

**Final Report of
Conceptual Geotechnical Data
St. Johns Offshore Investigation, Parts I and II
Contract W912EP-05-D-0009
Task Work Orders #114 & #117
St. Johns County, Florida
WOLF/WPC Project No. WPC6209.00066**

- Prepared For -

**U.S. Army Corps of Engineers
Jacksonville District
701 San Marco Boulevard, 3 East
Jacksonville, Florida 32207**

- Prepared By -

**WOLF/WPC
3047-4 St. Johns Bluff Road South
Jacksonville, Florida 32246**



July 19, 2010

Barbara Nist
U.S. Army Corps of Engineers
701 San Marco Boulevard, 3 East
Jacksonville, Florida 32207

Draft Geotechnical Data Report
St. Johns Offshore Investigation, Parts I and II
Contract W912EP-05-D-0009
St. Johns County, Florida
WOLF/WPC Project No. WPC6209.00066

Dear Ms. Nist:

WOLF/WPC has performed the field and laboratory geotechnical services for the St. Johns Offshore Area Investigation, Parts I and II, St. Johns County, Florida. This conceptual report presents our understanding of the project, outlines our exploratory procedures, and presents the field and laboratory data obtained for the project.

We have enjoyed assisting you on this project and look forward to serving as your geotechnical consultant on the remainder of this project, and on future projects. If you have any questions concerning this report, please contact us.

Respectfully Submitted,
WOLF/WPC



Daniel G. Blaydes, P.E.
Senior Geotechnical Engineer
Registered, Florida No. 58329

Distribution: U.S. Army Corps of Engineers (3)
File (1)

TABLE OF CONTENTS

SECTION/SUBJECT	PAGE NUMBER
1.0 Investigation Scope.....	1
2.0 Investigation Purpose.....	1
3.0 Field Exploration.....	1
3.1 General.....	1
3.2 Vibracore Borings.....	2
4.0 Laboratory Testing.....	3
5.0 Subsurface Profile.....	3

APPENDICES

APPENDIX A

- Site Location Map
- Field Exploration Plans

APPENDIX B

- Table 1: Summary of Exploration Point Locations and Depths
- Drilling Logs for Vibracore Borings
- Penetration Logs for Vibracore Borings
- Photographs

APPENDIX C

- Table 2: Summary of Laboratory Testing and Index Property Testing
- Laboratory Testing Results

SECTION 1.0 – INVESTIGATION SCOPE

The scopes of services for this investigation were provided in the statements of work (SOW) dated September 22, 2009 and September 25, 2009 for task work orders #114 and #117 respectively, and were performed under the existing contract W912EP-05-D-0009. The requested field scopes of services for this investigation included performing twenty (20) Vibracore borings under task work order #114, and forty (40) Vibracore borings under task work order #117. The laboratory testing scopes of services consisted of index property tests, including grain-size sieve analyses, visual shell, and special assignment carbonate testing.

The project site is shown on the Site Location Map and Field Exploration Plans in Appendix A of this report. The depth of the Vibracore borings was 20 feet below the existing ocean bottom or to refusal, whichever was most shallow. The target recovery for the vibracore borings was 85 percent or greater. Laboratory testing was assigned by the U.S. Army Core of Engineers (USACE) following review of preliminary field drilling logs and soil samples.

SECTION 2.0 – INVESTIGATION PURPOSE

St. Johns County is seeking long-term off-shore borrow sources for beach nourishment. As part of the sand search investigation, the proposed activity is to collect additional sediment samples using vibracores at two potential off-shore borrow areas. The investigation area is off-shore of St. Johns County adjacent to the St. Augustine inlet. Based on borings completed in 1996 and 2006, the North Off-Shore Borrow Area (NOBA) and the South Off-Shore Borrow Area (SOBA) have been defined. Sediments consist of sand, silty and clayey sand, silt, clay, and shell. Rock was not encountered. The NOBA area of investigation for the borrow source materials is located approximately 7 miles northeast of St. Augustine Inlet and covers an area of approximately 79 square miles. The SOBA area of investigation is located approximately 8 miles southeast of the city of St. Augustine Inlet and covers an area of approximately 30 square miles. The Atlantic Ocean in this area is generally 42.9 to 65.1 feet deep.

SECTION 3.0 – FIELD EXPLORATION

3.1 General

The field exploration conducted for this investigation included performing sixty (60) Vibracore borings at locations specified by the U.S. Army Corps of Engineers (USACE). Exploration point coordinates (Northings and Eastings) were provided by USACE. The exploration points

were initially laid out using differential GPS equipment on the work vessel following conversion of the coordinates from State Plane Coordinates to Latitude and Longitudes using the conversion program CORPSCON. The surveyed position of the test locations were determined using Global Positioning System (GPS) Real Time Kinematics (RTK) methods. The equipment used included an EPOCH 35 GPS receiver and a TDS NOMAD data collector. Table 1 in Appendix B of this report summarizes the exploration locations and depths for this project.

3.2 Vibracore Borings

The vibracore borings were performed by American Vibracore Services (AVS) using the AVS vessel Thunderforce. The Thunderforce is an 85-foot, steel hulled work boat with a 20,000 pound capacity winch and A-frame on the stern. The vibracore samples were collected by locating the vessel stern over the test location and then lowering the vibracore sample frame to the ocean bottom.

Once on the bottom, the sample was obtained by vibrating a 3.5-inch diameter tube into the bottom sediments to a depth of 20 feet or until refusal was met and then extracting the tube and sample using the A-frame and winch. The vibracore borings were extended to a depth of 20 feet below the existing bottom or to refusal conditions, whichever was most shallow.

Each sample was retained within a clear plastic lexan tube. While on the vessel, each sample was measured and cut into sealed sections of up five lineal feet. A penetration log of the vibracore was recorded with a laptop computer. After recording the depth of penetration and the recovery, the sample tubes were labeled and stored for later transport to our laboratory facility in Jacksonville, Florida. A sample recovery of 85 percent or greater was obtained for all sixty (60) samples. We note that second attempts were required for VB-SJSP09-23 and VB-SJSP09-28 due to poor sample recovery on the first attempts. The Vibracore Boring Drilling Logs, Penetration Logs and, photographs are presented in Appendix B of this report.

SECTION 4.0 – LABORATORY TESTING

Following review of the preliminary field logs, USACE assigned several laboratory tests on samples obtained from the vibracore operation. The laboratory testing conducted for this exploration included the following:

- 222 Sieve Analysis Tests
- 19 Special Assignment Carbonate Tests
- 19 Reseives (Post Special Carbonate Test)
- 203 Visual Shell Tests

A summary of the laboratory testing and index property testing are presented in Appendix C, Table 2 of this report. The gradation curves are provided in Appendix C after table 1. The visual shell and special carbonate test results are presented in the CO₃ % column on the gradation curve sheets. On these sheets, visual shell carbonate content is presented as a number followed by the letters (est). The special carbonate tests are presented as a number without the (est) designation.

Per FDEP's request, this contract was set-up to provide the special assignment Non-ASTM carbonate analysis. Nineteen (19) sediments samples were sieved and subject to the Non-ASTM carbonate analysis. Residual material from these samples was re-sieved to examine the grain size distribution of the material remaining after the carbonates had been removed by the test procedure.

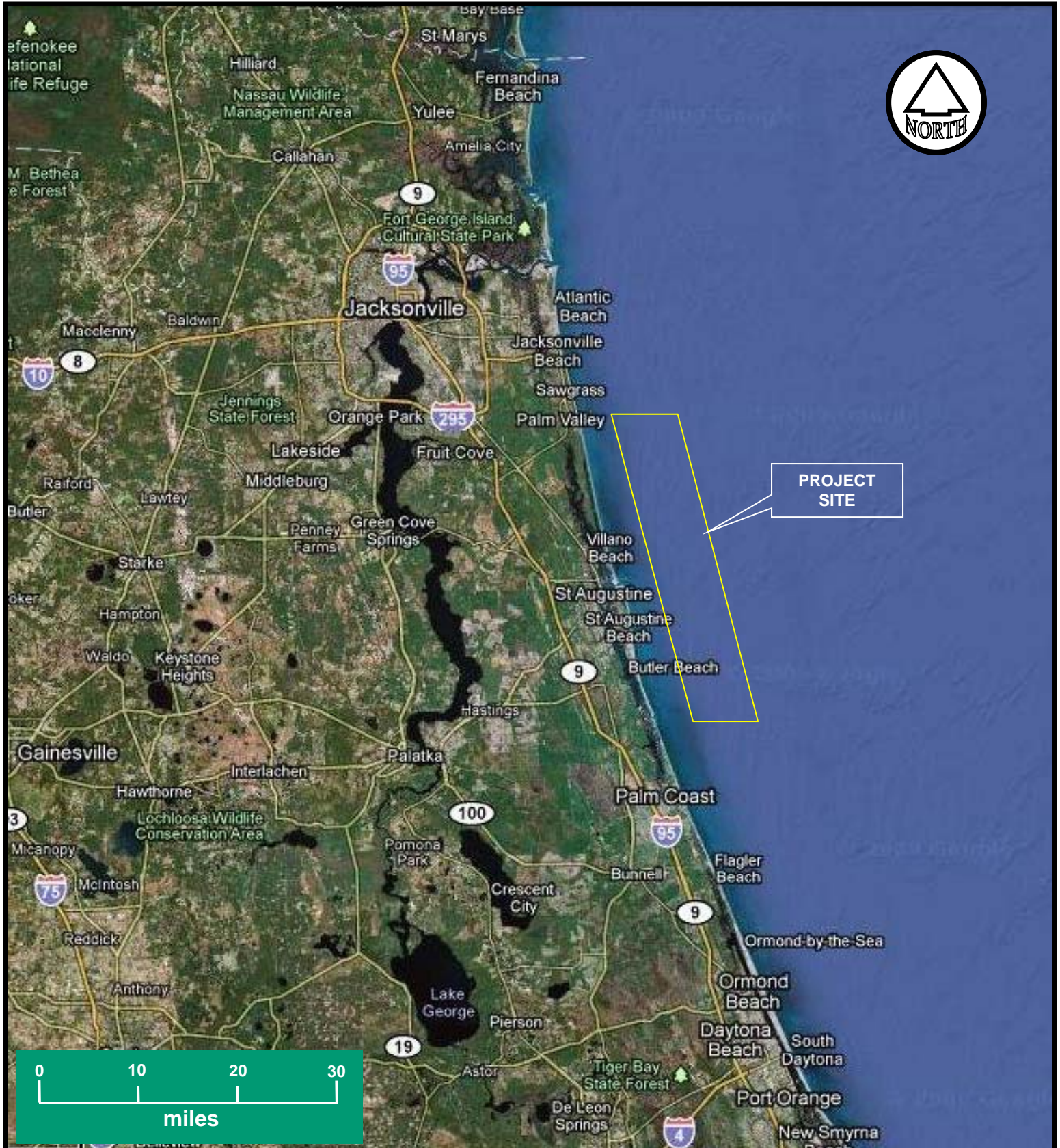
SECTION 5.0 – SUBSURFACE PROFILE

The encountered soils were classified using the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488. The water depth ranged from 42.9 to 65.1 feet at the test locations. Below the ocean bottom, the vibracores generally encountered a layer of relatively clean fine sand (SP) with trace to little shell fragments and occasional whole shells. The thickness of this layer varied from 1.1 to 16.3 feet with an average thickness of 5.1 feet. This layer was not encountered at locations 2, 4, 6, 9, 20, 21, 26, 37, 41, 42, 45, 57, 59, and 60. The upper layer of clean sands appears suitable for use in beach nourishment projects. Below the upper layer, the vibracores generally encountered silty fine to medium sand (SM), clayey fine to medium sand (SC), clay (CH), and silt (MH) extending to the maximum explored depth.

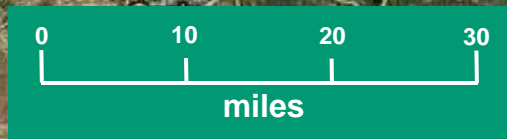
APPENDICES

APPENDIX A

- **Site Location Map**
- **Field Exploration Plans**



PROJECT SITE



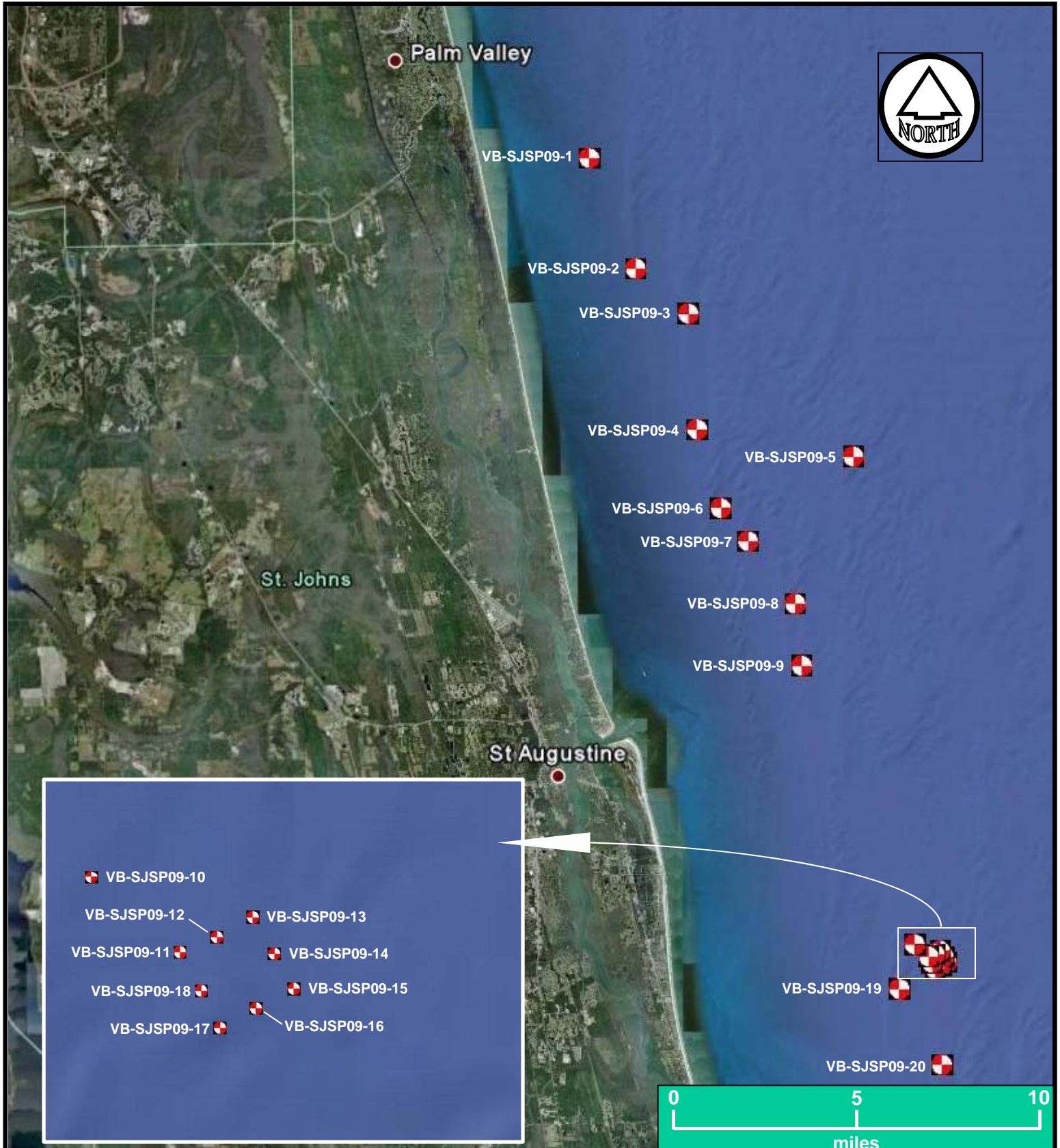
WOLF
WPC
 ENGINEERING, ENVIRONMENTAL
 & CONSTRUCTION SERVICES

Site Location Map

St. Johns Offshore Investigation, Parts I & II
 St. Johns County, Florida
 Contract No.: W912EP-05-D-0009
 Task Work Orders #114 & #117

WOLF/WPC Project No.: WPC6209.00066
Date: 12/29/2009

REFERENCE: Google Earth



Palm Valley



VB-SJSP09-1

VB-SJSP09-2

VB-SJSP09-3

VB-SJSP09-4

VB-SJSP09-5

VB-SJSP09-6

VB-SJSP09-7

St. Johns

VB-SJSP09-8

VB-SJSP09-9

St. Augustine

VB-SJSP09-10
 VB-SJSP09-12
 VB-SJSP09-11
 VB-SJSP09-18
 VB-SJSP09-17
 VB-SJSP09-13
 VB-SJSP09-14
 VB-SJSP09-15
 VB-SJSP09-16

VB-SJSP09-19

VB-SJSP09-20



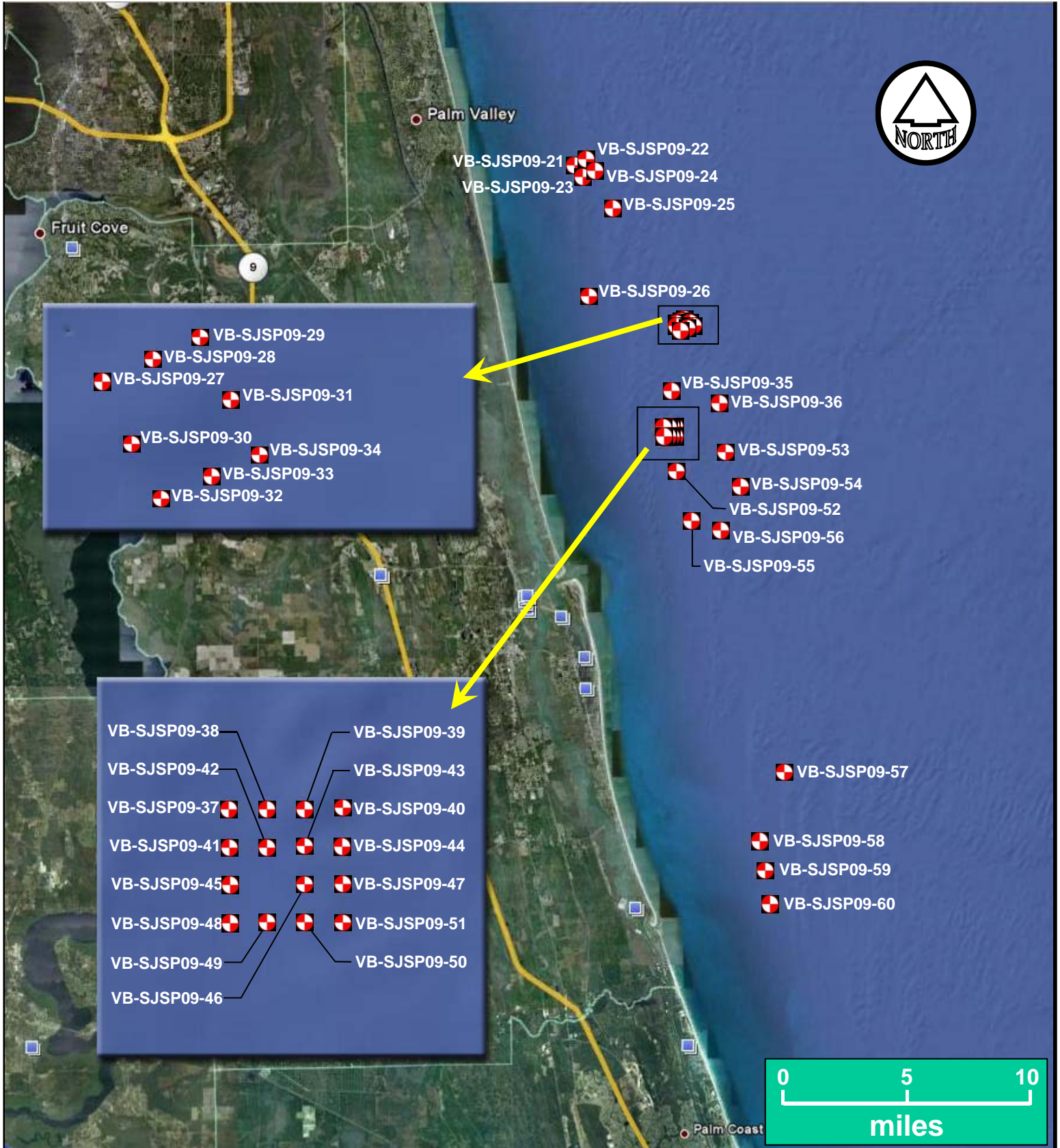
WOLF
WPC
ENGINEERING, ENVIRONMENTAL
& CONSTRUCTION SERVICES

Field Exploration Plan

St. Johns County Offshore Investigation Part I
 St. Johns County, Florida
 Contract No.: W912EP-05-D-0009
 Task Work Order #114

WOLF/WPC Project No.: WPC6209.00065
Date: 5/28/2010

REFERENCE: Google Earth



Field Exploration Plan

St. Johns Offshore Investigation Part II
 St. Johns County, Florida
 Contract No.: W912EP-05-D-0009
 Task Work Order #117

WOLF/WPC Project No.:
 WPC6209.00066

Date:
 5/28/2010

REFERENCE: Google Earth

APPENDIX B

- **Table 1: Summary of Exploration Point Locations and Depths**
- **Drilling Logs for Vibracore Borings**
- **Penetration Logs for Vibracore Borings**
- **Photographs**

Summary of Exploration Point Locations and Depths

POINT NAME	NORTHING COORDINATE LOCATION	EASTING COORDINATE LOCATION	WATER DEPTH (FEET)	EXPLORATION DEPTH / FEET	DATE PERFORMED
VB-SJSP09-1	2110592.1	561772.9	44.2	20	10/28/2009
VB-SJSP09-2	2094660.0	568401.6	53.6	19.6	10/28/2009
VB-SJSP09-3	2088188.0	575994.0	52.5	19.6	10/28/2009
VB-SJSP09-4	2071347.0	577225.0	58.1	20	10/28/2009
VB-SJSP09-5	2067393.8	599781.0	44.7	11.6	10/29/2009
VB-SJSP09-6	2060000.4	583826.0	58.7	20	10/29/2009
VB-SJSP09-7	2055267.2	584526.8	54.5	20	10/28/2009
VB-SJSP09-8	2046257.4	591339.3	53.2	20	10/28/2009
VB-SJSP09-9	2037309.9	592256.8	60.5	19.3	10/27/2009
VB-SJSP09-10	1997234.5	608394.1	53.5	20	11/19/2009
VB-SJSP09-11	1995523.7	610468.3	59.6	15.1	11/19/2009
VB-SJSP09-12	1995869.3	611280.4	57.1	20	11/19/2009
VB-SJSP09-13	1996285.5	612093.6	57.2	20	11/19/2009
VB-SJSP09-14	1995435.7	612573.6	59.2	20	11/19/2009
VB-SJSP09-15	1994695.3	613014.0	59.1	19.8	11/19/2009
VB-SJSP09-16	1994235.7	612152.0	56.5	18	11/19/2009
VB-SJSP09-17	1993806.3	611337.5	55.2	16.9	11/19/2009
VB-SJSP09-18	1994658.5	610904.8	56.9	17.1	11/19/2009
VB-SJSP09-19	1990840.2	606186.7	59.4	20	11/19/2009
VB-SJSP09-20	1979731.5	612300.5	60.5	20	11/19/2009

Table 1, Page 1 of 3

Summary of Exploration Point Locations and Depths

POINT NAME	NORTHING COORDINATE LOCATION	EASTING COORDINATE LOCATION	WATER DEPTH (FEET)	EXPLORATION DEPTH / FEET	DATE PERFORMED
VB-SJSP09-21	2115073.9	567763.3	51.5	20	10/28/2009
VB-SJSP09-22	2116309.5	570381.2	44.8	20	10/28/2009
VB-SJSP09-23	2112498.2	569515.8	44.5	20	10/28/2009
VB-SJSP09-24	2113686.4	572023.1	47.2	20	10/28/2009
VB-SJSP09-25	2105837.4	575996.0	42.9	20	10/28/2009
VB-SJSP09-26	2087159.1	570686.6	58.2	20	10/28/2009
VB-SJSP09-27	2081142.5	589290.2	50.2	20	10/29/2009
VB-SJSP09-28	2081428.7	589876.4	45.5	20	10/29/2009
VB-SJSP09-29	2081626.3	590449.3	43.6	20	10/29/2009
VB-SJSP09-30	2080405.0	589653.6	52.9	19.1	10/29/2009
VB-SJSP09-31	2080947.9	590806.0	46.2	19.6	10/29/2009
VB-SJSP09-32	2079742.7	590012.7	56.7	19.8	10/29/2009
VB-SJSP09-33	208033.1	590611.4	54.1	19.8	10/29/2009
VB-SJSP09-34	2080268.0	591133.6	57.4	19.9	10/29/2009
VB-SJSP09-35	2066924.1	588208.5	52.9	19.9	10/29/2009
VB-SJSP09-36	2064320.7	598432.0	52.7	20	10/29/2009
VB-SJSP09-37	2059187.7	586269.3	61.6	20	10/29/2009
VB-SJSP09-38	2059204.2	587053.5	63.9	20	10/29/2009
VB-SJSP09-39	2059182.7	587833.3	51.2	19.8	10/30/2009
VB-SJSP09-40	2059216.1	588554.0	52.8	20	10/31/2009

Table 1, Page 2 of 3

Summary of Exploration Point Locations and Depths

POINT NAME	NORTHING COORDINATE LOCATION	EASTING COORDINATE LOCATION	WATER DEPTH (FEET)	EXPLORATION DEPTH / FEET	DATE PERFORMED
VB-SJSP09-41	2058450.6	586319.8	65.1	19.9	11/18/2009
VB-SJSP09-42	2058436.4	587044.6	62.9	19.8	11/18/2009
VB-SJSP09-43	2058453.8	587797.8	55.9	18.9	11/18/2009
VB-SJSP09-44	2058432.5	588538.7	53.7	20	11/18/2009
VB-SJSP09-45	2057699.0	586302.5	56.9	20	11/18/2009
VB-SJSP09-46	2057690.1	587806.1	57.4	20	11/18/2009
VB-SJSP09-47	2057676.6	588544.6	55.4	16.4	11/18/2009
VB-SJSP09-48	2056953.5	586301.1	61.2	20	11/18/2009
VB-SJSP09-49	2056941.3	587037.0	60.8	19.9	11/18/2009
VB-SJSP09-50	2056938.5	587815.5	53.0	19.9	11/18/2009
VB-SJSP09-51	2056915.8	588516.3	55.7	19.9	11/18/2009
VB-SJSP09-52	2049983.0	589365.2	55.5	20	10/28/2009
VB-SJSP09-53	2053851.6	599769.7	55.6	19.7	10/27/2009
VB-SJSP09-54	2046603.4	602831.6	54.9	19.4	10/27/2009
VB-SJSP09-55	2039344.0	592445.0	57.8	19.3	10/27/2009
VB-SJSP09-56	2037366.5	598544.9	51.5	19.2	10/27/2009
VB-SJSP09-57	1985842.1	611849.8	62.8	20	11/19/2009
VB-SJSP09-58	1971366.6	606503.1	59.6	20	11/19/2009
VB-SJSP09-59	1965078.6	606478.4	61.8	20	11/19/2009
VB-SJSP09-60	1957931.6	608881.5	62.7	20	11/19/2009

Table 1, Page 3 of 3



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-1		LOCATION COORDINATES X = 561,773 Y = 2,110,592		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 10-28-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			16. ELEVATION TOP OF BORING -42.6 Ft.		COMPLETED 10-28-09
			17. TOTAL RECOVERY FOR BORING 99 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

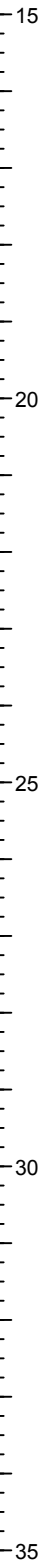
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE	
-42.6	0.0	[Dotted pattern]	SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to coarse-grained sand-sized shell, trace silt, wet, 10YR 7/1 light gray (SP)	100			-42.6		0	
					1			-45.1		
					100					5
-49.6	7.0	[Vertical line pattern]	SAND, silty, mostly fine-grained sand-sized quartz, little silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SM)	100			-48.6			
					2					
					100					
			At El. -54.1 Ft., some coarse gravel-sized limestone up to 3", 10YR 7/1 light gray	98			-50.6		10	
									15	

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 561,773 Y = 2,110,592			ELEVATION TOP OF BORING -42.6 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE												
-62.4	19.8			98			Vibracore														
-62.6	20.0																				
		NO REC	<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	6.0/6.5	SP*	3	8.0/8.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	2.5/3.0	SP*																			
2	6.0/6.5	SP*																			
3	8.0/8.5	SM*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-2		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-28-09
8. TOTAL DEPTH OF BORING 19.6 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-28-09
		17. TOTAL RECOVERY FOR BORING 85 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-53.6	0.0						-53.6		
			SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, wet, 10YR 6/1 gray (SP-SM)	100			Vibracore		0
-55.2	1.6		SAND, silty, mostly fine-grained sand-sized quartz, little silt, wet, 10YR 5/1 gray (SM)	100	1		Vibracore		
					2		-55.6		
				100			Vibracore		
			At El. -58.6 Ft., trace fine to coarse-grained sand-sized shell		3		-58.6		5
-61.0	7.4		CLAY, fat, high plasticity, soft, mostly clay, little fine-grained sand-sized shell, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)						
				80			Vibracore		10
-67.3	13.7		SAND, clayey, mostly fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, wet, 10YR 5/1 gray (SC)						

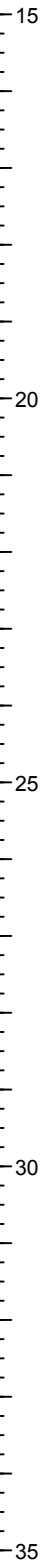
DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 568,402 Y = 2,094,660			ELEVATION TOP OF BORING -53.6 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-70.3	16.7																				
-73.2	19.6	NO RECOVERY		80			Vibracore														
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>2.0/2.5</td> <td>SM*</td> </tr> <tr> <td>3</td> <td>5.0/5.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP-SM*	2	2.0/2.5	SM*	3	5.0/5.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.0/1.5	SP-SM*																			
2	2.0/2.5	SM*																			
3	5.0/5.5	SM*																			



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-3		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-28-09
8. TOTAL DEPTH OF BORING 19.6 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-28-09
		17. TOTAL RECOVERY FOR BORING		88 %
		18. SIGNATURE AND TITLE OF INSPECTOR		Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-51.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-51.2 Vibracore		0
					1		-53.2 Vibracore		
-55.3	4.1		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100			-55.2 Vibracore		5
-57.1	5.9		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, few fine gravel-sized shell, wet, 10YR 5/1 gray (SC)	81			-58.2 Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 575,994 Y = 2,088,188			ELEVATION TOP OF BORING -51.2 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-68.4	17.2	Hatched pattern																			
				81			Vibracore														
-70.8	19.6	NR					-70.8														
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.0/4.5	SP-SM*	3	7.0/7.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	2.0/2.5	SP*																			
2	4.0/4.5	SP-SM*																			
3	7.0/7.5	SC*																			



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-4		LOCATION COORDINATES X = 577,225 Y = 2,071,347		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		13. TOTAL NUMBER CORE BOXES
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	14. ELEVATION GROUND WATER	
6. THICKNESS OF OVERBURDEN N/A			15. DATE BORING		16. ELEVATION TOP OF BORING
7. DEPTH DRILLED INTO ROCK N/A			17. TOTAL RECOVERY FOR BORING 89 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,
8. TOTAL DEPTH OF BORING 20.0 Ft.					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.3	0.0		SAND, silty, mostly fine-grained sand-sized quartz, little silt, wet, 10YR 6/1 gray (SM)				-57.3		0
				100			Vibracore		
					1		-60.3		
				100			Vibracore		5
					2		-64.3		
			At El. -64.3 Ft., mostly fine to medium-grained sand-sized quartz, few medium-grained sand-sized shell up to 1/8", wet, 10YR 5/1 gray						10
				83			Vibracore		
-70.5	13.2		SAND, poorly-graded with silt, mostly fine to medium-grained sand-sized quartz, few silt, trace fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)						15

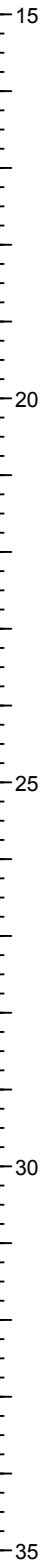
DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS											
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88											
LOCATION COORDINATES X = 577,225 Y = 2,071,347			ELEVATION TOP OF BORING -57.3 Ft.														
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE								
-73.8	16.5																
-75.1	17.8		CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 6/3 pale brown (CH)	83			Vibracore										
-77.3	20.0	NIP					-77.3										
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SM*</td> </tr> <tr> <td>2</td> <td>7.0/7.5</td> <td>SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SM*	2	7.0/7.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION															
1	3.0/3.5	SM*															
2	7.0/7.5	SM*															

Boring Designation VB-SJSP09-5

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-5		LOCATION COORDINATES X = 599,781 Y = 2,067,394		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 11.6 Ft.			15. DATE BORING		STARTED 10-29-09
			16. ELEVATION TOP OF BORING -46.2 Ft.		COMPLETED 10-29-09
			17. TOTAL RECOVERY FOR BORING 100 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE	
-46.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 6/1 gray (SP)	100			-46.2		0	
						1		-49.2		5
					100			-52.2		
						2		-55.2		
				100			-57.8		10	
-57.8	11.6		BORING TERMINATED IN REFUSAL							
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results							
			SAMPLE SAMPLE LABORATORY						15	

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District				SHEET 2 OF 2 SHEETS				
			PROJECT St. Johns County Offshore		COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88			
LOCATION COORDINATES X = 599,781 Y = 2,067,394			ELEVATION TOP OF BORING -46.2 Ft.								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS			% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
			ID	DEPTH	CLASSIFICATION						
			1	3.0/3.5	SP*						
			2	6.0/6.5	SP*						
			3	9.0/9.5	SP*						
			*Lab visual classification based on gradation curve. No Atterberg limits.								



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-6		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING		-58.4 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		93 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-58.4	0.0		SAND, poorly-graded with silt, mostly fine to medium-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100			-58.4		0
					1		Vibracore		
				100			-59.4		
					2		Vibracore		
							-61.4		
				100			Vibracore		5
-64.4	6.0		SAND, clayey, some sand to gravel-sized limestone, some fine-grained sand-sized quartz, little clay, wet, 10YR 6/1 gray (SC)				-65.4		
			At El. -66.3 Ft., 10YR 7/3 very pale brown		3				
			At El. -69.7 Ft., discontinue limestone, 10YR 6/2 light brownish gray	89			Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS														
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88														
LOCATION COORDINATES X = 583,826 Y = 2,060,000			ELEVATION TOP OF BORING -58.4 Ft.																	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE											
-77.0	18.6			89			Vibracore													
-78.4	20.0	N/R					-78.4													
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP-SM*	2	3.0/3.5	SP-SM*	3	7.0/7.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																		
1	1.0/1.5	SP-SM*																		
2	3.0/3.5	SP-SM*																		
3	7.0/7.5	SC*																		

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-7		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES 3		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED 10-28-09 COMPLETED 10-28-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -56.0 Ft.		
		17. TOTAL RECOVERY FOR BORING 95 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-56.0	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 7/1 light gray (SP)	100			-56.0 Vibracore		0
-59.1	3.1		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100	1		-57.5 Vibracore		
-62.1	6.1		SAND, clayey, some fine-grained sand-sized quartz, little coarse gravel-sized limestone, little clay, little medium to coarse-grained sand-sized shell, wet, 10YR 7/1 light gray (SC)	100	2		-60.5 Vibracore		5
-65.7	9.7		SAND, silty, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell up to 3/4", little silt, wet, 10YR 5/1 gray (SM)	92	3		-64.0 Vibracore		10
			At El. -69.1 Ft., trace clay, 10YR 7/3 very pale brown						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 584,527 Y = 2,055,267			ELEVATION TOP OF BORING -56.0 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-75.0	19.0			92			Vibracore														
-76.0	20.0	N/R					-76.0														
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.5/2.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.5/5.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.5/2.0	SP*	2	4.5/5.0	SP-SM*	3	8.0/8.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.5/2.0	SP*																			
2	4.5/5.0	SP-SM*																			
3	8.0/8.5	SM*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-8		LOCATION COORDINATES X = 591,339 Y = 2,046,257		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 3
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 3
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 20.0 Ft.		15. DATE BORING 10-28-09		STARTED 10-28-09
		16. ELEVATION TOP OF BORING -54.6 Ft.		COMPLETED 10-28-09
		17. TOTAL RECOVERY FOR BORING 89 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-54.6	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little silt, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-54.6 Vibracore		0
-58.4	3.8		SAND, silty, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell, little silt, wet, 10YR 5/1 gray (SM)	100	1		-56.6 Vibracore		
-62.0	7.4		SAND, clayey, mostly fine-grained sand-sized quartz, little clay, wet, 10YR 5/1 gray (SC)	100	2		-59.6 Vibracore		5
-68.0	13.4		SAND, silty, mostly fine-grained sand-sized quartz, little fine to coarse gravel-sized limestone up to 2", little fine to coarse gravel-sized shell up to 2", wet, trace weakly cemented sand lenses, 10YR 7/2 light gray	79	3		-63.6 Vibracore		10
									15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 591,339 Y = 2,046,257			ELEVATION TOP OF BORING -54.6 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE												
-72.3	17.7	↑↑↑↑↑	(SM)	79			Vibracore														
-74.6	20.0	NR					-74.6														
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SM*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	5.0/5.5	SM*	3	9.0/9.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	2.0/2.5	SP*																			
2	5.0/5.5	SM*																			
3	9.0/9.5	SC*																			



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-9		LOCATION COORDINATES X = 592,257 Y = 2,037,310		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 2
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 19.3 Ft.			15. DATE BORING		STARTED 10-27-09
			16. ELEVATION TOP OF BORING -61.2 Ft.		COMPLETED 10-27-09
			17. TOTAL RECOVERY FOR BORING 101 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-61.2	0.0		SAND, clayey, mostly fine-grained sand-sized quartz, little clay, few fine to coarse gravel-sized limestone up to 1", wet, 10YR 5/1 gray (SC)	100			-61.2		0
					1		-63.2		
-64.9	3.7		SAND, silty, some fine-grained sand-sized quartz, some medium to coarse-grained sand-sized limestone, little silt, wet, 10YR 7/1 light gray (SM)	100			Vibracore		5
					2		-67.2		
			At El. -74.3 Ft., mostly fine to medium-grained sand-sized quartz, discontinue medium to coarse-grained sand-sized limestone, 10YR 3/3 dark brown	101			Vibracore		10
									15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS												
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88												
LOCATION COORDINATES X = 592,257 Y = 2,037,310			ELEVATION TOP OF BORING -61.2 Ft.															
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE									
-78.8	17.6			101			Vibracore											
-80.5	19.3		CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)															
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SC*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SC*	2	6.0/6.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																
1	2.0/2.5	SC*																
2	6.0/6.5	SM*																

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-10		LOCATION COORDINATES X = 608,394 Y = 1,997,234		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			16. ELEVATION TOP OF BORING -50.7 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 95 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

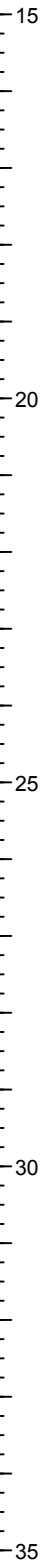
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-50.7	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 6/1 gray (SP)	100			-50.7 Vibracore		0
					1		-53.7 Vibracore		5
			At El. -58.4 Ft., little medium-grained sand-sized shell	100	2		-56.7 Vibracore		
			At El. -59.7 Ft., trace fine to medium-grained sand-sized shell		3		-59.7 Vibracore		10
-60.9	10.2		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)	100			-62.7 Vibracore		
				86	4		Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 608,394 Y = 1,997,234			ELEVATION TOP OF BORING -50.7 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-67.0	16.3																							
-69.6	18.9		CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)	86			Vibracore																	
-70.7	20.0	NR					-70.7																	
NOTES:																								
1. Soils are field visually classified in accordance with the Unified Soils Classification System.																								
2. Laboratory Testing Results																								
<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>12.0/12.5</td> <td>SP-SM*</td> </tr> </tbody> </table>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	3	9.0/9.5	SP*	4	12.0/12.5	SP-SM*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	3.0/3.5	SP*																						
2	6.0/6.5	SP*																						
3	9.0/9.5	SP*																						
4	12.0/12.5	SP-SM*																						
*Lab visual classification based on gradation curve. No Atterberg limits.																								

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-11		LOCATION COORDINATES X = 610,468 Y = 1,995,524		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 15.1 Ft.			15. DATE BORING		STARTED 11-19-09
			16. ELEVATION TOP OF BORING -53.3 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 92 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-53.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-53.3 Vibracore		0
-56.8	3.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100	1		-55.3 Vibracore		
-61.7	8.4		CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)	100	2		-57.8 Vibracore		5
-62.3	9.0		SAND, clayey, mostly sand to gravel-sized limestone, little fine-grained sand-sized quartz, little clay (SC)	100	3		-59.8 Vibracore		
-67.2	13.9			76	4		-63.3 Vibracore		10
		NR							15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 610,468 Y = 1,995,524			ELEVATION TOP OF BORING -53.3 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-68.4	15.1	N	BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.5/5.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>6.5/7.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.5/5.0	SP-SM*	3	6.5/7.0	SP-SM*	4	10.0/10.5	SC*				-68.4		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
2	4.5/5.0	SP-SM*																						
3	6.5/7.0	SP-SM*																						
4	10.0/10.5	SC*																						



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-12		LOCATION COORDINATES X = 611,280 Y = 1,995,869		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			16. ELEVATION TOP OF BORING -55.3 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 100 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, trace silt, wet, 10YR 6/1 gray (SP)	100			-55.3 Vibracore		0
					1		-58.8 Vibracore		5
				100	2-Post 2		-62.3 -62.3 Vibracore		
				100			Vibracore		
-65.5	10.2		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100	3		-65.8 Vibracore		10
				100	4		-68.3 Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 611,280 Y = 1,995,869			ELEVATION TOP OF BORING -55.3 Ft.																							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																	
-72.1	16.8		SAND, silty, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, little silt, wet, 10YR 7/1 light gray (SM)	100			Vibracore																			
-75.3	20.0																									
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.5/4.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>7.0/7.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>7.0/7.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.5/11.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>13.0/13.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.5/4.0	SP*	2	7.0/7.5	SP*	2-Post	7.0/7.5	SP*	3	10.5/11.0	SP-SM*	4	13.0/13.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																								
1	3.5/4.0	SP*																								
2	7.0/7.5	SP*																								
2-Post	7.0/7.5	SP*																								
3	10.5/11.0	SP-SM*																								
4	13.0/13.5	SP-SM*																								

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-13		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-19-09
		17. TOTAL RECOVERY FOR BORING		98 %
		18. SIGNATURE AND TITLE OF INSPECTOR		Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE	
-53.7	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, some fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-53.7		0	
						1		-56.7		
					100			Vibracore		5
						2		-59.7		
					100			Vibracore		
					3		-63.7		10	
				100			Vibracore			
					4		-65.7			
-67.2	13.5			100			Vibracore			
			SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)				-68.2			
				91	5		Vibracore		15	

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 612,094 Y = 1,996,285			ELEVATION TOP OF BORING -53.7 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																		
-69.7	16.0																										
-72.2	18.5		CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)	91			Vibracore																				
-73.2	19.5		SAND, silty, mostly fine-grained sand-sized quartz, little silt, wet, 10YR 5/3 brown (SM)																								
-73.7	20.0						-73.7																				
NOTES:																											
1. Soils are field visually classified in accordance with the Unified Soils Classification System.																											
2. Laboratory Testing Results																											
<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>12.0/12.5</td> <td>SP*</td> </tr> <tr> <td>5</td> <td>14.5/15.0</td> <td>SP-SM*</td> </tr> </tbody> </table>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	3	10.0/10.5	SP*	4	12.0/12.5	SP*	5	14.5/15.0	SP-SM*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	3.0/3.5	SP*																									
2	6.0/6.5	SP*																									
3	10.0/10.5	SP*																									
4	12.0/12.5	SP*																									
5	14.5/15.0	SP-SM*																									
*Lab visual classification based on gradation curve. No Atterberg limits.																											

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-14		LOCATION COORDINATES X = 612,574 Y = 1,995,436		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		13. TOTAL NUMBER CORE BOXES
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	14. ELEVATION GROUND WATER	
6. THICKNESS OF OVERBURDEN N/A			15. DATE BORING		16. ELEVATION TOP OF BORING
7. DEPTH DRILLED INTO ROCK N/A			17. TOTAL RECOVERY FOR BORING 95 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,
8. TOTAL DEPTH OF BORING 20.0 Ft.					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-56.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-56.3 Vibracore		0
				100	Post 1		-58.8 -58.8 Vibracore		
				100			Vibracore		5
					2		-61.8		
-62.6	6.3		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)	100			-63.3 Vibracore		
					3				
-65.3	9.0		SAND, clayey, some fine-grained sand-sized quartz, some clay, some medium to coarse-grained sand-sized limestone, wet, 5GY 6/1 greenish gray (SC)	100			-66.3 Vibracore		10
					4				
-67.2	10.9		SAND, silty, some fine-grained sand-sized quartz, some silt, little fine-grained sand-sized shell, wet, 10YR 7/2 light gray (SM)	89			Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 612,574 Y = 1,995,436			ELEVATION TOP OF BORING -56.3 Ft.																							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																	
-75.2	18.9		From El. -72.1 to -73.3 Ft., some shell	89			Vibracore																			
-76.3	20.0	NR					-76.3																			
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.5/6.0</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	1-Post	2.5/3.0	SP*	2	5.5/6.0	SP*	3	7.0/7.5	SP-SM*	4	10.0/10.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																								
1	2.5/3.0	SP*																								
1-Post	2.5/3.0	SP*																								
2	5.5/6.0	SP*																								
3	7.0/7.5	SP-SM*																								
4	10.0/10.5	SC*																								

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-15		LOCATION COORDINATES X = 613,014 Y = 1,994,695		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 19.8 Ft.			16. ELEVATION TOP OF BORING -60.0 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 89 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

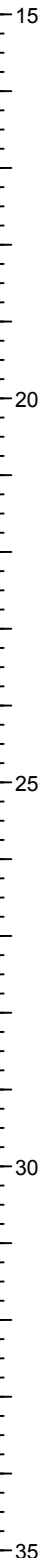
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-60.0	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-60.0 Vibracore		0
					1		-62.5 Vibracore		5
-66.7	6.7		At El. -66.0 Ft., little fine-grained sand-sized shell SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)	100	2		-66.0 Vibracore		
-69.4	9.4		SAND, clayey, mostly fine-grained sand-sized quartz, little clay, few fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SC)	100	3		-67.5 Vibracore		
-71.8	11.8		SAND, silty, mostly fine-grained sand-sized quartz, little silt, trace fine-grained sand-sized shell, wet, 10YR 7/1 light gray (SM)	76	4		-70.5 Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 613,014 Y = 1,994,695			ELEVATION TOP OF BORING -60.0 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-77.6	17.6			76			Vibracore																	
-79.8	19.8	NIR					-79.8																	
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>7.5/8.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.5/11.0</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	6.0/6.5	SP*	3	7.5/8.0	SP-SM*	4	10.5/11.0	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.5/3.0	SP*																						
2	6.0/6.5	SP*																						
3	7.5/8.0	SP-SM*																						
4	10.5/11.0	SC*																						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-16		LOCATION COORDINATES X = 612,152 Y = 1,994,236		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 18.0 Ft.			16. ELEVATION TOP OF BORING -57.2 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 93 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-57.2 Vibracore		0
				100	1	-Post	-59.7 -59.7 Vibracore		
				100			Vibracore		5
					2		-63.2		
-64.8	7.6		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)	100			Vibracore		
					3		-65.7		
-67.2	10.0		SAND, clayey, some fine-grained sand-sized quartz, little medium to coarse-grained sand-sized limestone, wet, 10YR 5/1 gray (SC)	100			Vibracore		10
					4		-68.2		
-69.7	12.5		SAND, silty, mostly fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, little silt, wet, 10YR 7/1 light gray (SM)	81			Vibracore		15

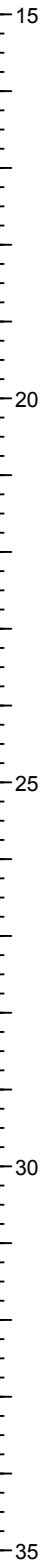
DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 612,152 Y = 1,994,236			ELEVATION TOP OF BORING -57.2 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																		
-73.9	16.7	↑↑↑↑		81			Vibracore																				
-75.2	18.0	NR					-75.2																				
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.5/9.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>11.0/11.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	1-Post	2.5/3.0	SP*	2	6.0/6.5	SP*	3	8.5/9.0	SP-SM*	4	11.0/11.5	SC*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	2.5/3.0	SP*																									
1-Post	2.5/3.0	SP*																									
2	6.0/6.5	SP*																									
3	8.5/9.0	SP-SM*																									
4	11.0/11.5	SC*																									



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-17		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 16.9 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-19-09
		17. TOTAL RECOVERY FOR BORING		-55.6 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		93 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.6	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-55.6 Vibracore		0
					1		-58.1		
				100			Vibracore		5
			At El. -61.6 Ft., some fine to medium-grained sand-sized shell, trace silt		2		-61.6		
				100			Vibracore		
			At El. -63.6 Ft., little fine-grained sand-sized shell		3		-63.6		
				100			Vibracore		10
-66.1	10.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)		4		-66.6		
-68.4	12.8		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, trace fine to medium-grained sand-sized shell, wet, 5GY 6/1 greenish gray (SC)	81			Vibracore		15

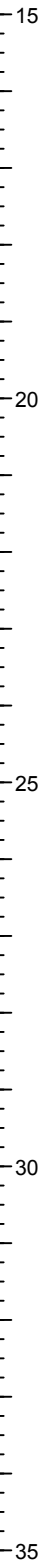
DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 611,338 Y = 1,993,806			ELEVATION TOP OF BORING -55.6 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-71.4	15.8																							
-72.5	16.9	NR		81			Vibracore																	
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>11.0/11.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	6.0/6.5	SP*	3	8.0/8.5	SP*	4	11.0/11.5	SP-SM*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.5/3.0	SP*																						
2	6.0/6.5	SP*																						
3	8.0/8.5	SP*																						
4	11.0/11.5	SP-SM*																						



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-18		LOCATION COORDINATES X = 610,905 Y = 1,994,659		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 17.1 Ft.			16. ELEVATION TOP OF BORING -56.4 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 100 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-56.4	0.0	[Dotted pattern]	SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP) At El. -61.4 Ft., few medium-grained sand-sized shell	100			-56.4 Vibracore		0
				100	1		-58.9 Vibracore		
				100	2-Post 2		-61.4 -61.4 Vibracore		5
				100			Vibracore		
-64.3	7.9	[Dotted pattern]	SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, few silt, trace medium-grained sand-sized limestone, wet, 10YR 6/1 gray (SP-SM) From El. -66.4 to -73.5 Ft., few fine-grained sand-sized shell, discontinue medium-grained sand-sized limestone, 10YR 5/1 gray	100	3		-64.9 Vibracore		
				100	4		-66.4 Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 610,905 Y = 1,994,659			ELEVATION TOP OF BORING -56.4 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																		
-73.5	17.1			100			Vibracore																				
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.5/9.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	5.0/5.5	SP*	2-Post	5.0/5.5	SP*	3	8.5/9.0	SP-SM*	4	10.0/10.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	2.5/3.0	SP*																									
2	5.0/5.5	SP*																									
2-Post	5.0/5.5	SP*																									
3	8.5/9.0	SP-SM*																									
4	10.0/10.5	SP-SM*																									

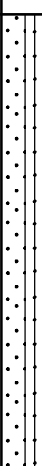



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-19		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-19-09
		17. TOTAL RECOVERY FOR BORING 94 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-57.2 Vibracore		0
					1		-59.7		
-62.9	5.7		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)	100			Vibracore		5
					2		-63.7		
							-67.2		10
-70.2	13.0		SAND, clayey, some fine-grained sand-sized quartz, some medium to coarse-grained sand-sized shell, little clay, wet, 10YR 5/1 gray (SC)	100			Vibracore		
					3				
							-71.2		
				78	4		Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 606,187 Y = 1,990,840			ELEVATION TOP OF BORING -57.2 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-75.9	18.7	Hatched pattern		78			Vibracore																	
-77.2	20.0	NIR					-77.2																	
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SAMPLE ID</th> <th style="text-align: left;">SAMPLE DEPTH</th> <th style="text-align: left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.5/7.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	6.5/7.0	SP-SM*	3	10.0/10.5	SP-SM*	4	14.0/14.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.5/3.0	SP*																						
2	6.5/7.0	SP-SM*																						
3	10.0/10.5	SP-SM*																						
4	14.0/14.5	SC*																						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part I			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-20		LOCATION COORDINATES X = 612,300 Y = 1,979,732		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL AVS Vibracore	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			16. ELEVATION TOP OF BORING -58.9 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 98 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-58.9	0.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100			-58.9		0
					1		Vibracore		
					100			-59.9	
			CLAY, fat, high plasticity, soft, mostly clay, few fine-grained sand-sized quartz, wet, 10YR 5/1 gray (CH)						
					2		Vibracore		
-64.9	6.0				100			-62.9	
					3		-66.9		
				97			Vibracore		10
									15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District				SHEET 2 OF 2 SHEETS														
			PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88												
LOCATION COORDINATES X = 612,300 Y = 1,979,732			ELEVATION TOP OF BORING -58.9 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE												
-78.5	19.6			97			Vibracore														
-78.9	20.0	NO REC					-78.9														
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SAMPLE ID</th> <th style="text-align: left;">SAMPLE DEPTH</th> <th style="text-align: left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>CH*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>										SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP-SM*	2	4.0/4.5	SP-SM*	3	8.0/8.5	CH*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.0/1.5	SP-SM*																			
2	4.0/4.5	SP-SM*																			
3	8.0/8.5	CH*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-21		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED 2 UNDISTURBED (UD) 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED 10-28-09 COMPLETED 10-28-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -53.6 Ft.		
		17. TOTAL RECOVERY FOR BORING 97 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-53.6	0.0		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to medium-grained sand-sized shell, wet, 10YR 4/1 dark gray (SM)	100			-53.6 Vibracore		0
			At El. -59.8 Ft., some fine to coarse-grained sand-sized shell	100	1		-56.6 Vibracore		5
-62.5	8.9		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, little medium-grained sand-sized shell, wet, 10YR 5/1 gray (SC)	93	2		-63.6 Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS											
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88											
LOCATION COORDINATES X = 567,763 Y = 2,115,074			ELEVATION TOP OF BORING -53.6 Ft.														
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE								
-72.9	19.3	Hatched pattern		93			Vibracore										
-73.6	20.0	NR					-73.6										
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SAMPLE ID</th> <th style="text-align: left;">SAMPLE DEPTH</th> <th style="text-align: left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SM*</td> </tr> <tr> <td>2</td> <td>10.0/10.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SM*	2	10.0/10.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION															
1	3.0/3.5	SM*															
2	10.0/10.5	SC*															

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-22		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-28-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-28-09
		17. TOTAL RECOVERY FOR BORING		-47.1 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		89 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-47.1	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-47.1 Vibracore		0
				100	-Post 1		-50.1 -50.1 Vibracore		
			At El. -53.1 Ft., trace silt	100			Vibracore		5
-55.1	8.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, few silt, wet, 10YR 4/1 dark gray (SP-SM)	100	2		-54.1 Vibracore		
				100	3		-56.1 Vibracore		10
-58.6	11.5		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few medium-grained sand-sized shell, wet, 10YR 4/1 dark gray (SM)	100	4		-60.1 Vibracore		
			At El. -60.8 Ft., 10YR 6/1 gray	69			Vibracore		15


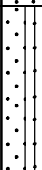

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 570,381 Y = 2,116,309			ELEVATION TOP OF BORING -47.1 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-64.9	17.8	↑↑↑↑↑		69			Vibracore																				
-67.1	20.0	NIP					-67.1																				
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>7.0/7.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>13.0/13.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	1-Post	3.0/3.5	SP*	2	7.0/7.5	SP*	3	9.0/9.5	SP-SM*	4	13.0/13.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	3.0/3.5	SP*																									
1-Post	3.0/3.5	SP*																									
2	7.0/7.5	SP*																									
3	9.0/9.5	SP-SM*																									
4	13.0/13.5	SM*																									


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-23		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		LOCATION COORDINATES X = 569,516 Y = 2,112,498	13. TOTAL NUMBER CORE BOXES 0	
6. THICKNESS OF OVERBURDEN N/A		CONTRACTOR FILE NO.	14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK N/A		BEARING	15. DATE BORING	
8. TOTAL DEPTH OF BORING 20.0 Ft.			STARTED 10-28-09	
			COMPLETED 10-28-09	
			16. ELEVATION TOP OF BORING -47.1 Ft.	
			17. TOTAL RECOVERY FOR BORING 99 %	
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE	
-47.1	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-47.1		0	
						1		-49.1		
					100			Vibracore		5
					100	2-Post		-53.1 -53.1		
-55.6	8.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, wet, 10YR 6/1 gray (SP-SM)	100			Vibracore			
						3		-57.1		10
				98			Vibracore		15	

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																	
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																	
LOCATION COORDINATES X = 569,516 Y = 2,112,498			ELEVATION TOP OF BORING -47.1 Ft.																				
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE														
-63.9	16.8		SAND, poorly-graded with silt, mostly sand to gravel-sized limestone, little fine to medium-grained sand-sized quartz, trace silt, wet, moderate cementation, 10YR 7/1 light gray (SP-SM)	98			Vibracore																
-66.9 -67.1	19.8 20.0									NO REC													
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	10.0/10.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																					
1	2.0/2.5	SP*																					
2	6.0/6.5	SP*																					
2-Post	6.0/6.5	SP*																					
3	10.0/10.5	SP-SM*																					


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-24		LOCATION COORDINATES X = 572,023 Y = 2,113,686		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		BEARING
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 20.0 Ft.			15. DATE BORING		STARTED 10-28-09
			16. ELEVATION TOP OF BORING -48.4 Ft.		COMPLETED 10-28-09
			17. TOTAL RECOVERY FOR BORING 98 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE		
-48.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP) At El. -54.0 Ft., little medium-grained sand-sized shell, trace silt, 10YR 6/1 gray	100			-48.4		0		
							1	-50.4			
						100			Vibracore		5
						100	2-Post		-54.4 -54.4	Vibracore	
-56.0	7.6		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)	100			-56.9				
						3					
-58.2	9.8		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, wet, 10YR 4/1 dark gray (CH)	97				Vibracore	10		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 572,023 Y = 2,113,686			ELEVATION TOP OF BORING -48.4 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-68.0	19.6			97			Vibracore																	
-68.4	20.0	NO REC																						
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.5/9.0</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	8.5/9.0	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
2	6.0/6.5	SP*																						
2-Post	6.0/6.5	SP*																						
3	8.5/9.0	SP-SM*																						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-25		LOCATION COORDINATES X = 575,996 Y = 2,105,837		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 7
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-28-09	COMPLETED 10-28-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -43.3 Ft.		17. TOTAL RECOVERY FOR BORING 100 %	
18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-43.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-43.3 Vibracore		0
				100	1		-46.3 Vibracore		5
				100	2-Post 2		-49.3 -49.3 Vibracore		
				100			-52.3 Vibracore		10
			At El. -52.3 Ft., few medium-grained sand-sized shell	100	3		-54.3 Vibracore		
				100	4		-56.3 Vibracore		
			At El. -55.7 Ft., 10YR 6/1 gray	100	5				
-58.3	15.0								15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																											
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																											
LOCATION COORDINATES X = 575,996 Y = 2,105,837			ELEVATION TOP OF BORING -43.3 Ft.																														
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																								
-63.3	20.0		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 3/1 very dark gray (CH)	100	6		Vibracore	-60.3																									
				100			Vibracore	-63.3																									
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr><td>1</td><td>3.0/3.5</td><td>SP*</td></tr> <tr><td>2</td><td>6.0/6.5</td><td>SP*</td></tr> <tr><td>2-Post</td><td>6.0/6.5</td><td>SP*</td></tr> <tr><td>3</td><td>9.0/9.5</td><td>SP*</td></tr> <tr><td>4</td><td>11.0/11.5</td><td>SP*</td></tr> <tr><td>5</td><td>13.0/13.5</td><td>SP*</td></tr> <tr><td>6</td><td>17.0/17.5</td><td>CH*</td></tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	9.0/9.5	SP*	4	11.0/11.5	SP*	5	13.0/13.5	SP*	6	17.0/17.5	CH*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																															
1	3.0/3.5	SP*																															
2	6.0/6.5	SP*																															
2-Post	6.0/6.5	SP*																															
3	9.0/9.5	SP*																															
4	11.0/11.5	SP*																															
5	13.0/13.5	SP*																															
6	17.0/17.5	CH*																															

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-26		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 2 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 10-28-09 COMPLETED: 10-28-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -57.3 Ft.		
		17. TOTAL RECOVERY FOR BORING 101 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.3	0.0		SILT, inorganic-H, high plasticity, soft, mostly silt, some fine-grained sand-sized quartz, wet, 10YR 4/1 dark gray (MH)	100			-57.3		0
					1			-58.3	
-60.8	3.5		SAND, silty, mostly fine-grained sand-sized quartz, little silt, trace fine-grained sand-sized shell, wet, 10YR 4/1 dark gray (SM)	100					
					2			-61.3	
-64.1	6.8		CLAY, fat, high plasticity, soft, mostly clay, little fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, wet, 10YR 5/1 gray (CH)	101			Vibracore		10
-71.8	14.5		SAND, silty, mostly fine-grained sand-sized						15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS												
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88												
LOCATION COORDINATES X = 570,687 Y = 2,087,159			ELEVATION TOP OF BORING -57.3 Ft.															
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE									
-73.3	16.0	↑↑↑↑	quartz, some silt, some sand to gravel-sized shell up to 3/4", wet, 10YR 6/1 gray (SM)															
			SILT, inorganic-H, low plasticity, firm, mostly silt, little fine-grained sand-sized quartz, wet, 10YR 6/1 gray (MH)	101			Vibracore											
-77.3	20.0						-77.3											
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>MH*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	MH*	2	4.0/4.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																
1	1.0/1.5	MH*																
2	4.0/4.5	SM*																

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-27		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING		-52.3 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		99 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-52.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-52.3 Vibracore		0
					1		-54.3		
				100			Vibracore		5
-57.1	4.8		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP-SM)		2		-58.3		
				100			Vibracore		
			At El. -60.8 Ft., little fine to medium-grained sand-sized shell, 10YR 6/1 gray		3		-60.8		
				100			Vibracore		10
			At El. -62.8 Ft., discontinue shell		4		-62.8		
				97			Vibracore		15
			At El. -64.5 Ft., some fine to coarse-grained sand-sized shell, trace clay						

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 589,290 Y = 2,081,142			ELEVATION TOP OF BORING -52.3 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-68.6	16.3		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, some fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SC)	97			Vibracore																	
-72.0	19.7																							
-72.3	20.0	NO REC																						
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>8.5/9.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.5/11.0</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>										SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP-SM*	3	8.5/9.0	SP-SM*	4	10.5/11.0	SP-SM*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
2	6.0/6.5	SP-SM*																						
3	8.5/9.0	SP-SM*																						
4	10.5/11.0	SP-SM*																						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-28		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 6
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING		-47.8 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		87 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-47.8	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, trace fine-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-47.8 Vibracore		0
					1		-49.8		
				100			Vibracore		5
			At El. -53.8 Ft., few fine to medium-grained sand-sized shell	100	2-Post		-53.8 -53.8 Vibracore		
				100			Vibracore		
-57.3	9.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, wet, 10YR 6/1 gray (SP-SM)		3		-57.8		10
				100			Vibracore		
-60.0	12.2		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)		4		-60.8		
				100			Vibracore		
-62.1	14.3		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little medium to				-62.8		15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 589,876 Y = 2,081,429			ELEVATION TOP OF BORING -47.8 Ft.																											
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																					
-63.8	16.0		coarse-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)	46	5		Vibracore																							
-65.1	17.3		SAND, silty, mostly fine-grained sand-sized quartz, some silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SM)																											
-67.8	20.0	NO RECOVERY					-67.8																							
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>13.0/13.5</td> <td>SP*</td> </tr> <tr> <td>5</td> <td>15.0/15.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>										SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	10.0/10.5	SP-SM*	4	13.0/13.5	SP*	5	15.0/15.5	SP-SM*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.0/2.5	SP*																												
2	6.0/6.5	SP*																												
2-Post	6.0/6.5	SP*																												
3	10.0/10.5	SP-SM*																												
4	13.0/13.5	SP*																												
5	15.0/15.5	SP-SM*																												

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-29			10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ			11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		
5. DIRECTION OF BORING			13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD)
<input checked="" type="checkbox"/> VERTICAL			8		0
<input type="checkbox"/> INCLINED			14. ELEVATION GROUND WATER		
6. THICKNESS OF OVERBURDEN N/A			15. DATE BORING		
7. DEPTH DRILLED INTO ROCK N/A			16. ELEVATION TOP OF BORING -46.2 Ft.		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			17. TOTAL RECOVERY FOR BORING 95 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

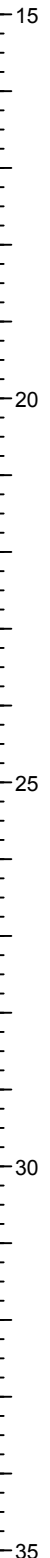
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-46.2	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP) At El. -52.2 Ft., mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell At El. -54.3 Ft., trace fine to medium-grained sand-sized shell At El. -55.2 Ft., few fine-grained sand-sized shell	100			-46.2		0
				100	1		-49.2		5
				100	2		-52.2		
				100	3	8-Post	-55.2 -55.2		
				100	4		-58.2		10
				100			-61.2		15
				100			-61.2		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																														
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																														
LOCATION COORDINATES X = 590,449 Y = 2,081,626			ELEVATION TOP OF BORING -46.2 Ft.																																	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																											
-62.5	16.3		~At El. -61.2 Ft., trace silt	100	5		Vibracore																													
-65.1	18.9		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine-grained sand-sized shell, 10YR 6/1 gray (SP-SM)	100	6		Vibracore																													
-66.2	20.0		NR		27	7		Vibracore																												
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr><td>1</td><td>3.0/3.5</td><td>SP*</td></tr> <tr><td>2</td><td>6.0/6.5</td><td>SP*</td></tr> <tr><td>3</td><td>9.0/9.5</td><td>SP*</td></tr> <tr><td>3-Post</td><td>9.0/9.5</td><td>SP*</td></tr> <tr><td>4</td><td>12.0/12.5</td><td>SP*</td></tr> <tr><td>5</td><td>15.0/15.5</td><td>SP*</td></tr> <tr><td>6</td><td>17.0/17.5</td><td>SP-SM*</td></tr> <tr><td>7</td><td>18.5/18.9</td><td>SP-SM*</td></tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	3	9.0/9.5	SP*	3-Post	9.0/9.5	SP*	4	12.0/12.5	SP*	5	15.0/15.5	SP*	6	17.0/17.5	SP-SM*	7	18.5/18.9	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																																		
1	3.0/3.5	SP*																																		
2	6.0/6.5	SP*																																		
3	9.0/9.5	SP*																																		
3-Post	9.0/9.5	SP*																																		
4	12.0/12.5	SP*																																		
5	15.0/15.5	SP*																																		
6	17.0/17.5	SP-SM*																																		
7	18.5/18.9	SP-SM*																																		

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-30		LOCATION COORDINATES X = 589,654 Y = 2,080,405		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		BEARING
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 19.1 Ft.			15. DATE BORING		STARTED 10-29-09
			16. ELEVATION TOP OF BORING -55.1 Ft.		COMPLETED 10-29-09
			17. TOTAL RECOVERY FOR BORING 87 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.1	0.0	[Dotted pattern]	SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP) At El. -58.1 Ft., few fine-grained sand-sized shell, trace silt, 10YR 5/1 gray	100			-55.1		0
				100	1		-56.6		
				100	2		-58.1		
-59.9	4.8			100			Vibracore		5
		[Vertical line pattern]	SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)		3		-61.1		
-62.3	7.2			100			Vibracore		
				77	4		-63.1		10
			SAND, silty, mostly sand to gravel-sized limestone, little fine-grained sand-sized quartz, little silt, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SM)						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																	
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																	
LOCATION COORDINATES X = 589,654 Y = 2,080,405			ELEVATION TOP OF BORING -55.1 Ft.																				
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE														
-71.7	16.6			77			Vibracore																
-74.2	19.1																						
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.5/2.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.5/2.0	SP*	2	3.0/3.5	SP*	3	6.0/6.5	SP-SM*	4	8.0/8.5	SM*					
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																					
1	1.5/2.0	SP*																					
2	3.0/3.5	SP*																					
3	6.0/6.5	SP-SM*																					
4	8.0/8.5	SM*																					



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-31		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 6
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 19.6 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING		-48.2 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		90 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-48.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-48.2 Vibracore		0
					1		-50.2		
				100			Vibracore		5
			At El. -53.7 Ft., little fine to medium-grained sand-sized shell	100	2-Post		-54.2 -54.2 Vibracore		
				100			Vibracore		
			At El. -57.6 Ft., few medium-grained sand-sized shell, trace silt		3		-58.2		10
				100			Vibracore		
			At El. -61.0 Ft., 10YR 6/1 gray		4		-61.7		
-62.7	14.5		SAND, silty, mostly fine-grained sand-sized	100			Vibracore		
							-63.2		15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 590,806 Y = 2,080,948			ELEVATION TOP OF BORING -48.2 Ft.																											
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																					
-65.9	17.7	↑↑↑↑↑	quartz, little silt, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SM)	59	5		Vibracore																							
-67.8	19.6	N/R					-67.8																							
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>13.5/14.0</td> <td>SP*</td> </tr> <tr> <td>5</td> <td>15.0/15.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	10.0/10.5	SP*	4	13.5/14.0	SP*	5	15.0/15.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.0/2.5	SP*																												
2	6.0/6.5	SP*																												
2-Post	6.0/6.5	SP*																												
3	10.0/10.5	SP*																												
4	13.5/14.0	SP*																												
5	15.0/15.5	SP-SM*																												

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-32		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 4 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 10-29-09 COMPLETED: 10-29-09		
8. TOTAL DEPTH OF BORING 19.8 Ft.		16. ELEVATION TOP OF BORING -56.3 Ft.		
		17. TOTAL RECOVERY FOR BORING 96 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-56.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-56.3		0
-58.3	2.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100	1		-57.3		
-61.5	5.2		SAND, clayey, mostly fine-grained sand-sized quartz, little clay, little sand to gravel-sized shell, wet, 10YR 3/1 very dark gray (SC)	100	2		-58.8		
-63.4	7.1		SAND, silty, mostly fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, little silt, few fine to coarse gravel-sized shell up to 3", wet, 10YR 7/1 light gray (SM)	100	3		-60.8		5
					4		-62.3		
				95			Vibracore		10
			At El. -69.6 Ft., discontinue sand to gravel-sized shell, weak cementation, 10YR 8/1 white						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 590,013 Y = 2,079,743			ELEVATION TOP OF BORING -56.3 Ft.																							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																	
-75.4	19.1			95			Vibracore																			
-76.1	19.8	NR					-76.1																			
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>2.5/3.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>4.5/5.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>6.0/6.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	2.5/3.0	SP-SM*	3	4.5/5.0	SP-SM*	4	6.0/6.5	SC*		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																								
1	1.0/1.5	SP*																								
2	2.5/3.0	SP-SM*																								
3	4.5/5.0	SP-SM*																								
4	6.0/6.5	SC*																								

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-33		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 19.8 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING		-55.2 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		97 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.2	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-55.2 Vibracore		0
				100	-Post 1		-58.2 -58.2 Vibracore		
			At El. -60.7 Ft., few medium-grained sand-sized shell	100			Vibracore		5
-62.5	7.3		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100	2		-61.2 Vibracore		
-64.1	8.9		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SM)	100	3		-63.2 Vibracore		
			At El. -67.4 Ft., 10YR 7/1 light gray	94	4		-65.2 Vibracore		10
			At El. -69.5 Ft., 5B 4/1 dark bluish gray						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 590,611 Y = 208,033			ELEVATION TOP OF BORING -55.2 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																		
-74.4	19.2		At El. -73.0 Ft., 10YR 7/1 light gray	94			Vibracore																				
-75.0	19.8																										
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	1-Post	3.0/3.5	SP*	2	6.0/6.5	SP*	3	8.0/8.5	SP-SM*	4	10.0/10.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	3.0/3.5	SP*																									
1-Post	3.0/3.5	SP*																									
2	6.0/6.5	SP*																									
3	8.0/8.5	SP-SM*																									
4	10.0/10.5	SM*																									

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-34		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 4 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 10-29-09 COMPLETED: 10-29-09		
8. TOTAL DEPTH OF BORING 19.9 Ft.		16. ELEVATION TOP OF BORING -55.4 Ft.		
		17. TOTAL RECOVERY FOR BORING 95 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-55.4 Vibracore		0
					1		-56.4 Vibracore		
				100			-58.4 Vibracore		
					2				
-59.3	3.9		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100			-60.4 Vibracore		5
					3				
-61.8	6.4		SAND, silty, mostly fine-grained sand-sized quartz, little silt, wet, 10YR 4/1 dark gray (SM)	100			-63.4 Vibracore		
					4				
			At El. -65.2 Ft., 10YR 6/1 gray	92			Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 591,134 Y = 2,080,268			ELEVATION TOP OF BORING -55.4 Ft.																							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																	
-74.4	19.0			92			Vibracore																			
-75.3	19.9	NR					-75.3																			
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>5.0/5.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	3.0/3.5	SP*	3	5.0/5.5	SP-SM*	4	8.0/8.5	SM*		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																								
1	1.0/1.5	SP*																								
2	3.0/3.5	SP*																								
3	5.0/5.5	SP-SM*																								
4	8.0/8.5	SM*																								


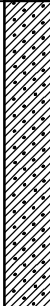
DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-35		LOCATION COORDINATES X = 588,208 Y = 2,066,924		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 5
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 5
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 19.9 Ft.		15. DATE BORING		STARTED 10-29-09
		16. ELEVATION TOP OF BORING -53.6 Ft.		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING 96 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-53.6	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-53.6 Vibracore		0
				100	-Post 1		-55.6 -55.6 Vibracore		
			At El. -57.9 Ft., trace medium-grained sand-sized shell, trace silt	100			Vibracore		
				100	2		-58.6 Vibracore		5
					3		-59.6 Vibracore		
-60.7	7.1		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, wet, 10GY 4/1 dark greenish gray (SC)	100			Vibracore		
					4		-61.6 Vibracore		10
				93			Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																							
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																							
LOCATION COORDINATES X = 588,208 Y = 2,066,924			ELEVATION TOP OF BORING -53.6 Ft.																										
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																				
-72.7	19.1	Hatched		93			Vibracore																						
-73.5	19.9	NR					-73.5																						
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	1-Post	2.0/2.5	SP*	2	5.0/5.5	SP*	3	6.0/6.5	SP*	4	8.0/8.5	SC*		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																											
1	2.0/2.5	SP*																											
1-Post	2.0/2.5	SP*																											
2	5.0/5.5	SP*																											
3	6.0/6.5	SP*																											
4	8.0/8.5	SC*																											

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-36		LOCATION COORDINATES X = 598,432 Y = 2,064,321		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 5
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN		N/A		14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK		N/A		15. DATE BORING STARTED 10-29-09 COMPLETED 10-29-09	
8. TOTAL DEPTH OF BORING		20.0 Ft.		16. ELEVATION TOP OF BORING -51.6 Ft.	
			17. TOTAL RECOVERY FOR BORING 100 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE		
-51.6	0.0	[Dotted pattern]	SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP) At El. -56.7 Ft., few fine to medium-grained sand-sized shell	100			-51.6		0		
						1		-53.6			
						100			Vibracore		5
						100	2-Post		-57.6 -57.6		
-59.8	8.2	[Dotted pattern]	SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100			-60.6		10		
						3		-62.1			
-62.7	11.1	[Diagonal hatching]	CLAY, fat, high plasticity, soft, mostly clay, few sand to gravel-sized shell up to 1/2", wet, 5B 5/1 bluish gray (CH)	100	4		Vibracore		15		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 598,432 Y = 2,064,321			ELEVATION TOP OF BORING -51.6 Ft.																								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																		
-67.6	16.0		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SC)	100			Vibracore																				
-71.6	20.0																										
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>10.5/11.0</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	9.0/9.5	SP-SM*	4	10.5/11.0	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	2.0/2.5	SP*																									
2	6.0/6.5	SP*																									
2-Post	6.0/6.5	SP*																									
3	9.0/9.5	SP-SM*																									
4	10.5/11.0	SP-SM*																									


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-37		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 2 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 10-29-09 COMPLETED: 10-29-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -61.1 Ft.		
		17. TOTAL RECOVERY FOR BORING 99 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-61.1	0.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100			-61.1 Vibracore		0
					1		-63.1		
-66.3	5.2		SAND, poorly-graded with silt, mostly sand to gravel-sized shell, little fine-grained sand-sized quartz, few silt (SP-SM)	100			Vibracore		5
					2		-67.1		
-71.1	10.0		CLAY, lean, low plasticity, firm, mostly clay, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (CL)	99			Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District				SHEET 2 OF 2 SHEETS											
			PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88									
LOCATION COORDINATES X = 586,269 Y = 2,059,188			ELEVATION TOP OF BORING -61.1 Ft.															
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE									
-80.9 -81.1	19.8 20.0			99			Vibracore											
		NO REC					-81.1											
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align:left;">SAMPLE ID</th> <th style="text-align:left;">SAMPLE DEPTH</th> <th style="text-align:left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP-SM*	2	6.0/6.5	SP-SM*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																
1	2.0/2.5	SP-SM*																
2	6.0/6.5	SP-SM*																


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-38		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-29-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-29-09
		17. TOTAL RECOVERY FOR BORING 100 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-64.4	0.0						-64.4		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 6/1 gray (SP)	100	1		Vibracore		0
-65.5	1.1		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100	2		Vibracore		
			At El. -69.6 Ft., few silt, trace fine to medium-grained sand-sized shell						5
			At El. -71.6 Ft., some fine to coarse-grained sand-sized shell, trace clay, 10YR 7/1 light gray						
-73.9	9.5		CLAY, fat, high plasticity, firm, mostly clay, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (CH)	100	3		Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 587,053 Y = 2,059,204			ELEVATION TOP OF BORING -64.4 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-84.4	20.0			100			Vibracore														
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.5/1.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>1.5/2.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	0.5/1.0	SP*	2	1.5/2.0	SP-SM*	3	6.0/6.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	0.5/1.0	SP*																			
2	1.5/2.0	SP-SM*																			
3	6.0/6.5	SP-SM*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-39		LOCATION COORDINATES X = 587,833 Y = 2,059,183		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		VERTICAL NAVD88
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
6. THICKNESS OF OVERBURDEN N/A		12. TOTAL SAMPLES		DISTURBED 4
7. DEPTH DRILLED INTO ROCK N/A		13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 19.8 Ft.		14. ELEVATION GROUND WATER		15. DATE BORING STARTED 10-30-09 COMPLETED 10-30-09
		16. ELEVATION TOP OF BORING -51.5 Ft.		17. TOTAL RECOVERY FOR BORING 88 %
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

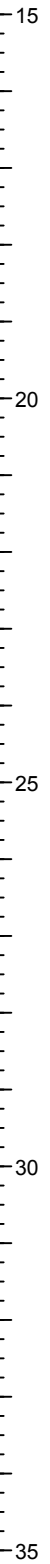
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE	
-51.5	0.0	[Dotted pattern]	SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-51.5		0	
				100	-Post 1		-53.5 -53.5	Vibracore		
-55.0	3.5			100				Vibracore		5
		[Dotted pattern]	SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100	2		-57.5			
				100				Vibracore		
					At El. -60.7 Ft., few fine-grained sand-sized shell					
-63.5	12.0	[Diagonal hatching]	CLAY, fat, high plasticity, firm, mostly clay, trace fine-grained sand-sized quartz, wet, 10YR 6/1 gray (CH)	76	3		-61.5		10	
-66.5	15.0							Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 587,833 Y = 2,059,183			ELEVATION TOP OF BORING -51.5 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-68.9	17.4		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, little silt, wet, 10YR 5/3 brown (SC)	76			Vibracore																	
-71.3	19.8	NR						-71.3																
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	1-Post	2.0/2.5	SP*	2	6.0/6.5	SP-SM*	3	10.0/10.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
1-Post	2.0/2.5	SP*																						
2	6.0/6.5	SP-SM*																						
3	10.0/10.5	SP-SM*																						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-40		LOCATION COORDINATES X = 588,554 Y = 2,059,216		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 3
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 0
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 20.0 Ft.		15. DATE BORING 10-31-09		STARTED 10-31-09
		16. ELEVATION TOP OF BORING -51.3 Ft.		COMPLETED 10-31-09
		17. TOTAL RECOVERY FOR BORING 86 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		


ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-51.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-51.3		0
-53.0	1.7		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, few silt, wet, 10YR 6/1 gray (SP-SM)	100	1		-52.3		
-55.7	4.4		SAND, clayey, mostly fine-grained sand-sized quartz, some sand to gravel-sized shell, little silt, wet, 10YR 6/1 gray (SC)	100	2		-54.3		
-58.3	7.0		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, wet, 5B 6/1 bluish gray (CH)	79	3		-57.3		
-64.3	13.0		SAND, clayey, mostly fine-grained sand-sized quartz, little clay, few sand to gravel-sized shell up to 1", trace silt, wet, 10YR 7/1 light gray (SC)						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 588,554 Y = 2,059,216			ELEVATION TOP OF BORING -51.3 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-68.4	17.1	[Hatched Pattern]																			
-71.3	20.0	NO RECOVERY		79			Vibracore														
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SAMPLE ID</th> <th style="text-align: left;">SAMPLE DEPTH</th> <th style="text-align: left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	3.0/3.5	SP-SM*	3	6.0/6.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.0/1.5	SP*																			
2	3.0/3.5	SP-SM*																			
3	6.0/6.5	SC*																			



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-41		LOCATION COORDINATES X = 586,320 Y = 2,058,451		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 2
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-18-09
8. TOTAL DEPTH OF BORING 19.9 Ft.			16. ELEVATION TOP OF BORING -65.0 Ft.		COMPLETED 11-18-09
			17. TOTAL RECOVERY FOR BORING 99 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-65.0	0.0		SAND, silty, mostly fine-grained sand-sized quartz, little medium to coarse-grained sand-sized shell, little silt, wet, 10YR 7/1 light gray (SM)	100			-65.0 Vibracore		0
					1		-67.0		
-69.5	4.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, some sand to gravel-sized shell, few silt, wet, 10YR 7/1 light gray (SP-SM)	100			Vibracore		5
					2		-71.0		
-74.7	9.7		CLAY, fat, high plasticity, firm, mostly clay, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (CH)	99			Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS												
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88												
LOCATION COORDINATES X = 586,320 Y = 2,058,451			ELEVATION TOP OF BORING -65.0 Ft.															
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE									
-84.8	19.8			99			Vibracore											
			BORING TERMINATED IN REFUSAL															
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SM*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SM*	2	6.0/6.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																
1	2.0/2.5	SM*																
2	6.0/6.5	SP-SM*																

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-42		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 2 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 11-18-09 COMPLETED: 11-18-09		
8. TOTAL DEPTH OF BORING 19.8 Ft.		16. ELEVATION TOP OF BORING -60.7 Ft.		
		17. TOTAL RECOVERY FOR BORING 97 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-60.7	0.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100			-60.7 Vibracore		0
					1		-62.7 Vibracore		5
					2		-66.7 Vibracore		10
			At El. -68.7 Ft., some fine to coarse gravel-sized shell, trace clay						
			At El. -72.7 Ft., discontinue clay						
				96			Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS														
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88														
LOCATION COORDINATES X = 587,045 Y = 2,058,436			ELEVATION TOP OF BORING -60.7 Ft.																	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE											
-79.9	19.2	NR		96			Vibracore													
-80.5	19.8						-80.5													
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP-SM*	2	6.0/6.5	SP-SM*		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																		
1	2.0/2.5	SP-SM*																		
2	6.0/6.5	SP-SM*																		


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-43		LOCATION COORDINATES X = 587,798 Y = 2,058,454		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 6
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 0
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 18.9 Ft.		15. DATE BORING		STARTED 11-18-09
		16. ELEVATION TOP OF BORING -52.9 Ft.		COMPLETED 11-18-09
		17. TOTAL RECOVERY FOR BORING 91 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-52.9	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to coarse-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-52.9 Vibracore		0
					1		-54.9 Vibracore		
			At El. -56.7 Ft., few fine-grained sand-sized shell	100	2-Post		-56.9 Vibracore		
				100	2		Vibracore		
			At El. -58.1 Ft., few medium-grained sand-sized shell, 10YR 6/1 gray	100	3		-58.4 Vibracore		5
-59.1	6.2		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)	100	4		-59.4 Vibracore		
-61.9	9.0		SAND, clayey, mostly fine-grained sand-sized quartz, little silt, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SC)	81	5		-62.9 Vibracore		10
-67.1	14.2		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to						15




DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 587,798 Y = 2,058,454			ELEVATION TOP OF BORING -52.9 Ft.																											
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																					
-70.1	17.2		coarse-grained sand-sized shell, few silt, wet, 10YR 8/1 white (SP-SM)	81			Vibracore																							
-71.8	18.9	N/R																												
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>5.5/6.0</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>6.5/7.0</td> <td>SP-SM*</td> </tr> <tr> <td>5</td> <td>10.0/10.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.0/4.5	SP*	2-Post	4.0/4.5	SP*	3	5.5/6.0	SP*	4	6.5/7.0	SP-SM*	5	10.0/10.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.0/2.5	SP*																												
2	4.0/4.5	SP*																												
2-Post	4.0/4.5	SP*																												
3	5.5/6.0	SP*																												
4	6.5/7.0	SP-SM*																												
5	10.0/10.5	SC*																												

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-44		LOCATION COORDINATES X = 588,539 Y = 2,058,432		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83 VERTICAL NAVD88
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 6 UNDISTURBED (UD) 0
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-18-09 COMPLETED 11-18-09
8. TOTAL DEPTH OF BORING 20.0 Ft.			16. ELEVATION TOP OF BORING -51.1 Ft.		17. TOTAL RECOVERY FOR BORING 101 %
18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-51.1	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-51.1 Vibracore		0
				100	Post 1		-53.6 -53.6 Vibracore		
			At El. -56.3 Ft., few medium-grained sand-sized shell, trace silt	100	2		-56.6 Vibracore		5
				100	3		-57.6 Vibracore		
-58.6	7.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little medium to coarse-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)	100	4		-59.1 Vibracore		
			At El. -60.1 Ft., trace fine-grained sand-sized shell	100	5		-60.1 Vibracore		10
-63.6	12.5		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, few fine to coarse-grained sand-sized shell, wet, 5G 5/1 greenish gray (SC)	101			Vibracore		15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 588,539 Y = 2,058,432			ELEVATION TOP OF BORING -51.1 Ft.																											
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																					
-71.1	20.0		At El. -69.1 Ft., some sand to gravel-sized shell up to 2", 10YR 6/1 gray	101			Vibracore																							
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>1-Post</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.5/6.0</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>6.5/7.0</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SP-SM*</td> </tr> <tr> <td>5</td> <td>9.0/9.5</td> <td>SP-SM*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	1-Post	2.5/3.0	SP*	2	5.5/6.0	SP*	3	6.5/7.0	SP*	4	8.0/8.5	SP-SM*	5	9.0/9.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.5/3.0	SP*																												
1-Post	2.5/3.0	SP*																												
2	5.5/6.0	SP*																												
3	6.5/7.0	SP*																												
4	8.0/8.5	SP-SM*																												
5	9.0/9.5	SP-SM*																												

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-45		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-18-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-18-09
		17. TOTAL RECOVERY FOR BORING		-54.1 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		96 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-54.1	0.0						-54.1		
			SAND, clayey, some fine-grained sand-sized quartz, some clay, some sand to gravel-sized shell, wet, 5B 4/1 dark bluish gray (SC)	100			Vibracore		
-55.9	1.8				1		-55.1		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium to coarse-grained sand-sized shell, trace silt, wet, 10YR 7/1 light gray (SP)	100			Vibracore		
					2		-57.1		
-59.9	5.8					100	Vibracore		5
			SILT, inorganic-H, high plasticity, firm, mostly silt, few medium-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (MH)				-61.1		
					3				
				94			Vibracore		10
			At El. -68.4 Ft., discontinue medium-grained sand-sized shell						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS														
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88														
LOCATION COORDINATES X = 586,302 Y = 2,057,699			ELEVATION TOP OF BORING -54.1 Ft.																	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE											
-73.3	19.2	NR		94			Vibracore													
-74.1	20.0						-74.1													
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SC*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>MH*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SC*	2	3.0/3.5	SP*	3	7.0/7.5	MH*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																		
1	1.0/1.5	SC*																		
2	3.0/3.5	SP*																		
3	7.0/7.5	MH*																		

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-46		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-18-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-18-09
		17. TOTAL RECOVERY FOR BORING		-54.3 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		89 %
				Tom Selfridge, Geotechnical Engineer,

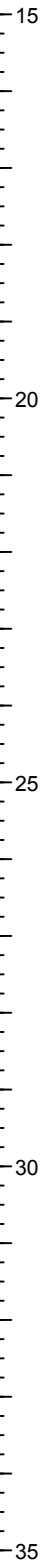
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-54.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-54.3 Vibracore		0
-57.8	3.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM)	100	1		-56.3 Vibracore		
-62.7	8.4		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP-SM) At El. -60.8 Ft., little medium-grained sand-sized shell	100	2		-58.3 Vibracore		5
-65.7	11.4		CLAY, fat, high plasticity, firm, mostly clay, few fine-grained sand-sized quartz, trace fine to coarse-grained sand-sized shell, wet, 5B 6/1 bluish gray (CH)	82	3		-61.3 Vibracore		10
			SAND, silty, mostly fine-grained sand-sized quartz, some silt, trace fine-grained sand-sized shell, trace clay, wet, 10YR 7/1 light gray (SM)						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 587,806 Y = 2,057,690			ELEVATION TOP OF BORING -54.3 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-72.0	17.7	↑↑↑↑↑		82			Vibracore														
-74.3	20.0	NR					-74.3														
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.0/4.5	SP-SM*	3	7.0/7.5	SP-SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	2.0/2.5	SP*																			
2	4.0/4.5	SP-SM*																			
3	7.0/7.5	SP-SM*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-47		LOCATION COORDINATES X = 588,545 Y = 2,057,677		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 4
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-18-09
8. TOTAL DEPTH OF BORING 16.4 Ft.			16. ELEVATION TOP OF BORING -51.9 Ft.		COMPLETED 11-18-09
			17. TOTAL RECOVERY FOR BORING 85 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-51.9	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP) At El. -54.9 Ft., trace silt	100			-51.9		0
				100	1		-53.9		
				100	2		-54.9		
-55.7	3.8						-55.9		
			SAND, silty, mostly fine-grained sand-sized quartz, some silt, few medium-grained sand-sized shell, wet, 10YR 5/1 gray (SM)	100	3				5
-57.9	6.0								
			CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, wet, 5B 4/1 dark bluish gray (CH)	73	4		-58.9		10
-63.8	11.9								
			SAND, silty, mostly fine-grained sand-sized quartz, some silt, little fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SM)						
-65.8	13.9								
		NR							15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 588,545 Y = 2,057,677			ELEVATION TOP OF BORING -51.9 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE															
-68.3	16.4	NR		73			Vibracore																	
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>4.0/4.5</td> <td>SM*</td> </tr> <tr> <td>4</td> <td>7.0/7.5</td> <td>CH*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	3.0/3.5	SP*	3	4.0/4.5	SM*	4	7.0/7.5	CH*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
2	3.0/3.5	SP*																						
3	4.0/4.5	SM*																						
4	7.0/7.5	CH*																						




DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-48		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED 1 UNDISTURBED (UD) 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED 11-18-09 COMPLETED 11-18-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -57.4 Ft.		
		17. TOTAL RECOVERY FOR BORING 101 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, some sand to gravel-sized shell, trace silt, wet, 10YR 5/1 gray (SP)	100			Vibracore		
-60.3	2.9		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, trace fine to coarse-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (CH)		1				
-64.0	6.6		SILT, inorganic-L, low plasticity, firm, mostly silt, little fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (ML)	101			Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS									
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88									
LOCATION COORDINATES X = 586,301 Y = 2,056,954			ELEVATION TOP OF BORING -57.4 Ft.												
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE						
-77.4	20.0			101			Vibracore								
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION													
1	2.0/2.5	SP*													



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-49		LOCATION COORDINATES X = 587,037 Y = 2,056,941		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		VERTICAL NAVD88
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
6. THICKNESS OF OVERBURDEN N/A		12. TOTAL SAMPLES		DISTURBED 3
7. DEPTH DRILLED INTO ROCK N/A		13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 19.9 Ft.		14. ELEVATION GROUND WATER		15. DATE BORING STARTED 11-18-09 COMPLETED 11-18-09
		16. ELEVATION TOP OF BORING -61.2 Ft.		17. TOTAL RECOVERY FOR BORING 97 %
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-61.2	0.0						-61.2		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 7/1 light gray (SP)	100			Vibracore		0
-62.3	1.1				1				
			SAND, silty, mostly fine-grained sand-sized quartz, little silt, trace sand to gravel-sized shell up to 1-1/2", wet, 10YR 6/1 gray (SM)	100			Vibracore		
					2				
				100			Vibracore		5
-69.1	7.9		SAND, clayey, some fine-grained sand-sized quartz, some clay, some medium to coarse-grained sand-sized limestone, wet, 10YR 5/1 gray (SC)						
					3				
-71.3	10.1		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, wet, 10YR 8/1 white (SM)						10
				94			Vibracore		
-73.6	12.4		CLAY, fat, high plasticity, firm, mostly clay, trace fine to medium-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (CH)						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 587,037 Y = 2,056,941			ELEVATION TOP OF BORING -61.2 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-80.5	19.3			94			Vibracore														
-81.1	19.9	NR					-81.1														
			BORING TERMINATED IN REFUSAL																		
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.5/1.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SM*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	0.5/1.0	SP*	2	3.0/3.5	SM*	3	9.0/9.5	SC*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	0.5/1.0	SP*																			
2	3.0/3.5	SM*																			
3	9.0/9.5	SC*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-50		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 3 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 11-18-09 COMPLETED: 11-18-09		
8. TOTAL DEPTH OF BORING 19.9 Ft.		16. ELEVATION TOP OF BORING -48.4 Ft.		
		17. TOTAL RECOVERY FOR BORING 87 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-48.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			-48.4 Vibracore		0
-52.0	3.6		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, wet, 10YR 6/1 gray (SP-SM)	100	1		-50.4 Vibracore		
			At El. -54.4 Ft., few medium-grained sand-sized shell	100	2		-52.4 Vibracore		5
-58.6	10.2		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, little fine to coarse-grained sand-sized shell, wet, trace strongly cemented sand and shell fragments up to 2", 2.5YR 5/3 reddish brown (SC)	79	3		-56.4 Vibracore		10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 587,816 Y = 2,056,939			ELEVATION TOP OF BORING -48.4 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE												
-65.3	16.9		CLAY, fat, high plasticity, soft, mostly clay, trace fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (CH)	79			Vibracore														
-65.8	17.4																				
-68.3	19.9	N/R					-68.3														
BORING TERMINATED IN REFUSAL																					
NOTES:																					
1. Soils are field visually classified in accordance with the Unified Soils Classification System.																					
2. Laboratory Testing Results																					
<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP-SM*</td> </tr> </tbody> </table>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.0/4.5	SP-SM*	3	8.0/8.5	SP-SM*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	2.0/2.5	SP*																			
2	4.0/4.5	SP-SM*																			
3	8.0/8.5	SP-SM*																			
*Lab visual classification based on gradation curve. No Atterberg limits.																					



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-51		LOCATION COORDINATES X = 588,516 Y = 2,056,916		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		14. ELEVATION GROUND WATER
7. DEPTH DRILLED INTO ROCK N/A			15. DATE BORING		STARTED 11-18-09
8. TOTAL DEPTH OF BORING 19.9 Ft.			16. ELEVATION TOP OF BORING -56.2 Ft.		COMPLETED 11-18-09
			17. TOTAL RECOVERY FOR BORING 98 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-56.2	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, trace silt, wet, 10YR 6/1 gray (SP)	100			-56.2		0
						1	Vibracore		
-58.3	2.1			100			-57.2		
			SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little medium to coarse-grained sand-sized shell, few silt, wet, 10YR 5/1 gray (SP-SM)				Vibracore		
-60.2	4.0			100		2	-59.7		
			CLAY, fat, high plasticity, firm, mostly clay, some fine-grained sand-sized quartz, few medium to coarse-grained sand-sized shell, wet, 10YR 4/1 dark gray (CH)				Vibracore		5
						3	-62.2		
				98			Vibracore		10
									15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 588,516 Y = 2,056,916			ELEVATION TOP OF BORING -56.2 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-71.6	15.4		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, wet, 10YR 7/2 light gray (SM)	98			Vibracore														
-75.8	19.6																				
-76.1	19.9	NO REC																			
			BORING TERMINATED IN REFUSAL																		
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.5/4.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>CH*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	3.5/4.0	SP-SM*	3	6.0/6.5	CH*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.0/1.5	SP*																			
2	3.5/4.0	SP-SM*																			
3	6.0/6.5	CH*																			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-52		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 10-28-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 10-28-09
		17. TOTAL RECOVERY FOR BORING		93 %
		18. SIGNATURE AND TITLE OF INSPECTOR		Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-57.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 8/1 white (SP)	100			-57.4		0
				100	1		Vibracore		
			At El. -59.4 Ft., few medium-grained sand-sized shell, trace silt		2		Vibracore		
				100			Vibracore		
-62.5	5.1		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, few coarse-grained sand-sized shell, wet, 10YR 3/1 very dark gray (SC)		3		-63.4		5
-66.1	8.7		CLAY, fat, high plasticity, firm, mostly clay, few fine-grained sand-sized quartz, trace fine-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (CH)	89			Vibracore		10
-70.8	13.4		SAND, clayey, mostly fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, little clay, wet, 5B 4/1 dark bluish gray (SC)						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS														
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88														
LOCATION COORDINATES X = 589,365 Y = 2,049,983			ELEVATION TOP OF BORING -57.4 Ft.																	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE											
-73.3	15.9		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SM)	89			Vibracore													
-75.9	18.5																			
-77.4	20.0	NR					-77.4													
<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SC*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	2.0/2.5	SP*	3	6.0/6.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																		
1	1.0/1.5	SP*																		
2	2.0/2.5	SP*																		
3	6.0/6.5	SC*																		

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-53		LOCATION COORDINATES X = 599,770 Y = 2,053,852		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 6
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		BEARING
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 19.7 Ft.			15. DATE BORING		STARTED 10-27-09
			16. ELEVATION TOP OF BORING -55.3 Ft.		COMPLETED 10-27-09
			17. TOTAL RECOVERY FOR BORING 89 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-55.3	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)				-55.3		0
				100			Vibracore		
					1		-58.3		
				100			Vibracore		5
			At El. -60.3 Ft., trace silt						
				100	2-Post		-61.3		
					2		-61.3		
				100			Vibracore		
			At El. -63.8 Ft., few shell, discontinue silt						
				100	3		-64.3		
			At El. -64.8 Ft., trace silt, 10YR 6/1 gray						
				100	4		-65.3		10
				100			Vibracore		
				100	5		-67.3		
			SILT, inorganic-H, high plasticity, firm, mostly silt, few fine to coarse-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (MH)						
				71			Vibracore		15
-66.6	11.3								

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																										
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																										
LOCATION COORDINATES X = 599,770 Y = 2,053,852			ELEVATION TOP OF BORING -55.3 Ft.																													
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE																							
-72.8	17.5			71			Vibracore																									
-75.0	19.7	NR																														
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>5</td> <td>12.0/12.5</td> <td>MH*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	2-Post	6.0/6.5	SP*	3	9.0/9.5	SP*	4	10.0/10.5	SP*	5	12.0/12.5	MH*		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																														
1	3.0/3.5	SP*																														
2	6.0/6.5	SP*																														
2-Post	6.0/6.5	SP*																														
3	9.0/9.5	SP*																														
4	10.0/10.5	SP*																														
5	12.0/12.5	MH*																														

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-54		LOCATION COORDINATES X = 602,832 Y = 2,046,603		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 4
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 4
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 19.4 Ft.		15. DATE BORING		STARTED 10-27-09
		16. ELEVATION TOP OF BORING -51.4 Ft.		COMPLETED 10-27-09
		17. TOTAL RECOVERY FOR BORING 89 %		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-51.4	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine to medium-grained sand-sized shell, wet, 10YR 8/1 white (SP)	100			-51.4		0
					1		-52.4		
-54.4	3.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine to medium-grained sand-sized shell, wet, 10YR 8/1 white (SP-SM)	100			-54.9		
-55.9	4.5		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 7/1 light gray (SP)	100			-56.4		5
			At El. -58.4 Ft., trace silt, 10YR 6/1 gray		3				
				100			-58.9		
-62.0	10.6		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, wet, 5G 5/1 greenish gray (CH)	82					10
					4				

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 602,832 Y = 2,046,603			ELEVATION TOP OF BORING -51.4 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE															
-66.6	15.2		SAND, silty, mostly fine-grained sand-sized quartz, some silt, wet, 10YR 7/1 light gray (SM)	82			Vibracore																	
-68.7	17.3																							
-70.8	19.4	NR					-70.8																	
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.5/4.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>7.5/8.0</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	3.5/4.0	SP-SM*	3	5.0/5.5	SP*	4	7.5/8.0	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	1.0/1.5	SP*																						
2	3.5/4.0	SP-SM*																						
3	5.0/5.5	SP*																						
4	7.5/8.0	SP*																						


DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-55		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED 3 UNDISTURBED (UD) 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED 10-27-09 COMPLETED 10-27-09		
8. TOTAL DEPTH OF BORING 19.3 Ft.		16. ELEVATION TOP OF BORING -59.1 Ft.		
		17. TOTAL RECOVERY FOR BORING 94 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-59.1	0.0						-59.1		0
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, few medium-grained sand-sized shell, wet, 10YR 6/1 gray (SP)	100			Vibracore		
					1				
-61.6	2.5			100			-60.6		
			SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)				Vibracore		
					2				
				100			-62.1		
							Vibracore		
					3				5
				92			-64.1		10
							Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																
LOCATION COORDINATES X = 592,445 Y = 2,039,344			ELEVATION TOP OF BORING -59.1 Ft.																			
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE													
-75.3	16.2		SAND, clayey, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, little clay, wet, 10YR 4/1 dark gray (SC)	92			Vibracore															
-77.3	18.2																					
-78.4	19.3	NR					-78.4															
			BORING TERMINATED IN REFUSAL																			
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.5/2.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>3.0/3.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>5.0/5.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.				SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.5/2.0	SP*	2	3.0/3.5	SP-SM*	3	5.0/5.5	SP-SM*				
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																				
1	1.5/2.0	SP*																				
2	3.0/3.5	SP-SM*																				
3	5.0/5.5	SP-SM*																				

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-56		LOCATION COORDINATES X = 598,545 Y = 2,037,366		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 6
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL		BEARING
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		UNDISTURBED (UD) 0
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 19.2 Ft.			15. DATE BORING		STARTED 10-27-09
			16. ELEVATION TOP OF BORING 52.9 Ft.		COMPLETED 10-27-09
			17. TOTAL RECOVERY FOR BORING 101 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
52.9	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, wet, 10YR 7/1 light gray (SP)	100			52.9		0
					1		50.4		
			At El. 48.7 Ft., few medium-grained sand-sized shell	100			47.9		
				100	2-Post		47.9		5
			At El. 45.8 Ft., little medium-grained sand-sized shell, trace silt	100			44.9		
				100	3		43.9		
				100	4				10
			At El. 41.4 Ft., little fine to medium-grained sand-sized shell, 10YR 5/1 gray	100			40.9		
				101	5				15

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 598,545 Y = 2,037,366			ELEVATION TOP OF BORING 52.9 Ft.																											
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																					
37.8	15.1		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, trace fine to coarse-grained sand-sized shell, wet, 5B 4/1 dark bluish gray (CH)	101			Vibracore																							
33.7	19.2						33.7																							
			BORING TERMINATED IN REFUSAL NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.5/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>2-Post</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>9.0/9.5</td> <td>SP*</td> </tr> <tr> <td>5</td> <td>12.0/12.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.5/3.0	SP*	2	5.0/5.5	SP*	2-Post	5.0/5.5	SP*	3	8.0/8.5	SP*	4	9.0/9.5	SP*	5	12.0/12.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.5/3.0	SP*																												
2	5.0/5.5	SP*																												
2-Post	5.0/5.5	SP*																												
3	8.0/8.5	SP*																												
4	9.0/9.5	SP*																												
5	12.0/12.5	SP*																												



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II		9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-57		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER		
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES DISTURBED: 2 UNDISTURBED (UD): 0		
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES 0		
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING STARTED: 11-19-09 COMPLETED: 11-19-09		
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING -62.2 Ft.		
		17. TOTAL RECOVERY FOR BORING 98 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-62.2	0.0						-62.2		
-63.2	1.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, some medium-grained sand-sized shell, few silt, wet, 10YR 7/1 light gray (SP-SM)	100			Vibracore		
			SAND, clayey, mostly fine-grained sand-sized quartz, little clay, wet, 10YR 6/2 light brownish gray (SC)	100	1		Vibracore		
			At El. -65.8 Ft., few medium-grained sand-sized shell, 10YR 6/3 pale brown				-66.2		
			At El. -70.7 Ft., 10YR 5/1 gray		2				
				98			Vibracore		
-74.6	12.4		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, wet, 10YR 6/1 gray (SM)						

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS												
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88												
LOCATION COORDINATES X = 611,850 Y = 1,985,842			ELEVATION TOP OF BORING -62.2 Ft.															
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE									
-81.8	19.6		At El. -79.2 Ft., few sand to gravel-sized shell up to 2-1/2"	98			Vibracore											
-82.2	20.0									NO REC			-82.2					
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SC*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SC*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SC*	2	4.0/4.5	SC*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																
1	1.0/1.5	SC*																
2	4.0/4.5	SC*																

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-58		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER American Vibracore Services		12. TOTAL SAMPLES		DISTURBED 3
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-19-09
8. TOTAL DEPTH OF BORING 20.0 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-19-09
		17. TOTAL RECOVERY FOR BORING		-58.5 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		98 %
				Tom Selfridge, Geotechnical Engineer,

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-58.5	0.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace fine-grained sand-sized shell, wet, 10YR 8/1 white (SP)	100			-58.5 Vibracore		0
-60.6	2.1		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace fine to medium-grained sand-sized shell, wet, 10YR 5/1 gray (SP-SM)	100	1		-59.5 Vibracore		
-62.6	4.1		SILT, inorganic-H, high plasticity, soft, mostly silt, trace fine-grained sand-sized quartz, wet, 10YR 5/1 gray (MH)	100	2		-61.0 Vibracore		
-64.3	5.8		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, few fine to coarse-grained sand-sized shell, wet, 10YR 3/1 very dark gray (SC)	97	3		-63.5 Vibracore		5
-66.1	7.6		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, wet, 10YR 5/1 gray (SM)				Vibracore		10
-70.0	11.5		SAND, clayey, mostly fine-grained sand-sized quartz, some clay, few fine to coarse-grained sand-sized shell, wet, 10YR 3/1 very dark gray (SC)						15


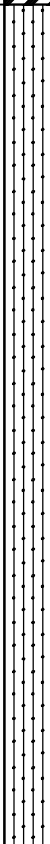
DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS															
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88															
LOCATION COORDINATES X = 606,503 Y = 1,971,367			ELEVATION TOP OF BORING -58.5 Ft.																		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE												
-74.3	15.8		SILT, inorganic-L, low plasticity, firm, mostly silt, little fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, wet, 5Y 6/3 pale olive (ML)	97			Vibracore														
-78.1	19.6																				
-78.5	20.0	NO REC																			
NOTES:																					
1. Soils are field visually classified in accordance with the Unified Soils Classification System.																					
2. Laboratory Testing Results																					
<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>2.5/3.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>5.0/5.5</td> <td>MH*</td> </tr> </tbody> </table>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	2.5/3.0	SP-SM*	3	5.0/5.5	MH*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																			
1	1.0/1.5	SP*																			
2	2.5/3.0	SP-SM*																			
3	5.0/5.5	MH*																			
*Lab visual classification based on gradation curve. No Atterberg limits.																					

