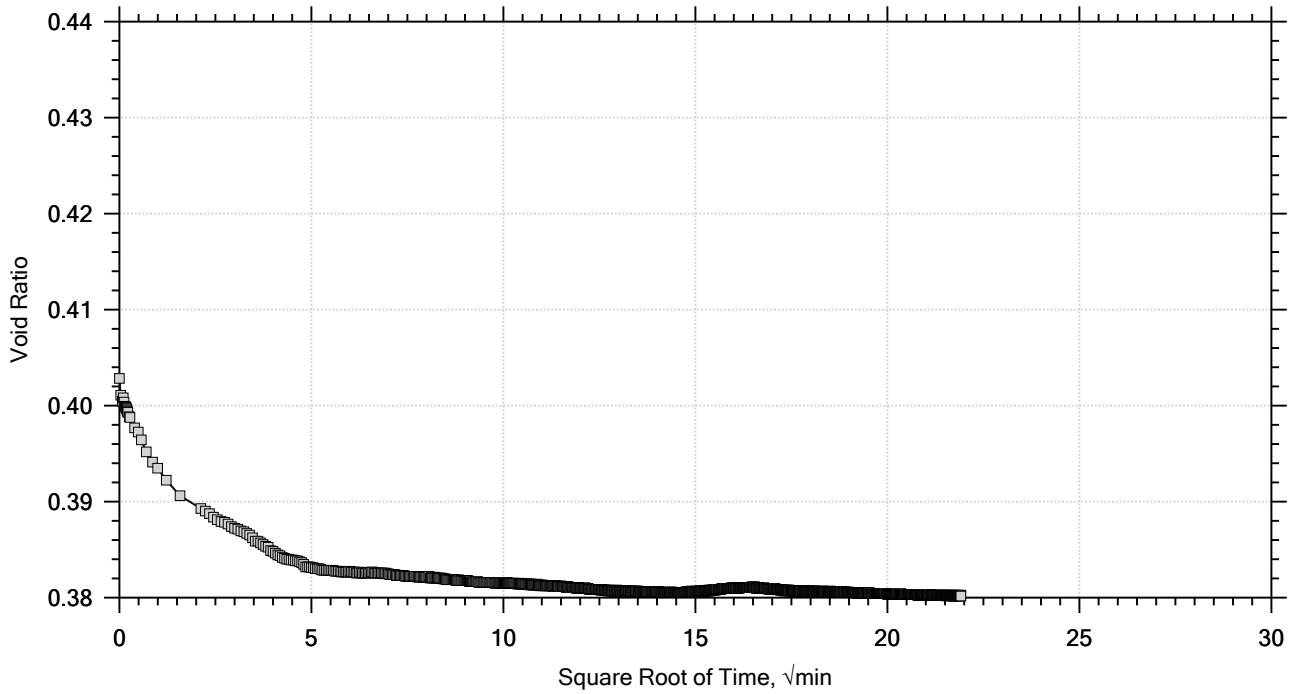


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 15 of 16
Constant Load Step
Stress: 14.3 tsf

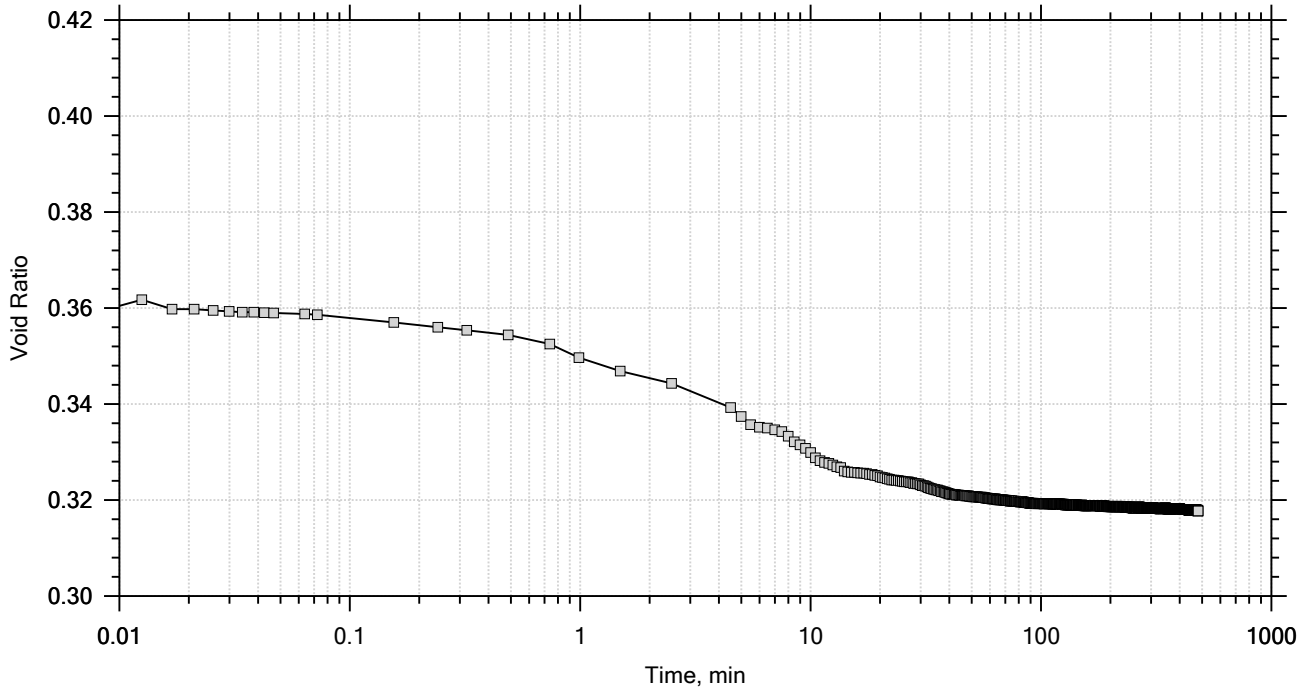


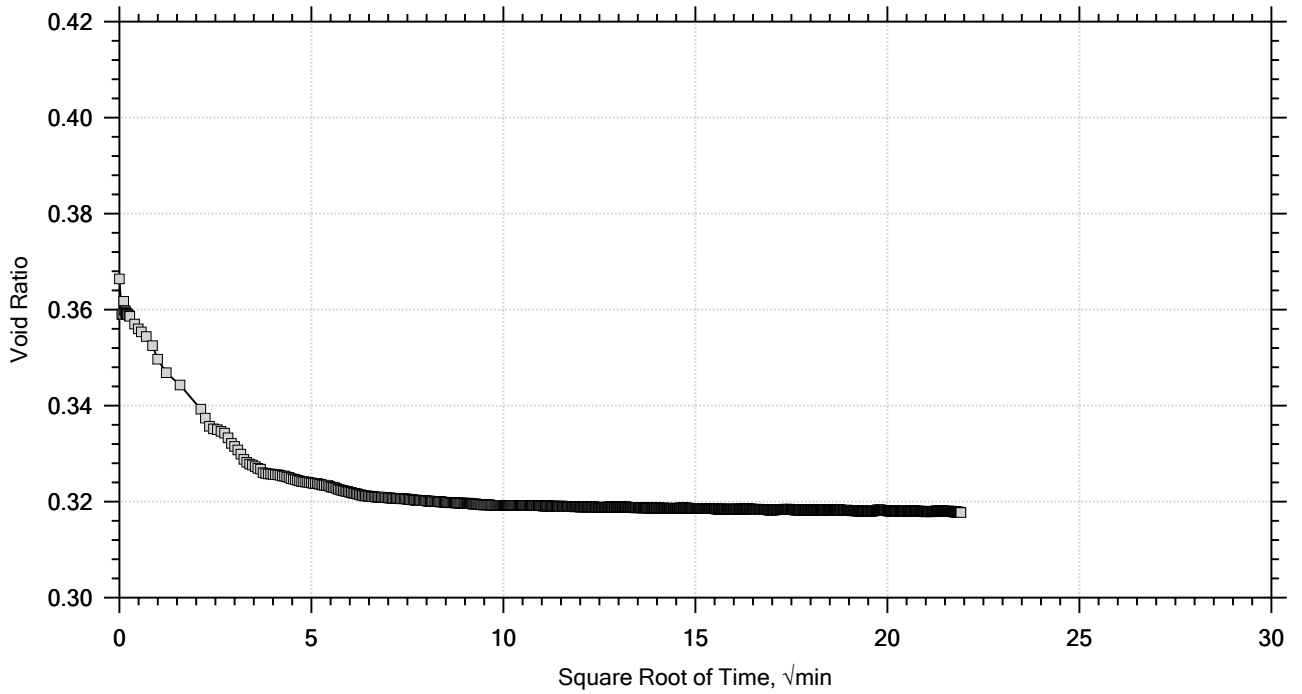


Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 16 of 16
Constant Load Step
Stress: 28.6 tsf





Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Specimen Diameter: 2.50 in	Estimated Specific Gravity: 2.62	Liquid Limit: 43
Initial Height: 1.00 in	Initial Void Ratio: 0.801	Plastic Limit: 21
Final Height: 0.76 in	Final Void Ratio: 0.372	Plasticity Index: 22

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID	M237	RING		2010
Mass Container, gm	5.9	108.73	108.73	6.8
Mass Container + Wet Soil, gm	297.01	261.03	244.24	141.33
Mass Container + Dry Soil, gm	228.4	225.76	225.76	122.98
Mass Dry Soil, gm	222.5	117.03	117.03	116.18
Water Content, %	30.84	30.14	15.79	15.79
Void Ratio	---	0.80	0.37	---
Degree of Saturation, %	---	98.60	111.16	---
Dry Unit Weight, pcf	---	90.822	119.19	---

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients

Step	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	Log T50 min	Cv ft²/s	Mv 1/tsf	k ft/day	Ca %
1	0.0560	0.002881	0.796	0.288	0.000	0.00e+00	5.14e-02	0.00e+00	0.00e+00
2	0.112	0.005662	0.791	0.566	0.000	0.00e+00	4.97e-02	0.00e+00	0.00e+00
3	0.223	0.01247	0.778	1.25	0.000	0.00e+00	6.13e-02	0.00e+00	0.00e+00
4	0.446	0.02687	0.753	2.69	0.000	0.00e+00	6.46e-02	0.00e+00	0.00e+00
5	0.893	0.06198	0.689	6.20	0.000	0.00e+00	7.86e-02	0.00e+00	0.00e+00
6	1.79	0.09858	0.623	9.86	0.000	0.00e+00	4.10e-02	0.00e+00	0.00e+00
7	3.57	0.1528	0.526	15.3	0.000	0.00e+00	3.04e-02	0.00e+00	0.00e+00
8	7.14	0.1866	0.465	18.7	0.000	0.00e+00	9.45e-03	0.00e+00	0.00e+00
9	14.3	0.2233	0.399	22.3	0.000	0.00e+00	5.14e-03	0.00e+00	0.00e+00
10	0.446	0.1958	0.448	19.6	0.000	0.00e+00	1.99e-03	0.00e+00	0.00e+00
11	0.893	0.1972	0.446	19.7	0.000	0.00e+00	3.11e-03	0.00e+00	0.00e+00
12	1.79	0.2016	0.438	20.2	0.000	0.00e+00	4.95e-03	0.00e+00	0.00e+00
13	3.57	0.2082	0.426	20.8	0.000	0.00e+00	3.70e-03	0.00e+00	0.00e+00
14	7.14	0.2160	0.412	21.6	0.000	0.00e+00	2.20e-03	0.00e+00	0.00e+00
15	14.3	0.2336	0.380	23.4	0.000	0.00e+00	2.46e-03	0.00e+00	0.00e+00
16	28.6	0.2683	0.318	26.8	0.000	0.00e+00	2.43e-03	0.00e+00	0.00e+00

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		
Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Square Root of Time Coefficients

Step	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	Sq.Rt. T90 min	Cv ft²/s	Mv 1/tsf	k ft/day
1	0.0560	0.002881	0.796	0.288	36.953	6.62e-07	5.14e-02	9.18e-05
2	0.112	0.005662	0.791	0.566	20.468	1.19e-06	4.97e-02	1.59e-04
3	0.223	0.01247	0.778	1.25	42.967	5.61e-07	6.13e-02	9.27e-05
4	0.446	0.02687	0.753	2.69	24.370	9.68e-07	6.46e-02	1.69e-04
5	0.893	0.06198	0.689	6.20	45.957	4.88e-07	7.86e-02	1.03e-04
6	1.79	0.09858	0.623	9.86	47.969	4.33e-07	4.10e-02	4.78e-05
7	3.57	0.1528	0.526	15.3	64.980	2.89e-07	3.04e-02	2.37e-05
8	7.14	0.1866	0.465	18.7	80.986	2.09e-07	9.45e-03	5.33e-06
9	14.3	0.2233	0.399	22.3	78.067	1.99e-07	5.14e-03	2.75e-06
10	0.446	0.1958	0.448	19.6	27.487	5.58e-07	1.99e-03	2.99e-06
11	0.893	0.1972	0.446	19.7	24.484	6.47e-07	3.11e-03	5.43e-06
12	1.79	0.2016	0.438	20.2	18.983	8.29e-07	4.95e-03	1.11e-05
13	3.57	0.2082	0.426	20.8	37.485	4.14e-07	3.70e-03	4.13e-06
14	7.14	0.2160	0.412	21.6	73.423	2.07e-07	2.20e-03	1.23e-06
15	14.3	0.2336	0.380	23.4	76.722	1.92e-07	2.46e-03	1.28e-06
16	28.6	0.2683	0.318	26.8	76.988	1.79e-07	2.43e-03	1.17e-06

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		
Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.051		0.00572	0.0000	0.0000	0.000	0.801
2	-0.047		0.00572	0.0000	0.0000	0.000	0.801
3	-0.043		0.00572	0.0000	0.0000	0.000	0.801
4	-0.038		0.00801	0.0000	0.0000	0.000	0.801
5	-0.034		0.0114	0.0000	0.0000	0.000	0.801
6	-0.030		0.0149	0.0000	4.966e-05	0.00497	0.801
7	-0.025		0.0194	0.0000	9.933e-05	0.00993	0.801
8	-0.021		0.0240	0.0000	0.0001490	0.0149	0.801
9	-0.017		0.0286	0.0000	0.0002483	0.0248	0.800
10	-0.012		0.0343	0.0000	0.0003477	0.0348	0.800
11	-0.008		0.0400	0.0000	0.0004470	0.0447	0.800
12	-0.004		0.0446	0.0000	0.0004966	0.0497	0.800
13	0.000	0.000	0.0504	0.0000	0.0005386	0.0539	0.800
14	0.001	0.026	0.0515	0.0000	0.0005463	0.0546	0.800
15	0.005	0.071	0.0572	0.0000	0.0006456	0.0646	0.800
16	0.010	0.098	0.0560	0.0000	0.0006953	0.0695	0.800
17	0.027	0.163	0.0515	0.0000	0.0006953	0.0695	0.800
18	0.035	0.188	0.0526	0.0000	0.0006953	0.0695	0.800
19	0.117	0.342	0.0538	0.0000	0.0007946	0.0795	0.799
20	0.199	0.446	0.0538	0.0000	0.0007946	0.0795	0.799
21	0.285	0.534	0.0538	0.0000	0.0008443	0.0844	0.799
22	0.453	0.673	0.0549	0.0000	0.0008940	0.0894	0.799
23	0.699	0.836	0.0549	0.0000	0.0009436	0.0944	0.799
24	0.951	0.975	0.0538	0.0000	0.0009933	0.0993	0.799
25	1.449	1.204	0.0549	0.0000	0.001093	0.109	0.799
26	2.449	1.565	0.0549	0.0000	0.001142	0.114	0.799
27	4.449	2.109	0.0572	0.0000	0.001440	0.144	0.798
28	4.951	2.225	0.0549	0.0000	0.001490	0.149	0.798
29	5.450	2.335	0.0549	0.0000	0.001540	0.154	0.798
30	5.953	2.440	0.0549	0.0000	0.001639	0.164	0.798
31	6.452	2.540	0.0549	0.0000	0.001689	0.169	0.798
32	6.949	2.636	0.0538	0.0000	0.001738	0.174	0.798
33	7.450	2.730	0.0538	0.0000	0.001788	0.179	0.798
34	7.952	2.820	0.0538	0.0000	0.001788	0.179	0.798
35	8.451	2.907	0.0560	0.0000	0.001838	0.184	0.798
36	8.950	2.992	0.0572	0.0000	0.001838	0.184	0.798
37	9.451	3.074	0.0560	0.0000	0.001838	0.184	0.798
38	9.951	3.155	0.0560	0.0000	0.001838	0.184	0.798
39	10.452	3.233	0.0549	0.0000	0.001887	0.189	0.797
40	10.952	3.309	0.0549	0.0000	0.001887	0.189	0.797
41	11.450	3.384	0.0549	0.0000	0.001937	0.194	0.797
42	11.949	3.457	0.0549	0.0000	0.001937	0.194	0.797
43	12.450	3.528	0.0549	0.0000	0.001987	0.199	0.797
44	12.950	3.599	0.0549	0.0000	0.001987	0.199	0.797
45	13.452	3.668	0.0549	0.0000	0.002036	0.204	0.797
46	13.949	3.735	0.0549	0.0000	0.002036	0.204	0.797
47	14.453	3.802	0.0538	0.0000	0.002036	0.204	0.797
48	14.951	3.867	0.0549	0.0000	0.002086	0.209	0.797
49	15.453	3.931	0.0549	0.0000	0.002086	0.209	0.797
50	15.951	3.994	0.0549	0.0000	0.002086	0.209	0.797

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.453	4.056	0.0549	0.0000	0.002086	0.209	0.797
52	16.951	4.117	0.0549	0.0000	0.002086	0.209	0.797
53	17.449	4.177	0.0549	0.0000	0.002136	0.214	0.797
54	17.951	4.237	0.0549	0.0000	0.002136	0.214	0.797
55	18.452	4.296	0.0549	0.0000	0.002185	0.219	0.797
56	18.949	4.353	0.0560	0.0000	0.002185	0.219	0.797
57	19.452	4.410	0.0549	0.0000	0.002185	0.219	0.797
58	19.951	4.467	0.0549	0.0000	0.002235	0.223	0.797
59	20.451	4.522	0.0549	0.0000	0.002235	0.223	0.797
60	20.951	4.577	0.0549	0.0000	0.002285	0.228	0.797
61	21.450	4.631	0.0549	0.0000	0.002285	0.228	0.797
62	21.950	4.685	0.0560	0.0000	0.002285	0.228	0.797
63	22.451	4.738	0.0549	0.0000	0.002285	0.228	0.797
64	22.953	4.791	0.0549	0.0000	0.002334	0.233	0.797
65	23.452	4.843	0.0560	0.0000	0.002384	0.238	0.797
66	23.949	4.894	0.0549	0.0000	0.002384	0.238	0.797
67	24.450	4.945	0.0549	0.0000	0.002434	0.243	0.797
68	24.953	4.995	0.0560	0.0000	0.002533	0.253	0.796
69	25.451	5.045	0.0549	0.0000	0.002483	0.248	0.796
70	25.951	5.094	0.0560	0.0000	0.002533	0.253	0.796
71	26.453	5.143	0.0549	0.0000	0.002533	0.253	0.796
72	26.951	5.191	0.0549	0.0000	0.002632	0.263	0.796
73	27.450	5.239	0.0549	0.0000	0.002583	0.258	0.796
74	27.949	5.287	0.0549	0.0000	0.002632	0.263	0.796
75	28.450	5.334	0.0549	0.0000	0.002682	0.268	0.796
76	28.951	5.381	0.0549	0.0000	0.002682	0.268	0.796
77	29.452	5.427	0.0549	0.0000	0.002682	0.268	0.796
78	29.950	5.473	0.0549	0.0000	0.002682	0.268	0.796
79	30.452	5.518	0.0549	0.0000	0.002682	0.268	0.796
80	30.952	5.563	0.0549	0.0000	0.002732	0.273	0.796
81	31.450	5.608	0.0549	0.0000	0.002732	0.273	0.796
82	31.952	5.653	0.0549	0.0000	0.002732	0.273	0.796
83	32.452	5.697	0.0549	0.0000	0.002732	0.273	0.796
84	32.950	5.740	0.0549	0.0000	0.002732	0.273	0.796
85	33.452	5.784	0.0549	0.0000	0.002781	0.278	0.796
86	33.950	5.827	0.0549	0.0000	0.002781	0.278	0.796
87	34.452	5.870	0.0549	0.0000	0.002781	0.278	0.796
88	34.950	5.912	0.0549	0.0000	0.002781	0.278	0.796
89	35.452	5.954	0.0549	0.0000	0.002781	0.278	0.796
90	35.950	5.996	0.0549	0.0000	0.002781	0.278	0.796
91	36.450	6.037	0.0549	0.0000	0.002781	0.278	0.796
92	36.953	6.079	0.0549	0.0000	0.002831	0.283	0.796
93	37.452	6.120	0.0549	0.0000	0.002781	0.278	0.796
94	37.949	6.160	0.0560	0.0000	0.002781	0.278	0.796
95	38.451	6.201	0.0549	0.0000	0.002781	0.278	0.796
96	38.951	6.241	0.0549	0.0000	0.002831	0.283	0.796
97	39.451	6.281	0.0549	0.0000	0.002781	0.278	0.796
98	39.950	6.321	0.0549	0.0000	0.002781	0.278	0.796
99	40.451	6.360	0.0549	0.0000	0.002831	0.283	0.796
100	40.953	6.399	0.0549	0.0000	0.002831	0.283	0.796

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 16
Constant Load Step
Stress: 0.056 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.452	6.438	0.0549	0.0000	0.002781	0.278	0.796
102	41.950	6.477	0.0549	0.0000	0.002781	0.278	0.796
103	42.452	6.516	0.0549	0.0000	0.002781	0.278	0.796
104	42.949	6.554	0.0549	0.0000	0.002781	0.278	0.796
105	43.450	6.592	0.0549	0.0000	0.002781	0.278	0.796
106	43.953	6.630	0.0549	0.0000	0.002781	0.278	0.796
107	44.451	6.667	0.0549	0.0000	0.002781	0.278	0.796
108	44.953	6.705	0.0549	0.0000	0.002781	0.278	0.796
109	45.451	6.742	0.0549	0.0000	0.002781	0.278	0.796
110	45.952	6.779	0.0549	0.0000	0.002831	0.283	0.796
111	46.449	6.815	0.0549	0.0000	0.002831	0.283	0.796
112	46.951	6.852	0.0560	0.0000	0.002831	0.283	0.796
113	47.450	6.888	0.0549	0.0000	0.002831	0.283	0.796
114	47.952	6.925	0.0549	0.0000	0.002831	0.283	0.796
115	48.450	6.961	0.0549	0.0000	0.002831	0.283	0.796
116	48.952	6.997	0.0560	0.0000	0.002831	0.283	0.796
117	49.449	7.032	0.0549	0.0000	0.002831	0.283	0.796
118	49.950	7.068	0.0549	0.0000	0.002831	0.283	0.796
119	50.450	7.103	0.0549	0.0000	0.002831	0.283	0.796
120	50.950	7.138	0.0549	0.0000	0.002831	0.283	0.796
121	51.451	7.173	0.0560	0.0000	0.002831	0.283	0.796
122	51.950	7.208	0.0549	0.0000	0.002831	0.283	0.796
123	52.452	7.242	0.0549	0.0000	0.002831	0.283	0.796
124	52.951	7.277	0.0549	0.0000	0.002831	0.283	0.796
125	53.449	7.311	0.0560	0.0000	0.002831	0.283	0.796
126	53.951	7.345	0.0549	0.0000	0.002831	0.283	0.796
127	54.451	7.379	0.0549	0.0000	0.002831	0.283	0.796
128	54.952	7.413	0.0549	0.0000	0.002831	0.283	0.796
129	55.450	7.446	0.0560	0.0000	0.002881	0.288	0.796
130	55.952	7.480	0.0549	0.0000	0.002831	0.283	0.796
131	56.449	7.513	0.0549	0.0000	0.002831	0.283	0.796
132	56.953	7.547	0.0549	0.0000	0.002831	0.283	0.796
133	57.449	7.580	0.0560	0.0000	0.002881	0.288	0.796
134	57.950	7.612	0.0549	0.0000	0.002881	0.288	0.796
135	58.451	7.645	0.0549	0.0000	0.002881	0.288	0.796
136	58.949	7.678	0.0549	0.0000	0.002881	0.288	0.796
137	59.450	7.710	0.0549	0.0000	0.002881	0.288	0.796
138	59.951	7.743	0.0549	0.0000	0.002881	0.288	0.796
139	59.960	7.743	0.0549	0.0000	0.002881	0.288	0.796

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.035		0.0560	0.0000	0.002881	0.288	0.796
2	-0.031		0.0560	0.0000	0.002881	0.288	0.796
3	-0.027		0.0560	0.0000	0.002881	0.288	0.796
4	-0.023		0.0606	0.0000	0.002930	0.293	0.796
5	-0.018		0.0732	0.0000	0.003278	0.328	0.795
6	-0.014		0.0823	0.0000	0.003477	0.348	0.795
7	-0.010		0.0915	0.0000	0.003675	0.368	0.794
8	-0.005		0.0984	0.0000	0.003725	0.372	0.794
9	-0.001		0.105	0.0000	0.003824	0.382	0.794
10	0.000	0.000	0.106	0.0000	0.003837	0.384	0.794
11	0.003	0.057	0.110	0.0000	0.003874	0.387	0.794
12	0.008	0.088	0.111	0.0000	0.003924	0.392	0.794
13	0.012	0.109	0.109	0.0000	0.003924	0.392	0.794
14	0.016	0.128	0.108	0.0000	0.003924	0.392	0.794
15	0.020	0.143	0.106	0.0000	0.003924	0.392	0.794
16	0.025	0.158	0.105	0.0000	0.003924	0.392	0.794
17	0.042	0.204	0.108	0.0000	0.004023	0.402	0.794
18	0.050	0.224	0.110	0.0000	0.004023	0.402	0.794
19	0.132	0.363	0.111	0.0000	0.004072	0.407	0.794
20	0.218	0.467	0.111	0.0000	0.004122	0.412	0.793
21	0.300	0.547	0.110	0.0000	0.004122	0.412	0.793
22	0.465	0.682	0.110	0.0000	0.004172	0.417	0.793
23	0.719	0.848	0.110	0.0000	0.004221	0.422	0.793
24	0.965	0.982	0.111	0.0000	0.004321	0.432	0.793
25	1.467	1.211	0.111	0.0000	0.004420	0.442	0.793
26	2.467	1.571	0.111	0.0000	0.004519	0.452	0.793
27	4.467	2.114	0.111	0.0000	0.004668	0.467	0.792
28	4.968	2.229	0.112	0.0000	0.004668	0.467	0.792
29	5.466	2.338	0.110	0.0000	0.004668	0.467	0.792
30	5.967	2.443	0.111	0.0000	0.004718	0.472	0.792
31	6.465	2.543	0.111	0.0000	0.004718	0.472	0.792
32	6.968	2.640	0.110	0.0000	0.004718	0.472	0.792
33	7.468	2.733	0.111	0.0000	0.004768	0.477	0.792
34	7.967	2.823	0.112	0.0000	0.004768	0.477	0.792
35	8.468	2.910	0.112	0.0000	0.004817	0.482	0.792
36	8.966	2.994	0.111	0.0000	0.004867	0.487	0.792
37	9.467	3.077	0.110	0.0000	0.004867	0.487	0.792
38	9.969	3.157	0.111	0.0000	0.004917	0.492	0.792
39	10.466	3.235	0.112	0.0000	0.004917	0.492	0.792
40	10.969	3.312	0.111	0.0000	0.004966	0.497	0.792
41	11.466	3.386	0.111	0.0000	0.004966	0.497	0.792
42	11.965	3.459	0.111	0.0000	0.004966	0.497	0.792
43	12.469	3.531	0.110	0.0000	0.004966	0.497	0.792
44	12.967	3.601	0.110	0.0000	0.005016	0.502	0.792
45	13.468	3.670	0.111	0.0000	0.005016	0.502	0.792
46	13.967	3.737	0.111	0.0000	0.005016	0.502	0.792
47	14.466	3.803	0.111	0.0000	0.005016	0.502	0.792
48	14.965	3.869	0.111	0.0000	0.005016	0.502	0.792
49	15.468	3.933	0.111	0.0000	0.005016	0.502	0.792
50	15.966	3.996	0.112	0.0000	0.005066	0.507	0.792

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.466	4.058	0.111	0.0000	0.005066	0.507	0.792
52	16.968	4.119	0.112	0.0000	0.005066	0.507	0.792
53	17.469	4.180	0.111	0.0000	0.005115	0.512	0.792
54	17.965	4.238	0.111	0.0000	0.005115	0.512	0.792
55	18.467	4.297	0.112	0.0000	0.005115	0.512	0.792
56	18.968	4.355	0.111	0.0000	0.005165	0.517	0.792
57	19.469	4.412	0.111	0.0000	0.005165	0.517	0.792
58	19.966	4.468	0.111	0.0000	0.005165	0.517	0.792
59	20.468	4.524	0.111	0.0000	0.005215	0.521	0.792
60	20.969	4.579	0.110	0.0000	0.005215	0.521	0.792
61	21.469	4.633	0.111	0.0000	0.005215	0.521	0.792
62	21.967	4.687	0.111	0.0000	0.005215	0.521	0.792
63	22.469	4.740	0.112	0.0000	0.005215	0.521	0.792
64	22.967	4.792	0.111	0.0000	0.005215	0.521	0.792
65	23.469	4.844	0.111	0.0000	0.005264	0.526	0.791
66	23.968	4.896	0.111	0.0000	0.005264	0.526	0.791
67	24.468	4.947	0.111	0.0000	0.005264	0.526	0.791
68	24.966	4.997	0.111	0.0000	0.005264	0.526	0.791
69	25.465	5.046	0.112	0.0000	0.005264	0.526	0.791
70	25.965	5.096	0.111	0.0000	0.005314	0.531	0.791
71	26.467	5.145	0.111	0.0000	0.005314	0.531	0.791
72	26.968	5.193	0.111	0.0000	0.005314	0.531	0.791
73	27.466	5.241	0.112	0.0000	0.005364	0.536	0.791
74	27.968	5.288	0.111	0.0000	0.005314	0.531	0.791
75	28.469	5.336	0.111	0.0000	0.005364	0.536	0.791
76	28.967	5.382	0.111	0.0000	0.005364	0.536	0.791
77	29.466	5.428	0.112	0.0000	0.005364	0.536	0.791
78	29.965	5.474	0.111	0.0000	0.005364	0.536	0.791
79	30.466	5.520	0.111	0.0000	0.005364	0.536	0.791
80	30.968	5.565	0.111	0.0000	0.005364	0.536	0.791
81	31.466	5.609	0.111	0.0000	0.005413	0.541	0.791
82	31.969	5.654	0.111	0.0000	0.005413	0.541	0.791
83	32.465	5.698	0.111	0.0000	0.005413	0.541	0.791
84	32.966	5.742	0.112	0.0000	0.005413	0.541	0.791
85	33.469	5.785	0.111	0.0000	0.005413	0.541	0.791
86	33.967	5.828	0.111	0.0000	0.005413	0.541	0.791
87	34.468	5.871	0.111	0.0000	0.005413	0.541	0.791
88	34.968	5.913	0.112	0.0000	0.005413	0.541	0.791
89	35.467	5.955	0.111	0.0000	0.005413	0.541	0.791
90	35.968	5.997	0.111	0.0000	0.005413	0.541	0.791
91	36.465	6.039	0.111	0.0000	0.005413	0.541	0.791
92	36.968	6.080	0.111	0.0000	0.005463	0.546	0.791
93	37.465	6.121	0.112	0.0000	0.005463	0.546	0.791
94	37.965	6.162	0.111	0.0000	0.005463	0.546	0.791
95	38.466	6.202	0.112	0.0000	0.005463	0.546	0.791
96	38.965	6.242	0.111	0.0000	0.005463	0.546	0.791
97	39.465	6.282	0.111	0.0000	0.005463	0.546	0.791
98	39.965	6.322	0.112	0.0000	0.005463	0.546	0.791
99	40.468	6.361	0.111	0.0000	0.005463	0.546	0.791
100	40.968	6.401	0.111	0.0000	0.005463	0.546	0.791

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 16
Constant Load Step
Stress: 0.112 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.466	6.439	0.111	0.0000	0.005463	0.546	0.791
102	41.965	6.478	0.111	0.0000	0.005463	0.546	0.791
103	42.469	6.517	0.112	0.0000	0.005463	0.546	0.791
104	42.965	6.555	0.111	0.0000	0.005463	0.546	0.791
105	43.466	6.593	0.112	0.0000	0.005513	0.551	0.791
106	43.965	6.631	0.111	0.0000	0.005513	0.551	0.791
107	44.466	6.668	0.111	0.0000	0.005463	0.546	0.791
108	44.966	6.706	0.111	0.0000	0.005513	0.551	0.791
109	45.465	6.743	0.111	0.0000	0.005513	0.551	0.791
110	45.967	6.780	0.111	0.0000	0.005513	0.551	0.791
111	46.467	6.817	0.112	0.0000	0.005513	0.551	0.791
112	46.969	6.853	0.111	0.0000	0.005562	0.556	0.791
113	47.467	6.890	0.111	0.0000	0.005562	0.556	0.791
114	47.968	6.926	0.110	0.0000	0.005562	0.556	0.791
115	48.467	6.962	0.111	0.0000	0.005562	0.556	0.791
116	48.966	6.998	0.111	0.0000	0.005562	0.556	0.791
117	49.467	7.033	0.111	0.0000	0.005562	0.556	0.791
118	49.965	7.069	0.111	0.0000	0.005562	0.556	0.791
119	50.467	7.104	0.111	0.0000	0.005562	0.556	0.791
120	50.965	7.139	0.111	0.0000	0.005562	0.556	0.791
121	51.465	7.174	0.112	0.0000	0.005562	0.556	0.791
122	51.966	7.209	0.111	0.0000	0.005612	0.561	0.791
123	52.465	7.243	0.111	0.0000	0.005612	0.561	0.791
124	52.968	7.278	0.111	0.0000	0.005612	0.561	0.791
125	53.466	7.312	0.111	0.0000	0.005612	0.561	0.791
126	53.967	7.346	0.111	0.0000	0.005612	0.561	0.791
127	54.466	7.380	0.110	0.0000	0.005612	0.561	0.791
128	54.968	7.414	0.111	0.0000	0.005612	0.561	0.791
129	55.465	7.447	0.112	0.0000	0.005612	0.561	0.791
130	55.968	7.481	0.111	0.0000	0.005612	0.561	0.791
131	56.465	7.514	0.111	0.0000	0.005612	0.561	0.791
132	56.967	7.548	0.111	0.0000	0.005612	0.561	0.791
133	57.465	7.581	0.112	0.0000	0.005612	0.561	0.791
134	57.966	7.614	0.111	0.0000	0.005612	0.561	0.791
135	58.465	7.646	0.111	0.0000	0.005662	0.566	0.791
136	58.968	7.679	0.111	0.0000	0.005612	0.561	0.791
137	59.468	7.712	0.112	0.0000	0.005662	0.566	0.791
138	59.965	7.744	0.111	0.0000	0.005662	0.566	0.791
139	59.974	7.744	0.111	0.0000	0.005662	0.566	0.791

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.034		0.111	0.0000	0.005662	0.566	0.791
2	-0.030		0.111	0.0000	0.005662	0.566	0.791
3	-0.025		0.118	0.0000	0.005711	0.571	0.791
4	-0.021		0.141	0.0000	0.006009	0.601	0.790
5	-0.017		0.158	0.0000	0.006357	0.636	0.789
6	-0.013		0.173	0.0000	0.006456	0.646	0.789
7	-0.008		0.188	0.0000	0.006605	0.661	0.789
8	-0.004		0.200	0.0000	0.006754	0.675	0.789
9	0.000	0.000	0.212	0.0000	0.006801	0.680	0.789
10	0.000	0.017	0.213	0.0000	0.006804	0.680	0.789
11	0.005	0.068	0.222	0.0000	0.006854	0.685	0.789
12	0.009	0.095	0.220	0.0000	0.006854	0.685	0.789
13	0.014	0.116	0.217	0.0000	0.006854	0.685	0.789
14	0.018	0.134	0.214	0.0000	0.006854	0.685	0.789
15	0.022	0.149	0.215	0.0000	0.006903	0.690	0.788
16	0.027	0.164	0.215	0.0000	0.006903	0.690	0.788
17	0.044	0.209	0.218	0.0000	0.006953	0.695	0.788
18	0.052	0.229	0.221	0.0000	0.006953	0.695	0.788
19	0.134	0.366	0.221	0.0000	0.007052	0.705	0.788
20	0.216	0.465	0.220	0.0000	0.007102	0.710	0.788
21	0.303	0.550	0.222	0.0000	0.007152	0.715	0.788
22	0.466	0.683	0.221	0.0000	0.007251	0.725	0.788
23	0.719	0.848	0.223	0.0000	0.007400	0.740	0.788
24	0.970	0.985	0.220	0.0000	0.007499	0.750	0.787
25	1.467	1.211	0.221	0.0000	0.007698	0.770	0.787
26	2.468	1.571	0.222	0.0000	0.008046	0.805	0.786
27	4.469	2.114	0.222	0.0000	0.008840	0.884	0.785
28	4.967	2.229	0.223	0.0000	0.008989	0.899	0.785
29	5.468	2.338	0.222	0.0000	0.009089	0.909	0.785
30	5.968	2.443	0.222	0.0000	0.009089	0.909	0.785
31	6.467	2.543	0.222	0.0000	0.009238	0.924	0.784
32	6.969	2.640	0.223	0.0000	0.009436	0.944	0.784
33	7.468	2.733	0.222	0.0000	0.009486	0.949	0.784
34	7.968	2.823	0.222	0.0000	0.009536	0.954	0.784
35	8.466	2.910	0.223	0.0000	0.009536	0.954	0.784
36	8.967	2.995	0.221	0.0000	0.009585	0.959	0.784
37	9.469	3.077	0.221	0.0000	0.009685	0.968	0.783
38	9.967	3.157	0.223	0.0000	0.009784	0.978	0.783
39	10.467	3.235	0.221	0.0000	0.009883	0.988	0.783
40	10.969	3.312	0.223	0.0000	0.009933	0.993	0.783
41	11.468	3.387	0.222	0.0000	0.01003	1.00	0.783
42	11.967	3.459	0.222	0.0000	0.01008	1.01	0.783
43	12.466	3.531	0.222	0.0000	0.01008	1.01	0.783
44	12.968	3.601	0.222	0.0000	0.01013	1.01	0.783
45	13.467	3.670	0.223	0.0000	0.01013	1.01	0.783
46	13.970	3.738	0.221	0.0000	0.01018	1.02	0.783
47	14.468	3.804	0.222	0.0000	0.01018	1.02	0.783
48	14.970	3.869	0.222	0.0000	0.01023	1.02	0.782
49	15.467	3.933	0.223	0.0000	0.01028	1.03	0.782
50	15.967	3.996	0.222	0.0000	0.01028	1.03	0.782

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.469	4.058	0.223	0.0000	0.01033	1.03	0.782
52	16.968	4.119	0.222	0.0000	0.01038	1.04	0.782
53	17.466	4.179	0.222	0.0000	0.01043	1.04	0.782
54	17.969	4.239	0.222	0.0000	0.01043	1.04	0.782
55	18.467	4.297	0.222	0.0000	0.01048	1.05	0.782
56	18.970	4.355	0.222	0.0000	0.01058	1.06	0.782
57	19.470	4.412	0.222	0.0000	0.01063	1.06	0.782
58	19.968	4.469	0.223	0.0000	0.01073	1.07	0.782
59	20.469	4.524	0.222	0.0000	0.01078	1.08	0.781
60	20.968	4.579	0.222	0.0000	0.01088	1.09	0.781
61	21.470	4.634	0.223	0.0000	0.01093	1.09	0.781
62	21.967	4.687	0.222	0.0000	0.01103	1.10	0.781
63	22.468	4.740	0.222	0.0000	0.01103	1.10	0.781
64	22.970	4.793	0.222	0.0000	0.01108	1.11	0.781
65	23.468	4.844	0.222	0.0000	0.01112	1.11	0.781
66	23.967	4.896	0.222	0.0000	0.01112	1.11	0.781
67	24.468	4.947	0.222	0.0000	0.01112	1.11	0.781
68	24.966	4.997	0.223	0.0000	0.01122	1.12	0.781
69	25.470	5.047	0.222	0.0000	0.01122	1.12	0.781
70	25.969	5.096	0.221	0.0000	0.01122	1.12	0.781
71	26.469	5.145	0.223	0.0000	0.01127	1.13	0.781
72	26.967	5.193	0.221	0.0000	0.01132	1.13	0.781
73	27.469	5.241	0.221	0.0000	0.01137	1.14	0.780
74	27.969	5.289	0.224	0.0000	0.01142	1.14	0.780
75	28.467	5.335	0.222	0.0000	0.01142	1.14	0.780
76	28.967	5.382	0.222	0.0000	0.01147	1.15	0.780
77	29.468	5.428	0.223	0.0000	0.01147	1.15	0.780
78	29.966	5.474	0.223	0.0000	0.01152	1.15	0.780
79	30.469	5.520	0.222	0.0000	0.01157	1.16	0.780
80	30.970	5.565	0.224	0.0000	0.01162	1.16	0.780
81	31.467	5.610	0.222	0.0000	0.01162	1.16	0.780
82	31.968	5.654	0.221	0.0000	0.01162	1.16	0.780
83	32.470	5.698	0.223	0.0000	0.01162	1.16	0.780
84	32.968	5.742	0.222	0.0000	0.01167	1.17	0.780
85	33.467	5.785	0.221	0.0000	0.01167	1.17	0.780
86	33.967	5.828	0.223	0.0000	0.01172	1.17	0.780
87	34.469	5.871	0.222	0.0000	0.01172	1.17	0.780
88	34.970	5.914	0.224	0.0000	0.01177	1.18	0.780
89	35.470	5.956	0.223	0.0000	0.01177	1.18	0.780
90	35.969	5.997	0.222	0.0000	0.01177	1.18	0.780
91	36.467	6.039	0.222	0.0000	0.01182	1.18	0.780
92	36.967	6.080	0.221	0.0000	0.01182	1.18	0.780
93	37.466	6.121	0.221	0.0000	0.01182	1.18	0.780
94	37.970	6.162	0.223	0.0000	0.01187	1.19	0.780
95	38.467	6.202	0.223	0.0000	0.01187	1.19	0.780
96	38.969	6.243	0.222	0.0000	0.01187	1.19	0.780
97	39.468	6.282	0.222	0.0000	0.01187	1.19	0.780
98	39.966	6.322	0.222	0.0000	0.01187	1.19	0.780
99	40.469	6.362	0.222	0.0000	0.01187	1.19	0.780
100	40.970	6.401	0.222	0.0000	0.01187	1.19	0.780

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.468	6.440	0.222	0.0000	0.01192	1.19	0.779
102	41.970	6.478	0.223	0.0000	0.01192	1.19	0.779
103	42.469	6.517	0.223	0.0000	0.01192	1.19	0.779
104	42.967	6.555	0.222	0.0000	0.01197	1.20	0.779
105	43.467	6.593	0.222	0.0000	0.01197	1.20	0.779
106	43.968	6.631	0.222	0.0000	0.01197	1.20	0.779
107	44.467	6.668	0.222	0.0000	0.01197	1.20	0.779
108	44.967	6.706	0.221	0.0000	0.01197	1.20	0.779
109	45.468	6.743	0.222	0.0000	0.01197	1.20	0.779
110	45.969	6.780	0.222	0.0000	0.01197	1.20	0.779
111	46.466	6.817	0.222	0.0000	0.01202	1.20	0.779
112	46.970	6.853	0.222	0.0000	0.01202	1.20	0.779
113	47.469	6.890	0.223	0.0000	0.01202	1.20	0.779
114	47.969	6.926	0.223	0.0000	0.01202	1.20	0.779
115	48.469	6.962	0.222	0.0000	0.01202	1.20	0.779
116	48.967	6.998	0.221	0.0000	0.01202	1.20	0.779
117	49.469	7.033	0.221	0.0000	0.01202	1.20	0.779
118	49.967	7.069	0.222	0.0000	0.01202	1.20	0.779
119	50.469	7.104	0.222	0.0000	0.01207	1.21	0.779
120	50.968	7.139	0.222	0.0000	0.01207	1.21	0.779
121	51.470	7.174	0.223	0.0000	0.01207	1.21	0.779
122	51.967	7.209	0.223	0.0000	0.01207	1.21	0.779
123	52.470	7.244	0.221	0.0000	0.01207	1.21	0.779
124	52.968	7.278	0.221	0.0000	0.01207	1.21	0.779
125	53.467	7.312	0.221	0.0000	0.01207	1.21	0.779
126	53.970	7.346	0.222	0.0000	0.01207	1.21	0.779
127	54.466	7.380	0.222	0.0000	0.01207	1.21	0.779
128	54.968	7.414	0.222	0.0000	0.01207	1.21	0.779
129	55.470	7.448	0.223	0.0000	0.01207	1.21	0.779
130	55.968	7.481	0.221	0.0000	0.01207	1.21	0.779
131	56.466	7.514	0.221	0.0000	0.01207	1.21	0.779
132	56.966	7.548	0.222	0.0000	0.01207	1.21	0.779
133	57.468	7.581	0.222	0.0000	0.01212	1.21	0.779
134	57.968	7.614	0.222	0.0000	0.01212	1.21	0.779
135	58.467	7.646	0.222	0.0000	0.01212	1.21	0.779
136	58.970	7.679	0.223	0.0000	0.01212	1.21	0.779
137	59.466	7.711	0.222	0.0000	0.01212	1.21	0.779
138	59.969	7.744	0.222	0.0000	0.01212	1.21	0.779
139	60.469	7.776	0.222	0.0000	0.01212	1.21	0.779
140	60.968	7.808	0.223	0.0000	0.01212	1.21	0.779
141	61.467	7.840	0.222	0.0000	0.01212	1.21	0.779
142	61.969	7.872	0.222	0.0000	0.01212	1.21	0.779
143	62.469	7.904	0.223	0.0000	0.01212	1.21	0.779
144	62.967	7.935	0.222	0.0000	0.01212	1.21	0.779
145	63.469	7.967	0.223	0.0000	0.01212	1.21	0.779
146	63.968	7.998	0.222	0.0000	0.01212	1.21	0.779
147	64.470	8.029	0.222	0.0000	0.01212	1.21	0.779
148	64.969	8.060	0.222	0.0000	0.01212	1.21	0.779
149	65.466	8.091	0.222	0.0000	0.01217	1.22	0.779
150	65.970	8.122	0.222	0.0000	0.01217	1.22	0.779

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.468	8.153	0.222	0.0000	0.01217	1.22	0.779
152	66.968	8.183	0.222	0.0000	0.01217	1.22	0.779
153	67.467	8.214	0.222	0.0000	0.01217	1.22	0.779
154	67.969	8.244	0.223	0.0000	0.01217	1.22	0.779
155	68.468	8.275	0.222	0.0000	0.01217	1.22	0.779
156	68.969	8.305	0.222	0.0000	0.01222	1.22	0.779
157	69.466	8.335	0.222	0.0000	0.01222	1.22	0.779
158	69.967	8.365	0.222	0.0000	0.01222	1.22	0.779
159	70.466	8.394	0.223	0.0000	0.01222	1.22	0.779
160	70.970	8.424	0.221	0.0000	0.01222	1.22	0.779
161	71.467	8.454	0.223	0.0000	0.01222	1.22	0.779
162	71.968	8.483	0.223	0.0000	0.01222	1.22	0.779
163	72.466	8.513	0.222	0.0000	0.01222	1.22	0.779
164	72.967	8.542	0.223	0.0000	0.01227	1.23	0.779
165	73.470	8.571	0.222	0.0000	0.01227	1.23	0.779
166	73.970	8.601	0.222	0.0000	0.01227	1.23	0.779
167	74.469	8.630	0.222	0.0000	0.01227	1.23	0.779
168	74.970	8.659	0.222	0.0000	0.01227	1.23	0.779
169	75.468	8.687	0.223	0.0000	0.01227	1.23	0.779
170	75.968	8.716	0.222	0.0000	0.01227	1.23	0.779
171	76.467	8.745	0.222	0.0000	0.01227	1.23	0.779
172	76.968	8.773	0.222	0.0000	0.01227	1.23	0.779
173	77.467	8.802	0.222	0.0000	0.01227	1.23	0.779
174	77.969	8.830	0.222	0.0000	0.01227	1.23	0.779
175	78.469	8.858	0.223	0.0000	0.01227	1.23	0.779
176	78.966	8.886	0.222	0.0000	0.01227	1.23	0.779
177	79.468	8.914	0.222	0.0000	0.01227	1.23	0.779
178	79.966	8.942	0.223	0.0000	0.01227	1.23	0.779
179	80.467	8.970	0.223	0.0000	0.01227	1.23	0.779
180	80.967	8.998	0.221	0.0000	0.01227	1.23	0.779
181	81.468	9.026	0.223	0.0000	0.01232	1.23	0.779
182	81.969	9.054	0.222	0.0000	0.01232	1.23	0.779
183	82.467	9.081	0.222	0.0000	0.01232	1.23	0.779
184	82.967	9.109	0.222	0.0000	0.01232	1.23	0.779
185	83.466	9.136	0.223	0.0000	0.01232	1.23	0.779
186	83.970	9.163	0.222	0.0000	0.01232	1.23	0.779
187	84.468	9.191	0.223	0.0000	0.01232	1.23	0.779
188	84.966	9.218	0.222	0.0000	0.01232	1.23	0.779
189	85.468	9.245	0.223	0.0000	0.01232	1.23	0.779
190	85.966	9.272	0.222	0.0000	0.01232	1.23	0.779
191	86.469	9.299	0.222	0.0000	0.01232	1.23	0.779
192	86.968	9.326	0.222	0.0000	0.01232	1.23	0.779
193	87.470	9.353	0.223	0.0000	0.01232	1.23	0.779
194	87.969	9.379	0.222	0.0000	0.01232	1.23	0.779
195	88.467	9.406	0.223	0.0000	0.01232	1.23	0.779
196	88.969	9.432	0.222	0.0000	0.01232	1.23	0.779
197	89.468	9.459	0.223	0.0000	0.01232	1.23	0.779
198	89.969	9.485	0.222	0.0000	0.01232	1.23	0.779
199	90.466	9.511	0.223	0.0000	0.01232	1.23	0.779
200	90.969	9.538	0.222	0.0000	0.01232	1.23	0.779

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.468	9.564	0.221	0.0000	0.01232	1.23	0.779
202	91.969	9.590	0.222	0.0000	0.01232	1.23	0.779
203	92.466	9.616	0.222	0.0000	0.01232	1.23	0.779
204	92.966	9.642	0.222	0.0000	0.01232	1.23	0.779
205	93.469	9.668	0.222	0.0000	0.01232	1.23	0.779
206	93.967	9.694	0.222	0.0000	0.01237	1.24	0.779
207	94.469	9.720	0.222	0.0000	0.01232	1.23	0.779
208	94.970	9.745	0.222	0.0000	0.01237	1.24	0.779
209	95.466	9.771	0.222	0.0000	0.01237	1.24	0.779
210	95.969	9.796	0.222	0.0000	0.01237	1.24	0.779
211	96.468	9.822	0.221	0.0000	0.01232	1.23	0.779
212	96.967	9.847	0.222	0.0000	0.01237	1.24	0.779
213	97.469	9.873	0.222	0.0000	0.01237	1.24	0.779
214	97.967	9.898	0.223	0.0000	0.01237	1.24	0.779
215	98.470	9.923	0.222	0.0000	0.01237	1.24	0.779
216	98.968	9.948	0.223	0.0000	0.01237	1.24	0.779
217	99.468	9.973	0.222	0.0000	0.01237	1.24	0.779
218	99.970	9.998	0.223	0.0000	0.01237	1.24	0.779
219	100.469	10.023	0.222	0.0000	0.01237	1.24	0.779
220	100.968	10.048	0.222	0.0000	0.01237	1.24	0.779
221	101.467	10.073	0.223	0.0000	0.01237	1.24	0.779
222	101.966	10.098	0.222	0.0000	0.01237	1.24	0.779
223	102.470	10.123	0.222	0.0000	0.01237	1.24	0.779
224	102.968	10.147	0.222	0.0000	0.01237	1.24	0.779
225	103.469	10.172	0.222	0.0000	0.01237	1.24	0.779
226	103.966	10.196	0.222	0.0000	0.01237	1.24	0.779
227	104.466	10.221	0.222	0.0000	0.01237	1.24	0.779
228	104.966	10.245	0.222	0.0000	0.01242	1.24	0.779
229	105.467	10.270	0.222	0.0000	0.01242	1.24	0.779
230	105.967	10.294	0.222	0.0000	0.01242	1.24	0.779
231	106.469	10.318	0.222	0.0000	0.01242	1.24	0.779
232	106.968	10.343	0.223	0.0000	0.01242	1.24	0.779
233	107.466	10.367	0.222	0.0000	0.01242	1.24	0.779
234	107.968	10.391	0.222	0.0000	0.01242	1.24	0.779
235	108.470	10.415	0.223	0.0000	0.01242	1.24	0.779
236	108.969	10.439	0.222	0.0000	0.01242	1.24	0.779
237	109.469	10.463	0.222	0.0000	0.01242	1.24	0.779
238	109.968	10.487	0.222	0.0000	0.01242	1.24	0.779
239	110.469	10.510	0.223	0.0000	0.01242	1.24	0.779
240	110.968	10.534	0.222	0.0000	0.01247	1.25	0.778
241	111.468	10.558	0.222	0.0000	0.01247	1.25	0.778
242	111.968	10.581	0.222	0.0000	0.01247	1.25	0.778
243	112.469	10.605	0.222	0.0000	0.01247	1.25	0.778
244	112.966	10.629	0.222	0.0000	0.01247	1.25	0.778
245	113.467	10.652	0.223	0.0000	0.01247	1.25	0.778
246	113.970	10.676	0.222	0.0000	0.01247	1.25	0.778
247	114.469	10.699	0.221	0.0000	0.01247	1.25	0.778
248	114.968	10.722	0.223	0.0000	0.01247	1.25	0.778
249	115.470	10.746	0.222	0.0000	0.01247	1.25	0.778
250	115.966	10.769	0.222	0.0000	0.01247	1.25	0.778

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 16
Constant Load Step
Stress: 0.223 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.468	10.792	0.222	0.0000	0.01247	1.25	0.778
252	116.967	10.815	0.222	0.0000	0.01247	1.25	0.778
253	117.469	10.838	0.222	0.0000	0.01247	1.25	0.778
254	117.967	10.861	0.223	0.0000	0.01247	1.25	0.778
255	118.470	10.884	0.222	0.0000	0.01247	1.25	0.778
256	118.967	10.907	0.222	0.0000	0.01247	1.25	0.778
257	119.468	10.930	0.223	0.0000	0.01247	1.25	0.778
258	119.966	10.953	0.222	0.0000	0.01247	1.25	0.778
259	119.983	10.954	0.222	0.0000	0.01247	1.25	0.778

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.038		0.222	0.0000	0.01247	1.25	0.778
2	-0.034		0.222	0.0000	0.01247	1.25	0.778
3	-0.029		0.223	0.0000	0.01247	1.25	0.778
4	-0.025		0.273	0.0000	0.01276	1.28	0.778
5	-0.021		0.311	0.0000	0.01291	1.29	0.778
6	-0.016		0.341	0.0000	0.01306	1.31	0.777
7	-0.012		0.367	0.0000	0.01341	1.34	0.777
8	-0.008		0.390	0.0000	0.01401	1.40	0.776
9	-0.003		0.411	0.0000	0.01430	1.43	0.775
10	0.000	0.000	0.424	0.0000	0.01459	1.46	0.775
11	0.001	0.035	0.429	0.0000	0.01470	1.47	0.774
12	0.006	0.075	0.446	0.0000	0.01505	1.50	0.774
13	0.010	0.099	0.432	0.0000	0.01520	1.52	0.774
14	0.014	0.119	0.424	0.0000	0.01525	1.52	0.773
15	0.019	0.137	0.423	0.0000	0.01530	1.53	0.773
16	0.023	0.152	0.424	0.0000	0.01545	1.54	0.773
17	0.040	0.201	0.435	0.0000	0.01564	1.56	0.773
18	0.049	0.222	0.439	0.0000	0.01574	1.57	0.773
19	0.131	0.362	0.439	0.0000	0.01609	1.61	0.772
20	0.213	0.461	0.441	0.0000	0.01629	1.63	0.772
21	0.299	0.547	0.445	0.0000	0.01639	1.64	0.771
22	0.464	0.681	0.441	0.0000	0.01654	1.65	0.771
23	0.713	0.844	0.412	0.0000	0.01718	1.72	0.770
24	0.964	0.982	0.441	0.0000	0.01778	1.78	0.769
25	1.465	1.210	0.443	0.0000	0.01823	1.82	0.768
26	2.463	1.569	0.445	0.0000	0.01862	1.86	0.767
27	4.466	2.113	0.445	0.0000	0.01947	1.95	0.766
28	4.964	2.228	0.445	0.0000	0.01967	1.97	0.765
29	5.465	2.338	0.444	0.0000	0.01982	1.98	0.765
30	5.963	2.442	0.444	0.0000	0.02001	2.00	0.765
31	6.466	2.543	0.445	0.0000	0.02021	2.02	0.764
32	6.963	2.639	0.445	0.0000	0.02056	2.06	0.764
33	7.463	2.732	0.444	0.0000	0.02086	2.09	0.763
34	7.965	2.822	0.446	0.0000	0.02106	2.11	0.763
35	8.465	2.910	0.445	0.0000	0.02126	2.13	0.763
36	8.963	2.994	0.444	0.0000	0.02146	2.15	0.762
37	9.463	3.076	0.444	0.0000	0.02165	2.17	0.762
38	9.963	3.156	0.445	0.0000	0.02185	2.19	0.762
39	10.462	3.235	0.444	0.0000	0.02200	2.20	0.761
40	10.962	3.311	0.444	0.0000	0.02220	2.22	0.761
41	11.464	3.386	0.446	0.0000	0.02240	2.24	0.761
42	11.962	3.459	0.444	0.0000	0.02260	2.26	0.760
43	12.466	3.531	0.446	0.0000	0.02275	2.27	0.760
44	12.962	3.600	0.446	0.0000	0.02285	2.28	0.760
45	13.463	3.669	0.446	0.0000	0.02295	2.29	0.760
46	13.965	3.737	0.444	0.0000	0.02299	2.30	0.759
47	14.463	3.803	0.444	0.0000	0.02309	2.31	0.759
48	14.965	3.868	0.446	0.0000	0.02314	2.31	0.759
49	15.464	3.932	0.444	0.0000	0.02319	2.32	0.759
50	15.964	3.996	0.445	0.0000	0.02324	2.32	0.759

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.466	4.058	0.445	0.0000	0.02329	2.33	0.759
52	16.965	4.119	0.444	0.0000	0.02339	2.34	0.759
53	17.463	4.179	0.444	0.0000	0.02339	2.34	0.759
54	17.965	4.239	0.444	0.0000	0.02344	2.34	0.759
55	18.463	4.297	0.445	0.0000	0.02344	2.34	0.759
56	18.963	4.355	0.447	0.0000	0.02349	2.35	0.759
57	19.466	4.412	0.444	0.0000	0.02349	2.35	0.759
58	19.965	4.468	0.446	0.0000	0.02354	2.35	0.759
59	20.465	4.524	0.445	0.0000	0.02359	2.36	0.758
60	20.963	4.579	0.445	0.0000	0.02364	2.36	0.758
61	21.464	4.633	0.445	0.0000	0.02369	2.37	0.758
62	21.963	4.686	0.445	0.0000	0.02374	2.37	0.758
63	22.466	4.740	0.446	0.0000	0.02374	2.37	0.758
64	22.964	4.792	0.446	0.0000	0.02379	2.38	0.758
65	23.464	4.844	0.446	0.0000	0.02384	2.38	0.758
66	23.966	4.895	0.446	0.0000	0.02384	2.38	0.758
67	24.465	4.946	0.444	0.0000	0.02389	2.39	0.758
68	24.963	4.996	0.444	0.0000	0.02394	2.39	0.758
69	25.466	5.046	0.445	0.0000	0.02394	2.39	0.758
70	25.965	5.096	0.444	0.0000	0.02404	2.40	0.758
71	26.466	5.145	0.445	0.0000	0.02414	2.41	0.757
72	26.963	5.193	0.443	0.0000	0.02414	2.41	0.757
73	27.464	5.241	0.446	0.0000	0.02419	2.42	0.757
74	27.965	5.288	0.444	0.0000	0.02424	2.42	0.757
75	28.462	5.335	0.448	0.0000	0.02429	2.43	0.757
76	28.963	5.382	0.445	0.0000	0.02434	2.43	0.757
77	29.465	5.428	0.446	0.0000	0.02439	2.44	0.757
78	29.963	5.474	0.445	0.0000	0.02439	2.44	0.757
79	30.465	5.520	0.444	0.0000	0.02443	2.44	0.757
80	30.962	5.564	0.445	0.0000	0.02448	2.45	0.757
81	31.464	5.609	0.445	0.0000	0.02453	2.45	0.757
82	31.963	5.654	0.445	0.0000	0.02458	2.46	0.757
83	32.464	5.698	0.445	0.0000	0.02468	2.47	0.756
84	32.963	5.741	0.445	0.0000	0.02473	2.47	0.756
85	33.463	5.785	0.447	0.0000	0.02478	2.48	0.756
86	33.966	5.828	0.446	0.0000	0.02483	2.48	0.756
87	34.462	5.870	0.446	0.0000	0.02488	2.49	0.756
88	34.966	5.913	0.445	0.0000	0.02488	2.49	0.756
89	35.465	5.955	0.446	0.0000	0.02493	2.49	0.756
90	35.965	5.997	0.447	0.0000	0.02498	2.50	0.756
91	36.465	6.039	0.444	0.0000	0.02498	2.50	0.756
92	36.963	6.080	0.444	0.0000	0.02503	2.50	0.756
93	37.463	6.121	0.445	0.0000	0.02508	2.51	0.756
94	37.965	6.162	0.445	0.0000	0.02508	2.51	0.756
95	38.464	6.202	0.447	0.0000	0.02513	2.51	0.756
96	38.963	6.242	0.444	0.0000	0.02513	2.51	0.756
97	39.465	6.282	0.446	0.0000	0.02518	2.52	0.756
98	39.964	6.322	0.447	0.0000	0.02523	2.52	0.755
99	40.466	6.361	0.444	0.0000	0.02523	2.52	0.755
100	40.964	6.400	0.447	0.0000	0.02533	2.53	0.755

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.462	6.439	0.444	0.0000	0.02533	2.53	0.755
102	41.965	6.478	0.445	0.0000	0.02533	2.53	0.755
103	42.462	6.516	0.444	0.0000	0.02538	2.54	0.755
104	42.962	6.555	0.446	0.0000	0.02538	2.54	0.755
105	43.462	6.593	0.444	0.0000	0.02543	2.54	0.755
106	43.965	6.631	0.444	0.0000	0.02543	2.54	0.755
107	44.463	6.668	0.446	0.0000	0.02548	2.55	0.755
108	44.966	6.706	0.445	0.0000	0.02548	2.55	0.755
109	45.464	6.743	0.446	0.0000	0.02553	2.55	0.755
110	45.966	6.780	0.444	0.0000	0.02553	2.55	0.755
111	46.465	6.817	0.447	0.0000	0.02558	2.56	0.755
112	46.964	6.853	0.445	0.0000	0.02558	2.56	0.755
113	47.466	6.890	0.447	0.0000	0.02563	2.56	0.755
114	47.964	6.926	0.445	0.0000	0.02568	2.57	0.755
115	48.465	6.962	0.444	0.0000	0.02568	2.57	0.755
116	48.966	6.998	0.446	0.0000	0.02568	2.57	0.755
117	49.464	7.033	0.445	0.0000	0.02573	2.57	0.755
118	49.964	7.069	0.444	0.0000	0.02573	2.57	0.755
119	50.462	7.104	0.446	0.0000	0.02578	2.58	0.754
120	50.964	7.139	0.445	0.0000	0.02578	2.58	0.754
121	51.462	7.174	0.444	0.0000	0.02583	2.58	0.754
122	51.963	7.209	0.446	0.0000	0.02588	2.59	0.754
123	52.462	7.243	0.445	0.0000	0.02592	2.59	0.754
124	52.965	7.278	0.444	0.0000	0.02592	2.59	0.754
125	53.464	7.312	0.446	0.0000	0.02597	2.60	0.754
126	53.966	7.346	0.445	0.0000	0.02602	2.60	0.754
127	54.466	7.380	0.445	0.0000	0.02602	2.60	0.754
128	54.965	7.414	0.444	0.0000	0.02602	2.60	0.754
129	55.462	7.447	0.446	0.0000	0.02602	2.60	0.754
130	55.965	7.481	0.445	0.0000	0.02607	2.61	0.754
131	56.464	7.514	0.444	0.0000	0.02607	2.61	0.754
132	56.963	7.547	0.444	0.0000	0.02607	2.61	0.754
133	57.465	7.581	0.447	0.0000	0.02607	2.61	0.754
134	57.964	7.613	0.446	0.0000	0.02612	2.61	0.754
135	58.464	7.646	0.445	0.0000	0.02612	2.61	0.754
136	58.966	7.679	0.445	0.0000	0.02612	2.61	0.754
137	59.463	7.711	0.444	0.0000	0.02612	2.61	0.754
138	59.965	7.744	0.444	0.0000	0.02617	2.62	0.754
139	60.466	7.776	0.447	0.0000	0.02617	2.62	0.754
140	60.964	7.808	0.446	0.0000	0.02617	2.62	0.754
141	61.465	7.840	0.445	0.0000	0.02617	2.62	0.754
142	61.963	7.872	0.446	0.0000	0.02617	2.62	0.754
143	62.463	7.903	0.445	0.0000	0.02617	2.62	0.754
144	62.965	7.935	0.445	0.0000	0.02622	2.62	0.754
145	63.463	7.966	0.444	0.0000	0.02622	2.62	0.754
146	63.964	7.998	0.445	0.0000	0.02622	2.62	0.754
147	64.466	8.029	0.444	0.0000	0.02622	2.62	0.754
148	64.964	8.060	0.445	0.0000	0.02627	2.63	0.754
149	65.466	8.091	0.444	0.0000	0.02627	2.63	0.754
150	65.963	8.122	0.444	0.0000	0.02627	2.63	0.754

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.464	8.153	0.444	0.0000	0.02627	2.63	0.754
152	66.962	8.183	0.444	0.0000	0.02632	2.63	0.753
153	67.466	8.214	0.444	0.0000	0.02632	2.63	0.753
154	67.966	8.244	0.444	0.0000	0.02632	2.63	0.753
155	68.464	8.274	0.444	0.0000	0.02632	2.63	0.753
156	68.966	8.305	0.444	0.0000	0.02632	2.63	0.753
157	69.462	8.334	0.445	0.0000	0.02632	2.63	0.753
158	69.963	8.364	0.445	0.0000	0.02632	2.63	0.753
159	70.465	8.394	0.444	0.0000	0.02632	2.63	0.753
160	70.964	8.424	0.445	0.0000	0.02632	2.63	0.753
161	71.462	8.454	0.444	0.0000	0.02632	2.63	0.753
162	71.963	8.483	0.445	0.0000	0.02637	2.64	0.753
163	72.466	8.513	0.445	0.0000	0.02637	2.64	0.753
164	72.963	8.542	0.445	0.0000	0.02637	2.64	0.753
165	73.464	8.571	0.445	0.0000	0.02637	2.64	0.753
166	73.965	8.600	0.445	0.0000	0.02642	2.64	0.753
167	74.464	8.629	0.445	0.0000	0.02642	2.64	0.753
168	74.963	8.658	0.445	0.0000	0.02642	2.64	0.753
169	75.466	8.687	0.446	0.0000	0.02642	2.64	0.753
170	75.963	8.716	0.446	0.0000	0.02642	2.64	0.753
171	76.466	8.744	0.446	0.0000	0.02642	2.64	0.753
172	76.965	8.773	0.446	0.0000	0.02647	2.65	0.753
173	77.463	8.801	0.445	0.0000	0.02647	2.65	0.753
174	77.964	8.830	0.445	0.0000	0.02647	2.65	0.753
175	78.464	8.858	0.445	0.0000	0.02647	2.65	0.753
176	78.963	8.886	0.445	0.0000	0.02647	2.65	0.753
177	79.462	8.914	0.445	0.0000	0.02647	2.65	0.753
178	79.964	8.942	0.447	0.0000	0.02647	2.65	0.753
179	80.464	8.970	0.445	0.0000	0.02647	2.65	0.753
180	80.963	8.998	0.445	0.0000	0.02652	2.65	0.753
181	81.465	9.026	0.446	0.0000	0.02652	2.65	0.753
182	81.962	9.053	0.446	0.0000	0.02652	2.65	0.753
183	82.466	9.081	0.445	0.0000	0.02652	2.65	0.753
184	82.964	9.108	0.444	0.0000	0.02652	2.65	0.753
185	83.466	9.136	0.445	0.0000	0.02652	2.65	0.753
186	83.964	9.163	0.446	0.0000	0.02652	2.65	0.753
187	84.466	9.191	0.445	0.0000	0.02652	2.65	0.753
188	84.965	9.218	0.445	0.0000	0.02657	2.66	0.753
189	85.465	9.245	0.445	0.0000	0.02657	2.66	0.753
190	85.965	9.272	0.445	0.0000	0.02657	2.66	0.753
191	86.464	9.299	0.445	0.0000	0.02657	2.66	0.753
192	86.964	9.325	0.446	0.0000	0.02657	2.66	0.753
193	87.462	9.352	0.445	0.0000	0.02657	2.66	0.753
194	87.962	9.379	0.445	0.0000	0.02657	2.66	0.753
195	88.466	9.406	0.445	0.0000	0.02657	2.66	0.753
196	88.965	9.432	0.446	0.0000	0.02657	2.66	0.753
197	89.466	9.459	0.445	0.0000	0.02657	2.66	0.753
198	89.962	9.485	0.444	0.0000	0.02657	2.66	0.753
199	90.465	9.511	0.446	0.0000	0.02657	2.66	0.753
200	90.962	9.537	0.447	0.0000	0.02657	2.66	0.753

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.463	9.564	0.444	0.0000	0.02657	2.66	0.753
202	91.965	9.590	0.445	0.0000	0.02662	2.66	0.753
203	92.464	9.616	0.445	0.0000	0.02662	2.66	0.753
204	92.962	9.642	0.445	0.0000	0.02662	2.66	0.753
205	93.463	9.668	0.445	0.0000	0.02662	2.66	0.753
206	93.962	9.693	0.445	0.0000	0.02662	2.66	0.753
207	94.466	9.719	0.445	0.0000	0.02662	2.66	0.753
208	94.962	9.745	0.445	0.0000	0.02662	2.66	0.753
209	95.464	9.771	0.446	0.0000	0.02667	2.67	0.753
210	95.965	9.796	0.445	0.0000	0.02667	2.67	0.753
211	96.466	9.822	0.445	0.0000	0.02667	2.67	0.753
212	96.965	9.847	0.445	0.0000	0.02667	2.67	0.753
213	97.464	9.872	0.445	0.0000	0.02667	2.67	0.753
214	97.962	9.898	0.445	0.0000	0.02667	2.67	0.753
215	98.463	9.923	0.445	0.0000	0.02672	2.67	0.753
216	98.966	9.948	0.447	0.0000	0.02672	2.67	0.753
217	99.464	9.973	0.445	0.0000	0.02672	2.67	0.753
218	99.963	9.998	0.446	0.0000	0.02672	2.67	0.753
219	100.464	10.023	0.446	0.0000	0.02672	2.67	0.753
220	100.965	10.048	0.445	0.0000	0.02672	2.67	0.753
221	101.463	10.073	0.446	0.0000	0.02672	2.67	0.753
222	101.962	10.098	0.445	0.0000	0.02672	2.67	0.753
223	102.465	10.122	0.445	0.0000	0.02672	2.67	0.753
224	102.964	10.147	0.445	0.0000	0.02672	2.67	0.753
225	103.465	10.172	0.445	0.0000	0.02677	2.68	0.753
226	103.963	10.196	0.445	0.0000	0.02672	2.67	0.753
227	104.464	10.221	0.445	0.0000	0.02677	2.68	0.753
228	104.966	10.245	0.445	0.0000	0.02677	2.68	0.753
229	105.462	10.269	0.446	0.0000	0.02672	2.67	0.753
230	105.965	10.294	0.445	0.0000	0.02677	2.68	0.753
231	106.463	10.318	0.445	0.0000	0.02677	2.68	0.753
232	106.962	10.342	0.445	0.0000	0.02677	2.68	0.753
233	107.465	10.367	0.445	0.0000	0.02677	2.68	0.753
234	107.962	10.390	0.445	0.0000	0.02677	2.68	0.753
235	108.464	10.415	0.445	0.0000	0.02682	2.68	0.753
236	108.966	10.439	0.446	0.0000	0.02682	2.68	0.753
237	109.463	10.462	0.445	0.0000	0.02682	2.68	0.753
238	109.966	10.486	0.446	0.0000	0.02682	2.68	0.753
239	110.464	10.510	0.445	0.0000	0.02682	2.68	0.753
240	110.964	10.534	0.445	0.0000	0.02682	2.68	0.753
241	111.463	10.558	0.446	0.0000	0.02682	2.68	0.753
242	111.962	10.581	0.445	0.0000	0.02682	2.68	0.753
243	112.465	10.605	0.445	0.0000	0.02682	2.68	0.753
244	112.965	10.628	0.445	0.0000	0.02682	2.68	0.753
245	113.462	10.652	0.445	0.0000	0.02682	2.68	0.753
246	113.963	10.675	0.445	0.0000	0.02682	2.68	0.753
247	114.464	10.699	0.445	0.0000	0.02687	2.69	0.753
248	114.965	10.722	0.445	0.0000	0.02687	2.69	0.753
249	115.462	10.745	0.445	0.0000	0.02682	2.68	0.753
250	115.965	10.769	0.446	0.0000	0.02687	2.69	0.753

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.462	10.792	0.445	0.0000	0.02687	2.69	0.753
252	116.962	10.815	0.446	0.0000	0.02687	2.69	0.753
253	117.466	10.838	0.445	0.0000	0.02687	2.69	0.753
254	117.964	10.861	0.445	0.0000	0.02687	2.69	0.753
255	118.463	10.884	0.445	0.0000	0.02687	2.69	0.753
256	118.965	10.907	0.445	0.0000	0.02687	2.69	0.753
257	119.464	10.930	0.445	0.0000	0.02687	2.69	0.753
258	119.964	10.953	0.445	0.0000	0.02687	2.69	0.753
259	119.995	10.954	0.445	0.0000	0.02687	2.69	0.753

