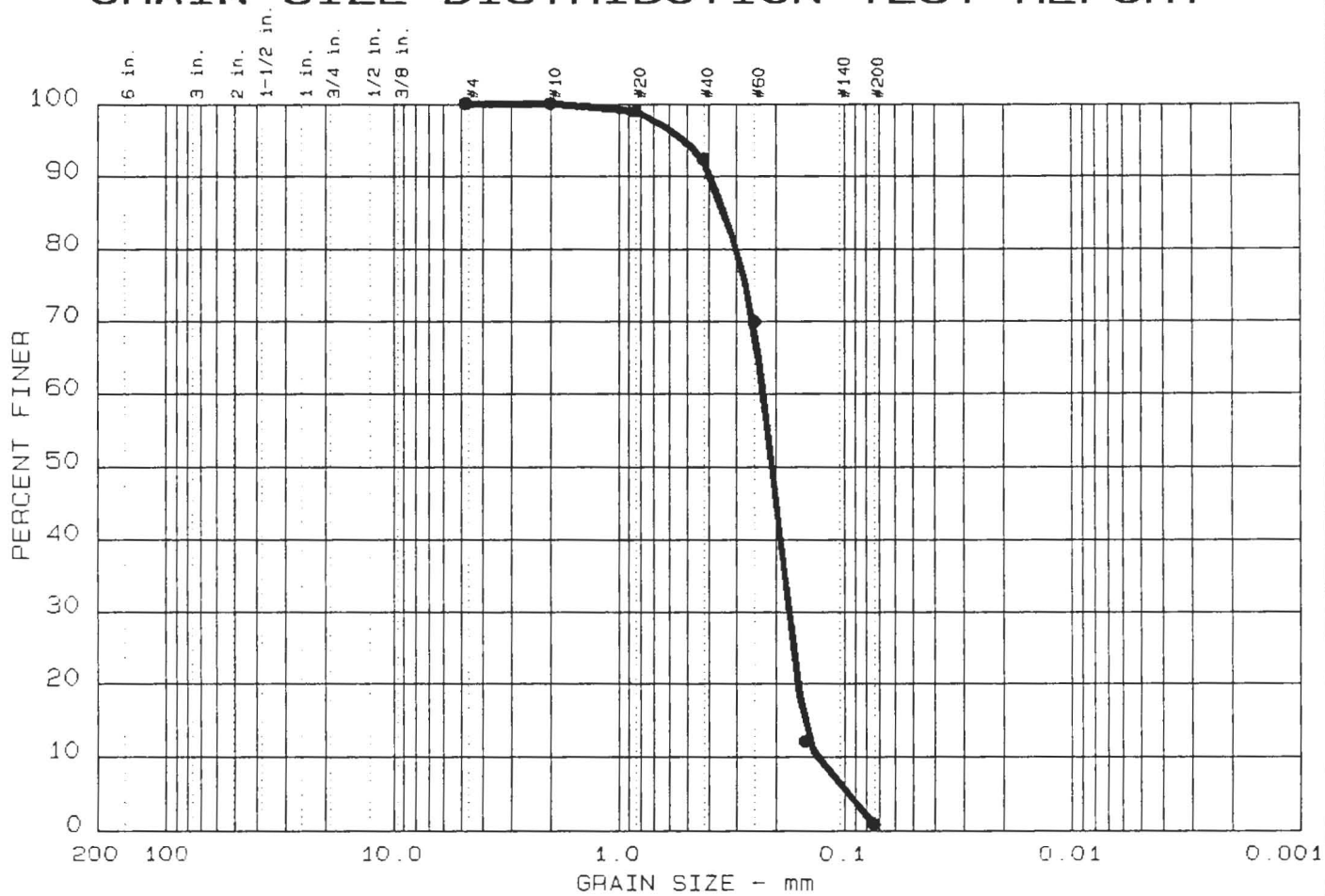
GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	19	0.0	0.0	99.1	0.9	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.34	0.23	0.21	0.175	0.1529	0.1302	1.03	1.8

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Poorly Graded Sand with Shell Fragments	SP	

Project No.: 50160-8-0025-W01-830

Project: Shallote Inlet, Brunswick, NC

● Location: SHI-8 Jar Sample 1 @ 1.0-1.5 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: CA JL

Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 19

Date: Feb.20,1999
Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet,Brunswick,NC

Sample Data

Location of Sample: SHI-8 Jar Sample 1 @ 1.0-1.5 Ft.
Sample Description: Brown Poorly Graded Sand with Shell Fragments
USCS Class: SP
Liquid limit:
AASHTO Class:
Plasticity index:

Notes

Remarks: Tested by: CA JL Reviewed by: UJ

Fig. No.:

Mechanical Analysis Data

	Initial
Dry sample and tare=	324.23
Tare =	0.00
Dry sample weight =	324.23

Tare for cumulative weight retained= 0

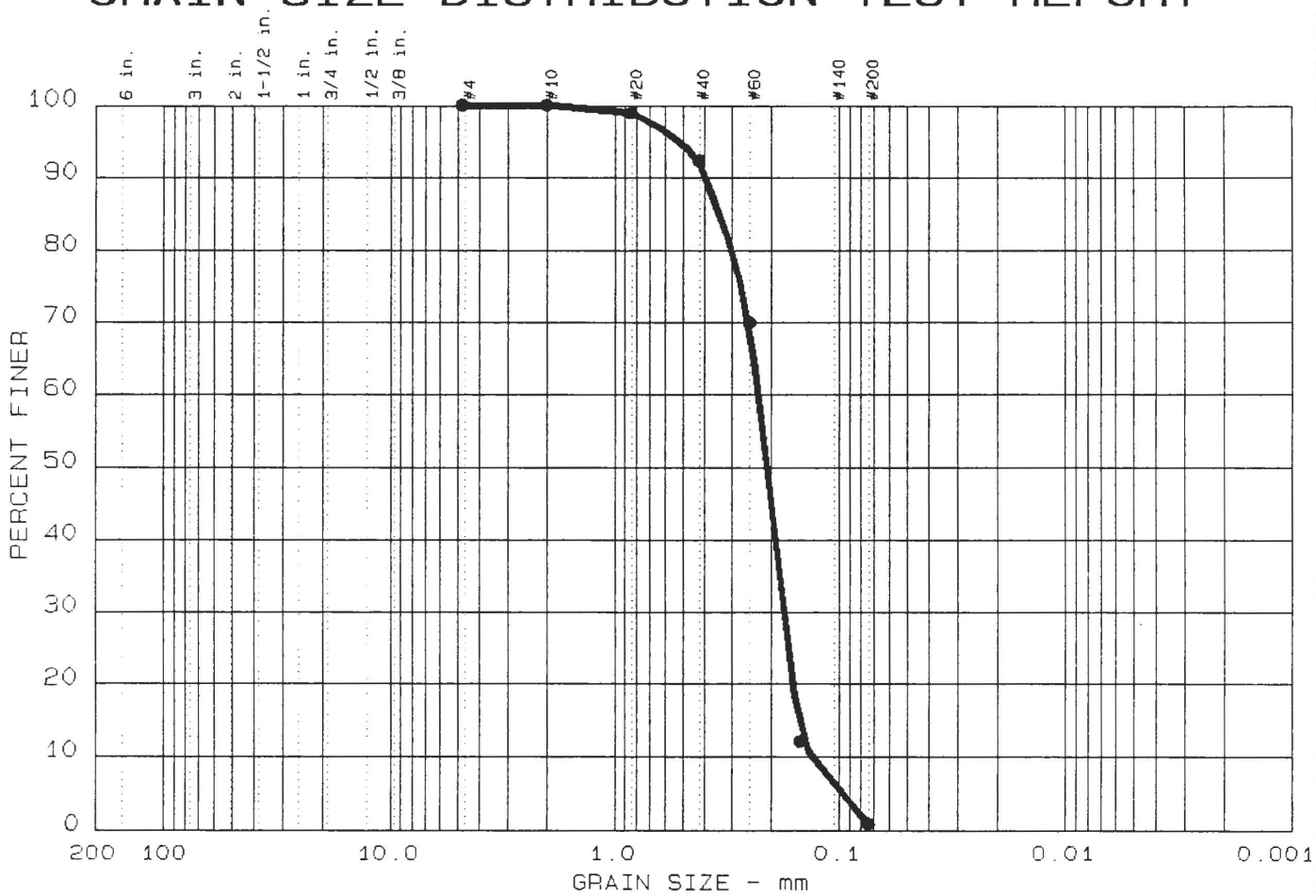
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.07	100.0
# 20	3.40	99.0
# 40	24.60	92.4
# 60	97.49	69.9
# 100	285.09	12.1
# 200	321.32	0.9

Fractional Components

% + 3 in. = 0.0 % GRAVEL = 0.0 % SAND = 99.1
% FINES = 0.9

D85= 0.34 D60= 0.229 D50= 0.209
D30= 0.1748 D15= 0.15293 D10= 0.13017
Cc = 1.0268 Cu = 1.7559

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	19	0.0	0.0	99.1	0.9	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.34	0.23	0.21	0.175	0.1529	0.1302	1.03	1.8

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Poorly Graded Sand with Shell Fragments	SP	

Project No.: 50160-8-0025-W01-830

Project: Shallote Inlet, Brunswick, NC

● Location: SHI-8 Jar Sample 1 @ 1.0-1.5 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: CA JL

Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 19

Date: Feb.20,1999
Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet,Brunswick,NC

Sample Data

Location of Sample: SHI-8 Jar Sample 1 @ 1.0-1.5 Ft.
Sample Description: Brown Poorly Graded Sand with Shell Fragments
USCS Class: SP
Liquid limit:
AASHTO Class:
Plasticity index:

Notes

Remarks: Tested by: CA JL Reviewed by: 4J

Fig. No.:

Mechanical Analysis Data

	Initial
Dry sample and tare=	324.23
Tare =	0.00
Dry sample weight =	324.23

Tare for cumulative weight retained= 0

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.07	100.0
# 20	3.40	99.0
# 40	24.60	92.4
# 60	97.49	69.9
# 100	285.09	12.1
# 200	321.32	0.9