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore	
2. BORING DESIGNATION VB-SJSP09-59		LOCATION COORDINATES X = 606,478 Y = 1,965,079		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		HORIZONTAL NAD83
4. NAME OF DRILLER American Vibracore Services		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	12. TOTAL SAMPLES 1
6. THICKNESS OF OVERBURDEN N/A		13. TOTAL NUMBER CORE BOXES 0		DISTURBED 1
7. DEPTH DRILLED INTO ROCK N/A		14. ELEVATION GROUND WATER		UNDISTURBED (UD) 0
8. TOTAL DEPTH OF BORING 20.0 Ft.		15. DATE BORING		STARTED 11-19-09
		16. ELEVATION TOP OF BORING -61.6 Ft.		COMPLETED 11-19-09
		17. TOTAL RECOVERY FOR BORING 99 %		
		18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-61.6	0.0		SAND, silty, mostly fine-grained sand-sized quartz, some silt, little fine to coarse-grained sand-sized shell, trace clay, wet, 10YR 5/1 gray (SM)	100			-61.6 Vibracore		0
-65.3	3.7		SILT, inorganic-L, low plasticity, firm, mostly silt, little fine-grained sand-sized quartz, wet, 5Y 5/3 olive (ML)	99	1		-63.6 Vibracore		5
-71.6	10.0		SILT, inorganic-L, mostly fine to medium-grained sand-sized quartz, some silt, 10YR 5/1 gray (ML)						10

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District				SHEET 2 OF 2 SHEETS								
			PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88						
LOCATION COORDINATES X = 606,478 Y = 1,965,079			ELEVATION TOP OF BORING -61.6 Ft.												
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE						
-81.4 -81.6	19.8 20.0	NO REC		99			Vibracore								
			NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SAMPLE ID</th> <th style="text-align: left;">SAMPLE DEPTH</th> <th style="text-align: left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td style="border-top: 1px dashed black;">1</td> <td style="border-top: 1px dashed black;">2.0/2.5</td> <td style="border-top: 1px dashed black;">SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SM*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION													
1	2.0/2.5	SM*													

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS
1. PROJECT St. Johns County Offshore Investigation Part II			9. SIZE AND TYPE OF BIT 3.5" Vibracore		
2. BORING DESIGNATION VB-SJSP09-60		LOCATION COORDINATES X = 608,881 Y = 1,957,932		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER American Vibracore Services			12. TOTAL SAMPLES		DISTURBED 1
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			DEG. FROM VERTICAL	BEARING	UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A			13. TOTAL NUMBER CORE BOXES 0		
7. DEPTH DRILLED INTO ROCK N/A			14. ELEVATION GROUND WATER		
8. TOTAL DEPTH OF BORING 20.0 Ft.			15. DATE BORING		STARTED 11-19-09
			16. ELEVATION TOP OF BORING -62.2 Ft.		COMPLETED 11-19-09
			17. TOTAL RECOVERY FOR BORING 99 %		
			18. SIGNATURE AND TITLE OF INSPECTOR Tom Selfridge, Geotechnical Engineer,		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-62.2	0.0		CLAY, fat, high plasticity, firm, mostly clay, little fine-grained sand-sized quartz, wet, 5B 4/1 dark bluish gray (CH)	100	1		-62.2	0	
							-64.2		
-66.2	4.0		SAND, silty, mostly fine-grained sand-sized quartz, some silt, few fine to medium-grained sand-sized shell, wet, some weak cementation, 10YR 7/1 light gray (SM)	98			-66.2	5	
							-66.2		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District				SHEET 2								
							OF 2 SHEETS								
PROJECT St. Johns County Offshore			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83		VERTICAL NAVD88								
LOCATION COORDINATES X = 608,881 Y = 1,957,932			ELEVATION TOP OF BORING -62.2 Ft.												
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE						
-81.9	19.7	↑↑↑↑↑		98			Vibracore								
-82.2	20.0	NO REC					-82.2								
			<p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align:left;">SAMPLE ID</th> <th style="text-align:left;">SAMPLE DEPTH</th> <th style="text-align:left;">LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">1</td> <td style="text-align:center;">2.0/2.5</td> <td style="text-align:center;">CH*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p>							SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	CH*
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION													
1	2.0/2.5	CH*													

Penetrometer Graphs

Depth

vs.

Time



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -42.6'

Core Identifier VB-SJSP09-1

Coordinate System

State Plane Coordinates (SPC)

561772.8817 X

2110592.134 Y

FL East Zone

Start Time 12:57:47

End Time 13:00:13

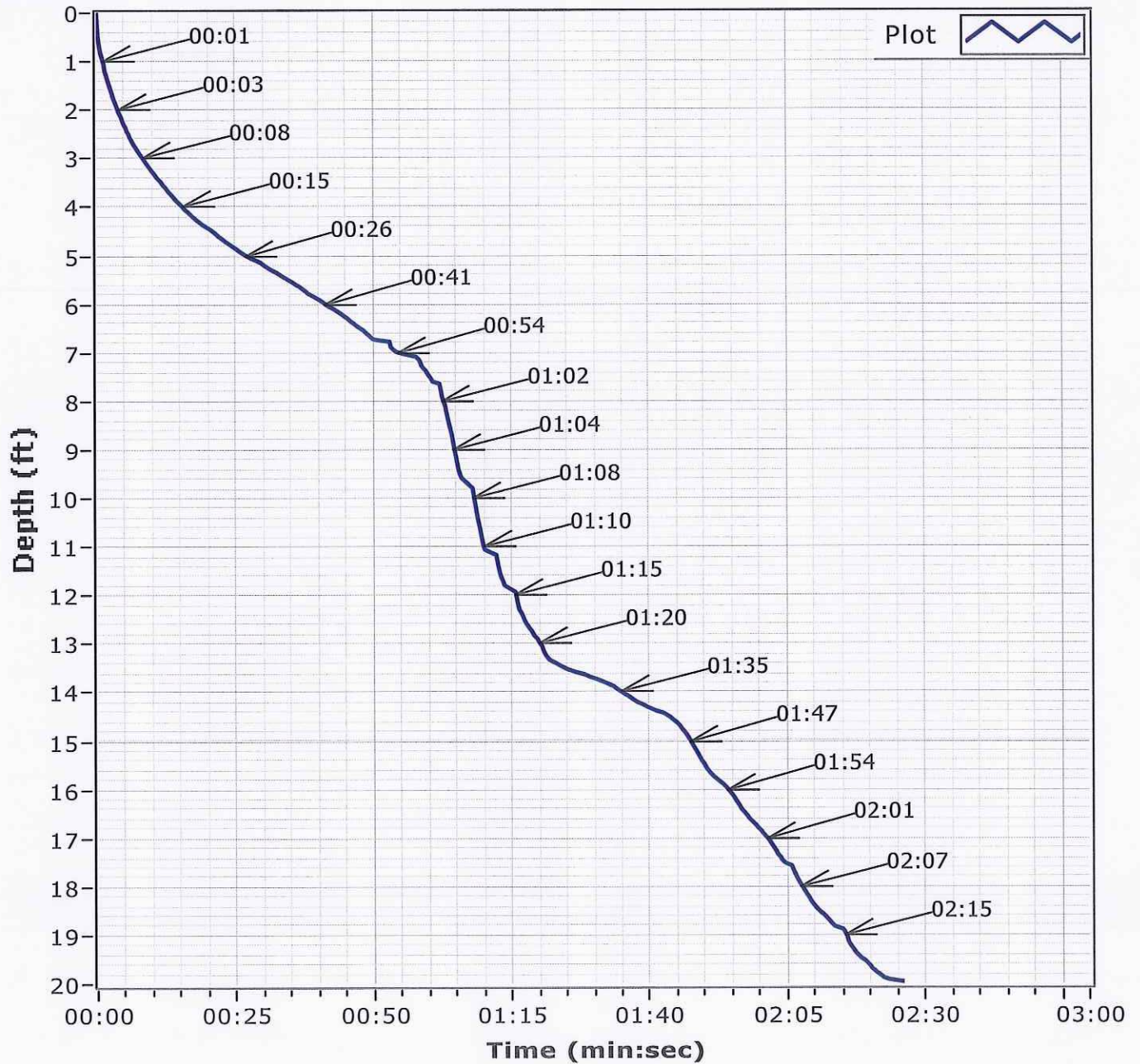
Total Time 00:02:26

Penetration 20.0'

Recovery 19.8'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -53.6'

Core Identifier VB-SJSP09-2

Coordinate System

State Plane Coordinates (SPC)

568401.6056 X

2094659.99 Y

FL East Zone

Start Time 14:20:52

End Time 14:21:24

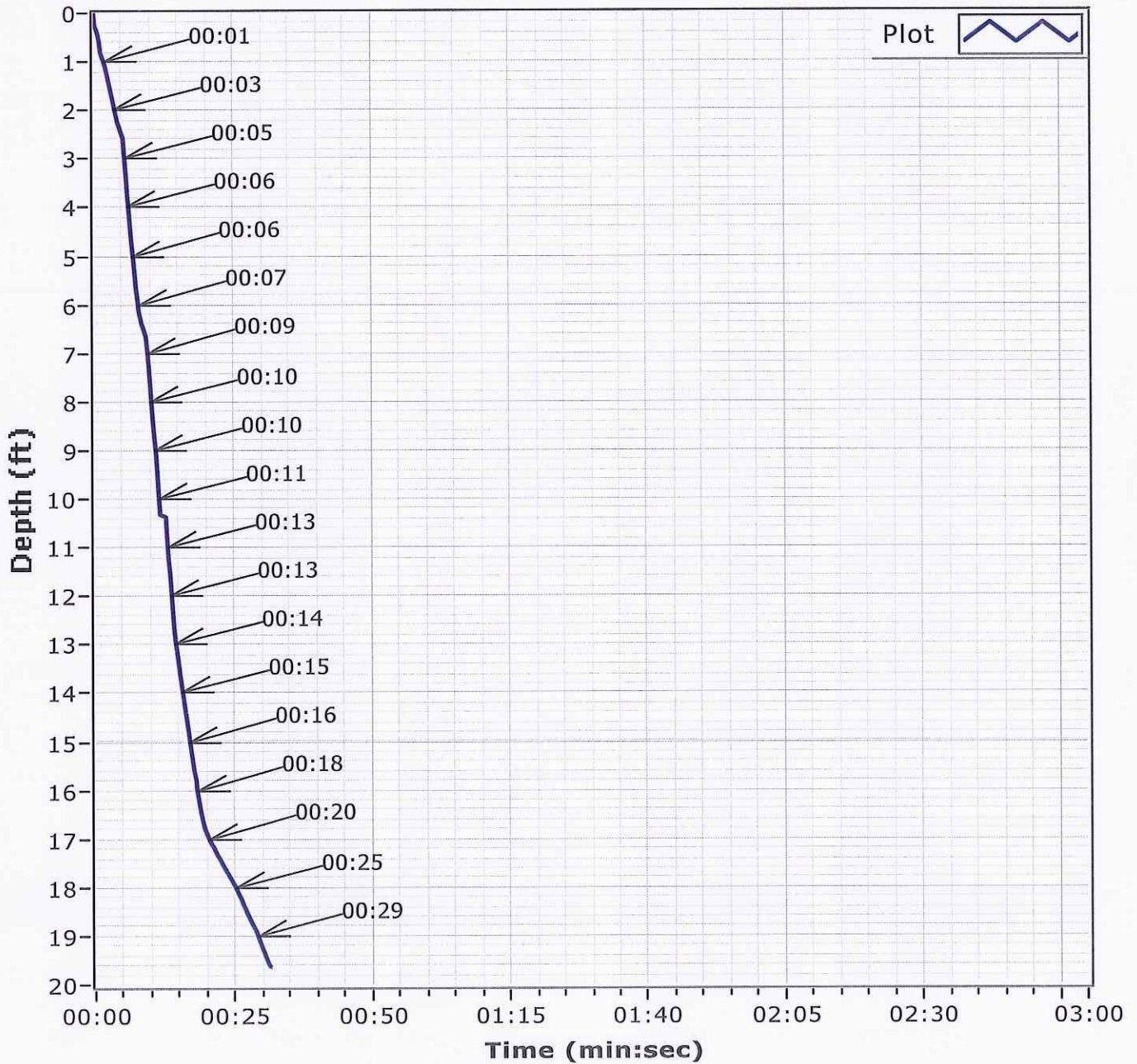
Total Time 00:00:31

Penetration 19.6'

Recovery 16.7'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -51.2'

Core Identifier VB-SJSP09-3

Coordinate System

State Plane Coordinates (SPC)

575994.032 X

2088187.797 Y

FL East Zone

Start Time 14:57:47

End Time 14:58:29

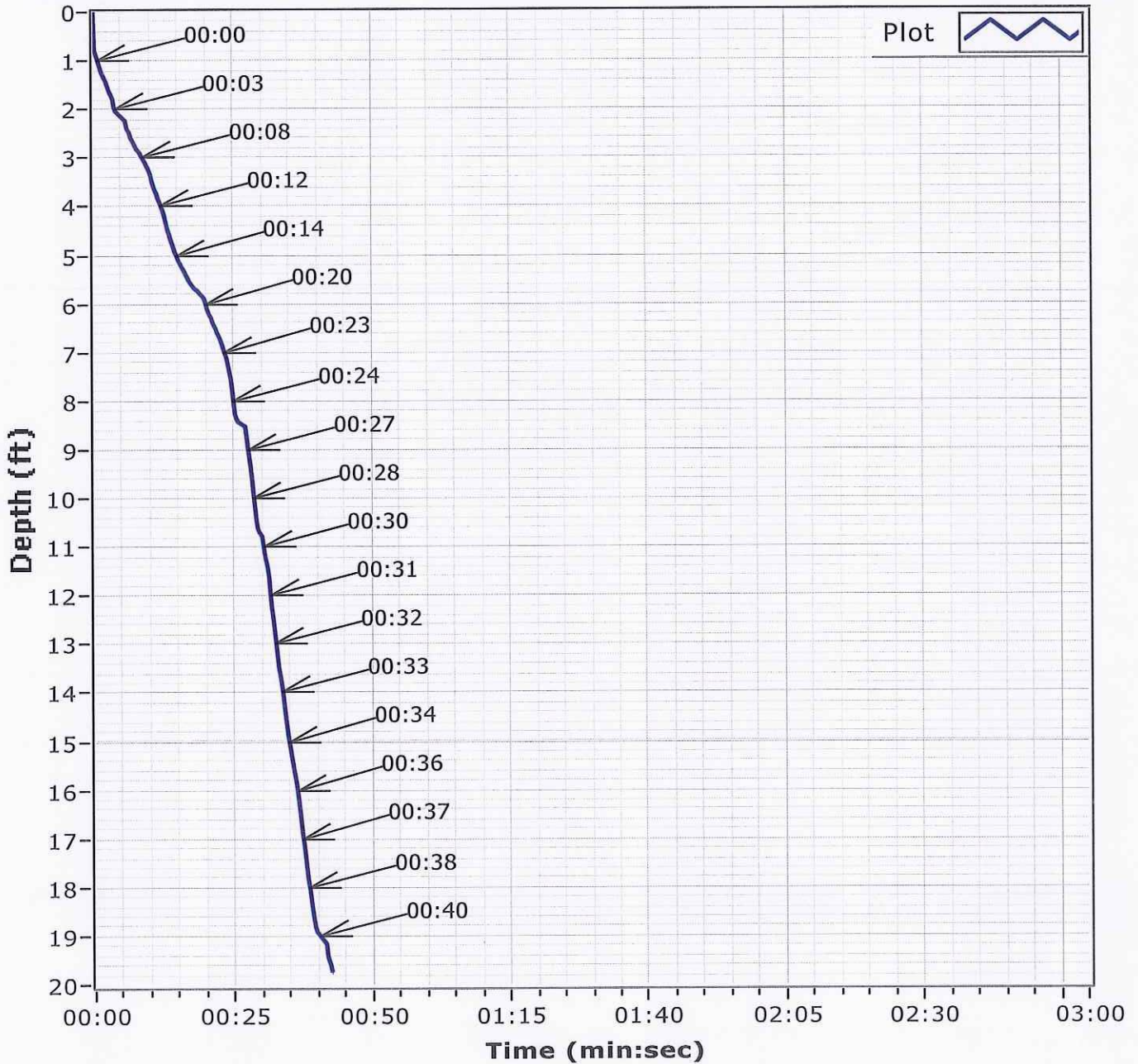
Total Time 00:00:42

Penetration 19.7'

Recovery 17.2'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -57.3'

Core Identifier VB-SJSP09-4

Coordinate System

Start Time 16:18:45

State Plane Coordinates (SPC)

End Time 16:21:38

Penetration 20.0'

577224.959 X

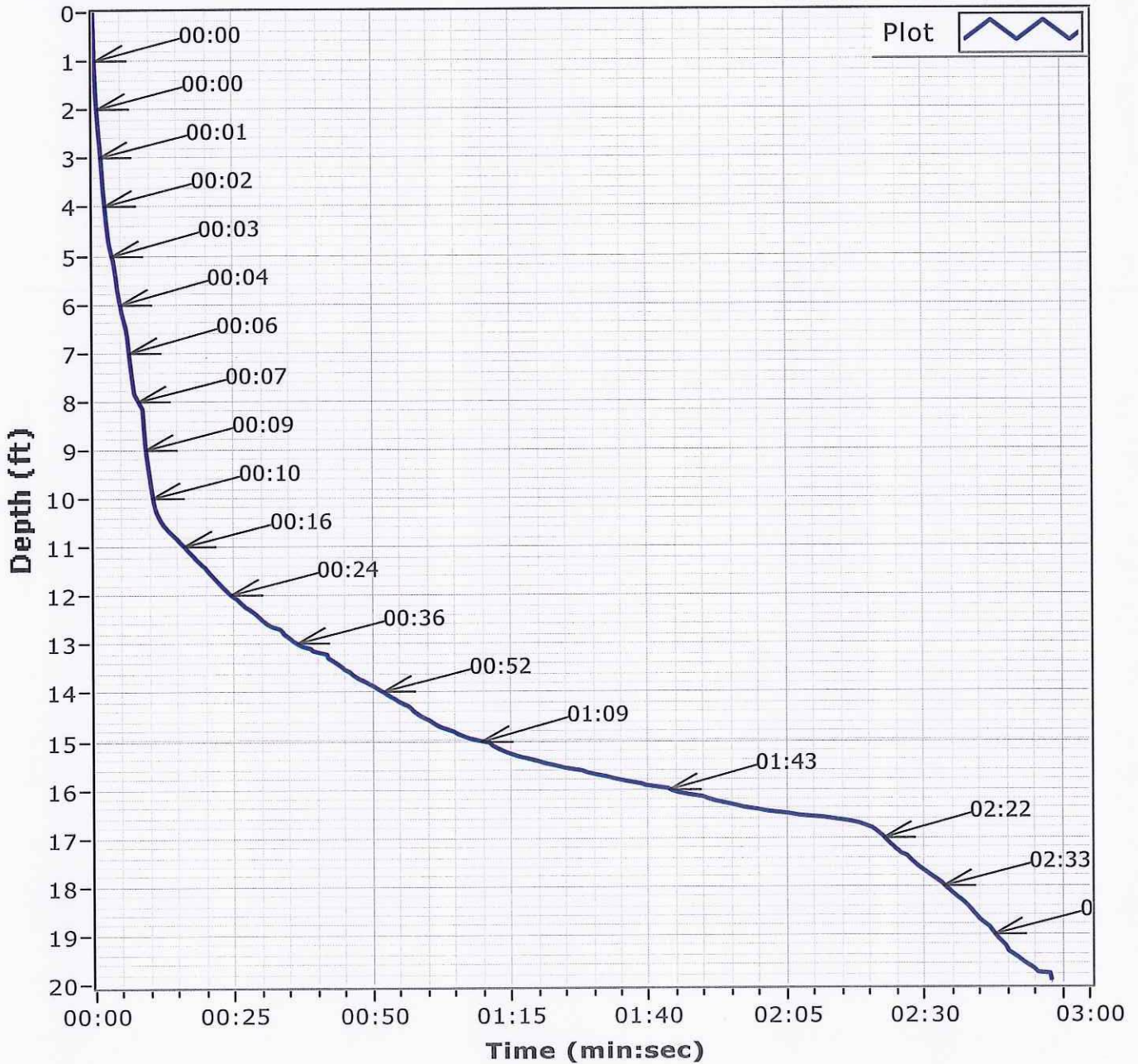
Total Time 00:02:53

Recovery 17.8'

2071346.669 Y

FL East Zone

Comments



Project ST JOHNS COUNTY OFFSHORE I



Date 10/29/2009

Water Depth -46.2'

Core Identifier VB-SJSP09-5

Coordinate System

State Plane Coordinates (SPC)

599780.9741 X

2067393.762 Y

FL East Zone

Start Time 14:49:14

End Time 14:54:15

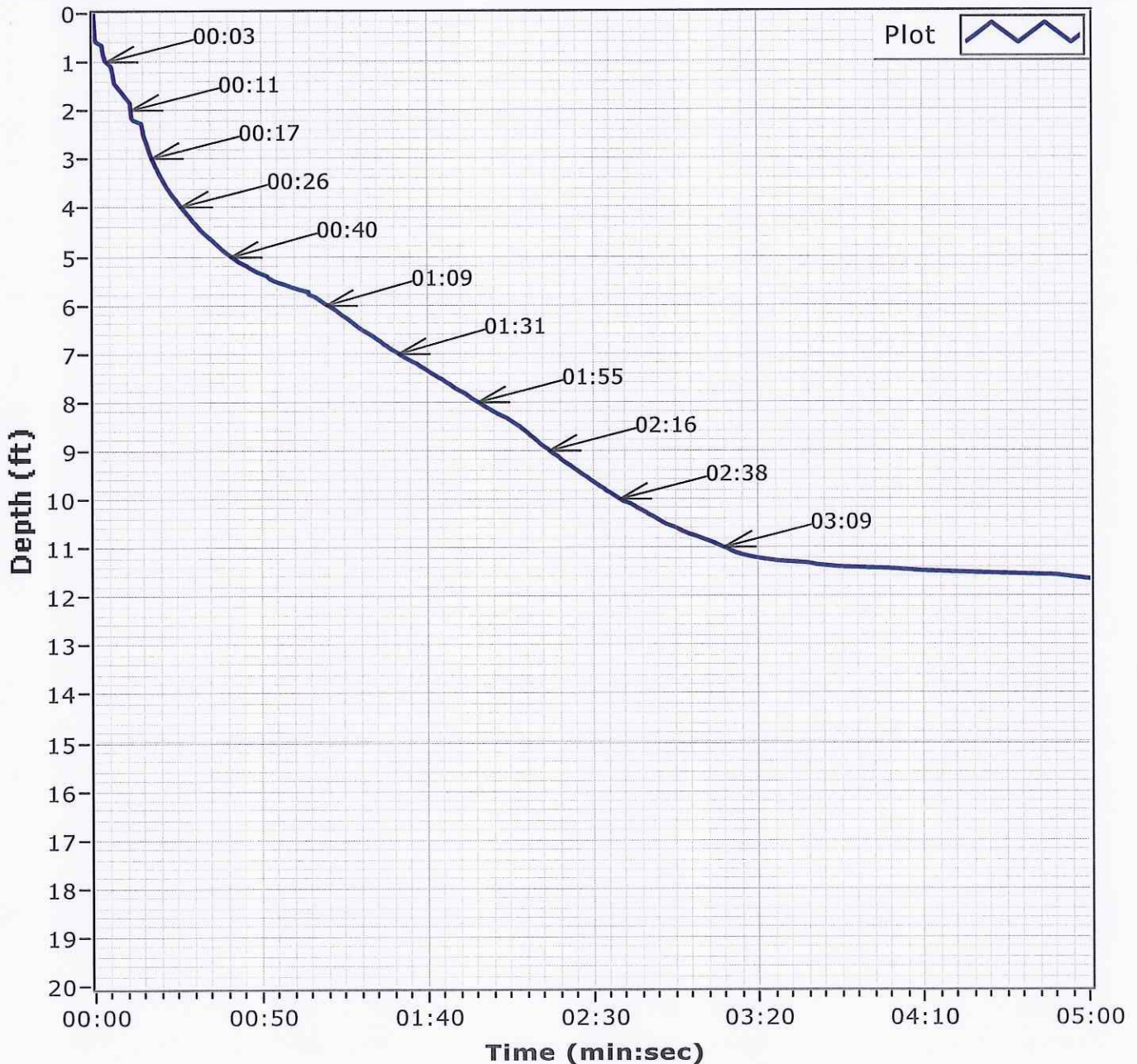
Total Time 00:05:00

Penetration 11.7'

Recovery 11.7'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/29/2009

Water Depth -58.4'

Core Identifier VB-SJSP09-6

Coordinate System

State Plane Coordinates (SPC)

583825.5878 X

2060000.3 Y

FL East Zone

Start Time 15:42:39

End Time 15:44:18

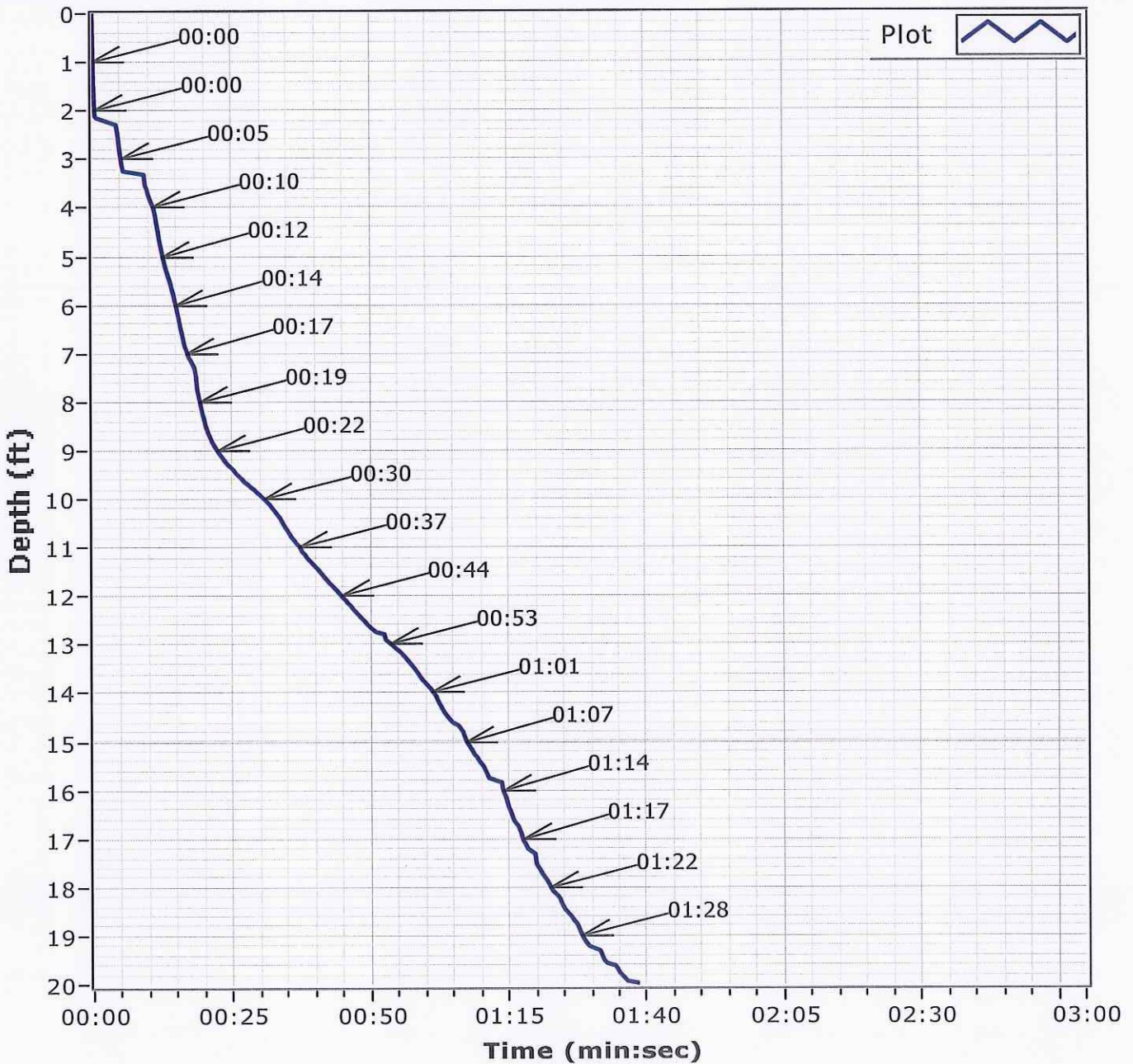
Total Time 00:01:38

Penetration 20.0'

Recovery 18.6'

Comments

[Empty comment box]



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -56.0'

Core Identifier VB-SJSP09-7

Coordinate System

State Plane Coordinates (SPC)

584526.8316 X

2055267.3143 Y

FL East Zone

Start Time 08:59:44

End Time 09:01:06

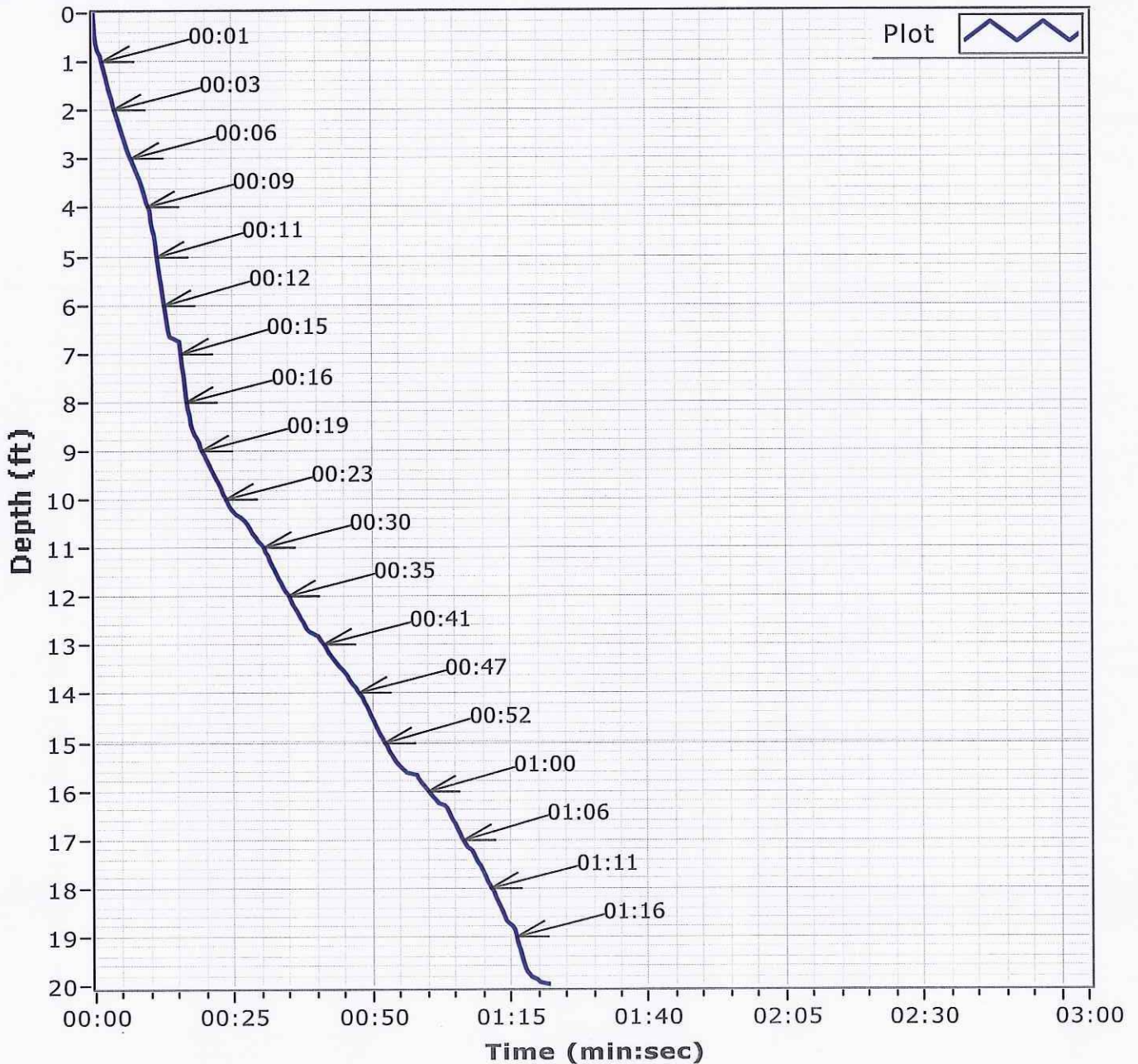
Total Time 00:01:22

Penetration 20.0'

Recovery 19.0'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/28/2009

Water Depth -54.6'

Core Identifier VB-SJSP09-08

Coordinate System

State Plane Coordinates (SPC)

591339.3144 X

2046257.3006 Y

FL East Zone

Start Time 08:02:24

End Time 08:04:26

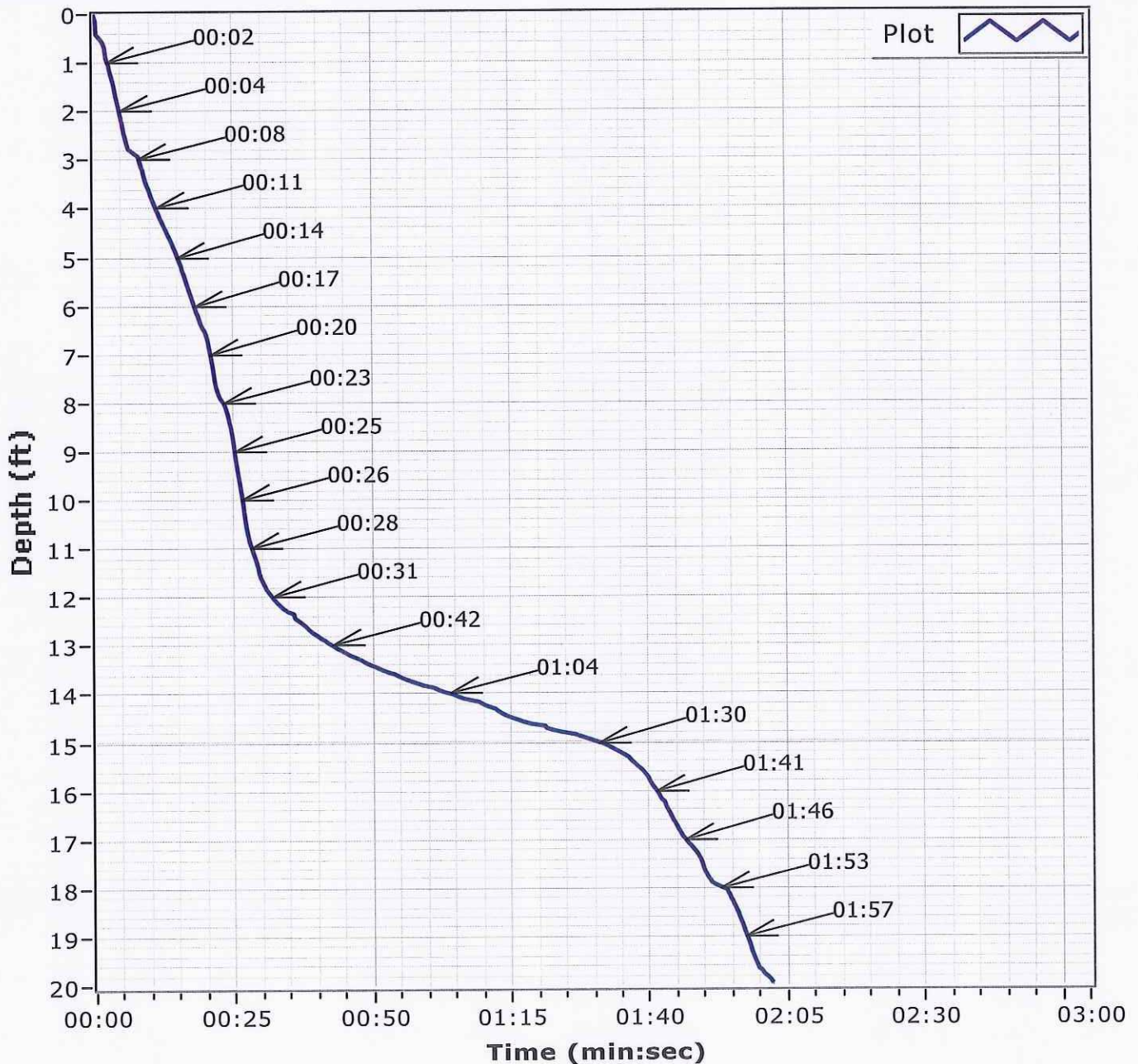
Total Time 00:02:02

Penetration 20.0'

Recovery 17.7'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 10/27/2009

Water Depth -61.2'

Core Identifier VB SJSP09-9

Coordinate System

Start Time 08:30:39

State Plane Coordinates (SPC)

End Time 08:35:31

Penetration 19.4'

592256.8082 X

Total Time 00:04:51

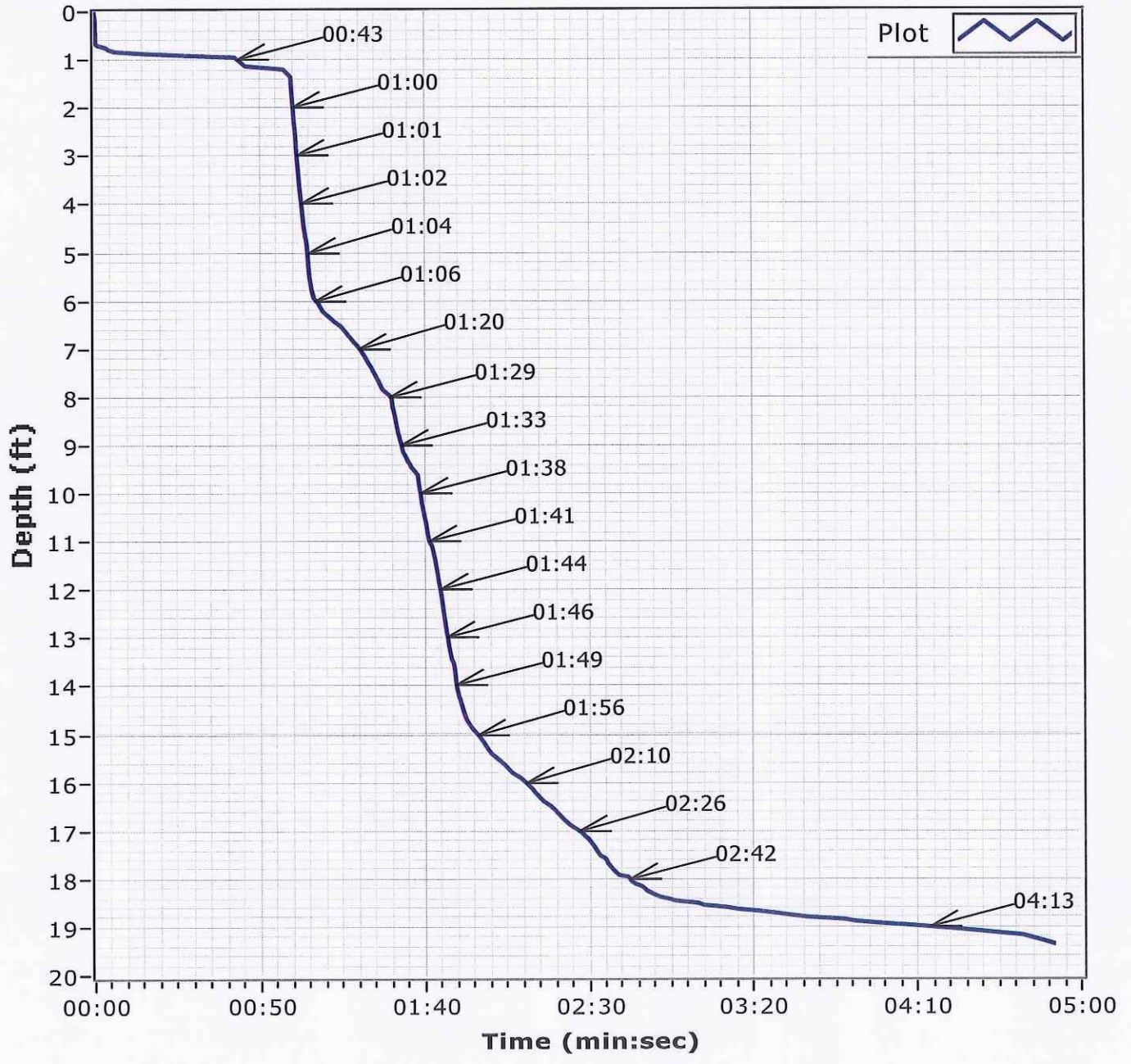
Recovery 19.4'

2037309.821 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -50.7'

Core Identifier VB-SJSP09-10

Coordinate System

Start Time 08:41:31

State Plane Coordinates (SPC)

End Time 08:45:25

Penetration 20.0'

608394.1238 X

Total Time 00:03:53

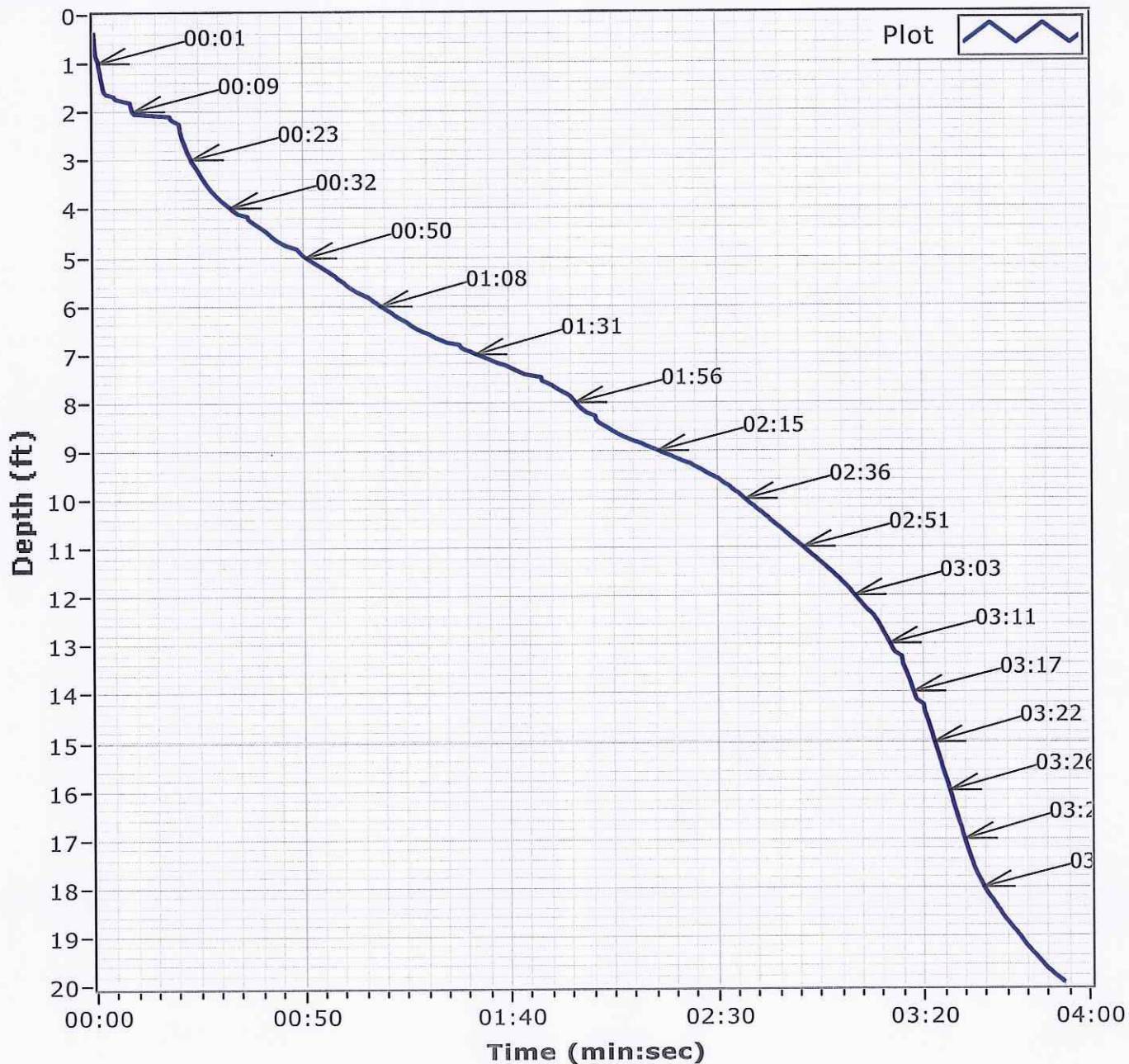
Recovery 18.9'

1997234.466 Y

FL East Zone

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -53.3'

Core Identifier VB-SJSP09-11

Coordinate System

State Plane Coordinates (SPC)

610468.2886 X

1995523.734 Y

FL East Zone

Start Time 09:00:05

End Time 09:02:15

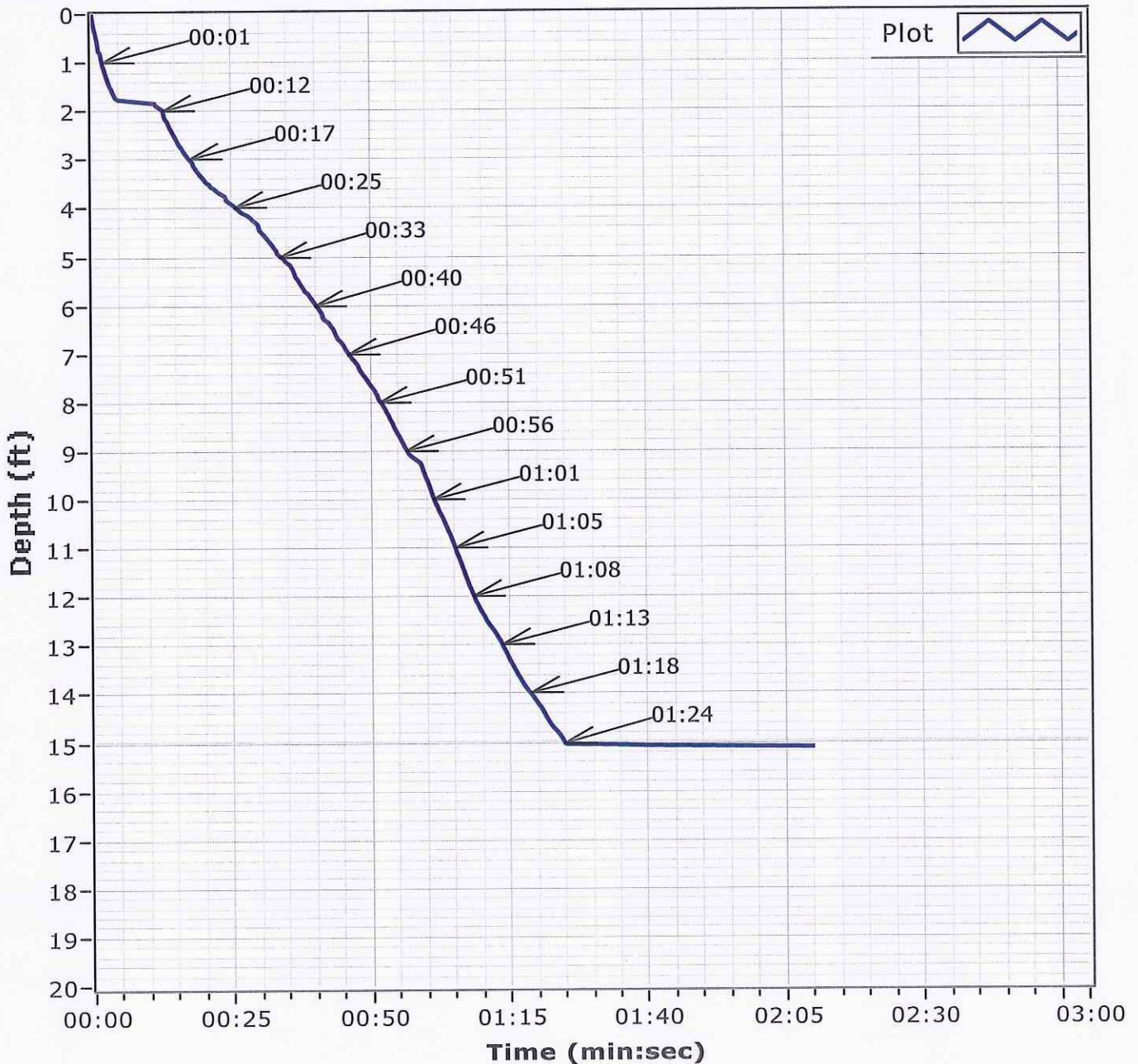
Total Time 00:02:10

Penetration 15.1'

Recovery 13.9'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -55.3'

Core Identifier VB-SJSP09-12

Coordinate System

State Plane Coordinates (SPC)

611280.3955 X

1995869.291 Y

FL East Zone

Start Time 09:13:47

End Time 09:15:59

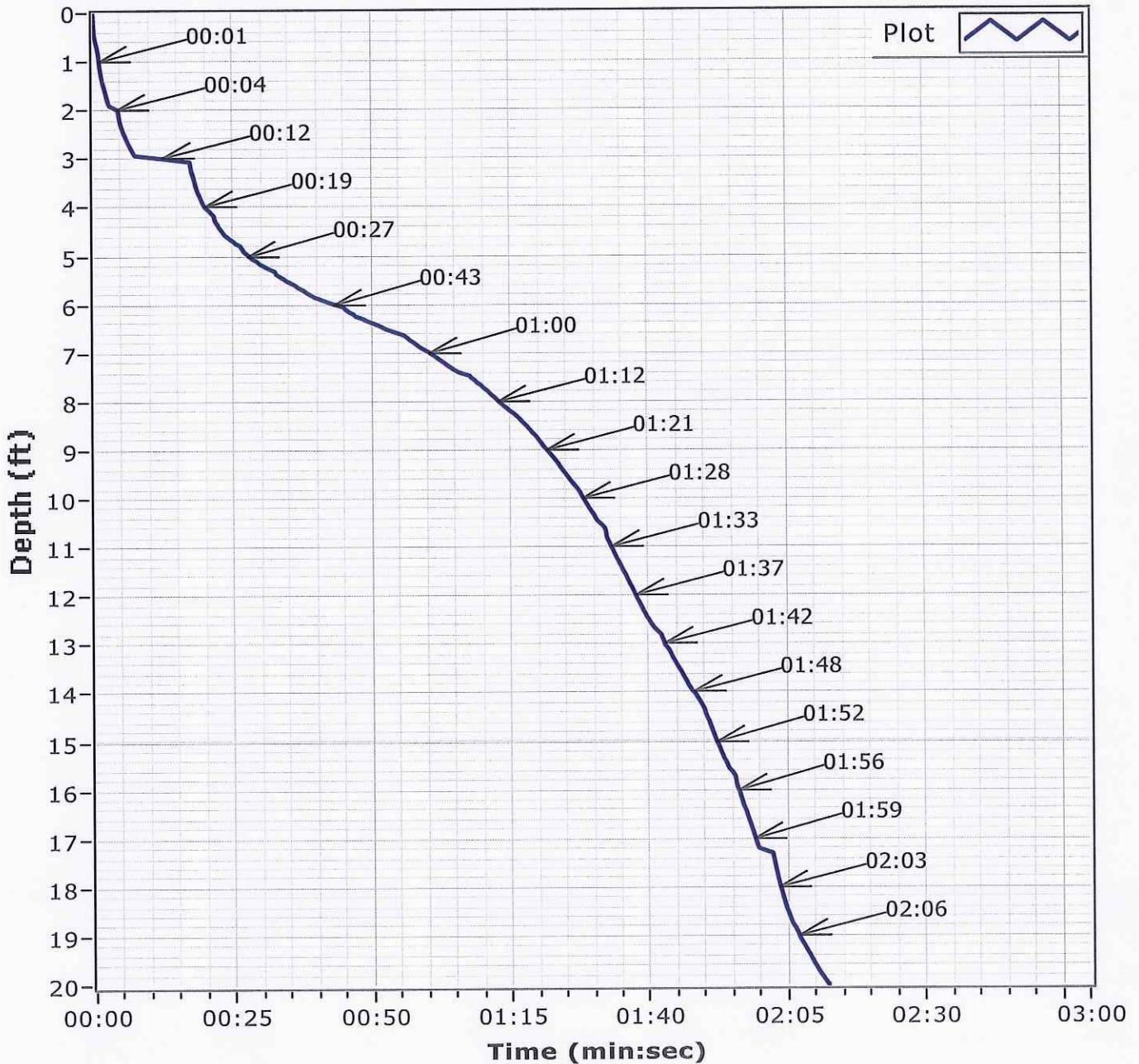
Total Time 00:02:12

Penetration 20.0'

Recovery 20.0'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -53.7'

Core Identifier VB-SJSP09-13

Coordinate System

State Plane Coordinates (SPC)

612093.6025 X

1996285.491 Y

FL East Zone

Start Time 09:26:22

End Time 09:30:50

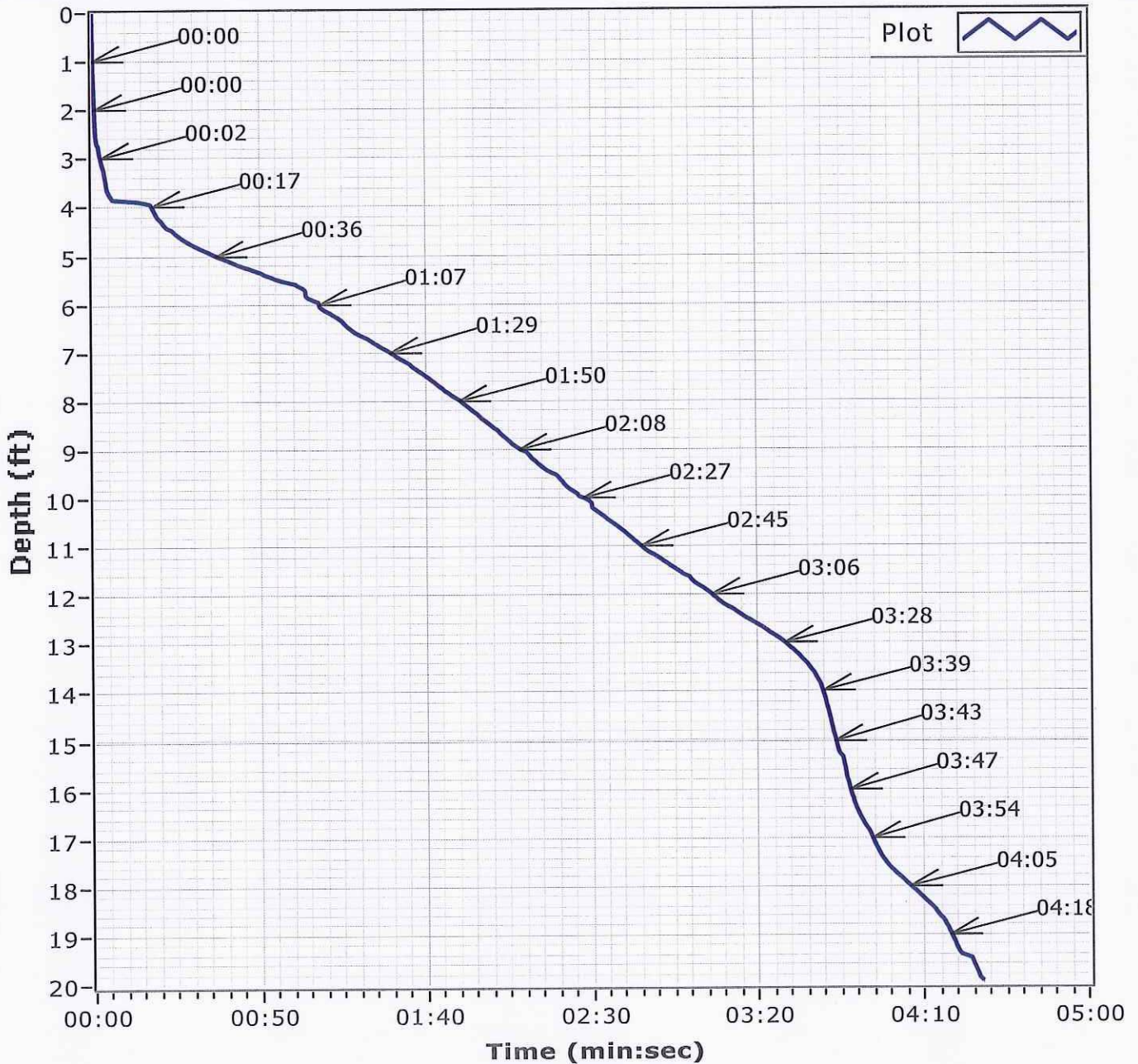
Total Time 00:04:27

Penetration 19.9'

Recovery 19.5'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -56.3'

Core Identifier VB-SJSP09-14

Coordinate System

State Plane Coordinates (SPC)

612573.6085 X

1995435.68 Y

FL East Zone

Start Time 09:42:28

End Time 09:45:59

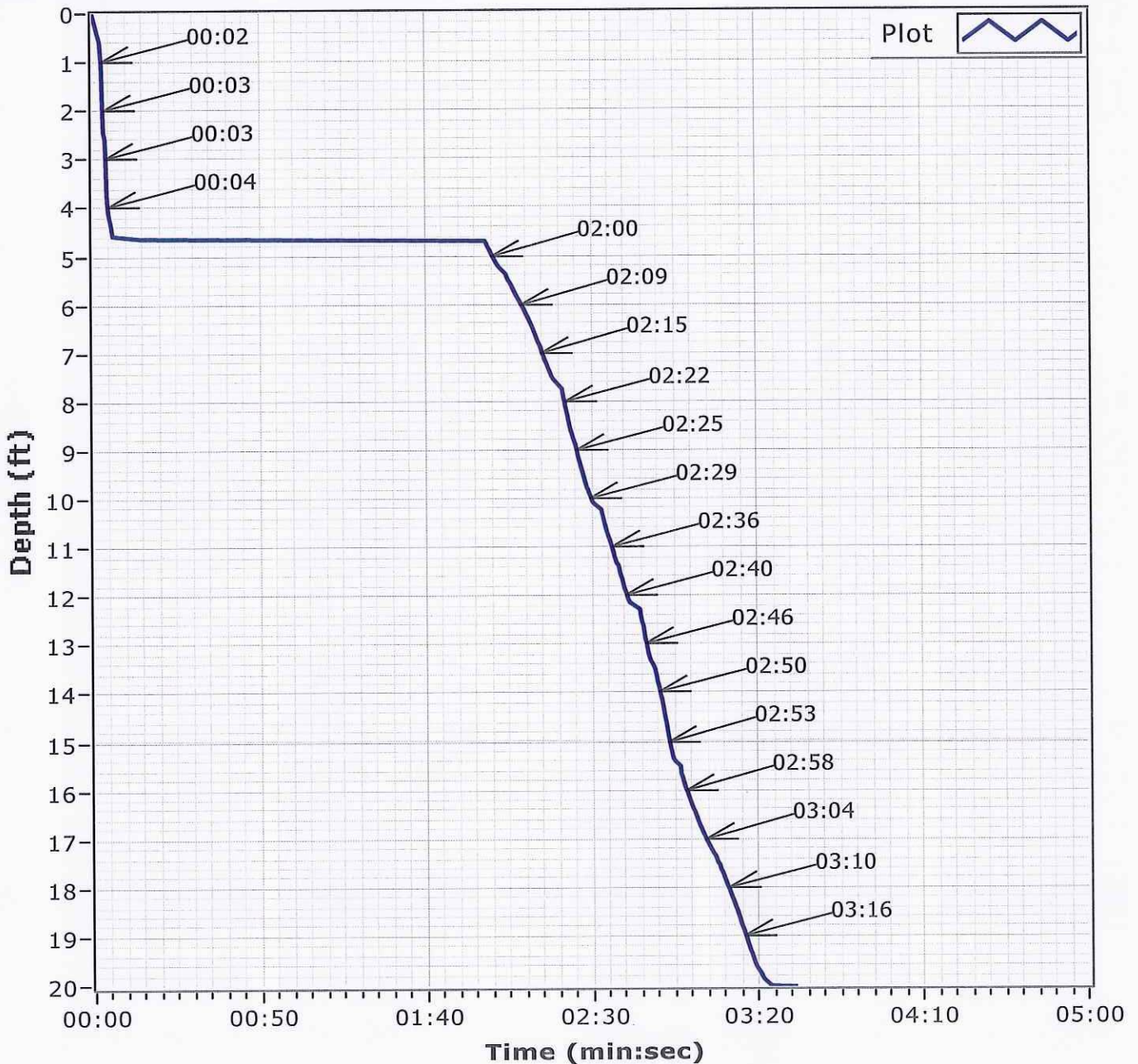
Total Time 00:03:31

Penetration 20.0'

Recovery 18.9'

Comments

Note: Compressor stalled and restarted



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -60.0'

Core Identifier VB-SJSP09-15

Coordinate System

State Plane Coordinates (SPC)

613013.977 X

1994695.272 Y

FL East Zone

Start Time 10:04:00

End Time 10:06:41

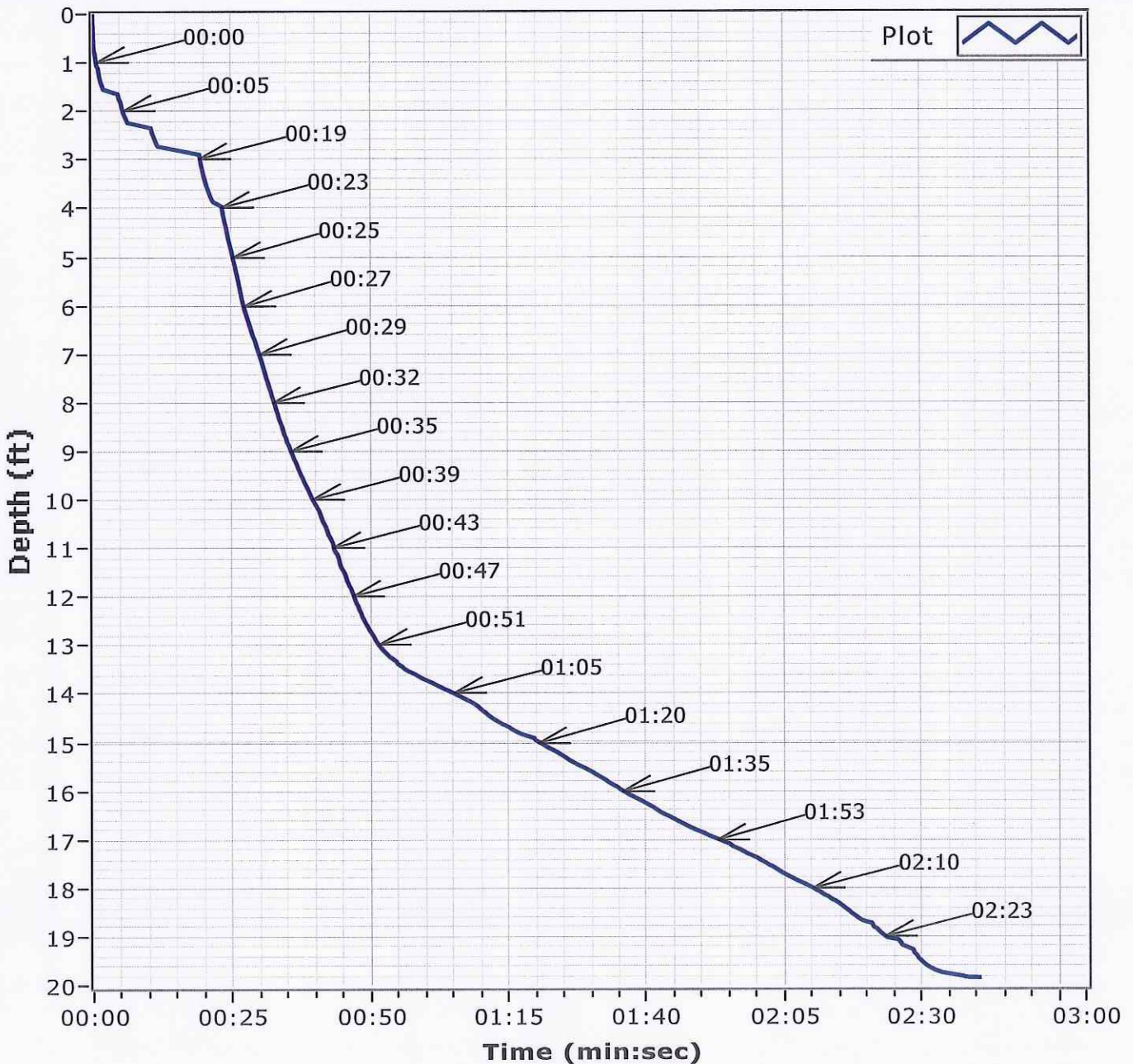
Total Time 00:02:40

Penetration 19.8'

Recovery 17.6'

Comments

[Empty comment box]



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -57.2

Core Identifier VB-SJSP09-16

Coordinate System

State Plane Coordinates (SPC)

612151.953 X

1994235.667 Y

FL East Zone

Start Time 10:17:42

End Time 10:20:26

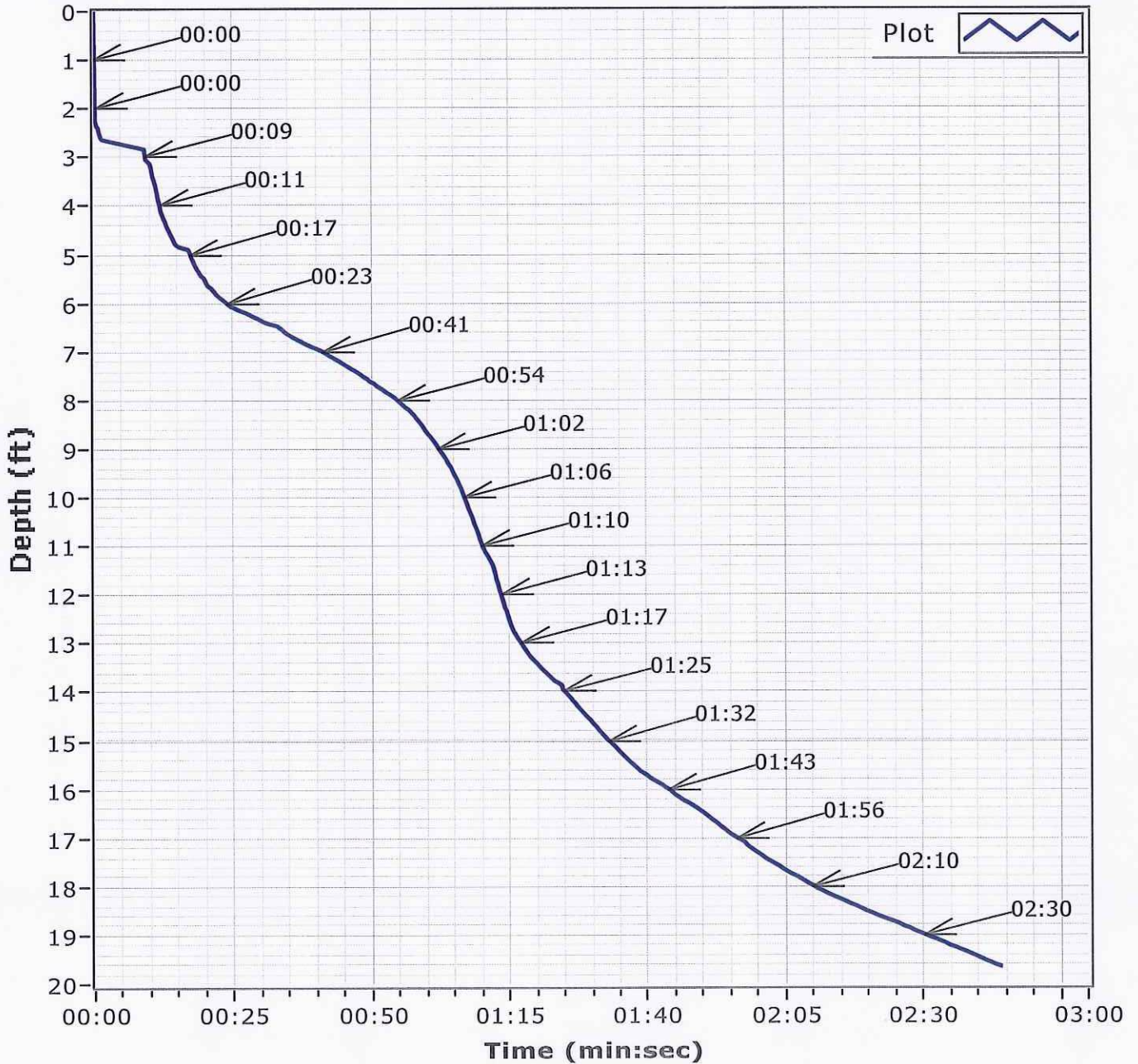
Total Time 00:02:44

Penetration 19.6'

Recovery 16.7'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -55.6'

Core Identifier VB-SJSP09-17

Coordinate System

State Plane Coordinates (SPC)

611337.511 X

1993806.328 Y

FL East Zone

Start Time 10:30:51

End Time 10:35:01

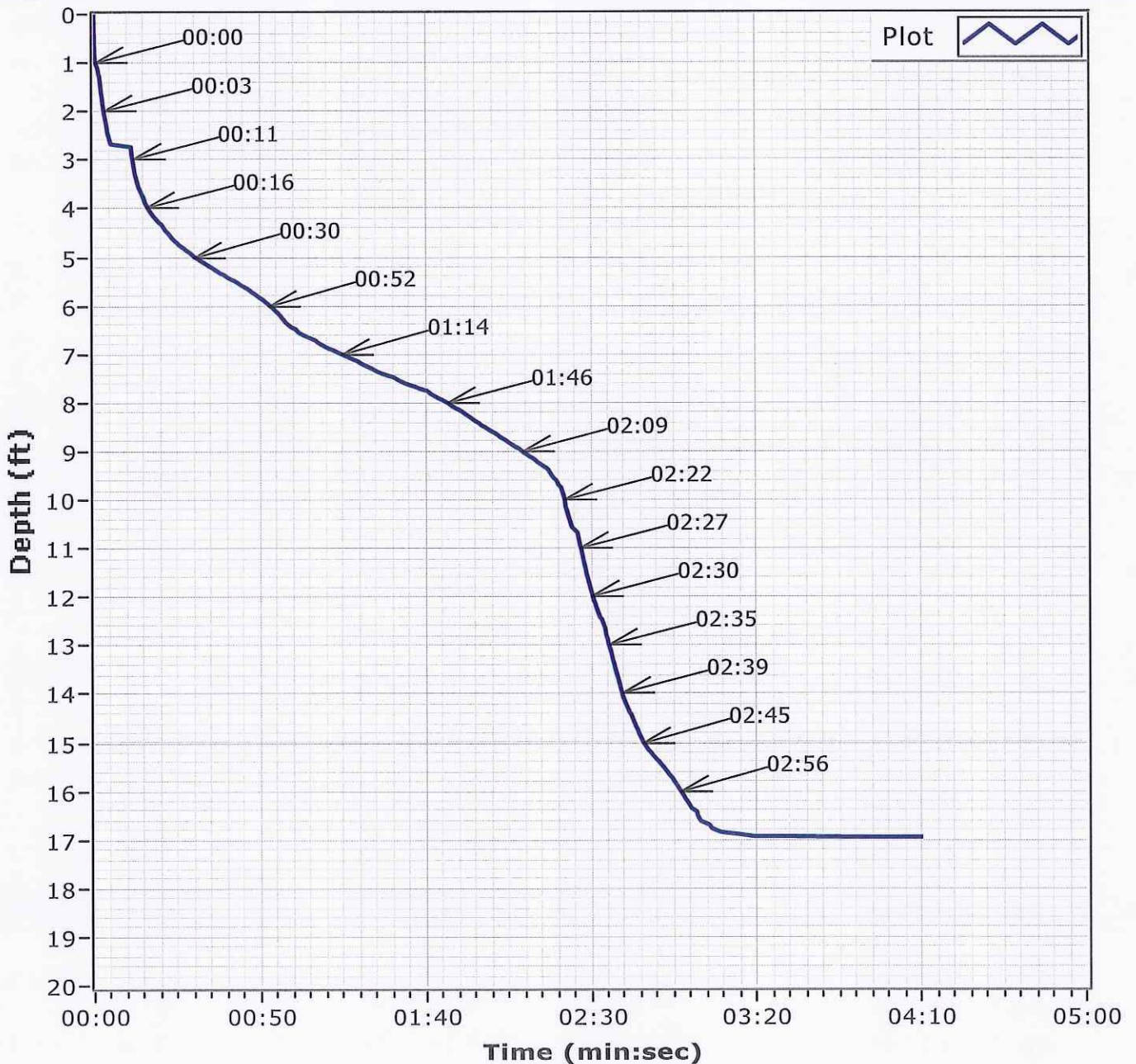
Total Time 00:04:10

Penetration 16.9'

Recovery 15.8'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -56.4'

Core Identifier VB-SJSP09-18

Coordinate System

State Plane Coordinates (SPC)

610904.7536 X

1994658.515 Y

FL East Zone

Start Time 10:44:47

End Time 10:48:30

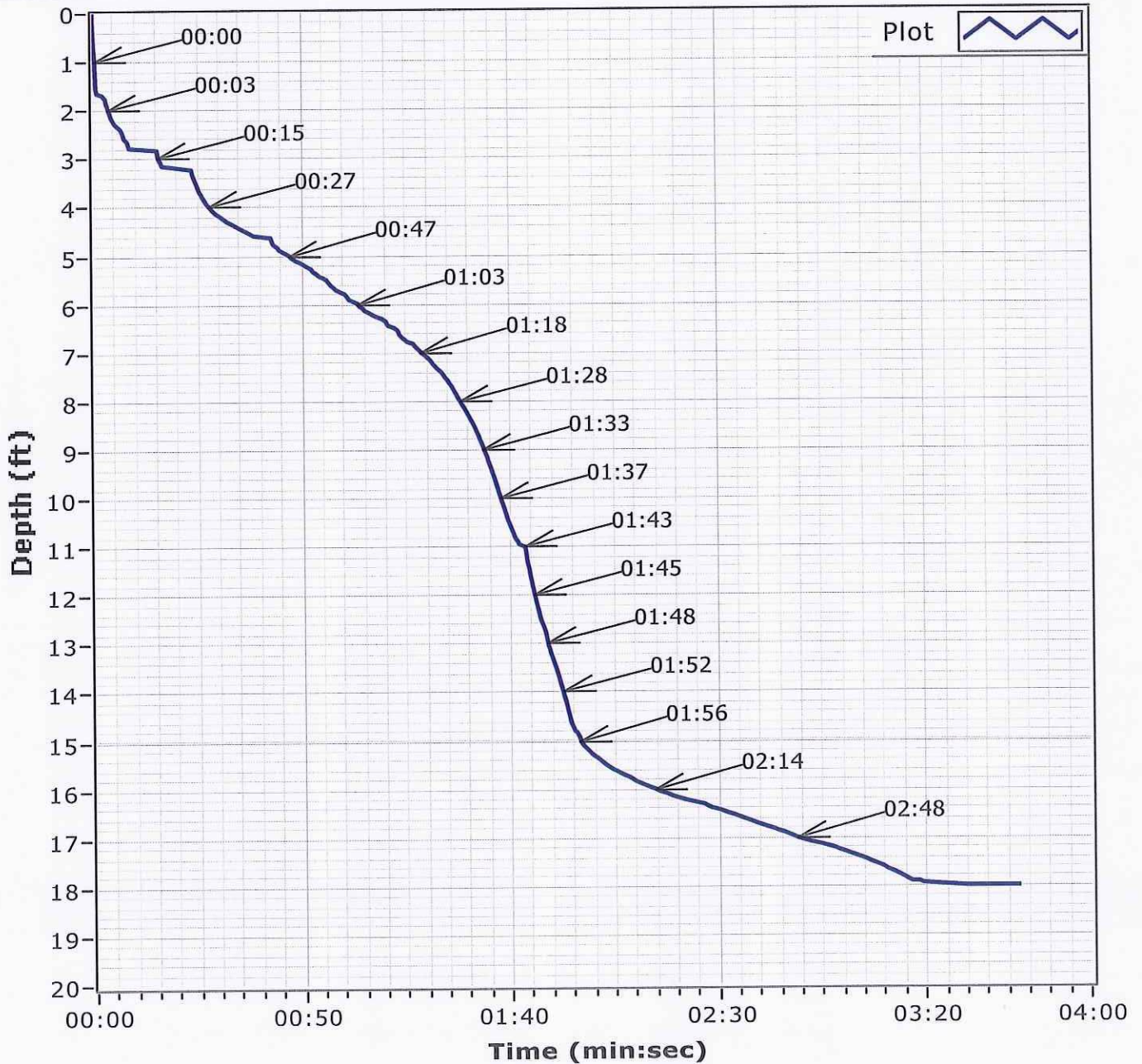
Total Time 00:03:42

Penetration 18.0'

Recovery 17.1'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -57.2'

Core Identifier VB-SJSP09-19

Coordinate System

State Plane Coordinates (SPC)

606186.6887 X

1990840.187 Y

FL East Zone

Start Time 11:05:28

End Time 11:06:33

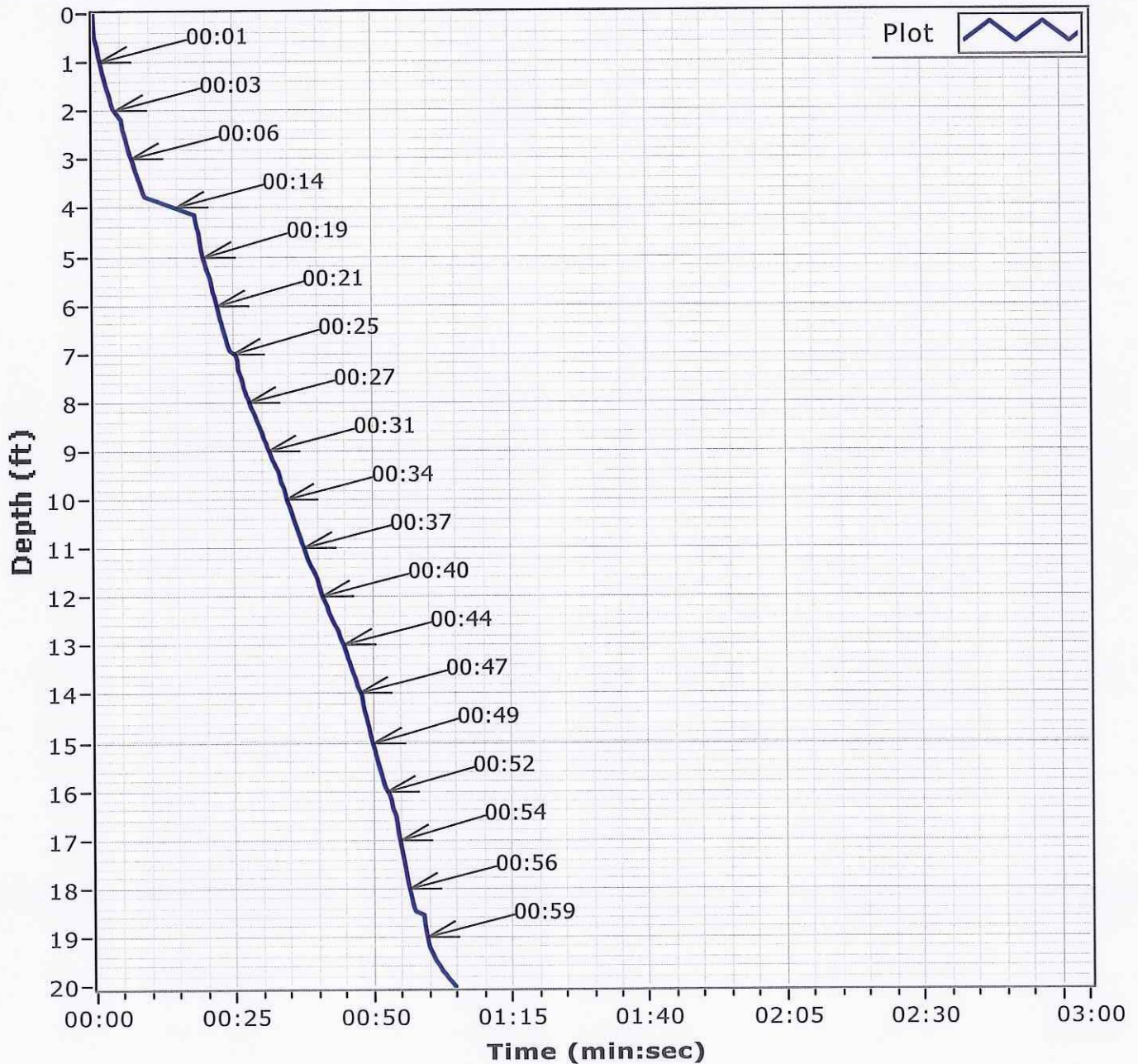
Total Time 00:01:05

Penetration 20.0'

Recovery 18.7'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE I



Date 11/19/2009

Water Depth -58.9'

Core Identifier VB-SJSP09-20

Coordinate System

State Plane Coordinates (SPC)

612300.4895 X

1979731.513 Y

FL East Zone

Start Time 11:19:00

End Time 11:19:00

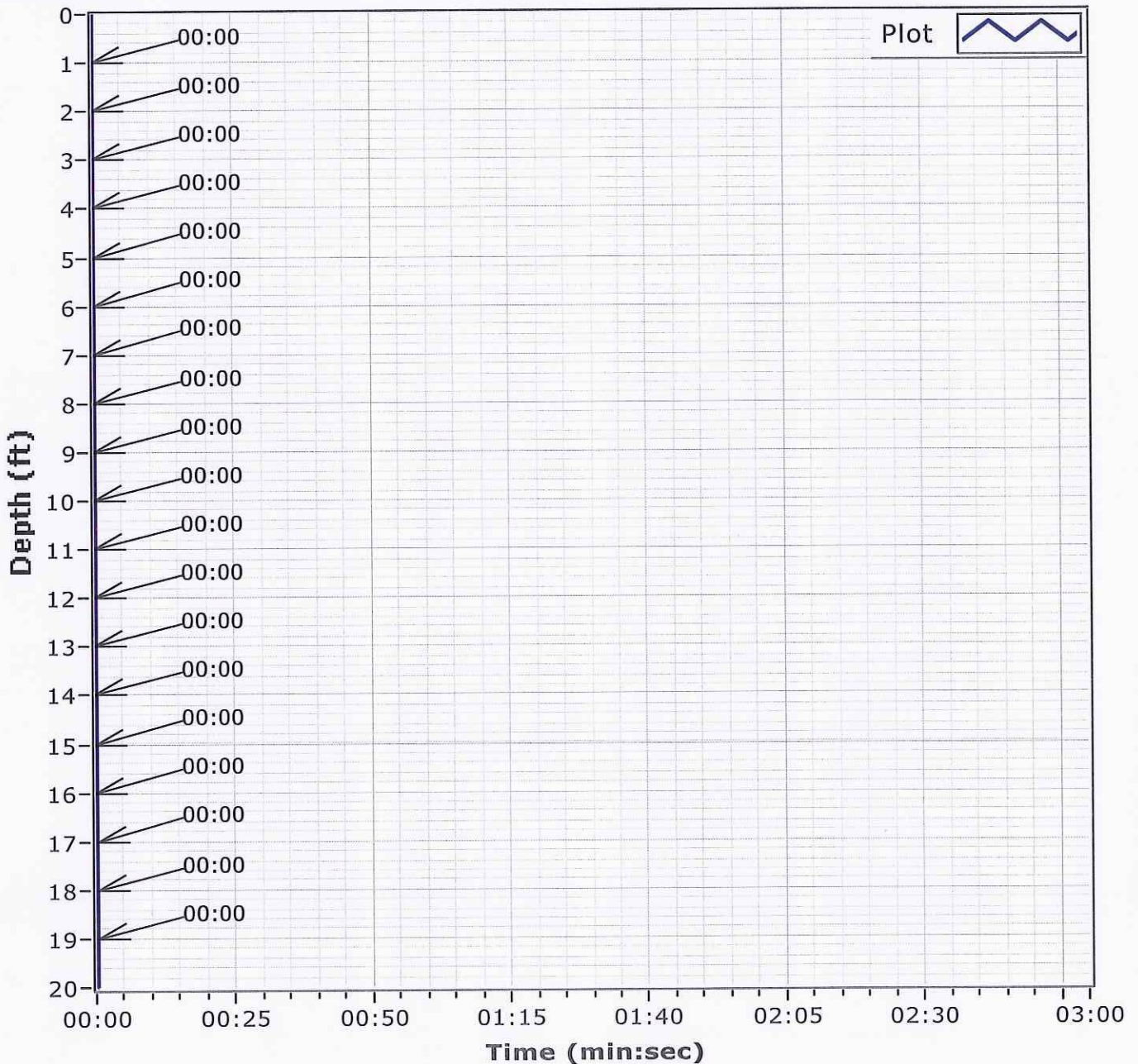
Total Time 00:00:00

Penetration 20.0'

Recovery 19.6'

Comments

Penetrometer internal failure - Replaced penetrometer - 20.0' penetration visible on core pipe



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -53.6'

Core Identifier VB-SJSP09-21

Coordinate System

State Plane Coordinates (SPC)

567763.2512 X

2115073.881 Y

FL East Zone

Start Time 11:27:35

End Time 11:28:27

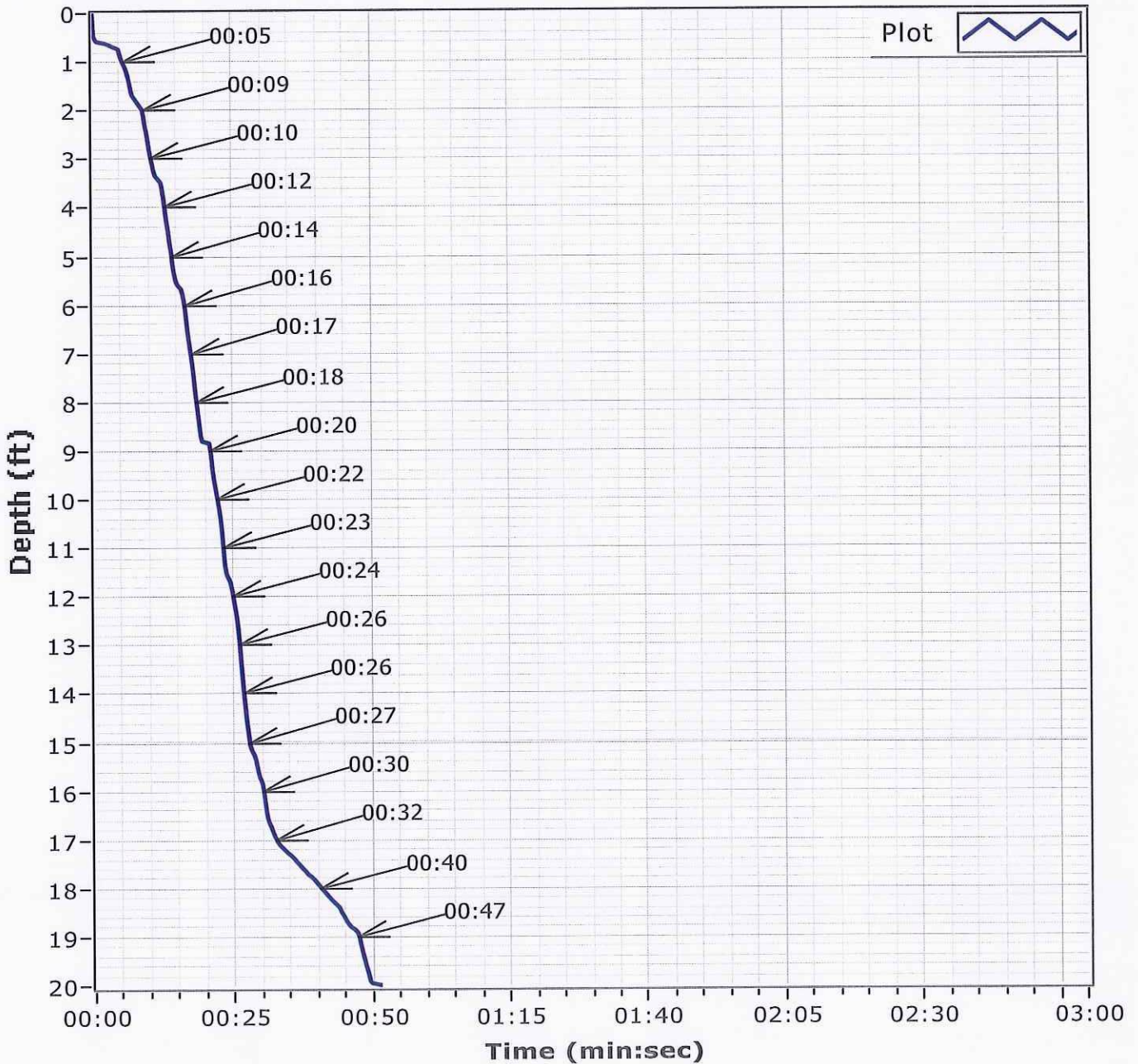
Total Time 00:00:51

Penetration 20.0'

Recovery 19.3'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -47.1'

Core Identifier VB-SJSP09-22

Coordinate System

Start Time 10:59:11

State Plane Coordinates (SPC)

End Time 11:01:07

Penetration 20.0'

570381.1724 X

Total Time 00:01:55

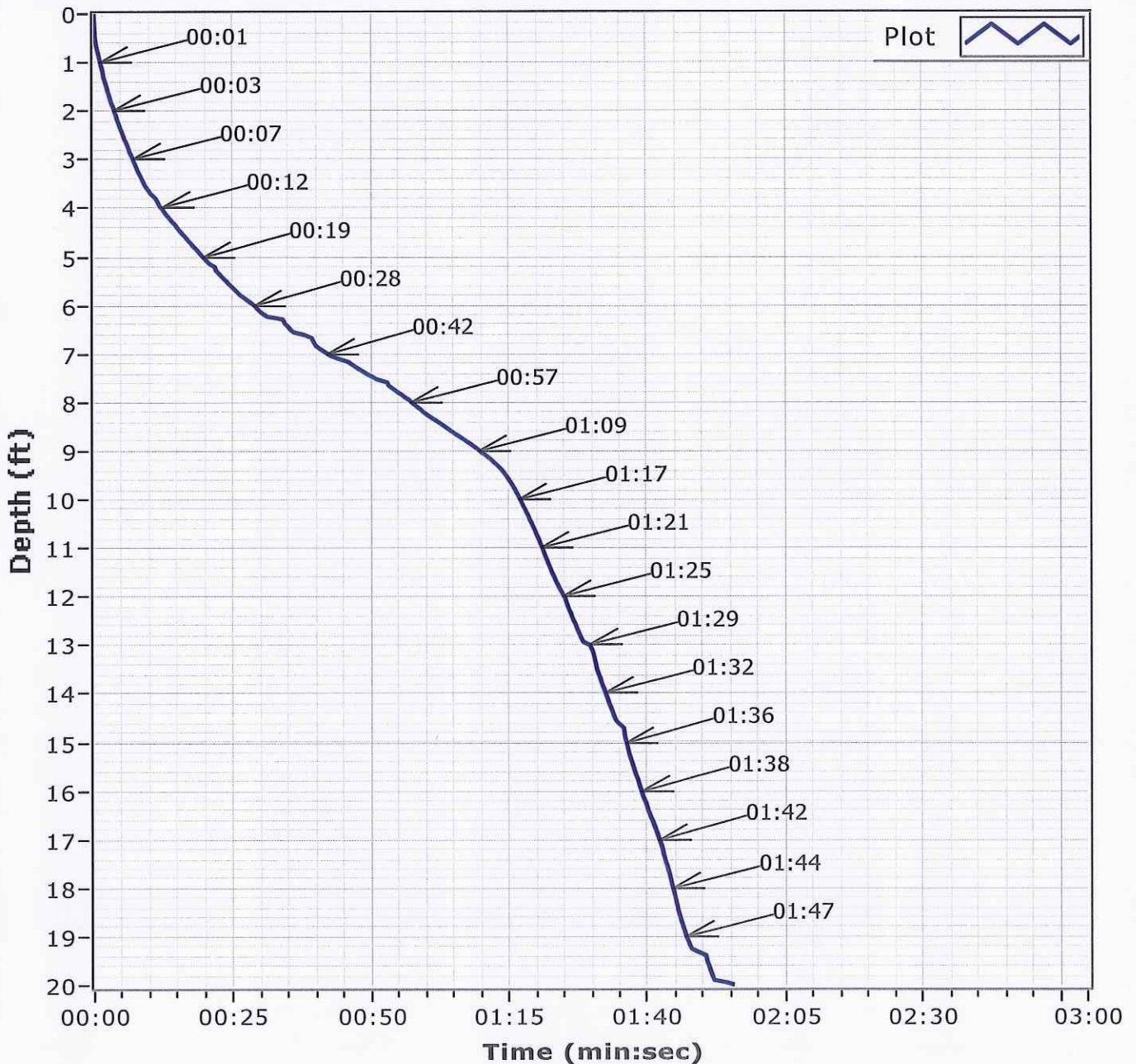
Recovery 17.8'

2116309.483 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -47.1'

Core Identifier VB-SJSP09-23

Coordinate System

Start Time 11:52:14

State Plane Coordinates (SPC)

End Time 11:55:46

Penetration 20.0'

569515.7591 X

Total Time 00:03:32

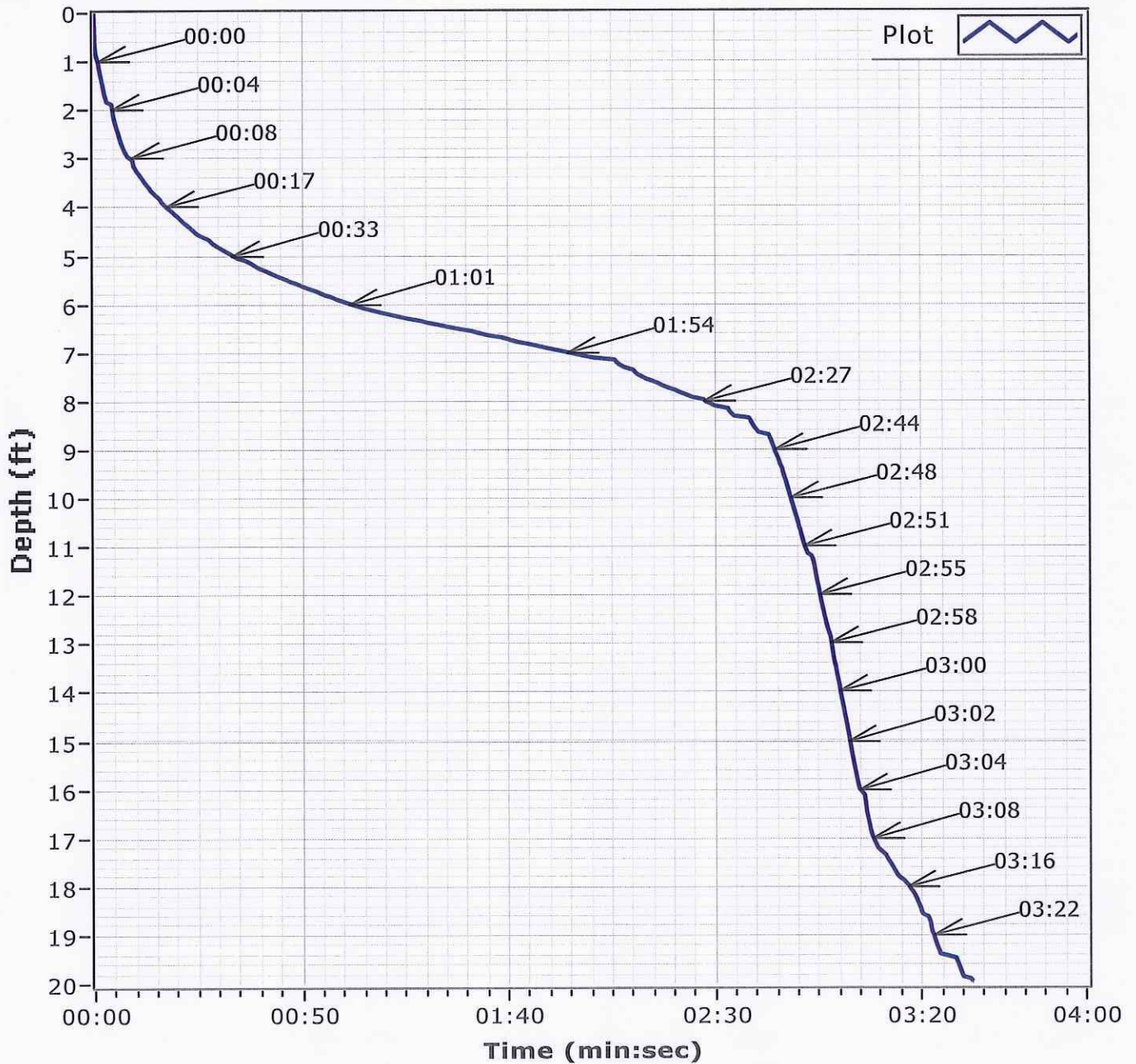
Recovery 19.8'

2112498.242 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -48.4'

Core Identifier VB-SJSP09-24

Coordinate System

State Plane Coordinates (SPC)

572023.1495 X

2113686.374 Y

FL East Zone

Start Time 12:15:43

End Time 12:18:36

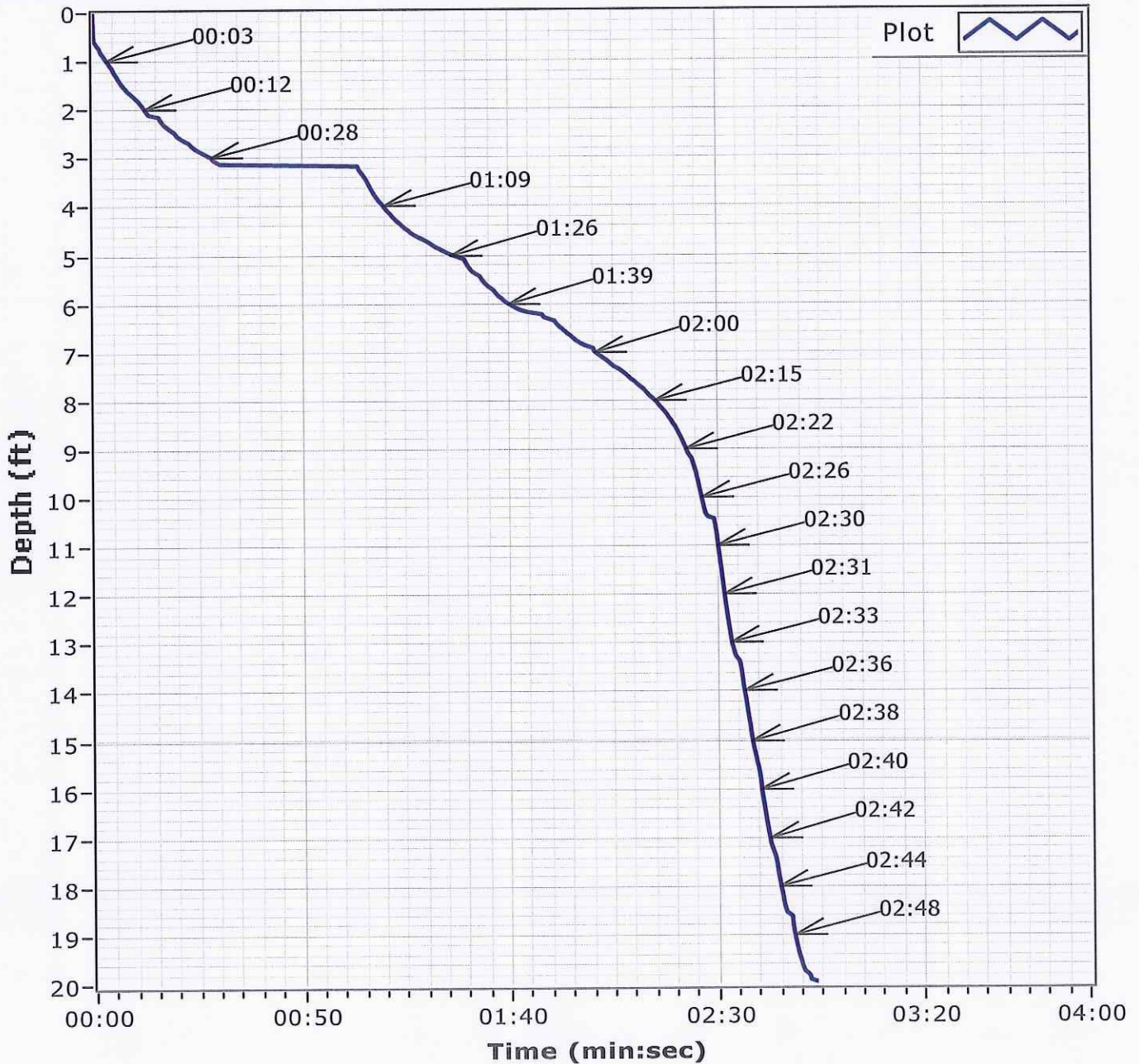
Total Time 00:02:53

Penetration 20.0'

Recovery 19.6'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -43.3'

Core Identifier VB-SJSP09-25

Coordinate System

State Plane Coordinates (SPC)

575995.9636 X

2105837.425 Y

FL East Zone

Start Time 13:40:40

End Time 13:45:48

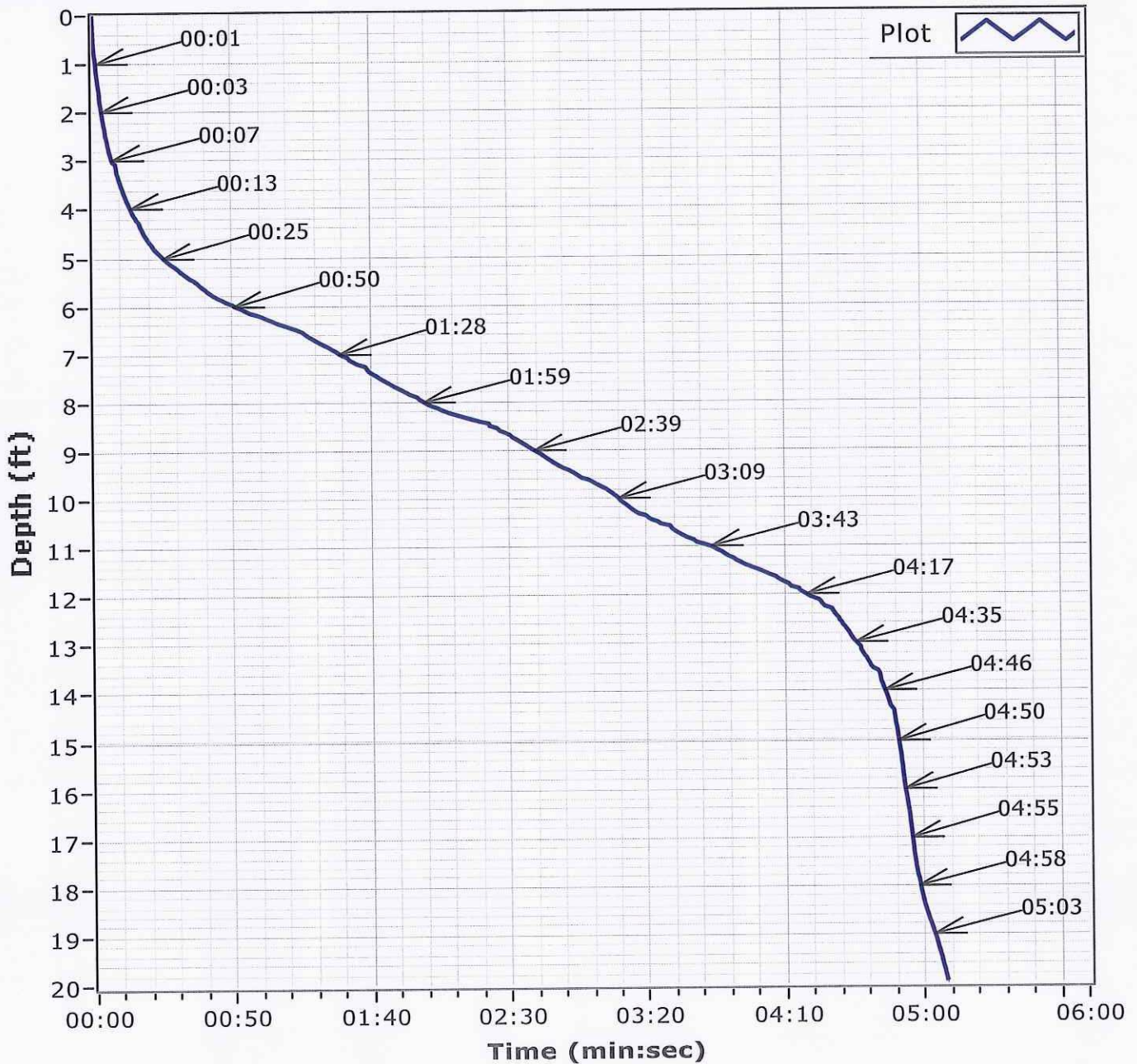
Total Time 00:05:08

Penetration 20.0'

Recovery 20.0'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -57.3'

Core Identifier VB-SJSP09-26

Coordinate System

State Plane Coordinates (SPC)

570686.6319 X

2087159.142 Y

FL East Zone

Start Time 15:33:40

End Time 15:35:13

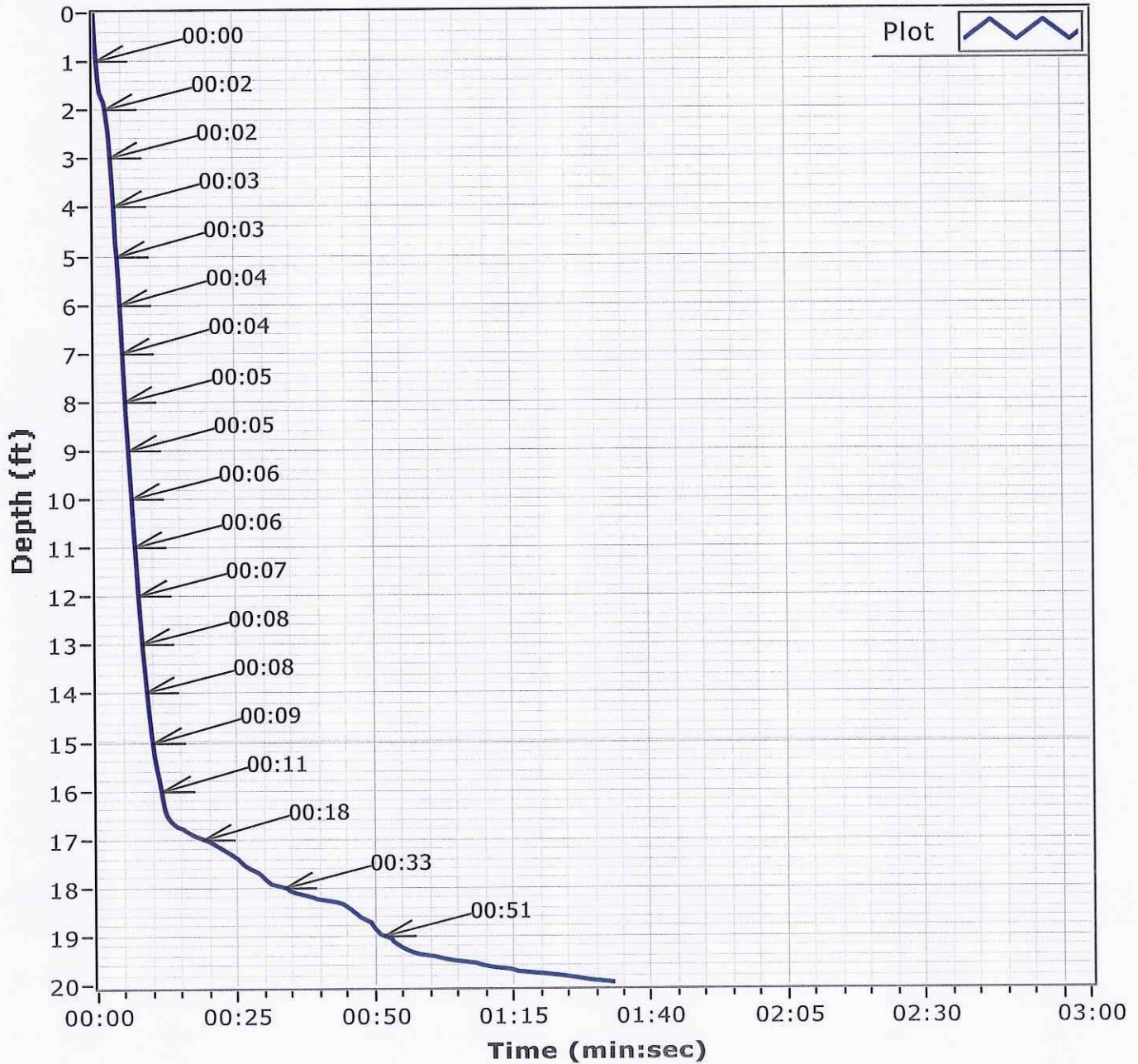
Total Time 00:01:33

Penetration 20.0'

Recovery 20.0'

Comments

[Empty comment box]



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -53.3'

Core Identifier VB-SJSP09-27

Coordinate System

State Plane Coordinates (SPC)

589290.1893 X

2081142.474 Y

FL East Zone

Start Time 10:09:52

End Time 10:12:34

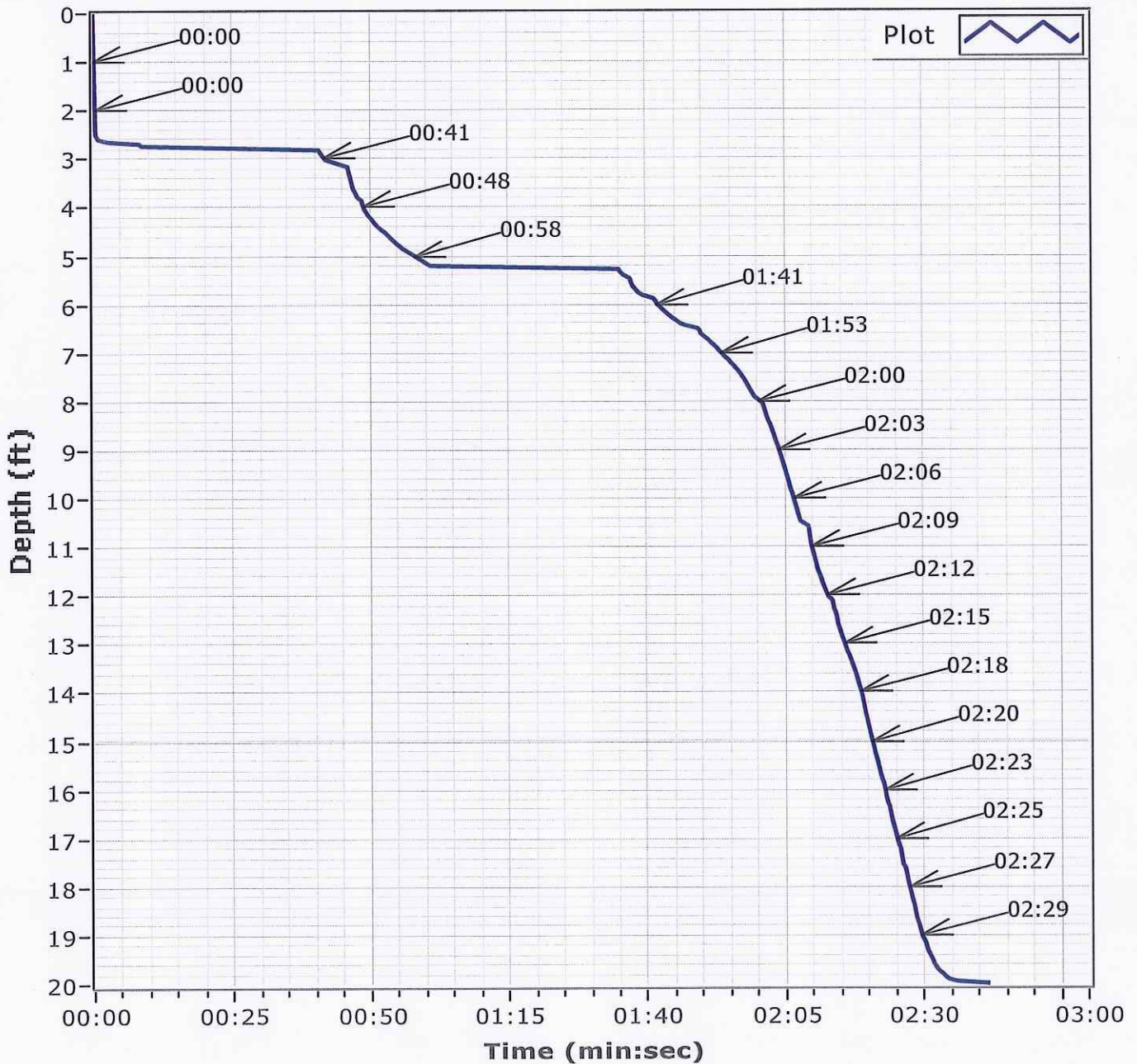
Total Time 00:02:41

Penetration 20.0'