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.047		0.445	0.0000	0.02687	2.69	0.753
2	-0.043		0.445	0.0000	0.02687	2.69	0.753
3	-0.038		0.475	0.0000	0.02692	2.69	0.752
4	-0.034		0.566	0.0000	0.02722	2.72	0.752
5	-0.030		0.619	0.0000	0.02766	2.77	0.751
6	-0.026		0.661	0.0000	0.02806	2.81	0.750
7	-0.021		0.699	0.0000	0.02846	2.85	0.750
8	-0.017		0.738	0.0000	0.02905	2.91	0.749
9	-0.013		0.770	0.0000	0.02970	2.97	0.747
10	-0.008		0.799	0.0000	0.03039	3.04	0.746
11	-0.004		0.826	0.0000	0.03074	3.07	0.746
12	0.000	0.000	0.848	0.0000	0.03134	3.13	0.744
13	0.001	0.025	0.852	0.0000	0.03144	3.14	0.744
14	0.005	0.071	0.876	0.0000	0.03213	3.21	0.743
15	0.009	0.096	0.897	0.0000	0.03263	3.26	0.742
16	0.014	0.117	0.849	0.0000	0.03268	3.27	0.742
17	0.031	0.176	0.847	0.0000	0.03303	3.30	0.741
18	0.039	0.198	0.859	0.0000	0.03328	3.33	0.741
19	0.122	0.349	0.892	0.0000	0.03422	3.42	0.739
20	0.204	0.452	0.876	0.0000	0.03566	3.57	0.737
21	0.287	0.536	0.891	0.0000	0.03616	3.62	0.736
22	0.455	0.674	0.886	0.0000	0.03695	3.70	0.734
23	0.703	0.838	0.891	0.0000	0.03839	3.84	0.732
24	0.957	0.978	0.886	0.0000	0.03889	3.89	0.731
25	1.456	1.206	0.890	0.0000	0.04038	4.04	0.728
26	2.455	1.567	0.891	0.0000	0.04266	4.27	0.724
27	4.457	2.111	0.890	0.0000	0.04604	4.60	0.718
28	4.955	2.226	0.892	0.0000	0.04639	4.64	0.717
29	5.455	2.336	0.890	0.0000	0.04673	4.67	0.717
30	5.957	2.441	0.890	0.0000	0.04698	4.70	0.716
31	6.456	2.541	0.891	0.0000	0.04758	4.76	0.715
32	6.955	2.637	0.891	0.0000	0.04842	4.84	0.714
33	7.455	2.730	0.890	0.0000	0.04912	4.91	0.712
34	7.957	2.821	0.892	0.0000	0.04947	4.95	0.712
35	8.455	2.908	0.890	0.0000	0.04966	4.97	0.711
36	8.954	2.992	0.890	0.0000	0.04996	5.00	0.711
37	9.456	3.075	0.890	0.0000	0.05006	5.01	0.711
38	9.956	3.155	0.890	0.0000	0.05036	5.04	0.710
39	10.455	3.233	0.887	0.0000	0.05185	5.18	0.708
40	10.956	3.310	0.891	0.0000	0.05210	5.21	0.707
41	11.454	3.384	0.892	0.0000	0.05235	5.23	0.707
42	11.957	3.458	0.893	0.0000	0.05259	5.26	0.706
43	12.455	3.529	0.890	0.0000	0.05304	5.30	0.705
44	12.954	3.599	0.894	0.0000	0.05319	5.32	0.705
45	13.455	3.668	0.890	0.0000	0.05339	5.34	0.705
46	13.954	3.736	0.894	0.0000	0.05349	5.35	0.705
47	14.454	3.802	0.891	0.0000	0.05364	5.36	0.704
48	14.953	3.867	0.815	0.0000	0.05389	5.39	0.704
49	15.457	3.931	0.890	0.0000	0.05483	5.48	0.702
50	15.956	3.994	0.892	0.0000	0.05518	5.52	0.702

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.455	4.056	0.892	0.0000	0.05538	5.54	0.701
52	16.953	4.117	0.890	0.0000	0.05562	5.56	0.701
53	17.456	4.178	0.891	0.0000	0.05582	5.58	0.700
54	17.953	4.237	0.891	0.0000	0.05587	5.59	0.700
55	18.455	4.296	0.892	0.0000	0.05592	5.59	0.700
56	18.955	4.354	0.891	0.0000	0.05602	5.60	0.700
57	19.456	4.411	0.892	0.0000	0.05612	5.61	0.700
58	19.955	4.467	0.892	0.0000	0.05617	5.62	0.700
59	20.456	4.523	0.892	0.0000	0.05617	5.62	0.700
60	20.955	4.578	0.892	0.0000	0.05622	5.62	0.700
61	21.455	4.632	0.892	0.0000	0.05637	5.64	0.699
62	21.953	4.685	0.890	0.0000	0.05662	5.66	0.699
63	22.455	4.739	0.891	0.0000	0.05672	5.67	0.699
64	22.956	4.791	0.892	0.0000	0.05682	5.68	0.699
65	23.455	4.843	0.892	0.0000	0.05692	5.69	0.698
66	23.957	4.895	0.893	0.0000	0.05701	5.70	0.698
67	24.456	4.945	0.883	0.0000	0.05736	5.74	0.698
68	24.955	4.996	0.893	0.0000	0.05771	5.77	0.697
69	25.454	5.045	0.891	0.0000	0.05791	5.79	0.697
70	25.954	5.095	0.892	0.0000	0.05801	5.80	0.696
71	26.453	5.143	0.892	0.0000	0.05811	5.81	0.696
72	26.954	5.192	0.895	0.0000	0.05826	5.83	0.696
73	27.457	5.240	0.892	0.0000	0.05836	5.84	0.696
74	27.954	5.287	0.892	0.0000	0.05850	5.85	0.696
75	28.454	5.334	0.891	0.0000	0.05855	5.86	0.695
76	28.954	5.381	0.893	0.0000	0.05860	5.86	0.695
77	29.456	5.427	0.892	0.0000	0.05865	5.87	0.695
78	29.954	5.473	0.891	0.0000	0.05875	5.88	0.695
79	30.453	5.518	0.891	0.0000	0.05890	5.89	0.695
80	30.956	5.564	0.892	0.0000	0.05900	5.90	0.695
81	31.457	5.609	0.890	0.0000	0.05905	5.91	0.695
82	31.955	5.653	0.892	0.0000	0.05915	5.92	0.694
83	32.457	5.697	0.894	0.0000	0.05920	5.92	0.694
84	32.955	5.741	0.893	0.0000	0.05925	5.92	0.694
85	33.456	5.784	0.894	0.0000	0.05935	5.93	0.694
86	33.954	5.827	0.891	0.0000	0.05940	5.94	0.694
87	34.456	5.870	0.890	0.0000	0.05945	5.94	0.694
88	34.955	5.912	0.894	0.0000	0.05955	5.95	0.694
89	35.453	5.954	0.892	0.0000	0.05960	5.96	0.694
90	35.954	5.996	0.891	0.0000	0.05965	5.96	0.693
91	36.454	6.038	0.893	0.0000	0.05970	5.97	0.693
92	36.957	6.079	0.894	0.0000	0.05975	5.97	0.693
93	37.456	6.120	0.891	0.0000	0.05980	5.98	0.693
94	37.957	6.161	0.891	0.0000	0.05980	5.98	0.693
95	38.454	6.201	0.892	0.0000	0.05985	5.98	0.693
96	38.956	6.241	0.893	0.0000	0.05985	5.98	0.693
97	39.454	6.281	0.892	0.0000	0.05985	5.98	0.693
98	39.956	6.321	0.892	0.0000	0.05990	5.99	0.693
99	40.453	6.360	0.891	0.0000	0.05990	5.99	0.693
100	40.955	6.400	0.895	0.0000	0.05995	5.99	0.693

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.456	6.439	0.894	0.0000	0.05999	6.00	0.693
102	41.953	6.477	0.893	0.0000	0.06004	6.00	0.693
103	42.455	6.516	0.890	0.0000	0.06009	6.01	0.693
104	42.957	6.554	0.895	0.0000	0.06014	6.01	0.693
105	43.456	6.592	0.890	0.0000	0.06019	6.02	0.692
106	43.953	6.630	0.890	0.0000	0.06029	6.03	0.692
107	44.455	6.667	0.891	0.0000	0.06029	6.03	0.692
108	44.957	6.705	0.894	0.0000	0.06034	6.03	0.692
109	45.456	6.742	0.892	0.0000	0.06034	6.03	0.692
110	45.957	6.779	0.891	0.0000	0.06039	6.04	0.692
111	46.454	6.816	0.891	0.0000	0.06039	6.04	0.692
112	46.954	6.852	0.894	0.0000	0.06039	6.04	0.692
113	47.455	6.889	0.895	0.0000	0.06044	6.04	0.692
114	47.957	6.925	0.895	0.0000	0.06054	6.05	0.692
115	48.455	6.961	0.894	0.0000	0.06064	6.06	0.692
116	48.956	6.997	0.894	0.0000	0.06064	6.06	0.692
117	49.454	7.032	0.892	0.0000	0.06064	6.06	0.692
118	49.954	7.068	0.893	0.0000	0.06064	6.06	0.692
119	50.456	7.103	0.891	0.0000	0.06069	6.07	0.692
120	50.953	7.138	0.892	0.0000	0.06069	6.07	0.692
121	51.456	7.173	0.892	0.0000	0.06069	6.07	0.692
122	51.953	7.208	0.892	0.0000	0.06074	6.07	0.692
123	52.455	7.243	0.893	0.0000	0.06079	6.08	0.691
124	52.957	7.277	0.894	0.0000	0.06084	6.08	0.691
125	53.456	7.311	0.891	0.0000	0.06089	6.09	0.691
126	53.955	7.345	0.891	0.0000	0.06089	6.09	0.691
127	54.453	7.379	0.891	0.0000	0.06089	6.09	0.691
128	54.954	7.413	0.891	0.0000	0.06089	6.09	0.691
129	55.454	7.447	0.894	0.0000	0.06089	6.09	0.691
130	55.955	7.480	0.891	0.0000	0.06089	6.09	0.691
131	56.453	7.514	0.892	0.0000	0.06089	6.09	0.691
132	56.955	7.547	0.892	0.0000	0.06094	6.09	0.691
133	57.457	7.580	0.892	0.0000	0.06089	6.09	0.691
134	57.955	7.613	0.892	0.0000	0.06094	6.09	0.691
135	58.454	7.646	0.893	0.0000	0.06094	6.09	0.691
136	58.955	7.678	0.893	0.0000	0.06094	6.09	0.691
137	59.454	7.711	0.893	0.0000	0.06094	6.09	0.691
138	59.955	7.743	0.891	0.0000	0.06094	6.09	0.691
139	60.456	7.775	0.891	0.0000	0.06094	6.09	0.691
140	60.953	7.807	0.893	0.0000	0.06094	6.09	0.691
141	61.455	7.839	0.892	0.0000	0.06094	6.09	0.691
142	61.957	7.871	0.894	0.0000	0.06094	6.09	0.691
143	62.456	7.903	0.891	0.0000	0.06094	6.09	0.691
144	62.954	7.934	0.892	0.0000	0.06094	6.09	0.691
145	63.453	7.966	0.894	0.0000	0.06099	6.10	0.691
146	63.954	7.997	0.892	0.0000	0.06099	6.10	0.691
147	64.456	8.028	0.892	0.0000	0.06099	6.10	0.691
148	64.957	8.060	0.894	0.0000	0.06099	6.10	0.691
149	65.456	8.090	0.892	0.0000	0.06099	6.10	0.691
150	65.953	8.121	0.892	0.0000	0.06099	6.10	0.691

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.456	8.152	0.893	0.0000	0.06099	6.10	0.691
152	66.953	8.182	0.891	0.0000	0.06099	6.10	0.691
153	67.455	8.213	0.891	0.0000	0.06099	6.10	0.691
154	67.954	8.243	0.894	0.0000	0.06099	6.10	0.691
155	68.456	8.274	0.891	0.0000	0.06099	6.10	0.691
156	68.953	8.304	0.893	0.0000	0.06099	6.10	0.691
157	69.456	8.334	0.893	0.0000	0.06099	6.10	0.691
158	69.953	8.364	0.893	0.0000	0.06099	6.10	0.691
159	70.456	8.394	0.892	0.0000	0.06099	6.10	0.691
160	70.954	8.423	0.892	0.0000	0.06104	6.10	0.691
161	71.456	8.453	0.892	0.0000	0.06104	6.10	0.691
162	71.954	8.483	0.892	0.0000	0.06104	6.10	0.691
163	72.456	8.512	0.891	0.0000	0.06104	6.10	0.691
164	72.955	8.541	0.892	0.0000	0.06104	6.10	0.691
165	73.453	8.570	0.891	0.0000	0.06104	6.10	0.691
166	73.955	8.600	0.892	0.0000	0.06104	6.10	0.691
167	74.457	8.629	0.892	0.0000	0.06104	6.10	0.691
168	74.954	8.658	0.891	0.0000	0.06104	6.10	0.691
169	75.457	8.687	0.892	0.0000	0.06104	6.10	0.691
170	75.956	8.715	0.891	0.0000	0.06104	6.10	0.691
171	76.454	8.744	0.891	0.0000	0.06104	6.10	0.691
172	76.953	8.772	0.892	0.0000	0.06109	6.11	0.691
173	77.454	8.801	0.891	0.0000	0.06109	6.11	0.691
174	77.956	8.829	0.894	0.0000	0.06109	6.11	0.691
175	78.453	8.857	0.892	0.0000	0.06109	6.11	0.691
176	78.954	8.886	0.895	0.0000	0.06109	6.11	0.691
177	79.453	8.914	0.893	0.0000	0.06109	6.11	0.691
178	79.957	8.942	0.891	0.0000	0.06109	6.11	0.691
179	80.454	8.970	0.894	0.0000	0.06109	6.11	0.691
180	80.956	8.998	0.892	0.0000	0.06109	6.11	0.691
181	81.454	9.025	0.895	0.0000	0.06109	6.11	0.691
182	81.956	9.053	0.893	0.0000	0.06109	6.11	0.691
183	82.453	9.080	0.892	0.0000	0.06109	6.11	0.691
184	82.955	9.108	0.894	0.0000	0.06109	6.11	0.691
185	83.456	9.135	0.892	0.0000	0.06109	6.11	0.691
186	83.955	9.163	0.893	0.0000	0.06114	6.11	0.691
187	84.454	9.190	0.893	0.0000	0.06114	6.11	0.691
188	84.954	9.217	0.892	0.0000	0.06114	6.11	0.691
189	85.456	9.244	0.891	0.0000	0.06114	6.11	0.691
190	85.953	9.271	0.892	0.0000	0.06114	6.11	0.691
191	86.454	9.298	0.893	0.0000	0.06114	6.11	0.691
192	86.954	9.325	0.891	0.0000	0.06114	6.11	0.691
193	87.457	9.352	0.892	0.0000	0.06114	6.11	0.691
194	87.956	9.378	0.891	0.0000	0.06114	6.11	0.691
195	88.455	9.405	0.894	0.0000	0.06114	6.11	0.691
196	88.953	9.431	0.893	0.0000	0.06114	6.11	0.691
197	89.457	9.458	0.892	0.0000	0.06114	6.11	0.691
198	89.956	9.485	0.894	0.0000	0.06114	6.11	0.691
199	90.455	9.511	0.893	0.0000	0.06114	6.11	0.691
200	90.955	9.537	0.892	0.0000	0.06114	6.11	0.691

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.457	9.563	0.893	0.0000	0.06114	6.11	0.691
202	91.955	9.589	0.892	0.0000	0.06114	6.11	0.691
203	92.453	9.615	0.892	0.0000	0.06114	6.11	0.691
204	92.956	9.641	0.893	0.0000	0.06114	6.11	0.691
205	93.455	9.667	0.892	0.0000	0.06114	6.11	0.691
206	93.956	9.693	0.892	0.0000	0.06114	6.11	0.691
207	94.456	9.719	0.891	0.0000	0.06114	6.11	0.691
208	94.955	9.744	0.893	0.0000	0.06114	6.11	0.691
209	95.456	9.770	0.892	0.0000	0.06114	6.11	0.691
210	95.957	9.796	0.892	0.0000	0.06114	6.11	0.691
211	96.456	9.821	0.892	0.0000	0.06114	6.11	0.691
212	96.954	9.847	0.892	0.0000	0.06114	6.11	0.691
213	97.455	9.872	0.891	0.0000	0.06119	6.12	0.691
214	97.954	9.897	0.892	0.0000	0.06119	6.12	0.691
215	98.453	9.922	0.892	0.0000	0.06119	6.12	0.691
216	98.956	9.948	0.891	0.0000	0.06119	6.12	0.691
217	99.453	9.973	0.893	0.0000	0.06119	6.12	0.691
218	99.954	9.998	0.892	0.0000	0.06119	6.12	0.691
219	100.456	10.023	0.892	0.0000	0.06119	6.12	0.691
220	100.955	10.048	0.893	0.0000	0.06119	6.12	0.691
221	101.456	10.073	0.893	0.0000	0.06119	6.12	0.691
222	101.955	10.097	0.893	0.0000	0.06119	6.12	0.691
223	102.457	10.122	0.892	0.0000	0.06119	6.12	0.691
224	102.956	10.147	0.892	0.0000	0.06119	6.12	0.691
225	103.454	10.171	0.892	0.0000	0.06119	6.12	0.691
226	103.956	10.196	0.893	0.0000	0.06119	6.12	0.691
227	104.453	10.220	0.893	0.0000	0.06119	6.12	0.691
228	104.956	10.245	0.892	0.0000	0.06119	6.12	0.691
229	105.453	10.269	0.892	0.0000	0.06124	6.12	0.691
230	105.954	10.293	0.892	0.0000	0.06119	6.12	0.691
231	106.456	10.318	0.892	0.0000	0.06119	6.12	0.691
232	106.955	10.342	0.891	0.0000	0.06124	6.12	0.691
233	107.454	10.366	0.891	0.0000	0.06124	6.12	0.691
234	107.955	10.390	0.891	0.0000	0.06124	6.12	0.691
235	108.457	10.414	0.893	0.0000	0.06124	6.12	0.691
236	108.955	10.438	0.892	0.0000	0.06124	6.12	0.691
237	109.453	10.462	0.892	0.0000	0.06124	6.12	0.691
238	109.957	10.486	0.892	0.0000	0.06124	6.12	0.691
239	110.457	10.510	0.892	0.0000	0.06124	6.12	0.691
240	110.954	10.533	0.892	0.0000	0.06124	6.12	0.691
241	111.457	10.557	0.892	0.0000	0.06124	6.12	0.691
242	111.956	10.581	0.892	0.0000	0.06124	6.12	0.691
243	112.454	10.604	0.891	0.0000	0.06124	6.12	0.691
244	112.956	10.628	0.891	0.0000	0.06124	6.12	0.691
245	113.456	10.652	0.891	0.0000	0.06124	6.12	0.691
246	113.953	10.675	0.894	0.0000	0.06124	6.12	0.691
247	114.454	10.698	0.892	0.0000	0.06124	6.12	0.691
248	114.956	10.722	0.891	0.0000	0.06124	6.12	0.691
249	115.457	10.745	0.892	0.0000	0.06124	6.12	0.691
250	115.956	10.768	0.892	0.0000	0.06124	6.12	0.691

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.454	10.791	0.892	0.0000	0.06124	6.12	0.691
252	116.955	10.815	0.892	0.0000	0.06124	6.12	0.691
253	117.455	10.838	0.893	0.0000	0.06129	6.13	0.691
254	117.956	10.861	0.892	0.0000	0.06129	6.13	0.691
255	118.456	10.884	0.892	0.0000	0.06129	6.13	0.691
256	118.955	10.907	0.892	0.0000	0.06129	6.13	0.691
257	119.454	10.930	0.892	0.0000	0.06129	6.13	0.691
258	119.956	10.952	0.892	0.0000	0.06129	6.13	0.691
259	120.454	10.975	0.892	0.0000	0.06129	6.13	0.691
260	120.956	10.998	0.892	0.0000	0.06129	6.13	0.691
261	121.455	11.021	0.892	0.0000	0.06129	6.13	0.691
262	121.955	11.043	0.892	0.0000	0.06129	6.13	0.691
263	122.454	11.066	0.892	0.0000	0.06129	6.13	0.691
264	122.955	11.089	0.893	0.0000	0.06129	6.13	0.691
265	123.453	11.111	0.892	0.0000	0.06129	6.13	0.691
266	123.956	11.134	0.892	0.0000	0.06129	6.13	0.691
267	124.454	11.156	0.892	0.0000	0.06129	6.13	0.691
268	124.955	11.178	0.893	0.0000	0.06129	6.13	0.691
269	125.454	11.201	0.893	0.0000	0.06129	6.13	0.691
270	125.956	11.223	0.891	0.0000	0.06129	6.13	0.691
271	126.454	11.245	0.892	0.0000	0.06129	6.13	0.691
272	126.957	11.268	0.891	0.0000	0.06129	6.13	0.691
273	127.455	11.290	0.892	0.0000	0.06129	6.13	0.691
274	127.955	11.312	0.892	0.0000	0.06129	6.13	0.691
275	128.456	11.334	0.892	0.0000	0.06129	6.13	0.691
276	128.956	11.356	0.892	0.0000	0.06129	6.13	0.691
277	129.455	11.378	0.892	0.0000	0.06129	6.13	0.691
278	129.955	11.400	0.892	0.0000	0.06129	6.13	0.691
279	130.454	11.422	0.893	0.0000	0.06134	6.13	0.690
280	130.955	11.444	0.892	0.0000	0.06134	6.13	0.690
281	131.455	11.465	0.892	0.0000	0.06134	6.13	0.690
282	131.954	11.487	0.891	0.0000	0.06134	6.13	0.690
283	132.457	11.509	0.892	0.0000	0.06134	6.13	0.690
284	132.955	11.531	0.891	0.0000	0.06134	6.13	0.690
285	133.455	11.552	0.892	0.0000	0.06134	6.13	0.690
286	133.957	11.574	0.892	0.0000	0.06134	6.13	0.690
287	134.455	11.595	0.892	0.0000	0.06134	6.13	0.690
288	134.953	11.617	0.892	0.0000	0.06134	6.13	0.690
289	135.456	11.639	0.892	0.0000	0.06134	6.13	0.690
290	135.954	11.660	0.892	0.0000	0.06134	6.13	0.690
291	136.456	11.681	0.892	0.0000	0.06139	6.14	0.690
292	136.953	11.703	0.892	0.0000	0.06139	6.14	0.690
293	137.453	11.724	0.893	0.0000	0.06139	6.14	0.690
294	137.955	11.745	0.893	0.0000	0.06139	6.14	0.690
295	138.456	11.767	0.891	0.0000	0.06139	6.14	0.690
296	138.954	11.788	0.892	0.0000	0.06139	6.14	0.690
297	139.456	11.809	0.893	0.0000	0.06139	6.14	0.690
298	139.955	11.830	0.892	0.0000	0.06139	6.14	0.690
299	140.455	11.851	0.892	0.0000	0.06139	6.14	0.690
300	140.956	11.872	0.892	0.0000	0.06139	6.14	0.690

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.453	11.893	0.892	0.0000	0.06144	6.14	0.690
302	141.955	11.914	0.892	0.0000	0.06144	6.14	0.690
303	142.454	11.935	0.892	0.0000	0.06139	6.14	0.690
304	142.955	11.956	0.893	0.0000	0.06144	6.14	0.690
305	143.453	11.977	0.892	0.0000	0.06139	6.14	0.690
306	143.955	11.998	0.892	0.0000	0.06144	6.14	0.690
307	144.457	12.019	0.892	0.0000	0.06144	6.14	0.690
308	144.954	12.040	0.892	0.0000	0.06144	6.14	0.690
309	145.454	12.060	0.892	0.0000	0.06144	6.14	0.690
310	145.956	12.081	0.892	0.0000	0.06144	6.14	0.690
311	146.453	12.102	0.893	0.0000	0.06144	6.14	0.690
312	146.956	12.123	0.892	0.0000	0.06144	6.14	0.690
313	147.456	12.143	0.892	0.0000	0.06144	6.14	0.690
314	147.954	12.164	0.892	0.0000	0.06144	6.14	0.690
315	148.456	12.184	0.892	0.0000	0.06148	6.15	0.690
316	148.955	12.205	0.893	0.0000	0.06148	6.15	0.690
317	149.456	12.225	0.892	0.0000	0.06148	6.15	0.690
318	149.953	12.246	0.892	0.0000	0.06148	6.15	0.690
319	150.453	12.266	0.892	0.0000	0.06148	6.15	0.690
320	150.955	12.286	0.892	0.0000	0.06148	6.15	0.690
321	151.453	12.307	0.892	0.0000	0.06153	6.15	0.690
322	151.955	12.327	0.893	0.0000	0.06153	6.15	0.690
323	152.453	12.347	0.892	0.0000	0.06153	6.15	0.690
324	152.956	12.368	0.893	0.0000	0.06153	6.15	0.690
325	153.456	12.388	0.892	0.0000	0.06153	6.15	0.690
326	153.957	12.408	0.892	0.0000	0.06153	6.15	0.690
327	154.456	12.428	0.892	0.0000	0.06153	6.15	0.690
328	154.957	12.448	0.893	0.0000	0.06153	6.15	0.690
329	155.455	12.468	0.892	0.0000	0.06153	6.15	0.690
330	155.957	12.488	0.892	0.0000	0.06158	6.16	0.690
331	156.455	12.508	0.893	0.0000	0.06158	6.16	0.690
332	156.953	12.528	0.892	0.0000	0.06158	6.16	0.690
333	157.453	12.548	0.892	0.0000	0.06158	6.16	0.690
334	157.957	12.568	0.893	0.0000	0.06158	6.16	0.690
335	158.456	12.588	0.892	0.0000	0.06158	6.16	0.690
336	158.953	12.608	0.892	0.0000	0.06158	6.16	0.690
337	159.455	12.628	0.893	0.0000	0.06158	6.16	0.690
338	159.956	12.647	0.893	0.0000	0.06158	6.16	0.690
339	160.454	12.667	0.892	0.0000	0.06158	6.16	0.690
340	160.956	12.687	0.892	0.0000	0.06158	6.16	0.690
341	161.457	12.707	0.892	0.0000	0.06158	6.16	0.690
342	161.953	12.726	0.893	0.0000	0.06158	6.16	0.690
343	162.455	12.746	0.892	0.0000	0.06158	6.16	0.690
344	162.955	12.765	0.892	0.0000	0.06158	6.16	0.690
345	163.456	12.785	0.892	0.0000	0.06158	6.16	0.690
346	163.955	12.804	0.892	0.0000	0.06158	6.16	0.690
347	164.454	12.824	0.893	0.0000	0.06158	6.16	0.690
348	164.957	12.844	0.892	0.0000	0.06158	6.16	0.690
349	165.455	12.863	0.892	0.0000	0.06158	6.16	0.690
350	165.954	12.882	0.892	0.0000	0.06158	6.16	0.690

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.456	12.902	0.892	0.0000	0.06158	6.16	0.690
352	166.953	12.921	0.892	0.0000	0.06158	6.16	0.690
353	167.456	12.940	0.892	0.0000	0.06158	6.16	0.690
354	167.955	12.960	0.893	0.0000	0.06163	6.16	0.690
355	168.457	12.979	0.893	0.0000	0.06163	6.16	0.690
356	168.955	12.998	0.891	0.0000	0.06163	6.16	0.690
357	169.456	13.018	0.892	0.0000	0.06163	6.16	0.690
358	169.956	13.037	0.892	0.0000	0.06163	6.16	0.690
359	170.455	13.056	0.892	0.0000	0.06163	6.16	0.690
360	170.953	13.075	0.892	0.0000	0.06163	6.16	0.690
361	171.453	13.094	0.892	0.0000	0.06163	6.16	0.690
362	171.955	13.113	0.892	0.0000	0.06163	6.16	0.690
363	172.457	13.132	0.892	0.0000	0.06163	6.16	0.690
364	172.956	13.151	0.893	0.0000	0.06163	6.16	0.690
365	173.454	13.170	0.891	0.0000	0.06163	6.16	0.690
366	173.956	13.189	0.892	0.0000	0.06163	6.16	0.690
367	174.454	13.208	0.892	0.0000	0.06163	6.16	0.690
368	174.953	13.227	0.893	0.0000	0.06163	6.16	0.690
369	175.453	13.246	0.892	0.0000	0.06163	6.16	0.690
370	175.957	13.265	0.892	0.0000	0.06163	6.16	0.690
371	176.453	13.284	0.892	0.0000	0.06163	6.16	0.690
372	176.955	13.302	0.892	0.0000	0.06163	6.16	0.690
373	177.453	13.321	0.893	0.0000	0.06168	6.17	0.690
374	177.953	13.340	0.892	0.0000	0.06168	6.17	0.690
375	178.456	13.359	0.892	0.0000	0.06163	6.16	0.690
376	178.953	13.377	0.892	0.0000	0.06163	6.16	0.690
377	179.456	13.396	0.892	0.0000	0.06163	6.16	0.690
378	179.954	13.415	0.892	0.0000	0.06168	6.17	0.690
379	180.455	13.433	0.892	0.0000	0.06163	6.16	0.690
380	180.955	13.452	0.892	0.0000	0.06168	6.17	0.690
381	181.455	13.471	0.892	0.0000	0.06168	6.17	0.690
382	181.954	13.489	0.892	0.0000	0.06168	6.17	0.690
383	182.455	13.508	0.892	0.0000	0.06168	6.17	0.690
384	182.954	13.526	0.893	0.0000	0.06168	6.17	0.690
385	183.454	13.545	0.892	0.0000	0.06168	6.17	0.690
386	183.954	13.563	0.892	0.0000	0.06168	6.17	0.690
387	184.455	13.581	0.892	0.0000	0.06168	6.17	0.690
388	184.956	13.600	0.892	0.0000	0.06168	6.17	0.690
389	185.455	13.618	0.892	0.0000	0.06168	6.17	0.690
390	185.955	13.637	0.892	0.0000	0.06168	6.17	0.690
391	186.456	13.655	0.892	0.0000	0.06168	6.17	0.690
392	186.953	13.673	0.892	0.0000	0.06168	6.17	0.690
393	187.456	13.691	0.892	0.0000	0.06168	6.17	0.690
394	187.956	13.710	0.892	0.0000	0.06168	6.17	0.690
395	188.453	13.728	0.892	0.0000	0.06168	6.17	0.690
396	188.956	13.746	0.892	0.0000	0.06168	6.17	0.690
397	189.453	13.764	0.892	0.0000	0.06168	6.17	0.690
398	189.956	13.782	0.892	0.0000	0.06168	6.17	0.690
399	190.456	13.801	0.892	0.0000	0.06168	6.17	0.690
400	190.955	13.819	0.892	0.0000	0.06168	6.17	0.690

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.453	13.837	0.892	0.0000	0.06168	6.17	0.690
402	191.956	13.855	0.892	0.0000	0.06168	6.17	0.690
403	192.455	13.873	0.892	0.0000	0.06168	6.17	0.690
404	192.955	13.891	0.892	0.0000	0.06168	6.17	0.690
405	193.453	13.909	0.892	0.0000	0.06168	6.17	0.690
406	193.956	13.927	0.892	0.0000	0.06168	6.17	0.690
407	194.456	13.945	0.892	0.0000	0.06173	6.17	0.690
408	194.954	13.963	0.892	0.0000	0.06173	6.17	0.690
409	195.457	13.981	0.892	0.0000	0.06173	6.17	0.690
410	195.955	13.998	0.893	0.0000	0.06173	6.17	0.690
411	196.454	14.016	0.892	0.0000	0.06173	6.17	0.690
412	196.955	14.034	0.892	0.0000	0.06173	6.17	0.690
413	197.456	14.052	0.893	0.0000	0.06173	6.17	0.690
414	197.955	14.070	0.892	0.0000	0.06173	6.17	0.690
415	198.453	14.087	0.892	0.0000	0.06173	6.17	0.690
416	198.956	14.105	0.892	0.0000	0.06173	6.17	0.690
417	199.456	14.123	0.892	0.0000	0.06173	6.17	0.690
418	199.956	14.141	0.892	0.0000	0.06173	6.17	0.690
419	200.453	14.158	0.892	0.0000	0.06173	6.17	0.690
420	200.956	14.176	0.892	0.0000	0.06173	6.17	0.690
421	201.453	14.193	0.892	0.0000	0.06173	6.17	0.690
422	201.956	14.211	0.892	0.0000	0.06173	6.17	0.690
423	202.453	14.229	0.893	0.0000	0.06173	6.17	0.690
424	202.956	14.246	0.892	0.0000	0.06173	6.17	0.690
425	203.456	14.264	0.892	0.0000	0.06173	6.17	0.690
426	203.955	14.281	0.893	0.0000	0.06173	6.17	0.690
427	204.454	14.299	0.892	0.0000	0.06173	6.17	0.690
428	204.955	14.316	0.892	0.0000	0.06173	6.17	0.690
429	205.454	14.334	0.892	0.0000	0.06173	6.17	0.690
430	205.954	14.351	0.892	0.0000	0.06173	6.17	0.690
431	206.455	14.369	0.892	0.0000	0.06178	6.18	0.690
432	206.956	14.386	0.892	0.0000	0.06178	6.18	0.690
433	207.455	14.403	0.893	0.0000	0.06178	6.18	0.690
434	207.954	14.421	0.892	0.0000	0.06178	6.18	0.690
435	208.456	14.438	0.892	0.0000	0.06178	6.18	0.690
436	208.957	14.455	0.892	0.0000	0.06173	6.17	0.690
437	209.455	14.473	0.892	0.0000	0.06178	6.18	0.690
438	209.957	14.490	0.892	0.0000	0.06173	6.17	0.690
439	210.456	14.507	0.892	0.0000	0.06178	6.18	0.690
440	210.956	14.524	0.892	0.0000	0.06173	6.17	0.690
441	211.456	14.542	0.892	0.0000	0.06178	6.18	0.690
442	211.957	14.559	0.892	0.0000	0.06178	6.18	0.690
443	212.456	14.576	0.892	0.0000	0.06178	6.18	0.690
444	212.954	14.593	0.892	0.0000	0.06178	6.18	0.690
445	213.455	14.610	0.892	0.0000	0.06178	6.18	0.690
446	213.955	14.627	0.892	0.0000	0.06178	6.18	0.690
447	214.454	14.644	0.892	0.0000	0.06178	6.18	0.690
448	214.953	14.661	0.892	0.0000	0.06178	6.18	0.690
449	215.454	14.678	0.892	0.0000	0.06178	6.18	0.690
450	215.956	14.695	0.892	0.0000	0.06178	6.18	0.690

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.454	14.712	0.893	0.0000	0.06178	6.18	0.690
452	216.955	14.729	0.892	0.0000	0.06178	6.18	0.690
453	217.456	14.746	0.892	0.0000	0.06178	6.18	0.690
454	217.956	14.763	0.891	0.0000	0.06183	6.18	0.690
455	218.456	14.780	0.892	0.0000	0.06183	6.18	0.690
456	218.953	14.797	0.892	0.0000	0.06183	6.18	0.690
457	219.456	14.814	0.892	0.0000	0.06183	6.18	0.690
458	219.955	14.831	0.892	0.0000	0.06183	6.18	0.690
459	220.454	14.848	0.892	0.0000	0.06183	6.18	0.690
460	220.953	14.864	0.892	0.0000	0.06183	6.18	0.690
461	221.454	14.881	0.892	0.0000	0.06183	6.18	0.690
462	221.957	14.898	0.892	0.0000	0.06183	6.18	0.690
463	222.455	14.915	0.891	0.0000	0.06183	6.18	0.690
464	222.953	14.932	0.892	0.0000	0.06183	6.18	0.690
465	223.457	14.948	0.892	0.0000	0.06183	6.18	0.690
466	223.955	14.965	0.892	0.0000	0.06183	6.18	0.690
467	224.456	14.982	0.892	0.0000	0.06183	6.18	0.690
468	224.954	14.998	0.892	0.0000	0.06183	6.18	0.690
469	225.454	15.015	0.892	0.0000	0.06183	6.18	0.690
470	225.953	15.032	0.892	0.0000	0.06183	6.18	0.690
471	226.453	15.048	0.892	0.0000	0.06183	6.18	0.690
472	226.953	15.065	0.892	0.0000	0.06188	6.19	0.689
473	227.456	15.082	0.892	0.0000	0.06188	6.19	0.689
474	227.954	15.098	0.892	0.0000	0.06188	6.19	0.689
475	228.453	15.115	0.892	0.0000	0.06188	6.19	0.689
476	228.953	15.131	0.892	0.0000	0.06188	6.19	0.689
477	229.454	15.148	0.893	0.0000	0.06193	6.19	0.689
478	229.954	15.164	0.892	0.0000	0.06188	6.19	0.689
479	230.456	15.181	0.892	0.0000	0.06193	6.19	0.689
480	230.956	15.197	0.892	0.0000	0.06193	6.19	0.689
481	231.455	15.214	0.892	0.0000	0.06193	6.19	0.689
482	231.956	15.230	0.892	0.0000	0.06193	6.19	0.689
483	232.454	15.246	0.892	0.0000	0.06193	6.19	0.689
484	232.953	15.263	0.892	0.0000	0.06193	6.19	0.689
485	233.456	15.279	0.892	0.0000	0.06193	6.19	0.689
486	233.956	15.296	0.892	0.0000	0.06193	6.19	0.689
487	234.454	15.312	0.892	0.0000	0.06193	6.19	0.689
488	234.954	15.328	0.893	0.0000	0.06193	6.19	0.689
489	235.457	15.345	0.893	0.0000	0.06198	6.20	0.689
490	235.955	15.361	0.892	0.0000	0.06198	6.20	0.689
491	236.455	15.377	0.892	0.0000	0.06198	6.20	0.689
492	236.953	15.393	0.892	0.0000	0.06198	6.20	0.689
493	237.455	15.410	0.892	0.0000	0.06198	6.20	0.689
494	237.954	15.426	0.892	0.0000	0.06198	6.20	0.689
495	238.453	15.442	0.892	0.0000	0.06198	6.20	0.689
496	238.955	15.458	0.892	0.0000	0.06198	6.20	0.689
497	239.453	15.474	0.892	0.0000	0.06198	6.20	0.689
498	239.954	15.490	0.892	0.0000	0.06198	6.20	0.689
499	239.998	15.492	0.892	0.0000	0.06198	6.20	0.689

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.033		0.892	0.0000	0.06198	6.20	0.689
2	-0.029		0.892	0.0000	0.06198	6.20	0.689
3	-0.025		1.10	0.0000	0.06263	6.26	0.688
4	-0.020		1.28	0.0000	0.06347	6.35	0.687
5	-0.016		1.40	0.0000	0.06407	6.41	0.686
6	-0.012		1.48	0.0000	0.06441	6.44	0.685
7	-0.007		1.56	0.0000	0.06511	6.51	0.684
8	-0.003		1.64	0.0000	0.06595	6.60	0.682
9	0.000	0.000	1.70	0.0000	0.06640	6.64	0.681
10	0.001	0.032	1.71	0.0000	0.06655	6.66	0.681
11	0.005	0.074	1.78	0.0000	0.06779	6.78	0.679
12	0.010	0.098	1.72	0.0000	0.06814	6.81	0.678
13	0.014	0.118	1.70	0.0000	0.06819	6.82	0.678
14	0.018	0.134	1.70	0.0000	0.06824	6.82	0.678
15	0.022	0.150	1.72	0.0000	0.06824	6.82	0.678
16	0.027	0.164	1.73	0.0000	0.06844	6.84	0.678
17	0.044	0.210	1.78	0.0000	0.06948	6.95	0.676
18	0.053	0.230	1.75	0.0000	0.06968	6.97	0.675
19	0.135	0.368	1.78	0.0000	0.07082	7.08	0.673
20	0.221	0.470	1.65	0.0000	0.07107	7.11	0.673
21	0.303	0.550	1.77	0.0000	0.07177	7.18	0.672
22	0.468	0.684	1.78	0.0000	0.07236	7.24	0.671
23	0.717	0.847	1.79	0.0000	0.07350	7.35	0.669
24	0.968	0.984	1.78	0.0000	0.07400	7.40	0.668
25	1.470	1.212	1.78	0.0000	0.07579	7.58	0.664
26	2.470	1.571	1.78	0.0000	0.07738	7.74	0.662
27	4.470	2.114	1.78	0.0000	0.08100	8.10	0.655
28	4.971	2.230	1.78	0.0000	0.08135	8.14	0.654
29	5.468	2.338	1.78	0.0000	0.08264	8.26	0.652
30	5.970	2.443	1.78	0.0000	0.08324	8.32	0.651
31	6.469	2.543	1.78	0.0000	0.08378	8.38	0.650
32	6.969	2.640	1.79	0.0000	0.08403	8.40	0.650
33	7.469	2.733	1.78	0.0000	0.08433	8.43	0.649
34	7.969	2.823	1.78	0.0000	0.08458	8.46	0.649
35	8.471	2.911	1.79	0.0000	0.08493	8.49	0.648
36	8.969	2.995	1.78	0.0000	0.08542	8.54	0.647
37	9.468	3.077	1.79	0.0000	0.08577	8.58	0.646
38	9.971	3.158	1.78	0.0000	0.08662	8.66	0.645
39	10.470	3.236	1.79	0.0000	0.08701	8.70	0.644
40	10.968	3.312	1.78	0.0000	0.08741	8.74	0.643
41	11.469	3.387	1.79	0.0000	0.08761	8.76	0.643
42	11.971	3.460	1.78	0.0000	0.08786	8.79	0.643
43	12.469	3.531	1.79	0.0000	0.08806	8.81	0.642
44	12.970	3.601	1.78	0.0000	0.08820	8.82	0.642
45	13.468	3.670	1.78	0.0000	0.08830	8.83	0.642
46	13.970	3.738	1.78	0.0000	0.08840	8.84	0.642
47	14.471	3.804	1.78	0.0000	0.08870	8.87	0.641
48	14.970	3.869	1.78	0.0000	0.08905	8.90	0.641
49	15.469	3.933	1.78	0.0000	0.08955	8.95	0.640
50	15.971	3.996	1.78	0.0000	0.08994	8.99	0.639

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.470	4.058	1.78	0.0000	0.09004	9.00	0.639
52	16.968	4.119	1.79	0.0000	0.09014	9.01	0.639
53	17.471	4.180	1.79	0.0000	0.09029	9.03	0.638
54	17.969	4.239	1.78	0.0000	0.09034	9.03	0.638
55	18.468	4.297	1.79	0.0000	0.09049	9.05	0.638
56	18.969	4.355	1.79	0.0000	0.09064	9.06	0.638
57	19.468	4.412	1.79	0.0000	0.09069	9.07	0.638
58	19.971	4.469	1.78	0.0000	0.09079	9.08	0.637
59	20.470	4.524	1.79	0.0000	0.09094	9.09	0.637
60	20.970	4.579	1.79	0.0000	0.09108	9.11	0.637
61	21.470	4.634	1.79	0.0000	0.09113	9.11	0.637
62	21.968	4.687	1.79	0.0000	0.09123	9.12	0.637
63	22.469	4.740	1.78	0.0000	0.09148	9.15	0.636
64	22.969	4.793	1.79	0.0000	0.09163	9.16	0.636
65	23.471	4.845	1.79	0.0000	0.09168	9.17	0.636
66	23.970	4.896	1.79	0.0000	0.09173	9.17	0.636
67	24.470	4.947	1.79	0.0000	0.09183	9.18	0.636
68	24.971	4.997	1.79	0.0000	0.09188	9.19	0.635
69	25.470	5.047	1.78	0.0000	0.09193	9.19	0.635
70	25.969	5.096	1.79	0.0000	0.09208	9.21	0.635
71	26.470	5.145	1.78	0.0000	0.09208	9.21	0.635
72	26.967	5.193	1.79	0.0000	0.09213	9.21	0.635
73	27.470	5.241	1.79	0.0000	0.09218	9.22	0.635
74	27.968	5.288	1.78	0.0000	0.09302	9.30	0.633
75	28.471	5.336	1.79	0.0000	0.09327	9.33	0.633
76	28.970	5.382	1.79	0.0000	0.09347	9.35	0.633
77	29.469	5.429	1.79	0.0000	0.09362	9.36	0.632
78	29.971	5.475	1.78	0.0000	0.09382	9.38	0.632
79	30.469	5.520	1.79	0.0000	0.09402	9.40	0.632
80	30.969	5.565	1.79	0.0000	0.09416	9.42	0.631
81	31.471	5.610	1.79	0.0000	0.09431	9.43	0.631
82	31.969	5.654	1.78	0.0000	0.09441	9.44	0.631
83	32.467	5.698	1.78	0.0000	0.09451	9.45	0.631
84	32.970	5.742	1.78	0.0000	0.09456	9.46	0.631
85	33.469	5.785	1.78	0.0000	0.09466	9.47	0.630
86	33.969	5.828	1.79	0.0000	0.09471	9.47	0.630
87	34.469	5.871	1.78	0.0000	0.09476	9.48	0.630
88	34.967	5.913	1.78	0.0000	0.09481	9.48	0.630
89	35.469	5.956	1.79	0.0000	0.09486	9.49	0.630
90	35.971	5.998	1.79	0.0000	0.09496	9.50	0.630
91	36.468	6.039	1.78	0.0000	0.09506	9.51	0.630
92	36.970	6.080	1.79	0.0000	0.09516	9.52	0.630
93	37.468	6.121	1.79	0.0000	0.09526	9.53	0.629
94	37.968	6.162	1.79	0.0000	0.09531	9.53	0.629
95	38.467	6.202	1.79	0.0000	0.09531	9.53	0.629
96	38.970	6.243	1.78	0.0000	0.09536	9.54	0.629
97	39.469	6.282	1.79	0.0000	0.09541	9.54	0.629
98	39.968	6.322	1.79	0.0000	0.09550	9.55	0.629
99	40.471	6.362	1.79	0.0000	0.09550	9.55	0.629
100	40.970	6.401	1.78	0.0000	0.09555	9.56	0.629

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.470	6.440	1.78	0.0000	0.09565	9.57	0.629
102	41.971	6.478	1.79	0.0000	0.09570	9.57	0.629
103	42.470	6.517	1.78	0.0000	0.09575	9.58	0.628
104	42.969	6.555	1.79	0.0000	0.09580	9.58	0.628
105	43.467	6.593	1.78	0.0000	0.09585	9.59	0.628
106	43.967	6.631	1.78	0.0000	0.09590	9.59	0.628
107	44.470	6.669	1.79	0.0000	0.09595	9.60	0.628
108	44.970	6.706	1.79	0.0000	0.09600	9.60	0.628
109	45.470	6.743	1.78	0.0000	0.09605	9.61	0.628
110	45.967	6.780	1.78	0.0000	0.09615	9.62	0.628
111	46.470	6.817	1.78	0.0000	0.09625	9.62	0.628
112	46.968	6.853	1.79	0.0000	0.09630	9.63	0.627
113	47.470	6.890	1.79	0.0000	0.09630	9.63	0.627
114	47.969	6.926	1.79	0.0000	0.09635	9.63	0.627
115	48.470	6.962	1.79	0.0000	0.09635	9.63	0.627
116	48.970	6.998	1.78	0.0000	0.09635	9.63	0.627
117	49.468	7.033	1.78	0.0000	0.09640	9.64	0.627
118	49.967	7.069	1.78	0.0000	0.09640	9.64	0.627
119	50.469	7.104	1.78	0.0000	0.09640	9.64	0.627
120	50.967	7.139	1.78	0.0000	0.09645	9.64	0.627
121	51.471	7.174	1.78	0.0000	0.09645	9.64	0.627
122	51.968	7.209	1.79	0.0000	0.09645	9.64	0.627
123	52.471	7.244	1.78	0.0000	0.09650	9.65	0.627
124	52.969	7.278	1.79	0.0000	0.09650	9.65	0.627
125	53.468	7.312	1.79	0.0000	0.09655	9.65	0.627
126	53.971	7.346	1.78	0.0000	0.09655	9.65	0.627
127	54.469	7.380	1.78	0.0000	0.09655	9.65	0.627
128	54.970	7.414	1.79	0.0000	0.09655	9.65	0.627
129	55.467	7.448	1.79	0.0000	0.09665	9.66	0.627
130	55.969	7.481	1.78	0.0000	0.09670	9.67	0.627
131	56.468	7.514	1.79	0.0000	0.09670	9.67	0.627
132	56.969	7.548	1.79	0.0000	0.09670	9.67	0.627
133	57.468	7.581	1.79	0.0000	0.09675	9.67	0.627
134	57.967	7.614	1.78	0.0000	0.09675	9.67	0.627
135	58.471	7.647	1.78	0.0000	0.09675	9.67	0.627
136	58.971	7.679	1.79	0.0000	0.09675	9.67	0.627
137	59.469	7.712	1.78	0.0000	0.09675	9.67	0.627
138	59.971	7.744	1.79	0.0000	0.09680	9.68	0.627
139	60.469	7.776	1.79	0.0000	0.09680	9.68	0.627
140	60.969	7.808	1.79	0.0000	0.09680	9.68	0.627
141	61.468	7.840	1.79	0.0000	0.09680	9.68	0.627
142	61.971	7.872	1.78	0.0000	0.09680	9.68	0.627
143	62.467	7.904	1.79	0.0000	0.09685	9.68	0.626
144	62.970	7.935	1.78	0.0000	0.09690	9.69	0.626
145	63.469	7.967	1.78	0.0000	0.09695	9.69	0.626
146	63.971	7.998	1.79	0.0000	0.09699	9.70	0.626
147	64.470	8.029	1.78	0.0000	0.09699	9.70	0.626
148	64.968	8.060	1.78	0.0000	0.09699	9.70	0.626
149	65.470	8.091	1.78	0.0000	0.09699	9.70	0.626
150	65.968	8.122	1.78	0.0000	0.09704	9.70	0.626

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.468	8.153	1.79	0.0000	0.09704	9.70	0.626
152	66.970	8.184	1.79	0.0000	0.09704	9.70	0.626
153	67.468	8.214	1.79	0.0000	0.09709	9.71	0.626
154	67.970	8.244	1.78	0.0000	0.09709	9.71	0.626
155	68.468	8.275	1.78	0.0000	0.09709	9.71	0.626
156	68.970	8.305	1.79	0.0000	0.09714	9.71	0.626
157	69.468	8.335	1.79	0.0000	0.09714	9.71	0.626
158	69.967	8.365	1.79	0.0000	0.09714	9.71	0.626
159	70.468	8.395	1.79	0.0000	0.09714	9.71	0.626
160	70.971	8.424	1.79	0.0000	0.09719	9.72	0.626
161	71.469	8.454	1.79	0.0000	0.09719	9.72	0.626
162	71.968	8.483	1.79	0.0000	0.09719	9.72	0.626
163	72.471	8.513	1.78	0.0000	0.09719	9.72	0.626
164	72.970	8.542	1.78	0.0000	0.09719	9.72	0.626
165	73.470	8.571	1.79	0.0000	0.09724	9.72	0.626
166	73.969	8.601	1.79	0.0000	0.09724	9.72	0.626
167	74.471	8.630	1.79	0.0000	0.09724	9.72	0.626
168	74.970	8.659	1.79	0.0000	0.09724	9.72	0.626
169	75.470	8.687	1.78	0.0000	0.09724	9.72	0.626
170	75.970	8.716	1.79	0.0000	0.09724	9.72	0.626
171	76.468	8.745	1.78	0.0000	0.09729	9.73	0.626
172	76.970	8.773	1.79	0.0000	0.09729	9.73	0.626
173	77.469	8.802	1.79	0.0000	0.09729	9.73	0.626
174	77.968	8.830	1.78	0.0000	0.09729	9.73	0.626
175	78.470	8.858	1.79	0.0000	0.09734	9.73	0.626
176	78.970	8.887	1.79	0.0000	0.09734	9.73	0.626
177	79.469	8.915	1.79	0.0000	0.09734	9.73	0.626
178	79.969	8.943	1.79	0.0000	0.09734	9.73	0.626
179	80.471	8.971	1.79	0.0000	0.09734	9.73	0.626
180	80.968	8.998	1.79	0.0000	0.09734	9.73	0.626
181	81.470	9.026	1.78	0.0000	0.09734	9.73	0.626
182	81.970	9.054	1.79	0.0000	0.09739	9.74	0.626
183	82.471	9.081	1.78	0.0000	0.09739	9.74	0.626
184	82.971	9.109	1.79	0.0000	0.09739	9.74	0.626
185	83.469	9.136	1.78	0.0000	0.09739	9.74	0.626
186	83.971	9.164	1.79	0.0000	0.09744	9.74	0.625
187	84.470	9.191	1.79	0.0000	0.09744	9.74	0.625
188	84.971	9.218	1.79	0.0000	0.09744	9.74	0.625
189	85.467	9.245	1.79	0.0000	0.09744	9.74	0.625
190	85.967	9.272	1.79	0.0000	0.09739	9.74	0.626
191	86.469	9.299	1.78	0.0000	0.09744	9.74	0.625
192	86.971	9.326	1.79	0.0000	0.09744	9.74	0.625
193	87.470	9.353	1.78	0.0000	0.09744	9.74	0.625
194	87.969	9.379	1.79	0.0000	0.09744	9.74	0.625
195	88.467	9.406	1.78	0.0000	0.09749	9.75	0.625
196	88.970	9.432	1.79	0.0000	0.09749	9.75	0.625
197	89.468	9.459	1.79	0.0000	0.09749	9.75	0.625
198	89.968	9.485	1.79	0.0000	0.09749	9.75	0.625
199	90.470	9.512	1.79	0.0000	0.09749	9.75	0.625
200	90.967	9.538	1.79	0.0000	0.09749	9.75	0.625

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.468	9.564	1.79	0.0000	0.09749	9.75	0.625
202	91.971	9.590	1.79	0.0000	0.09754	9.75	0.625
203	92.469	9.616	1.79	0.0000	0.09754	9.75	0.625
204	92.970	9.642	1.79	0.0000	0.09754	9.75	0.625
205	93.470	9.668	1.79	0.0000	0.09754	9.75	0.625
206	93.969	9.694	1.78	0.0000	0.09754	9.75	0.625
207	94.468	9.719	1.79	0.0000	0.09754	9.75	0.625
208	94.971	9.745	1.79	0.0000	0.09754	9.75	0.625
209	95.469	9.771	1.79	0.0000	0.09754	9.75	0.625
210	95.970	9.796	1.78	0.0000	0.09759	9.76	0.625
211	96.467	9.822	1.79	0.0000	0.09754	9.75	0.625
212	96.970	9.847	1.79	0.0000	0.09759	9.76	0.625
213	97.469	9.873	1.78	0.0000	0.09759	9.76	0.625
214	97.967	9.898	1.79	0.0000	0.09759	9.76	0.625
215	98.471	9.923	1.79	0.0000	0.09759	9.76	0.625
216	98.968	9.948	1.79	0.0000	0.09759	9.76	0.625
217	99.471	9.973	1.79	0.0000	0.09759	9.76	0.625
218	99.969	9.998	1.79	0.0000	0.09764	9.76	0.625
219	100.468	10.023	1.78	0.0000	0.09759	9.76	0.625
220	100.970	10.048	1.79	0.0000	0.09764	9.76	0.625
221	101.470	10.073	1.78	0.0000	0.09764	9.76	0.625
222	101.970	10.098	1.79	0.0000	0.09769	9.77	0.625
223	102.470	10.123	1.79	0.0000	0.09769	9.77	0.625
224	102.969	10.147	1.78	0.0000	0.09769	9.77	0.625
225	103.467	10.172	1.79	0.0000	0.09769	9.77	0.625
226	103.969	10.197	1.79	0.0000	0.09774	9.77	0.625
227	104.467	10.221	1.79	0.0000	0.09774	9.77	0.625
228	104.970	10.245	1.79	0.0000	0.09774	9.77	0.625
229	105.469	10.270	1.79	0.0000	0.09774	9.77	0.625
230	105.970	10.294	1.79	0.0000	0.09774	9.77	0.625
231	106.471	10.318	1.79	0.0000	0.09774	9.77	0.625
232	106.969	10.343	1.79	0.0000	0.09774	9.77	0.625
233	107.468	10.367	1.79	0.0000	0.09774	9.77	0.625
234	107.969	10.391	1.79	0.0000	0.09779	9.78	0.625
235	108.467	10.415	1.79	0.0000	0.09779	9.78	0.625
236	108.971	10.439	1.78	0.0000	0.09779	9.78	0.625
237	109.470	10.463	1.79	0.0000	0.09779	9.78	0.625
238	109.968	10.487	1.79	0.0000	0.09779	9.78	0.625
239	110.469	10.510	1.79	0.0000	0.09779	9.78	0.625
240	110.969	10.534	1.79	0.0000	0.09779	9.78	0.625
241	111.467	10.558	1.79	0.0000	0.09779	9.78	0.625
242	111.970	10.582	1.79	0.0000	0.09779	9.78	0.625
243	112.469	10.605	1.79	0.0000	0.09779	9.78	0.625
244	112.967	10.629	1.79	0.0000	0.09779	9.78	0.625
245	113.470	10.652	1.79	0.0000	0.09779	9.78	0.625
246	113.971	10.676	1.79	0.0000	0.09784	9.78	0.625
247	114.470	10.699	1.79	0.0000	0.09784	9.78	0.625
248	114.967	10.722	1.79	0.0000	0.09789	9.79	0.625
249	115.470	10.746	1.79	0.0000	0.09789	9.79	0.625
250	115.969	10.769	1.79	0.0000	0.09789	9.79	0.625

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.471	10.792	1.79	0.0000	0.09789	9.79	0.625
252	116.967	10.815	1.79	0.0000	0.09789	9.79	0.625
253	117.469	10.838	1.79	0.0000	0.09789	9.79	0.625
254	117.968	10.861	1.79	0.0000	0.09789	9.79	0.625
255	118.471	10.884	1.79	0.0000	0.09789	9.79	0.625
256	118.969	10.907	1.79	0.0000	0.09794	9.79	0.625
257	119.469	10.930	1.79	0.0000	0.09794	9.79	0.625
258	119.969	10.953	1.79	0.0000	0.09794	9.79	0.625
259	120.471	10.976	1.79	0.0000	0.09794	9.79	0.625
260	120.969	10.999	1.79	0.0000	0.09794	9.79	0.625
261	121.467	11.021	1.79	0.0000	0.09794	9.79	0.625
262	121.970	11.044	1.79	0.0000	0.09794	9.79	0.625
263	122.470	11.067	1.79	0.0000	0.09799	9.80	0.624
264	122.968	11.089	1.79	0.0000	0.09799	9.80	0.624
265	123.471	11.112	1.79	0.0000	0.09794	9.79	0.625
266	123.968	11.134	1.79	0.0000	0.09794	9.79	0.625
267	124.469	11.157	1.79	0.0000	0.09794	9.79	0.625
268	124.967	11.179	1.79	0.0000	0.09799	9.80	0.624
269	125.470	11.201	1.79	0.0000	0.09799	9.80	0.624
270	125.968	11.224	1.79	0.0000	0.09799	9.80	0.624
271	126.469	11.246	1.78	0.0000	0.09804	9.80	0.624
272	126.969	11.268	1.79	0.0000	0.09804	9.80	0.624
273	127.470	11.290	1.79	0.0000	0.09804	9.80	0.624
274	127.968	11.312	1.79	0.0000	0.09804	9.80	0.624
275	128.469	11.334	1.79	0.0000	0.09804	9.80	0.624
276	128.968	11.356	1.79	0.0000	0.09804	9.80	0.624
277	129.467	11.378	1.79	0.0000	0.09804	9.80	0.624
278	129.970	11.400	1.79	0.0000	0.09804	9.80	0.624
279	130.467	11.422	1.79	0.0000	0.09809	9.81	0.624
280	130.970	11.444	1.79	0.0000	0.09809	9.81	0.624
281	131.468	11.466	1.79	0.0000	0.09809	9.81	0.624
282	131.970	11.488	1.78	0.0000	0.09804	9.80	0.624
283	132.470	11.510	1.78	0.0000	0.09809	9.81	0.624
284	132.967	11.531	1.79	0.0000	0.09809	9.81	0.624
285	133.467	11.553	1.79	0.0000	0.09809	9.81	0.624
286	133.970	11.575	1.79	0.0000	0.09809	9.81	0.624
287	134.468	11.596	1.79	0.0000	0.09809	9.81	0.624
288	134.968	11.618	1.79	0.0000	0.09809	9.81	0.624
289	135.470	11.639	1.79	0.0000	0.09809	9.81	0.624
290	135.971	11.661	1.79	0.0000	0.09809	9.81	0.624
291	136.469	11.682	1.79	0.0000	0.09809	9.81	0.624
292	136.970	11.703	1.78	0.0000	0.09814	9.81	0.624
293	137.471	11.725	1.79	0.0000	0.09809	9.81	0.624
294	137.969	11.746	1.79	0.0000	0.09814	9.81	0.624
295	138.471	11.767	1.79	0.0000	0.09809	9.81	0.624
296	138.971	11.789	1.79	0.0000	0.09814	9.81	0.624
297	139.470	11.810	1.79	0.0000	0.09814	9.81	0.624
298	139.968	11.831	1.79	0.0000	0.09814	9.81	0.624
299	140.470	11.852	1.79	0.0000	0.09814	9.81	0.624
300	140.971	11.873	1.79	0.0000	0.09814	9.81	0.624

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.468	11.894	1.79	0.0000	0.09814	9.81	0.624
302	141.970	11.915	1.79	0.0000	0.09814	9.81	0.624
303	142.468	11.936	1.79	0.0000	0.09814	9.81	0.624
304	142.971	11.957	1.79	0.0000	0.09814	9.81	0.624
305	143.471	11.978	1.78	0.0000	0.09814	9.81	0.624
306	143.969	11.999	1.79	0.0000	0.09819	9.82	0.624
307	144.468	12.019	1.79	0.0000	0.09814	9.81	0.624
308	144.970	12.040	1.79	0.0000	0.09819	9.82	0.624
309	145.471	12.061	1.79	0.0000	0.09819	9.82	0.624
310	145.971	12.082	1.79	0.0000	0.09819	9.82	0.624
311	146.468	12.102	1.79	0.0000	0.09819	9.82	0.624
312	146.968	12.123	1.79	0.0000	0.09819	9.82	0.624
313	147.470	12.144	1.79	0.0000	0.09819	9.82	0.624
314	147.968	12.164	1.79	0.0000	0.09819	9.82	0.624
315	148.470	12.185	1.79	0.0000	0.09819	9.82	0.624
316	148.969	12.205	1.79	0.0000	0.09819	9.82	0.624
317	149.468	12.226	1.79	0.0000	0.09819	9.82	0.624
318	149.970	12.246	1.79	0.0000	0.09824	9.82	0.624
319	150.469	12.267	1.79	0.0000	0.09824	9.82	0.624
320	150.967	12.287	1.79	0.0000	0.09824	9.82	0.624
321	151.469	12.307	1.79	0.0000	0.09824	9.82	0.624
322	151.967	12.328	1.79	0.0000	0.09824	9.82	0.624
323	152.469	12.348	1.79	0.0000	0.09824	9.82	0.624
324	152.968	12.368	1.79	0.0000	0.09824	9.82	0.624
325	153.471	12.388	1.79	0.0000	0.09824	9.82	0.624
326	153.969	12.408	1.79	0.0000	0.09824	9.82	0.624
327	154.471	12.429	1.79	0.0000	0.09824	9.82	0.624
328	154.969	12.449	1.79	0.0000	0.09824	9.82	0.624
329	155.471	12.469	1.79	0.0000	0.09824	9.82	0.624
330	155.970	12.489	1.79	0.0000	0.09824	9.82	0.624
331	156.469	12.509	1.79	0.0000	0.09829	9.83	0.624
332	156.970	12.529	1.79	0.0000	0.09829	9.83	0.624
333	157.468	12.549	1.79	0.0000	0.09829	9.83	0.624
334	157.971	12.569	1.79	0.0000	0.09829	9.83	0.624
335	158.469	12.588	1.79	0.0000	0.09829	9.83	0.624
336	158.967	12.608	1.79	0.0000	0.09829	9.83	0.624
337	159.470	12.628	1.79	0.0000	0.09829	9.83	0.624
338	159.968	12.648	1.79	0.0000	0.09829	9.83	0.624
339	160.470	12.668	1.79	0.0000	0.09829	9.83	0.624
340	160.969	12.687	1.79	0.0000	0.09829	9.83	0.624
341	161.471	12.707	1.79	0.0000	0.09829	9.83	0.624
342	161.967	12.727	1.79	0.0000	0.09829	9.83	0.624
343	162.470	12.746	1.78	0.0000	0.09829	9.83	0.624
344	162.968	12.766	1.79	0.0000	0.09829	9.83	0.624
345	163.469	12.785	1.79	0.0000	0.09834	9.83	0.624
346	163.968	12.805	1.79	0.0000	0.09834	9.83	0.624
347	164.470	12.825	1.79	0.0000	0.09834	9.83	0.624
348	164.969	12.844	1.79	0.0000	0.09834	9.83	0.624
349	165.468	12.863	1.79	0.0000	0.09834	9.83	0.624
350	165.970	12.883	1.79	0.0000	0.09834	9.83	0.624

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.468	12.902	1.79	0.0000	0.09834	9.83	0.624
352	166.968	12.922	1.79	0.0000	0.09834	9.83	0.624
353	167.470	12.941	1.79	0.0000	0.09834	9.83	0.624
354	167.968	12.960	1.79	0.0000	0.09834	9.83	0.624
355	168.471	12.980	1.79	0.0000	0.09834	9.83	0.624
356	168.967	12.999	1.79	0.0000	0.09834	9.83	0.624
357	169.467	13.018	1.79	0.0000	0.09834	9.83	0.624
358	169.970	13.037	1.79	0.0000	0.09834	9.83	0.624
359	170.471	13.056	1.79	0.0000	0.09839	9.84	0.624
360	170.969	13.076	1.79	0.0000	0.09839	9.84	0.624
361	171.467	13.095	1.79	0.0000	0.09839	9.84	0.624
362	171.967	13.114	1.78	0.0000	0.09834	9.83	0.624
363	172.470	13.133	1.79	0.0000	0.09839	9.84	0.624
364	172.970	13.152	1.79	0.0000	0.09839	9.84	0.624
365	173.469	13.171	1.79	0.0000	0.09839	9.84	0.624
366	173.969	13.190	1.79	0.0000	0.09839	9.84	0.624
367	174.471	13.209	1.79	0.0000	0.09839	9.84	0.624
368	174.968	13.228	1.79	0.0000	0.09839	9.84	0.624
369	175.468	13.246	1.79	0.0000	0.09839	9.84	0.624
370	175.968	13.265	1.79	0.0000	0.09839	9.84	0.624
371	176.468	13.284	1.79	0.0000	0.09839	9.84	0.624
372	176.970	13.303	1.79	0.0000	0.09839	9.84	0.624
373	177.469	13.322	1.79	0.0000	0.09839	9.84	0.624
374	177.970	13.341	1.79	0.0000	0.09839	9.84	0.624
375	178.471	13.359	1.79	0.0000	0.09839	9.84	0.624
376	178.970	13.378	1.79	0.0000	0.09839	9.84	0.624
377	179.467	13.397	1.79	0.0000	0.09839	9.84	0.624
378	179.969	13.415	1.79	0.0000	0.09839	9.84	0.624
379	180.470	13.434	1.79	0.0000	0.09844	9.84	0.624
380	180.970	13.452	1.79	0.0000	0.09844	9.84	0.624
381	181.469	13.471	1.79	0.0000	0.09844	9.84	0.624
382	181.969	13.490	1.79	0.0000	0.09844	9.84	0.624
383	182.468	13.508	1.79	0.0000	0.09844	9.84	0.624
384	182.967	13.527	1.79	0.0000	0.09844	9.84	0.624
385	183.471	13.545	1.79	0.0000	0.09844	9.84	0.624
386	183.970	13.564	1.79	0.0000	0.09844	9.84	0.624
387	184.467	13.582	1.79	0.0000	0.09844	9.84	0.624
388	184.968	13.600	1.79	0.0000	0.09844	9.84	0.624
389	185.468	13.619	1.79	0.0000	0.09844	9.84	0.624
390	185.968	13.637	1.79	0.0000	0.09844	9.84	0.624
391	186.469	13.655	1.79	0.0000	0.09844	9.84	0.624
392	186.968	13.674	1.78	0.0000	0.09848	9.85	0.624
393	187.470	13.692	1.79	0.0000	0.09844	9.84	0.624
394	187.969	13.710	1.79	0.0000	0.09844	9.84	0.624
395	188.471	13.728	1.79	0.0000	0.09844	9.84	0.624
396	188.970	13.747	1.79	0.0000	0.09844	9.84	0.624
397	189.468	13.765	1.79	0.0000	0.09848	9.85	0.624
398	189.968	13.783	1.79	0.0000	0.09848	9.85	0.624
399	190.470	13.801	1.79	0.0000	0.09848	9.85	0.624
400	190.968	13.819	1.79	0.0000	0.09848	9.85	0.624

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.470	13.837	1.79	0.0000	0.09848	9.85	0.624
402	191.968	13.855	1.79	0.0000	0.09848	9.85	0.624
403	192.467	13.873	1.79	0.0000	0.09848	9.85	0.624
404	192.968	13.891	1.79	0.0000	0.09848	9.85	0.624
405	193.468	13.909	1.79	0.0000	0.09848	9.85	0.624
406	193.970	13.927	1.79	0.0000	0.09848	9.85	0.624
407	194.469	13.945	1.79	0.0000	0.09848	9.85	0.624
408	194.969	13.963	1.79	0.0000	0.09848	9.85	0.624
409	195.467	13.981	1.79	0.0000	0.09848	9.85	0.624
410	195.969	13.999	1.79	0.0000	0.09848	9.85	0.624
411	196.469	14.017	1.79	0.0000	0.09848	9.85	0.624
412	196.967	14.035	1.79	0.0000	0.09848	9.85	0.624
413	197.470	14.052	1.79	0.0000	0.09848	9.85	0.624
414	197.970	14.070	1.79	0.0000	0.09848	9.85	0.624
415	198.469	14.088	1.79	0.0000	0.09848	9.85	0.624
416	198.971	14.106	1.79	0.0000	0.09848	9.85	0.624
417	199.468	14.123	1.79	0.0000	0.09848	9.85	0.624
418	199.970	14.141	1.78	0.0000	0.09848	9.85	0.624
419	200.468	14.159	1.79	0.0000	0.09848	9.85	0.624
420	200.967	14.176	1.79	0.0000	0.09848	9.85	0.624
421	201.467	14.194	1.79	0.0000	0.09848	9.85	0.624
422	201.968	14.212	1.79	0.0000	0.09848	9.85	0.624
423	202.468	14.229	1.79	0.0000	0.09848	9.85	0.624
424	202.969	14.247	1.79	0.0000	0.09848	9.85	0.624
425	203.470	14.264	1.79	0.0000	0.09848	9.85	0.624
426	203.970	14.282	1.79	0.0000	0.09853	9.85	0.623
427	204.470	14.299	1.79	0.0000	0.09848	9.85	0.624
428	204.971	14.317	1.79	0.0000	0.09853	9.85	0.623
429	205.471	14.334	1.79	0.0000	0.09853	9.85	0.623
430	205.971	14.352	1.79	0.0000	0.09853	9.85	0.623
431	206.468	14.369	1.79	0.0000	0.09853	9.85	0.623
432	206.967	14.386	1.79	0.0000	0.09853	9.85	0.623
433	207.469	14.404	1.79	0.0000	0.09853	9.85	0.623
434	207.971	14.421	1.79	0.0000	0.09853	9.85	0.623
435	208.469	14.438	1.79	0.0000	0.09853	9.85	0.623
436	208.968	14.456	1.79	0.0000	0.09853	9.85	0.623
437	209.470	14.473	1.79	0.0000	0.09853	9.85	0.623
438	209.969	14.490	1.79	0.0000	0.09853	9.85	0.623
439	210.467	14.507	1.79	0.0000	0.09853	9.85	0.623
440	210.969	14.525	1.79	0.0000	0.09853	9.85	0.623
441	211.469	14.542	1.79	0.0000	0.09853	9.85	0.623
442	211.967	14.559	1.79	0.0000	0.09853	9.85	0.623
443	212.468	14.576	1.79	0.0000	0.09853	9.85	0.623
444	212.971	14.594	1.79	0.0000	0.09853	9.85	0.623
445	213.471	14.611	1.79	0.0000	0.09853	9.85	0.623
446	213.969	14.628	1.79	0.0000	0.09853	9.85	0.623
447	214.469	14.645	1.79	0.0000	0.09853	9.85	0.623
448	214.971	14.662	1.78	0.0000	0.09858	9.86	0.623
449	215.468	14.679	1.79	0.0000	0.09853	9.85	0.623
450	215.970	14.696	1.79	0.0000	0.09858	9.86	0.623

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.470	14.713	1.79	0.0000	0.09858	9.86	0.623
452	216.968	14.730	1.79	0.0000	0.09858	9.86	0.623
453	217.469	14.747	1.79	0.0000	0.09858	9.86	0.623
454	217.971	14.764	1.79	0.0000	0.09853	9.85	0.623
455	218.470	14.781	1.79	0.0000	0.09858	9.86	0.623
456	218.969	14.798	1.79	0.0000	0.09858	9.86	0.623
457	219.467	14.814	1.79	0.0000	0.09858	9.86	0.623
458	219.970	14.831	1.79	0.0000	0.09858	9.86	0.623
459	220.469	14.848	1.79	0.0000	0.09853	9.85	0.623
460	220.970	14.865	1.79	0.0000	0.09858	9.86	0.623
461	221.470	14.882	1.79	0.0000	0.09858	9.86	0.623
462	221.968	14.899	1.79	0.0000	0.09858	9.86	0.623
463	222.471	14.915	1.78	0.0000	0.09858	9.86	0.623
464	222.970	14.932	1.79	0.0000	0.09858	9.86	0.623
465	223.470	14.949	1.79	0.0000	0.09858	9.86	0.623
466	223.968	14.966	1.79	0.0000	0.09858	9.86	0.623
467	224.470	14.982	1.79	0.0000	0.09858	9.86	0.623
468	224.969	14.999	1.79	0.0000	0.09858	9.86	0.623
469	225.471	15.016	1.79	0.0000	0.09858	9.86	0.623
470	225.969	15.032	1.79	0.0000	0.09858	9.86	0.623
471	226.470	15.049	1.79	0.0000	0.09858	9.86	0.623
472	226.968	15.065	1.79	0.0000	0.09858	9.86	0.623
473	227.471	15.082	1.79	0.0000	0.09858	9.86	0.623
474	227.968	15.099	1.79	0.0000	0.09858	9.86	0.623
475	228.469	15.115	1.79	0.0000	0.09858	9.86	0.623
476	228.969	15.132	1.79	0.0000	0.09858	9.86	0.623
477	229.468	15.148	1.79	0.0000	0.09858	9.86	0.623
478	229.971	15.165	1.79	0.0000	0.09858	9.86	0.623
479	230.468	15.181	1.79	0.0000	0.09858	9.86	0.623
480	230.970	15.198	1.79	0.0000	0.09858	9.86	0.623
481	231.468	15.214	1.79	0.0000	0.09858	9.86	0.623
482	231.971	15.231	1.79	0.0000	0.09858	9.86	0.623
483	232.467	15.247	1.79	0.0000	0.09858	9.86	0.623
484	232.969	15.263	1.79	0.0000	0.09858	9.86	0.623
485	233.470	15.280	1.79	0.0000	0.09858	9.86	0.623
486	233.967	15.296	1.79	0.0000	0.09858	9.86	0.623
487	234.470	15.312	1.79	0.0000	0.09858	9.86	0.623
488	234.968	15.329	1.78	0.0000	0.09858	9.86	0.623
489	235.470	15.345	1.79	0.0000	0.09858	9.86	0.623
490	235.968	15.361	1.79	0.0000	0.09858	9.86	0.623
491	236.470	15.378	1.79	0.0000	0.09858	9.86	0.623
492	236.969	15.394	1.79	0.0000	0.09858	9.86	0.623
493	237.468	15.410	1.79	0.0000	0.09858	9.86	0.623
494	237.971	15.426	1.79	0.0000	0.09858	9.86	0.623
495	238.468	15.442	1.79	0.0000	0.09858	9.86	0.623
496	238.970	15.459	1.79	0.0000	0.09858	9.86	0.623
497	239.469	15.475	1.79	0.0000	0.09858	9.86	0.623
498	239.969	15.491	1.79	0.0000	0.09858	9.86	0.623
499	240.004	15.492	1.79	0.0000	0.09858	9.86	0.623