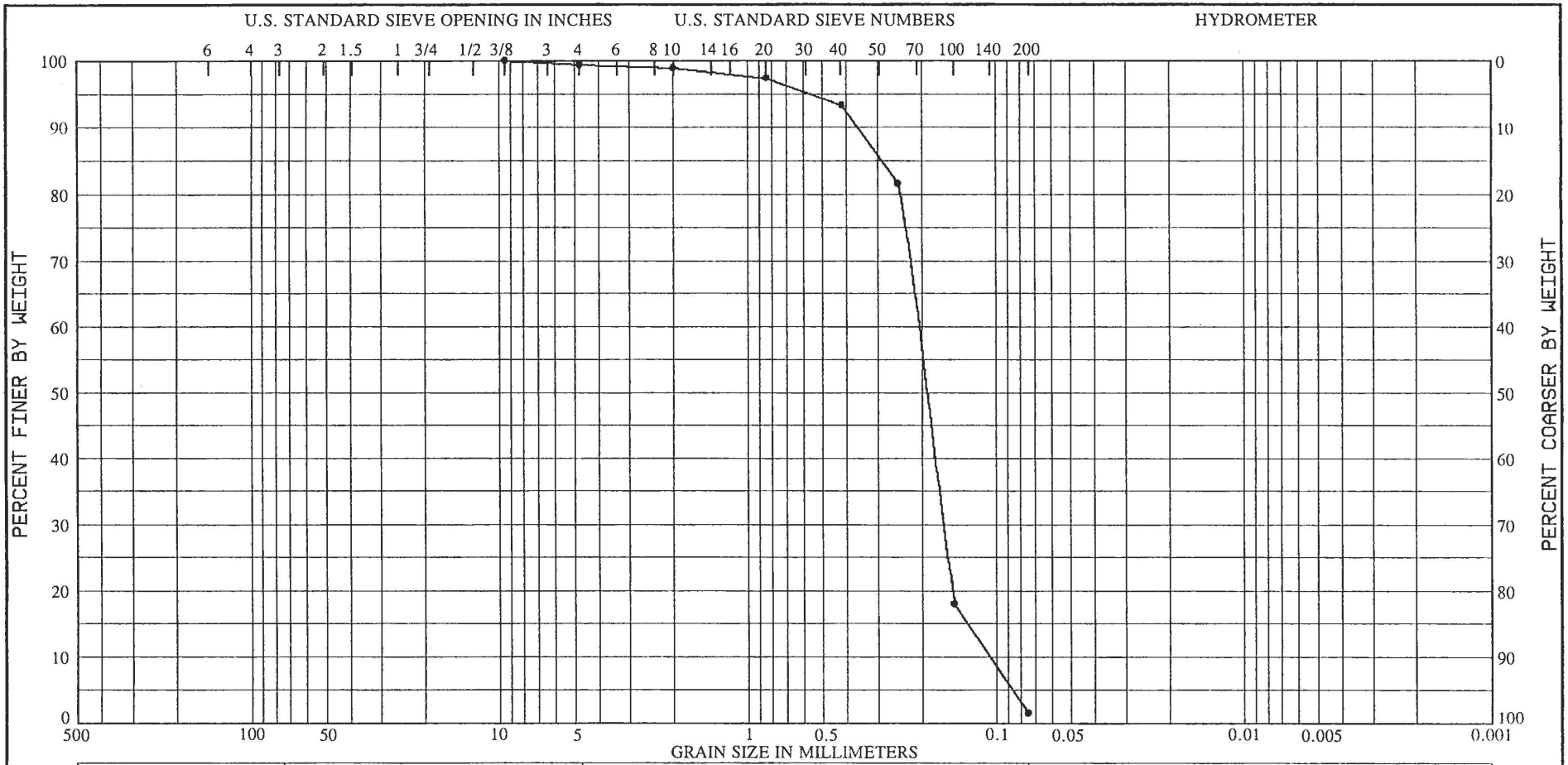
Fractional Components

% + 3 in. = 0.0 % GRAVEL = 0.0 % SAND = 99.1
% FINES = 0.9

D85= 0.34 D60= 0.229 D50= 0.209
D30= 0.1748 D15= 0.15293 D10= 0.13017
Cc = 1.0268 Cu = 1.7559

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
2	7.0 - 7.5	GRAYISH TAN, POORLY GRADED SAND (SP), WITH A TRACE OF SAND SIZE SHELL FRAGMENTS.	20.1			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6017
Hole No. SHI-8
Date 05/26/98

GRADATION CURVES

Hole No. SHI-12

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION WILMINGTON DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT SHALLOTTE INLET	10. SIZE AND TYPE OF BIT 4" VIBRACORE TUBE 20'
2. LOCATION (Coordinates or Station) E 2188483 N 54209	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY WILMINGTON DISTRICT	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRA-CORE (SNELL)
4. HOLE NO. (As shown on drawing title and file number) SHI-12	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 2 UNDISTURBED 0
5. NAME OF DRILLER JERRY FULCHER	14. TOTAL NUMBER CORE BOXES N/A
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN N/A	16. DATE HOLE STARTED 2/5/98 COMPLETED 2/5/98
8. DEPTH DRILLED INTO ROCK 0.0'	17. ELEVATION TOP OF HOLE -9.5 Ft.
9. TOTAL DEPTH OF HOLE 8.0'	18. TOTAL CORE RECOVERY FOR BORING N/A %
	19. SIGNATURE OF INSPECTOR KEITH BENTON

ELEVATION	DEPTH	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-9.5	0		SP-Tan, coarse poorly graded sand with shell fragments		1	Time Began Vibracoring @ 15:10 hours NOTE: CLASSIFIED ON 3/4/98 BY LARRY BENJAMIN CIVIL ENGINEER TECH. NOTE: Top of Hole at River Bottom LAB CLASSIFICATION Jar Number 2 — Classification SP
	2					
	4					
	6		Gray, medium to coarse grain sizes, trace of shell fragments		2	
-17.5	8		BOTTOM OF HOLE AT 8.0' SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			NOTE: Hole Terminated as necessary for convenience, predetermined depth, or assumed vibracore refusal. NOTE: The Vibracore run depth was not recorded.

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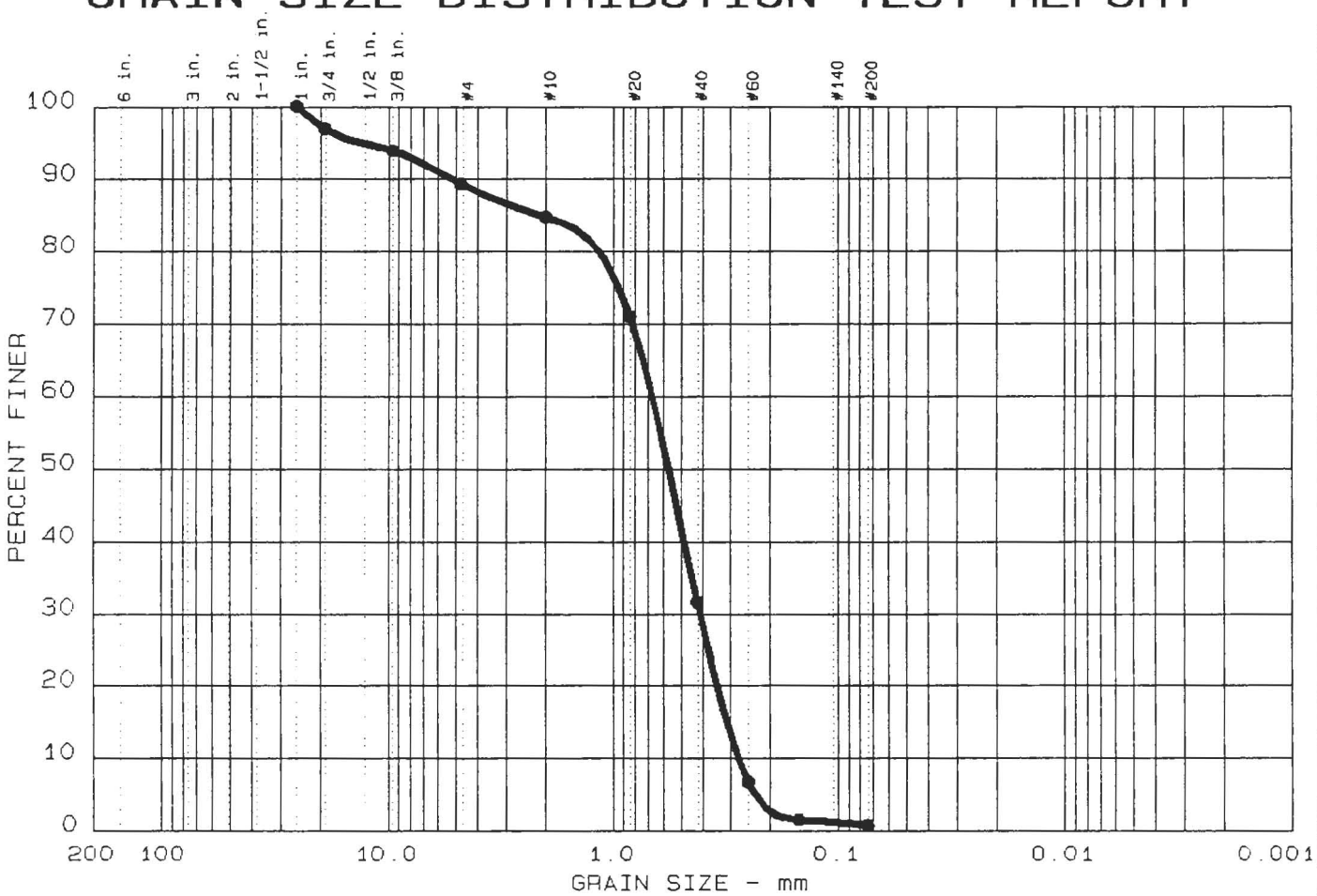
PROJECT SHALLOTTE INLET | HOLE NO. SHI-12

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	20	0.0	10.6	88.6	0.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			2.11	0.67	0.56	0.409	0.3101	0.2764	0.90	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Tan Poorly Graded Sand with Gravel & Shell Frag.	SP	

Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet, Brunswick, NC
● Location: SHI-12 Jar Sample 1 @ 0.0-0.5 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: SAJC

Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 20

Date: Feb.20,1999
Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet,Brunswick,NC