Recovery 19.5'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -47.8'

Core Identifier VB-SJSP09-28

Coordinate System

Start Time 10:46:50

State Plane Coordinates (SPC)

End Time 10:51:33

Penetration 19.6'

589876.4472 X

Total Time 00:04:43

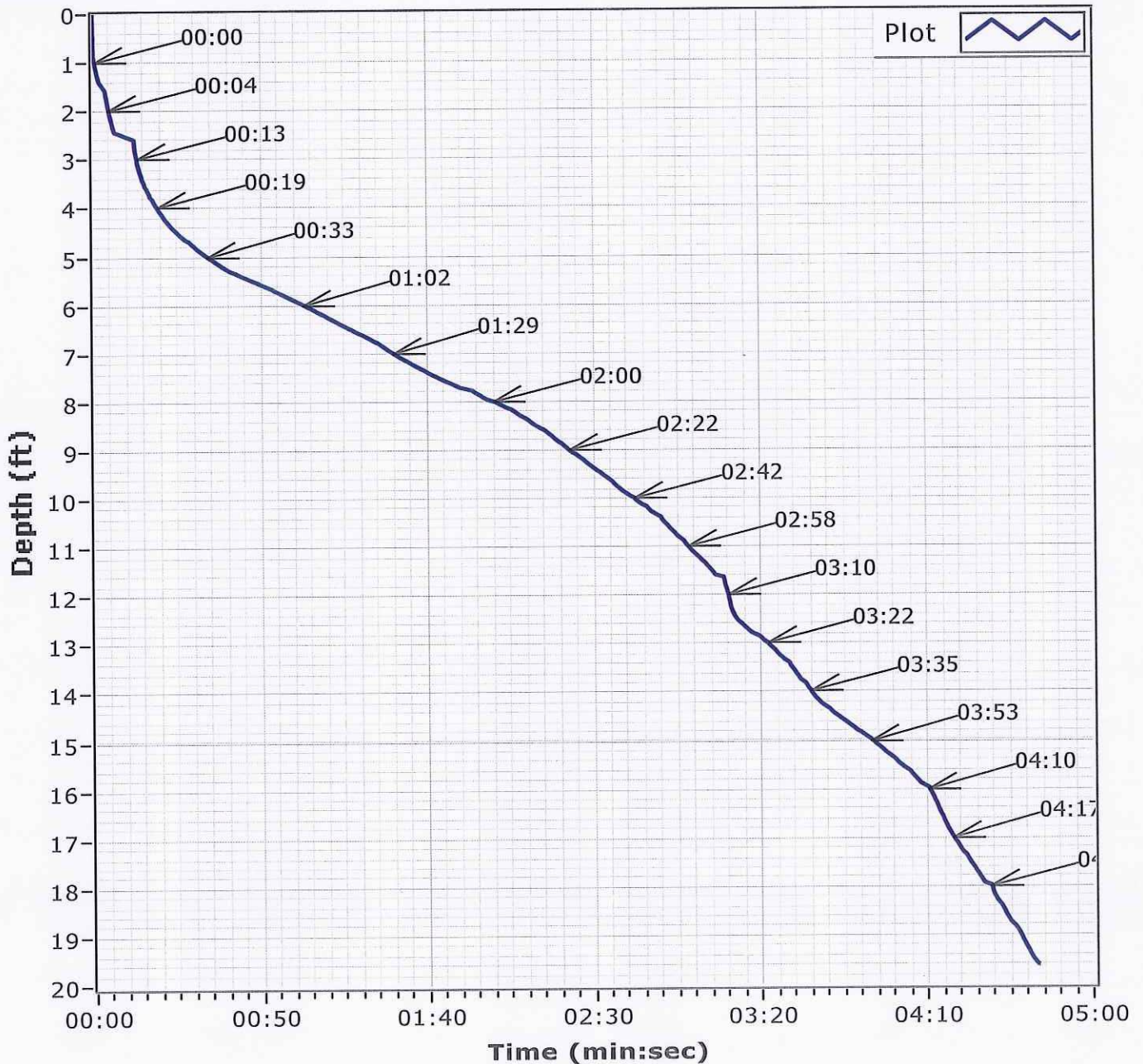
Recovery 16.7'

2081428.701 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHN'S COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -46.2'

Core Identifier VB-SJSP09-29

Coordinate System

Start Time 11:05:48

State Plane Coordinates (SPC)

End Time 11:15:33

Penetration 20.0'

590449.269 X

Total Time 00:09:44

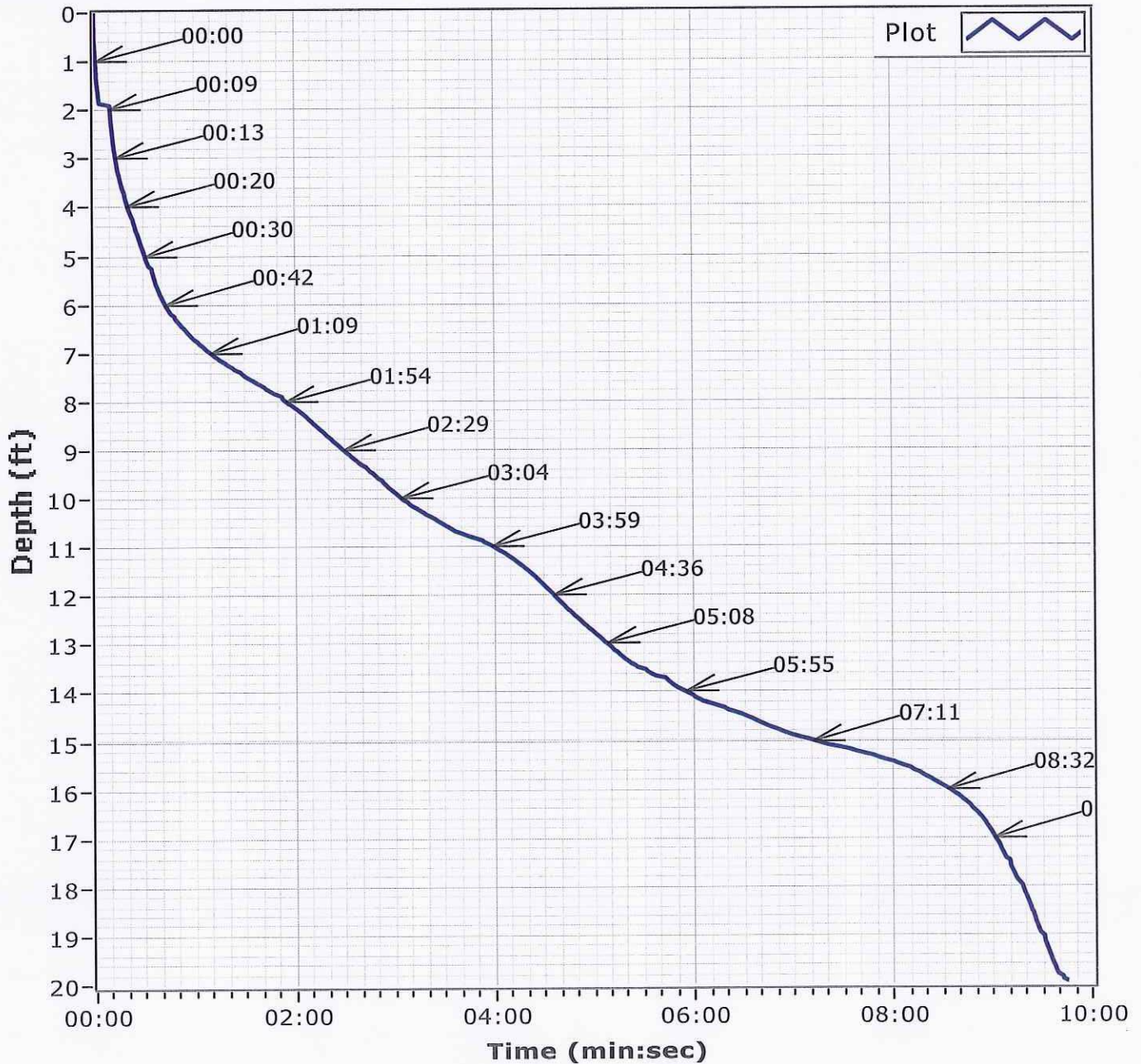
Recovery 18.9'

2081626.317 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHN'S COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -55.1'

Core Identifier VB-SJSP09-30

Coordinate System

Start Time 11:29:15

State Plane Coordinates (SPC)

End Time 11:31:50

Penetration 18.8'

589653.5573 X

Total Time 00:02:35

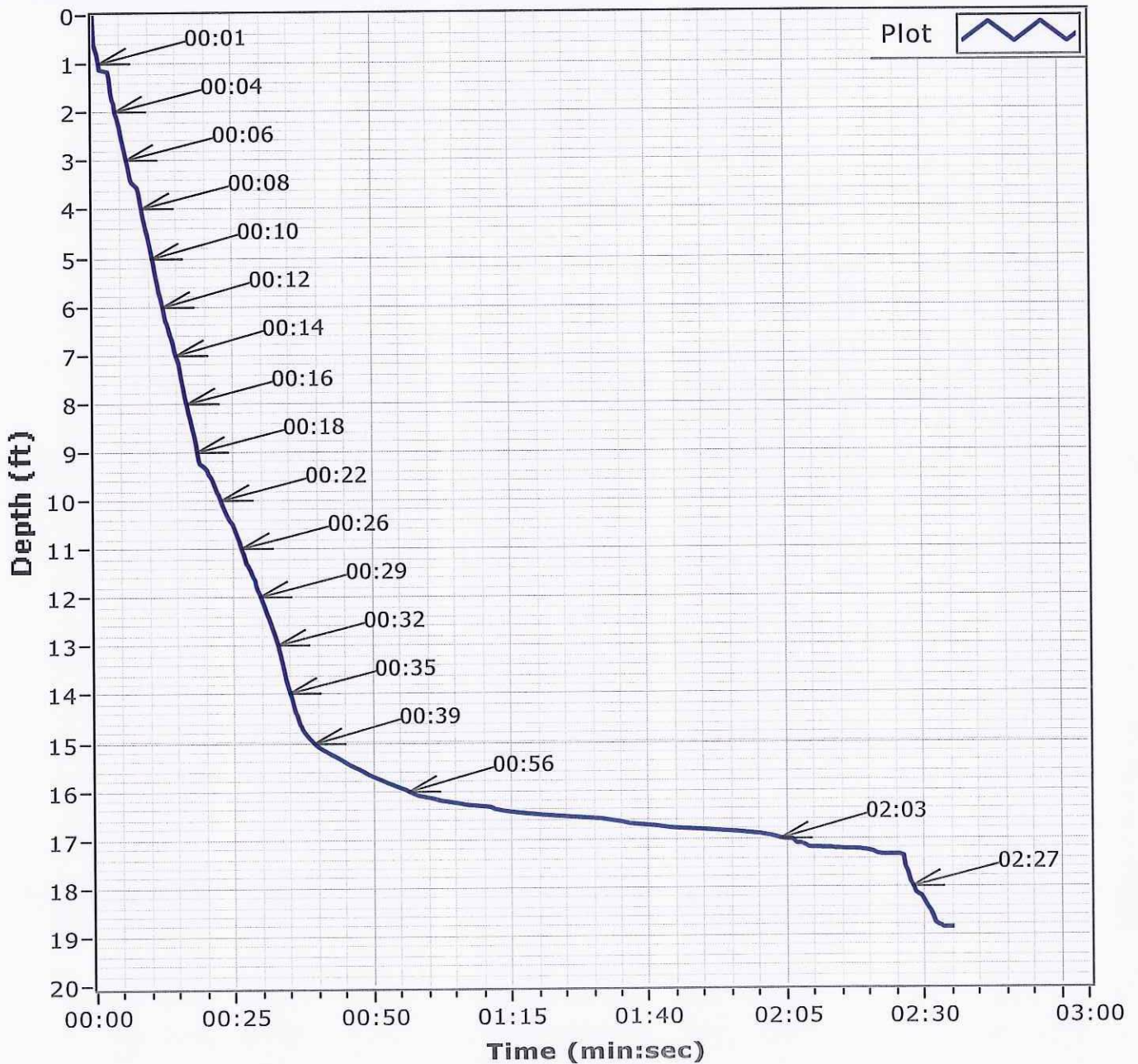
Recovery 16.0'

2080404.965 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHN'S COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -48.2'

Core Identifier VB-SJSP09-31

Coordinate System

State Plane Coordinates (SPC)

590806.0246 X

2080947.860 Y

FL East Zone

Start Time 11:50:37

End Time 12:00:38

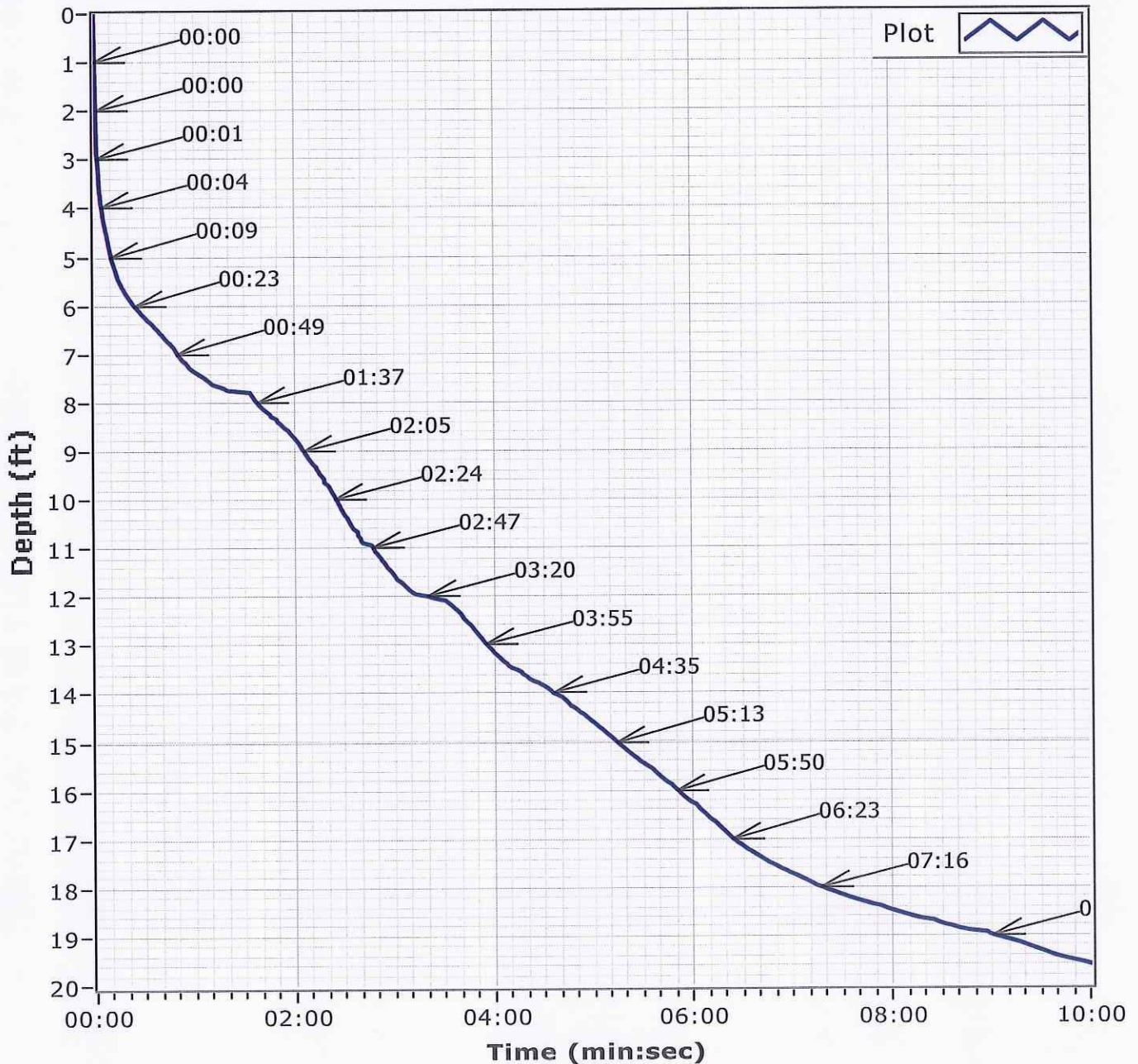
Total Time 00:10:00

Penetration 19.6'

Recovery 17.7'

Comments

Empty comment box



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -56.3'

Core Identifier VB-SJSP09-32

Coordinate System

Start Time 12:39:08

State Plane Coordinates (SPC)

End Time 12:41:27

Penetration 19.9'

590012.7056 X

Total Time 00:02:18

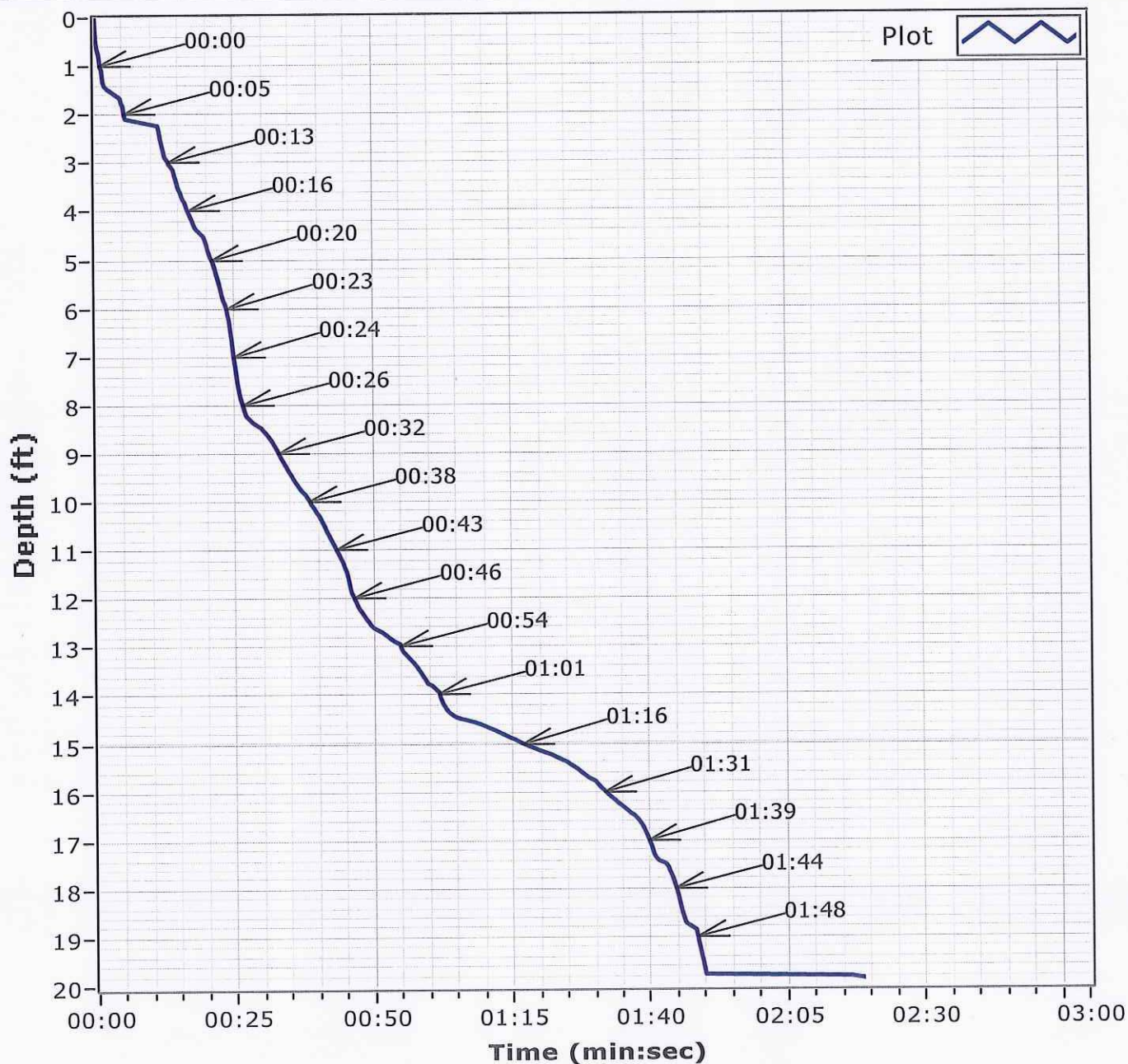
Recovery 17.6'

2079742.652 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -55.2'

Core Identifier VB-SJSP09-33

Coordinate System

State Plane Coordinates (SPC)

590611.4211 X

2080033.1382 Y

FL East Zone

Start Time 13:22:19

End Time 13:25:04

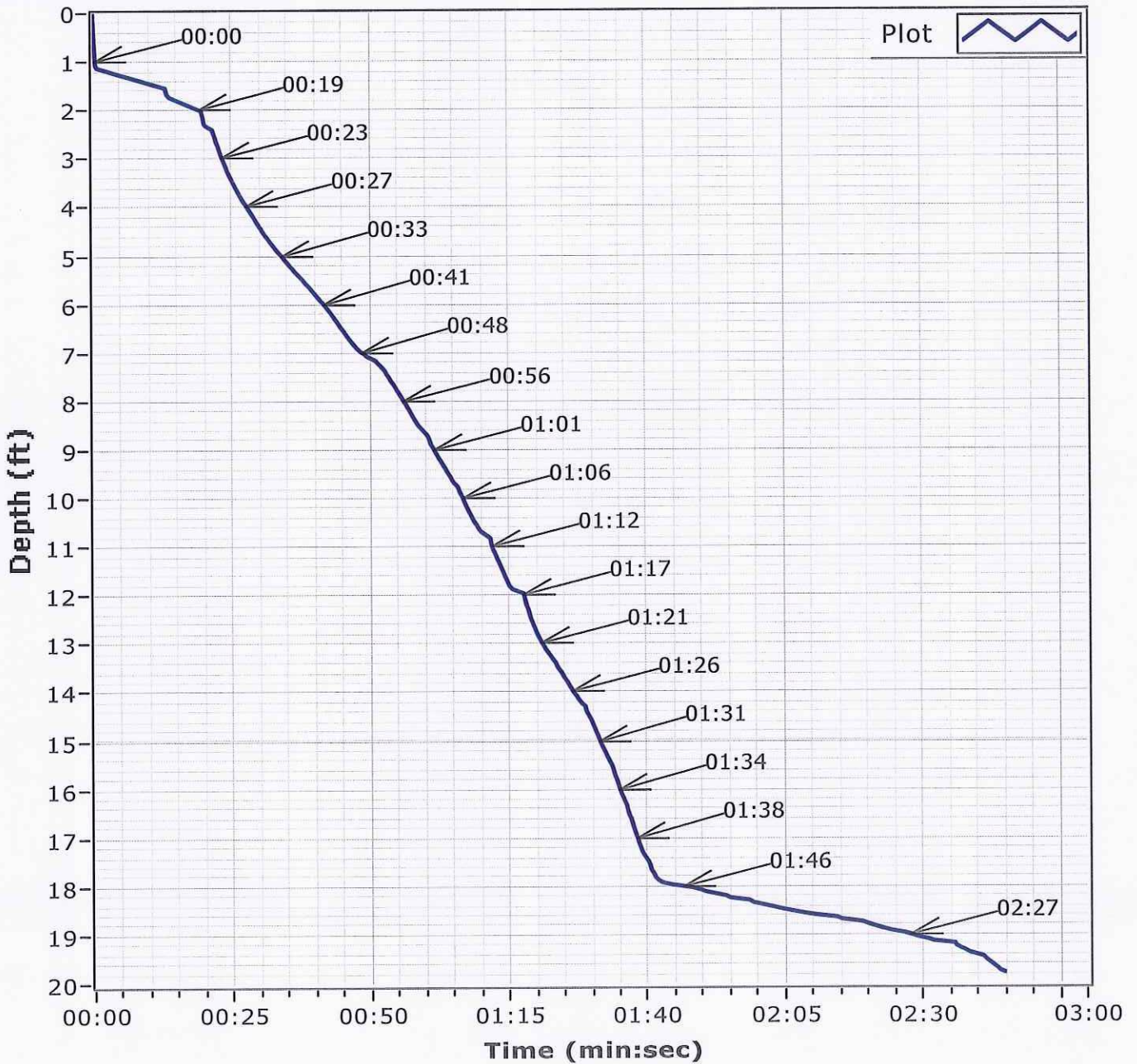
Total Time 00:02:45

Penetration 19.8'

Recovery 19.2'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -55.4'

Core Identifier VB-SJSP09-34

Coordinate System

State Plane Coordinates (SPC)

591133.597 X

2080267.953 Y

FL East Zone

Start Time 13:44:58

End Time 13:46:11

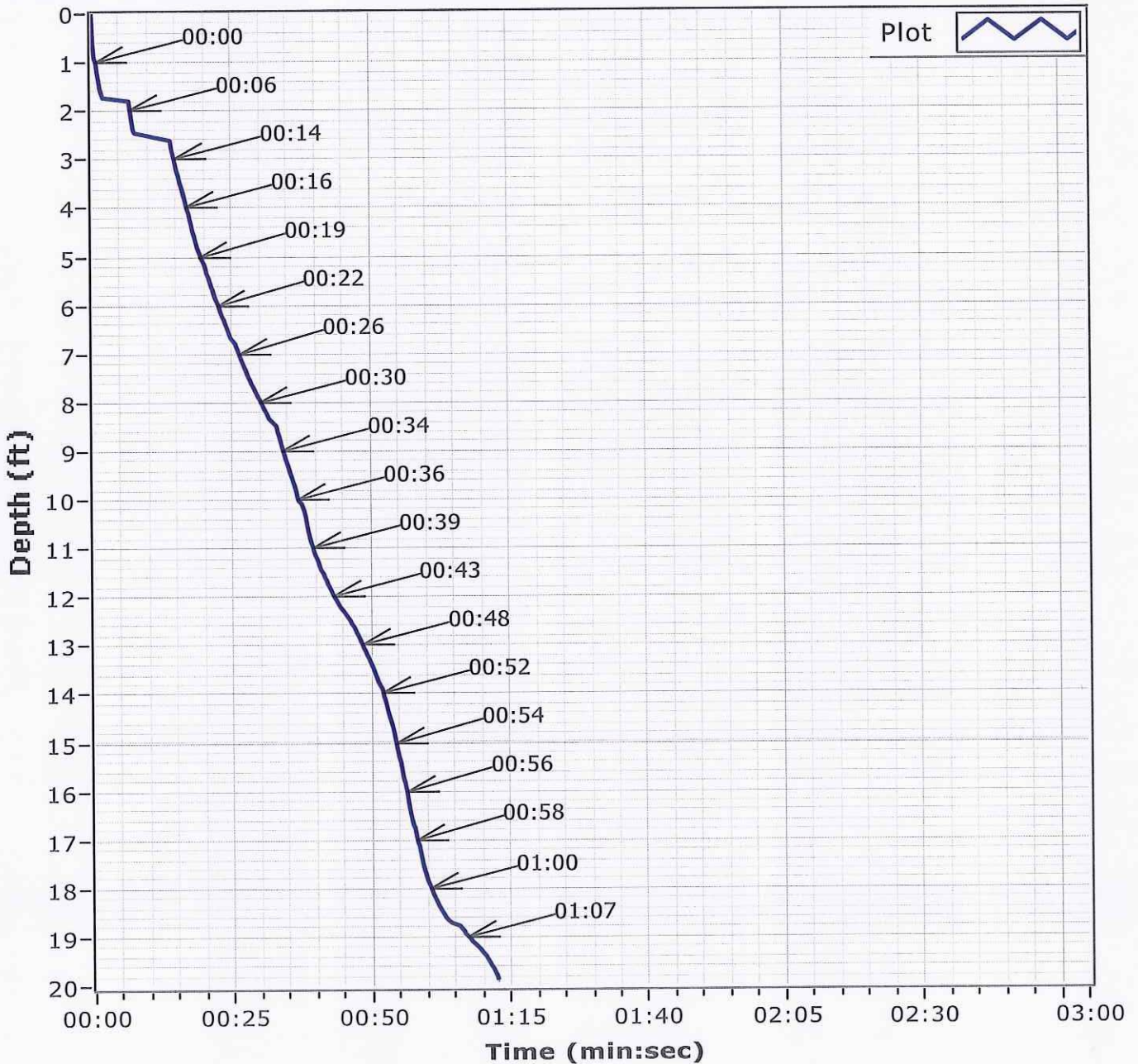
Total Time 00:01:12

Penetration 19.9'

Recovery 19.0'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -53.6'

Core Identifier VB-SJSP09-35

Coordinate System

State Plane Coordinates (SPC)

588208.4769 X

2066924.063 Y

FL East Zone

Start Time 14:15:44

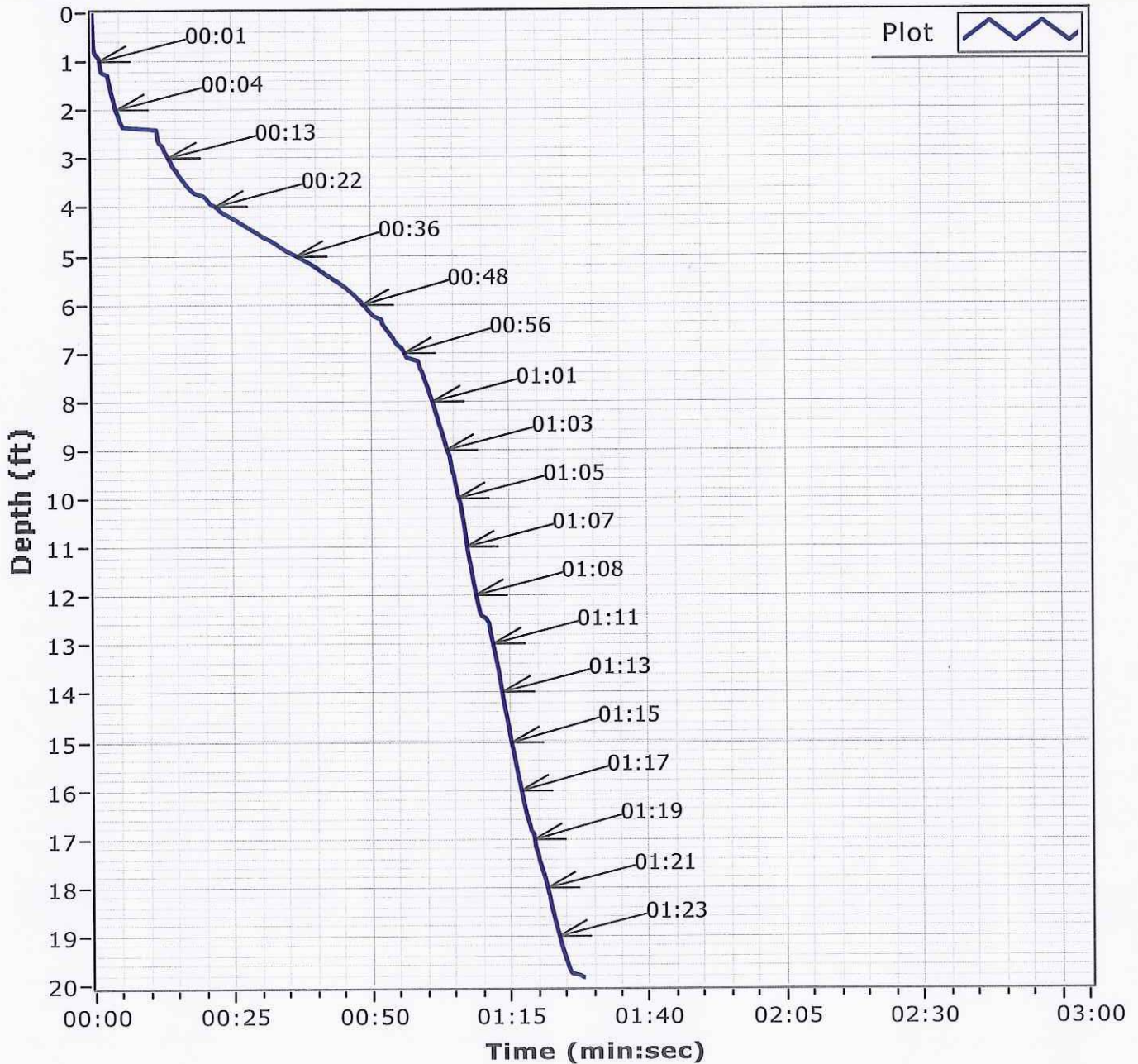
End Time 14:17:12

Total Time 00:01:28

Penetration 19.9'

Recovery 19.1'

Comments



Project ST JOHN'S COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -51.6'

Core Identifier VB-SJSP09-36

Coordinate System

State Plane Coordinates (SPC)

598431.952 X

2064320.736 Y

FL East Zone

Start Time 15:10:46

End Time 15:14:01

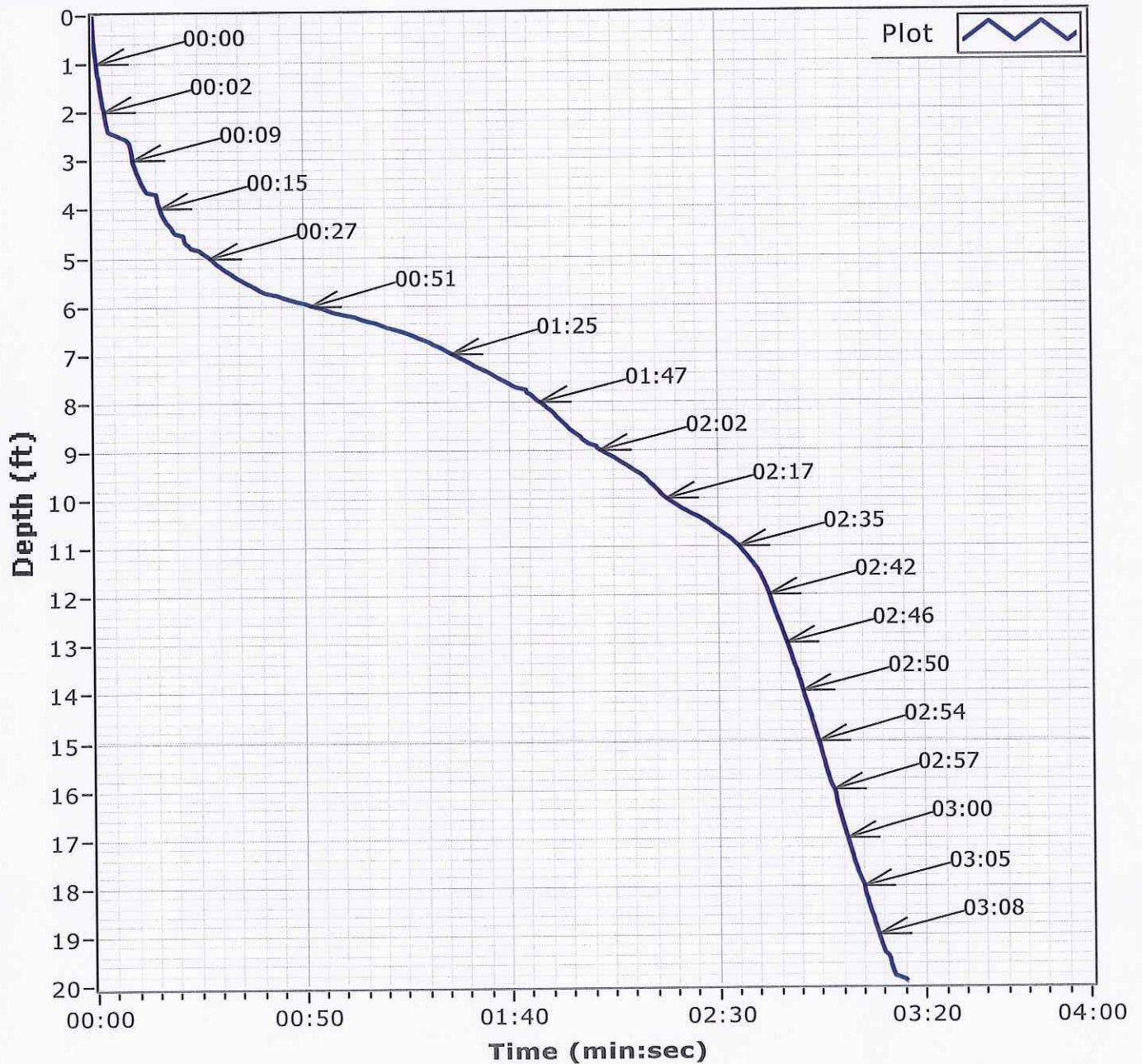
Total Time 00:03:15

Penetration 20.0'

Recovery 20.1'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -61.1'

Core Identifier VB-SJSP09-37

Coordinate System

State Plane Coordinates (SPC)

586269.2572 X

2059187.702 Y

FL East Zone

Start Time 16:02:30

End Time 16:04:42

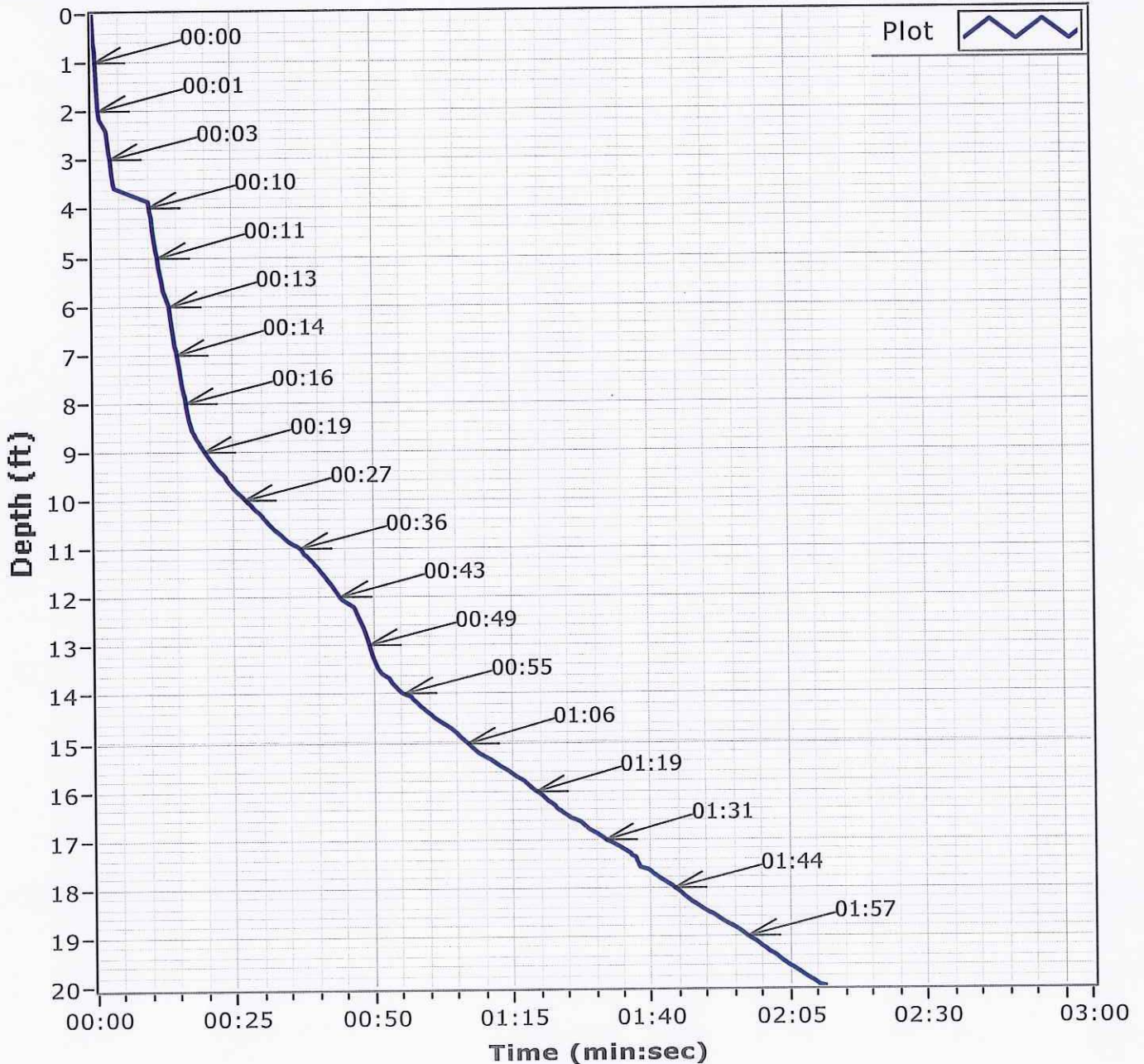
Total Time 00:02:11

Penetration 20.0'

Recovery 19.8'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/29/2009

Water Depth -64.4'

Core Identifier VB-SJSP09-38

Coordinate System

State Plane Coordinates (SPC)

587053.4895 X

2059204.22 Y

FL East Zone

Start Time 16:35:37

End Time 16:37:27

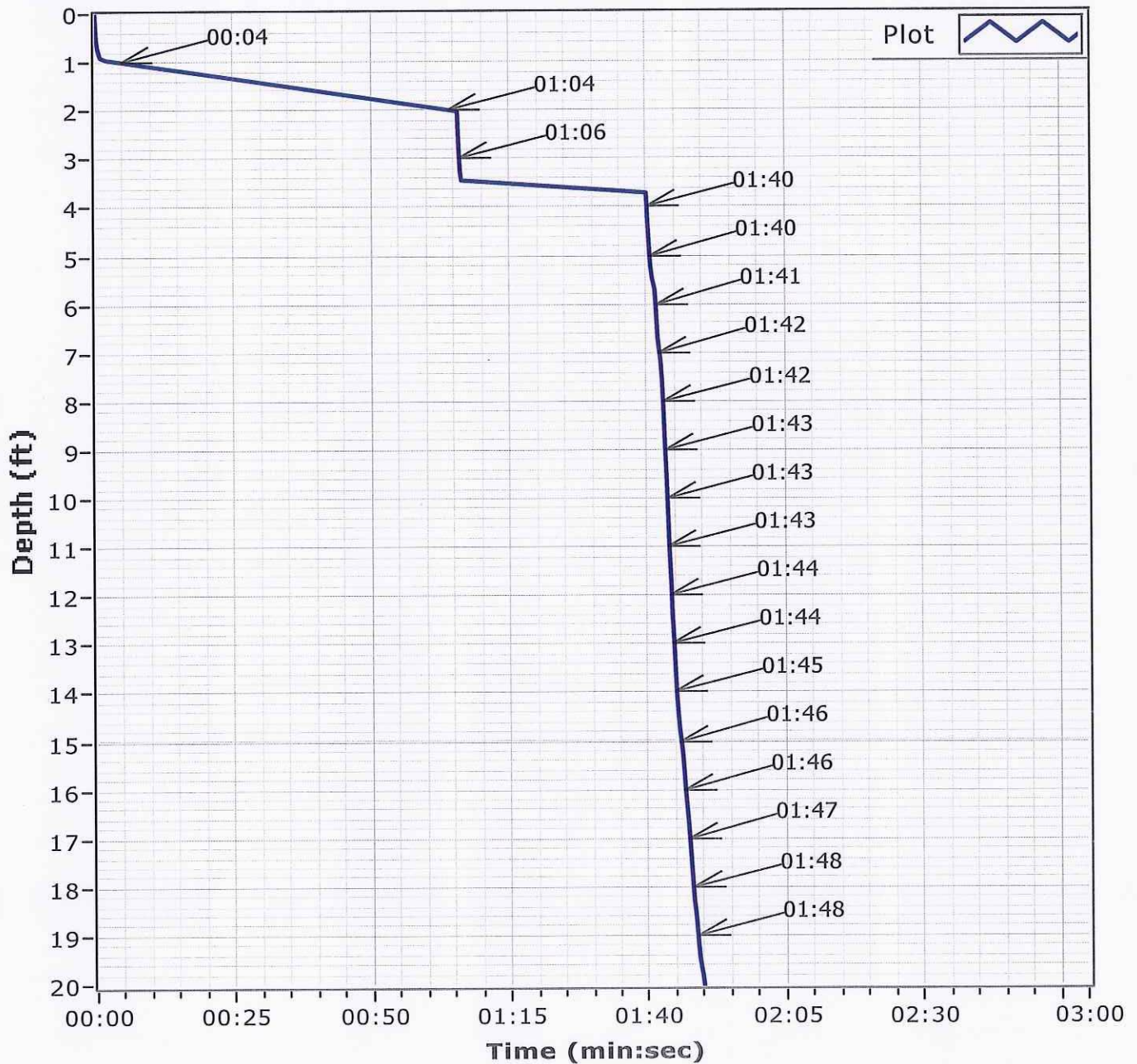
Total Time 00:01:50

Penetration 20.0'

Recovery 20.3'

Comments

Note: Compressor stalled then restarted



Project ST JOHNS COUNTY OFFSHORE II



Date 10/30/2009

Water Depth -51.5'

Core Identifier VB-SJSP09-39

Coordinate System

State Plane Coordinates (SPC)

587833.2595 X

2059182.653 Y

FL East Zone

Start Time 08:26:21

End Time 08:30:41

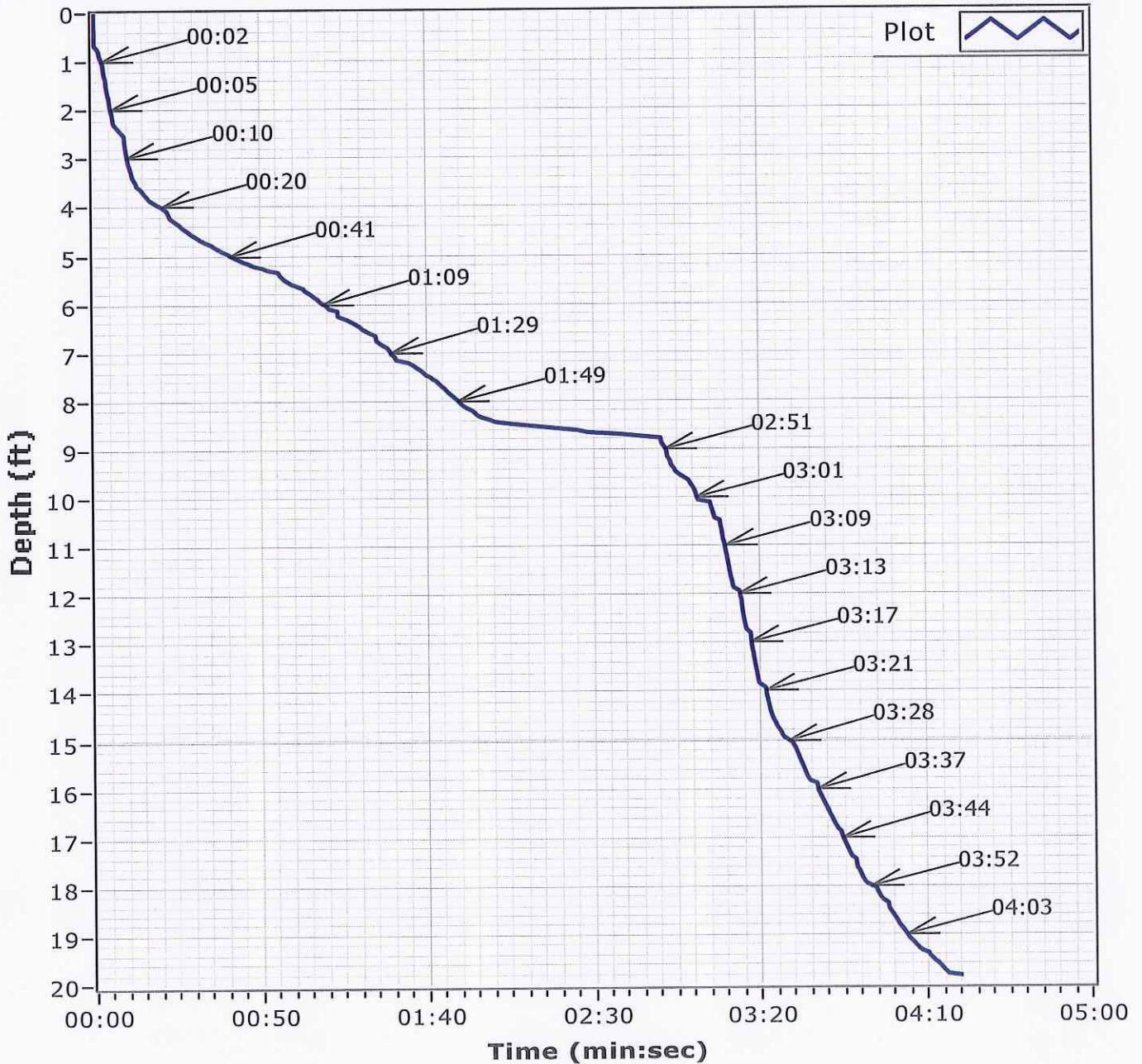
Total Time 00:04:20

Penetration 19.8'

Recovery 16.8'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/31/2009

Water Depth -51.3'

Core Identifier VB-SJSP09-40

Coordinate System

Start Time 08:34:12

State Plane Coordinates (SPC)

End Time 08:39:14

Penetration 19.2'

588554.0374 X

Total Time 00:05:02

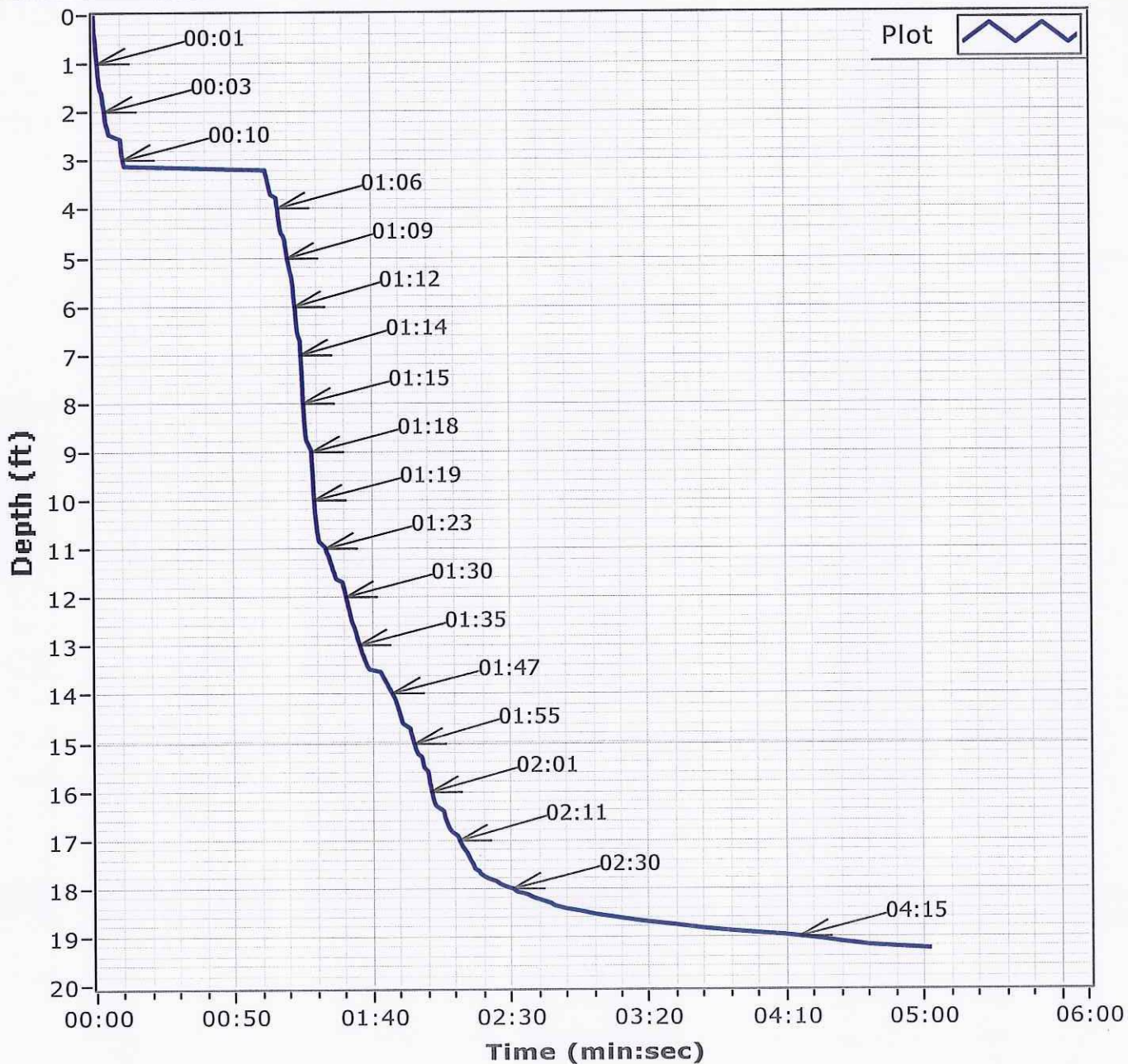
Recovery 16.4'

2059216.107 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -65.0'

Core Identifier VB-SJSP09-41

Coordinate System

Start Time 09:19:09

State Plane Coordinates (SPC)

End Time 09:21:03

Penetration 19.9'

586319.762 X

Total Time 00:01:54

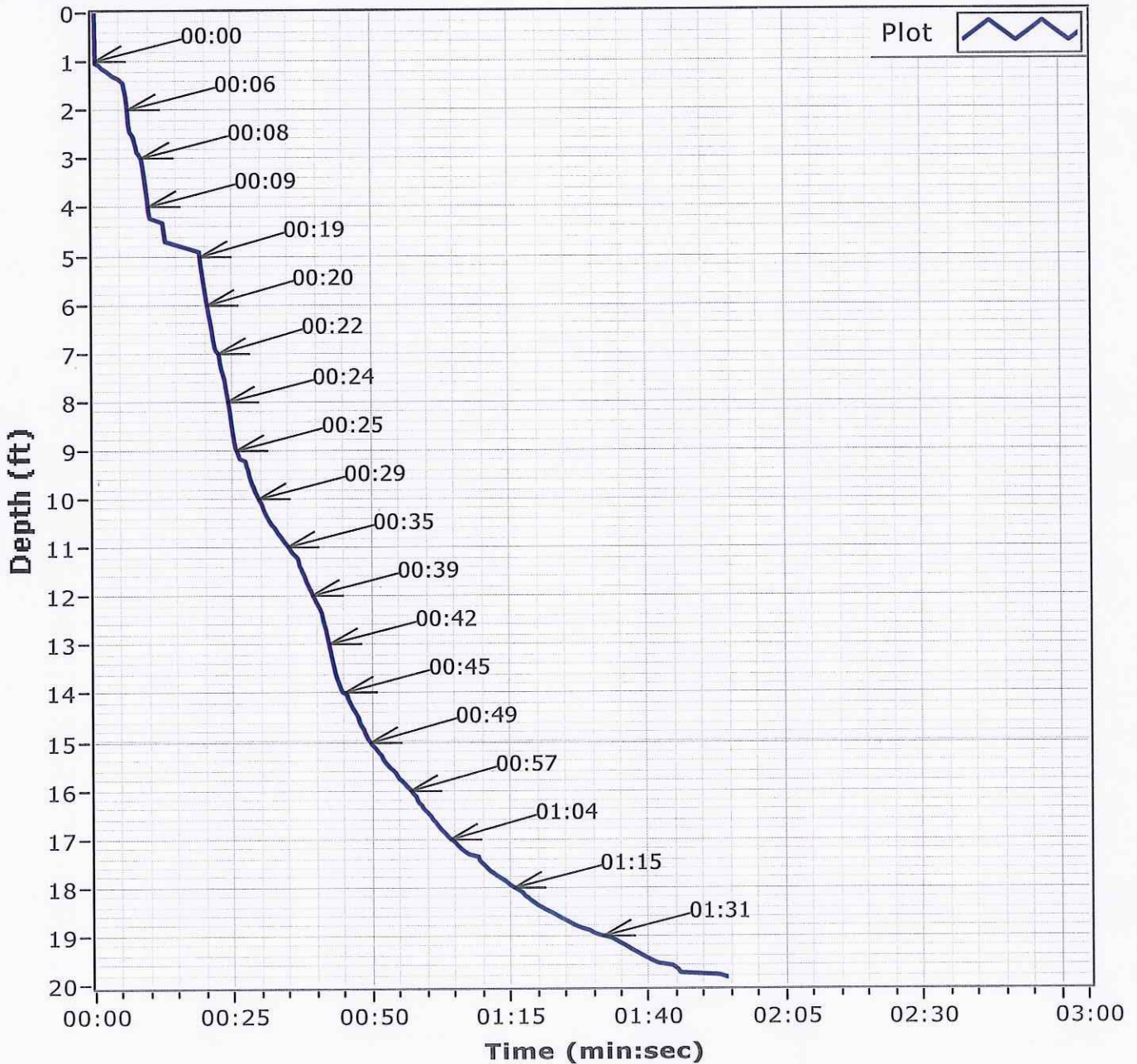
Recovery 19.8'

2058450.595 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHN'S COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -60.7'

Core Identifier VB-SJSP09-42

Coordinate System

State Plane Coordinates (SPC)

587044.5981 X

2058436.392 Y

FL East Zone

Start Time 09:40:50

End Time 09:45:50

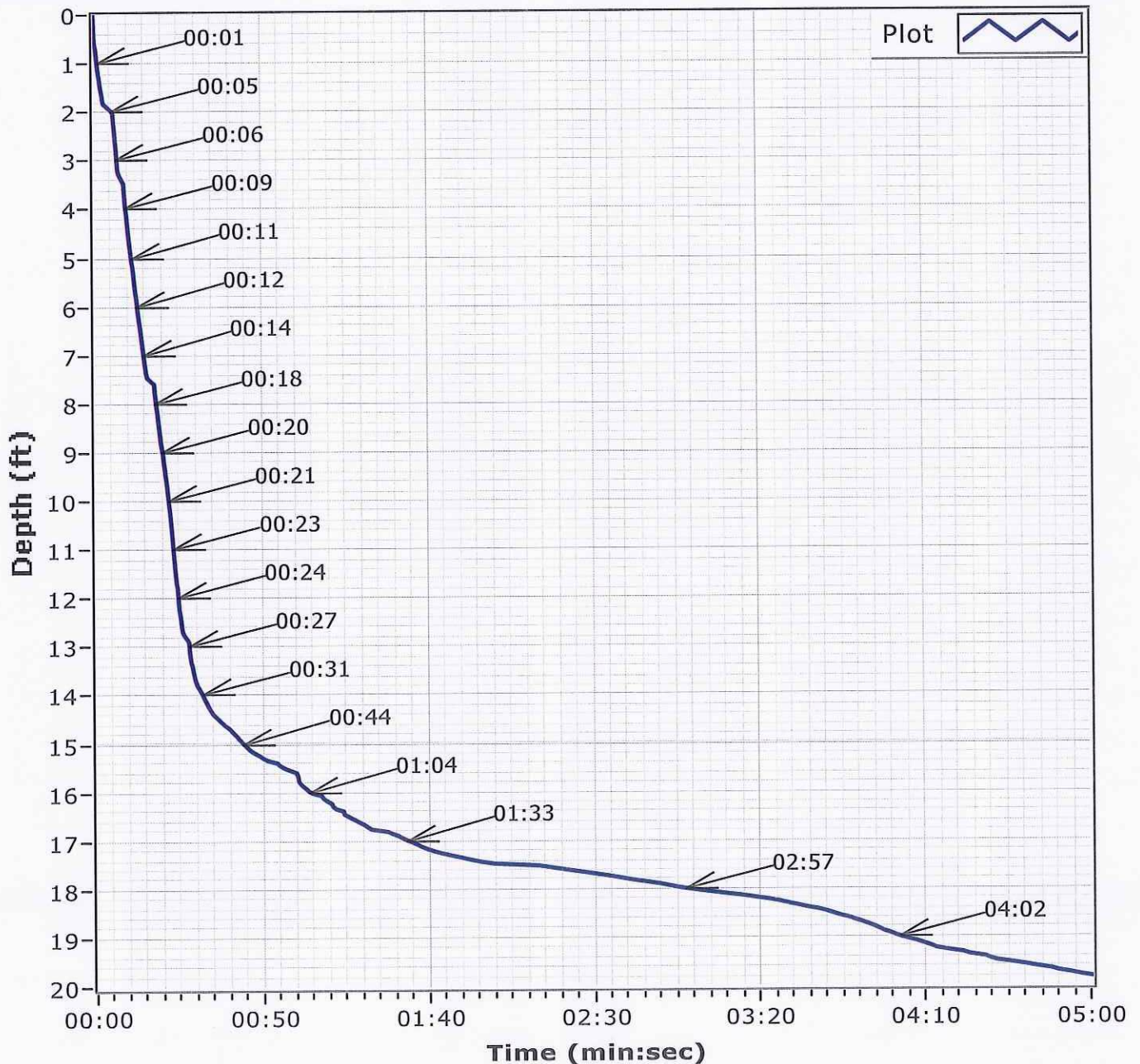
Total Time 00:05:00

Penetration 19.8'

Recovery 19.2'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -52.9'

Core Identifier VB-SJSP09-43

Coordinate System

State Plane Coordinates (SPC)

587797.842 X

2058453.842 Y

FL East Zone

Start Time 09:37:05

End Time 09:42:17

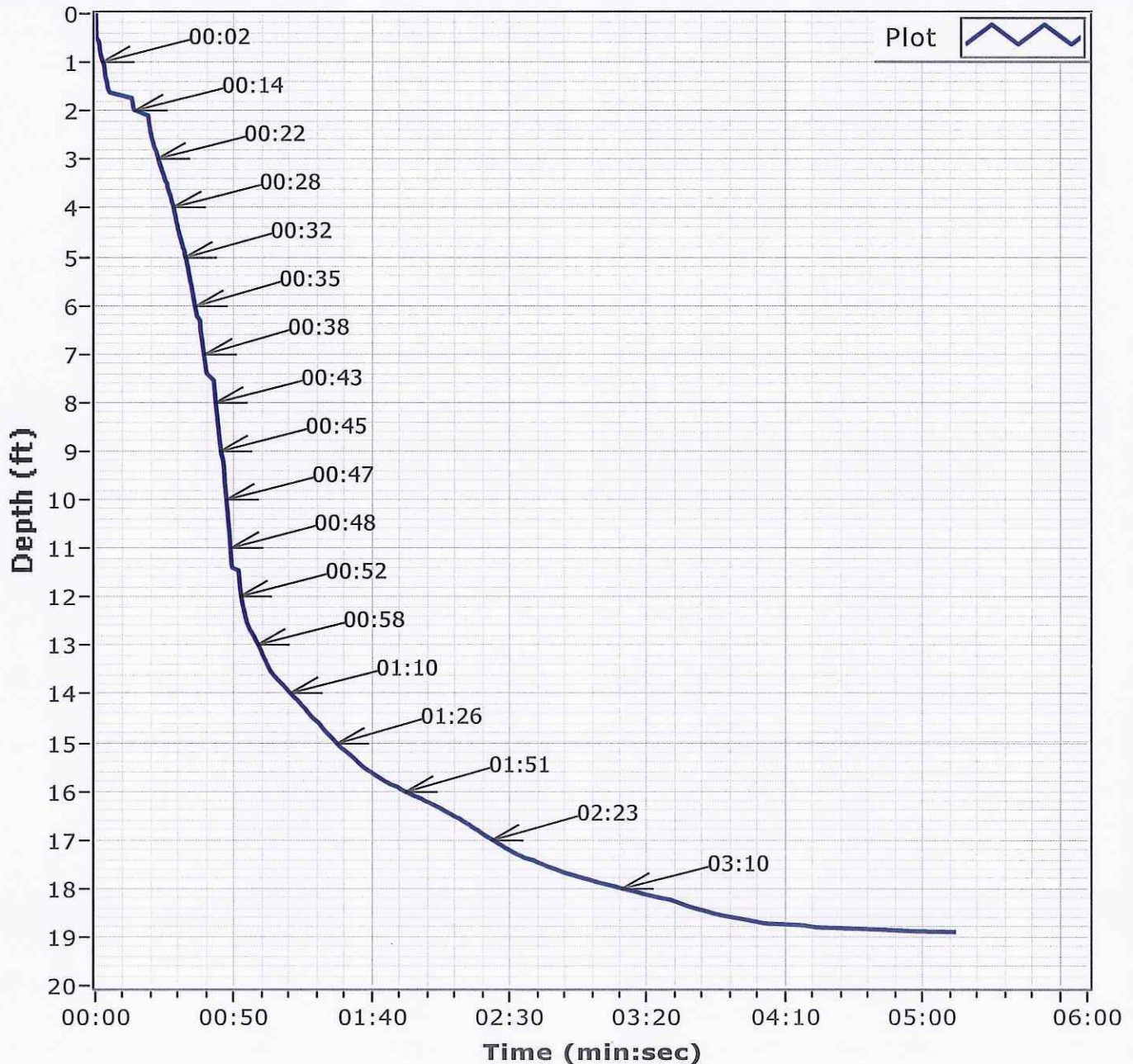
Total Time 00:05:12

Penetration 18.9'

Recovery 16.6'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -51.1'

Core Identifier VB-SJSP09-44

Coordinate System

State Plane Coordinates (SPC)

588538.6968 X

2058432.482 Y

FL East Zone

Start Time 09:55:14

End Time 09:59:30

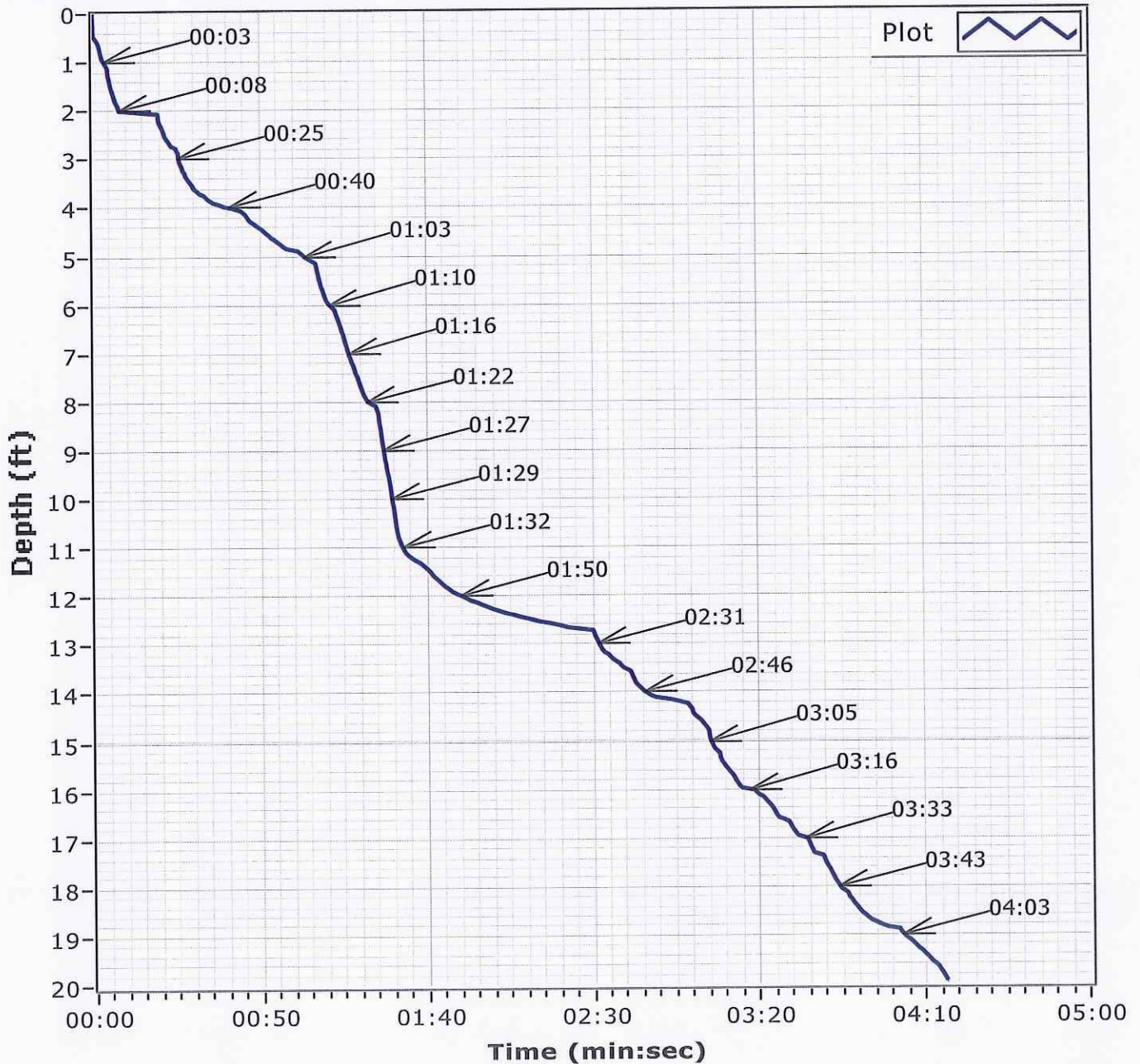
Total Time 00:04:16

Penetration 19.9'

Recovery 20.1

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -54.1

Core Identifier VB-SJSP09-45

Coordinate System

State Plane Coordinates (SPC)

586302.488 X

2057699.045 Y

FL East Zone

Start Time 10:20:02

End Time 10:22:40

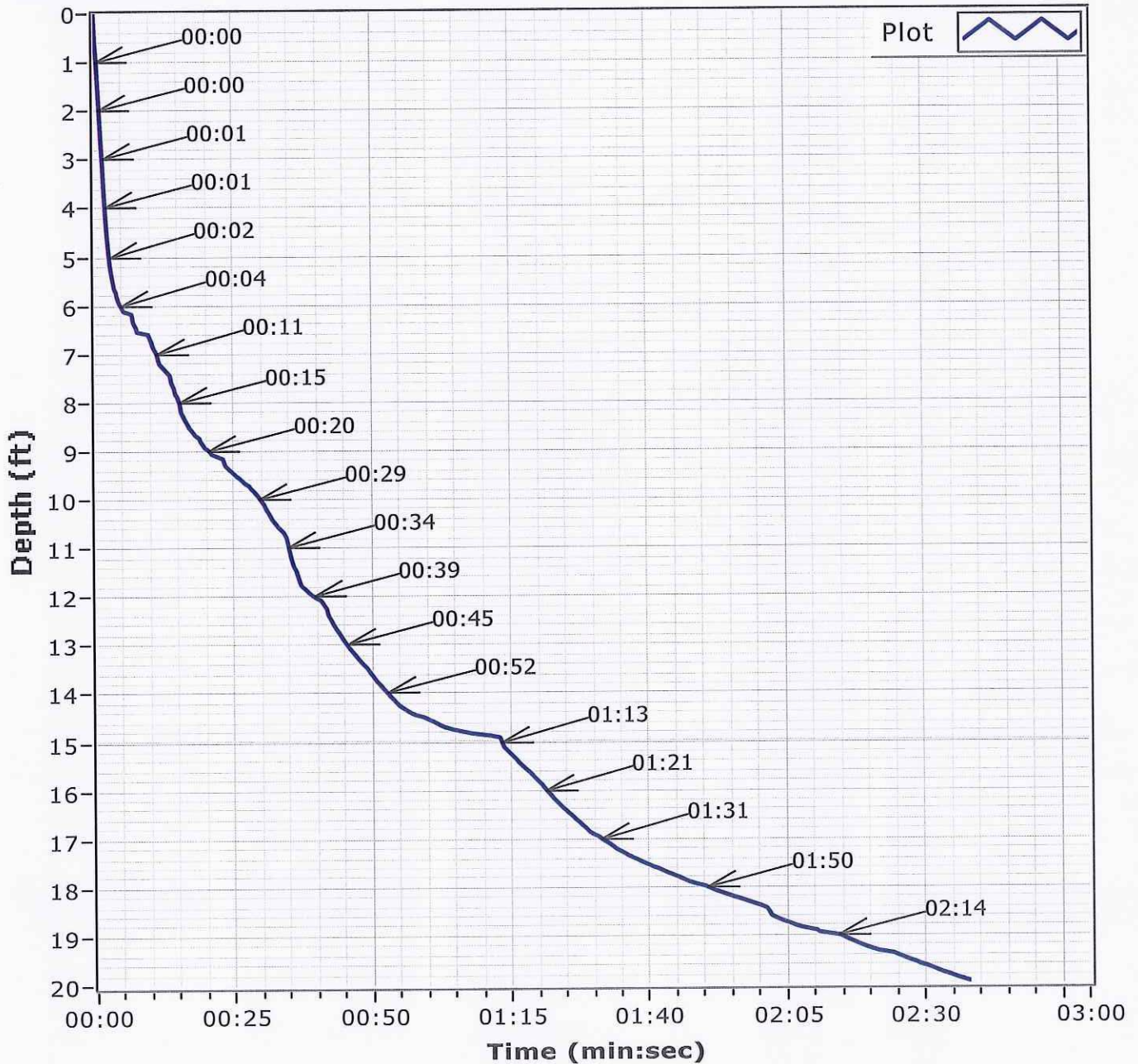
Total Time 00:02:38

Penetration 19.9'

Recovery 19.2'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -54.3'

Core Identifier VB-SJSP09-46

Coordinate System

State Plane Coordinates (SPC)

587806.127 X

2057690.127 Y

FL East Zone

Start Time 10:40:08

End Time 10:41:21

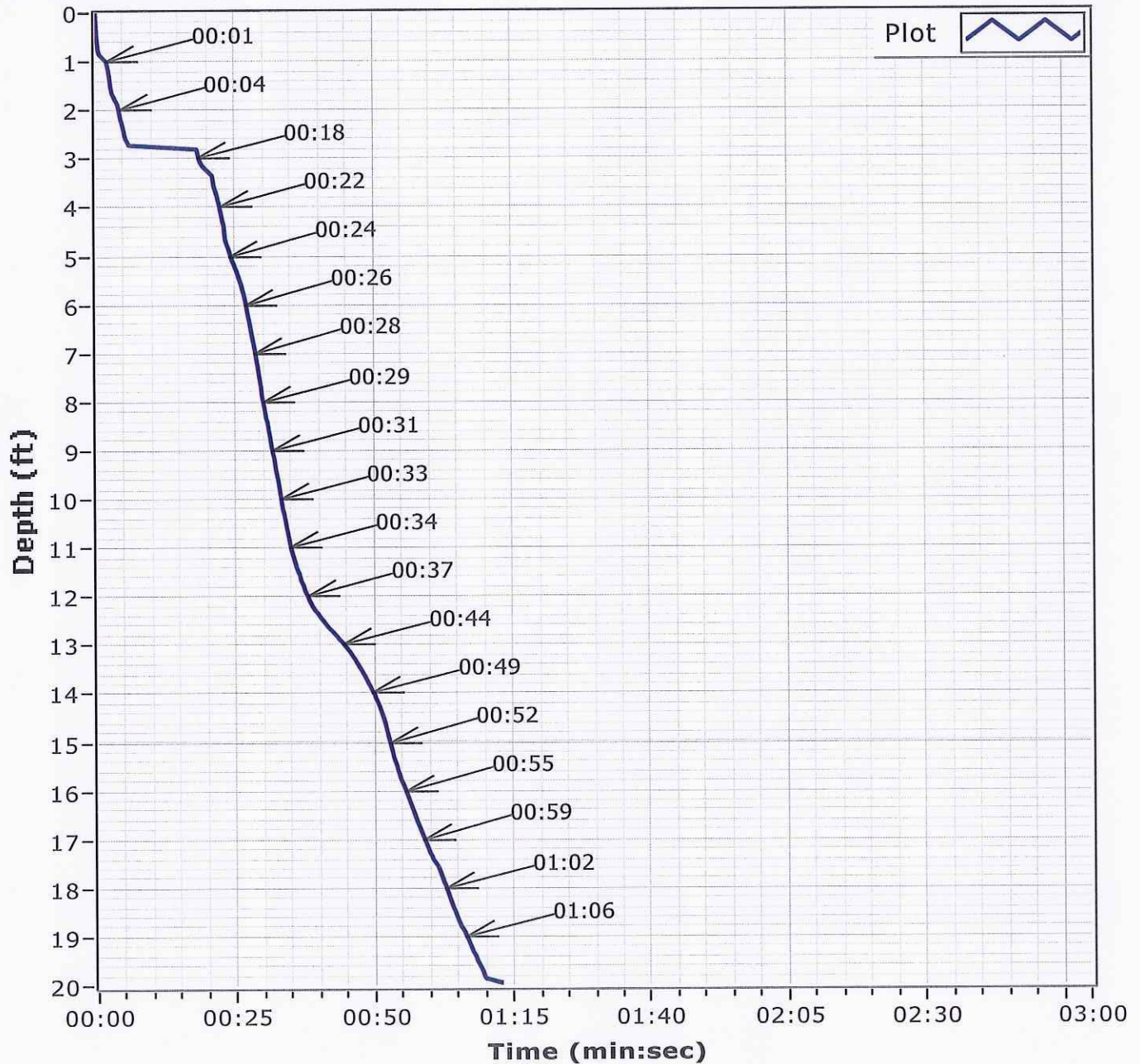
Total Time 00:01:12

Penetration 20.0'

Recovery 17.7'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -51.9'

Core Identifier VB-SJSP09-47

Coordinate System

State Plane Coordinates (SPC)

588544.613 X

2057676.613 Y

FL East Zone

Start Time 10:54:46

End Time 10:59:46

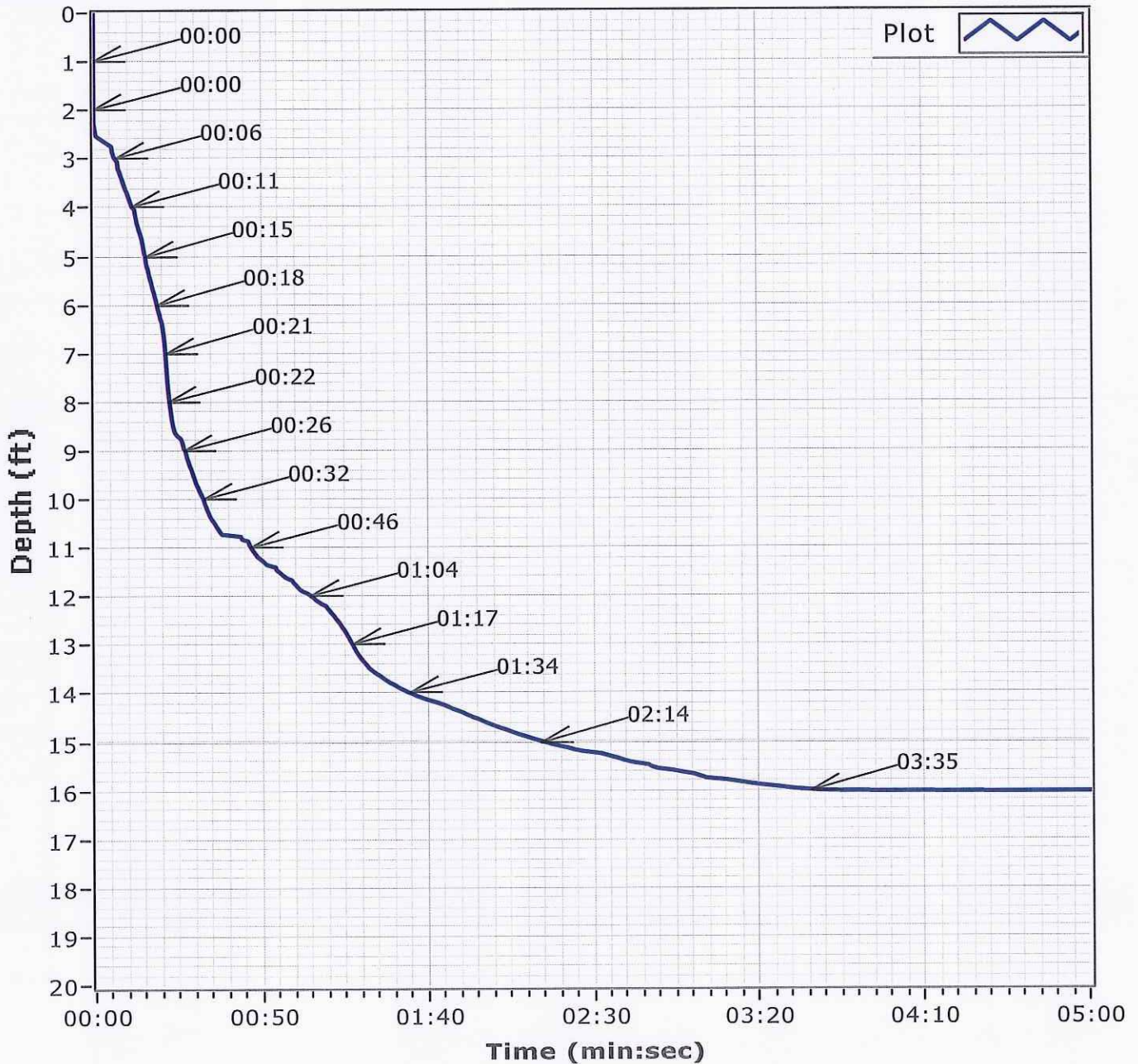
Total Time 00:05:00

Penetration 16.0'

Recovery 13.3'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -57.4'

Core Identifier VB-SJSP09-48

Coordinate System

Start Time 11:16:08

State Plane Coordinates (SPC)

End Time 11:18:50

Penetration 20.0'

586301.052 X

Total Time 00:02:42

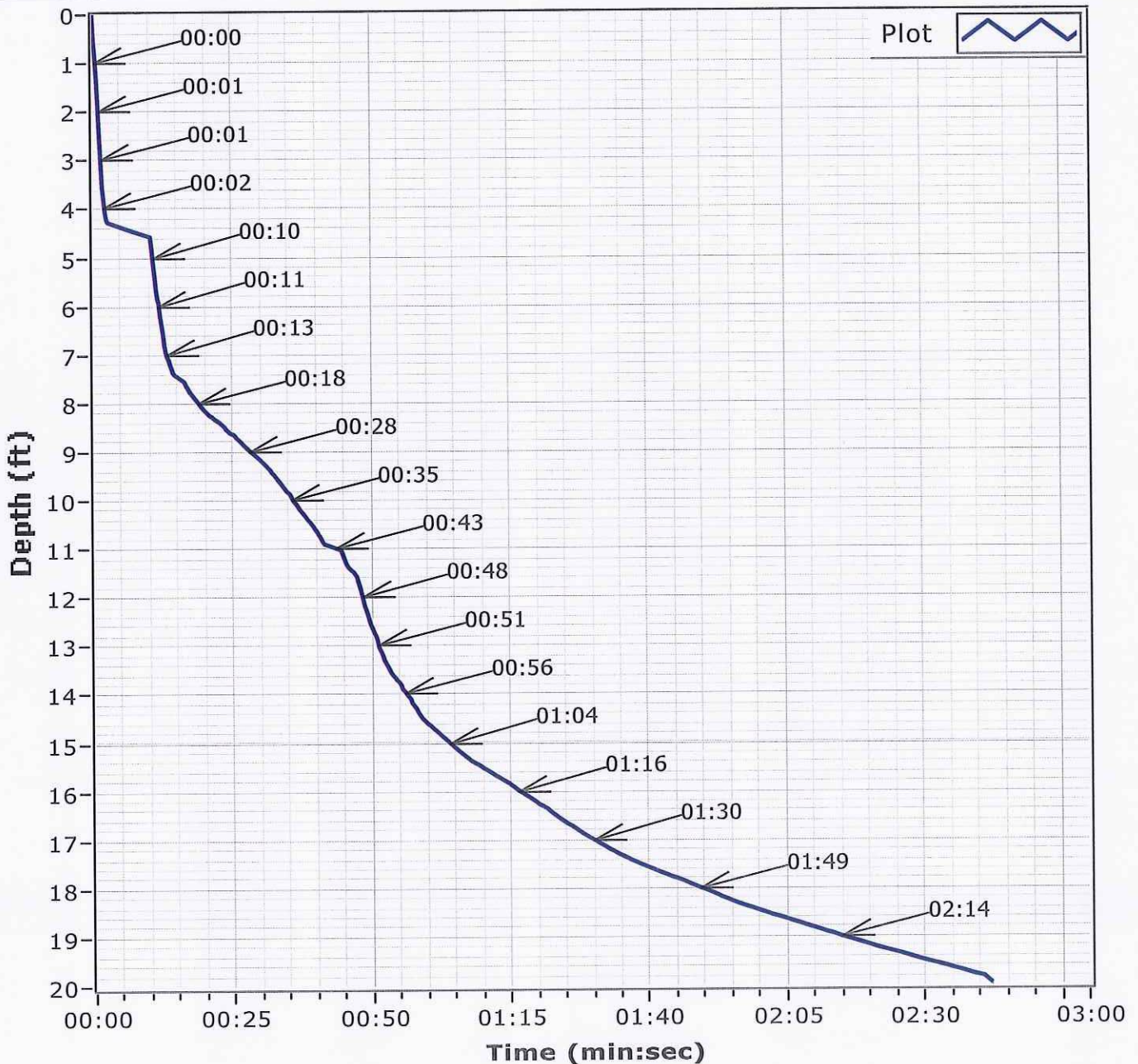
Recovery 20.1'

2056953.525 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -61.2'

Core Identifier VB-SJSP09-49

Coordinate System

State Plane Coordinates (SPC)

587036.9868 X

2056941.314 Y

FL East Zone

Start Time 11:36:50

End Time 11:39:23

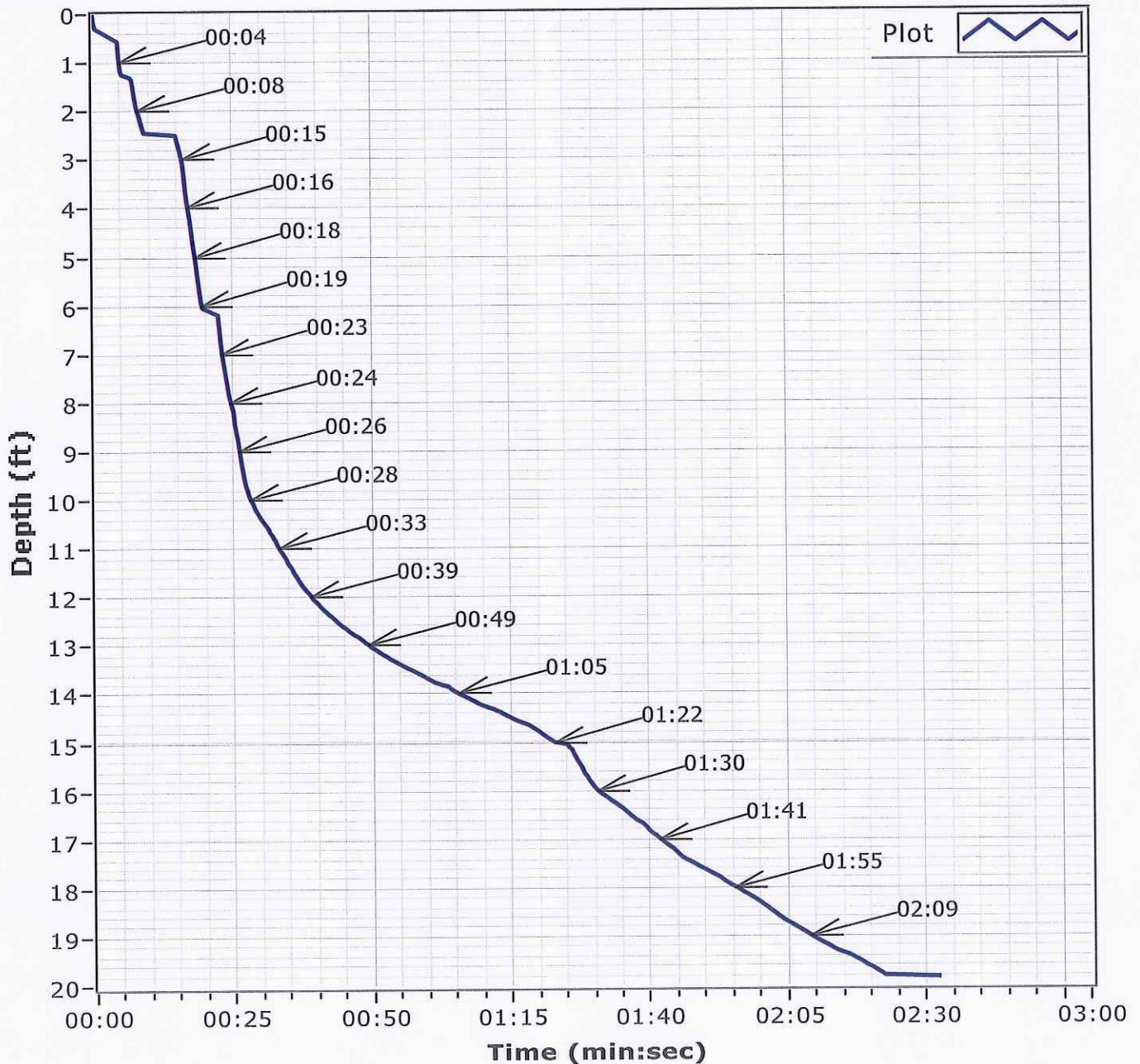
Total Time 00:02:32

Penetration 19.9'

Recovery 19.3'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -48.4'

Core Identifier VB-SJSP09-50

Coordinate System

State Plane Coordinates (SPC)

587815.519 X

2056938.519 Y

FL East Zone

Start Time 11:56:13

End Time 11:57:22

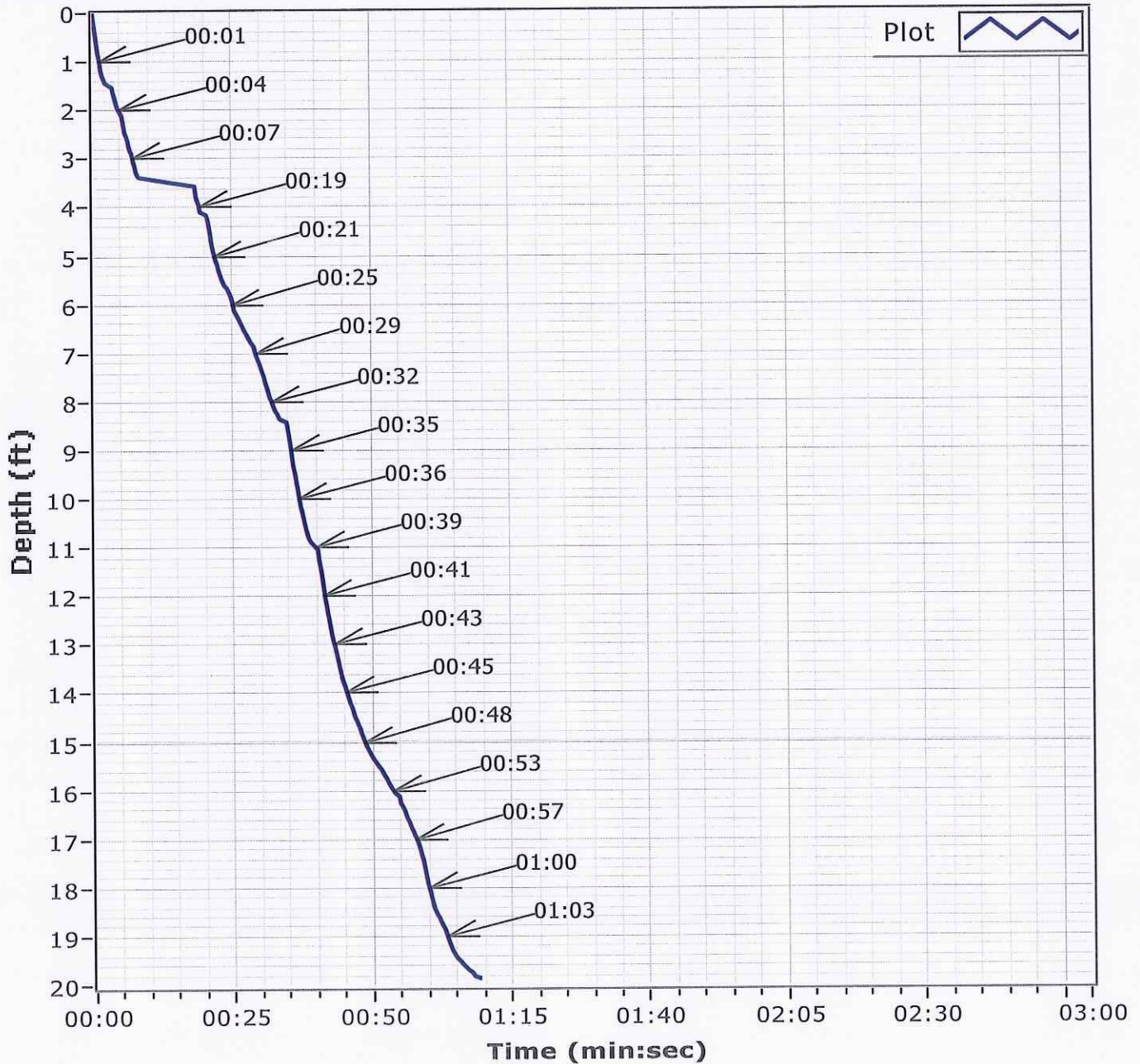
Total Time 00:01:09

Penetration 19.9'

Recovery 17.4'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/18/2009

Water Depth -56.2'

Core Identifier VB-SJSP09-51

Coordinate System

State Plane Coordinates (SPC)

588516.2786 X

2056915.789 Y

FL East Zone

Start Time 12:13:38

End Time 12:14:31

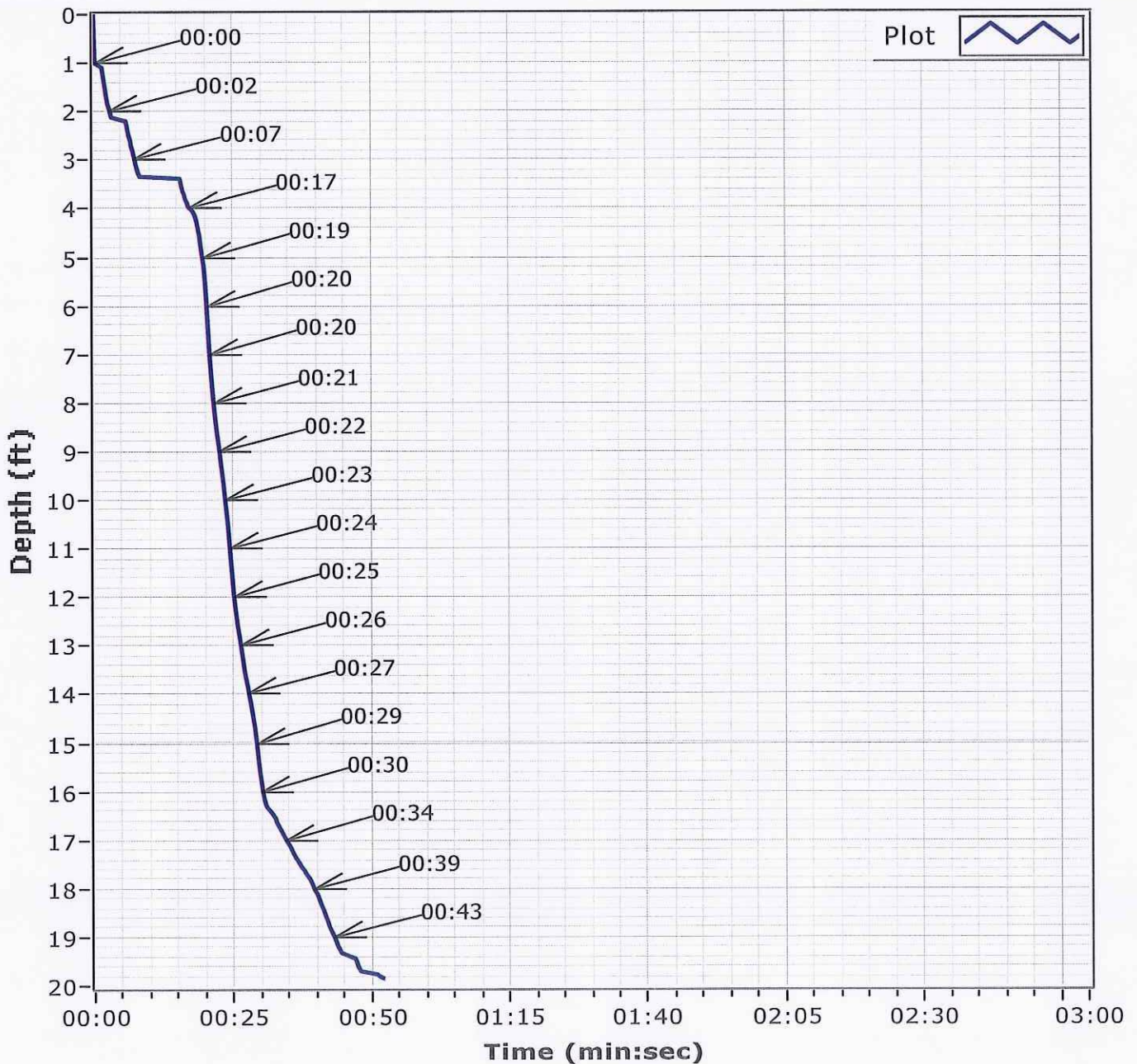
Total Time 00:00:52

Penetration 19.9'

Recovery 19.6'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/28/2009

Water Depth -57.4'

Core Identifier VB-SJSP09-52

Coordinate System

State Plane Coordinates (SPC)

589365.2176 X

2049983.004 Y

FL East Zone

Start Time 08:26:32

End Time 08:28:05

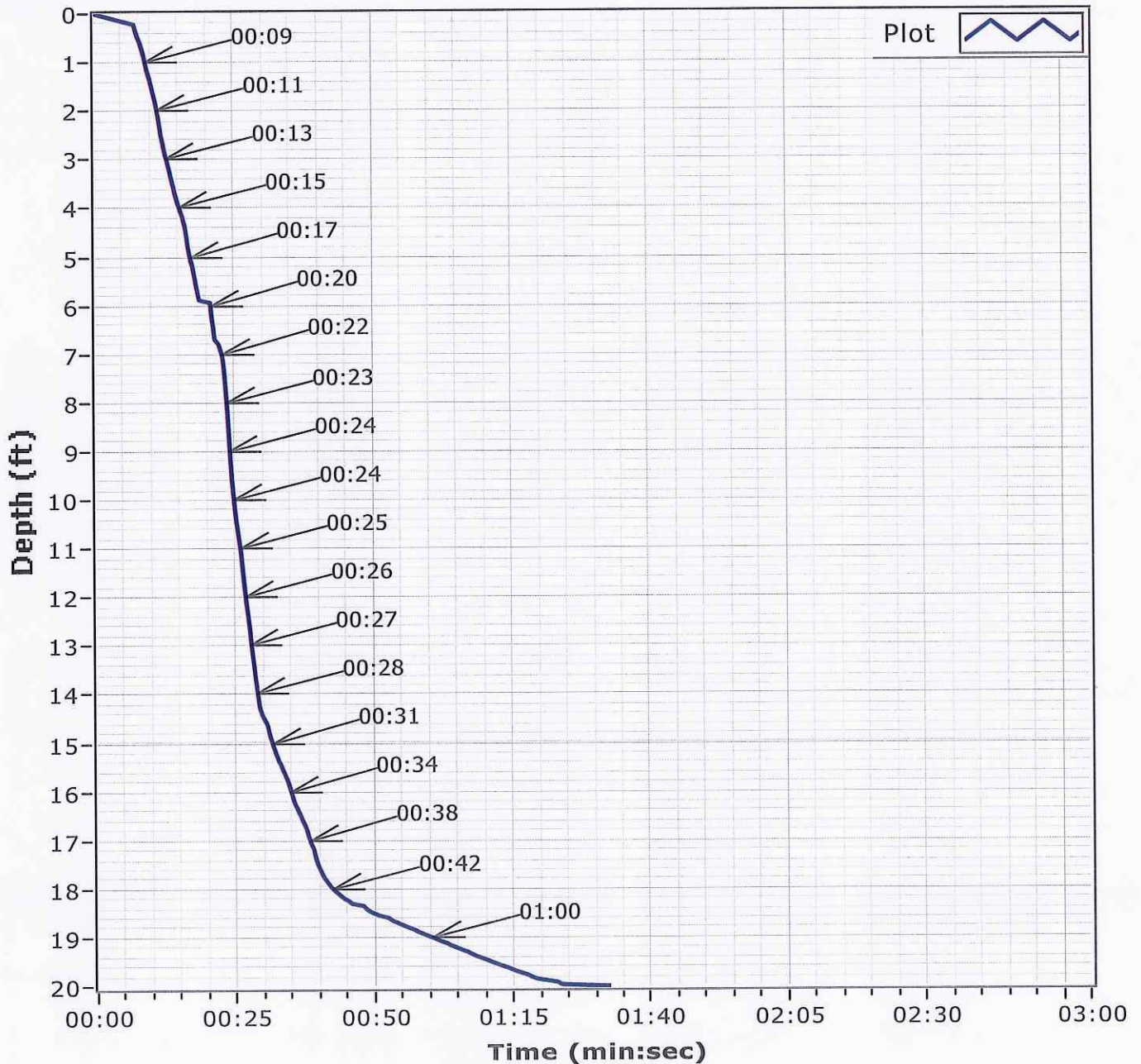
Total Time 00:01:32

Penetration 20.0'

Recovery 18.5'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/27/2009

Water Depth -55.3'

Core Identifier VB SJSP09-53

Coordinate System

State Plane Coordinates (SPC)

599769.6801 X

2053841.613 Y

FL East Zone

Start Time 12:35:07

End Time 12:38:07

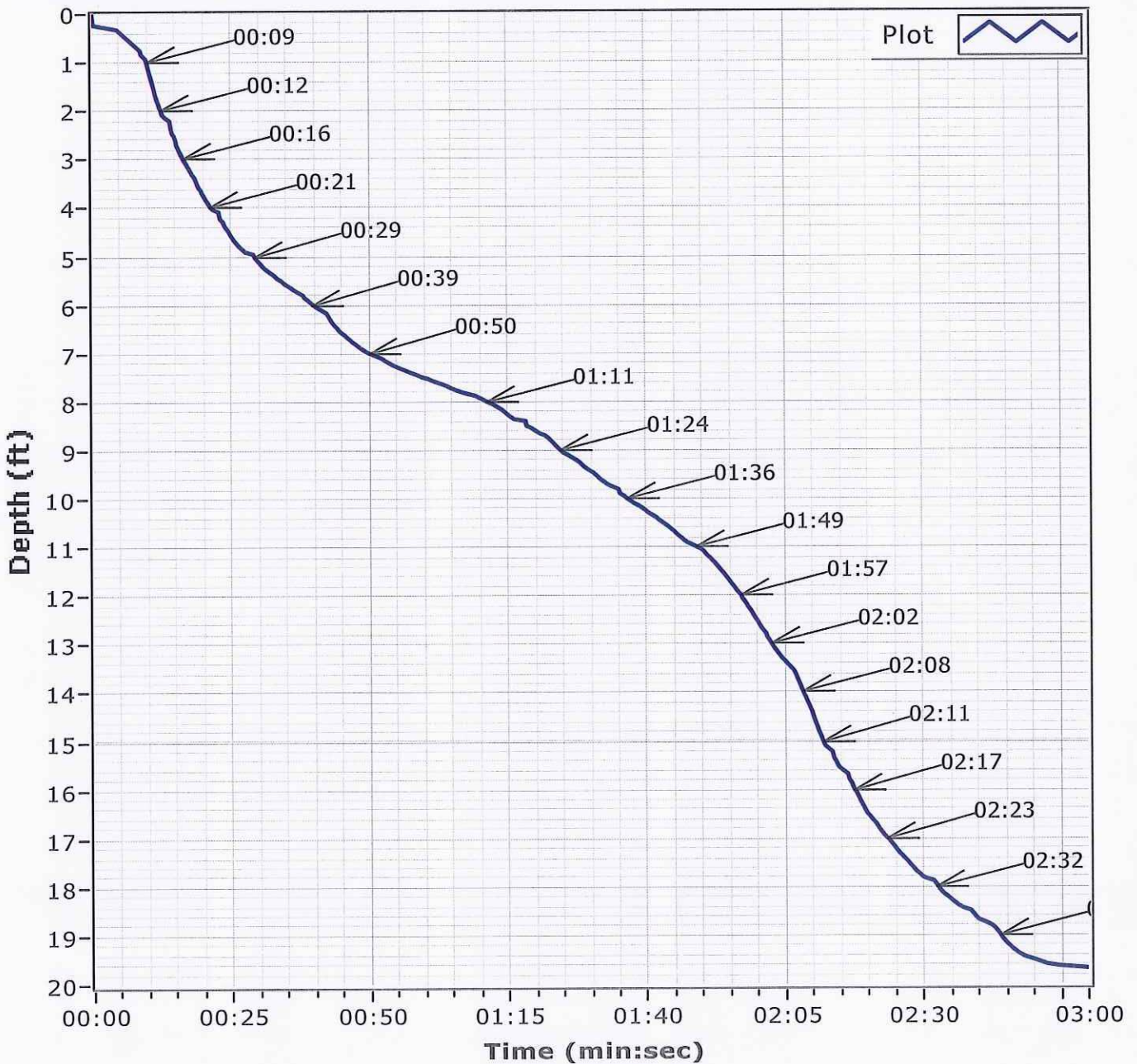
Total Time 00:02:59

Penetration 19.7'

Recovery 17.5'

Comments

Empty comment box.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/27/2009

Water Depth -51.4'

Core Identifier VB SJSP09-54

Coordinate System

Start Time 11:54:51

Penetration 19.4'

State Plane Coordinates (SPC)

End Time 11:56:56

602831.649 X

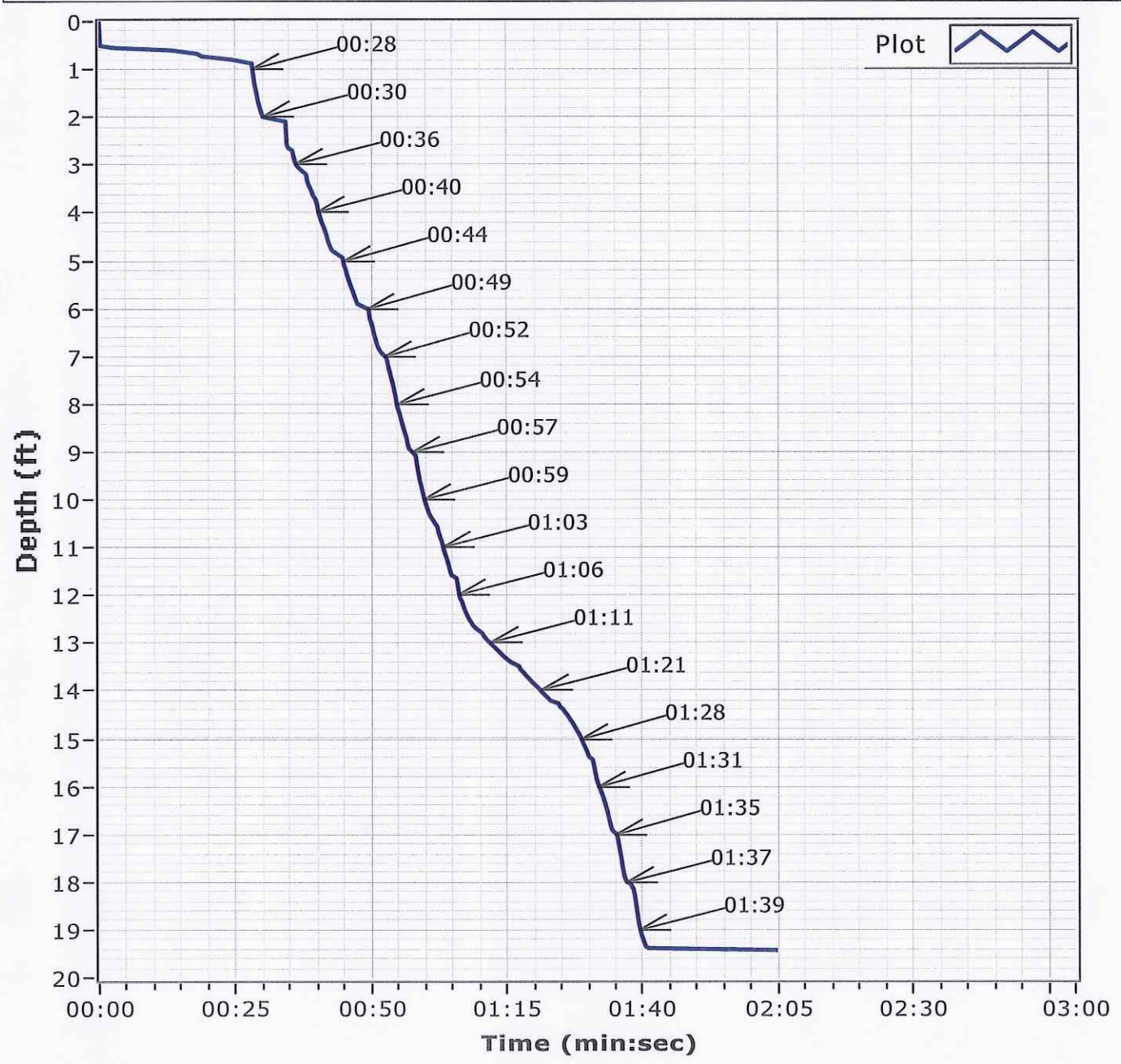
Total Time 00:02:04

Recovery 17.3'

2046603.37 Y

FL East Zone

Comments



Project ST JOHNS COUNTY OFFSHORE II



Date 10/27/2009

Water Depth -59.1'

Core Identifier VB SJSP09-55

Coordinate System

Start Time 09:10:51

State Plane Coordinates (SPC)

End Time 09:13:57

Penetration 19.3'

592444.9687 X

Total Time 00:03:05

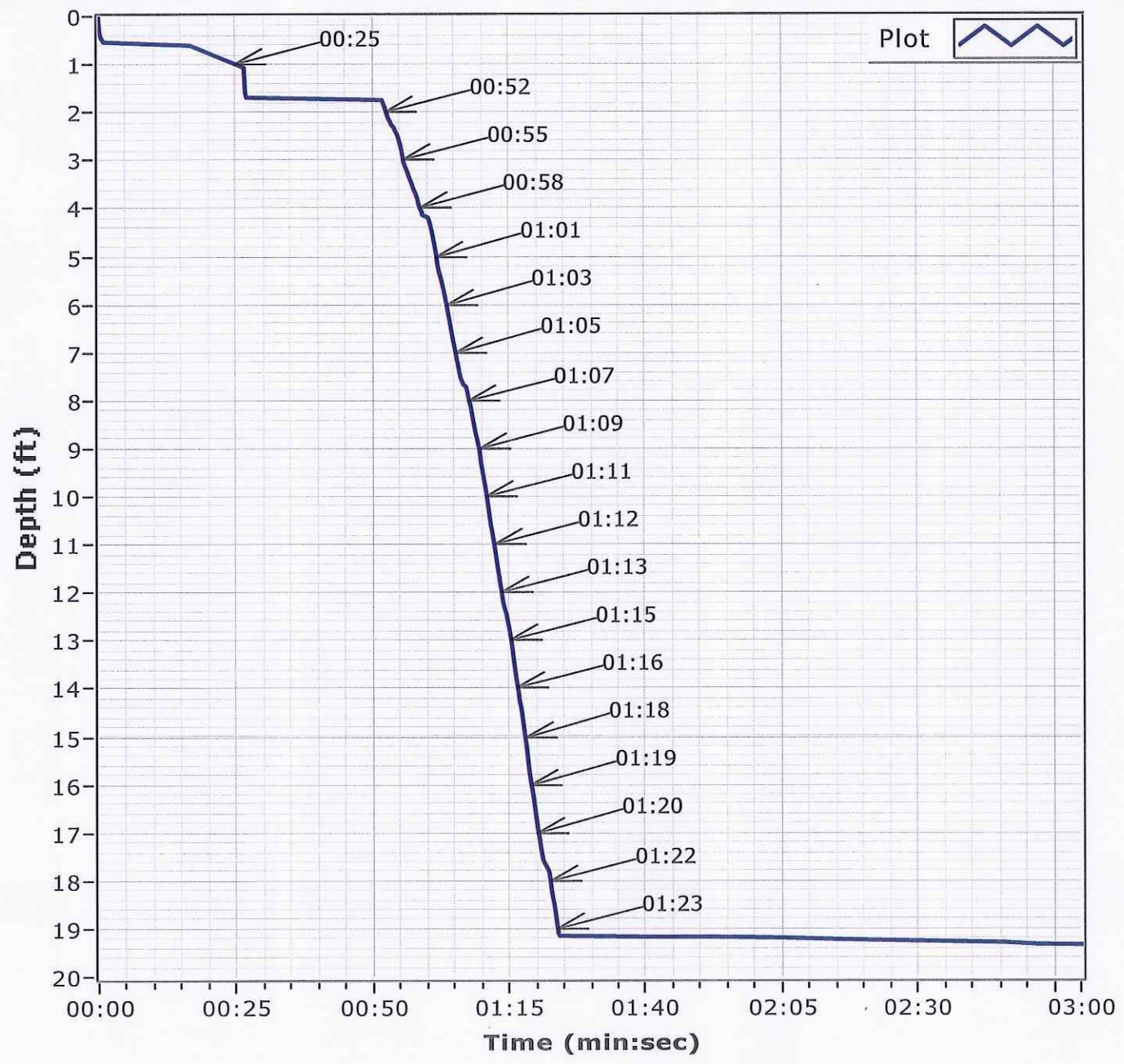
Recovery 18.2'

2039344.005 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 10/27/2009

Water Depth -52.9'

Core Identifier VB SJSP09-56

Coordinate System

Start Time 09:50:11

State Plane Coordinates (SPC)

End Time 09:53:42

Penetration 19.3'

598544.9166 X

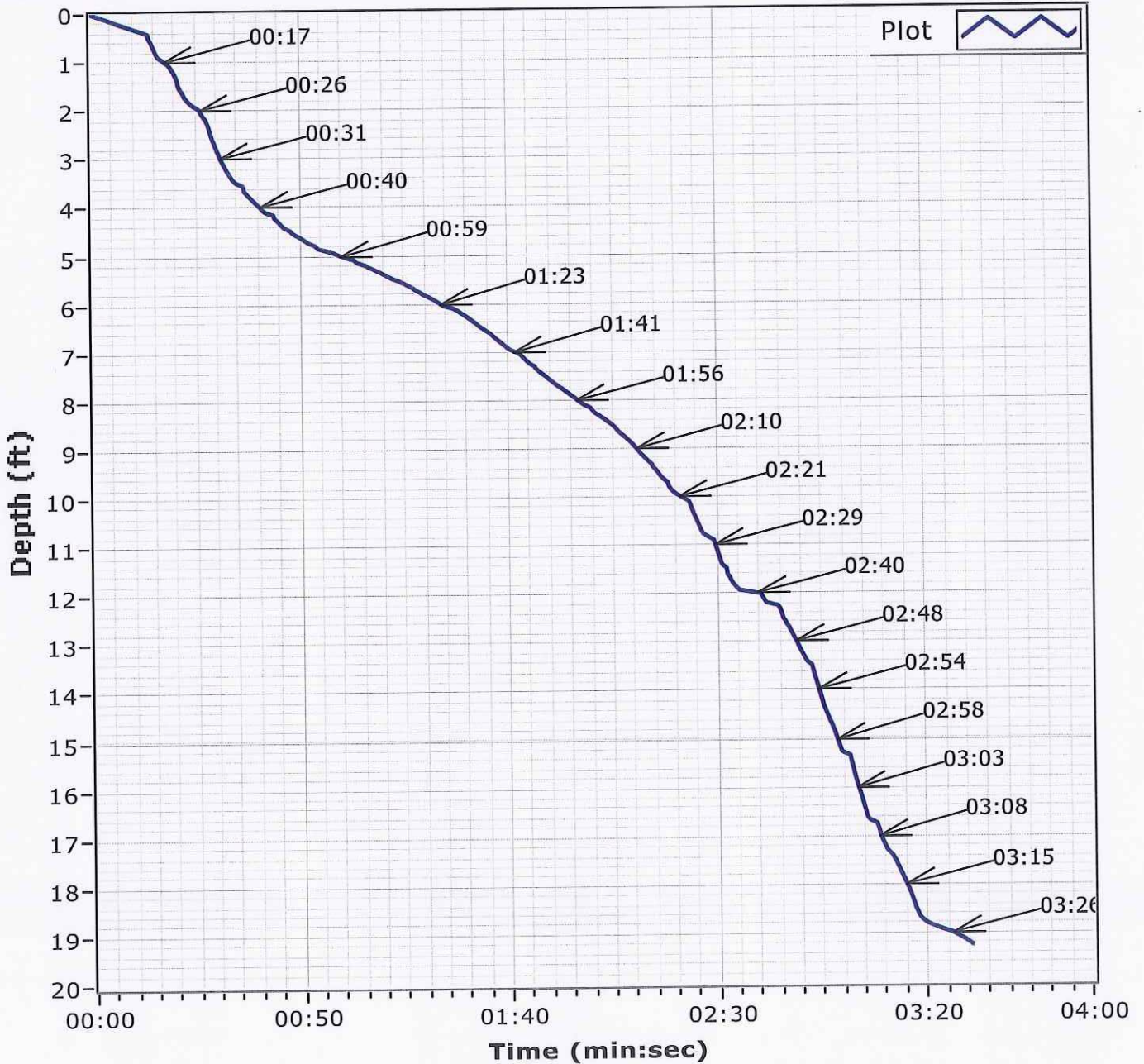
Total Time 00:03:31

Recovery 19.3'

2037366.481 Y

FL East Zone

Comments



Project ST JOHNS COUNTY OFFSHORE II



Date 11/19/2009

Water Depth -62.2'

Core Identifier VB-SJSP09-57

Coordinate System

Start Time 11:24:57

State Plane Coordinates (SPC)

End Time 11:29:01

Penetration 20.0'

611849.8324 X

Total Time 00:04:03

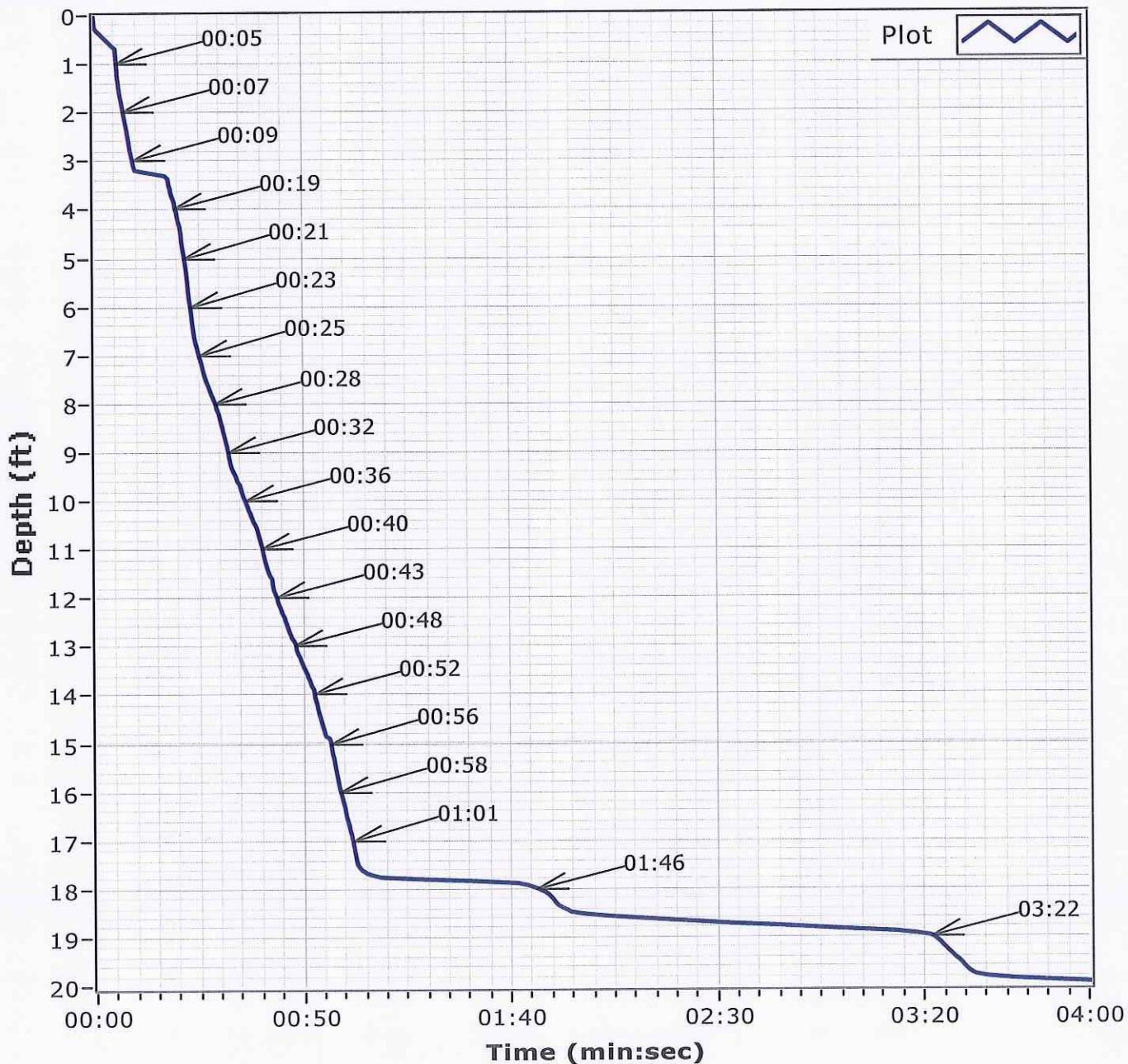
Recovery 19.6'

1985842.104 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/19/2009

Water Depth -58.5'

Core Identifier VB-SJSP09-58

Coordinate System

Start Time 12:07:39

State Plane Coordinates (SPC)

End Time 12:09:43

Penetration 20.0'

606503.1403 X

Total Time 00:02:03

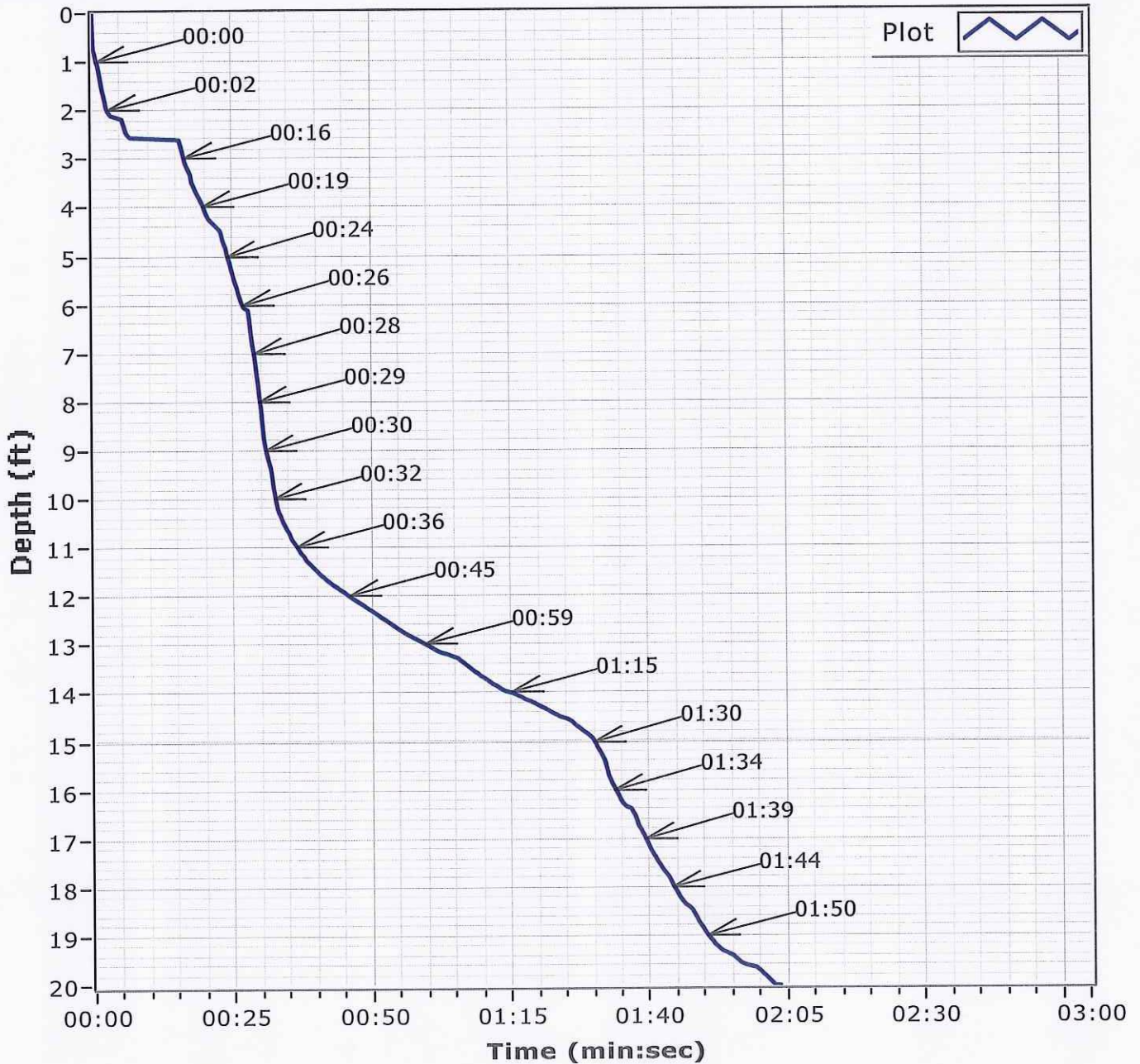
Recovery 19.6'

1971366.6 Y

FL East Zone

Comments

Empty rectangular box for comments.