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.024		1.79	0.0000	0.09858	9.86	0.623
2	-0.019		1.79	0.0000	0.09858	9.86	0.623
3	-0.015		2.51	0.0000	0.09928	9.93	0.622
4	-0.011		2.92	0.0000	0.1004	10.0	0.620
5	-0.007		3.14	0.0000	0.1020	10.2	0.617
6	-0.003		3.32	0.0000	0.1027	10.3	0.616
7	0.000	0.000	3.39	0.0000	0.1035	10.3	0.615
8	0.002	0.042	3.44	0.0000	0.1039	10.4	0.614
9	0.006	0.078	3.58	0.0000	0.1046	10.5	0.612
10	0.011	0.103	3.42	0.0000	0.1048	10.5	0.612
11	0.015	0.122	3.44	0.0000	0.1050	10.5	0.612
12	0.019	0.139	3.47	0.0000	0.1053	10.5	0.611
13	0.024	0.154	3.51	0.0000	0.1057	10.6	0.611
14	0.028	0.167	3.53	0.0000	0.1060	10.6	0.610
15	0.032	0.180	3.54	0.0000	0.1062	10.6	0.610
16	0.037	0.192	3.55	0.0000	0.1064	10.6	0.609
17	0.054	0.233	3.26	0.0000	0.1097	11.0	0.603
18	0.063	0.251	3.50	0.0000	0.1113	11.1	0.600
19	0.145	0.380	3.54	0.0000	0.1136	11.4	0.596
20	0.228	0.477	3.55	0.0000	0.1153	11.5	0.593
21	0.310	0.557	3.56	0.0000	0.1158	11.6	0.592
22	0.479	0.692	3.56	0.0000	0.1169	11.7	0.590
23	0.730	0.854	3.56	0.0000	0.1184	11.8	0.588
24	0.977	0.988	3.56	0.0000	0.1195	12.0	0.586
25	1.478	1.216	3.56	0.0000	0.1209	12.1	0.583
26	2.479	1.574	3.57	0.0000	0.1241	12.4	0.577
27	4.477	2.116	3.56	0.0000	0.1279	12.8	0.570
28	4.979	2.231	3.56	0.0000	0.1285	12.9	0.569
29	5.478	2.341	3.56	0.0000	0.1293	12.9	0.568
30	5.979	2.445	3.56	0.0000	0.1301	13.0	0.567
31	6.478	2.545	3.57	0.0000	0.1312	13.1	0.565
32	6.977	2.641	3.56	0.0000	0.1323	13.2	0.563
33	7.479	2.735	3.56	0.0000	0.1330	13.3	0.561
34	7.979	2.825	3.56	0.0000	0.1332	13.3	0.561
35	8.479	2.912	3.56	0.0000	0.1334	13.3	0.561
36	8.976	2.996	3.56	0.0000	0.1335	13.4	0.560
37	9.480	3.079	3.58	0.0000	0.1337	13.4	0.560
38	9.979	3.159	3.57	0.0000	0.1347	13.5	0.558
39	10.477	3.237	3.56	0.0000	0.1359	13.6	0.556
40	10.977	3.313	3.56	0.0000	0.1363	13.6	0.555
41	11.480	3.388	3.57	0.0000	0.1367	13.7	0.555
42	11.980	3.461	3.57	0.0000	0.1372	13.7	0.554
43	12.479	3.533	3.57	0.0000	0.1375	13.7	0.553
44	12.977	3.602	3.57	0.0000	0.1378	13.8	0.553
45	13.478	3.671	3.56	0.0000	0.1382	13.8	0.552
46	13.980	3.739	3.57	0.0000	0.1384	13.8	0.552
47	14.476	3.805	3.57	0.0000	0.1386	13.9	0.551
48	14.977	3.870	3.57	0.0000	0.1389	13.9	0.551
49	15.480	3.934	3.56	0.0000	0.1393	13.9	0.550
50	15.979	3.997	3.56	0.0000	0.1395	14.0	0.550

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.480	4.060	3.56	0.0000	0.1402	14.0	0.548
52	16.978	4.120	3.57	0.0000	0.1405	14.1	0.548
53	17.479	4.181	3.56	0.0000	0.1408	14.1	0.547
54	17.976	4.240	3.56	0.0000	0.1411	14.1	0.547
55	18.480	4.299	3.57	0.0000	0.1415	14.2	0.546
56	18.979	4.357	3.56	0.0000	0.1417	14.2	0.546
57	19.478	4.413	3.57	0.0000	0.1419	14.2	0.545
58	19.978	4.470	3.57	0.0000	0.1421	14.2	0.545
59	20.480	4.525	3.58	0.0000	0.1426	14.3	0.544
60	20.977	4.580	3.58	0.0000	0.1431	14.3	0.543
61	21.479	4.635	3.57	0.0000	0.1436	14.4	0.542
62	21.977	4.688	3.56	0.0000	0.1439	14.4	0.542
63	22.479	4.741	3.58	0.0000	0.1440	14.4	0.542
64	22.980	4.794	3.56	0.0000	0.1443	14.4	0.541
65	23.479	4.845	3.57	0.0000	0.1443	14.4	0.541
66	23.977	4.897	3.58	0.0000	0.1445	14.4	0.541
67	24.479	4.948	3.58	0.0000	0.1445	14.4	0.541
68	24.979	4.998	3.56	0.0000	0.1445	14.5	0.541
69	25.477	5.048	3.57	0.0000	0.1446	14.5	0.541
70	25.979	5.097	3.58	0.0000	0.1446	14.5	0.540
71	26.478	5.146	3.56	0.0000	0.1446	14.5	0.540
72	26.976	5.194	3.58	0.0000	0.1448	14.5	0.540
73	27.480	5.242	3.57	0.0000	0.1450	14.5	0.540
74	27.979	5.290	3.57	0.0000	0.1452	14.5	0.539
75	28.479	5.337	3.58	0.0000	0.1454	14.5	0.539
76	28.978	5.383	3.56	0.0000	0.1455	14.6	0.539
77	29.479	5.429	3.57	0.0000	0.1456	14.6	0.539
78	29.978	5.475	3.57	0.0000	0.1457	14.6	0.539
79	30.478	5.521	3.56	0.0000	0.1460	14.6	0.538
80	30.980	5.566	3.56	0.0000	0.1462	14.6	0.538
81	31.479	5.611	3.57	0.0000	0.1464	14.6	0.537
82	31.980	5.655	3.58	0.0000	0.1466	14.7	0.537
83	32.479	5.699	3.57	0.0000	0.1467	14.7	0.537
84	32.978	5.743	3.58	0.0000	0.1468	14.7	0.537
85	33.480	5.786	3.58	0.0000	0.1470	14.7	0.536
86	33.978	5.829	3.58	0.0000	0.1472	14.7	0.536
87	34.479	5.872	3.56	0.0000	0.1472	14.7	0.536
88	34.980	5.914	3.57	0.0000	0.1474	14.7	0.536
89	35.477	5.956	3.56	0.0000	0.1475	14.7	0.535
90	35.977	5.998	3.56	0.0000	0.1476	14.8	0.535
91	36.480	6.040	3.56	0.0000	0.1477	14.8	0.535
92	36.977	6.081	3.57	0.0000	0.1478	14.8	0.535
93	37.480	6.122	3.58	0.0000	0.1479	14.8	0.535
94	37.979	6.163	3.56	0.0000	0.1480	14.8	0.534
95	38.479	6.203	3.57	0.0000	0.1480	14.8	0.534
96	38.978	6.243	3.56	0.0000	0.1481	14.8	0.534
97	39.480	6.283	3.57	0.0000	0.1481	14.8	0.534
98	39.979	6.323	3.58	0.0000	0.1482	14.8	0.534
99	40.480	6.362	3.57	0.0000	0.1483	14.8	0.534
100	40.978	6.401	3.56	0.0000	0.1485	14.8	0.533

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.480	6.440	3.58	0.0000	0.1487	14.9	0.533
102	41.977	6.479	3.58	0.0000	0.1488	14.9	0.533
103	42.480	6.518	3.57	0.0000	0.1489	14.9	0.533
104	42.980	6.556	3.58	0.0000	0.1493	14.9	0.532
105	43.480	6.594	3.57	0.0000	0.1495	14.9	0.532
106	43.977	6.632	3.57	0.0000	0.1496	15.0	0.532
107	44.479	6.669	3.57	0.0000	0.1497	15.0	0.531
108	44.978	6.707	3.57	0.0000	0.1498	15.0	0.531
109	45.478	6.744	3.58	0.0000	0.1499	15.0	0.531
110	45.978	6.781	3.57	0.0000	0.1500	15.0	0.531
111	46.478	6.818	3.58	0.0000	0.1501	15.0	0.531
112	46.979	6.854	3.56	0.0000	0.1501	15.0	0.531
113	47.479	6.891	3.57	0.0000	0.1502	15.0	0.530
114	47.980	6.927	3.57	0.0000	0.1503	15.0	0.530
115	48.479	6.963	3.57	0.0000	0.1504	15.0	0.530
116	48.977	6.998	3.56	0.0000	0.1504	15.0	0.530
117	49.480	7.034	3.57	0.0000	0.1505	15.0	0.530
118	49.980	7.070	3.57	0.0000	0.1505	15.1	0.530
119	50.478	7.105	3.56	0.0000	0.1505	15.1	0.530
120	50.976	7.140	3.57	0.0000	0.1506	15.1	0.530
121	51.480	7.175	3.57	0.0000	0.1506	15.1	0.530
122	51.979	7.210	3.57	0.0000	0.1506	15.1	0.530
123	52.477	7.244	3.57	0.0000	0.1507	15.1	0.530
124	52.978	7.279	3.58	0.0000	0.1508	15.1	0.529
125	53.480	7.313	3.57	0.0000	0.1508	15.1	0.529
126	53.979	7.347	3.57	0.0000	0.1508	15.1	0.529
127	54.479	7.381	3.58	0.0000	0.1509	15.1	0.529
128	54.977	7.415	3.58	0.0000	0.1509	15.1	0.529
129	55.478	7.448	3.58	0.0000	0.1510	15.1	0.529
130	55.980	7.482	3.57	0.0000	0.1510	15.1	0.529
131	56.479	7.515	3.57	0.0000	0.1511	15.1	0.529
132	56.979	7.548	3.56	0.0000	0.1511	15.1	0.529
133	57.477	7.581	3.58	0.0000	0.1512	15.1	0.529
134	57.980	7.614	3.57	0.0000	0.1512	15.1	0.529
135	58.480	7.647	3.57	0.0000	0.1513	15.1	0.528
136	58.978	7.680	3.57	0.0000	0.1513	15.1	0.528
137	59.478	7.712	3.57	0.0000	0.1513	15.1	0.528
138	59.976	7.744	3.57	0.0000	0.1513	15.1	0.528
139	60.479	7.777	3.57	0.0000	0.1514	15.1	0.528
140	60.977	7.809	3.57	0.0000	0.1514	15.1	0.528
141	61.476	7.841	3.57	0.0000	0.1514	15.1	0.528
142	61.979	7.873	3.57	0.0000	0.1515	15.1	0.528
143	62.479	7.904	3.57	0.0000	0.1515	15.2	0.528
144	62.977	7.936	3.57	0.0000	0.1515	15.1	0.528
145	63.477	7.967	3.57	0.0000	0.1515	15.2	0.528
146	63.979	7.999	3.57	0.0000	0.1515	15.2	0.528
147	64.476	8.030	3.57	0.0000	0.1515	15.2	0.528
148	64.980	8.061	3.57	0.0000	0.1516	15.2	0.528
149	65.477	8.092	3.57	0.0000	0.1516	15.2	0.528
150	65.980	8.123	3.57	0.0000	0.1516	15.2	0.528

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.477	8.153	3.57	0.0000	0.1516	15.2	0.528
152	66.977	8.184	3.57	0.0000	0.1516	15.2	0.528
153	67.479	8.215	3.57	0.0000	0.1516	15.2	0.528
154	67.979	8.245	3.57	0.0000	0.1516	15.2	0.528
155	68.478	8.275	3.57	0.0000	0.1516	15.2	0.528
156	68.977	8.305	3.57	0.0000	0.1517	15.2	0.528
157	69.477	8.335	3.57	0.0000	0.1517	15.2	0.528
158	69.977	8.365	3.57	0.0000	0.1517	15.2	0.528
159	70.480	8.395	3.57	0.0000	0.1517	15.2	0.528
160	70.979	8.425	3.57	0.0000	0.1517	15.2	0.528
161	71.480	8.455	3.57	0.0000	0.1517	15.2	0.528
162	71.979	8.484	3.57	0.0000	0.1517	15.2	0.528
163	72.480	8.514	3.57	0.0000	0.1517	15.2	0.528
164	72.977	8.543	3.57	0.0000	0.1517	15.2	0.528
165	73.480	8.572	3.58	0.0000	0.1518	15.2	0.528
166	73.980	8.601	3.57	0.0000	0.1518	15.2	0.528
167	74.479	8.630	3.57	0.0000	0.1518	15.2	0.528
168	74.978	8.659	3.57	0.0000	0.1518	15.2	0.528
169	75.477	8.688	3.57	0.0000	0.1518	15.2	0.528
170	75.977	8.716	3.57	0.0000	0.1518	15.2	0.527
171	76.480	8.745	3.57	0.0000	0.1518	15.2	0.527
172	76.979	8.774	3.57	0.0000	0.1518	15.2	0.527
173	77.479	8.802	3.57	0.0000	0.1518	15.2	0.527
174	77.977	8.830	3.57	0.0000	0.1518	15.2	0.527
175	78.480	8.859	3.57	0.0000	0.1518	15.2	0.527
176	78.979	8.887	3.58	0.0000	0.1518	15.2	0.527
177	79.478	8.915	3.57	0.0000	0.1518	15.2	0.527
178	79.977	8.943	3.57	0.0000	0.1519	15.2	0.527
179	80.480	8.971	3.57	0.0000	0.1518	15.2	0.527
180	80.978	8.999	3.57	0.0000	0.1519	15.2	0.527
181	81.478	9.026	3.57	0.0000	0.1519	15.2	0.527
182	81.976	9.054	3.57	0.0000	0.1519	15.2	0.527
183	82.476	9.082	3.57	0.0000	0.1519	15.2	0.527
184	82.980	9.109	3.57	0.0000	0.1519	15.2	0.527
185	83.479	9.137	3.57	0.0000	0.1519	15.2	0.527
186	83.978	9.164	3.57	0.0000	0.1520	15.2	0.527
187	84.477	9.191	3.57	0.0000	0.1520	15.2	0.527
188	84.978	9.218	3.57	0.0000	0.1520	15.2	0.527
189	85.479	9.245	3.57	0.0000	0.1519	15.2	0.527
190	85.977	9.272	3.57	0.0000	0.1520	15.2	0.527
191	86.479	9.299	3.57	0.0000	0.1520	15.2	0.527
192	86.978	9.326	3.57	0.0000	0.1520	15.2	0.527
193	87.479	9.353	3.57	0.0000	0.1520	15.2	0.527
194	87.979	9.380	3.57	0.0000	0.1520	15.2	0.527
195	88.477	9.406	3.57	0.0000	0.1520	15.2	0.527
196	88.977	9.433	3.57	0.0000	0.1520	15.2	0.527
197	89.480	9.459	3.57	0.0000	0.1520	15.2	0.527
198	89.980	9.486	3.57	0.0000	0.1520	15.2	0.527
199	90.479	9.512	3.57	0.0000	0.1520	15.2	0.527
200	90.977	9.538	3.57	0.0000	0.1520	15.2	0.527

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.480	9.565	3.57	0.0000	0.1520	15.2	0.527
202	91.980	9.591	3.57	0.0000	0.1520	15.2	0.527
203	92.476	9.616	3.57	0.0000	0.1520	15.2	0.527
204	92.980	9.643	3.58	0.0000	0.1520	15.2	0.527
205	93.479	9.668	3.57	0.0000	0.1521	15.2	0.527
206	93.978	9.694	3.57	0.0000	0.1521	15.2	0.527
207	94.476	9.720	3.57	0.0000	0.1521	15.2	0.527
208	94.976	9.746	3.57	0.0000	0.1521	15.2	0.527
209	95.478	9.771	3.57	0.0000	0.1521	15.2	0.527
210	95.980	9.797	3.57	0.0000	0.1521	15.2	0.527
211	96.480	9.822	3.57	0.0000	0.1521	15.2	0.527
212	96.978	9.848	3.57	0.0000	0.1521	15.2	0.527
213	97.478	9.873	3.57	0.0000	0.1521	15.2	0.527
214	97.980	9.898	3.57	0.0000	0.1521	15.2	0.527
215	98.480	9.924	3.57	0.0000	0.1521	15.2	0.527
216	98.979	9.949	3.57	0.0000	0.1521	15.2	0.527
217	99.478	9.974	3.57	0.0000	0.1521	15.2	0.527
218	99.978	9.999	3.57	0.0000	0.1521	15.2	0.527
219	100.480	10.024	3.57	0.0000	0.1521	15.2	0.527
220	100.978	10.049	3.57	0.0000	0.1521	15.2	0.527
221	101.479	10.074	3.57	0.0000	0.1521	15.2	0.527
222	101.976	10.098	3.57	0.0000	0.1521	15.2	0.527
223	102.479	10.123	3.57	0.0000	0.1521	15.2	0.527
224	102.978	10.148	3.57	0.0000	0.1521	15.2	0.527
225	103.480	10.173	3.57	0.0000	0.1521	15.2	0.527
226	103.979	10.197	3.57	0.0000	0.1521	15.2	0.527
227	104.477	10.221	3.57	0.0000	0.1521	15.2	0.527
228	104.977	10.246	3.57	0.0000	0.1521	15.2	0.527
229	105.479	10.270	3.57	0.0000	0.1521	15.2	0.527
230	105.978	10.295	3.57	0.0000	0.1521	15.2	0.527
231	106.477	10.319	3.57	0.0000	0.1521	15.2	0.527
232	106.977	10.343	3.57	0.0000	0.1521	15.2	0.527
233	107.478	10.367	3.57	0.0000	0.1521	15.2	0.527
234	107.980	10.391	3.57	0.0000	0.1522	15.2	0.527
235	108.480	10.415	3.57	0.0000	0.1522	15.2	0.527
236	108.979	10.439	3.57	0.0000	0.1522	15.2	0.527
237	109.478	10.463	3.57	0.0000	0.1522	15.2	0.527
238	109.977	10.487	3.57	0.0000	0.1522	15.2	0.527
239	110.480	10.511	3.57	0.0000	0.1522	15.2	0.527
240	110.980	10.535	3.57	0.0000	0.1522	15.2	0.527
241	111.478	10.558	3.57	0.0000	0.1522	15.2	0.527
242	111.980	10.582	3.57	0.0000	0.1522	15.2	0.527
243	112.479	10.606	3.57	0.0000	0.1522	15.2	0.527
244	112.977	10.629	3.57	0.0000	0.1522	15.2	0.527
245	113.477	10.653	3.57	0.0000	0.1522	15.2	0.527
246	113.979	10.676	3.57	0.0000	0.1522	15.2	0.527
247	114.478	10.699	3.57	0.0000	0.1522	15.2	0.527
248	114.978	10.723	3.57	0.0000	0.1522	15.2	0.527
249	115.480	10.746	3.57	0.0000	0.1522	15.2	0.527
250	115.980	10.769	3.57	0.0000	0.1522	15.2	0.527

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.477	10.792	3.57	0.0000	0.1522	15.2	0.527
252	116.979	10.816	3.57	0.0000	0.1522	15.2	0.527
253	117.476	10.839	3.57	0.0000	0.1522	15.2	0.527
254	117.979	10.862	3.57	0.0000	0.1522	15.2	0.527
255	118.478	10.885	3.57	0.0000	0.1522	15.2	0.527
256	118.979	10.908	3.57	0.0000	0.1522	15.2	0.527
257	119.480	10.931	3.57	0.0000	0.1522	15.2	0.527
258	119.978	10.953	3.57	0.0000	0.1522	15.2	0.527
259	120.477	10.976	3.57	0.0000	0.1522	15.2	0.527
260	120.978	10.999	3.57	0.0000	0.1522	15.2	0.527
261	121.480	11.022	3.57	0.0000	0.1522	15.2	0.527
262	121.979	11.044	3.57	0.0000	0.1522	15.2	0.527
263	122.477	11.067	3.57	0.0000	0.1522	15.2	0.527
264	122.976	11.089	3.57	0.0000	0.1522	15.2	0.527
265	123.479	11.112	3.57	0.0000	0.1522	15.2	0.527
266	123.977	11.135	3.57	0.0000	0.1522	15.2	0.527
267	124.479	11.157	3.57	0.0000	0.1522	15.2	0.527
268	124.977	11.179	3.57	0.0000	0.1522	15.2	0.527
269	125.479	11.202	3.57	0.0000	0.1522	15.2	0.527
270	125.980	11.224	3.57	0.0000	0.1522	15.2	0.527
271	126.480	11.246	3.57	0.0000	0.1522	15.2	0.527
272	126.980	11.269	3.57	0.0000	0.1522	15.2	0.527
273	127.480	11.291	3.57	0.0000	0.1522	15.2	0.527
274	127.980	11.313	3.57	0.0000	0.1522	15.2	0.527
275	128.479	11.335	3.57	0.0000	0.1522	15.2	0.527
276	128.980	11.357	3.57	0.0000	0.1522	15.2	0.527
277	129.477	11.379	3.57	0.0000	0.1522	15.2	0.527
278	129.980	11.401	3.57	0.0000	0.1522	15.2	0.527
279	130.478	11.423	3.57	0.0000	0.1522	15.2	0.527
280	130.979	11.445	3.57	0.0000	0.1522	15.2	0.527
281	131.479	11.466	3.57	0.0000	0.1522	15.2	0.527
282	131.977	11.488	3.57	0.0000	0.1522	15.2	0.527
283	132.478	11.510	3.57	0.0000	0.1522	15.2	0.527
284	132.978	11.532	3.57	0.0000	0.1522	15.2	0.527
285	133.479	11.553	3.57	0.0000	0.1522	15.2	0.527
286	133.979	11.575	3.57	0.0000	0.1522	15.2	0.527
287	134.478	11.596	3.57	0.0000	0.1522	15.2	0.527
288	134.978	11.618	3.57	0.0000	0.1522	15.2	0.527
289	135.478	11.640	3.57	0.0000	0.1522	15.2	0.527
290	135.980	11.661	3.57	0.0000	0.1522	15.2	0.527
291	136.479	11.682	3.57	0.0000	0.1522	15.2	0.527
292	136.977	11.704	3.57	0.0000	0.1522	15.2	0.527
293	137.480	11.725	3.57	0.0000	0.1522	15.2	0.527
294	137.979	11.746	3.57	0.0000	0.1522	15.2	0.527
295	138.480	11.768	3.57	0.0000	0.1522	15.2	0.527
296	138.978	11.789	3.57	0.0000	0.1522	15.2	0.527
297	139.479	11.810	3.57	0.0000	0.1522	15.2	0.527
298	139.978	11.831	3.57	0.0000	0.1522	15.2	0.527
299	140.478	11.852	3.57	0.0000	0.1522	15.2	0.527
300	140.979	11.873	3.57	0.0000	0.1522	15.2	0.527

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.477	11.894	3.57	0.0000	0.1522	15.2	0.527
302	141.976	11.915	3.57	0.0000	0.1522	15.2	0.527
303	142.479	11.936	3.57	0.0000	0.1522	15.2	0.527
304	142.978	11.957	3.57	0.0000	0.1522	15.2	0.527
305	143.479	11.978	3.57	0.0000	0.1522	15.2	0.527
306	143.978	11.999	3.57	0.0000	0.1522	15.2	0.527
307	144.477	12.020	3.57	0.0000	0.1522	15.2	0.527
308	144.980	12.041	3.57	0.0000	0.1522	15.2	0.527
309	145.480	12.062	3.57	0.0000	0.1522	15.2	0.527
310	145.979	12.082	3.57	0.0000	0.1522	15.2	0.527
311	146.476	12.103	3.57	0.0000	0.1522	15.2	0.527
312	146.979	12.123	3.57	0.0000	0.1522	15.2	0.527
313	147.478	12.144	3.57	0.0000	0.1522	15.2	0.527
314	147.977	12.165	3.57	0.0000	0.1522	15.2	0.527
315	148.479	12.185	3.57	0.0000	0.1522	15.2	0.527
316	148.980	12.206	3.57	0.0000	0.1522	15.2	0.527
317	149.480	12.226	3.57	0.0000	0.1522	15.2	0.527
318	149.980	12.247	3.57	0.0000	0.1522	15.2	0.527
319	150.479	12.267	3.57	0.0000	0.1522	15.2	0.527
320	150.977	12.287	3.57	0.0000	0.1522	15.2	0.527
321	151.479	12.308	3.57	0.0000	0.1522	15.2	0.527
322	151.977	12.328	3.57	0.0000	0.1522	15.2	0.527
323	152.480	12.348	3.57	0.0000	0.1522	15.2	0.527
324	152.979	12.368	3.57	0.0000	0.1522	15.2	0.527
325	153.480	12.389	3.57	0.0000	0.1522	15.2	0.527
326	153.980	12.409	3.57	0.0000	0.1522	15.2	0.527
327	154.479	12.429	3.57	0.0000	0.1522	15.2	0.527
328	154.977	12.449	3.57	0.0000	0.1522	15.2	0.527
329	155.477	12.469	3.57	0.0000	0.1522	15.2	0.527
330	155.978	12.489	3.57	0.0000	0.1522	15.2	0.527
331	156.480	12.509	3.57	0.0000	0.1522	15.2	0.527
332	156.979	12.529	3.57	0.0000	0.1522	15.2	0.527
333	157.478	12.549	3.57	0.0000	0.1522	15.2	0.527
334	157.978	12.569	3.57	0.0000	0.1522	15.2	0.527
335	158.479	12.589	3.57	0.0000	0.1522	15.2	0.527
336	158.980	12.609	3.57	0.0000	0.1522	15.2	0.527
337	159.478	12.628	3.57	0.0000	0.1522	15.2	0.527
338	159.980	12.648	3.57	0.0000	0.1522	15.2	0.527
339	160.480	12.668	3.57	0.0000	0.1522	15.2	0.527
340	160.978	12.688	3.57	0.0000	0.1522	15.2	0.527
341	161.477	12.707	3.57	0.0000	0.1522	15.2	0.527
342	161.979	12.727	3.57	0.0000	0.1522	15.2	0.527
343	162.480	12.747	3.57	0.0000	0.1522	15.2	0.527
344	162.980	12.766	3.57	0.0000	0.1522	15.2	0.527
345	163.479	12.786	3.57	0.0000	0.1522	15.2	0.527
346	163.980	12.805	3.57	0.0000	0.1523	15.2	0.527
347	164.480	12.825	3.57	0.0000	0.1523	15.2	0.527
348	164.979	12.844	3.57	0.0000	0.1522	15.2	0.527
349	165.477	12.864	3.57	0.0000	0.1523	15.2	0.527
350	165.977	12.883	3.57	0.0000	0.1523	15.2	0.527

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.477	12.903	3.57	0.0000	0.1523	15.2	0.527
352	166.977	12.922	3.57	0.0000	0.1523	15.2	0.527
353	167.478	12.941	3.57	0.0000	0.1523	15.2	0.527
354	167.978	12.961	3.57	0.0000	0.1523	15.2	0.527
355	168.479	12.980	3.57	0.0000	0.1523	15.2	0.527
356	168.978	12.999	3.57	0.0000	0.1523	15.2	0.527
357	169.477	13.018	3.57	0.0000	0.1523	15.2	0.527
358	169.980	13.038	3.57	0.0000	0.1523	15.2	0.527
359	170.476	13.057	3.57	0.0000	0.1523	15.2	0.527
360	170.979	13.076	3.57	0.0000	0.1523	15.2	0.527
361	171.478	13.095	3.57	0.0000	0.1523	15.2	0.527
362	171.976	13.114	3.57	0.0000	0.1523	15.2	0.527
363	172.476	13.133	3.57	0.0000	0.1523	15.2	0.527
364	172.980	13.152	3.57	0.0000	0.1523	15.2	0.527
365	173.477	13.171	3.57	0.0000	0.1523	15.2	0.527
366	173.980	13.190	3.57	0.0000	0.1523	15.2	0.527
367	174.479	13.209	3.57	0.0000	0.1523	15.2	0.527
368	174.978	13.228	3.57	0.0000	0.1523	15.2	0.527
369	175.477	13.247	3.57	0.0000	0.1523	15.2	0.527
370	175.980	13.266	3.57	0.0000	0.1523	15.2	0.527
371	176.480	13.285	3.57	0.0000	0.1523	15.2	0.527
372	176.980	13.303	3.57	0.0000	0.1523	15.2	0.527
373	177.478	13.322	3.57	0.0000	0.1523	15.2	0.527
374	177.976	13.341	3.57	0.0000	0.1523	15.2	0.527
375	178.476	13.360	3.57	0.0000	0.1523	15.2	0.527
376	178.978	13.378	3.57	0.0000	0.1523	15.2	0.527
377	179.480	13.397	3.57	0.0000	0.1523	15.2	0.527
378	179.979	13.416	3.57	0.0000	0.1523	15.2	0.527
379	180.480	13.434	3.57	0.0000	0.1523	15.2	0.527
380	180.978	13.453	3.57	0.0000	0.1523	15.2	0.527
381	181.478	13.471	3.57	0.0000	0.1523	15.2	0.527
382	181.977	13.490	3.57	0.0000	0.1523	15.2	0.527
383	182.479	13.508	3.57	0.0000	0.1523	15.2	0.527
384	182.978	13.527	3.57	0.0000	0.1523	15.2	0.527
385	183.480	13.545	3.57	0.0000	0.1523	15.2	0.527
386	183.980	13.564	3.57	0.0000	0.1523	15.2	0.527
387	184.479	13.582	3.57	0.0000	0.1524	15.2	0.526
388	184.978	13.601	3.57	0.0000	0.1524	15.2	0.526
389	185.476	13.619	3.57	0.0000	0.1523	15.2	0.527
390	185.976	13.637	3.57	0.0000	0.1524	15.2	0.526
391	186.479	13.656	3.57	0.0000	0.1524	15.2	0.526
392	186.977	13.674	3.57	0.0000	0.1524	15.2	0.526
393	187.479	13.692	3.57	0.0000	0.1524	15.2	0.526
394	187.977	13.710	3.57	0.0000	0.1524	15.2	0.526
395	188.480	13.729	3.57	0.0000	0.1524	15.2	0.526
396	188.980	13.747	3.57	0.0000	0.1524	15.2	0.526
397	189.479	13.765	3.57	0.0000	0.1524	15.2	0.526
398	189.979	13.783	3.57	0.0000	0.1524	15.2	0.526
399	190.479	13.801	3.57	0.0000	0.1524	15.2	0.526
400	190.976	13.819	3.57	0.0000	0.1524	15.2	0.526

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.479	13.838	3.57	0.0000	0.1524	15.2	0.526
402	191.978	13.856	3.57	0.0000	0.1524	15.2	0.526
403	192.480	13.874	3.57	0.0000	0.1524	15.2	0.526
404	192.977	13.892	3.57	0.0000	0.1524	15.2	0.526
405	193.479	13.910	3.57	0.0000	0.1524	15.2	0.526
406	193.977	13.928	3.57	0.0000	0.1524	15.2	0.526
407	194.477	13.945	3.57	0.0000	0.1524	15.2	0.526
408	194.977	13.963	3.57	0.0000	0.1524	15.2	0.526
409	195.478	13.981	3.57	0.0000	0.1524	15.2	0.526
410	195.979	13.999	3.57	0.0000	0.1524	15.2	0.526
411	196.479	14.017	3.57	0.0000	0.1524	15.2	0.526
412	196.979	14.035	3.57	0.0000	0.1524	15.2	0.526
413	197.477	14.053	3.57	0.0000	0.1524	15.2	0.526
414	197.980	14.071	3.57	0.0000	0.1524	15.2	0.526
415	198.478	14.088	3.57	0.0000	0.1524	15.2	0.526
416	198.978	14.106	3.57	0.0000	0.1524	15.2	0.526
417	199.478	14.124	3.57	0.0000	0.1524	15.2	0.526
418	199.978	14.141	3.57	0.0000	0.1524	15.2	0.526
419	200.476	14.159	3.57	0.0000	0.1524	15.2	0.526
420	200.978	14.177	3.57	0.0000	0.1524	15.2	0.526
421	201.479	14.194	3.57	0.0000	0.1524	15.2	0.526
422	201.977	14.212	3.57	0.0000	0.1525	15.2	0.526
423	202.480	14.230	3.57	0.0000	0.1524	15.2	0.526
424	202.979	14.247	3.57	0.0000	0.1525	15.2	0.526
425	203.476	14.265	3.57	0.0000	0.1524	15.2	0.526
426	203.979	14.282	3.57	0.0000	0.1525	15.2	0.526
427	204.477	14.300	3.57	0.0000	0.1524	15.2	0.526
428	204.980	14.317	3.57	0.0000	0.1524	15.2	0.526
429	205.477	14.334	3.57	0.0000	0.1525	15.2	0.526
430	205.979	14.352	3.57	0.0000	0.1524	15.2	0.526
431	206.478	14.369	3.57	0.0000	0.1525	15.2	0.526
432	206.978	14.387	3.57	0.0000	0.1524	15.2	0.526
433	207.478	14.404	3.57	0.0000	0.1525	15.2	0.526
434	207.980	14.422	3.57	0.0000	0.1525	15.2	0.526
435	208.478	14.439	3.57	0.0000	0.1525	15.2	0.526
436	208.977	14.456	3.57	0.0000	0.1525	15.2	0.526
437	209.476	14.473	3.57	0.0000	0.1525	15.2	0.526
438	209.978	14.491	3.57	0.0000	0.1525	15.2	0.526
439	210.478	14.508	3.57	0.0000	0.1525	15.2	0.526
440	210.977	14.525	3.57	0.0000	0.1524	15.2	0.526
441	211.479	14.542	3.57	0.0000	0.1525	15.2	0.526
442	211.979	14.560	3.57	0.0000	0.1525	15.2	0.526
443	212.478	14.577	3.57	0.0000	0.1525	15.2	0.526
444	212.977	14.594	3.57	0.0000	0.1525	15.2	0.526
445	213.478	14.611	3.57	0.0000	0.1525	15.2	0.526
446	213.979	14.628	3.57	0.0000	0.1525	15.2	0.526
447	214.480	14.645	3.57	0.0000	0.1525	15.3	0.526
448	214.978	14.662	3.57	0.0000	0.1525	15.3	0.526
449	215.477	14.679	3.57	0.0000	0.1525	15.3	0.526
450	215.979	14.696	3.57	0.0000	0.1525	15.3	0.526

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.480	14.713	3.57	0.0000	0.1525	15.3	0.526
452	216.978	14.730	3.57	0.0000	0.1525	15.3	0.526
453	217.477	14.747	3.57	0.0000	0.1525	15.3	0.526
454	217.980	14.764	3.57	0.0000	0.1525	15.3	0.526
455	218.480	14.781	3.57	0.0000	0.1525	15.3	0.526
456	218.979	14.798	3.57	0.0000	0.1525	15.3	0.526
457	219.479	14.815	3.57	0.0000	0.1525	15.3	0.526
458	219.976	14.832	3.57	0.0000	0.1525	15.3	0.526
459	220.478	14.848	3.57	0.0000	0.1525	15.3	0.526
460	220.979	14.865	3.57	0.0000	0.1525	15.3	0.526
461	221.480	14.882	3.57	0.0000	0.1525	15.3	0.526
462	221.978	14.899	3.57	0.0000	0.1525	15.3	0.526
463	222.477	14.916	3.57	0.0000	0.1525	15.3	0.526
464	222.979	14.932	3.57	0.0000	0.1525	15.3	0.526
465	223.477	14.949	3.57	0.0000	0.1525	15.3	0.526
466	223.979	14.966	3.57	0.0000	0.1525	15.3	0.526
467	224.478	14.983	3.57	0.0000	0.1525	15.3	0.526
468	224.977	14.999	3.57	0.0000	0.1525	15.3	0.526
469	225.476	15.016	3.57	0.0000	0.1525	15.3	0.526
470	225.978	15.033	3.57	0.0000	0.1525	15.3	0.526
471	226.481	15.049	3.57	0.0000	0.1525	15.3	0.526
472	226.980	15.066	3.57	0.0000	0.1525	15.3	0.526
473	227.479	15.082	3.57	0.0000	0.1525	15.3	0.526
474	227.980	15.099	3.57	0.0000	0.1525	15.3	0.526
475	228.478	15.115	3.57	0.0000	0.1525	15.3	0.526
476	228.980	15.132	3.57	0.0000	0.1525	15.3	0.526
477	229.479	15.149	3.57	0.0000	0.1525	15.3	0.526
478	229.980	15.165	3.57	0.0000	0.1526	15.3	0.526
479	230.479	15.182	3.57	0.0000	0.1525	15.3	0.526
480	230.976	15.198	3.57	0.0000	0.1525	15.3	0.526
481	231.476	15.214	3.57	0.0000	0.1525	15.3	0.526
482	231.978	15.231	3.57	0.0000	0.1525	15.3	0.526
483	232.480	15.247	3.57	0.0000	0.1525	15.3	0.526
484	232.976	15.264	3.57	0.0000	0.1526	15.3	0.526
485	233.478	15.280	3.57	0.0000	0.1525	15.3	0.526
486	233.979	15.296	3.57	0.0000	0.1525	15.3	0.526
487	234.479	15.313	3.57	0.0000	0.1525	15.3	0.526
488	234.976	15.329	3.57	0.0000	0.1526	15.3	0.526
489	235.478	15.345	3.57	0.0000	0.1525	15.3	0.526
490	235.980	15.362	3.57	0.0000	0.1526	15.3	0.526
491	236.480	15.378	3.57	0.0000	0.1526	15.3	0.526
492	236.977	15.394	3.57	0.0000	0.1526	15.3	0.526
493	237.481	15.410	3.57	0.0000	0.1526	15.3	0.526
494	237.980	15.427	3.57	0.0000	0.1526	15.3	0.526
495	238.478	15.443	3.57	0.0000	0.1526	15.3	0.526
496	238.980	15.459	3.57	0.0000	0.1526	15.3	0.526
497	239.478	15.475	3.57	0.0000	0.1526	15.3	0.526
498	239.977	15.491	3.57	0.0000	0.1526	15.3	0.526
499	240.480	15.507	3.57	0.0000	0.1526	15.3	0.526
500	240.979	15.523	3.57	0.0000	0.1526	15.3	0.526

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.479	15.540	3.57	0.0000	0.1526	15.3	0.526
502	241.977	15.556	3.57	0.0000	0.1526	15.3	0.526
503	242.480	15.572	3.57	0.0000	0.1526	15.3	0.526
504	242.976	15.588	3.57	0.0000	0.1526	15.3	0.526
505	243.480	15.604	3.57	0.0000	0.1526	15.3	0.526
506	243.980	15.620	3.57	0.0000	0.1526	15.3	0.526
507	244.477	15.636	3.57	0.0000	0.1526	15.3	0.526
508	244.980	15.652	3.57	0.0000	0.1526	15.3	0.526
509	245.480	15.668	3.57	0.0000	0.1526	15.3	0.526
510	245.976	15.684	3.57	0.0000	0.1526	15.3	0.526
511	246.480	15.700	3.57	0.0000	0.1526	15.3	0.526
512	246.976	15.715	3.57	0.0000	0.1526	15.3	0.526
513	247.477	15.731	3.57	0.0000	0.1526	15.3	0.526
514	247.979	15.747	3.57	0.0000	0.1526	15.3	0.526
515	248.480	15.763	3.57	0.0000	0.1526	15.3	0.526
516	248.980	15.779	3.57	0.0000	0.1526	15.3	0.526
517	249.479	15.795	3.57	0.0000	0.1526	15.3	0.526
518	249.978	15.811	3.57	0.0000	0.1526	15.3	0.526
519	250.477	15.826	3.57	0.0000	0.1526	15.3	0.526
520	250.979	15.842	3.57	0.0000	0.1526	15.3	0.526
521	251.477	15.858	3.57	0.0000	0.1526	15.3	0.526
522	251.978	15.874	3.57	0.0000	0.1526	15.3	0.526
523	252.476	15.890	3.57	0.0000	0.1526	15.3	0.526
524	252.980	15.905	3.57	0.0000	0.1526	15.3	0.526
525	253.481	15.921	3.57	0.0000	0.1526	15.3	0.526
526	253.978	15.937	3.57	0.0000	0.1526	15.3	0.526
527	254.477	15.952	3.57	0.0000	0.1526	15.3	0.526
528	254.977	15.968	3.57	0.0000	0.1526	15.3	0.526
529	255.477	15.984	3.57	0.0000	0.1526	15.3	0.526
530	255.979	15.999	3.57	0.0000	0.1526	15.3	0.526
531	256.480	16.015	3.57	0.0000	0.1526	15.3	0.526
532	256.980	16.031	3.57	0.0000	0.1526	15.3	0.526
533	257.478	16.046	3.57	0.0000	0.1526	15.3	0.526
534	257.980	16.062	3.57	0.0000	0.1526	15.3	0.526
535	258.479	16.077	3.57	0.0000	0.1526	15.3	0.526
536	258.977	16.093	3.57	0.0000	0.1526	15.3	0.526
537	259.479	16.108	3.57	0.0000	0.1526	15.3	0.526
538	259.978	16.124	3.57	0.0000	0.1526	15.3	0.526
539	260.480	16.139	3.57	0.0000	0.1526	15.3	0.526
540	260.978	16.155	3.57	0.0000	0.1526	15.3	0.526
541	261.478	16.170	3.57	0.0000	0.1526	15.3	0.526
542	261.979	16.186	3.57	0.0000	0.1526	15.3	0.526
543	262.479	16.201	3.57	0.0000	0.1526	15.3	0.526
544	262.978	16.217	3.57	0.0000	0.1526	15.3	0.526
545	263.478	16.232	3.57	0.0000	0.1526	15.3	0.526
546	263.979	16.247	3.57	0.0000	0.1526	15.3	0.526
547	264.478	16.263	3.57	0.0000	0.1526	15.3	0.526
548	264.977	16.278	3.57	0.0000	0.1526	15.3	0.526
549	265.479	16.294	3.57	0.0000	0.1526	15.3	0.526
550	265.977	16.309	3.57	0.0000	0.1526	15.3	0.526

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.479	16.324	3.57	0.0000	0.1526	15.3	0.526
552	266.979	16.339	3.57	0.0000	0.1526	15.3	0.526
553	267.477	16.355	3.57	0.0000	0.1526	15.3	0.526
554	267.979	16.370	3.57	0.0000	0.1526	15.3	0.526
555	268.477	16.385	3.57	0.0000	0.1526	15.3	0.526
556	268.979	16.401	3.57	0.0000	0.1526	15.3	0.526
557	269.478	16.416	3.57	0.0000	0.1526	15.3	0.526
558	269.979	16.431	3.57	0.0000	0.1526	15.3	0.526
559	270.478	16.446	3.57	0.0000	0.1526	15.3	0.526
560	270.977	16.461	3.57	0.0000	0.1526	15.3	0.526
561	271.477	16.477	3.57	0.0000	0.1526	15.3	0.526
562	271.977	16.492	3.57	0.0000	0.1526	15.3	0.526
563	272.477	16.507	3.57	0.0000	0.1526	15.3	0.526
564	272.978	16.522	3.57	0.0000	0.1526	15.3	0.526
565	273.476	16.537	3.57	0.0000	0.1526	15.3	0.526
566	273.977	16.552	3.57	0.0000	0.1526	15.3	0.526
567	274.476	16.567	3.57	0.0000	0.1526	15.3	0.526
568	274.979	16.582	3.57	0.0000	0.1526	15.3	0.526
569	275.478	16.598	3.57	0.0000	0.1526	15.3	0.526
570	275.977	16.613	3.57	0.0000	0.1526	15.3	0.526
571	276.479	16.628	3.57	0.0000	0.1526	15.3	0.526
572	276.977	16.643	3.57	0.0000	0.1526	15.3	0.526
573	277.480	16.658	3.57	0.0000	0.1526	15.3	0.526
574	277.980	16.673	3.57	0.0000	0.1526	15.3	0.526
575	278.478	16.688	3.57	0.0000	0.1526	15.3	0.526
576	278.976	16.703	3.57	0.0000	0.1526	15.3	0.526
577	279.479	16.718	3.57	0.0000	0.1526	15.3	0.526
578	279.977	16.733	3.57	0.0000	0.1526	15.3	0.526
579	280.477	16.747	3.57	0.0000	0.1526	15.3	0.526
580	280.976	16.762	3.57	0.0000	0.1527	15.3	0.526
581	281.480	16.777	3.57	0.0000	0.1527	15.3	0.526
582	281.979	16.792	3.57	0.0000	0.1527	15.3	0.526
583	282.479	16.807	3.57	0.0000	0.1527	15.3	0.526
584	282.980	16.822	3.57	0.0000	0.1527	15.3	0.526
585	283.479	16.837	3.57	0.0000	0.1526	15.3	0.526
586	283.979	16.852	3.57	0.0000	0.1527	15.3	0.526
587	284.478	16.866	3.57	0.0000	0.1527	15.3	0.526
588	284.976	16.881	3.57	0.0000	0.1527	15.3	0.526
589	285.479	16.896	3.57	0.0000	0.1527	15.3	0.526
590	285.980	16.911	3.57	0.0000	0.1527	15.3	0.526
591	286.479	16.926	3.57	0.0000	0.1527	15.3	0.526
592	286.978	16.940	3.57	0.0000	0.1527	15.3	0.526
593	287.477	16.955	3.57	0.0000	0.1527	15.3	0.526
594	287.978	16.970	3.57	0.0000	0.1527	15.3	0.526
595	288.480	16.985	3.57	0.0000	0.1527	15.3	0.526
596	288.979	16.999	3.57	0.0000	0.1527	15.3	0.526
597	289.479	17.014	3.57	0.0000	0.1527	15.3	0.526
598	289.980	17.029	3.57	0.0000	0.1527	15.3	0.526
599	290.480	17.043	3.57	0.0000	0.1527	15.3	0.526
600	290.980	17.058	3.57	0.0000	0.1527	15.3	0.526

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.480	17.073	3.57	0.0000	0.1527	15.3	0.526
602	291.978	17.087	3.57	0.0000	0.1527	15.3	0.526
603	292.478	17.102	3.57	0.0000	0.1527	15.3	0.526
604	292.977	17.117	3.57	0.0000	0.1527	15.3	0.526
605	293.480	17.131	3.57	0.0000	0.1527	15.3	0.526
606	293.979	17.146	3.57	0.0000	0.1527	15.3	0.526
607	294.478	17.160	3.57	0.0000	0.1527	15.3	0.526
608	294.977	17.175	3.57	0.0000	0.1527	15.3	0.526
609	295.478	17.189	3.57	0.0000	0.1527	15.3	0.526
610	295.977	17.204	3.57	0.0000	0.1527	15.3	0.526
611	296.480	17.219	3.57	0.0000	0.1527	15.3	0.526
612	296.978	17.233	3.57	0.0000	0.1527	15.3	0.526
613	297.477	17.248	3.57	0.0000	0.1527	15.3	0.526
614	297.979	17.262	3.57	0.0000	0.1527	15.3	0.526
615	298.478	17.277	3.57	0.0000	0.1527	15.3	0.526
616	298.977	17.291	3.57	0.0000	0.1527	15.3	0.526
617	299.478	17.305	3.57	0.0000	0.1527	15.3	0.526
618	299.979	17.320	3.57	0.0000	0.1527	15.3	0.526
619	300.478	17.334	3.57	0.0000	0.1527	15.3	0.526
620	300.978	17.349	3.57	0.0000	0.1527	15.3	0.526
621	301.479	17.363	3.57	0.0000	0.1527	15.3	0.526
622	301.977	17.377	3.57	0.0000	0.1527	15.3	0.526
623	302.478	17.392	3.57	0.0000	0.1527	15.3	0.526
624	302.980	17.406	3.57	0.0000	0.1527	15.3	0.526
625	303.480	17.421	3.57	0.0000	0.1527	15.3	0.526
626	303.977	17.435	3.57	0.0000	0.1527	15.3	0.526
627	304.480	17.449	3.57	0.0000	0.1527	15.3	0.526
628	304.979	17.464	3.57	0.0000	0.1527	15.3	0.526
629	305.477	17.478	3.57	0.0000	0.1527	15.3	0.526
630	305.978	17.492	3.57	0.0000	0.1527	15.3	0.526
631	306.477	17.506	3.57	0.0000	0.1527	15.3	0.526
632	306.979	17.521	3.57	0.0000	0.1527	15.3	0.526
633	307.479	17.535	3.57	0.0000	0.1527	15.3	0.526
634	307.977	17.549	3.57	0.0000	0.1527	15.3	0.526
635	308.480	17.564	3.57	0.0000	0.1527	15.3	0.526
636	308.976	17.578	3.57	0.0000	0.1527	15.3	0.526
637	309.479	17.592	3.57	0.0000	0.1528	15.3	0.526
638	309.977	17.606	3.57	0.0000	0.1528	15.3	0.526
639	310.480	17.620	3.57	0.0000	0.1528	15.3	0.526
640	310.978	17.635	3.57	0.0000	0.1527	15.3	0.526
641	311.477	17.649	3.57	0.0000	0.1527	15.3	0.526
642	311.978	17.663	3.57	0.0000	0.1527	15.3	0.526
643	312.477	17.677	3.57	0.0000	0.1527	15.3	0.526
644	312.976	17.691	3.57	0.0000	0.1527	15.3	0.526
645	313.480	17.705	3.57	0.0000	0.1527	15.3	0.526
646	313.979	17.719	3.57	0.0000	0.1527	15.3	0.526
647	314.481	17.734	3.57	0.0000	0.1527	15.3	0.526
648	314.977	17.748	3.57	0.0000	0.1527	15.3	0.526
649	315.480	17.762	3.57	0.0000	0.1527	15.3	0.526
650	315.978	17.776	3.57	0.0000	0.1527	15.3	0.526

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.480	17.790	3.57	0.0000	0.1527	15.3	0.526
652	316.978	17.804	3.57	0.0000	0.1527	15.3	0.526
653	317.481	17.818	3.57	0.0000	0.1527	15.3	0.526
654	317.979	17.832	3.57	0.0000	0.1527	15.3	0.526
655	318.478	17.846	3.57	0.0000	0.1527	15.3	0.526
656	318.980	17.860	3.57	0.0000	0.1527	15.3	0.526
657	319.480	17.874	3.57	0.0000	0.1527	15.3	0.526
658	319.978	17.888	3.57	0.0000	0.1527	15.3	0.526
659	320.480	17.902	3.57	0.0000	0.1527	15.3	0.526
660	320.979	17.916	3.57	0.0000	0.1527	15.3	0.526
661	321.480	17.930	3.57	0.0000	0.1527	15.3	0.526
662	321.979	17.944	3.57	0.0000	0.1527	15.3	0.526
663	322.479	17.958	3.57	0.0000	0.1527	15.3	0.526
664	322.976	17.972	3.57	0.0000	0.1527	15.3	0.526
665	323.478	17.986	3.57	0.0000	0.1527	15.3	0.526
666	323.978	17.999	3.57	0.0000	0.1527	15.3	0.526
667	324.479	18.013	3.57	0.0000	0.1527	15.3	0.526
668	324.977	18.027	3.57	0.0000	0.1527	15.3	0.526
669	325.477	18.041	3.57	0.0000	0.1527	15.3	0.526
670	325.980	18.055	3.57	0.0000	0.1527	15.3	0.526
671	326.478	18.069	3.57	0.0000	0.1527	15.3	0.526
672	326.977	18.083	3.57	0.0000	0.1527	15.3	0.526
673	327.477	18.096	3.57	0.0000	0.1527	15.3	0.526
674	327.981	18.110	3.57	0.0000	0.1527	15.3	0.526
675	328.477	18.124	3.57	0.0000	0.1527	15.3	0.526
676	328.979	18.138	3.57	0.0000	0.1527	15.3	0.526
677	329.478	18.152	3.57	0.0000	0.1527	15.3	0.526
678	329.976	18.165	3.57	0.0000	0.1527	15.3	0.526
679	330.480	18.179	3.57	0.0000	0.1527	15.3	0.526
680	330.977	18.193	3.57	0.0000	0.1527	15.3	0.526
681	331.478	18.207	3.57	0.0000	0.1527	15.3	0.526
682	331.979	18.220	3.57	0.0000	0.1527	15.3	0.526
683	332.480	18.234	3.57	0.0000	0.1527	15.3	0.526
684	332.976	18.248	3.57	0.0000	0.1527	15.3	0.526
685	333.479	18.261	3.57	0.0000	0.1527	15.3	0.526
686	333.980	18.275	3.57	0.0000	0.1527	15.3	0.526
687	334.479	18.289	3.57	0.0000	0.1527	15.3	0.526
688	334.979	18.302	3.57	0.0000	0.1527	15.3	0.526
689	335.477	18.316	3.57	0.0000	0.1527	15.3	0.526
690	335.979	18.330	3.57	0.0000	0.1527	15.3	0.526
691	336.478	18.343	3.57	0.0000	0.1528	15.3	0.526
692	336.977	18.357	3.57	0.0000	0.1527	15.3	0.526
693	337.479	18.371	3.57	0.0000	0.1527	15.3	0.526
694	337.977	18.384	3.57	0.0000	0.1527	15.3	0.526
695	338.477	18.398	3.57	0.0000	0.1527	15.3	0.526
696	338.978	18.411	3.57	0.0000	0.1527	15.3	0.526
697	339.477	18.425	3.57	0.0000	0.1528	15.3	0.526
698	339.980	18.439	3.57	0.0000	0.1528	15.3	0.526
699	340.478	18.452	3.57	0.0000	0.1527	15.3	0.526
700	340.978	18.466	3.57	0.0000	0.1528	15.3	0.526

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 16
Constant Load Step
Stress: 3.57 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.478	18.479	3.57	0.0000	0.1527	15.3	0.526
702	341.978	18.493	3.57	0.0000	0.1528	15.3	0.526
703	342.478	18.506	3.57	0.0000	0.1528	15.3	0.526
704	342.976	18.520	3.57	0.0000	0.1528	15.3	0.526
705	343.479	18.533	3.57	0.0000	0.1528	15.3	0.526
706	343.980	18.547	3.57	0.0000	0.1528	15.3	0.526
707	344.478	18.560	3.57	0.0000	0.1528	15.3	0.526
708	344.977	18.574	3.57	0.0000	0.1528	15.3	0.526
709	345.479	18.587	3.57	0.0000	0.1528	15.3	0.526
710	345.979	18.601	3.57	0.0000	0.1528	15.3	0.526
711	346.480	18.614	3.57	0.0000	0.1528	15.3	0.526
712	346.978	18.627	3.57	0.0000	0.1528	15.3	0.526
713	347.479	18.641	3.57	0.0000	0.1528	15.3	0.526
714	347.977	18.654	3.57	0.0000	0.1528	15.3	0.526
715	348.476	18.668	3.57	0.0000	0.1528	15.3	0.526
716	348.979	18.681	3.57	0.0000	0.1528	15.3	0.526
717	349.478	18.694	3.57	0.0000	0.1528	15.3	0.526
718	349.976	18.708	3.57	0.0000	0.1528	15.3	0.526
719	350.479	18.721	3.57	0.0000	0.1528	15.3	0.526
720	350.977	18.734	3.57	0.0000	0.1528	15.3	0.526
721	351.479	18.748	3.57	0.0000	0.1528	15.3	0.526
722	351.979	18.761	3.57	0.0000	0.1528	15.3	0.526
723	352.478	18.774	3.57	0.0000	0.1528	15.3	0.526
724	352.980	18.788	3.57	0.0000	0.1528	15.3	0.526
725	353.477	18.801	3.57	0.0000	0.1528	15.3	0.526
726	353.976	18.814	3.57	0.0000	0.1528	15.3	0.526
727	354.479	18.828	3.57	0.0000	0.1528	15.3	0.526
728	354.977	18.841	3.57	0.0000	0.1528	15.3	0.526
729	355.478	18.854	3.57	0.0000	0.1528	15.3	0.526
730	355.980	18.867	3.57	0.0000	0.1528	15.3	0.526
731	356.477	18.881	3.57	0.0000	0.1528	15.3	0.526
732	356.979	18.894	3.57	0.0000	0.1528	15.3	0.526
733	357.477	18.907	3.57	0.0000	0.1528	15.3	0.526
734	357.980	18.920	3.57	0.0000	0.1529	15.3	0.526
735	358.477	18.933	3.57	0.0000	0.1529	15.3	0.526
736	358.979	18.947	3.57	0.0000	0.1528	15.3	0.526
737	359.477	18.960	3.57	0.0000	0.1529	15.3	0.526
738	359.980	18.973	3.57	0.0000	0.1529	15.3	0.526
739	360.006	18.974	3.57	0.0000	0.1528	15.3	0.526

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.015		3.57	0.0000	0.1529	15.3	0.526
2	-0.011		3.57	0.0000	0.1529	15.3	0.526
3	-0.007		5.06	0.0000	0.1543	15.4	0.523
4	-0.002		6.35	0.0000	0.1567	15.7	0.519
5	0.000	0.000	6.79	0.0000	0.1580	15.8	0.516
6	0.002	0.044	7.16	0.0000	0.1590	15.9	0.515
7	0.006	0.078	7.02	0.0000	0.1593	15.9	0.514
8	0.010	0.101	6.98	0.0000	0.1594	15.9	0.514
9	0.014	0.120	7.04	0.0000	0.1595	15.9	0.514
10	0.019	0.138	7.10	0.0000	0.1596	16.0	0.514
11	0.023	0.152	7.13	0.0000	0.1597	16.0	0.513
12	0.027	0.165	7.12	0.0000	0.1599	16.0	0.513
13	0.032	0.178	7.06	0.0000	0.1599	16.0	0.513
14	0.036	0.190	7.09	0.0000	0.1599	16.0	0.513
15	0.041	0.201	7.11	0.0000	0.1600	16.0	0.513
16	0.045	0.212	7.12	0.0000	0.1600	16.0	0.513
17	0.062	0.249	7.09	0.0000	0.1601	16.0	0.513
18	0.071	0.266	7.11	0.0000	0.1602	16.0	0.512
19	0.153	0.391	7.14	0.0000	0.1609	16.1	0.511
20	0.235	0.485	7.12	0.0000	0.1615	16.2	0.510
21	0.322	0.567	7.13	0.0000	0.1618	16.2	0.509
22	0.486	0.697	7.13	0.0000	0.1626	16.3	0.508
23	0.737	0.859	7.14	0.0000	0.1638	16.4	0.506
24	0.989	0.994	7.14	0.0000	0.1647	16.5	0.504
25	1.487	1.219	7.13	0.0000	0.1661	16.6	0.502
26	2.487	1.577	7.14	0.0000	0.1679	16.8	0.499
27	4.487	2.118	7.13	0.0000	0.1706	17.1	0.494
28	4.986	2.233	7.13	0.0000	0.1712	17.1	0.493
29	5.487	2.342	7.14	0.0000	0.1714	17.1	0.492
30	5.987	2.447	7.14	0.0000	0.1718	17.2	0.491
31	6.488	2.547	7.14	0.0000	0.1723	17.2	0.491
32	6.987	2.643	7.13	0.0000	0.1726	17.3	0.490
33	7.488	2.736	7.13	0.0000	0.1728	17.3	0.490
34	7.986	2.826	7.13	0.0000	0.1733	17.3	0.489
35	8.487	2.913	7.15	0.0000	0.1737	17.4	0.488
36	8.987	2.998	7.14	0.0000	0.1743	17.4	0.487
37	9.486	3.080	7.14	0.0000	0.1747	17.5	0.486
38	9.989	3.161	7.13	0.0000	0.1752	17.5	0.485
39	10.489	3.239	7.14	0.0000	0.1758	17.6	0.484
40	10.985	3.314	7.15	0.0000	0.1763	17.6	0.483
41	11.488	3.389	7.14	0.0000	0.1766	17.7	0.483
42	11.986	3.462	7.14	0.0000	0.1769	17.7	0.482
43	12.488	3.534	7.14	0.0000	0.1772	17.7	0.482
44	12.987	3.604	7.15	0.0000	0.1775	17.7	0.481
45	13.488	3.673	7.14	0.0000	0.1776	17.8	0.481
46	13.986	3.740	7.14	0.0000	0.1778	17.8	0.481
47	14.489	3.806	7.15	0.0000	0.1780	17.8	0.480
48	14.988	3.871	7.15	0.0000	0.1781	17.8	0.480
49	15.485	3.935	7.13	0.0000	0.1783	17.8	0.480
50	15.985	3.998	7.15	0.0000	0.1786	17.9	0.479

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.486	4.060	7.14	0.0000	0.1787	17.9	0.479
52	16.986	4.121	7.15	0.0000	0.1789	17.9	0.479
53	17.488	4.182	7.13	0.0000	0.1791	17.9	0.478
54	17.987	4.241	7.15	0.0000	0.1793	17.9	0.478
55	18.488	4.300	7.14	0.0000	0.1795	17.9	0.478
56	18.986	4.357	7.15	0.0000	0.1795	18.0	0.478
57	19.486	4.414	7.15	0.0000	0.1797	18.0	0.477
58	19.987	4.471	7.14	0.0000	0.1799	18.0	0.477
59	20.488	4.526	7.15	0.0000	0.1801	18.0	0.476
60	20.988	4.581	7.13	0.0000	0.1805	18.0	0.476
61	21.486	4.635	7.14	0.0000	0.1807	18.1	0.476
62	21.986	4.689	7.14	0.0000	0.1808	18.1	0.475
63	22.489	4.742	7.15	0.0000	0.1809	18.1	0.475
64	22.985	4.794	7.14	0.0000	0.1811	18.1	0.475
65	23.485	4.846	7.14	0.0000	0.1813	18.1	0.474
66	23.987	4.898	7.14	0.0000	0.1815	18.2	0.474
67	24.485	4.948	7.14	0.0000	0.1817	18.2	0.474
68	24.987	4.999	7.14	0.0000	0.1819	18.2	0.473
69	25.488	5.049	7.15	0.0000	0.1822	18.2	0.473
70	25.987	5.098	7.14	0.0000	0.1823	18.2	0.473
71	26.489	5.147	7.14	0.0000	0.1823	18.2	0.473
72	26.988	5.195	7.15	0.0000	0.1824	18.2	0.472
73	27.486	5.243	7.13	0.0000	0.1824	18.2	0.472
74	27.987	5.290	7.15	0.0000	0.1825	18.2	0.472
75	28.486	5.337	7.15	0.0000	0.1825	18.3	0.472
76	28.987	5.384	7.14	0.0000	0.1827	18.3	0.472
77	29.485	5.430	7.15	0.0000	0.1827	18.3	0.472
78	29.988	5.476	7.14	0.0000	0.1828	18.3	0.472
79	30.488	5.522	7.15	0.0000	0.1829	18.3	0.472
80	30.989	5.567	7.15	0.0000	0.1829	18.3	0.471
81	31.489	5.611	7.14	0.0000	0.1830	18.3	0.471
82	31.988	5.656	7.14	0.0000	0.1830	18.3	0.471
83	32.488	5.700	7.14	0.0000	0.1831	18.3	0.471
84	32.985	5.743	7.14	0.0000	0.1832	18.3	0.471
85	33.487	5.787	7.15	0.0000	0.1832	18.3	0.471
86	33.989	5.830	7.14	0.0000	0.1832	18.3	0.471
87	34.487	5.873	7.15	0.0000	0.1833	18.3	0.471
88	34.987	5.915	7.14	0.0000	0.1833	18.3	0.471
89	35.489	5.957	7.15	0.0000	0.1834	18.3	0.471
90	35.986	5.999	7.15	0.0000	0.1834	18.3	0.471
91	36.488	6.041	7.15	0.0000	0.1835	18.4	0.470
92	36.987	6.082	7.14	0.0000	0.1836	18.4	0.470
93	37.487	6.123	7.14	0.0000	0.1836	18.4	0.470
94	37.988	6.163	7.14	0.0000	0.1836	18.4	0.470
95	38.487	6.204	7.15	0.0000	0.1837	18.4	0.470
96	38.989	6.244	7.15	0.0000	0.1837	18.4	0.470
97	39.488	6.284	7.14	0.0000	0.1838	18.4	0.470
98	39.987	6.323	7.14	0.0000	0.1838	18.4	0.470
99	40.487	6.363	7.14	0.0000	0.1839	18.4	0.470
100	40.985	6.402	7.14	0.0000	0.1839	18.4	0.470

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.489	6.441	7.14	0.0000	0.1839	18.4	0.470
102	41.987	6.480	7.14	0.0000	0.1840	18.4	0.470
103	42.489	6.518	7.14	0.0000	0.1840	18.4	0.470
104	42.987	6.556	7.14	0.0000	0.1840	18.4	0.470
105	43.489	6.595	7.14	0.0000	0.1840	18.4	0.470
106	43.985	6.632	7.15	0.0000	0.1841	18.4	0.469
107	44.487	6.670	7.14	0.0000	0.1842	18.4	0.469
108	44.989	6.707	7.14	0.0000	0.1842	18.4	0.469
109	45.486	6.744	7.14	0.0000	0.1842	18.4	0.469
110	45.987	6.781	7.14	0.0000	0.1842	18.4	0.469
111	46.486	6.818	7.14	0.0000	0.1842	18.4	0.469
112	46.987	6.855	7.14	0.0000	0.1842	18.4	0.469
113	47.488	6.891	7.14	0.0000	0.1842	18.4	0.469
114	47.988	6.927	7.14	0.0000	0.1843	18.4	0.469
115	48.489	6.963	7.14	0.0000	0.1843	18.4	0.469
116	48.989	6.999	7.15	0.0000	0.1843	18.4	0.469
117	49.487	7.035	7.14	0.0000	0.1843	18.4	0.469
118	49.986	7.070	7.14	0.0000	0.1844	18.4	0.469
119	50.488	7.106	7.14	0.0000	0.1844	18.4	0.469
120	50.989	7.141	7.15	0.0000	0.1845	18.4	0.469
121	51.488	7.176	7.14	0.0000	0.1845	18.4	0.469
122	51.986	7.210	7.14	0.0000	0.1845	18.5	0.469
123	52.488	7.245	7.14	0.0000	0.1845	18.5	0.469
124	52.986	7.279	7.14	0.0000	0.1846	18.5	0.469
125	53.488	7.314	7.14	0.0000	0.1846	18.5	0.469
126	53.988	7.348	7.14	0.0000	0.1846	18.5	0.469
127	54.486	7.381	7.14	0.0000	0.1846	18.5	0.468
128	54.988	7.415	7.14	0.0000	0.1846	18.5	0.468
129	55.486	7.449	7.14	0.0000	0.1846	18.5	0.468
130	55.988	7.483	7.14	0.0000	0.1846	18.5	0.468
131	56.485	7.516	7.14	0.0000	0.1846	18.5	0.468
132	56.985	7.549	7.14	0.0000	0.1846	18.5	0.468
133	57.488	7.582	7.15	0.0000	0.1847	18.5	0.468
134	57.986	7.615	7.14	0.0000	0.1847	18.5	0.468
135	58.487	7.648	7.14	0.0000	0.1847	18.5	0.468
136	58.989	7.680	7.14	0.0000	0.1847	18.5	0.468
137	59.488	7.713	7.14	0.0000	0.1847	18.5	0.468
138	59.986	7.745	7.14	0.0000	0.1847	18.5	0.468
139	60.486	7.777	7.14	0.0000	0.1847	18.5	0.468
140	60.988	7.809	7.14	0.0000	0.1847	18.5	0.468
141	61.485	7.841	7.14	0.0000	0.1847	18.5	0.468
142	61.988	7.873	7.15	0.0000	0.1847	18.5	0.468
143	62.486	7.905	7.14	0.0000	0.1847	18.5	0.468
144	62.987	7.936	7.14	0.0000	0.1847	18.5	0.468
145	63.487	7.968	7.14	0.0000	0.1848	18.5	0.468
146	63.985	7.999	7.14	0.0000	0.1848	18.5	0.468
147	64.488	8.030	7.14	0.0000	0.1848	18.5	0.468
148	64.987	8.061	7.14	0.0000	0.1848	18.5	0.468
149	65.486	8.092	7.14	0.0000	0.1848	18.5	0.468
150	65.987	8.123	7.14	0.0000	0.1849	18.5	0.468

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.488	8.154	7.14	0.0000	0.1849	18.5	0.468
152	66.988	8.185	7.14	0.0000	0.1849	18.5	0.468
153	67.486	8.215	7.14	0.0000	0.1849	18.5	0.468
154	67.988	8.245	7.14	0.0000	0.1849	18.5	0.468
155	68.487	8.276	7.15	0.0000	0.1850	18.5	0.468
156	68.987	8.306	7.14	0.0000	0.1850	18.5	0.468
157	69.485	8.336	7.14	0.0000	0.1850	18.5	0.468
158	69.987	8.366	7.14	0.0000	0.1850	18.5	0.468
159	70.488	8.396	7.15	0.0000	0.1850	18.5	0.468
160	70.985	8.425	7.14	0.0000	0.1850	18.5	0.468
161	71.488	8.455	7.14	0.0000	0.1850	18.5	0.468
162	71.988	8.485	7.14	0.0000	0.1850	18.5	0.468
163	72.488	8.514	7.14	0.0000	0.1850	18.5	0.468
164	72.987	8.543	7.14	0.0000	0.1850	18.5	0.468
165	73.487	8.572	7.14	0.0000	0.1850	18.5	0.468
166	73.986	8.602	7.14	0.0000	0.1850	18.5	0.468
167	74.487	8.631	7.14	0.0000	0.1851	18.5	0.468
168	74.988	8.660	7.14	0.0000	0.1851	18.5	0.468
169	75.487	8.688	7.14	0.0000	0.1851	18.5	0.468
170	75.986	8.717	7.14	0.0000	0.1851	18.5	0.468
171	76.488	8.746	7.14	0.0000	0.1851	18.5	0.467
172	76.986	8.774	7.14	0.0000	0.1851	18.5	0.467
173	77.486	8.803	7.14	0.0000	0.1851	18.5	0.467
174	77.987	8.831	7.14	0.0000	0.1852	18.5	0.467
175	78.485	8.859	7.14	0.0000	0.1852	18.5	0.467
176	78.986	8.887	7.14	0.0000	0.1852	18.5	0.467
177	79.489	8.916	7.14	0.0000	0.1852	18.5	0.467
178	79.988	8.944	7.14	0.0000	0.1852	18.5	0.467
179	80.486	8.971	7.14	0.0000	0.1852	18.5	0.467
180	80.986	8.999	7.14	0.0000	0.1853	18.5	0.467
181	81.488	9.027	7.14	0.0000	0.1853	18.5	0.467
182	81.987	9.055	7.14	0.0000	0.1853	18.5	0.467
183	82.489	9.082	7.14	0.0000	0.1853	18.5	0.467
184	82.989	9.110	7.14	0.0000	0.1853	18.5	0.467
185	83.485	9.137	7.14	0.0000	0.1853	18.5	0.467
186	83.986	9.164	7.14	0.0000	0.1853	18.5	0.467
187	84.486	9.192	7.14	0.0000	0.1854	18.5	0.467
188	84.988	9.219	7.14	0.0000	0.1854	18.5	0.467
189	85.486	9.246	7.14	0.0000	0.1854	18.5	0.467
190	85.989	9.273	7.14	0.0000	0.1854	18.5	0.467
191	86.486	9.300	7.14	0.0000	0.1854	18.5	0.467
192	86.989	9.327	7.14	0.0000	0.1854	18.5	0.467
193	87.486	9.353	7.14	0.0000	0.1854	18.5	0.467
194	87.987	9.380	7.14	0.0000	0.1854	18.5	0.467
195	88.487	9.407	7.14	0.0000	0.1854	18.5	0.467
196	88.988	9.433	7.14	0.0000	0.1854	18.5	0.467
197	89.485	9.460	7.14	0.0000	0.1854	18.5	0.467
198	89.986	9.486	7.14	0.0000	0.1855	18.5	0.467
199	90.488	9.513	7.14	0.0000	0.1855	18.5	0.467
200	90.989	9.539	7.14	0.0000	0.1855	18.5	0.467

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.488	9.565	7.14	0.0000	0.1855	18.5	0.467
202	91.986	9.591	7.14	0.0000	0.1855	18.5	0.467
203	92.489	9.617	7.14	0.0000	0.1855	18.6	0.467
204	92.985	9.643	7.14	0.0000	0.1855	18.6	0.467
205	93.488	9.669	7.14	0.0000	0.1855	18.6	0.467
206	93.987	9.695	7.14	0.0000	0.1855	18.6	0.467
207	94.488	9.721	7.14	0.0000	0.1855	18.6	0.467
208	94.986	9.746	7.14	0.0000	0.1856	18.6	0.467
209	95.488	9.772	7.14	0.0000	0.1855	18.6	0.467
210	95.988	9.797	7.14	0.0000	0.1856	18.6	0.467
211	96.489	9.823	7.14	0.0000	0.1855	18.6	0.467
212	96.987	9.848	7.14	0.0000	0.1856	18.6	0.467
213	97.489	9.874	7.14	0.0000	0.1855	18.6	0.467
214	97.987	9.899	7.14	0.0000	0.1856	18.6	0.467
215	98.485	9.924	7.14	0.0000	0.1855	18.6	0.467
216	98.987	9.949	7.14	0.0000	0.1855	18.6	0.467
217	99.488	9.974	7.14	0.0000	0.1855	18.6	0.467
218	99.986	9.999	7.14	0.0000	0.1856	18.6	0.467
219	100.489	10.024	7.14	0.0000	0.1856	18.6	0.467
220	100.985	10.049	7.14	0.0000	0.1856	18.6	0.467
221	101.487	10.074	7.14	0.0000	0.1856	18.6	0.467
222	101.985	10.099	7.14	0.0000	0.1856	18.6	0.467
223	102.486	10.124	7.14	0.0000	0.1856	18.6	0.467
224	102.988	10.148	7.14	0.0000	0.1856	18.6	0.467
225	103.489	10.173	7.14	0.0000	0.1856	18.6	0.467
226	103.989	10.197	7.14	0.0000	0.1856	18.6	0.467
227	104.487	10.222	7.14	0.0000	0.1856	18.6	0.467
228	104.989	10.246	7.14	0.0000	0.1856	18.6	0.467
229	105.488	10.271	7.14	0.0000	0.1856	18.6	0.467
230	105.989	10.295	7.14	0.0000	0.1856	18.6	0.467
231	106.487	10.319	7.14	0.0000	0.1856	18.6	0.467
232	106.987	10.343	7.14	0.0000	0.1856	18.6	0.467
233	107.486	10.368	7.14	0.0000	0.1856	18.6	0.467
234	107.987	10.392	7.14	0.0000	0.1856	18.6	0.467
235	108.488	10.416	7.14	0.0000	0.1857	18.6	0.466
236	108.988	10.440	7.14	0.0000	0.1856	18.6	0.467
237	109.488	10.464	7.14	0.0000	0.1856	18.6	0.467
238	109.987	10.487	7.14	0.0000	0.1856	18.6	0.467
239	110.486	10.511	7.14	0.0000	0.1857	18.6	0.466
240	110.988	10.535	7.15	0.0000	0.1856	18.6	0.467
241	111.486	10.559	7.14	0.0000	0.1857	18.6	0.466
242	111.987	10.582	7.14	0.0000	0.1857	18.6	0.466
243	112.486	10.606	7.14	0.0000	0.1856	18.6	0.467
244	112.988	10.630	7.14	0.0000	0.1857	18.6	0.466
245	113.485	10.653	7.14	0.0000	0.1857	18.6	0.466
246	113.986	10.676	7.14	0.0000	0.1857	18.6	0.466
247	114.488	10.700	7.14	0.0000	0.1857	18.6	0.466
248	114.986	10.723	7.14	0.0000	0.1857	18.6	0.466
249	115.489	10.747	7.14	0.0000	0.1857	18.6	0.466
250	115.985	10.770	7.14	0.0000	0.1857	18.6	0.466

