GARRETT & MOORE
Engineering for the Power and Waste Industries

Beaufort County
North Boyd Rd. & Stilley Station Rd.

Geotechnical Information

1029 West South Street, Raleigh, North Carolina 27603 • O: 919-792-1900 • F: 866-311-7206

December 05, 2025

Project No. R-2025-333-001

Cooper Dalton
Garrett & Moore
1029 West South St.
Raleigh, NC 27603

cdalton@garrett-moore.com

Transmittal
Laboratory Test Results
Beaufort County

Please find attached the laboratory test results for the above referenced project. The tests were outlined on the Project Verification Form that was transmitted to your firm. The testing was performed in general accordance with the methods listed on the enclosed data sheets. The test results are believed to be representative of the samples that were submitted for testing and are indicative only of the specimens which were evaluated. We have no direct knowledge of the origin of the samples and imply no position with regard to the nature of the test results, i.e., pass/fail and no claims as to the suitability of the material for its intended use.

The test data and all associated project information provided shall be held in strict confidence and disclosed to other parties only with authorization by our Client. The test data submitted herein is considered integral with this report and is not to be reproduced except in whole and only with the authorization of the Client and Geotechnics. The remaining sample materials for this project will be retained for a minimum of 90 days as directed by the Geotechnics' Quality Program.

We are pleased to provide these testing services. Should you have any questions or if we may be of further assistance, please contact our office.

Respectively submitted,
Geotechnics, Inc.

Michael P. Smith
VP Regional Manager

We understand that you have a choice in your laboratory services and we thank you for choosing Geotechnics.

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MOISTURE CONTENT

ASTM D 2216-19

Client: Garrett & Moore
Client Reference: Beaufort County
Project No.: R-2025-333-001

Lab ID:	001	002	003	004	005
Boring No.:	SSR-TP-3	SSR-TP-6	SSR-TP-7	NBR-TP-2	NBR-TP-3
Depth (ft):	-7	-8	-5	-7	-8
Sample No.:	B-1	B-2	B-3	B-4	B-5
Tare Number	400	41-A	28-A	733	739
Wt. of Tare & Wet Sample (g)	514.79	535.16	537.94	501.05	513.83
Wt. of Tare & Dry Sample (g)	466.96	498.61	490.12	464.27	467.62
Weight of Tare (g)	134.02	136.07	139.35	141.35	142.48
Weight of Water (g)	47.83	36.55	47.82	36.78	46.21
Weight of Dry Sample (g)	332.94	362.54	350.77	322.92	325.14
Water Content (%)	**14.4**	**10.1**	**13.6**	**11.4**	**14.2**

Lab ID	006
Boring No.	NBR-TP-7
Depth (ft)	-7
Sample No.	B-6
Tare Number	469
Wt. of Tare & Wet Sample (g)	508.21
Wt. of Tare & Dry Sample (g)	473.18
Weight of Tare (g)	145.98
Weight of Water (g)	35.03
Weight of Dry Sample (g)	327.20
Water Content (%)	**10.7**

Notes :

Tested By BS *Date* 11/30/25 *Checked By* AES *Date* 12/5/25

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North Boyd Road Site
Geotechnical Data &
Test Pit Photos
November 2025

Path: D:\Project\Beaufort\N Boyd\NORTH BOYD SITE PLAN 09-04-25.pro Plot Date/Time: Wed Oct 29,2025 / 14:41:15

GRAPHIC SCALE 1" = 75'
0 75 150

SHEET
TP-1

TEST PIT LOCATIONS

BEAUFORT COUNTY

NORTH BOYD
CONVENIENCE SITE

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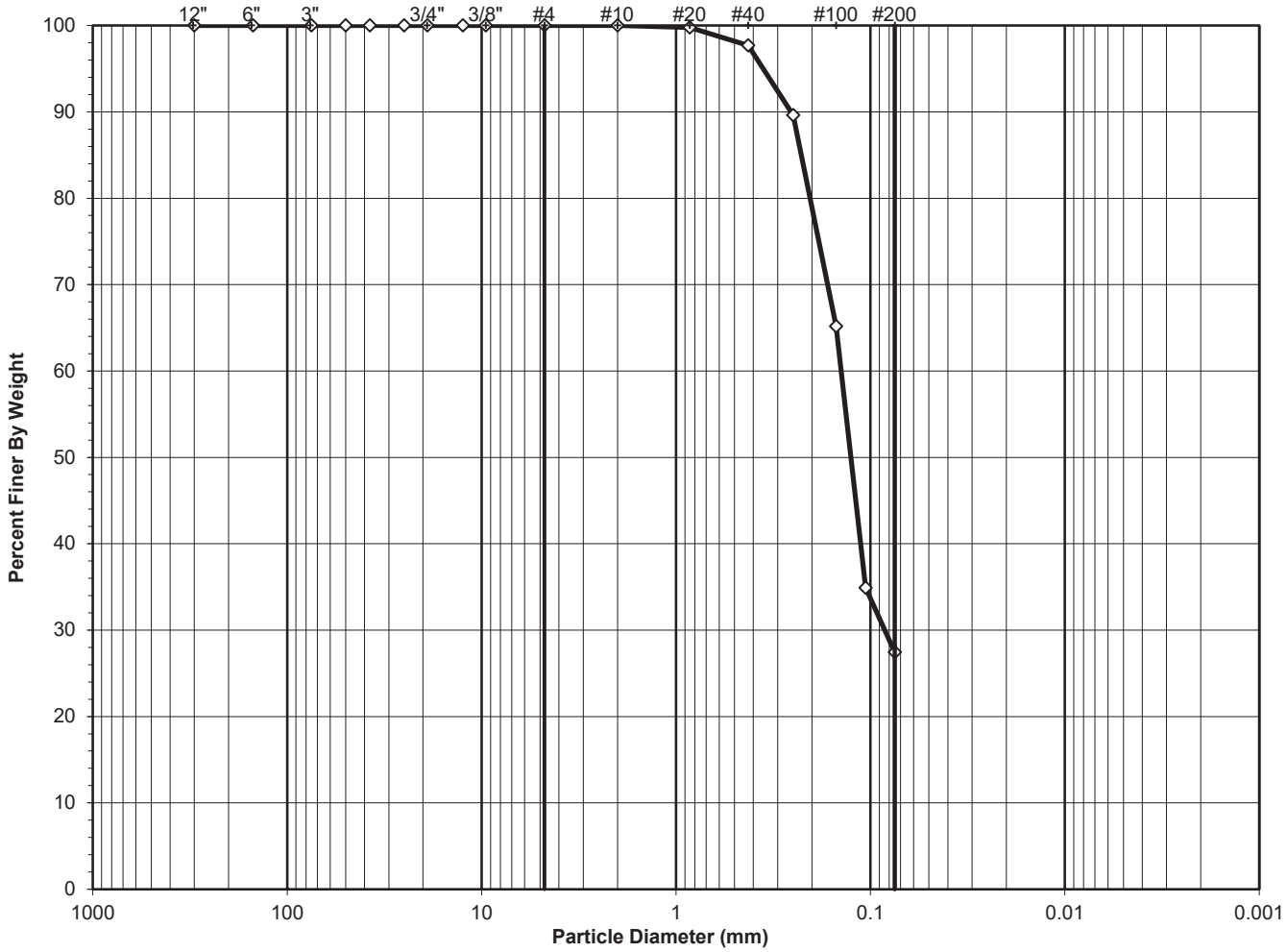
Engineering for the Power and Waste Industries
1029 West South Street
Raleigh, NC 27603
www.Garrett-Moore.com

SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	NBR-TP-2
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-4
Lab ID:	R-2025-333-001-004	Soil Color:	Gray Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SC-SM, TESTED

D50 = 0.13

USCS Classification:
SILTY, CLAYEY SAND

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	NBR-TP-2
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-4
Lab ID:	R-2025-333-001-004	Soil Color:	Gray Brown

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	733	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	501.05	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	464.27	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	141.35	Weight of Tare (g):	NA
Weight of Water (g):	36.78	Weight of Water (g):	NA
Weight of Dry Soil (g):	322.92	Weight of Dry Soil (g):	NA
Moisture Content (%):	**11.4**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	322.92
Tare No. (Sub-Specimen)	733	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	501.05	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	141.35	Dry Weight of - 3/4" Sample (g):	322.92
Sub-Specimen Wet Weight (g):	359.70	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	322.92
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.03		0.01	0.01	99.99	**100.0**
#20	0.85	0.68	(**)	0.21	0.22	99.78	**99.8**
#40	0.425	6.73		2.08	2.30	97.70	**97.7**
#60	0.25	26.13		8.09	10.40	89.60	**89.6**
#100	0.15	78.92		24.44	34.84	65.16	**65.2**
#140	0.106	97.68		30.25	65.08	34.92	**34.9**
#200	0.075	24.14		7.48	72.56	27.44	**27.4**
Pan	-	88.61		27.44	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

Client:	Garrett & Moore	Boring No.:	NBR-TP-2
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-4
Lab ID:	R-2025-333-001-004	Soil Description:	GRAY BROWN SILTY CLAY

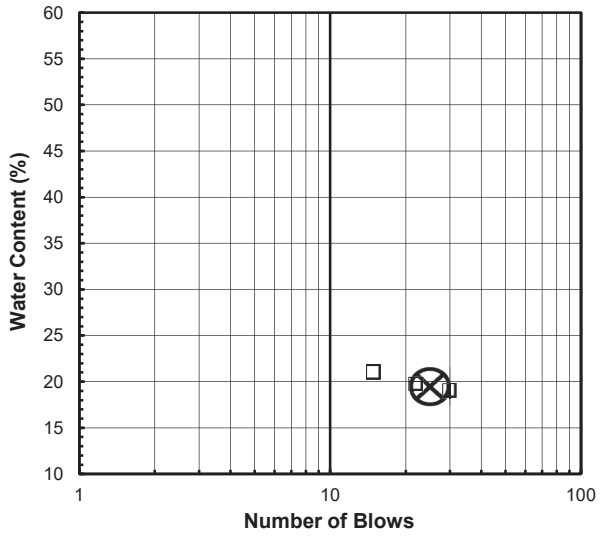
Note: The* USCS *symbol used with this test refers only to the minus No. 40 sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description. (Minus #40 sieve material, Air dried)

As Received Moisture Content		Liquid Limit Test			
ASTM D2216-19		1	2	3	M
Tare Number:	733	B-4	A-L	KP	U
Wt. of Tare & Wet Sample (g):	501.05	29.41	28.71	30.52	L
Wt. of Tare & Dry Sample (g):	464.27	27.17	26.52	27.90	T
Weight of Tare (g):	141.35	15.37	15.41	15.41	I
Weight of Water (g):	36.8	2.2	2.2	2.6	P
Weight of Dry Sample (g):	322.9	11.8	11.1	12.5	O
Was As Received MC Preserved:	**Yes**				I
Moisture Content (%):	**11.4**	**19.0**	**19.7**	**21.0**	N
Number of Blows:		**30**	**22**	**15**	T