Project ST JOHN'S COUNTY OFFSHORE II



Date 11/19/2009

Water Depth -61.6'

Core Identifier VB-SJSP09-59

Coordinate System

State Plane Coordinates (SPC)

606478.3891 X

1965078.642 Y

FL East Zone

Start Time 12:25:12

End Time 12:31:37

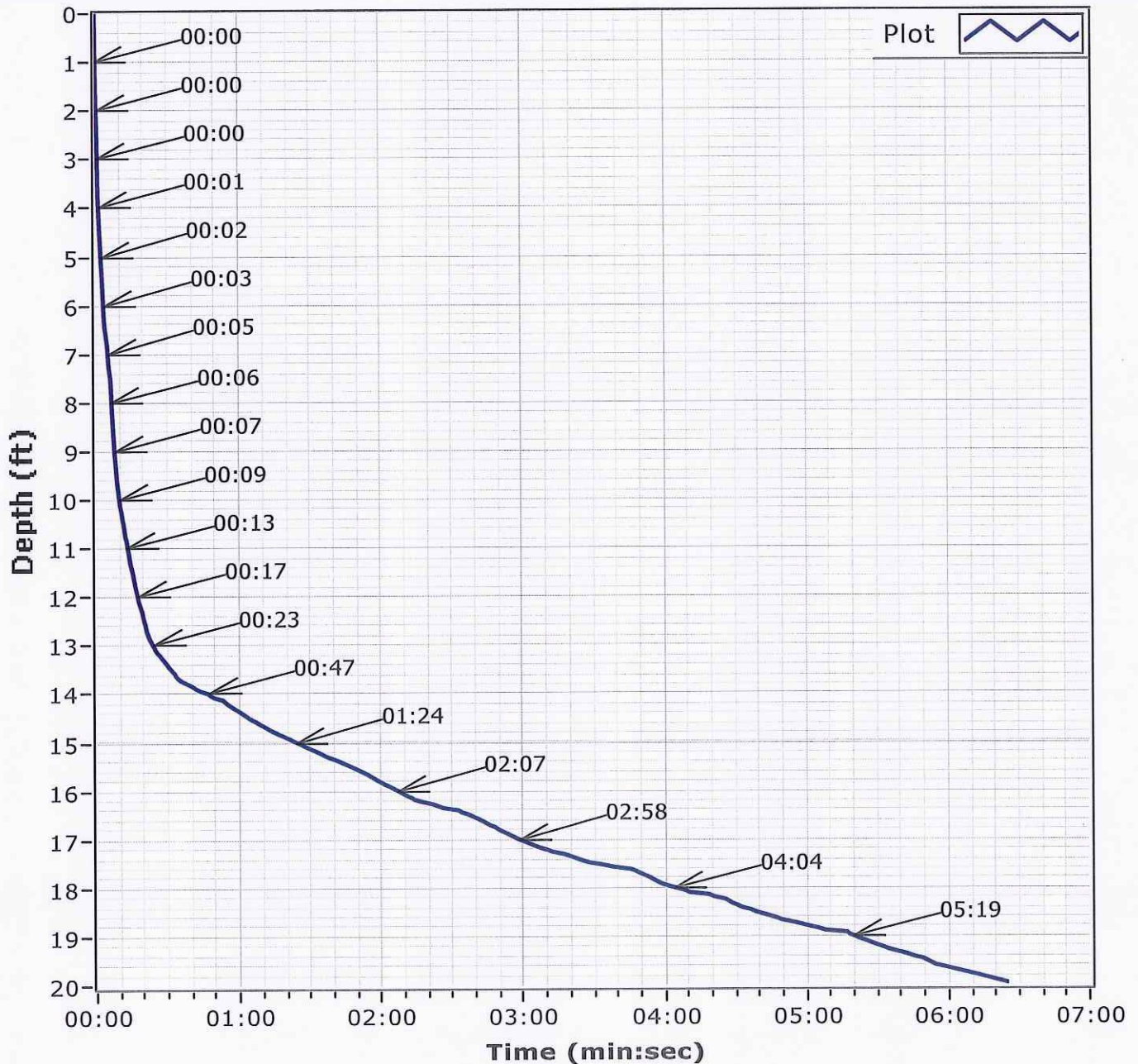
Total Time 00:06:25

Penetration 20.0'

Recovery 19.8'

Comments

Empty rectangular box for comments.



Project ST JOHNS COUNTY OFFSHORE II



Date 11/19/2009

Water Depth -62.2'

Core Identifier VB-SJSP09-60

Coordinate System

Start Time 12:52:03

State Plane Coordinates (SPC)

End Time 12:53:44

Penetration 20.0'

608881.4538 X

Total Time 00:01:40

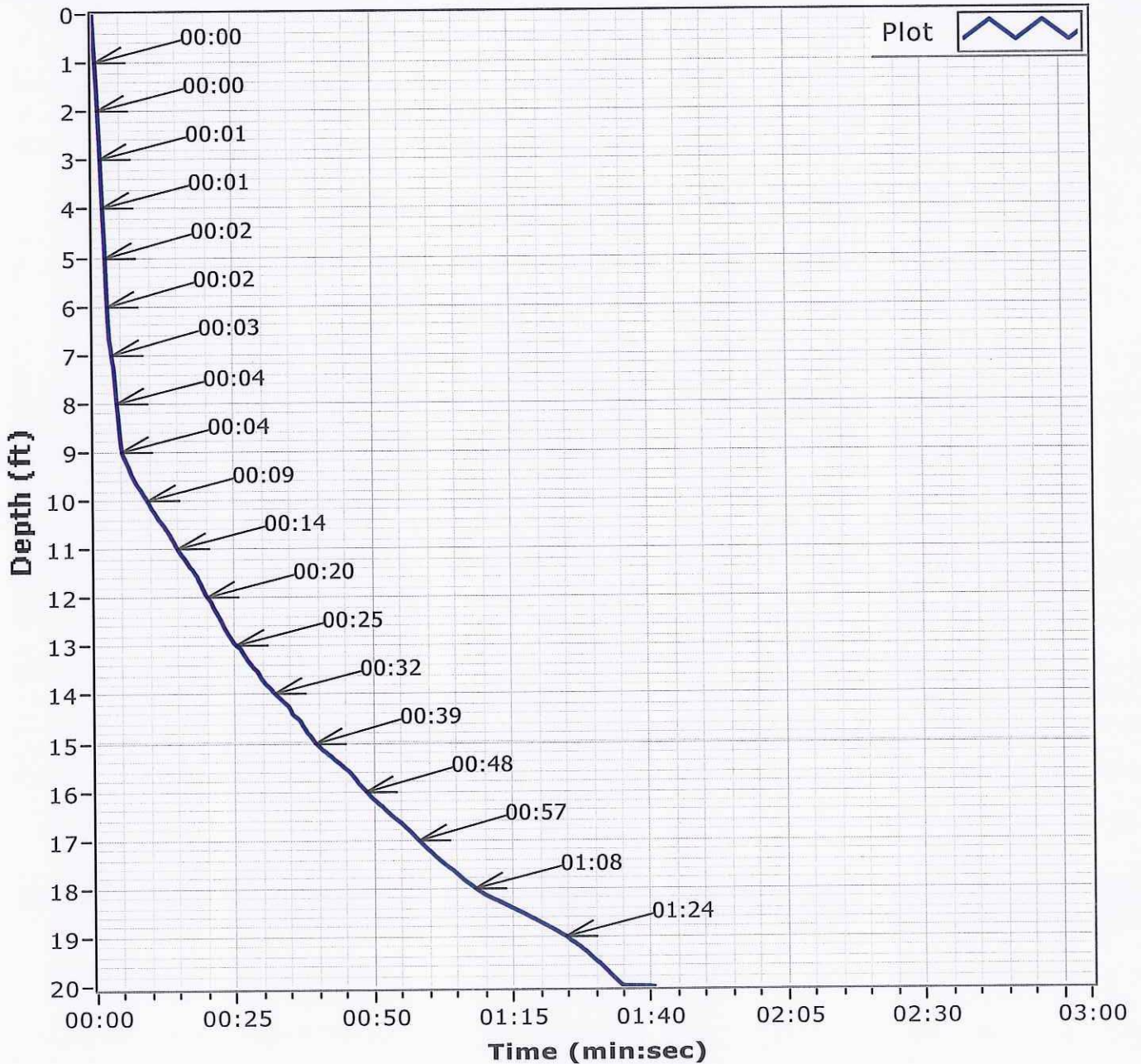
Recovery 19.7'

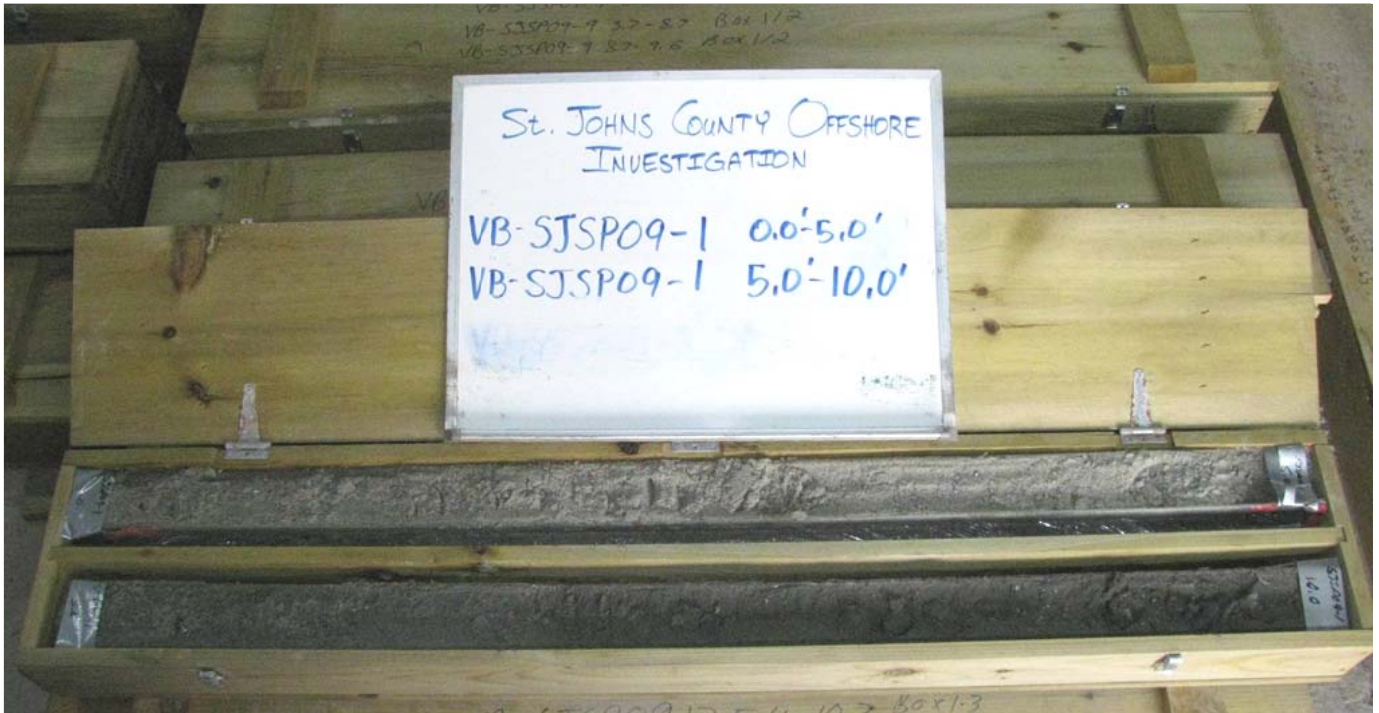
1957931.585 Y

FL East Zone

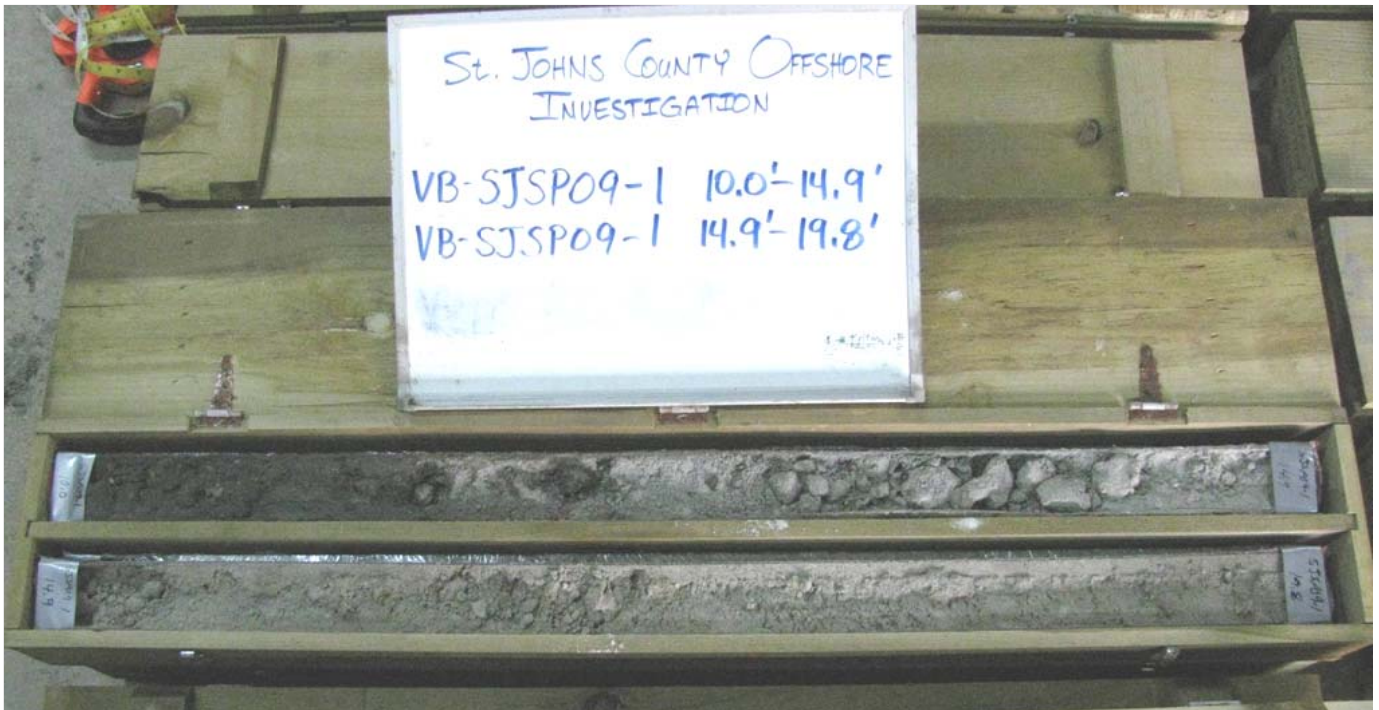
Comments

Empty rectangular box for comments.