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.489	10.793	7.14	0.0000	0.1857	18.6	0.466
252	116.986	10.816	7.14	0.0000	0.1857	18.6	0.466
253	117.486	10.839	7.14	0.0000	0.1857	18.6	0.466
254	117.986	10.862	7.14	0.0000	0.1857	18.6	0.466
255	118.487	10.885	7.14	0.0000	0.1857	18.6	0.466
256	118.986	10.908	7.14	0.0000	0.1857	18.6	0.466
257	119.487	10.931	7.14	0.0000	0.1857	18.6	0.466
258	119.987	10.954	7.14	0.0000	0.1857	18.6	0.466
259	120.485	10.977	7.14	0.0000	0.1857	18.6	0.466
260	120.986	10.999	7.14	0.0000	0.1857	18.6	0.466
261	121.489	11.022	7.14	0.0000	0.1857	18.6	0.466
262	121.986	11.045	7.14	0.0000	0.1857	18.6	0.466
263	122.486	11.067	7.14	0.0000	0.1857	18.6	0.466
264	122.986	11.090	7.14	0.0000	0.1857	18.6	0.466
265	123.488	11.113	7.14	0.0000	0.1857	18.6	0.466
266	123.986	11.135	7.14	0.0000	0.1857	18.6	0.466
267	124.485	11.157	7.14	0.0000	0.1857	18.6	0.466
268	124.985	11.180	7.14	0.0000	0.1857	18.6	0.466
269	125.488	11.202	7.14	0.0000	0.1857	18.6	0.466
270	125.989	11.224	7.14	0.0000	0.1857	18.6	0.466
271	126.486	11.247	7.14	0.0000	0.1857	18.6	0.466
272	126.988	11.269	7.14	0.0000	0.1857	18.6	0.466
273	127.486	11.291	7.14	0.0000	0.1858	18.6	0.466
274	127.985	11.313	7.14	0.0000	0.1858	18.6	0.466
275	128.487	11.335	7.14	0.0000	0.1858	18.6	0.466
276	128.988	11.357	7.14	0.0000	0.1857	18.6	0.466
277	129.487	11.379	7.14	0.0000	0.1858	18.6	0.466
278	129.988	11.401	7.14	0.0000	0.1858	18.6	0.466
279	130.487	11.423	7.14	0.0000	0.1858	18.6	0.466
280	130.988	11.445	7.14	0.0000	0.1858	18.6	0.466
281	131.489	11.467	7.14	0.0000	0.1858	18.6	0.466
282	131.987	11.489	7.14	0.0000	0.1858	18.6	0.466
283	132.487	11.510	7.14	0.0000	0.1858	18.6	0.466
284	132.985	11.532	7.14	0.0000	0.1858	18.6	0.466
285	133.488	11.554	7.14	0.0000	0.1858	18.6	0.466
286	133.985	11.575	7.14	0.0000	0.1858	18.6	0.466
287	134.485	11.597	7.14	0.0000	0.1858	18.6	0.466
288	134.986	11.618	7.14	0.0000	0.1858	18.6	0.466
289	135.488	11.640	7.14	0.0000	0.1858	18.6	0.466
290	135.988	11.661	7.14	0.0000	0.1858	18.6	0.466
291	136.486	11.683	7.14	0.0000	0.1858	18.6	0.466
292	136.985	11.704	7.14	0.0000	0.1858	18.6	0.466
293	137.486	11.725	7.14	0.0000	0.1858	18.6	0.466
294	137.989	11.747	7.14	0.0000	0.1858	18.6	0.466
295	138.488	11.768	7.14	0.0000	0.1858	18.6	0.466
296	138.987	11.789	7.14	0.0000	0.1858	18.6	0.466
297	139.488	11.810	7.14	0.0000	0.1858	18.6	0.466
298	139.988	11.832	7.14	0.0000	0.1858	18.6	0.466
299	140.486	11.853	7.14	0.0000	0.1859	18.6	0.466
300	140.986	11.874	7.14	0.0000	0.1859	18.6	0.466

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.486	11.895	7.14	0.0000	0.1859	18.6	0.466
302	141.988	11.916	7.14	0.0000	0.1859	18.6	0.466
303	142.486	11.937	7.14	0.0000	0.1859	18.6	0.466
304	142.985	11.958	7.14	0.0000	0.1859	18.6	0.466
305	143.487	11.979	7.14	0.0000	0.1859	18.6	0.466
306	143.987	11.999	7.14	0.0000	0.1859	18.6	0.466
307	144.489	12.020	7.14	0.0000	0.1859	18.6	0.466
308	144.985	12.041	7.14	0.0000	0.1859	18.6	0.466
309	145.488	12.062	7.14	0.0000	0.1859	18.6	0.466
310	145.986	12.082	7.14	0.0000	0.1859	18.6	0.466
311	146.489	12.103	7.14	0.0000	0.1859	18.6	0.466
312	146.988	12.124	7.14	0.0000	0.1859	18.6	0.466
313	147.487	12.144	7.14	0.0000	0.1859	18.6	0.466
314	147.988	12.165	7.14	0.0000	0.1859	18.6	0.466
315	148.486	12.185	7.14	0.0000	0.1859	18.6	0.466
316	148.988	12.206	7.14	0.0000	0.1859	18.6	0.466
317	149.485	12.226	7.14	0.0000	0.1859	18.6	0.466
318	149.989	12.247	7.14	0.0000	0.1859	18.6	0.466
319	150.489	12.267	7.14	0.0000	0.1859	18.6	0.466
320	150.986	12.288	7.14	0.0000	0.1859	18.6	0.466
321	151.485	12.308	7.14	0.0000	0.1859	18.6	0.466
322	151.985	12.328	7.14	0.0000	0.1859	18.6	0.466
323	152.488	12.349	7.14	0.0000	0.1859	18.6	0.466
324	152.989	12.369	7.14	0.0000	0.1859	18.6	0.466
325	153.487	12.389	7.14	0.0000	0.1859	18.6	0.466
326	153.988	12.409	7.14	0.0000	0.1859	18.6	0.466
327	154.486	12.429	7.14	0.0000	0.1859	18.6	0.466
328	154.986	12.449	7.14	0.0000	0.1859	18.6	0.466
329	155.487	12.469	7.14	0.0000	0.1859	18.6	0.466
330	155.989	12.490	7.14	0.0000	0.1859	18.6	0.466
331	156.487	12.509	7.14	0.0000	0.1859	18.6	0.466
332	156.989	12.530	7.14	0.0000	0.1859	18.6	0.466
333	157.489	12.549	7.14	0.0000	0.1859	18.6	0.466
334	157.987	12.569	7.14	0.0000	0.1859	18.6	0.466
335	158.485	12.589	7.14	0.0000	0.1859	18.6	0.466
336	158.988	12.609	7.14	0.0000	0.1859	18.6	0.466
337	159.487	12.629	7.14	0.0000	0.1859	18.6	0.466
338	159.987	12.649	7.14	0.0000	0.1859	18.6	0.466
339	160.487	12.668	7.14	0.0000	0.1859	18.6	0.466
340	160.987	12.688	7.14	0.0000	0.1859	18.6	0.466
341	161.485	12.708	7.14	0.0000	0.1859	18.6	0.466
342	161.987	12.727	7.14	0.0000	0.1859	18.6	0.466
343	162.485	12.747	7.14	0.0000	0.1859	18.6	0.466
344	162.989	12.767	7.14	0.0000	0.1860	18.6	0.466
345	163.486	12.786	7.14	0.0000	0.1860	18.6	0.466
346	163.989	12.806	7.14	0.0000	0.1860	18.6	0.466
347	164.485	12.825	7.14	0.0000	0.1860	18.6	0.466
348	164.986	12.845	7.14	0.0000	0.1860	18.6	0.466
349	165.489	12.864	7.14	0.0000	0.1860	18.6	0.466
350	165.989	12.884	7.14	0.0000	0.1860	18.6	0.466

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.487	12.903	7.14	0.0000	0.1860	18.6	0.466
352	166.986	12.922	7.14	0.0000	0.1860	18.6	0.466
353	167.485	12.942	7.14	0.0000	0.1860	18.6	0.466
354	167.988	12.961	7.14	0.0000	0.1860	18.6	0.466
355	168.487	12.980	7.14	0.0000	0.1860	18.6	0.466
356	168.988	13.000	7.14	0.0000	0.1860	18.6	0.466
357	169.485	13.019	7.14	0.0000	0.1860	18.6	0.466
358	169.986	13.038	7.14	0.0000	0.1860	18.6	0.466
359	170.487	13.057	7.14	0.0000	0.1860	18.6	0.466
360	170.988	13.076	7.14	0.0000	0.1860	18.6	0.466
361	171.486	13.095	7.14	0.0000	0.1860	18.6	0.466
362	171.989	13.114	7.14	0.0000	0.1860	18.6	0.466
363	172.486	13.133	7.14	0.0000	0.1860	18.6	0.466
364	172.988	13.152	7.14	0.0000	0.1861	18.6	0.466
365	173.488	13.171	7.14	0.0000	0.1861	18.6	0.466
366	173.986	13.190	7.14	0.0000	0.1861	18.6	0.466
367	174.488	13.209	7.14	0.0000	0.1861	18.6	0.466
368	174.985	13.228	7.14	0.0000	0.1861	18.6	0.466
369	175.489	13.247	7.14	0.0000	0.1861	18.6	0.466
370	175.987	13.266	7.14	0.0000	0.1861	18.6	0.466
371	176.488	13.285	7.14	0.0000	0.1861	18.6	0.466
372	176.988	13.304	7.14	0.0000	0.1861	18.6	0.466
373	177.485	13.322	7.14	0.0000	0.1861	18.6	0.466
374	177.987	13.341	7.14	0.0000	0.1861	18.6	0.466
375	178.488	13.360	7.14	0.0000	0.1861	18.6	0.466
376	178.985	13.379	7.14	0.0000	0.1861	18.6	0.466
377	179.488	13.397	7.14	0.0000	0.1861	18.6	0.466
378	179.985	13.416	7.14	0.0000	0.1861	18.6	0.466
379	180.487	13.435	7.14	0.0000	0.1861	18.6	0.466
380	180.988	13.453	7.14	0.0000	0.1861	18.6	0.466
381	181.485	13.472	7.14	0.0000	0.1861	18.6	0.466
382	181.987	13.490	7.14	0.0000	0.1861	18.6	0.466
383	182.488	13.509	7.14	0.0000	0.1861	18.6	0.466
384	182.988	13.527	7.14	0.0000	0.1861	18.6	0.466
385	183.488	13.546	7.14	0.0000	0.1861	18.6	0.466
386	183.989	13.564	7.14	0.0000	0.1861	18.6	0.466
387	184.489	13.583	7.14	0.0000	0.1861	18.6	0.466
388	184.985	13.601	7.14	0.0000	0.1861	18.6	0.466
389	185.488	13.619	7.14	0.0000	0.1861	18.6	0.466
390	185.989	13.638	7.14	0.0000	0.1861	18.6	0.466
391	186.488	13.656	7.14	0.0000	0.1861	18.6	0.466
392	186.988	13.674	7.14	0.0000	0.1861	18.6	0.466
393	187.485	13.693	7.14	0.0000	0.1861	18.6	0.466
394	187.987	13.711	7.14	0.0000	0.1861	18.6	0.466
395	188.488	13.729	7.14	0.0000	0.1861	18.6	0.466
396	188.989	13.747	7.14	0.0000	0.1861	18.6	0.466
397	189.485	13.765	7.14	0.0000	0.1861	18.6	0.466
398	189.986	13.784	7.14	0.0000	0.1861	18.6	0.466
399	190.486	13.802	7.14	0.0000	0.1861	18.6	0.466
400	190.986	13.820	7.14	0.0000	0.1861	18.6	0.466

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.488	13.838	7.14	0.0000	0.1861	18.6	0.466
402	191.986	13.856	7.14	0.0000	0.1861	18.6	0.466
403	192.486	13.874	7.14	0.0000	0.1861	18.6	0.466
404	192.987	13.892	7.14	0.0000	0.1861	18.6	0.466
405	193.489	13.910	7.14	0.0000	0.1861	18.6	0.466
406	193.986	13.928	7.14	0.0000	0.1861	18.6	0.466
407	194.488	13.946	7.14	0.0000	0.1861	18.6	0.466
408	194.989	13.964	7.14	0.0000	0.1861	18.6	0.466
409	195.488	13.982	7.14	0.0000	0.1861	18.6	0.466
410	195.988	14.000	7.14	0.0000	0.1861	18.6	0.466
411	196.486	14.017	7.14	0.0000	0.1861	18.6	0.466
412	196.988	14.035	7.14	0.0000	0.1861	18.6	0.466
413	197.488	14.053	7.14	0.0000	0.1861	18.6	0.466
414	197.985	14.071	7.14	0.0000	0.1861	18.6	0.466
415	198.487	14.089	7.14	0.0000	0.1861	18.6	0.466
416	198.987	14.106	7.14	0.0000	0.1861	18.6	0.466
417	199.488	14.124	7.14	0.0000	0.1861	18.6	0.466
418	199.985	14.142	7.14	0.0000	0.1861	18.6	0.466
419	200.487	14.159	7.14	0.0000	0.1861	18.6	0.466
420	200.986	14.177	7.14	0.0000	0.1861	18.6	0.466
421	201.485	14.195	7.14	0.0000	0.1861	18.6	0.466
422	201.987	14.212	7.14	0.0000	0.1861	18.6	0.466
423	202.485	14.230	7.14	0.0000	0.1861	18.6	0.466
424	202.988	14.247	7.14	0.0000	0.1861	18.6	0.466
425	203.486	14.265	7.14	0.0000	0.1861	18.6	0.466
426	203.989	14.282	7.14	0.0000	0.1861	18.6	0.466
427	204.487	14.300	7.14	0.0000	0.1861	18.6	0.466
428	204.989	14.317	7.14	0.0000	0.1861	18.6	0.466
429	205.486	14.335	7.14	0.0000	0.1861	18.6	0.466
430	205.987	14.352	7.14	0.0000	0.1862	18.6	0.466
431	206.487	14.370	7.14	0.0000	0.1862	18.6	0.466
432	206.988	14.387	7.14	0.0000	0.1862	18.6	0.466
433	207.488	14.404	7.14	0.0000	0.1862	18.6	0.466
434	207.988	14.422	7.14	0.0000	0.1862	18.6	0.466
435	208.485	14.439	7.14	0.0000	0.1861	18.6	0.466
436	208.987	14.456	7.14	0.0000	0.1862	18.6	0.466
437	209.489	14.474	7.14	0.0000	0.1862	18.6	0.466
438	209.987	14.491	7.14	0.0000	0.1862	18.6	0.466
439	210.488	14.508	7.14	0.0000	0.1862	18.6	0.466
440	210.988	14.525	7.14	0.0000	0.1862	18.6	0.466
441	211.486	14.543	7.14	0.0000	0.1862	18.6	0.466
442	211.988	14.560	7.14	0.0000	0.1862	18.6	0.466
443	212.488	14.577	7.14	0.0000	0.1862	18.6	0.466
444	212.987	14.594	7.14	0.0000	0.1862	18.6	0.466
445	213.488	14.611	7.14	0.0000	0.1862	18.6	0.466
446	213.986	14.628	7.14	0.0000	0.1862	18.6	0.466
447	214.487	14.645	7.14	0.0000	0.1862	18.6	0.466
448	214.987	14.662	7.14	0.0000	0.1862	18.6	0.466
449	215.489	14.680	7.14	0.0000	0.1862	18.6	0.466
450	215.988	14.697	7.14	0.0000	0.1862	18.6	0.466

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.486	14.713	7.14	0.0000	0.1862	18.6	0.466
452	216.987	14.730	7.14	0.0000	0.1862	18.6	0.466
453	217.485	14.747	7.14	0.0000	0.1862	18.6	0.466
454	217.986	14.764	7.14	0.0000	0.1862	18.6	0.466
455	218.487	14.781	7.14	0.0000	0.1862	18.6	0.466
456	218.988	14.798	7.14	0.0000	0.1862	18.6	0.465
457	219.488	14.815	7.14	0.0000	0.1862	18.6	0.465
458	219.989	14.832	7.14	0.0000	0.1862	18.6	0.465
459	220.487	14.849	7.14	0.0000	0.1862	18.6	0.465
460	220.986	14.866	7.14	0.0000	0.1862	18.6	0.465
461	221.485	14.882	7.14	0.0000	0.1862	18.6	0.465
462	221.989	14.899	7.14	0.0000	0.1862	18.6	0.465
463	222.486	14.916	7.14	0.0000	0.1862	18.6	0.465
464	222.986	14.933	7.14	0.0000	0.1862	18.6	0.465
465	223.487	14.949	7.14	0.0000	0.1862	18.6	0.465
466	223.987	14.966	7.14	0.0000	0.1862	18.6	0.465
467	224.488	14.983	7.14	0.0000	0.1862	18.6	0.465
468	224.985	15.000	7.14	0.0000	0.1862	18.6	0.465
469	225.487	15.016	7.14	0.0000	0.1862	18.6	0.465
470	225.987	15.033	7.14	0.0000	0.1862	18.6	0.465
471	226.487	15.049	7.14	0.0000	0.1862	18.6	0.465
472	226.989	15.066	7.14	0.0000	0.1862	18.6	0.465
473	227.486	15.083	7.14	0.0000	0.1862	18.6	0.465
474	227.988	15.099	7.14	0.0000	0.1862	18.6	0.465
475	228.486	15.116	7.14	0.0000	0.1862	18.6	0.466
476	228.987	15.132	7.14	0.0000	0.1862	18.6	0.466
477	229.486	15.149	7.14	0.0000	0.1862	18.6	0.465
478	229.985	15.165	7.14	0.0000	0.1862	18.6	0.465
479	230.487	15.182	7.14	0.0000	0.1862	18.6	0.465
480	230.988	15.198	7.14	0.0000	0.1862	18.6	0.465
481	231.486	15.215	7.14	0.0000	0.1862	18.6	0.465
482	231.988	15.231	7.14	0.0000	0.1862	18.6	0.465
483	232.485	15.247	7.14	0.0000	0.1862	18.6	0.465
484	232.987	15.264	7.14	0.0000	0.1862	18.6	0.465
485	233.489	15.280	7.14	0.0000	0.1862	18.6	0.465
486	233.987	15.297	7.14	0.0000	0.1862	18.6	0.465
487	234.489	15.313	7.14	0.0000	0.1862	18.6	0.465
488	234.988	15.329	7.14	0.0000	0.1862	18.6	0.465
489	235.485	15.346	7.14	0.0000	0.1862	18.6	0.465
490	235.985	15.362	7.14	0.0000	0.1862	18.6	0.465
491	236.487	15.378	7.14	0.0000	0.1862	18.6	0.465
492	236.986	15.394	7.14	0.0000	0.1862	18.6	0.465
493	237.486	15.411	7.14	0.0000	0.1862	18.6	0.465
494	237.986	15.427	7.14	0.0000	0.1862	18.6	0.465
495	238.487	15.443	7.14	0.0000	0.1862	18.6	0.465
496	238.986	15.459	7.14	0.0000	0.1862	18.6	0.465
497	239.488	15.475	7.14	0.0000	0.1862	18.6	0.465
498	239.988	15.492	7.14	0.0000	0.1862	18.6	0.465
499	240.488	15.508	7.14	0.0000	0.1862	18.6	0.465
500	240.985	15.524	7.14	0.0000	0.1862	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.487	15.540	7.14	0.0000	0.1862	18.6	0.465
502	241.987	15.556	7.14	0.0000	0.1862	18.6	0.465
503	242.486	15.572	7.14	0.0000	0.1862	18.6	0.465
504	242.989	15.588	7.14	0.0000	0.1862	18.6	0.465
505	243.488	15.604	7.14	0.0000	0.1862	18.6	0.465
506	243.985	15.620	7.14	0.0000	0.1862	18.6	0.465
507	244.486	15.636	7.14	0.0000	0.1862	18.6	0.465
508	244.988	15.652	7.14	0.0000	0.1862	18.6	0.465
509	245.488	15.668	7.14	0.0000	0.1863	18.6	0.465
510	245.988	15.684	7.14	0.0000	0.1862	18.6	0.465
511	246.489	15.700	7.14	0.0000	0.1863	18.6	0.465
512	246.989	15.716	7.14	0.0000	0.1862	18.6	0.465
513	247.487	15.732	7.14	0.0000	0.1862	18.6	0.465
514	247.987	15.748	7.14	0.0000	0.1863	18.6	0.465
515	248.486	15.763	7.14	0.0000	0.1863	18.6	0.465
516	248.987	15.779	7.14	0.0000	0.1862	18.6	0.465
517	249.486	15.795	7.14	0.0000	0.1862	18.6	0.465
518	249.987	15.811	7.14	0.0000	0.1863	18.6	0.465
519	250.488	15.827	7.14	0.0000	0.1863	18.6	0.465
520	250.986	15.843	7.14	0.0000	0.1863	18.6	0.465
521	251.489	15.858	7.14	0.0000	0.1863	18.6	0.465
522	251.986	15.874	7.14	0.0000	0.1863	18.6	0.465
523	252.489	15.890	7.14	0.0000	0.1863	18.6	0.465
524	252.988	15.906	7.14	0.0000	0.1863	18.6	0.465
525	253.488	15.921	7.14	0.0000	0.1863	18.6	0.465
526	253.988	15.937	7.14	0.0000	0.1863	18.6	0.465
527	254.487	15.953	7.14	0.0000	0.1863	18.6	0.465
528	254.988	15.968	7.14	0.0000	0.1863	18.6	0.465
529	255.489	15.984	7.14	0.0000	0.1863	18.6	0.465
530	255.986	16.000	7.14	0.0000	0.1863	18.6	0.465
531	256.489	16.015	7.14	0.0000	0.1863	18.6	0.465
532	256.988	16.031	7.14	0.0000	0.1863	18.6	0.465
533	257.487	16.046	7.14	0.0000	0.1863	18.6	0.465
534	257.986	16.062	7.14	0.0000	0.1863	18.6	0.465
535	258.485	16.077	7.14	0.0000	0.1863	18.6	0.465
536	258.986	16.093	7.14	0.0000	0.1863	18.6	0.465
537	259.487	16.109	7.14	0.0000	0.1863	18.6	0.465
538	259.986	16.124	7.14	0.0000	0.1863	18.6	0.465
539	260.486	16.140	7.14	0.0000	0.1863	18.6	0.465
540	260.987	16.155	7.14	0.0000	0.1863	18.6	0.465
541	261.486	16.171	7.14	0.0000	0.1863	18.6	0.465
542	261.987	16.186	7.14	0.0000	0.1863	18.6	0.465
543	262.488	16.201	7.14	0.0000	0.1863	18.6	0.465
544	262.989	16.217	7.14	0.0000	0.1863	18.6	0.465
545	263.487	16.232	7.14	0.0000	0.1863	18.6	0.465
546	263.987	16.248	7.14	0.0000	0.1863	18.6	0.465
547	264.487	16.263	7.14	0.0000	0.1863	18.6	0.465
548	264.989	16.278	7.14	0.0000	0.1863	18.6	0.465
549	265.488	16.294	7.14	0.0000	0.1863	18.6	0.465
550	265.986	16.309	7.14	0.0000	0.1863	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.488	16.324	7.14	0.0000	0.1863	18.6	0.465
552	266.989	16.340	7.14	0.0000	0.1863	18.6	0.465
553	267.485	16.355	7.14	0.0000	0.1863	18.6	0.465
554	267.986	16.370	7.14	0.0000	0.1863	18.6	0.465
555	268.489	16.386	7.14	0.0000	0.1863	18.6	0.465
556	268.986	16.401	7.14	0.0000	0.1863	18.6	0.465
557	269.486	16.416	7.14	0.0000	0.1863	18.6	0.465
558	269.986	16.431	7.14	0.0000	0.1863	18.6	0.465
559	270.486	16.446	7.14	0.0000	0.1863	18.6	0.465
560	270.985	16.462	7.14	0.0000	0.1863	18.6	0.465
561	271.488	16.477	7.14	0.0000	0.1863	18.6	0.465
562	271.986	16.492	7.14	0.0000	0.1863	18.6	0.465
563	272.489	16.507	7.14	0.0000	0.1863	18.6	0.465
564	272.988	16.522	7.14	0.0000	0.1863	18.6	0.465
565	273.487	16.537	7.14	0.0000	0.1863	18.6	0.465
566	273.985	16.552	7.14	0.0000	0.1863	18.6	0.465
567	274.486	16.568	7.14	0.0000	0.1863	18.6	0.465
568	274.988	16.583	7.14	0.0000	0.1863	18.6	0.465
569	275.488	16.598	7.14	0.0000	0.1863	18.6	0.465
570	275.988	16.613	7.14	0.0000	0.1863	18.6	0.465
571	276.486	16.628	7.14	0.0000	0.1863	18.6	0.465
572	276.988	16.643	7.14	0.0000	0.1863	18.6	0.465
573	277.486	16.658	7.14	0.0000	0.1863	18.6	0.465
574	277.988	16.673	7.14	0.0000	0.1863	18.6	0.465
575	278.488	16.688	7.14	0.0000	0.1863	18.6	0.465
576	278.987	16.703	7.14	0.0000	0.1863	18.6	0.465
577	279.487	16.718	7.14	0.0000	0.1863	18.6	0.465
578	279.989	16.733	7.14	0.0000	0.1863	18.6	0.465
579	280.489	16.748	7.14	0.0000	0.1863	18.6	0.465
580	280.985	16.763	7.14	0.0000	0.1863	18.6	0.465
581	281.487	16.778	7.14	0.0000	0.1863	18.6	0.465
582	281.988	16.793	7.14	0.0000	0.1863	18.6	0.465
583	282.488	16.807	7.14	0.0000	0.1863	18.6	0.465
584	282.985	16.822	7.14	0.0000	0.1863	18.6	0.465
585	283.489	16.837	7.14	0.0000	0.1863	18.6	0.465
586	283.986	16.852	7.14	0.0000	0.1863	18.6	0.465
587	284.486	16.867	7.14	0.0000	0.1863	18.6	0.465
588	284.988	16.882	7.14	0.0000	0.1863	18.6	0.465
589	285.487	16.896	7.14	0.0000	0.1863	18.6	0.465
590	285.987	16.911	7.14	0.0000	0.1863	18.6	0.465
591	286.489	16.926	7.14	0.0000	0.1863	18.6	0.465
592	286.987	16.941	7.14	0.0000	0.1863	18.6	0.465
593	287.487	16.955	7.14	0.0000	0.1863	18.6	0.465
594	287.988	16.970	7.14	0.0000	0.1863	18.6	0.465
595	288.487	16.985	7.14	0.0000	0.1863	18.6	0.465
596	288.989	17.000	7.14	0.0000	0.1863	18.6	0.465
597	289.486	17.014	7.14	0.0000	0.1863	18.6	0.465
598	289.989	17.029	7.14	0.0000	0.1863	18.6	0.465
599	290.486	17.044	7.14	0.0000	0.1863	18.6	0.465
600	290.986	17.058	7.14	0.0000	0.1863	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.488	17.073	7.14	0.0000	0.1863	18.6	0.465
602	291.986	17.088	7.14	0.0000	0.1863	18.6	0.465
603	292.485	17.102	7.14	0.0000	0.1863	18.6	0.465
604	292.986	17.117	7.14	0.0000	0.1863	18.6	0.465
605	293.488	17.131	7.14	0.0000	0.1864	18.6	0.465
606	293.986	17.146	7.14	0.0000	0.1864	18.6	0.465
607	294.488	17.161	7.14	0.0000	0.1864	18.6	0.465
608	294.987	17.175	7.14	0.0000	0.1863	18.6	0.465
609	295.485	17.190	7.14	0.0000	0.1864	18.6	0.465
610	295.985	17.204	7.14	0.0000	0.1864	18.6	0.465
611	296.489	17.219	7.14	0.0000	0.1864	18.6	0.465
612	296.985	17.233	7.14	0.0000	0.1864	18.6	0.465
613	297.487	17.248	7.14	0.0000	0.1864	18.6	0.465
614	297.986	17.262	7.14	0.0000	0.1864	18.6	0.465
615	298.487	17.277	7.14	0.0000	0.1864	18.6	0.465
616	298.986	17.291	7.14	0.0000	0.1864	18.6	0.465
617	299.488	17.306	7.14	0.0000	0.1864	18.6	0.465
618	299.987	17.320	7.14	0.0000	0.1864	18.6	0.465
619	300.489	17.335	7.14	0.0000	0.1864	18.6	0.465
620	300.985	17.349	7.14	0.0000	0.1864	18.6	0.465
621	301.489	17.363	7.14	0.0000	0.1864	18.6	0.465
622	301.987	17.378	7.14	0.0000	0.1864	18.6	0.465
623	302.489	17.392	7.14	0.0000	0.1864	18.6	0.465
624	302.986	17.406	7.14	0.0000	0.1864	18.6	0.465
625	303.487	17.421	7.14	0.0000	0.1864	18.6	0.465
626	303.988	17.435	7.14	0.0000	0.1863	18.6	0.465
627	304.488	17.450	7.14	0.0000	0.1864	18.6	0.465
628	304.988	17.464	7.14	0.0000	0.1864	18.6	0.465
629	305.485	17.478	7.14	0.0000	0.1864	18.6	0.465
630	305.987	17.492	7.14	0.0000	0.1864	18.6	0.465
631	306.486	17.507	7.14	0.0000	0.1864	18.6	0.465
632	306.988	17.521	7.14	0.0000	0.1864	18.6	0.465
633	307.487	17.535	7.14	0.0000	0.1864	18.6	0.465
634	307.989	17.550	7.14	0.0000	0.1864	18.6	0.465
635	308.487	17.564	7.14	0.0000	0.1864	18.6	0.465
636	308.987	17.578	7.14	0.0000	0.1864	18.6	0.465
637	309.488	17.592	7.14	0.0000	0.1864	18.6	0.465
638	309.986	17.606	7.14	0.0000	0.1864	18.6	0.465
639	310.487	17.621	7.14	0.0000	0.1864	18.6	0.465
640	310.988	17.635	7.14	0.0000	0.1864	18.6	0.465
641	311.488	17.649	7.14	0.0000	0.1864	18.6	0.465
642	311.988	17.663	7.14	0.0000	0.1863	18.6	0.465
643	312.486	17.677	7.14	0.0000	0.1864	18.6	0.465
644	312.987	17.691	7.14	0.0000	0.1864	18.6	0.465
645	313.489	17.706	7.14	0.0000	0.1863	18.6	0.465
646	313.988	17.720	7.14	0.0000	0.1864	18.6	0.465
647	314.486	17.734	7.14	0.0000	0.1864	18.6	0.465
648	314.988	17.748	7.14	0.0000	0.1864	18.6	0.465
649	315.488	17.762	7.14	0.0000	0.1864	18.6	0.465
650	315.987	17.776	7.14	0.0000	0.1864	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.486	17.790	7.14	0.0000	0.1864	18.6	0.465
652	316.986	17.804	7.14	0.0000	0.1864	18.6	0.465
653	317.487	17.818	7.14	0.0000	0.1864	18.6	0.465
654	317.987	17.832	7.14	0.0000	0.1863	18.6	0.465
655	318.486	17.846	7.14	0.0000	0.1864	18.6	0.465
656	318.987	17.860	7.14	0.0000	0.1864	18.6	0.465
657	319.486	17.874	7.14	0.0000	0.1864	18.6	0.465
658	319.988	17.888	7.14	0.0000	0.1864	18.6	0.465
659	320.487	17.902	7.14	0.0000	0.1864	18.6	0.465
660	320.987	17.916	7.14	0.0000	0.1864	18.6	0.465
661	321.487	17.930	7.14	0.0000	0.1864	18.6	0.465
662	321.988	17.944	7.14	0.0000	0.1864	18.6	0.465
663	322.486	17.958	7.14	0.0000	0.1864	18.6	0.465
664	322.988	17.972	7.14	0.0000	0.1864	18.6	0.465
665	323.485	17.986	7.14	0.0000	0.1863	18.6	0.465
666	323.987	18.000	7.14	0.0000	0.1864	18.6	0.465
667	324.485	18.013	7.14	0.0000	0.1864	18.6	0.465
668	324.987	18.027	7.14	0.0000	0.1864	18.6	0.465
669	325.488	18.041	7.14	0.0000	0.1864	18.6	0.465
670	325.986	18.055	7.14	0.0000	0.1864	18.6	0.465
671	326.485	18.069	7.14	0.0000	0.1864	18.6	0.465
672	326.986	18.083	7.14	0.0000	0.1864	18.6	0.465
673	327.486	18.097	7.14	0.0000	0.1864	18.6	0.465
674	327.987	18.110	7.14	0.0000	0.1864	18.6	0.465
675	328.485	18.124	7.14	0.0000	0.1864	18.6	0.465
676	328.988	18.138	7.14	0.0000	0.1864	18.6	0.465
677	329.489	18.152	7.14	0.0000	0.1864	18.6	0.465
678	329.988	18.166	7.14	0.0000	0.1864	18.6	0.465
679	330.486	18.179	7.14	0.0000	0.1864	18.6	0.465
680	330.988	18.193	7.14	0.0000	0.1864	18.6	0.465
681	331.486	18.207	7.14	0.0000	0.1864	18.6	0.465
682	331.987	18.221	7.14	0.0000	0.1864	18.6	0.465
683	332.489	18.234	7.14	0.0000	0.1864	18.6	0.465
684	332.986	18.248	7.14	0.0000	0.1864	18.6	0.465
685	333.485	18.262	7.14	0.0000	0.1864	18.6	0.465
686	333.988	18.275	7.14	0.0000	0.1864	18.6	0.465
687	334.487	18.289	7.14	0.0000	0.1864	18.6	0.465
688	334.987	18.303	7.14	0.0000	0.1864	18.6	0.465
689	335.488	18.316	7.14	0.0000	0.1864	18.6	0.465
690	335.985	18.330	7.14	0.0000	0.1864	18.6	0.465
691	336.485	18.344	7.14	0.0000	0.1864	18.6	0.465
692	336.987	18.357	7.14	0.0000	0.1864	18.6	0.465
693	337.485	18.371	7.14	0.0000	0.1864	18.6	0.465
694	337.988	18.384	7.14	0.0000	0.1864	18.6	0.465
695	338.486	18.398	7.14	0.0000	0.1864	18.6	0.465
696	338.989	18.412	7.14	0.0000	0.1864	18.6	0.465
697	339.486	18.425	7.14	0.0000	0.1864	18.6	0.465
698	339.985	18.439	7.14	0.0000	0.1864	18.6	0.465
699	340.489	18.452	7.14	0.0000	0.1864	18.6	0.465
700	340.986	18.466	7.14	0.0000	0.1864	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.489	18.479	7.14	0.0000	0.1864	18.6	0.465
702	341.987	18.493	7.14	0.0000	0.1864	18.6	0.465
703	342.488	18.506	7.14	0.0000	0.1864	18.6	0.465
704	342.987	18.520	7.14	0.0000	0.1864	18.6	0.465
705	343.486	18.533	7.14	0.0000	0.1864	18.6	0.465
706	343.987	18.547	7.14	0.0000	0.1864	18.6	0.465
707	344.486	18.560	7.14	0.0000	0.1864	18.6	0.465
708	344.985	18.574	7.14	0.0000	0.1864	18.6	0.465
709	345.488	18.587	7.14	0.0000	0.1864	18.6	0.465
710	345.988	18.601	7.14	0.0000	0.1864	18.6	0.465
711	346.487	18.614	7.14	0.0000	0.1864	18.6	0.465
712	346.989	18.628	7.14	0.0000	0.1864	18.6	0.465
713	347.489	18.641	7.14	0.0000	0.1864	18.6	0.465
714	347.988	18.654	7.14	0.0000	0.1864	18.6	0.465
715	348.487	18.668	7.14	0.0000	0.1864	18.6	0.465
716	348.986	18.681	7.14	0.0000	0.1864	18.6	0.465
717	349.486	18.695	7.14	0.0000	0.1864	18.6	0.465
718	349.987	18.708	7.14	0.0000	0.1864	18.6	0.465
719	350.485	18.721	7.14	0.0000	0.1864	18.6	0.465
720	350.986	18.735	7.14	0.0000	0.1864	18.6	0.465
721	351.486	18.748	7.14	0.0000	0.1864	18.6	0.465
722	351.986	18.761	7.14	0.0000	0.1864	18.6	0.465
723	352.488	18.775	7.14	0.0000	0.1864	18.6	0.465
724	352.985	18.788	7.14	0.0000	0.1864	18.6	0.465
725	353.487	18.801	7.14	0.0000	0.1864	18.6	0.465
726	353.988	18.815	7.14	0.0000	0.1864	18.6	0.465
727	354.485	18.828	7.14	0.0000	0.1864	18.6	0.465
728	354.986	18.841	7.14	0.0000	0.1864	18.6	0.465
729	355.485	18.854	7.14	0.0000	0.1864	18.6	0.465
730	355.987	18.868	7.14	0.0000	0.1864	18.6	0.465
731	356.486	18.881	7.14	0.0000	0.1864	18.6	0.465
732	356.988	18.894	7.14	0.0000	0.1864	18.6	0.465
733	357.485	18.907	7.14	0.0000	0.1864	18.6	0.465
734	357.985	18.920	7.14	0.0000	0.1864	18.6	0.465
735	358.488	18.934	7.14	0.0000	0.1864	18.6	0.465
736	358.985	18.947	7.14	0.0000	0.1864	18.6	0.465
737	359.487	18.960	7.14	0.0000	0.1864	18.6	0.465
738	359.985	18.973	7.14	0.0000	0.1864	18.6	0.465
739	360.487	18.986	7.14	0.0000	0.1864	18.6	0.465
740	360.989	19.000	7.14	0.0000	0.1864	18.6	0.465
741	361.487	19.013	7.14	0.0000	0.1864	18.6	0.465
742	361.989	19.026	7.14	0.0000	0.1864	18.6	0.465
743	362.487	19.039	7.14	0.0000	0.1864	18.6	0.465
744	362.988	19.052	7.14	0.0000	0.1864	18.6	0.465
745	363.485	19.065	7.14	0.0000	0.1864	18.6	0.465
746	363.987	19.078	7.14	0.0000	0.1864	18.6	0.465
747	364.487	19.092	7.14	0.0000	0.1864	18.6	0.465
748	364.987	19.105	7.14	0.0000	0.1864	18.6	0.465
749	365.488	19.118	7.14	0.0000	0.1864	18.6	0.465
750	365.987	19.131	7.14	0.0000	0.1864	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
751	366.485	19.144	7.14	0.0000	0.1864	18.6	0.465
752	366.987	19.157	7.14	0.0000	0.1864	18.6	0.465
753	367.488	19.170	7.14	0.0000	0.1864	18.6	0.465
754	367.987	19.183	7.14	0.0000	0.1864	18.6	0.465
755	368.486	19.196	7.14	0.0000	0.1864	18.6	0.465
756	368.987	19.209	7.14	0.0000	0.1864	18.6	0.465
757	369.486	19.222	7.14	0.0000	0.1864	18.6	0.465
758	369.986	19.235	7.14	0.0000	0.1864	18.6	0.465
759	370.486	19.248	7.14	0.0000	0.1864	18.6	0.465
760	370.985	19.261	7.14	0.0000	0.1864	18.6	0.465
761	371.485	19.274	7.14	0.0000	0.1864	18.6	0.465
762	371.989	19.287	7.14	0.0000	0.1864	18.6	0.465
763	372.489	19.300	7.14	0.0000	0.1864	18.6	0.465
764	372.988	19.313	7.14	0.0000	0.1864	18.6	0.465
765	373.486	19.326	7.14	0.0000	0.1864	18.6	0.465
766	373.988	19.339	7.14	0.0000	0.1864	18.6	0.465
767	374.488	19.352	7.14	0.0000	0.1864	18.6	0.465
768	374.986	19.365	7.14	0.0000	0.1864	18.6	0.465
769	375.488	19.378	7.14	0.0000	0.1864	18.6	0.465
770	375.989	19.390	7.14	0.0000	0.1864	18.6	0.465
771	376.488	19.403	7.14	0.0000	0.1864	18.6	0.465
772	376.985	19.416	7.14	0.0000	0.1864	18.6	0.465
773	377.487	19.429	7.14	0.0000	0.1864	18.6	0.465
774	377.985	19.442	7.14	0.0000	0.1864	18.6	0.465
775	378.485	19.455	7.14	0.0000	0.1864	18.6	0.465
776	378.988	19.468	7.14	0.0000	0.1864	18.6	0.465
777	379.488	19.480	7.14	0.0000	0.1864	18.6	0.465
778	379.986	19.493	7.14	0.0000	0.1864	18.6	0.465
779	380.489	19.506	7.14	0.0000	0.1864	18.6	0.465
780	380.988	19.519	7.14	0.0000	0.1864	18.6	0.465
781	381.488	19.532	7.14	0.0000	0.1864	18.6	0.465
782	381.988	19.545	7.14	0.0000	0.1864	18.6	0.465
783	382.489	19.557	7.14	0.0000	0.1864	18.6	0.465
784	382.985	19.570	7.14	0.0000	0.1864	18.6	0.465
785	383.487	19.583	7.14	0.0000	0.1865	18.6	0.465
786	383.985	19.596	7.14	0.0000	0.1864	18.6	0.465
787	384.488	19.608	7.14	0.0000	0.1865	18.6	0.465
788	384.987	19.621	7.14	0.0000	0.1864	18.6	0.465
789	385.488	19.634	7.14	0.0000	0.1865	18.6	0.465
790	385.988	19.647	7.14	0.0000	0.1865	18.6	0.465
791	386.488	19.659	7.14	0.0000	0.1864	18.6	0.465
792	386.988	19.672	7.14	0.0000	0.1864	18.6	0.465
793	387.488	19.685	7.14	0.0000	0.1864	18.6	0.465
794	387.989	19.697	7.14	0.0000	0.1864	18.6	0.465
795	388.486	19.710	7.14	0.0000	0.1864	18.6	0.465
796	388.985	19.723	7.14	0.0000	0.1865	18.6	0.465
797	389.489	19.735	7.14	0.0000	0.1865	18.6	0.465
798	389.985	19.748	7.14	0.0000	0.1864	18.6	0.465
799	390.487	19.761	7.14	0.0000	0.1864	18.6	0.465
800	390.985	19.773	7.14	0.0000	0.1865	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
801	391.489	19.786	7.14	0.0000	0.1865	18.6	0.465
802	391.985	19.799	7.14	0.0000	0.1864	18.6	0.465
803	392.488	19.811	7.14	0.0000	0.1865	18.6	0.465
804	392.986	19.824	7.14	0.0000	0.1865	18.6	0.465
805	393.487	19.836	7.14	0.0000	0.1865	18.6	0.465
806	393.988	19.849	7.14	0.0000	0.1865	18.6	0.465
807	394.487	19.862	7.14	0.0000	0.1865	18.6	0.465
808	394.986	19.874	7.14	0.0000	0.1864	18.6	0.465
809	395.487	19.887	7.14	0.0000	0.1865	18.6	0.465
810	395.989	19.899	7.14	0.0000	0.1865	18.6	0.465
811	396.487	19.912	7.14	0.0000	0.1865	18.6	0.465
812	396.988	19.925	7.14	0.0000	0.1865	18.6	0.465
813	397.487	19.937	7.14	0.0000	0.1865	18.6	0.465
814	397.985	19.950	7.14	0.0000	0.1865	18.6	0.465
815	398.489	19.962	7.14	0.0000	0.1865	18.6	0.465
816	398.985	19.975	7.14	0.0000	0.1865	18.6	0.465
817	399.488	19.987	7.14	0.0000	0.1865	18.6	0.465
818	399.988	20.000	7.14	0.0000	0.1865	18.6	0.465
819	400.485	20.012	7.14	0.0000	0.1865	18.6	0.465
820	400.987	20.025	7.14	0.0000	0.1865	18.6	0.465
821	401.489	20.037	7.14	0.0000	0.1865	18.6	0.465
822	401.986	20.050	7.14	0.0000	0.1865	18.6	0.465
823	402.485	20.062	7.14	0.0000	0.1865	18.6	0.465
824	402.986	20.075	7.14	0.0000	0.1865	18.6	0.465
825	403.487	20.087	7.14	0.0000	0.1865	18.6	0.465
826	403.989	20.099	7.14	0.0000	0.1865	18.6	0.465
827	404.489	20.112	7.14	0.0000	0.1865	18.6	0.465
828	404.989	20.124	7.14	0.0000	0.1865	18.6	0.465
829	405.485	20.137	7.14	0.0000	0.1865	18.6	0.465
830	405.985	20.149	7.14	0.0000	0.1865	18.6	0.465
831	406.487	20.162	7.14	0.0000	0.1865	18.6	0.465
832	406.988	20.174	7.14	0.0000	0.1865	18.6	0.465
833	407.487	20.186	7.14	0.0000	0.1865	18.6	0.465
834	407.988	20.199	7.14	0.0000	0.1865	18.6	0.465
835	408.488	20.211	7.14	0.0000	0.1865	18.6	0.465
836	408.987	20.223	7.14	0.0000	0.1865	18.6	0.465
837	409.489	20.236	7.14	0.0000	0.1865	18.6	0.465
838	409.986	20.248	7.14	0.0000	0.1865	18.6	0.465
839	410.485	20.260	7.14	0.0000	0.1865	18.6	0.465
840	410.987	20.273	7.14	0.0000	0.1865	18.6	0.465
841	411.486	20.285	7.14	0.0000	0.1865	18.6	0.465
842	411.985	20.297	7.14	0.0000	0.1865	18.6	0.465
843	412.488	20.310	7.14	0.0000	0.1865	18.6	0.465
844	412.989	20.322	7.14	0.0000	0.1865	18.6	0.465
845	413.488	20.334	7.14	0.0000	0.1865	18.6	0.465
846	413.986	20.347	7.14	0.0000	0.1865	18.6	0.465
847	414.489	20.359	7.14	0.0000	0.1865	18.6	0.465
848	414.987	20.371	7.14	0.0000	0.1865	18.6	0.465
849	415.485	20.383	7.14	0.0000	0.1865	18.6	0.465
850	415.987	20.396	7.14	0.0000	0.1865	18.6	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
851	416.489	20.408	7.14	0.0000	0.1865	18.7	0.465
852	416.985	20.420	7.14	0.0000	0.1865	18.7	0.465
853	417.489	20.433	7.14	0.0000	0.1865	18.7	0.465
854	417.987	20.445	7.14	0.0000	0.1865	18.6	0.465
855	418.486	20.457	7.14	0.0000	0.1865	18.6	0.465
856	418.989	20.469	7.14	0.0000	0.1865	18.7	0.465
857	419.486	20.481	7.14	0.0000	0.1865	18.7	0.465
858	419.988	20.494	7.14	0.0000	0.1865	18.7	0.465
859	420.487	20.506	7.14	0.0000	0.1865	18.7	0.465
860	420.986	20.518	7.14	0.0000	0.1865	18.7	0.465
861	421.487	20.530	7.14	0.0000	0.1865	18.7	0.465
862	421.987	20.542	7.14	0.0000	0.1865	18.7	0.465
863	422.489	20.555	7.14	0.0000	0.1865	18.7	0.465
864	422.986	20.567	7.14	0.0000	0.1865	18.7	0.465
865	423.486	20.579	7.14	0.0000	0.1865	18.7	0.465
866	423.985	20.591	7.14	0.0000	0.1865	18.7	0.465
867	424.488	20.603	7.14	0.0000	0.1865	18.7	0.465
868	424.986	20.615	7.14	0.0000	0.1865	18.7	0.465
869	425.489	20.627	7.14	0.0000	0.1865	18.7	0.465
870	425.988	20.639	7.14	0.0000	0.1865	18.7	0.465
871	426.486	20.652	7.14	0.0000	0.1865	18.7	0.465
872	426.988	20.664	7.14	0.0000	0.1865	18.7	0.465
873	427.485	20.676	7.14	0.0000	0.1865	18.7	0.465
874	427.987	20.688	7.14	0.0000	0.1865	18.7	0.465
875	428.488	20.700	7.14	0.0000	0.1865	18.7	0.465
876	428.987	20.712	7.14	0.0000	0.1865	18.7	0.465
877	429.486	20.724	7.14	0.0000	0.1865	18.7	0.465
878	429.987	20.736	7.14	0.0000	0.1865	18.7	0.465
879	430.486	20.748	7.14	0.0000	0.1865	18.7	0.465
880	430.988	20.760	7.14	0.0000	0.1865	18.7	0.465
881	431.486	20.772	7.14	0.0000	0.1865	18.7	0.465
882	431.985	20.784	7.14	0.0000	0.1865	18.7	0.465
883	432.488	20.796	7.14	0.0000	0.1865	18.7	0.465
884	432.989	20.808	7.14	0.0000	0.1865	18.7	0.465
885	433.487	20.820	7.14	0.0000	0.1865	18.7	0.465
886	433.989	20.832	7.14	0.0000	0.1865	18.7	0.465
887	434.489	20.844	7.14	0.0000	0.1865	18.7	0.465
888	434.989	20.856	7.14	0.0000	0.1865	18.7	0.465
889	435.487	20.868	7.14	0.0000	0.1865	18.7	0.465
890	435.987	20.880	7.14	0.0000	0.1865	18.7	0.465
891	436.485	20.892	7.14	0.0000	0.1865	18.7	0.465
892	436.986	20.904	7.14	0.0000	0.1865	18.7	0.465
893	437.489	20.916	7.14	0.0000	0.1865	18.7	0.465
894	437.986	20.928	7.14	0.0000	0.1865	18.7	0.465
895	438.489	20.940	7.14	0.0000	0.1866	18.7	0.465
896	438.988	20.952	7.14	0.0000	0.1866	18.7	0.465
897	439.487	20.964	7.14	0.0000	0.1865	18.7	0.465
898	439.985	20.976	7.14	0.0000	0.1866	18.7	0.465
899	440.489	20.988	7.14	0.0000	0.1866	18.7	0.465
900	440.987	21.000	7.14	0.0000	0.1866	18.7	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
901	441.488	21.012	7.14	0.0000	0.1866	18.7	0.465
902	441.989	21.024	7.14	0.0000	0.1865	18.7	0.465
903	442.485	21.035	7.14	0.0000	0.1865	18.7	0.465
904	442.988	21.047	7.14	0.0000	0.1866	18.7	0.465
905	443.486	21.059	7.14	0.0000	0.1866	18.7	0.465
906	443.988	21.071	7.14	0.0000	0.1866	18.7	0.465
907	444.485	21.083	7.14	0.0000	0.1865	18.7	0.465
908	444.987	21.095	7.14	0.0000	0.1866	18.7	0.465
909	445.486	21.107	7.14	0.0000	0.1866	18.7	0.465
910	445.988	21.118	7.14	0.0000	0.1866	18.7	0.465
911	446.485	21.130	7.14	0.0000	0.1866	18.7	0.465
912	446.987	21.142	7.14	0.0000	0.1866	18.7	0.465
913	447.485	21.154	7.14	0.0000	0.1866	18.7	0.465
914	447.989	21.166	7.14	0.0000	0.1865	18.7	0.465
915	448.486	21.177	7.14	0.0000	0.1866	18.7	0.465
916	448.985	21.189	7.14	0.0000	0.1866	18.7	0.465
917	449.487	21.201	7.14	0.0000	0.1866	18.7	0.465
918	449.988	21.213	7.14	0.0000	0.1866	18.7	0.465
919	450.486	21.225	7.14	0.0000	0.1866	18.7	0.465
920	450.986	21.236	7.14	0.0000	0.1866	18.7	0.465
921	451.489	21.248	7.14	0.0000	0.1866	18.7	0.465
922	451.986	21.260	7.14	0.0000	0.1866	18.7	0.465
923	452.487	21.272	7.14	0.0000	0.1866	18.7	0.465
924	452.985	21.283	7.14	0.0000	0.1865	18.7	0.465
925	453.487	21.295	7.14	0.0000	0.1866	18.7	0.465
926	453.988	21.307	7.14	0.0000	0.1866	18.7	0.465
927	454.489	21.319	7.14	0.0000	0.1866	18.7	0.465
928	454.988	21.330	7.14	0.0000	0.1866	18.7	0.465
929	455.489	21.342	7.14	0.0000	0.1866	18.7	0.465
930	455.985	21.354	7.14	0.0000	0.1866	18.7	0.465
931	456.485	21.366	7.14	0.0000	0.1866	18.7	0.465
932	456.988	21.377	7.14	0.0000	0.1866	18.7	0.465
933	457.485	21.389	7.14	0.0000	0.1866	18.7	0.465
934	457.987	21.401	7.14	0.0000	0.1866	18.7	0.465
935	458.486	21.412	7.14	0.0000	0.1866	18.7	0.465
936	458.989	21.424	7.14	0.0000	0.1866	18.7	0.465
937	459.488	21.436	7.14	0.0000	0.1866	18.7	0.465
938	459.987	21.447	7.14	0.0000	0.1866	18.7	0.465
939	460.488	21.459	7.14	0.0000	0.1866	18.7	0.465
940	460.988	21.471	7.14	0.0000	0.1866	18.7	0.465
941	461.487	21.482	7.14	0.0000	0.1866	18.7	0.465
942	461.987	21.494	7.14	0.0000	0.1866	18.7	0.465
943	462.487	21.506	7.14	0.0000	0.1866	18.7	0.465
944	462.985	21.517	7.14	0.0000	0.1866	18.7	0.465
945	463.486	21.529	7.14	0.0000	0.1866	18.7	0.465
946	463.989	21.540	7.14	0.0000	0.1866	18.7	0.465
947	464.488	21.552	7.14	0.0000	0.1866	18.7	0.465
948	464.985	21.564	7.14	0.0000	0.1866	18.7	0.465
949	465.487	21.575	7.14	0.0000	0.1866	18.7	0.465
950	465.988	21.587	7.14	0.0000	0.1866	18.7	0.465

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 16
Constant Load Step
Stress: 7.14 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
951	466.486	21.598	7.14	0.0000	0.1866	18.7	0.465
952	466.989	21.610	7.14	0.0000	0.1866	18.7	0.465
953	467.485	21.621	7.14	0.0000	0.1866	18.7	0.465
954	467.986	21.633	7.14	0.0000	0.1866	18.7	0.465
955	468.487	21.645	7.14	0.0000	0.1866	18.7	0.465
956	468.987	21.656	7.14	0.0000	0.1866	18.7	0.465
957	469.485	21.668	7.14	0.0000	0.1866	18.7	0.465
958	469.988	21.679	7.14	0.0000	0.1866	18.7	0.465
959	470.487	21.691	7.14	0.0000	0.1866	18.7	0.465
960	470.988	21.702	7.14	0.0000	0.1866	18.7	0.465
961	471.486	21.714	7.14	0.0000	0.1866	18.7	0.465
962	471.988	21.725	7.14	0.0000	0.1866	18.7	0.465
963	472.489	21.737	7.14	0.0000	0.1866	18.7	0.465
964	472.989	21.748	7.14	0.0000	0.1866	18.7	0.465
965	473.486	21.760	7.14	0.0000	0.1866	18.7	0.465
966	473.986	21.771	7.14	0.0000	0.1866	18.7	0.465
967	474.488	21.783	7.14	0.0000	0.1866	18.7	0.465
968	474.985	21.794	7.14	0.0000	0.1866	18.7	0.465
969	475.489	21.806	7.14	0.0000	0.1866	18.7	0.465
970	475.986	21.817	7.14	0.0000	0.1866	18.7	0.465
971	476.488	21.829	7.14	0.0000	0.1866	18.7	0.465
972	476.987	21.840	7.14	0.0000	0.1866	18.7	0.465
973	477.486	21.851	7.14	0.0000	0.1866	18.7	0.465
974	477.988	21.863	7.14	0.0000	0.1866	18.7	0.465
975	478.488	21.874	7.14	0.0000	0.1866	18.7	0.465
976	478.985	21.886	7.14	0.0000	0.1866	18.7	0.465
977	479.487	21.897	7.14	0.0000	0.1866	18.7	0.465
978	479.989	21.909	7.14	0.0000	0.1866	18.7	0.465
979	480.002	21.909	7.14	0.0000	0.1866	18.7	0.465

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.013		7.14	0.0000	0.1866	18.7	0.465
2	-0.009		7.14	0.0000	0.1866	18.7	0.465
3	-0.004		9.23	0.0000	0.1885	18.9	0.461
4	0.000	0.000	13.6	0.0000	0.1922	19.2	0.455
5	0.000	0.002	13.6	0.0000	0.1923	19.2	0.455
6	0.004	0.065	15.0	0.0000	0.1953	19.5	0.449
7	0.009	0.093	14.0	0.0000	0.1949	19.5	0.450
8	0.013	0.114	14.1	0.0000	0.1953	19.5	0.449
9	0.017	0.132	14.2	0.0000	0.1956	19.6	0.449
10	0.022	0.147	14.3	0.0000	0.1957	19.6	0.448
11	0.026	0.161	14.2	0.0000	0.1959	19.6	0.448
12	0.030	0.174	14.2	0.0000	0.1959	19.6	0.448
13	0.035	0.186	14.2	0.0000	0.1960	19.6	0.448
14	0.039	0.197	14.3	0.0000	0.1960	19.6	0.448
15	0.043	0.208	14.3	0.0000	0.1962	19.6	0.448
16	0.048	0.218	14.3	0.0000	0.1962	19.6	0.448
17	0.065	0.254	14.3	0.0000	0.1964	19.6	0.447
18	0.073	0.270	14.3	0.0000	0.1964	19.6	0.447
19	0.156	0.395	14.3	0.0000	0.1974	19.7	0.445
20	0.238	0.488	14.3	0.0000	0.1978	19.8	0.445
21	0.321	0.566	14.3	0.0000	0.1983	19.8	0.444
22	0.490	0.700	14.3	0.0000	0.1995	19.9	0.442
23	0.739	0.860	14.3	0.0000	0.2007	20.1	0.439
24	0.991	0.995	14.3	0.0000	0.2014	20.1	0.438
25	1.488	1.220	14.3	0.0000	0.2022	20.2	0.437
26	2.487	1.577	14.3	0.0000	0.2046	20.5	0.432
27	4.490	2.119	14.3	0.0000	0.2081	20.8	0.426
28	4.991	2.234	14.3	0.0000	0.2085	20.9	0.425
29	5.489	2.343	14.3	0.0000	0.2088	20.9	0.425
30	5.990	2.448	14.3	0.0000	0.2089	20.9	0.425
31	6.489	2.547	14.3	0.0000	0.2094	20.9	0.424
32	6.988	2.644	14.3	0.0000	0.2100	21.0	0.423
33	7.488	2.736	14.3	0.0000	0.2104	21.0	0.422
34	7.990	2.827	14.3	0.0000	0.2113	21.1	0.420
35	8.488	2.913	14.3	0.0000	0.2119	21.2	0.419
36	8.988	2.998	14.3	0.0000	0.2127	21.3	0.418
37	9.490	3.081	14.3	0.0000	0.2129	21.3	0.417
38	9.987	3.160	14.3	0.0000	0.2131	21.3	0.417
39	10.490	3.239	14.3	0.0000	0.2134	21.3	0.417
40	10.988	3.315	14.3	0.0000	0.2136	21.4	0.416
41	11.490	3.390	14.3	0.0000	0.2140	21.4	0.415
42	11.989	3.462	14.3	0.0000	0.2145	21.4	0.415
43	12.491	3.534	14.3	0.0000	0.2148	21.5	0.414
44	12.990	3.604	14.3	0.0000	0.2151	21.5	0.414
45	13.487	3.673	14.3	0.0000	0.2153	21.5	0.413
46	13.988	3.740	14.3	0.0000	0.2156	21.6	0.413
47	14.489	3.806	14.3	0.0000	0.2158	21.6	0.412
48	14.990	3.872	14.3	0.0000	0.2159	21.6	0.412
49	15.488	3.935	14.3	0.0000	0.2160	21.6	0.412
50	15.988	3.999	14.3	0.0000	0.2161	21.6	0.412

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.489	4.061	14.3	0.0000	0.2163	21.6	0.411
52	16.990	4.122	14.3	0.0000	0.2164	21.6	0.411
53	17.491	4.182	14.3	0.0000	0.2166	21.7	0.411
54	17.989	4.241	14.3	0.0000	0.2167	21.7	0.411
55	18.488	4.300	14.3	0.0000	0.2169	21.7	0.410
56	18.989	4.358	14.3	0.0000	0.2171	21.7	0.410
57	19.488	4.415	14.3	0.0000	0.2172	21.7	0.410
58	19.989	4.471	14.3	0.0000	0.2174	21.7	0.409
59	20.488	4.526	14.3	0.0000	0.2176	21.8	0.409
60	20.990	4.581	14.3	0.0000	0.2177	21.8	0.409
61	21.491	4.636	14.3	0.0000	0.2179	21.8	0.408
62	21.989	4.689	14.3	0.0000	0.2180	21.8	0.408
63	22.488	4.742	14.3	0.0000	0.2181	21.8	0.408
64	22.988	4.795	14.3	0.0000	0.2183	21.8	0.408
65	23.490	4.847	14.3	0.0000	0.2184	21.8	0.408
66	23.989	4.898	14.3	0.0000	0.2186	21.9	0.407
67	24.487	4.948	14.3	0.0000	0.2188	21.9	0.407
68	24.990	4.999	14.3	0.0000	0.2190	21.9	0.407
69	25.491	5.049	14.3	0.0000	0.2191	21.9	0.406
70	25.989	5.098	14.3	0.0000	0.2194	21.9	0.406
71	26.490	5.147	14.3	0.0000	0.2194	21.9	0.406
72	26.988	5.195	14.3	0.0000	0.2195	21.9	0.406
73	27.491	5.243	14.3	0.0000	0.2196	22.0	0.405
74	27.989	5.290	14.3	0.0000	0.2196	22.0	0.405
75	28.489	5.338	14.3	0.0000	0.2197	22.0	0.405
76	28.988	5.384	14.3	0.0000	0.2197	22.0	0.405
77	29.488	5.430	14.3	0.0000	0.2199	22.0	0.405
78	29.991	5.476	14.3	0.0000	0.2199	22.0	0.405
79	30.490	5.522	14.3	0.0000	0.2200	22.0	0.405
80	30.988	5.567	14.3	0.0000	0.2201	22.0	0.405
81	31.489	5.612	14.3	0.0000	0.2202	22.0	0.404
82	31.991	5.656	14.3	0.0000	0.2203	22.0	0.404
83	32.489	5.700	14.3	0.0000	0.2203	22.0	0.404
84	32.990	5.744	14.3	0.0000	0.2204	22.0	0.404
85	33.488	5.787	14.3	0.0000	0.2204	22.0	0.404
86	33.987	5.830	14.3	0.0000	0.2205	22.1	0.404
87	34.489	5.873	14.3	0.0000	0.2206	22.1	0.404
88	34.989	5.915	14.3	0.0000	0.2207	22.1	0.404
89	35.488	5.957	14.3	0.0000	0.2207	22.1	0.403
90	35.991	5.999	14.3	0.0000	0.2208	22.1	0.403
91	36.490	6.041	14.3	0.0000	0.2208	22.1	0.403
92	36.988	6.082	14.3	0.0000	0.2208	22.1	0.403
93	37.489	6.123	14.3	0.0000	0.2209	22.1	0.403
94	37.989	6.164	14.3	0.0000	0.2209	22.1	0.403
95	38.489	6.204	14.3	0.0000	0.2209	22.1	0.403
96	38.987	6.244	14.3	0.0000	0.2210	22.1	0.403
97	39.488	6.284	14.3	0.0000	0.2210	22.1	0.403
98	39.991	6.324	14.3	0.0000	0.2210	22.1	0.403
99	40.489	6.363	14.3	0.0000	0.2211	22.1	0.403
100	40.989	6.402	14.3	0.0000	0.2211	22.1	0.403

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.491	6.441	14.3	0.0000	0.2212	22.1	0.403
102	41.989	6.480	14.3	0.0000	0.2212	22.1	0.403
103	42.488	6.518	14.3	0.0000	0.2212	22.1	0.403
104	42.991	6.557	14.3	0.0000	0.2213	22.1	0.402
105	43.488	6.595	14.3	0.0000	0.2213	22.1	0.402
106	43.991	6.633	14.3	0.0000	0.2213	22.1	0.402
107	44.490	6.670	14.3	0.0000	0.2213	22.1	0.402
108	44.991	6.708	14.3	0.0000	0.2214	22.1	0.402
109	45.491	6.745	14.3	0.0000	0.2214	22.1	0.402
110	45.990	6.782	14.3	0.0000	0.2214	22.1	0.402
111	46.490	6.818	14.3	0.0000	0.2214	22.1	0.402
112	46.988	6.855	14.3	0.0000	0.2214	22.1	0.402
113	47.488	6.891	14.3	0.0000	0.2215	22.1	0.402
114	47.990	6.928	14.3	0.0000	0.2215	22.2	0.402
115	48.490	6.963	14.3	0.0000	0.2215	22.2	0.402
116	48.989	6.999	14.3	0.0000	0.2215	22.2	0.402
117	49.489	7.035	14.3	0.0000	0.2216	22.2	0.402
118	49.991	7.070	14.3	0.0000	0.2216	22.2	0.402
119	50.490	7.106	14.3	0.0000	0.2216	22.2	0.402
120	50.990	7.141	14.3	0.0000	0.2216	22.2	0.402
121	51.487	7.175	14.3	0.0000	0.2217	22.2	0.402
122	51.991	7.210	14.3	0.0000	0.2217	22.2	0.402
123	52.490	7.245	14.3	0.0000	0.2217	22.2	0.402
124	52.990	7.279	14.3	0.0000	0.2217	22.2	0.402
125	53.489	7.314	14.3	0.0000	0.2217	22.2	0.402
126	53.988	7.348	14.3	0.0000	0.2217	22.2	0.402
127	54.488	7.382	14.3	0.0000	0.2217	22.2	0.402
128	54.988	7.415	14.3	0.0000	0.2217	22.2	0.402
129	55.488	7.449	14.3	0.0000	0.2217	22.2	0.402
130	55.989	7.483	14.3	0.0000	0.2217	22.2	0.402
131	56.490	7.516	14.3	0.0000	0.2217	22.2	0.402
132	56.989	7.549	14.3	0.0000	0.2217	22.2	0.402
133	57.490	7.582	14.3	0.0000	0.2217	22.2	0.402
134	57.988	7.615	14.3	0.0000	0.2217	22.2	0.402
135	58.491	7.648	14.3	0.0000	0.2217	22.2	0.402
136	58.989	7.680	14.3	0.0000	0.2217	22.2	0.402
137	59.489	7.713	14.3	0.0000	0.2217	22.2	0.402
138	59.988	7.745	14.3	0.0000	0.2217	22.2	0.402
139	60.487	7.777	14.3	0.0000	0.2218	22.2	0.402
140	60.989	7.810	14.3	0.0000	0.2218	22.2	0.402
141	61.490	7.842	14.3	0.0000	0.2218	22.2	0.402
142	61.991	7.873	14.3	0.0000	0.2218	22.2	0.402
143	62.491	7.905	14.3	0.0000	0.2218	22.2	0.402
144	62.991	7.937	14.3	0.0000	0.2218	22.2	0.402
145	63.490	7.968	14.3	0.0000	0.2218	22.2	0.402
146	63.991	7.999	14.3	0.0000	0.2218	22.2	0.402
147	64.487	8.030	14.3	0.0000	0.2218	22.2	0.401
148	64.991	8.062	14.3	0.0000	0.2218	22.2	0.401
149	65.491	8.093	14.3	0.0000	0.2218	22.2	0.401
150	65.989	8.123	14.3	0.0000	0.2218	22.2	0.401

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.487	8.154	14.3	0.0000	0.2219	22.2	0.401
152	66.990	8.185	14.3	0.0000	0.2218	22.2	0.401
153	67.491	8.215	14.3	0.0000	0.2219	22.2	0.401
154	67.987	8.245	14.3	0.0000	0.2219	22.2	0.401
155	68.490	8.276	14.3	0.0000	0.2219	22.2	0.401
156	68.988	8.306	14.3	0.0000	0.2219	22.2	0.401
157	69.490	8.336	14.3	0.0000	0.2219	22.2	0.401
158	69.989	8.366	14.3	0.0000	0.2219	22.2	0.401
159	70.490	8.396	14.3	0.0000	0.2219	22.2	0.401
160	70.990	8.426	14.3	0.0000	0.2219	22.2	0.401
161	71.488	8.455	14.3	0.0000	0.2219	22.2	0.401
162	71.989	8.485	14.3	0.0000	0.2219	22.2	0.401
163	72.491	8.514	14.3	0.0000	0.2219	22.2	0.401
164	72.989	8.543	14.3	0.0000	0.2219	22.2	0.401
165	73.488	8.573	14.3	0.0000	0.2219	22.2	0.401
166	73.991	8.602	14.3	0.0000	0.2219	22.2	0.401
167	74.488	8.631	14.3	0.0000	0.2219	22.2	0.401
168	74.988	8.660	14.3	0.0000	0.2219	22.2	0.401
169	75.491	8.689	14.3	0.0000	0.2219	22.2	0.401
170	75.990	8.717	14.3	0.0000	0.2219	22.2	0.401
171	76.490	8.746	14.3	0.0000	0.2220	22.2	0.401
172	76.987	8.774	14.3	0.0000	0.2220	22.2	0.401
173	77.488	8.803	14.3	0.0000	0.2220	22.2	0.401
174	77.991	8.831	14.3	0.0000	0.2220	22.2	0.401
175	78.491	8.860	14.3	0.0000	0.2220	22.2	0.401
176	78.990	8.888	14.3	0.0000	0.2220	22.2	0.401
177	79.491	8.916	14.3	0.0000	0.2220	22.2	0.401
178	79.990	8.944	14.3	0.0000	0.2220	22.2	0.401
179	80.490	8.972	14.3	0.0000	0.2220	22.2	0.401
180	80.988	8.999	14.3	0.0000	0.2220	22.2	0.401
181	81.491	9.027	14.3	0.0000	0.2220	22.2	0.401
182	81.991	9.055	14.3	0.0000	0.2220	22.2	0.401
183	82.489	9.082	14.3	0.0000	0.2220	22.2	0.401
184	82.989	9.110	14.3	0.0000	0.2220	22.2	0.401
185	83.491	9.137	14.3	0.0000	0.2220	22.2	0.401
186	83.990	9.165	14.3	0.0000	0.2220	22.2	0.401
187	84.488	9.192	14.3	0.0000	0.2220	22.2	0.401
188	84.988	9.219	14.3	0.0000	0.2220	22.2	0.401
189	85.491	9.246	14.3	0.0000	0.2220	22.2	0.401
190	85.990	9.273	14.3	0.0000	0.2221	22.2	0.401
191	86.489	9.300	14.3	0.0000	0.2221	22.2	0.401
192	86.991	9.327	14.3	0.0000	0.2221	22.2	0.401
193	87.491	9.354	14.3	0.0000	0.2221	22.2	0.401
194	87.988	9.380	14.3	0.0000	0.2221	22.2	0.401
195	88.491	9.407	14.3	0.0000	0.2221	22.2	0.401
196	88.989	9.433	14.3	0.0000	0.2221	22.2	0.401
197	89.490	9.460	14.3	0.0000	0.2221	22.2	0.401
198	89.989	9.486	14.3	0.0000	0.2221	22.2	0.401
199	90.489	9.513	14.3	0.0000	0.2221	22.2	0.401
200	90.989	9.539	14.3	0.0000	0.2221	22.2	0.401

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.489	9.565	14.3	0.0000	0.2221	22.2	0.401
202	91.991	9.591	14.3	0.0000	0.2221	22.2	0.401
203	92.488	9.617	14.3	0.0000	0.2221	22.2	0.401
204	92.991	9.643	14.3	0.0000	0.2221	22.2	0.401
205	93.489	9.669	14.3	0.0000	0.2221	22.2	0.401
206	93.990	9.695	14.3	0.0000	0.2221	22.2	0.401
207	94.490	9.721	14.3	0.0000	0.2221	22.2	0.401
208	94.987	9.746	14.3	0.0000	0.2221	22.2	0.401
209	95.491	9.772	14.3	0.0000	0.2221	22.2	0.401
210	95.990	9.797	14.3	0.0000	0.2221	22.2	0.401
211	96.488	9.823	14.3	0.0000	0.2221	22.2	0.401
212	96.990	9.848	14.3	0.0000	0.2221	22.2	0.401
213	97.489	9.874	14.3	0.0000	0.2221	22.2	0.401
214	97.990	9.899	14.3	0.0000	0.2221	22.2	0.401
215	98.488	9.924	14.3	0.0000	0.2221	22.2	0.401
216	98.988	9.949	14.3	0.0000	0.2221	22.2	0.401
217	99.489	9.974	14.3	0.0000	0.2221	22.2	0.401
218	99.988	9.999	14.3	0.0000	0.2221	22.2	0.401
219	100.488	10.024	14.3	0.0000	0.2221	22.2	0.401
220	100.991	10.049	14.3	0.0000	0.2221	22.2	0.401
221	101.488	10.074	14.3	0.0000	0.2221	22.2	0.401
222	101.991	10.099	14.3	0.0000	0.2221	22.2	0.401
223	102.488	10.124	14.3	0.0000	0.2221	22.2	0.401
224	102.990	10.148	14.3	0.0000	0.2221	22.2	0.401
225	103.488	10.173	14.3	0.0000	0.2221	22.2	0.401
226	103.988	10.197	14.3	0.0000	0.2221	22.2	0.401
227	104.487	10.222	14.3	0.0000	0.2221	22.2	0.401
228	104.987	10.246	14.3	0.0000	0.2221	22.2	0.401
229	105.491	10.271	14.3	0.0000	0.2221	22.2	0.401
230	105.989	10.295	14.3	0.0000	0.2221	22.2	0.401
231	106.488	10.319	14.3	0.0000	0.2221	22.2	0.401
232	106.991	10.344	14.3	0.0000	0.2221	22.2	0.401
233	107.491	10.368	14.3	0.0000	0.2221	22.2	0.401
234	107.990	10.392	14.3	0.0000	0.2221	22.2	0.401
235	108.488	10.416	14.3	0.0000	0.2221	22.2	0.401
236	108.991	10.440	14.3	0.0000	0.2221	22.2	0.401
237	109.487	10.464	14.3	0.0000	0.2221	22.2	0.401
238	109.990	10.488	14.3	0.0000	0.2221	22.2	0.401
239	110.489	10.511	14.3	0.0000	0.2221	22.2	0.401
240	110.987	10.535	14.3	0.0000	0.2221	22.2	0.401
241	111.491	10.559	14.3	0.0000	0.2221	22.2	0.401
242	111.988	10.582	14.3	0.0000	0.2221	22.2	0.401
243	112.490	10.606	14.3	0.0000	0.2221	22.2	0.401
244	112.991	10.630	14.3	0.0000	0.2221	22.2	0.401
245	113.490	10.653	14.3	0.0000	0.2221	22.2	0.401
246	113.988	10.677	14.3	0.0000	0.2221	22.2	0.401
247	114.488	10.700	14.3	0.0000	0.2221	22.2	0.401
248	114.988	10.723	14.3	0.0000	0.2221	22.2	0.401
249	115.490	10.747	14.3	0.0000	0.2221	22.2	0.401
250	115.989	10.770	14.3	0.0000	0.2221	22.2	0.401