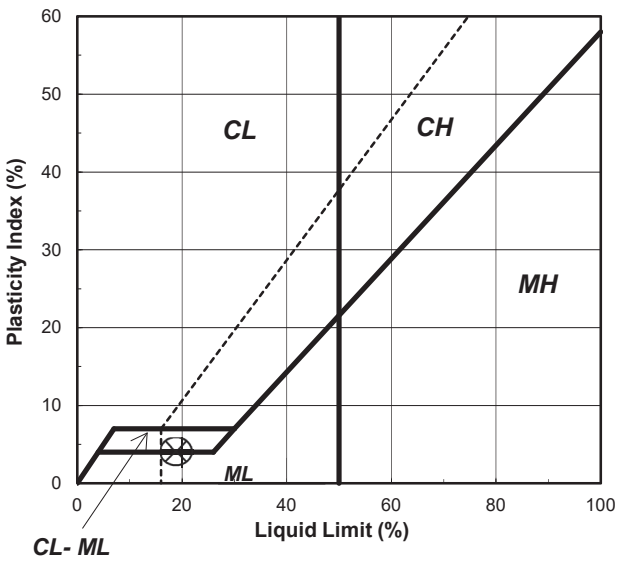
Plastic Limit Test	1	2	Range
Tare Number:	2	13	
Wt. of Tare & Wet Sample (g):	16.16	16.13	
Wt. of Tare & Dry Sample (g):	14.97	14.93	
Weight of Tare (g):	7.05	7.02	
Weight of Water (g):	1.2	1.2	
Weight of Dry Sample (g):	7.9	7.9	
Moisture Content (%):	**15.0**	**15.2**	**-0.1**
Note: The acceptable range of the two Moisture Contents is ±			0.84

Test Results	
Liquid Limit (%):	**19**
Plastic Limit (%):	**15**
Plasticity Index (%):	**4**
USCS Symbol:	**CL-ML**

Flow Curve



Plasticity Chart



Tested By CB *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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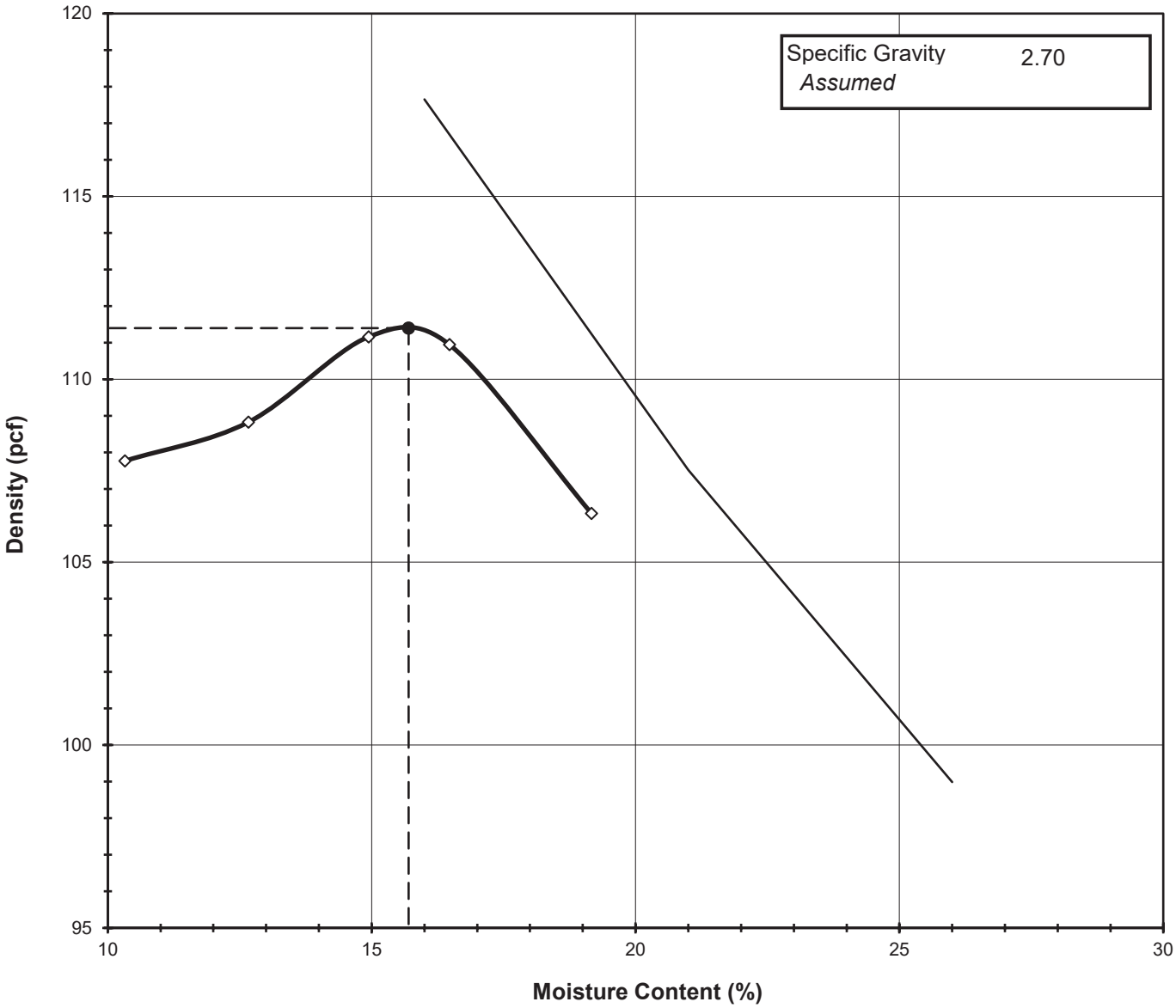
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-004	Test Method	**STANDARD**

Visual Description: Gray Brown Silty,Clayey Sand

Optimum Moisture Content (%): 15.7
Maximum Dry Density (pcf): 111.4



Tested By MFP *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-004		

Visual Description: Gray Brown Silty,Clayey Sand

Total Weight of the Sample (g):	20650
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R174
Mold ID:	R607
Mold diameter:	4"
Weight of the Mold (g):	4231
Volume of the Mold (cm^3):	937

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	6015	6071	6148	6170	6132
Weight of Mold (g):	4231	4231	4231	4231	4231
Weight of Wet Sample (g):	1785	1840	1918	1940	1902
Mold Volume (cm^3):	937	937	937	937	937

Moisture Content / Density

Tare Number:	20-A	485	19-A	428	16-A
Weight of Tare & Wet Sample (g):	365.40	376.20	342.90	368.80	380.10
Weight of Tare & Dry Sample (g):	339.81	345.11	309.71	330.67	333.64
Weight of Tare (g):	91.90	99.60	87.60	99.20	91.20
Weight of Water (g):	25.59	31.09	33.19	38.13	46.46
Weight of Dry Sample (g):	247.91	245.51	222.11	231.47	242.44

Wet Density (g/cm^3):	1.91	1.96	2.05	2.07	2.03
Wet Density (pcf):	118.9	122.6	127.8	129.2	126.7
Moisture Content (%):	**10.3**	**12.7**	**14.9**	**16.5**	**19.2**
Dry Density (pcf):	**107.8**	**108.8**	**111.2**	**110.9**	**106.3**

Zero Air Voids

Moisture Content (%):	16.0	21.0	26.0
Dry Unit Weight (pcf):	117.7	107.5	99.0

Tested By MFP *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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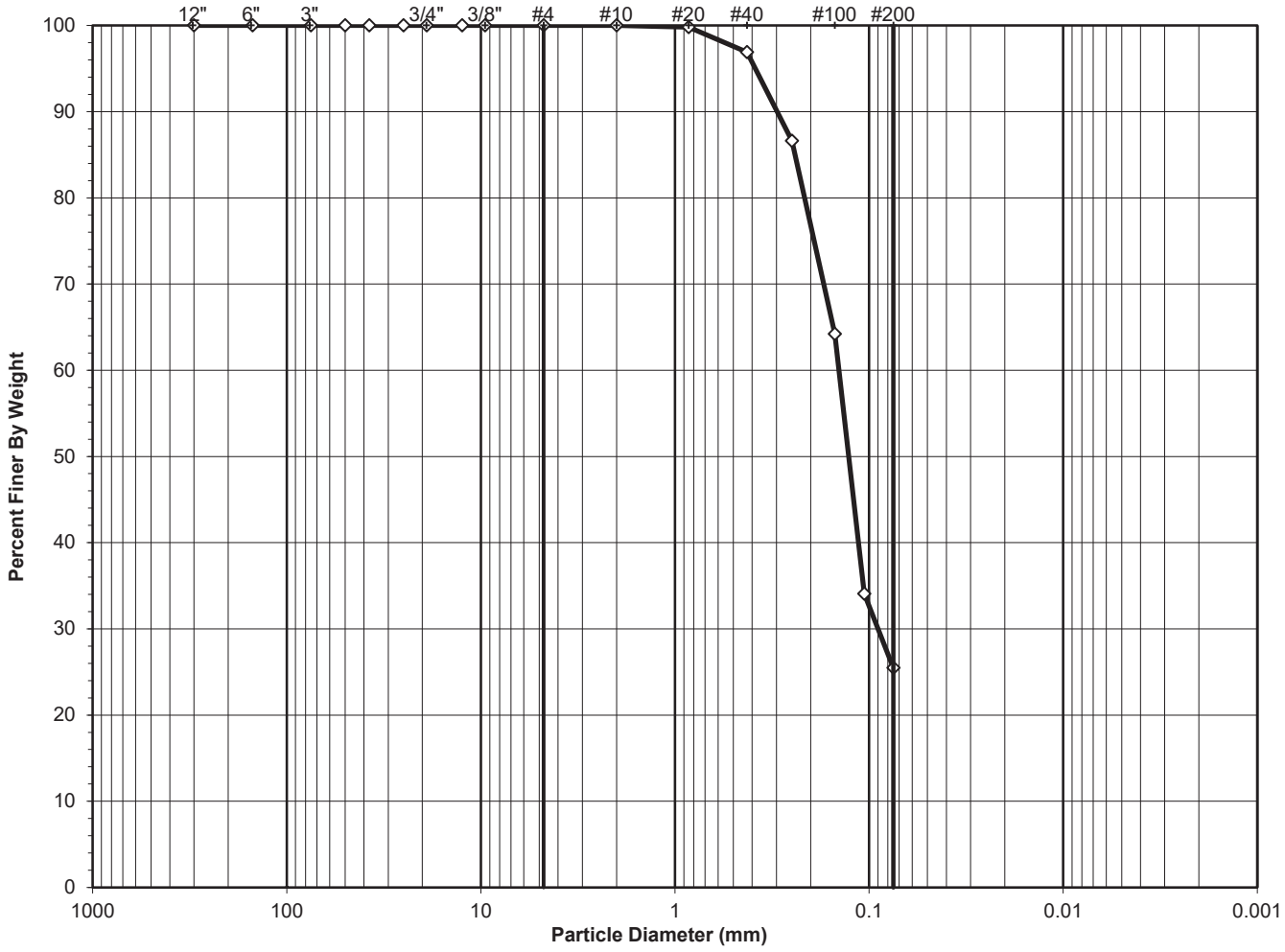
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	NBR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-5
Lab ID:	R-2025-333-001-005	Soil Color:	Gray Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SM, TESTED