Sample Data

Location of Sample: SHI-12 Jar Sample 1 @ 0.0-0.5 Ft.
Sample Description: Tan Poorly Graded Sand with Gravel & Shell Frag.
USCS Class: SP
Liquid limit:
AASHTO Class:
Plasticity index:

Notes

CAJC 16

Remarks: Tested by: Reviewed by:

Fig. No.:

Mechanical Analysis Data

	Initial
Dry sample and tare=	328.34
Tare =	0.00
Dry sample weight =	328.34

Tare for cumulative weight retained= 0

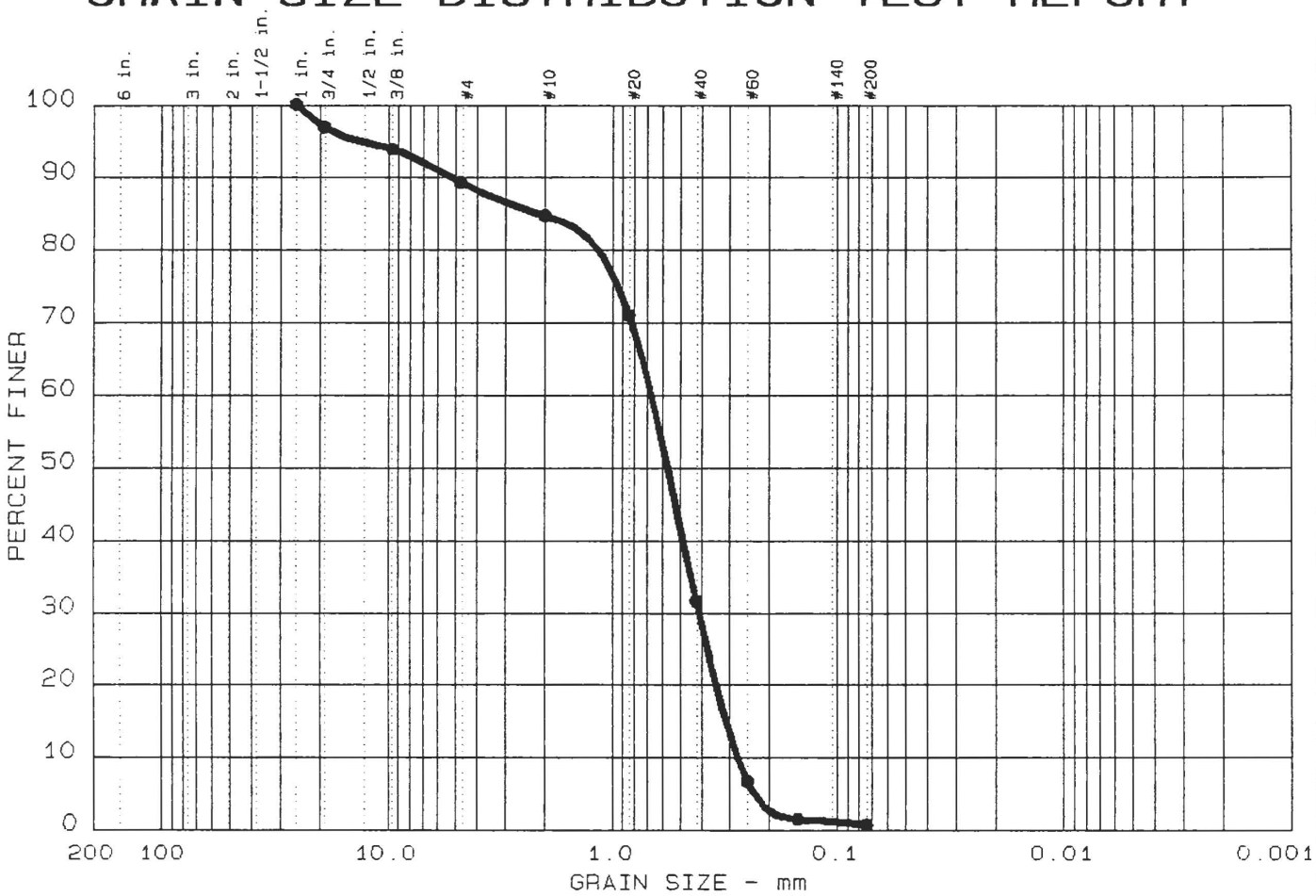
Sieve	Cumul. Wt. retained	Percent finer
1 inches	0.00	100.0
0.75 inches	10.16	96.9
0.375 inches	20.18	93.9
# 4	34.94	89.4
# 10	50.16	84.7
# 20	95.18	71.0
# 40	224.62	31.6
# 60	306.43	6.7
# 100	323.41	1.5
# 200	325.94	0.7

Fractional Components

% + 3 in. = 0.0 % GRAVEL = 10.6 % SAND = 88.6
% FINES = 0.8

D85= 2.11 D60= 0.668 D50= 0.562
D30= 0.4088 D15= 0.31010 D10= 0.27638
Cc = 0.9047 Cu = 2.4182

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	20	0.0	10.6	88.6	0.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			2.11	0.67	0.56	0.409	0.3101	0.2764	0.90	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Tan Poorly Graded Sand with Gravel & Shell Frag.	SP	

Project No.: 50160-8-0025-W01-830

Project: Shallote Inlet, Brunswick, NC

● Location: SHI-12 Jar Sample 1 @ 0.0-0.5 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: SRJC

Reviewed by: HJ

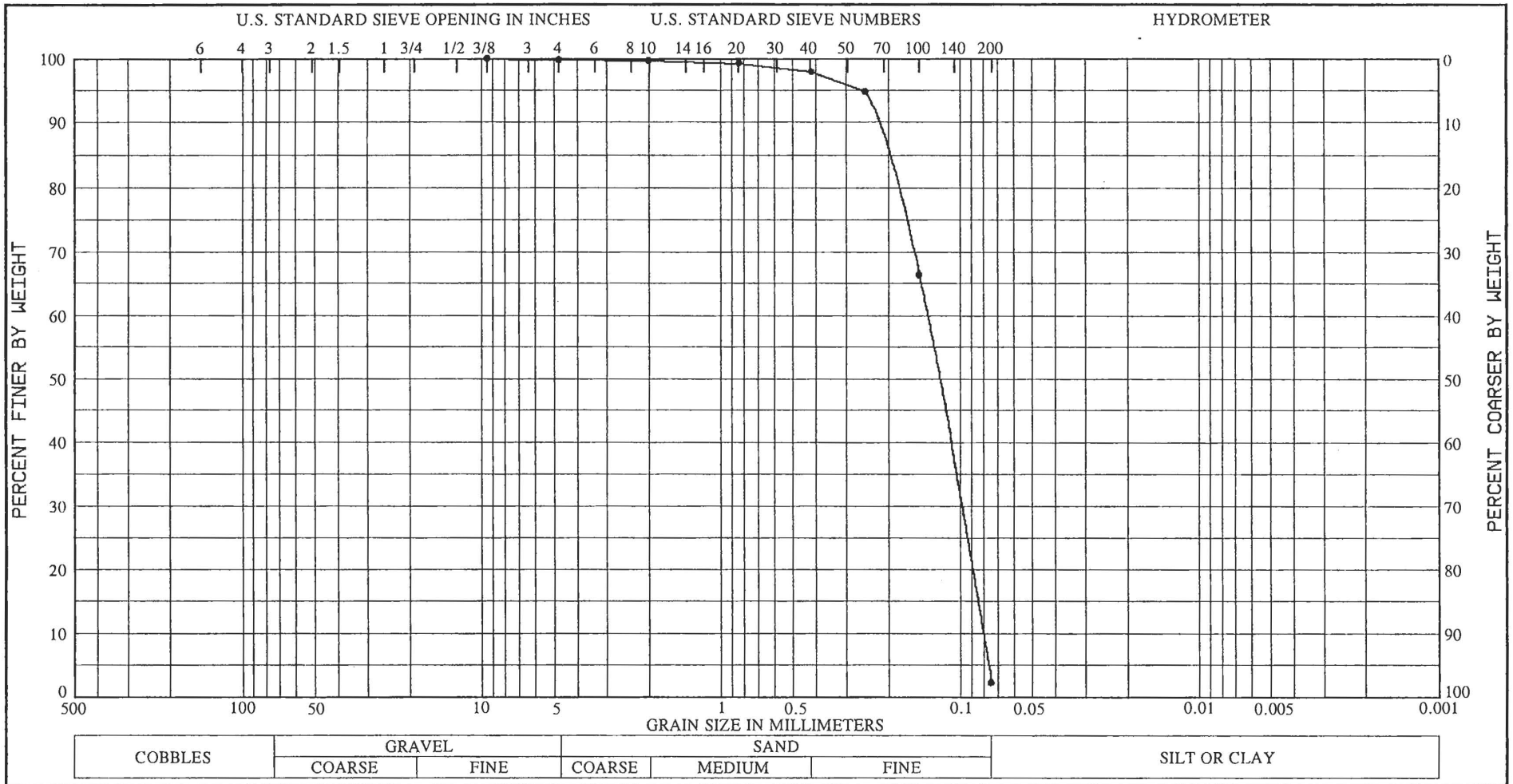
GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
2	6.0 - 6.5	GRAY, POORLY GRADED SAND (SP), WITH A TRACE OF MICA.	26.2			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6018
Hole No. SHI-12
Date 05/26/98

GRADATION CURVES

Hole No. SHI-13

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION WILMINGTON DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT SHALLOTTE INLET	10. SIZE AND TYPE OF BIT 4" VIBRACORE TUBE 20'
2. LOCATION (Coordinates or Station) E 2187457 N 53902	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY WILMINGTON DISTRICT	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRA-CORE (SNELL)
4. HOLE NO. (As shown on drawing title and file number) SHI-13	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 2 UNDISTURBED 0
5. NAME OF DRILLER JERRY FULCHER	14. TOTAL NUMBER CORE BOXES N/A
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE STARTED 2/5/98 COMPLETED 2/5/98
7. THICKNESS OF OVERBURDEN N/A	17. ELEVATION TOP OF HOLE -7.9 Ft.
8. DEPTH DRILLED INTO ROCK 0.0'	18. TOTAL CORE RECOVERY FOR BORING N/A %
9. TOTAL DEPTH OF HOLE 4.9'	19. SIGNATURE OF INSPECTOR KEITH BENTON

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-7.9	0		SP-Tan, coarse poorly graded sand with shell fragments			Time Began Vibracoring @ 14:35 hours NOTE: CLASSIFIED ON 3/4/98 BY LARRY BENJAMIN CIVIL ENGINEER TECH.
	1				1	
	2					NOTE: Top of Hole at River Bottom
	3				2	LAB CLASSIFICATION Jar Number 1 — Classification SP
	4					
-12.8	4.9		BOTTOM OF HOLE AT 4.9' SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			NOTE: Hole Terminated as necessary for convenience, predetermined depth, or assumed vibracore refusal. NOTE: The Vibracore run depth was not recorded.