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.488	10.793	14.3	0.0000	0.2221	22.2	0.401
252	116.989	10.816	14.3	0.0000	0.2221	22.2	0.401
253	117.488	10.839	14.3	0.0000	0.2221	22.2	0.401
254	117.989	10.862	14.3	0.0000	0.2221	22.2	0.401
255	118.489	10.885	14.3	0.0000	0.2221	22.2	0.401
256	118.991	10.908	14.3	0.0000	0.2221	22.2	0.401
257	119.490	10.931	14.3	0.0000	0.2221	22.2	0.401
258	119.989	10.954	14.3	0.0000	0.2221	22.2	0.401
259	120.491	10.977	14.3	0.0000	0.2221	22.2	0.401
260	120.991	11.000	14.3	0.0000	0.2221	22.2	0.401
261	121.491	11.022	14.3	0.0000	0.2221	22.2	0.401
262	121.988	11.045	14.3	0.0000	0.2221	22.2	0.401
263	122.490	11.068	14.3	0.0000	0.2221	22.2	0.401
264	122.988	11.090	14.3	0.0000	0.2221	22.2	0.401
265	123.489	11.113	14.3	0.0000	0.2221	22.2	0.401
266	123.989	11.135	14.3	0.0000	0.2221	22.2	0.401
267	124.490	11.158	14.3	0.0000	0.2221	22.2	0.401
268	124.988	11.180	14.3	0.0000	0.2221	22.2	0.401
269	125.490	11.202	14.3	0.0000	0.2221	22.2	0.401
270	125.990	11.225	14.3	0.0000	0.2221	22.2	0.401
271	126.489	11.247	14.3	0.0000	0.2221	22.2	0.401
272	126.987	11.269	14.3	0.0000	0.2221	22.2	0.401
273	127.488	11.291	14.3	0.0000	0.2221	22.2	0.401
274	127.990	11.313	14.3	0.0000	0.2221	22.2	0.401
275	128.488	11.335	14.3	0.0000	0.2221	22.2	0.401
276	128.988	11.357	14.3	0.0000	0.2221	22.2	0.401
277	129.487	11.379	14.3	0.0000	0.2221	22.2	0.401
278	129.991	11.401	14.3	0.0000	0.2221	22.2	0.401
279	130.488	11.423	14.3	0.0000	0.2221	22.2	0.401
280	130.990	11.445	14.3	0.0000	0.2221	22.2	0.401
281	131.487	11.467	14.3	0.0000	0.2221	22.2	0.401
282	131.990	11.489	14.3	0.0000	0.2221	22.2	0.401
283	132.488	11.510	14.3	0.0000	0.2221	22.2	0.401
284	132.988	11.532	14.3	0.0000	0.2221	22.2	0.401
285	133.490	11.554	14.3	0.0000	0.2221	22.2	0.401
286	133.990	11.575	14.3	0.0000	0.2221	22.2	0.401
287	134.491	11.597	14.3	0.0000	0.2222	22.2	0.401
288	134.991	11.619	14.3	0.0000	0.2221	22.2	0.401
289	135.489	11.640	14.3	0.0000	0.2221	22.2	0.401
290	135.990	11.661	14.3	0.0000	0.2221	22.2	0.401
291	136.488	11.683	14.3	0.0000	0.2222	22.2	0.401
292	136.988	11.704	14.3	0.0000	0.2221	22.2	0.401
293	137.489	11.726	14.3	0.0000	0.2222	22.2	0.401
294	137.990	11.747	14.3	0.0000	0.2222	22.2	0.401
295	138.489	11.768	14.3	0.0000	0.2221	22.2	0.401
296	138.991	11.789	14.3	0.0000	0.2222	22.2	0.401
297	139.491	11.811	14.3	0.0000	0.2222	22.2	0.401
298	139.988	11.832	14.3	0.0000	0.2222	22.2	0.401
299	140.491	11.853	14.3	0.0000	0.2222	22.2	0.401
300	140.990	11.874	14.3	0.0000	0.2222	22.2	0.401

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
301	141.489	11.895	14.3	0.0000	0.2222	22.2	0.401
302	141.988	11.916	14.3	0.0000	0.2222	22.2	0.401
303	142.491	11.937	14.3	0.0000	0.2222	22.2	0.401
304	142.989	11.958	14.3	0.0000	0.2222	22.2	0.401
305	143.491	11.979	14.3	0.0000	0.2222	22.2	0.401
306	143.990	12.000	14.3	0.0000	0.2222	22.2	0.401
307	144.489	12.020	14.3	0.0000	0.2222	22.2	0.401
308	144.988	12.041	14.3	0.0000	0.2222	22.2	0.401
309	145.490	12.062	14.3	0.0000	0.2222	22.2	0.401
310	145.988	12.083	14.3	0.0000	0.2222	22.2	0.401
311	146.488	12.103	14.3	0.0000	0.2222	22.2	0.401
312	146.989	12.124	14.3	0.0000	0.2222	22.2	0.401
313	147.489	12.145	14.3	0.0000	0.2222	22.2	0.401
314	147.990	12.165	14.3	0.0000	0.2222	22.2	0.401
315	148.491	12.186	14.3	0.0000	0.2222	22.2	0.401
316	148.991	12.206	14.3	0.0000	0.2222	22.2	0.401
317	149.488	12.227	14.3	0.0000	0.2222	22.2	0.401
318	149.988	12.247	14.3	0.0000	0.2222	22.2	0.401
319	150.487	12.267	14.3	0.0000	0.2223	22.2	0.401
320	150.989	12.288	14.3	0.0000	0.2223	22.2	0.401
321	151.489	12.308	14.3	0.0000	0.2223	22.2	0.401
322	151.988	12.328	14.3	0.0000	0.2223	22.2	0.401
323	152.488	12.349	14.3	0.0000	0.2223	22.2	0.401
324	152.990	12.369	14.3	0.0000	0.2223	22.2	0.400
325	153.487	12.389	14.3	0.0000	0.2223	22.2	0.400
326	153.988	12.409	14.3	0.0000	0.2223	22.2	0.400
327	154.488	12.429	14.3	0.0000	0.2223	22.2	0.400
328	154.991	12.450	14.3	0.0000	0.2223	22.2	0.400
329	155.489	12.470	14.3	0.0000	0.2223	22.2	0.400
330	155.991	12.490	14.3	0.0000	0.2223	22.2	0.400
331	156.489	12.510	14.3	0.0000	0.2223	22.2	0.400
332	156.988	12.529	14.3	0.0000	0.2223	22.2	0.400
333	157.487	12.549	14.3	0.0000	0.2223	22.2	0.400
334	157.991	12.569	14.3	0.0000	0.2223	22.2	0.400
335	158.488	12.589	14.3	0.0000	0.2224	22.2	0.400
336	158.988	12.609	14.3	0.0000	0.2223	22.2	0.400
337	159.490	12.629	14.3	0.0000	0.2223	22.2	0.400
338	159.988	12.649	14.3	0.0000	0.2223	22.2	0.400
339	160.487	12.668	14.3	0.0000	0.2224	22.2	0.400
340	160.988	12.688	14.3	0.0000	0.2224	22.2	0.400
341	161.487	12.708	14.3	0.0000	0.2224	22.2	0.400
342	161.990	12.728	14.3	0.0000	0.2224	22.2	0.400
343	162.489	12.747	14.3	0.0000	0.2224	22.2	0.400
344	162.988	12.767	14.3	0.0000	0.2224	22.2	0.400
345	163.491	12.786	14.3	0.0000	0.2224	22.2	0.400
346	163.990	12.806	14.3	0.0000	0.2224	22.2	0.400
347	164.488	12.825	14.3	0.0000	0.2224	22.2	0.400
348	164.988	12.845	14.3	0.0000	0.2224	22.2	0.400
349	165.491	12.864	14.3	0.0000	0.2224	22.2	0.400
350	165.991	12.884	14.3	0.0000	0.2224	22.2	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
351	166.490	12.903	14.3	0.0000	0.2224	22.2	0.400
352	166.987	12.922	14.3	0.0000	0.2224	22.2	0.400
353	167.488	12.942	14.3	0.0000	0.2224	22.2	0.400
354	167.990	12.961	14.3	0.0000	0.2224	22.2	0.400
355	168.489	12.980	14.3	0.0000	0.2224	22.2	0.400
356	168.989	13.000	14.3	0.0000	0.2224	22.2	0.400
357	169.488	13.019	14.3	0.0000	0.2224	22.2	0.400
358	169.991	13.038	14.3	0.0000	0.2224	22.2	0.400
359	170.489	13.057	14.3	0.0000	0.2224	22.2	0.400
360	170.988	13.076	14.3	0.0000	0.2224	22.2	0.400
361	171.489	13.095	14.3	0.0000	0.2224	22.2	0.400
362	171.988	13.114	14.3	0.0000	0.2224	22.2	0.400
363	172.487	13.133	14.3	0.0000	0.2224	22.2	0.400
364	172.988	13.153	14.3	0.0000	0.2224	22.2	0.400
365	173.488	13.171	14.3	0.0000	0.2224	22.2	0.400
366	173.990	13.191	14.3	0.0000	0.2224	22.2	0.400
367	174.491	13.209	14.3	0.0000	0.2224	22.2	0.400
368	174.990	13.228	14.3	0.0000	0.2224	22.2	0.400
369	175.491	13.247	14.3	0.0000	0.2224	22.2	0.400
370	175.990	13.266	14.3	0.0000	0.2224	22.2	0.400
371	176.490	13.285	14.3	0.0000	0.2224	22.2	0.400
372	176.989	13.304	14.3	0.0000	0.2224	22.2	0.400
373	177.489	13.323	14.3	0.0000	0.2224	22.2	0.400
374	177.987	13.341	14.3	0.0000	0.2224	22.2	0.400
375	178.490	13.360	14.3	0.0000	0.2224	22.2	0.400
376	178.988	13.379	14.3	0.0000	0.2224	22.2	0.400
377	179.488	13.397	14.3	0.0000	0.2224	22.2	0.400
378	179.990	13.416	14.3	0.0000	0.2224	22.2	0.400
379	180.487	13.435	14.3	0.0000	0.2224	22.2	0.400
380	180.990	13.453	14.3	0.0000	0.2224	22.2	0.400
381	181.490	13.472	14.3	0.0000	0.2224	22.2	0.400
382	181.991	13.490	14.3	0.0000	0.2224	22.2	0.400
383	182.491	13.509	14.3	0.0000	0.2224	22.2	0.400
384	182.991	13.527	14.3	0.0000	0.2224	22.2	0.400
385	183.489	13.546	14.3	0.0000	0.2224	22.2	0.400
386	183.988	13.564	14.3	0.0000	0.2224	22.2	0.400
387	184.489	13.583	14.3	0.0000	0.2224	22.2	0.400
388	184.989	13.601	14.3	0.0000	0.2224	22.2	0.400
389	185.487	13.619	14.3	0.0000	0.2224	22.2	0.400
390	185.991	13.638	14.3	0.0000	0.2224	22.2	0.400
391	186.490	13.656	14.3	0.0000	0.2225	22.2	0.400
392	186.991	13.674	14.3	0.0000	0.2224	22.2	0.400
393	187.489	13.693	14.3	0.0000	0.2225	22.2	0.400
394	187.987	13.711	14.3	0.0000	0.2225	22.2	0.400
395	188.490	13.729	14.3	0.0000	0.2225	22.2	0.400
396	188.988	13.747	14.3	0.0000	0.2225	22.2	0.400
397	189.490	13.766	14.3	0.0000	0.2225	22.2	0.400
398	189.991	13.784	14.3	0.0000	0.2225	22.2	0.400
399	190.490	13.802	14.3	0.0000	0.2224	22.2	0.400
400	190.989	13.820	14.3	0.0000	0.2224	22.2	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
401	191.488	13.838	14.3	0.0000	0.2225	22.2	0.400
402	191.988	13.856	14.3	0.0000	0.2225	22.2	0.400
403	192.491	13.874	14.3	0.0000	0.2224	22.2	0.400
404	192.991	13.892	14.3	0.0000	0.2224	22.2	0.400
405	193.487	13.910	14.3	0.0000	0.2225	22.2	0.400
406	193.990	13.928	14.3	0.0000	0.2225	22.2	0.400
407	194.491	13.946	14.3	0.0000	0.2225	22.2	0.400
408	194.991	13.964	14.3	0.0000	0.2225	22.2	0.400
409	195.488	13.982	14.3	0.0000	0.2225	22.2	0.400
410	195.988	14.000	14.3	0.0000	0.2225	22.2	0.400
411	196.491	14.018	14.3	0.0000	0.2225	22.2	0.400
412	196.988	14.035	14.3	0.0000	0.2225	22.2	0.400
413	197.488	14.053	14.3	0.0000	0.2225	22.2	0.400
414	197.988	14.071	14.3	0.0000	0.2225	22.2	0.400
415	198.490	14.089	14.3	0.0000	0.2225	22.2	0.400
416	198.990	14.106	14.3	0.0000	0.2225	22.2	0.400
417	199.489	14.124	14.3	0.0000	0.2225	22.2	0.400
418	199.988	14.142	14.3	0.0000	0.2225	22.2	0.400
419	200.491	14.159	14.3	0.0000	0.2225	22.3	0.400
420	200.988	14.177	14.3	0.0000	0.2225	22.2	0.400
421	201.488	14.195	14.3	0.0000	0.2225	22.2	0.400
422	201.990	14.212	14.3	0.0000	0.2225	22.2	0.400
423	202.488	14.230	14.3	0.0000	0.2225	22.2	0.400
424	202.988	14.247	14.3	0.0000	0.2225	22.2	0.400
425	203.488	14.265	14.3	0.0000	0.2225	22.2	0.400
426	203.989	14.282	14.3	0.0000	0.2225	22.2	0.400
427	204.488	14.300	14.3	0.0000	0.2225	22.3	0.400
428	204.991	14.317	14.3	0.0000	0.2225	22.2	0.400
429	205.490	14.335	14.3	0.0000	0.2225	22.3	0.400
430	205.990	14.352	14.3	0.0000	0.2225	22.2	0.400
431	206.491	14.370	14.3	0.0000	0.2225	22.3	0.400
432	206.989	14.387	14.3	0.0000	0.2225	22.3	0.400
433	207.491	14.405	14.3	0.0000	0.2225	22.3	0.400
434	207.989	14.422	14.3	0.0000	0.2225	22.3	0.400
435	208.489	14.439	14.3	0.0000	0.2225	22.3	0.400
436	208.988	14.456	14.3	0.0000	0.2225	22.3	0.400
437	209.488	14.474	14.3	0.0000	0.2225	22.3	0.400
438	209.988	14.491	14.3	0.0000	0.2225	22.3	0.400
439	210.490	14.508	14.3	0.0000	0.2225	22.3	0.400
440	210.989	14.525	14.3	0.0000	0.2225	22.3	0.400
441	211.489	14.543	14.3	0.0000	0.2225	22.3	0.400
442	211.991	14.560	14.3	0.0000	0.2225	22.3	0.400
443	212.489	14.577	14.3	0.0000	0.2225	22.3	0.400
444	212.989	14.594	14.3	0.0000	0.2225	22.3	0.400
445	213.488	14.611	14.3	0.0000	0.2225	22.3	0.400
446	213.988	14.628	14.3	0.0000	0.2225	22.3	0.400
447	214.487	14.645	14.3	0.0000	0.2225	22.3	0.400
448	214.990	14.663	14.3	0.0000	0.2225	22.3	0.400
449	215.488	14.680	14.3	0.0000	0.2225	22.3	0.400
450	215.988	14.697	14.3	0.0000	0.2226	22.3	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
451	216.489	14.714	14.3	0.0000	0.2226	22.3	0.400
452	216.987	14.730	14.3	0.0000	0.2226	22.3	0.400
453	217.490	14.748	14.3	0.0000	0.2226	22.3	0.400
454	217.989	14.764	14.3	0.0000	0.2225	22.3	0.400
455	218.488	14.781	14.3	0.0000	0.2225	22.3	0.400
456	218.987	14.798	14.3	0.0000	0.2226	22.3	0.400
457	219.488	14.815	14.3	0.0000	0.2226	22.3	0.400
458	219.991	14.832	14.3	0.0000	0.2226	22.3	0.400
459	220.489	14.849	14.3	0.0000	0.2225	22.3	0.400
460	220.988	14.866	14.3	0.0000	0.2226	22.3	0.400
461	221.491	14.883	14.3	0.0000	0.2226	22.3	0.400
462	221.987	14.899	14.3	0.0000	0.2225	22.3	0.400
463	222.488	14.916	14.3	0.0000	0.2226	22.3	0.400
464	222.991	14.933	14.3	0.0000	0.2226	22.3	0.400
465	223.490	14.950	14.3	0.0000	0.2226	22.3	0.400
466	223.987	14.966	14.3	0.0000	0.2226	22.3	0.400
467	224.491	14.983	14.3	0.0000	0.2226	22.3	0.400
468	224.990	15.000	14.3	0.0000	0.2226	22.3	0.400
469	225.490	15.016	14.3	0.0000	0.2226	22.3	0.400
470	225.990	15.033	14.3	0.0000	0.2226	22.3	0.400
471	226.488	15.050	14.3	0.0000	0.2226	22.3	0.400
472	226.991	15.066	14.3	0.0000	0.2226	22.3	0.400
473	227.490	15.083	14.3	0.0000	0.2226	22.3	0.400
474	227.989	15.099	14.3	0.0000	0.2226	22.3	0.400
475	228.490	15.116	14.3	0.0000	0.2226	22.3	0.400
476	228.989	15.132	14.3	0.0000	0.2226	22.3	0.400
477	229.489	15.149	14.3	0.0000	0.2226	22.3	0.400
478	229.989	15.165	14.3	0.0000	0.2226	22.3	0.400
479	230.491	15.182	14.3	0.0000	0.2226	22.3	0.400
480	230.990	15.198	14.3	0.0000	0.2226	22.3	0.400
481	231.489	15.215	14.3	0.0000	0.2226	22.3	0.400
482	231.989	15.231	14.3	0.0000	0.2226	22.3	0.400
483	232.488	15.248	14.3	0.0000	0.2226	22.3	0.400
484	232.988	15.264	14.3	0.0000	0.2226	22.3	0.400
485	233.491	15.280	14.3	0.0000	0.2226	22.3	0.400
486	233.989	15.297	14.3	0.0000	0.2226	22.3	0.400
487	234.488	15.313	14.3	0.0000	0.2226	22.3	0.400
488	234.988	15.329	14.3	0.0000	0.2226	22.3	0.400
489	235.489	15.346	14.3	0.0000	0.2226	22.3	0.400
490	235.990	15.362	14.3	0.0000	0.2226	22.3	0.400
491	236.489	15.378	14.3	0.0000	0.2226	22.3	0.400
492	236.988	15.394	14.3	0.0000	0.2226	22.3	0.400
493	237.490	15.411	14.3	0.0000	0.2226	22.3	0.400
494	237.991	15.427	14.3	0.0000	0.2226	22.3	0.400
495	238.491	15.443	14.3	0.0000	0.2226	22.3	0.400
496	238.991	15.459	14.3	0.0000	0.2226	22.3	0.400
497	239.489	15.475	14.3	0.0000	0.2226	22.3	0.400
498	239.987	15.492	14.3	0.0000	0.2226	22.3	0.400
499	240.487	15.508	14.3	0.0000	0.2226	22.3	0.400
500	240.991	15.524	14.3	0.0000	0.2226	22.3	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
501	241.491	15.540	14.3	0.0000	0.2226	22.3	0.400
502	241.991	15.556	14.3	0.0000	0.2226	22.3	0.400
503	242.489	15.572	14.3	0.0000	0.2226	22.3	0.400
504	242.989	15.588	14.3	0.0000	0.2226	22.3	0.400
505	243.487	15.604	14.3	0.0000	0.2226	22.3	0.400
506	243.988	15.620	14.3	0.0000	0.2227	22.3	0.400
507	244.490	15.636	14.3	0.0000	0.2227	22.3	0.400
508	244.991	15.652	14.3	0.0000	0.2226	22.3	0.400
509	245.489	15.668	14.3	0.0000	0.2227	22.3	0.400
510	245.990	15.684	14.3	0.0000	0.2227	22.3	0.400
511	246.489	15.700	14.3	0.0000	0.2227	22.3	0.400
512	246.987	15.716	14.3	0.0000	0.2227	22.3	0.400
513	247.488	15.732	14.3	0.0000	0.2227	22.3	0.400
514	247.988	15.748	14.3	0.0000	0.2227	22.3	0.400
515	248.489	15.764	14.3	0.0000	0.2227	22.3	0.400
516	248.989	15.779	14.3	0.0000	0.2227	22.3	0.400
517	249.488	15.795	14.3	0.0000	0.2227	22.3	0.400
518	249.991	15.811	14.3	0.0000	0.2227	22.3	0.400
519	250.490	15.827	14.3	0.0000	0.2227	22.3	0.400
520	250.990	15.843	14.3	0.0000	0.2227	22.3	0.400
521	251.490	15.858	14.3	0.0000	0.2226	22.3	0.400
522	251.988	15.874	14.3	0.0000	0.2227	22.3	0.400
523	252.489	15.890	14.3	0.0000	0.2227	22.3	0.400
524	252.991	15.906	14.3	0.0000	0.2227	22.3	0.400
525	253.490	15.921	14.3	0.0000	0.2227	22.3	0.400
526	253.987	15.937	14.3	0.0000	0.2227	22.3	0.400
527	254.491	15.953	14.3	0.0000	0.2227	22.3	0.400
528	254.989	15.968	14.3	0.0000	0.2227	22.3	0.400
529	255.489	15.984	14.3	0.0000	0.2227	22.3	0.400
530	255.990	16.000	14.3	0.0000	0.2227	22.3	0.400
531	256.487	16.015	14.3	0.0000	0.2227	22.3	0.400
532	256.987	16.031	14.3	0.0000	0.2227	22.3	0.400
533	257.489	16.046	14.3	0.0000	0.2227	22.3	0.400
534	257.988	16.062	14.3	0.0000	0.2227	22.3	0.400
535	258.487	16.078	14.3	0.0000	0.2227	22.3	0.400
536	258.988	16.093	14.3	0.0000	0.2227	22.3	0.400
537	259.489	16.109	14.3	0.0000	0.2227	22.3	0.400
538	259.991	16.124	14.3	0.0000	0.2227	22.3	0.400
539	260.490	16.140	14.3	0.0000	0.2227	22.3	0.400
540	260.991	16.155	14.3	0.0000	0.2227	22.3	0.400
541	261.488	16.171	14.3	0.0000	0.2227	22.3	0.400
542	261.988	16.186	14.3	0.0000	0.2227	22.3	0.400
543	262.490	16.202	14.3	0.0000	0.2227	22.3	0.400
544	262.988	16.217	14.3	0.0000	0.2227	22.3	0.400
545	263.491	16.232	14.3	0.0000	0.2227	22.3	0.400
546	263.988	16.248	14.3	0.0000	0.2227	22.3	0.400
547	264.489	16.263	14.3	0.0000	0.2227	22.3	0.400
548	264.989	16.278	14.3	0.0000	0.2227	22.3	0.400
549	265.490	16.294	14.3	0.0000	0.2227	22.3	0.400
550	265.989	16.309	14.3	0.0000	0.2227	22.3	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
551	266.488	16.324	14.3	0.0000	0.2227	22.3	0.400
552	266.988	16.340	14.3	0.0000	0.2227	22.3	0.400
553	267.489	16.355	14.3	0.0000	0.2227	22.3	0.400
554	267.990	16.370	14.3	0.0000	0.2227	22.3	0.400
555	268.489	16.386	14.3	0.0000	0.2227	22.3	0.400
556	268.989	16.401	14.3	0.0000	0.2227	22.3	0.400
557	269.491	16.416	14.3	0.0000	0.2227	22.3	0.400
558	269.991	16.431	14.3	0.0000	0.2227	22.3	0.400
559	270.490	16.447	14.3	0.0000	0.2227	22.3	0.400
560	270.989	16.462	14.3	0.0000	0.2227	22.3	0.400
561	271.490	16.477	14.3	0.0000	0.2227	22.3	0.400
562	271.989	16.492	14.3	0.0000	0.2227	22.3	0.400
563	272.487	16.507	14.3	0.0000	0.2228	22.3	0.400
564	272.987	16.522	14.3	0.0000	0.2227	22.3	0.400
565	273.491	16.538	14.3	0.0000	0.2228	22.3	0.400
566	273.989	16.553	14.3	0.0000	0.2227	22.3	0.400
567	274.490	16.568	14.3	0.0000	0.2227	22.3	0.400
568	274.990	16.583	14.3	0.0000	0.2228	22.3	0.400
569	275.489	16.598	14.3	0.0000	0.2228	22.3	0.400
570	275.989	16.613	14.3	0.0000	0.2228	22.3	0.400
571	276.490	16.628	14.3	0.0000	0.2227	22.3	0.400
572	276.991	16.643	14.3	0.0000	0.2228	22.3	0.400
573	277.490	16.658	14.3	0.0000	0.2228	22.3	0.400
574	277.988	16.673	14.3	0.0000	0.2228	22.3	0.400
575	278.487	16.688	14.3	0.0000	0.2228	22.3	0.400
576	278.989	16.703	14.3	0.0000	0.2228	22.3	0.400
577	279.488	16.718	14.3	0.0000	0.2228	22.3	0.400
578	279.990	16.733	14.3	0.0000	0.2228	22.3	0.400
579	280.490	16.748	14.3	0.0000	0.2228	22.3	0.400
580	280.989	16.763	14.3	0.0000	0.2228	22.3	0.400
581	281.490	16.778	14.3	0.0000	0.2228	22.3	0.400
582	281.991	16.793	14.3	0.0000	0.2227	22.3	0.400
583	282.489	16.807	14.3	0.0000	0.2227	22.3	0.400
584	282.987	16.822	14.3	0.0000	0.2227	22.3	0.400
585	283.491	16.837	14.3	0.0000	0.2228	22.3	0.400
586	283.990	16.852	14.3	0.0000	0.2228	22.3	0.400
587	284.491	16.867	14.3	0.0000	0.2228	22.3	0.400
588	284.991	16.882	14.3	0.0000	0.2228	22.3	0.400
589	285.491	16.896	14.3	0.0000	0.2228	22.3	0.400
590	285.989	16.911	14.3	0.0000	0.2228	22.3	0.400
591	286.488	16.926	14.3	0.0000	0.2228	22.3	0.400
592	286.990	16.941	14.3	0.0000	0.2228	22.3	0.400
593	287.488	16.955	14.3	0.0000	0.2228	22.3	0.400
594	287.991	16.970	14.3	0.0000	0.2228	22.3	0.400
595	288.487	16.985	14.3	0.0000	0.2228	22.3	0.400
596	288.990	17.000	14.3	0.0000	0.2228	22.3	0.400
597	289.491	17.014	14.3	0.0000	0.2228	22.3	0.400
598	289.989	17.029	14.3	0.0000	0.2228	22.3	0.400
599	290.487	17.044	14.3	0.0000	0.2228	22.3	0.400
600	290.987	17.058	14.3	0.0000	0.2228	22.3	0.400

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
601	291.491	17.073	14.3	0.0000	0.2228	22.3	0.400
602	291.991	17.088	14.3	0.0000	0.2228	22.3	0.400
603	292.491	17.102	14.3	0.0000	0.2228	22.3	0.400
604	292.988	17.117	14.3	0.0000	0.2228	22.3	0.400
605	293.488	17.131	14.3	0.0000	0.2228	22.3	0.400
606	293.990	17.146	14.3	0.0000	0.2228	22.3	0.400
607	294.491	17.161	14.3	0.0000	0.2229	22.3	0.399
608	294.988	17.175	14.3	0.0000	0.2228	22.3	0.400
609	295.491	17.190	14.3	0.0000	0.2229	22.3	0.399
610	295.988	17.204	14.3	0.0000	0.2228	22.3	0.400
611	296.488	17.219	14.3	0.0000	0.2229	22.3	0.399
612	296.988	17.233	14.3	0.0000	0.2229	22.3	0.399
613	297.488	17.248	14.3	0.0000	0.2229	22.3	0.399
614	297.989	17.262	14.3	0.0000	0.2229	22.3	0.399
615	298.489	17.277	14.3	0.0000	0.2229	22.3	0.399
616	298.988	17.291	14.3	0.0000	0.2229	22.3	0.399
617	299.489	17.306	14.3	0.0000	0.2229	22.3	0.399
618	299.989	17.320	14.3	0.0000	0.2229	22.3	0.399
619	300.488	17.335	14.3	0.0000	0.2228	22.3	0.400
620	300.988	17.349	14.3	0.0000	0.2229	22.3	0.399
621	301.491	17.364	14.3	0.0000	0.2229	22.3	0.399
622	301.990	17.378	14.3	0.0000	0.2228	22.3	0.400
623	302.490	17.392	14.3	0.0000	0.2229	22.3	0.399
624	302.988	17.407	14.3	0.0000	0.2229	22.3	0.399
625	303.487	17.421	14.3	0.0000	0.2229	22.3	0.399
626	303.990	17.435	14.3	0.0000	0.2229	22.3	0.399
627	304.488	17.450	14.3	0.0000	0.2229	22.3	0.399
628	304.989	17.464	14.3	0.0000	0.2229	22.3	0.399
629	305.490	17.478	14.3	0.0000	0.2229	22.3	0.399
630	305.988	17.492	14.3	0.0000	0.2229	22.3	0.399
631	306.491	17.507	14.3	0.0000	0.2229	22.3	0.399
632	306.991	17.521	14.3	0.0000	0.2229	22.3	0.399
633	307.488	17.535	14.3	0.0000	0.2229	22.3	0.399
634	307.991	17.550	14.3	0.0000	0.2229	22.3	0.399
635	308.489	17.564	14.3	0.0000	0.2229	22.3	0.399
636	308.987	17.578	14.3	0.0000	0.2229	22.3	0.399
637	309.490	17.592	14.3	0.0000	0.2229	22.3	0.399
638	309.990	17.607	14.3	0.0000	0.2229	22.3	0.399
639	310.490	17.621	14.3	0.0000	0.2229	22.3	0.399
640	310.989	17.635	14.3	0.0000	0.2229	22.3	0.399
641	311.488	17.649	14.3	0.0000	0.2229	22.3	0.399
642	311.987	17.663	14.3	0.0000	0.2229	22.3	0.399
643	312.487	17.677	14.3	0.0000	0.2229	22.3	0.399
644	312.990	17.692	14.3	0.0000	0.2229	22.3	0.399
645	313.488	17.706	14.3	0.0000	0.2229	22.3	0.399
646	313.991	17.720	14.3	0.0000	0.2229	22.3	0.399
647	314.490	17.734	14.3	0.0000	0.2229	22.3	0.399
648	314.991	17.748	14.3	0.0000	0.2229	22.3	0.399
649	315.489	17.762	14.3	0.0000	0.2229	22.3	0.399
650	315.988	17.776	14.3	0.0000	0.2229	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
651	316.490	17.790	14.3	0.0000	0.2229	22.3	0.399
652	316.990	17.804	14.3	0.0000	0.2229	22.3	0.399
653	317.488	17.818	14.3	0.0000	0.2229	22.3	0.399
654	317.988	17.832	14.3	0.0000	0.2229	22.3	0.399
655	318.490	17.846	14.3	0.0000	0.2229	22.3	0.399
656	318.991	17.860	14.3	0.0000	0.2229	22.3	0.399
657	319.490	17.874	14.3	0.0000	0.2229	22.3	0.399
658	319.987	17.888	14.3	0.0000	0.2229	22.3	0.399
659	320.491	17.902	14.3	0.0000	0.2229	22.3	0.399
660	320.989	17.916	14.3	0.0000	0.2229	22.3	0.399
661	321.488	17.930	14.3	0.0000	0.2229	22.3	0.399
662	321.990	17.944	14.3	0.0000	0.2229	22.3	0.399
663	322.488	17.958	14.3	0.0000	0.2229	22.3	0.399
664	322.987	17.972	14.3	0.0000	0.2229	22.3	0.399
665	323.490	17.986	14.3	0.0000	0.2229	22.3	0.399
666	323.988	18.000	14.3	0.0000	0.2229	22.3	0.399
667	324.490	18.014	14.3	0.0000	0.2229	22.3	0.399
668	324.988	18.027	14.3	0.0000	0.2229	22.3	0.399
669	325.488	18.041	14.3	0.0000	0.2229	22.3	0.399
670	325.991	18.055	14.3	0.0000	0.2229	22.3	0.399
671	326.491	18.069	14.3	0.0000	0.2229	22.3	0.399
672	326.989	18.083	14.3	0.0000	0.2229	22.3	0.399
673	327.488	18.097	14.3	0.0000	0.2229	22.3	0.399
674	327.990	18.110	14.3	0.0000	0.2229	22.3	0.399
675	328.491	18.124	14.3	0.0000	0.2229	22.3	0.399
676	328.990	18.138	14.3	0.0000	0.2230	22.3	0.399
677	329.489	18.152	14.3	0.0000	0.2229	22.3	0.399
678	329.991	18.166	14.3	0.0000	0.2229	22.3	0.399
679	330.487	18.179	14.3	0.0000	0.2229	22.3	0.399
680	330.991	18.193	14.3	0.0000	0.2229	22.3	0.399
681	331.490	18.207	14.3	0.0000	0.2229	22.3	0.399
682	331.991	18.221	14.3	0.0000	0.2229	22.3	0.399
683	332.488	18.234	14.3	0.0000	0.2229	22.3	0.399
684	332.990	18.248	14.3	0.0000	0.2229	22.3	0.399
685	333.488	18.262	14.3	0.0000	0.2229	22.3	0.399
686	333.987	18.275	14.3	0.0000	0.2229	22.3	0.399
687	334.487	18.289	14.3	0.0000	0.2229	22.3	0.399
688	334.989	18.303	14.3	0.0000	0.2229	22.3	0.399
689	335.489	18.316	14.3	0.0000	0.2229	22.3	0.399
690	335.988	18.330	14.3	0.0000	0.2229	22.3	0.399
691	336.491	18.344	14.3	0.0000	0.2229	22.3	0.399
692	336.990	18.357	14.3	0.0000	0.2229	22.3	0.399
693	337.489	18.371	14.3	0.0000	0.2229	22.3	0.399
694	337.991	18.385	14.3	0.0000	0.2229	22.3	0.399
695	338.491	18.398	14.3	0.0000	0.2230	22.3	0.399
696	338.990	18.412	14.3	0.0000	0.2229	22.3	0.399
697	339.490	18.425	14.3	0.0000	0.2230	22.3	0.399
698	339.989	18.439	14.3	0.0000	0.2230	22.3	0.399
699	340.489	18.452	14.3	0.0000	0.2230	22.3	0.399
700	340.990	18.466	14.3	0.0000	0.2230	22.3	0.399

F&ME CONSULTANTS	Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
	Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
	Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
	Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
	Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
	Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
701	341.490	18.479	14.3	0.0000	0.2230	22.3	0.399
702	341.988	18.493	14.3	0.0000	0.2230	22.3	0.399
703	342.489	18.506	14.3	0.0000	0.2230	22.3	0.399
704	342.991	18.520	14.3	0.0000	0.2230	22.3	0.399
705	343.491	18.534	14.3	0.0000	0.2229	22.3	0.399
706	343.990	18.547	14.3	0.0000	0.2230	22.3	0.399
707	344.490	18.560	14.3	0.0000	0.2230	22.3	0.399
708	344.987	18.574	14.3	0.0000	0.2230	22.3	0.399
709	345.488	18.587	14.3	0.0000	0.2229	22.3	0.399
710	345.990	18.601	14.3	0.0000	0.2230	22.3	0.399
711	346.489	18.614	14.3	0.0000	0.2230	22.3	0.399
712	346.987	18.628	14.3	0.0000	0.2230	22.3	0.399
713	347.490	18.641	14.3	0.0000	0.2230	22.3	0.399
714	347.988	18.654	14.3	0.0000	0.2230	22.3	0.399
715	348.487	18.668	14.3	0.0000	0.2230	22.3	0.399
716	348.988	18.681	14.3	0.0000	0.2230	22.3	0.399
717	349.491	18.695	14.3	0.0000	0.2230	22.3	0.399
718	349.990	18.708	14.3	0.0000	0.2230	22.3	0.399
719	350.490	18.721	14.3	0.0000	0.2230	22.3	0.399
720	350.989	18.735	14.3	0.0000	0.2230	22.3	0.399
721	351.487	18.748	14.3	0.0000	0.2230	22.3	0.399
722	351.987	18.761	14.3	0.0000	0.2230	22.3	0.399
723	352.489	18.775	14.3	0.0000	0.2230	22.3	0.399
724	352.989	18.788	14.3	0.0000	0.2230	22.3	0.399
725	353.487	18.801	14.3	0.0000	0.2230	22.3	0.399
726	353.990	18.815	14.3	0.0000	0.2230	22.3	0.399
727	354.488	18.828	14.3	0.0000	0.2230	22.3	0.399
728	354.988	18.841	14.3	0.0000	0.2230	22.3	0.399
729	355.488	18.854	14.3	0.0000	0.2230	22.3	0.399
730	355.988	18.868	14.3	0.0000	0.2230	22.3	0.399
731	356.488	18.881	14.3	0.0000	0.2230	22.3	0.399
732	356.988	18.894	14.3	0.0000	0.2230	22.3	0.399
733	357.491	18.907	14.3	0.0000	0.2230	22.3	0.399
734	357.988	18.921	14.3	0.0000	0.2230	22.3	0.399
735	358.488	18.934	14.3	0.0000	0.2230	22.3	0.399
736	358.990	18.947	14.3	0.0000	0.2230	22.3	0.399
737	359.489	18.960	14.3	0.0000	0.2230	22.3	0.399
738	359.989	18.973	14.3	0.0000	0.2230	22.3	0.399
739	360.491	18.987	14.3	0.0000	0.2230	22.3	0.399
740	360.991	19.000	14.3	0.0000	0.2230	22.3	0.399
741	361.488	19.013	14.3	0.0000	0.2230	22.3	0.399
742	361.991	19.026	14.3	0.0000	0.2230	22.3	0.399
743	362.488	19.039	14.3	0.0000	0.2230	22.3	0.399
744	362.991	19.052	14.3	0.0000	0.2230	22.3	0.399
745	363.487	19.065	14.3	0.0000	0.2230	22.3	0.399
746	363.991	19.079	14.3	0.0000	0.2230	22.3	0.399
747	364.491	19.092	14.3	0.0000	0.2230	22.3	0.399
748	364.990	19.105	14.3	0.0000	0.2230	22.3	0.399
749	365.488	19.118	14.3	0.0000	0.2230	22.3	0.399
750	365.990	19.131	14.3	0.0000	0.2230	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
751	366.488	19.144	14.3	0.0000	0.2230	22.3	0.399
752	366.989	19.157	14.3	0.0000	0.2230	22.3	0.399
753	367.490	19.170	14.3	0.0000	0.2230	22.3	0.399
754	367.991	19.183	14.3	0.0000	0.2230	22.3	0.399
755	368.489	19.196	14.3	0.0000	0.2230	22.3	0.399
756	368.988	19.209	14.3	0.0000	0.2230	22.3	0.399
757	369.488	19.222	14.3	0.0000	0.2230	22.3	0.399
758	369.988	19.235	14.3	0.0000	0.2230	22.3	0.399
759	370.488	19.248	14.3	0.0000	0.2230	22.3	0.399
760	370.989	19.261	14.3	0.0000	0.2230	22.3	0.399
761	371.488	19.274	14.3	0.0000	0.2230	22.3	0.399
762	371.987	19.287	14.3	0.0000	0.2230	22.3	0.399
763	372.490	19.300	14.3	0.0000	0.2230	22.3	0.399
764	372.991	19.313	14.3	0.0000	0.2230	22.3	0.399
765	373.487	19.326	14.3	0.0000	0.2230	22.3	0.399
766	373.991	19.339	14.3	0.0000	0.2230	22.3	0.399
767	374.488	19.352	14.3	0.0000	0.2230	22.3	0.399
768	374.991	19.365	14.3	0.0000	0.2230	22.3	0.399
769	375.491	19.378	14.3	0.0000	0.2230	22.3	0.399
770	375.990	19.390	14.3	0.0000	0.2230	22.3	0.399
771	376.487	19.403	14.3	0.0000	0.2230	22.3	0.399
772	376.991	19.416	14.3	0.0000	0.2230	22.3	0.399
773	377.490	19.429	14.3	0.0000	0.2230	22.3	0.399
774	377.989	19.442	14.3	0.0000	0.2230	22.3	0.399
775	378.490	19.455	14.3	0.0000	0.2230	22.3	0.399
776	378.988	19.468	14.3	0.0000	0.2230	22.3	0.399
777	379.487	19.480	14.3	0.0000	0.2230	22.3	0.399
778	379.991	19.493	14.3	0.0000	0.2230	22.3	0.399
779	380.489	19.506	14.3	0.0000	0.2230	22.3	0.399
780	380.988	19.519	14.3	0.0000	0.2230	22.3	0.399
781	381.489	19.532	14.3	0.0000	0.2230	22.3	0.399
782	381.989	19.545	14.3	0.0000	0.2230	22.3	0.399
783	382.490	19.557	14.3	0.0000	0.2230	22.3	0.399
784	382.988	19.570	14.3	0.0000	0.2230	22.3	0.399
785	383.490	19.583	14.3	0.0000	0.2230	22.3	0.399
786	383.989	19.596	14.3	0.0000	0.2230	22.3	0.399
787	384.489	19.608	14.3	0.0000	0.2230	22.3	0.399
788	384.989	19.621	14.3	0.0000	0.2230	22.3	0.399
789	385.488	19.634	14.3	0.0000	0.2230	22.3	0.399
790	385.991	19.647	14.3	0.0000	0.2230	22.3	0.399
791	386.489	19.659	14.3	0.0000	0.2230	22.3	0.399
792	386.987	19.672	14.3	0.0000	0.2230	22.3	0.399
793	387.488	19.685	14.3	0.0000	0.2231	22.3	0.399
794	387.991	19.697	14.3	0.0000	0.2231	22.3	0.399
795	388.490	19.710	14.3	0.0000	0.2231	22.3	0.399
796	388.991	19.723	14.3	0.0000	0.2230	22.3	0.399
797	389.490	19.735	14.3	0.0000	0.2230	22.3	0.399
798	389.989	19.748	14.3	0.0000	0.2230	22.3	0.399
799	390.489	19.761	14.3	0.0000	0.2230	22.3	0.399
800	390.988	19.773	14.3	0.0000	0.2230	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
801	391.487	19.786	14.3	0.0000	0.2230	22.3	0.399
802	391.988	19.799	14.3	0.0000	0.2231	22.3	0.399
803	392.488	19.811	14.3	0.0000	0.2231	22.3	0.399
804	392.988	19.824	14.3	0.0000	0.2231	22.3	0.399
805	393.488	19.837	14.3	0.0000	0.2231	22.3	0.399
806	393.987	19.849	14.3	0.0000	0.2231	22.3	0.399
807	394.491	19.862	14.3	0.0000	0.2230	22.3	0.399
808	394.989	19.874	14.3	0.0000	0.2230	22.3	0.399
809	395.489	19.887	14.3	0.0000	0.2230	22.3	0.399
810	395.988	19.899	14.3	0.0000	0.2231	22.3	0.399
811	396.488	19.912	14.3	0.0000	0.2230	22.3	0.399
812	396.991	19.925	14.3	0.0000	0.2230	22.3	0.399
813	397.488	19.937	14.3	0.0000	0.2230	22.3	0.399
814	397.988	19.950	14.3	0.0000	0.2231	22.3	0.399
815	398.489	19.962	14.3	0.0000	0.2230	22.3	0.399
816	398.988	19.975	14.3	0.0000	0.2231	22.3	0.399
817	399.488	19.987	14.3	0.0000	0.2231	22.3	0.399
818	399.988	20.000	14.3	0.0000	0.2231	22.3	0.399
819	400.488	20.012	14.3	0.0000	0.2231	22.3	0.399
820	400.988	20.025	14.3	0.0000	0.2231	22.3	0.399
821	401.488	20.037	14.3	0.0000	0.2231	22.3	0.399
822	401.990	20.050	14.3	0.0000	0.2231	22.3	0.399
823	402.491	20.062	14.3	0.0000	0.2231	22.3	0.399
824	402.987	20.075	14.3	0.0000	0.2231	22.3	0.399
825	403.489	20.087	14.3	0.0000	0.2231	22.3	0.399
826	403.988	20.099	14.3	0.0000	0.2231	22.3	0.399
827	404.488	20.112	14.3	0.0000	0.2231	22.3	0.399
828	404.987	20.124	14.3	0.0000	0.2230	22.3	0.399
829	405.487	20.137	14.3	0.0000	0.2231	22.3	0.399
830	405.988	20.149	14.3	0.0000	0.2231	22.3	0.399
831	406.490	20.162	14.3	0.0000	0.2231	22.3	0.399
832	406.988	20.174	14.3	0.0000	0.2231	22.3	0.399
833	407.488	20.186	14.3	0.0000	0.2231	22.3	0.399
834	407.991	20.199	14.3	0.0000	0.2231	22.3	0.399
835	408.488	20.211	14.3	0.0000	0.2231	22.3	0.399
836	408.988	20.223	14.3	0.0000	0.2231	22.3	0.399
837	409.490	20.236	14.3	0.0000	0.2231	22.3	0.399
838	409.991	20.248	14.3	0.0000	0.2231	22.3	0.399
839	410.488	20.260	14.3	0.0000	0.2231	22.3	0.399
840	410.991	20.273	14.3	0.0000	0.2231	22.3	0.399
841	411.490	20.285	14.3	0.0000	0.2231	22.3	0.399
842	411.991	20.298	14.3	0.0000	0.2231	22.3	0.399
843	412.488	20.310	14.3	0.0000	0.2231	22.3	0.399
844	412.988	20.322	14.3	0.0000	0.2231	22.3	0.399
845	413.491	20.334	14.3	0.0000	0.2231	22.3	0.399
846	413.990	20.347	14.3	0.0000	0.2231	22.3	0.399
847	414.490	20.359	14.3	0.0000	0.2231	22.3	0.399
848	414.991	20.371	14.3	0.0000	0.2231	22.3	0.399
849	415.489	20.384	14.3	0.0000	0.2231	22.3	0.399
850	415.990	20.396	14.3	0.0000	0.2231	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
851	416.490	20.408	14.3	0.0000	0.2231	22.3	0.399
852	416.990	20.420	14.3	0.0000	0.2231	22.3	0.399
853	417.489	20.433	14.3	0.0000	0.2231	22.3	0.399
854	417.991	20.445	14.3	0.0000	0.2231	22.3	0.399
855	418.489	20.457	14.3	0.0000	0.2231	22.3	0.399
856	418.991	20.469	14.3	0.0000	0.2231	22.3	0.399
857	419.489	20.481	14.3	0.0000	0.2231	22.3	0.399
858	419.987	20.494	14.3	0.0000	0.2231	22.3	0.399
859	420.489	20.506	14.3	0.0000	0.2231	22.3	0.399
860	420.991	20.518	14.3	0.0000	0.2231	22.3	0.399
861	421.487	20.530	14.3	0.0000	0.2231	22.3	0.399
862	421.987	20.542	14.3	0.0000	0.2231	22.3	0.399
863	422.491	20.555	14.3	0.0000	0.2231	22.3	0.399
864	422.990	20.567	14.3	0.0000	0.2231	22.3	0.399
865	423.488	20.579	14.3	0.0000	0.2231	22.3	0.399
866	423.990	20.591	14.3	0.0000	0.2231	22.3	0.399
867	424.490	20.603	14.3	0.0000	0.2231	22.3	0.399
868	424.987	20.615	14.3	0.0000	0.2231	22.3	0.399
869	425.490	20.627	14.3	0.0000	0.2231	22.3	0.399
870	425.988	20.639	14.3	0.0000	0.2231	22.3	0.399
871	426.487	20.652	14.3	0.0000	0.2231	22.3	0.399
872	426.990	20.664	14.3	0.0000	0.2231	22.3	0.399
873	427.488	20.676	14.3	0.0000	0.2231	22.3	0.399
874	427.990	20.688	14.3	0.0000	0.2231	22.3	0.399
875	428.488	20.700	14.3	0.0000	0.2231	22.3	0.399
876	428.990	20.712	14.3	0.0000	0.2231	22.3	0.399
877	429.489	20.724	14.3	0.0000	0.2231	22.3	0.399
878	429.989	20.736	14.3	0.0000	0.2231	22.3	0.399
879	430.489	20.748	14.3	0.0000	0.2231	22.3	0.399
880	430.987	20.760	14.3	0.0000	0.2231	22.3	0.399
881	431.490	20.772	14.3	0.0000	0.2231	22.3	0.399
882	431.988	20.784	14.3	0.0000	0.2231	22.3	0.399
883	432.489	20.796	14.3	0.0000	0.2231	22.3	0.399
884	432.988	20.808	14.3	0.0000	0.2231	22.3	0.399
885	433.488	20.820	14.3	0.0000	0.2231	22.3	0.399
886	433.987	20.832	14.3	0.0000	0.2231	22.3	0.399
887	434.491	20.844	14.3	0.0000	0.2231	22.3	0.399
888	434.991	20.856	14.3	0.0000	0.2231	22.3	0.399
889	435.490	20.868	14.3	0.0000	0.2231	22.3	0.399
890	435.988	20.880	14.3	0.0000	0.2231	22.3	0.399
891	436.491	20.892	14.3	0.0000	0.2232	22.3	0.399
892	436.990	20.904	14.3	0.0000	0.2231	22.3	0.399
893	437.489	20.916	14.3	0.0000	0.2232	22.3	0.399
894	437.991	20.928	14.3	0.0000	0.2231	22.3	0.399
895	438.490	20.940	14.3	0.0000	0.2231	22.3	0.399
896	438.989	20.952	14.3	0.0000	0.2231	22.3	0.399
897	439.491	20.964	14.3	0.0000	0.2232	22.3	0.399
898	439.988	20.976	14.3	0.0000	0.2232	22.3	0.399
899	440.489	20.988	14.3	0.0000	0.2232	22.3	0.399
900	440.991	21.000	14.3	0.0000	0.2232	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
901	441.489	21.012	14.3	0.0000	0.2232	22.3	0.399
902	441.987	21.023	14.3	0.0000	0.2232	22.3	0.399
903	442.488	21.035	14.3	0.0000	0.2232	22.3	0.399
904	442.990	21.047	14.3	0.0000	0.2232	22.3	0.399
905	443.489	21.059	14.3	0.0000	0.2232	22.3	0.399
906	443.991	21.071	14.3	0.0000	0.2232	22.3	0.399
907	444.489	21.083	14.3	0.0000	0.2232	22.3	0.399
908	444.990	21.095	14.3	0.0000	0.2232	22.3	0.399
909	445.490	21.107	14.3	0.0000	0.2232	22.3	0.399
910	445.987	21.118	14.3	0.0000	0.2232	22.3	0.399
911	446.488	21.130	14.3	0.0000	0.2232	22.3	0.399
912	446.987	21.142	14.3	0.0000	0.2232	22.3	0.399
913	447.489	21.154	14.3	0.0000	0.2232	22.3	0.399
914	447.988	21.166	14.3	0.0000	0.2232	22.3	0.399
915	448.490	21.178	14.3	0.0000	0.2232	22.3	0.399
916	448.991	21.189	14.3	0.0000	0.2232	22.3	0.399
917	449.488	21.201	14.3	0.0000	0.2232	22.3	0.399
918	449.990	21.213	14.3	0.0000	0.2232	22.3	0.399
919	450.490	21.225	14.3	0.0000	0.2232	22.3	0.399
920	450.988	21.236	14.3	0.0000	0.2232	22.3	0.399
921	451.490	21.248	14.3	0.0000	0.2232	22.3	0.399
922	451.988	21.260	14.3	0.0000	0.2232	22.3	0.399
923	452.488	21.272	14.3	0.0000	0.2232	22.3	0.399
924	452.991	21.284	14.3	0.0000	0.2232	22.3	0.399
925	453.490	21.295	14.3	0.0000	0.2232	22.3	0.399
926	453.991	21.307	14.3	0.0000	0.2232	22.3	0.399
927	454.489	21.319	14.3	0.0000	0.2232	22.3	0.399
928	454.987	21.330	14.3	0.0000	0.2232	22.3	0.399
929	455.491	21.342	14.3	0.0000	0.2232	22.3	0.399
930	455.990	21.354	14.3	0.0000	0.2232	22.3	0.399
931	456.489	21.366	14.3	0.0000	0.2232	22.3	0.399
932	456.988	21.377	14.3	0.0000	0.2232	22.3	0.399
933	457.490	21.389	14.3	0.0000	0.2232	22.3	0.399
934	457.990	21.401	14.3	0.0000	0.2232	22.3	0.399
935	458.487	21.412	14.3	0.0000	0.2232	22.3	0.399
936	458.987	21.424	14.3	0.0000	0.2232	22.3	0.399
937	459.491	21.436	14.3	0.0000	0.2232	22.3	0.399
938	459.990	21.447	14.3	0.0000	0.2232	22.3	0.399
939	460.489	21.459	14.3	0.0000	0.2232	22.3	0.399
940	460.991	21.471	14.3	0.0000	0.2232	22.3	0.399
941	461.489	21.482	14.3	0.0000	0.2232	22.3	0.399
942	461.988	21.494	14.3	0.0000	0.2232	22.3	0.399
943	462.488	21.506	14.3	0.0000	0.2232	22.3	0.399
944	462.989	21.517	14.3	0.0000	0.2232	22.3	0.399
945	463.491	21.529	14.3	0.0000	0.2232	22.3	0.399
946	463.989	21.540	14.3	0.0000	0.2232	22.3	0.399
947	464.488	21.552	14.3	0.0000	0.2232	22.3	0.399
948	464.988	21.564	14.3	0.0000	0.2232	22.3	0.399
949	465.491	21.575	14.3	0.0000	0.2232	22.3	0.399
950	465.989	21.587	14.3	0.0000	0.2232	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 16
Constant Load Step
Stress: 14.3 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
951	466.487	21.598	14.3	0.0000	0.2232	22.3	0.399
952	466.991	21.610	14.3	0.0000	0.2232	22.3	0.399
953	467.491	21.622	14.3	0.0000	0.2232	22.3	0.399
954	467.990	21.633	14.3	0.0000	0.2232	22.3	0.399
955	468.488	21.645	14.3	0.0000	0.2232	22.3	0.399
956	468.987	21.656	14.3	0.0000	0.2232	22.3	0.399
957	469.491	21.668	14.3	0.0000	0.2232	22.3	0.399
958	469.989	21.679	14.3	0.0000	0.2232	22.3	0.399
959	470.488	21.691	14.3	0.0000	0.2232	22.3	0.399
960	470.988	21.702	14.3	0.0000	0.2232	22.3	0.399
961	471.487	21.714	14.3	0.0000	0.2232	22.3	0.399
962	471.987	21.725	14.3	0.0000	0.2232	22.3	0.399
963	472.487	21.737	14.3	0.0000	0.2232	22.3	0.399
964	472.987	21.748	14.3	0.0000	0.2232	22.3	0.399
965	473.490	21.760	14.3	0.0000	0.2232	22.3	0.399
966	473.991	21.771	14.3	0.0000	0.2232	22.3	0.399
967	474.490	21.783	14.3	0.0000	0.2232	22.3	0.399
968	474.990	21.794	14.3	0.0000	0.2232	22.3	0.399
969	475.489	21.806	14.3	0.0000	0.2232	22.3	0.399
970	475.989	21.817	14.3	0.0000	0.2232	22.3	0.399
971	476.489	21.829	14.3	0.0000	0.2232	22.3	0.399
972	476.990	21.840	14.3	0.0000	0.2232	22.3	0.399
973	477.488	21.851	14.3	0.0000	0.2232	22.3	0.399
974	477.991	21.863	14.3	0.0000	0.2232	22.3	0.399
975	478.490	21.874	14.3	0.0000	0.2232	22.3	0.399
976	478.991	21.886	14.3	0.0000	0.2232	22.3	0.399
977	479.491	21.897	14.3	0.0000	0.2232	22.3	0.399
978	479.989	21.909	14.3	0.0000	0.2232	22.3	0.399
979	480.020	21.909	14.3	0.0000	0.2233	22.3	0.399

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.016		14.3	0.0000	0.2232	22.3	0.399
2	-0.012		14.3	0.0000	0.2232	22.3	0.399
3	-0.008		12.2	0.0000	0.2223	22.2	0.401
4	-0.003		3.93	0.0000	0.2166	21.7	0.411
5	0.000	0.000	1.83	0.0000	0.2135	21.4	0.416
6	0.001	0.032	1.15	0.0000	0.2125	21.3	0.418
7	0.005	0.074	0.164	0.0000	0.2083	20.8	0.426
8	0.010	0.098	0.204	0.0000	0.2070	20.7	0.428
9	0.014	0.118	0.317	0.0000	0.2074	20.7	0.427
10	0.018	0.135	0.421	0.0000	0.2077	20.8	0.427
11	0.023	0.150	0.473	0.0000	0.2079	20.8	0.426
12	0.027	0.164	0.491	0.0000	0.2079	20.8	0.426
13	0.031	0.176	0.507	0.0000	0.2079	20.8	0.426
14	0.035	0.188	0.514	0.0000	0.2078	20.8	0.427
15	0.040	0.199	0.488	0.0000	0.2076	20.8	0.427
16	0.044	0.209	0.460	0.0000	0.2075	20.8	0.427
17	0.061	0.248	0.470	0.0000	0.2073	20.7	0.428
18	0.070	0.265	0.464	0.0000	0.2071	20.7	0.428
19	0.152	0.389	0.454	0.0000	0.2067	20.7	0.429
20	0.234	0.484	0.449	0.0000	0.2064	20.6	0.429
21	0.320	0.566	0.449	0.0000	0.2061	20.6	0.430
22	0.484	0.696	0.451	0.0000	0.2057	20.6	0.430
23	0.735	0.857	0.449	0.0000	0.2051	20.5	0.432
24	0.986	0.993	0.447	0.0000	0.2046	20.5	0.432
25	1.484	1.218	0.448	0.0000	0.2041	20.4	0.433
26	2.484	1.576	0.448	0.0000	0.2030	20.3	0.435
27	4.484	2.118	0.446	0.0000	0.2020	20.2	0.437
28	4.987	2.233	0.446	0.0000	0.2018	20.2	0.437
29	5.486	2.342	0.445	0.0000	0.2017	20.2	0.438
30	5.984	2.446	0.446	0.0000	0.2017	20.2	0.438
31	6.485	2.547	0.446	0.0000	0.2016	20.2	0.438
32	6.984	2.643	0.446	0.0000	0.2015	20.2	0.438
33	7.488	2.736	0.446	0.0000	0.2014	20.1	0.438
34	7.986	2.826	0.446	0.0000	0.2014	20.1	0.438
35	8.486	2.913	0.445	0.0000	0.2012	20.1	0.438
36	8.986	2.998	0.447	0.0000	0.2012	20.1	0.439
37	9.484	3.080	0.444	0.0000	0.2010	20.1	0.439
38	9.988	3.160	0.445	0.0000	0.2009	20.1	0.439
39	10.485	3.238	0.446	0.0000	0.2009	20.1	0.439
40	10.984	3.314	0.445	0.0000	0.2008	20.1	0.439
41	11.484	3.389	0.446	0.0000	0.2007	20.1	0.439
42	11.986	3.462	0.446	0.0000	0.2005	20.1	0.440
43	12.486	3.534	0.447	0.0000	0.2004	20.0	0.440
44	12.985	3.603	0.446	0.0000	0.2001	20.0	0.440
45	13.486	3.672	0.446	0.0000	0.2000	20.0	0.441
46	13.984	3.740	0.446	0.0000	0.1999	20.0	0.441
47	14.488	3.806	0.445	0.0000	0.1998	20.0	0.441
48	14.986	3.871	0.447	0.0000	0.1997	20.0	0.441
49	15.486	3.935	0.445	0.0000	0.1996	20.0	0.441
50	15.986	3.998	0.446	0.0000	0.1995	20.0	0.442

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.487	4.060	0.445	0.0000	0.1995	19.9	0.442
52	16.985	4.121	0.447	0.0000	0.1993	19.9	0.442
53	17.484	4.181	0.444	0.0000	0.1992	19.9	0.442
54	17.988	4.241	0.445	0.0000	0.1990	19.9	0.443
55	18.484	4.299	0.444	0.0000	0.1989	19.9	0.443
56	18.986	4.357	0.445	0.0000	0.1989	19.9	0.443
57	19.487	4.414	0.444	0.0000	0.1988	19.9	0.443
58	19.986	4.471	0.445	0.0000	0.1987	19.9	0.443
59	20.488	4.526	0.445	0.0000	0.1986	19.9	0.443
60	20.986	4.581	0.446	0.0000	0.1986	19.9	0.443
61	21.486	4.635	0.446	0.0000	0.1985	19.9	0.443
62	21.985	4.689	0.444	0.0000	0.1985	19.8	0.443
63	22.484	4.742	0.446	0.0000	0.1984	19.8	0.444
64	22.987	4.795	0.446	0.0000	0.1984	19.8	0.444
65	23.485	4.846	0.445	0.0000	0.1983	19.8	0.444
66	23.988	4.898	0.444	0.0000	0.1982	19.8	0.444
67	24.486	4.948	0.445	0.0000	0.1981	19.8	0.444
68	24.984	4.998	0.446	0.0000	0.1981	19.8	0.444
69	25.484	5.048	0.445	0.0000	0.1980	19.8	0.444
70	25.986	5.098	0.446	0.0000	0.1980	19.8	0.444
71	26.485	5.146	0.446	0.0000	0.1980	19.8	0.444
72	26.984	5.195	0.445	0.0000	0.1979	19.8	0.444
73	27.487	5.243	0.445	0.0000	0.1979	19.8	0.445
74	27.988	5.290	0.446	0.0000	0.1979	19.8	0.445
75	28.487	5.337	0.446	0.0000	0.1979	19.8	0.445
76	28.985	5.384	0.446	0.0000	0.1978	19.8	0.445
77	29.486	5.430	0.445	0.0000	0.1978	19.8	0.445
78	29.988	5.476	0.446	0.0000	0.1978	19.8	0.445
79	30.486	5.521	0.445	0.0000	0.1977	19.8	0.445
80	30.986	5.566	0.444	0.0000	0.1977	19.8	0.445
81	31.488	5.611	0.445	0.0000	0.1977	19.8	0.445
82	31.985	5.656	0.446	0.0000	0.1976	19.8	0.445
83	32.485	5.700	0.445	0.0000	0.1976	19.8	0.445
84	32.986	5.743	0.445	0.0000	0.1976	19.8	0.445
85	33.486	5.787	0.446	0.0000	0.1976	19.8	0.445
86	33.984	5.830	0.446	0.0000	0.1975	19.8	0.445
87	34.487	5.873	0.446	0.0000	0.1975	19.8	0.445
88	34.987	5.915	0.445	0.0000	0.1975	19.7	0.445
89	35.486	5.957	0.445	0.0000	0.1974	19.7	0.445
90	35.985	5.999	0.446	0.0000	0.1974	19.7	0.445
91	36.486	6.040	0.445	0.0000	0.1974	19.7	0.445
92	36.987	6.082	0.445	0.0000	0.1974	19.7	0.445
93	37.484	6.122	0.445	0.0000	0.1973	19.7	0.446
94	37.987	6.163	0.446	0.0000	0.1973	19.7	0.446
95	38.486	6.204	0.444	0.0000	0.1972	19.7	0.446
96	38.984	6.244	0.445	0.0000	0.1972	19.7	0.446
97	39.484	6.284	0.447	0.0000	0.1972	19.7	0.446
98	39.986	6.323	0.444	0.0000	0.1971	19.7	0.446
99	40.484	6.363	0.445	0.0000	0.1971	19.7	0.446
100	40.986	6.402	0.445	0.0000	0.1970	19.7	0.446

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.487	6.441	0.445	0.0000	0.1970	19.7	0.446
102	41.984	6.480	0.445	0.0000	0.1970	19.7	0.446
103	42.484	6.518	0.446	0.0000	0.1970	19.7	0.446
104	42.987	6.556	0.445	0.0000	0.1970	19.7	0.446
105	43.484	6.594	0.445	0.0000	0.1969	19.7	0.446
106	43.985	6.632	0.445	0.0000	0.1969	19.7	0.446
107	44.487	6.670	0.445	0.0000	0.1968	19.7	0.446
108	44.984	6.707	0.444	0.0000	0.1968	19.7	0.446
109	45.487	6.744	0.445	0.0000	0.1968	19.7	0.446
110	45.985	6.781	0.446	0.0000	0.1968	19.7	0.447
111	46.488	6.818	0.446	0.0000	0.1968	19.7	0.447
112	46.986	6.855	0.445	0.0000	0.1967	19.7	0.447
113	47.484	6.891	0.445	0.0000	0.1967	19.7	0.447
114	47.986	6.927	0.446	0.0000	0.1967	19.7	0.447
115	48.485	6.963	0.446	0.0000	0.1967	19.7	0.447
116	48.984	6.999	0.446	0.0000	0.1967	19.7	0.447
117	49.486	7.035	0.446	0.0000	0.1967	19.7	0.447
118	49.984	7.070	0.446	0.0000	0.1966	19.7	0.447
119	50.487	7.105	0.445	0.0000	0.1966	19.7	0.447
120	50.986	7.140	0.444	0.0000	0.1966	19.7	0.447
121	51.486	7.175	0.446	0.0000	0.1966	19.7	0.447
122	51.986	7.210	0.445	0.0000	0.1966	19.7	0.447
123	52.484	7.245	0.445	0.0000	0.1965	19.7	0.447
124	52.986	7.279	0.445	0.0000	0.1965	19.7	0.447
125	53.484	7.313	0.445	0.0000	0.1965	19.7	0.447
126	53.985	7.347	0.445	0.0000	0.1965	19.6	0.447
127	54.487	7.382	0.446	0.0000	0.1965	19.6	0.447
128	54.984	7.415	0.447	0.0000	0.1965	19.6	0.447
129	55.484	7.449	0.446	0.0000	0.1964	19.6	0.447
130	55.985	7.482	0.446	0.0000	0.1964	19.6	0.447
131	56.484	7.516	0.445	0.0000	0.1964	19.6	0.447
132	56.986	7.549	0.445	0.0000	0.1964	19.6	0.447
133	57.484	7.582	0.445	0.0000	0.1964	19.6	0.447
134	57.986	7.615	0.445	0.0000	0.1964	19.6	0.447
135	58.486	7.648	0.444	0.0000	0.1964	19.6	0.447
136	58.985	7.680	0.444	0.0000	0.1964	19.6	0.447
137	59.487	7.713	0.445	0.0000	0.1963	19.6	0.447
138	59.985	7.745	0.445	0.0000	0.1963	19.6	0.447
139	60.487	7.777	0.447	0.0000	0.1963	19.6	0.447
140	60.986	7.809	0.445	0.0000	0.1963	19.6	0.447
141	61.485	7.841	0.445	0.0000	0.1963	19.6	0.447
142	61.986	7.873	0.445	0.0000	0.1963	19.6	0.447
143	62.485	7.905	0.446	0.0000	0.1962	19.6	0.448
144	62.987	7.936	0.445	0.0000	0.1962	19.6	0.448
145	63.487	7.968	0.445	0.0000	0.1962	19.6	0.448
146	63.987	7.999	0.445	0.0000	0.1962	19.6	0.448
147	64.486	8.030	0.445	0.0000	0.1962	19.6	0.448
148	64.987	8.061	0.446	0.0000	0.1962	19.6	0.448
149	65.484	8.092	0.445	0.0000	0.1962	19.6	0.448
150	65.987	8.123	0.444	0.0000	0.1962	19.6	0.448

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Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.485	8.154	0.445	0.0000	0.1962	19.6	0.448
152	66.986	8.184	0.445	0.0000	0.1962	19.6	0.448
153	67.484	8.215	0.446	0.0000	0.1962	19.6	0.448
154	67.987	8.245	0.445	0.0000	0.1962	19.6	0.448
155	68.487	8.276	0.446	0.0000	0.1962	19.6	0.448
156	68.987	8.306	0.443	0.0000	0.1962	19.6	0.448
157	69.484	8.336	0.445	0.0000	0.1961	19.6	0.448
158	69.985	8.366	0.446	0.0000	0.1961	19.6	0.448
159	70.487	8.396	0.446	0.0000	0.1961	19.6	0.448
160	70.984	8.425	0.445	0.0000	0.1961	19.6	0.448
161	71.486	8.455	0.445	0.0000	0.1961	19.6	0.448
162	71.985	8.484	0.445	0.0000	0.1961	19.6	0.448
163	72.485	8.514	0.445	0.0000	0.1961	19.6	0.448
164	72.988	8.543	0.445	0.0000	0.1961	19.6	0.448
165	73.488	8.572	0.445	0.0000	0.1961	19.6	0.448
166	73.984	8.601	0.446	0.0000	0.1961	19.6	0.448
167	74.488	8.631	0.444	0.0000	0.1961	19.6	0.448
168	74.988	8.660	0.446	0.0000	0.1961	19.6	0.448
169	75.486	8.688	0.445	0.0000	0.1960	19.6	0.448
170	75.986	8.717	0.445	0.0000	0.1960	19.6	0.448
171	76.484	8.745	0.446	0.0000	0.1960	19.6	0.448
172	76.987	8.774	0.444	0.0000	0.1960	19.6	0.448
173	77.485	8.803	0.445	0.0000	0.1960	19.6	0.448
174	77.986	8.831	0.446	0.0000	0.1960	19.6	0.448
175	78.487	8.859	0.445	0.0000	0.1960	19.6	0.448
176	78.985	8.887	0.445	0.0000	0.1960	19.6	0.448
177	79.484	8.915	0.446	0.0000	0.1960	19.6	0.448
178	79.988	8.944	0.445	0.0000	0.1960	19.6	0.448
179	80.484	8.971	0.446	0.0000	0.1960	19.6	0.448
180	80.984	8.999	0.445	0.0000	0.1960	19.6	0.448
181	81.487	9.027	0.444	0.0000	0.1960	19.6	0.448
182	81.988	9.055	0.446	0.0000	0.1960	19.6	0.448
183	82.484	9.082	0.447	0.0000	0.1960	19.6	0.448
184	82.985	9.110	0.445	0.0000	0.1960	19.6	0.448
185	83.485	9.137	0.445	0.0000	0.1960	19.6	0.448
186	83.986	9.164	0.445	0.0000	0.1960	19.6	0.448
187	84.487	9.192	0.445	0.0000	0.1960	19.6	0.448
188	84.987	9.219	0.446	0.0000	0.1959	19.6	0.448
189	85.484	9.246	0.445	0.0000	0.1960	19.6	0.448
190	85.984	9.273	0.445	0.0000	0.1959	19.6	0.448
191	86.486	9.300	0.445	0.0000	0.1959	19.6	0.448
192	86.987	9.327	0.446	0.0000	0.1959	19.6	0.448
193	87.488	9.353	0.446	0.0000	0.1959	19.6	0.448
194	87.987	9.380	0.443	0.0000	0.1959	19.6	0.448
195	88.485	9.407	0.445	0.0000	0.1959	19.6	0.448
196	88.987	9.433	0.446	0.0000	0.1959	19.6	0.448
197	89.485	9.460	0.445	0.0000	0.1959	19.6	0.448
198	89.986	9.486	0.445	0.0000	0.1959	19.6	0.448
199	90.487	9.512	0.445	0.0000	0.1959	19.6	0.448
200	90.988	9.539	0.445	0.0000	0.1959	19.6	0.448

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.485	9.565	0.446	0.0000	0.1959	19.6	0.448
202	91.987	9.591	0.445	0.0000	0.1959	19.6	0.448
203	92.484	9.617	0.444	0.0000	0.1959	19.6	0.448
204	92.988	9.643	0.445	0.0000	0.1959	19.6	0.448
205	93.484	9.669	0.446	0.0000	0.1959	19.6	0.448
206	93.986	9.695	0.446	0.0000	0.1959	19.6	0.448
207	94.484	9.720	0.447	0.0000	0.1959	19.6	0.448
208	94.987	9.746	0.446	0.0000	0.1959	19.6	0.448
209	95.486	9.772	0.445	0.0000	0.1959	19.6	0.448
210	95.984	9.797	0.445	0.0000	0.1959	19.6	0.448
211	96.484	9.823	0.445	0.0000	0.1959	19.6	0.448
212	96.985	9.848	0.445	0.0000	0.1959	19.6	0.448
213	97.485	9.873	0.446	0.0000	0.1959	19.6	0.448
214	97.986	9.899	0.444	0.0000	0.1959	19.6	0.448
215	98.486	9.924	0.445	0.0000	0.1959	19.6	0.448
216	98.984	9.949	0.443	0.0000	0.1959	19.6	0.448
217	99.486	9.974	0.446	0.0000	0.1959	19.6	0.448
218	99.986	9.999	0.445	0.0000	0.1959	19.6	0.448
219	100.486	10.024	0.445	0.0000	0.1959	19.6	0.448
220	100.985	10.049	0.446	0.0000	0.1959	19.6	0.448
221	101.488	10.074	0.446	0.0000	0.1959	19.6	0.448
222	101.984	10.099	0.446	0.0000	0.1959	19.6	0.448
223	102.486	10.124	0.445	0.0000	0.1959	19.6	0.448
224	102.984	10.148	0.444	0.0000	0.1958	19.6	0.448
225	103.487	10.173	0.445	0.0000	0.1958	19.6	0.448
226	103.984	10.197	0.445	0.0000	0.1958	19.6	0.448
227	104.487	10.222	0.445	0.0000	0.1958	19.6	0.448
228	104.984	10.246	0.446	0.0000	0.1959	19.6	0.448
229	105.487	10.271	0.446	0.0000	0.1958	19.6	0.448
230	105.987	10.295	0.445	0.0000	0.1958	19.6	0.448
231	106.484	10.319	0.445	0.0000	0.1958	19.6	0.448
232	106.984	10.343	0.446	0.0000	0.1958	19.6	0.448
233	107.487	10.368	0.447	0.0000	0.1958	19.6	0.448
234	107.984	10.392	0.445	0.0000	0.1958	19.6	0.448
235	108.487	10.416	0.443	0.0000	0.1958	19.6	0.448
236	108.984	10.440	0.445	0.0000	0.1958	19.6	0.448
237	109.488	10.464	0.446	0.0000	0.1958	19.6	0.448
238	109.984	10.487	0.445	0.0000	0.1958	19.6	0.448
239	110.486	10.511	0.446	0.0000	0.1958	19.6	0.448
240	110.986	10.535	0.444	0.0000	0.1958	19.6	0.448
241	111.484	10.559	0.445	0.0000	0.1958	19.6	0.448
242	111.987	10.582	0.445	0.0000	0.1958	19.6	0.448
243	112.487	10.606	0.446	0.0000	0.1958	19.6	0.448
244	112.984	10.629	0.446	0.0000	0.1958	19.6	0.448
245	113.487	10.653	0.445	0.0000	0.1958	19.6	0.448
246	113.986	10.676	0.445	0.0000	0.1958	19.6	0.448
247	114.484	10.700	0.445	0.0000	0.1958	19.6	0.448
248	114.987	10.723	0.444	0.0000	0.1958	19.6	0.448
249	115.485	10.746	0.446	0.0000	0.1958	19.6	0.448
250	115.984	10.770	0.446	0.0000	0.1958	19.6	0.448

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 16
Constant Load Step
Stress: 0.446 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.485	10.793	0.446	0.0000	0.1958	19.6	0.448
252	116.985	10.816	0.446	0.0000	0.1958	19.6	0.448
253	117.486	10.839	0.445	0.0000	0.1957	19.6	0.448
254	117.984	10.862	0.444	0.0000	0.1957	19.6	0.448
255	118.488	10.885	0.446	0.0000	0.1957	19.6	0.448
256	118.984	10.908	0.446	0.0000	0.1957	19.6	0.448
257	119.486	10.931	0.445	0.0000	0.1958	19.6	0.448
258	119.987	10.954	0.445	0.0000	0.1957	19.6	0.448
259	120.018	10.955	0.445	0.0000	0.1958	19.6	0.448