D50 = 0.13

USCS Classification:
SILTY SAND

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	NBR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-5
Lab ID:	R-2025-333-001-005	Soil Color:	Gray Brown

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	739	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	513.83	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	467.62	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	142.48	Weight of Tare (g):	NA
Weight of Water (g):	46.21	Weight of Water (g):	NA
Weight of Dry Soil (g):	325.14	Weight of Dry Soil (g):	NA
Moisture Content (%):	**14.2**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	325.14
Tare No. (Sub-Specimen)	739	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	513.83	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	142.48	Dry Weight of - 3/4" Sample (g):	325.14
Sub-Specimen Wet Weight (g):	371.35	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	325.14
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.00		0.00	0.00	100.00	**100.0**
#20	0.85	0.64	(**)	0.20	0.20	99.80	**99.8**
#40	0.425	9.45		2.91	3.10	96.90	**96.9**
#60	0.25	33.48		10.30	13.40	86.60	**86.6**
#100	0.15	72.80		22.39	35.79	64.21	**64.2**
#140	0.106	97.98		30.13	65.93	34.07	**34.1**
#200	0.075	28.00		8.61	74.54	25.46	**25.5**
Pan	-	82.79		25.46	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

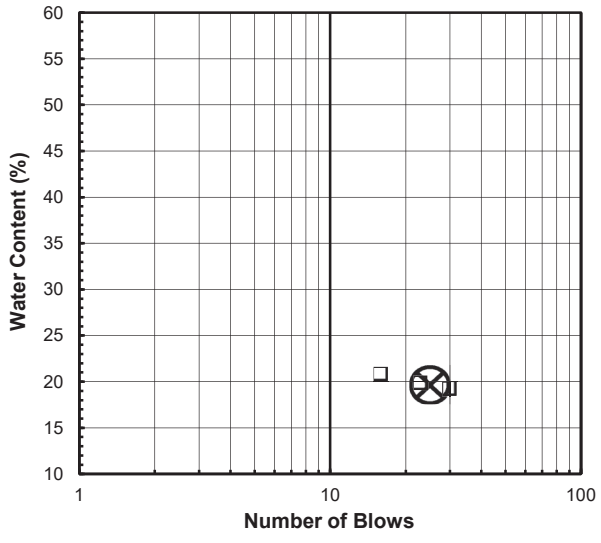
Client:	Garrett & Moore	Boring No.:	NBR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-5
Lab ID:	R-2025-333-001-005	Soil Description:	GRAY BROWN SILT

Note: The* USCS *symbol used with this test refers only to the minus No. 40 sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description. (Minus #40 sieve material, Air dried)

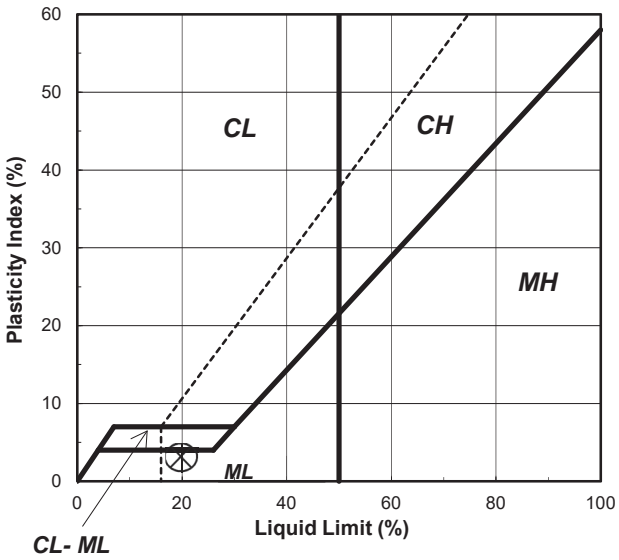
As Received Moisture Content		Liquid Limit Test			
ASTM D2216-19		1	2	3	M
Tare Number:	739	C	A-F	2M	U
Wt. of Tare & Wet Sample (g):	513.83	31.81	32.90	31.72	L
Wt. of Tare & Dry Sample (g):	467.62	29.12	29.99	28.93	T
Weight of Tare (g):	142.48	15.12	15.32	15.50	I
Weight of Water (g):	46.2	2.7	2.9	2.8	P
Weight of Dry Sample (g):	325.1	14.0	14.7	13.4	O
Was As Received MC Preserved:	**Yes**				I
Moisture Content (%):	**14.2**	**19.2**	**19.8**	**20.8**	N
Number of Blows:		**30**	**23**	**16**	T

Plastic Limit Test	**1**	**2**	**Range**		**Test Results**	
Tare Number:	7	8				
Wt. of Tare & Wet Sample (g):	15.53	15.60			**Liquid Limit (%):**	**20**
Wt. of Tare & Dry Sample (g):	14.27	14.35				
Weight of Tare (g):	6.94	7.01			**Plastic Limit (%):**	**17**
Weight of Water (g):	1.3	1.3				
Weight of Dry Sample (g):	7.3	7.3			**Plasticity Index (%):**	**3**
					USCS Symbol:	**ML**
Moisture Content (%):	**17.2**	**17.0**	**0.2**			
Note: The acceptable range of the two Moisture Contents is ±				0.84		

Flow Curve



Plasticity Chart



Tested By CB *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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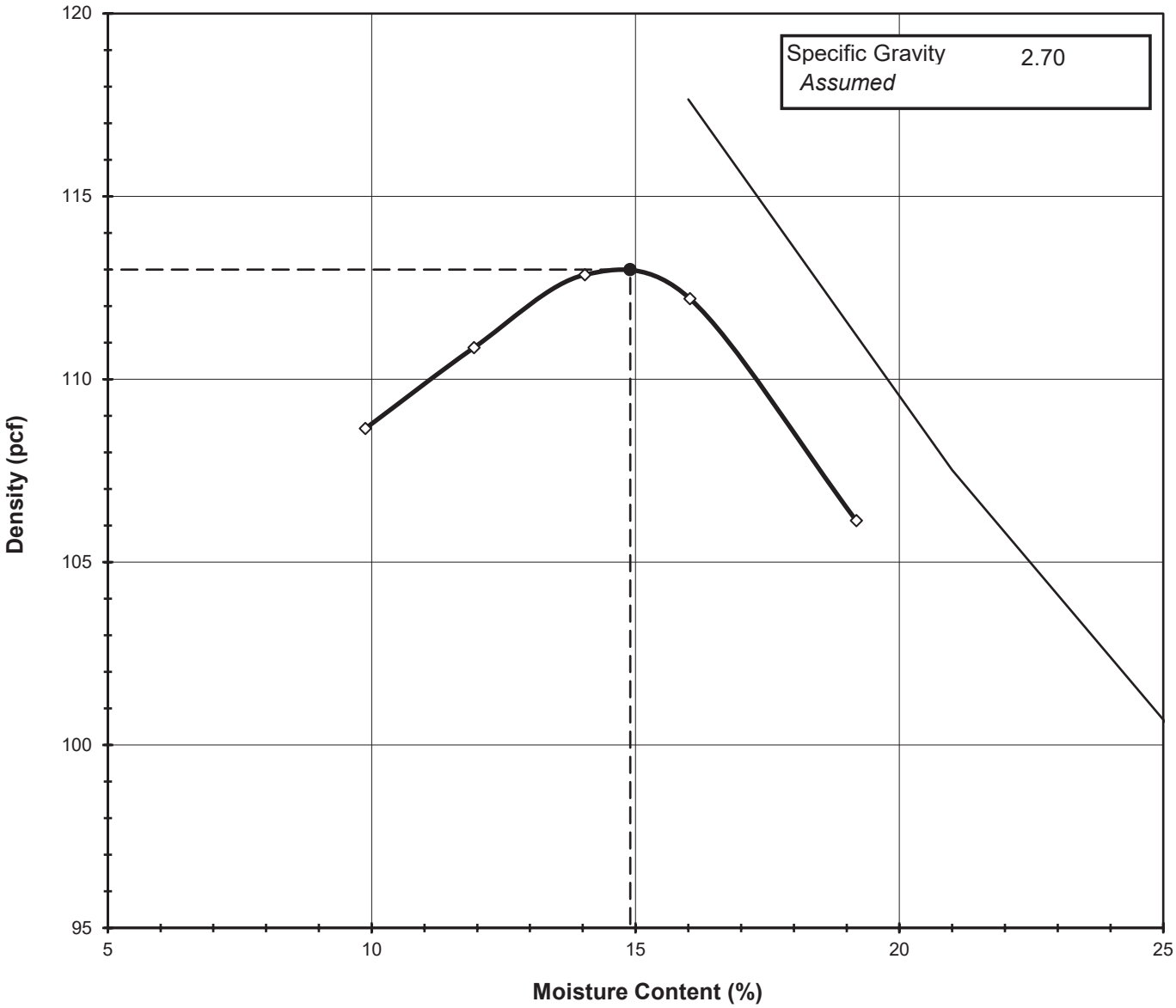
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	NBR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-5
Lab ID:	R-2025-333-001-005	Test Method	**STANDARD**

Visual Description: Gray Brown Silt

Optimum Moisture Content (%): 14.9
Maximum Dry Density (pcf): 113.0



Tested By MFP *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	NBR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-5
Lab ID:	R-2025-333-001-005		

Visual Description: Gray Brown Silt

Total Weight of the Sample (g):	20250
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R174
Mold ID:	R607
Mold diameter:	4"
Weight of the Mold (g):	4231
Volume of the Mold (cm^3):	937

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	6023	6093	6162	6185	6129
Weight of Mold (g):	4231	4231	4231	4231	4231
Weight of Wet Sample (g):	1792	1863	1932	1954	1899
Mold Volume (cm^3):	937	937	937	937	937

Moisture Content / Density

Tare Number:	431	487	8-A	721	13-A
Weight of Tare & Wet Sample (g):	362.90	413.70	373.30	392.10	363.70
Weight of Tare & Dry Sample (g):	339.15	380.14	338.54	350.36	319.31
Weight of Tare (g):	98.80	99.10	91.00	90.00	87.90
Weight of Water (g):	23.75	33.56	34.76	41.74	44.39
Weight of Dry Sample (g):	240.35	281.04	247.54	260.36	231.41

Wet Density (g/cm^3):	1.91	1.99	2.06	2.09	2.03
Wet Density (pcf):	119.4	124.1	128.7	130.2	126.5
Moisture Content (%):	**9.9**	**11.9**	**14.0**	**16.0**	**19.2**
Dry Density (pcf):	**108.7**	**110.9**	**112.9**	**112.2**	**106.1**