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PROJECT SHALLOTTE INLET | HOLE NO. SHI-13

GRAIN SIZE DISTRIBUTION TEST REPORT

	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	1	0.0	5.6	93.6	0.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			1.15	0.63	0.55	0.412	0.3069	0.2783	0.96	2.3

MATERIAL DESCRIPTION	USCS	AASHTO
● Tan Poorly Graded Sand with Gravel & Shell Frag.	SP	

Project No.: 50160-8-0025-W01-830

Project: Shallote Inlet, Brunswick, NC

● Location: SHI-13 Jar Sample 2 @ 3.0-3.5 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: CA JL

Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 1

Date: Feb.20,1999
Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet,Brunswick,NC

Sample Data

Location of Sample: SHI-13 Jar Sample 2 @ 3.0-3.5 Ft.
Sample Description: Tan Poorly Graded Sand with Gravel & Shell Frag.
USCS Class: SP Liquid limit:
AASHTO Class: Plasticity index:

Notes

Remarks: Tested by: CA JL Reviewed by: KJ

Fig. No.:

Mechanical Analysis Data

	Initial
Dry sample and tare=	342.31
Tare =	0.00
Dry sample weight =	342.31

Tare for cumulative weight retained= 0

Sieve	Cumul. Wt. retained	Percent finer
1 inches	0.00	100.0
0.75 inches	7.48	97.8
0.375 inches	11.98	96.5
# 4	19.21	94.4
# 10	35.38	89.7
# 20	84.76	75.2
# 40	236.18	31.0
# 60	327.04	4.5
# 100	337.91	1.3
# 200	339.62	0.8

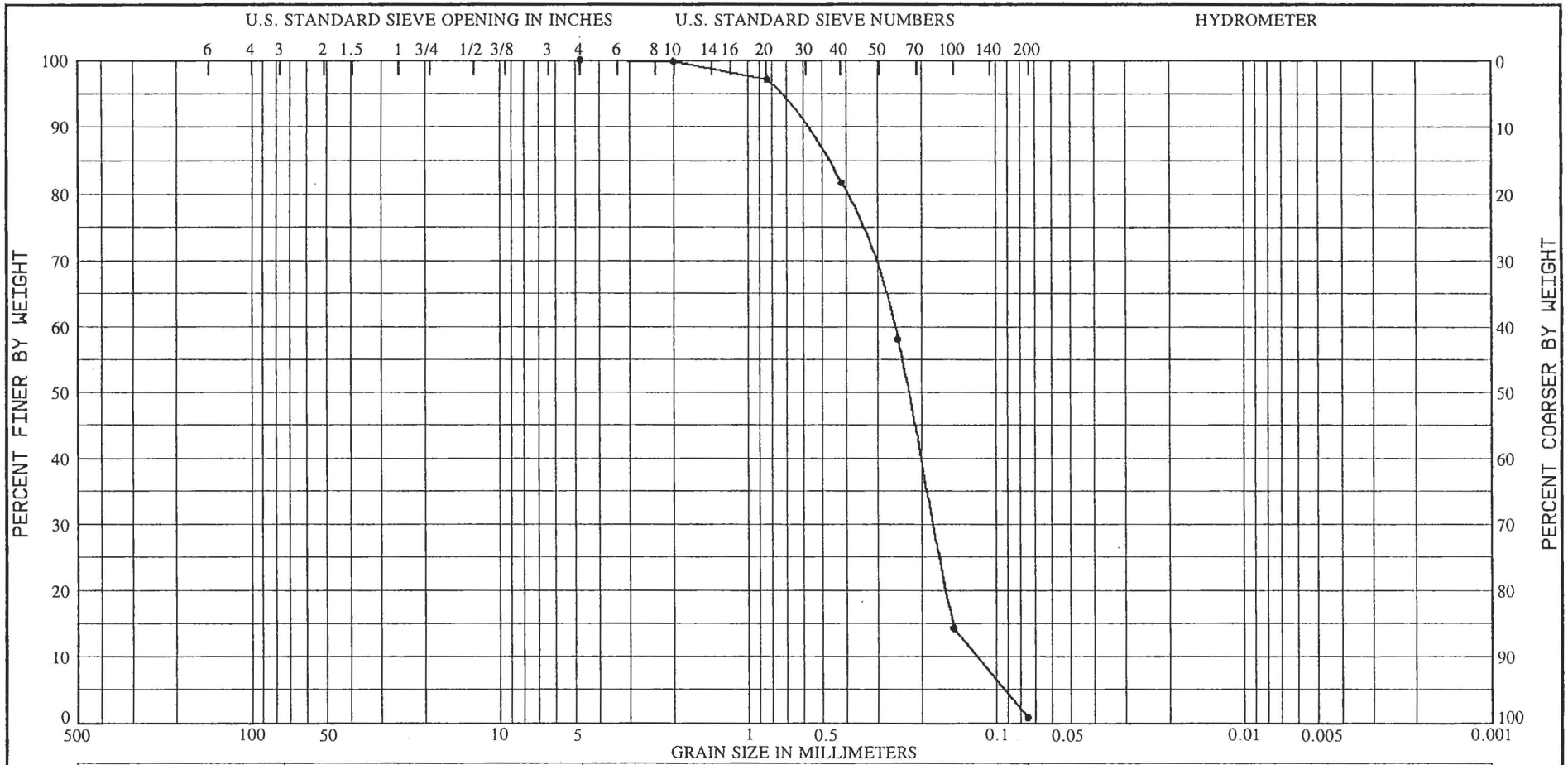
Fractional Components

% + 3 in. = 0.0 % GRAVEL = 5.6 % SAND = 93.6
% FINES = 0.8

D85= 1.15 D60= 0.632 D50= 0.546
D30= 0.4116 D15= 0.30690 D10= 0.27829
Cc = 0.9627 Cu = 2.2725

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
1	1.0 - 1.5	GRAYISH TAN, POORLY GRADED SAND (SP), WITH A TRACE OF SAND SIZE SHELL FRAGMENTS.	19.6			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6019
Hole No. SHI-13
Date 05/26/98

GRADATION CURVES

Hole No. SHI-14

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION WILMINGTON DISTRICT 1 1

1. PROJECT SHALLOTTE INLET	10. SIZE AND TYPE OF BIT 4" VIBRACORE TUBE 20'
2. LOCATION (Coordinates or Station) E 2188003 N 53643	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY WILMINGTON DISTRICT	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRA-CORE (SNELL)
4. HOLE NO. (As shown on drawing title and file number) SHI-14	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 4 UNDISTURBED 0
5. NAME OF DRILLER JERRY FULCHER	14. TOTAL NUMBER CORE BOXES N/A
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE STARTED 2/5/98 COMPLETED 2/5/98
7. THICKNESS OF OVERBURDEN N/A	17. ELEVATION TOP OF HOLE -11.4 Ft.
8. DEPTH DRILLED INTO ROCK 0.0'	18. TOTAL CORE RECOVERY FOR BORING N/A %
9. TOTAL DEPTH OF HOLE 13.8'	19. SIGNATURE OF INSPECTOR KEITH BENTON

ELEVATION -11.4	DEPTH 0	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			SP-Tan, coarse poorly graded sand with shell fragments		1	Time Begon Vibracoring @ 14:00 hours NOTE: CLASSIFIED ON 3/4/98 BY LARRY BENJAMIN CIVIL ENGINEER TECH.
	2					
			Gray		2	NOTE: Top of Hole at River Bottom
	4					
	6					LAB CLASSIFICATION Jar Number / Classification 2 SP 3 SP-SM 4 SC
	8					
-21.2	10		SM-Gray, fine to medium silty sand with shell fragments		3	
			With gray inorganic silt			NOTE: Hole Terminated as necessary for convenience, predetermined depth, or assumed vibracore refusal.
-23.2	12		ML-Grayish tan sandy silt with rock fragments		4	NOTE: The Vibracore run depth was not recorded.
-25.2	13.8		BOTTOM OF HOLE AT 13.8' SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			