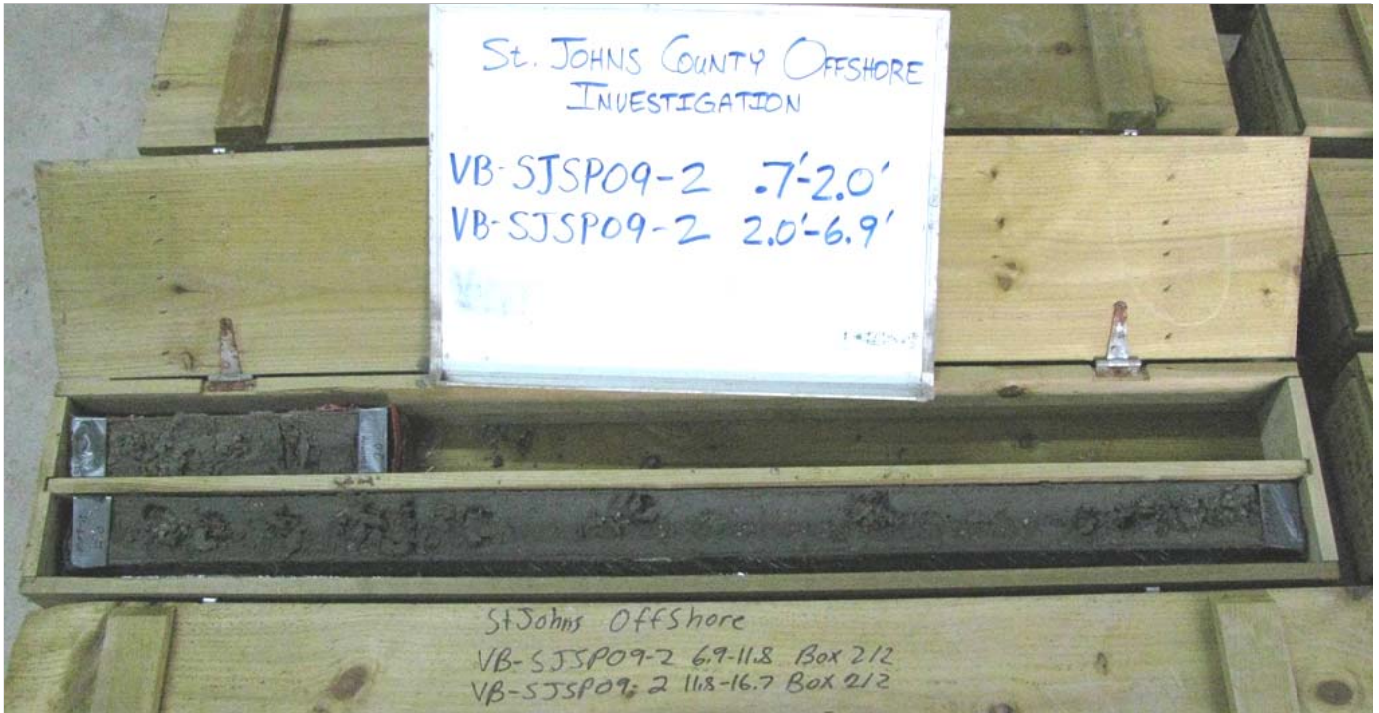




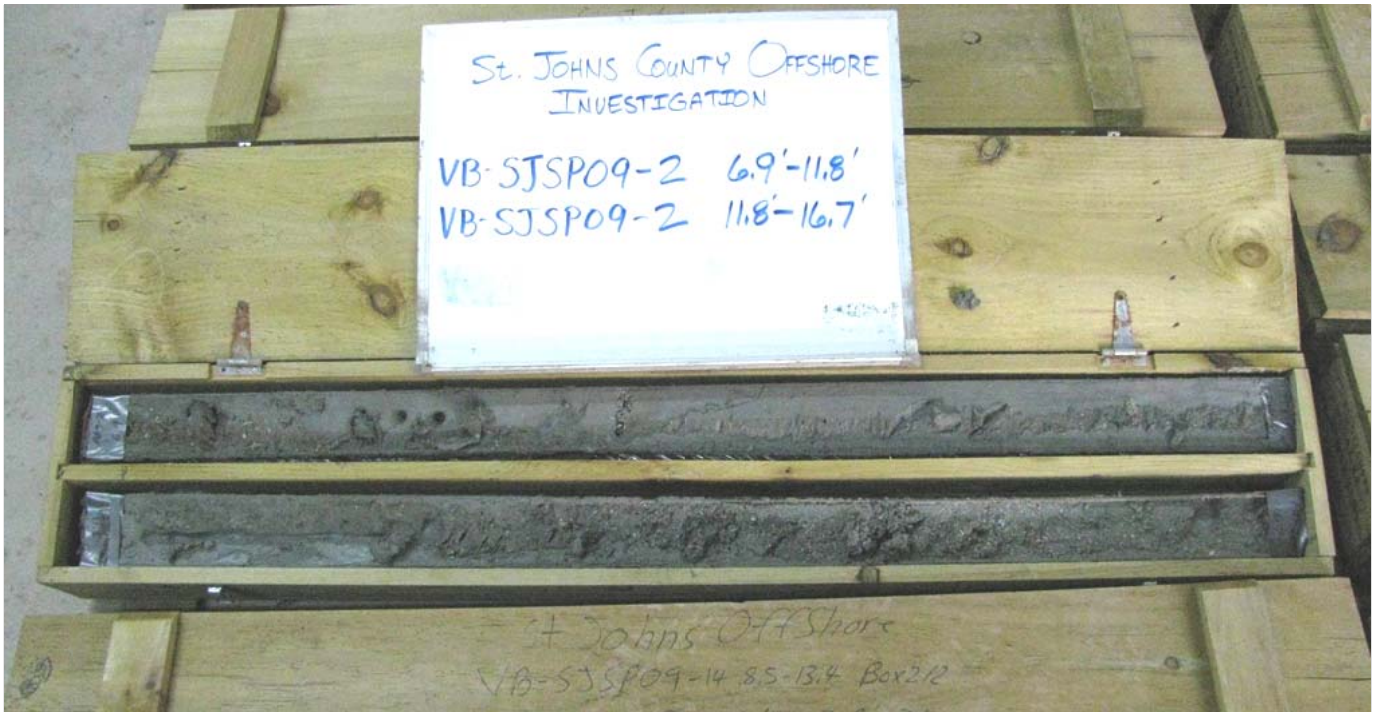
VB-SJSP09-1



VB-SJSP09-1



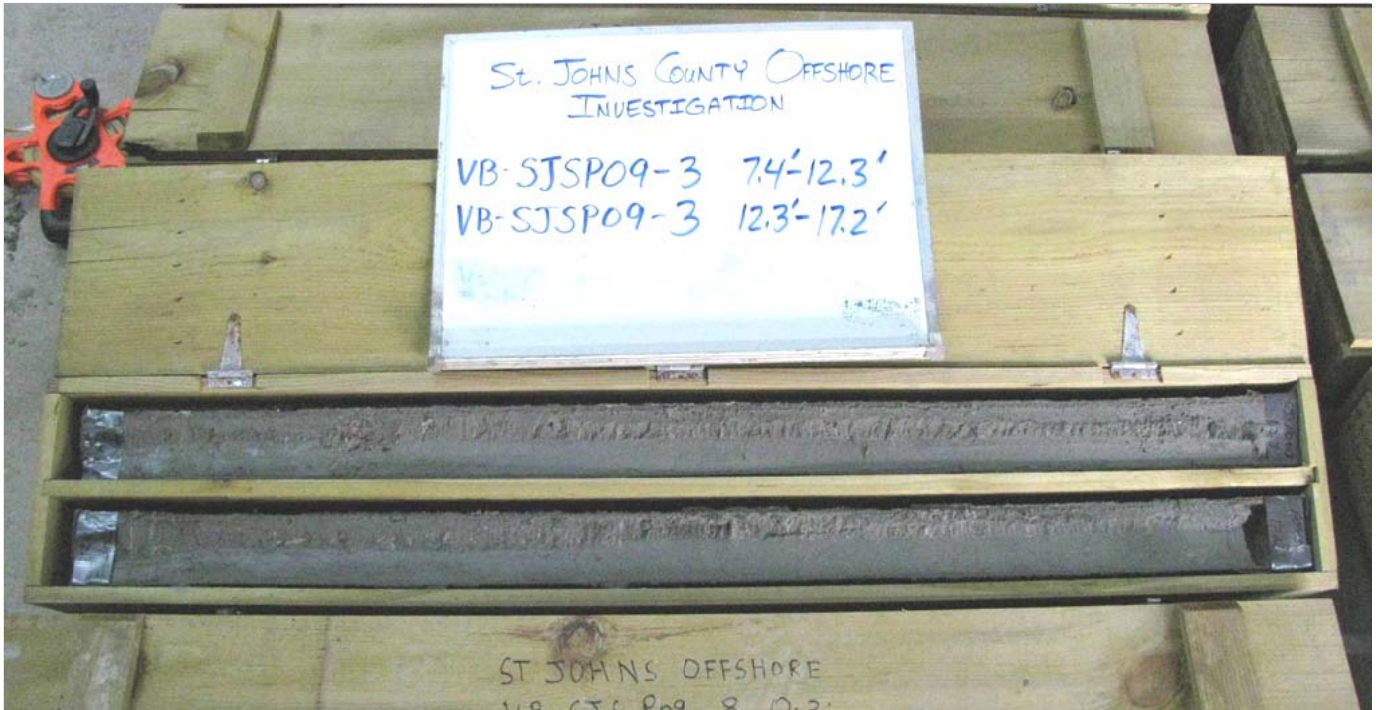
VB-SJSP09-2



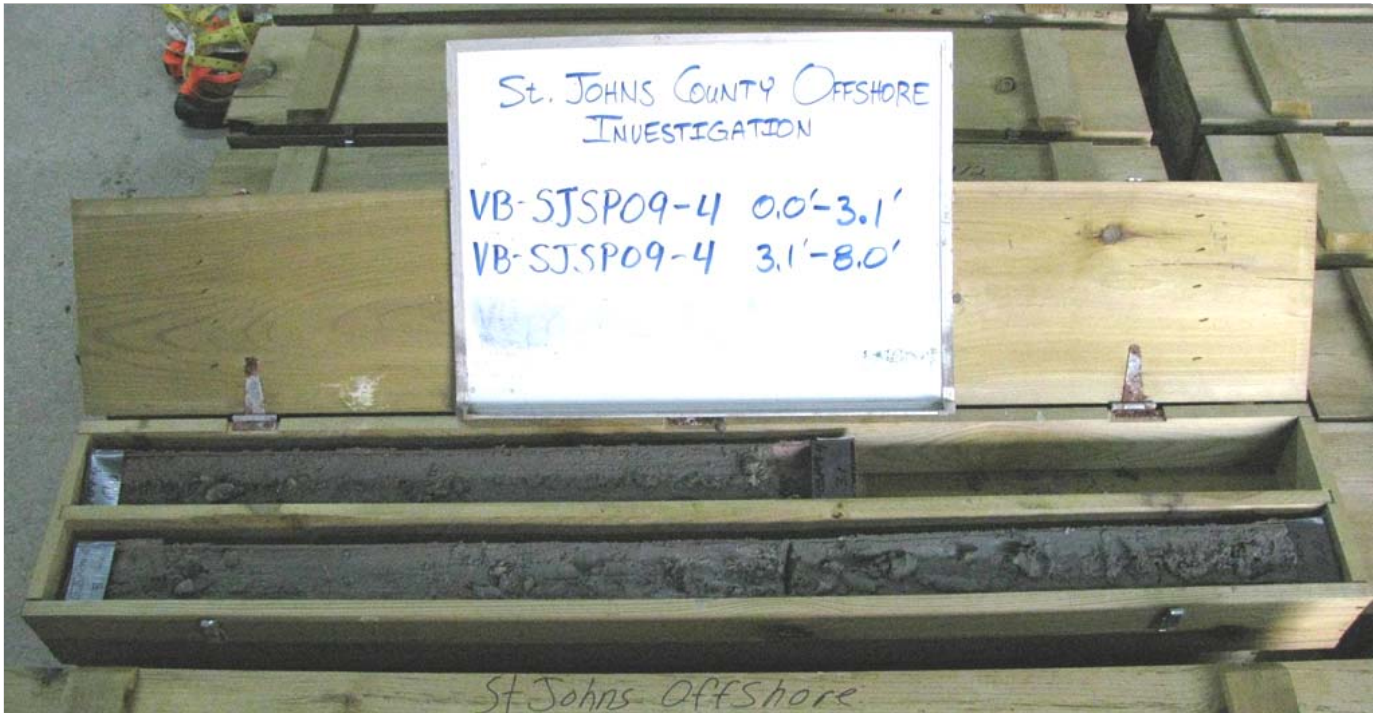
VB-SJSP09-2



VB-SJSP09-3



VB-SJSP09-3



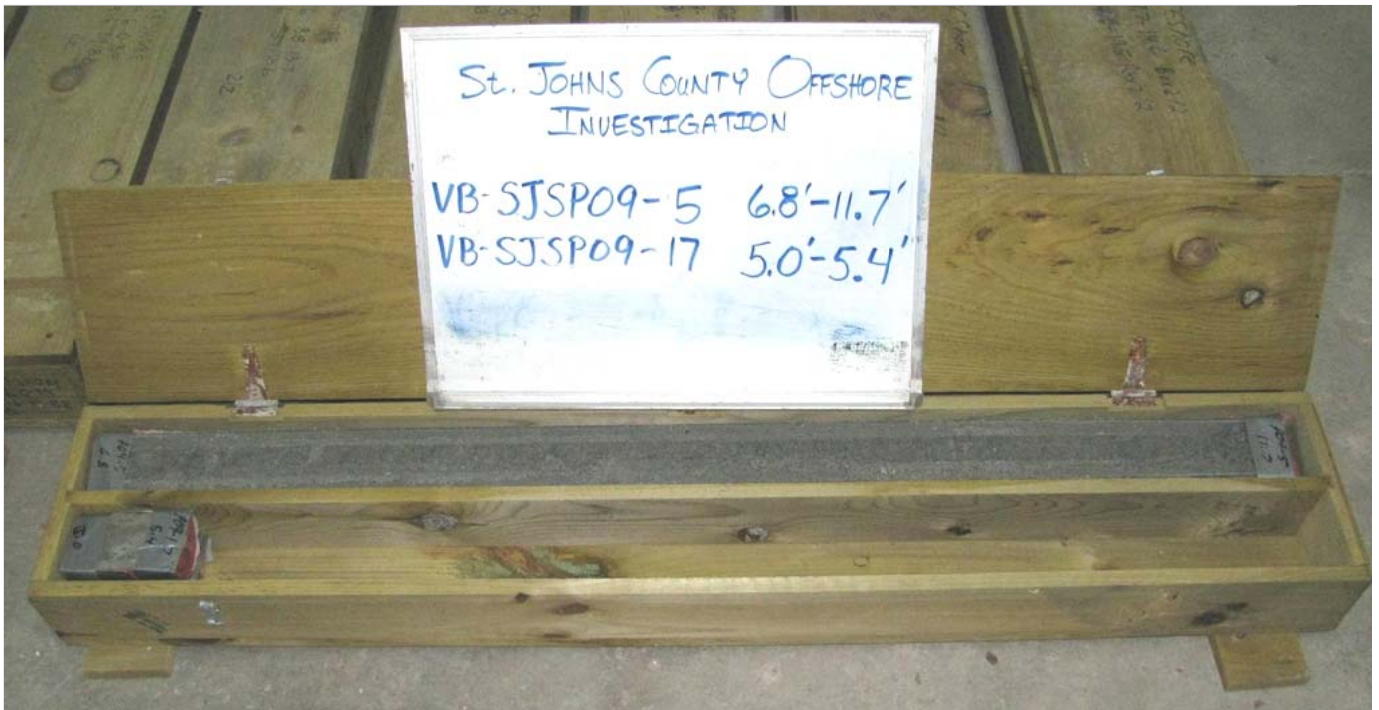
VB-SJSP09-4



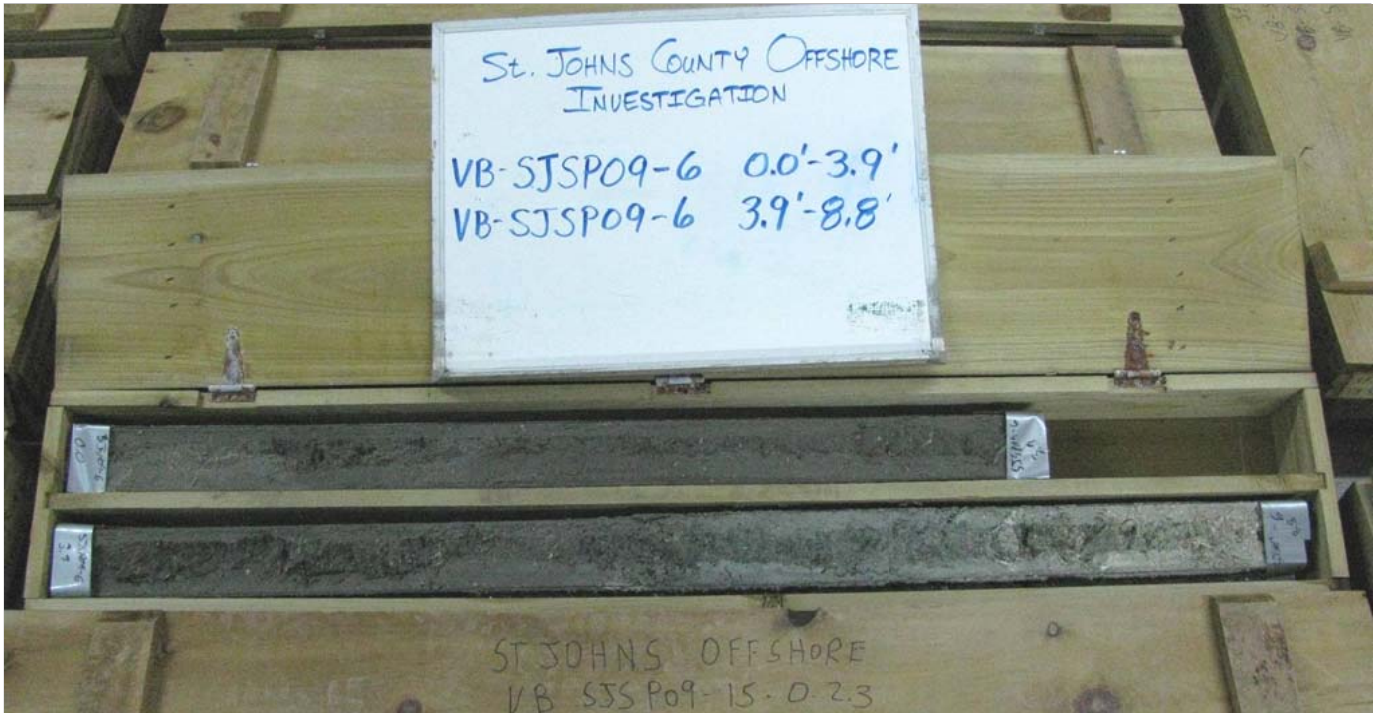
VB-SJSP09-4



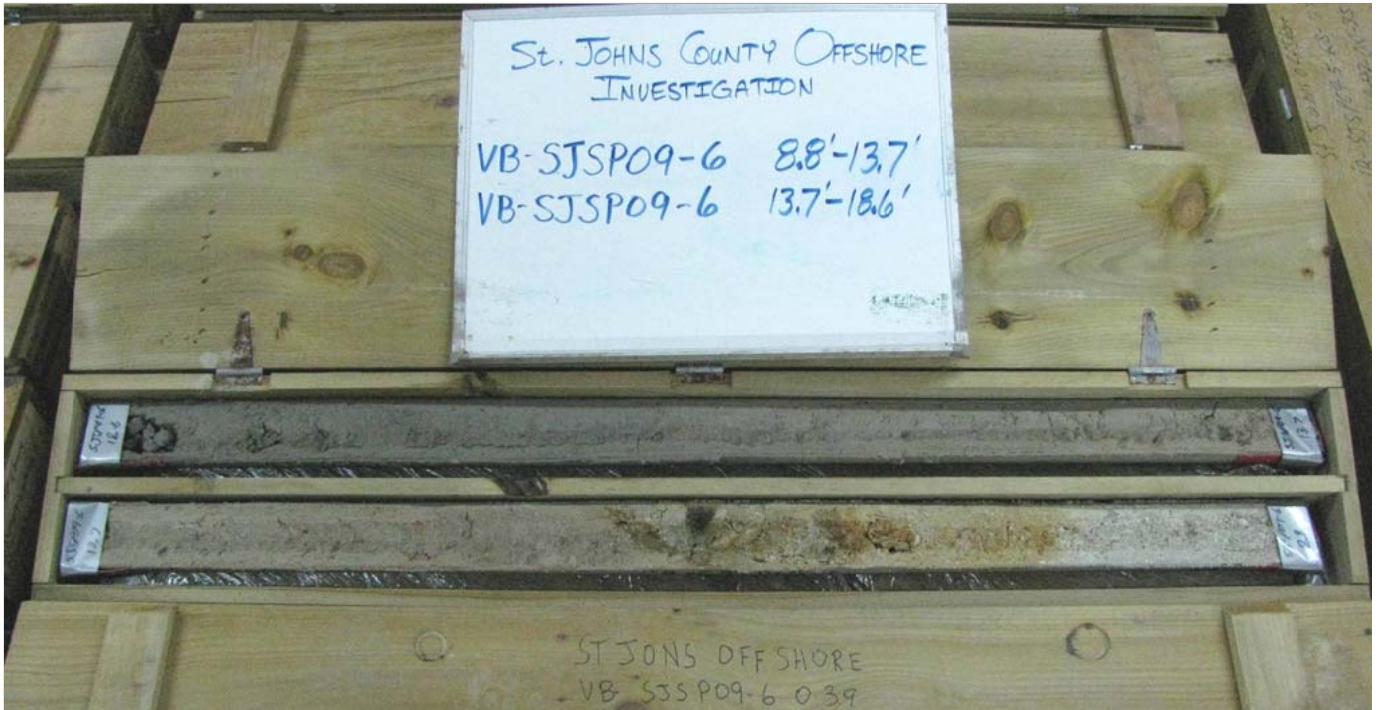
VB-SJSP09-5



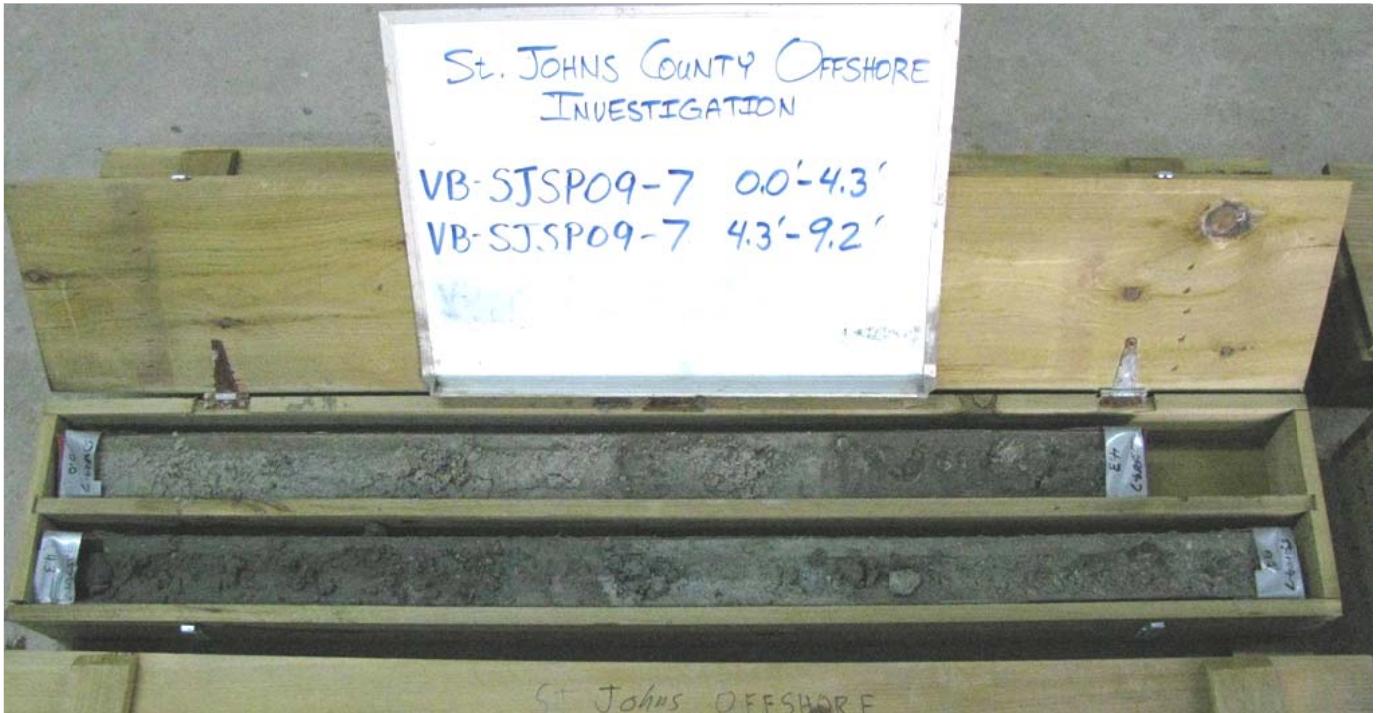
VB-SJSP09-5



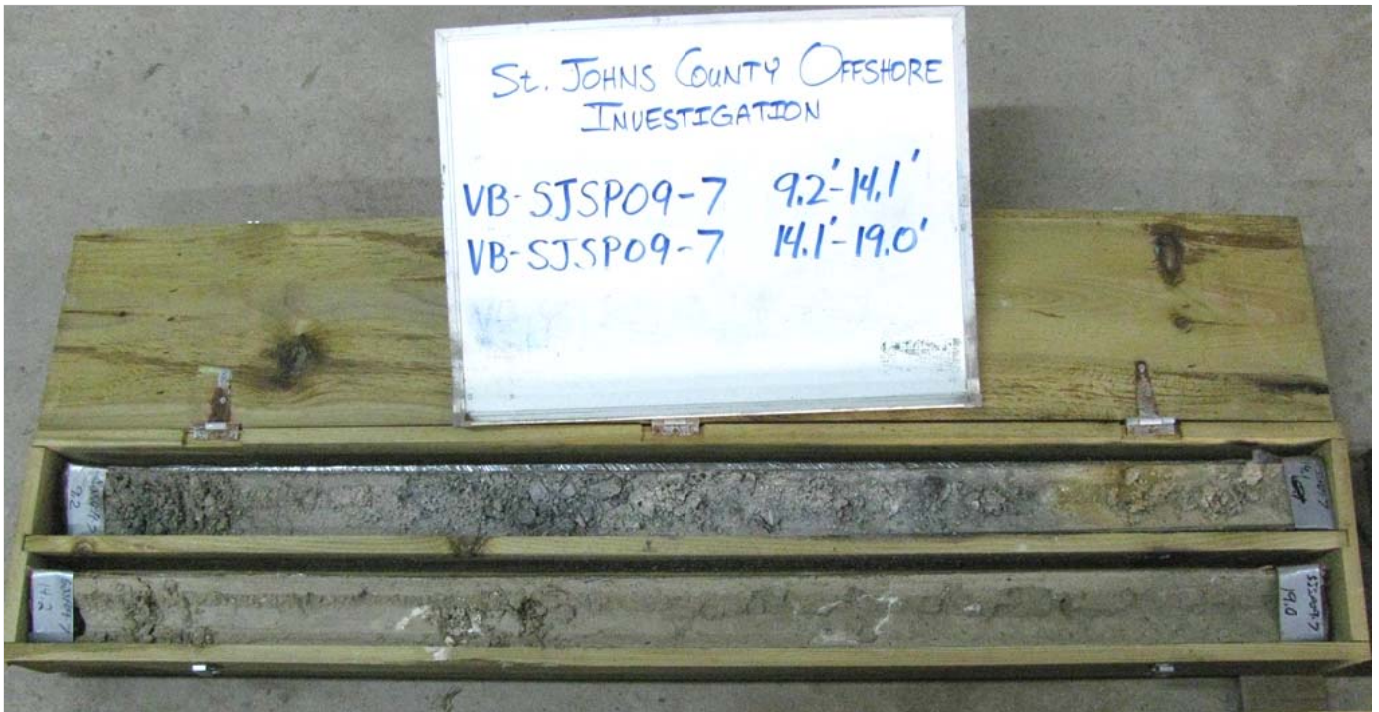
VB-SJSP09-6



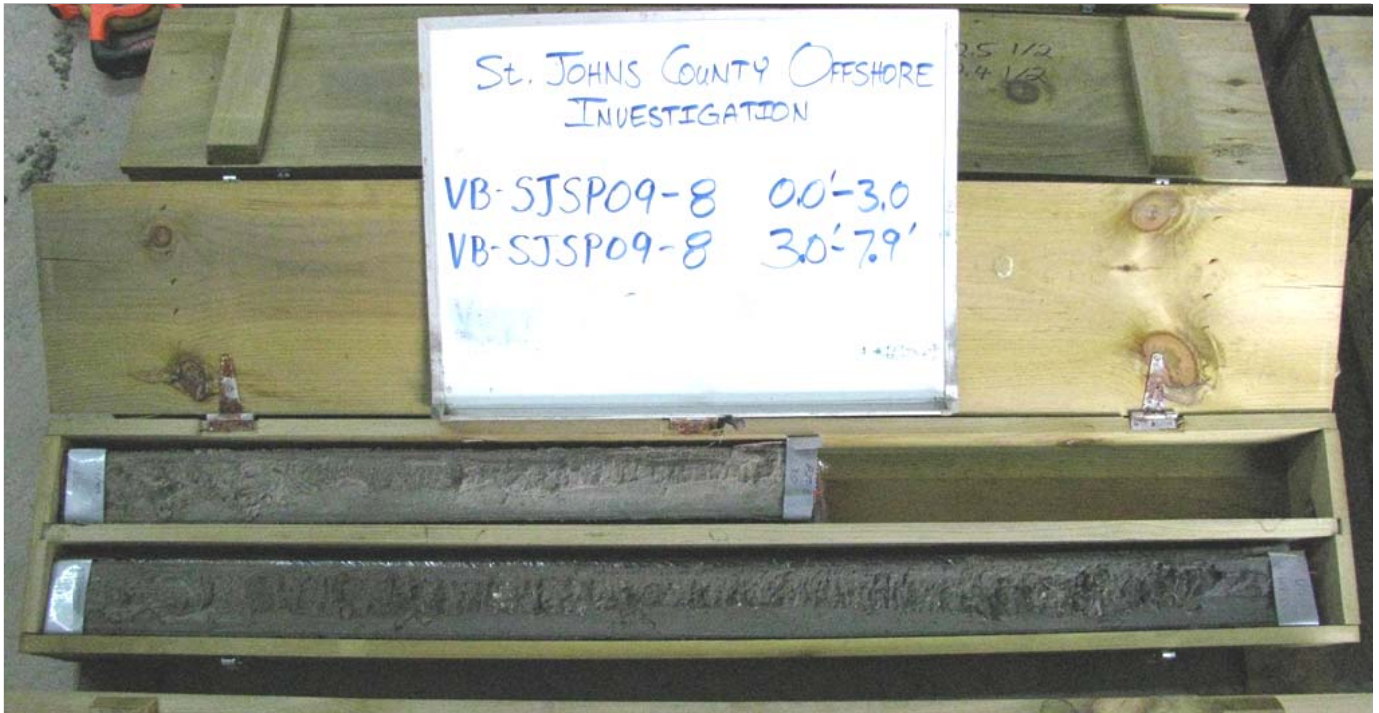
VB-SJSP09-6



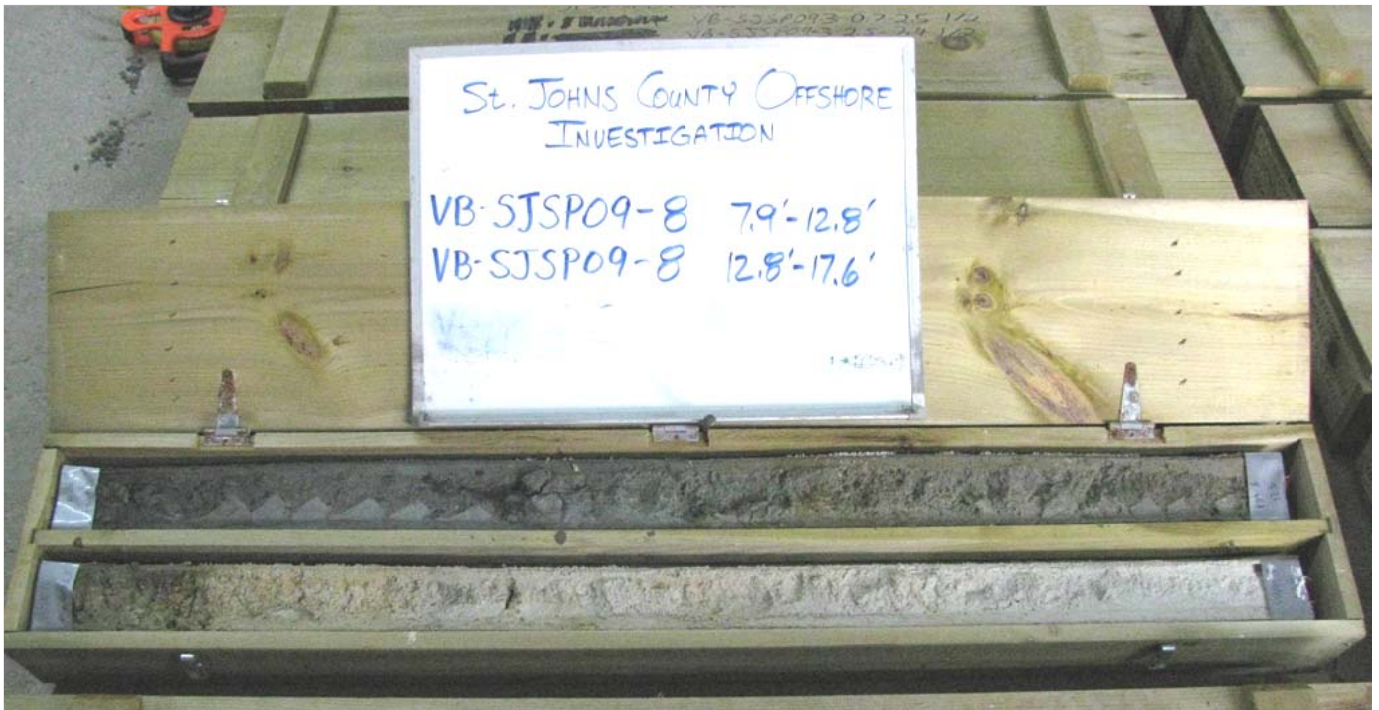
VB-SJSP09-7



VB-SJSP09-7



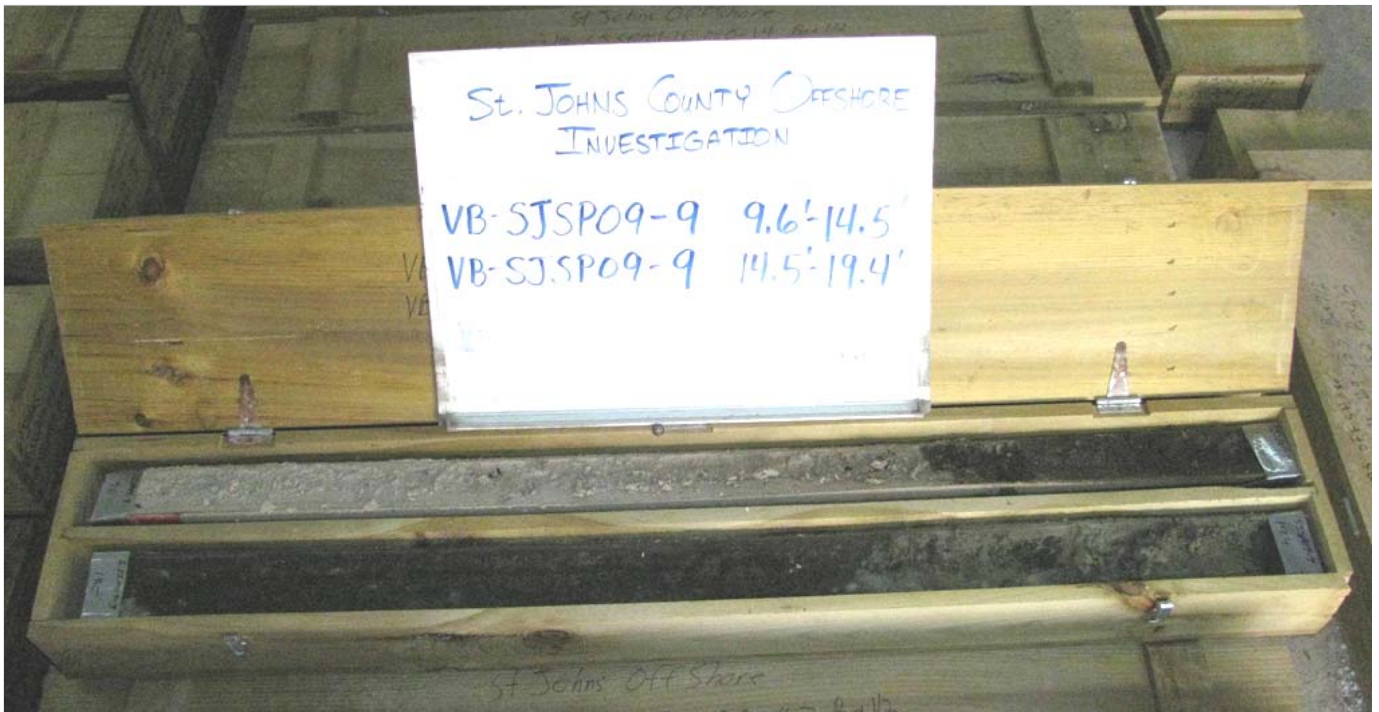
VB-SJSP09-8



VB-SJSP09-8



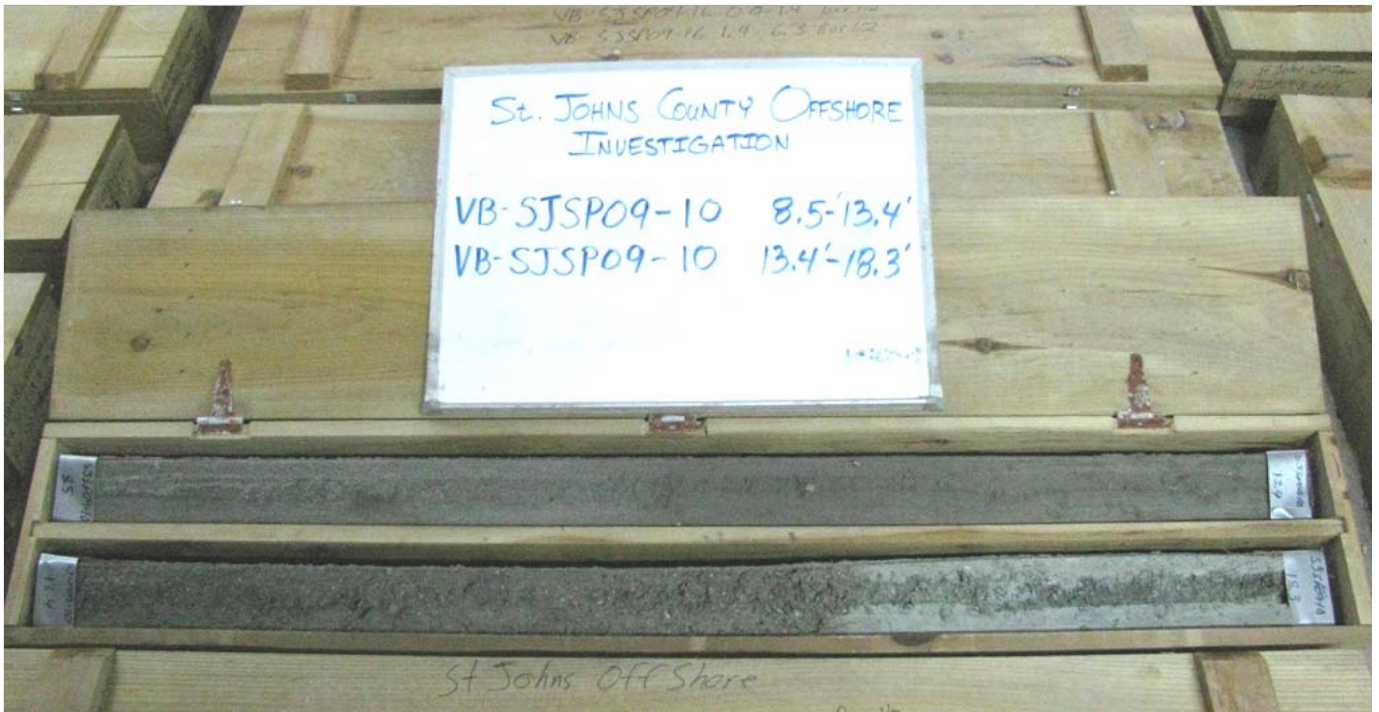
VB-SJSP09-9



VB-SJSP09-9



VB-SJSP09-10



VB-SJSP09-10



VB-SJSP09-11



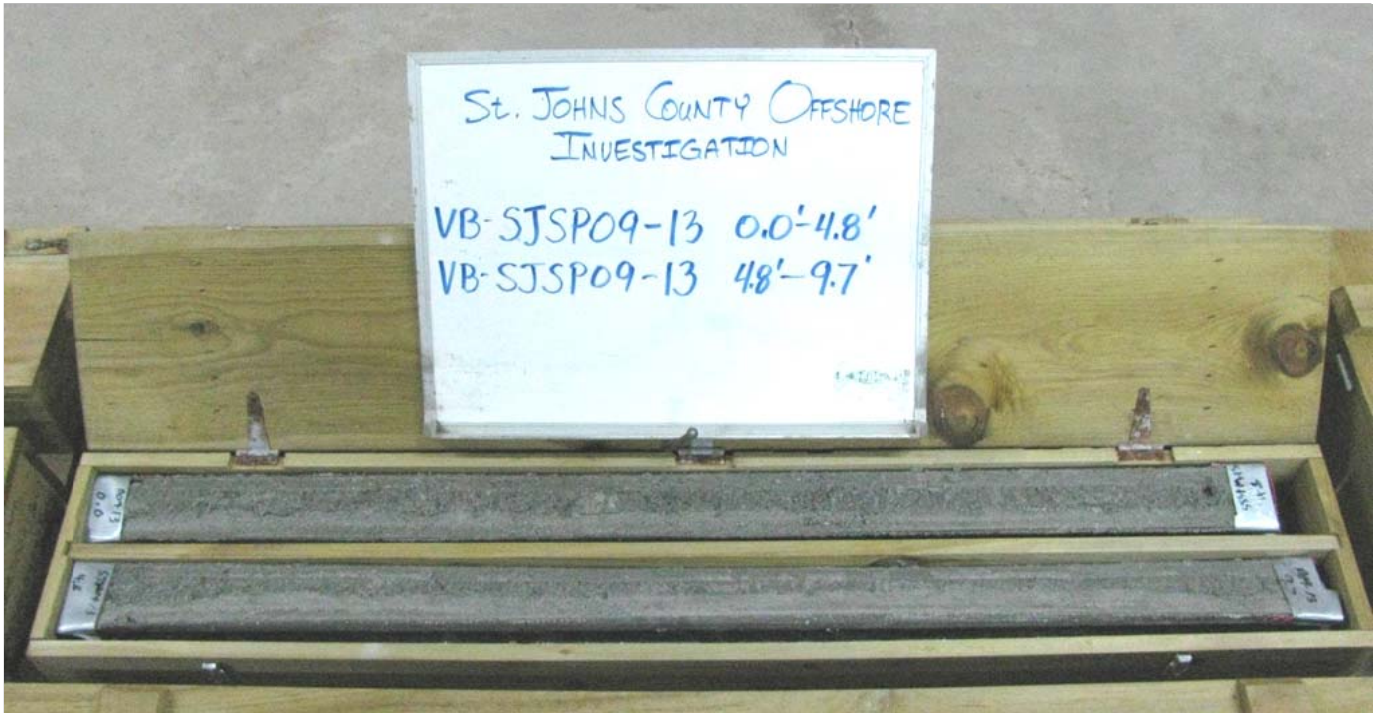
VB-SJSP09-11



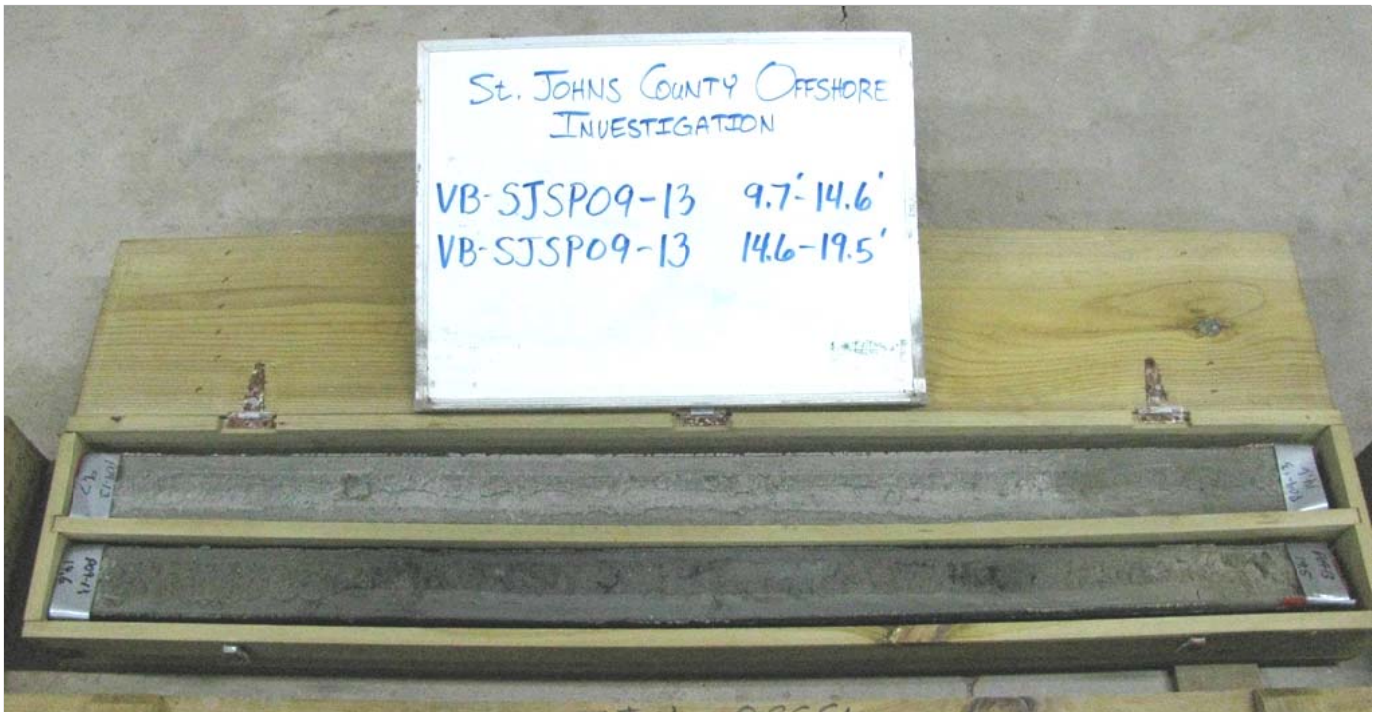
VB-SJSP09-12



VB-SJSP09-12



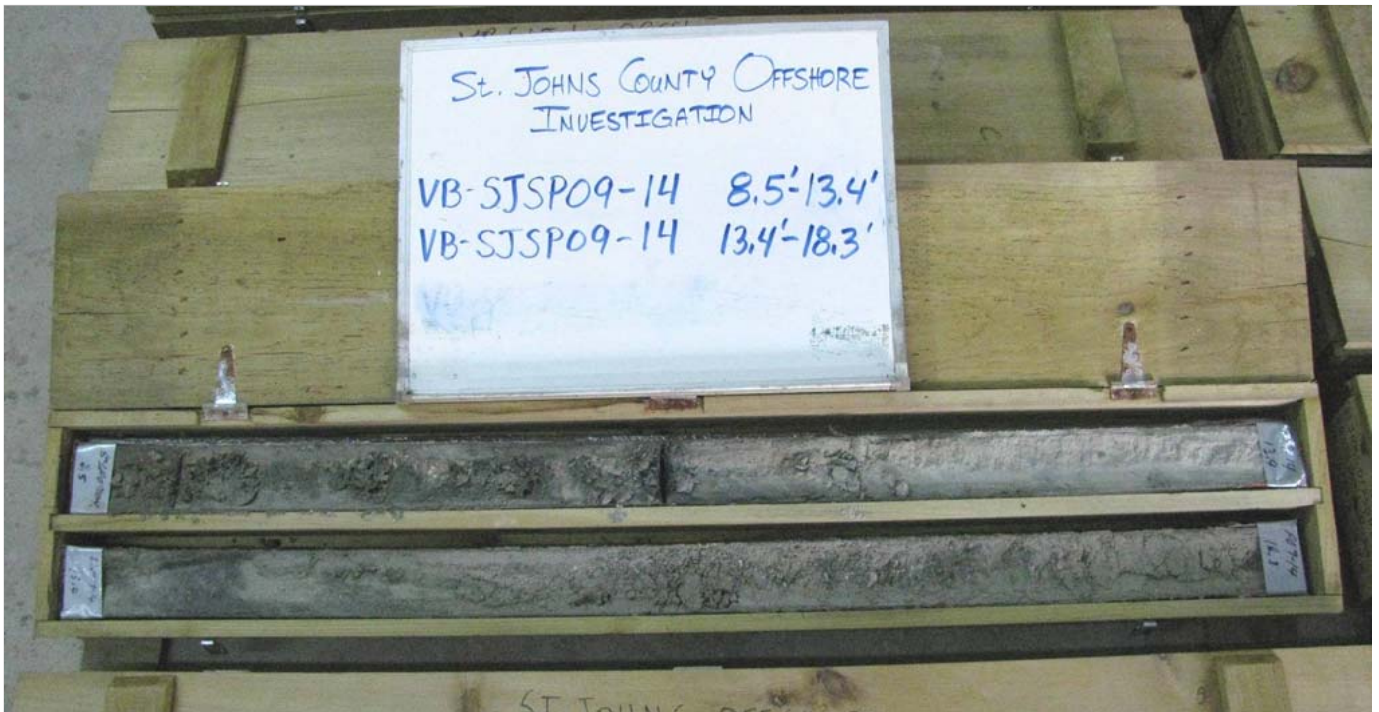
VB-SJSP09-13



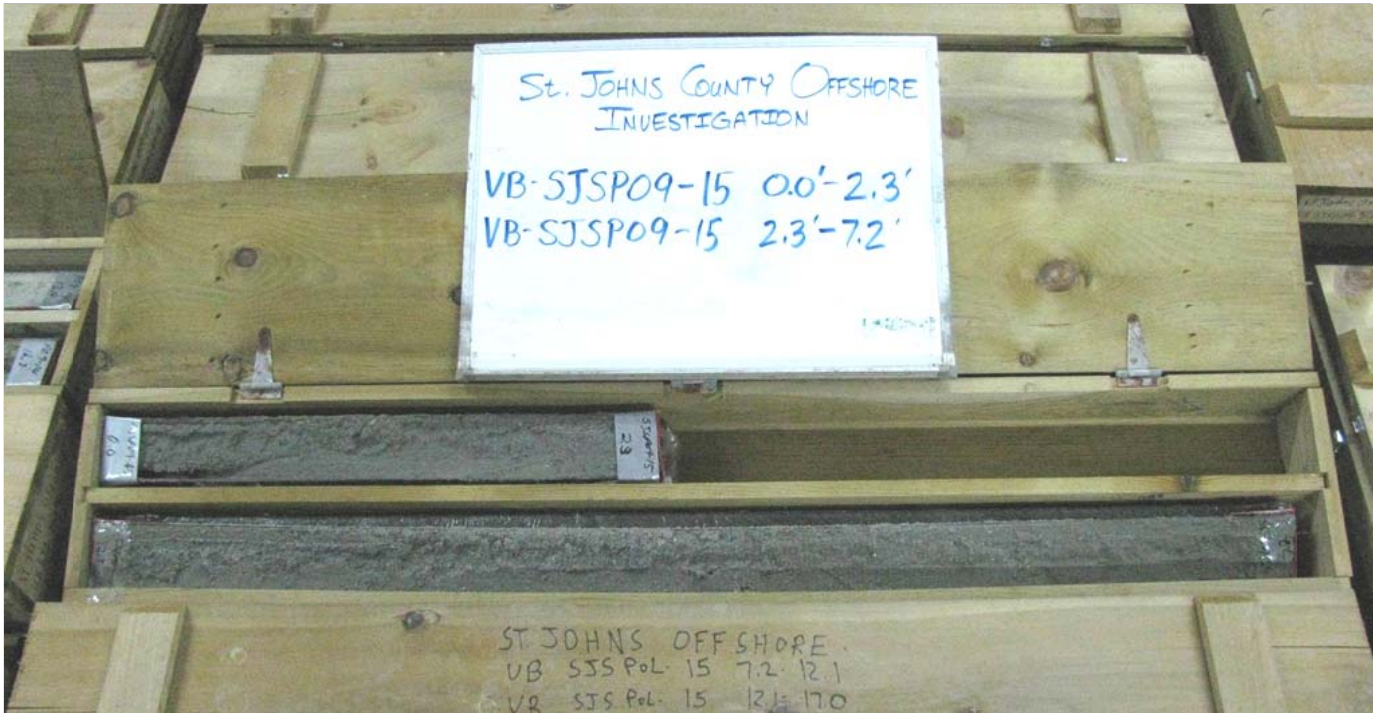
VB-SJSP09-13



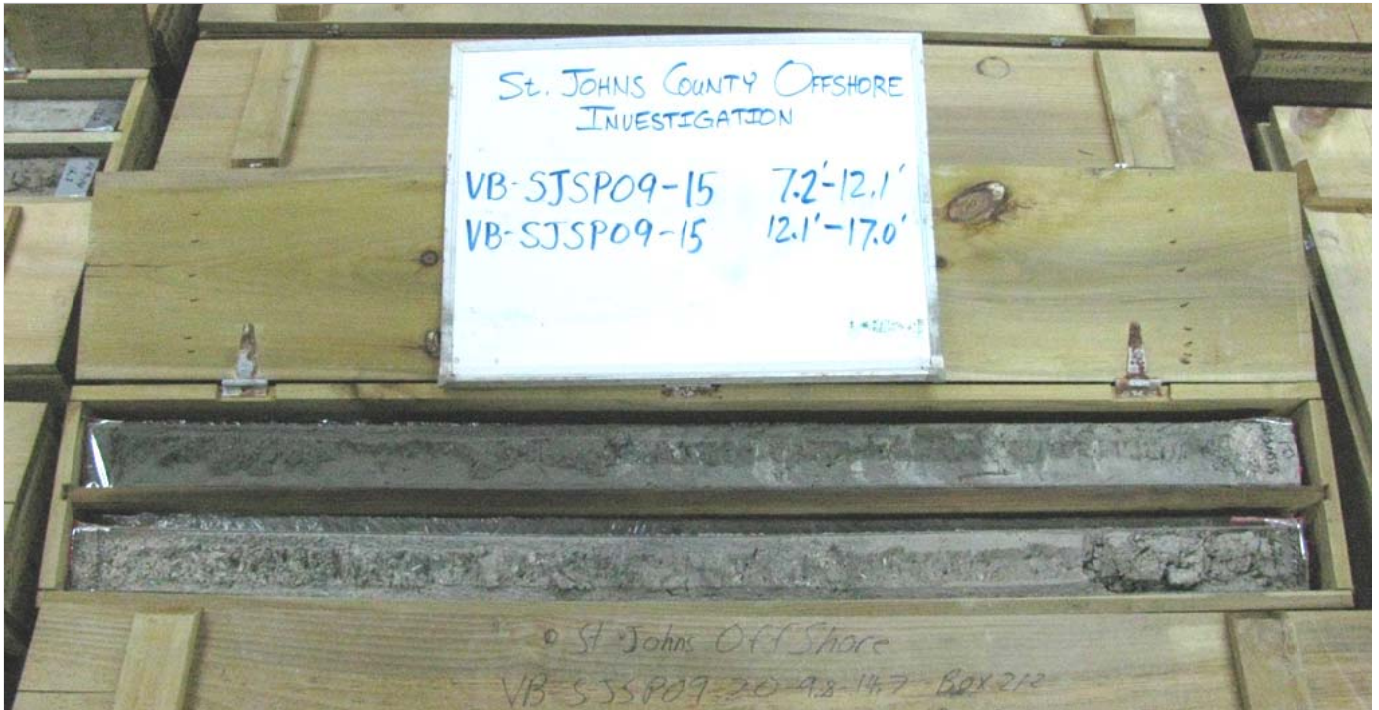
VB-SJSP09-14



VB-SJSP09-14



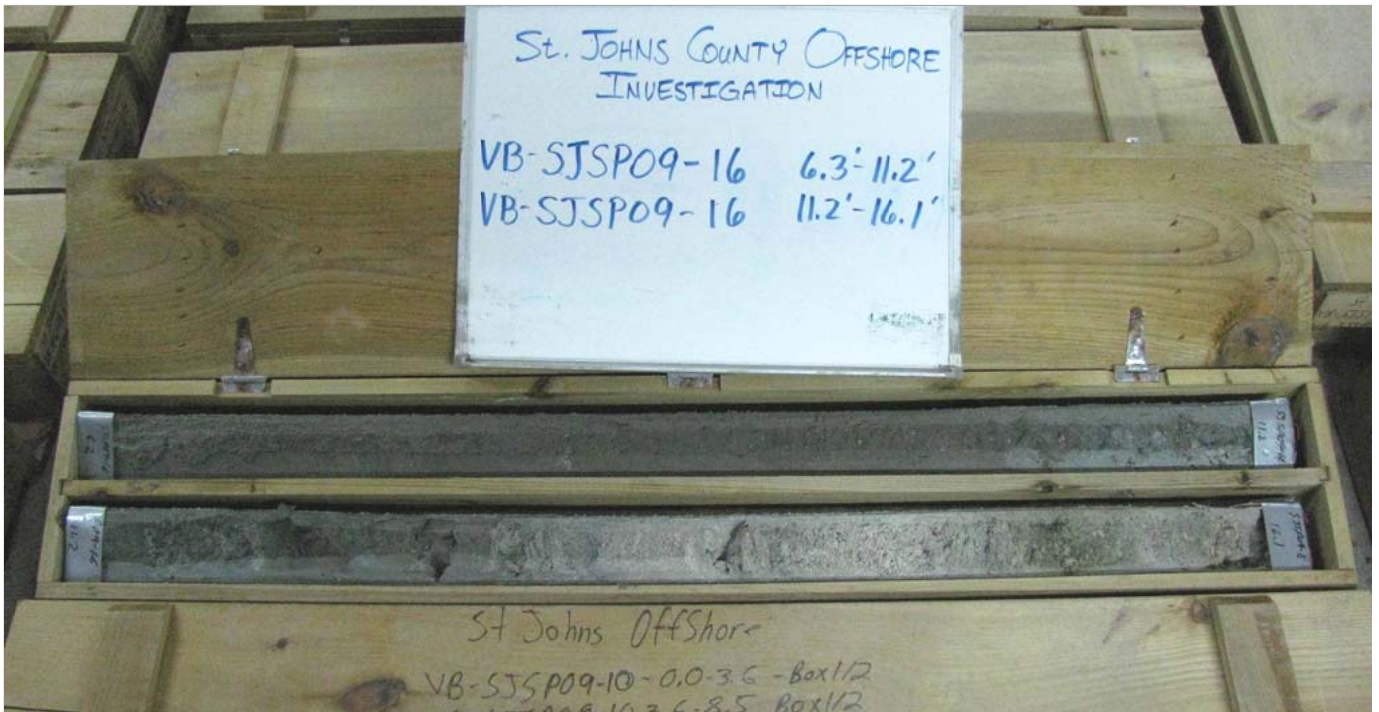
VB-SJSP09-15



VB-SJSP09-15



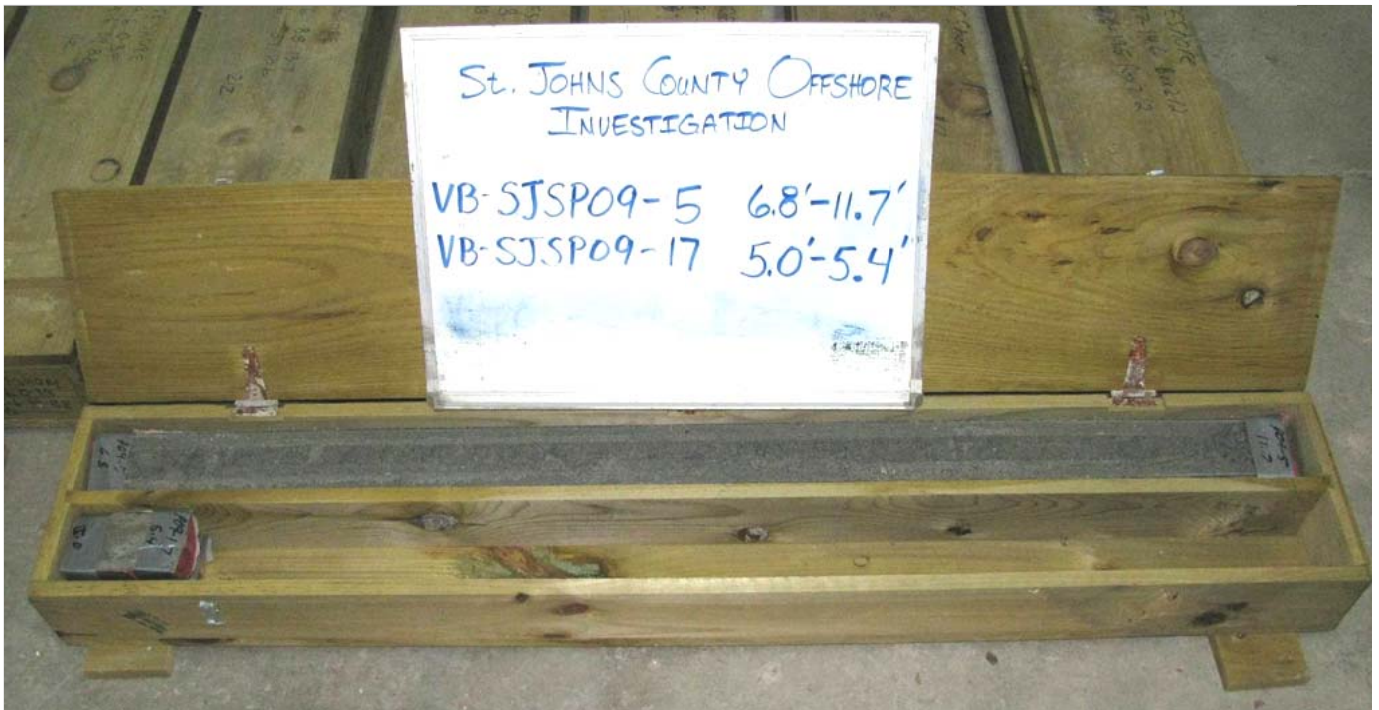
VB-SJSP09-16



VB-SJSP09-16



VB-SJSP09-17



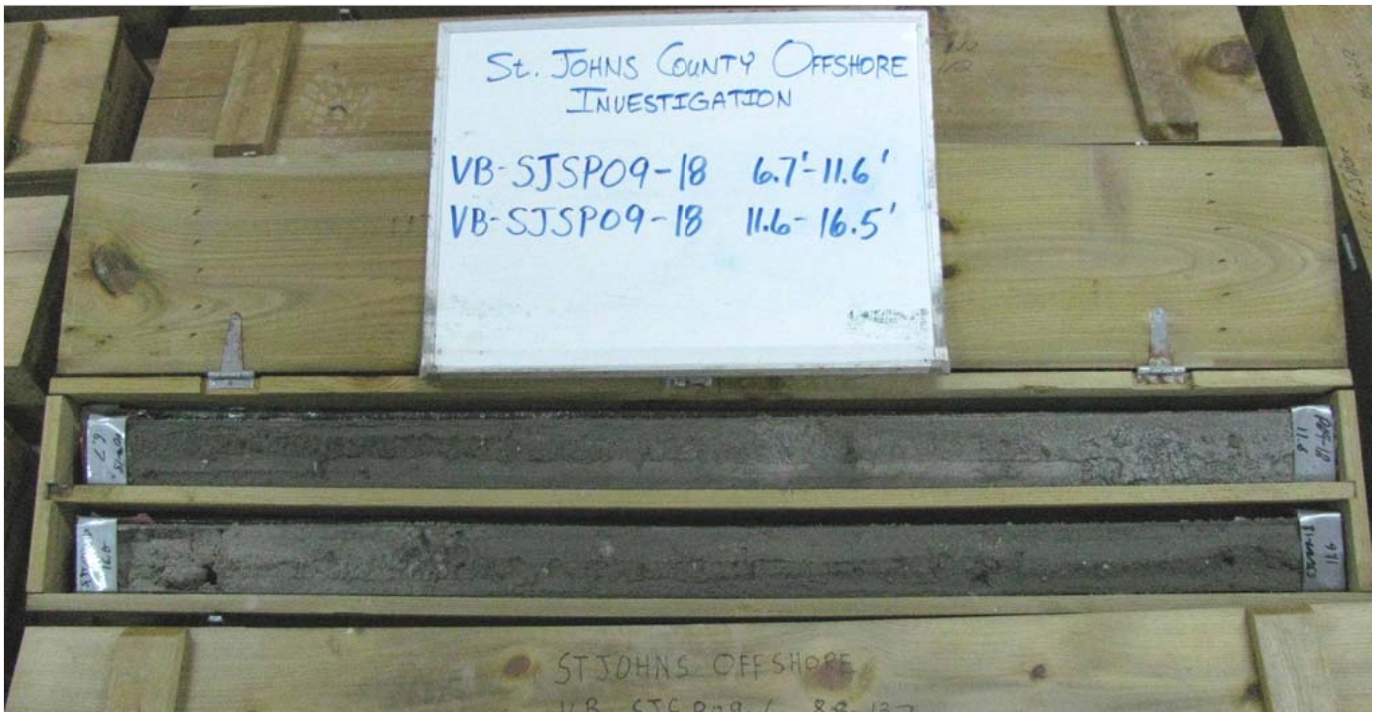
VB-SJSP09-17



VB-SJSP09-17



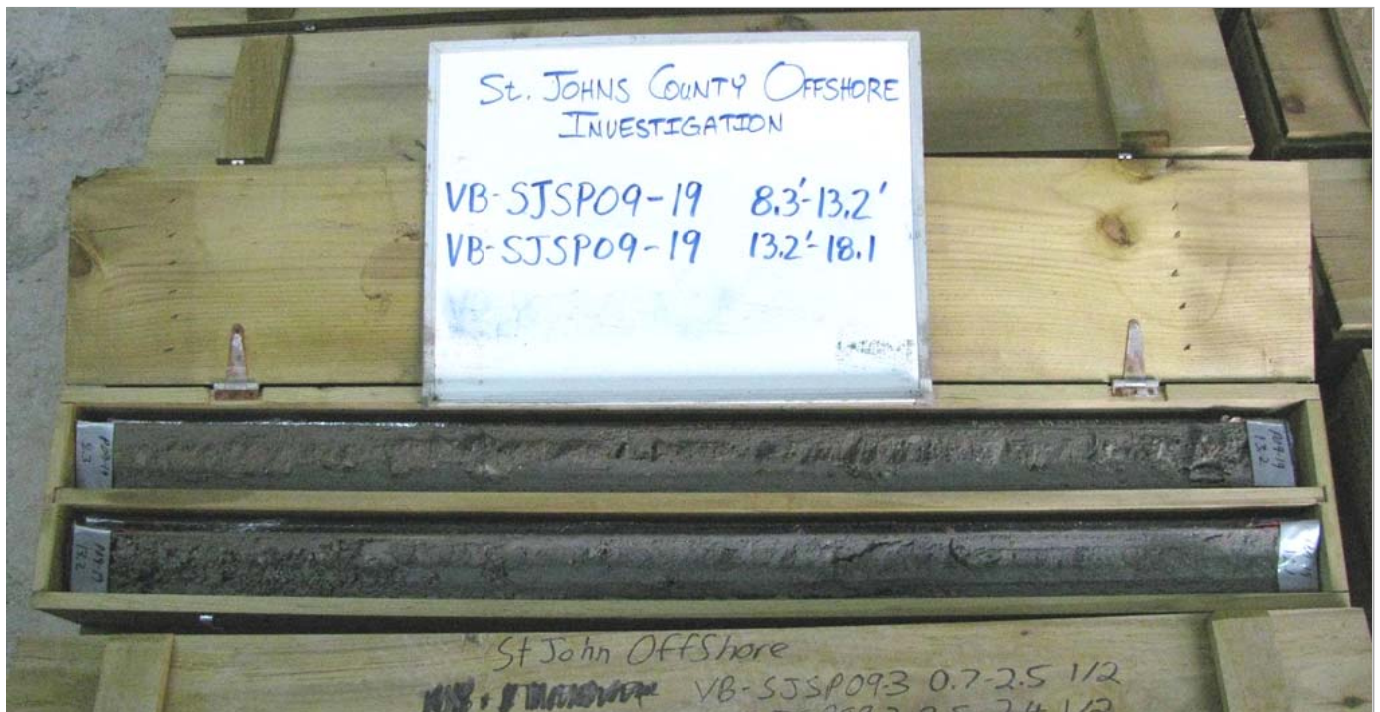
VB-SJSP09-18



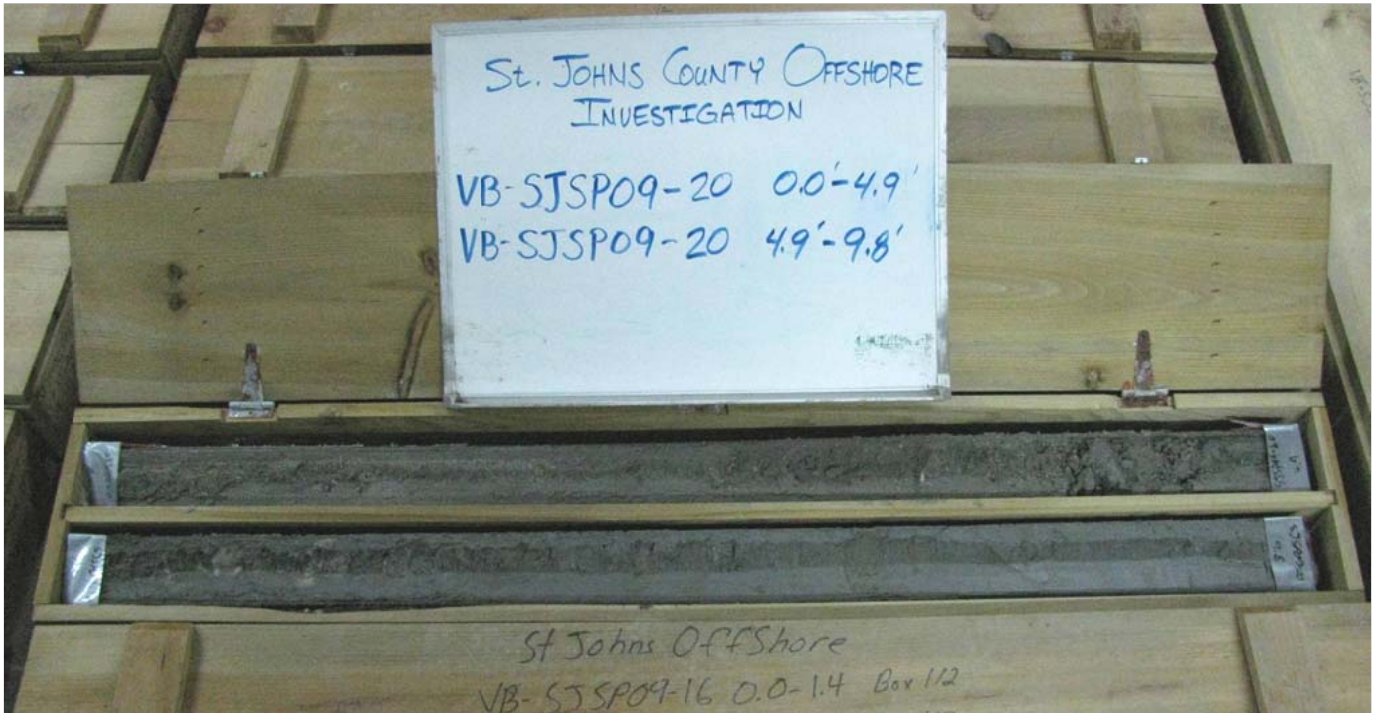
VB-SJSP09-18



VB-SJSP09-19



VB-SJSP09-19



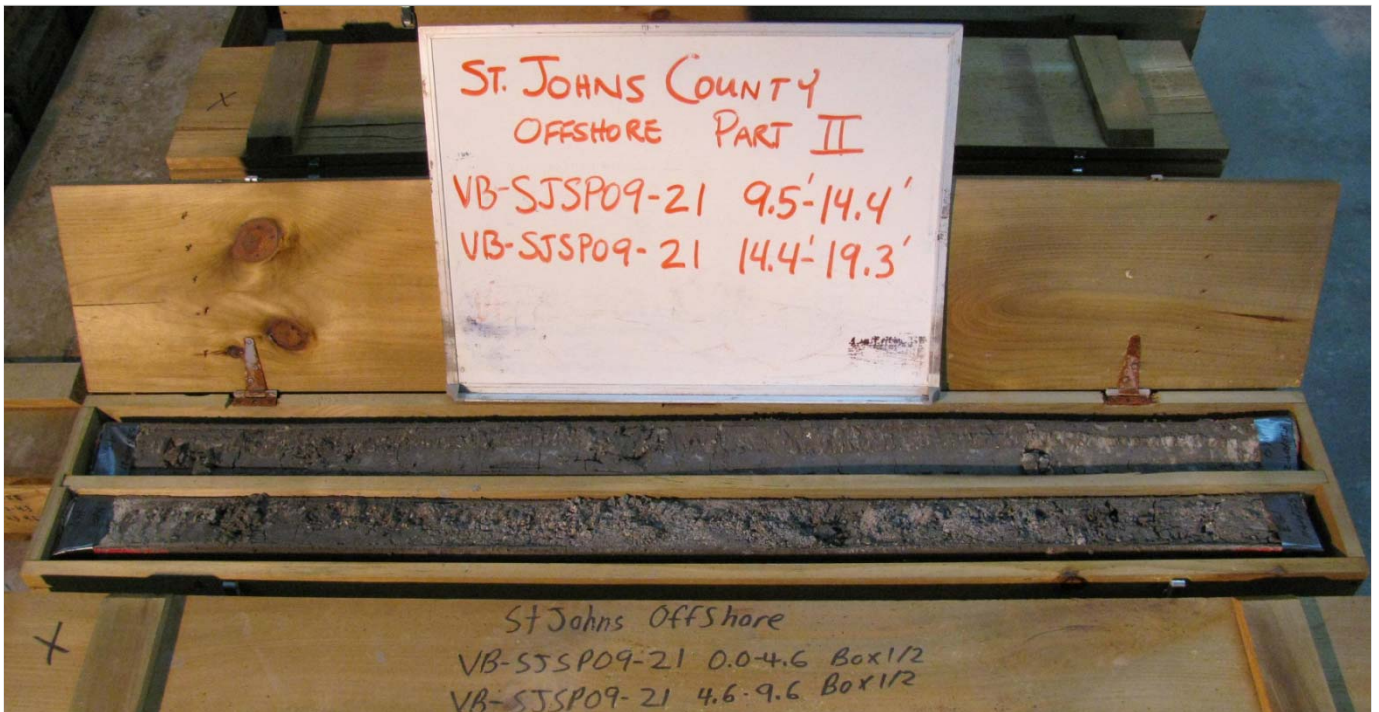
VB-SJSP09-20



VB-SJSP09-20



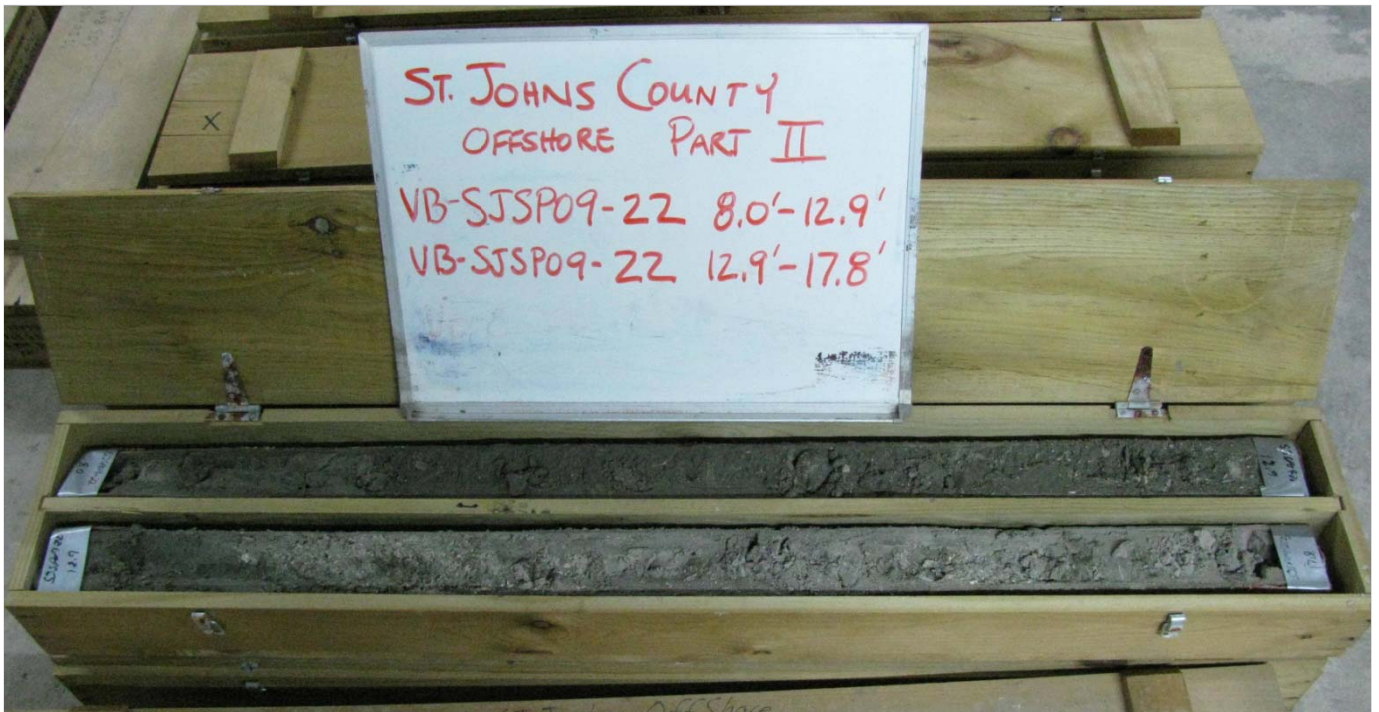
VB-SJSP09-21



VB-SJSP09-21



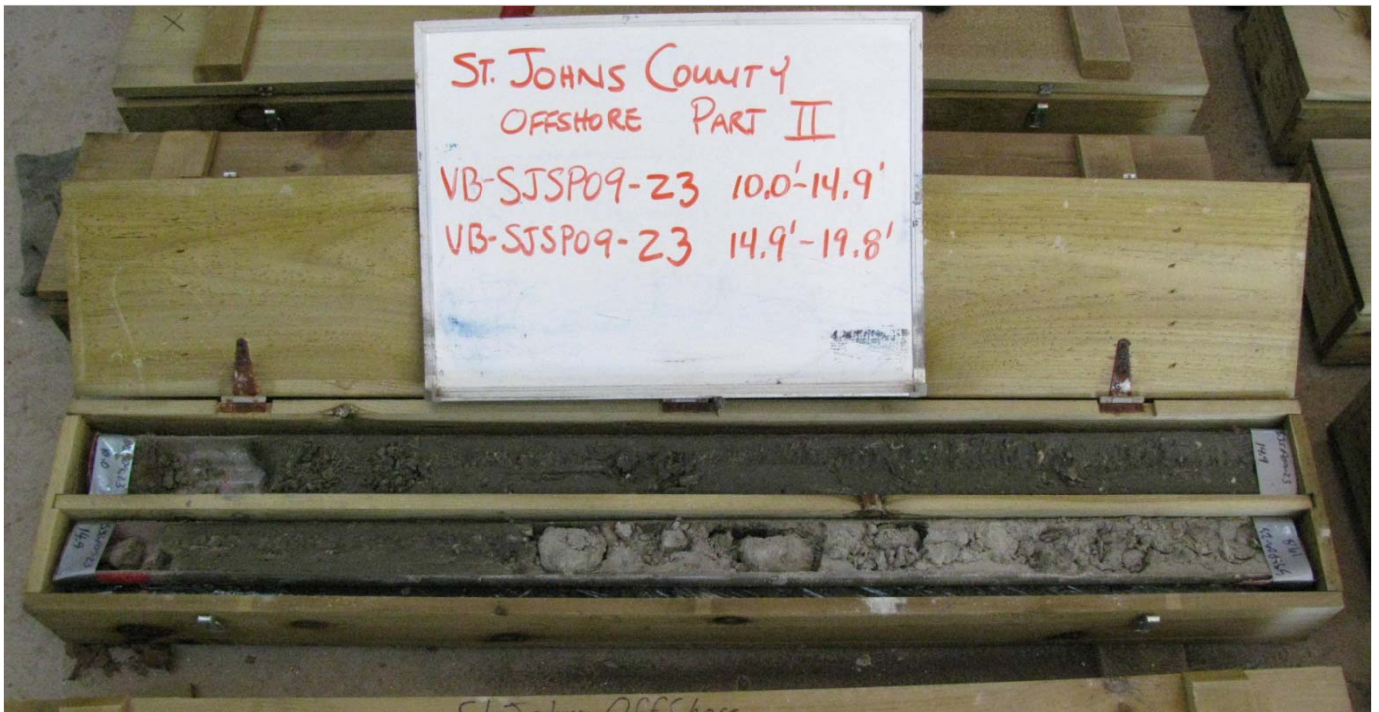
VB-SJSP09-22



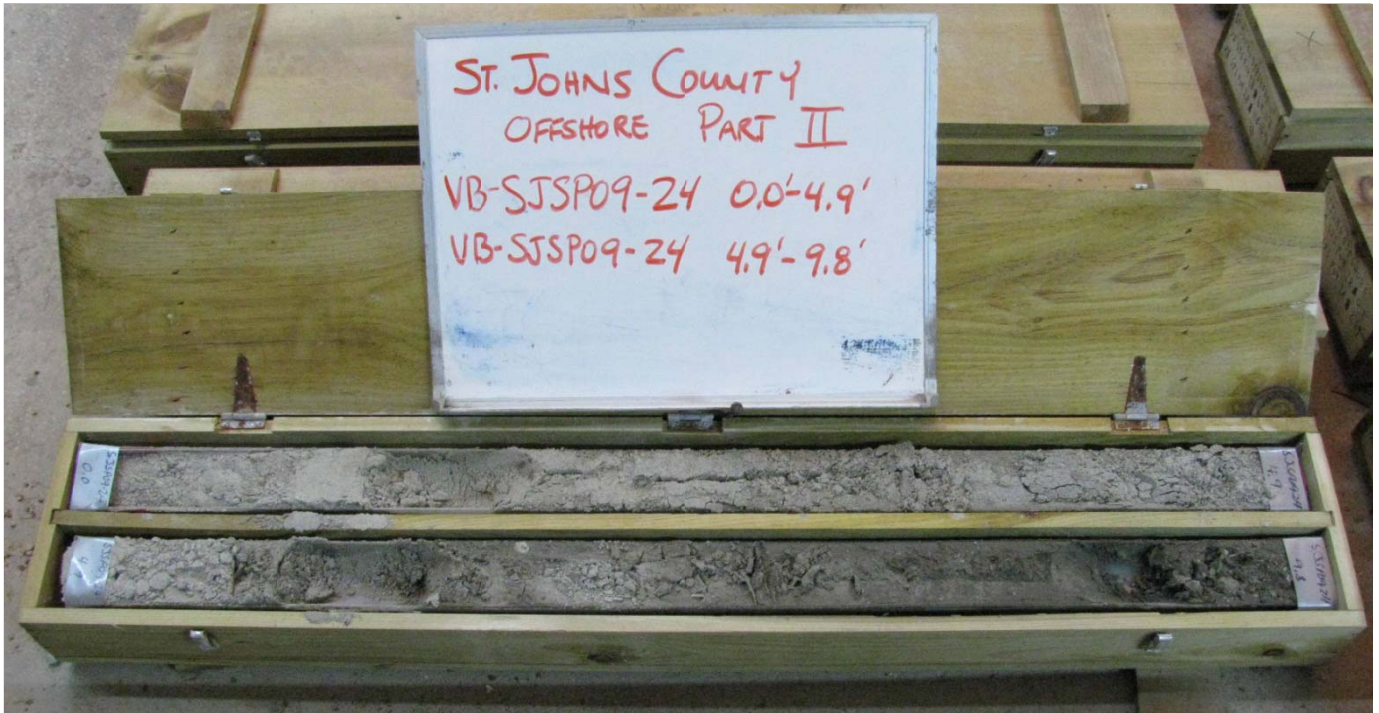
VB-SJSP09-22



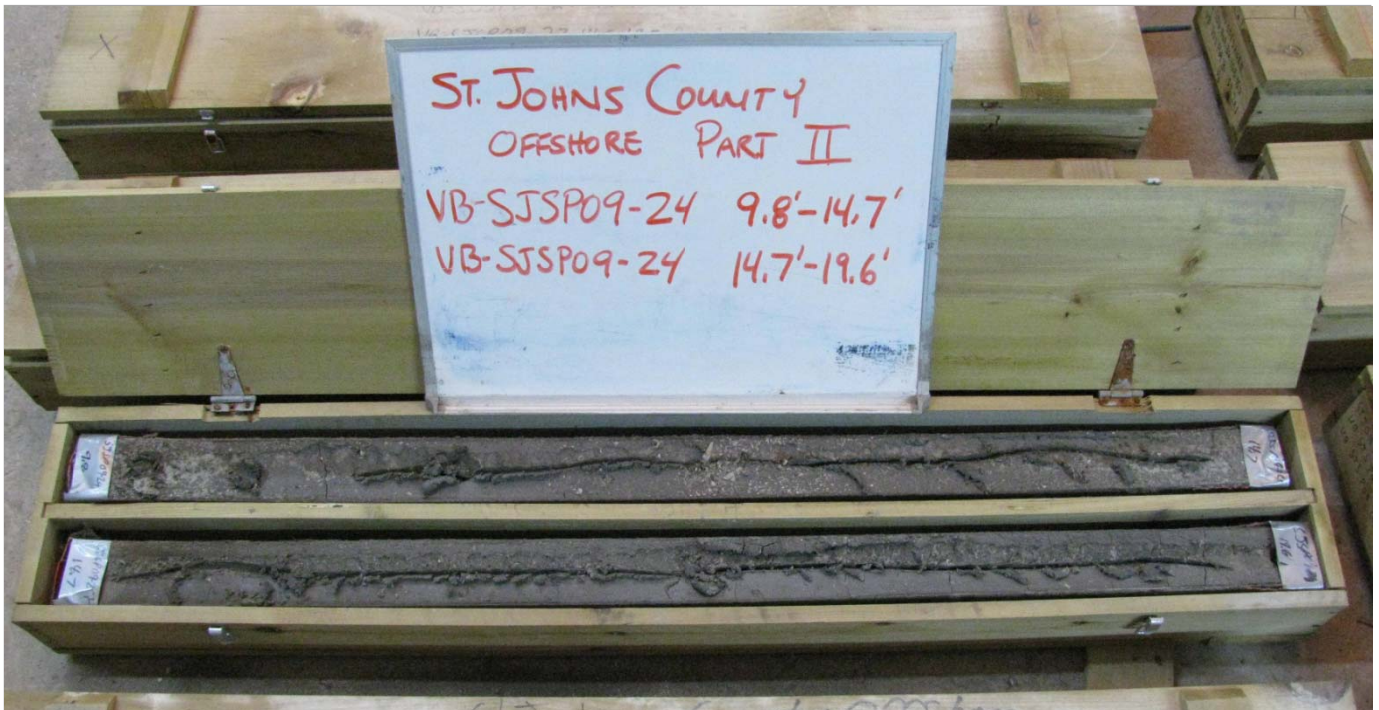
VB-SJSP09-23



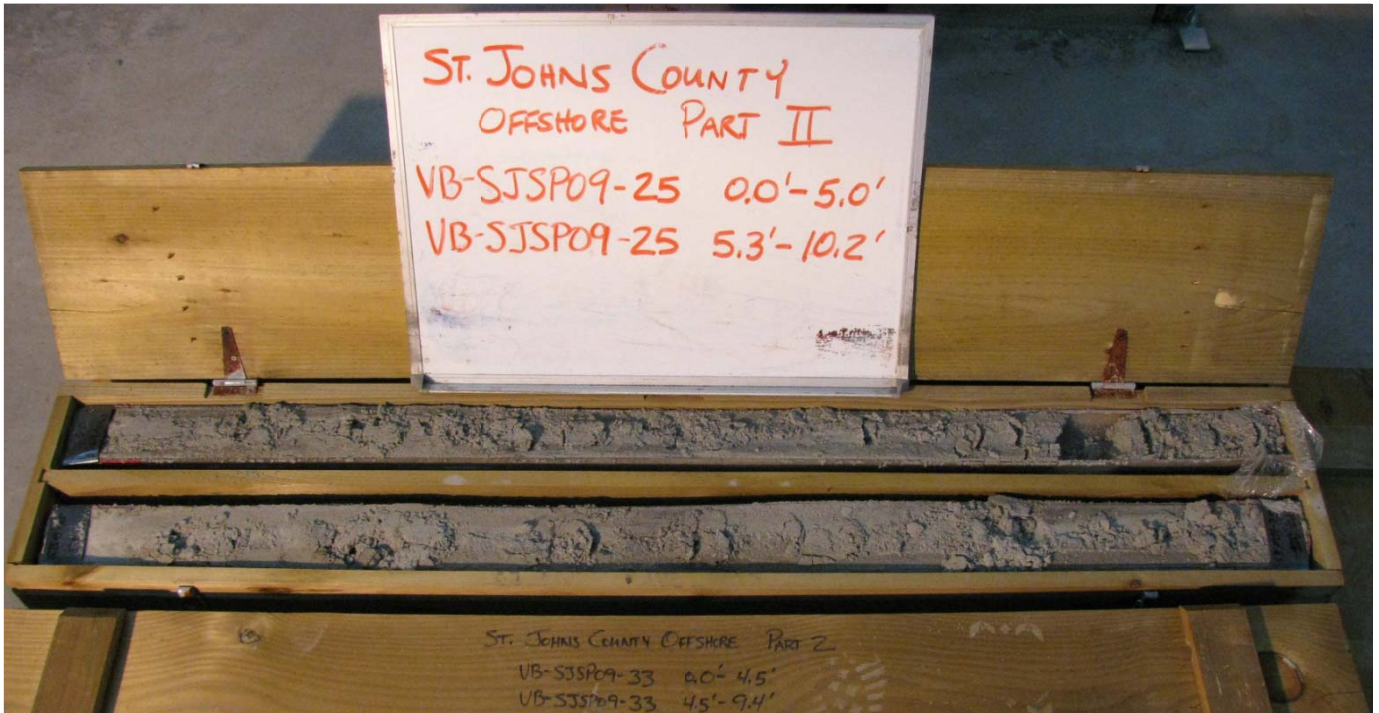
VB-SJSP09-23



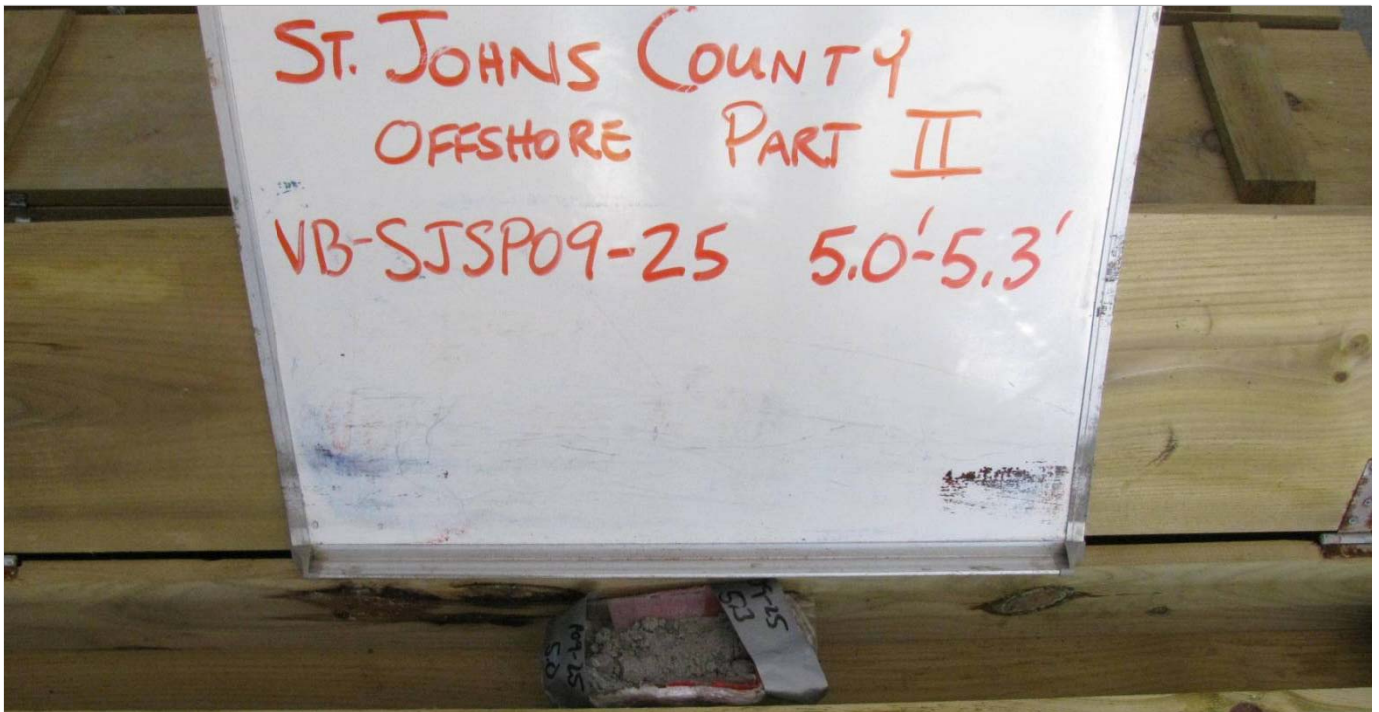
VB-SJSP09-24



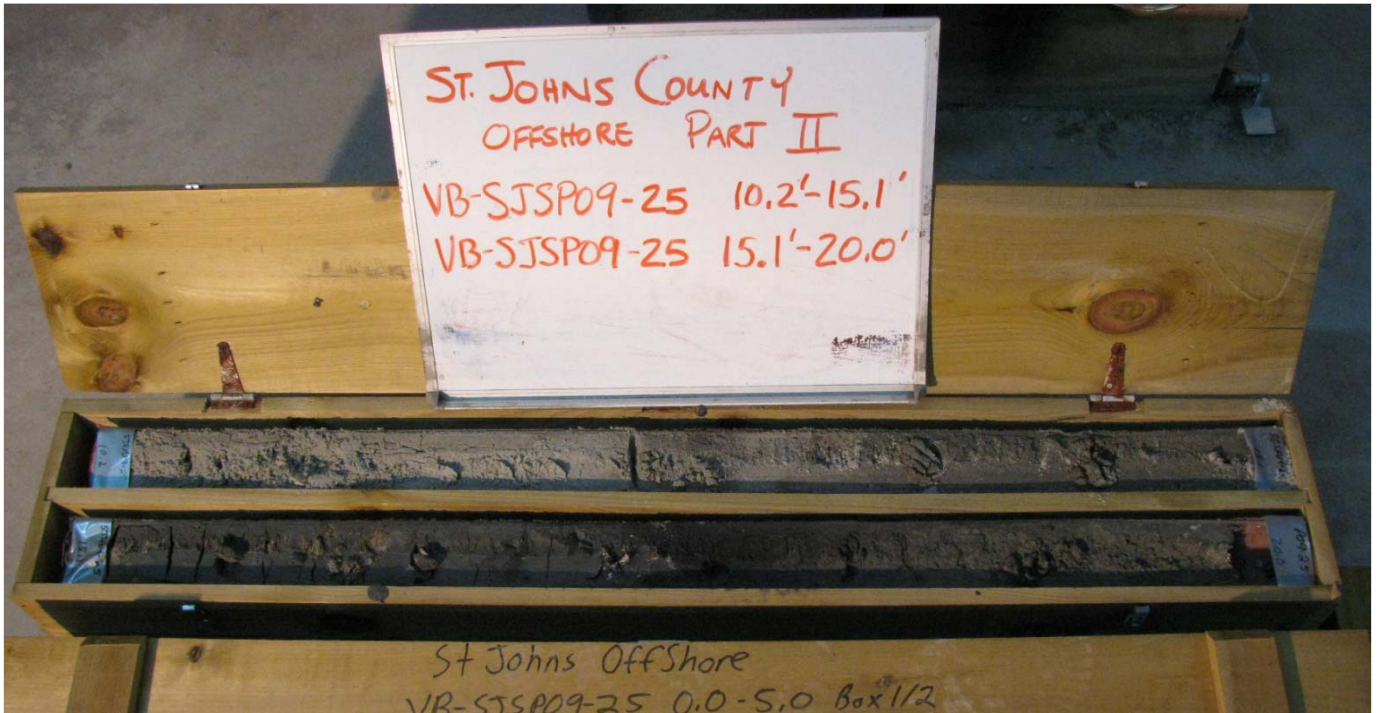
VB-SJSP09-24



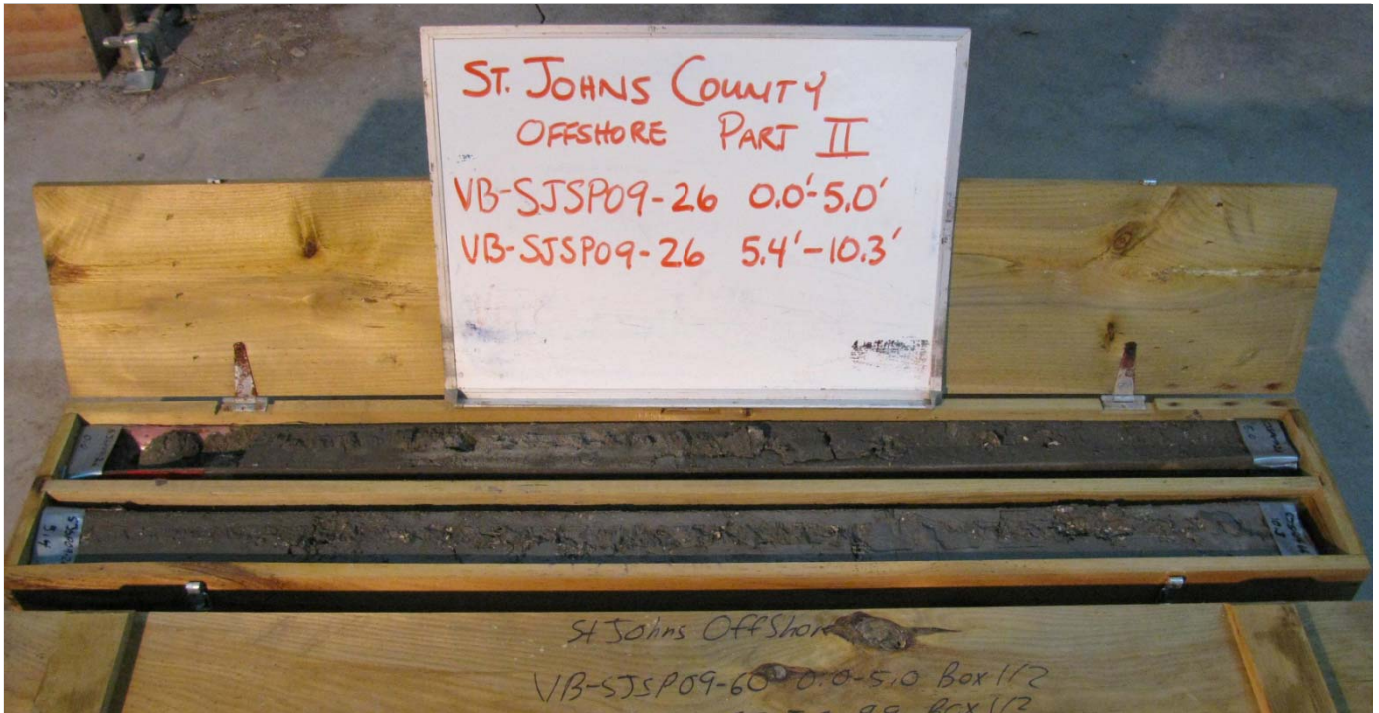
VB-SJSP09-25



VB-SJSP09-25



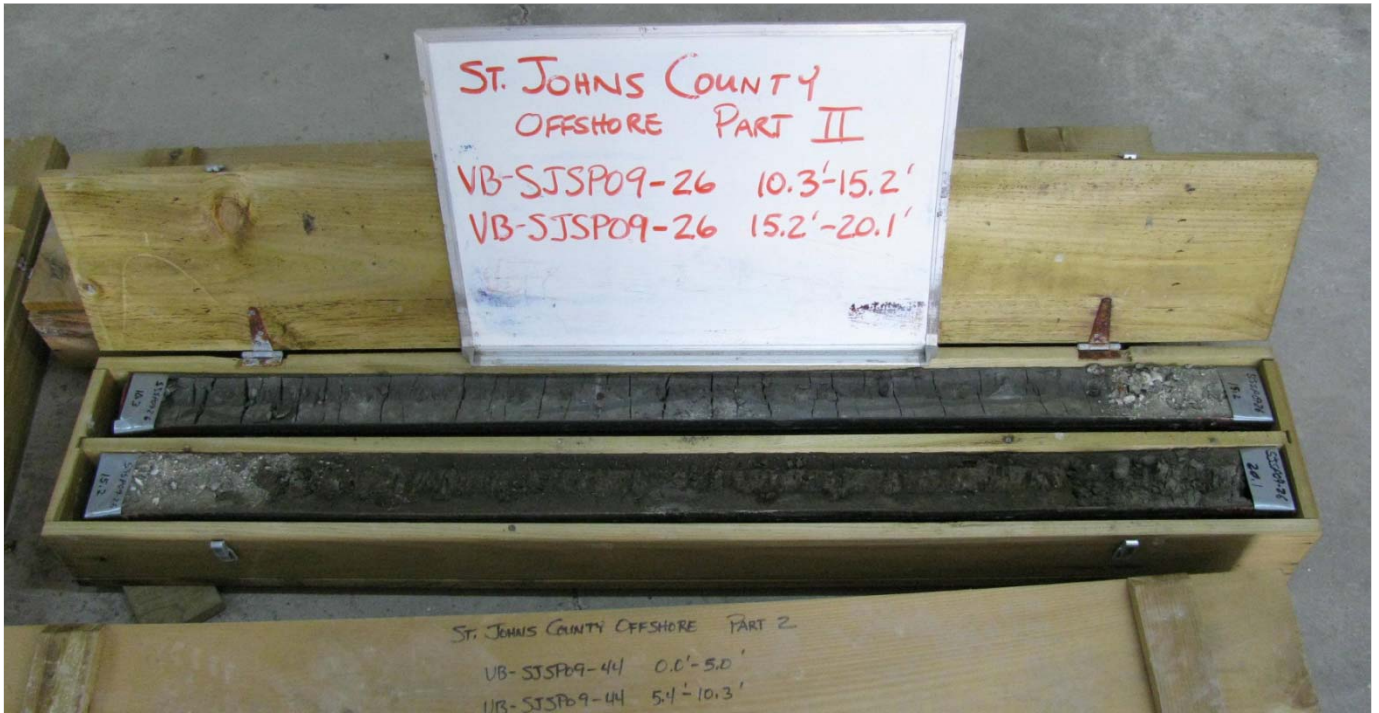
VB-SJSP09-25



VB-SJSP09-26



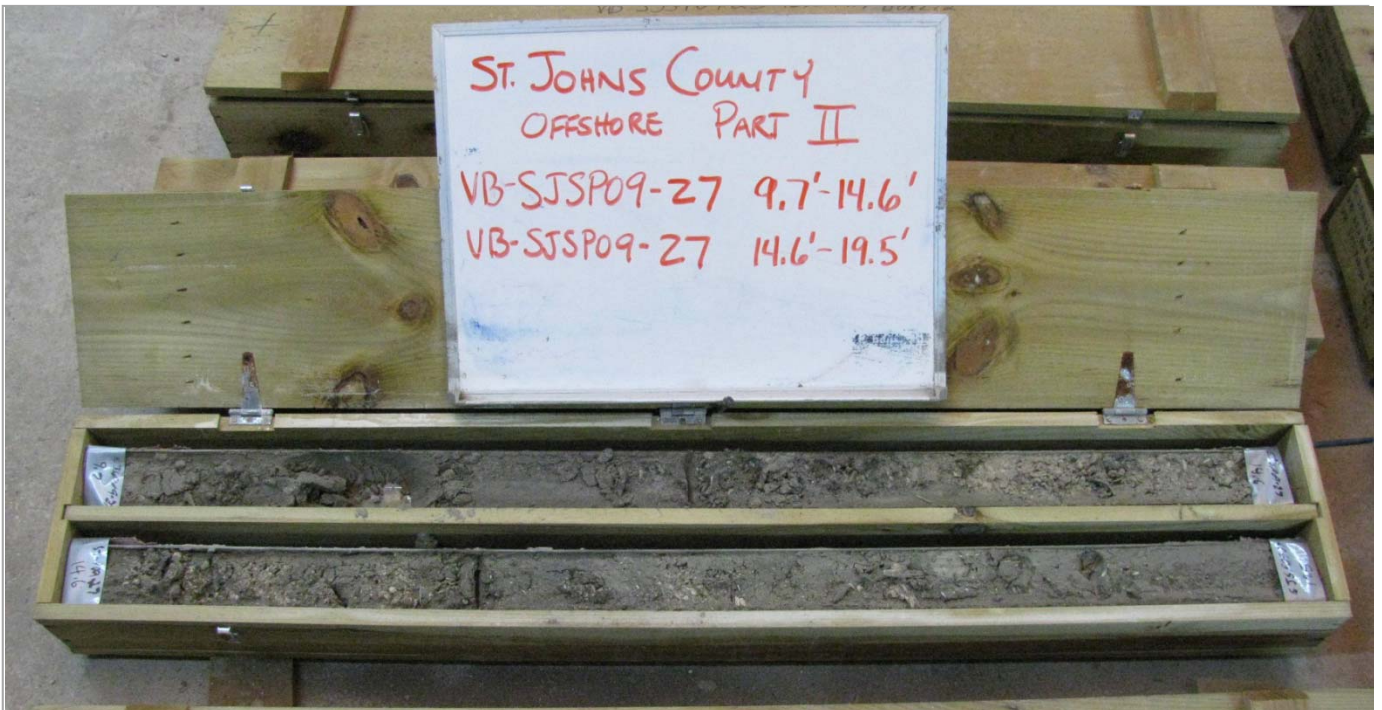
VB-SJSP09-26



VB-SJSP09-26



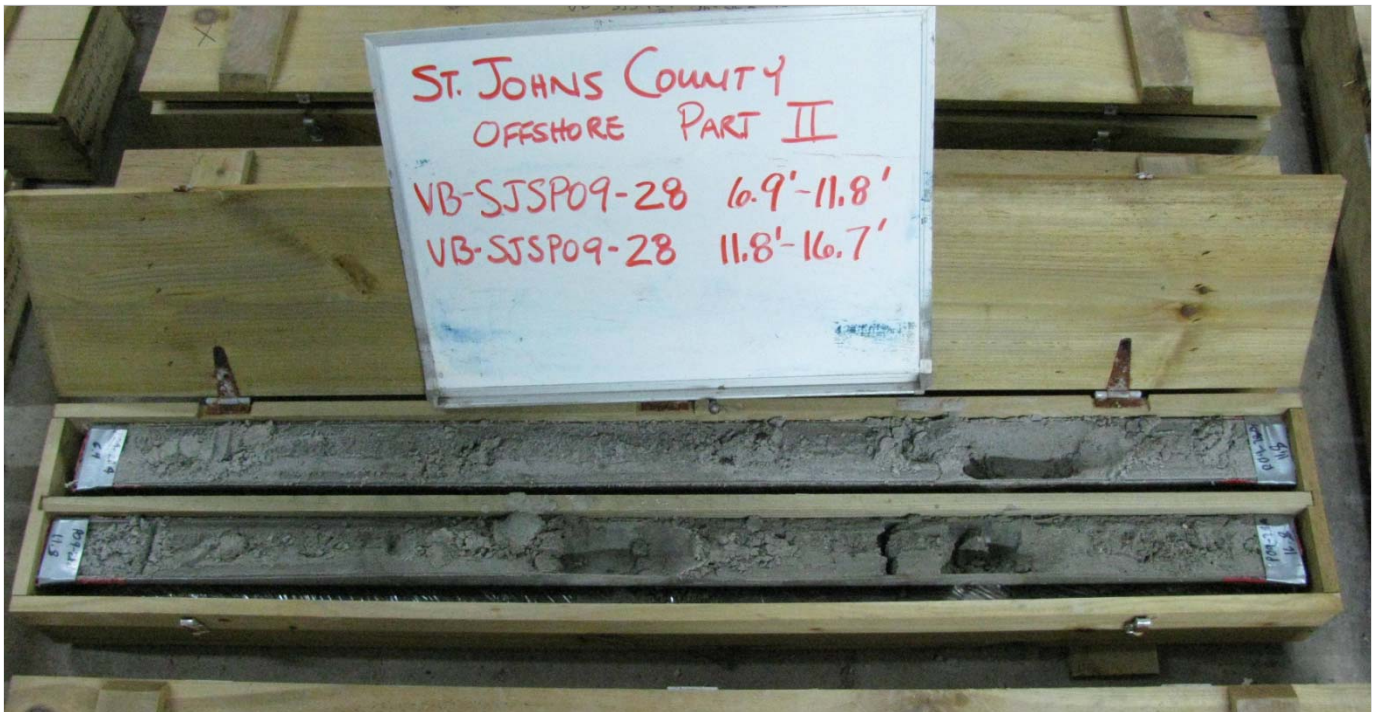
VB-SJSP09-27



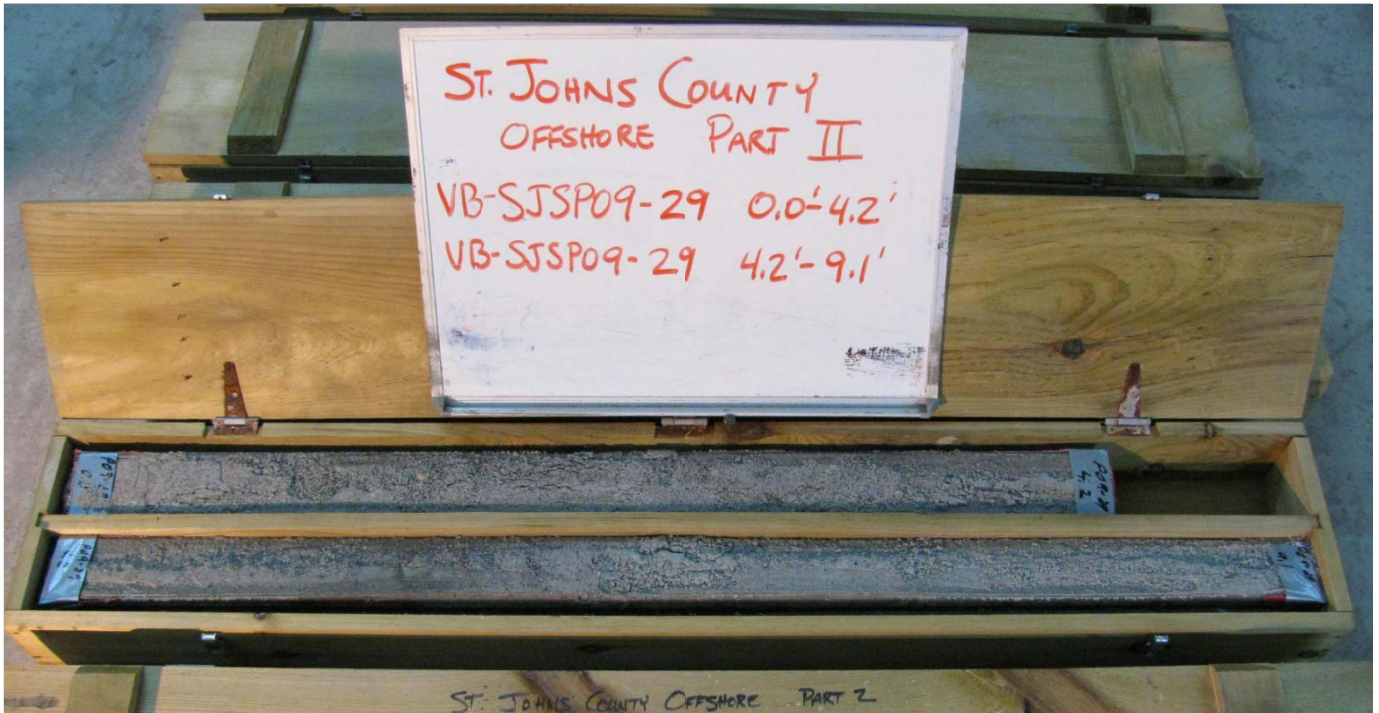
VB-SJSP09-27



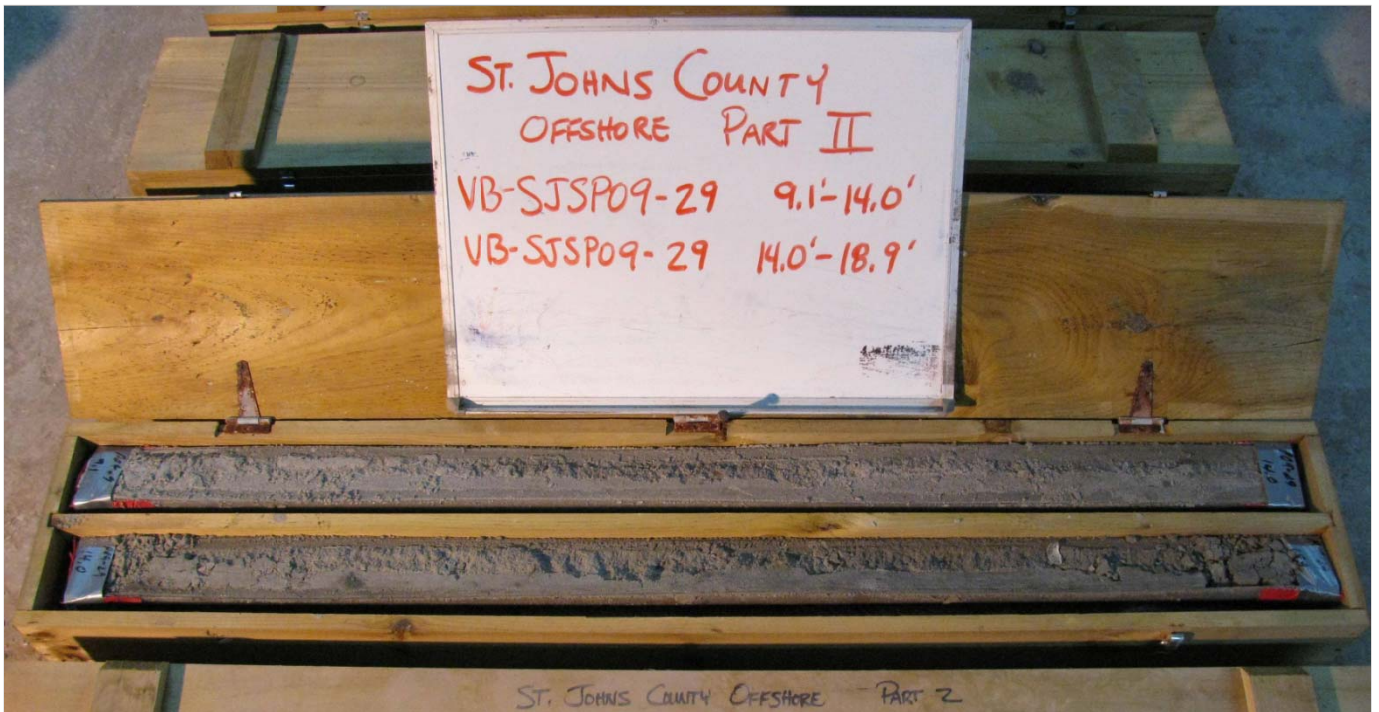
VB-SJSP09-28



VB-SJSP09-28



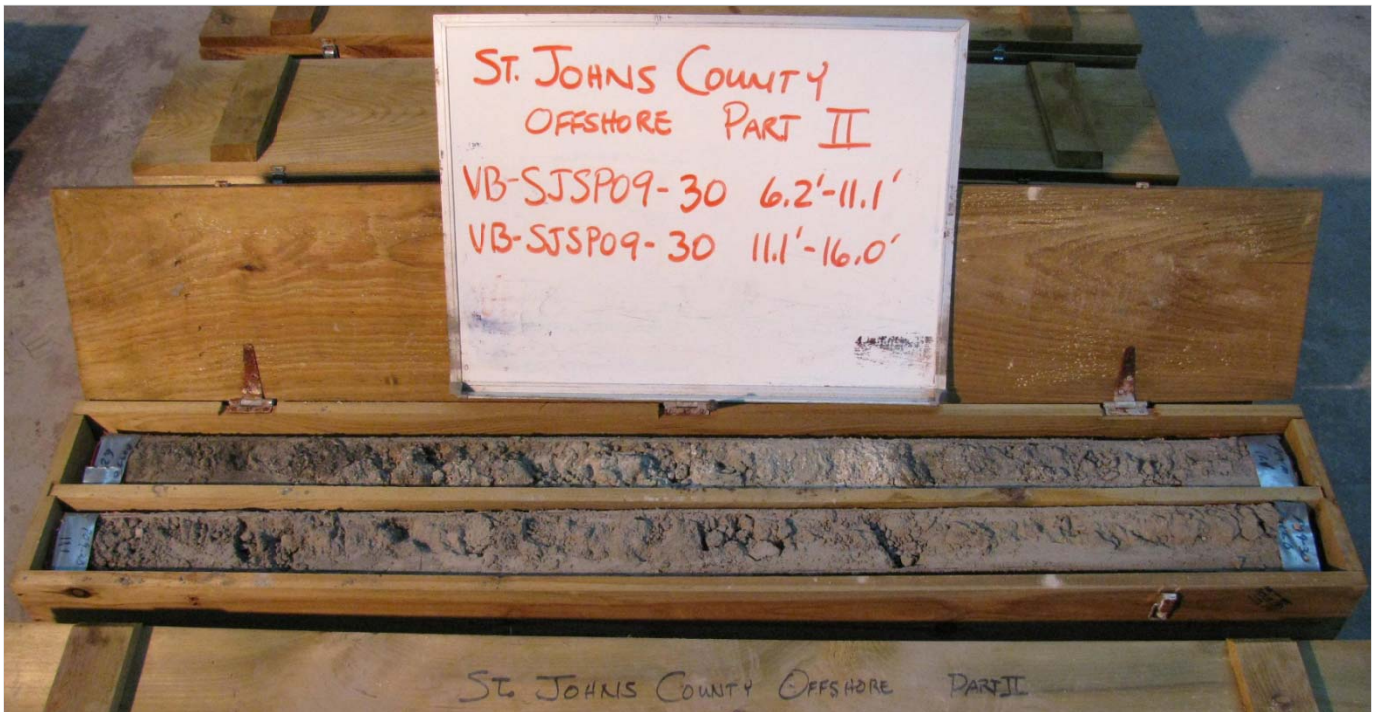
VB-SJSP09-29



VB-SJSP09-29



VB-SJSP09-30



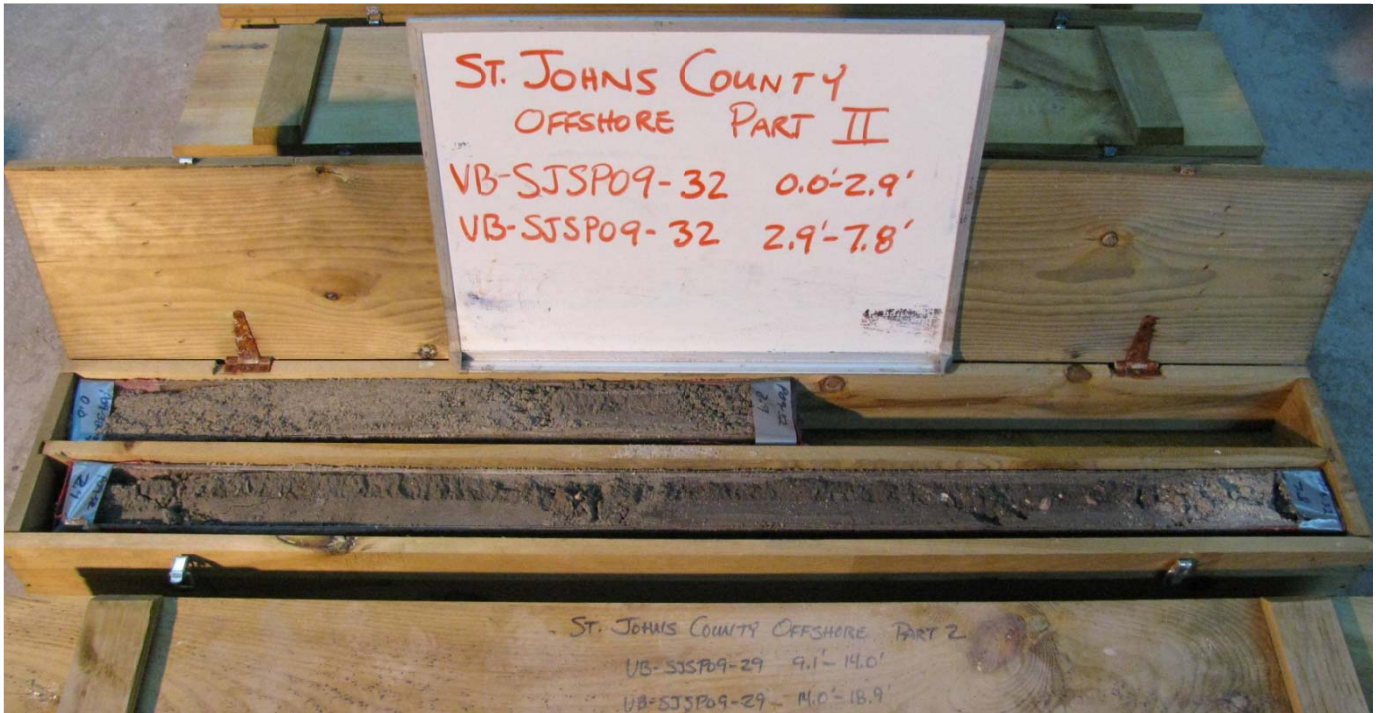
VB-SJSP09-30



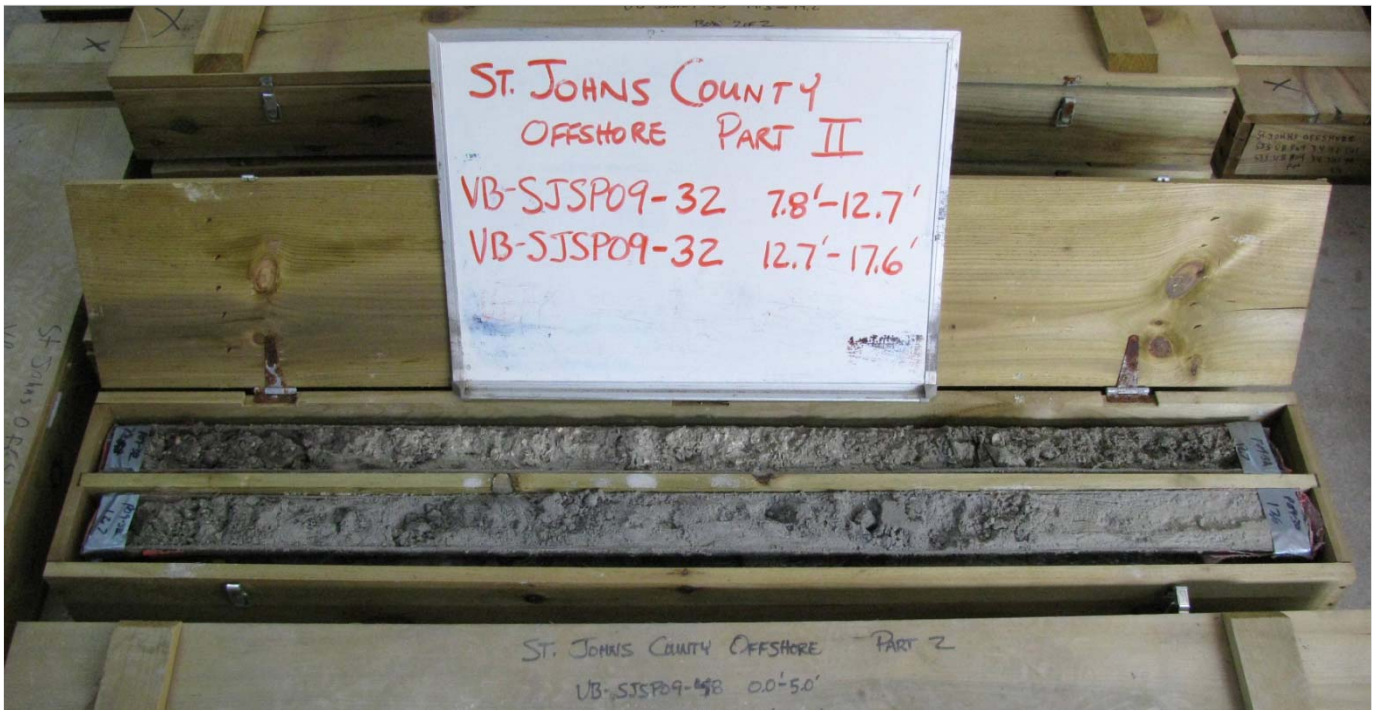
VB-SJSP09-31



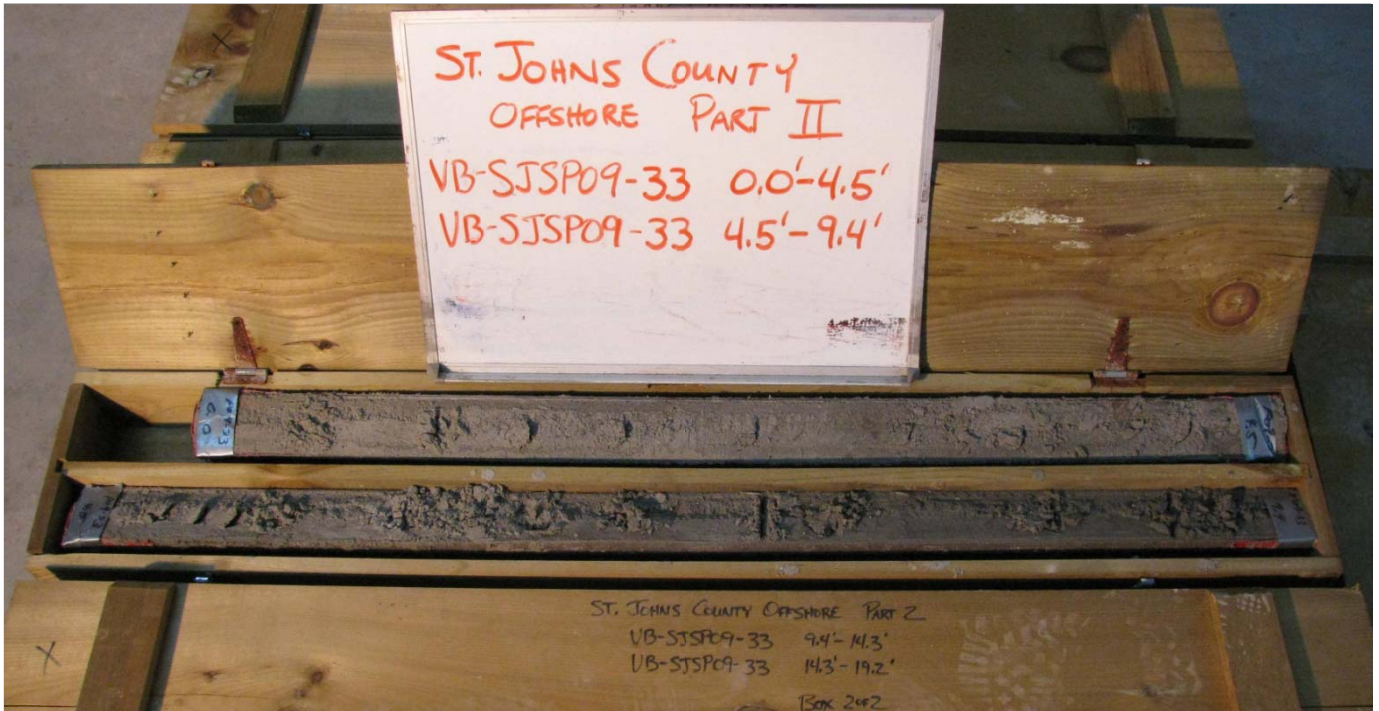
VB-SJSP09-31



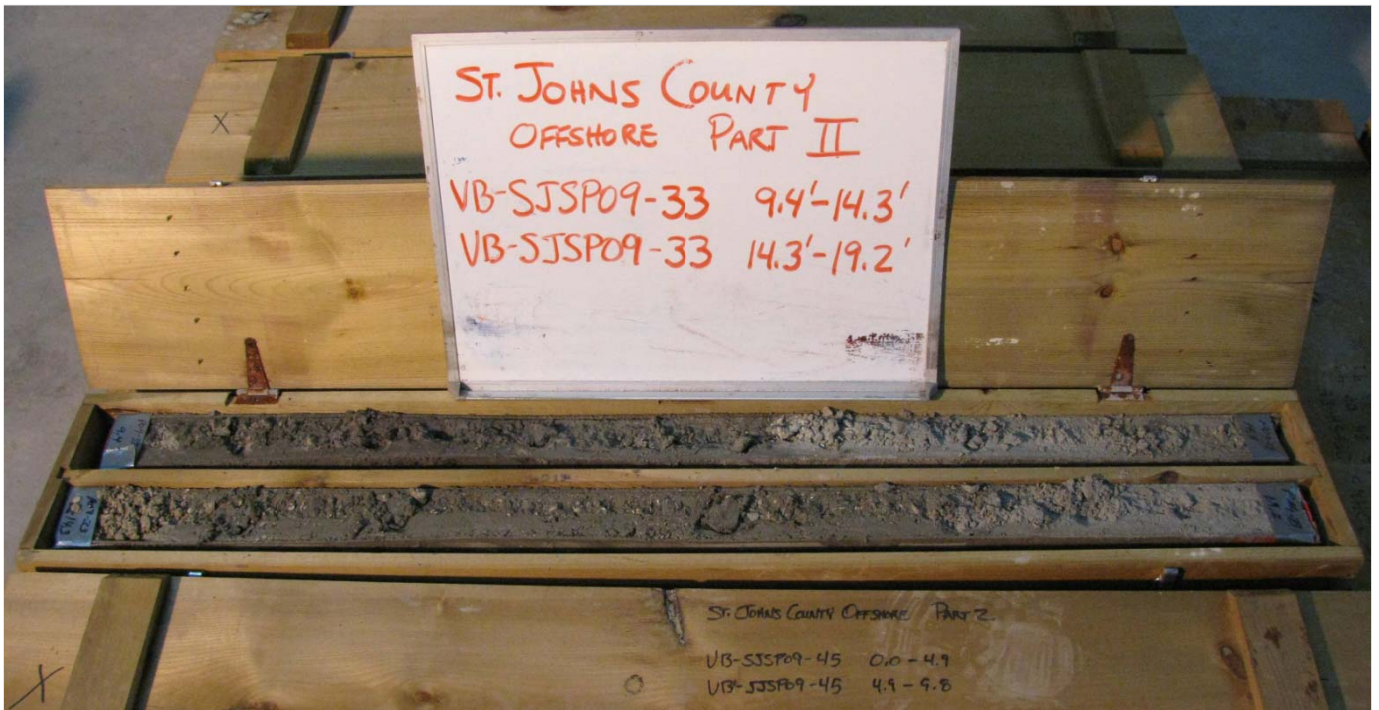
VB-SJSP09-32



VB-SJSP09-32



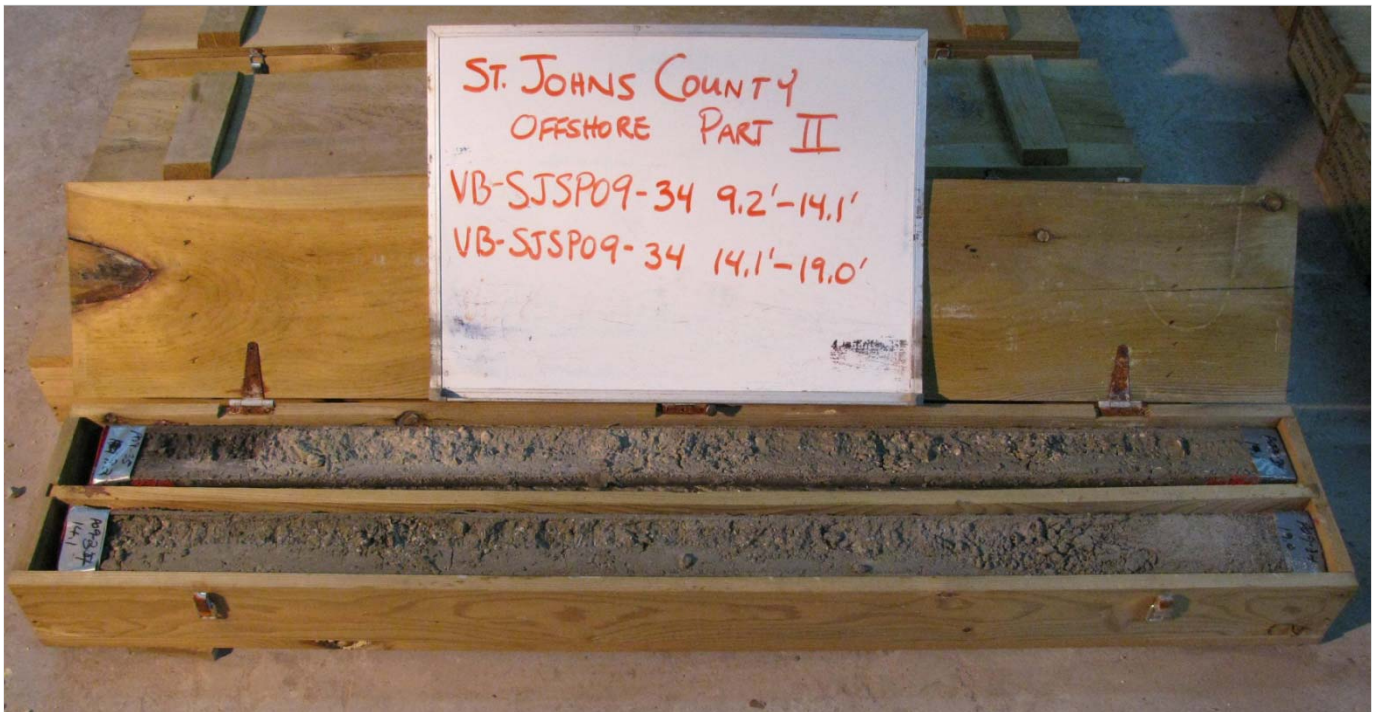
VB-SJSP09-33



VB-SJSP09-33



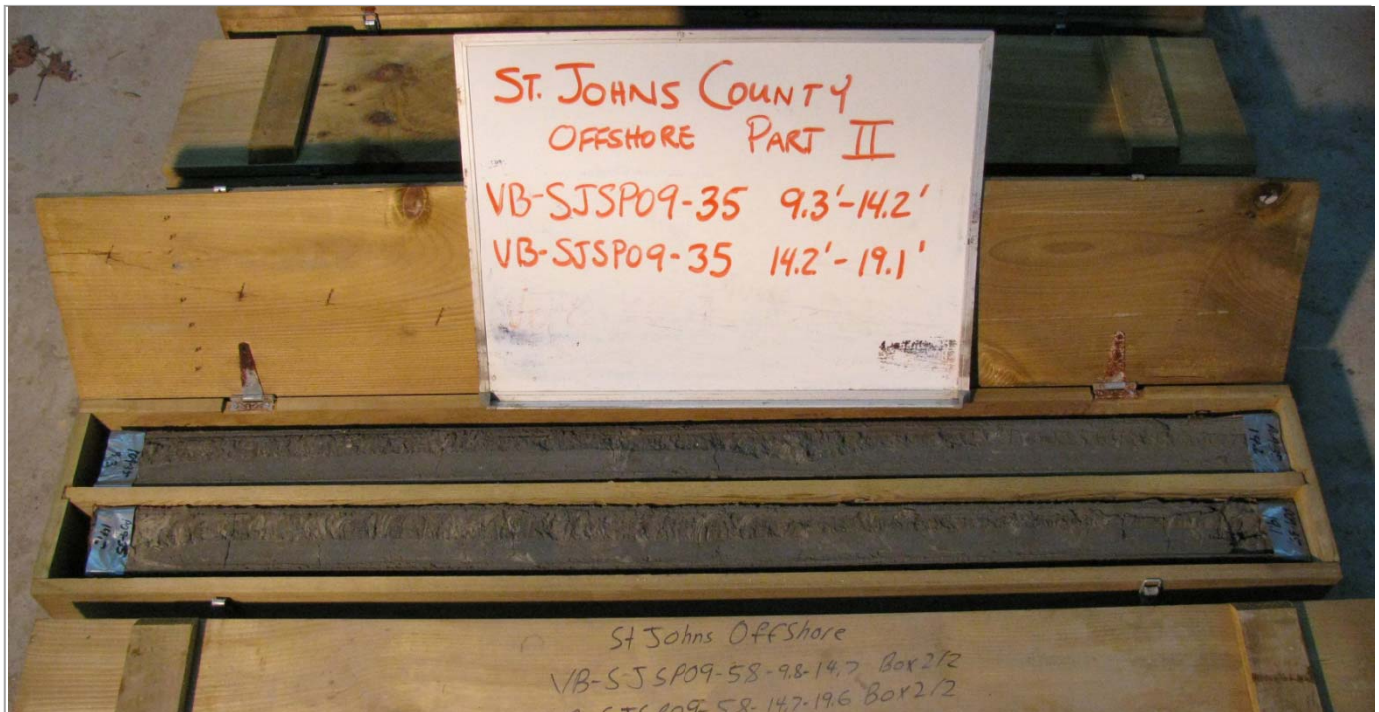
VB-SJSP09-34



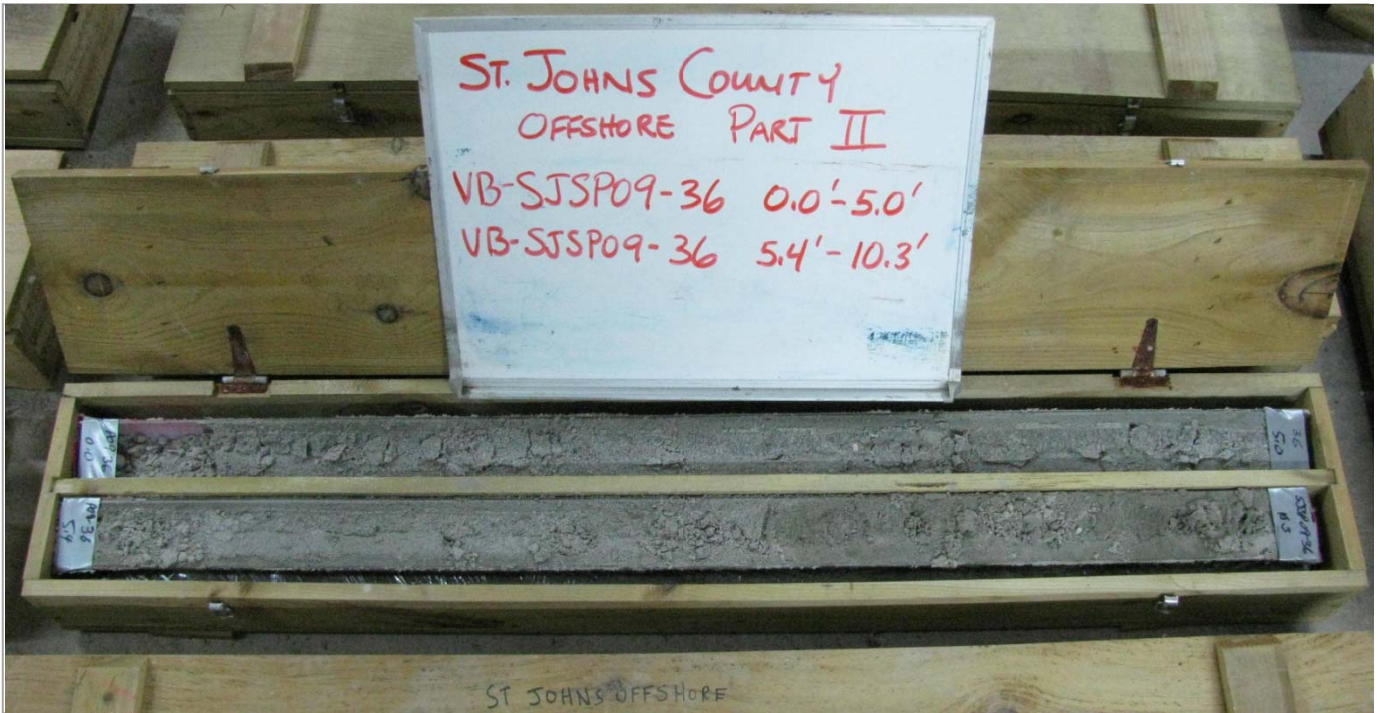
VB-SJSP09-34



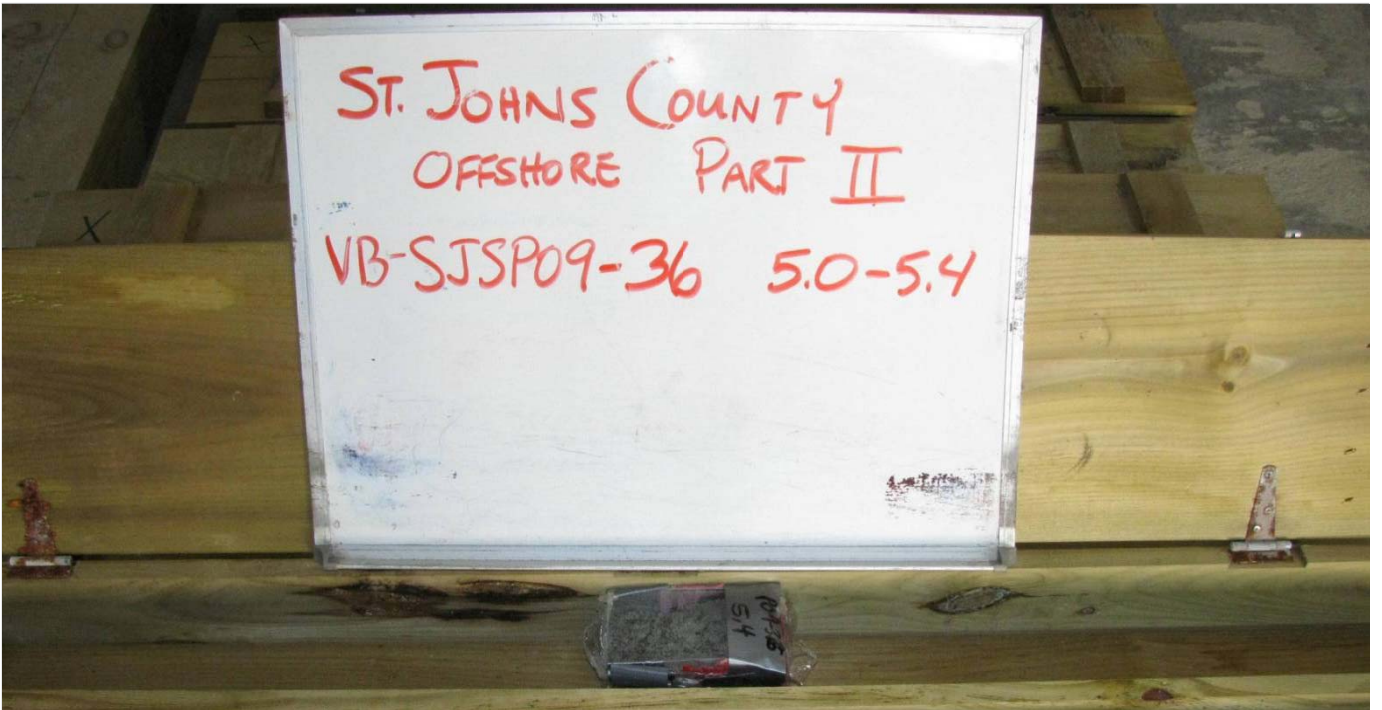
VB-SJSP09-35



VB-SJSP09-35



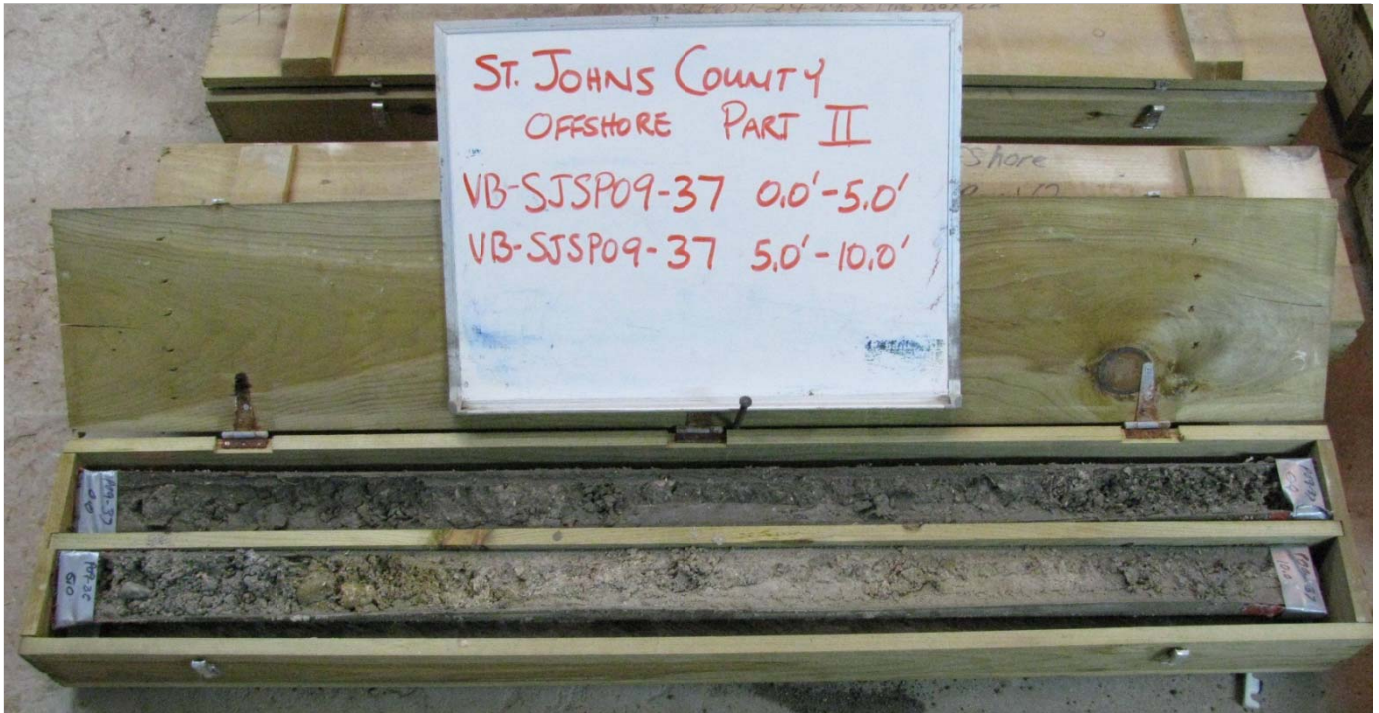
VB-SJSP09-36



VB-SJSP09-36



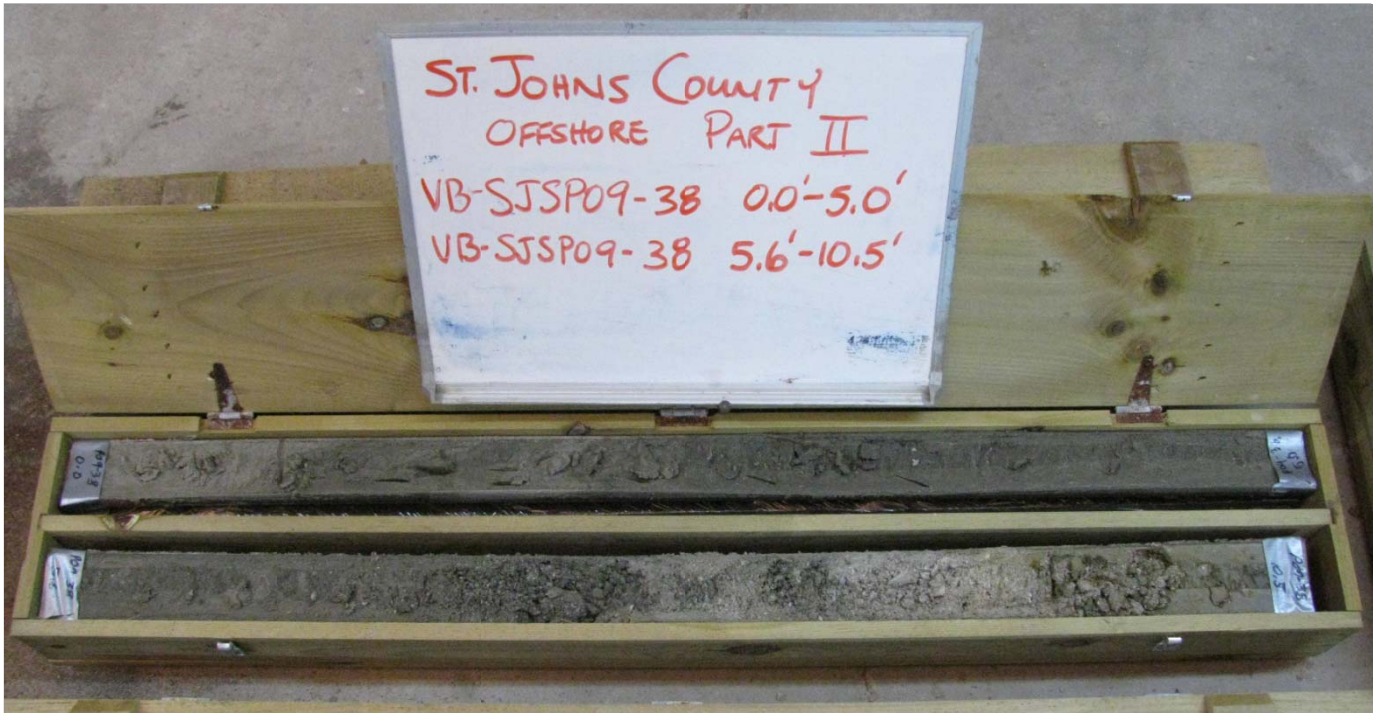
VB-SJSP09-36



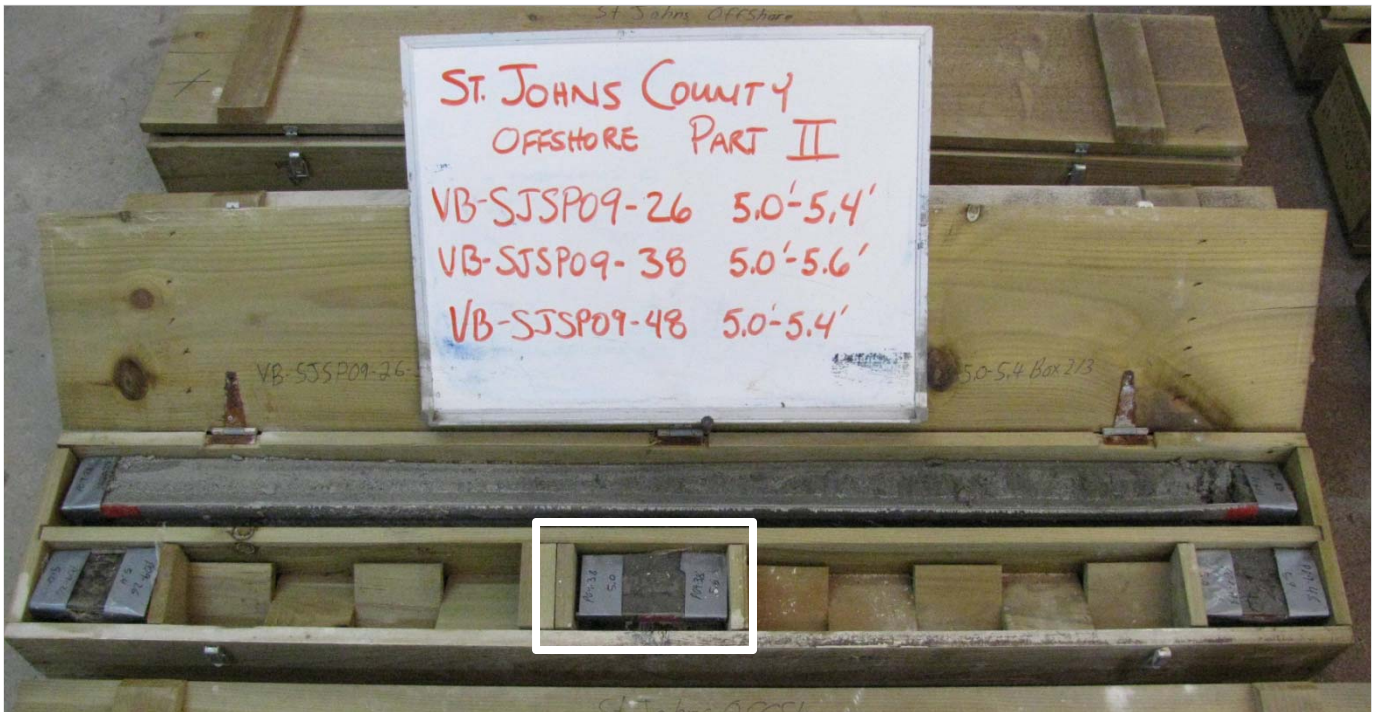
VB-SJSP09-37



VB-SJSP09-37



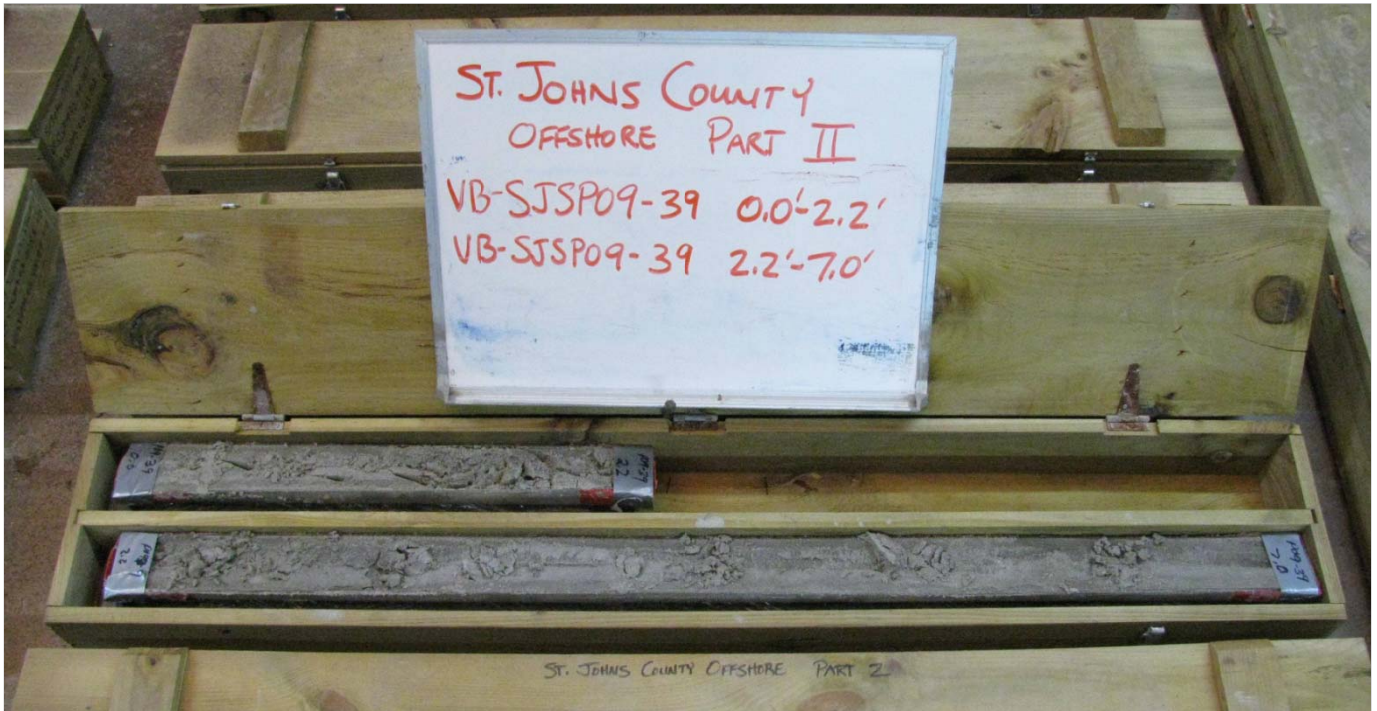
VB-SJSP09-38



VB-SJSP09-38



VB-SJSP09-38



VB-SJSP09-39



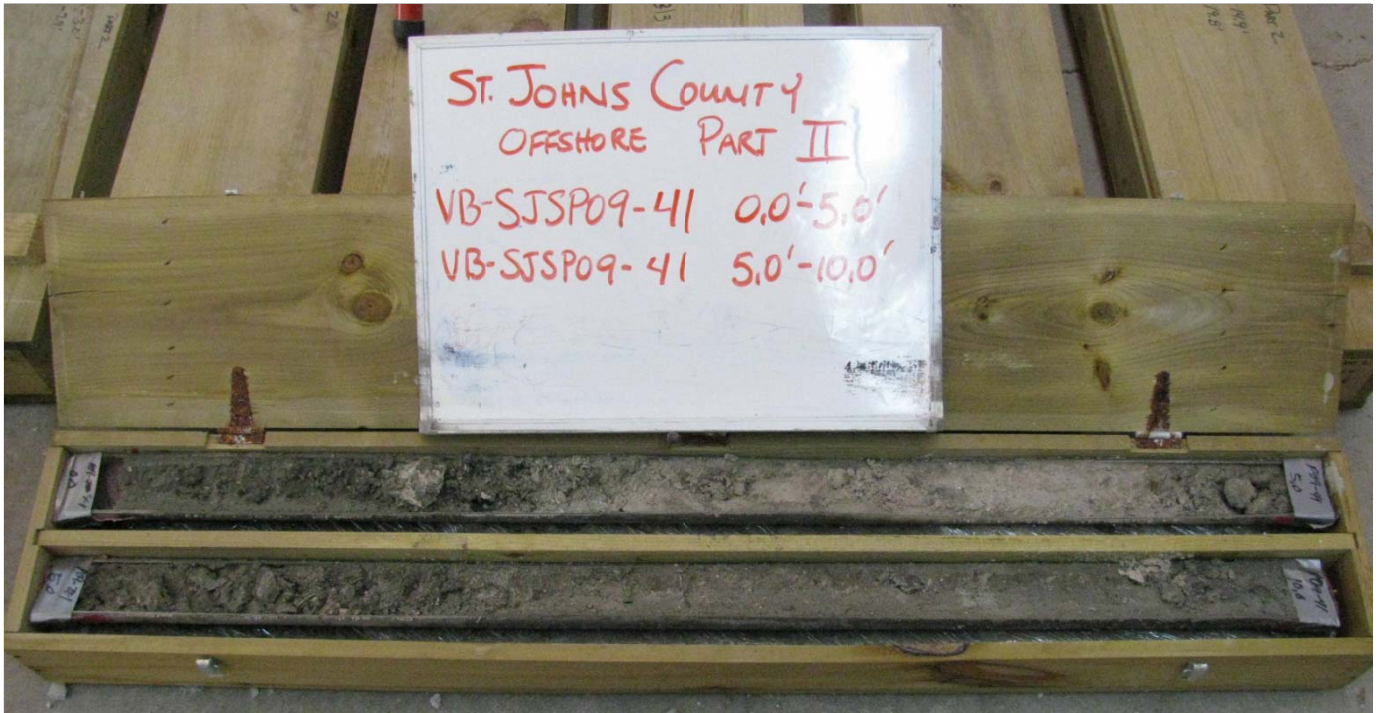
VB-SJSP09-39



VB-SJSP09-40



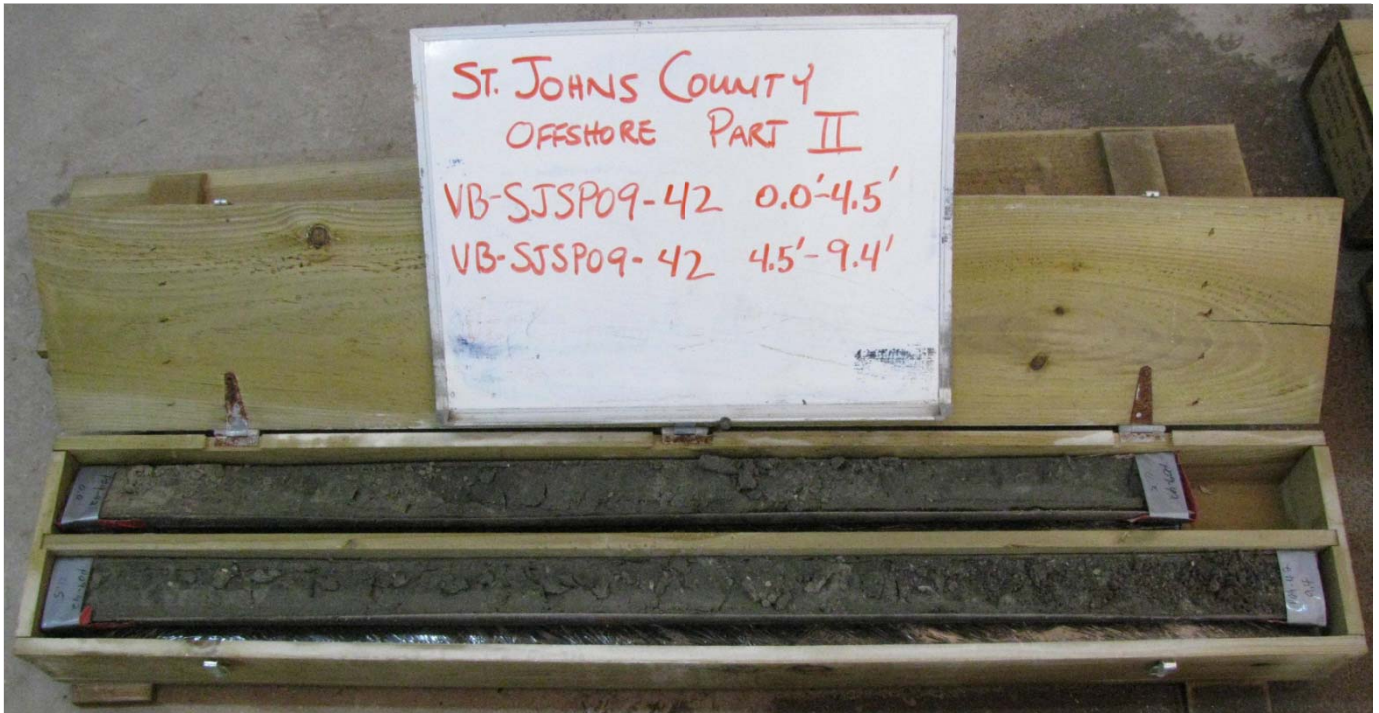
VB-SJSP09-40



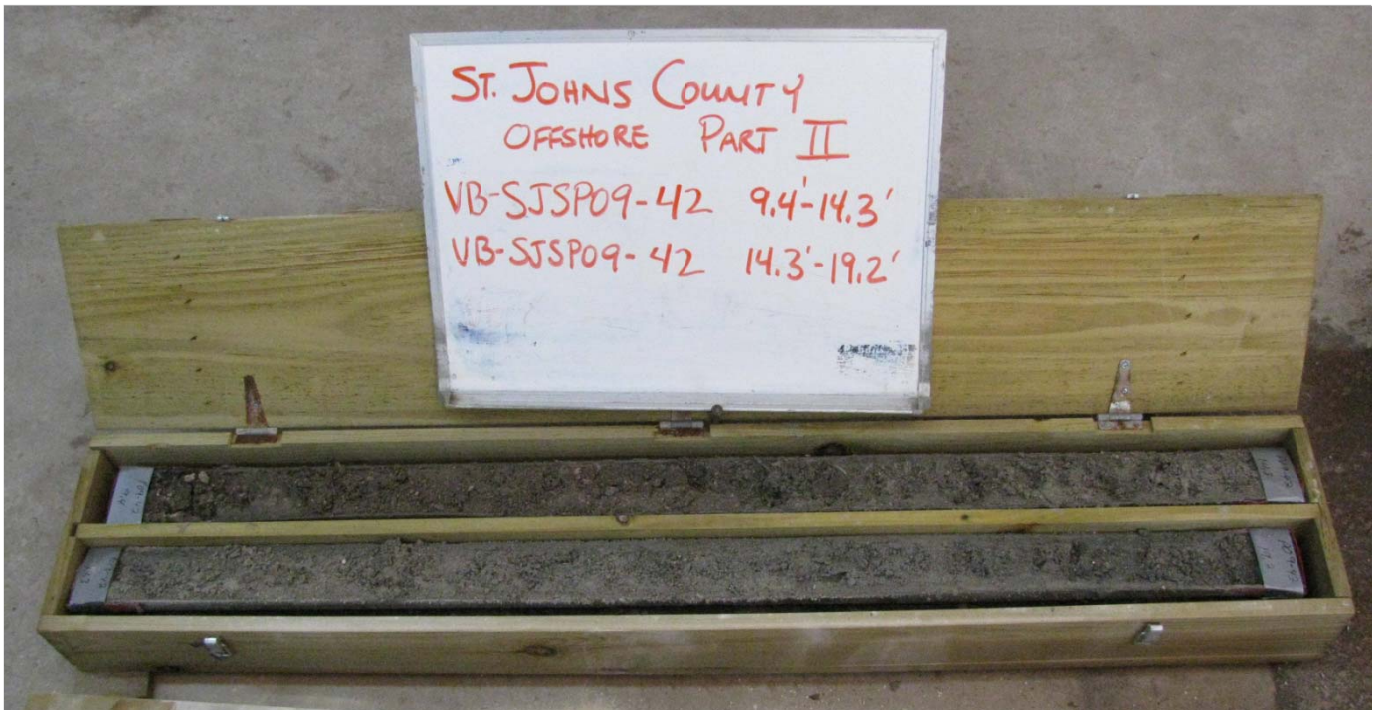
VB-SJSP09-41



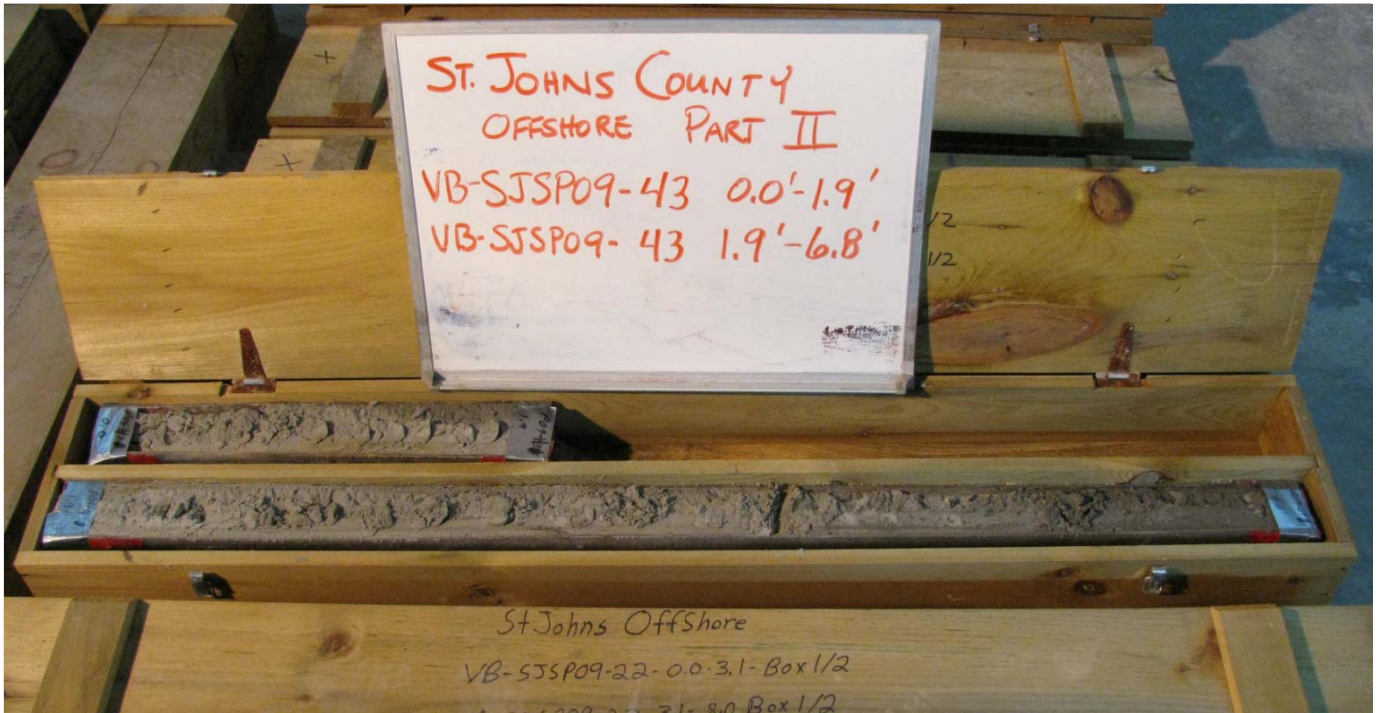
VB-SJSP09-41



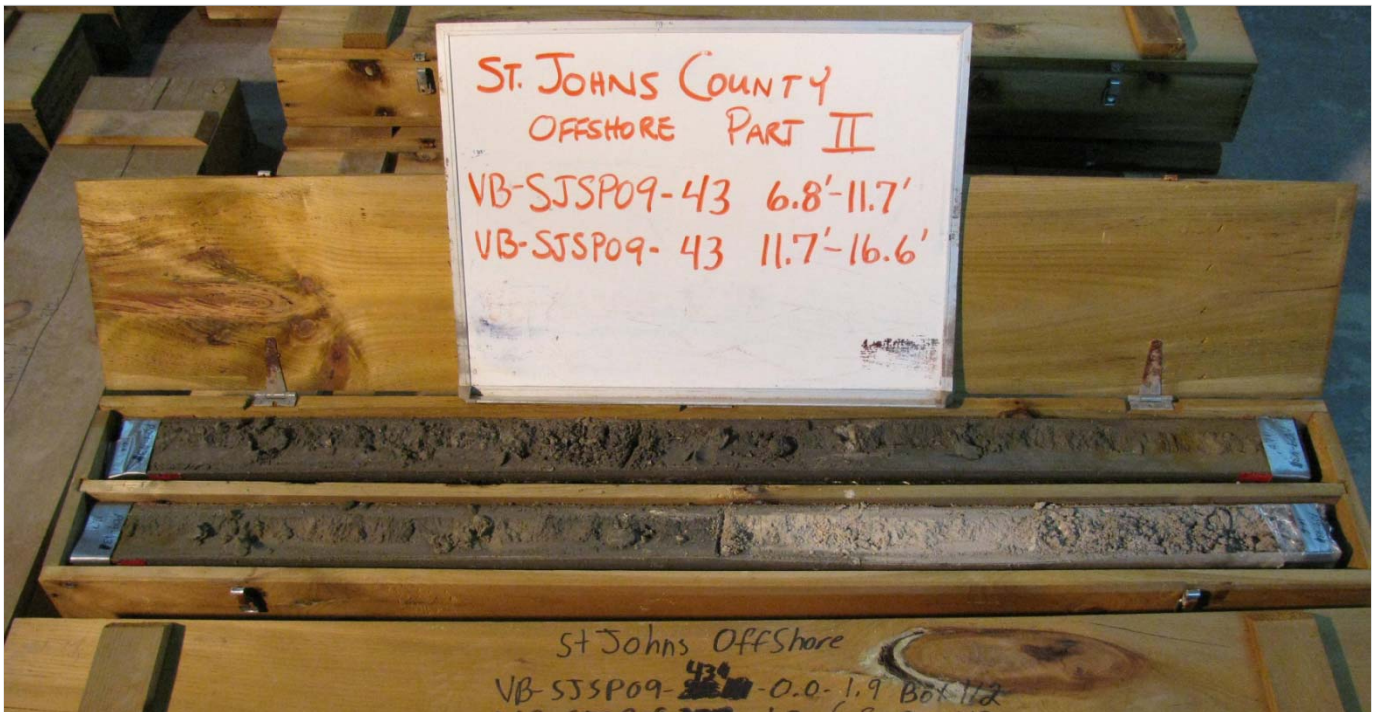
VB-SJSP09-42



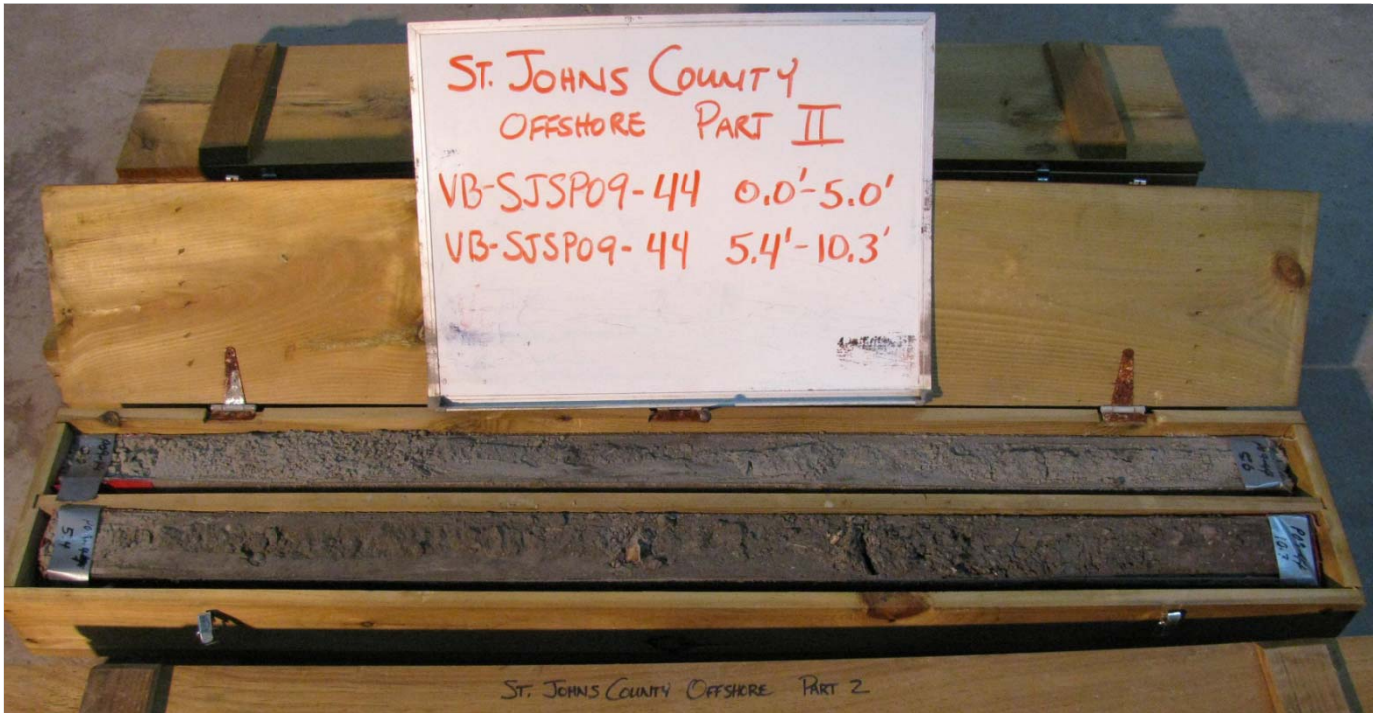
VB-SJSP09-42



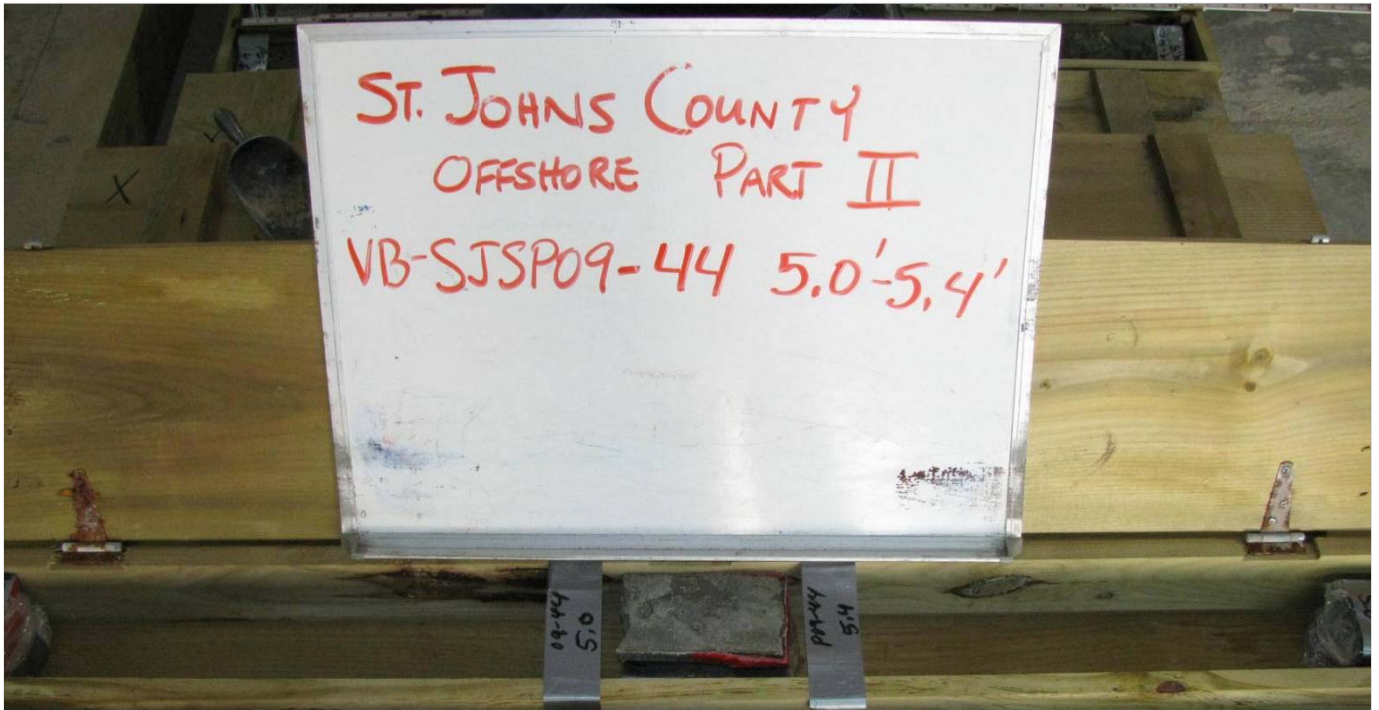
VB-SJSP09-43



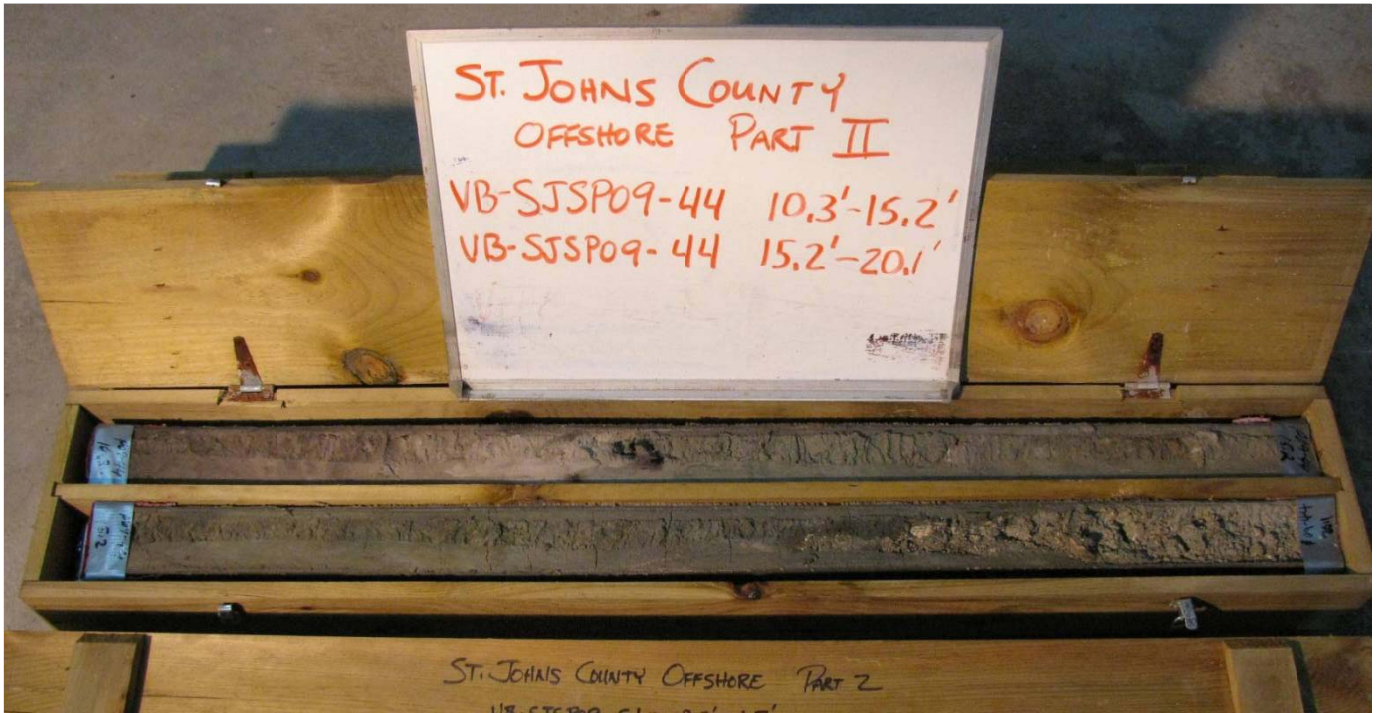
VB-SJSP09-43



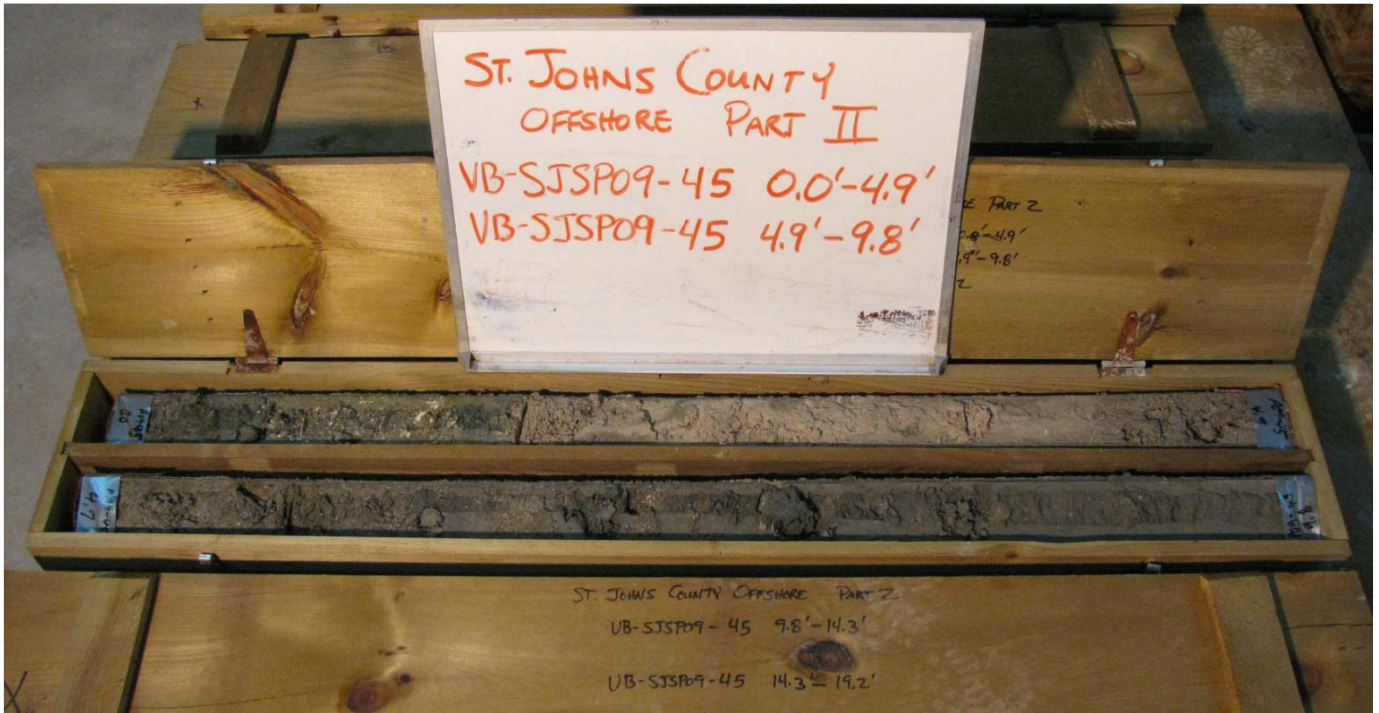
VB-SJSP09-44



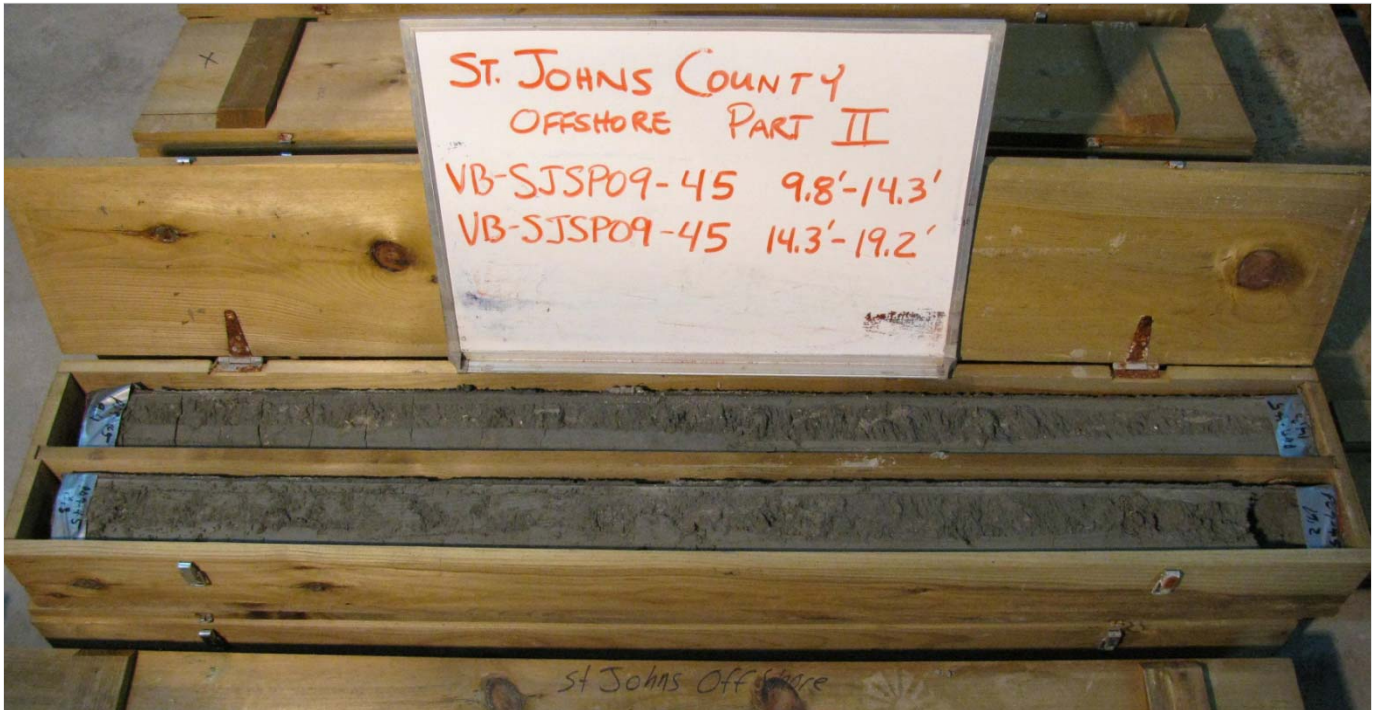
VB-SJSP09-44



VB-SJSP09-44



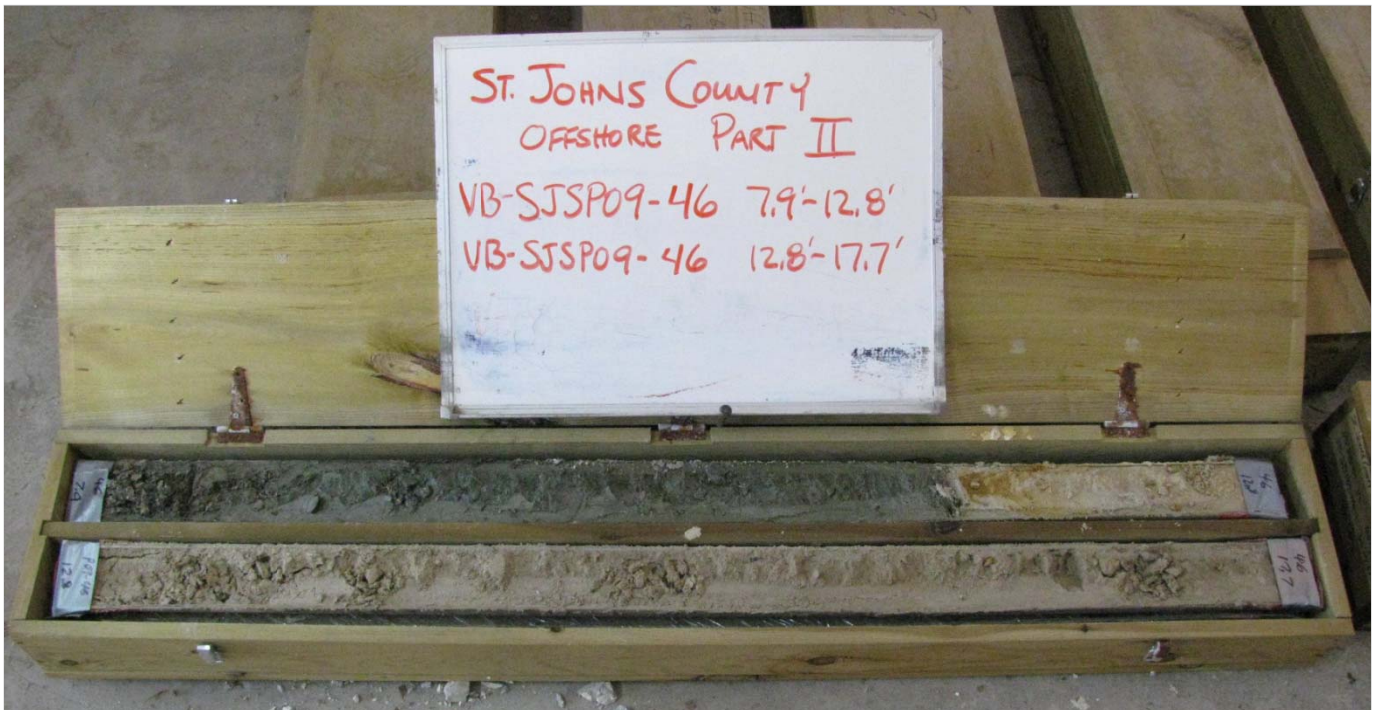
VB-SJSP09-45



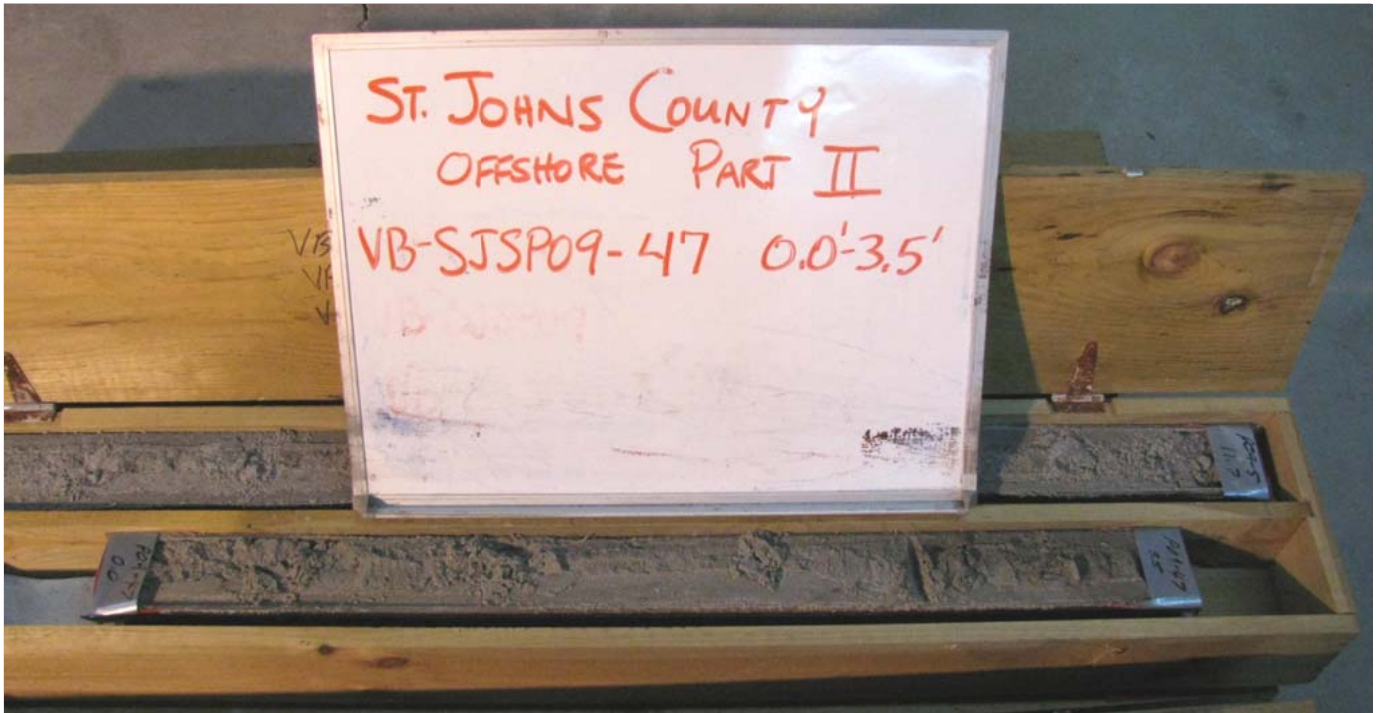
VB-SJSP09-45



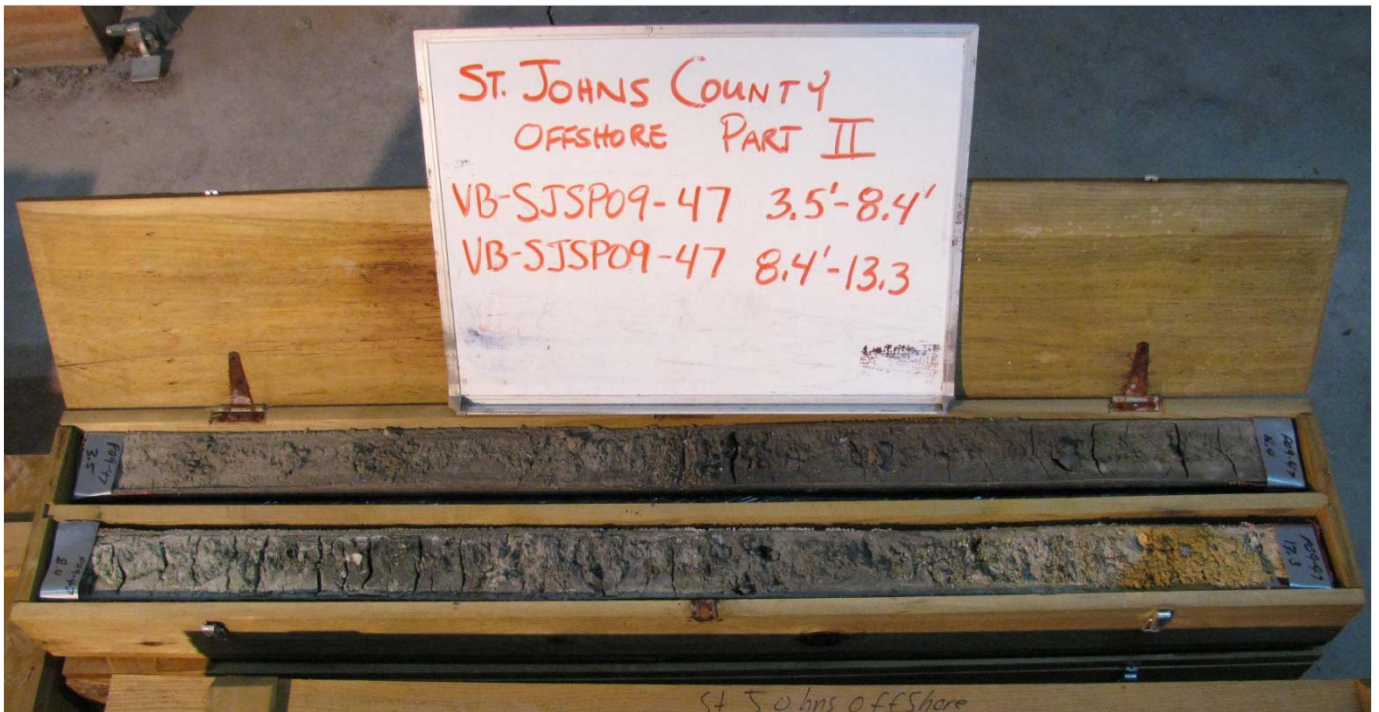
VB-SJSP09-46



VB-SJSP09-46



VB-SJSP09-47



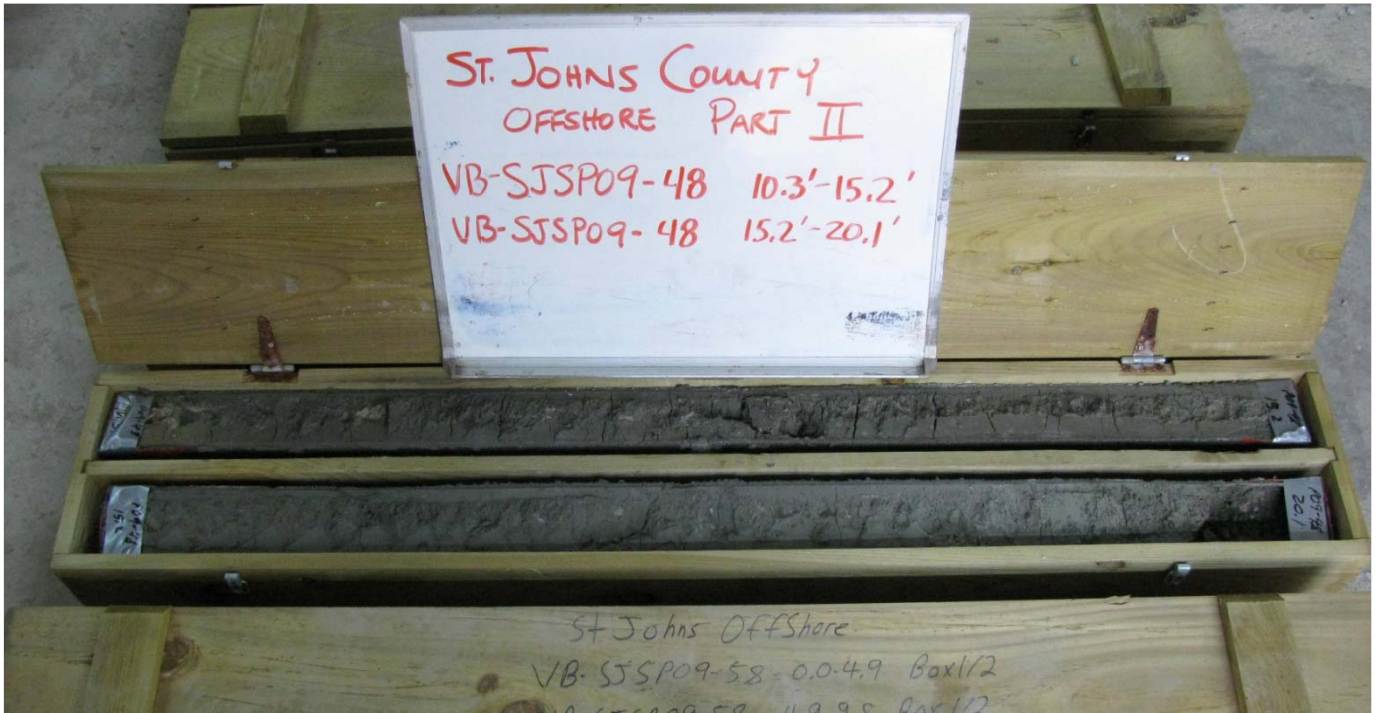
VB-SJSP09-47



VB-SJSP09-48



VB-SJSP09-48



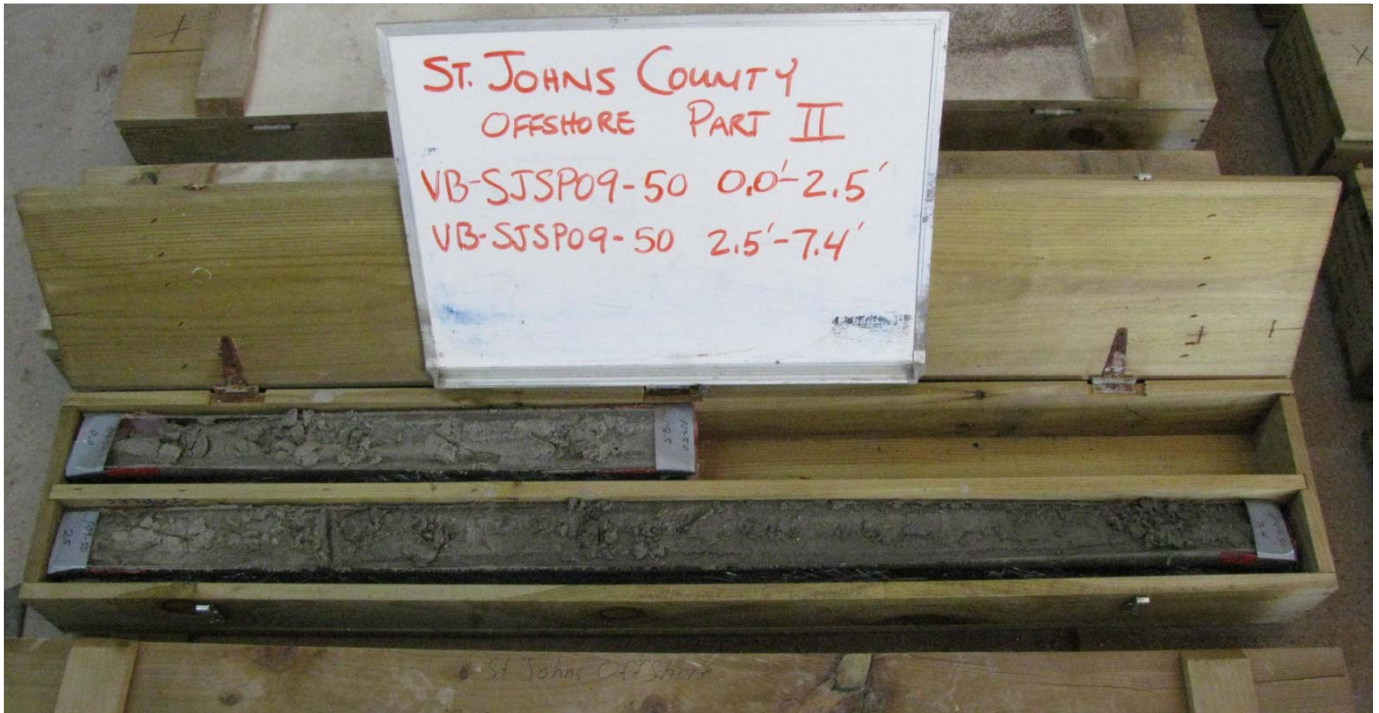
VB-SJSP09-48



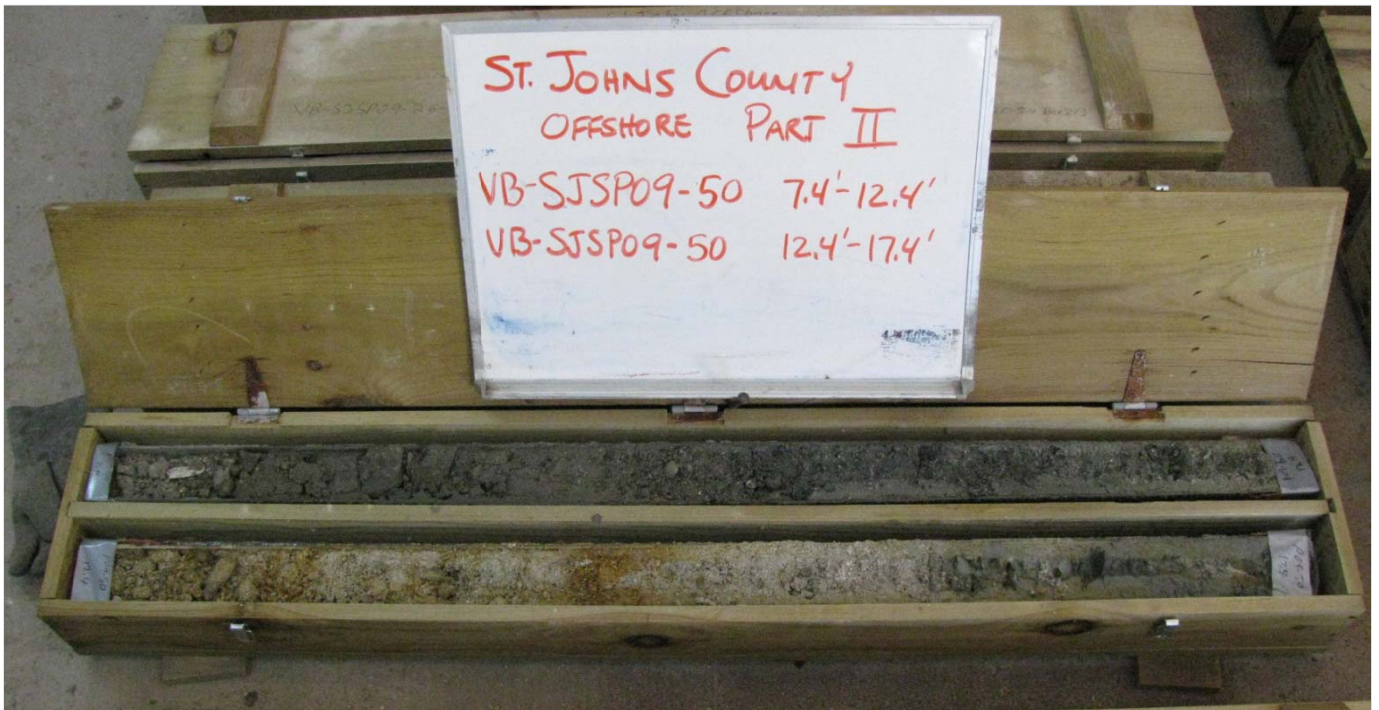
VB-SJSP09-49



VB-SJSP09-49



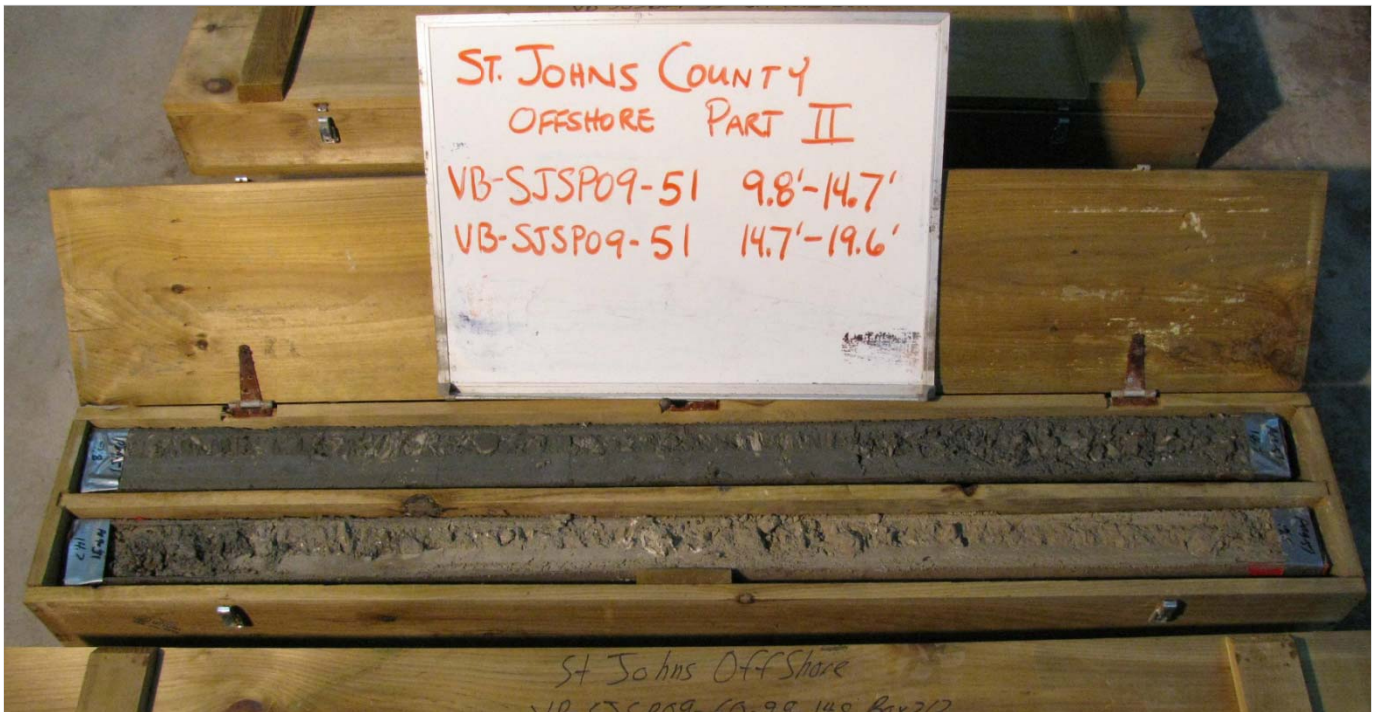
VB-SJSP09-50



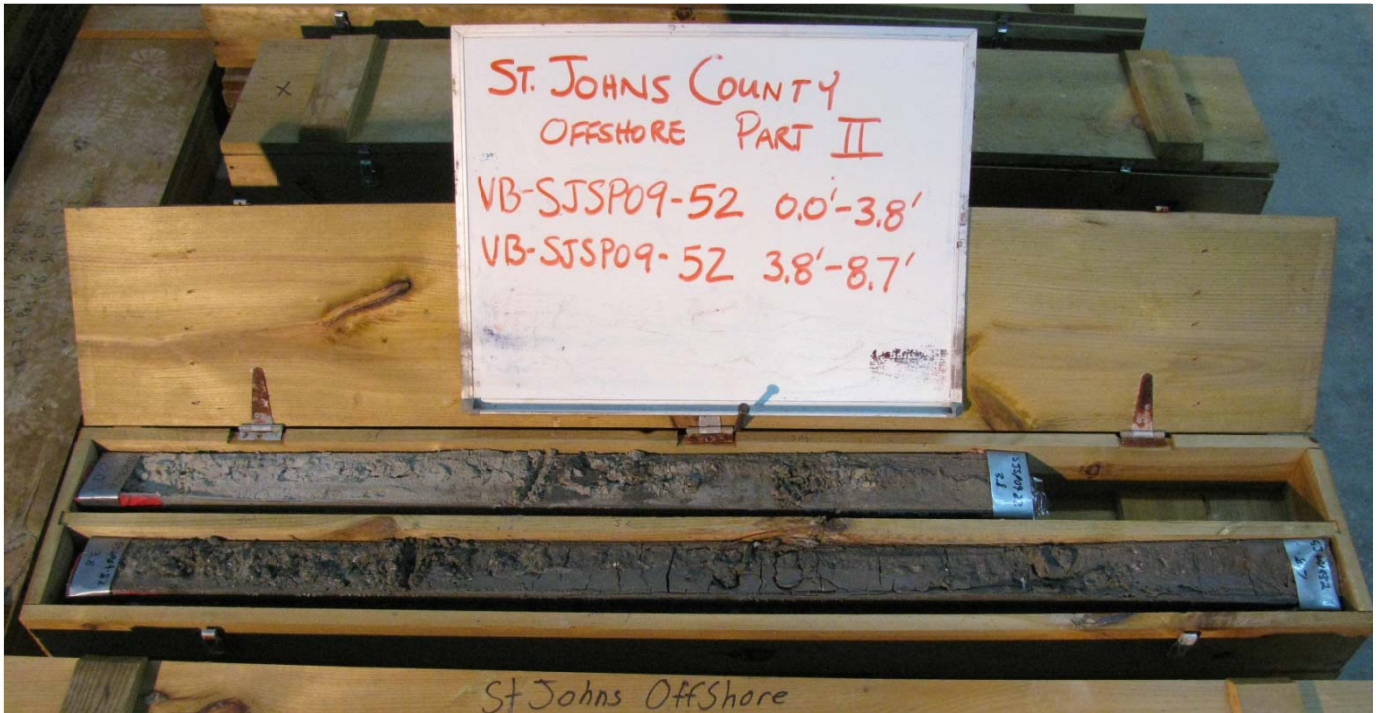
VB-SJSP09-50



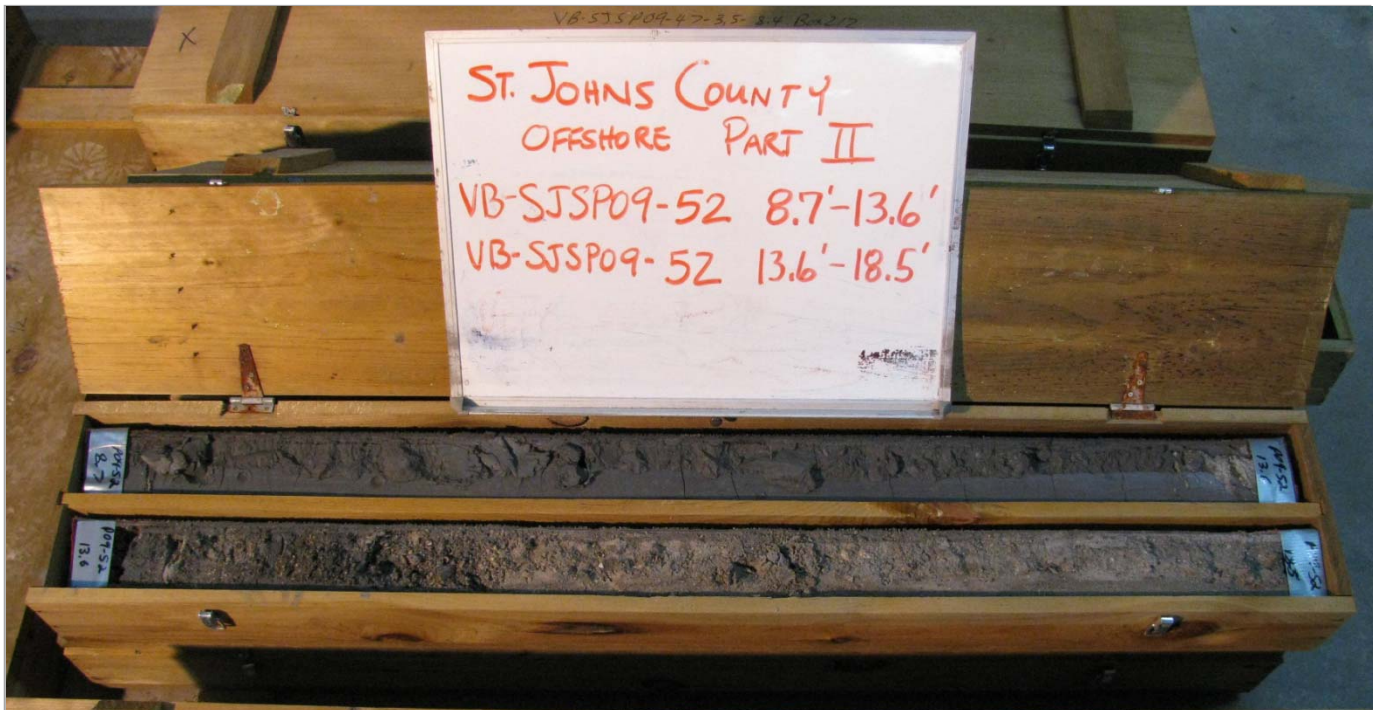
VB-SJSP09-51



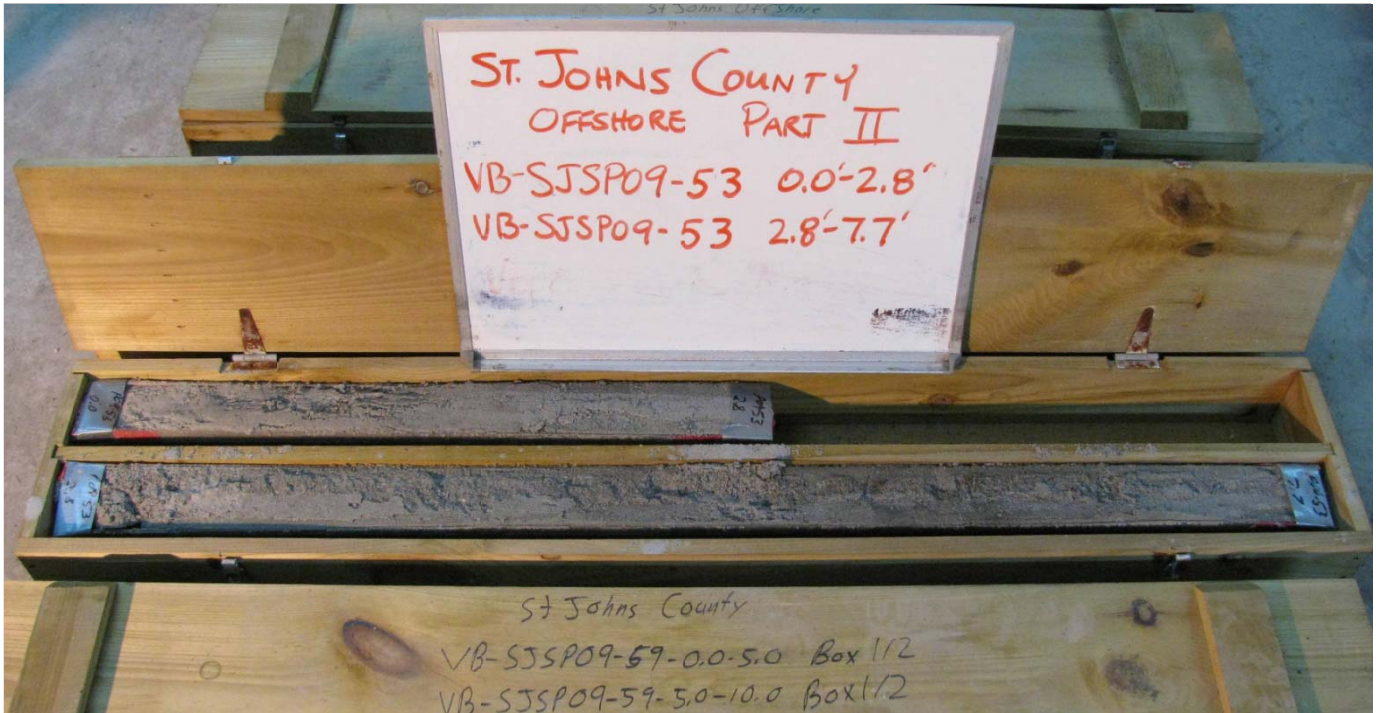
VB-SJSP09-51



VB-SJSP09-52



VB-SJSP09-52



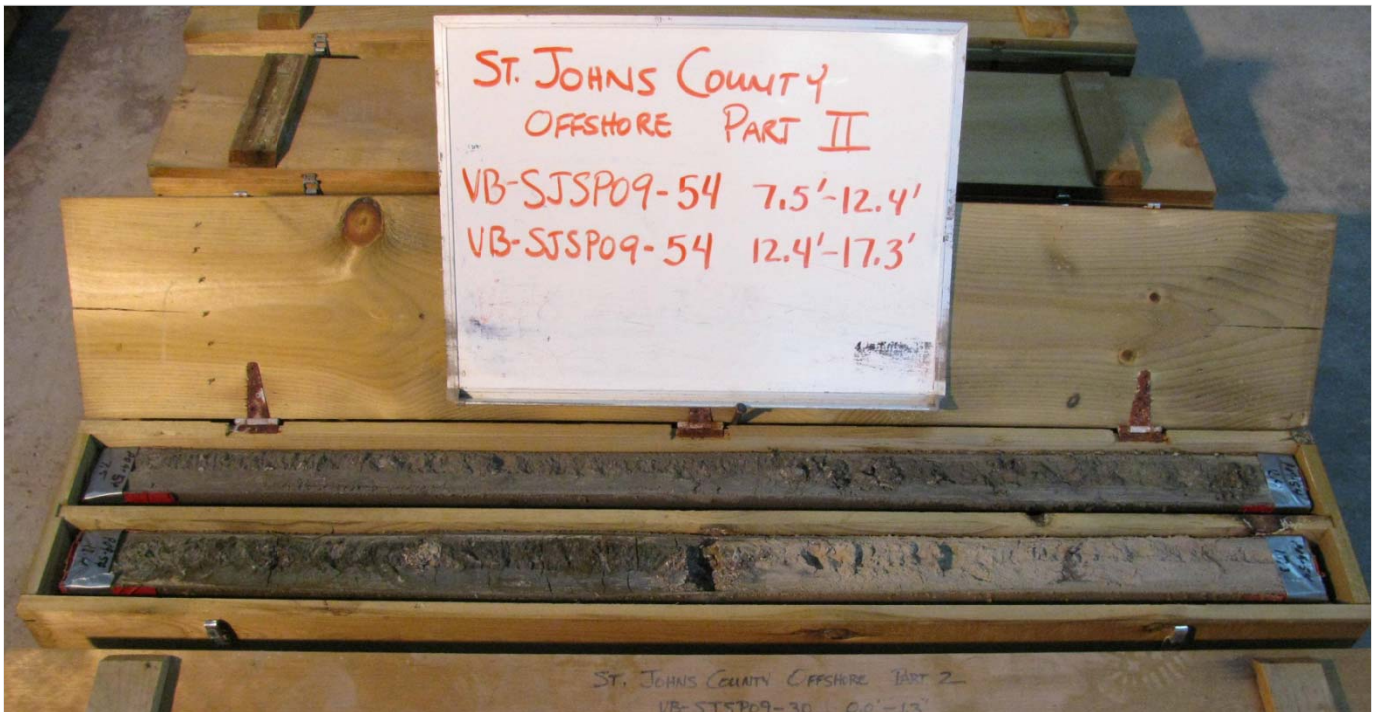
VB-SJSP09-53



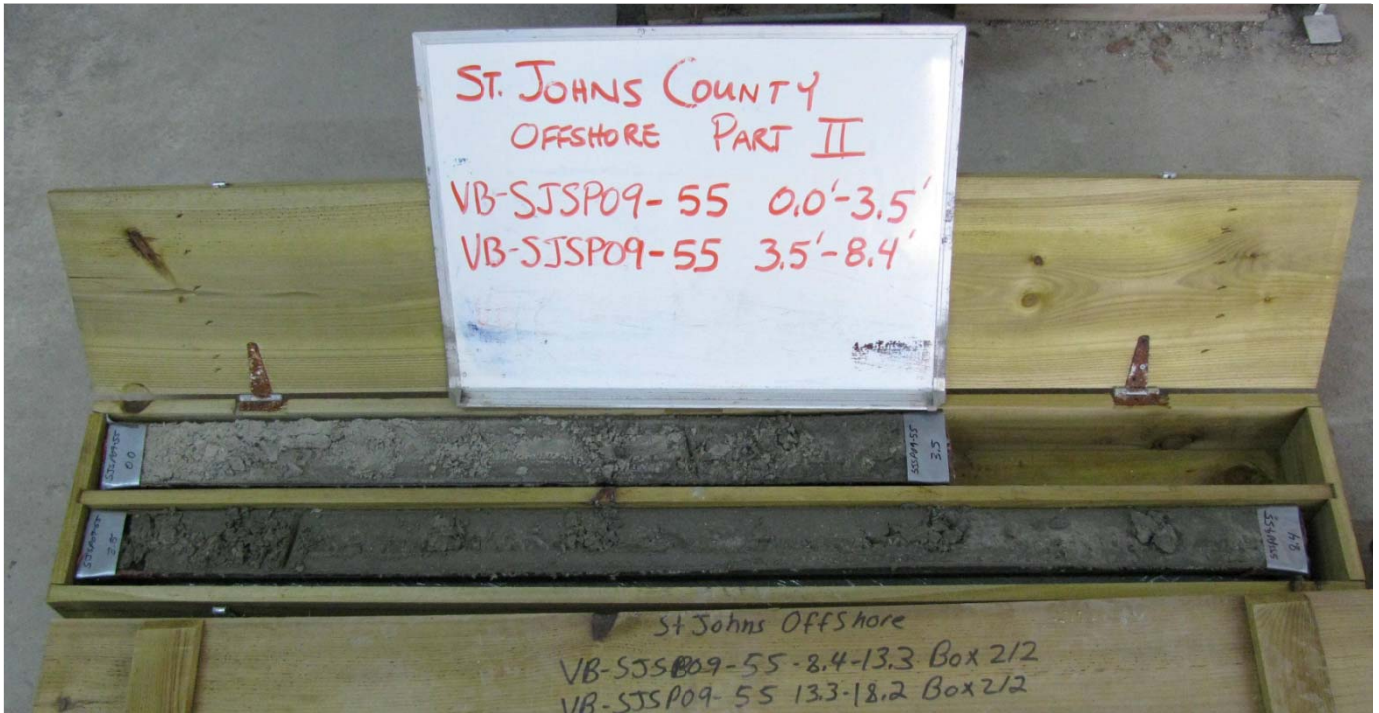
VB-SJSP09-53



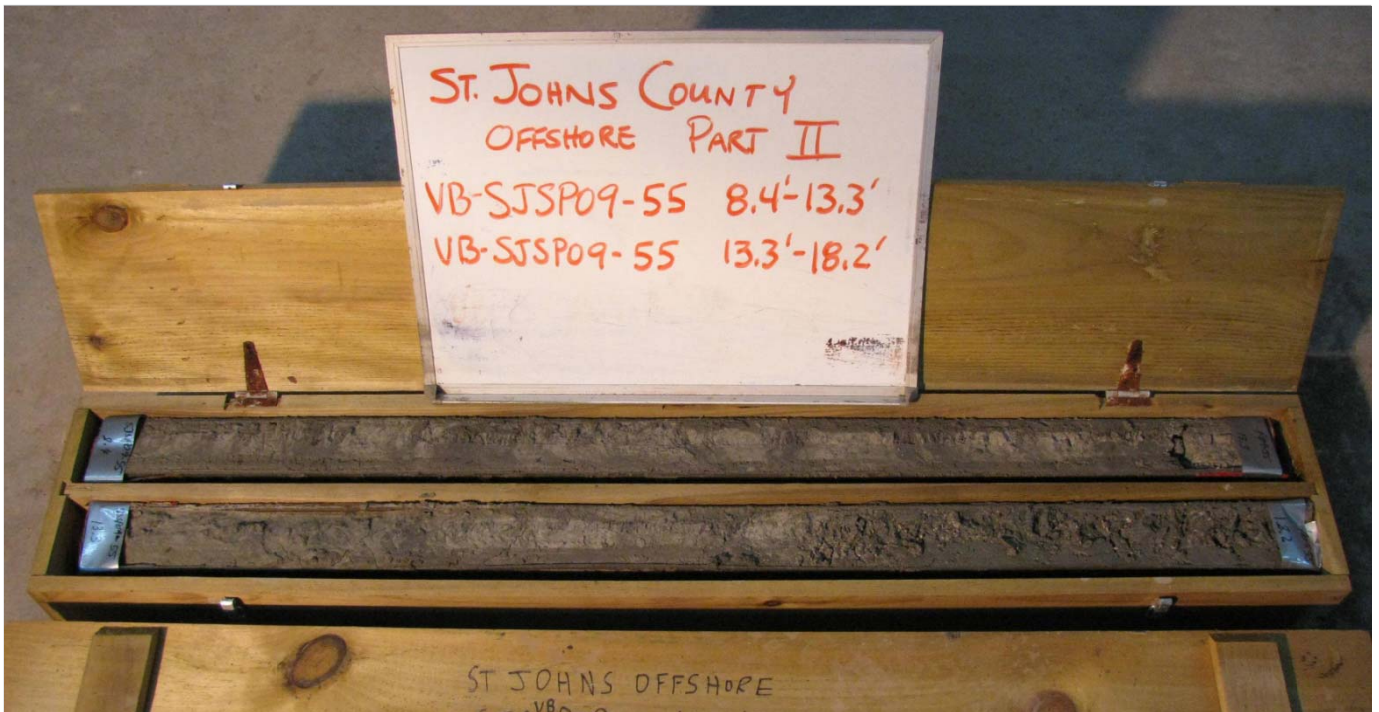
VB-SJSP09-54



VB-SJSP09-54



VB-SJSP09-55



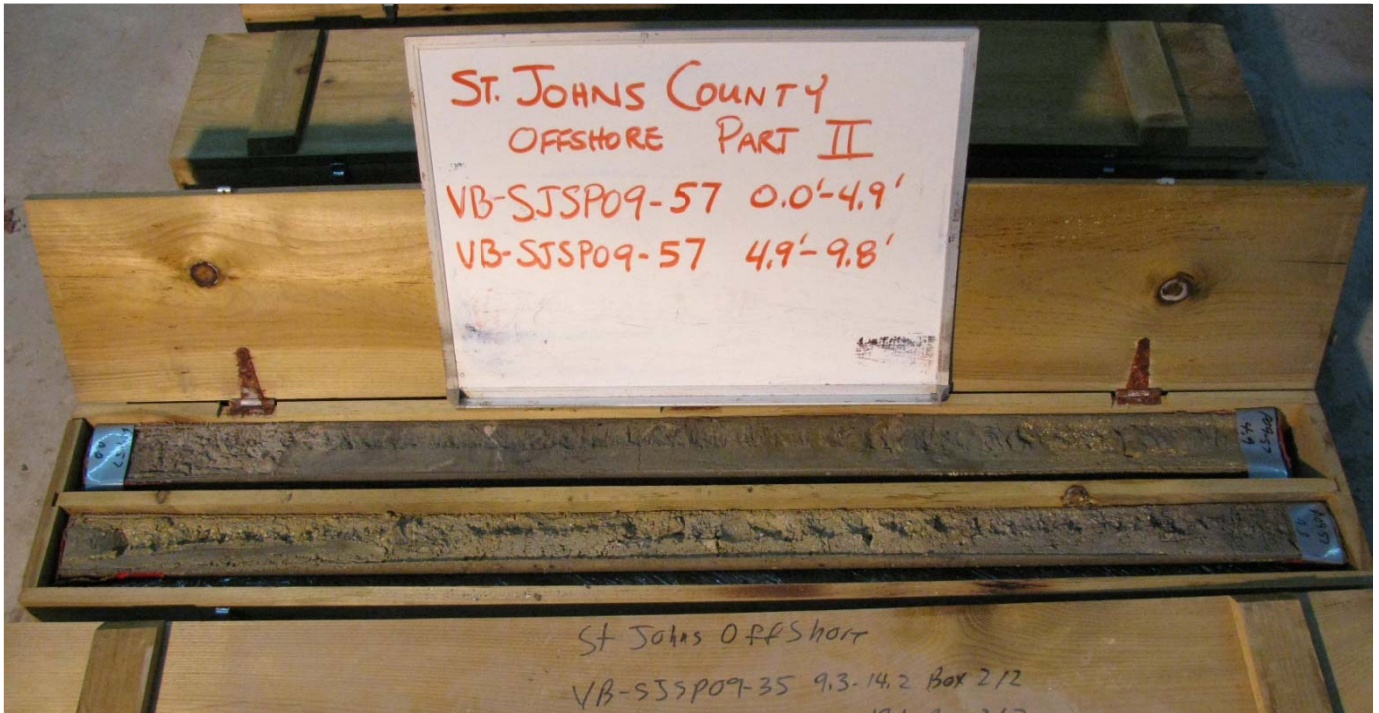
VB-SJSP09-55



VB-SJSP09-56



VB-SJSP09-56



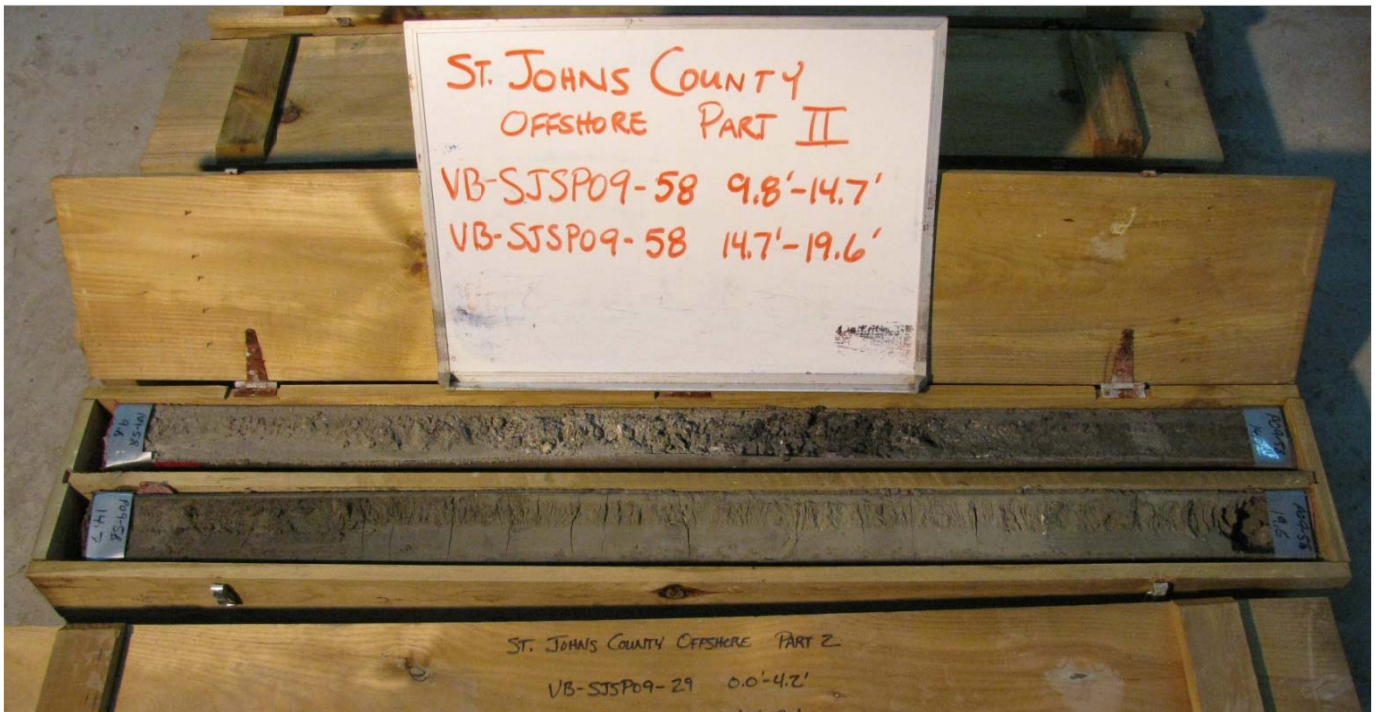
VB-SJSP09-57



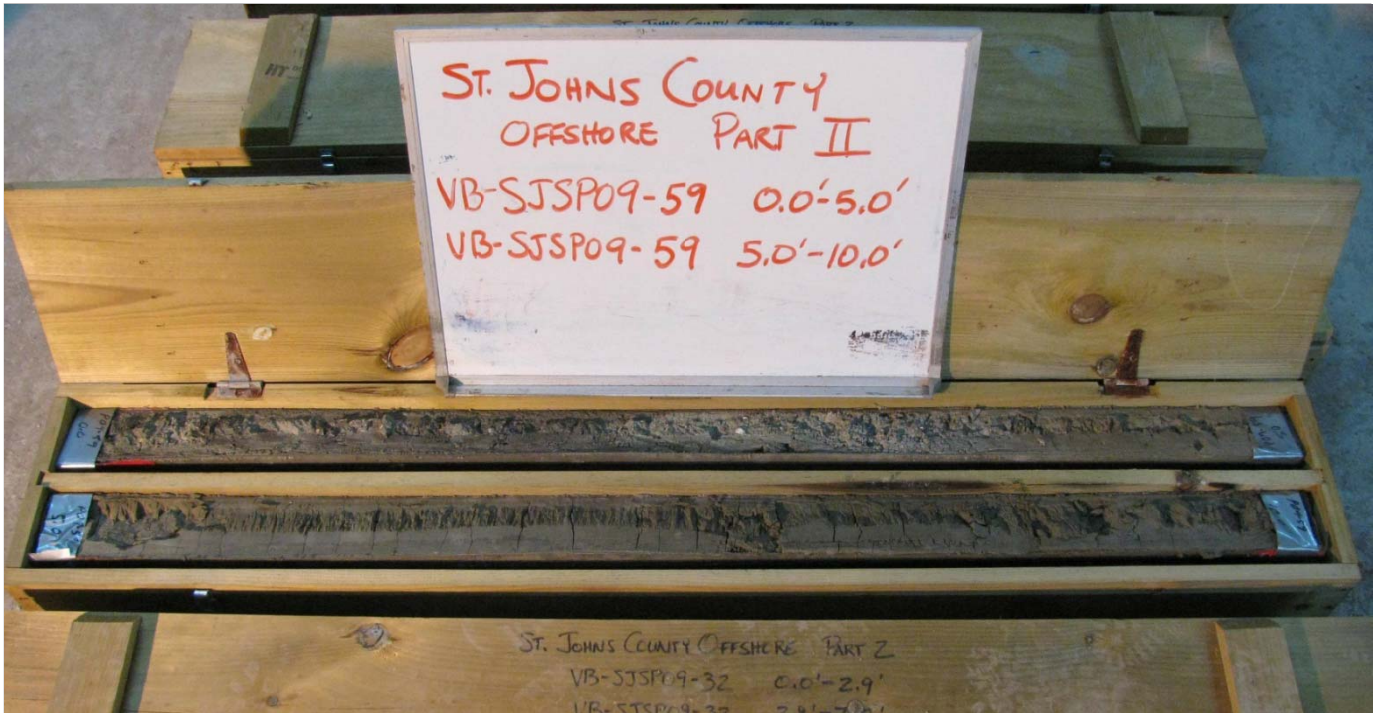
VB-SJSP09-57



VB-SJSP09-58



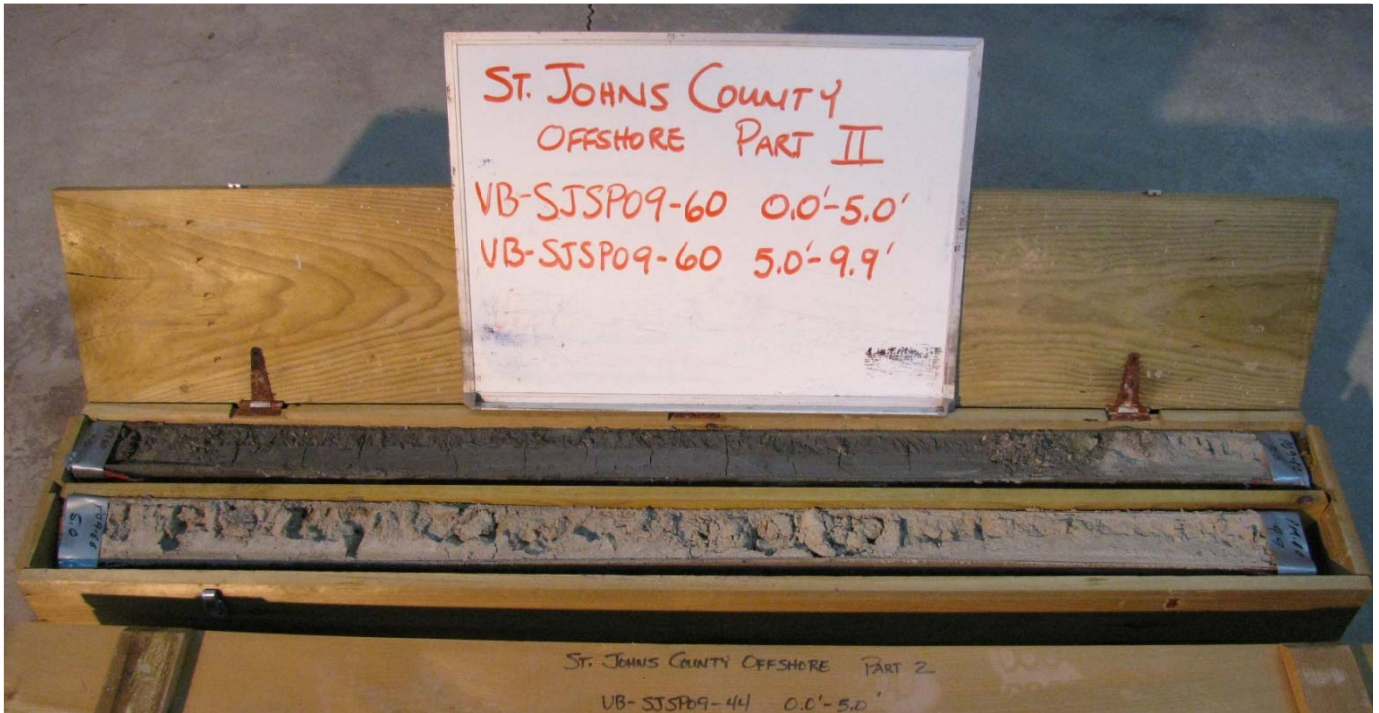
VB-SJSP09-58



VB-SJSP09-59



VB-SJSP09-59



VB-SJSP09-60



VB-SJSP09-60

APPENDIX C

- **Table 2: Summary of Laboratory Testing and Index Property Testing**
- **Laboratory Test Results**

Summary of Laboratory Testing and Index Property Testing

Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-1	1	2.5-3.0	3		3.83	
VB-SJSP09-1	2	6.0-6.5	3		2.32	
VB-SJSP09-1	3	8.0-8.5	5		16.87	
VB-SJSP09-2	1	1.0-1.5	2		7.91	
VB-SJSP09-2	2	2.0-2.5	1		13.85	
VB-SJSP09-2	3	5.0-5.5	4		17.25	
VB-SJSP09-3	1	2.0-2.5	3		2.30	
VB-SJSP09-3	2	4.0-4.5	25		7.52	
VB-SJSP09-3	3	7.0-7.5	10		38.52	
VB-SJSP09-4	1	3.0-3.5	1		24.02	
VB-SJSP09-4	2	7.0-7.5	7		22.69	
VB-SJSP09-5	1	3.0-3.5	11		2.18	
VB-SJSP09-5	2	6.0-6.5	5		1.86	
VB-SJSP09-5	3	9.0-9.5	5		3.62	
VB-SJSP09-6	1	1.0-1.5	4		9.55	
VB-SJSP09-6	2	3.0-3.5	5		8.07	
VB-SJSP09-6	3	7.0-7.5	0		25.04	
VB-SJSP09-7	1	1.5-2.0	5		3.23	
VB-SJSP09-7	2	4.5-5.0	7		11.48	
VB-SJSP09-7	3	8.0-8.5	14		19.10	
VB-SJSP09-8	1	2.0-2.5	4		1.79	
VB-SJSP09-8	2	5.0-5.5	24		13.27	
VB-SJSP09-8	3	9.0-9.5	0		21.94	
VB-SJSP09-9	1	2.0-2.5	1		25.90	
VB-SJSP09-9	2	6.0-6.5	0		36.67	
VB-SJSP09-10	1	3.0-3.5	10		1.57	
VB-SJSP09-10	2	6.0-6.5	14		1.73	
VB-SJSP09-10	3	9.0-9.5	4		2.27	
VB-SJSP09-10	4	12.0-12.5	4		9.86	

Table 2, Page 1 of 6

Summary of Laboratory Testing and Index Property Testing

Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-11	1	2.0-2.5	1		2.76	
VB-SJSP09-11	2	4.5-5.0	20		6.42	
VB-SJSP09-11	3	6.5-7.0	7		9.22	
VB-SJSP09-11	4	10.0-10.5	0		14.40	
VB-SJSP09-12	1	3.5-4.0	29		3.10	
VB-SJSP09-12	2	7.0-7.5	7		1.82	
VB-SJSP09-12	2-Post	7.0-7.5		9.2		0.04
VB-SJSP09-12	3	10.5-11.0	19		5.21	
VB-SJSP09-12	4	13.0-13.5	9		7.92	
VB-SJSP09-13	1	3.0-3.5	43		2.62	
VB-SJSP09-13	2	6.0-6.5	15		1.91	
VB-SJSP09-13	3	10.0-10.5	12		1.14	
VB-SJSP09-13	4	12.0-12.5	18		2.03	
VB-SJSP09-13	5	14.5-15.0	10		5.19	
VB-SJSP09-14	1	2.5-3.0	9		1.53	
VB-SJSP09-14	1-Post	2.5-3.0		8.9		0.08
VB-SJSP09-14	2	5.5-6.0	18		1.73	
VB-SJSP09-14	3	7.0-7.5	10		6.45	
VB-SJSP09-14	4	10.0-10.5	4		34.56	
VB-SJSP09-15	1	2.5-3.0	15		1.78	
VB-SJSP09-15	2	6.0-6.5	17		4.58	
VB-SJSP09-15	3	7.5-8.0	15		5.67	
VB-SJSP09-15	4	10.5-11.0	7		22.66	
VB-SJSP09-16	1	2.5-3.0	14		1.13	
VB-SJSP09-16	1-Post	2.5-3.0		8.9		0.18
VB-SJSP09-16	2	6.0-6.5	13		2.67	
VB-SJSP09-16	3	8.5-9.0	8		6.64	
VB-SJSP09-16	4	11.0-11.5	0		39.85	
VB-SJSP09-17	1	2.5-3.0	20		2.20	
VB-SJSP09-17	2	6.0-6.5	32		4.34	
VB-SJSP09-17	3	8.0-8.5	22		3.71	
VB-SJSP09-17	4	11.0-11.5	24		6.73	

Table 2, Page 2 of 6

Summary of Laboratory Testing and Index Property Testing

Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-18	1	2.5-3.0	19		0.36	
VB-SJSP09-18	2	5.0-5.5	14		2.23	
VB-SJSP09-18	2-Post	5.0-5.5		9.9		0.17
VB-SJSP09-18	3	8.5-9.0	10		8.73	
VB-SJSP09-18	4	10.0-10.5	11		7.62	
VB-SJSP09-19	1	2.5-3.0	6		1.64	
VB-SJSP09-19	2	6.5-7.0	5		8.28	
VB-SJSP09-19	3	10.0-10.5	10		10.26	
VB-SJSP09-19	4	14.0-14.5	38		15.83	
VB-SJSP09-20	1	1.0-1.5	14		5.12	
VB-SJSP09-20	2	4.0-4.5	40		9.66	
VB-SJSP09-20	3	8.0-8.5	1		90.69	
VB-SJSP09-21	1	3.0-3.5	8		12.50	
VB-SJSP09-21	2	10.0-10.5	12		33.52	
VB-SJSP09-22	1	3.0-3.5	10	9.4	0.65	