Zero Air Voids

Moisture Content (%):	16.0	21.0	26.0
Dry Unit Weight (pcf):	117.7	107.5	99.0

Tested By MFP *Date* 12/2/25 *Checked By* AES *Date* 12/3/25

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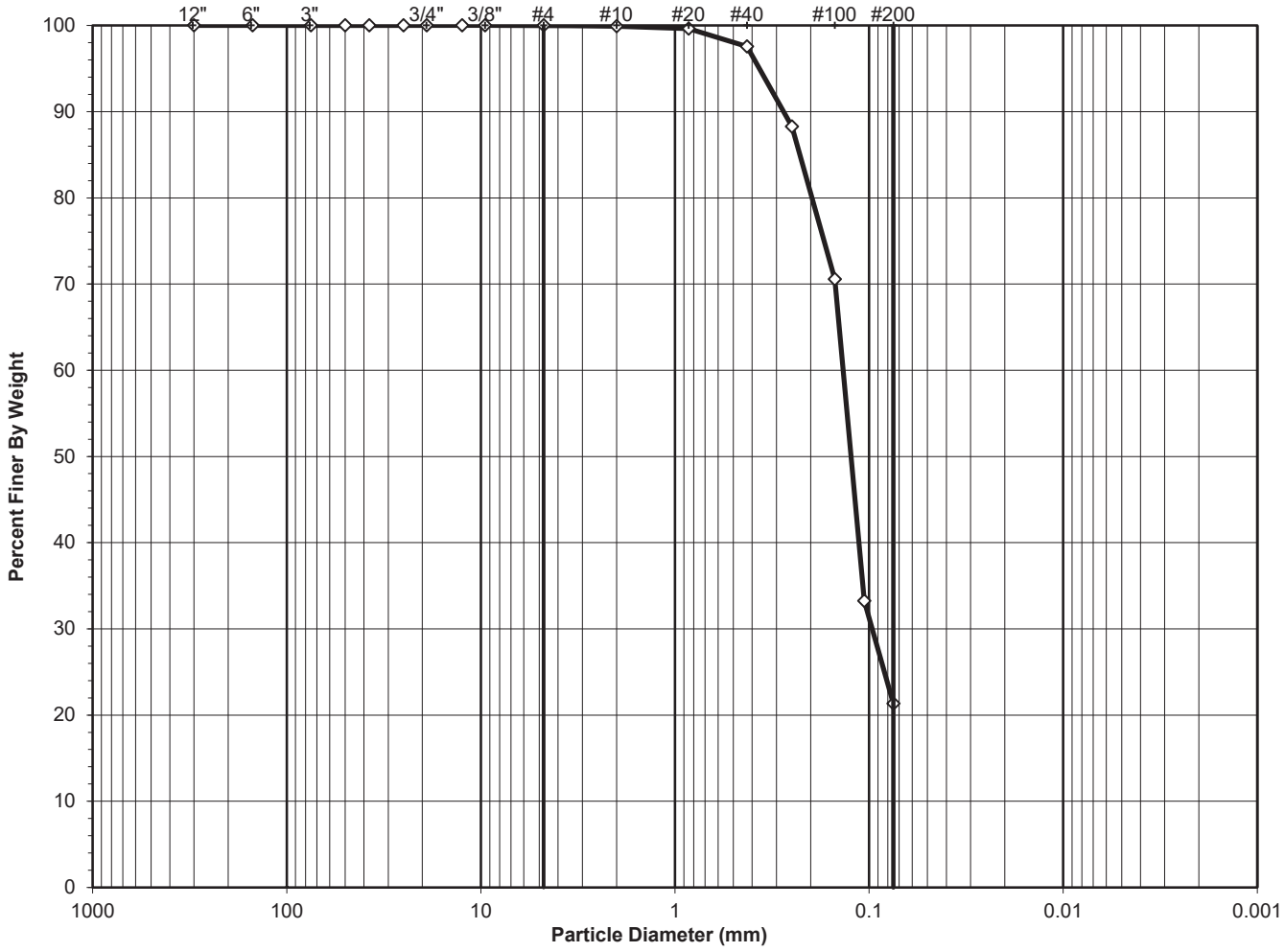
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	NBR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-6
Lab ID:	R-2025-333-001-006	Soil Color:	Light Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SM, TESTED

D50 = 0.12

USCS Classification:
SILTY SAND
(NON-PLASTIC FINES)

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	NBR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-6
Lab ID:	R-2025-333-001-006	Soil Color:	Light Brown

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	469	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	508.21	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	473.18	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	145.98	Weight of Tare (g):	NA
Weight of Water (g):	35.03	Weight of Water (g):	NA
Weight of Dry Soil (g):	327.20	Weight of Dry Soil (g):	NA
Moisture Content (%):	**10.7**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	327.20
Tare No. (Sub-Specimen)	469	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	508.21	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	145.98	Dry Weight of - 3/4" Sample (g):	327.20
Sub-Specimen Wet Weight (g):	362.23	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	327.20
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.27		0.08	0.08	99.92	**99.9**
#20	0.85	0.99	(**)	0.30	0.39	99.61	**99.6**
#40	0.425	6.70		2.05	2.43	97.57	**97.6**
#60	0.25	30.46		9.31	11.74	88.26	**88.3**
#100	0.15	57.87		17.69	29.43	70.57	**70.6**
#140	0.106	122.15		37.33	66.76	33.24	**33.2**
#200	0.075	38.95		11.90	78.66	21.34	**21.3**
Pan	-	69.81		21.34	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

Client:	Garrett & Moore	Boring No.:	NBR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-6
Lab ID:	R-2025-333-001-006	Color:	Light Brown
			(MInus No. 40 sieve material)

As Received
Water Content

Tare Number	469
Wt. of Tare & Wet Sample (g)	508.21
Wt. of Tare & Dry Sample (g)	473.18
Weight of Tare (g)	145.98
Weight of Water (g)	35.03
Weight of Dry Sample (g)	327.20
Water Content (%)	**10.7**

NON - PLASTIC MATERIAL

Tested By *SM* *Date* *12/3/25* *Checked By* *AES* *Date* *12/3/25*

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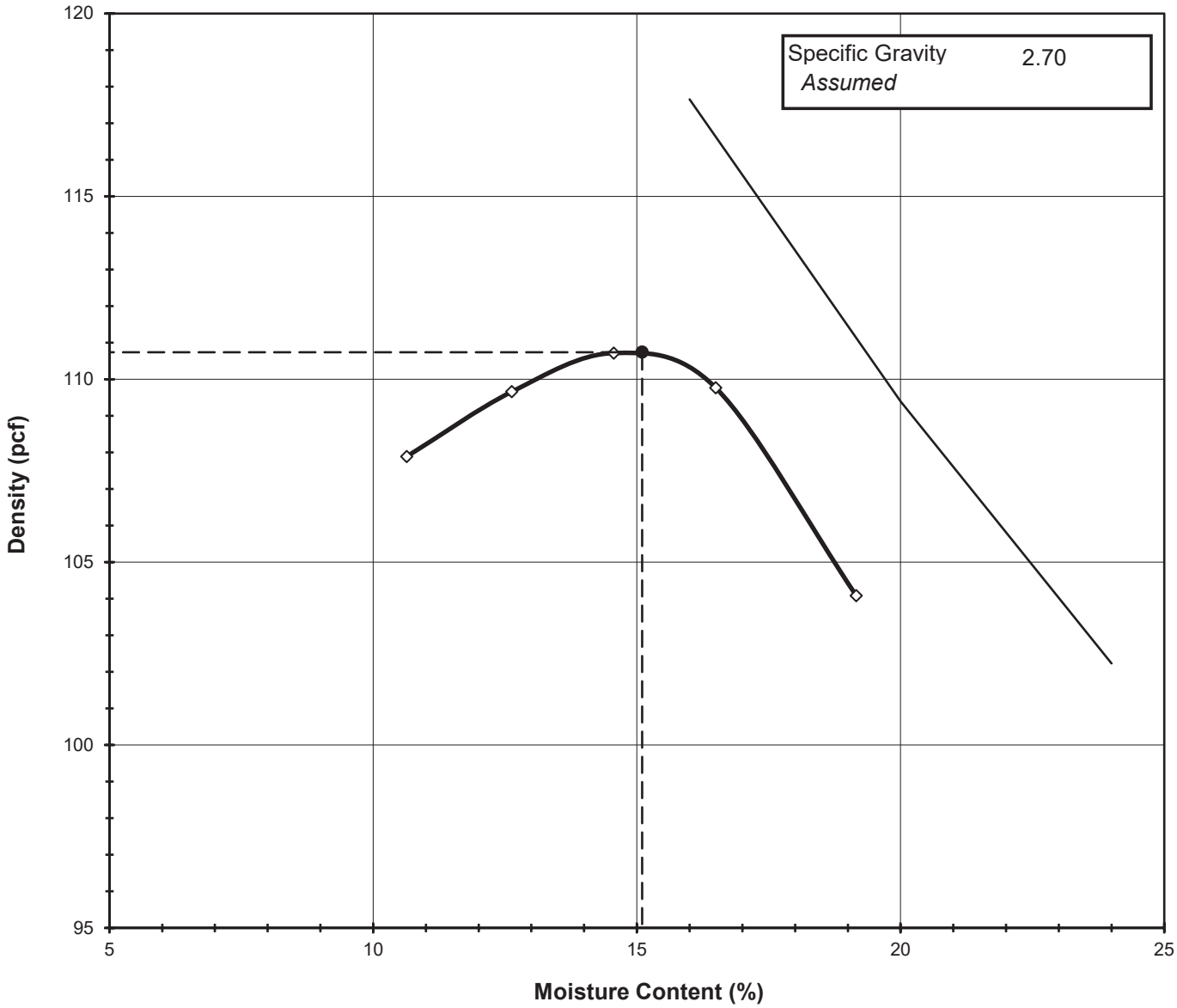
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	NBR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-6
Lab ID:	R-2025-333-001-006	Test Method	**STANDARD**

Visual Description: Light Brown Silty Sand

Optimum Moisture Content (%): 15.1
Maximum Dry Density (pcf): 110.7



Tested By MFP *Date* 12/3/25 *Checked By* AES *Date* 12/4/25

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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	NBR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-6
Lab ID:	R-2025-333-001-006		

Visual Description: Light Brown Silty Sand

Total Weight of the Sample (g):	19200
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R174
Mold ID:	R607
Mold diameter:	4"
Weight of the Mold (g):	4230
Volume of the Mold (cm^3):	937

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	6021	6084	6134	6149	6091
Weight of Mold (g):	4230	4230	4230	4230	4230
Weight of Wet Sample (g):	1792	1854	1904	1919	1862
Mold Volume (cm^3):	937	937	937	937	937

Moisture Content / Density

Tare Number:	480	14-A	427	1-A	4-A
Weight of Tare & Wet Sample (g):	345.40	408.70	368.40	383.00	364.10
Weight of Tare & Dry Sample (g):	321.73	372.64	334.18	341.41	319.61
Weight of Tare (g):	99.20	87.10	99.20	89.30	87.40
Weight of Water (g):	23.67	36.06	34.22	41.59	44.49
Weight of Dry Sample (g):	222.53	285.54	234.98	252.11	232.21

Wet Density (g/cm^3):	1.91	1.98	2.03	2.05	1.99
Wet Density (pcf):	119.4	123.5	126.8	127.9	124.0
Moisture Content (%):	**10.6**	**12.6**	**14.6**	**16.5**	**19.2**
Dry Density (pcf):	**107.9**	**109.7**	**110.7**	**109.8**	**104.1**