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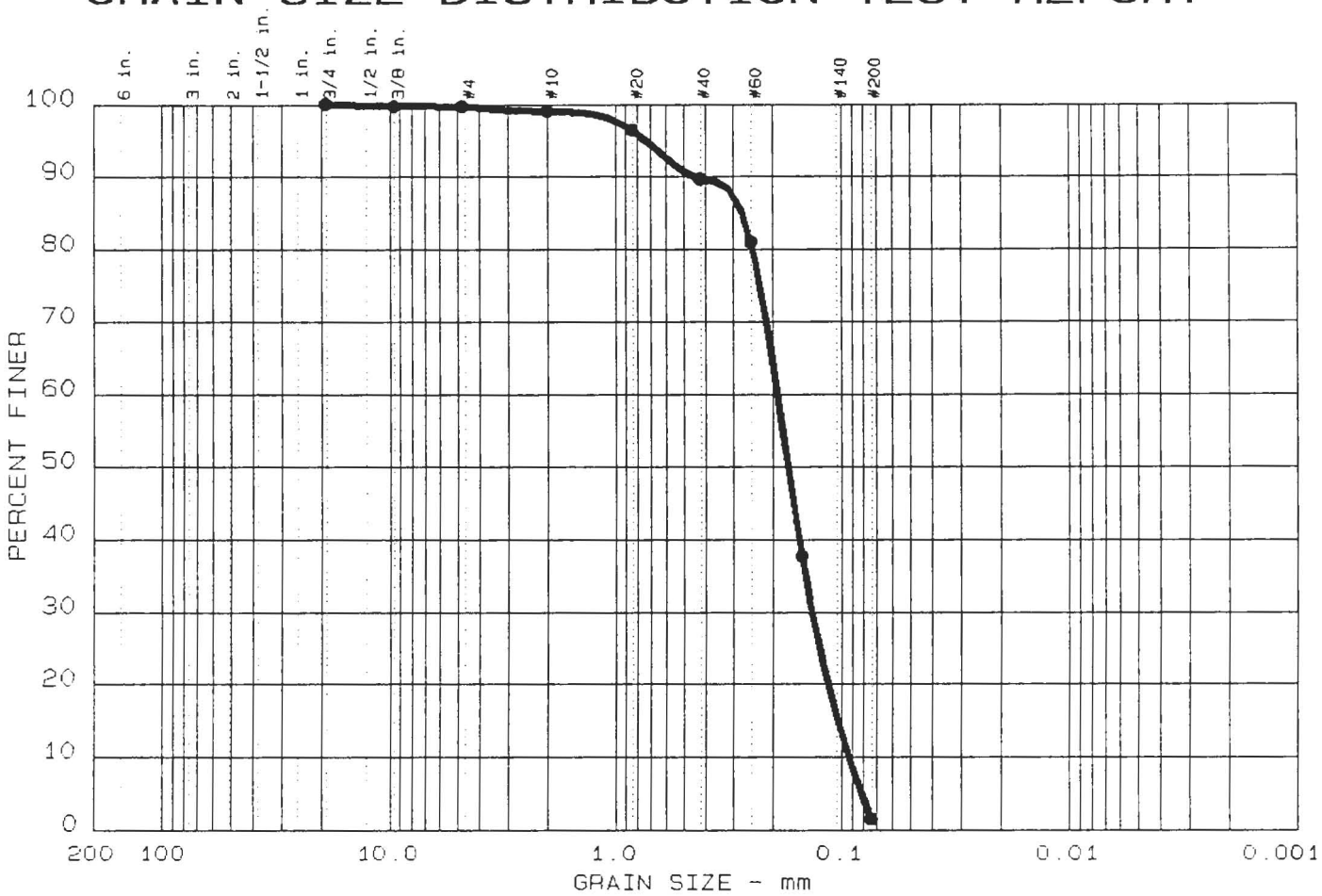
PROJECT SHALLOTTE INLET | HOLE NO. SHI-14

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	2	0.0	0.3	98.2	1.5	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.27	0.19	0.17	0.134	0.1036	0.0924	1.03	2.1

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Poorly Graded Sand with Shell Fragments	SP	

Project No.: 50160-8-0025-W01-830

Project: Shallote Inlet, Brunswick, NC

● Location: SHI-14 Jar Sample 1 @ 0.5-1.0 Ft.

Date: Feb.20, 1999

Remarks:

Tested by: CA JL

Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST REPORT

LAW ENGINEERING, INC.

Figure No.

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 2

Date: Feb.20,1999
Project No.: 50160-8-0025-W01-830
Project: Shallote Inlet,Brunswick,NC

Sample Data

Location of Sample: SHI-14 Jar Sample 1 @ 0.5-1.0 Ft.
Sample Description: Brown Poorly Graded Sand with Shell Fragments
USCS Class: SP
Liquid limit:
AASHTO Class:
Plasticity index:

Notes

Remarks: Tested by: CA JL Reviewed by: 4J

Fig. No.:

Mechanical Analysis Data

	Initial
Dry sample and tare=	327.11
Tare =	0.00
Dry sample weight =	327.11

Tare for cumulative weight retained= 0

Sieve	Cumul. Wt. retained	Percent finer
0.75 inches	0.00	100.0
0.375 inches	0.90	99.7
# 4	1.05	99.7
# 10	3.22	99.0
# 20	11.77	96.4
# 40	33.72	89.7
# 60	62.02	81.0
# 100	203.99	37.6
# 200	322.12	1.5

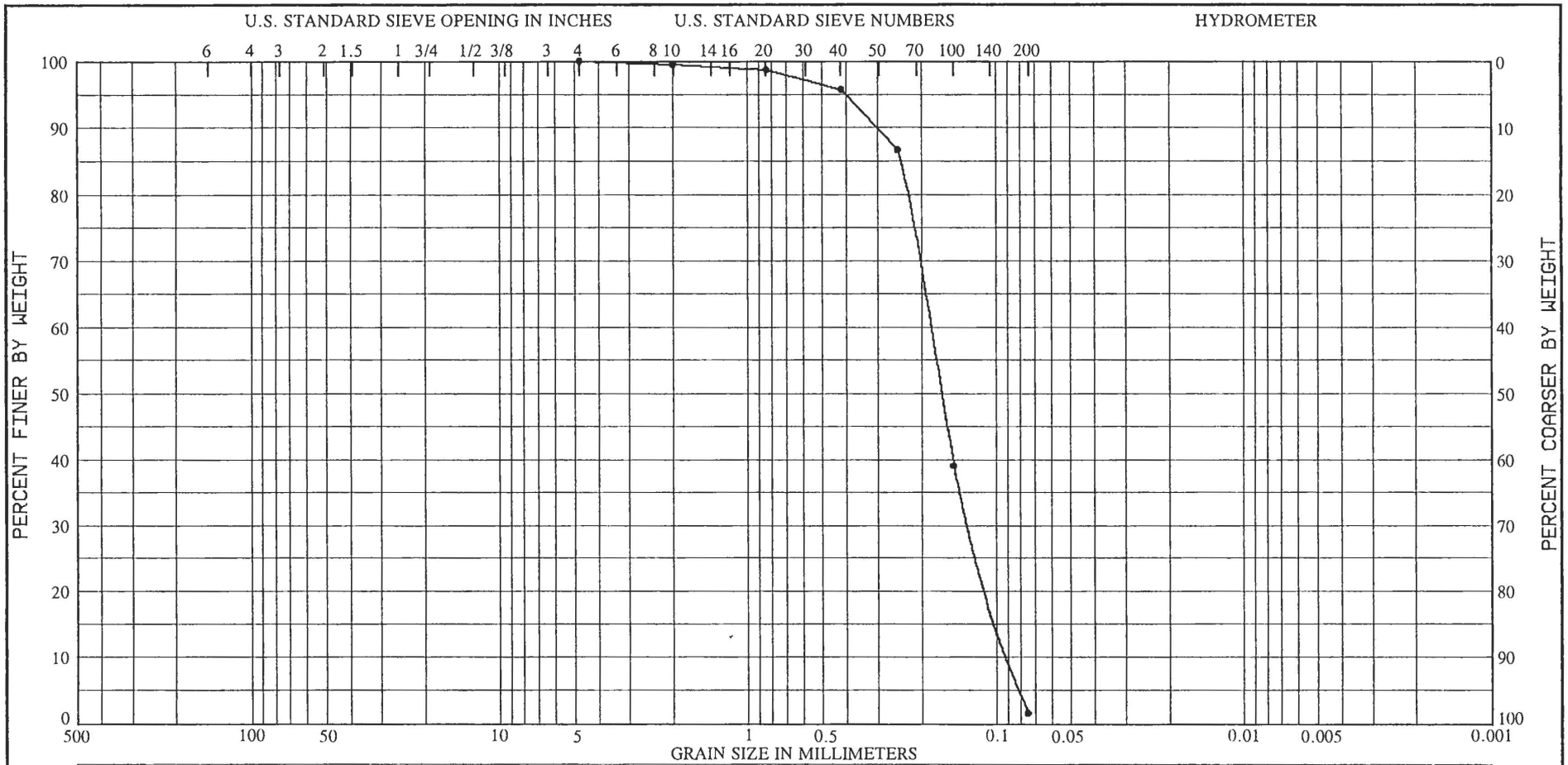
Fractional Components

% + 3 in. = 0.0 % GRAVEL = 0.3 % SAND = 98.2
% FINES = 1.5

D85= 0.27 D60= 0.191 D50= 0.171
D30= 0.1344 D15= 0.10363 D10= 0.09236
Cc = 1.0268 Cu = 2.0630

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

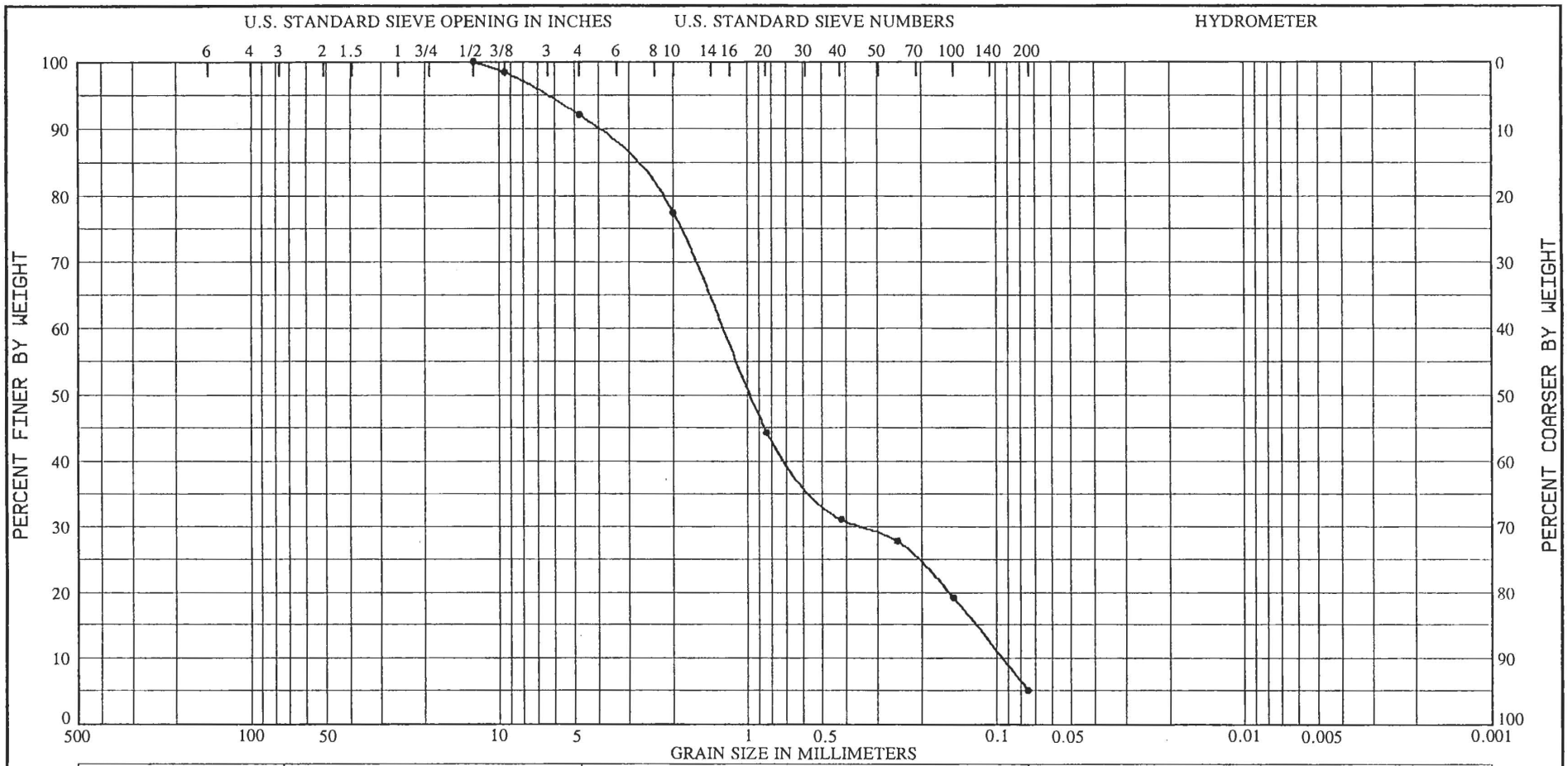
Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
2	3.5 - 4.0	GRAYISH TAN, POORLY GRADED SAND (SP),	24.4			
		WITH A TRACE OF SAND SIZE SHELL				
		FRAGMENTS.				