VB-SJSP09-22	1-Post	3.0-3.5				0.56
VB-SJSP09-22	2	7.0-7.5	6		3.97	
VB-SJSP09-22	3	9.0-9.5	6		5.03	
VB-SJSP09-22	4	13.0-13.5	7		18.75	
VB-SJSP09-23	1	2.0-2.5	11		1.79	
VB-SJSP09-23	2	6.0-6.5	4	5.5	2.13	
VB-SJSP09-23	2-Post	6.0-6.5				0.20
VB-SJSP09-23	3	10.0-10.5	2		8.45	
VB-SJSP09-24	1	2.0-2.5	9		0.63	
VB-SJSP09-24	2	6.0-6.5	18	18.4	3.07	
VB-SJSP09-24	2-Post	6.0-6.5				1.09
VB-SJSP09-24	3	8.5-9.0	5		8.96	
VB-SJSP09-25	1	3.0-3.5	6		0.31	
VB-SJSP09-25	2	6.0-6.5	5	5.7	2.29	
VB-SJSP09-25	2 Post	6.0-6.5				0.54
VB-SJSP09-25	3	9.0-9.5	8		2.62	
VB-SJSP09-25	4	11.0-11.5	5		2.30	
VB-SJSP09-25	5	13.0-13.5	8		3.71	
VB-SJSP09-25	6	17.0-17.5	0		79.05	

Table 2, Page 3 of 6

Summary of Laboratory Testing and Index Property Testing

Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-26	1	1.0-1.5	1		61.45	
VB-SJSP09-26	2	4.0-4.5	4		26.88	
VB-SJSP09-27	1	2.0-2.5	6		3.38	
VB-SJSP09-27	2	6.0-6.5	6		6.86	
VB-SJSP09-27	3	8.5-9.0	14		8.98	
VB-SJSP09-27	4	10.5-11.0	2		9.53	
VB-SJSP09-28	1	2.0-2.5	4		1.21	
VB-SJSP09-28	2	6.0-6.5	4	8.5	1.79	
VB-SJSP09-28	2-Post	6.0-6.5				1.50
VB-SJSP09-28	3	10.0-10.5	2		5.73	
VB-SJSP09-28	4	13.0-13.5	5		3.50	
VB-SJSP09-28	5	15.0-15.5	21		8.36	
VB-SJSP09-29	1	3.0-3.5	19		1.05	
VB-SJSP09-29	2	6.0-6.5	11		0.76	
VB-SJSP09-29	3	9.0-9.5	5	8.6	1.64	
VB-SJSP09-29	3 Post	9.0-9.5				0.12
VB-SJSP09-29	4	12.0-12.5	7		1.55	
VB-SJSP09-29	5	15.0-15.5	7		4.02	
VB-SJSP09-29	6	17.0-17.5	4		7.34	
VB-SJSP09-29	7	18.5-18.9	3		5.04	
VB-SJSP09-30	1	1.5-2.0	6		3.59	
VB-SJSP09-30	2	3.0-3.5	6		4.74	
VB-SJSP09-30	3	6.0-6.5	7		5.86	
VB-SJSP09-30	4	8.0-8.5	5		12.60	
VB-SJSP09-31	1	2.0-2.5	8		1.16	
VB-SJSP09-31	2	6.0-6.5	4	12	2.87	
VB-SJSP09-31	2-Post	6.0-6.5				1.41
VB-SJSP09-31	3	10.0-10.5	8		3.25	
VB-SJSP09-31	4	13.5-14.0	10		4.08	
VB-SJSP09-31	5	15.0-15.5	9		5.57	
VB-SJSP09-32	1	1.0-1.5	15		3.04	
VB-SJSP09-32	2	2.5-3.0	5		5.17	
VB-SJSP09-32	3	4.5-5.0	5		6.97	
VB-SJSP09-32	4	6.0-6.5	12		19.87	
VB-SJSP09-33	1	3.0-3.5	6	14.2	2.92	
VB-SJSP09-33	1-Post	3.0-3.5				0.69
VB-SJSP09-33	2	6.0-6.5	6		3.63	
VB-SJSP09-33	3	8.0-8.5	3		5.66	
VB-SJSP09-33	4	10.0-10.5	5		15.74	
VB-SJSP09-34	1	1.0-1.5	6		4.21	
VB-SJSP09-34	2	3.0-3.5	7		3.39	
VB-SJSP09-34	3	5.0-5.5	4		5.36	
VB-SJSP09-34	4	8.0-8.5	1		28.40	

Table 2, Page 4 of 6

Summary of Laboratory Testing and Index Property Testing

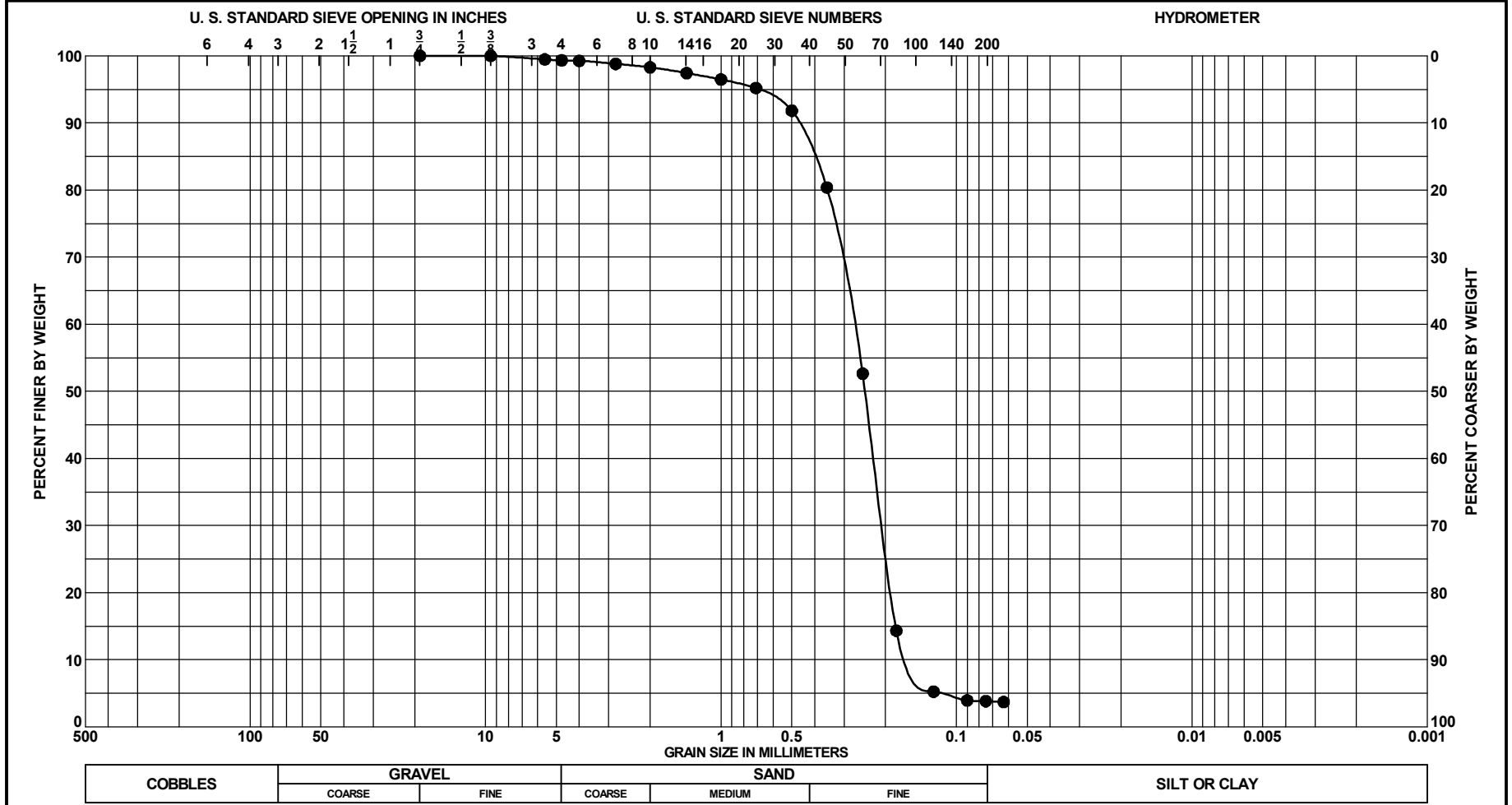
Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-35	1	2.0-2.5	5	7.7	1.90	
VB-SJSP09-35	1-Post	2.0-2.5				0.50
VB-SJSP09-35	2	5.0-5.5	3		4.28	
VB-SJSP09-35	3	6.0-6.5	3		4.22	
VB-SJSP09-35	4	8.0-8.5	2		37.53	
VB-SJSP09-36	1	2.0-2.5	17		1.84	
VB-SJSP09-36	2	6.0-6.5	2	10.3	3.22	
VB-SJSP09-36	2-Post	6.0-6.5				0.10
VB-SJSP09-36	3	9.0-9.5	6		10.98	
VB-SJSP09-36	4	10.5-11.0	9		10.99	
VB-SJSP09-37	1	2.0-2.5	9		10.47	
VB-SJSP09-37	2	6.0-6.5	76		5.04	
VB-SJSP09-38	1	0.5-1.0	9		4.54	
VB-SJSP09-38	2	1.5-2.0	10		5.03	
VB-SJSP09-38	3	6.0-6.5	4		6.96	
VB-SJSP09-39	1	2.0-2.5	2	5	2.59	
VB-SJSP09-39	1-Post	2.0-2.5				0.05
VB-SJSP09-39	2	6.0-6.5	10		7.97	
VB-SJSP09-39	3	10.0-10.5	11		9.90	
VB-SJSP09-40	1	1.0-1.5	7		2.80	
VB-SJSP09-40	2	3.0-3.5	3		7.20	
VB-SJSP09-40	3	6.0-6.5	37		22.75	
VB-SJSP09-41	1	2.0-2.5	24		15.86	
VB-SJSP09-41	2	6.0-6.5	32		11.48	
VB-SJSP09-42	1	2.0-2.5	5		8.88	
VB-SJSP09-42	2	6.0-6.5	4		8.19	
VB-SJSP09-43	1	2.0-2.5	3		1.37	
VB-SJSP09-43	2	4.0-4.5	6	8.3	2.36	
VB-SJSP09-43	2-Post	4.0-4.5				0.20
VB-SJSP09-43	3	5.5-6.0	5		4.22	
VB-SJSP09-43	4	6.5-7.0	6		9.99	
VB-SJSP09-43	5	10.0-10.5	3		21.08	
VB-SJSP09-44	1	2.5-3.0	3	6	1.89	
VB-SJSP09-44	1-Post	2.5-3.0				0.31
VB-SJSP09-44	2	5.5-6.0	5		4.78	
VB-SJSP09-44	3	6.5-7.0	5		3.99	
VB-SJSP09-44	4	8.0-8.5	12		7.82	
VB-SJSP09-44	5	9.0-9.5	4		6.40	
VB-SJSP09-45	1	1.0-1.5	31		32.56	
VB-SJSP09-45	2	3.0-3.5	24		3.78	
VB-SJSP09-45	3	7.0-7.5	5		68.83	
VB-SJSP09-46	1	2.0-2.5	1		3.19	
VB-SJSP09-46	2	4.0-4.5	8		10.19	
VB-SJSP09-46	3	7.0-7.5	14		8.83	

Table 2, Page 5 of 6

Summary of Laboratory Testing and Index Property Testing

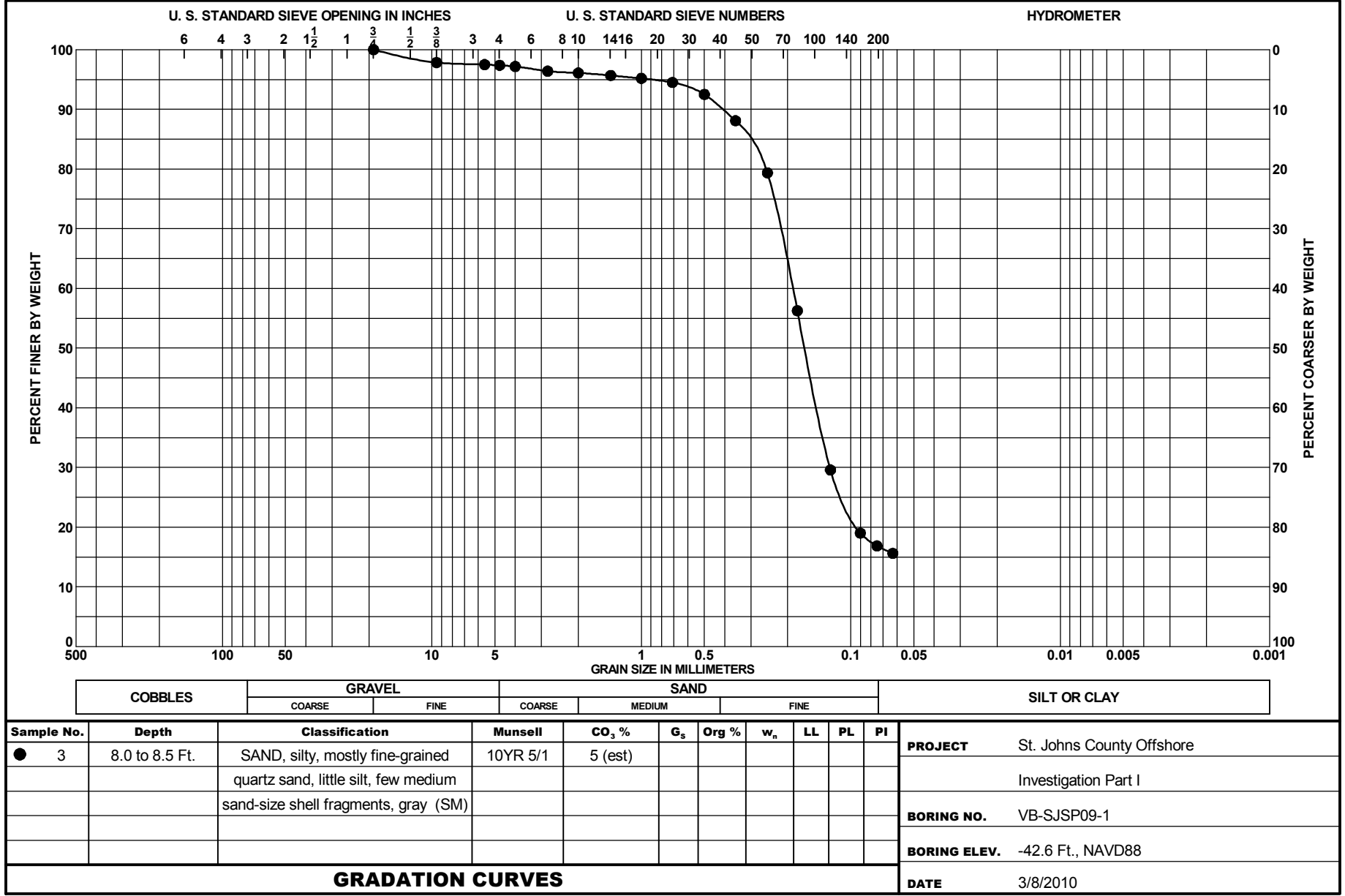
Boring Designation	Sample #	Sample Depth (feet)	Visual % Shell (estimated)	Percent Carbonate	% Fines Passing 200 Sieve (pre and post burn)	
					Pre	Post
VB-SJSP09-47	1	2.0-2.5	4		2.01	
VB-SJSP09-47	2	3.0-3.5	4		4.26	
VB-SJSP09-47	3	4.0-4.5	8		36.42	
VB-SJSP09-47	4	7.0-7.5	0		83.57	
VB-SJSP09-48	1	2.0-2.5	44		4.77	
VB-SJSP09-49	1	0.5-1.0	5		4.94	
VB-SJSP09-49	2	3.0-3.5	3		16.41	
VB-SJSP09-49	3	9.0-9.5	1		36.10	
VB-SJSP09-50	1	2.0-2.5	1		2.78	
VB-SJSP09-50	2	4.0-4.5	1		5.98	
VB-SJSP09-50	3	8.0-8.1	7		9.63	
VB-SJSP09-51	1	1.0-1.5	7		3.81	
VB-SJSP09-51	2	3.5-4.0	14		5.27	
VB-SJSP09-51	3	6.0-6.5	9		56.13	
VB-SJSP09-52	1	1.0-1.5	4		1.46	
VB-SJSP09-52	2	2.0-2.5	6		3.36	
VB-SJSP09-52	3	6.0-6.5	6		43.57	
VB-SJSP09-53	1	3.0-3.5	12		1.78	
VB-SJSP09-53	2	6.0-6.5	20	24.5	3.91	
VB-SJSP09-53	2-Post	6.0-6.5				0.78
VB-SJSP09-53	3	9.0-9.5	7		1.28	
VB-SJSP09-53	4	10.0-10.5	8		5.17	
VB-SJSP09-53	5	12.0-12.5	0		77.38	
VB-SJSP09-54	1	1.0-1.5	3		0.81	
VB-SJSP09-54	2	3.5-4.0	3		11.65	
VB-SJSP09-54	3	5.0-5.5	10		2.73	
VB-SJSP09-54	4	7.5-8.0	5		4.58	
VB-SJSP09-55	1	1.5-2.0	6		1.70	
VB-SJSP09-55	2	3.0-3.5	4		11.07	
VB-SJSP09-55	3	5.0-5.5	4		8.75	
VB-SJSP09-56	1	2.5-3.0	2		2.83	
VB-SJSP09-56	2	5.0-5.5	5	6.3	0.42	
VB-SJSP09-56	2-Post	5.0-5.5				0.44
VB-SJSP09-56	3	8.0-8.52	20		2.88	
VB-SJSP09-56	4	9.0-9.5	5		4.88	
VB-SJSP09-56	5	12.0-12.5	18		3.15	
VB-SJSP09-57	1	1.0-1.5	1		14.17	
VB-SJSP09-57	2	4.0-4.5	6		20.13	
VB-SJSP09-58	1	1.0-1.5	4		2.15	
VB-SJSP09-58	2	2.5-3.0	4		6.68	
VB-SJSP09-58	3	5.0-5.5	0		95.70	
VB-SJSP09-59	1	2.0-2.5	8		18.14	
VB-SJSP09-60	1	2.0-2.5	2		81.32	

Table 2, Page 6 of 6



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, trace silt, light gray (SP)	10YR 7/1	3 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-1
											BORING ELEV. -42.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

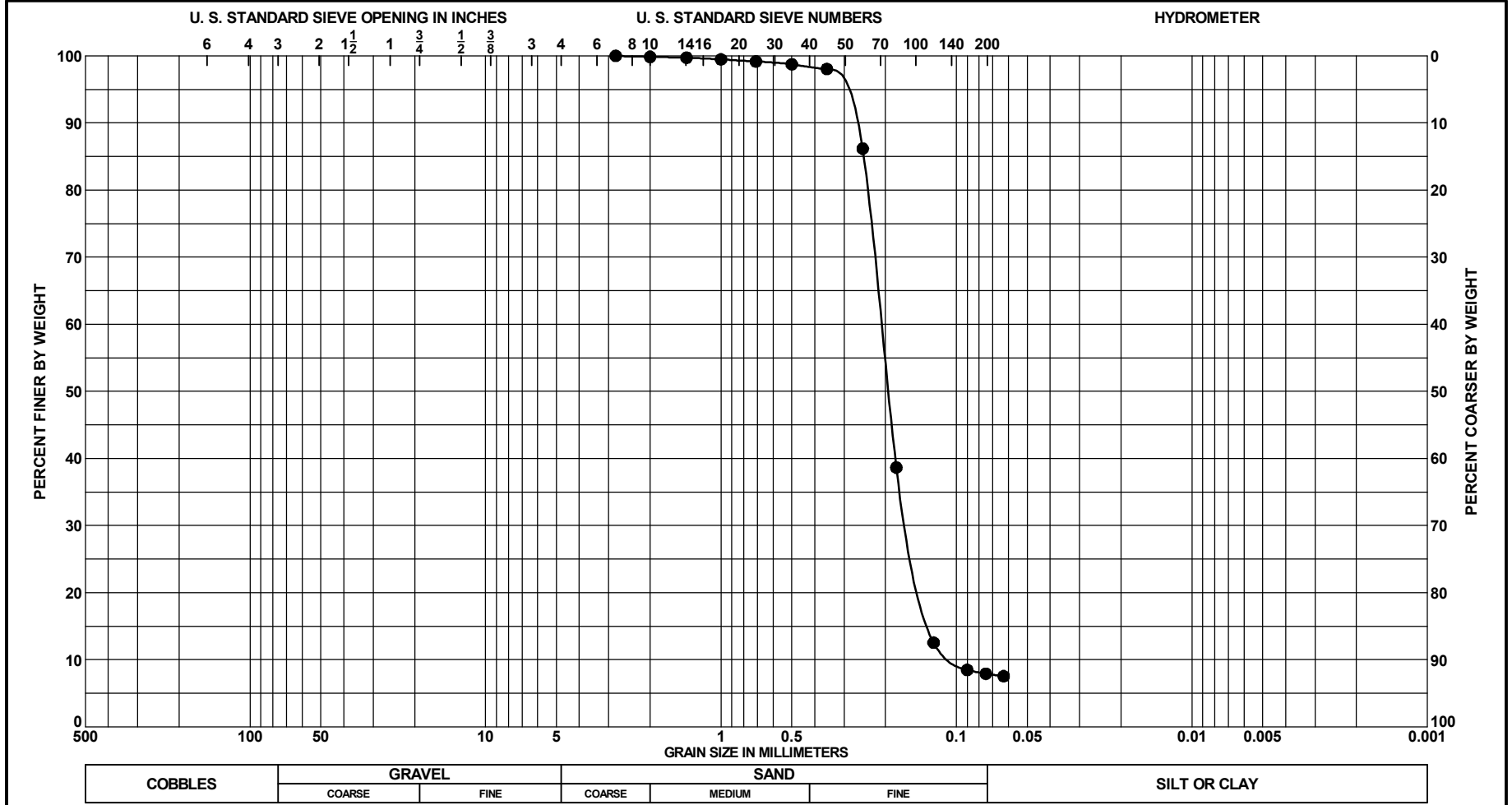


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

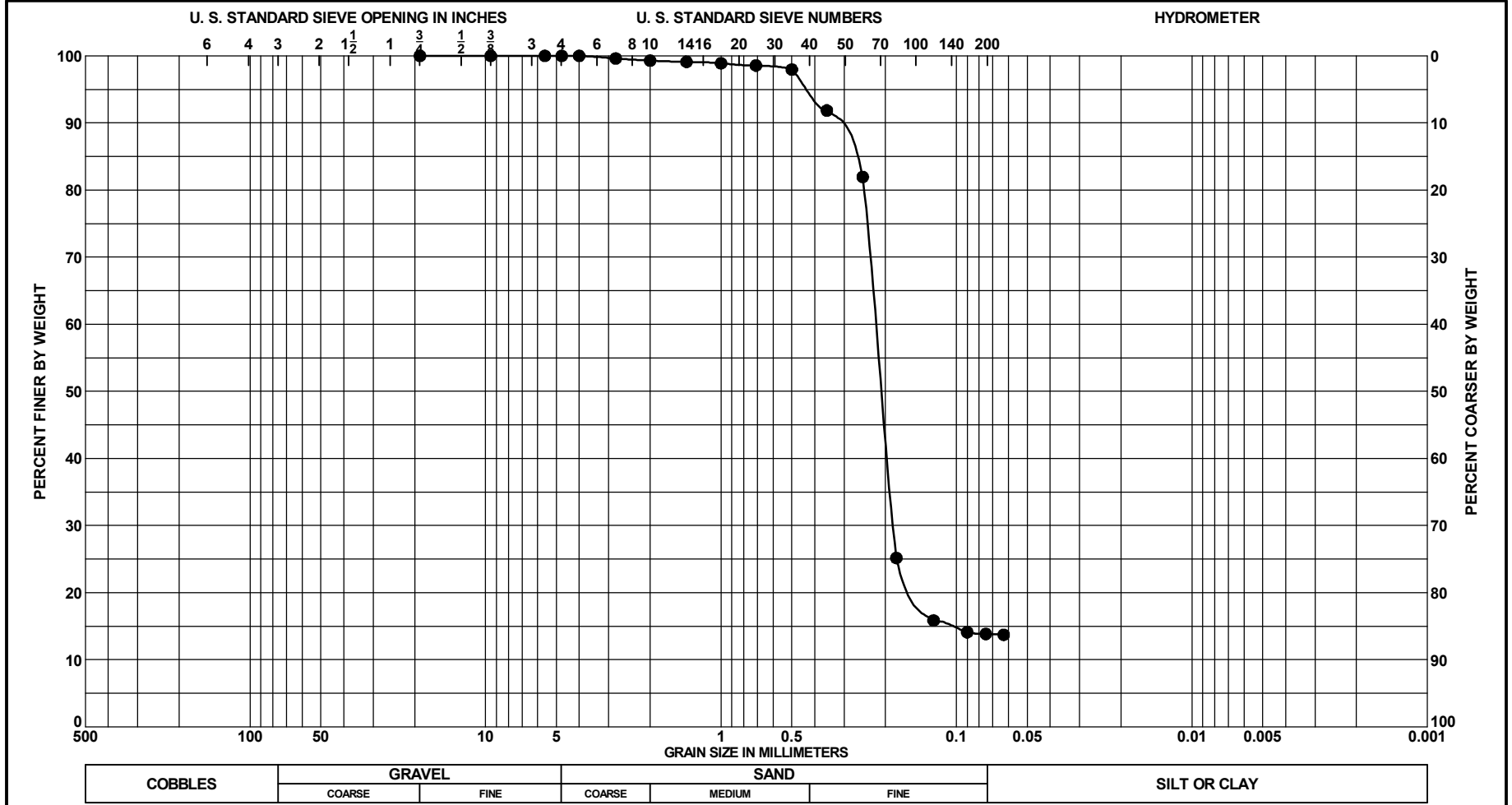
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 3	8.0 to 8.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, few medium sand-size shell fragments, gray (SM)	10YR 5/1	5 (est)						

PROJECT	St. Johns County Offshore
	Investigation Part I
BORING NO.	VB-SJSP09-1
BORING ELEV.	-42.6 Ft., NAVD88
DATE	3/8/2010

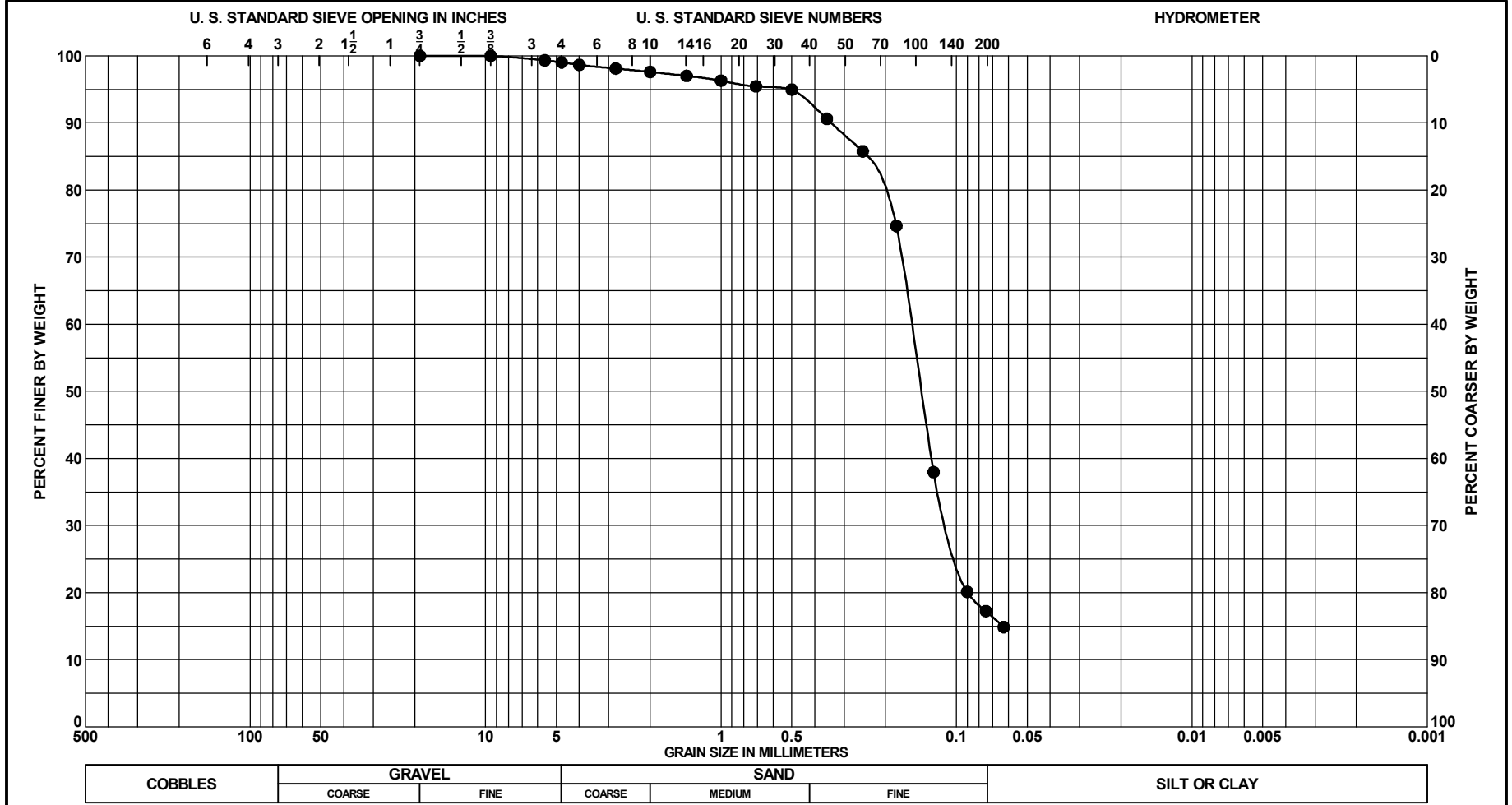
GRADATION CURVES



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, gray (SP-SM)	10YR 6/1	2 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-2
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

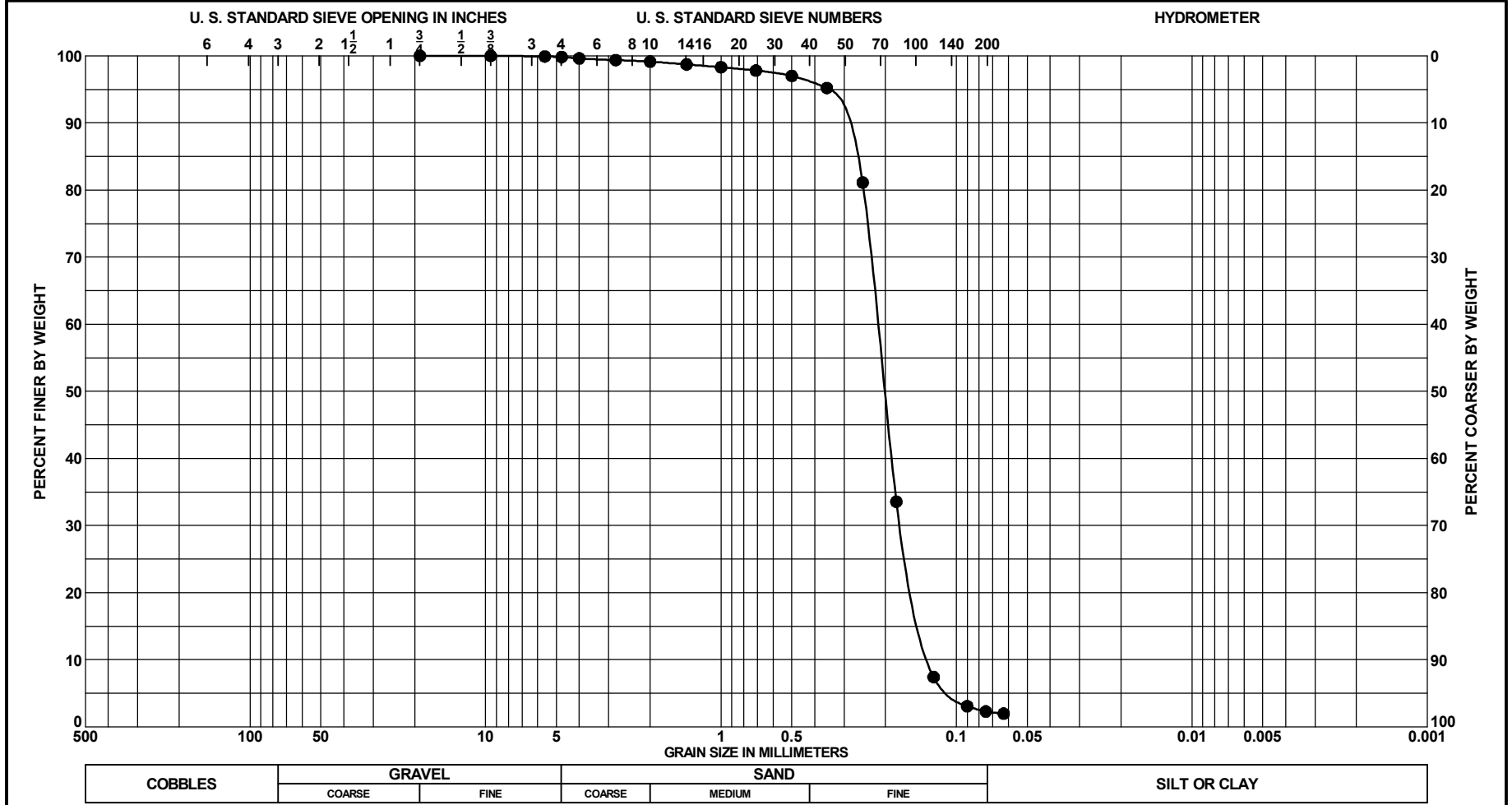


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	2.0 to 2.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, gray (SM)	10YR 5/1	1 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-2
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

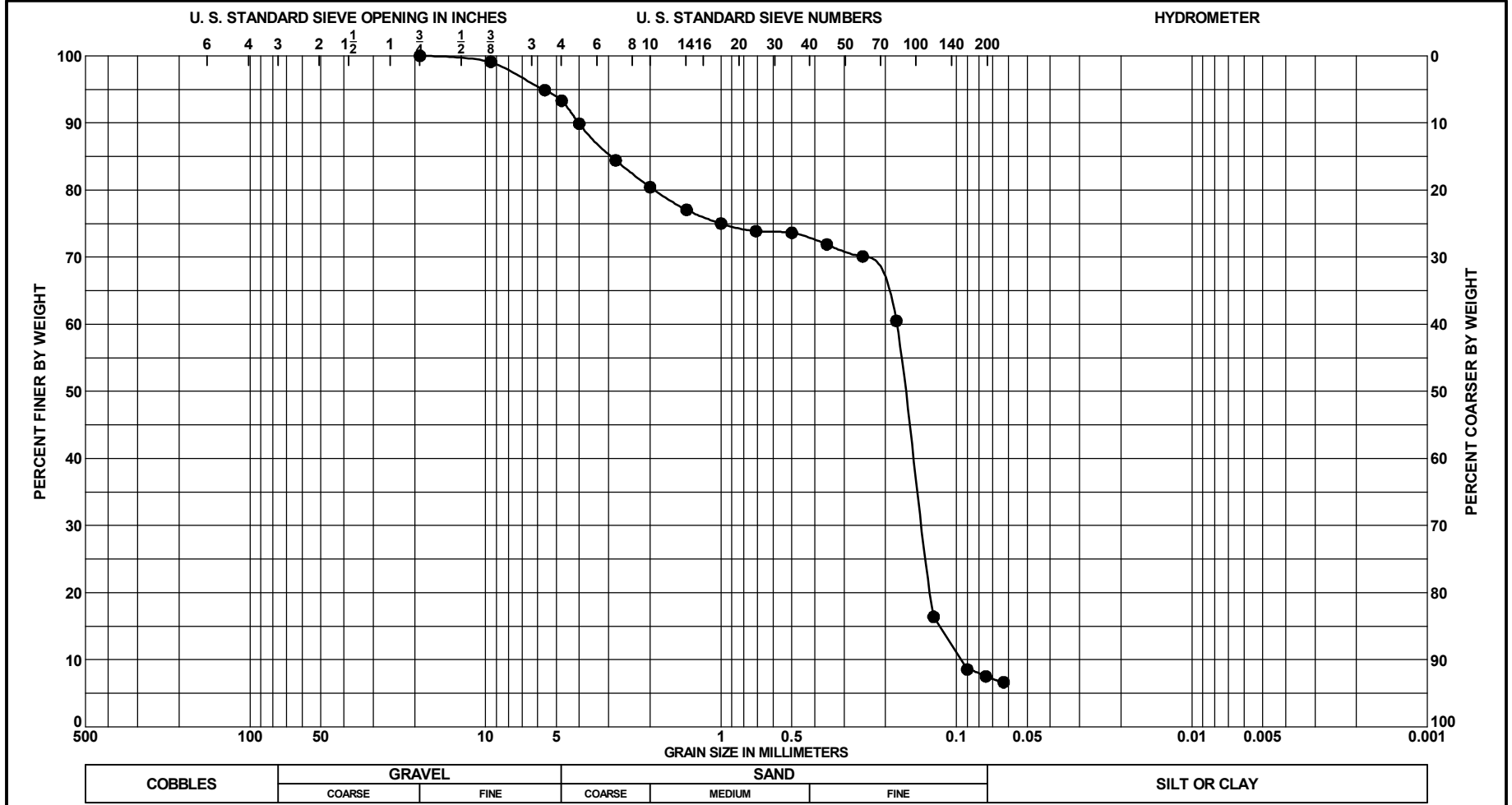


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

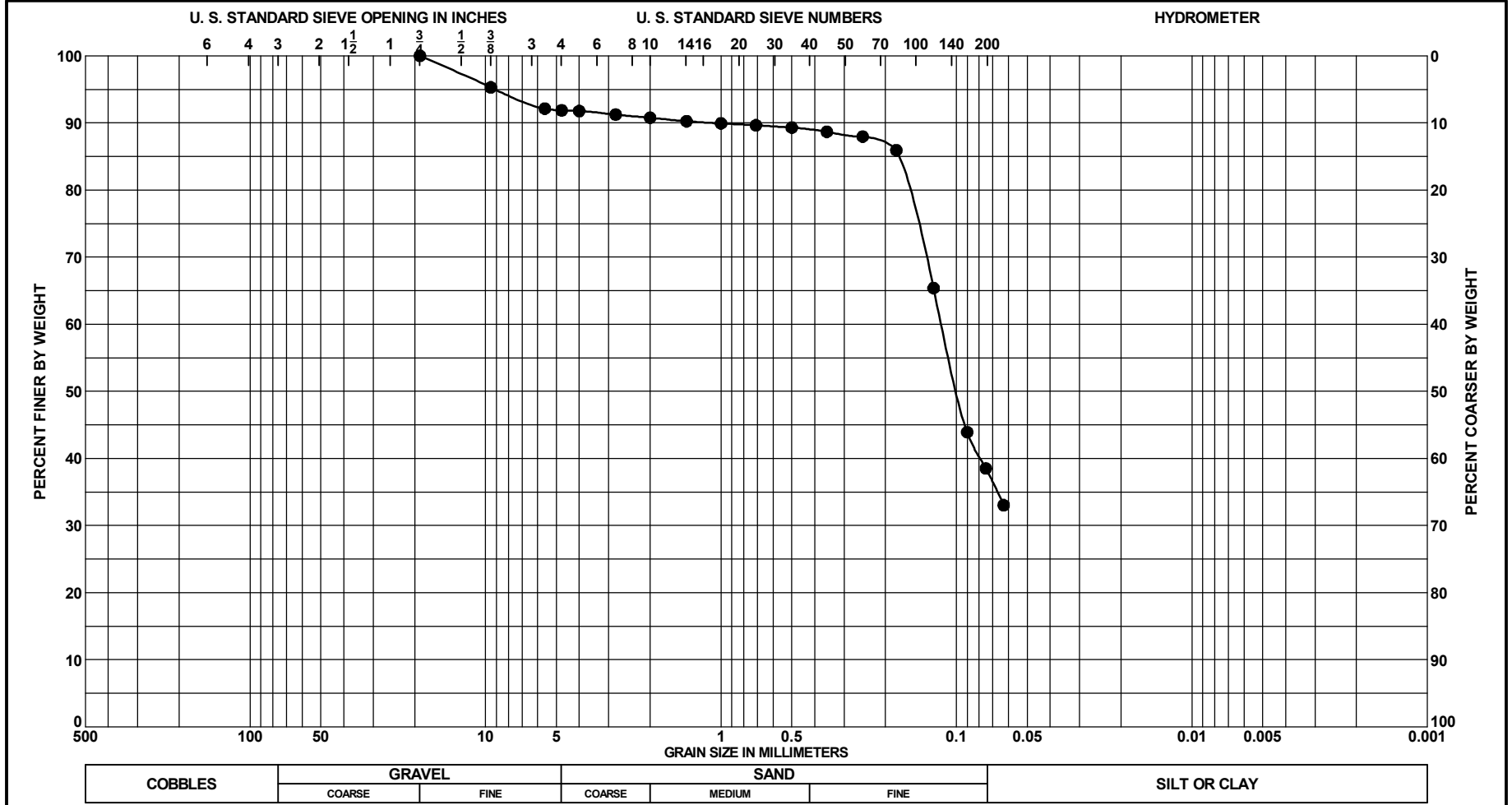
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	5.0 to 5.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, trace shell fragments, gray (SM)	10YR 5/1	4 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-2
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, gray (SP)	10YR 6/1	3 (est)								
GRADATION CURVES												
											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-3
											BORING ELEV.	-51.2 Ft., NAVD88
											DATE	3/8/2010

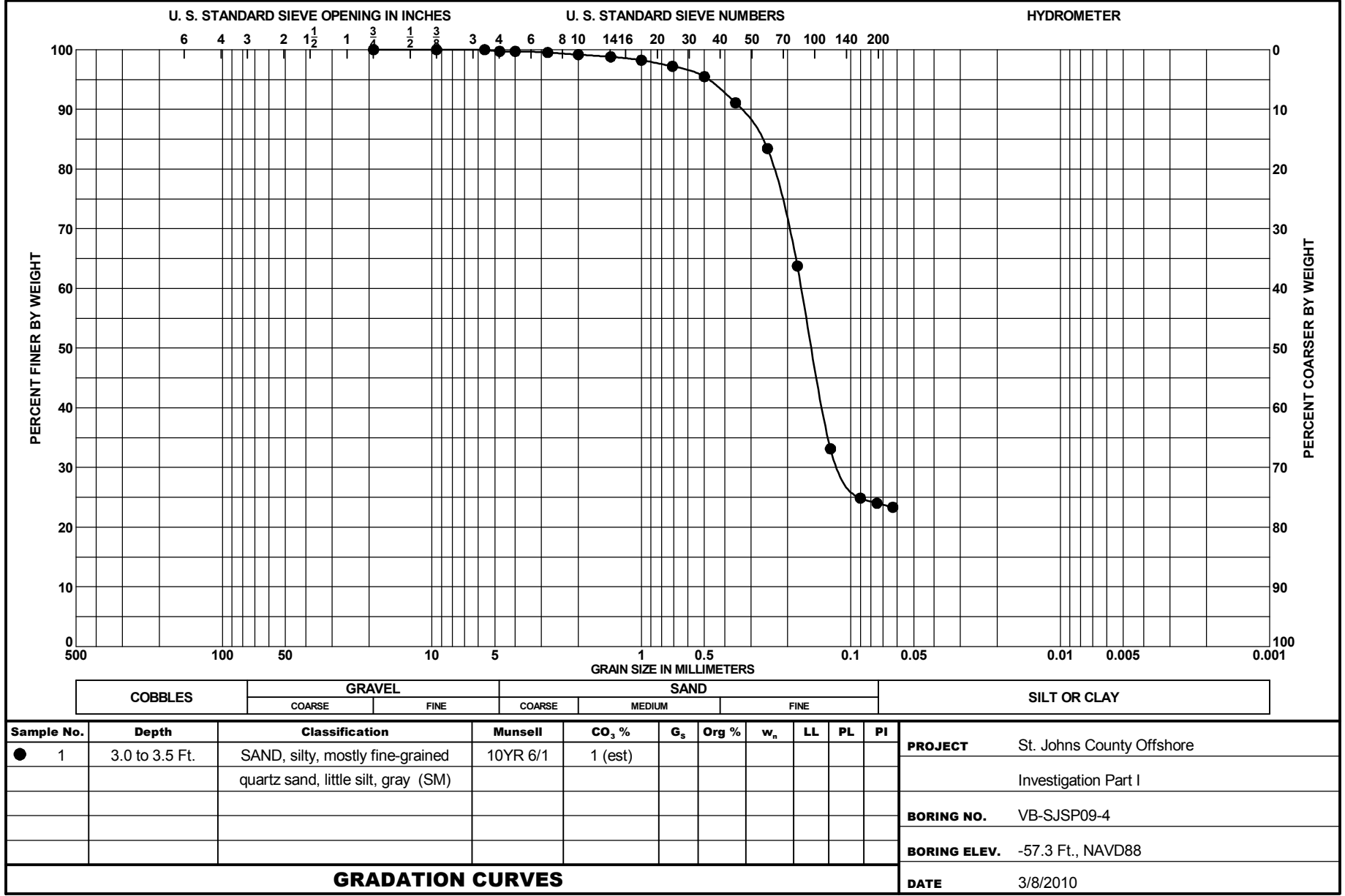


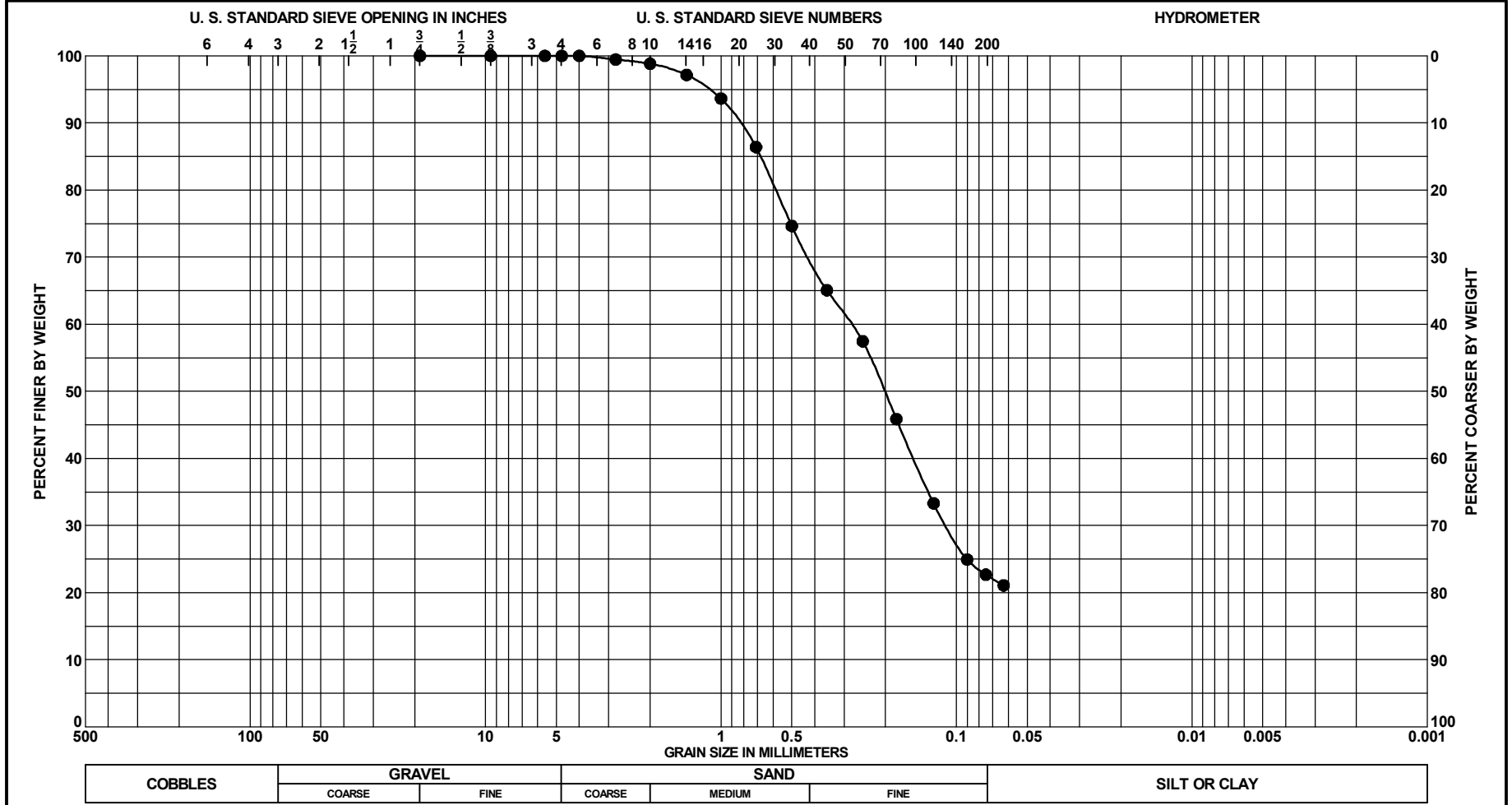
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little fine-gravel to medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	25 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-3
											BORING ELEV. -51.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



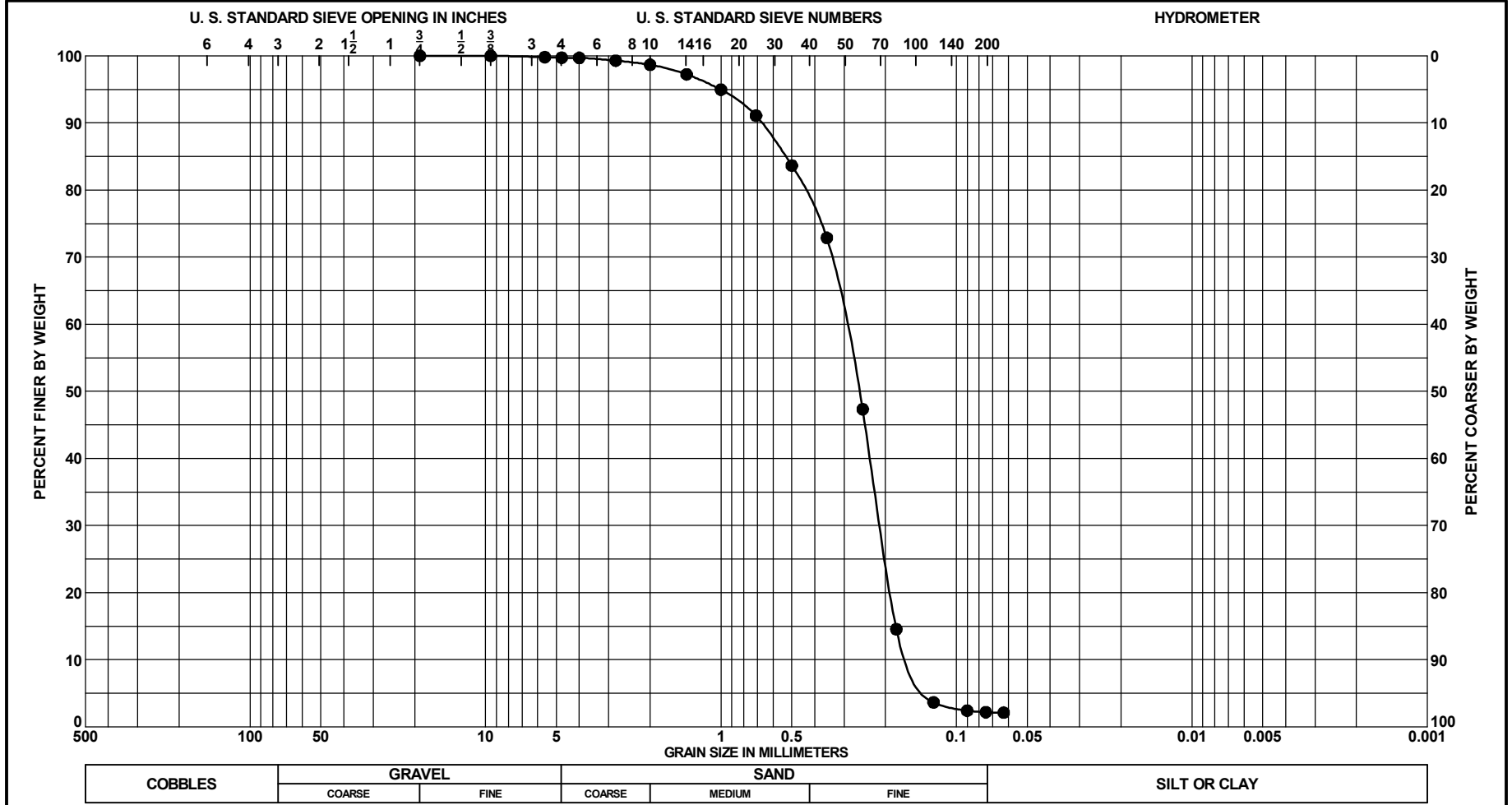
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	7.0 to 7.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, some clay, few fine gravel-size shell fragments, gray (SC)	10YR 5/1	10 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-3
											BORING ELEV. -51.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