Zero Air Voids

Moisture Content (%):	16.0	20.0	24.0
Dry Unit Weight (pcf):	117.7	109.4	102.2

Tested By MFP *Date* 12/3/25 *Checked By* AES *Date* 12/4/25

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CAT

Stilley Station Road Site

Geotechnical Data &

Test Pit Photos

November 2025

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19796 VANCE FREDERICK MOORE

9/25/2025

GARRETT & MOORE
Engineering for the Power and Waste Industries
1029 West South Street
Raleigh, NC 27603
www.Garrett-Moore.com

BEAUFORT COUNTY

STILLEY STATION

TEST PIT LOCATIONS

GRAPHIC SCALE 1" = 40'
0 75 150

SHEET TP-1

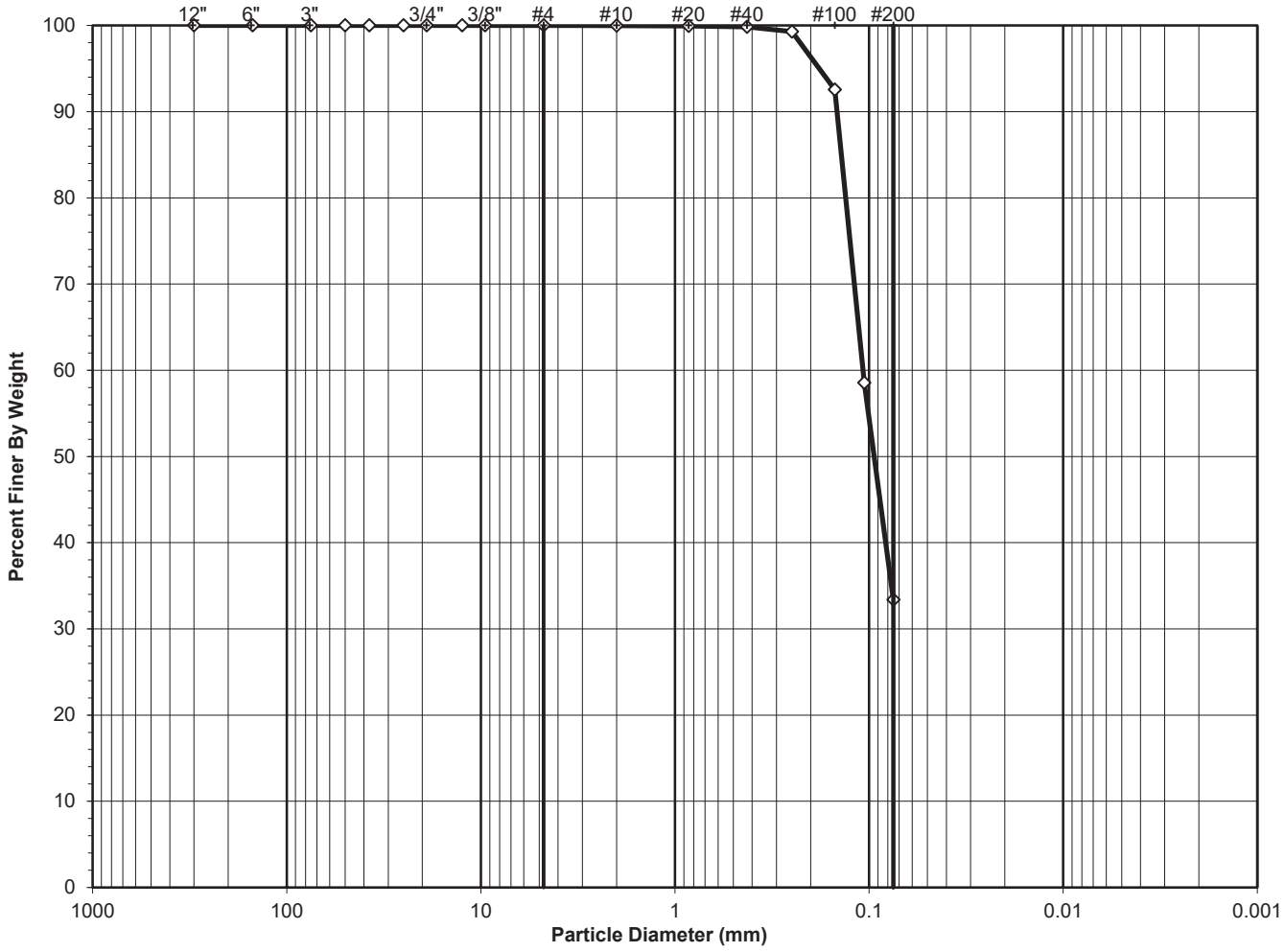
Path: D:\Project\Beaufort\Stilley Station\STILLEY STATION SITE PLAN 10-28-25.pro Plot Date/Time: Wed Oct 29,2025 / 15:06:36

SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	SSR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-1
Lab ID:	R-2025-333-001-001	Soil Color:	Orange

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SC-SM, TESTED

D50 = 0.09

USCS Classification:
SILTY, CLAYEY SAND

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-1
Lab ID:	R-2025-333-001-001	Soil Color:	Orange

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	400	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	514.79	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	466.96	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	134.02	Weight of Tare (g):	NA
Weight of Water (g):	47.83	Weight of Water (g):	NA
Weight of Dry Soil (g):	332.94	Weight of Dry Soil (g):	NA
Moisture Content (%):	**14.4**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	332.94
Tare No. (Sub-Specimen)	400	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	514.79	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	134.02	Dry Weight of - 3/4" Sample (g):	332.94
Sub-Specimen Wet Weight (g):	380.77	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	332.94
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.06		0.02	0.02	99.98	**100.0**
#20	0.85	0.14	(**)	0.04	0.06	99.94	**99.9**
#40	0.425	0.31		0.09	0.15	99.85	**99.8**
#60	0.25	1.83		0.55	0.70	99.30	**99.3**
#100	0.15	22.52		6.76	7.47	92.53	**92.5**
#140	0.106	113.10		33.97	41.44	58.56	**58.6**
#200	0.075	83.90		25.20	66.64	33.36	**33.4**
Pan	-	111.08		33.36	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-1
Lab ID:	R-2025-333-001-001	Soil Description:	ORANGE SILTY CLAY

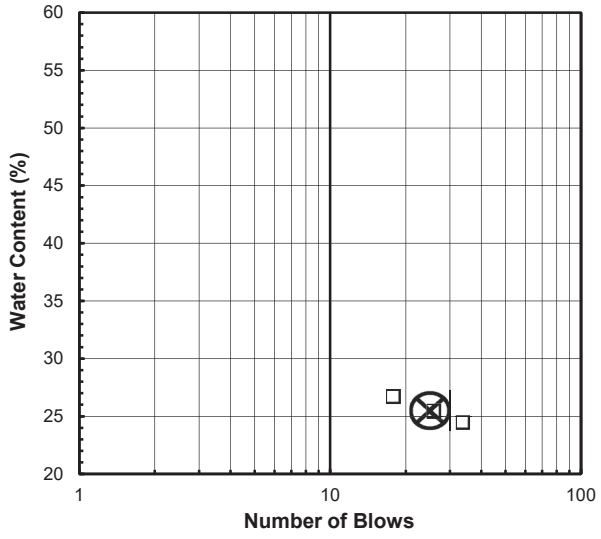
Note: The* USCS *symbol used with this test refers only to the minus No. 40 sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description. (Minus #40 sieve material, Air dried)

As Received Moisture Content		Liquid Limit Test			
ASTM D2216-19		1	2	3	M
Tare Number:	400	W	I7	P	U
Wt. of Tare & Wet Sample (g):	514.79	30.62	31.66	31.22	L
Wt. of Tare & Dry Sample (g):	466.96	27.56	28.36	27.83	T
Weight of Tare (g):	134.02	15.03	15.38	15.10	I
Weight of Water (g):	47.8	3.1	3.3	3.4	P
Weight of Dry Sample (g):	332.9	12.5	13.0	12.7	O
Was As Received MC Preserved:	**Yes**				I
Moisture Content (%):	**14.4**	**24.4**	**25.4**	**26.6**	N
Number of Blows:		**34**	**26**	**18**	T

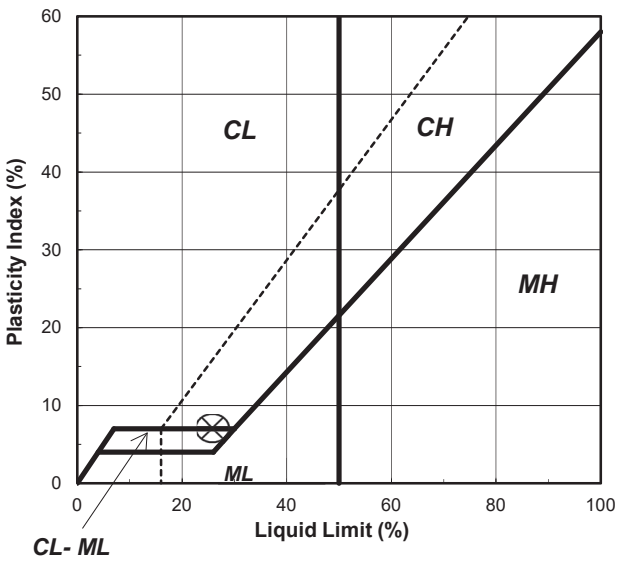
Plastic Limit Test	1	2	Range
Tare Number:	5	10	
Wt. of Tare & Wet Sample (g):	16.79	16.73	
Wt. of Tare & Dry Sample (g):	15.25	15.18	
Weight of Tare (g):	6.98	6.94	
Weight of Water (g):	1.5	1.6	
Weight of Dry Sample (g):	8.3	8.2	
Moisture Content (%):	**18.6**	**18.8**	**-0.2**
Note: The acceptable range of the two Moisture Contents is ±			0.84

Test Results	
Liquid Limit (%):	**26**
Plastic Limit (%):	**19**
Plasticity Index (%):	**7**
USCS Symbol:	**CL-ML**