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6020
Hole No. SHI-14
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

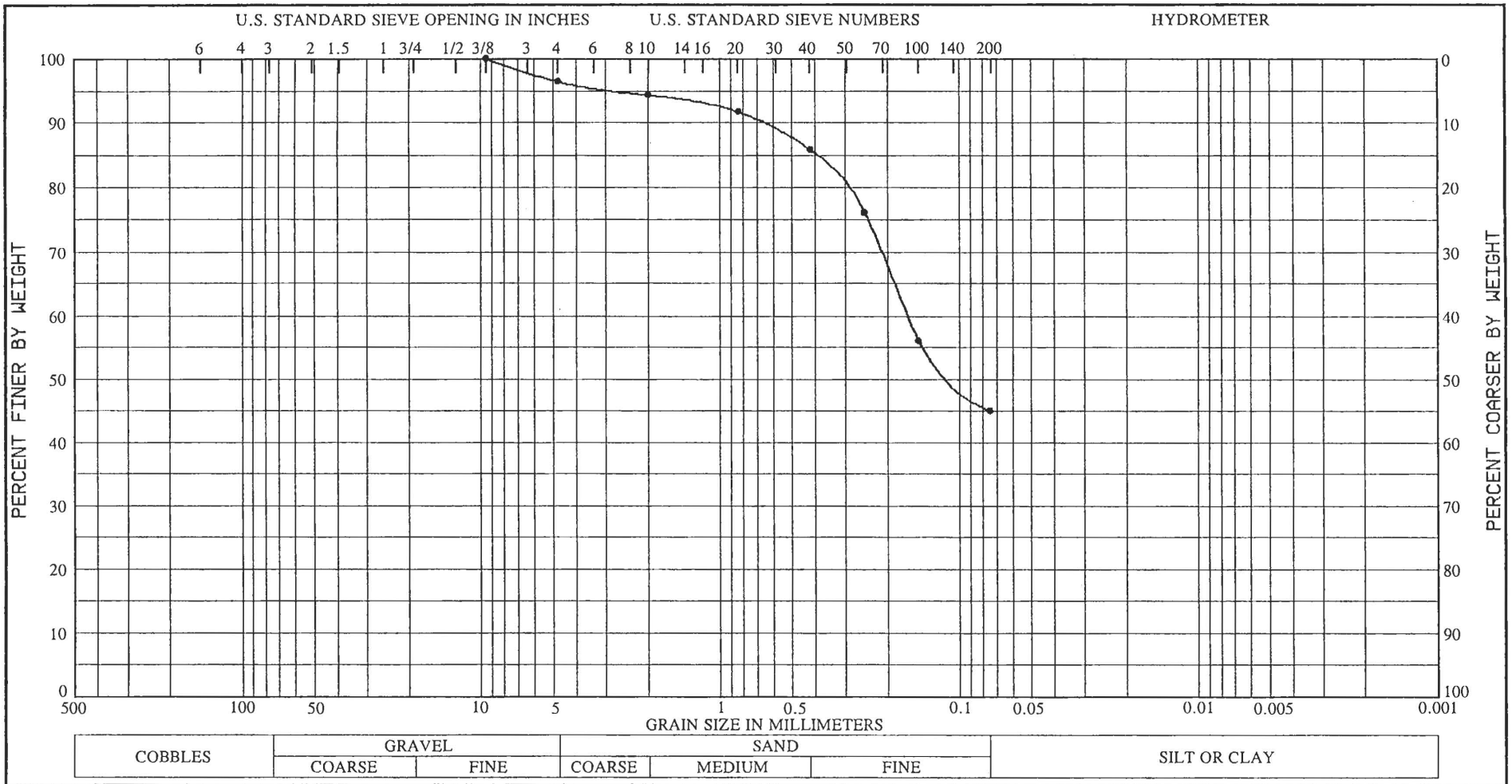
Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
3	9.8 - 10.3	GRAY, POORLY GRADED SILTY SAND (SP-SM), WITH A TRACE OF GRAVEL SIZE AND A LITTLE SAND SIZE SHELL FRAGMENTS.	20.4			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6021
Hole No. SHI-14
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
4	12.0 - 12.5	GRAY, CLAYEY SAND (SC), WITH A TRACE OF GRAVEL.	27.9			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6022
Hole No. SHI-14
Date 05/26/98

GRADATION CURVES

Hole No. SHI-15

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION WILMINGTON DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT SHALLOTTE INLET	10. SIZE AND TYPE OF BIT 4" VIBRACORE TUBE 20'
2. LOCATION (Coordinates or Station) E 2188632 N 53195	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY WILMINGTON DISTRICT	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRA-CORE (SNELL)
4. HOLE NO. (As shown on drawing title and file number) SHI-15	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 3 UNDISTURBED 0
5. NAME OF DRILLER JERRY FULCHER	14. TOTAL NUMBER CORE BOXES N/A
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE STARTED 2/5/98 COMPLETED 2/5/98
7. THICKNESS OF OVERBURDEN N/A	17. ELEVATION TOP OF HOLE -16.8 Ft.
8. DEPTH DRILLED INTO ROCK 0.0'	18. TOTAL CORE RECOVERY FOR BORING N/A %
9. TOTAL DEPTH OF HOLE 15.3'	19. SIGNATURE OF INSPECTOR KEITH BENTON

ELEVATION	DEPTH	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-16.8	0		SP-Tan, coarse poorly graded sand		1	Time Began Vibracoring @ 13:25 hours NOTE: CLASSIFIED ON 3/4/98 BY LARRY BENJAMIN CIVIL ENGINEER TECH. NOTE: Top of Hole at River Bottom LAB CLASSIFICATION Jar Number / Classification 1 SP 2 SP-SM 3 SC
	2					
	4					
-22.3	6		SM-Grayish tan, fine silty sand, trace of shell fragments		2	
	8		With shell fragments (Shell hash)			
-26.0			ML-Gray sandy silt with rock fragments		3	
	10					
	12					
	14					NOTE: Hole Terminated as necessary for convenience, predetermined depth, or assumed vibracore refusal. NOTE: The Vibrocore run depth was not recorded.
-32.1	15.3		BOTTOM OF HOLE AT 15.3' SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			

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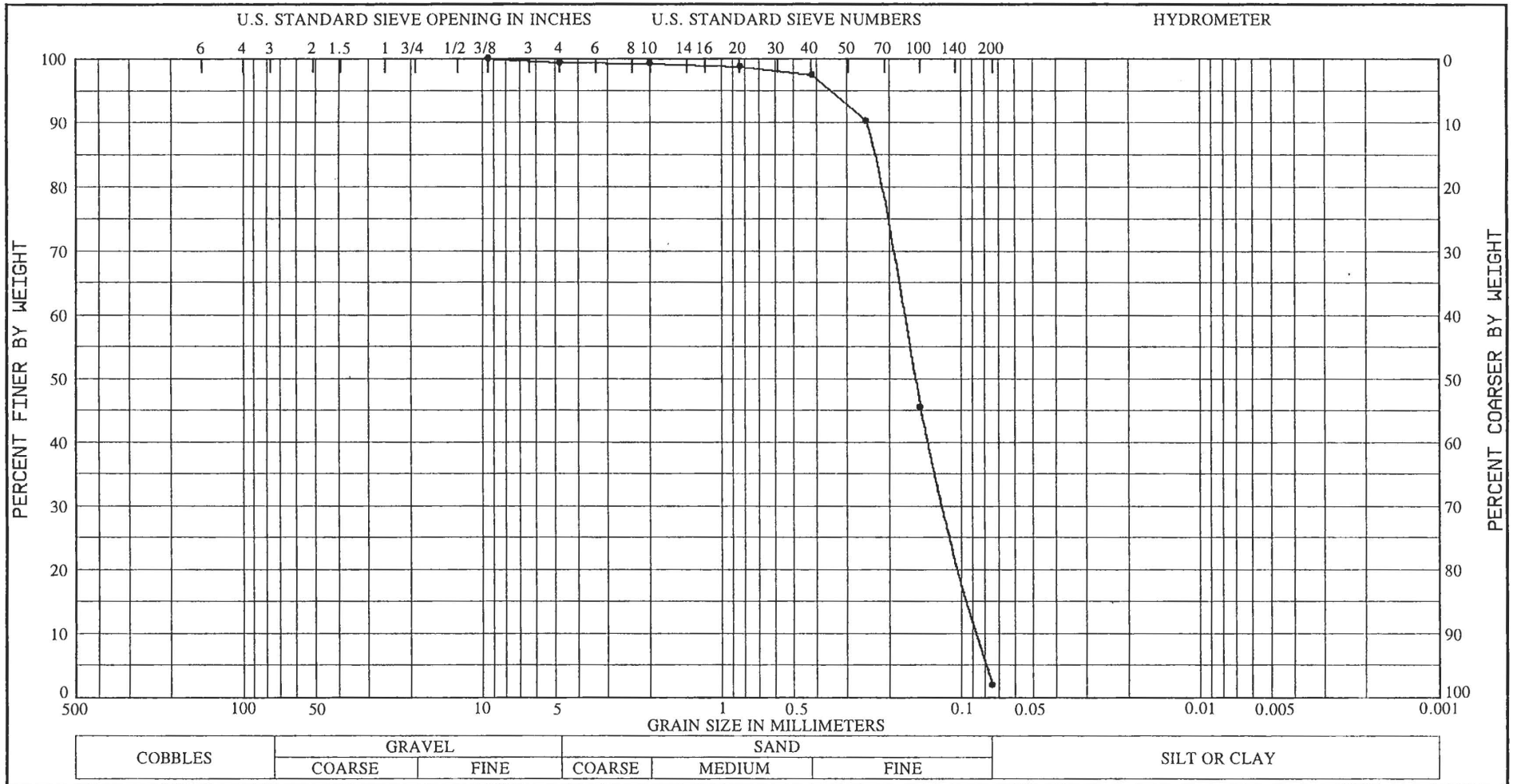
PROJECT SHALLOTTE INLET | HOLE NO. SHI-15