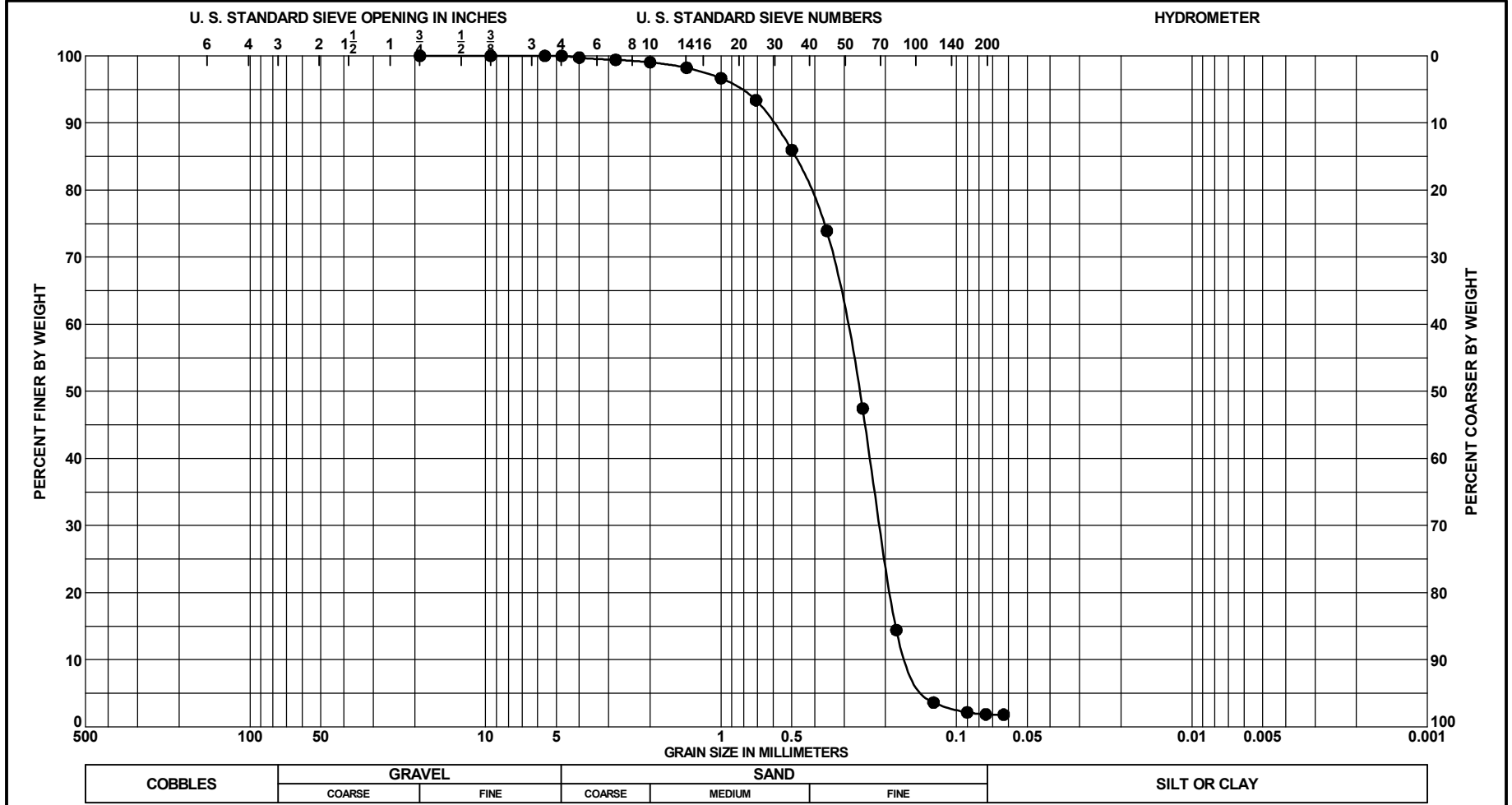




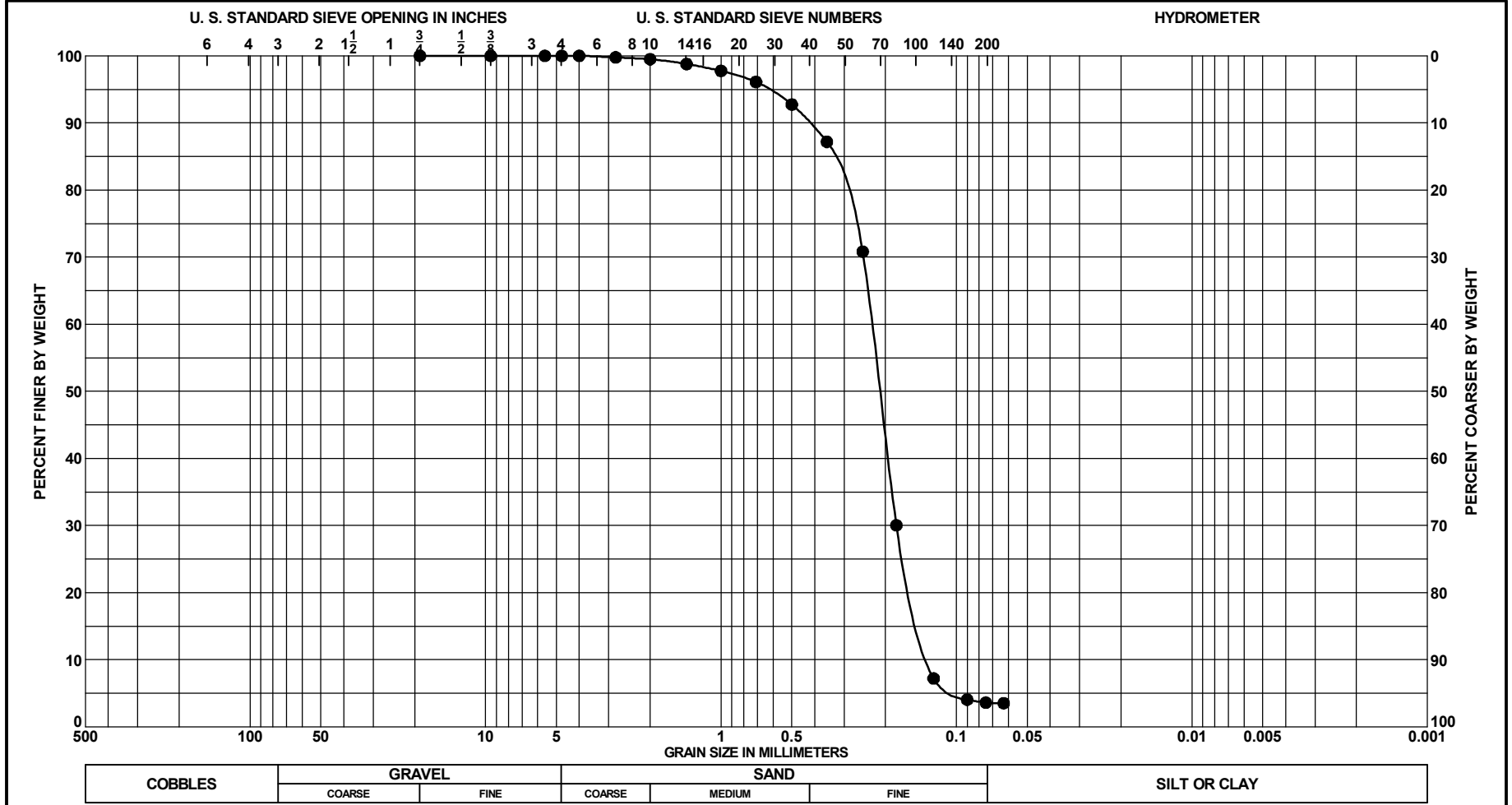
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	7.0 to 7.5 Ft.	SAND, silty, mostly medium to fine-grained quartz sand, little silt, few medium sand-size shell fragments, gray (SM)	10YR 5/1	7 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-4
											BORING ELEV. -57.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



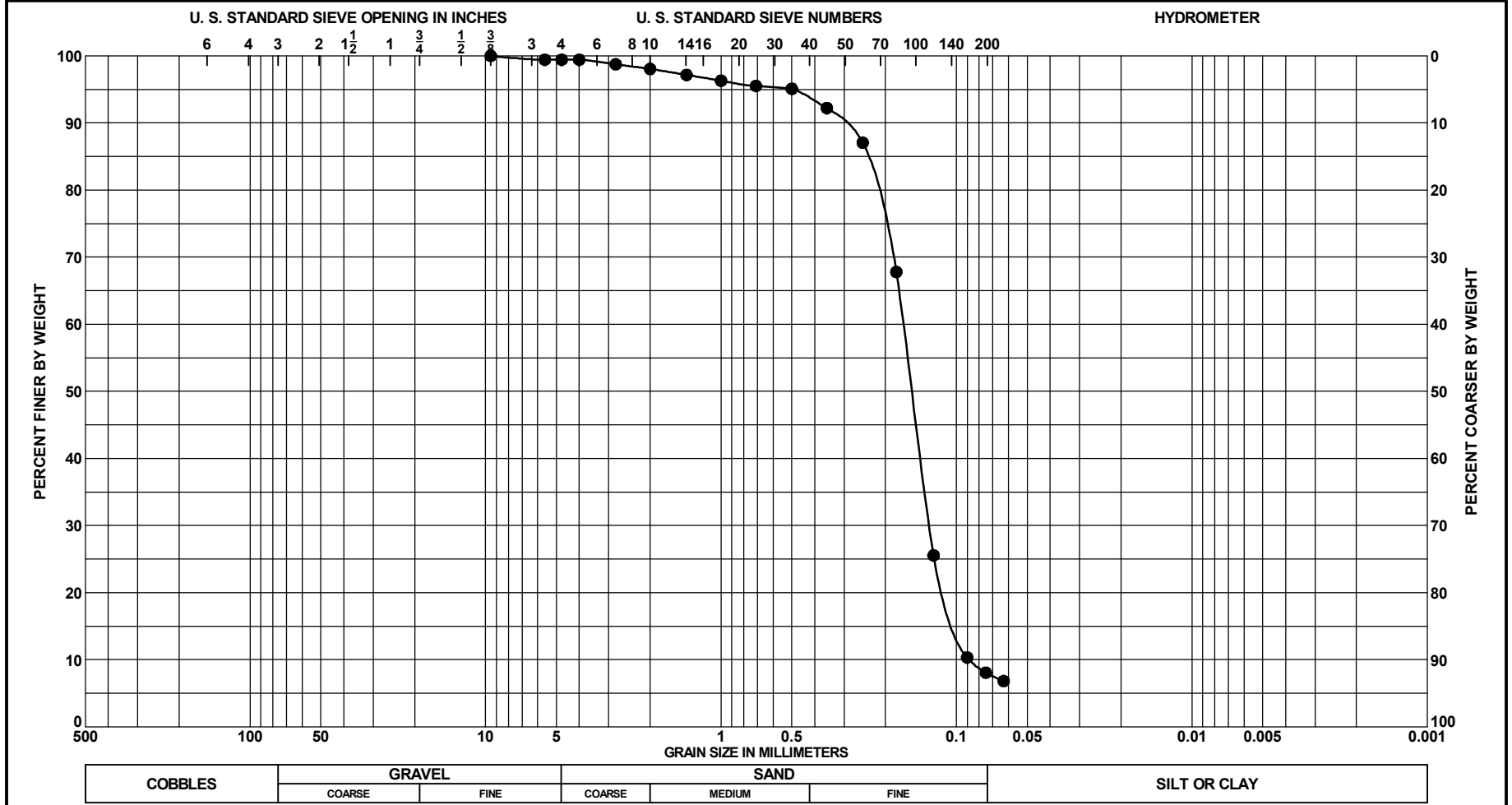
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	11 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-5
											BORING ELEV.	-46.2 Ft., NAVD88
											DATE	3/8/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly medium to fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	5 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-5
											BORING ELEV. -46.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

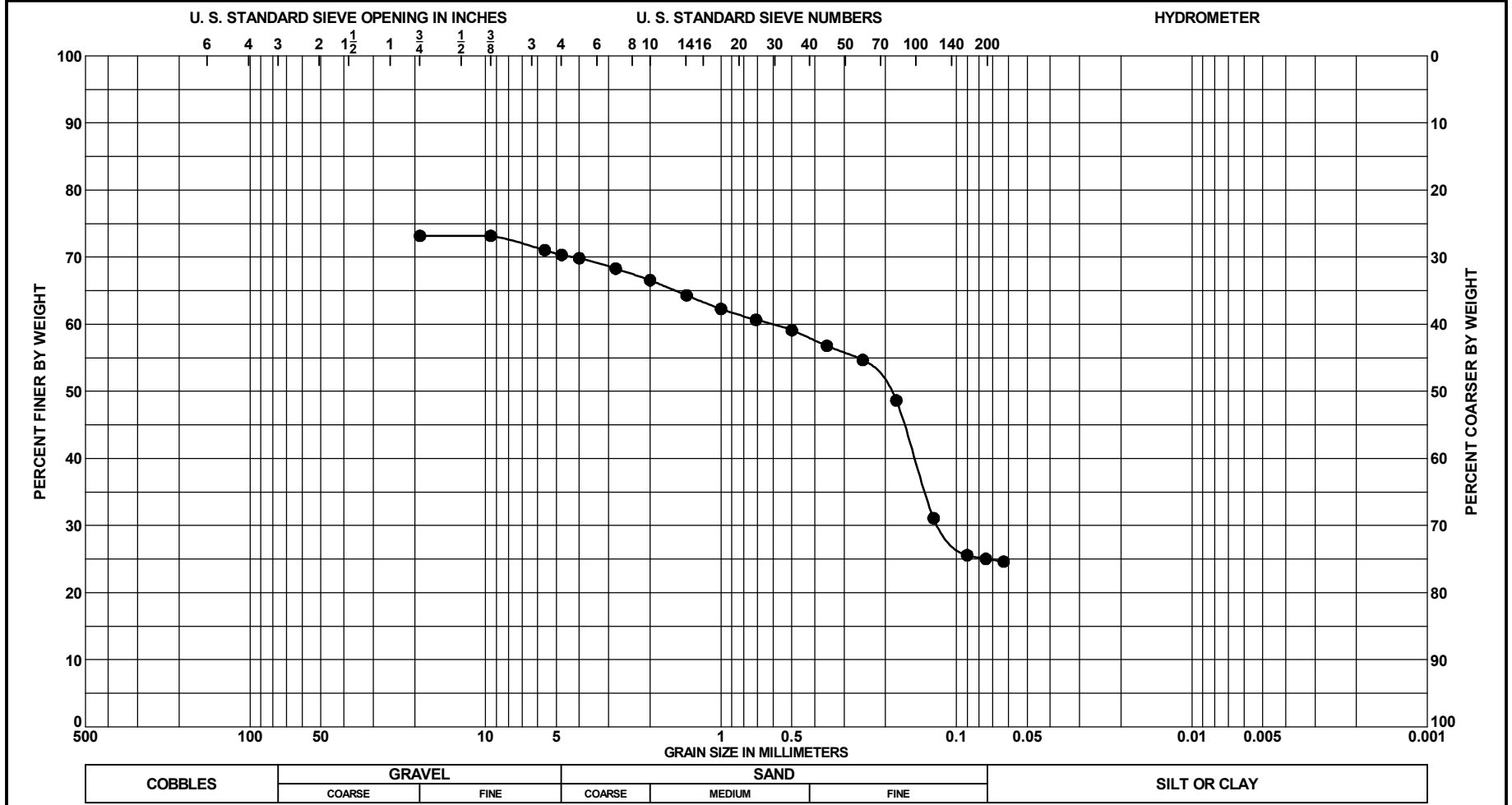


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	5 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-5
											BORING ELEV. -46.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

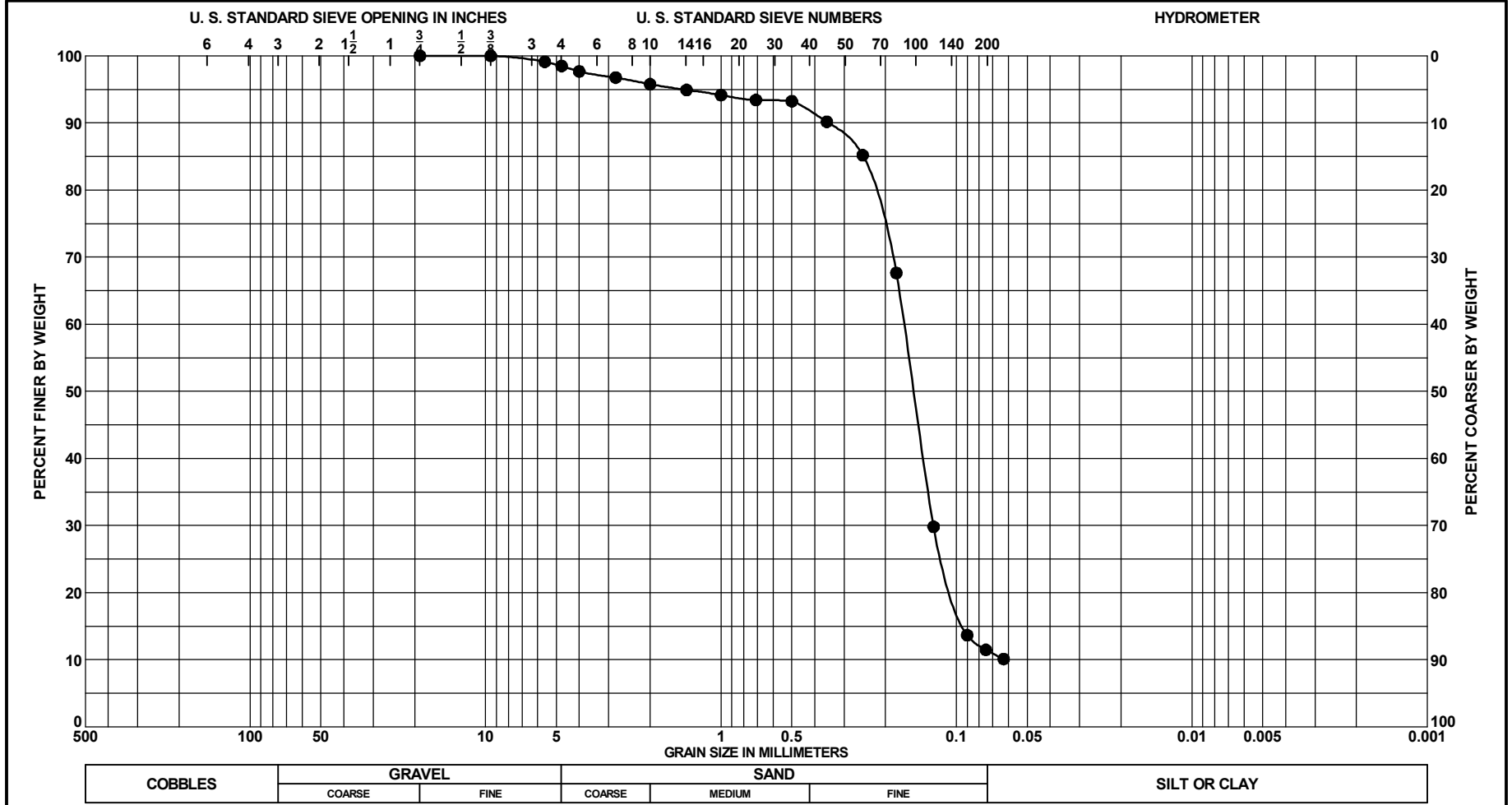


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 5/1	5 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-6
											BORING ELEV. -58.4 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

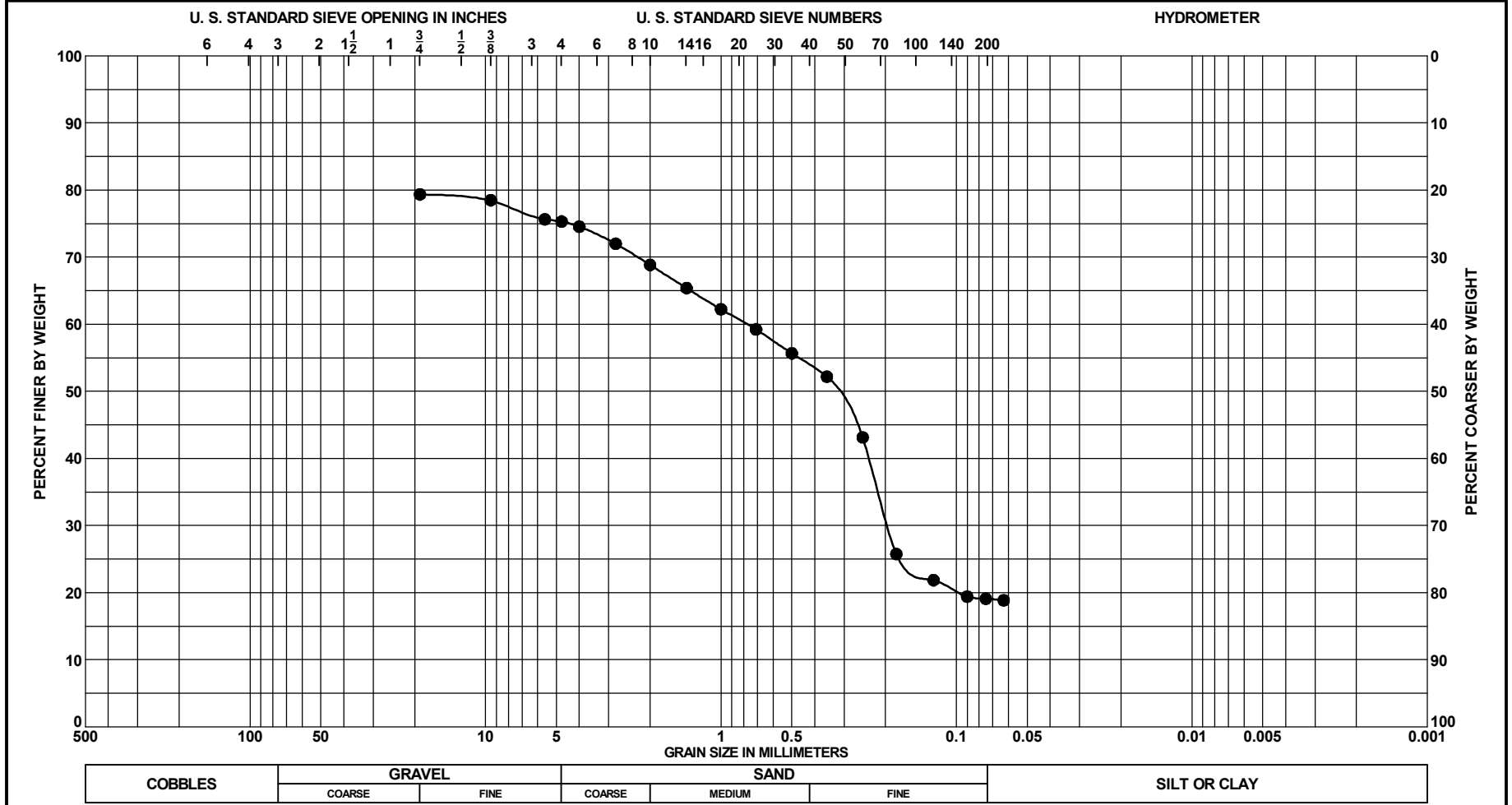


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 3	7.0 to 7.5 Ft.	SAND, clayey, some coarse-gravel to medium sand-size limerock fragments, some fine-grained quartz sand, little clay, gray (SC)	10YR 6/1	0 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-6
											BORING ELEV.	-58.4 Ft., NAVD88
											DATE	3/8/2010

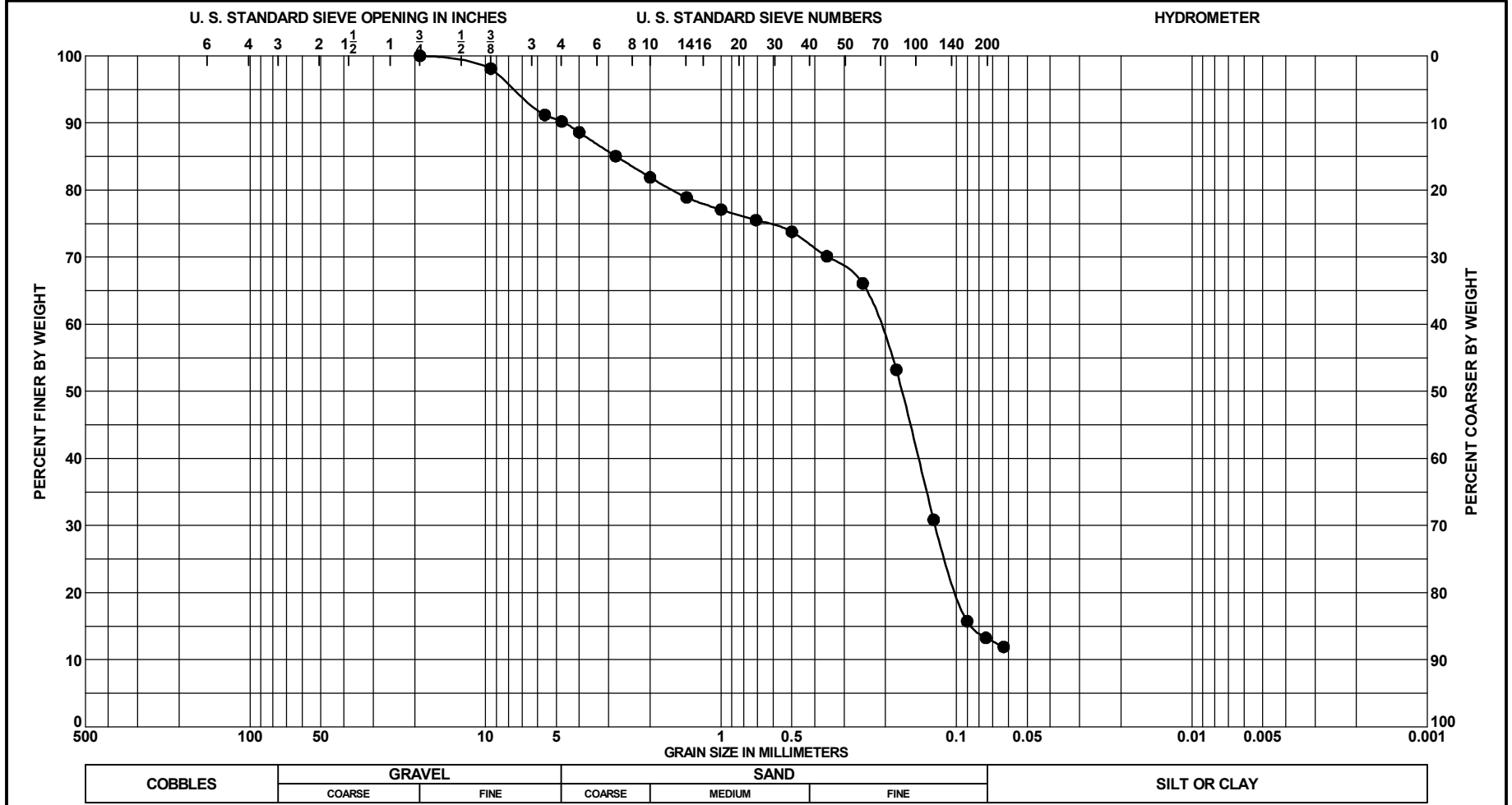


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.5 to 5.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few coarse sand-size shell fragments, gray (SP-SM)	10YR 6/1	7 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-7
											BORING ELEV. -56.0 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

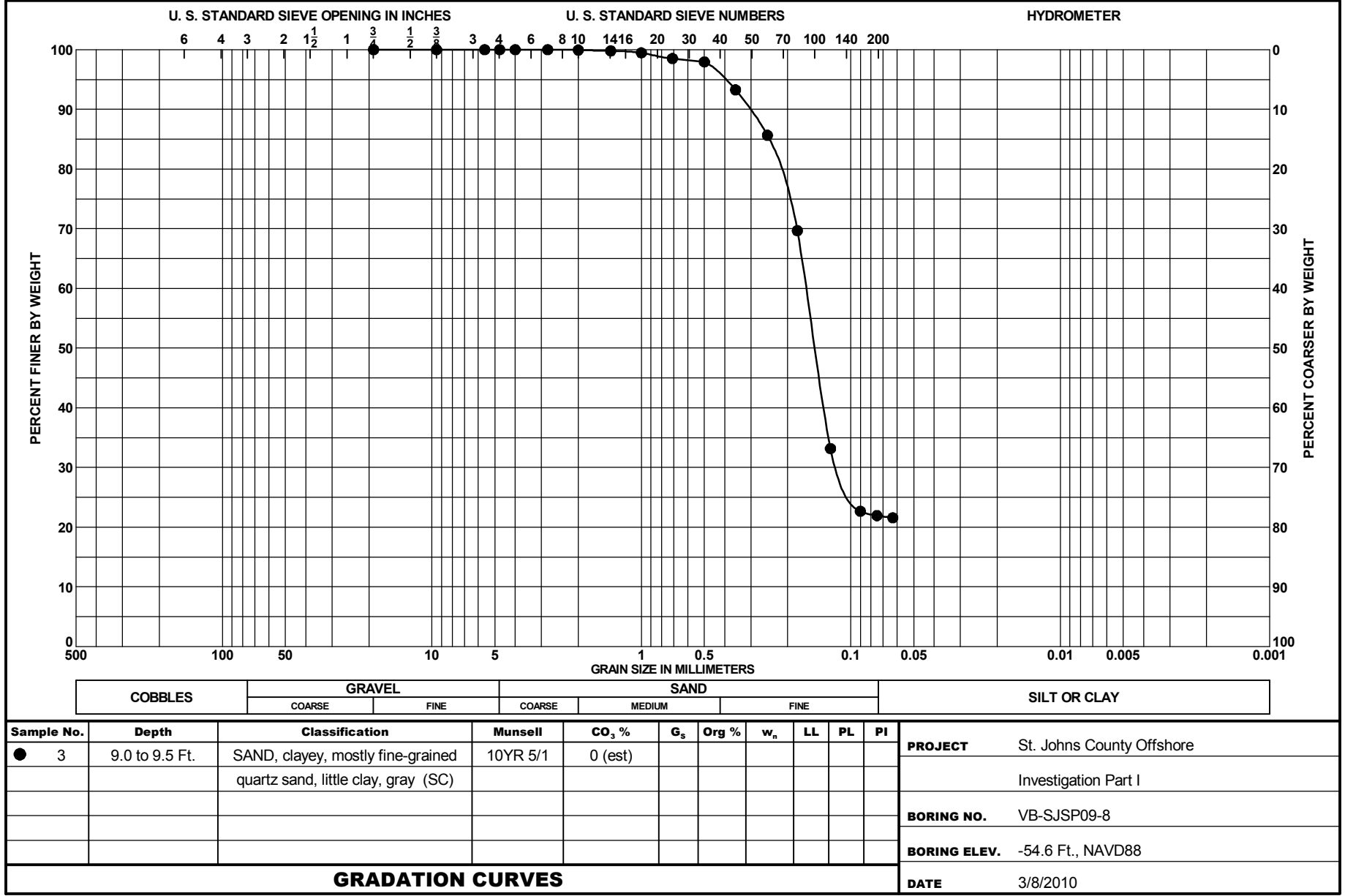


		GRAVEL		SAND			SILT OR CLAY								
		COARSE	FINE	COARSE	MEDIUM	FINE									
Sample No.	Depth	Classification					Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 3	8.0 to 8.5 Ft.	SAND, silty, some fine-grained quartz sand, little coarse gravel-size limerock frag., little silt, little coarse to medium sand-size shell frag., light greenish gray (SM)					10Y 7/1	14 (est)							St. Johns County Offshore Investigation Part I
														BORING NO. VB-SJSP09-7	
														BORING ELEV. -56.0 Ft., NAVD88	
GRADATION CURVES														DATE 3/8/2010	



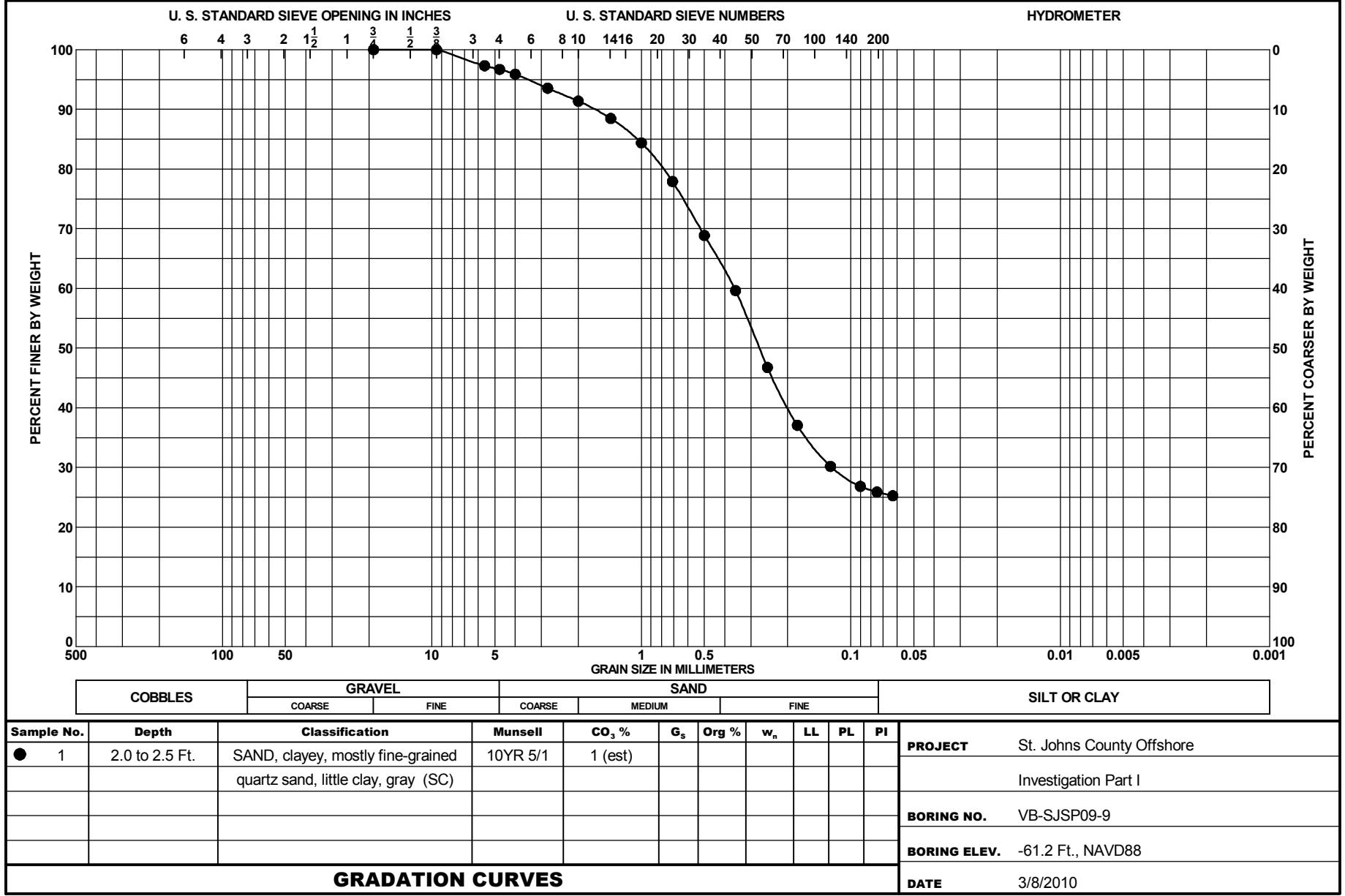
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

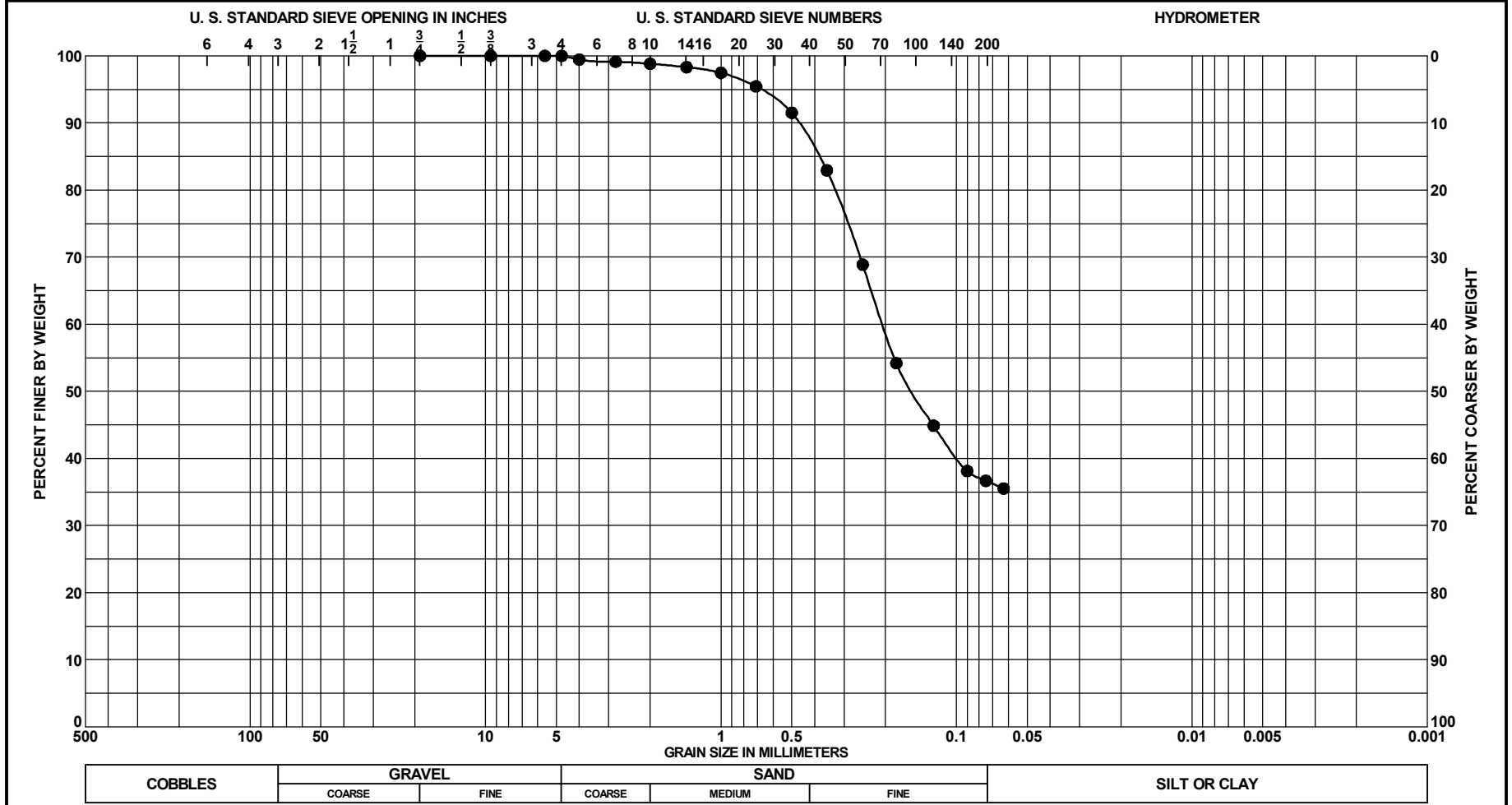
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	5.0 to 5.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little fine-gravel to medium sand-size shell fragments, little silt, gray (SM)	10YR 5/1	24 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-8
											BORING ELEV. -54.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

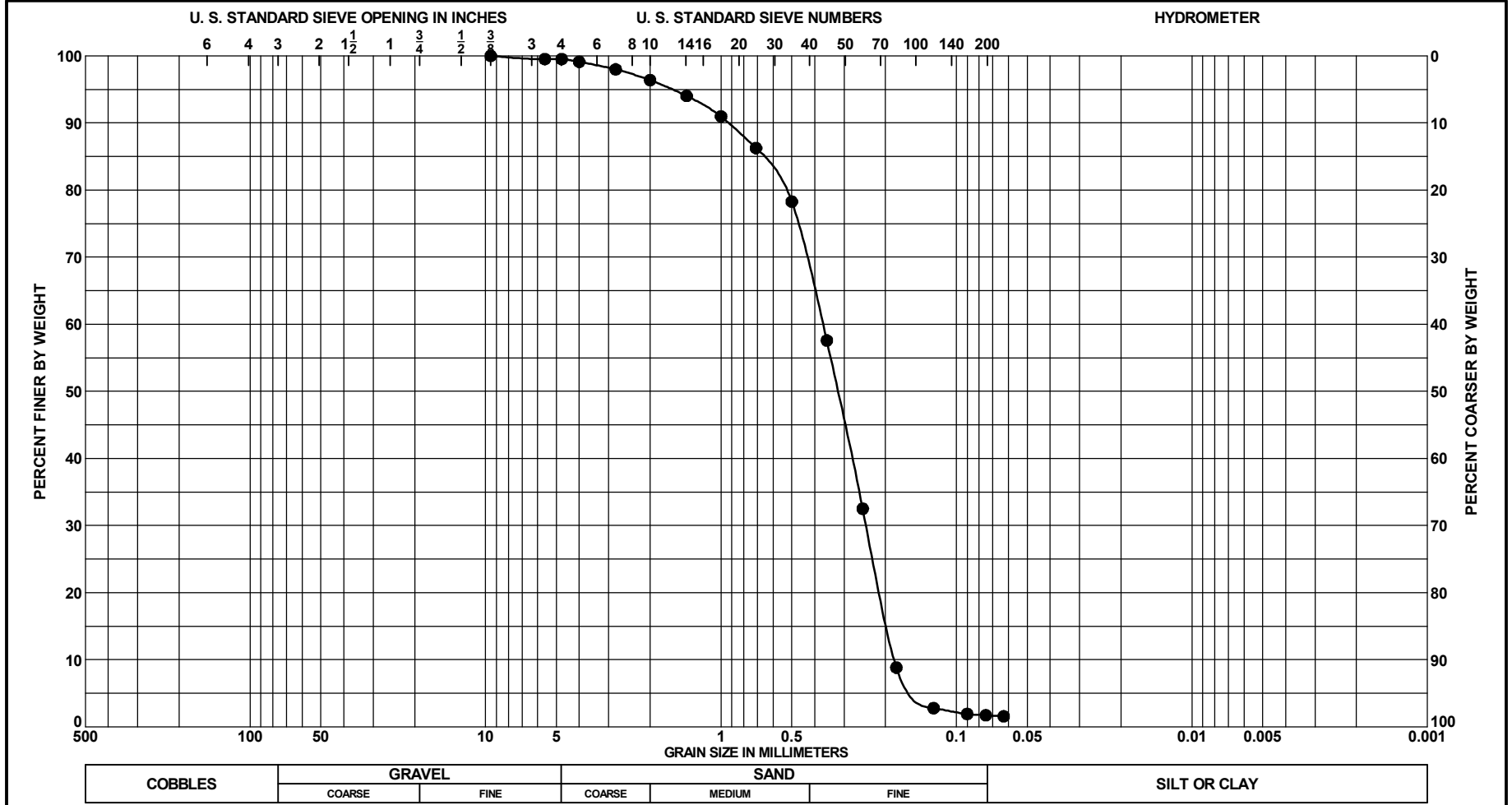
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, little clay, gray (SC)	10YR 5/1	0 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-8
											BORING ELEV. -54.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010





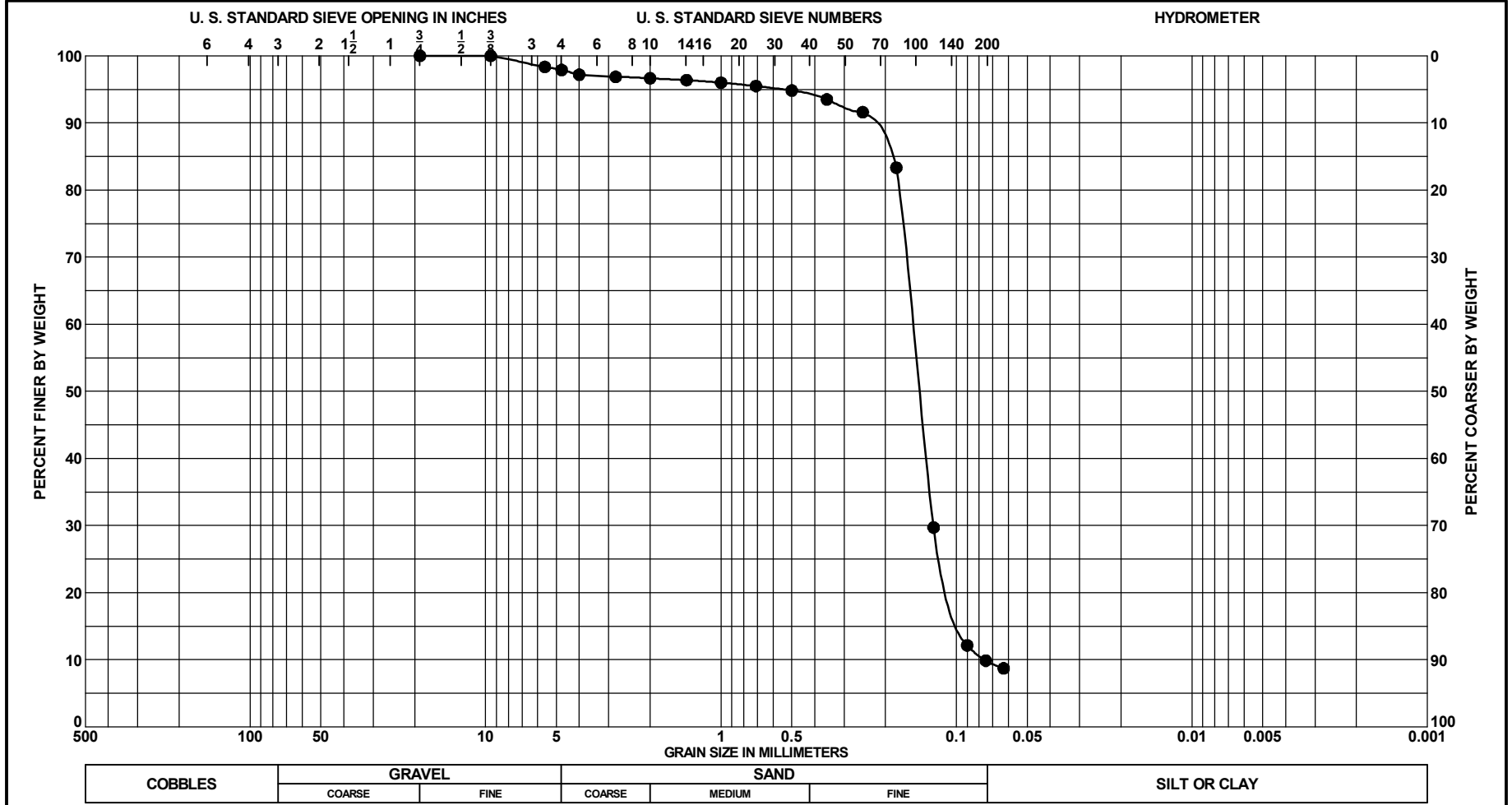
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, silty, some fine-grained quartz sand, some coarse to medium sand-size limerock fragments, little silt, light gray (SM)	10YR 7/1	0 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-9
											BORING ELEV. -61.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



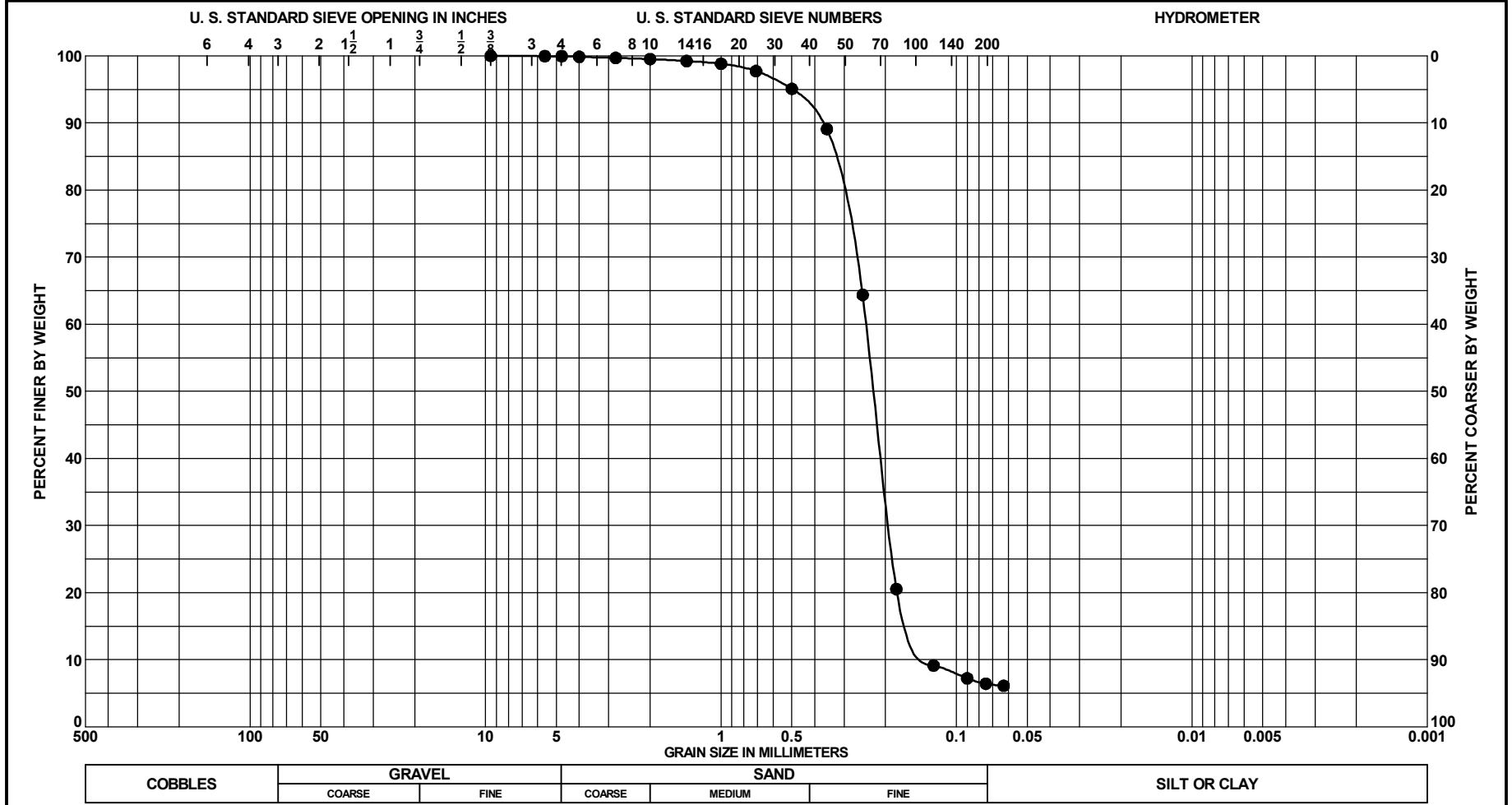
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, gray (SP)	10YR 6/1	14 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-10
											BORING ELEV. -50.7 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

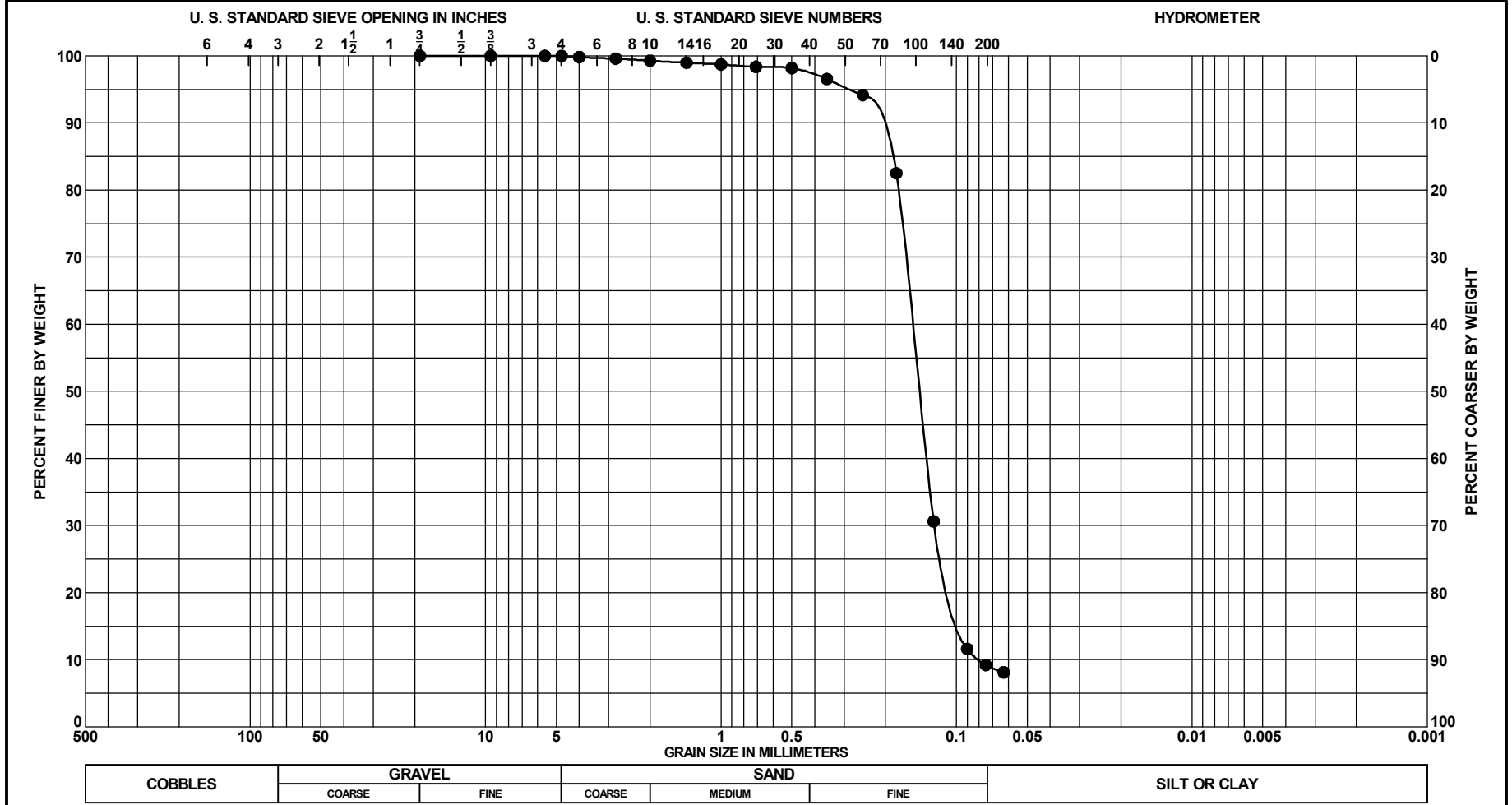


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	12.0 to 12.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt. trace shell fragments, gray (SP-SM)	10YR 5/1	4 (est)							St. Johns County Offshore
											Investigation Part I
											BORING NO. VB-SJSP09-10
											BORING ELEV. -50.7 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

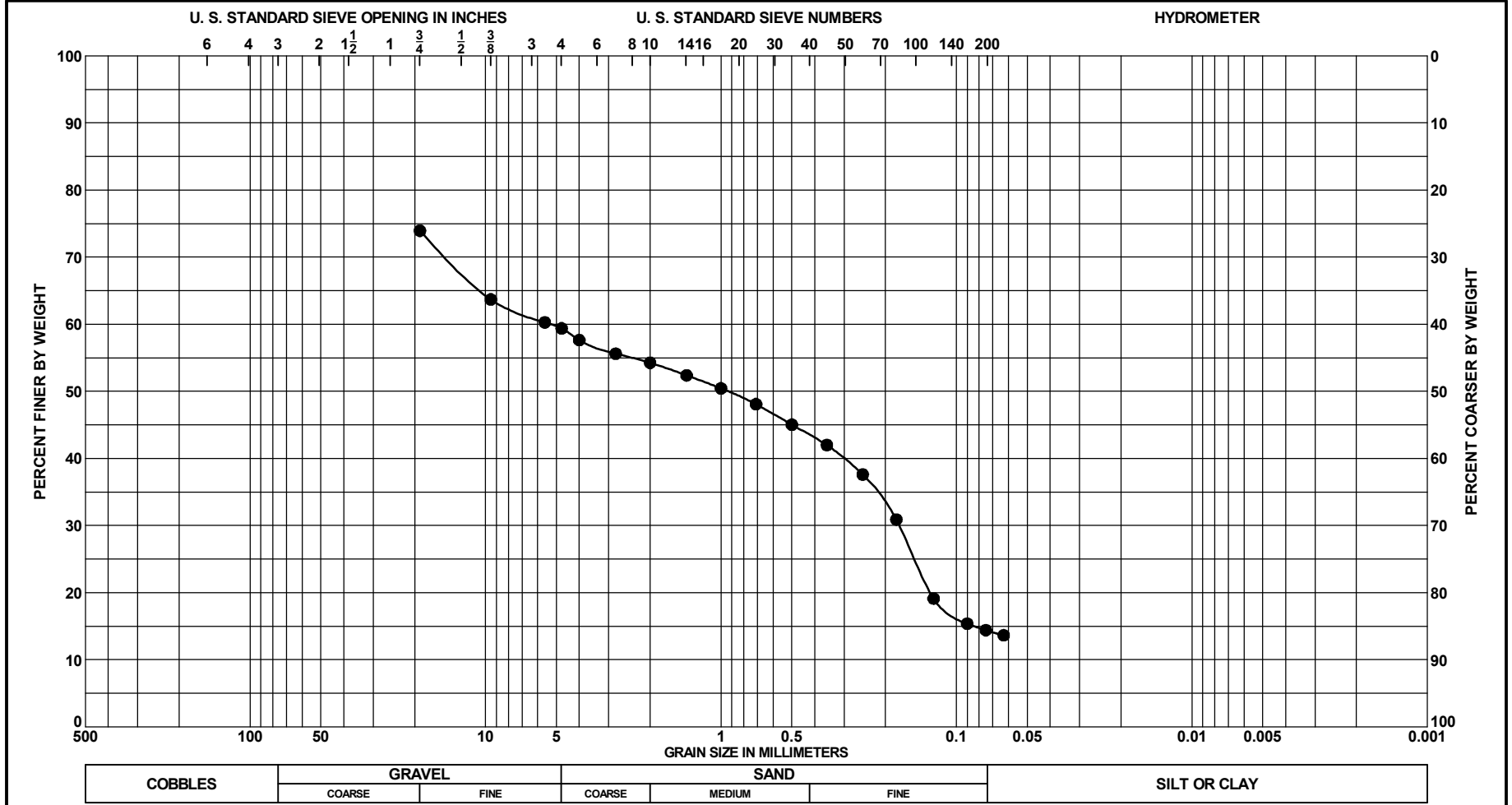


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.5 to 5.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	20 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-11
											BORING ELEV. -53.3 Ft., NAVD88
											DATE 3/8/2010



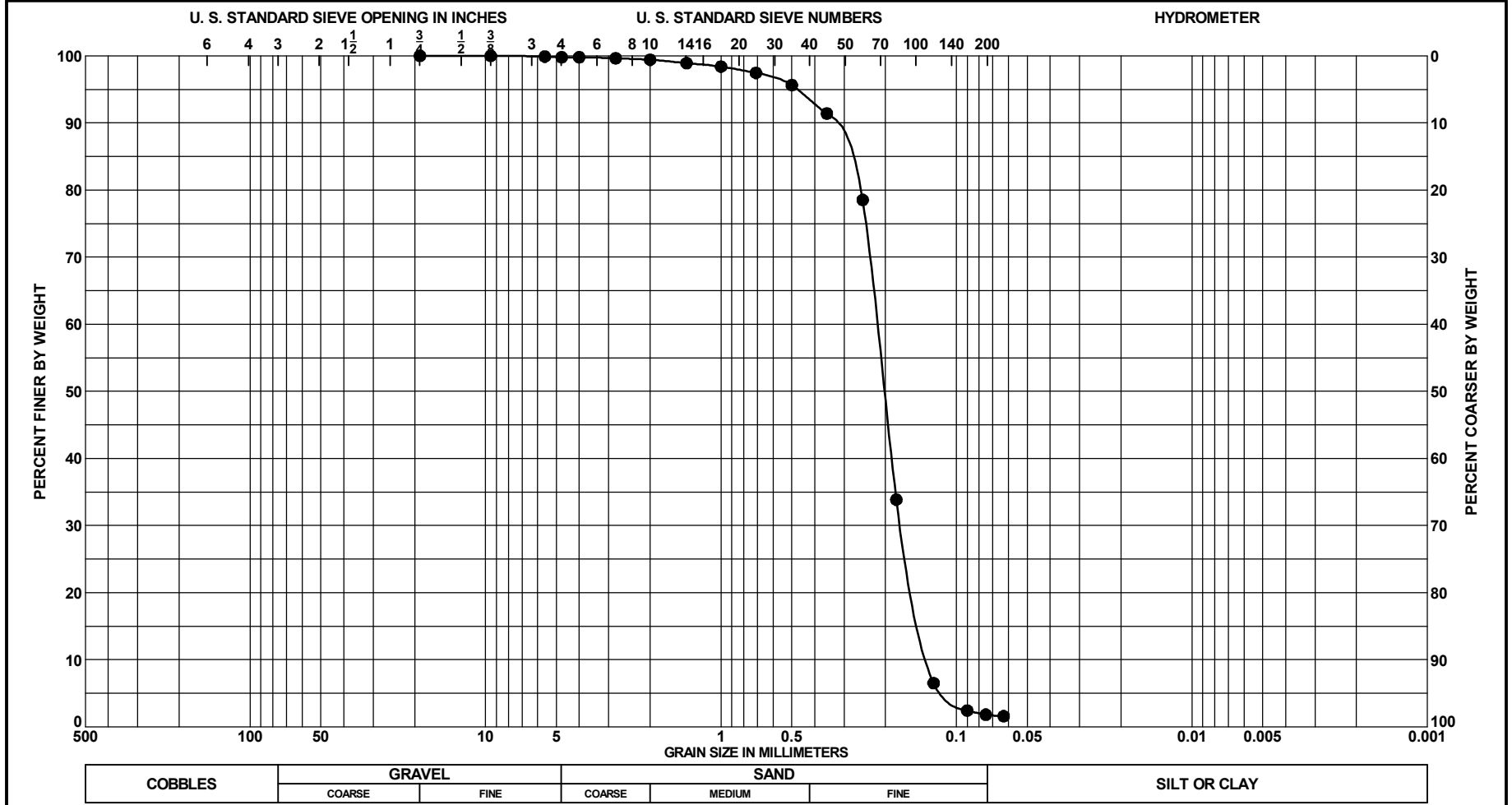
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	6.5 to 7.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few fine sand-size shell fragments, gray (SP-SM)	10YR 5/1	7 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-11
											BORING ELEV. -53.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

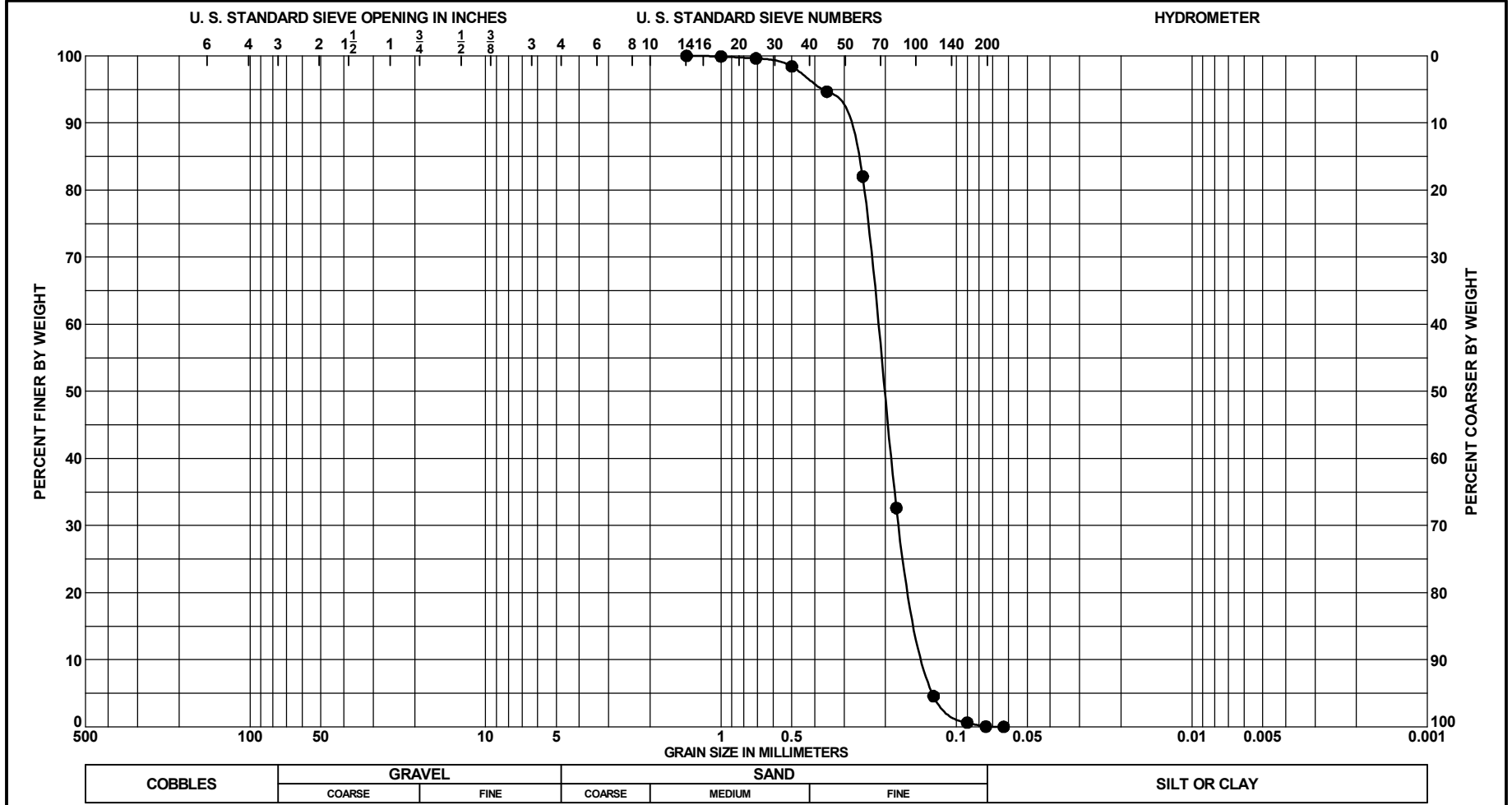


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

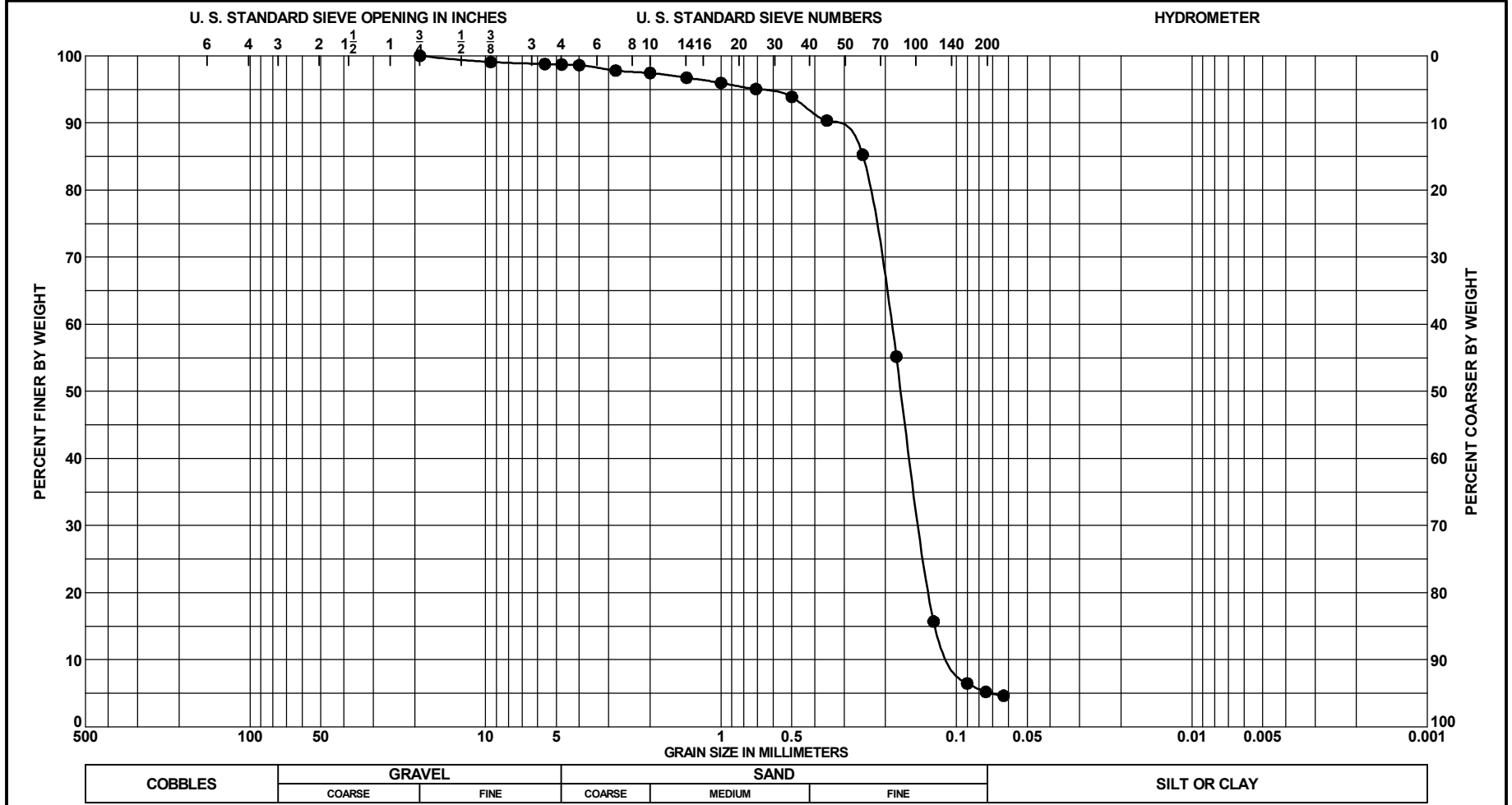
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	10.0 to 10.5 Ft.	SAND, clayey, mostly coarse-gravel to fine sand-size limerock fragments, little fine-grained quartz sand, little clay, gray (SC)	10YR 5/1	0 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-11
											BORING ELEV. -53.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



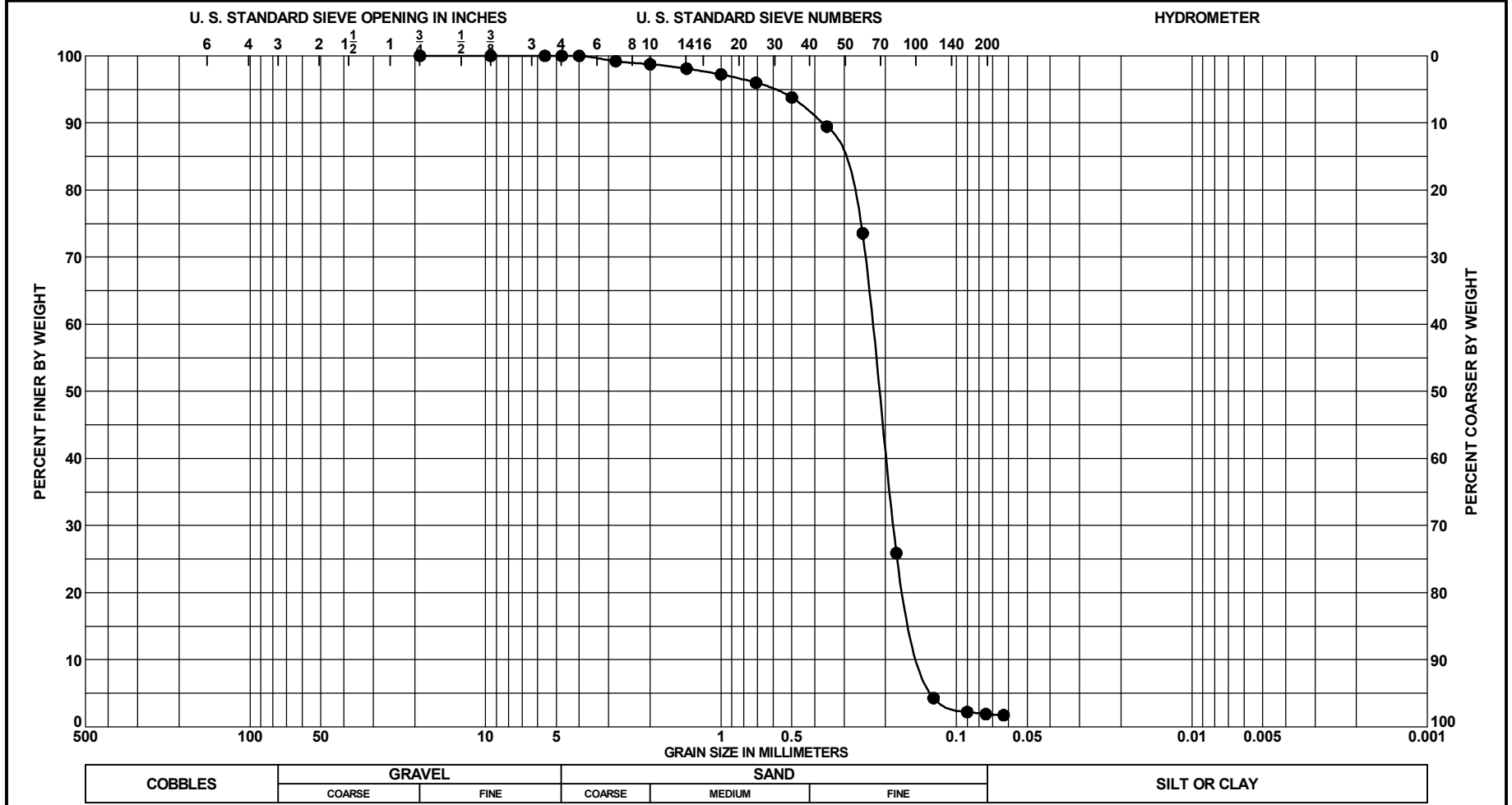
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	7.0 to 7.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	9/7 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-12
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



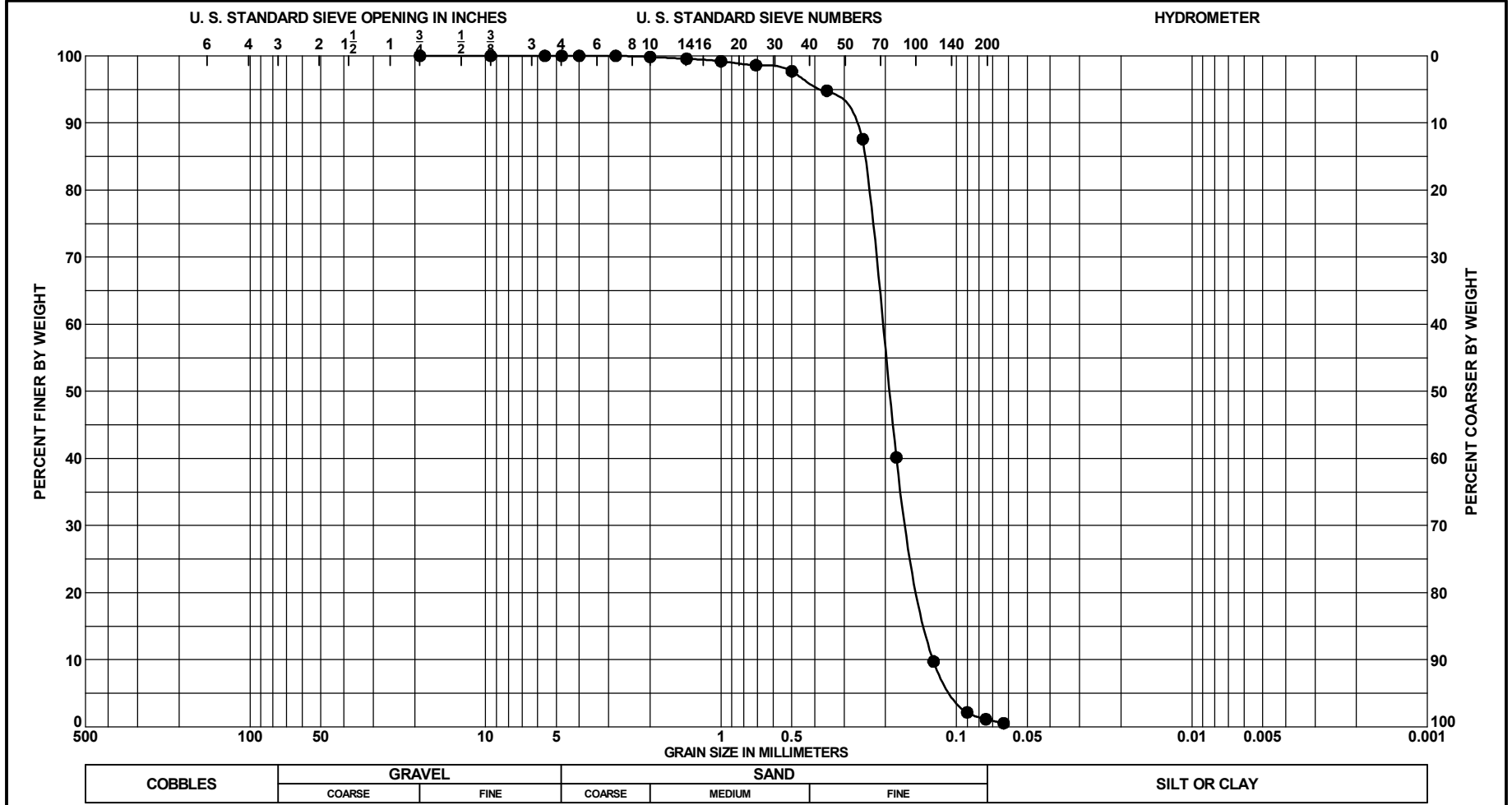
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 2-Post	7.0 to 7.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand (SP)										
GRADATION CURVES												
											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-12
											BORING ELEV.	-55.3 Ft., NAVD88
											DATE	3/19/2010



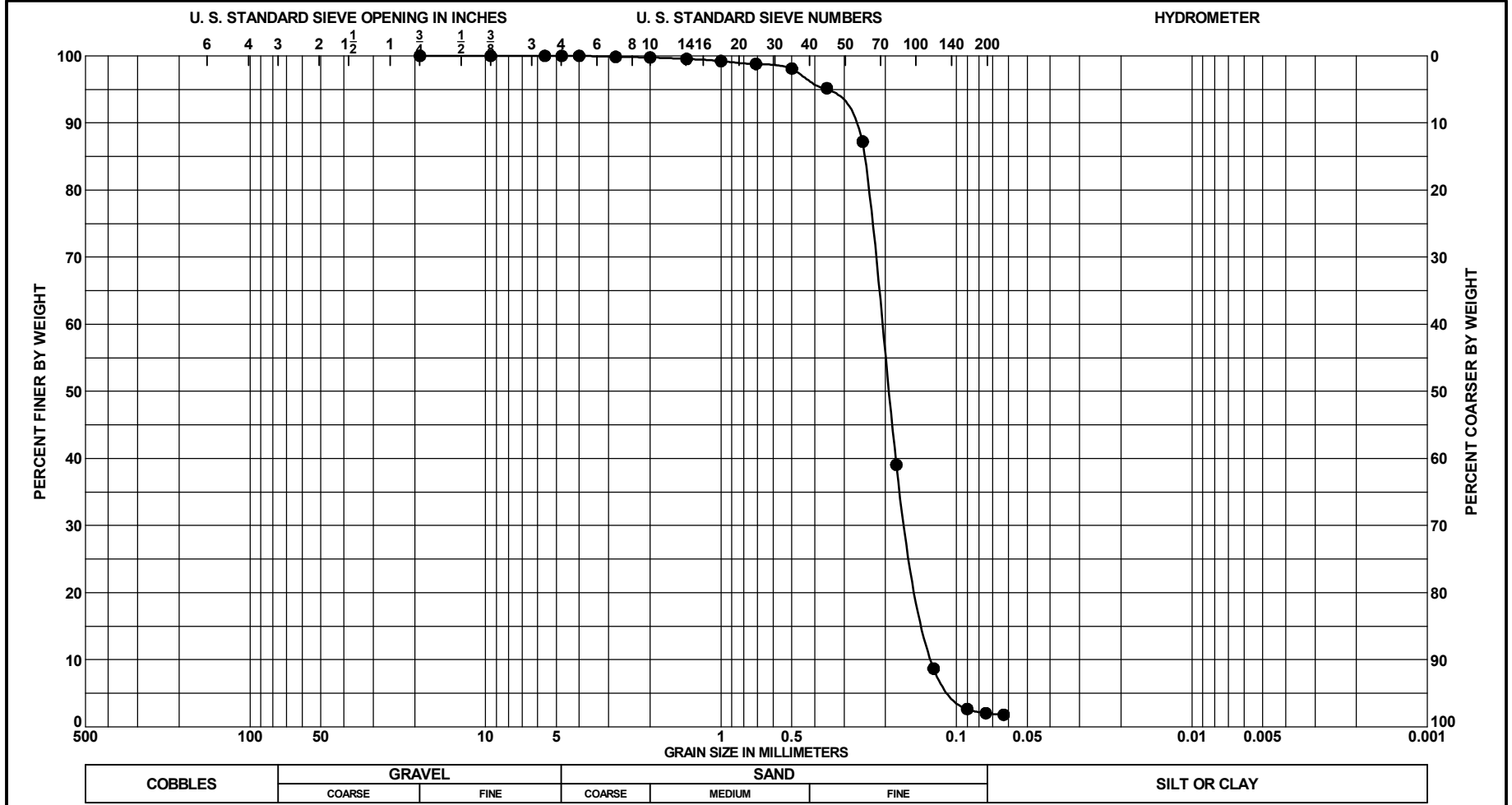
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	10.5 to 11.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	19 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-12
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, gray (SP)	10YR 6/1	15 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-13
											BORING ELEV. -53.7 Ft., NAVD88
											DATE 3/8/2010

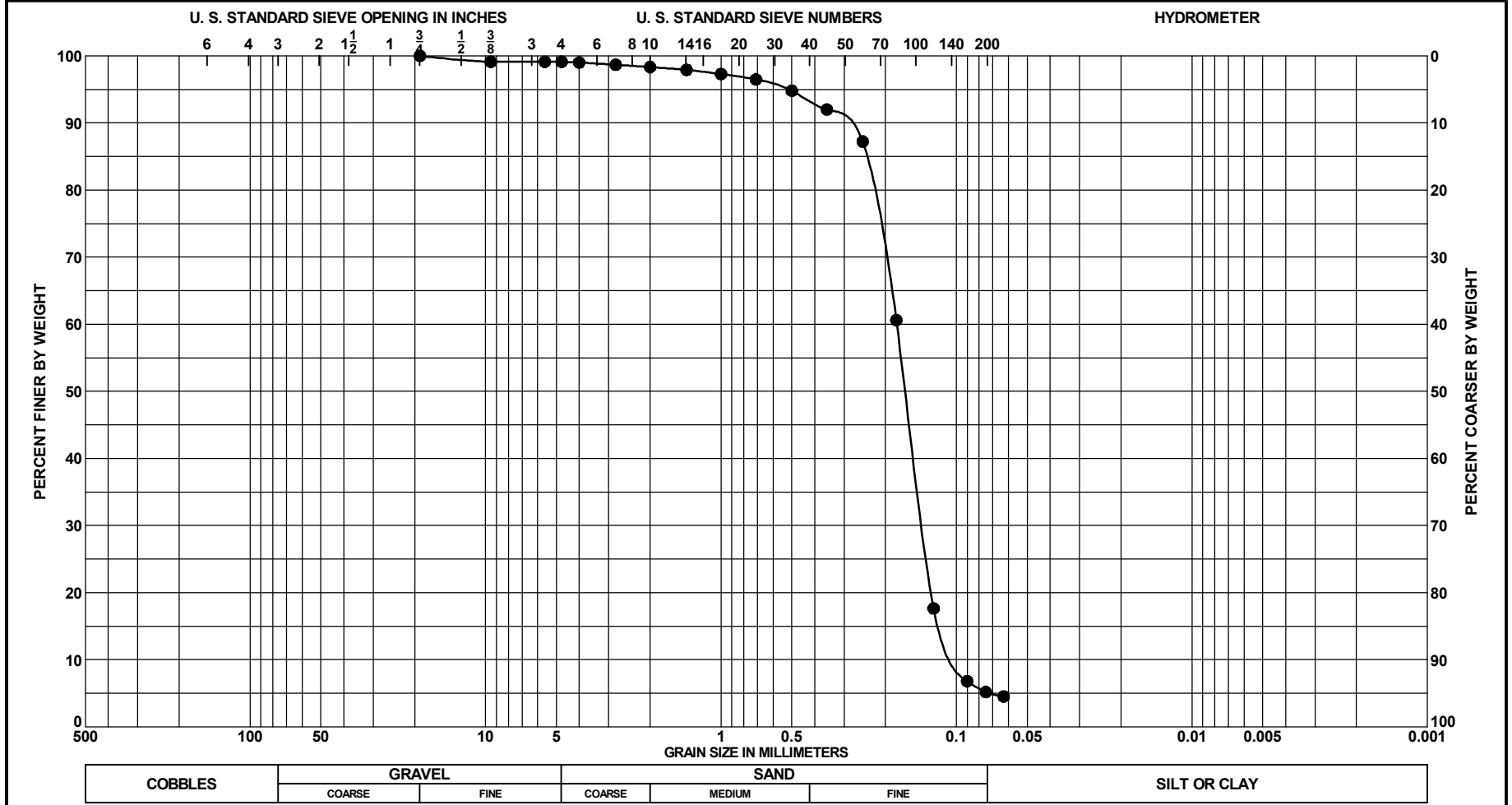


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	10.0 to 10.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little fine sand-size shell fragments, gray (SP)	10YR 6/1	12 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-13
											BORING ELEV. -53.7 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

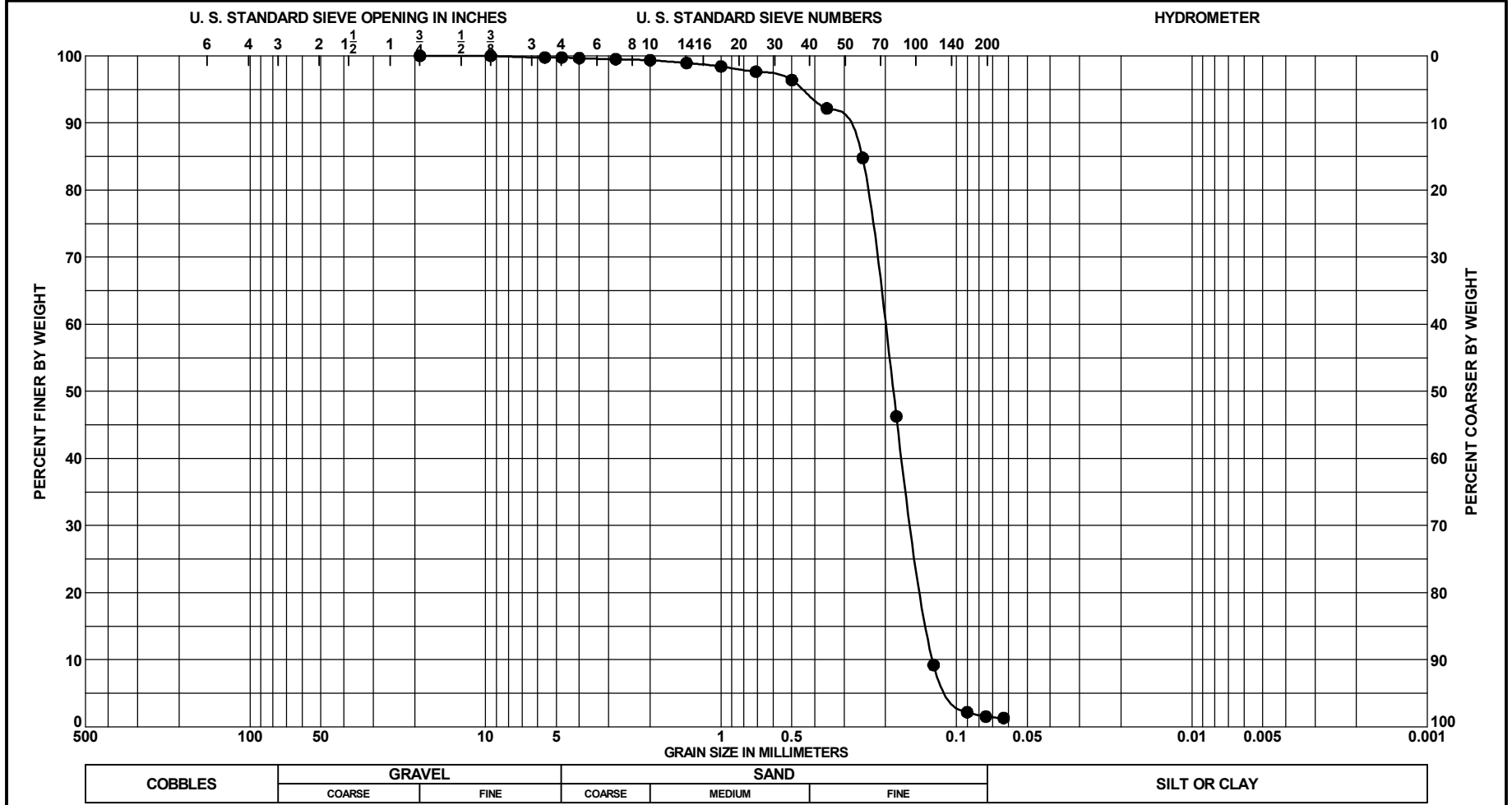


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

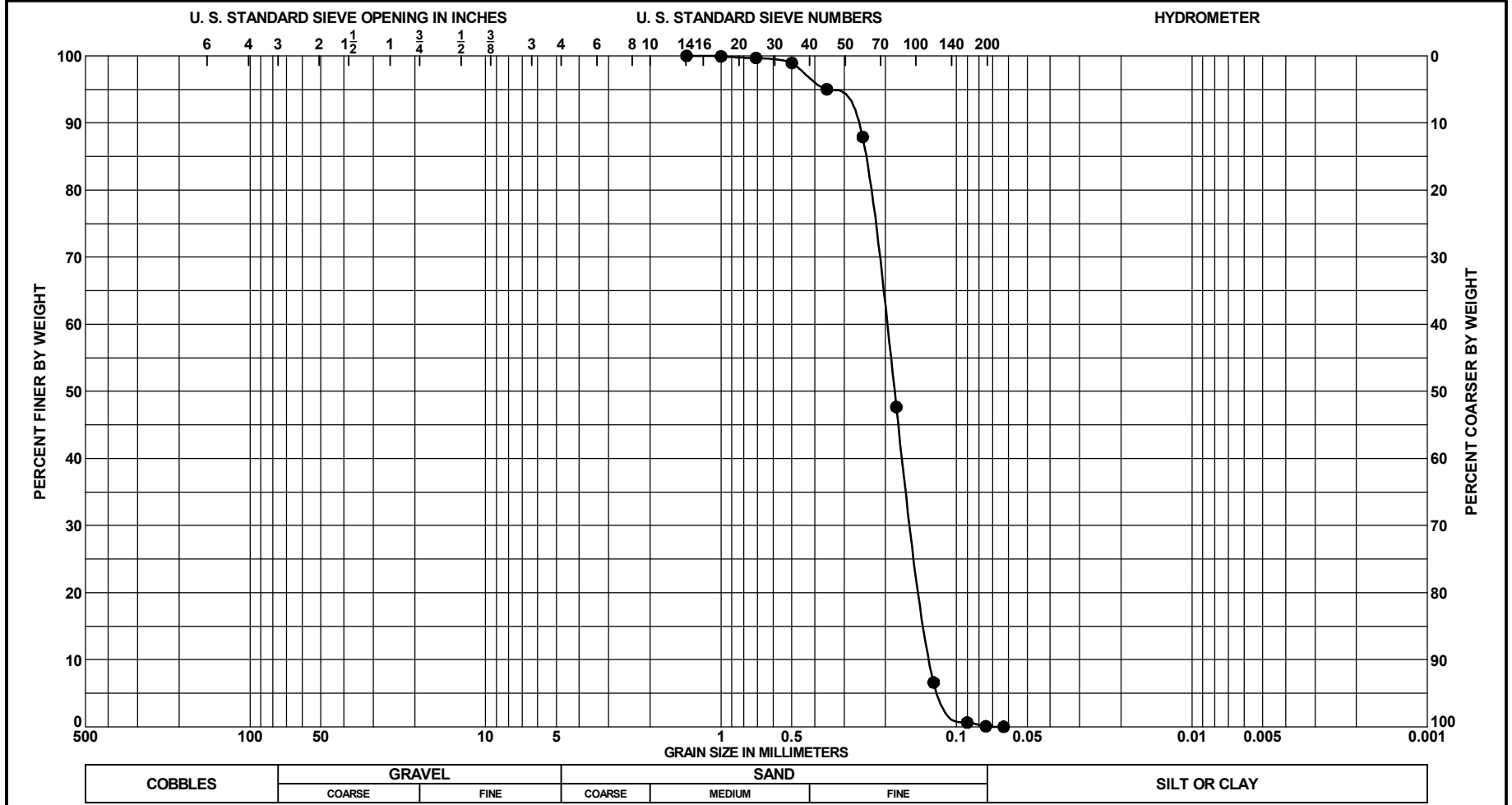
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	12.0 to 12.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little fine sand-size shell fragments, gray (SP)	10YR 6/1	18 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-13
											BORING ELEV. -53.7 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

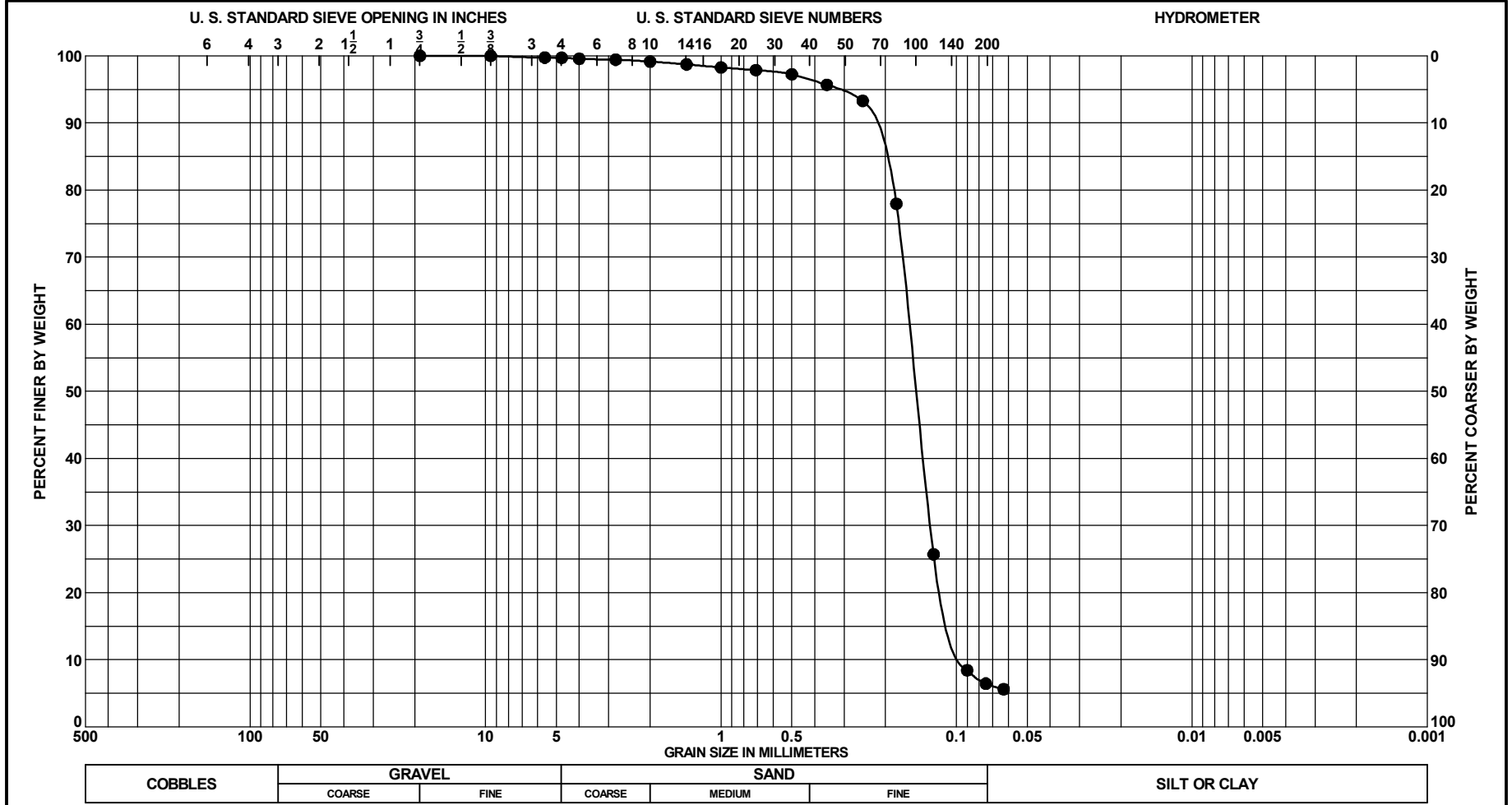


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 5	14.5 to 15.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	10 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-13
											BORING ELEV.	-53.7 Ft., NAVD88
											DATE	3/8/2010



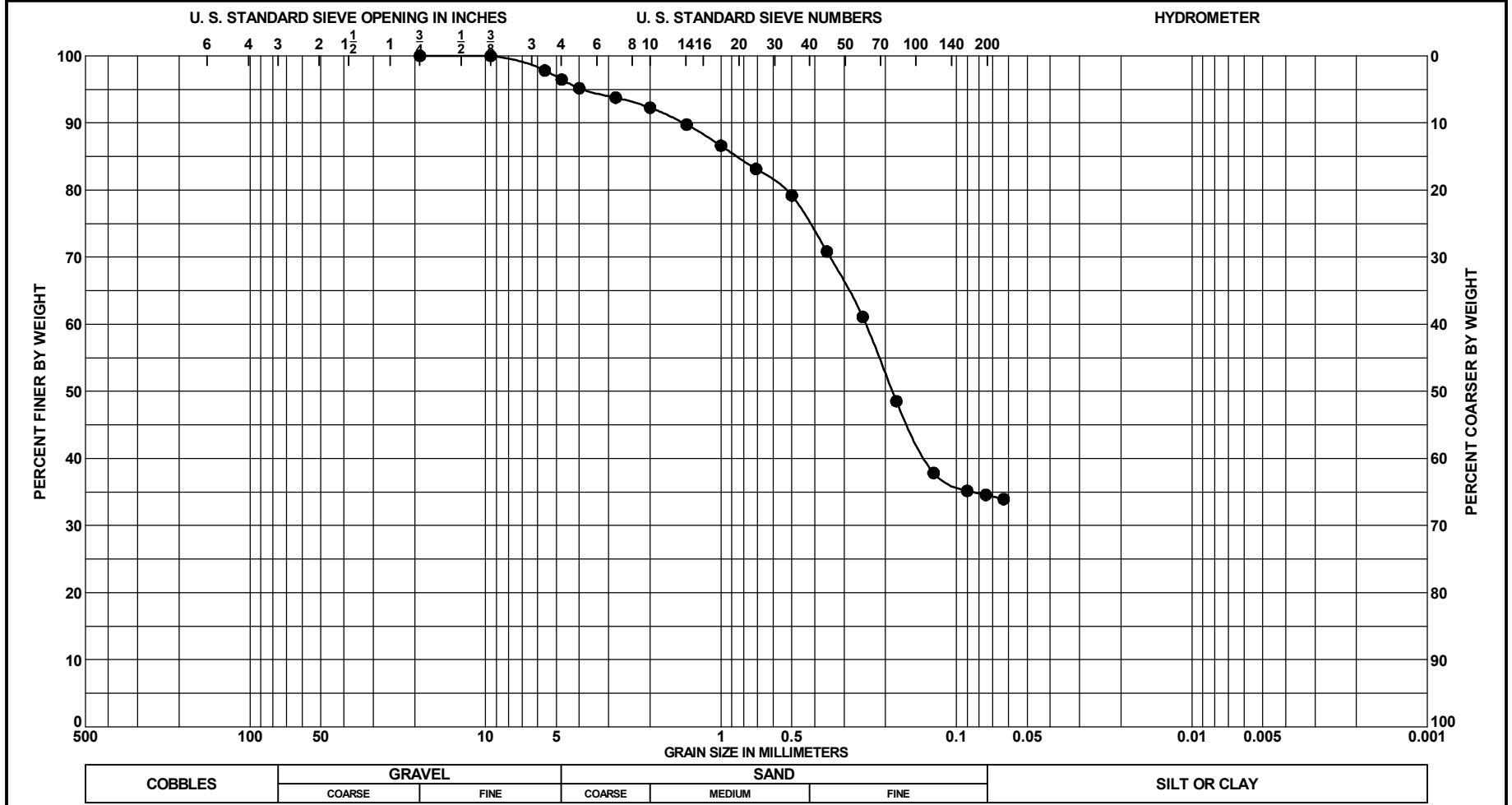
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, gray (SP)	10YR 6/1	9/9 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part I
											BORING NO.	VB-SJSP09-14
											BORING ELEV.	-56.3 Ft., NAVD88
											DATE	3/8/2010



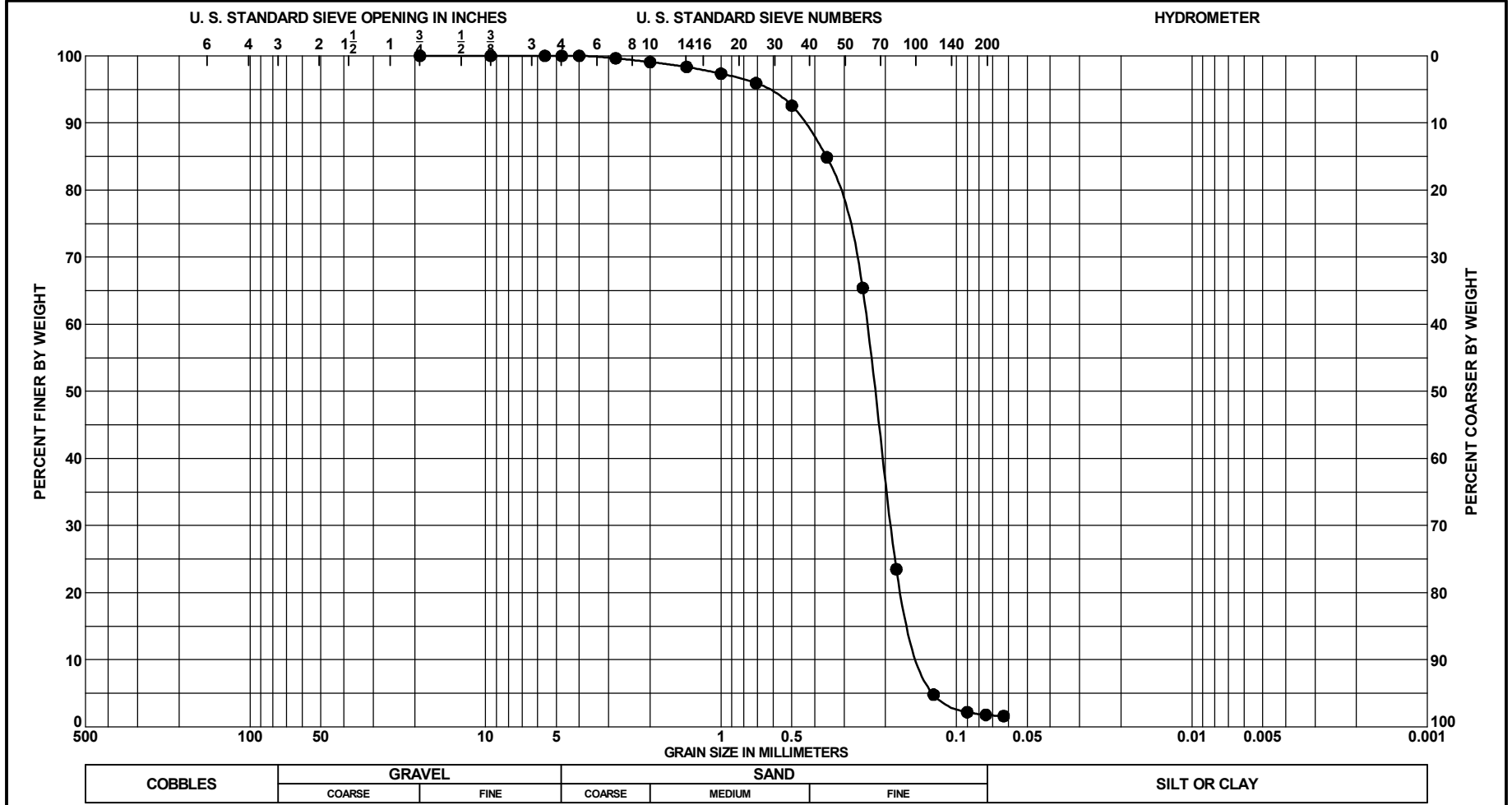


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	7.0 to 7.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	10 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-14
											BORING ELEV. -56.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

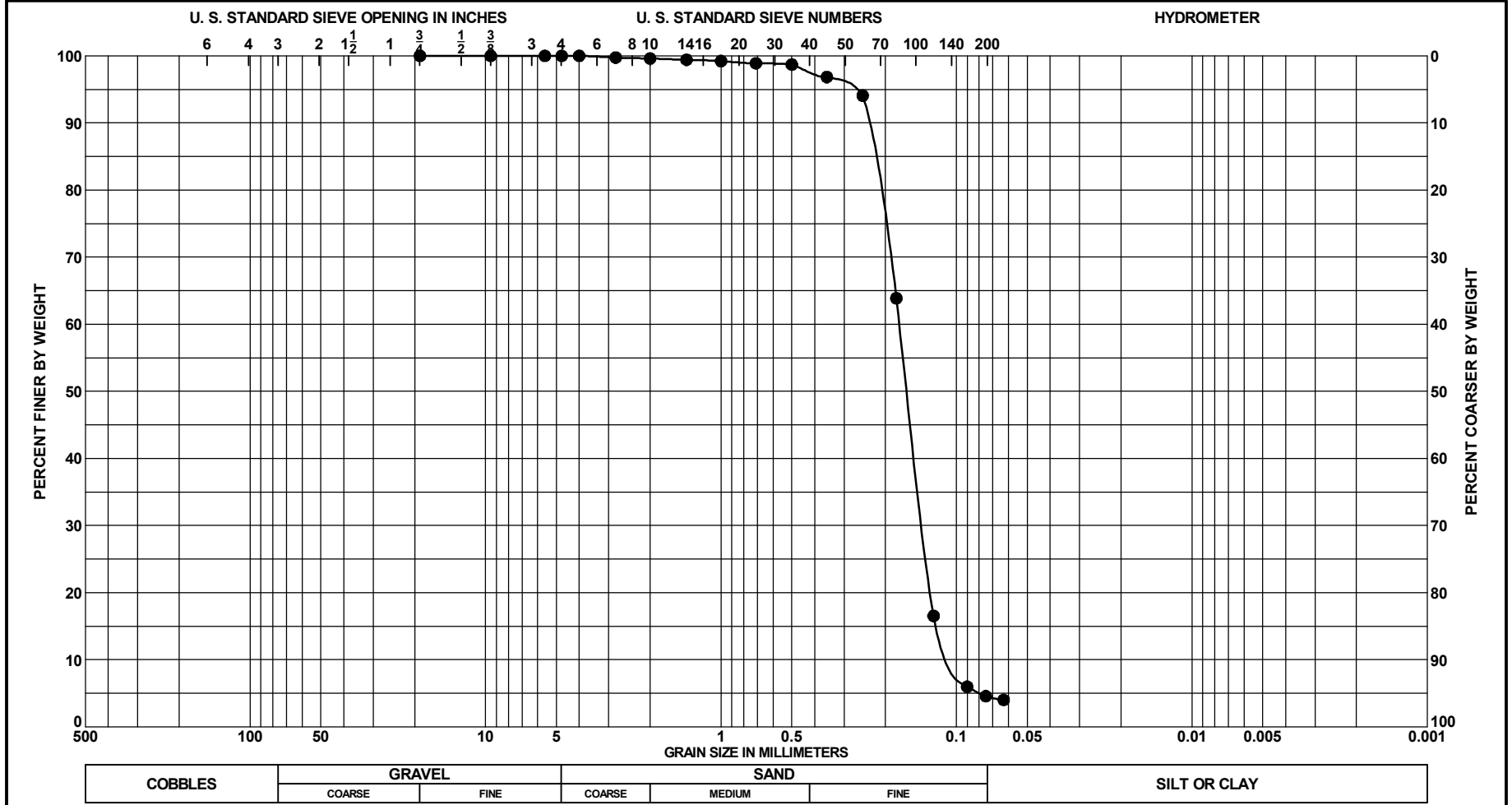


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	10.0 to 10.5 Ft.	SAND, clayey, some fine-grained quartz sand, some clay, some coarse to medium sand-size limerock fragments, greenish gray (SC)	5GY 6/1	4 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-14
											BORING ELEV. -56.3 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