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.017		0.445	0.0000	0.1957	19.6	0.448
2	-0.013		0.445	0.0000	0.1957	19.6	0.448
3	-0.009		0.469	0.0000	0.1958	19.6	0.448
4	-0.005		0.674	0.0000	0.1960	19.6	0.448
5	-0.000		0.845	0.0000	0.1961	19.6	0.448
6	0.000	0.000	0.848	0.0000	0.1961	19.6	0.448
7	0.004	0.063	0.913	0.0000	0.1963	19.6	0.447
8	0.008	0.090	0.894	0.0000	0.1963	19.6	0.447
9	0.013	0.112	0.884	0.0000	0.1963	19.6	0.447
10	0.017	0.130	0.876	0.0000	0.1963	19.6	0.447
11	0.021	0.146	0.878	0.0000	0.1963	19.6	0.447
12	0.026	0.161	0.886	0.0000	0.1963	19.6	0.447
13	0.030	0.174	0.892	0.0000	0.1963	19.6	0.447
14	0.035	0.186	0.891	0.0000	0.1964	19.6	0.447
15	0.039	0.198	0.887	0.0000	0.1964	19.6	0.447
16	0.043	0.208	0.885	0.0000	0.1964	19.6	0.447
17	0.061	0.246	0.893	0.0000	0.1964	19.6	0.447
18	0.069	0.263	0.889	0.0000	0.1964	19.6	0.447
19	0.151	0.389	0.890	0.0000	0.1964	19.6	0.447
20	0.234	0.483	0.892	0.0000	0.1965	19.6	0.447
21	0.320	0.565	0.887	0.0000	0.1965	19.6	0.447
22	0.485	0.696	0.890	0.0000	0.1965	19.7	0.447
23	0.737	0.858	0.890	0.0000	0.1965	19.7	0.447
24	0.983	0.992	0.891	0.0000	0.1966	19.7	0.447
25	1.485	1.219	0.892	0.0000	0.1966	19.7	0.447
26	2.486	1.577	0.892	0.0000	0.1966	19.7	0.447
27	4.486	2.118	0.892	0.0000	0.1967	19.7	0.447
28	4.984	2.232	0.891	0.0000	0.1967	19.7	0.447
29	5.484	2.342	0.891	0.0000	0.1968	19.7	0.447
30	5.985	2.446	0.892	0.0000	0.1968	19.7	0.447
31	6.486	2.547	0.892	0.0000	0.1968	19.7	0.447
32	6.984	2.643	0.893	0.0000	0.1968	19.7	0.446
33	7.486	2.736	0.894	0.0000	0.1968	19.7	0.446
34	7.984	2.826	0.893	0.0000	0.1968	19.7	0.446
35	8.483	2.913	0.893	0.0000	0.1968	19.7	0.446
36	8.986	2.998	0.891	0.0000	0.1968	19.7	0.446
37	9.485	3.080	0.893	0.0000	0.1969	19.7	0.446
38	9.983	3.160	0.892	0.0000	0.1969	19.7	0.446
39	10.487	3.238	0.892	0.0000	0.1969	19.7	0.446
40	10.985	3.314	0.892	0.0000	0.1969	19.7	0.446
41	11.486	3.389	0.893	0.0000	0.1969	19.7	0.446
42	11.984	3.462	0.892	0.0000	0.1969	19.7	0.446
43	12.483	3.533	0.892	0.0000	0.1969	19.7	0.446
44	12.983	3.603	0.892	0.0000	0.1969	19.7	0.446
45	13.483	3.672	0.892	0.0000	0.1969	19.7	0.446
46	13.985	3.740	0.892	0.0000	0.1969	19.7	0.446
47	14.484	3.806	0.893	0.0000	0.1969	19.7	0.446
48	14.986	3.871	0.892	0.0000	0.1970	19.7	0.446
49	15.486	3.935	0.891	0.0000	0.1969	19.7	0.446
50	15.986	3.998	0.893	0.0000	0.1970	19.7	0.446

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
51	16.484	4.060	0.892	0.0000	0.1970	19.7	0.446
52	16.984	4.121	0.892	0.0000	0.1970	19.7	0.446
53	17.485	4.182	0.892	0.0000	0.1970	19.7	0.446
54	17.987	4.241	0.892	0.0000	0.1969	19.7	0.446
55	18.486	4.300	0.893	0.0000	0.1970	19.7	0.446
56	18.985	4.357	0.892	0.0000	0.1970	19.7	0.446
57	19.485	4.414	0.892	0.0000	0.1970	19.7	0.446
58	19.983	4.470	0.892	0.0000	0.1970	19.7	0.446
59	20.486	4.526	0.892	0.0000	0.1970	19.7	0.446
60	20.987	4.581	0.892	0.0000	0.1970	19.7	0.446
61	21.487	4.635	0.893	0.0000	0.1970	19.7	0.446
62	21.986	4.689	0.892	0.0000	0.1970	19.7	0.446
63	22.485	4.742	0.892	0.0000	0.1970	19.7	0.446
64	22.984	4.794	0.892	0.0000	0.1970	19.7	0.446
65	23.487	4.846	0.892	0.0000	0.1970	19.7	0.446
66	23.985	4.897	0.892	0.0000	0.1970	19.7	0.446
67	24.484	4.948	0.892	0.0000	0.1971	19.7	0.446
68	24.985	4.998	0.893	0.0000	0.1971	19.7	0.446
69	25.485	5.048	0.893	0.0000	0.1971	19.7	0.446
70	25.985	5.098	0.892	0.0000	0.1971	19.7	0.446
71	26.485	5.146	0.892	0.0000	0.1970	19.7	0.446
72	26.983	5.195	0.892	0.0000	0.1971	19.7	0.446
73	27.484	5.243	0.893	0.0000	0.1971	19.7	0.446
74	27.986	5.290	0.892	0.0000	0.1971	19.7	0.446
75	28.484	5.337	0.892	0.0000	0.1971	19.7	0.446
76	28.983	5.384	0.892	0.0000	0.1971	19.7	0.446
77	29.485	5.430	0.892	0.0000	0.1971	19.7	0.446
78	29.985	5.476	0.892	0.0000	0.1971	19.7	0.446
79	30.487	5.521	0.893	0.0000	0.1971	19.7	0.446
80	30.986	5.567	0.892	0.0000	0.1971	19.7	0.446
81	31.486	5.611	0.893	0.0000	0.1971	19.7	0.446
82	31.984	5.655	0.892	0.0000	0.1971	19.7	0.446
83	32.486	5.700	0.892	0.0000	0.1971	19.7	0.446
84	32.986	5.743	0.892	0.0000	0.1971	19.7	0.446
85	33.484	5.787	0.892	0.0000	0.1971	19.7	0.446
86	33.983	5.830	0.892	0.0000	0.1971	19.7	0.446
87	34.484	5.872	0.892	0.0000	0.1971	19.7	0.446
88	34.984	5.915	0.892	0.0000	0.1971	19.7	0.446
89	35.483	5.957	0.892	0.0000	0.1971	19.7	0.446
90	35.985	5.999	0.892	0.0000	0.1971	19.7	0.446
91	36.487	6.040	0.892	0.0000	0.1971	19.7	0.446
92	36.983	6.081	0.892	0.0000	0.1971	19.7	0.446
93	37.485	6.122	0.892	0.0000	0.1971	19.7	0.446
94	37.985	6.163	0.892	0.0000	0.1971	19.7	0.446
95	38.487	6.204	0.892	0.0000	0.1971	19.7	0.446
96	38.987	6.244	0.892	0.0000	0.1971	19.7	0.446
97	39.486	6.284	0.892	0.0000	0.1971	19.7	0.446
98	39.983	6.323	0.892	0.0000	0.1971	19.7	0.446
99	40.485	6.363	0.892	0.0000	0.1971	19.7	0.446
100	40.985	6.402	0.892	0.0000	0.1971	19.7	0.446

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
101	41.485	6.441	0.892	0.0000	0.1971	19.7	0.446
102	41.987	6.480	0.892	0.0000	0.1971	19.7	0.446
103	42.485	6.518	0.892	0.0000	0.1971	19.7	0.446
104	42.987	6.556	0.892	0.0000	0.1971	19.7	0.446
105	43.486	6.594	0.892	0.0000	0.1971	19.7	0.446
106	43.986	6.632	0.892	0.0000	0.1971	19.7	0.446
107	44.487	6.670	0.892	0.0000	0.1971	19.7	0.446
108	44.984	6.707	0.892	0.0000	0.1971	19.7	0.446
109	45.486	6.744	0.892	0.0000	0.1971	19.7	0.446
110	45.987	6.781	0.893	0.0000	0.1971	19.7	0.446
111	46.486	6.818	0.892	0.0000	0.1971	19.7	0.446
112	46.987	6.855	0.892	0.0000	0.1971	19.7	0.446
113	47.486	6.891	0.892	0.0000	0.1971	19.7	0.446
114	47.985	6.927	0.892	0.0000	0.1971	19.7	0.446
115	48.483	6.963	0.892	0.0000	0.1971	19.7	0.446
116	48.986	6.999	0.892	0.0000	0.1971	19.7	0.446
117	49.483	7.034	0.892	0.0000	0.1971	19.7	0.446
118	49.985	7.070	0.892	0.0000	0.1971	19.7	0.446
119	50.486	7.105	0.892	0.0000	0.1971	19.7	0.446
120	50.983	7.140	0.892	0.0000	0.1971	19.7	0.446
121	51.486	7.175	0.892	0.0000	0.1971	19.7	0.446
122	51.984	7.210	0.893	0.0000	0.1971	19.7	0.446
123	52.487	7.245	0.892	0.0000	0.1971	19.7	0.446
124	52.986	7.279	0.892	0.0000	0.1971	19.7	0.446
125	53.484	7.313	0.892	0.0000	0.1971	19.7	0.446
126	53.985	7.347	0.892	0.0000	0.1971	19.7	0.446
127	54.486	7.381	0.891	0.0000	0.1971	19.7	0.446
128	54.985	7.415	0.892	0.0000	0.1971	19.7	0.446
129	55.484	7.449	0.892	0.0000	0.1971	19.7	0.446
130	55.985	7.482	0.892	0.0000	0.1971	19.7	0.446
131	56.487	7.516	0.892	0.0000	0.1971	19.7	0.446
132	56.986	7.549	0.892	0.0000	0.1971	19.7	0.446
133	57.484	7.582	0.893	0.0000	0.1971	19.7	0.446
134	57.983	7.615	0.892	0.0000	0.1971	19.7	0.446
135	58.486	7.648	0.892	0.0000	0.1971	19.7	0.446
136	58.986	7.680	0.892	0.0000	0.1971	19.7	0.446
137	59.485	7.713	0.892	0.0000	0.1971	19.7	0.446
138	59.983	7.745	0.892	0.0000	0.1971	19.7	0.446
139	60.485	7.777	0.892	0.0000	0.1971	19.7	0.446
140	60.984	7.809	0.892	0.0000	0.1972	19.7	0.446
141	61.487	7.841	0.892	0.0000	0.1971	19.7	0.446
142	61.987	7.873	0.892	0.0000	0.1971	19.7	0.446
143	62.486	7.905	0.892	0.0000	0.1971	19.7	0.446
144	62.984	7.936	0.892	0.0000	0.1971	19.7	0.446
145	63.486	7.968	0.892	0.0000	0.1971	19.7	0.446
146	63.986	7.999	0.892	0.0000	0.1971	19.7	0.446
147	64.487	8.030	0.892	0.0000	0.1971	19.7	0.446
148	64.987	8.061	0.892	0.0000	0.1971	19.7	0.446
149	65.483	8.092	0.892	0.0000	0.1972	19.7	0.446
150	65.986	8.123	0.892	0.0000	0.1972	19.7	0.446

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
151	66.484	8.154	0.891	0.0000	0.1972	19.7	0.446
152	66.983	8.184	0.892	0.0000	0.1971	19.7	0.446
153	67.484	8.215	0.892	0.0000	0.1972	19.7	0.446
154	67.983	8.245	0.892	0.0000	0.1971	19.7	0.446
155	68.486	8.276	0.892	0.0000	0.1972	19.7	0.446
156	68.985	8.306	0.892	0.0000	0.1972	19.7	0.446
157	69.486	8.336	0.892	0.0000	0.1971	19.7	0.446
158	69.984	8.366	0.892	0.0000	0.1971	19.7	0.446
159	70.485	8.396	0.892	0.0000	0.1971	19.7	0.446
160	70.985	8.425	0.892	0.0000	0.1972	19.7	0.446
161	71.484	8.455	0.892	0.0000	0.1972	19.7	0.446
162	71.986	8.484	0.892	0.0000	0.1972	19.7	0.446
163	72.483	8.514	0.893	0.0000	0.1971	19.7	0.446
164	72.986	8.543	0.892	0.0000	0.1972	19.7	0.446
165	73.484	8.572	0.892	0.0000	0.1971	19.7	0.446
166	73.987	8.602	0.893	0.0000	0.1972	19.7	0.446
167	74.484	8.630	0.893	0.0000	0.1971	19.7	0.446
168	74.987	8.660	0.892	0.0000	0.1971	19.7	0.446
169	75.484	8.688	0.892	0.0000	0.1972	19.7	0.446
170	75.985	8.717	0.892	0.0000	0.1972	19.7	0.446
171	76.486	8.746	0.892	0.0000	0.1972	19.7	0.446
172	76.986	8.774	0.892	0.0000	0.1972	19.7	0.446
173	77.485	8.803	0.892	0.0000	0.1972	19.7	0.446
174	77.987	8.831	0.892	0.0000	0.1972	19.7	0.446
175	78.485	8.859	0.892	0.0000	0.1972	19.7	0.446
176	78.986	8.887	0.892	0.0000	0.1972	19.7	0.446
177	79.486	8.916	0.892	0.0000	0.1972	19.7	0.446
178	79.983	8.943	0.892	0.0000	0.1972	19.7	0.446
179	80.486	8.971	0.892	0.0000	0.1972	19.7	0.446
180	80.986	8.999	0.892	0.0000	0.1972	19.7	0.446
181	81.483	9.027	0.892	0.0000	0.1972	19.7	0.446
182	81.986	9.055	0.892	0.0000	0.1972	19.7	0.446
183	82.485	9.082	0.892	0.0000	0.1972	19.7	0.446
184	82.986	9.110	0.892	0.0000	0.1972	19.7	0.446
185	83.485	9.137	0.892	0.0000	0.1972	19.7	0.446
186	83.983	9.164	0.893	0.0000	0.1972	19.7	0.446
187	84.487	9.192	0.892	0.0000	0.1972	19.7	0.446
188	84.985	9.219	0.892	0.0000	0.1972	19.7	0.446
189	85.485	9.246	0.892	0.0000	0.1972	19.7	0.446
190	85.983	9.273	0.892	0.0000	0.1972	19.7	0.446
191	86.486	9.300	0.892	0.0000	0.1972	19.7	0.446
192	86.985	9.327	0.892	0.0000	0.1972	19.7	0.446
193	87.486	9.353	0.892	0.0000	0.1972	19.7	0.446
194	87.986	9.380	0.892	0.0000	0.1972	19.7	0.446
195	88.485	9.407	0.892	0.0000	0.1972	19.7	0.446
196	88.986	9.433	0.892	0.0000	0.1972	19.7	0.446
197	89.484	9.460	0.892	0.0000	0.1972	19.7	0.446
198	89.983	9.486	0.892	0.0000	0.1972	19.7	0.446
199	90.486	9.512	0.892	0.0000	0.1972	19.7	0.446
200	90.985	9.539	0.892	0.0000	0.1972	19.7	0.446

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
201	91.486	9.565	0.892	0.0000	0.1972	19.7	0.446
202	91.984	9.591	0.892	0.0000	0.1972	19.7	0.446
203	92.487	9.617	0.892	0.0000	0.1972	19.7	0.446
204	92.984	9.643	0.892	0.0000	0.1972	19.7	0.446
205	93.486	9.669	0.892	0.0000	0.1972	19.7	0.446
206	93.985	9.695	0.892	0.0000	0.1972	19.7	0.446
207	94.486	9.720	0.892	0.0000	0.1972	19.7	0.446
208	94.986	9.746	0.892	0.0000	0.1972	19.7	0.446
209	95.485	9.772	0.892	0.0000	0.1972	19.7	0.446
210	95.985	9.797	0.892	0.0000	0.1972	19.7	0.446
211	96.486	9.823	0.892	0.0000	0.1972	19.7	0.446
212	96.987	9.848	0.892	0.0000	0.1972	19.7	0.446
213	97.485	9.873	0.892	0.0000	0.1972	19.7	0.446
214	97.983	9.899	0.892	0.0000	0.1972	19.7	0.446
215	98.485	9.924	0.892	0.0000	0.1972	19.7	0.446
216	98.984	9.949	0.893	0.0000	0.1972	19.7	0.446
217	99.487	9.974	0.892	0.0000	0.1972	19.7	0.446
218	99.985	9.999	0.892	0.0000	0.1972	19.7	0.446
219	100.483	10.024	0.892	0.0000	0.1972	19.7	0.446
220	100.983	10.049	0.892	0.0000	0.1972	19.7	0.446
221	101.485	10.074	0.892	0.0000	0.1972	19.7	0.446
222	101.983	10.099	0.892	0.0000	0.1972	19.7	0.446
223	102.483	10.123	0.892	0.0000	0.1972	19.7	0.446
224	102.986	10.148	0.892	0.0000	0.1972	19.7	0.446
225	103.486	10.173	0.892	0.0000	0.1972	19.7	0.446
226	103.984	10.197	0.892	0.0000	0.1972	19.7	0.446
227	104.484	10.222	0.892	0.0000	0.1972	19.7	0.446
228	104.983	10.246	0.892	0.0000	0.1972	19.7	0.446
229	105.484	10.271	0.892	0.0000	0.1972	19.7	0.446
230	105.984	10.295	0.892	0.0000	0.1972	19.7	0.446
231	106.483	10.319	0.892	0.0000	0.1972	19.7	0.446
232	106.986	10.343	0.892	0.0000	0.1972	19.7	0.446
233	107.484	10.367	0.892	0.0000	0.1972	19.7	0.446
234	107.987	10.392	0.892	0.0000	0.1972	19.7	0.446
235	108.487	10.416	0.892	0.0000	0.1972	19.7	0.446
236	108.986	10.440	0.892	0.0000	0.1972	19.7	0.446
237	109.486	10.464	0.893	0.0000	0.1972	19.7	0.446
238	109.985	10.487	0.892	0.0000	0.1972	19.7	0.446
239	110.487	10.511	0.892	0.0000	0.1972	19.7	0.446
240	110.984	10.535	0.893	0.0000	0.1972	19.7	0.446
241	111.487	10.559	0.892	0.0000	0.1972	19.7	0.446
242	111.984	10.582	0.893	0.0000	0.1972	19.7	0.446
243	112.486	10.606	0.892	0.0000	0.1972	19.7	0.446
244	112.985	10.629	0.892	0.0000	0.1972	19.7	0.446
245	113.486	10.653	0.892	0.0000	0.1972	19.7	0.446
246	113.985	10.676	0.892	0.0000	0.1972	19.7	0.446
247	114.486	10.700	0.892	0.0000	0.1972	19.7	0.446
248	114.986	10.723	0.892	0.0000	0.1972	19.7	0.446
249	115.487	10.746	0.892	0.0000	0.1972	19.7	0.446
250	115.984	10.770	0.893	0.0000	0.1972	19.7	0.446

F&ME CONSULTANTS

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 16
Constant Load Step
Stress: 0.893 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
251	116.487	10.793	0.892	0.0000	0.1972	19.7	0.446
252	116.985	10.816	0.892	0.0000	0.1972	19.7	0.446
253	117.484	10.839	0.893	0.0000	0.1972	19.7	0.446
254	117.986	10.862	0.892	0.0000	0.1972	19.7	0.446
255	118.486	10.885	0.892	0.0000	0.1972	19.7	0.446
256	118.984	10.908	0.892	0.0000	0.1972	19.7	0.446
257	119.487	10.931	0.892	0.0000	0.1972	19.7	0.446
258	119.985	10.954	0.892	0.0000	0.1972	19.7	0.446
259	120.002	10.955	0.892	0.0000	0.1972	19.7	0.446

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

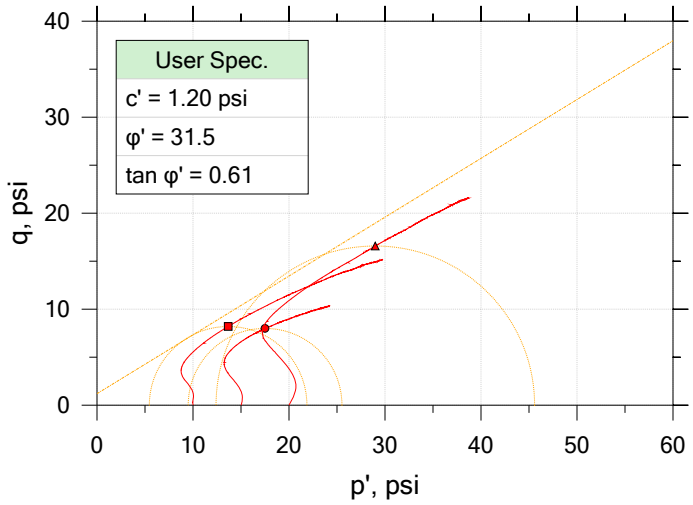
One-Dimensional Consolidation by ASTM D2435 - Method B

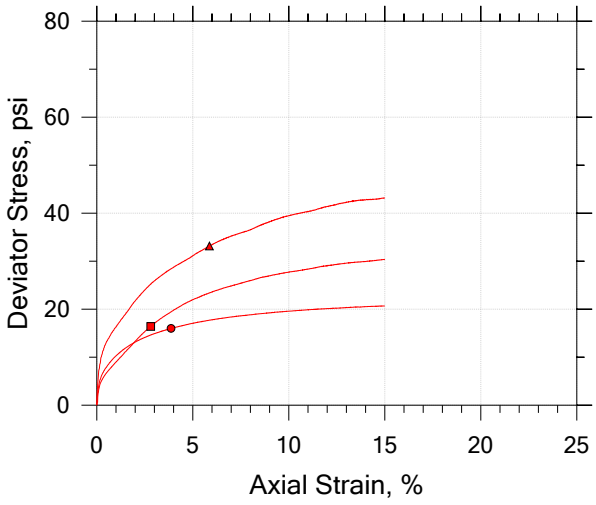
Time Curve 12 of 16
Constant Load Step
Stress: 1.79 tsf

	Elpased Time min	Sq.Rt. of Time min	Stress tsf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
1	-0.019		0.892	0.0000	0.1972	19.7	0.446
2	-0.014		0.892	0.0000	0.1972	19.7	0.446
3	-0.010		1.07	0.0000	0.1974	19.7	0.445
4	-0.006		1.41	0.0000	0.1978	19.8	0.445
5	-0.001		1.64	0.0000	0.1982	19.8	0.444
6	0.000	0.000	1.70	0.0000	0.1983	19.8	0.444
7	0.003	0.054	1.82	0.0000	0.1985	19.9	0.443
8	0.007	0.085	1.79	0.0000	0.1986	19.9	0.443
9	0.011	0.107	1.76	0.0000	0.1986	19.9	0.443
10	0.016	0.125	1.75	0.0000	0.1986	19.9	0.443
11	0.020	0.141	1.76	0.0000	0.1986	19.9	0.443
12	0.024	0.156	1.77	0.0000	0.1987	19.9	0.443
13	0.029	0.170	1.78	0.0000	0.1987	19.9	0.443
14	0.033	0.181	1.78	0.0000	0.1988	19.9	0.443
15	0.037	0.193	1.78	0.0000	0.1988	19.9	0.443
16	0.041	0.203	1.77	0.0000	0.1988	19.9	0.443
17	0.059	0.242	1.78	0.0000	0.1989	19.9	0.443
18	0.068	0.260	1.78	0.0000	0.1989	19.9	0.443
19	0.150	0.387	1.79	0.0000	0.1993	19.9	0.442
20	0.233	0.483	1.78	0.0000	0.1994	19.9	0.442
21	0.316	0.562	1.78	0.0000	0.1995	20.0	0.442
22	0.485	0.697	1.79	0.0000	0.1997	20.0	0.441
23	0.734	0.857	1.79	0.0000	0.1999	20.0	0.441
24	0.982	0.991	1.79	0.0000	0.2000	20.0	0.441
25	1.483	1.218	1.79	0.0000	0.2001	20.0	0.441
26	2.484	1.576	1.79	0.0000	0.2005	20.1	0.440
27	4.483	2.117	1.79	0.0000	0.2008	20.1	0.439
28	4.981	2.232	1.79	0.0000	0.2008	20.1	0.439
29	5.485	2.342	1.78	0.0000	0.2008	20.1	0.439
30	5.983	2.446	1.79	0.0000	0.2008	20.1	0.439
31	6.482	2.546	1.78	0.0000	0.2008	20.1	0.439
32	6.982	2.642	1.79	0.0000	0.2009	20.1	0.439
33	7.482	2.735	1.78	0.0000	0.2009	20.1	0.439
34	7.981	2.825	1.79	0.0000	0.2009	20.1	0.439
35	8.483	2.913	1.79	0.0000	0.2009	20.1	0.439
36	8.984	2.997	1.78	0.0000	0.2009	20.1	0.439
37	9.485	3.080	1.79	0.0000	0.2009	20.1	0.439
38	9.981	3.159	1.79	0.0000	0.2010	20.1	0.439
39	10.485	3.238	1.79	0.0000	0.2010	20.1	0.439
40	10.983	3.314	1.79	0.0000	0.2010	20.1	0.439
41	11.485	3.389	1.79	0.0000	0.2010	20.1	0.439
42	11.985	3.462	1.79	0.0000	0.2010	20.1	0.439
43	12.483	3.533	1.79	0.0000	0.2010	20.1	0.439
44	12.982	3.603	1.78	0.0000	0.2010	20.1	0.439
45	13.484	3.672	1.79	0.0000	0.2010	20.1	0.439
46	13.983	3.739	1.79	0.0000	0.2010	20.1	0.439
47	14.482	3.806	1.79	0.0000	0.2010	20.1	0.439
48	14.985	3.871	1.79	0.0000	0.2010	20.1	0.439
49	15.483	3.935	1.78	0.0000	0.2011	20.1	0.439
50	15.985	3.998	1.78	0.0000	0.2011	20.1	0.439

Project: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project No.: G6400.200
Boring No.: RW-1U	Tested By: WP/RC	Checked By: WP/WG
Sample No.: 23-3537	Test Date: 10/27/2023	Depth: 13.0' - 17.0'
Test No.: ST-1.A	Sample Type: Undisturbed	Elevation: --
Description: Sandy Lean CLAY (CL/A-7-6)	LL=43, PL=21, PI=22, %200=61.3	
Remarks: Sample was very moist		

Consolidated Undrained by AASHTO T297





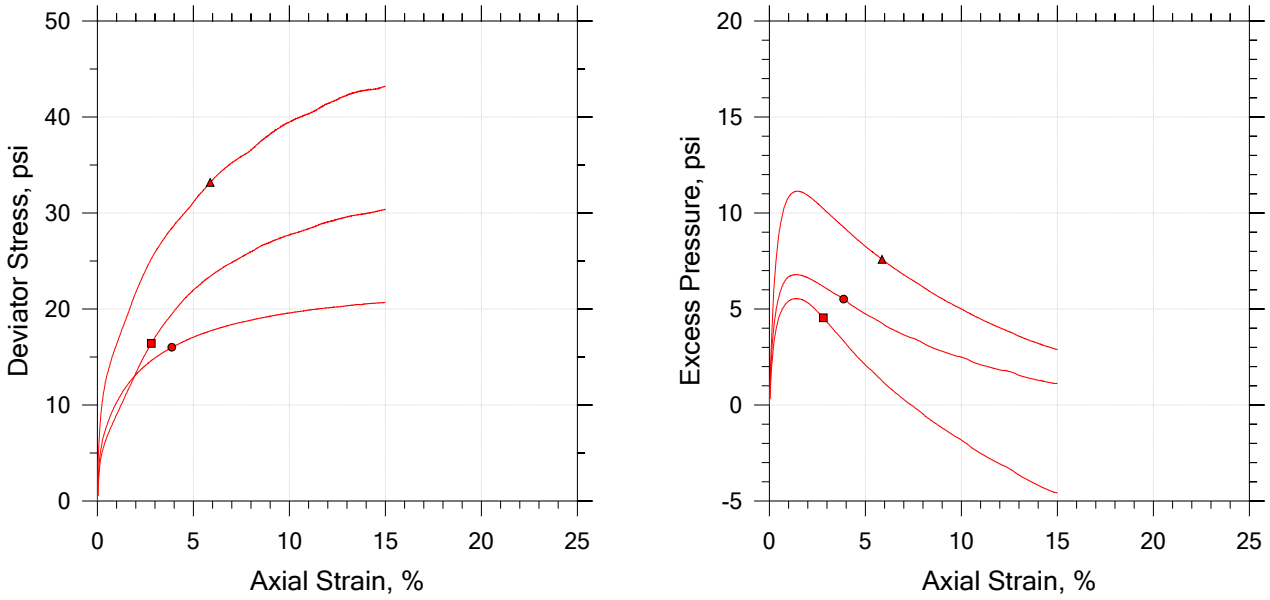
Symbol		■	●	▲
Sample ID		23-3537	23-3537	23-3537
Depth		13.0' - 17.0'	13.0' - 17.0'	13.0' - 17.0'
Test Number		ST-1.C	ST-1.D	ST-2.D
Initial	Height, in	6.152	6.149	6.051
	Diameter, in	2.848	2.853	2.841
	Moisture Content (from Cuttings), %	23.6	23.6	19.6
	Dry Density, pcf	106.	104.	105.
	Saturation (Wet Method), %	109.4	104.8	88.1
	Void Ratio	0.577	0.603	0.597
Final	Moisture Content, %	20.2	21.0	20.7
	Dry Density, pcf	109.	107.	108.
	Cross-Sectional Area (Method A), in²	6.279	6.285	6.219
	Saturation, %	100.0	100.0	100.0
	Void Ratio	0.542	0.563	0.554
	Back Pressure, psi	71.00	52.99	92.00
Vertical Effective Consolidation Stress, psi		9.980	14.96	19.96
Horizontal Effective Consolidation Stress, psi		9.997	15.01	19.99
Vertical Strain after Consolidation, %		0.6948	0.8982	0.6773
Volumetric Strain after Consolidation, %		1.904	2.733	2.280
Time to 50% Consolidation, min		0.9000	1.200	0.4000
Shear Strength, psi		8.208	8.009	16.59
Strain at Failure, %		2.81	3.87	5.87
Strain Rate, %/min		0.05000	0.05000	0.05000
Deviator Stress at Failure, psi		16.42	16.02	33.19
Effective Minor Principal Stress at Failure, psi		5.450	9.491	12.39
Effective Major Principal Stress at Failure, psi		21.87	25.51	45.58
B-Value		0.95	0.95	0.96

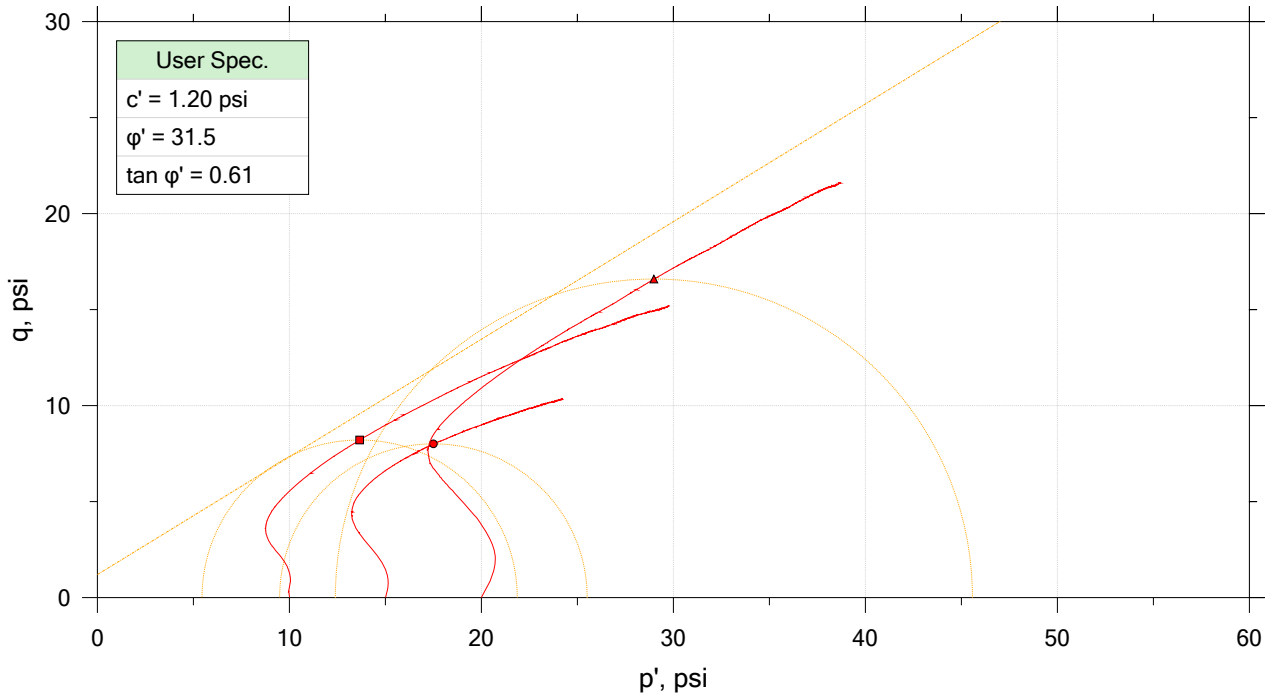
Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

F&ME CONSULTANTS

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

Consolidated Undrained by AASHTO T297

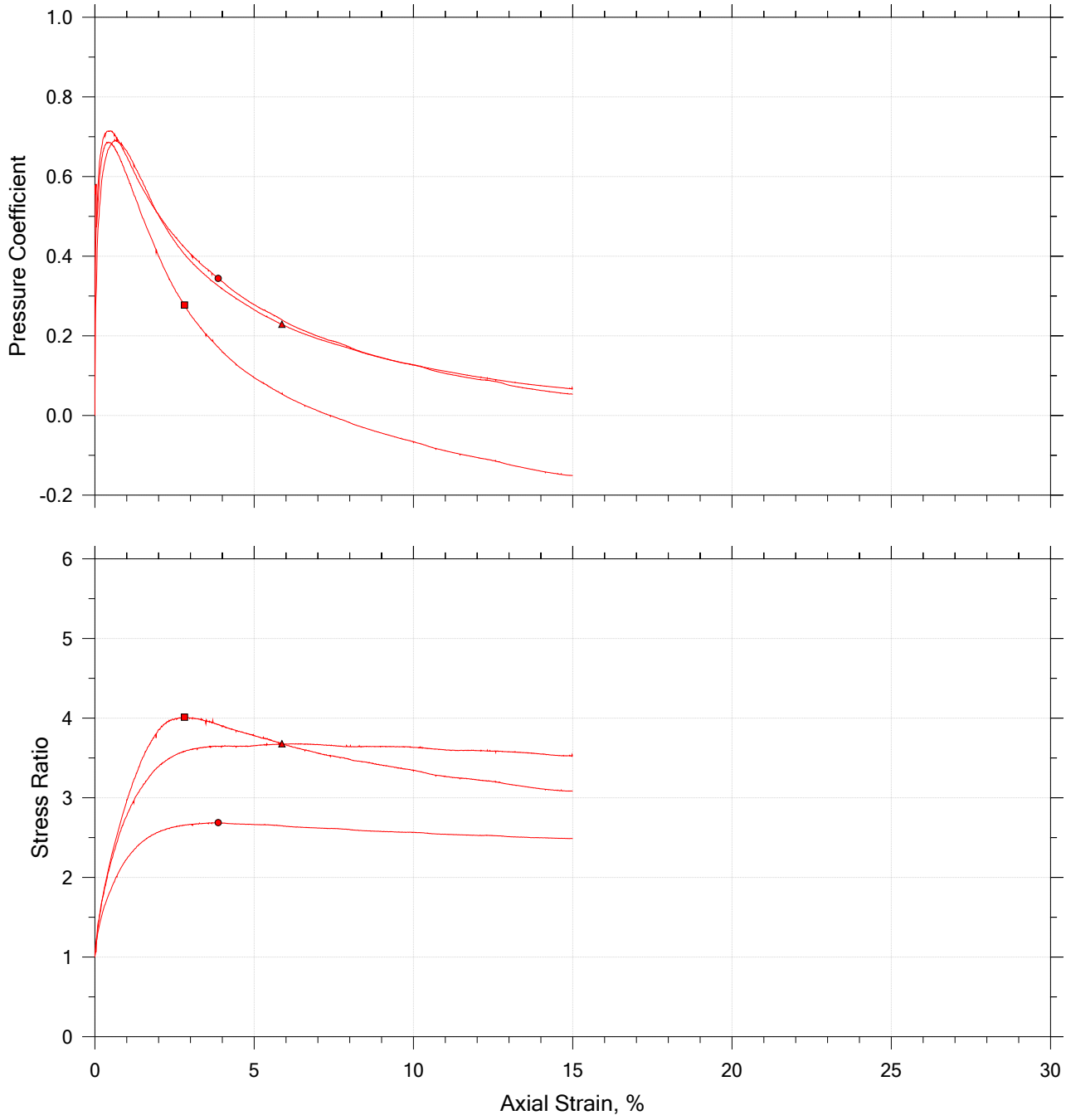




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3537	ST-1.C	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.C_Test_A.dat
●	23-3537	ST-1.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.D_Test B.dat
▲	23-3537	ST-2.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-2.D_Test C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

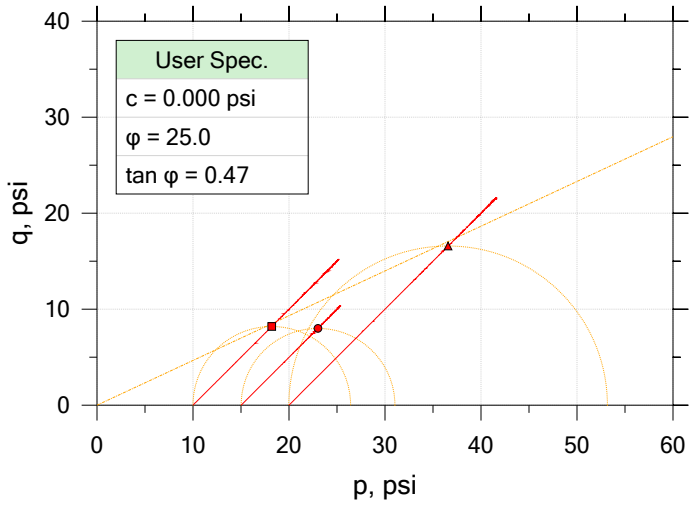
Consolidated Undrained by AASHTO T297

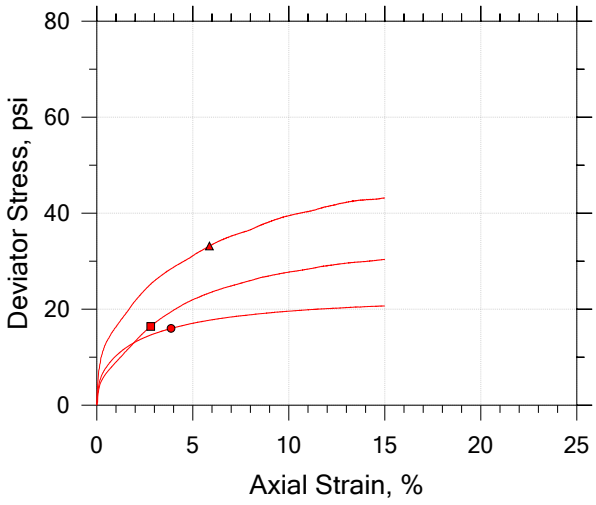


	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3537	ST-1.C	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.C_Test_A.dat
●	23-3537	ST-1.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.D_Test B.dat
▲	23-3537	ST-2.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-2.D_Test C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

Consolidated Undrained by AASHTO T297





Symbol		■	●	▲	
Sample ID		23-3537	23-3537	23-3537	
Depth		13.0' - 17.0'	13.0' - 17.0'	13.0' - 17.0'	
Test Number		ST-1.C	ST-1.D	ST-2.D	
Initial	Height, in	6.152	6.149	6.051	
	Diameter, in	2.848	2.853	2.841	
	Moisture Content (from Cuttings), %	23.6	23.6	19.6	
	Dry Density, pcf	106.	104.	105.	
	Saturation (Wet Method), %	109.4	104.8	88.1	
	Void Ratio	0.577	0.603	0.597	
Final	Moisture Content, %	20.2	21.0	20.7	
	Dry Density, pcf	109.	107.	108.	
	Cross-Sectional Area (Method A), in²	6.279	6.285	6.219	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	0.542	0.563	0.554	
	Back Pressure, psi	71.00	52.99	92.00	
Vertical Effective Consolidation Stress, psi		9.980	14.96	19.96	
Horizontal Effective Consolidation Stress, psi		9.997	15.01	19.99	
Vertical Strain after Consolidation, %		0.6948	0.8982	0.6773	
Volumetric Strain after Consolidation, %		1.904	2.733	2.280	
Time to 50% Consolidation, min		0.9000	1.200	0.4000	
Shear Strength, psi		8.208	8.009	16.59	
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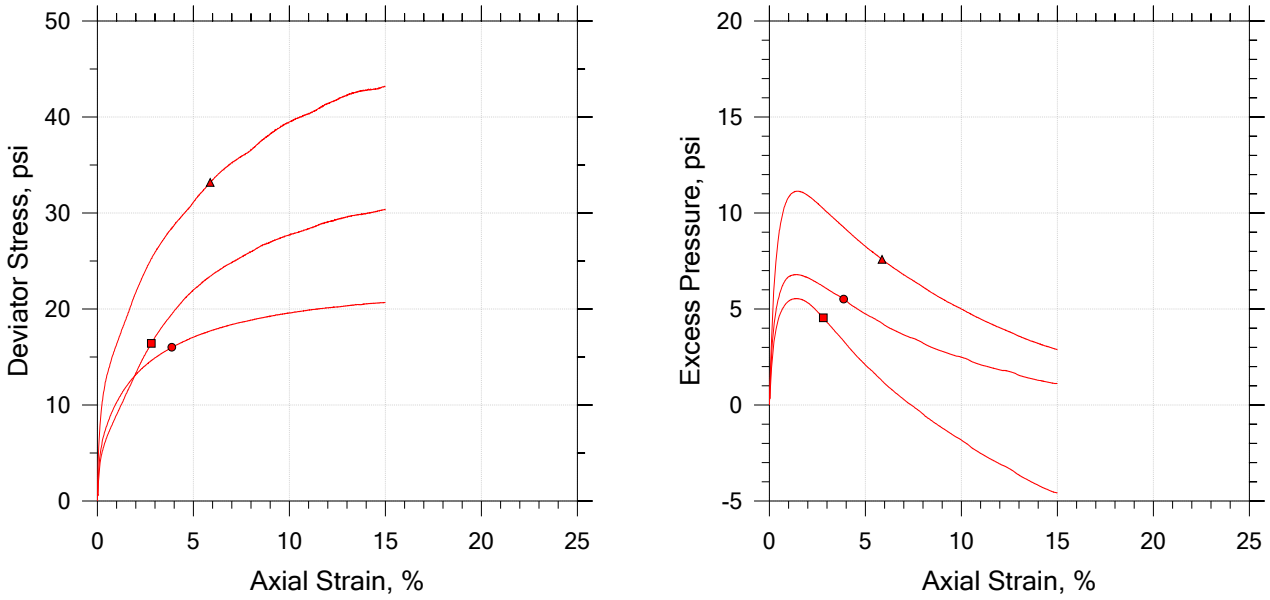
B-Value		0.95	0.95	0.96	

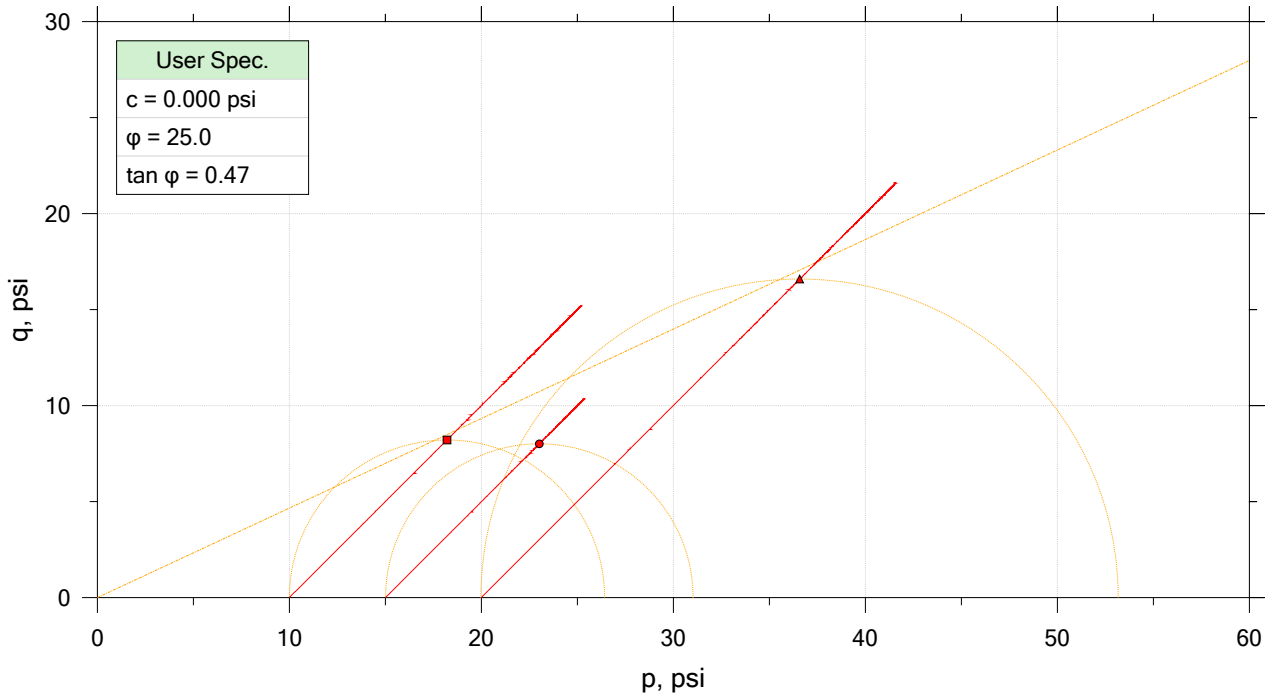
Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

F&ME CONSULTANTS

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

Consolidated Undrained by AASHTO T297

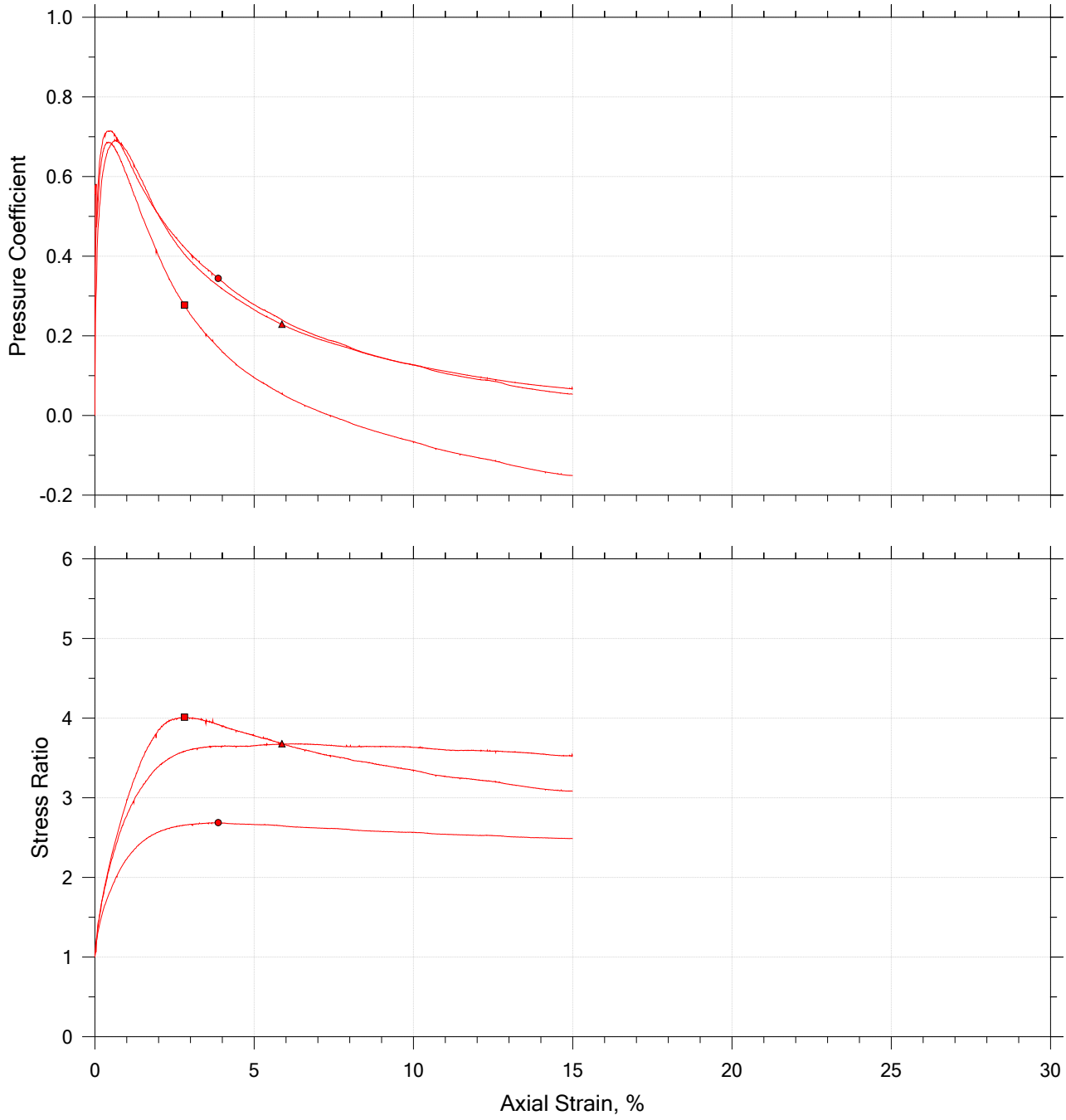




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3537	ST-1.C	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.C_Test_A.dat
●	23-3537	ST-1.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.D_Test B.dat
▲	23-3537	ST-2.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-2.D_Test C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

Consolidated Undrained by AASHTO T297



	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3537	ST-1.C	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-1.C_Test_A.dat
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▲	23-3537	ST-2.D	13.0' - 17.0'	RMC	10/30/2023	WAP/ WJG	11/6/2023	G6400.200_RW-1U_ST-2.D_Test C.dat

F&ME CONSULTANTS

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: RW-1U	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3537	Test Date: 10/30/2023	Depth: 13.0' - 17.0'
Test Number: ABC	Preparation: Undisturbed	Elevation:
Description: VARIOUS, See Logs		
Remarks:		

APPENDIX

SECTION 5 LABORATORY TEST RESULTS

SECTION 5C BULK SAMPLES

SUMMARY OF LABORATORY RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

Boring No.	Sample Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index	%<#200 Sieve	Soil Classification	Desired % Compaction	% Compaction	Shrink/ Swell %	0.1-in. CBR	0.2-in. CBR
BS-1 @ RW-1	0.0 – 4.0	22	17	5	34.4	SC-SM	90.0	90.9	0.3	3.4	2.5
BS-1 @ RW-1	0.0 – 4.0	22	17	5	34.4	SC-SM	95.0	95.2	0.3	11.1	11.1
BS-1 @ RW-1	0.0 – 4.0	22	17	5	34.4	SC-SM	100.0	100.3	0.3	12.3	17.3
BS-2 @ RW-2	0.0 – 4.0	18	17	1	10.2	SM	90.0	90.1	0.3	5.4	4.4
BS-2 @ RW-2	0.0 – 4.0	18	17	1	10.2	SM	95.0	91.0	0.3	5.7	5.5
BS-2 @ RW-2	0.0 – 4.0	18	17	1	10.2	SM	100.0	100.5	0.3	15.0	19.0

SUMMARY OF LABORATORY RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

Boring No.	Sample Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index	%<#200 Sieve	Soil Classifi-cation	Moisture Content (%)	Max Dry Density (PCF)	Optimum Moisture Content (%)	C (psi)	ϕ (Degrees)	C' (psi)	ϕ' (Degrees)
BS-2 @ B-2	0.0 – 4.0	NP	NP	NP	36.4	SM	12.6	118.1	12.0	2.1	17.0	0.3	35.8

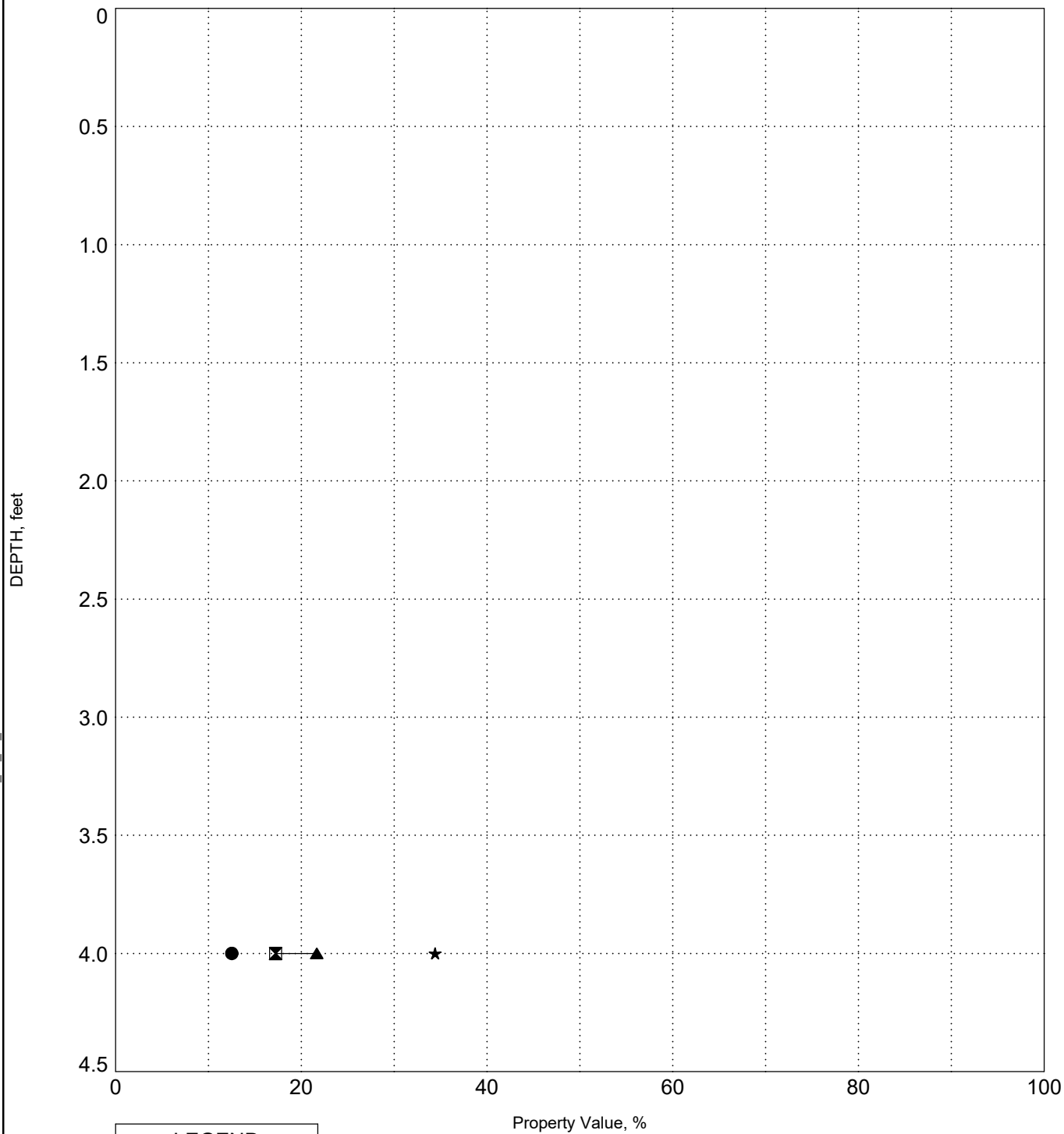
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING BS-1 @ RW-1

SURFACE ELEVATION: 28.6



F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT: US 21/US 17A over CSX RR **SCDOT PROJECT No.:** P042942

SAMPLE NUMBER: 23-3482 **DATE SAMPLE RECEIVED:** 10/19/2023

DESCRIPTION OF SOIL: SILTY, CLAYEY SAND (SC-SM/A-2-4)

TESTED BY: LG **DATE SETUP:** 10/20/2023

WEIGHED BY: TW **DATE OF WEIGHING:** 10/22/2023

BORING NO.	BS-1 @ RW-1				
SAMPLE NO.	--				
SAMPLE DEPTH (FT.)	0.0 - 4.0				
WATER CONTENT, W%	12.5				

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

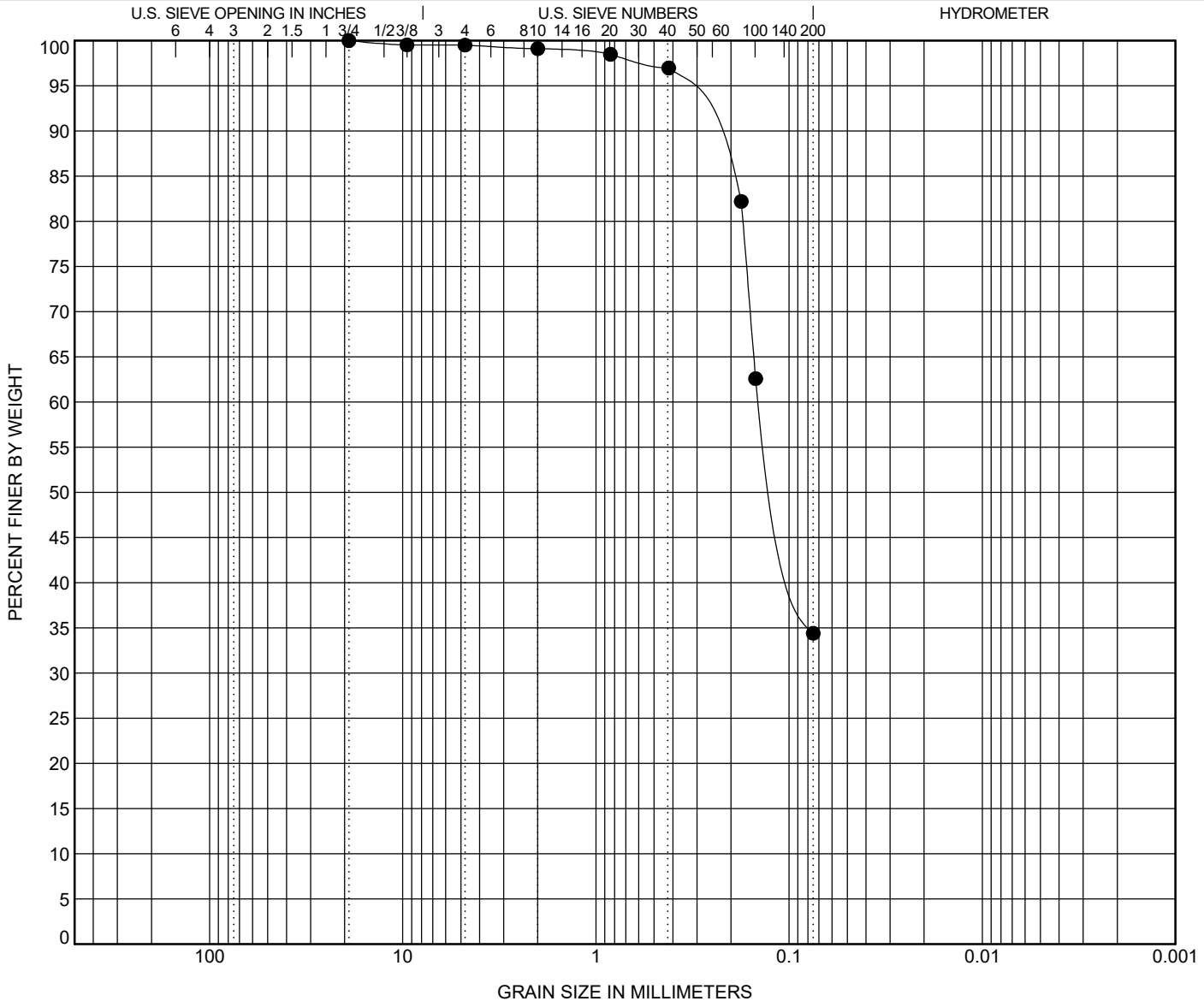
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

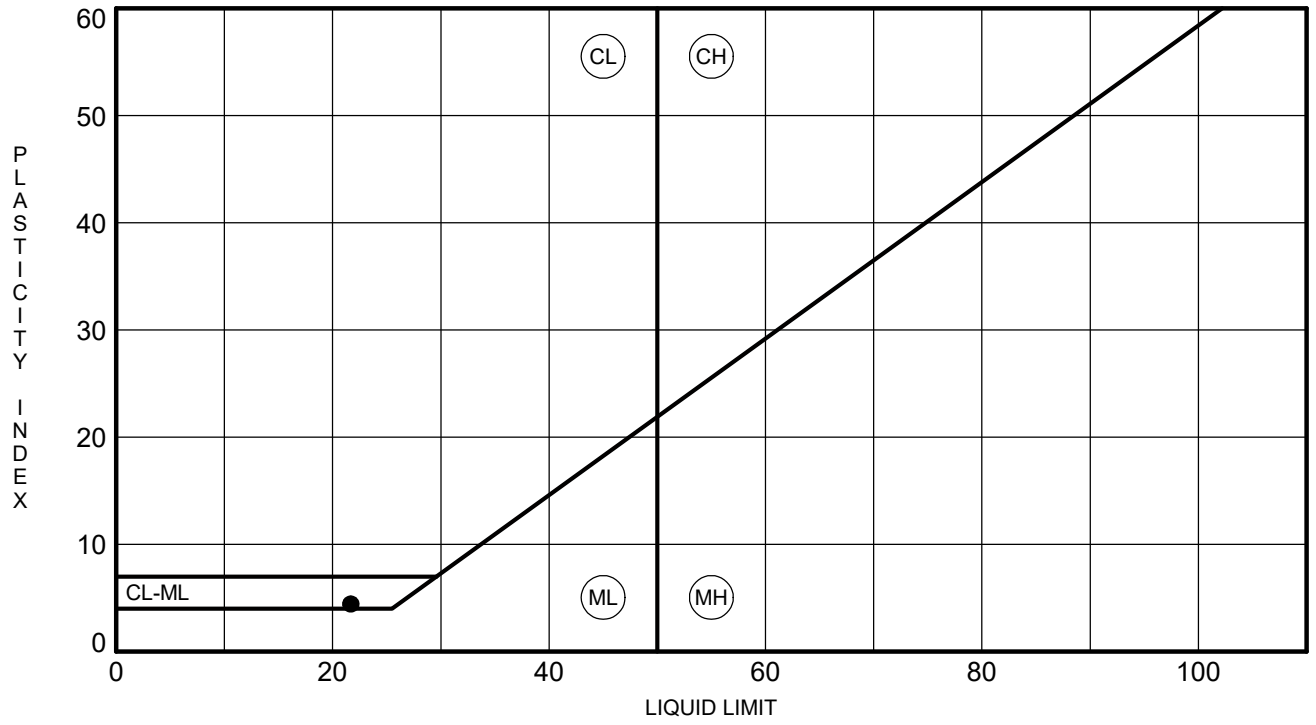
	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**BS-1 @ RW-1**	**4.0**	**SILTY, CLAYEY SAND (SC-SM/A-2-4)**	**22**	**17**	**5**		

	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BS-1 @ RW-1**	**4.0**	**19**	**0.14**			**0.5**	**65.1**	**34.4**	

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

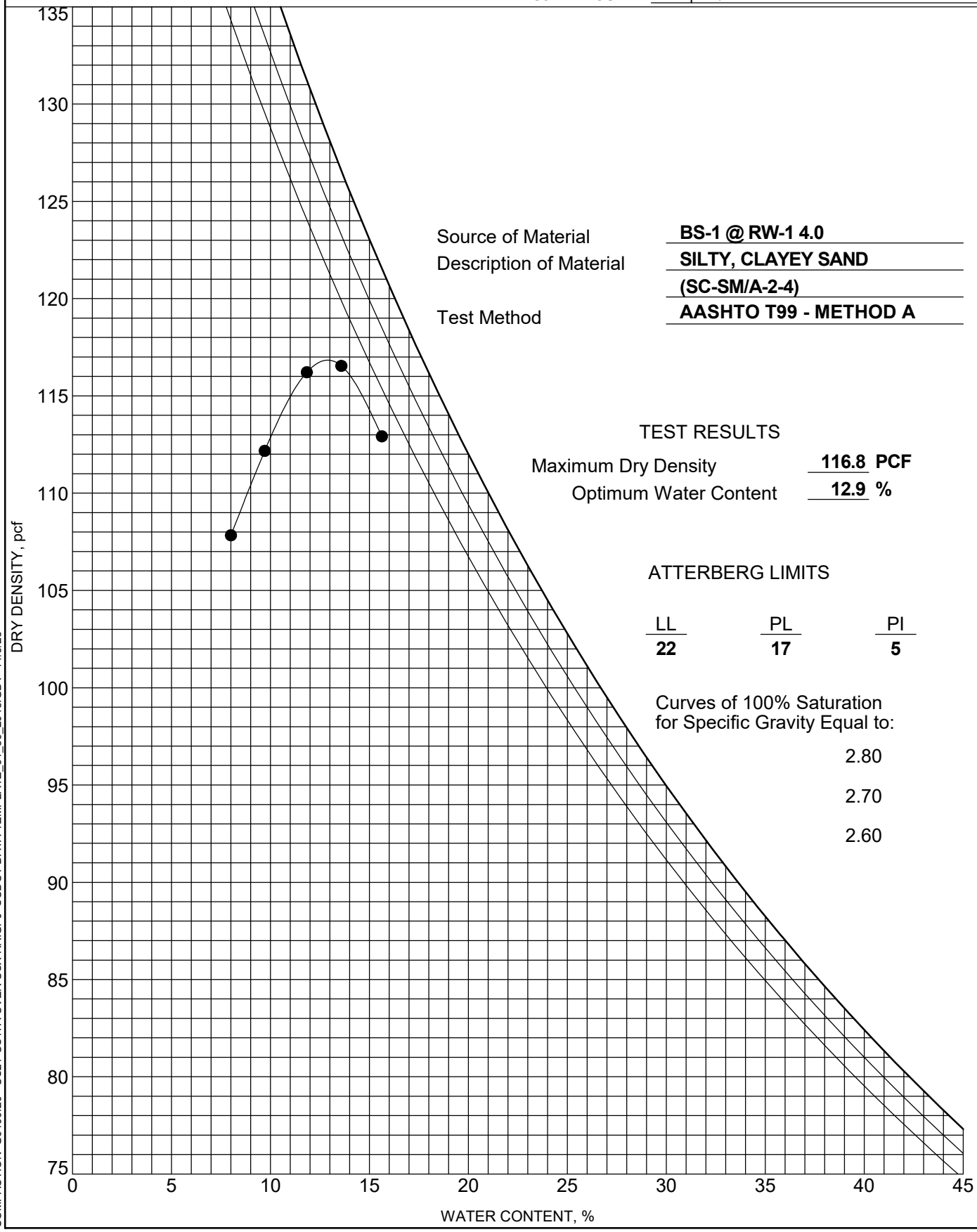


	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**BS-1 @ RW-1**	**4.0**	**22**	**17**	**5**	**34**	**SILTY, CLAYEY SAND (SC-SM/A-2-4)**

MOISTURE-DENSITY RELATIONSHIP

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



Source of Material **BS-1 @ RW-1 4.0**

Description of Material **SILTY, CLAYEY SAND (SC-SM/A-2-4)**

Test Method **AASHTO T99 - METHOD A**

TEST RESULTS

Maximum Dry Density **116.8** **PCF**

Optimum Water Content **12.9** **%**

ATTERBERG LIMITS

LL	PL	PI
22	**17**	**5**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/6/23

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

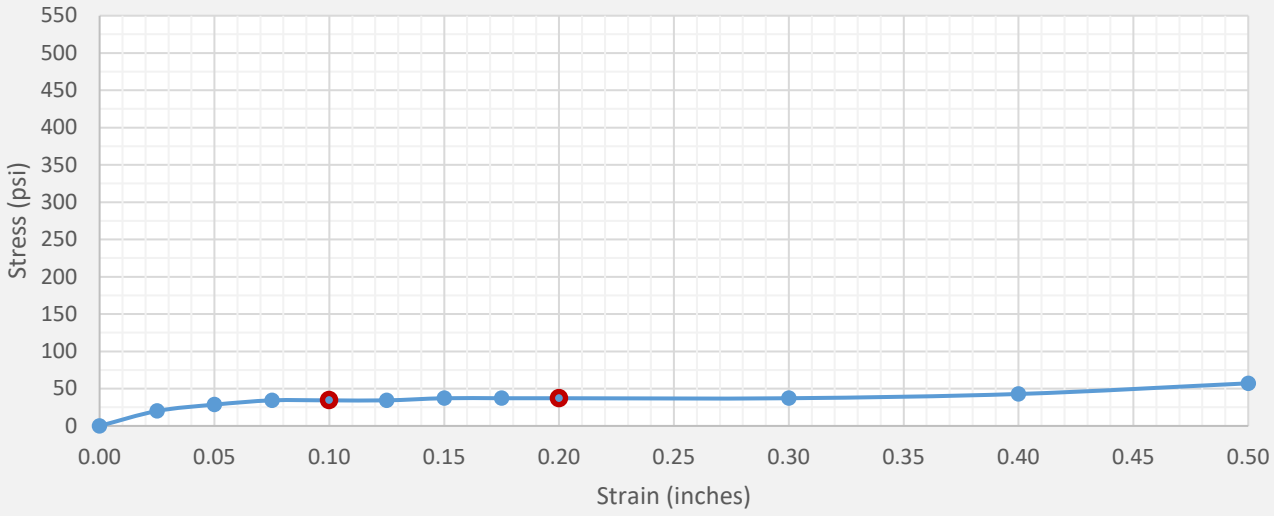
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-1 @ RW-1			FME Lab ID	23-3484
Soil Description	Silty, Clayey SAND (SC-SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	116.8	Optimum Moisture Content (%)	12.9
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
3.4	**2.5**



Before Soaking	
Dry Density (lb/ft^3)	106.2
Moisture Content	12.7%
Percent Compaction	90.9%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	108.0
Moisture Content (Top 1")	14.8%
Percent Compaction	92.5%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 90%

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F&ME Consultants, Inc.

211 Business Park Blvd., Columbia, South Carolina 29203

Reviewed By

11/3/23
Date

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

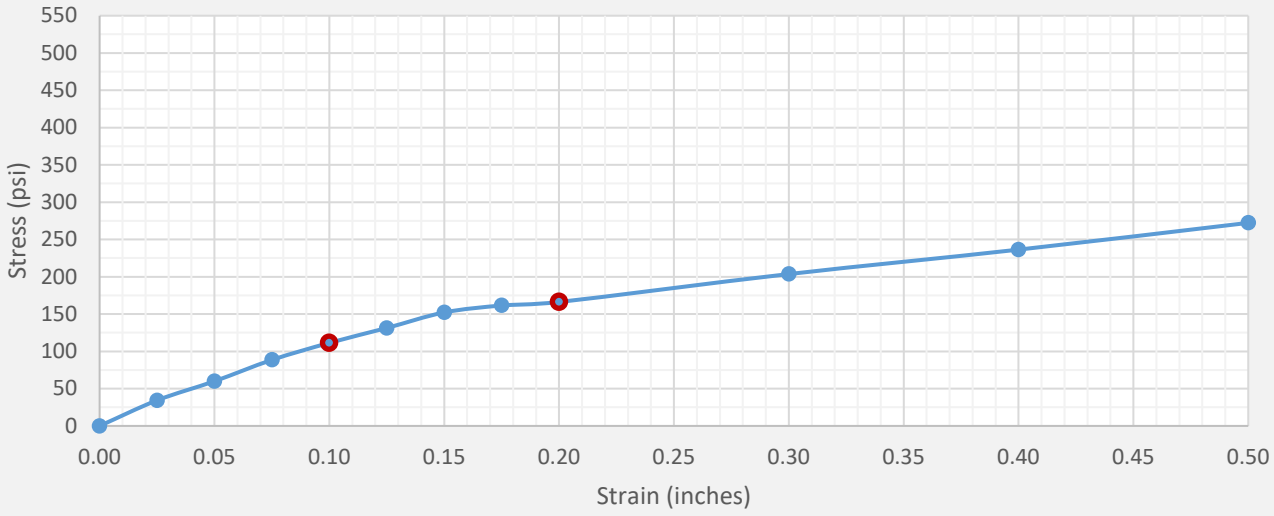
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-1 @ RW-1			FME Lab ID	23-3484
Soil Description	Silty, Clayey SAND (SC-SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	116.8	Optimum Moisture Content (%)	12.9
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
11.1	**11.1**



Before Soaking	
Dry Density (lb/ft^3)	111.2
Moisture Content	12.6%
Percent Compaction	95.2%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	112.0
Moisture Content (Top 1")	14.7%
Percent Compaction	95.9%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 95%

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F&ME Consultants, Inc.

211 Business Park Blvd., Columbia, South Carolina 29203

Reviewed By

11/3/23
Date

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

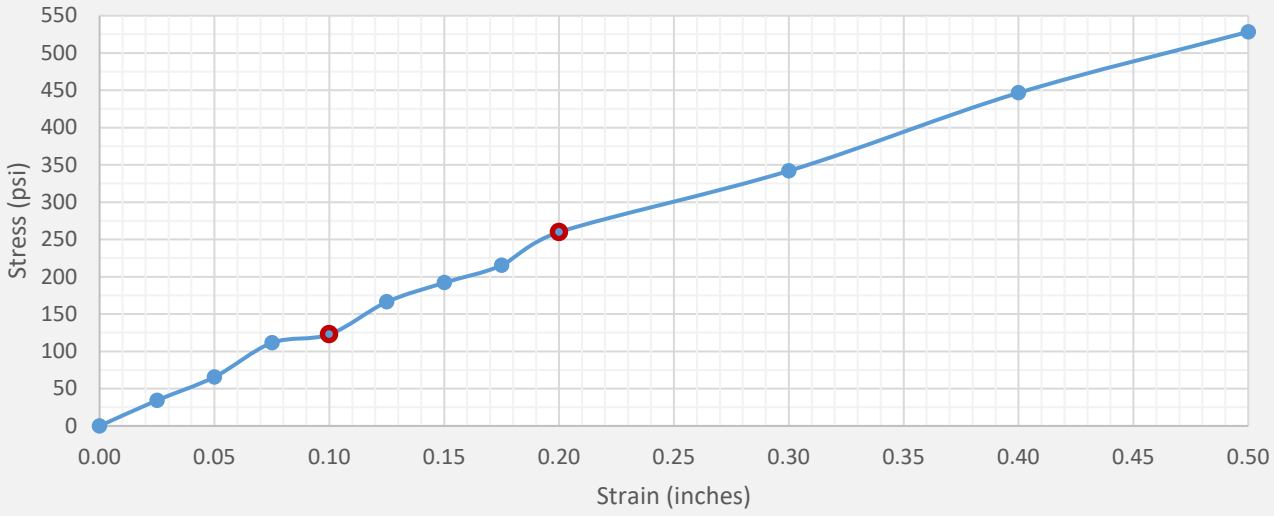
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-1 @ RW-1			FME Lab ID	23-3484
Soil Description	Silty, Clayey SAND (SC-SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	116.8	Optimum Moisture Content (%)	12.9
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
12.3	**17.3**



Before Soaking	
Dry Density (lb/ft^3)	117.2
Moisture Content	12.7%
Percent Compaction	100.3%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	118.3
Moisture Content (Top 1")	13.7%
Percent Compaction	101.3%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 100%

F&ME CONSULTANTS

F&ME Consultants, Inc.