Flow Curve



Plasticity Chart



Tested By CB *Date* 12/3/25 *Checked By* AES *Date* 12/3/25

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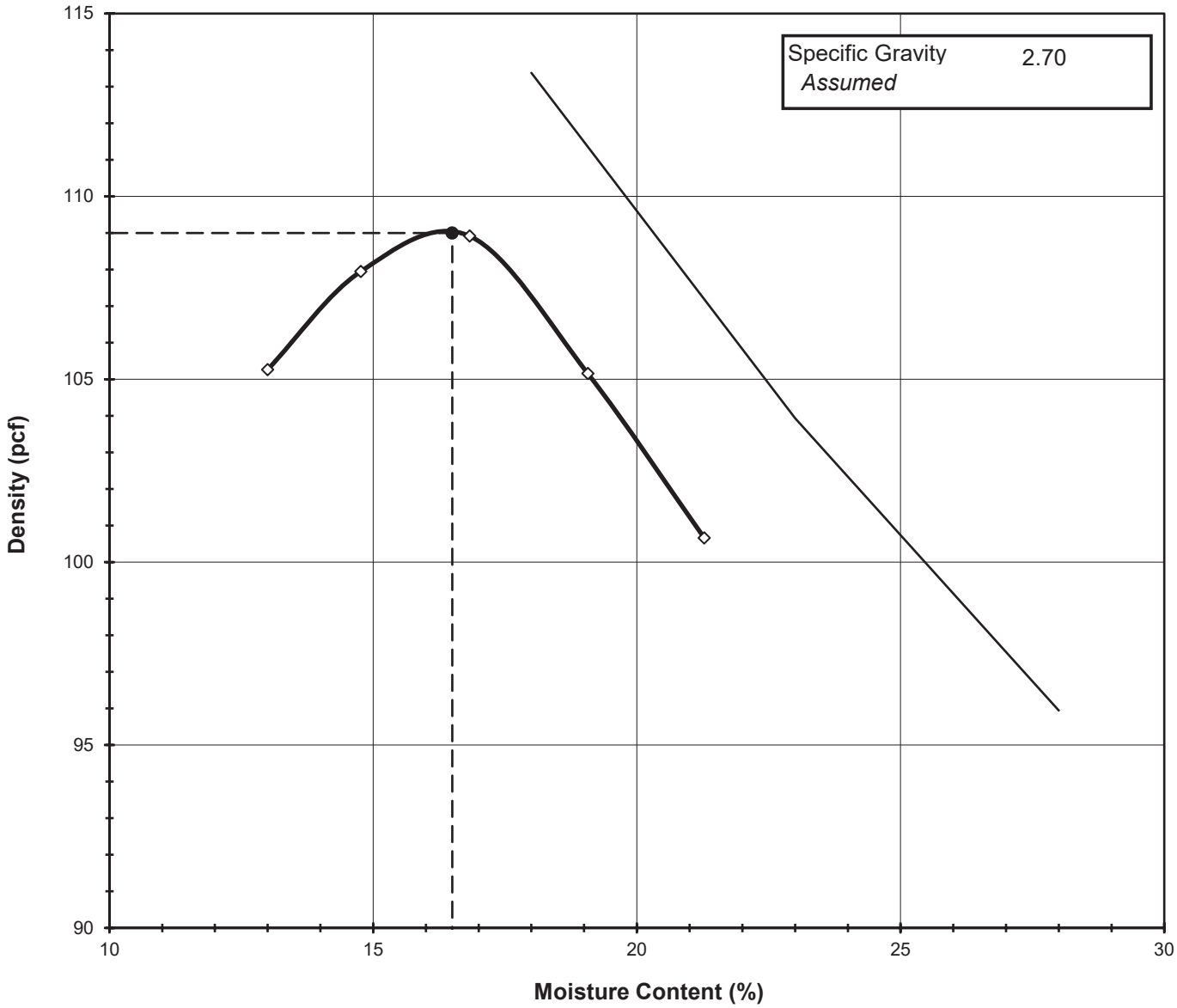
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-1
Lab ID:	R-2025-333-001-001	Test Method	**STANDARD**

Visual Description: Orange Silty,Clayey Sand

Optimum Moisture Content (%): 16.5
Maximum Dry Density (pcf): 109.0



Tested By MFP *Date* 12/1/25 *Checked By* AES *Date* 12/2/25

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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-3
Client Reference:	Beaufort County	Depth (ft):	-7
Project No.:	R-2025-333-001	Sample No.:	B-1
Lab ID:	R-2025-333-001-001		

Visual Description: Orange Silty,Clayey Sand

Total Weight of the Sample (g):	19000
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R606
Mold ID:	R755
Mold diameter:	4"
Weight of the Mold (g):	4124
Volume of the Mold (cm^3):	942

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	5919	5994	6044	6013	5966
Weight of Mold (g):	4124	4124	4124	4124	4124
Weight of Wet Sample (g):	1795	1870	1920	1889	1842
Mold Volume (cm^3):	942	942	942	942	942

Moisture Content / Density

Tare Number:	720	492	474	436	424
Weight of Tare & Wet Sample (g):	294.70	329.00	346.30	319.70	311.30
Weight of Tare & Dry Sample (g):	271.11	299.43	310.53	284.37	273.88
Weight of Tare (g):	89.60	99.20	98.00	99.10	98.00
Weight of Water (g):	23.59	29.57	35.77	35.33	37.42
Weight of Dry Sample (g):	181.51	200.23	212.53	185.27	175.88

Wet Density (g/cm^3):	1.91	1.99	2.04	2.01	1.96
Wet Density (pcf):	118.9	123.9	127.2	125.2	122.1
Moisture Content (%):	**13.0**	**14.8**	**16.8**	**19.1**	**21.3**
Dry Density (pcf):	**105.3**	**108.0**	**108.9**	**105.2**	**100.7**

Zero Air Voids

Moisture Content (%):	18.0	23.0	28.0
Dry Unit Weight (pcf):	113.4	103.9	95.9

Tested By MFP *Date* 12/1/25 *Checked By* AES *Date* 12/2/25

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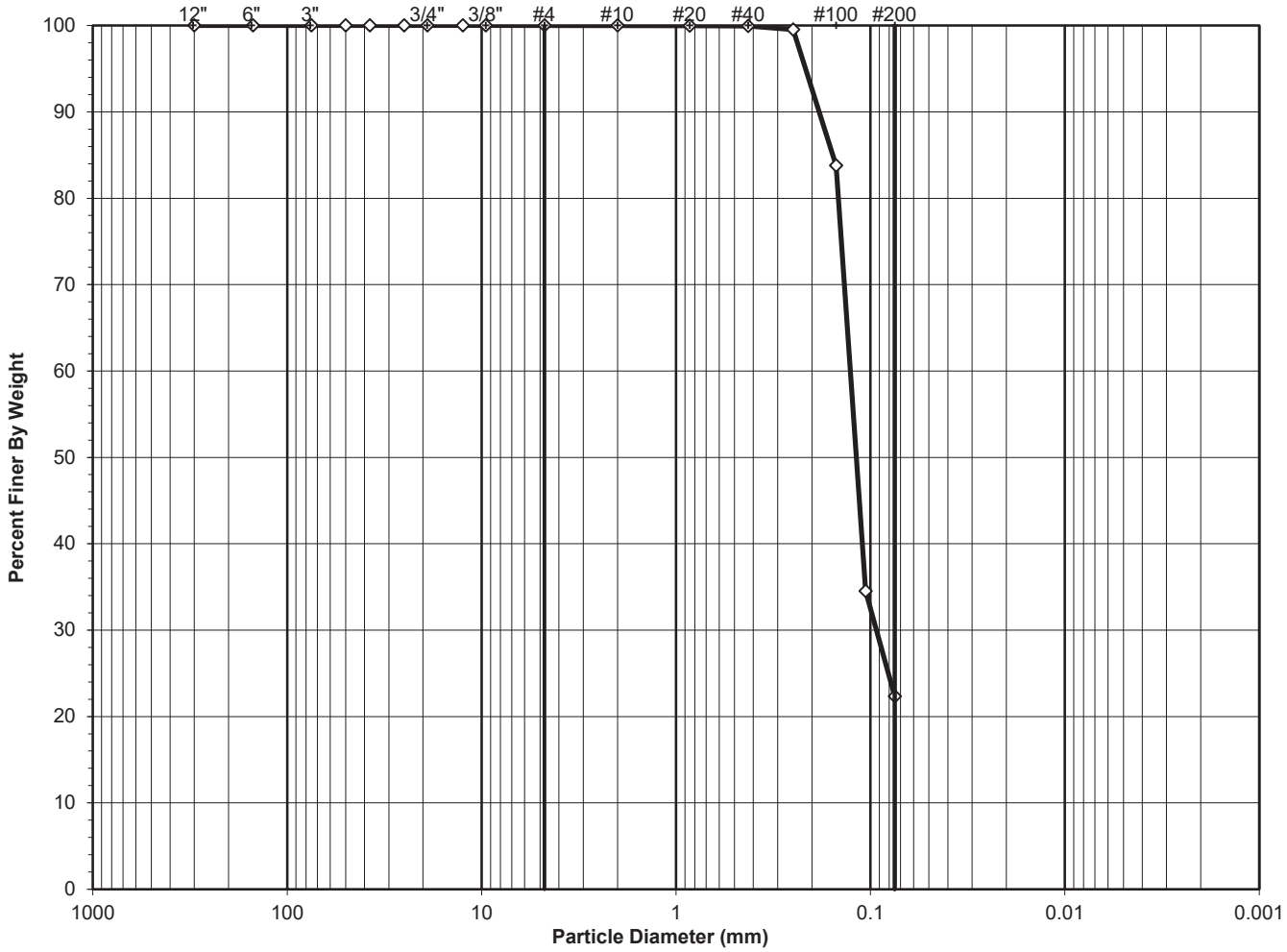
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	SSR-TP-6
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-2
Lab ID:	R-2025-333-001-002	Soil Color:	Light Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SM, TESTED

D50 = 0.12

USCS Classification:
SILTY SAND
(NON-PLASTIC FINES)

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-6
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-2
Lab ID:	R-2025-333-001-002	Soil Color:	Light Brown

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	41-A	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	535.16	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	498.61	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	136.07	Weight of Tare (g):	NA
Weight of Water (g):	36.55	Weight of Water (g):	NA
Weight of Dry Soil (g):	362.54	Weight of Dry Soil (g):	NA
Moisture Content (%):	**10.1**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	362.54
Tare No. (Sub-Specimen)	41-A	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	535.16	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	136.07	Dry Weight of - 3/4" Sample (g):	362.54
Sub-Specimen Wet Weight (g):	399.09	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	362.54
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.00		0.00	0.00	100.00	**100.0**
#20	0.85	0.06	(**)	0.02	0.02	99.98	**100.0**
#40	0.425	0.18		0.05	0.07	99.93	**99.9**
#60	0.25	1.49		0.41	0.48	99.52	**99.5**
#100	0.15	57.04		15.73	16.21	83.79	**83.8**
#140	0.106	178.59		49.26	65.47	34.53	**34.5**
#200	0.075	44.21		12.19	77.67	22.33	**22.3**
Pan	-	80.97		22.33	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-6
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-2
Lab ID:	R-2025-333-001-002	Color:	Light Brown
			(MInus No. 40 sieve material)

As Received
Water Content

Tare Number	41-A
Wt. of Tare & Wet Sample (g)	535.16
Wt. of Tare & Dry Sample (g)	498.61
Weight of Tare (g)	136.07
Weight of Water (g)	36.55
Weight of Dry Sample (g)	362.54
Water Content (%)	**10.1**