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



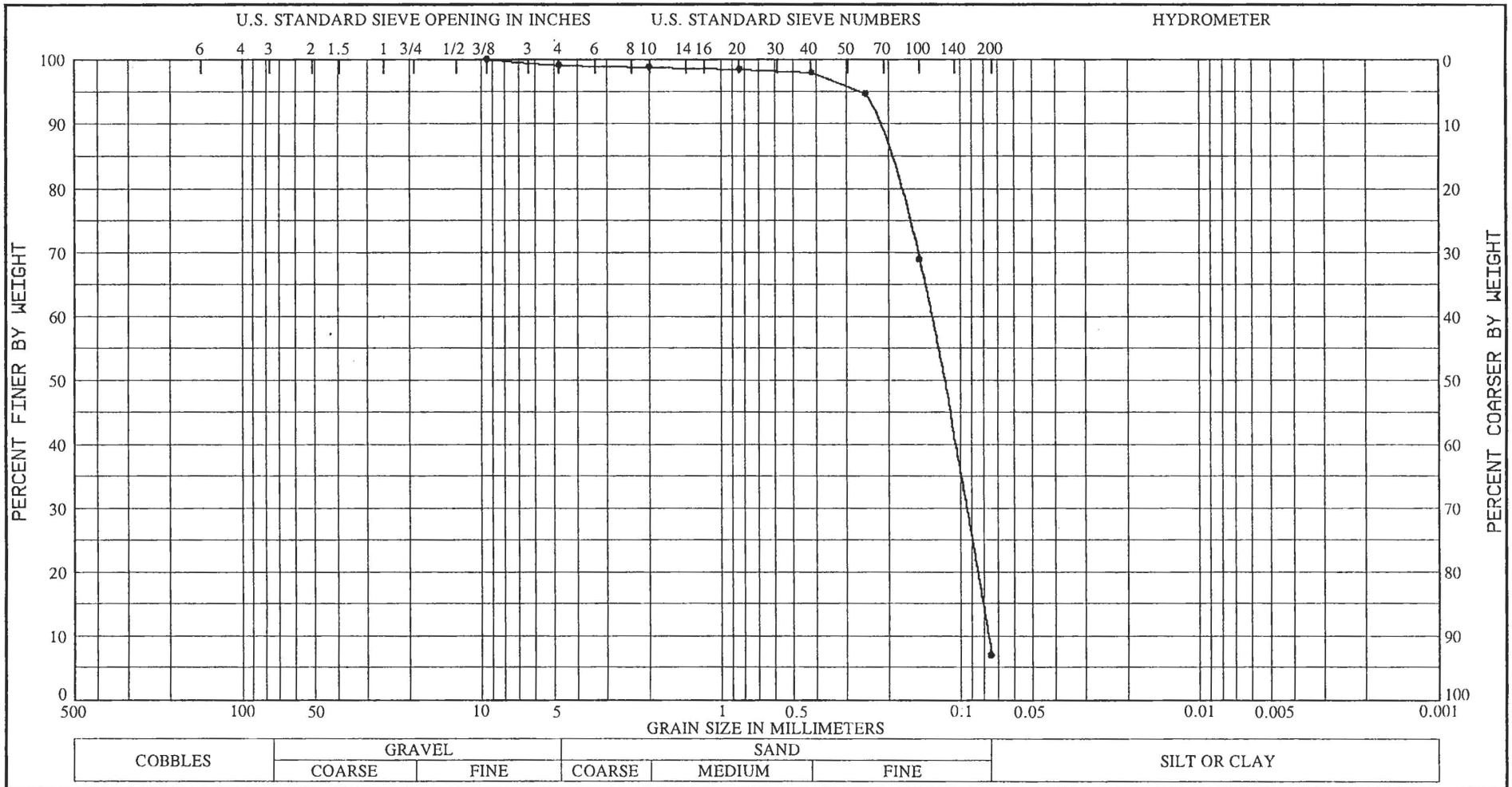
Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
1	1.0 - 1.5	GRAY, POORLY GRADED SAND (SP), WITH A TRACE OF SAND SIZE SHELL FRAGMENTS.	27.4			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6023
Hole No. SHI-15
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
2	5.5 - 6.0	GRAY, POORLY GRADED SILTY SAND (SP-SM), WITH A TRACE OF SAND SIZE SHELL FRAGMENTS.	28.9			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6024
Hole No. SHI-15
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
3	9.2 - 9.7	GRAY, CLAYEY SAND (SC), WITH SOME GRAVEL.	26.3			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6025
Hole No. SHI-15
Date 05/26/98

GRADATION CURVES

Hole No. SHI-16

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION WILMINGTON DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT SHALLOTTE INLET	10. SIZE AND TYPE OF BIT 4" VIBRACORE TUBE 20'
2. LOCATION (Coordinates or Station) E 2187394 N 52983	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY WILMINGTON DISTRICT	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRA-CORE (SNELL)
4. HOLE NO. (As shown on drawing title and file number) SHI-16	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 3 UNDISTURBED 0
5. NAME OF DRILLER JERRY FULCHER	14. TOTAL NUMBER CORE BOXES N/A
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE STARTED 2/5/98 COMPLETED 2/5/98
7. THICKNESS OF OVERBURDEN N/A	17. ELEVATION TOP OF HOLE -17.3 Ft.
8. DEPTH DRILLED INTO ROCK 0.0'	18. TOTAL CORE RECOVERY FOR BORING N/A %
9. TOTAL DEPTH OF HOLE 12.0'	19. SIGNATURE OF INSPECTOR KEITH BENTON

ELEVATION -17.3	DEPTH 0	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			SP-Grayish tan, coarse poorly graded sand, trace of shell fragments		1	Time Began Vibracoring @ 13:00 hours NOTE: CLASSIFIED ON 3/4/98 BY LARRY BENJAMIN CIVIL ENGINEER TECH. NOTE: Top of Hole at River Bottom LAB CLASSIFICATION Jar Number / Classification 1 SP 2 SM 3 SC
	2					
	4					
	6					
-24.3			SM-Grayish tan fine silty sand with shell fragments		2	
-25.3	8		ML-Grayish tan, sandy silt with rock fragments		3	
	10					NOTE: Hole Terminated as necessary for convenience, predetermined depth, or assumed vibracore refusal. NOTE: The Vibracore run depth was not recorded.
-29.3	12		BOTTOM OF HOLE AT 12.0' SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			

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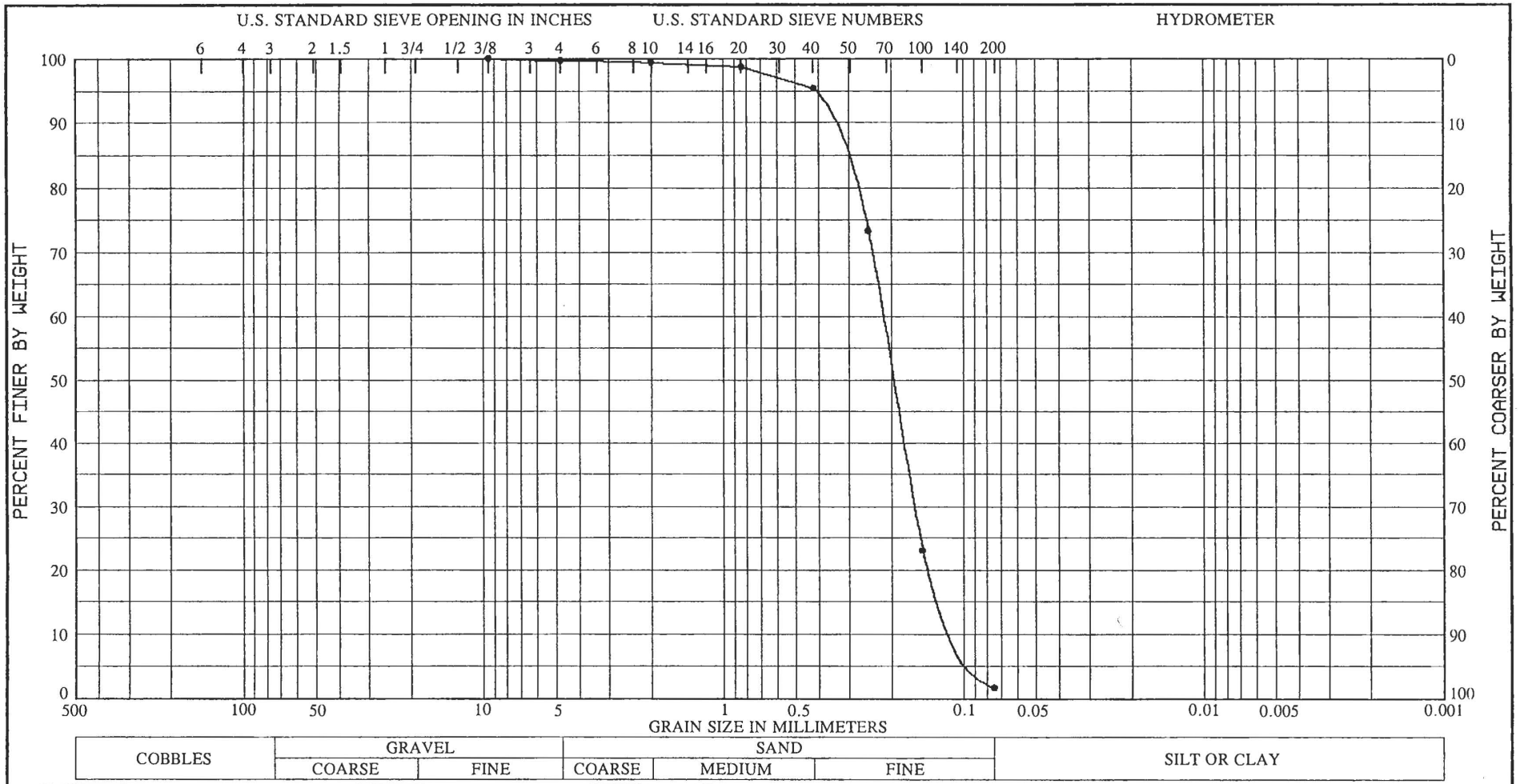
PROJECT SHALLOTTE INLET | HOLE NO. SHI-16