211 Business Park Blvd., Columbia, South Carolina 29203

Reviewed By

11/3/23
Date

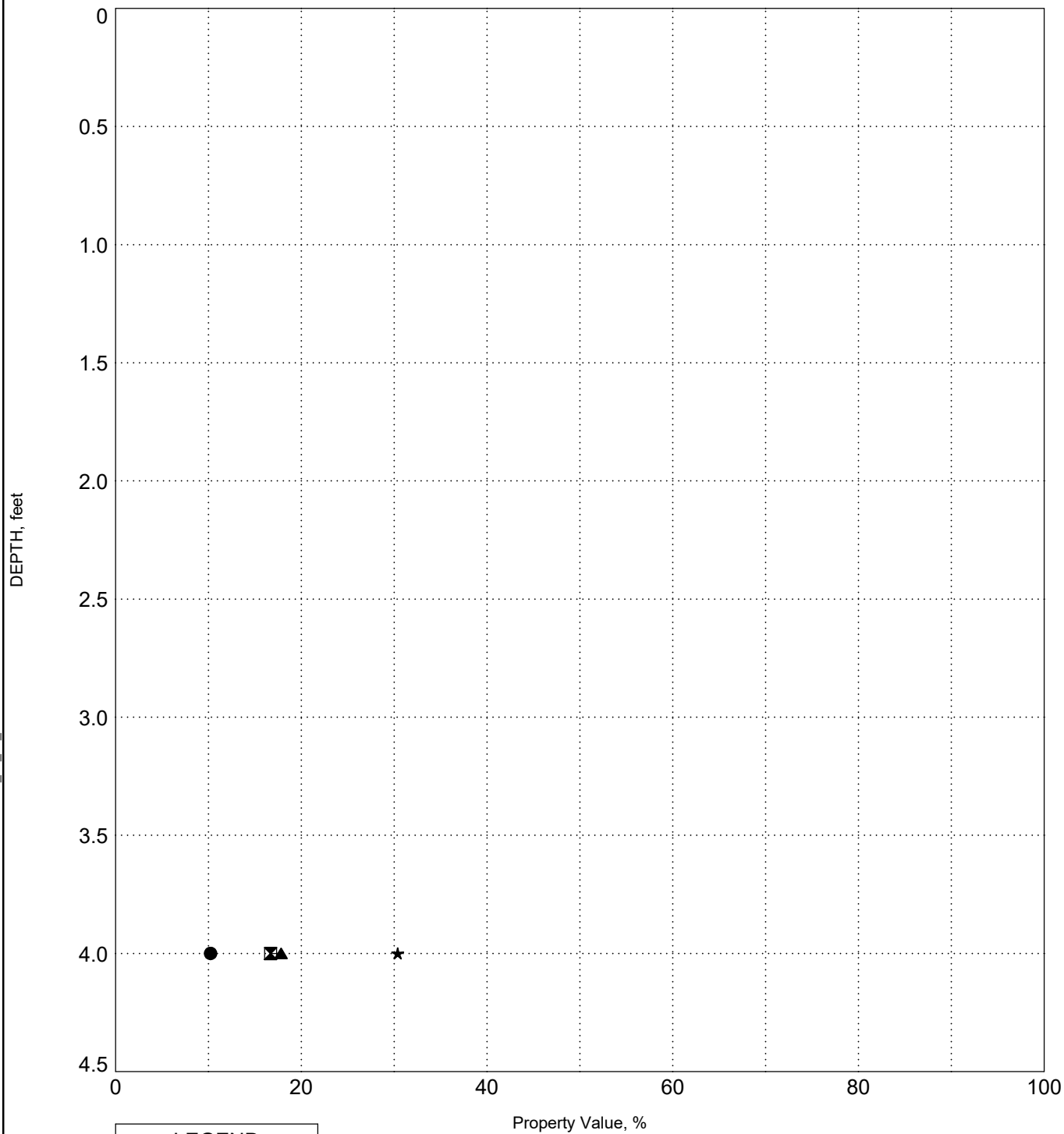
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING BS-3 @ RW-2

SURFACE ELEVATION: 28.9



LEGEND
● Water Content
⊠ Plastic Limit
▲ Liquid Limit
★ Fines

INDEX PROPS G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/6/23

F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT:	US 21/US 17A over CSX RR	**SCDOT PROJECT No.:**	P042942
SAMPLE NUMBER:	23-3482	**DATE SAMPLE RECEIVED:**	10/19/2023
DESCRIPTION OF SOIL:	SILTY SAND (SM/A-2-4)		
TESTED BY:	LG	**DATE SETUP:**	10/20/2023
WEIGHED BY:	TW	**DATE OF WEIGHING:**	10/22/2023

BORING NO.	BS-3 @ RW-2				
SAMPLE NO.	--				
SAMPLE DEPTH (FT.)	0.0 - 4.0				
WATER CONTENT, W%	10.2				

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

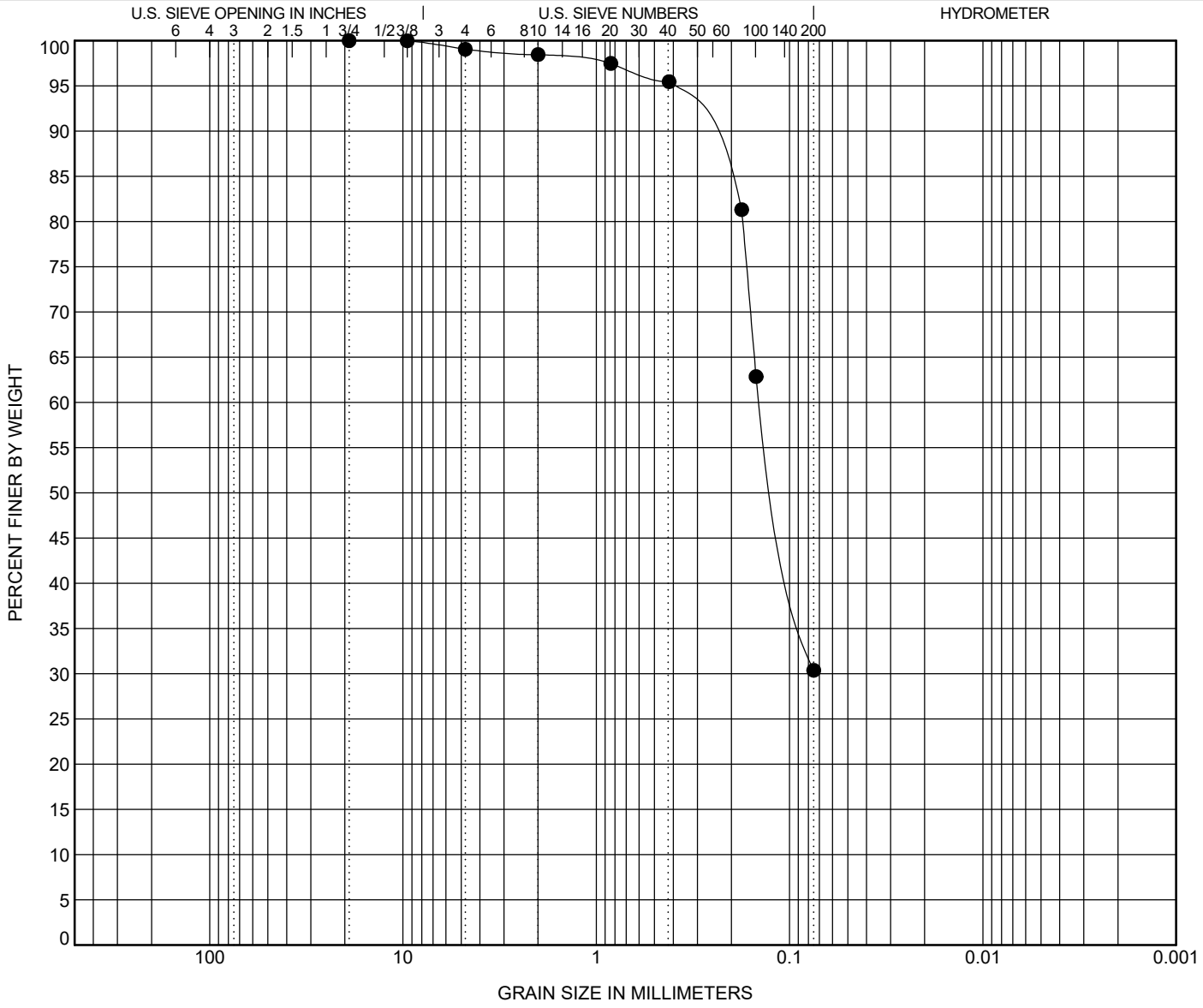
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● **BS-3 @ RW-2**	**4.0**	**SILTY SAND (SM/A-2-4)**	**18**	**17**	**1**		

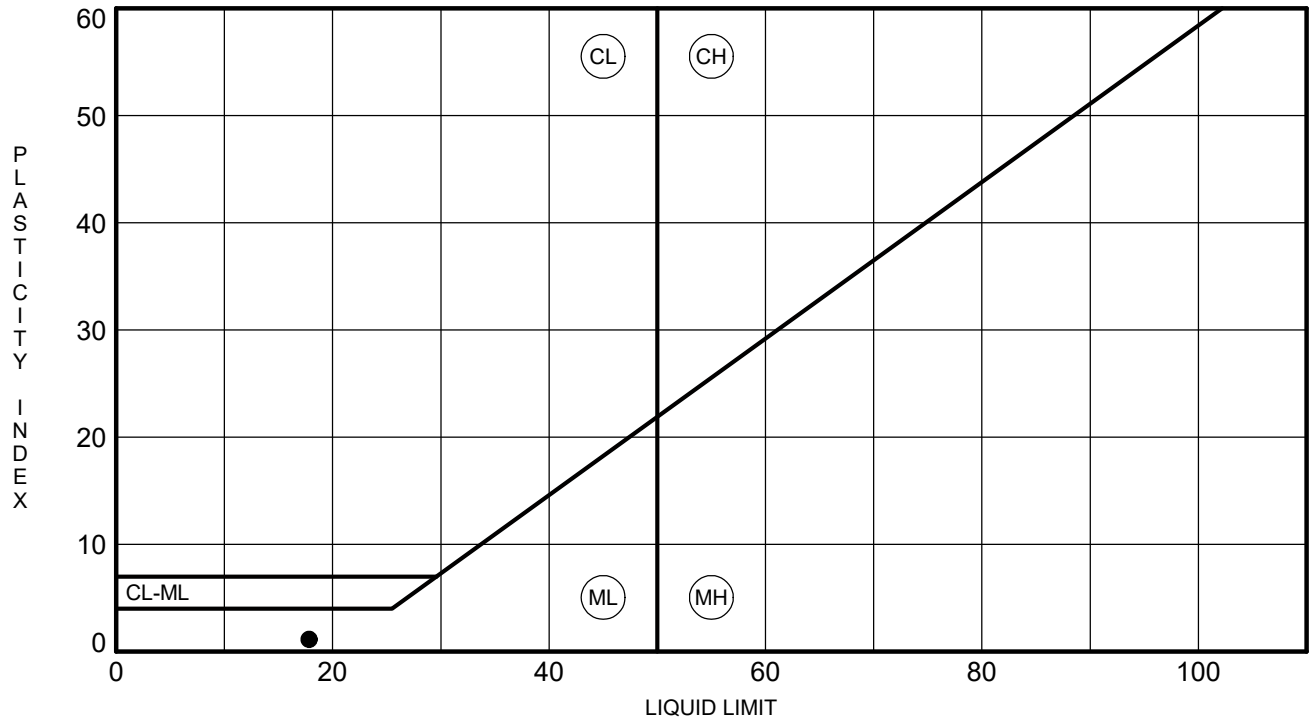
BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **BS-3 @ RW-2**	**4.0**	**19**	**0.14**			**0.9**	**68.7**	**30.4**	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/31/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

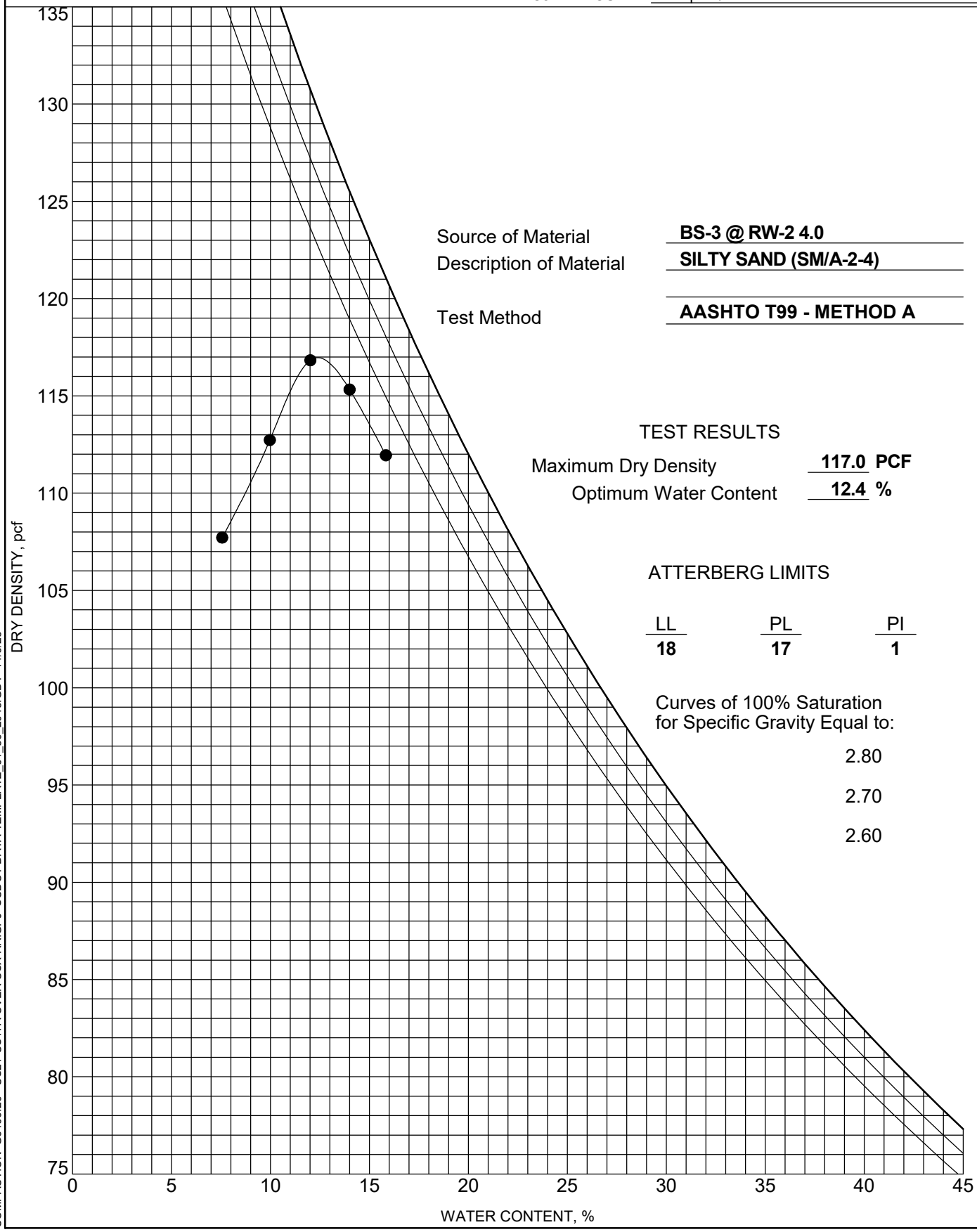


	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**BS-3 @ RW-2**	**4.0**	**18**	**17**	**1**	**30**	**SILTY SAND (SM/A-2-4)**

MOISTURE-DENSITY RELATIONSHIP

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



Source of Material **BS-3 @ RW-2 4.0**

Description of Material **SILTY SAND (SM/A-2-4)**

Test Method **AASHTO T99 - METHOD A**

TEST RESULTS

Maximum Dry Density **117.0 PCF**

Optimum Water Content **12.4 %**

ATTERBERG LIMITS

LL	PL	PI
18	**17**	**1**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 11/6/23

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

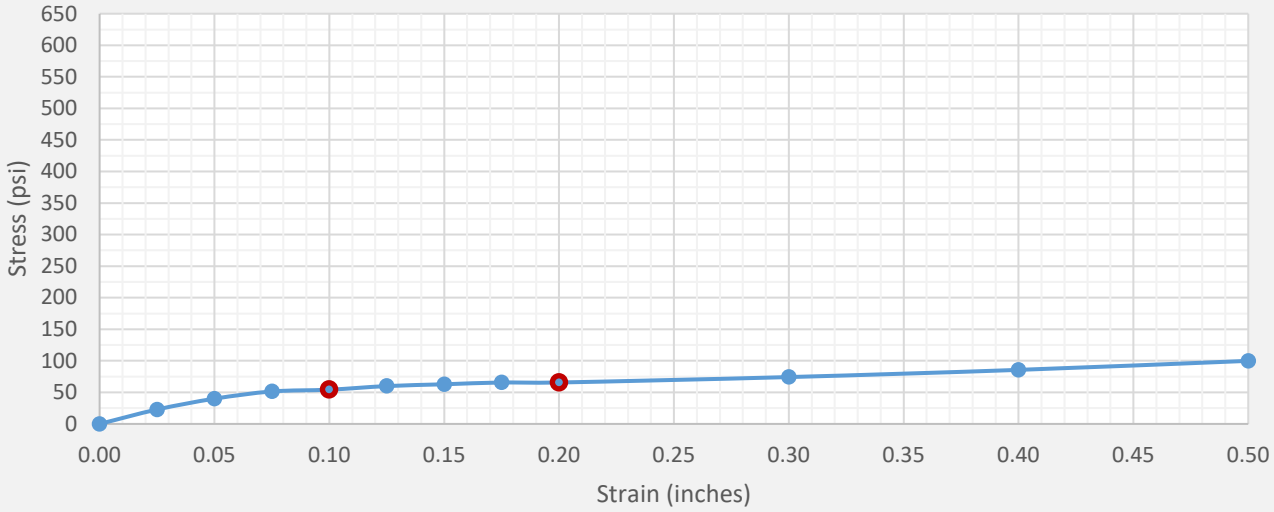
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-3 @ RW-2			FME Lab ID	23-3485
Soil Description	Silty SAND (SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	117.0	Optimum Moisture Content (%)	12.4
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
5.4	**4.4**



Before Soaking	
Dry Density (lb/ft^3)	105.4
Moisture Content	12.5%
Percent Compaction	90.1%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	107.3
Moisture Content (Top 1")	15.7%
Percent Compaction	91.7%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 90%

F&ME CONSULTANTS

F&ME Consultants, Inc.

211 Business Park Blvd., Columbia, South Carolina 29203

Reviewed By

11/3/23
Date

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

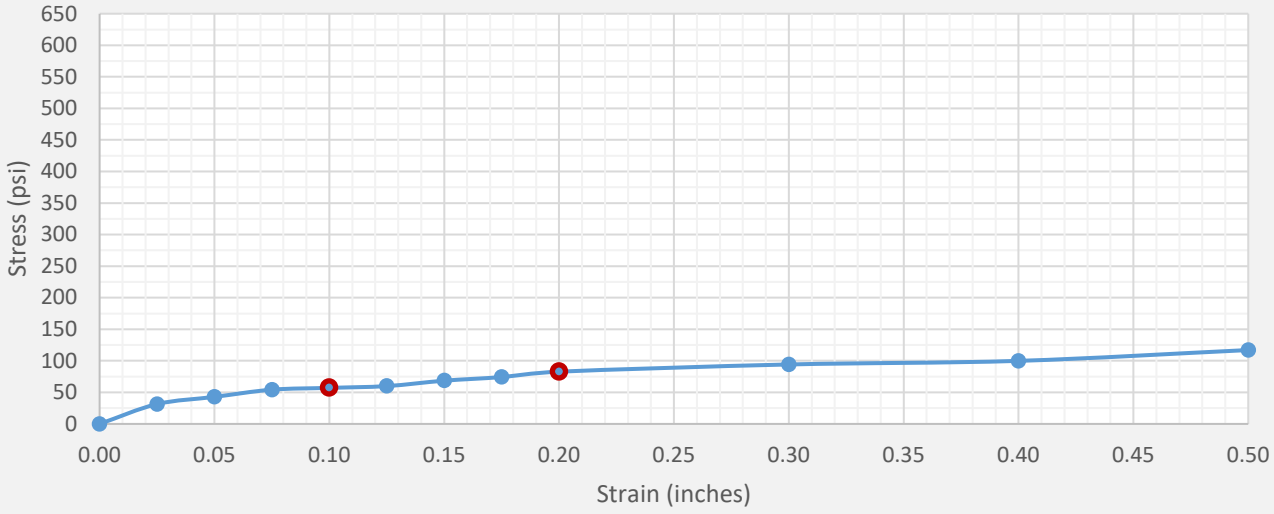
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-3 @ RW-2			FME Lab ID	23-3485
Soil Description	Silty SAND (SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	117.0	Optimum Moisture Content (%)	12.4
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
5.7	**5.5**



Before Soaking	
Dry Density (lb/ft^3)	106.4
Moisture Content	12.6%
Percent Compaction	91.0%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	109.3
Moisture Content (Top 1")	14.7%
Percent Compaction	93.4%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 95%

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Reviewed By

11/3/23
Date

REV 01/2023

CALIFORNIA BEARING RATIO (CBR)
AASHTO T193

SAMPLE INFORMATION

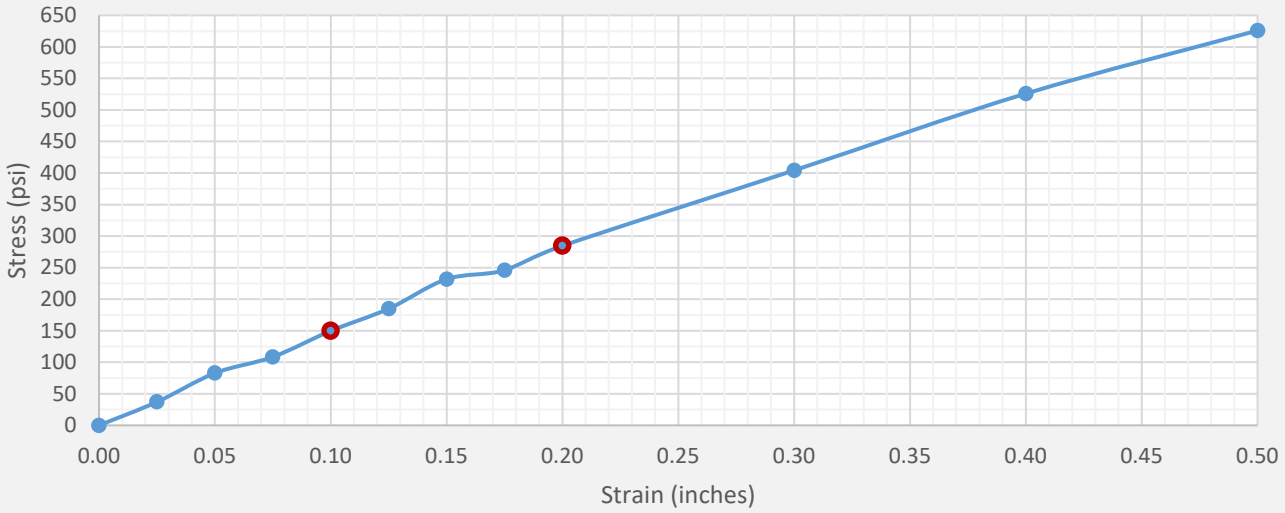
Project Name	US 21/US 17A over CSX RR			SCDOT Project ID	P042942
Sample Location	BS-3 @ RW-2			FME Lab ID	23-3485
Soil Description	Silty SAND (SM/A-2-4)			Depth/Elev.	0.0 - 4.0
Date Sampled	--	Sampled By:	FME	Date Received	10/20/2023
Date Test Began	10/26/23	Date Completed	10/30/23	Tested By	DH

MOLDING CHARACTERISTICS

Method	AASHTO T99 - Method A	% Retained on 3/4" Sieve	0%
Max Dry Density (lb/ft^3)	117.0	Optimum Moisture Content (%)	12.4
Soak Time (hr)	96	Surcharge Weight (lb)	10.0

TESTING RESULTS

CBR at 0.10-inch penetration	CBR at 0.20-inch penetration
15.0	**19.0**



Before Soaking	
Dry Density (lb/ft^3)	117.6
Moisture Content	12.0%
Percent Compaction	100.5%
Percent Shrink/Swell	--

After Soaking	
Dry Density (lb/ft^3)	118.2
Moisture Content (Top 1")	13.2%
Percent Compaction	101.0%
Percent Shrink/Swell	0.3%

ADDITIONAL COMMENTS

Target %Compaction = 100%

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Reviewed By

11/3/23
Date

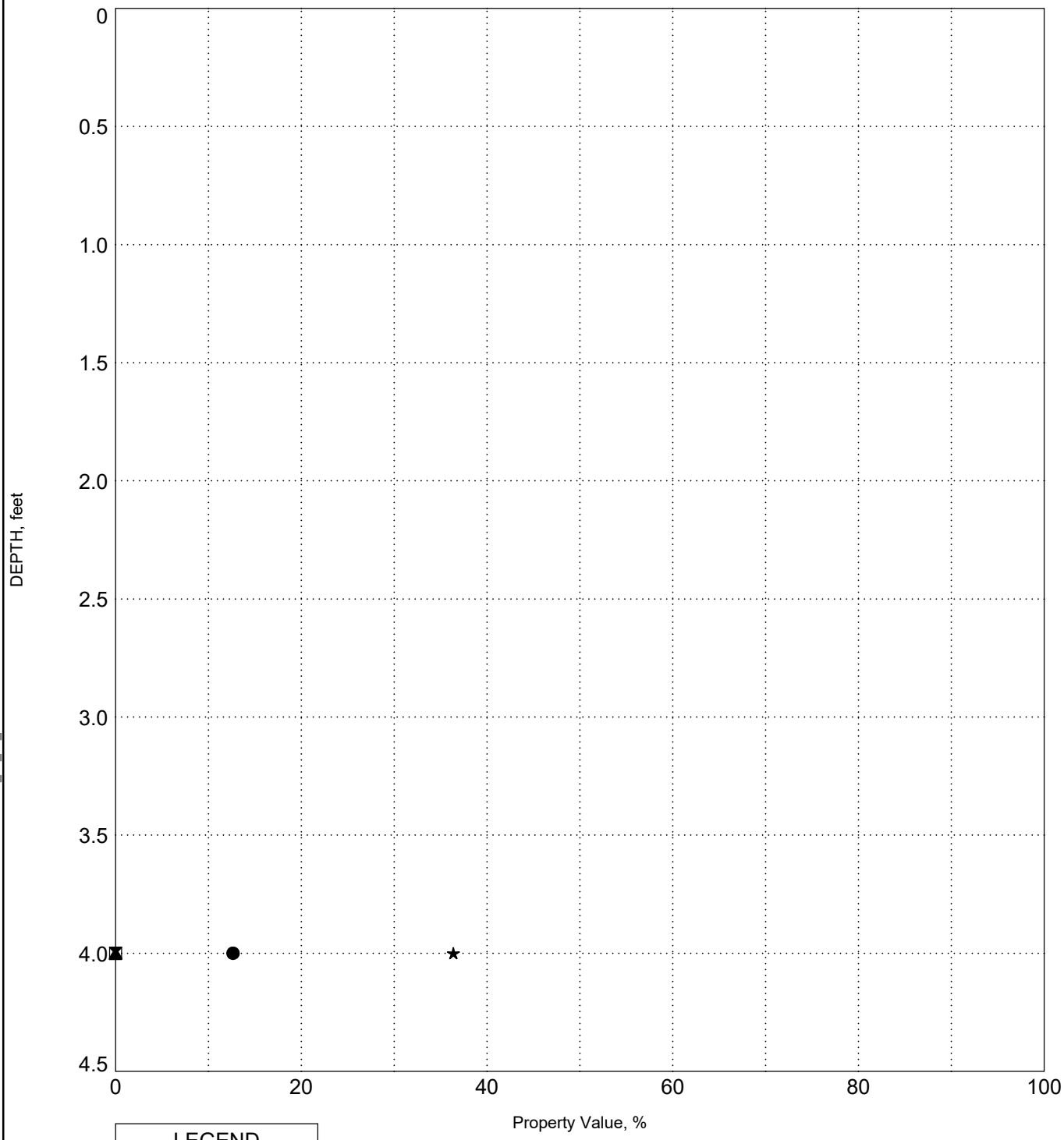
INDEX PROPERTIES VERSUS DEPTH

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

BORING BS-2 @ B-2

SURFACE ELEVATION: 44.2



LEGEND
● Water Content
⊠ Plastic Limit
▲ Liquid Limit
★ Fines

F&ME CONSULTANTS, INC.

MOISTURE CONTENT DETERMINATION
(AASHTO T265)

PROJECT: US 21/US 17A over CSX RR
SCDOT PROJECT No.: P042942
SAMPLE NUMBER: 23-3409
DATE SAMPLE RECEIVED: 10/16/2023
DESCRIPTION OF SOIL: SILTY SAND (SM/A-4)
TESTED BY: LG/TW
DATE SETUP: 10/16/2023
WEIGHED BY: TP
DATE OF WEIGHING: 10/17/2023

BORING NO.	BS-2 @ B-2				
SAMPLE NO.	--				
SAMPLE DEPTH (FT.)	0.0 - 4.0				
WATER CONTENT, W%	12.6				

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

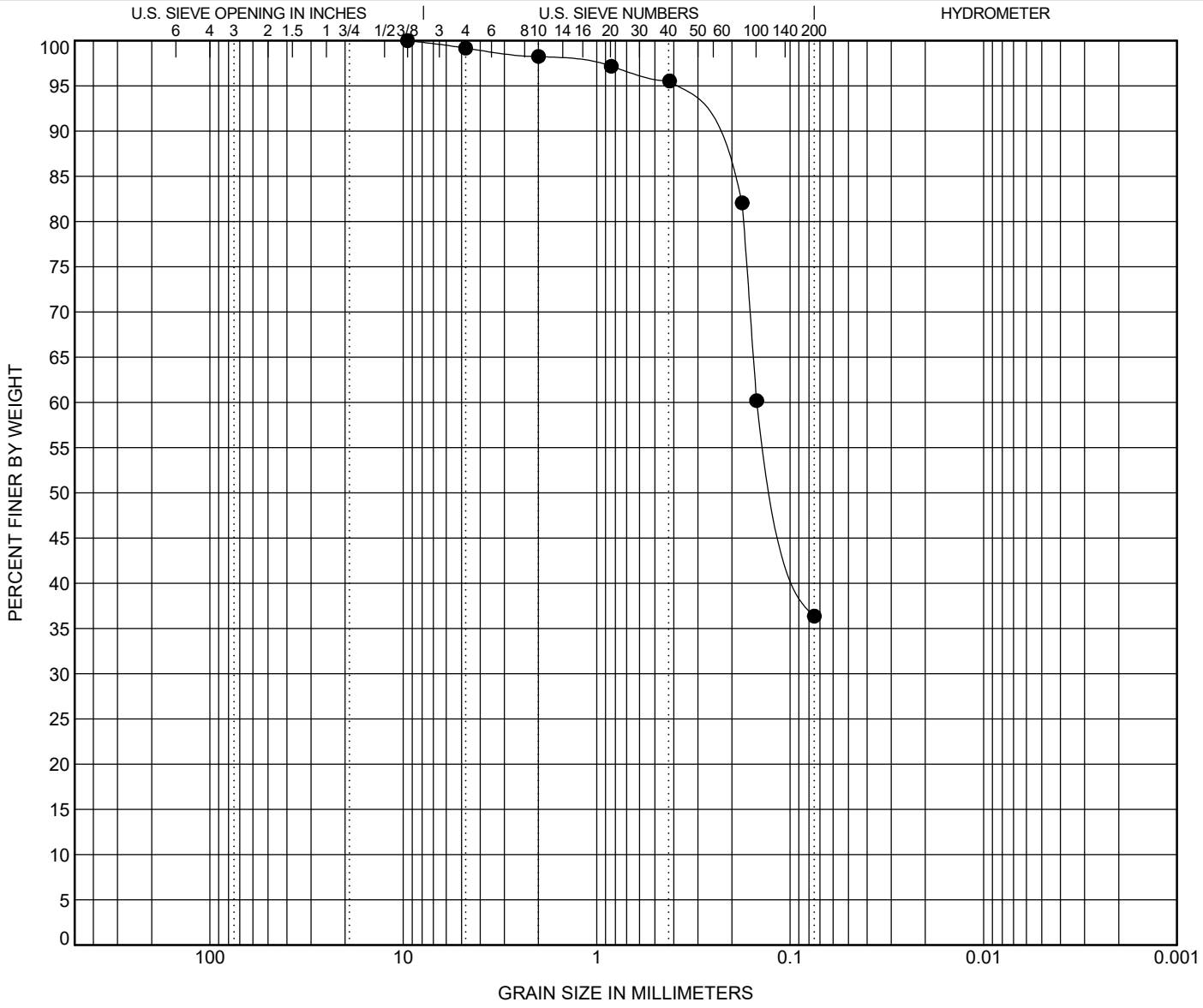
BORING NO.					
SAMPLE NO.					
SAMPLE DEPTH (FT.)					
WATER CONTENT, W%					

211 Business Park Blvd., SC 29203

GRAIN SIZE DISTRIBUTION

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	**BS-2 @ B-2**	**4.0**	**SILTY SAND (SM/A-4)**	**NP**	**NP**	**NP**		

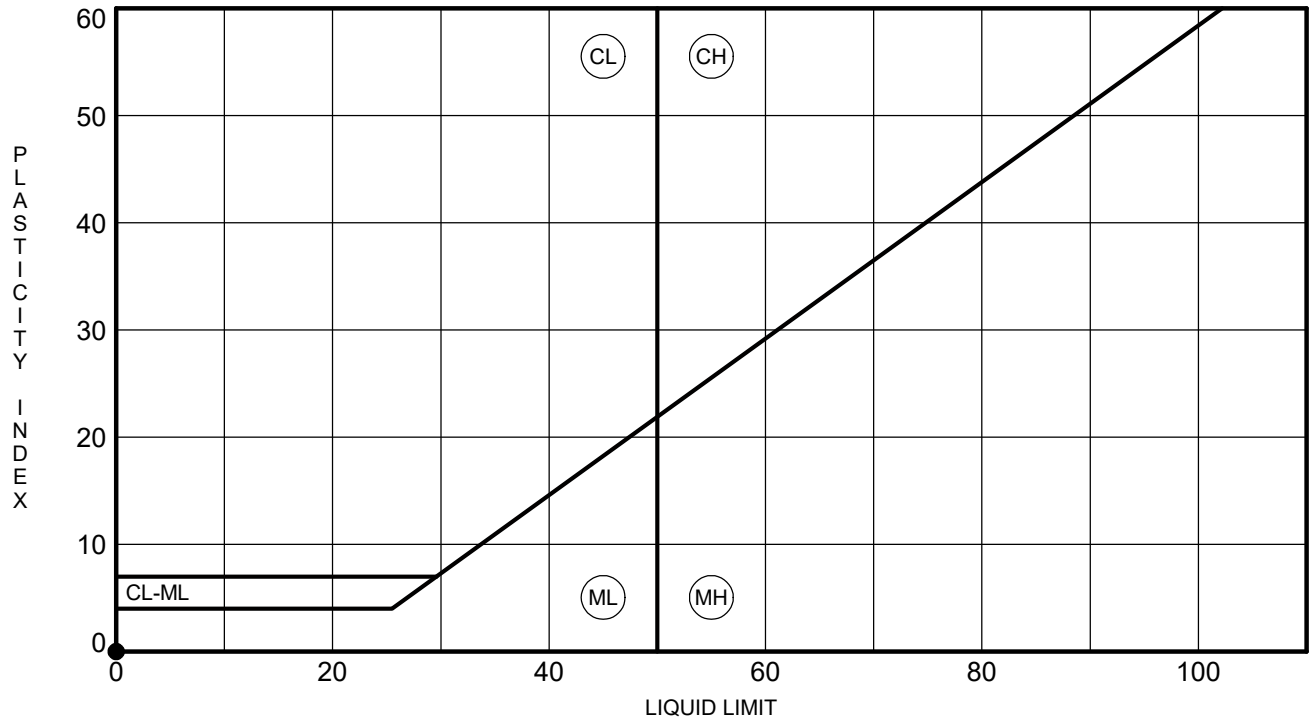
	BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**BS-2 @ B-2**	**4.0**	**9.51**	**0.148**			**0.8**	**62.8**	**36.4**	

GRAIN SIZE G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/24/23

ATTERBERG LIMITS' RESULTS

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort

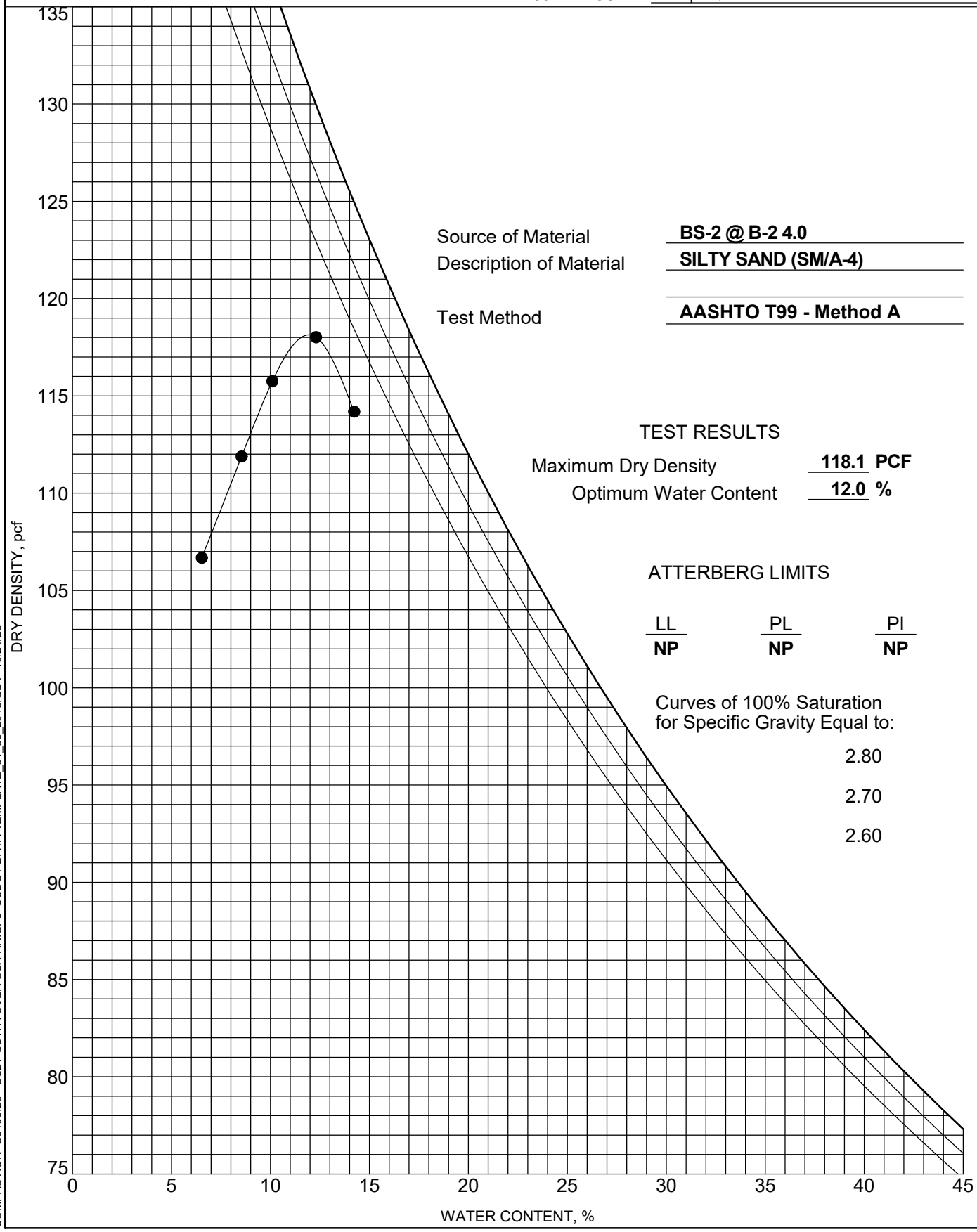


	BOREHOLE	DEPTH	LL	PL	PI	Fines	Classification
●	**BS-2 @ B-2**	**4.0**	**NP**	**NP**	**NP**	**36**	**SILTY SAND (SM/A-4)**

MOISTURE-DENSITY RELATIONSHIP

PROJECT ID P042942 **PROJECT NAME** US 21/US 17A over CSX RR

PROJECT COUNTY Hampton/Beaufort



Source of Material **BS-2 @ B-2 4.0**

Description of Material **SILTY SAND (SM/A-4)**

Test Method **AASHTO T99 - Method A**

TEST RESULTS

Maximum Dry Density **118.1** **PCF**

Optimum Water Content **12.0** **%**

ATTERBERG LIMITS

LL	PL	PI
NP	**NP**	**NP**

Curves of 100% Saturation for Specific Gravity Equal to:

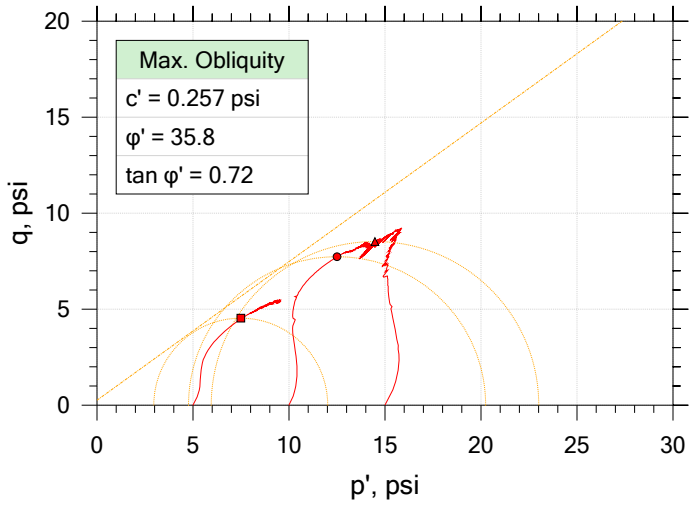
2.80

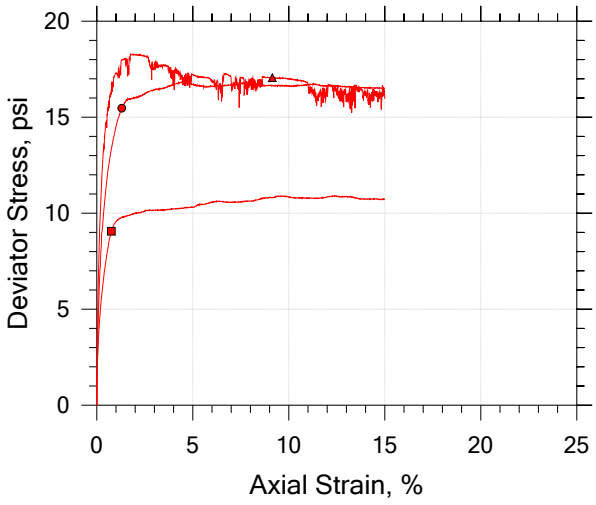
2.70

2.60

COMPACTION G6400.20 - US21-US17A OVER CSX RR.GPJ SCDOT DATA TEMPLATE_01_30_2015.GDT 10/24/23

Consolidated Undrained by AASHTO T297





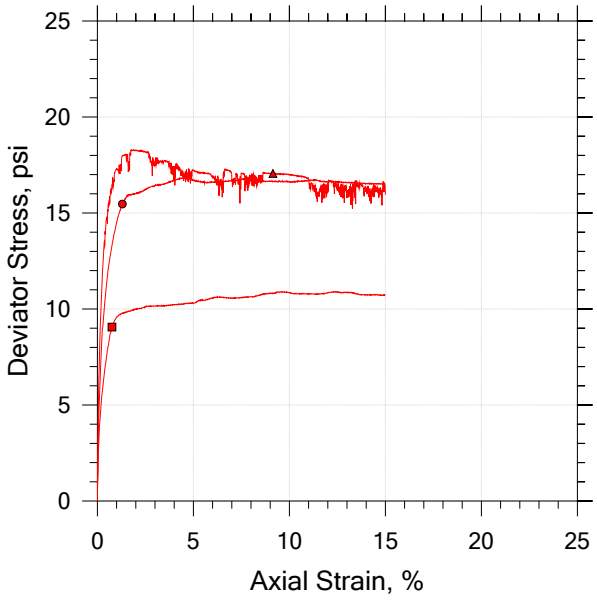
Symbol		■	●	▲	
Sample ID		23-3409	23-3409	23-3409	
Depth		0.0' - 4.0'	0.0' - 4.0'	0.0' - 4.0'	
Test Number		A	B	C	
Initial	Height, in	6.000	6.000	6.000	
	Diameter, in	2.800	2.800	2.800	
	Moisture Content (from Cuttings), %	12.0	12.0	12.0	
	Dry Density, pcf	113.	113.	114.	
	Saturation (Wet Method), %	61.2	61.2	59.4	
	Void Ratio	0.476	0.476	0.470	
Final	Moisture Content, %	16.3	17.1	16.5	
	Dry Density, pcf	116.	115.	116.	
	Cross-Sectional Area (Method A), in²	6.046	6.099	6.075	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	0.437	0.458	0.442	
	Back Pressure, psi	100.8	101.0	101.0	
Vertical Effective Consolidation Stress, psi		4.983	9.974	14.99	
Horizontal Effective Consolidation Stress, psi		4.996	9.998	14.99	
Vertical Strain after Consolidation, %		0.1184	0.2203	0.3202	
Volumetric Strain after Consolidation, %		0.4334	0.9631	1.178	
Time to 50% Consolidation, min		0.1600	0.2500	0.2300	
Shear Strength, psi		4.532	7.737	8.531	
Strain at Failure, %		0.761	1.30	9.14	
Strain Rate, %/min		0.0005000	0.0005000	0.0005000	
Deviator Stress at Failure, psi		9.063	15.47	17.06	
Effective Minor Principal Stress at Failure, psi		2.955	4.764	5.945	
Effective Major Principal Stress at Failure, psi		12.02	20.24	23.01	
B-Value		0.95	0.92	0.91	

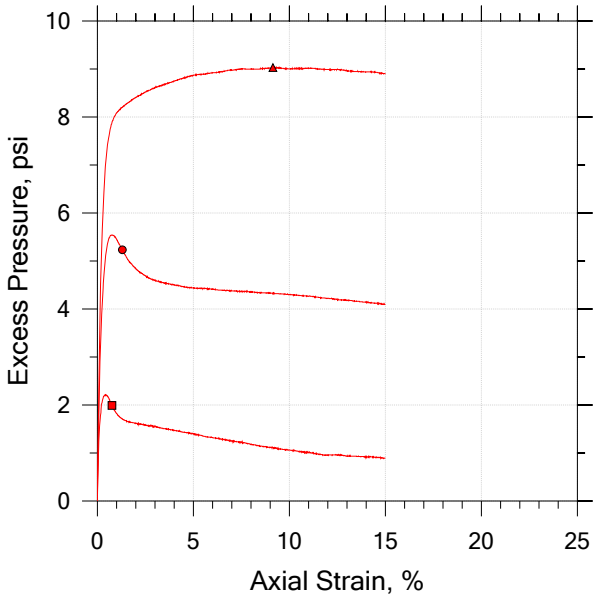
Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

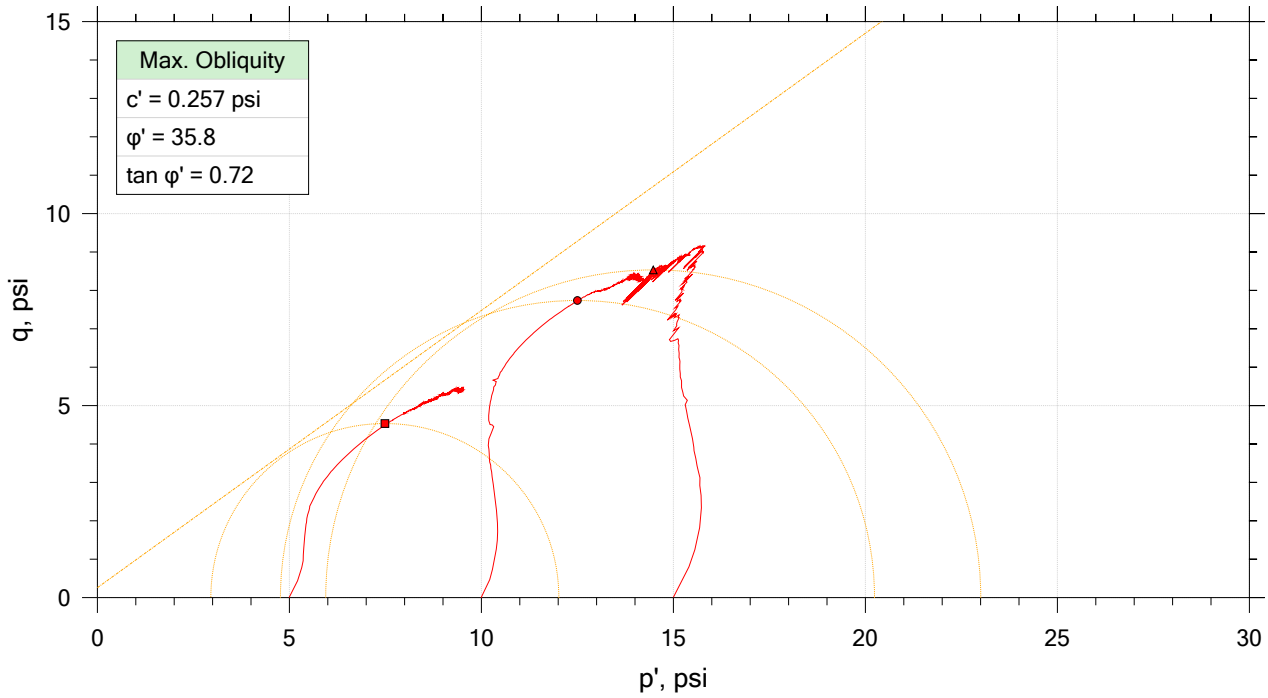
F&ME CONSULTANTS

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

Consolidated Undrained by AASHTO T297



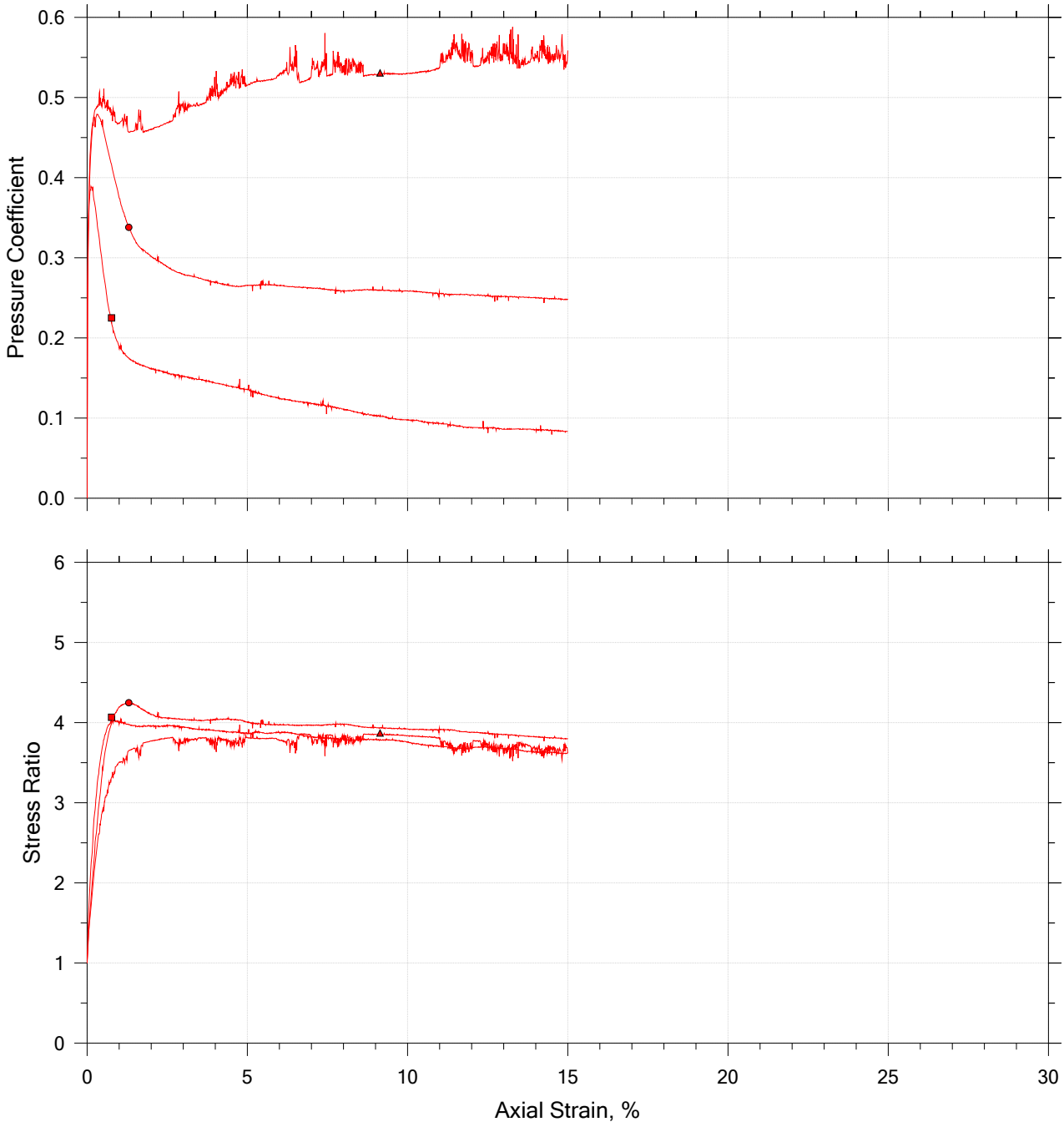




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3409	A	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_A.dat
●	23-3409	B	0.0' - 4.0'	RMC	10/25/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_B.dat
▲	23-3409	C	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

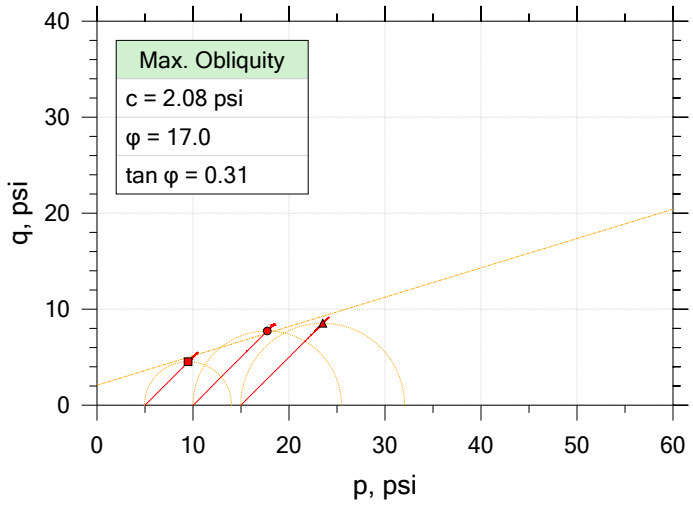
Consolidated Undrained by AASHTO T297

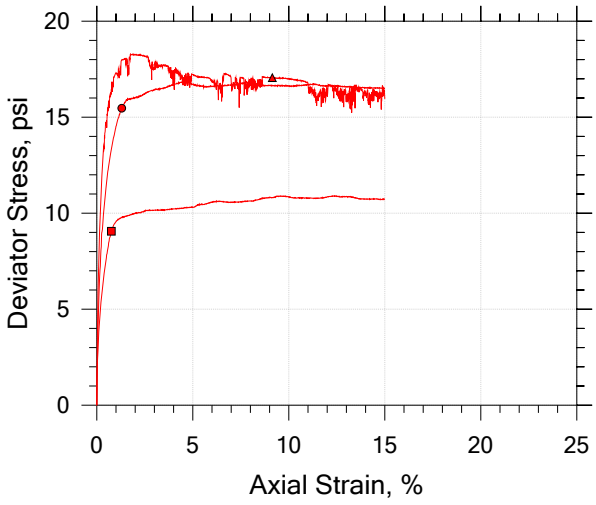


	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3409	A	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_A.dat
●	23-3409	B	0.0' - 4.0'	RMC	10/25/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_B.dat
▲	23-3409	C	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

Consolidated Undrained by AASHTO T297





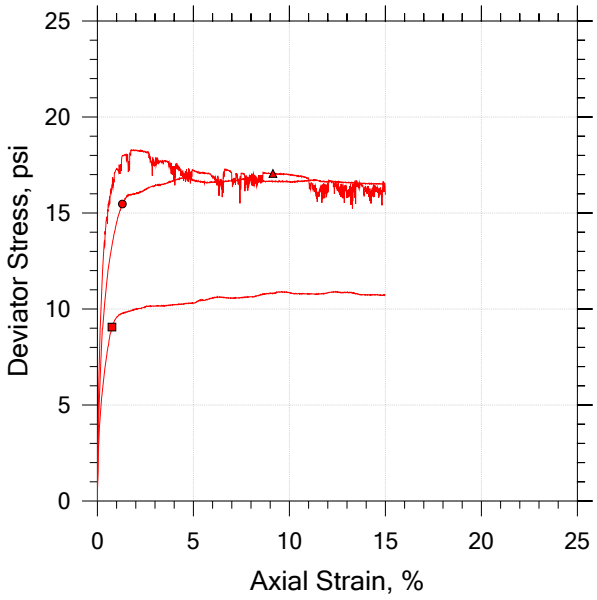
Symbol		■	●	▲	
Sample ID		23-3409	23-3409	23-3409	
Depth		0.0' - 4.0'	0.0' - 4.0'	0.0' - 4.0'	
Test Number		A	B	C	
Initial	Height, in	6.000	6.000	6.000	
	Diameter, in	2.800	2.800	2.800	
	Moisture Content (from Cuttings), %	12.0	12.0	12.0	
	Dry Density, pcf	113.	113.	114.	
	Saturation (Wet Method), %	61.2	61.2	59.4	
	Void Ratio	0.476	0.476	0.470	
Final	Moisture Content, %	16.3	17.1	16.5	
	Dry Density, pcf	116.	115.	116.	
	Cross-Sectional Area (Method A), in²	6.046	6.099	6.075	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	0.437	0.458	0.442	
	Back Pressure, psi	100.8	101.0	101.0	
Vertical Effective Consolidation Stress, psi		4.983	9.974	14.99	
Horizontal Effective Consolidation Stress, psi		4.996	9.998	14.99	
Vertical Strain after Consolidation, %		0.1184	0.2203	0.3202	
Volumetric Strain after Consolidation, %		0.4334	0.9631	1.178	
Time to 50% Consolidation, min		0.1600	0.2500	0.2300	
Shear Strength, psi		4.532	7.737	8.531	
Strain at Failure, %		0.761	1.30	9.14	
Strain Rate, %/min		0.0005000	0.0005000	0.0005000	
Deviator Stress at Failure, psi		9.063	15.47	17.06	
Effective Minor Principal Stress at Failure, psi		2.955	4.764	5.945	
Effective Major Principal Stress at Failure, psi		12.02	20.24	23.01	
B-Value		0.95	0.92	0.91	

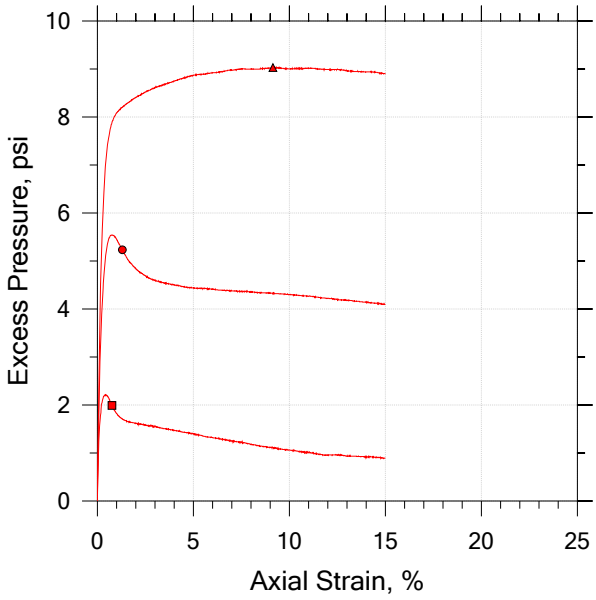
Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

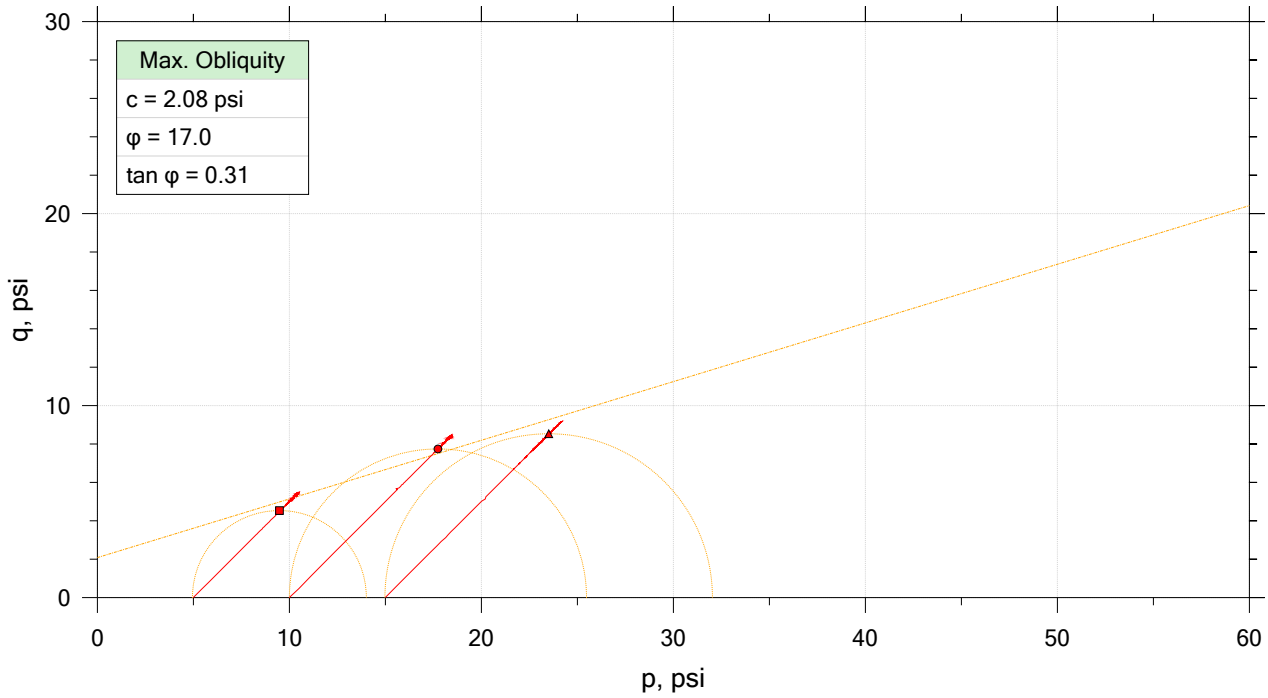
F&ME CONSULTANTS

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

Consolidated Undrained by AASHTO T297



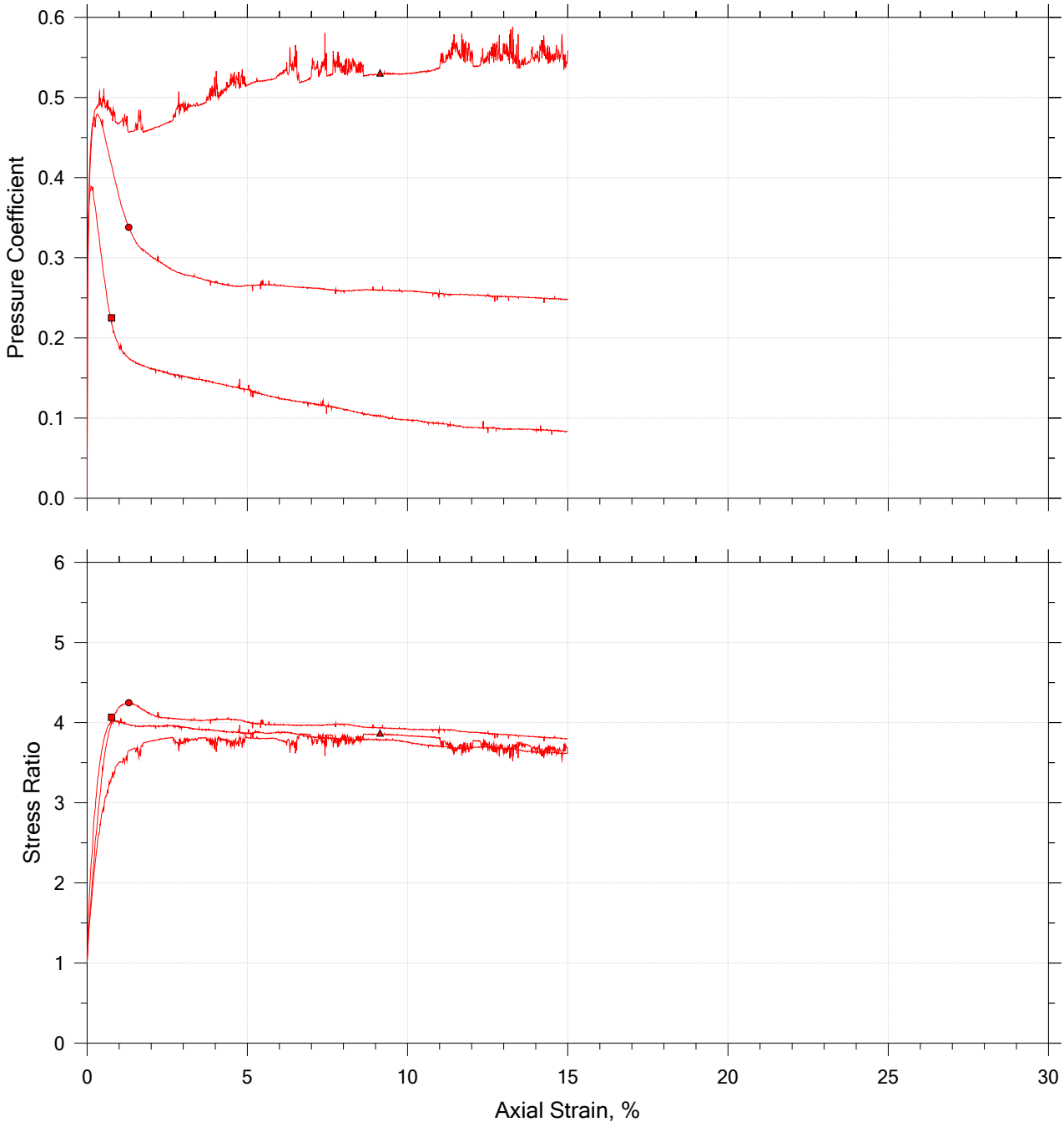




	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3409	A	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_A.dat
●	23-3409	B	0.0' - 4.0'	RMC	10/25/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_B.dat
▲	23-3409	C	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_C.dat

Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

Consolidated Undrained by AASHTO T297



	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	23-3409	A	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_A.dat
●	23-3409	B	0.0' - 4.0'	RMC	10/25/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_B.dat
▲	23-3409	C	0.0' - 4.0'	RMC	10/26/2023	WAP/ WJG	10/30/2023	G6400.200_BS-2_C.dat

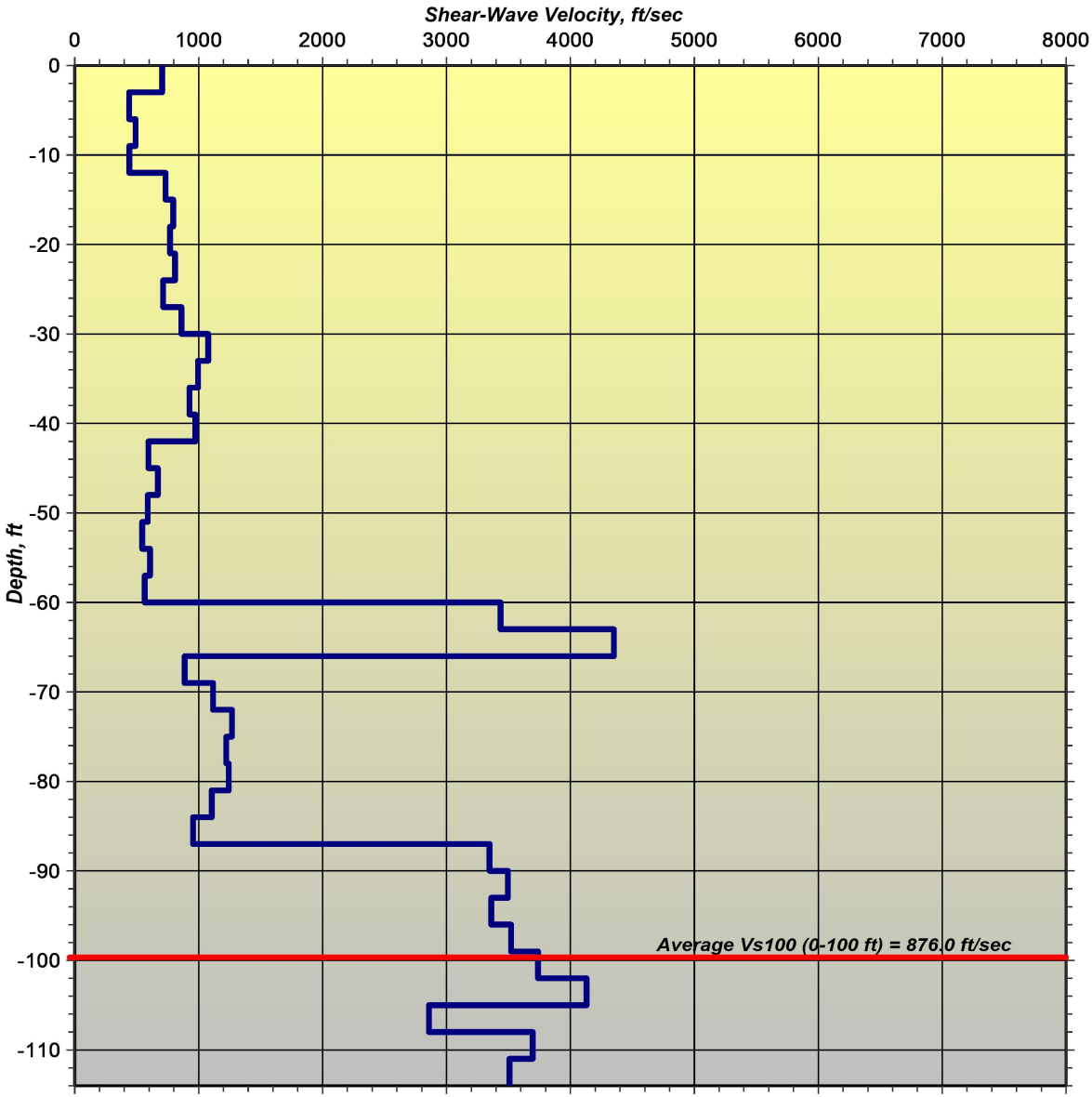
Project Name: US 21/US 17A over CSX RR	Location: Hampton/Beaufort	Project Number: G6400.200
Boring Number: BS-2 @ B-2	Tester: RMC	Checker: WAP/ WJG
Sample Number: 23-3409	Test Date: 10/26/2023	Depth: 0.0' - 4.0'
Test Number: ABC	Preparation: Remolded	Elevation:
Description: SILTY SAND (SM/A-4) LL=NP, PL=NP, PI=NP, %200=36.4		
Remarks: Max Dry Density=118.1 pcf, OMC=12.0%, Samples Molded at 95%		

APPENDIX

SECTION 6 GEOPHYSICAL TEST RESULTS

SB-1

32°40'25" N 80°51'30" W



GeoWave Solutions, Inc.
www.geowavesolutions.com

US 21 / US 17 A over CSX
Project: G7000.200

Yemassee, South Carolina

F&ME Consultants

Downhole Seismic Shear-Wave Investigation

Shear Wave Velocity Graph

October 24, 2023

Project Manager: V. Vandervelde & S. Hurd

SB-1

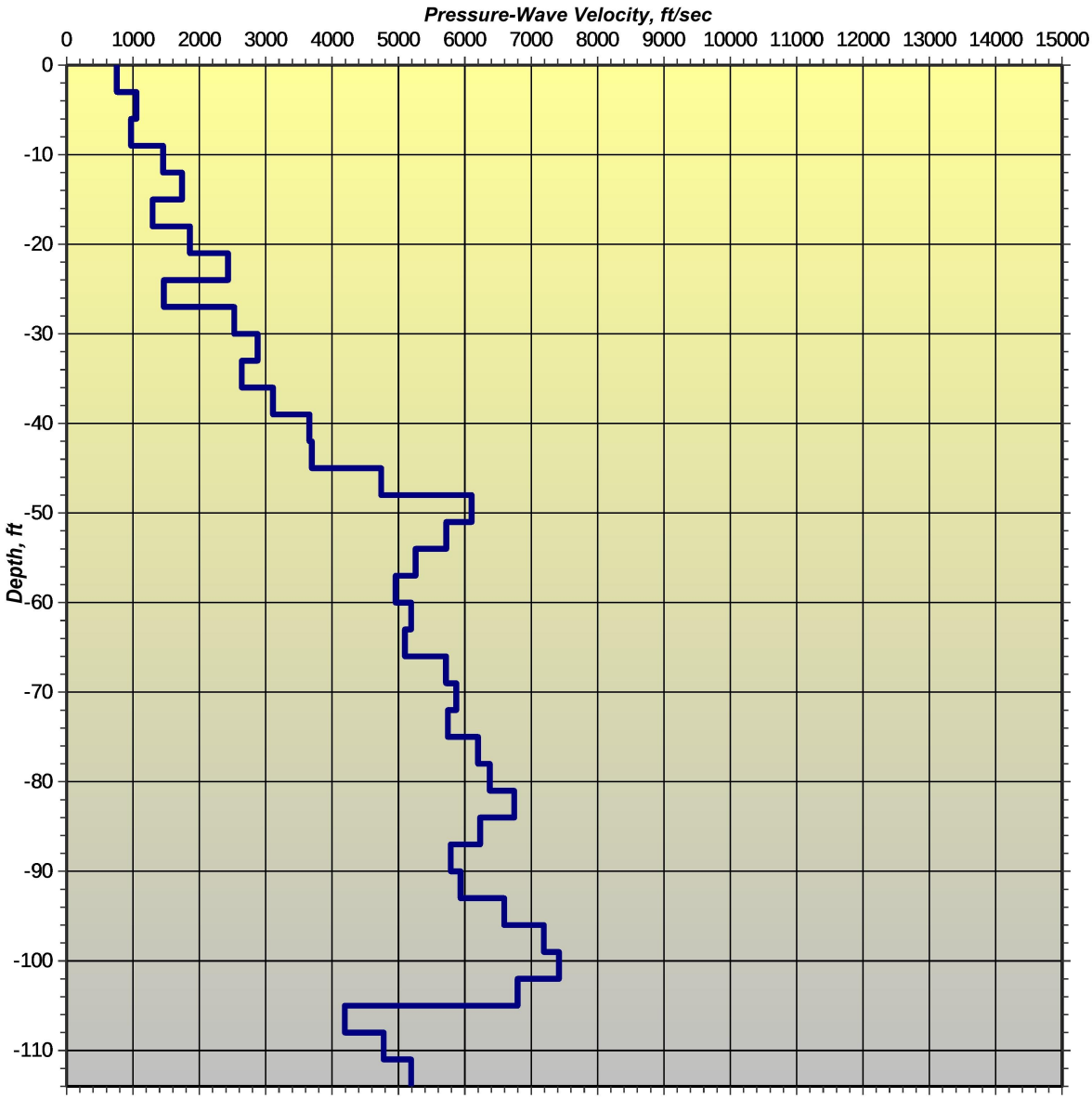
32°40'25" N 80°51'30" W

Depth (ft)	Vs (ft/sec)
0.0	---
-3.0	705.9
-6.0	439.0
-9.0	491.0
-12.0	440.2
-15.0	733.4
-18.0	794.8
-21.0	769.5
-24.0	809.2
-27.0	713.4
-30.0	861.0
-33.0	1077.6
-36.0	995.0
-39.0	926.2
-42.0	973.3
-45.0	594.6
-48.0	670.3
-51.0	589.5
-54.0	544.4
-57.0	607.0
-60.0	564.7
-63.0	3435.8
-66.0	4350.8
-69.0	886.6
-72.0	1115.9
-75.0	1268.4
-78.0	1223.4
-81.0	1242.6
-84.0	1105.3
-87.0	955.3
-90.0	3347.8
-93.0	3495.2
-96.0	3361.4
-99.0	3520.6
-102.0	3738.8
-105.0	4130.1
-108.0	2858.3
-111.0	3696.0
-114.0	3507.9

Average Vs100 (0-100 ft) = 876.0 ft/sec

SB-1

32°40'25" N 80°51'30" W



GeoWave Solutions, Inc.
www.geowavesolutions.com

US 21 / US 17 A over CSX
Project: G7000.200

Yemassee, South Carolina

F&ME Consultants

Downhole Seismic Shear-Wave Investigation

Pressure Wave Velocity Graph

October 24, 2023

Project Manager: V.Vandervelde & S. Hurd

SB-1

32°40'25" N 80°51'30" W

Depth (ft)	Vp (ft/sec)
0.0	---
-3.0	756.8
-6.0	1051.7
-9.0	971.0
-12.0	1453.7
-15.0	1738.9
-18.0	1295.6
-21.0	1857.9
-24.0	2431.6
-27.0	1465.8
-30.0	2526.6
-33.0	2876.5
-36.0	2639.6
-39.0	3109.0
-42.0	3659.2
-45.0	3694.1
-48.0	4739.6
-51.0	6102.5
-54.0	5720.9
-57.0	5258.2
-60.0	4958.5
-63.0	5190.7
-66.0	5097.7
-69.0	5716.8
-72.0	5871.4
-75.0	5744.8
-78.0	6200.1
-81.0	6375.9
-84.0	6744.1
-87.0	6230.2
-90.0	5787.9
-93.0	5936.4
-96.0	6592.8
-99.0	7190.3
-102.0	7418.8
-105.0	6795.7
-108.0	4192.5
-111.0	4776.7
-114.0	5190.9

APPENDIX

SECTION 7 EXISTING ASPHALT CORE PHOTOS

Drill Rig Setup Photographs

B-1

Drill Rig Setup Photographs

B-2

Drill Rig Setup Photographs

B-3

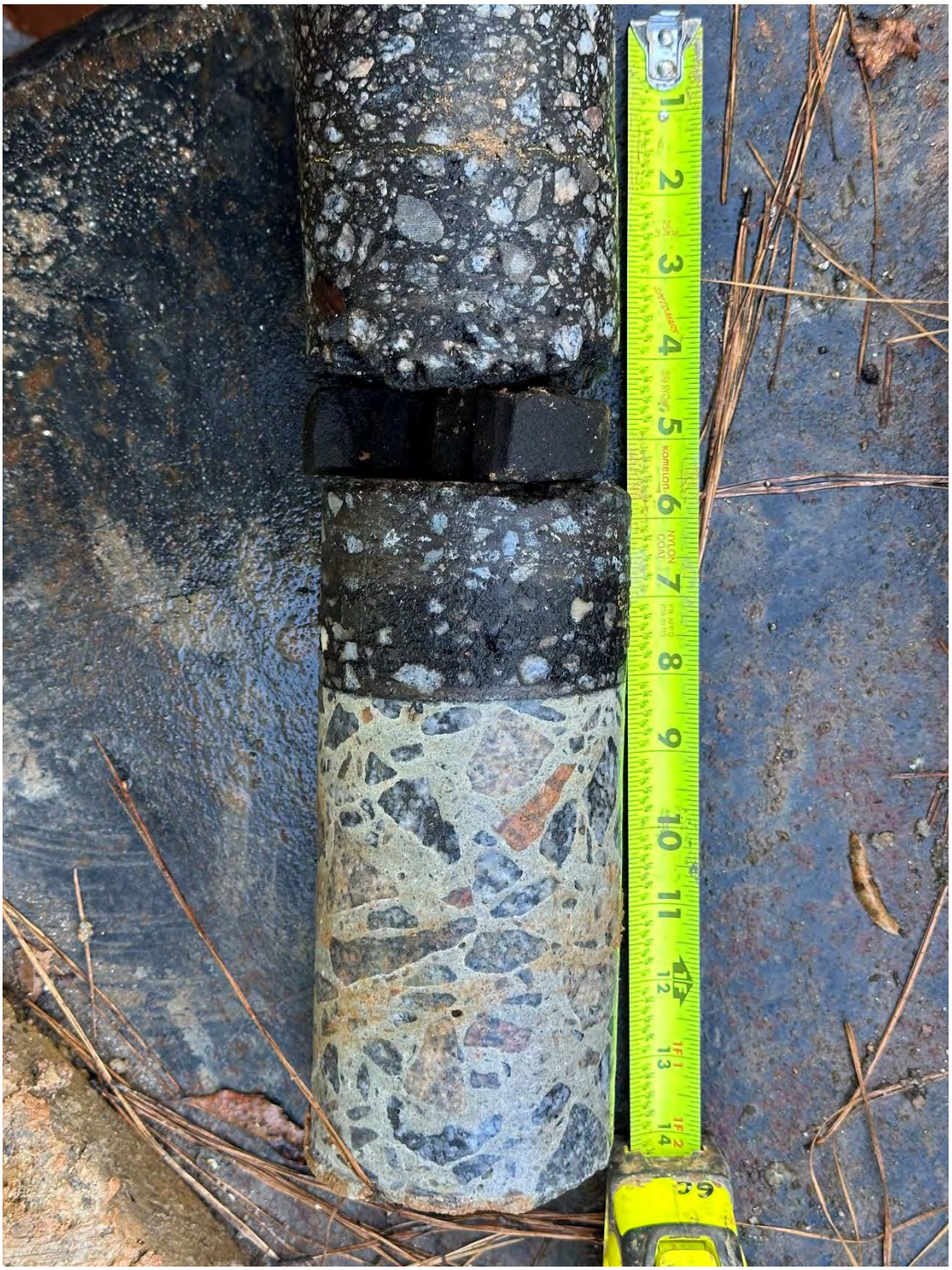
Drill Rig Setup Photographs

B-4

Drill Rig Setup Photographs

C-1

Drill Rig Setup Photographs



E-1

Drill Rig Setup Photographs

RW-1

Drill Rig Setup Photographs

RW-2

APPENDIX

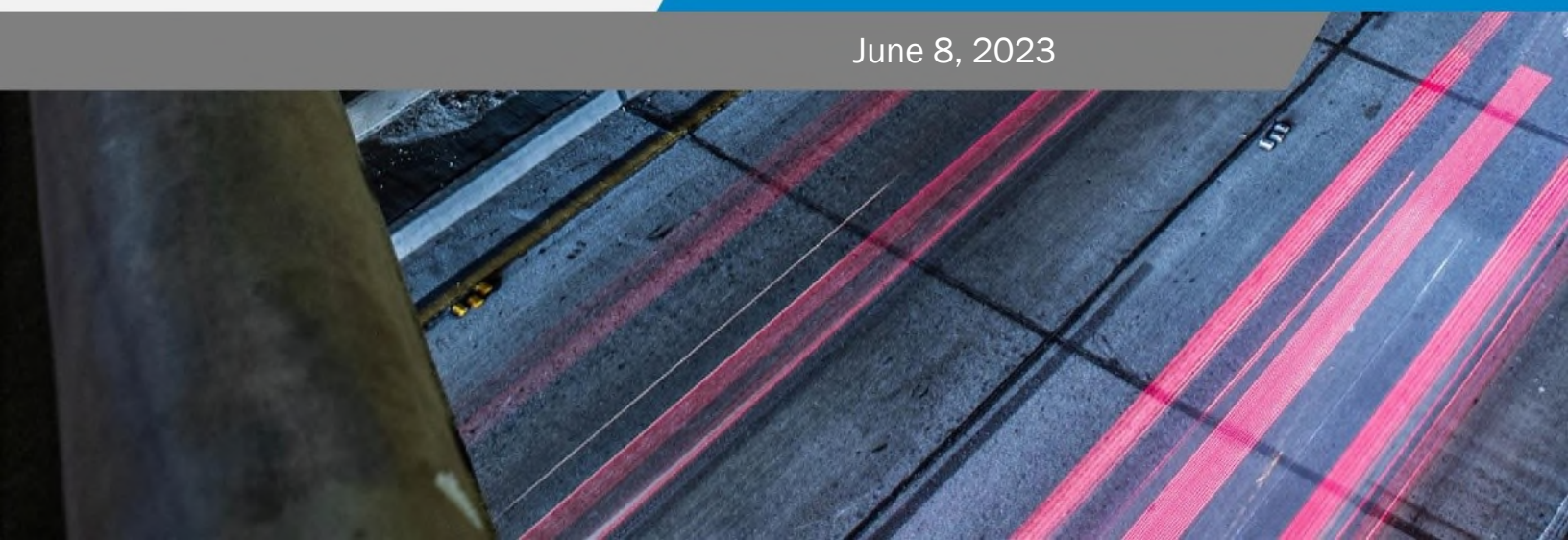
SECTION 8 REPORT OF SPT HAMMER ENERGY

CAROLINAS GEOTECHNICAL GROUP

Report of SPT Hammer Energy

Prepared for:
Breccia Construction, LLC
620-B Industrial Way
Chester, South Carolina 29706

June 8, 2023



CAROLINAS GEOTECHNICAL GROUP

N.C. Firm License: P-1904

2400 Crownpoint Executive Drive
Suite 800
Charlotte, NC 28227

(980) 339-8684
contact@carolinasgeotech.com
www.carolinasgeotech.com

June 8, 2023

Mr. Adam J. Shannon
Breccia Construction, LLC
620-B Industrial Way
Chester, South Carolina 29706

SUBJECT: **Report of SPT Hammer Energy**
Breccia Construction, LLC CME 45B Trailer Rig (SN 303304)
Chester, South Carolina
CG2 Project No.: 240021095

Dear Mr. Shannon:

Carolinas Geotechnical Group, PLLC (CG2) has completed the Standard Penetration Test (SPT) energy measurements on the automatic hammer mounted on a Breccia Construction, LLC (Breccia) CME 45B trailer-mounted drill rig with a serial number of 303304, see attached Drill Rig Photo Log. This service was performed by Mr. Robert E. Kral, PE on June 8, 2023. SPT energy testing was performed in general accordance with ASTM D4633 and the most recent revision of the North Carolina Department of Transportation (NCDOT), Geotechnical Engineering Unit's requirements. The testing procedures, equipment used during testing, and detailed results are presented in this report.