NON - PLASTIC MATERIAL

Tested By SRM *Date* 12/2/25 *Checked By* AES *Date* 12/4/25

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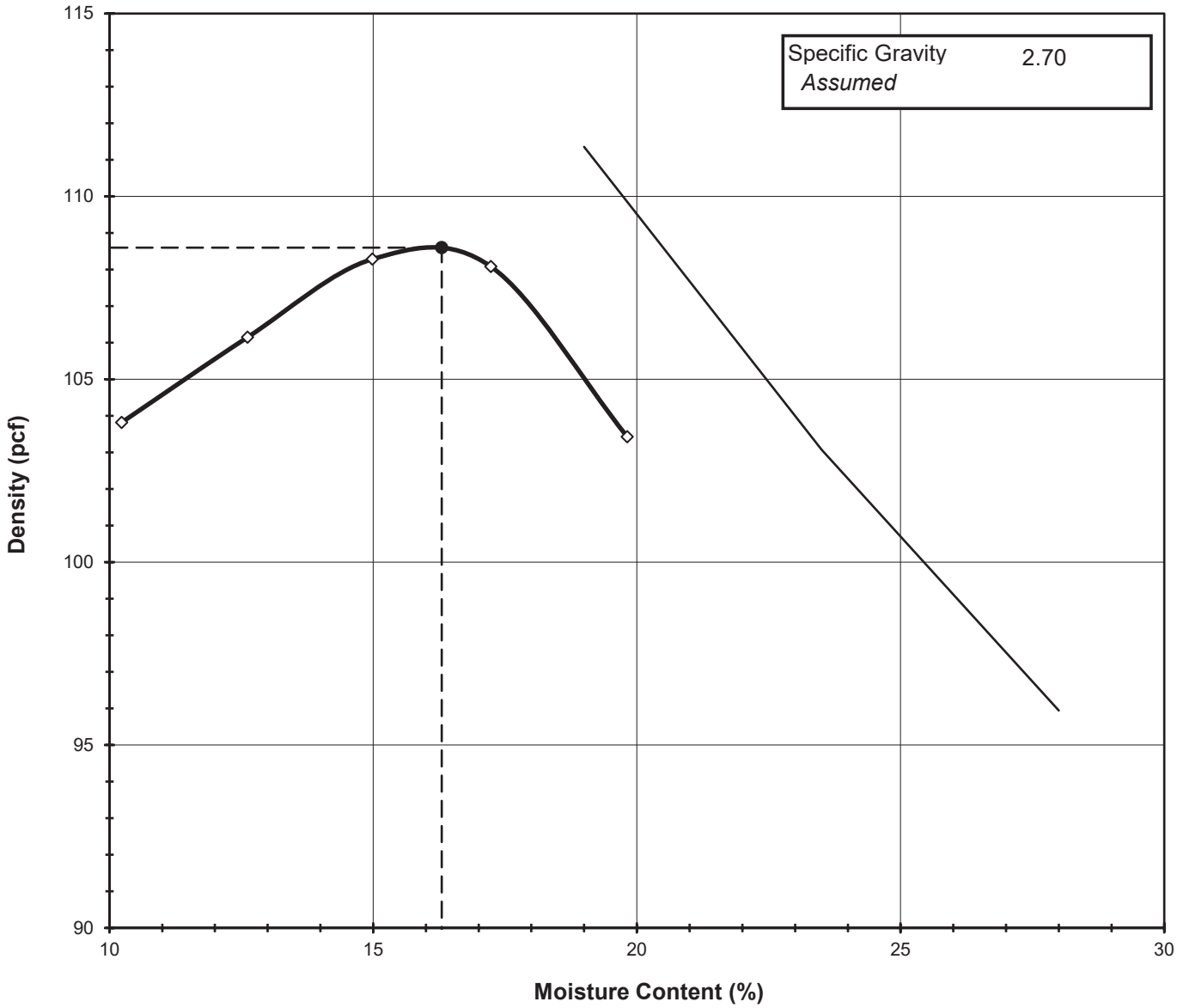
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-6
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-2
Lab ID:	R-2025-333-001-002	Test Method	**STANDARD**

Visual Description: Light Brown Silty Sand

Optimum Moisture Content (%): 16.3
Maximum Dry Density (pcf): 108.6



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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-6
Client Reference:	Beaufort County	Depth (ft):	-8
Project No.:	R-2025-333-001	Sample No.:	B-2
Lab ID:	R-2025-333-001-002		

Visual Description: Light Brown Silty Sand

Total Weight of the Sample (g):	20550
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R174
Mold ID:	R607
Mold diameter:	4"
Weight of the Mold (g):	4230
Volume of the Mold (cm^3):	937

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	5948	6025	6099	6132	6090
Weight of Mold (g):	4230	4230	4230	4230	4230
Weight of Wet Sample (g):	1718	1794	1869	1902	1860
Mold Volume (cm^3):	937	937	937	937	937

Moisture Content / Density

Tare Number:	486	714	483	711	10-A
Weight of Tare & Wet Sample (g):	353.00	343.40	372.30	355.40	406.30
Weight of Tare & Dry Sample (g):	329.38	314.67	336.53	316.73	353.56
Weight of Tare (g):	98.50	87.00	97.80	92.30	87.40
Weight of Water (g):	23.62	28.73	35.77	38.67	52.74
Weight of Dry Sample (g):	230.88	227.67	238.73	224.43	266.16

Wet Density (g/cm^3):	1.83	1.92	2.00	2.03	1.99
Wet Density (pcf):	114.4	119.5	124.5	126.7	123.9
Moisture Content (%):	**10.2**	**12.6**	**15.0**	**17.2**	**19.8**
Dry Density (pcf):	**103.8**	**106.2**	**108.3**	**108.1**	**103.4**

Zero Air Voids

Moisture Content (%):	19.0	23.5	28.0	
Dry Unit Weight (pcf):	111.4	103.1	95.9	

Tested By MFP *Date* 12/1/25 *Checked By* AES *Date* 12/2/25

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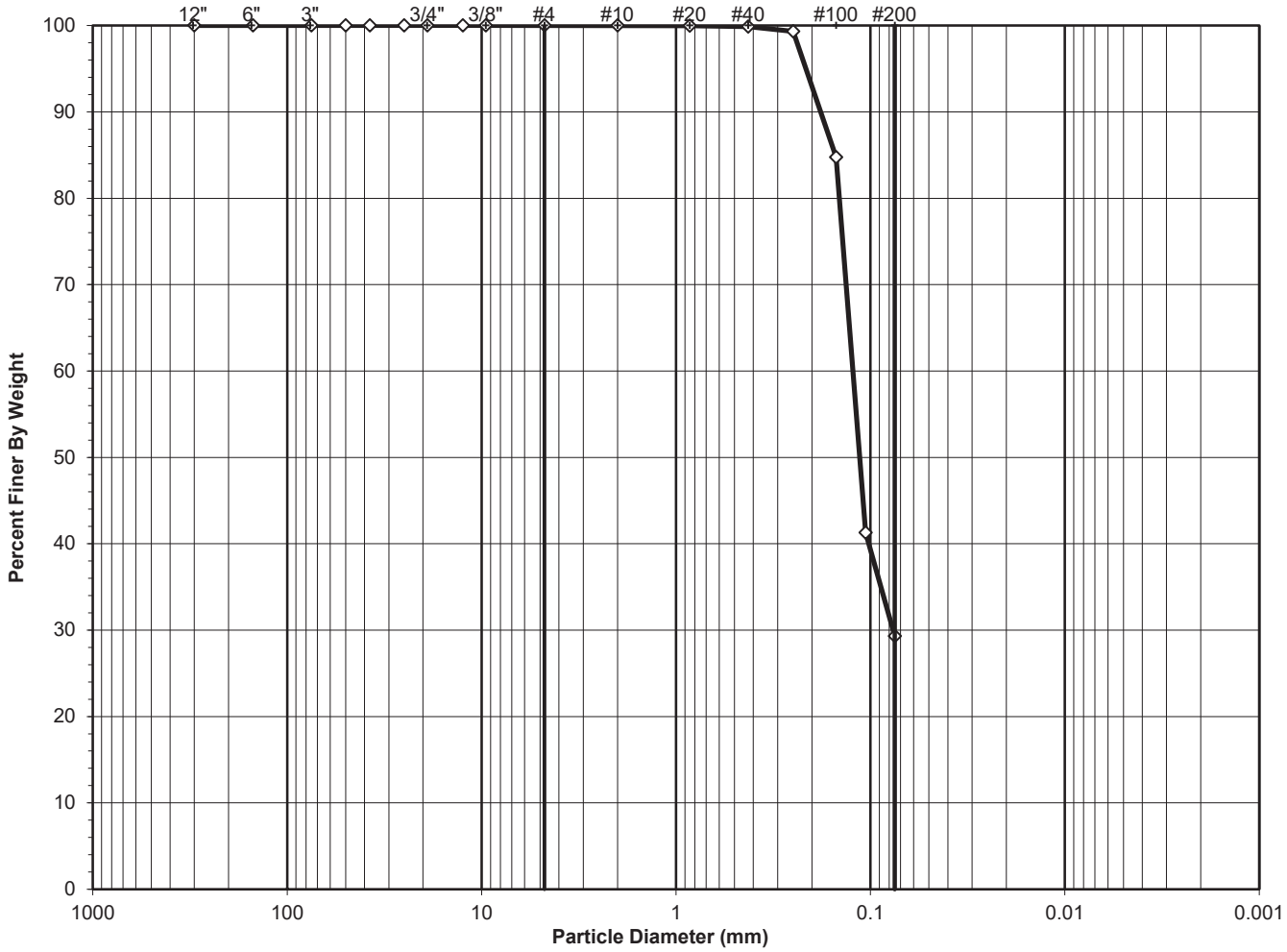
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-003	Soil Color:	Orange Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol:
SM, TESTED

D50 = 0.11

USCS Classification:
SILTY SAND

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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WASH SIEVE ANALYSIS

ASTM D6913-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-003	Soil Color:	Orange Brown

Moisture Content of Passing 3/4" Material		Moisture Content of Retained 3/4" Material	
Tare No.:	28-A	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	537.94	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	490.12	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	139.35	Weight of Tare (g):	NA
Weight of Water (g):	47.82	Weight of Water (g):	NA
Weight of Dry Soil (g):	350.77	Weight of Dry Soil (g):	NA
Moisture Content (%):	**13.6**	**Moisture Content (%):**	**0.0**

Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	350.77
Tare No. (Sub-Specimen)	28-A	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	537.94	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	139.35	Dry Weight of - 3/4" Sample (g):	350.77
Sub-Specimen Wet Weight (g):	398.59	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	350.77
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)		Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	**Accumulated Percent Finer (%)**
12"	300	0.00		0.00	0.00	100.00	**100.0**
6"	150	0.00		0.00	0.00	100.00	**100.0**
3"	75	0.00		0.00	0.00	100.00	**100.0**
2"	50	0.00	(*)	0.00	0.00	100.00	**100.0**
1 1/2"	37.5	0.00		0.00	0.00	100.00	**100.0**
1"	25	0.00		0.00	0.00	100.00	**100.0**
3/4"	19	0.00		0.00	0.00	100.00	**100.0**
1/2"	12.5	0.00	(**)	0.00	0.00	100.00	**100.0**
3/8"	9.5	0.00		0.00	0.00	100.00	**100.0**
#4	4.75	0.00		0.00	0.00	100.00	**100.0**
#10	2	0.00		0.00	0.00	100.00	**100.0**
#20	0.85	0.09	(**)	0.03	0.03	99.97	**100.0**
#40	0.425	0.36		0.10	0.13	99.87	**99.9**
#60	0.25	1.90		0.54	0.67	99.33	**99.3**
#100	0.15	51.12		14.57	15.24	84.76	**84.8**
#140	0.106	152.51		43.48	58.72	41.28	**41.3**
#200	0.075	41.97		11.97	70.69	29.31	**29.3**
Pan	-	102.82		29.31	100.00	-	**-**