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

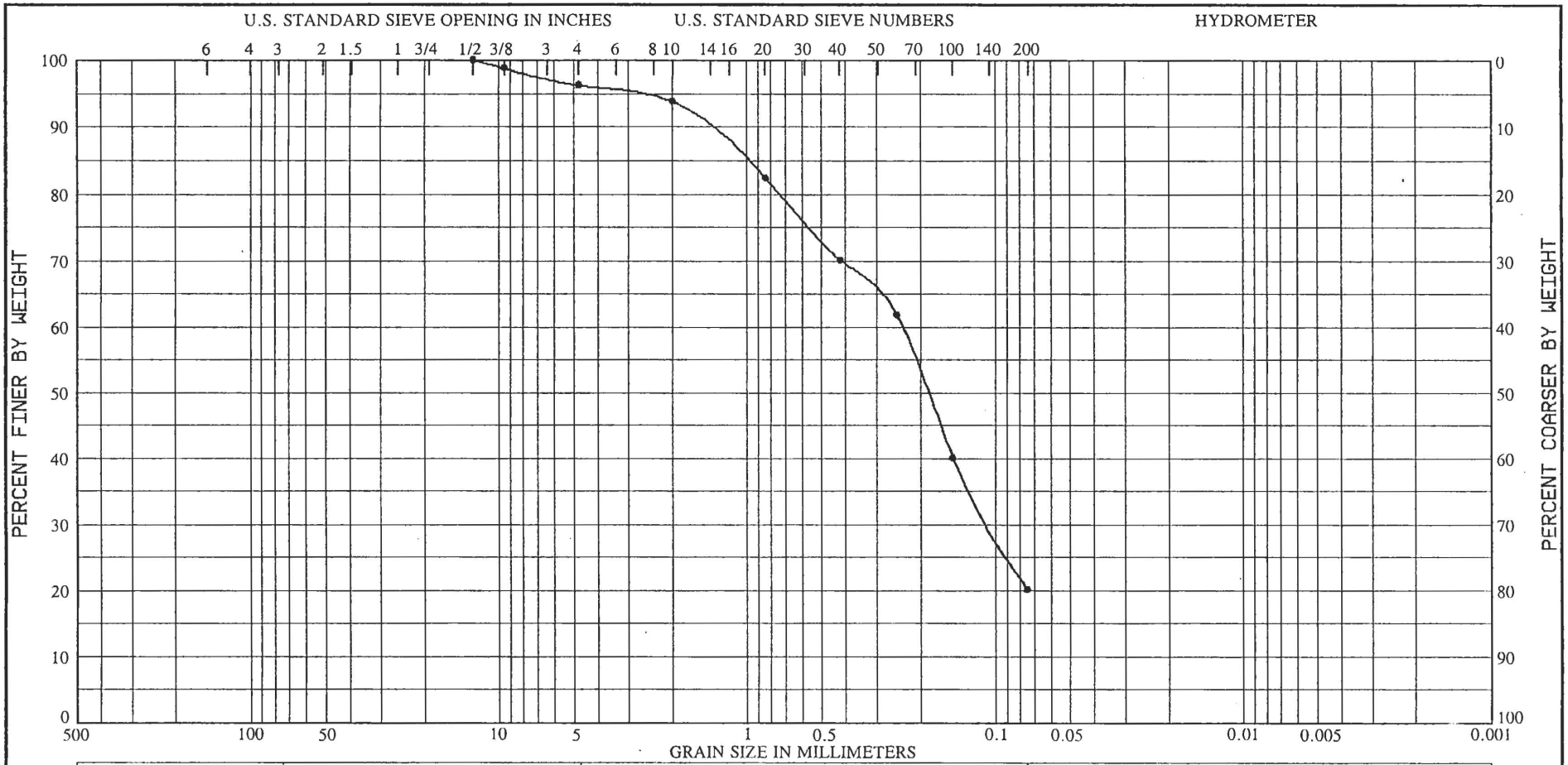
Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
1	1.0 - 1.5	GRAY, POORLY GRADED SAND (SP), WITH A TRACE OF SAND SIZE SHELL FRAGMENTS.	28.4			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6026
Hole No. SHI-16
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

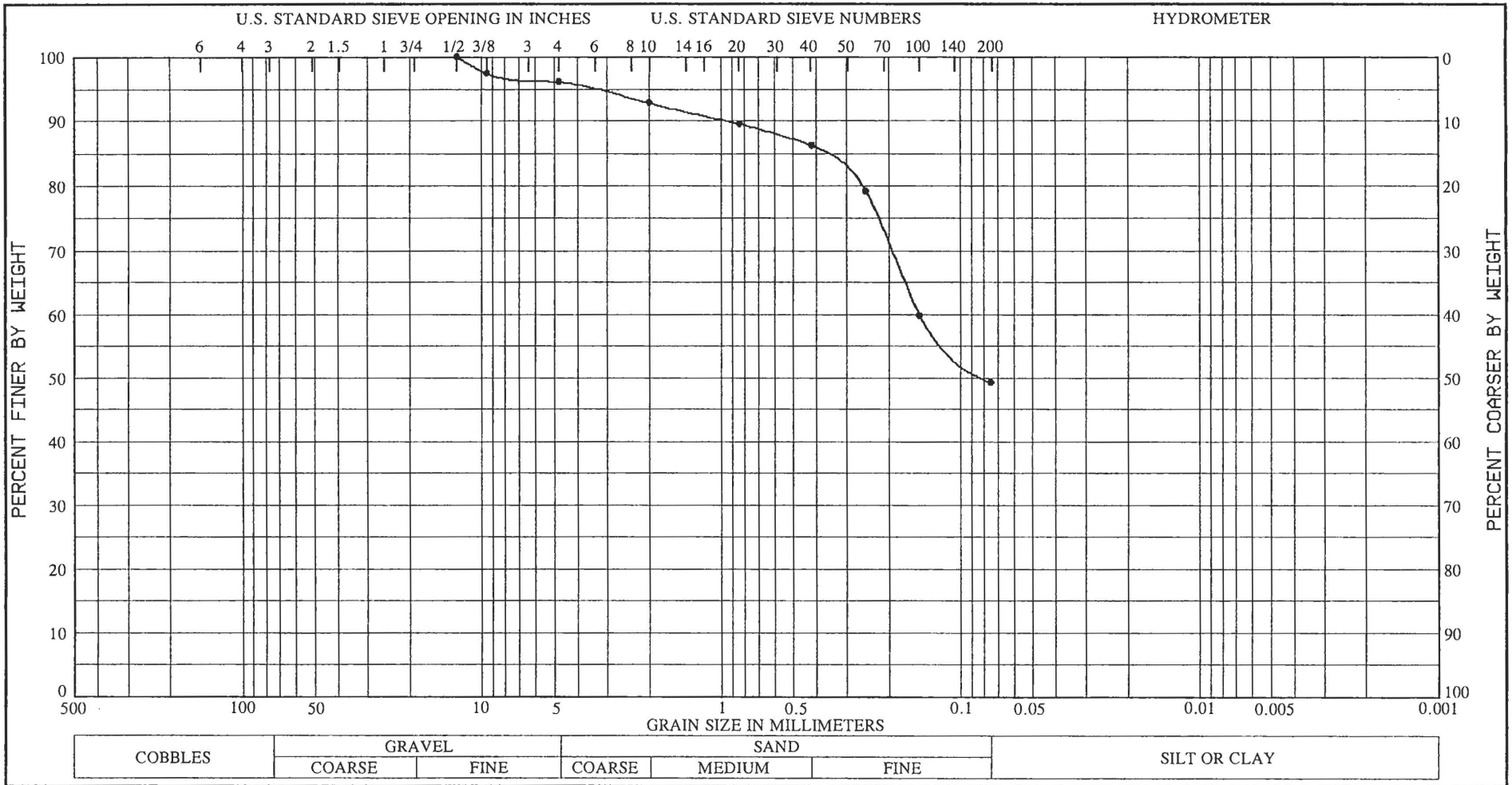
Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
2	6.0 - 6.5	GRAY, SILTY SAND (SM), WITH A TRACE OF GRAVEL SIZE AND SAND SIZE SHELL FRAGMENTS, AND A TRACE OF MICA.	28.0			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6027
Hole No. SHI-16
Date 05/26/98

GRADATION CURVES

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 8426
REQUISITION: W81LJ881245987



Sample No.	Depth (ft)	(VISUAL) Classification	Nat w%	LL	PL	PI
3	7.0 - 7.5	GRAY, CLAYEY SAND (SC), WITH A TRACE OF GRAVEL.	22.8			

Project SHALLOTTE INLET
WILMINGTON DISTRICT
Lab No. 72/6028
Hole No. SHI-16
Date 05/26/98

GRADATION CURVES