CG2 recommends Breccia submit this Report of SPT Hammer Energy to the NCDOT Geotechnical Engineering Unit for review and approval no later than July 6, 2023.

DYNAMIC TESTING METHODOLOGY

Testing was performed using a model SPT (Serial No. 4549 TB) Pile Driving Analyzer™ (PDA) manufactured by Pile Dynamics, Inc. The PDA was used to record and interpret data from two piezoresistive accelerometers (Serial Nos. K10959 and K10960) bolted to a 2-foot long AWJ drill rod (SN 528AWJ) internally instrumented with two strain transducers. The instrumented AWJ drill rod has a cross-sectional area of 1.19 square inches, an outside diameter of approximately 1.75 inches, and an inside diameter of 1.25 inches at the gauge location. The accelerometers and strain gauges, which are mounted on opposing axis near the middle of the instrumented rod, monitor acceleration and strain for each hammer blow. The analyzer converts the data to velocities and forces and computes the maximum transferred hammer energies with the "EFV" method described in ASTM D4633. Preliminary results are recorded and displayed in real-time for each blow. Calibration sheets for the PDA, accelerometers, and the instrumented rod are included in the Appendix III.

TESTING AND OBSERVATIONS

CG2 personnel was on site June 8, 2023 to observe and perform high-strain dynamic testing during SPT sampling on the CME 45B trailer-mounted drill rig operated by D. Harris of Breccia. The measurements were taken during drilling operations at 1817 Lowrys Highway in Chester, South Carolina (Chester County). The approximate coordinates (not professionally surveyed) for the test location are 34.7704109, -81.2454062. No Soil Test Boring Log was maintained. SPT energy measurements were recorded during three intervals at depths of approximately 28½, 33½, and 38½ feet below the existing ground surface. The information presented in the table below summarizes the equipment tested and tooling used during the SPT energy measurements.

Table 1: SPT Field Data

Drill Rig Information	
Manufacturer	CME
Model	45B
Serial Number	303304
Operator	D. Harris
Carrier	Trailer
Hammer Information	
Model / Type	CME / Auto
Serial Number	N/A
Anvil Height (inches)	11.5
Anvil Diameter (inches)	2.5
Drop Height (inches)	30
Ram Weight (pounds)	140
Ram Serial Number	N/A
Drilling and Instrumented Rod Information	
Drill Rod Type	AWJ
OD (inches)	1.75
ID (inches)	1.25
Cross-Sectional Area (in^2)	1.19
Typical Lengths (feet)	5
Instrumented Rod Type	AWJ (SN 528)
OD (inches)	1.75
ID (inches)	1.25
Cross-Sectional Area (in^2)	1.19
Total Instrumented Rod Length (feet)	2.00
Length Below Gages (feet)	0.70
Split-Spoon Length (feet)	2.85

DYNAMIC TESTING RESULTS

The total rod length from the instrumentation to the tip of the split-spoon sampler was determined by adding 3.6 feet to the required drill rod length at each sample depth. Based on the test data recorded, the automatic hammer on the CME 45B trailer-mounted drill rig operated at a rate of about 55.3 to 56.2 BPM during dynamic testing. The measured transferred hammer energy (EFV) ranged from 287.6 to 299.0 foot-pounds, which corresponds to Energy Transfer Ratio (ETR) values of 82.2 to 85.4%, respectively. These data ranges are based on the overall minimum and maximum values for the last 12 inches of each sample interval.

The SPT Energy Measurement Data Summary tables in the Appendix present the test data from every hammer blow at each sampling interval along with representative force and velocity traces for each test interval. The reported blow counts, obtained by the drill rig personnel, a summary of the test data, and average computed BPM, EFV, and ETR values are provided in Table 2. The BPM, EFV, and ETR values presented in Table 2 were computed by averaging data from the last 12 inches of each sample interval. Plots and tables of the following are also included in the Appendix and present the test data with depth for each test interval:

- Penetration vs. BLC
- Penetration vs. FMX
- Penetration vs. EFV
- Penetration vs. CSX
- Penetration vs. VMX
- Penetration vs. ETR
- Average ETR vs. Rod Length
- ETR vs. Rod Length

Table 2: Summary of Dynamic Testing Results

Data Set ID	Sample Depth (ft)	Drill Rod Length (ft)	Instrumentation to Sampler Tip Length (ft)	Blows per 6" Increment / N-value	Soil Sample Description (Piedmont Residual)	Avg. BPM	Avg. EFV (ft-lbs)	Avg. ETR (%)
1	28½ - 30	30	33.6	4-6-9 / 15	SA SILT	55.9	292.8	83.6
2	33½ - 35	35	38.6	3-5-9 / 14	SA SILT	55.8	293.2	83.8
3	38½ - 40	40	43.6	4-8-9 / 17	SA SILT	55.6	294.5	84.2
					Overall Average	**55.8**	**293.6**	**83.9**

The average hammer rate, transferred energy, and transfer ratio were calculated for each depth interval. Per ASTM D4633, only the blows from the final foot of each sample interval (i.e., the blows that determine the N-value) were included when computing the average values shown in Table 2. The overall average transferred hammer energy for the automatic hammer on the CME 45B truck-mounted drill rig (for all the depth intervals included in Table 2) was 293.6 foot-pounds, with an average ETR of 83.9%.

LIMITATIONS OF REPORT

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The information contained in this report were based on the applicable standards of our profession in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

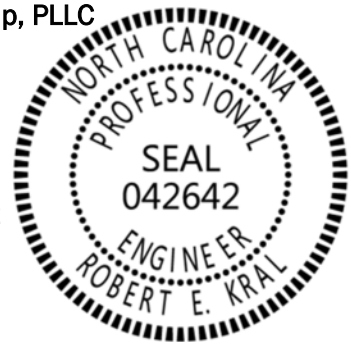
CLOSING

CG2 is pleased to have the opportunity to provide these services to you. If you have questions concerning the content of this report, or if CG2 can be of further service, please contact CG2 at (980) 339-8684.

Sincerely,
Carolinas Geotechnical Group, PLLC

DocuSigned by:
Robert E. Kral
8AD703B2A8484F4...

Robert E. Kral, PE
Senior Project Engineer
NC Registration No. 042642



Appendices:

- Appendix I - CME 45B Trailer Rig (SN 303304) SPT Energy Measurements Summary Plots and Tables
- Appendix II - SPT Hammer Energy Field Form (Field Log) and Drill Rig Photo Log
- Appendix III - Instrumented Rod and Accelerometer Calibration Sheets
- Appendix IV - Certificate of Proficiency

APPENDIX I

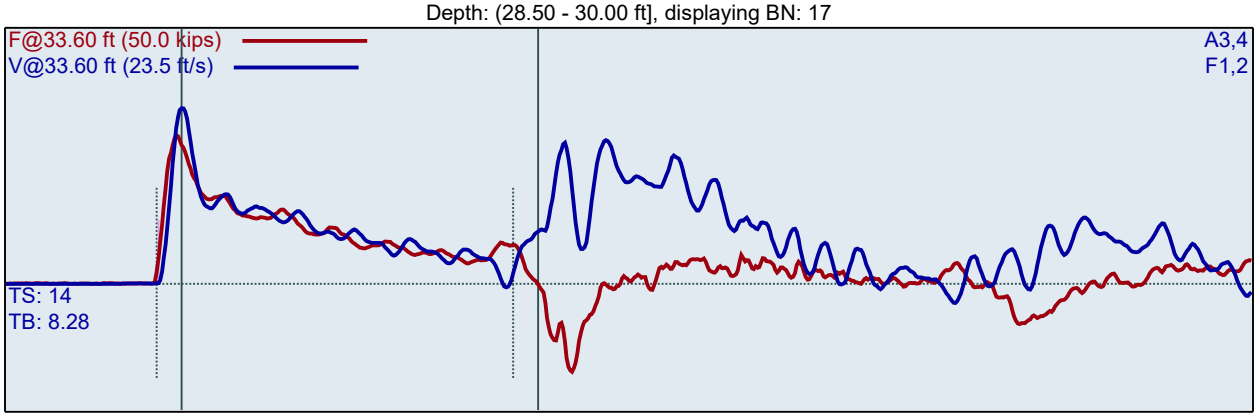
CME 45B (SN 303304)
REK
B-1

B-1
Interval start: 6/8/2023

AR: 1.19 in^2
LE: 33.60 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (28.50 - 30.00 ft], displaying BN: 17



F1 : [528AWJ-1] 203.51 PDICAL (1) FF1
F2 : [528AWJ-2] 203.28 PDICAL (1) FF1

A3 (PR): [K10960] 419.894 mv/6.4v/5000g (1) VF1
A4 (PR): [K10959] 413.827 mv/6.4v/5000g (1) VF1

BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity
DMX: Maximum Displacement

CSX: Compression Stress Maximum
DFN: Final Displacement
EFV: Maximum Energy
ETR: Energy Transfer Ratio - Rated

LP	BL#	BC	BPM	FMX	VMX	DMX	CSX	DFN	EFV	ETR
ft		/6"	bpm	kips	ft/s	in	ksi	in	ft-lb	%
28.63	1	4	1.9	27.2	16.4	2.3	22.8	1.5	288.5	82.4
28.75	2	4	54.9	27.7	16.2	1.6	23.3	1.5	286.8	81.9
28.88	3	4	55.7	28.4	17.1	1.6	23.9	1.5	288.2	82.4
29.00	4	4	55.8	27.7	15.9	1.6	23.3	1.5	290.8	83.1
29.08	5	6	55.7	27.8	15.7	1.4	23.4	1.0	290.8	83.1
29.17	6	6	56.0	28.3	16.3	1.3	23.8	1.0	289.2	82.6
29.25	7	6	55.8	28.4	16.1	1.3	23.8	1.0	291.9	83.4
29.33	8	6	56.0	28.6	16.3	1.2	24.1	1.0	291.6	83.3
29.42	9	6	56.1	28.5	16.2	1.1	23.9	1.0	293.8	83.9
29.50	10	6	55.9	29.1	16.4	1.0	24.5	1.0	293.3	83.8
29.56	11	9	55.9	29.3	16.5	0.9	24.6	0.7	295.2	84.4
29.61	12	9	56.2	29.2	16.5	1.0	24.6	0.7	294.7	84.2
29.67	13	9	55.7	29.2	16.4	0.8	24.5	0.7	292.7	83.6
29.72	14	9	55.6	28.8	16.2	0.9	24.2	0.7	293.5	83.9
29.78	15	9	56.1	29.0	16.1	0.8	24.3	0.7	293.9	84.0
29.83	16	9	56.2	29.1	16.1	0.8	24.4	0.7	295.7	84.5
29.89	17	9	55.9	29.1	16.2	0.8	24.4	0.7	293.6	83.9
29.94	18	9	56.1	28.6	16.1	0.9	24.0	0.7	293.5	83.9
30.00	19	9	56.1	28.8	16.1	0.8	24.2	0.7	287.7	82.2
		Average	55.9	28.8	16.2	1.0	24.2	0.8	292.8	83.6
		Std Dev	0.2	0.4	0.2	0.2	0.3	0.2	2.1	0.6
		Maximum	56.2	29.3	16.5	1.4	24.6	1.0	295.7	84.5
		Minimum	55.6	27.8	15.7	0.8	23.4	0.7	287.7	82.2

N-value: 15

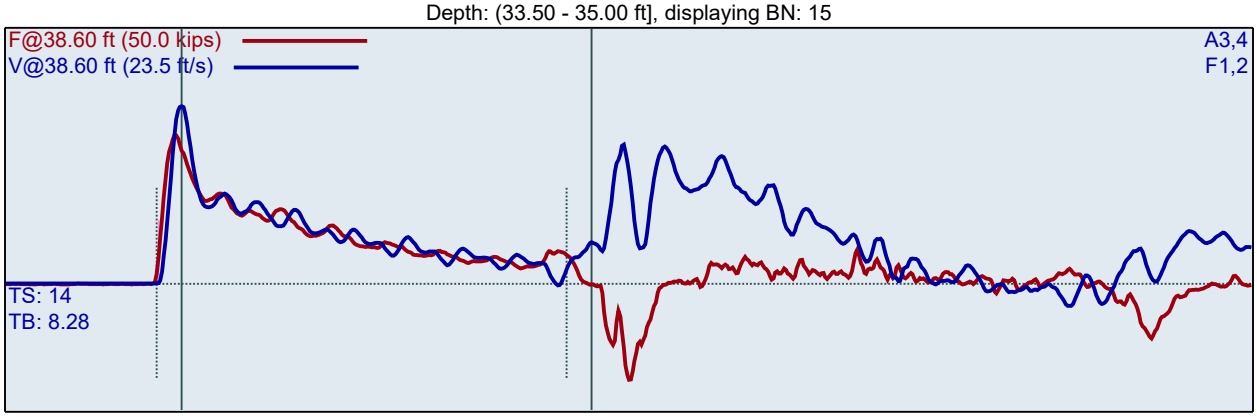
CME 45B (SN 303304)
REK
B-1

B-1
Interval start: 6/8/2023

AR: 1.19 in^2
LE: 38.60 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (33.50 - 35.00 ft], displaying BN: 15



F1 : [528AWJ-1] 203.51 PDICAL (1) FF1
F2 : [528AWJ-2] 203.28 PDICAL (1) FF1

A3 (PR): [K10960] 419.894 mv/6.4v/5000g (1) VF1
A4 (PR): [K10959] 413.827 mv/6.4v/5000g (1) VF1

LP ft	BL#	BC /6"	BPM bpm	FMX kips	VMX ft/s	DMX in	CSX ksi	DFN in	EFV ft-lb	ETR %
33.67	1	3	1.9	28.7	15.8	2.1	24.1	2.0	279.7	79.9
33.83	2	3	55.1	28.5	15.8	2.0	23.9	2.0	283.8	81.1
34.00	3	3	55.6	28.3	15.7	2.0	23.7	2.0	284.9	81.4
34.10	4	5	55.7	28.7	16.1	1.6	24.1	1.2	291.3	83.2
34.20	5	5	56.0	28.9	16.4	1.4	24.3	1.2	291.2	83.2
34.30	6	5	55.7	28.5	16.2	1.3	24.0	1.2	288.2	82.3
34.40	7	5	56.0	29.1	16.5	1.2	24.4	1.2	294.3	84.1
34.50	8	5	55.6	29.2	16.4	1.3	24.6	1.2	296.3	84.6
34.56	9	9	56.0	29.0	16.2	1.0	24.3	0.7	295.8	84.5
34.61	10	9	55.7	29.3	16.2	0.9	24.6	0.7	290.7	83.1
34.67	11	9	55.7	29.3	16.3	0.9	24.6	0.7	296.0	84.6
34.72	12	9	56.0	29.3	16.5	0.8	24.7	0.7	296.2	84.6
34.78	13	9	55.8	29.2	16.2	0.8	24.6	0.7	290.9	83.1
34.83	14	9	55.6	29.3	16.4	0.8	24.6	0.7	299.0	85.4
34.89	15	9	56.0	29.1	16.3	0.8	24.5	0.7	294.3	84.1
34.94	16	9	55.8	29.2	16.4	0.7	24.5	0.7	290.2	82.9
35.00	17	9	55.7	28.9	16.4	0.7	24.3	0.7	290.6	83.0
		Average	55.8	29.1	16.3	1.0	24.4	0.9	293.2	83.8
		Std Dev	0.1	0.2	0.1	0.3	0.2	0.3	3.0	0.9
		Maximum	56.0	29.3	16.5	1.6	24.7	1.2	299.0	85.4
		Minimum	55.6	28.5	16.1	0.7	24.0	0.7	288.2	82.3

N-value: 14

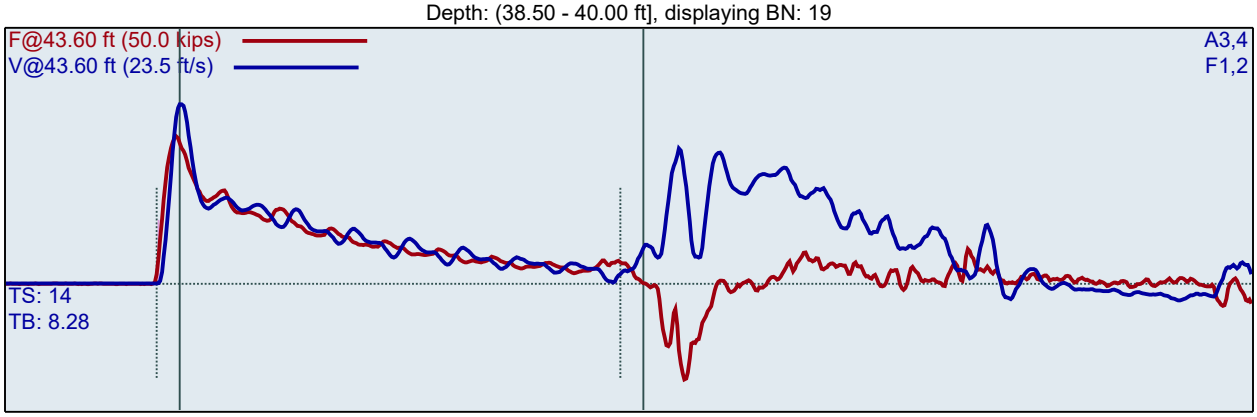
CME 45B (SN 303304)
REK
B-1

B-1
Interval start: 6/8/2023

AR: 1.19 in^2
LE: 43.60 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (38.50 - 40.00 ft], displaying BN: 19



F1 : [528AWJ-1] 203.51 PDICAL (1) FF1
F2 : [528AWJ-2] 203.28 PDICAL (1) FF1

A3 (PR): [K10960] 419.894 mv/6.4v/5000g (1) VF1
A4 (PR): [K10959] 413.827 mv/6.4v/5000g (1) VF1

LP	BL#	BC	BPM	FMX	VMX	DMX	CSX	DFN	EFV	ETR
ft		/6"	bpm	kips	ft/s	in	ksi	in	ft-lb	%
38.63	1	4	1.9	27.8	15.9	2.1	23.3	1.5	287.2	82.0
38.75	2	4	54.9	28.9	16.1	1.8	24.3	1.5	291.1	83.2
38.88	3	4	55.4	28.8	16.6	1.5	24.2	1.5	284.0	81.1
39.00	4	4	55.4	28.4	16.7	1.6	23.9	1.5	298.2	85.2
39.06	5	8	55.6	28.7	16.3	1.1	24.2	0.7	294.1	84.0
39.13	6	8	55.8	28.9	16.1	1.1	24.3	0.7	293.4	83.8
39.19	7	8	55.3	28.5	15.5	1.0	24.0	0.7	297.9	85.1
39.25	8	8	55.4	28.8	15.6	1.0	24.2	0.7	297.1	84.9
39.31	9	8	55.4	28.8	16.1	0.9	24.2	0.7	297.9	85.1
39.38	10	8	56.0	28.9	16.2	0.9	24.3	0.7	294.6	84.2
39.44	11	8	55.6	28.8	16.3	0.9	24.2	0.7	294.8	84.2
39.50	12	8	55.3	28.9	16.5	0.9	24.3	0.7	297.3	84.9
39.56	13	9	55.8	28.8	16.1	0.8	24.2	0.7	293.1	83.7
39.61	14	9	55.5	28.8	15.7	0.8	24.2	0.7	290.3	82.9
39.67	15	9	55.7	29.0	15.8	0.8	24.3	0.7	287.6	82.2
39.72	16	9	55.6	29.4	16.5	0.8	24.7	0.7	293.6	83.9
39.78	17	9	55.7	29.0	16.6	0.7	24.3	0.7	295.3	84.4
39.83	18	9	55.5	29.3	16.6	0.7	24.6	0.7	295.3	84.4
39.89	19	9	55.5	28.8	16.5	0.8	24.2	0.7	297.8	85.1
39.94	20	9	55.5	29.2	16.2	0.7	24.5	0.7	295.3	84.4
40.00	21	9	55.8	28.6	16.4	0.7	24.1	0.7	291.6	83.3
		Average	55.6	28.9	16.2	0.9	24.3	0.7	294.5	84.2
		Std Dev	0.2	0.2	0.3	0.1	0.2	0.0	2.8	0.8
		Maximum	56.0	29.4	16.6	1.1	24.7	0.7	297.9	85.1
		Minimum	55.3	28.5	15.5	0.7	24.0	0.7	287.6	82.2

N-value: 17

Summary of SPT Test Results

Project: CME 45B (SN 303304), Test Date: 6/8/2023

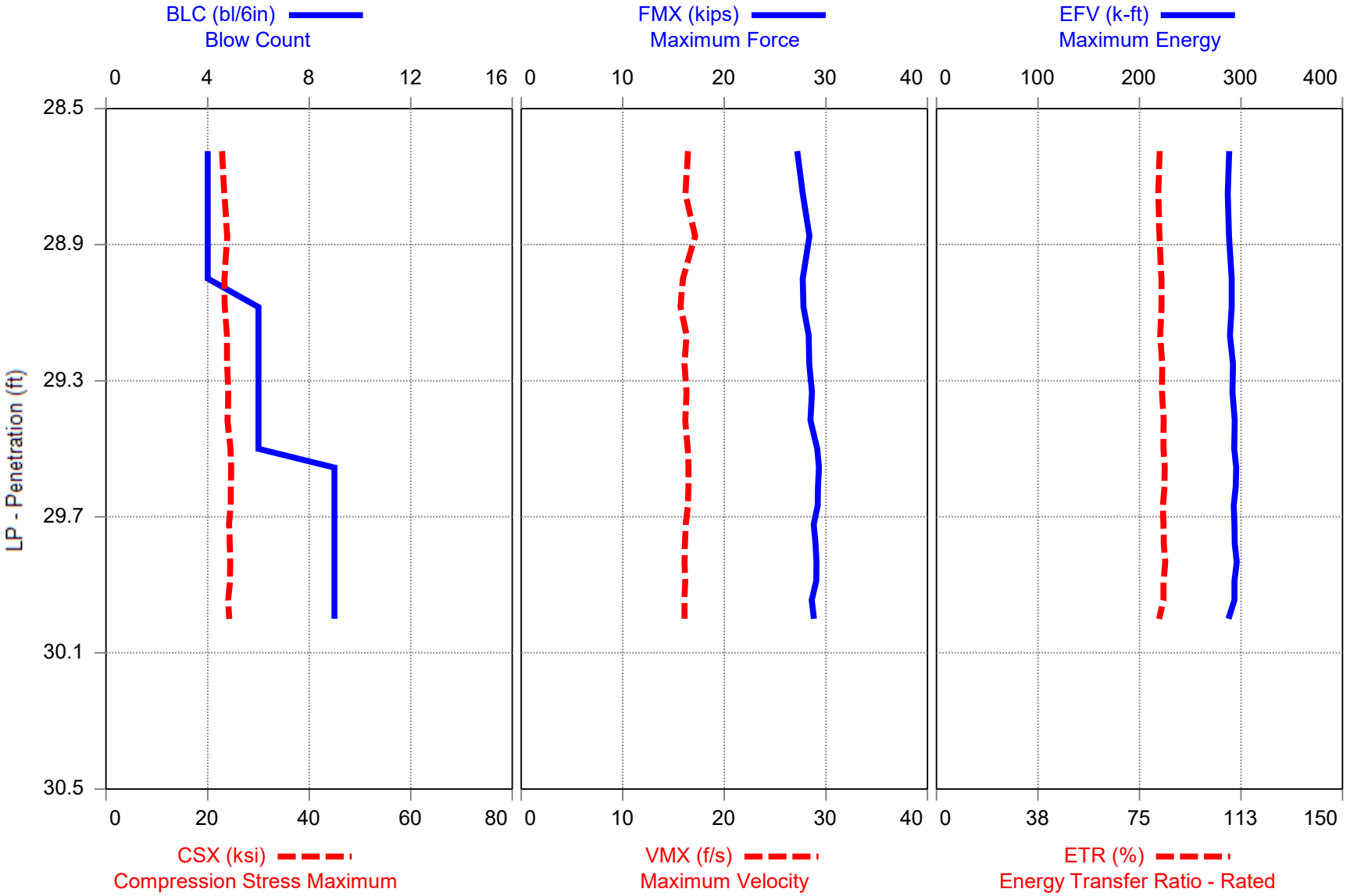
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity
DMX: Maximum Displacement
CSX: Compression Stress Maximum
DFN: Final Displacement
EFV: Maximum Energy
ETR: Energy Transfer Ratio - Rated

Instr. Length ft	Start Depth ft	Final Depth ft	Blows Applied /6"	**N Value**	**N60 Value**	Average BPM bpm	Average FMX kips	Average VMX ft/s	Average DMX in	Average CSX ksi	Average DFN in	Average EFV ft-lb	Average ETR %
33.60	28.50	30.00	**4-6-9**	**15**	**20**	55.9	28.8	16.2	1.0	24.2	0.8	292.8	83.6
38.60	33.50	35.00	**3-5-9**	**14**	**19**	55.8	29.1	16.3	1.0	24.4	0.9	293.2	83.8
43.60	38.50	40.00	**4-8-9**	**17**	**23**	55.6	28.9	16.2	0.9	24.3	0.7	294.5	84.2
				Overall Average Values:		55.8	28.9	16.2	0.9	24.3	0.8	293.6	83.9
				Standard Deviation:		0.2	0.3	0.3	0.2	0.3	0.2	2.8	0.8
				Overall Maximum Value:		56.2	29.4	16.6	1.6	24.7	1.2	299.0	85.4
				Overall Minimum Value:		55.3	27.8	15.5	0.7	23.4	0.7	287.6	82.2

GRL Engineers, Inc. - PDIPLOT2 Ver 2021.1.61.0 - Case Method & iCAP® Results

Printed: 08-June-2023 Test started: 08-June-2023

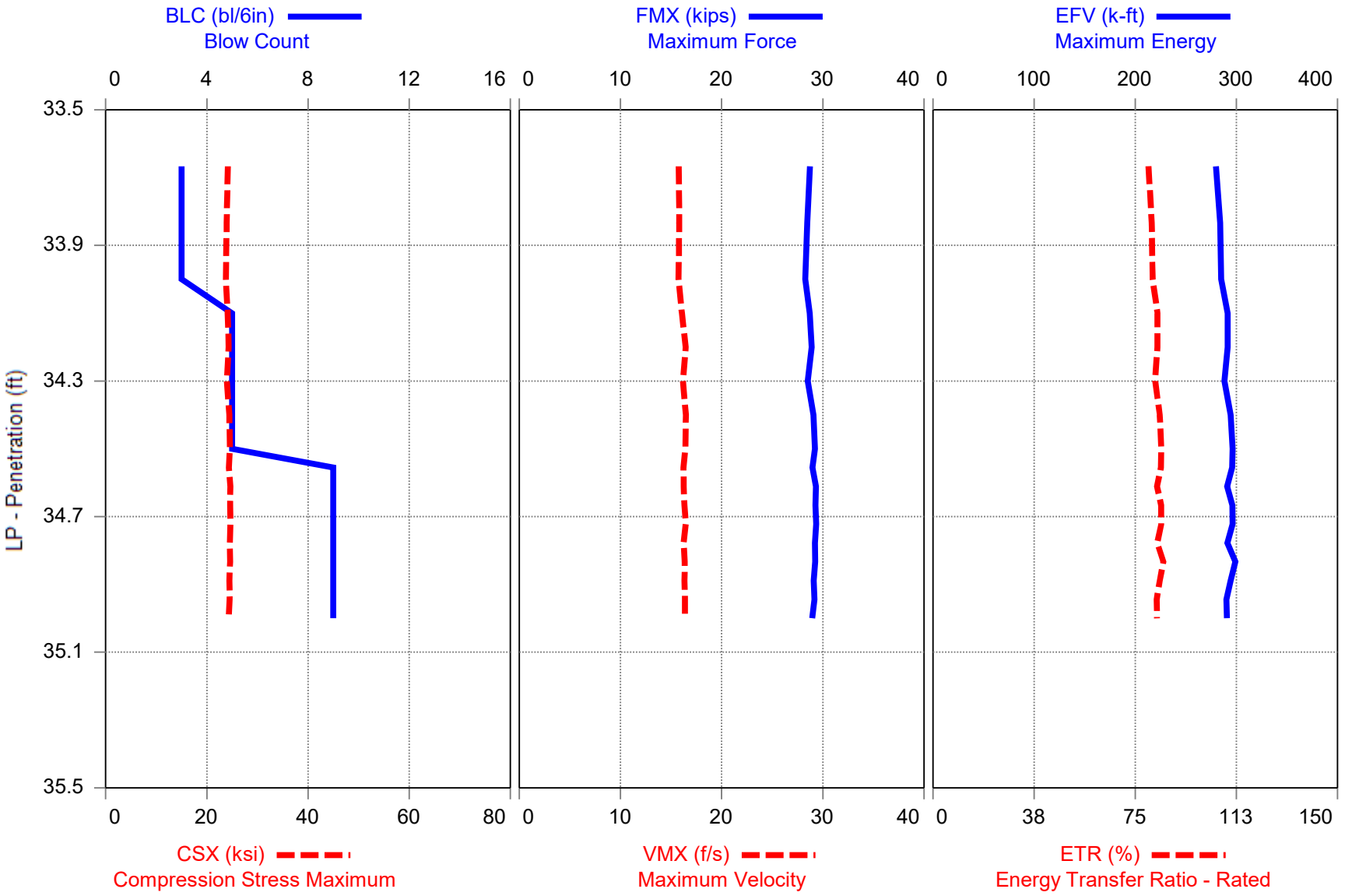
CME 45B (SN 303304) - 28.5 TO 30.0



GRL Engineers, Inc. - PDIPLOT2 Ver 2021.1.61.0 - Case Method & iCAP® Results

Printed: 08-June-2023 Test started: 08-June-2023

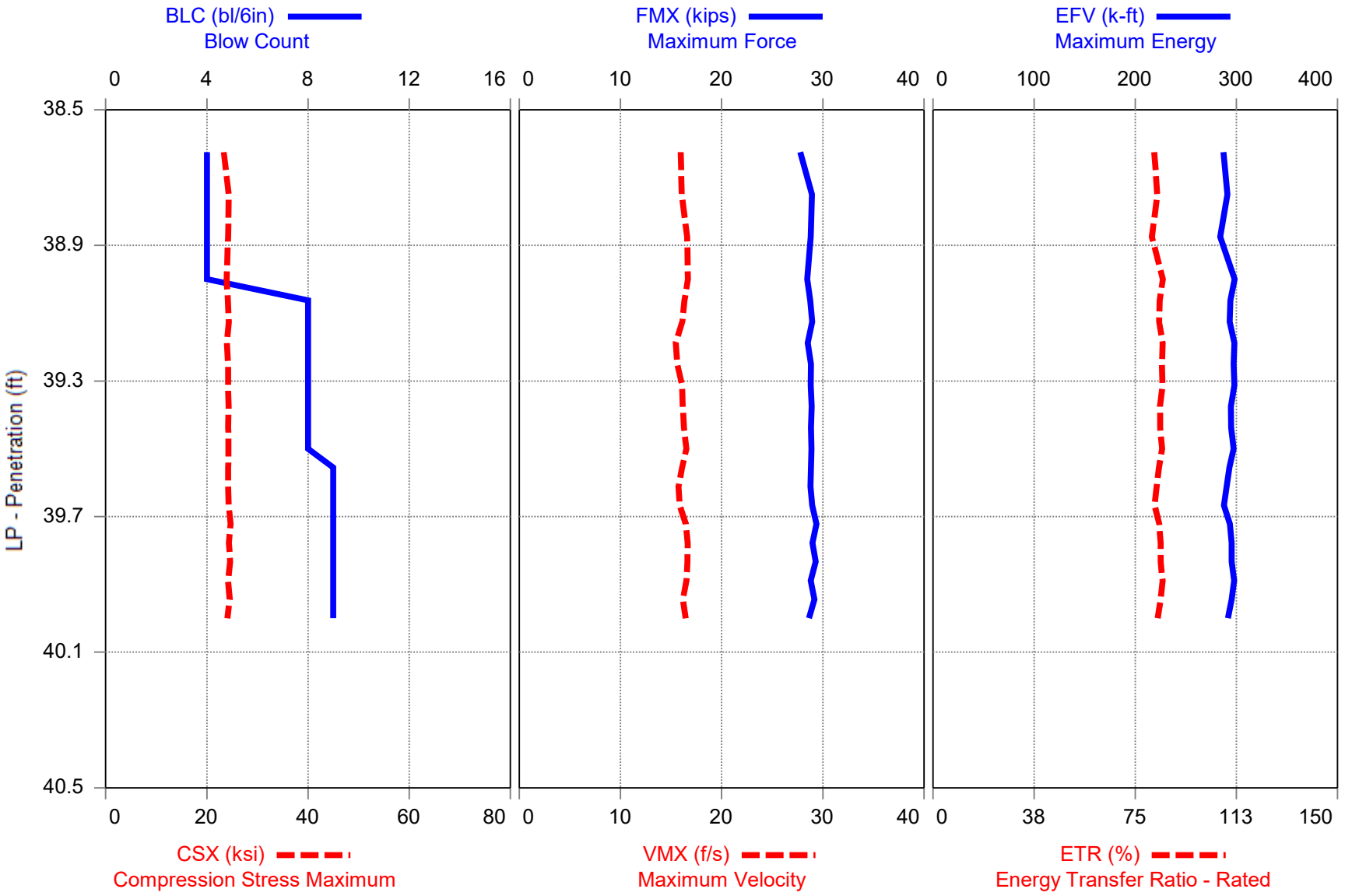
CME 45B (SN 303304) - 33.5 TO 35.0

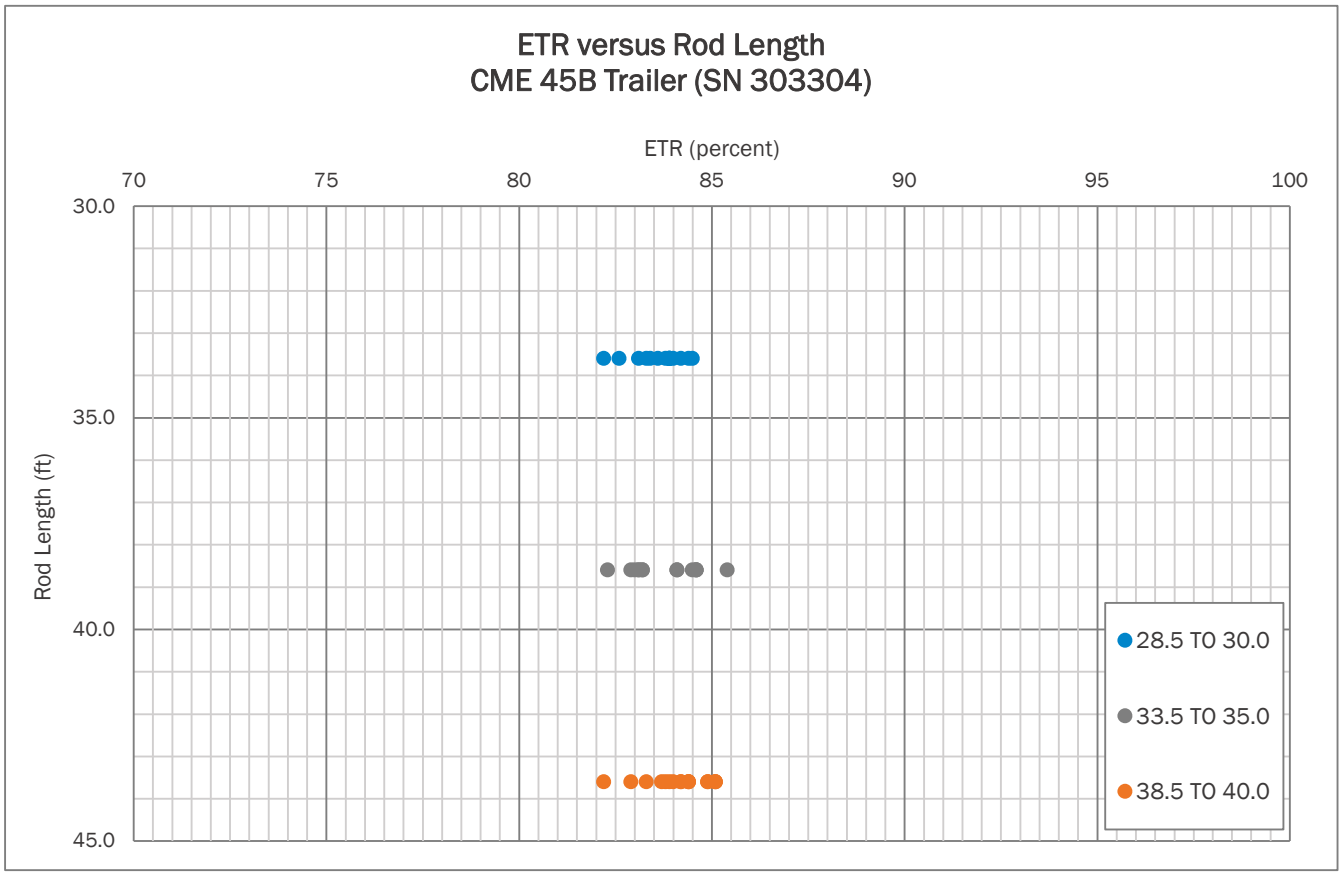


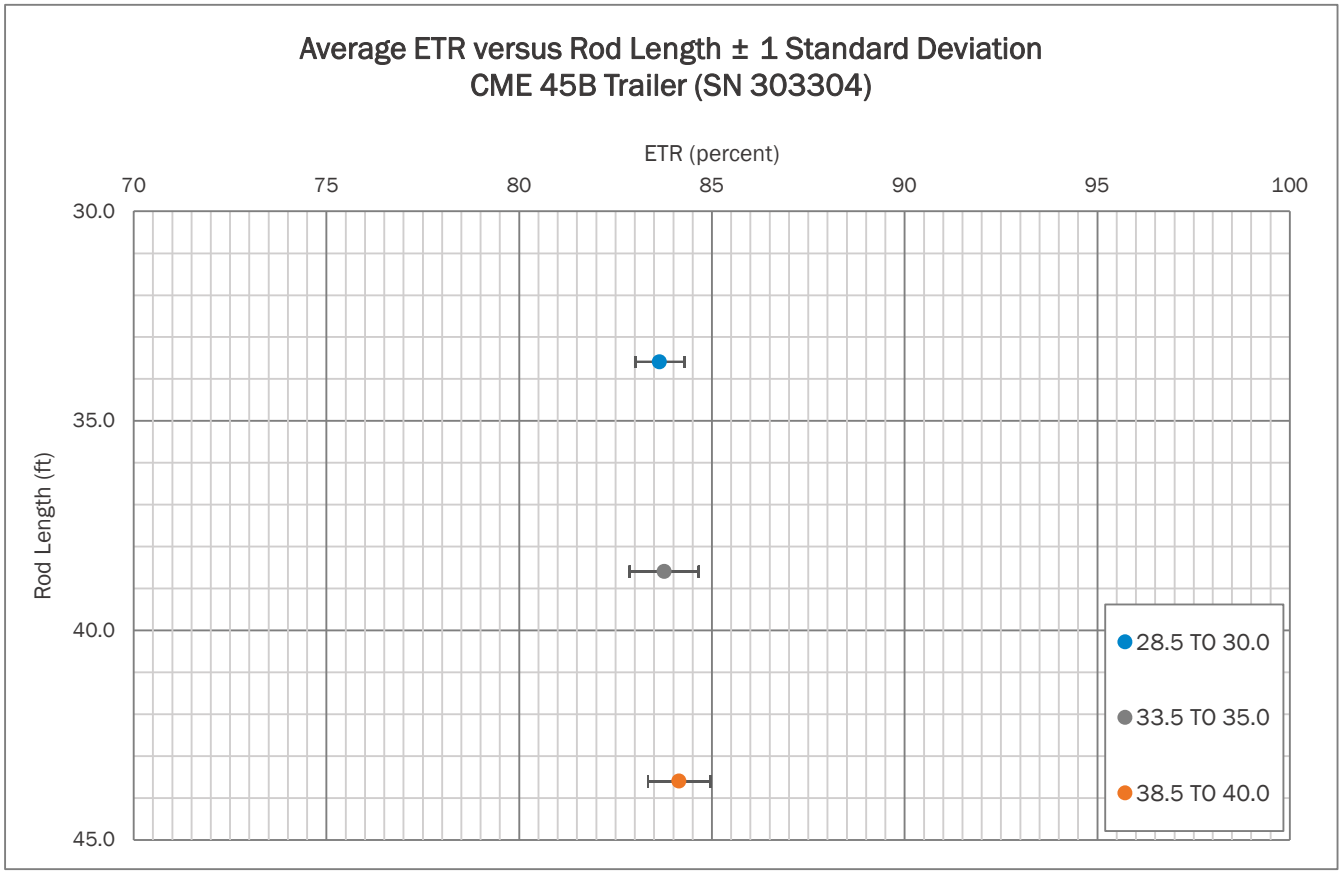
GRL Engineers, Inc. - PDIPLOT2 Ver 2021.1.61.0 - Case Method & iCAP® Results

Printed: 08-June-2023 Test started: 08-June-2023

CME 45B (SN 303304) - 38.5 TO 40.0




ETR versus Rod Length
CME 45B Trailer (SN 303304)
ETR (percent)
70
75
80
85
90
95
100
30.0
35.0
40.0
45.0
Rod Length (ft)
28.5 TO 30.0
33.5 TO 35.0
38.5 TO 40.0


Average ETR versus Rod Length ± 1 Standard Deviation
CME 45B Trailer (SN 303304)
ETR (percent)
70
75
80
85
90
95
100
30.0
35.0
40.0
45.0
Rod Length (ft)
28.5 TO 30.0
33.5 TO 35.0
38.5 TO 40.0

APPENDIX II

Figure No. 1: Rear View of Drill Rig

Figure No. 2: Side View of Drill Rig

Figure No. 3: Serial Number Plate

Figure No. 4: Automatic Hammer

CAROLINAS GEOTECHNICAL GROUP

SPT Hammer Energy Field Form

Project:	SPT HAMMER ENERGY	**Date:**	6/8/2023
Project No.:	240021095	**Weather:**	50's CLOUDY
Boring No.:	B-1	**Drill Rod Type:**	AWJ

On-site Personnel

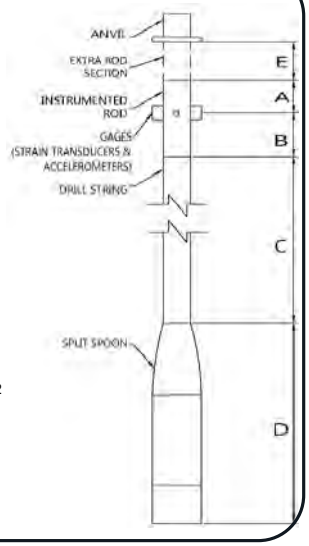
Drilling Company:	BRECCIA CONSTRUCTION, LLC
Rig Operator:	D. HARRIS
Engr/Geologist:	N/A
Client Rep.:	N/A
Analyzer Oper.:	R. KRAL

Rig/Hammer Info

Drill Rig Make/Model:	CME 45B
Carrier Type:	TRAILER
Rig Serial No.:	303304 (DR-1)
Hammer Type/Model:	CME
Hammer Serial No.:	N/A
Hammer Drop System:	AUTO
Lubrication Condition:	PER MANUFACTURER
Manufacturer Recommended Operation Rate (bpm):	55
Drop Height (in.):	30
Hammer Weight (lbs):	140
Anvil Dimension (in.):	11.5
Drilling Method:	2.25 HSA

Rod Info

(A + E) Impact Surface to Gages Length:	1.36	ft
(B) Instr. Rod Length below Gages:	0.70	ft
(A) + (B) Instr. Rod Length:	2.00	ft
(D) Spoon Length:	2.85	ft
(E) Rod Length Above Instr. Rod (if applicable):	0.06	ft
Instr. Rod S/N:	528AWJ	
Instr. Rod Outside Dia.:	1.75	in.
Instr. Rod Area:	1.19	in^2
PDA Make/Model:	SPT	
PDA Serial No.:	4549 TB	
Calib. Pulse Test (y/n):	Y	



Gage Info

Gage		Serial No.	Calibration No.
Accel.	A3	K10959	413.83
	A4	K10960	419.89
Strain	F3	528AWJ-1	203.51
	F4	528AWJ-2	203.28

Date of Test	Test Depth Increment (ft to ft)	Test Time Start / Stop (military)	Length of Drill String (ft) ***(C)***	(LE) Length below Gages (ft) ***(B) + (C) + (D)***	Avg. Meas. Hammer Rate (BPM)	SPT Blow Counts 6"	12"	18"	N-Value	Drop Height in Tolerance (y/n)	Soil Class.
8-Jun	28.5 TO 30.0	0635/0635	30	33.6	56	4	6	9	15	Y	SA SI
8-Jun	33.5 TO 35.0	0642/0642	35	38.6	55	3	5	9	14	Y	SA SI
8-Jun	38.5 TO 40.0	0650/0650	40	43.6	55	4	8	9	17	Y	SA SI

Notes:
TESTING PERFORMED AT 1817 LOWRYS HIGHWAY IN CHESTER, SOUTH CAROLINA (CHESTER COUNTY). THE APPROXIMATE COORDINATES ARE 34.7704109, -81.2454062.

NOTE: (1) Note any unusual hammer operating conditions that affect the hammer performance, or changes in operating conditions (e.g. veritcality, weather, or lubrication between trials). (2) Note any changes in rod diameter along drill string and record locations of short rod sections.

Prepared By (print/signature)

6/8/2023
Date

APPENDIX III

Certificate of Calibration

Pile Dynamics, Inc. certifies that the

Pile Driving Analyzer®, Model SPT

Serial Number: 4549 TB

was calibrated on 14 July 2022

using a PDA Calibration Box whose output was calibrated with test equipment traceable to NIST.

This certificate is valid for 2 years from above date.

CORPORATE SEAL 1972 OHIO

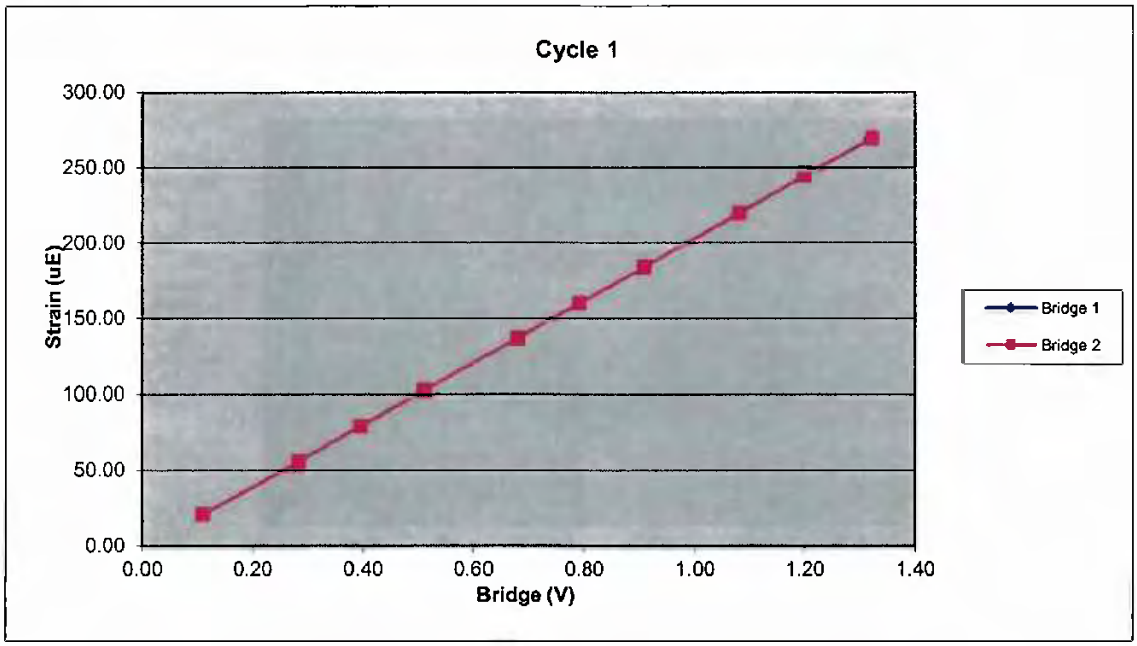
Tested by

Pile Dynamics, Inc.
30725 Aurora Road
Cleveland, Ohio 44139 USA

528AWJ		Cycle 1		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	803.20	21.15	0.11	0.11
3	2080.73	56.33	0.28	0.28
4	2904.01	79.79	0.39	0.39
5	3765.89	103.49	0.51	0.51
6	5005.11	138.03	0.68	0.68
7	5828.59	161.56	0.79	0.79
8	6692.71	185.68	0.91	0.91
9	7962.93	221.03	1.08	1.08
10	8831.54	245.89	1.20	1.20
11	9736.80	270.68	1.32	1.32

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**7358.13**	**Force Calibration (lb/V)**	**7351.82**
Offset	3.52	Offset	6.26
Correlation	0.999999	Correlation	0.999999
Strain Calibration (µE/V)	**205.90**	**Strain Calibration (µE/V)**	**205.73**
Offset	-1.56	Offset	-1.48
Correlation	0.999995	Correlation	0.999996

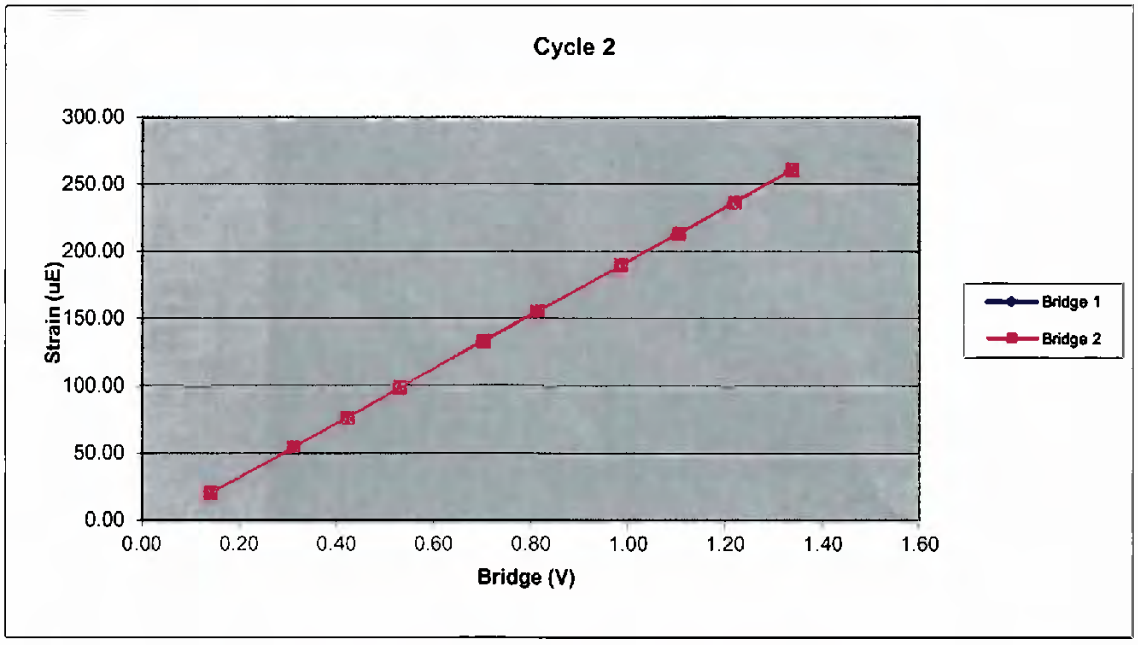
Force Strain Calibration	
EA (Kips)	**35735.87**
Offset	59.29
Correlation	0.999995



528AWJ		Cycle 2		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	1038.71	19.60	0.14	0.14
3	2288.25	53.30	0.31	0.31
4	3093.11	75.49	0.42	0.42
5	3893.00	97.84	0.53	0.53
6	5167.50	132.26	0.70	0.70
7	5988.25	154.39	0.81	0.81
8	7248.72	188.87	0.98	0.98
9	8125.71	212.29	1.10	1.10
10	8976.19	235.45	1.22	1.22
11	9854.85	259.50	1.33	1.34

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**7381.92**	**Force Calibration (lb/V)**	**7365.94**
Offset	**-0.76**	Offset	**4.69**
Correlation	**0.999998**	Correlation	**0.999999**
Strain Calibration (µE/V)	**200.83**	**Strain Calibration (µE/V)**	**200.40**
Offset	**-8.59**	Offset	**-8.44**
Correlation	**0.999997**	Correlation	**0.999996**

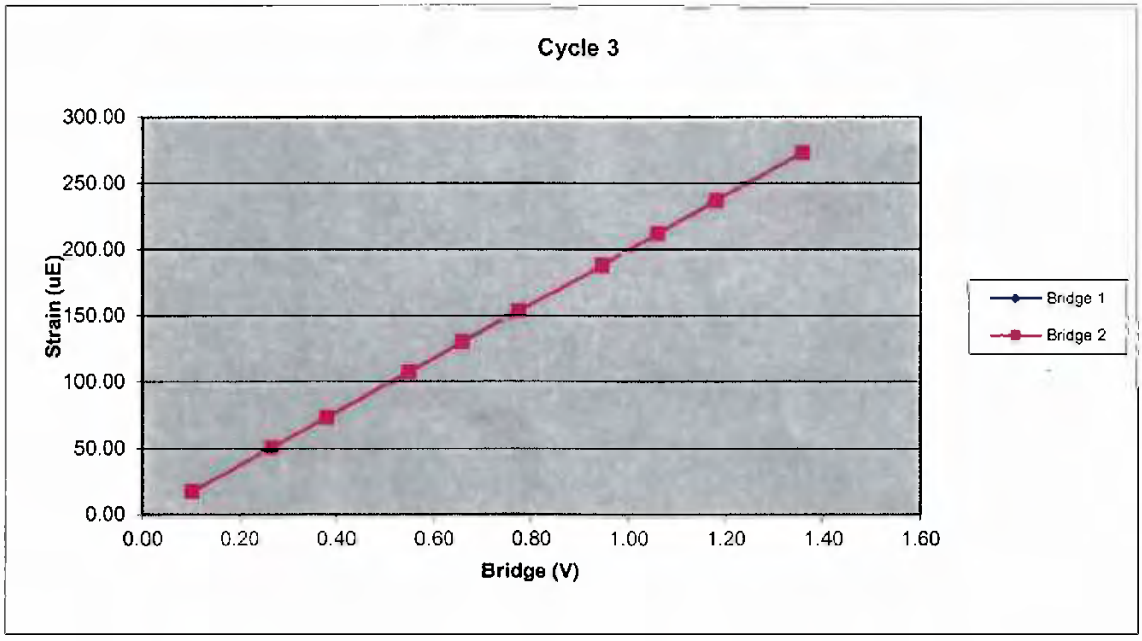
Force Strain Calibration	
EA (Kips)	**36756.34**
Offset	**315.07**
Correlation	**0.999995**



528AWJ		Cycle 3		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	734.68	18.74	0.10	0.10
3	1943.58	51.94	0.26	0.26
4	2781.29	75.07	0.38	0.38
5	4027.81	108.88	0.55	0.55
6	4829.55	131.78	0.66	0.66
7	5689.29	155.36	0.77	0.77
8	6956.49	190.12	0.95	0.95
9	7799.46	214.09	1.06	1.06
10	8693.90	238.78	1.18	1.18
11	10007.88	275.06	1.36	1.36

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**7366.71**	**Force Calibration (lb/V)**	**7364.49**
Offset	**-6.17**	Offset	**-9.40**
Correlation	**0.999998**	Correlation	**0.999999**
Strain Calibration (µE/V)	**203.78**	**Strain Calibration (µE/V)**	**203.72**
Offset	**-2.08**	Offset	**-2.17**
Correlation	**0.999989**	Correlation	**0.999993**

Force Strain Calibration	
EA (Kips)	**36149.33**
Offset	**69.26**
Correlation	**0.999994**



Bridge Excitation (V) 5
Shunt Resitor (ohm) 60.4k

Calibration Factors	528AWJ		
Bridge 1 (µE/V)	203.51	Bridge 2 (µE/V)	203.28
EA Factor (Kips)	36213.85	Area (in^2)	1.21

Calibrated by: _____
Calibrated Date: 7/18/2022

Pile Dynamics Inc
30725 Aurora Rd
Solon, OH 44139

Traceable to N.I.S.T.

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on 14Jun2022

Serial No:	K10959	**Temperature:**	79.0 °F
Model:	PR	**Humidity:**	50%
Calibrated on:	Channel 3 on 8G 5161 LE		

Ref Acc 1:	72517! 1049 g's/volt	**Cal on:**	24Mar2022
Ref Acc 2:	72505! 1035 g's/volt	**Cal on:**	24Mar2022

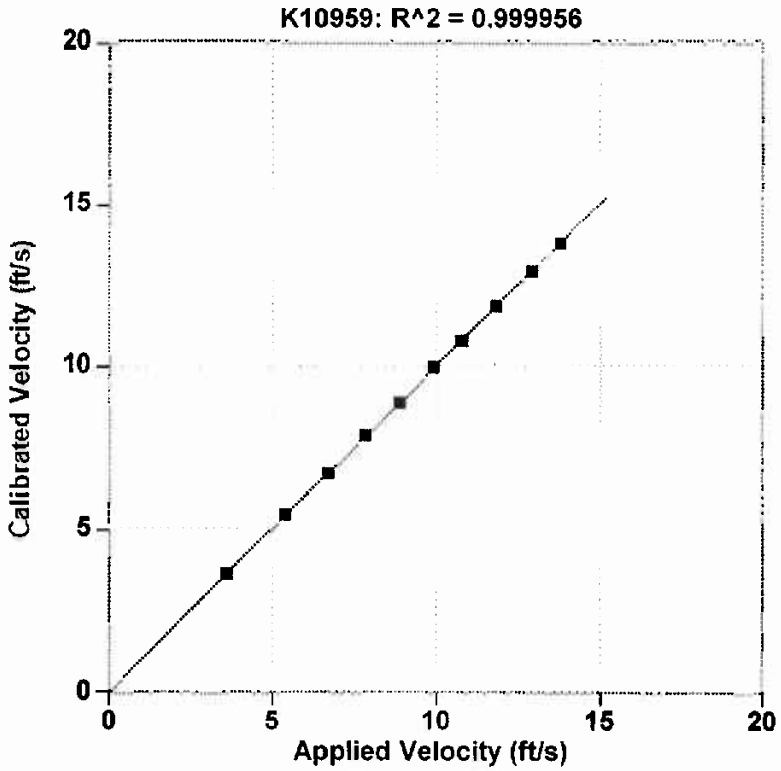
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

413.8 mv/5000g
(82.8 µv/g)
R^2: 0.999956 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity	S/N K10959 Velocity
ft/s	ft/s
3.605	3.589
5.397	5.412
6.705	6.699
7.841	7.862
8.877	8.913
9.904	9.929
10.746	10.721
11.807	11.815
12.910	12.889
13.783	13.762

Maximum Acceleration: 935 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on 14Jun2022

Serial No:	K10960	**Temperature:**	79.0 °F
Model:	PR	**Humidity:**	50%
Calibrated on:	Channel 3 on 8G 5161 LE		

Ref Acc 1:	72517! 1049 g's/volt	**Cal on:**	24Mar2022
Ref Acc 2:	72505! 1035 g's/volt	**Cal on:**	24Mar2022

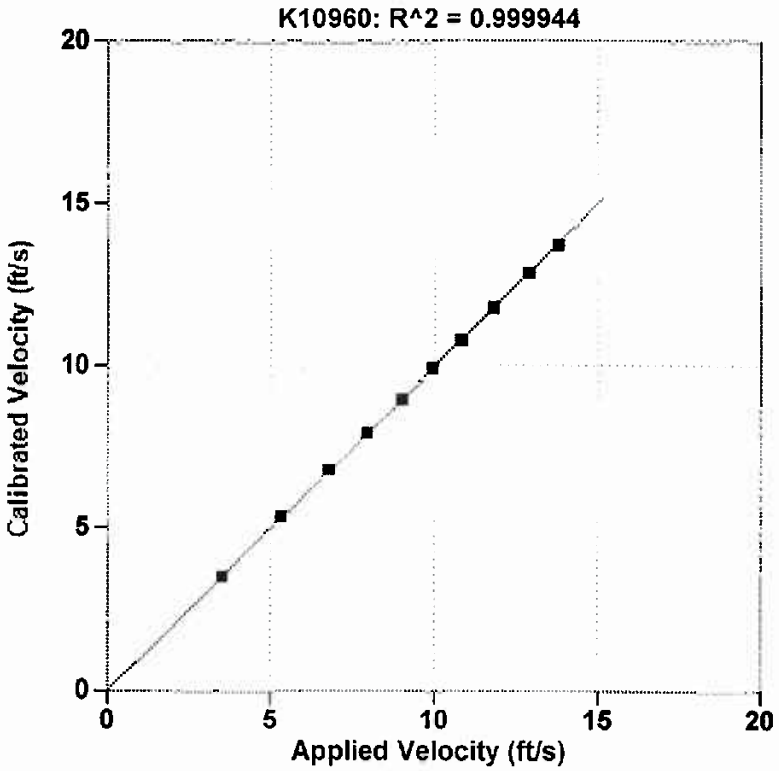
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

419.9 mv/5000g
(84.0 µv/g)
R^2: 0.999944 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity	S/N K10960 Velocity
ft/s	ft/s
3.513	3.540
5.322	5.345
6.769	6.796
7.933	7.937
8.998	9.037
9.912	9.923
10.788	10.775
11.781	11.779
12.877	12.863
13.771	13.732

Maximum Acceleration: 934 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on 14Jun2022

Serial No:	K11957	**Temperature:**	79.0 °F
Model:	PR	**Humidity:**	50%
Calibrated on:	Channel 3 on 8G 5161 LE		

Ref Acc 1:	72517! 1049 g's/volt	**Cal on:**	24Mar2022
Ref Acc 2:	72505! 1035 g's/volt	**Cal on:**	24Mar2022

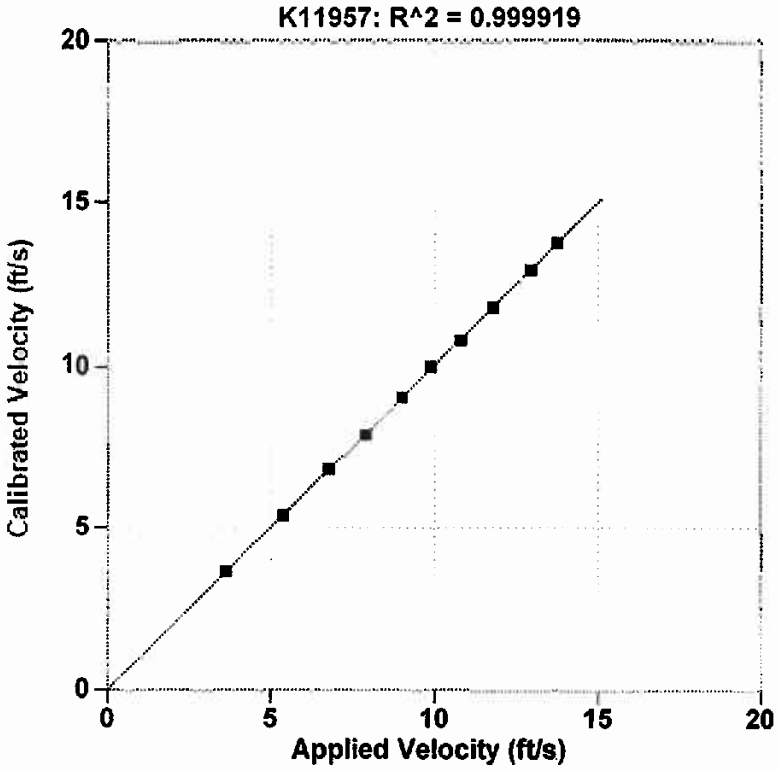
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

409.6 mv/5000g
(81.9 µv/g)
R^2: 0.999919 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity ft/s	S/N K11957 Velocity ft/s
3.643	3.661
5.377	5.363
6.761	6.783
7.895	7.905
8.973	8.989
9.864	9.918
10.780	10.730
11.763	11.749
12.920	12.894
13.735	13.746

Maximum Acceleration: 931 g's

APPENDIX IV

PDCA
PILE DRIVING CONTRACTORS ASSOCIATION

Pile Dynamics, Inc.

This documents that

Robert E. Kral
Carolinas Geotechnical Group

has on May 20, 2016 achieved the rank of

ADVANCED

on the **Dynamic Measurement and Analysis Proficiency Test.**

The individual identified on this document demonstrated to the degree granted above an understanding of theory, data quality evaluation, interpretation and signal matching for high strain dynamic testing of deep foundations. ***It is recommended*** **that Individuals at the Advanced level seek Master or Expert levels through additional study within six years of the date of this document.**

The ability of the individual named to provide appropriate knowledge and advice on a specific project is not implied or warranted by the Pile Driving Contractors Association or Pile Dynamics, Inc. **This certificate can be verified at www.PDAproficiencytest.com.** The Pile Driving Contractors Association or Pile Dynamics, Inc. assumes no liability for foundation testing and analysis work performed by the bearer of this certificate.

Steven A. Hall, Executive Director
Pile Driving Contractors Association

Garland Likins, Senior Partner
Pile Dynamics, Inc.

No. 2072