Notes : *(*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample*
*(**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen*

Tested By MFP Date 12/1/25 Checked By AES Date 12/2/25

DCN: CT-S73T, DATE 2/25/22, REV. 1

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ATTERBERG LIMITS

ASTM D 4318-17

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-003	Soil Description:	ORANGE BROWN SILT

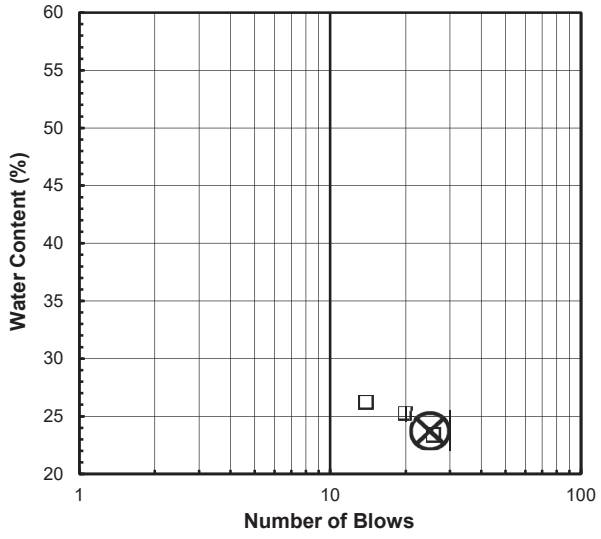
Note: The* USCS *symbol used with this test refers only to the minus No. 40 sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description. (Minus #40 sieve material, Air dried)

As Received Moisture Content		Liquid Limit Test			
ASTM D2216-19		1	2	3	M
Tare Number:	28-A	X-9	A-D	A-H	U
Wt. of Tare & Wet Sample (g):	537.94	31.85	32.68	31.86	L
Wt. of Tare & Dry Sample (g):	490.12	28.77	29.17	28.46	T
Weight of Tare (g):	139.35	15.56	15.25	15.45	I
Weight of Water (g):	47.8	3.1	3.5	3.4	P
Weight of Dry Sample (g):	350.8	13.2	13.9	13.0	O
Was As Received MC Preserved:	**Yes**				I
Moisture Content (%):	**13.6**	**23.3**	**25.2**	**26.1**	N
Number of Blows:		**26**	**20**	**14**	T

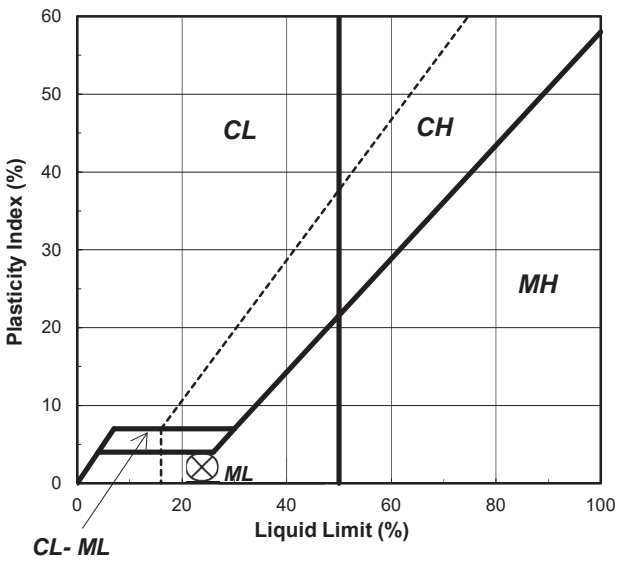
Plastic Limit Test	1	2	Range
Tare Number:	20	35	
Wt. of Tare & Wet Sample (g):	20.59	21.32	
Wt. of Tare & Dry Sample (g):	18.20	18.74	
Weight of Tare (g):	7.01	7.03	
Weight of Water (g):	2.4	2.6	
Weight of Dry Sample (g):	11.2	11.7	
Moisture Content (%):	**21.4**	**22.0**	**-0.7**
Note: The acceptable range of the two Moisture Contents is ±			0.84

Test Results	
Liquid Limit (%):	**24**
Plastic Limit (%):	**22**
Plasticity Index (%):	**2**
USCS Symbol:	**ML**

Flow Curve



Plasticity Chart



Tested By SM *Date* 12/3/25 *Checked By* AES *Date* 12/4/25

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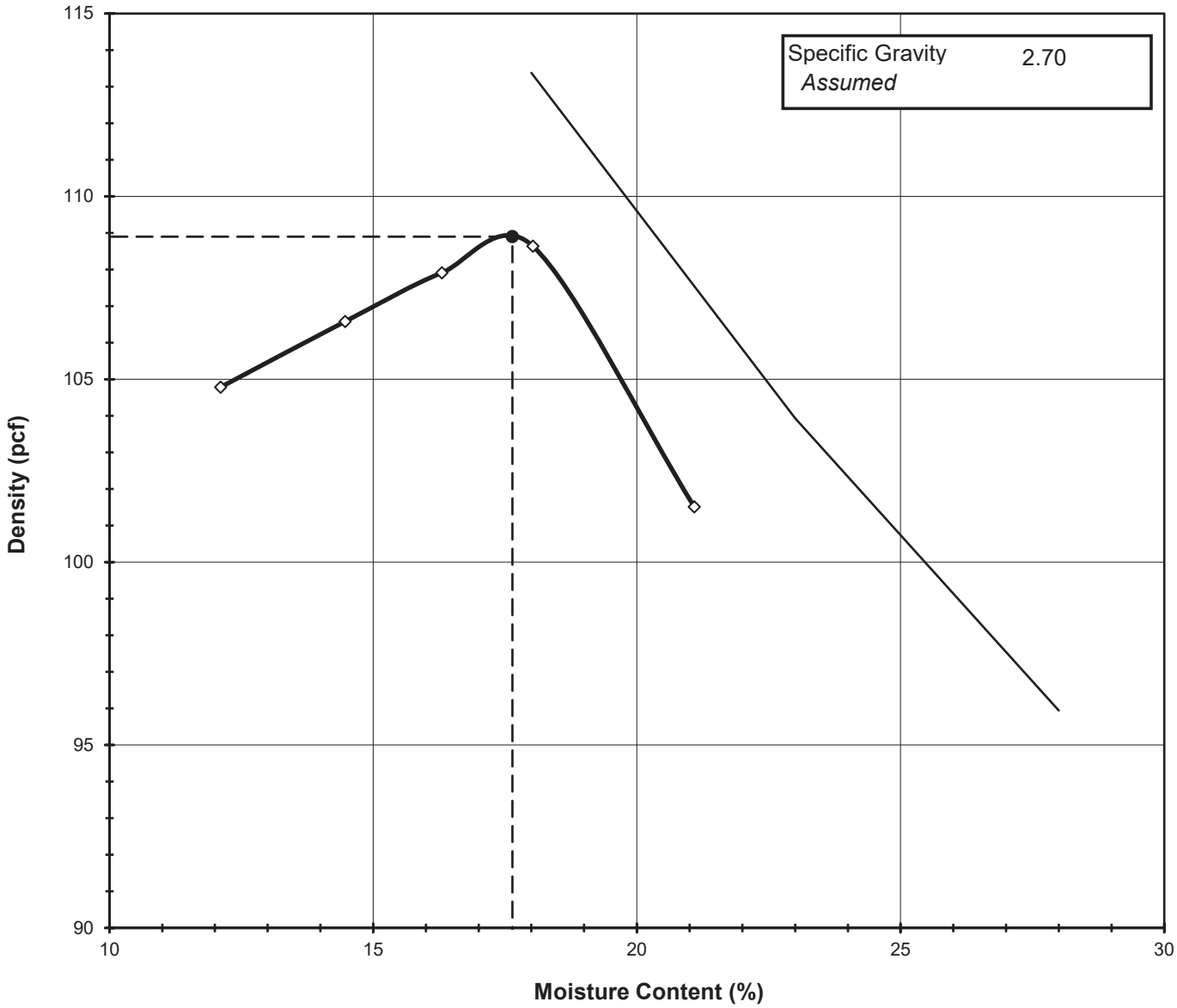
MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-003	Test Method	**STANDARD**

Visual Description: Orange Brown Silty Sand

Optimum Moisture Content (%): 17.6
Maximum Dry Density (pcf): 108.9



Tested By NS *Date* 12/1/25 *Checked By* AES *Date* 12/2/25

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MOISTURE - DENSITY RELATIONSHIP

ASTM D698-12

Client:	Garrett & Moore	Boring No.:	SSR-TP-7
Client Reference:	Beaufort County	Depth (ft):	-5
Project No.:	R-2025-333-001	Sample No.:	B-3
Lab ID:	R-2025-333-001-003		

Visual Description: Orange Brown Silty Sand

Total Weight of the Sample (g):	18250
As Received Water Content (%):	NA
Assumed Specific Gravity:	2.70
Percent Retained on 3/4":	NA
Percent Retained on 3/8":	NA
Percent Retained on #4:	NA
Oversize Material:	Not included
Procedure Used:	B

Test Type:	**STANDARD**
Rammer Weight (lb):	5.5
Rammer Drop (in):	12
Rammer Type:	MECHANICAL
Machine ID:	R174
Mold ID:	R607
Mold diameter:	4"
Weight of the Mold (g):	4230
Volume of the Mold (cm^3):	937

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Weight of Mold & Wet Sample (g):	5994	6062	6114	6155	6075
Weight of Mold (g):	4230	4230	4230	4230	4230
Weight of Wet Sample (g):	1763	1831	1884	1925	1845
Mold Volume (cm^3):	937	937	937	937	937

Moisture Content / Density

Tare Number:	484	703	493	7-A	718
Weight of Tare & Wet Sample (g):	363.70	359.10	438.80	403.50	338.00
Weight of Tare & Dry Sample (g):	335.22	325.11	391.01	355.11	295.16
Weight of Tare (g):	100.00	90.20	97.90	86.70	92.00
Weight of Water (g):	28.48	33.99	47.79	48.39	42.84
Weight of Dry Sample (g):	235.22	234.91	293.11	268.41	203.16

Wet Density (g/cm^3):	1.88	1.96	2.01	2.05	1.97
Wet Density (pcf):	117.5	122.0	125.5	128.2	122.9
Moisture Content (%):	**12.1**	**14.5**	**16.3**	**18.0**	**21.1**
Dry Density (pcf):	**104.8**	**106.6**	**107.9**	**108.6**	**101.5**

Zero Air Voids

Moisture Content (%):	18.0	23.0	28.0
Dry Unit Weight (pcf):	113.4	103.9	95.9

Tested By NS *Date* 12/1/25 *Checked By* AES *Date* 12/2/25

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