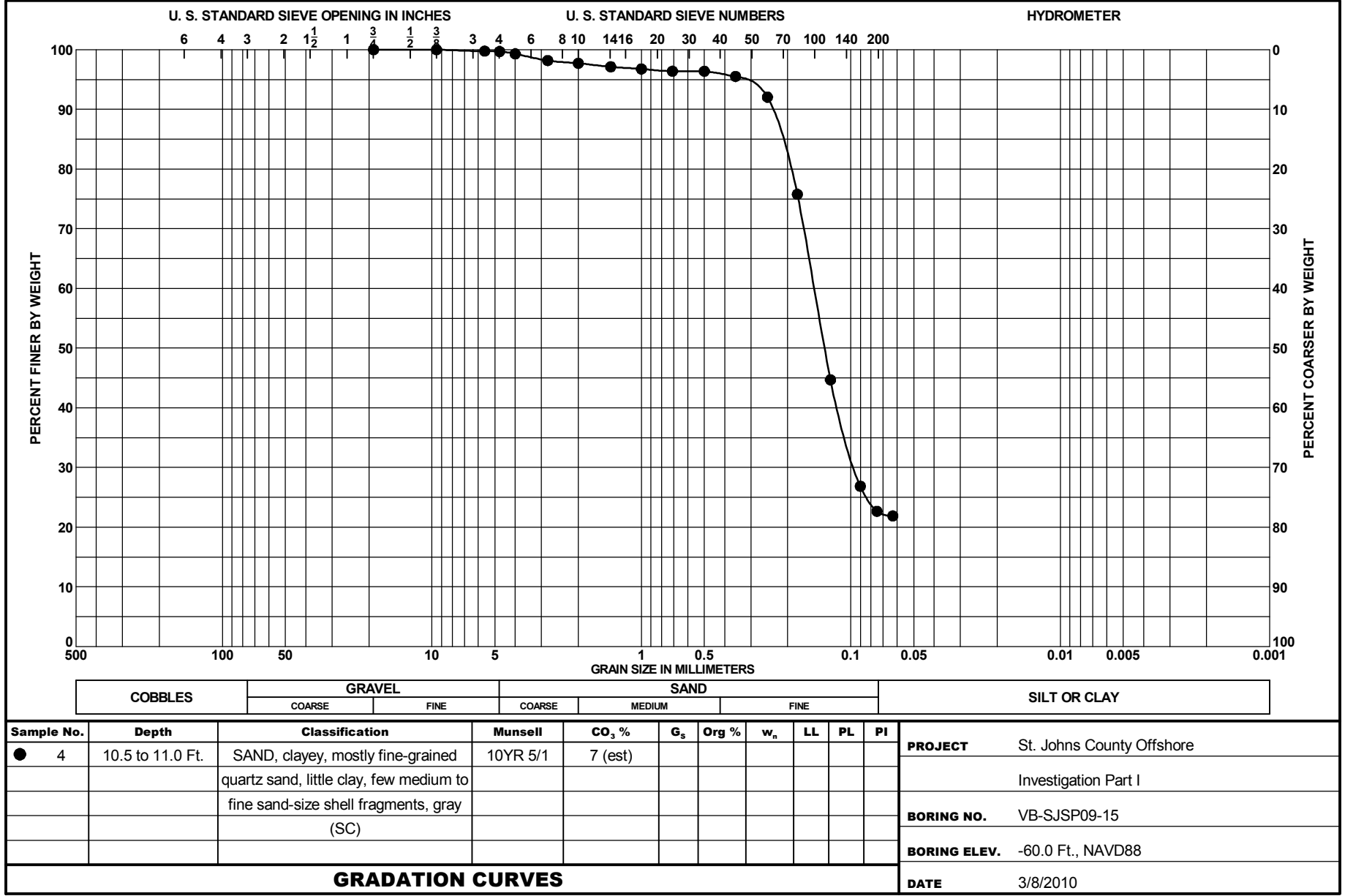


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, gray (SP)	10YR 6/1	15 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-15
											BORING ELEV. -60.0 Ft., NAVD88
											DATE 3/8/2010

GRADATION CURVES



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	COBBLES		GRAVEL		SAND			SILT OR CLAY					
											COARSE	FINE	COARSE	MEDIUM	FINE								
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little fine sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	17 (est)																	PROJECT	St. Johns County Offshore	
																						Investigation Part I	
																						BORING NO.	VB-SJSP09-15
																						BORING ELEV.	-60.0 Ft., NAVD88
GRADATION CURVES																						DATE	3/8/2010

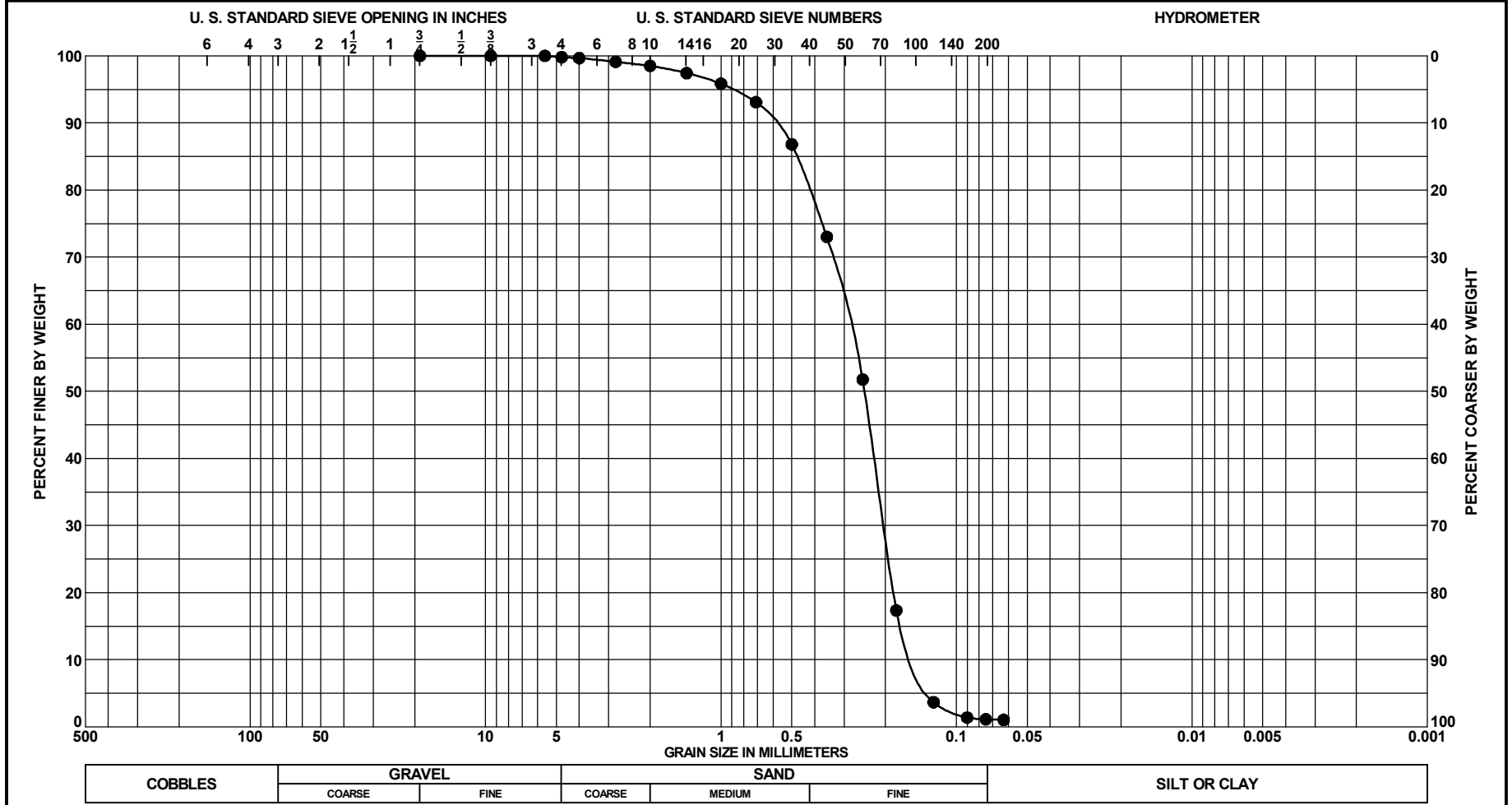


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

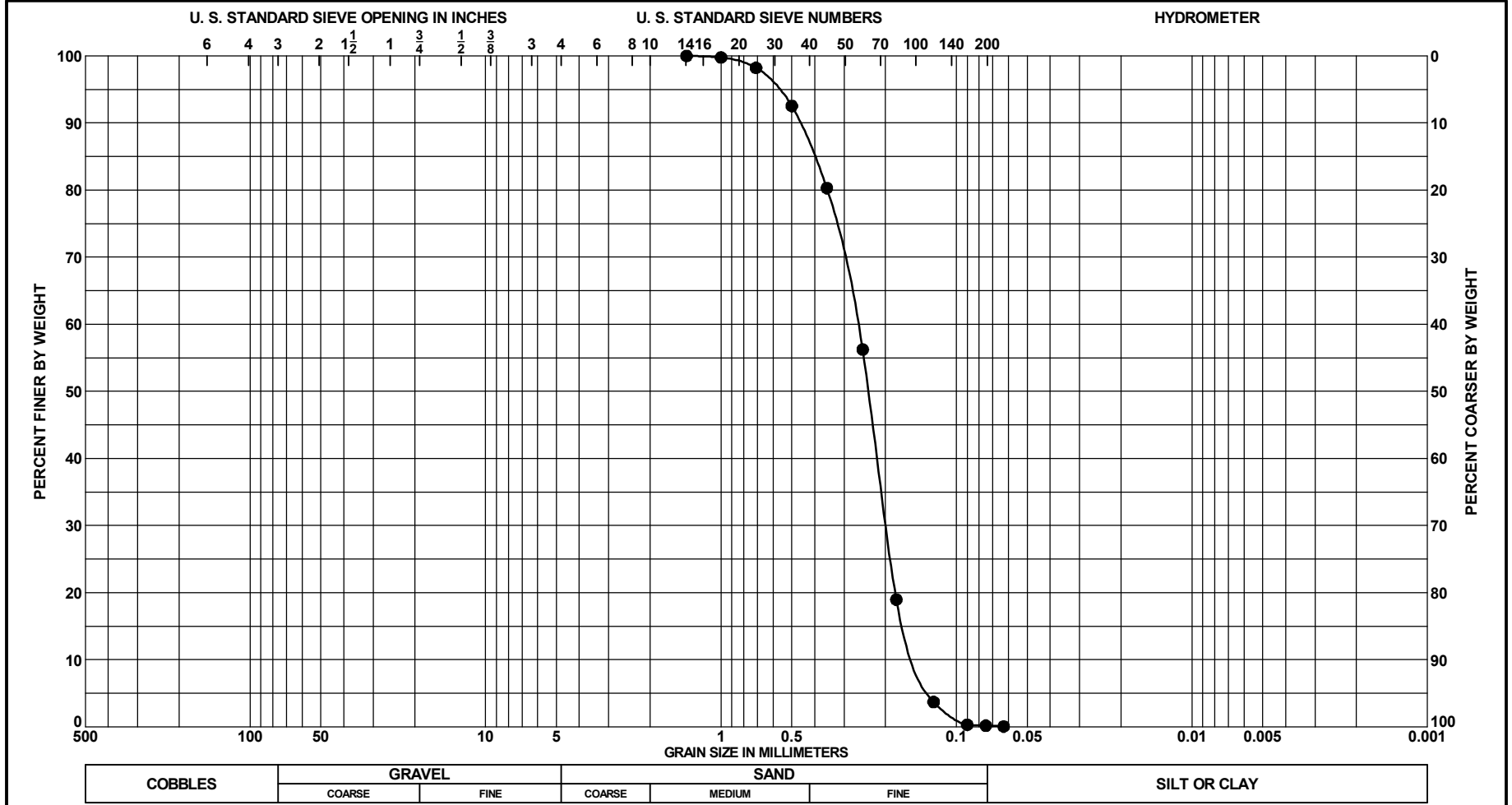
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 4	10.5 to 11.0 Ft.	SAND, clayey, mostly fine-grained quartz sand, little clay, few medium to fine sand-size shell fragments, gray (SC)	10YR 5/1	7 (est)						

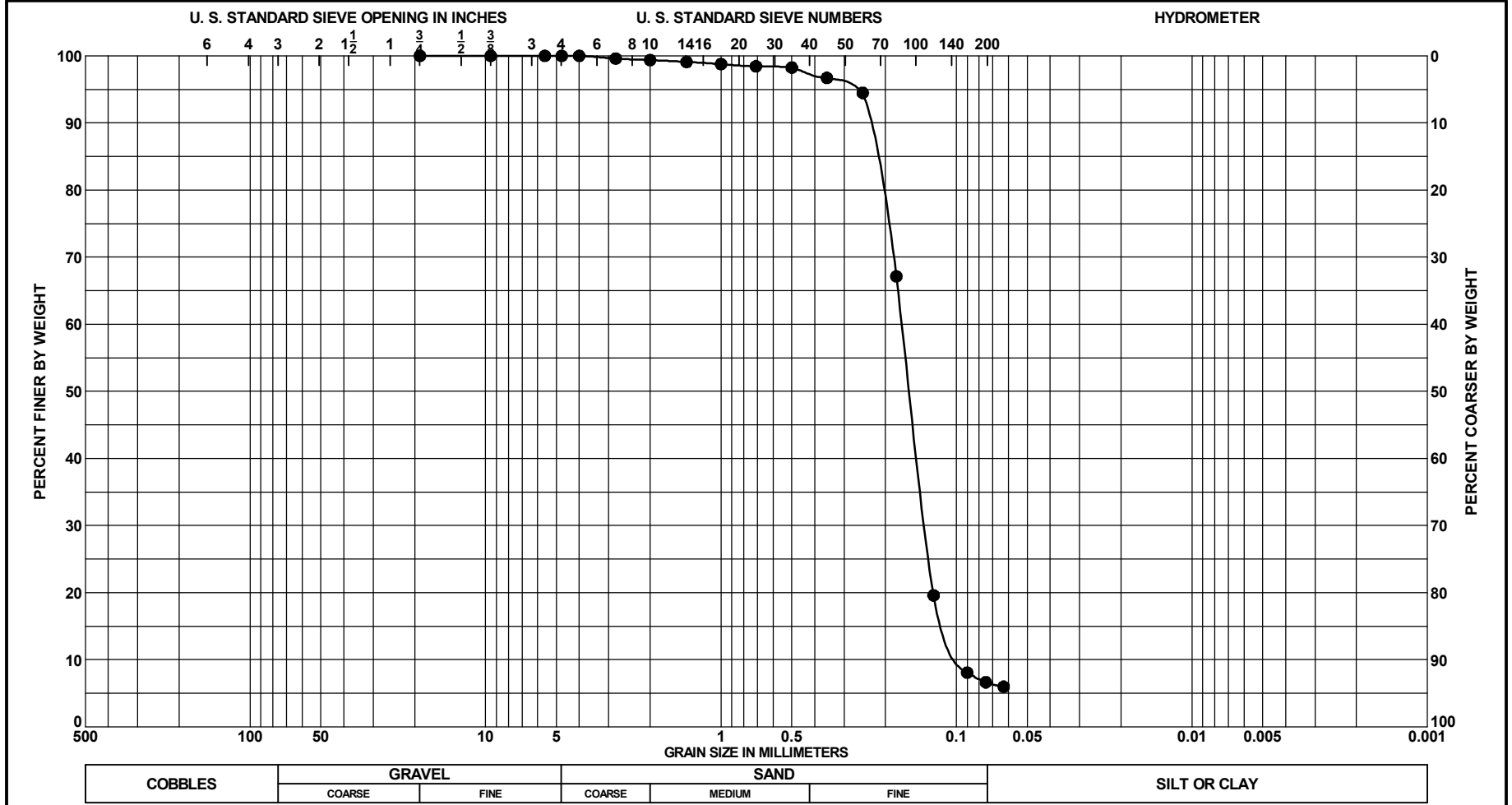
PROJECT	St. Johns County Offshore
	Investigation Part I
BORING NO.	VB-SJSP09-15
BORING ELEV.	-60.0 Ft., NAVD88
DATE	3/8/2010

GRADATION CURVES

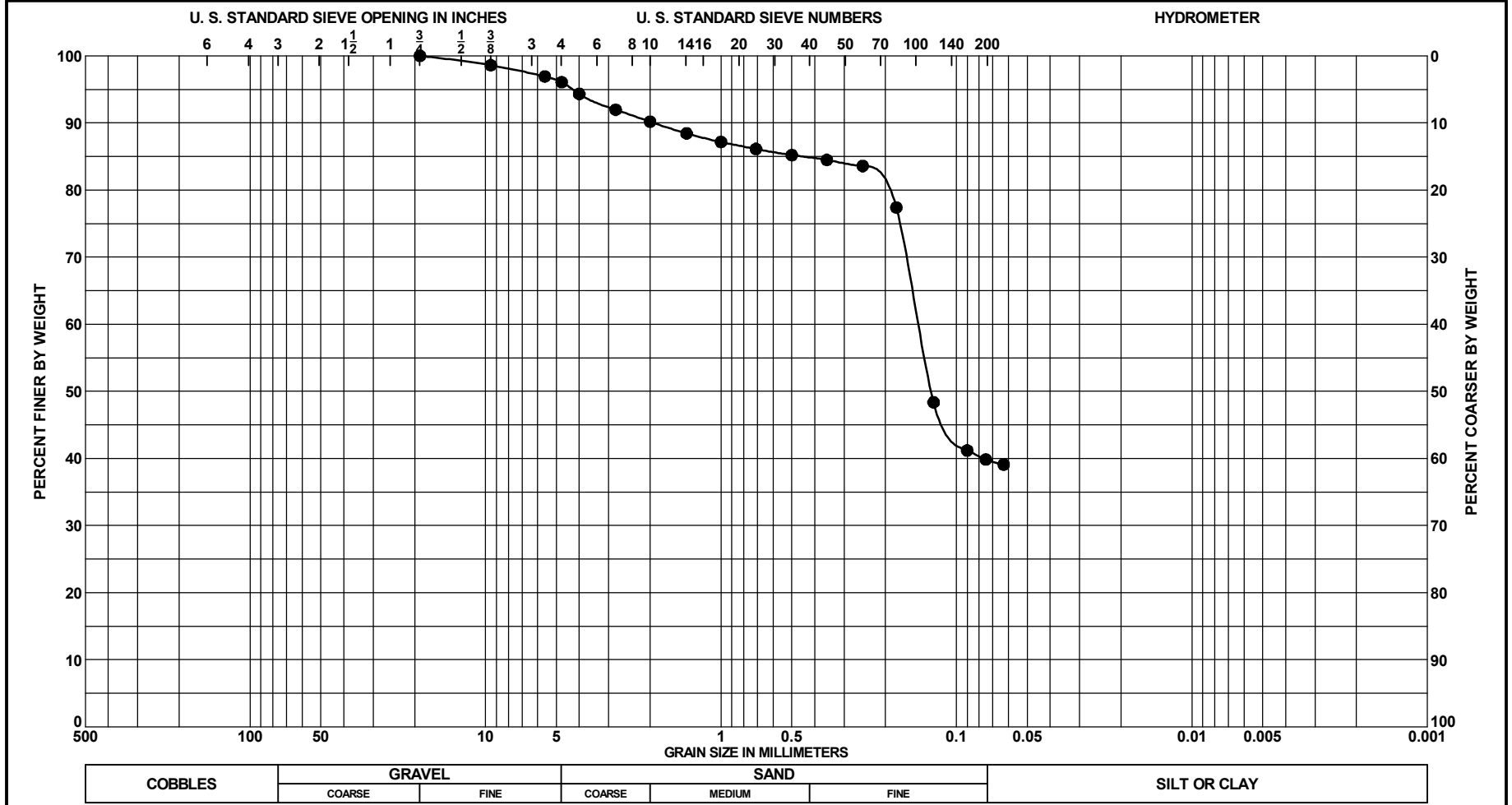


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	9/14 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-16
											BORING ELEV. -57.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



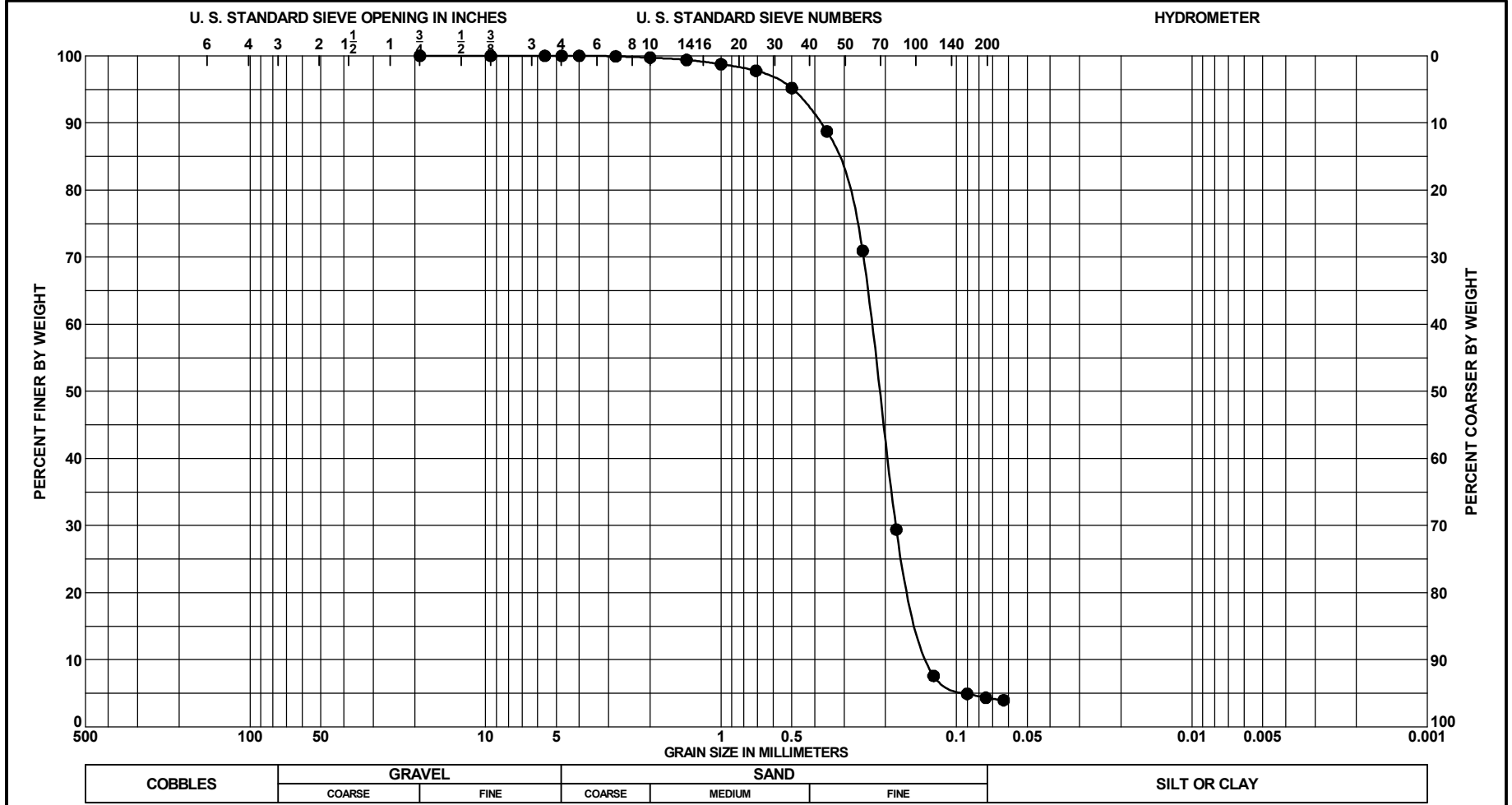


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	8.5 to 9.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	8 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-16
											BORING ELEV. -57.2 Ft., NAVD88
											DATE 3/8/2010

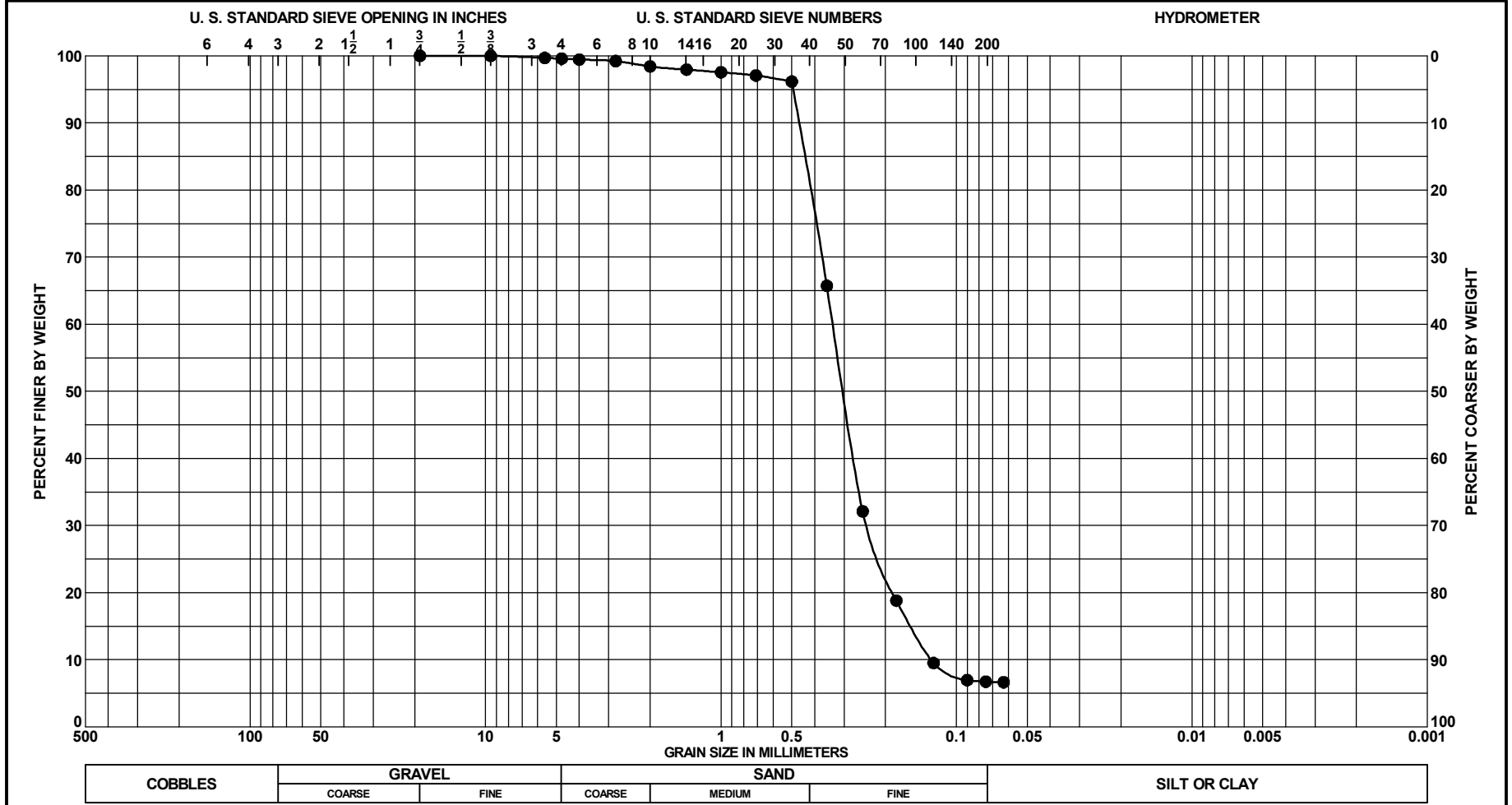


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	11.0 to 11.5 Ft.	SAND, clayey, some fine-grained quartz sand, some clay, little coarse to medium sand-size limerock fragments, gray (SC)	10YR 5/1	0 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-16
											BORING ELEV. -57.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

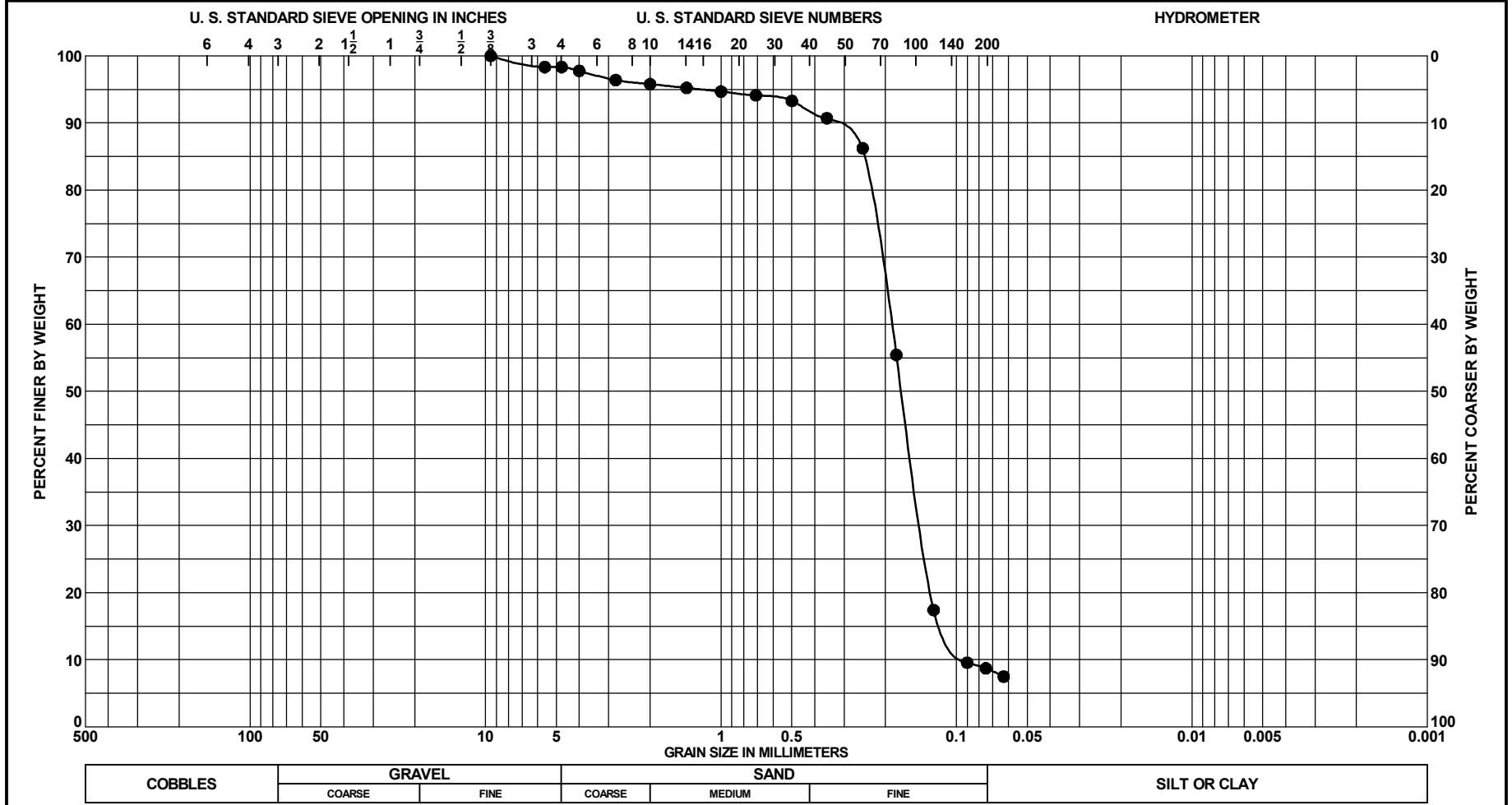


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, some medium to fine sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	32 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part I
											BORING NO.	VB-SJSP09-17
											BORING ELEV.	-55.6 Ft., NAVD88
											DATE	3/8/2010

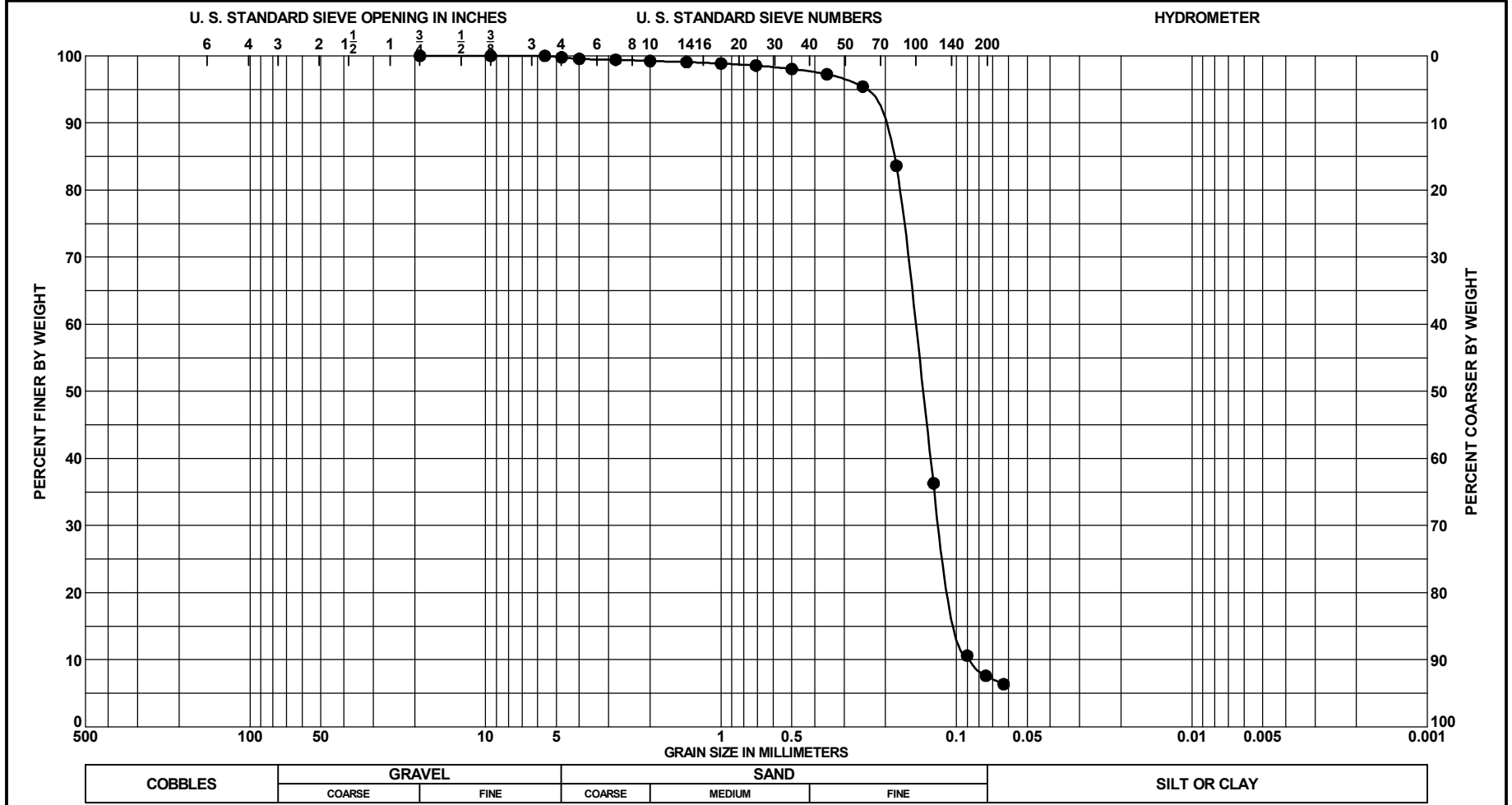


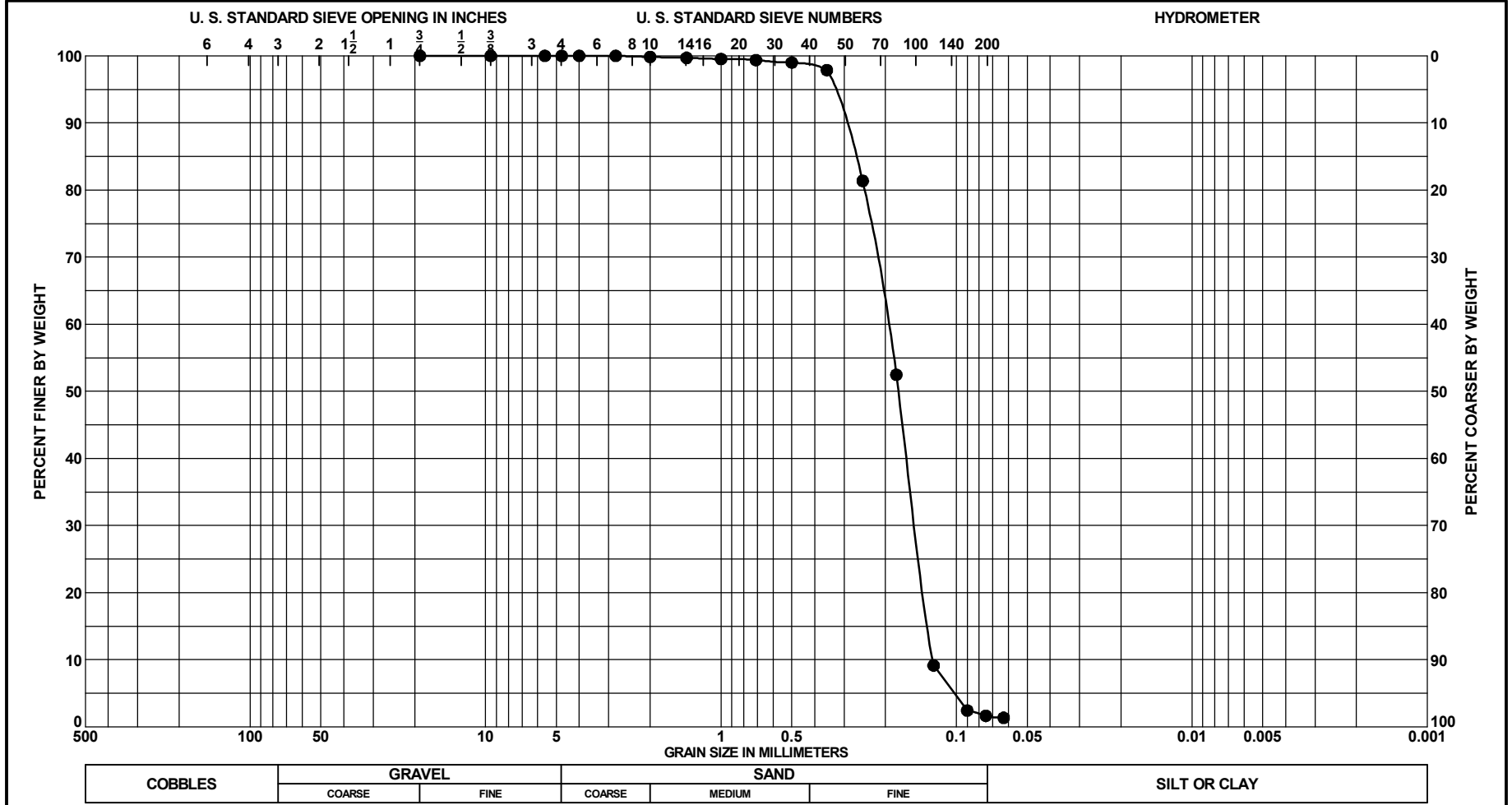
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	11.0 to 11.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	24 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-17
											BORING ELEV. -55.6 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010

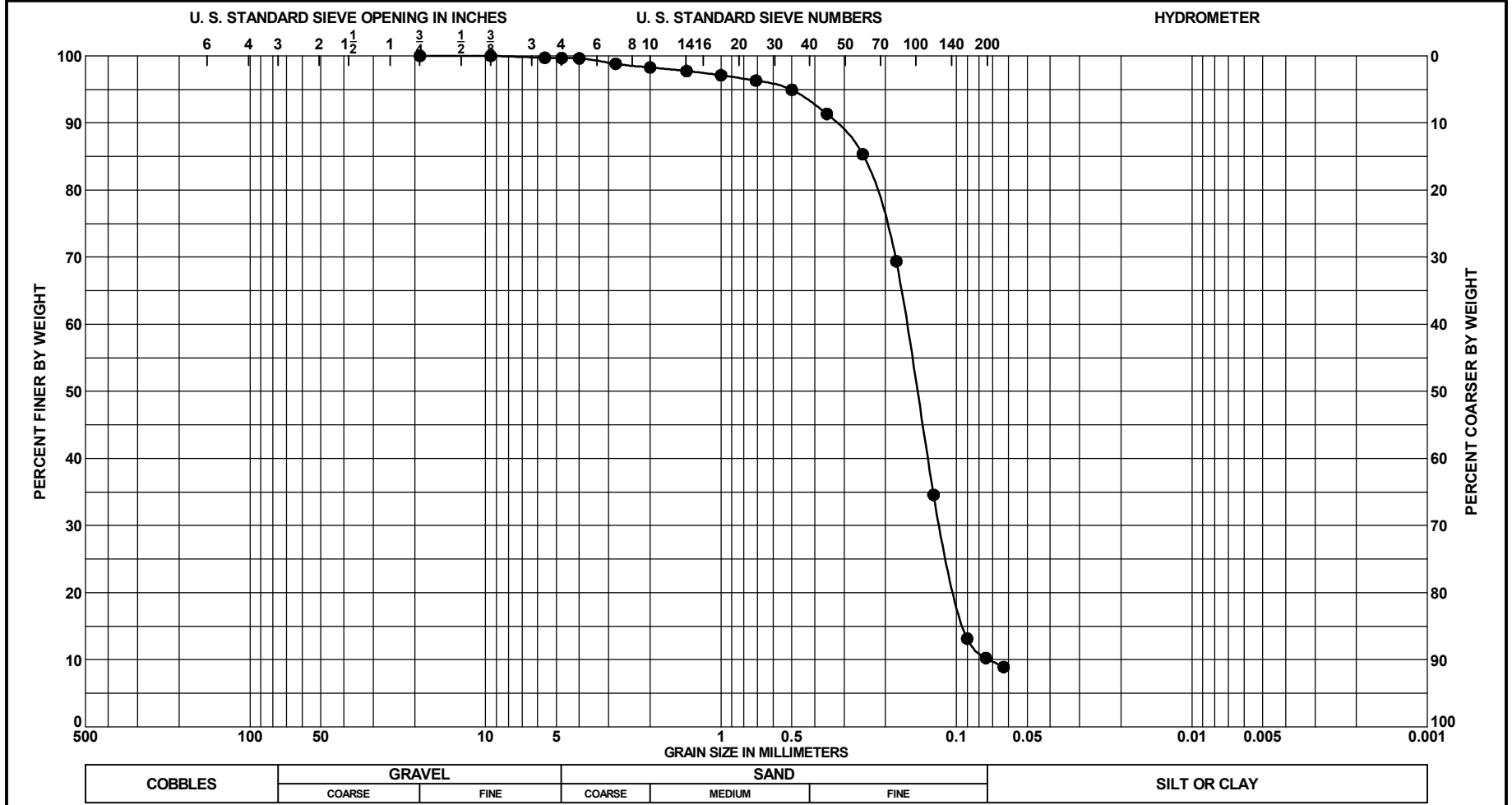


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 3	8.5 to 9.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell frag., few silt, trace limerock frag., gray (SP-SM)	10YR 6/1	10 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-18
											BORING ELEV.	-56.4 Ft., NAVD88
											DATE	3/8/2010

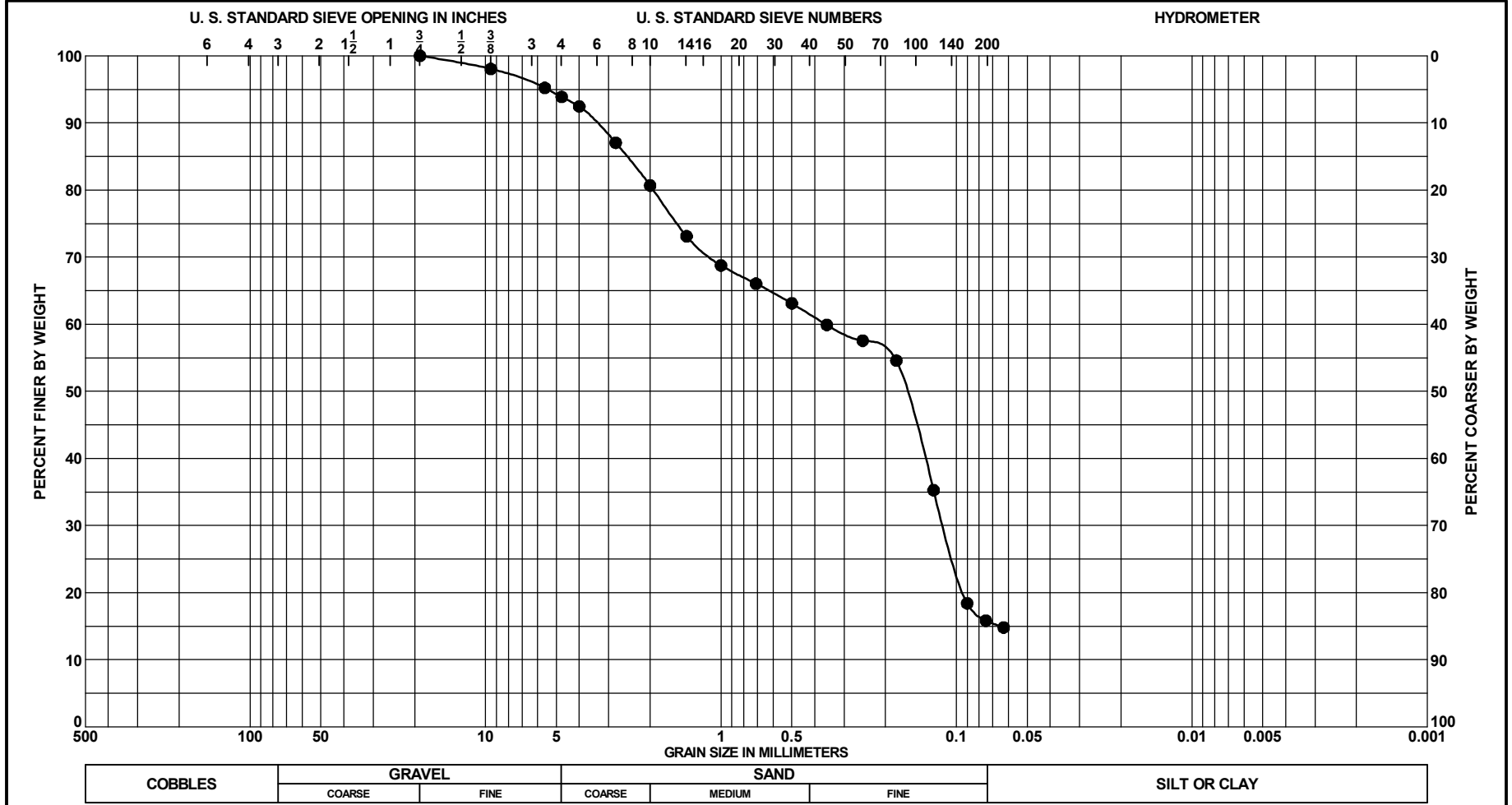




Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, gray (SP)	10YR 6/1	6 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-19
											BORING ELEV.	-57.2 Ft., NAVD88
											DATE	3/8/2010

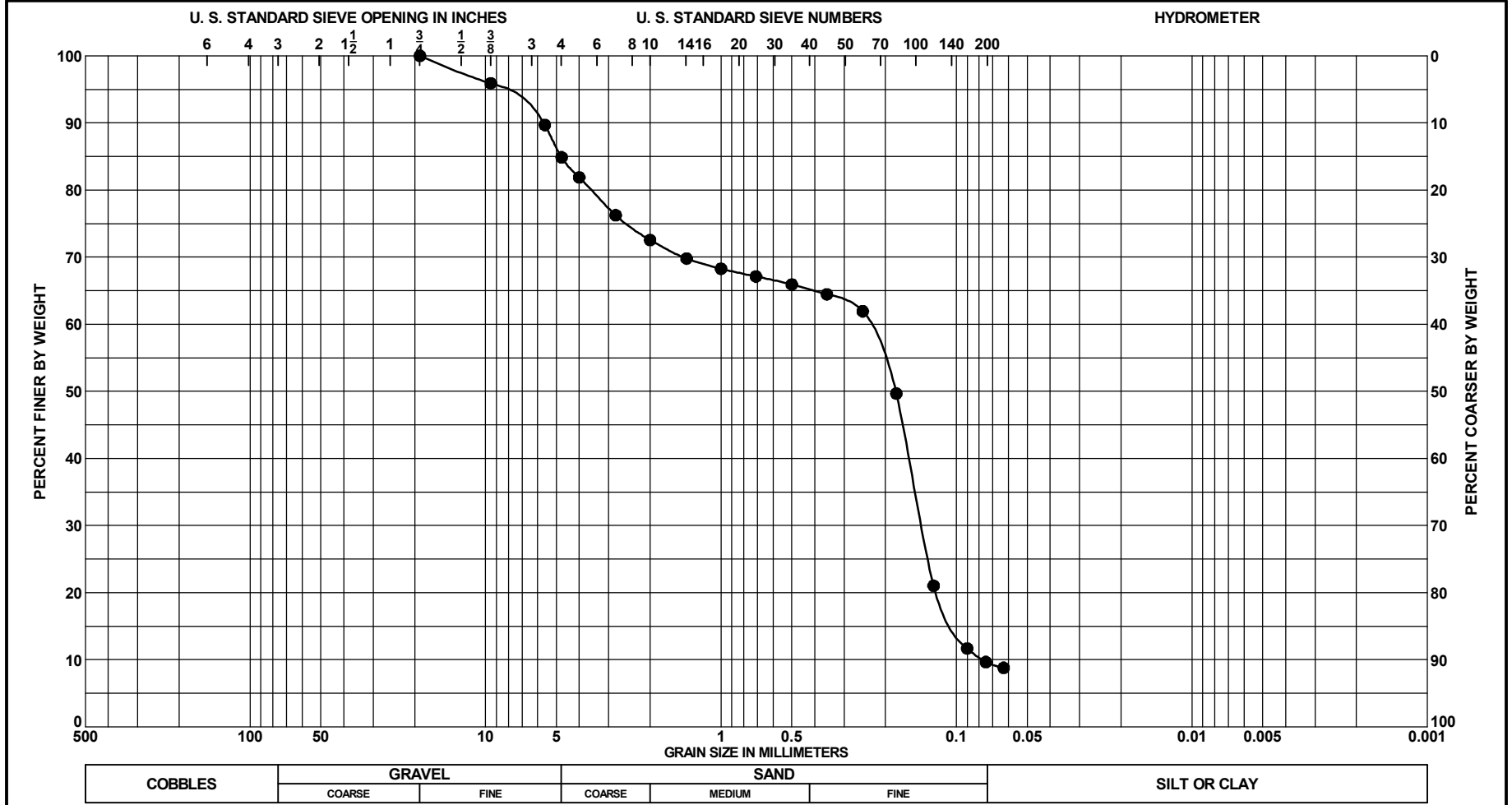


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 3	10.0 to 10.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 5/1	10 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part I
											BORING NO.	VB-SJSP09-19
											BORING ELEV.	-57.2 Ft., NAVD88
											DATE	3/8/2010



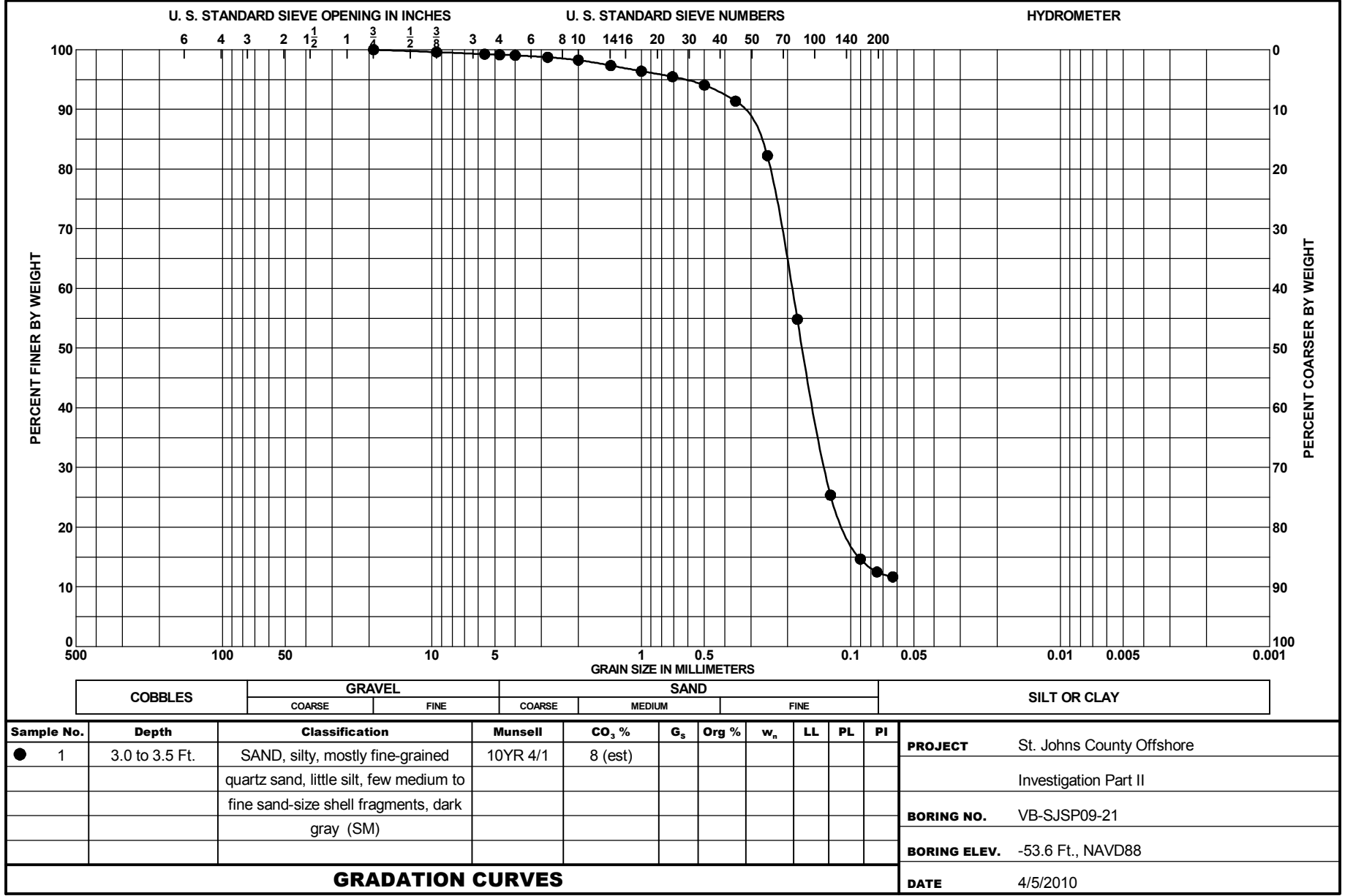
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

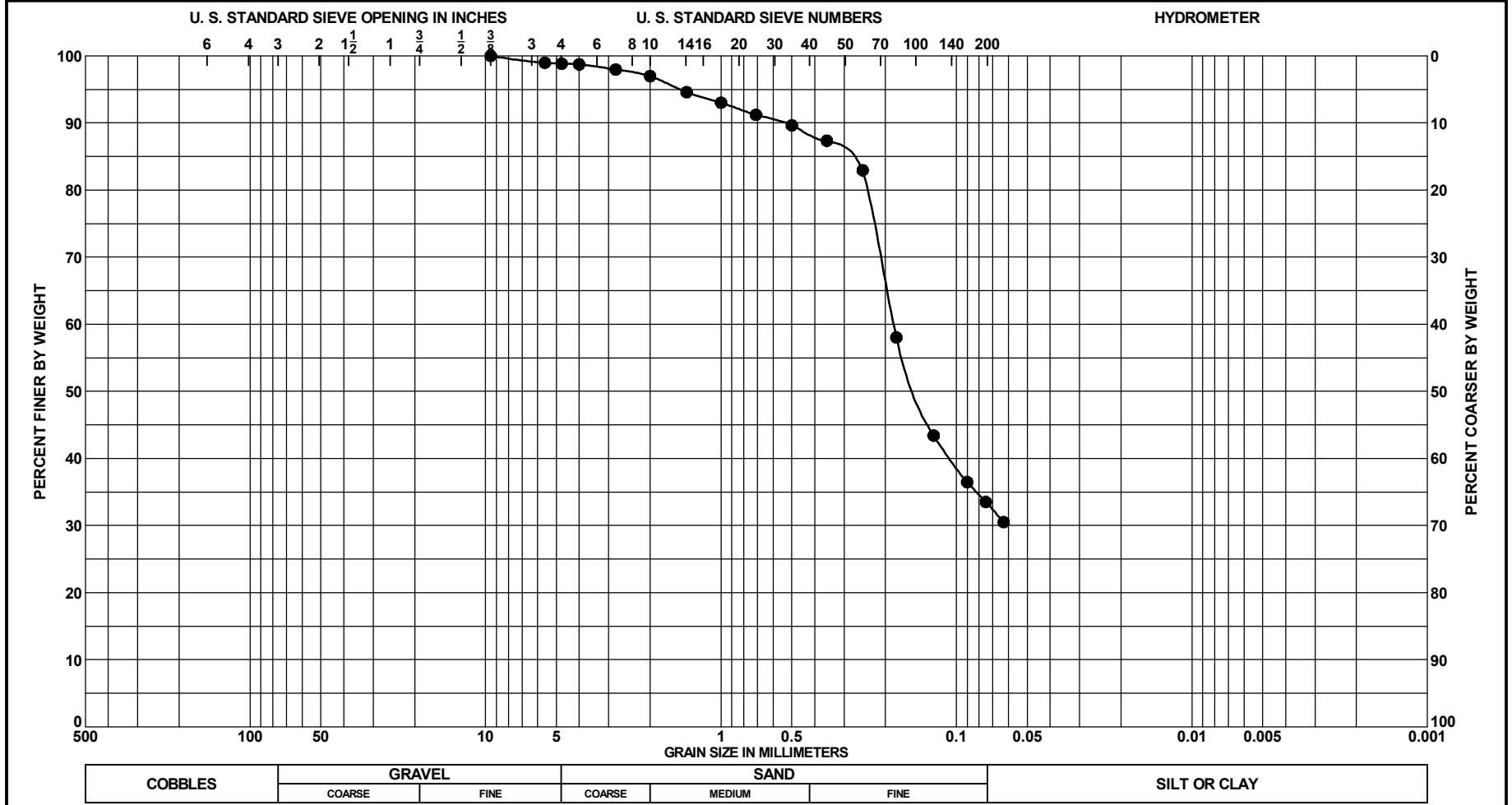
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	14.0 to 14.5 Ft.	SAND, clayey, some fine-grained quartz sand, some coarse to medium sand-size shell fragments, little clay, gray (SC)	10YR 5/1	38 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-19
											BORING ELEV. -57.2 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

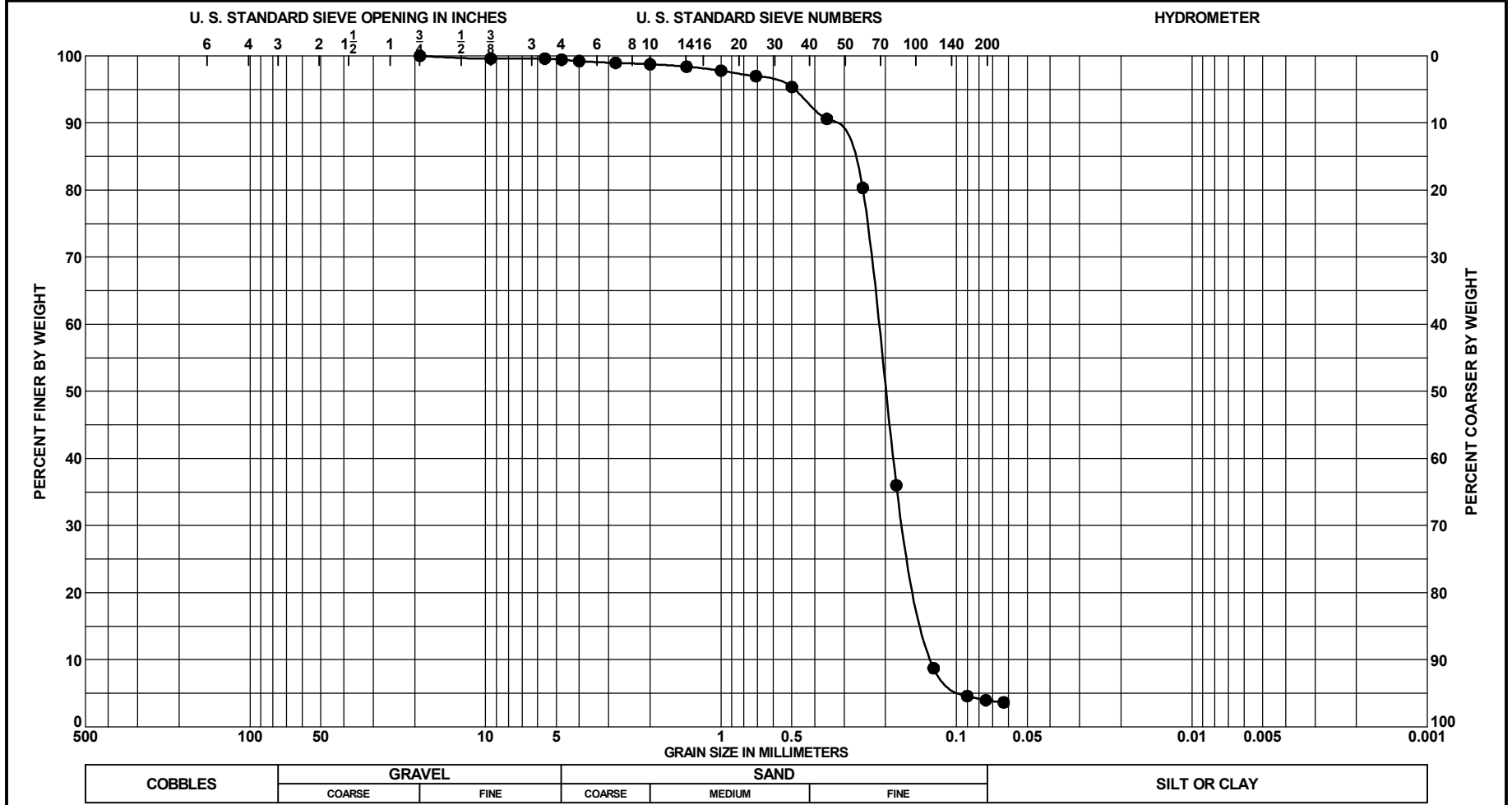
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, some fine-gravel to medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	40 (est)							St. Johns County Offshore Investigation Part I
											BORING NO. VB-SJSP09-20
											BORING ELEV. -58.9 Ft., NAVD88
GRADATION CURVES											DATE 3/8/2010



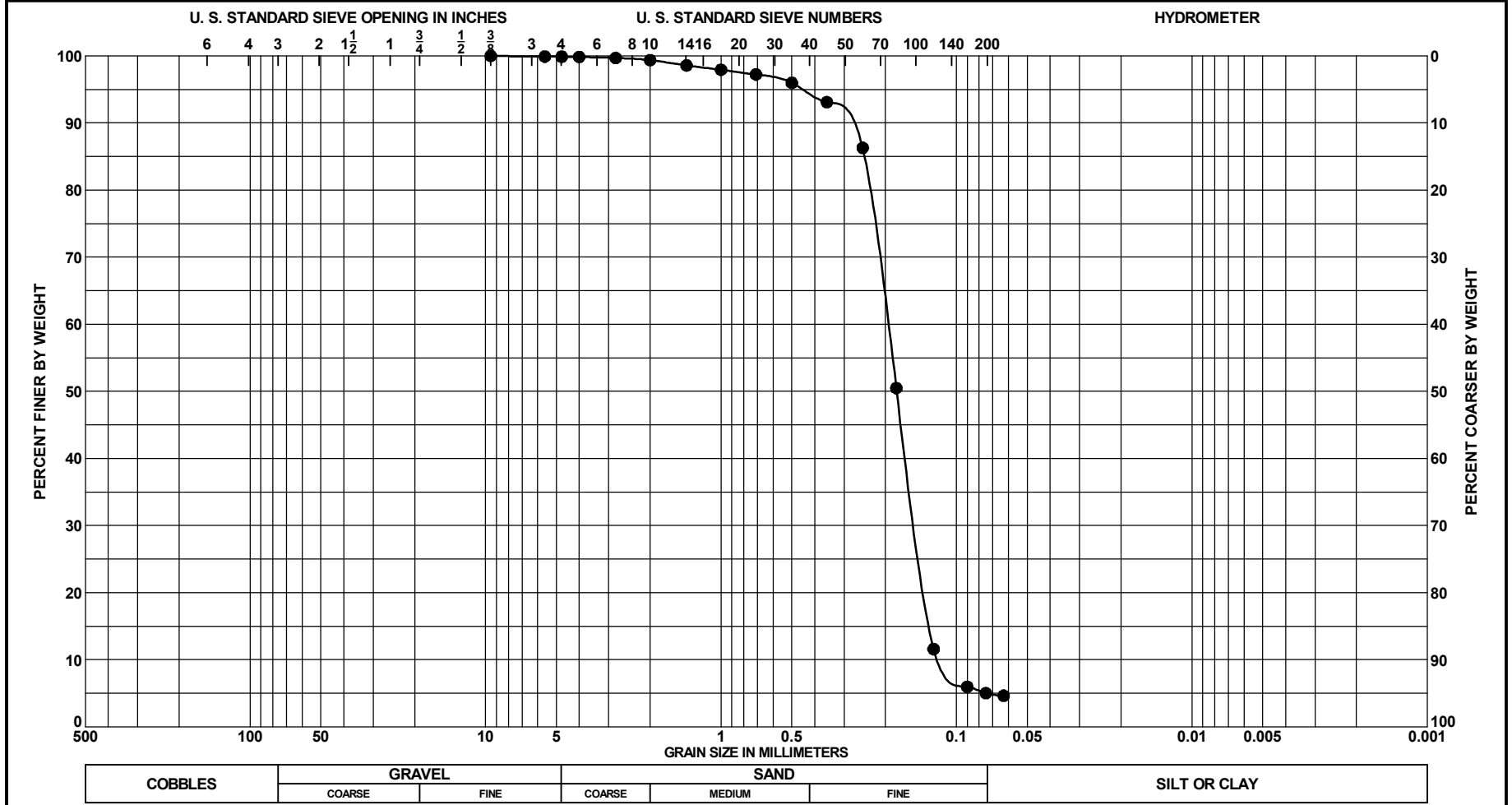


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

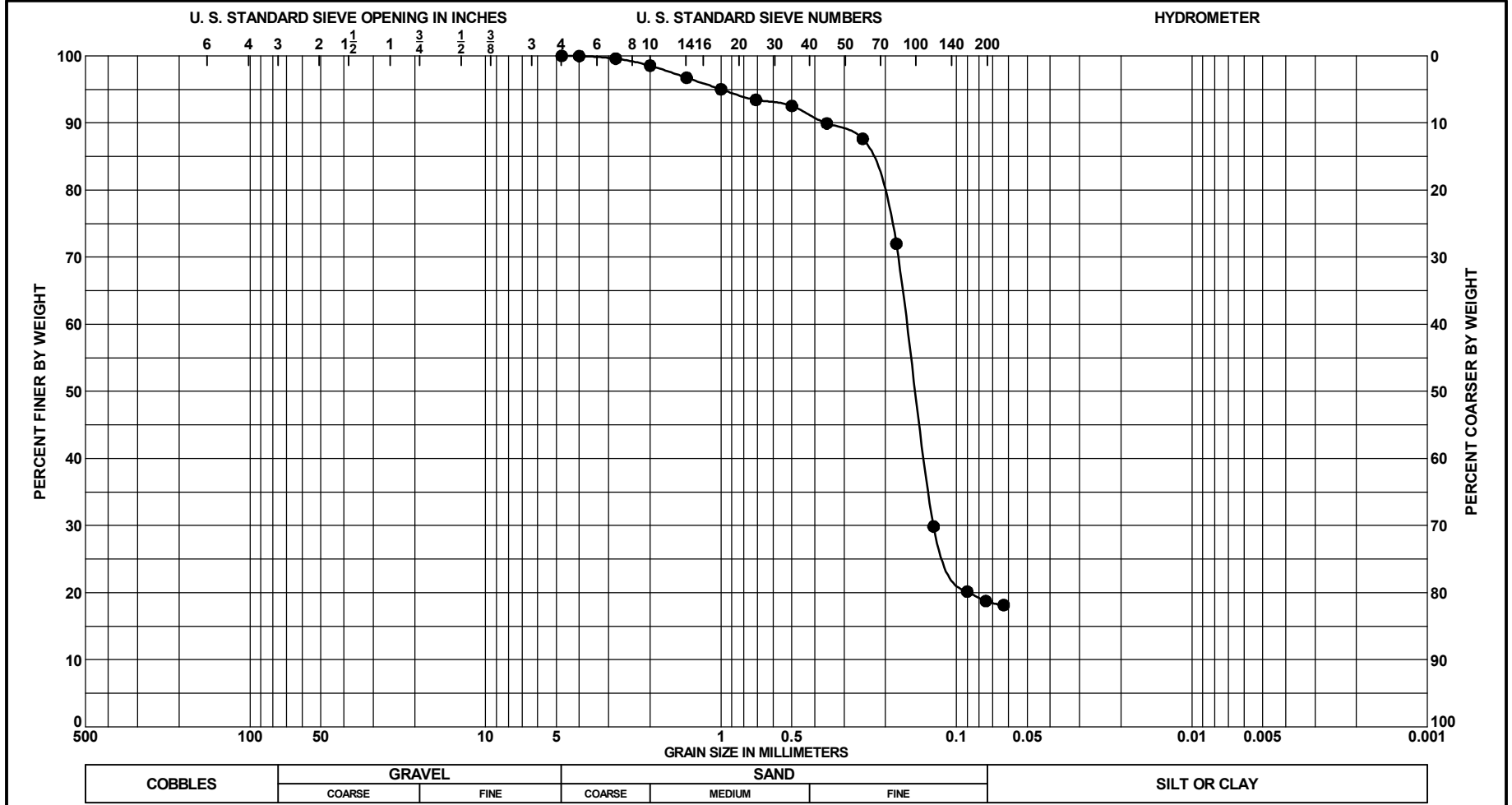
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	10.0 to 10.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, some clay, little medium sand-size shell fragments, gray (SC)	10YR 5/1	12 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-21
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	7.0 to 7.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	6 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-22
											BORING ELEV.	-47.1 Ft., NAVD88
											DATE	4/5/2010

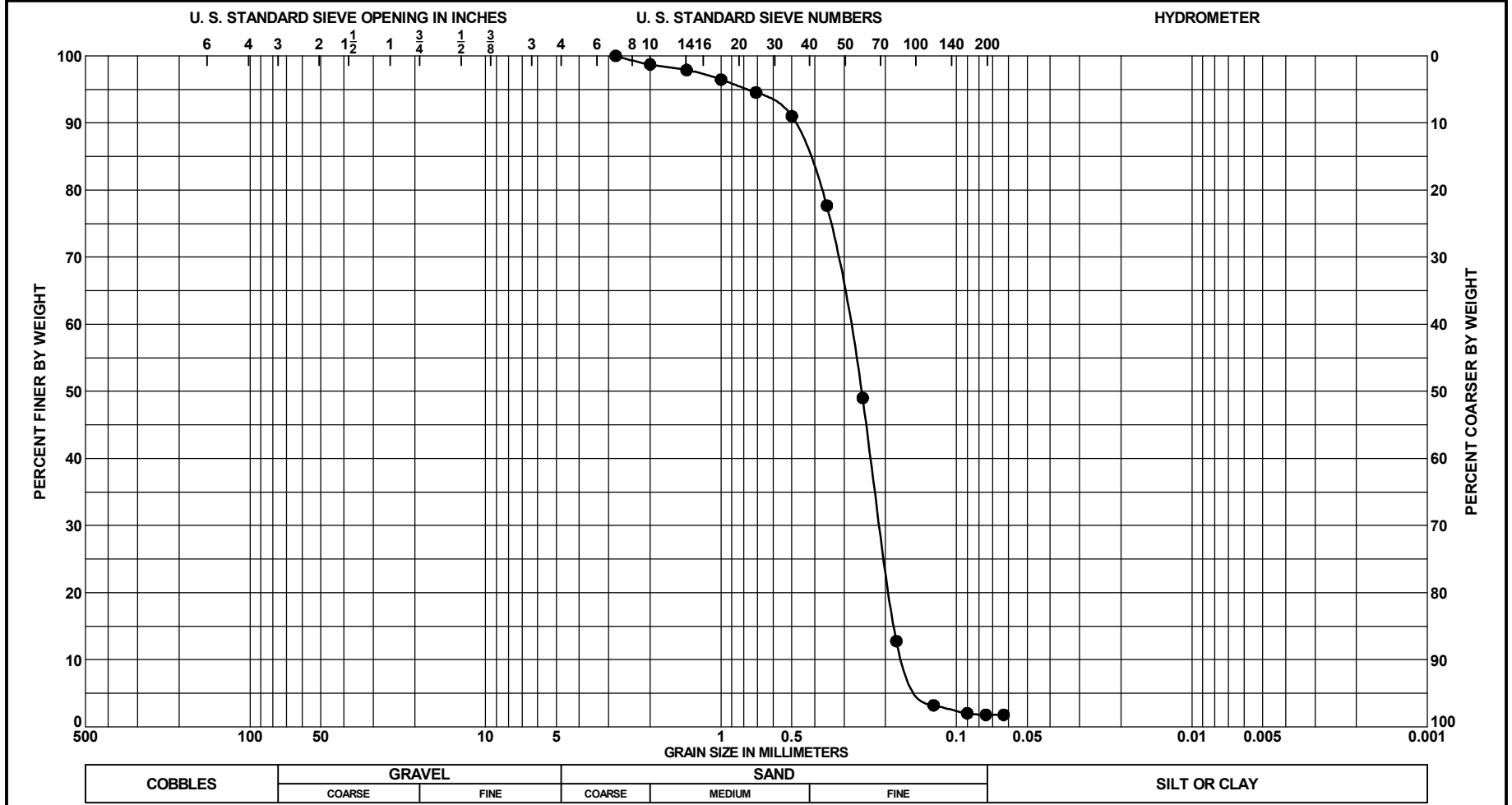


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell fragments, few silt, dark gray (SP-SM)	10YR 4/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-22
											BORING ELEV. -47.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

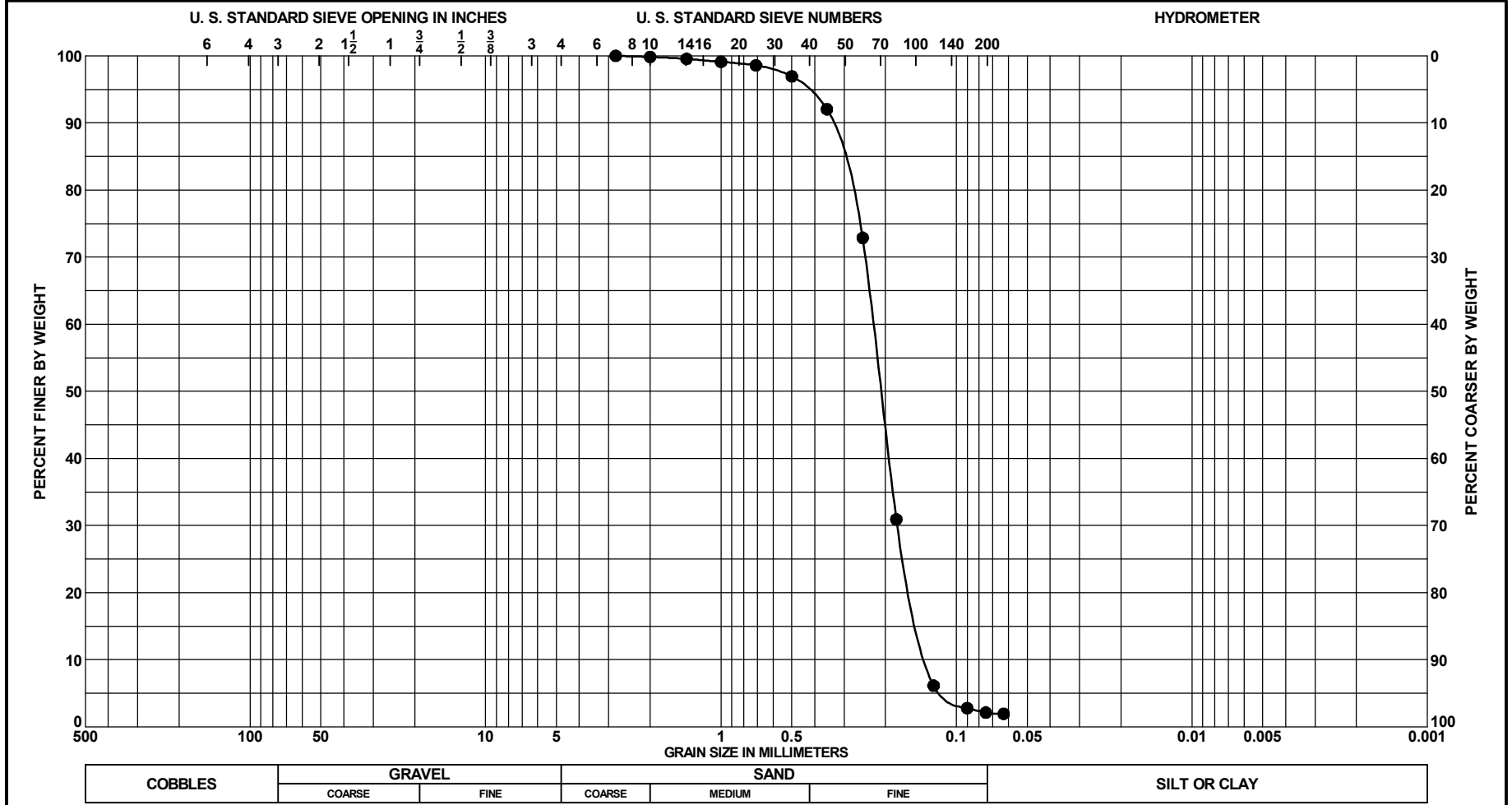


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

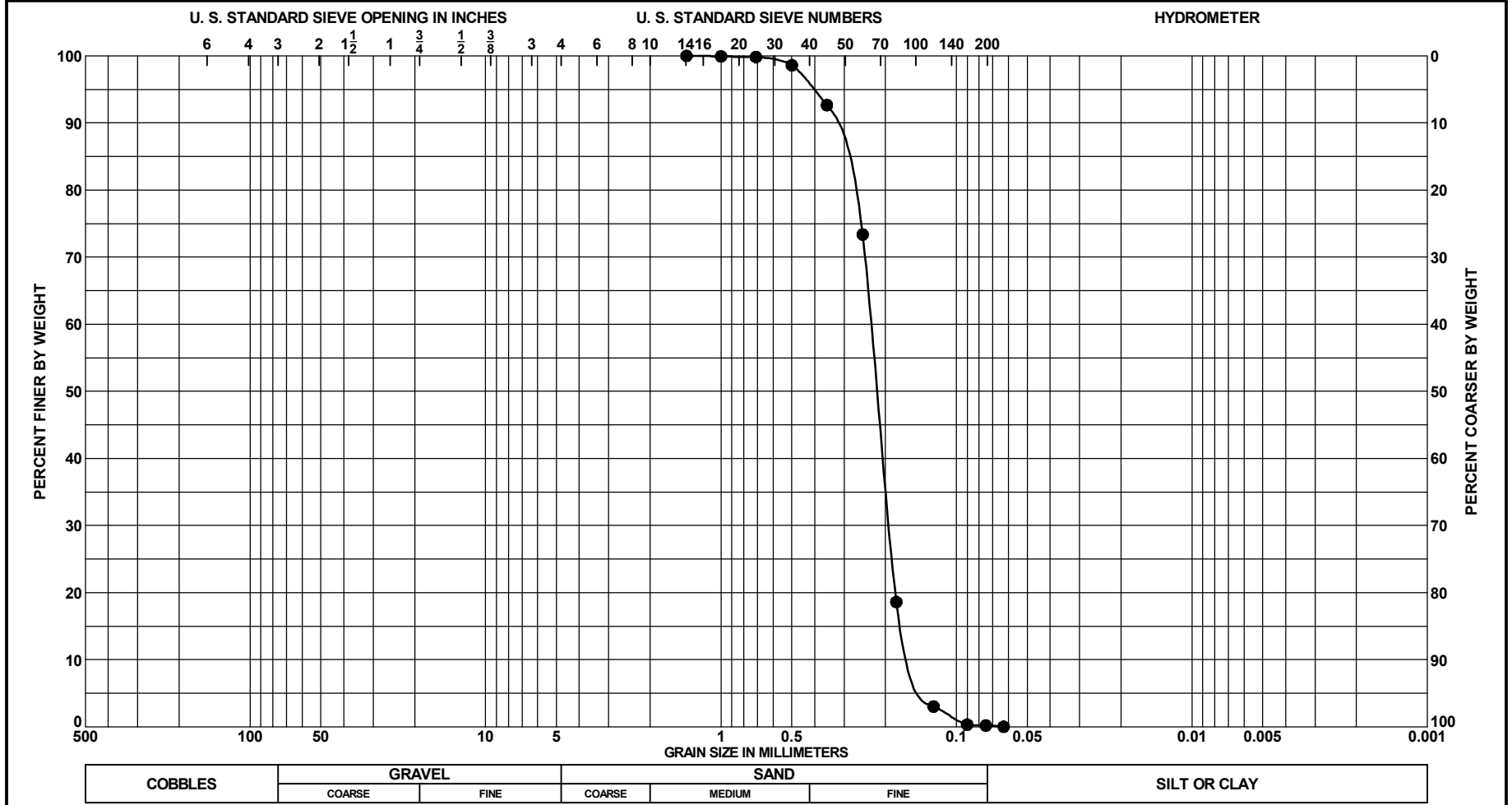
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	13.0 to 13.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, few medium sand-size shell fragments, dark gray (SM)	10YR 4/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-22
											BORING ELEV. -47.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



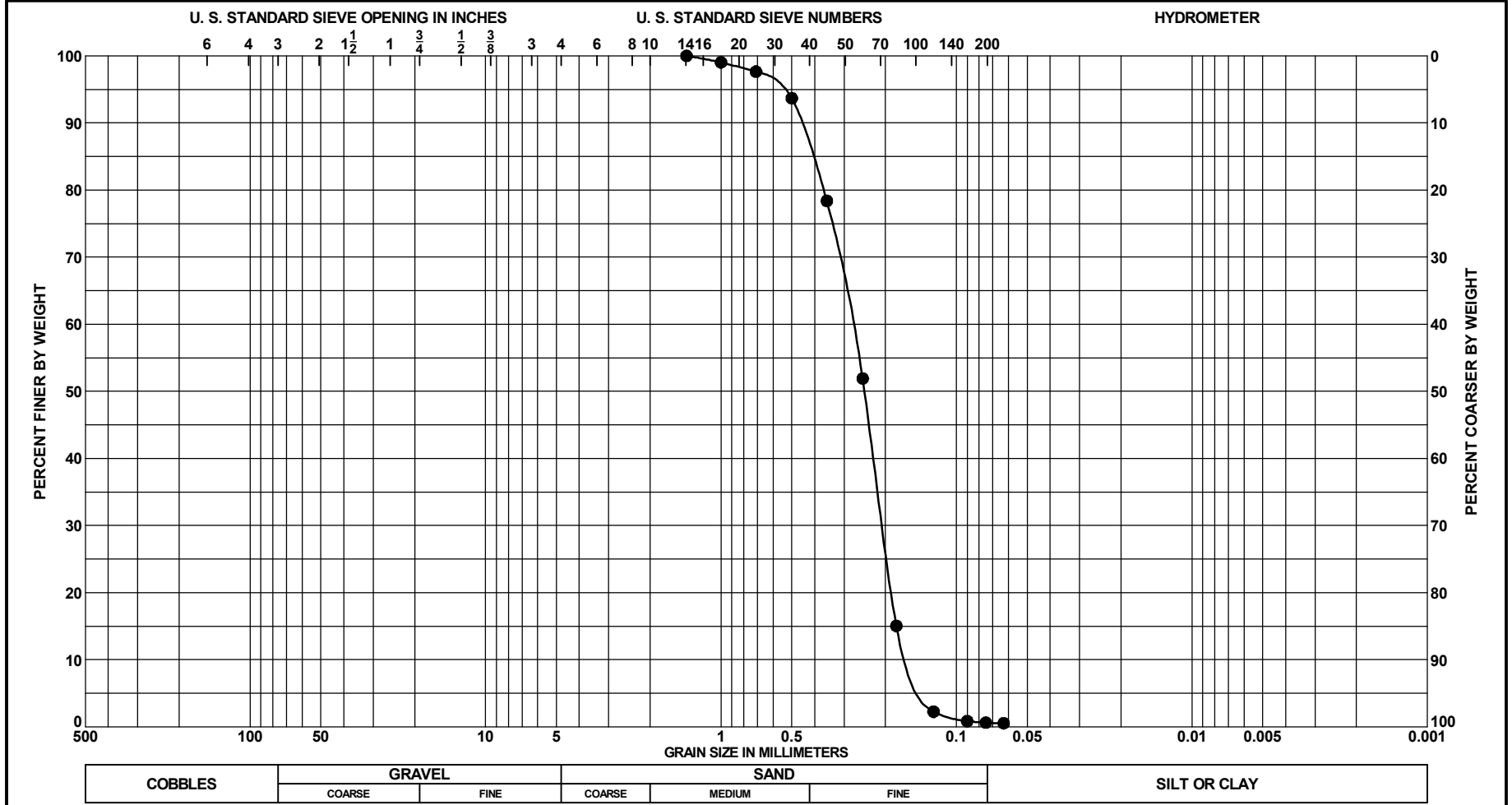
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	11 (est)							St. Johns County Offshore Investigation Part II	3/18/2010
											BORING NO. VB-SJSP09-23	
											BORING ELEV. -47.1 Ft., NAVD88	



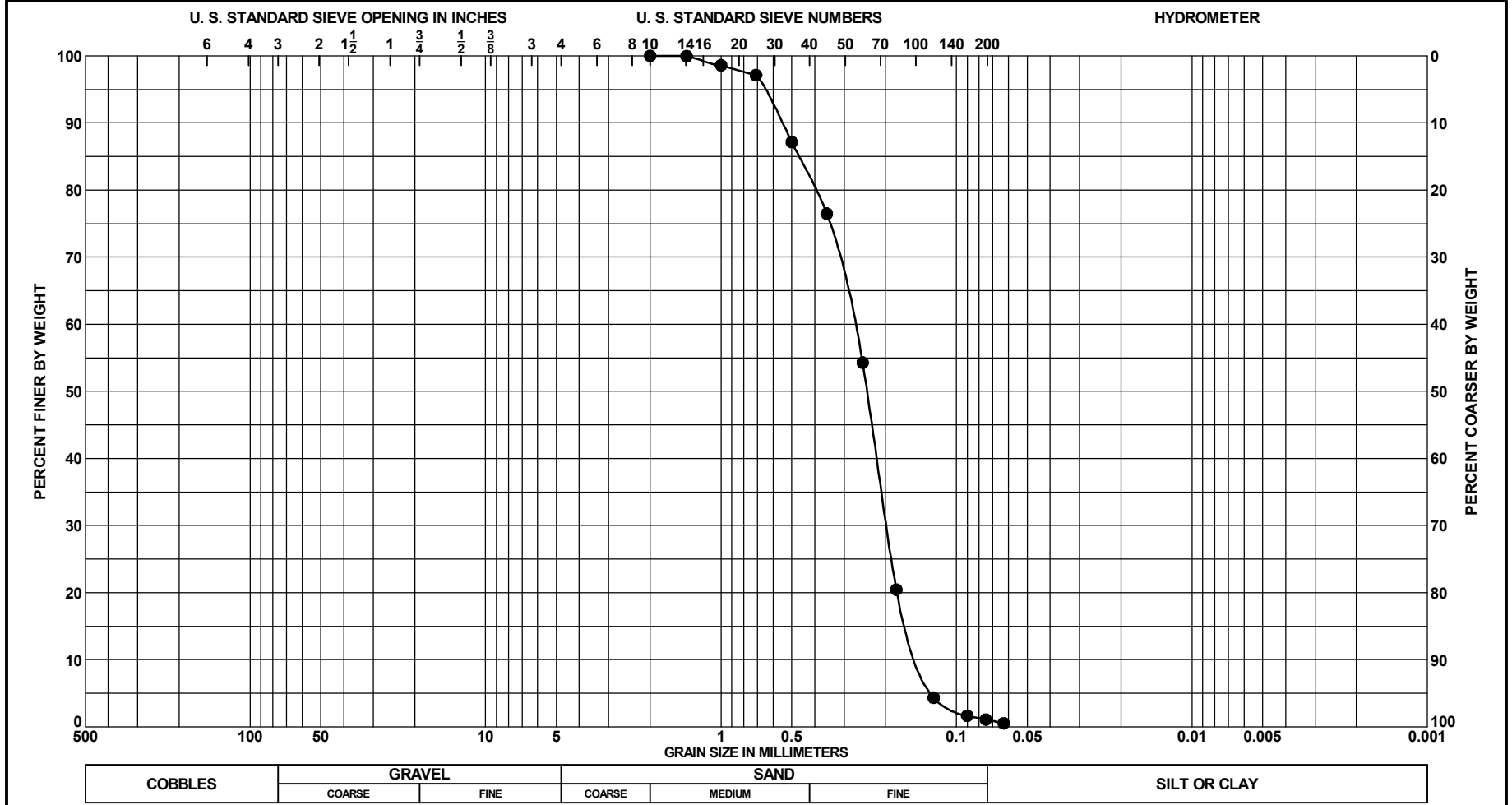
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	6/4 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-23
											BORING ELEV.	-47.1 Ft., NAVD88
											DATE	3/18/2010



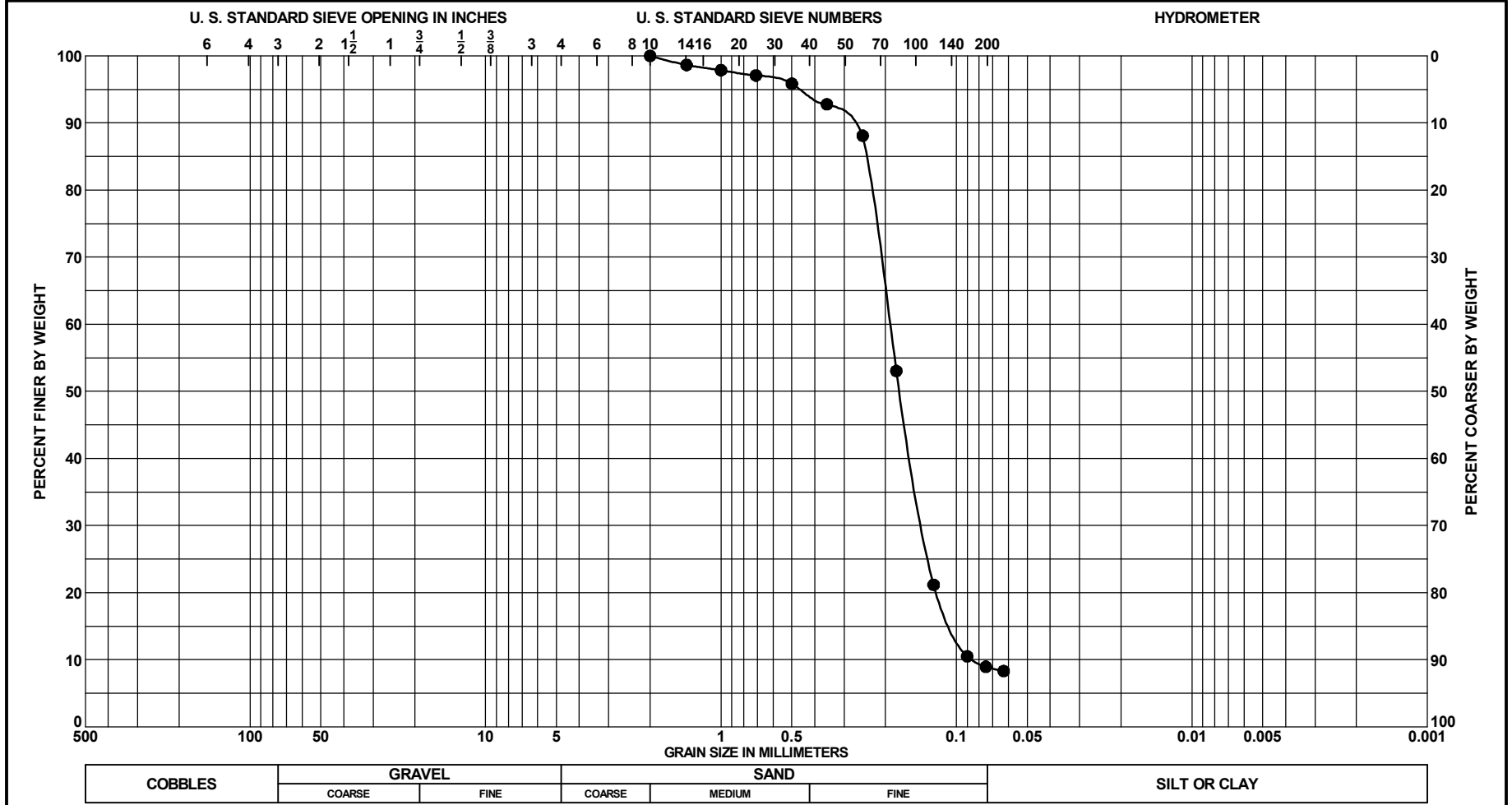
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION		
											COBBLES	SILT OR CLAY	
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1										
GRADATION CURVES												PROJECT	St. Johns County Offshore
													Investigation Part II
												BORING NO.	VB-SJSP09-23
												BORING ELEV.	-47.1 Ft., NAVD88
												DATE	4/6/2010



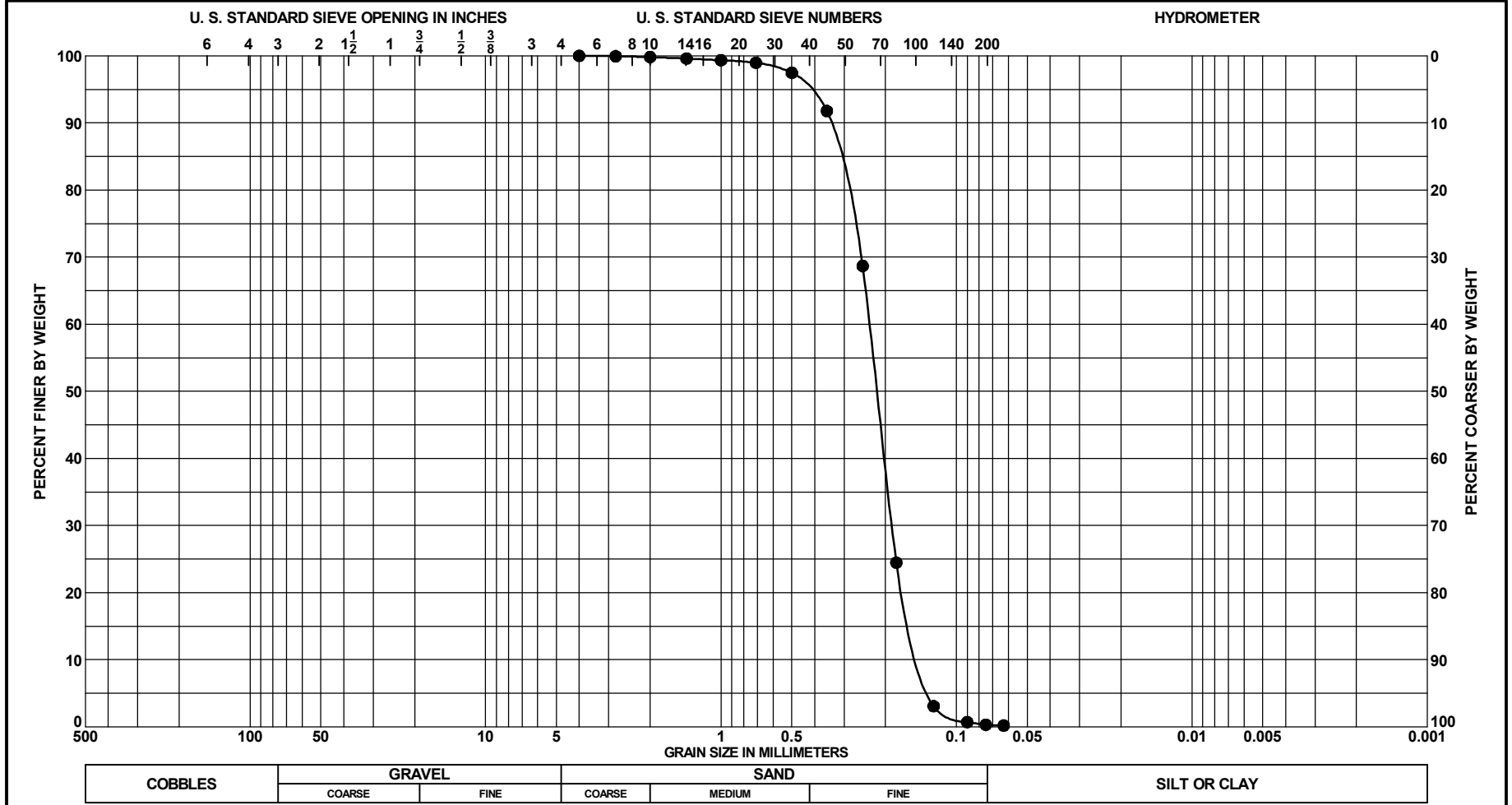
COBBLES		GRAVEL		SAND			SILT OR CLAY							
		COARSE	FINE	COARSE	MEDIUM	FINE								
Sample No.	Depth	Classification			Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT	St. Johns County Offshore
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)			10YR 7/1	9 (est)							Investigation Part II	
													BORING NO.	VB-SJSP09-24
													BORING ELEV.	-48.4 Ft., NAVD88
GRADATION CURVES												DATE	3/18/2010	



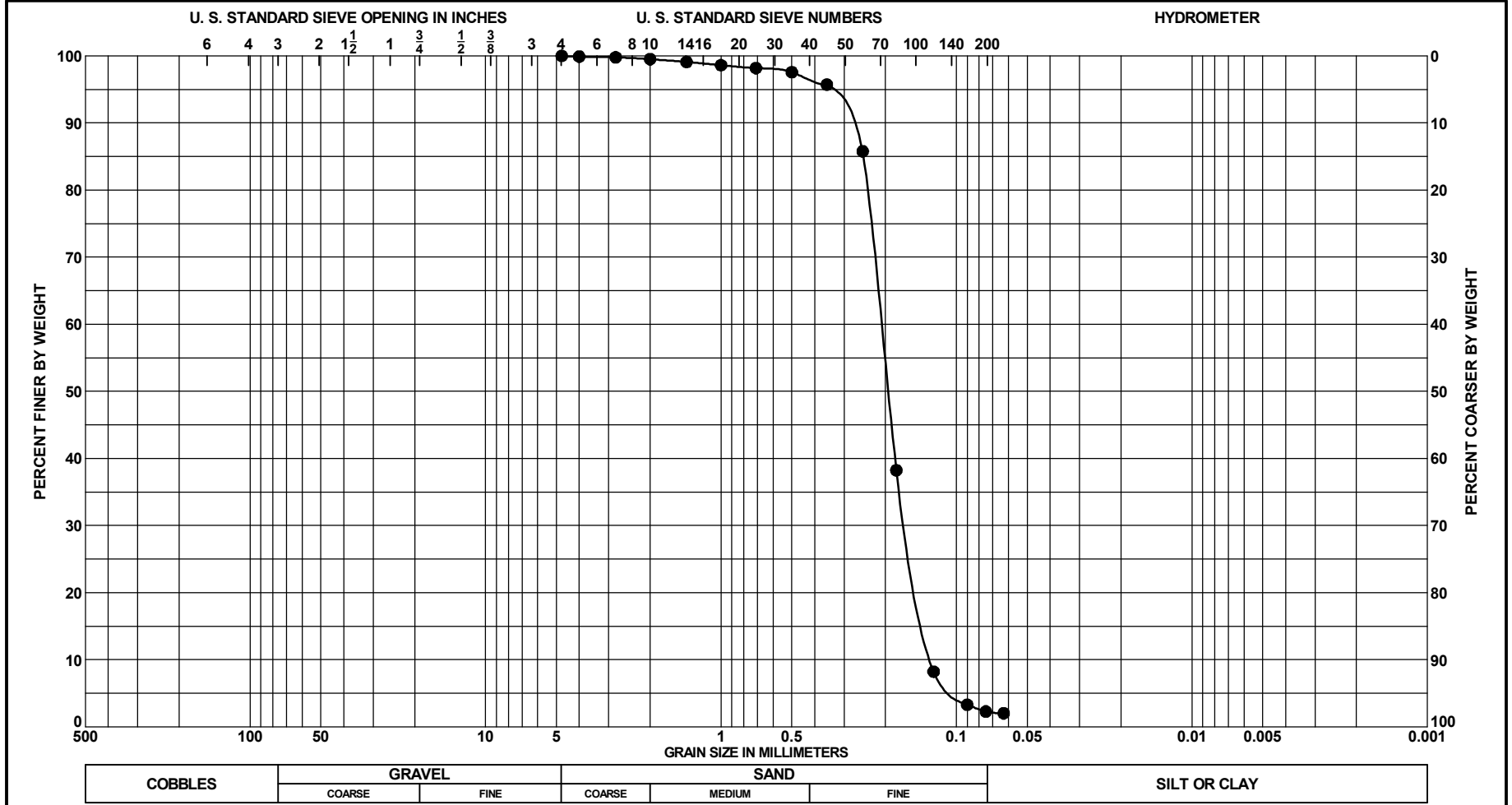
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly medium to fine-grained quartz sand, light gray (SP)	10YR 7/1									
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-24
											BORING ELEV.	-48.4 Ft., NAVD88
											DATE	4/6/2010



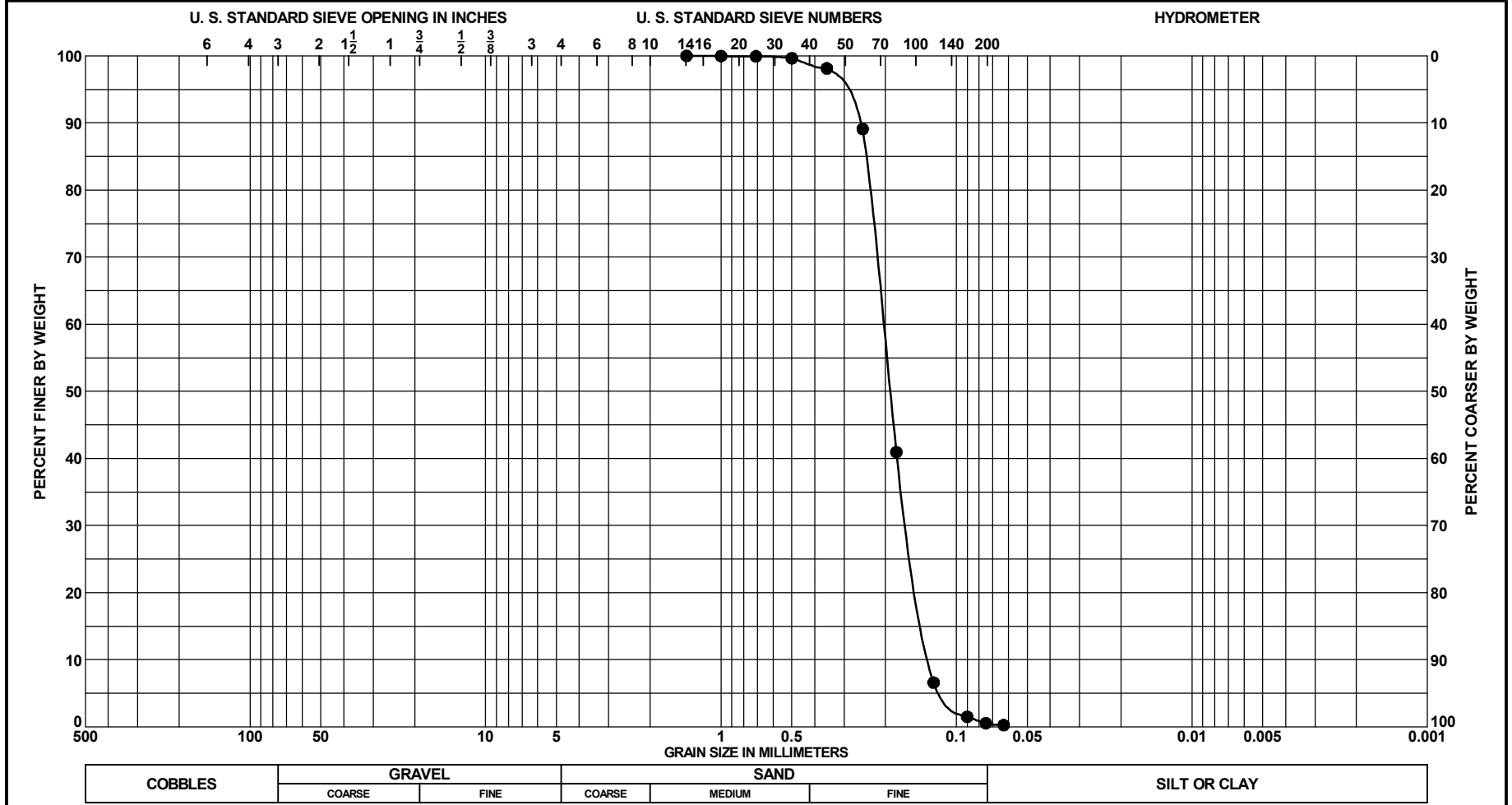
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 3	8.5 to 9.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 5/1	5 (est)							St. Johns County Offshore Investigation Part II	3/18/2010
											BORING NO.	VB-SJSP09-24
											BORING ELEV.	-48.4 Ft., NAVD88



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, light gray (SP)	10YR 7/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-25
											BORING ELEV. -43.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

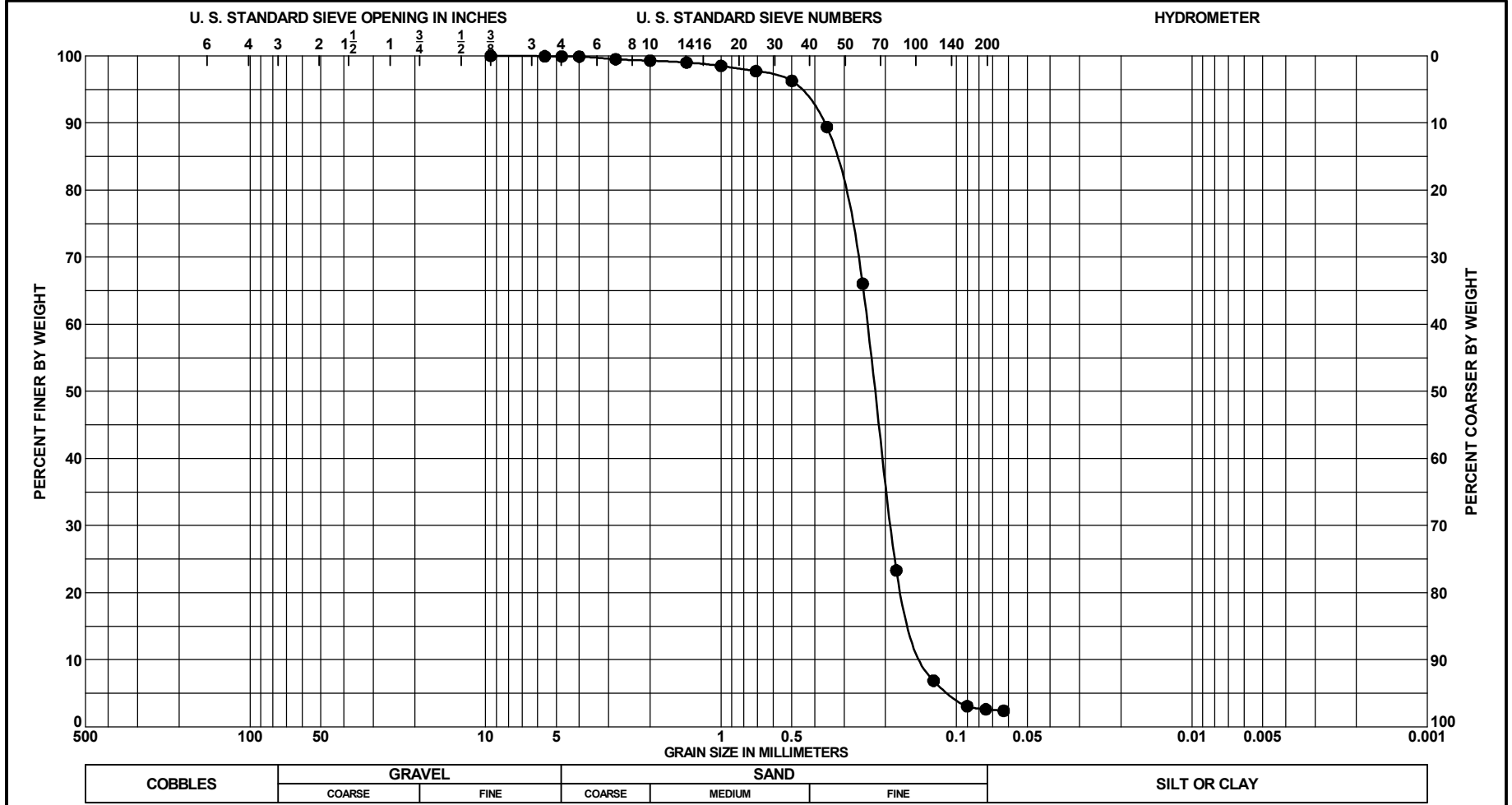


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, light gray (SP)	10YR 7/1	6/5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-25
											BORING ELEV. -43.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

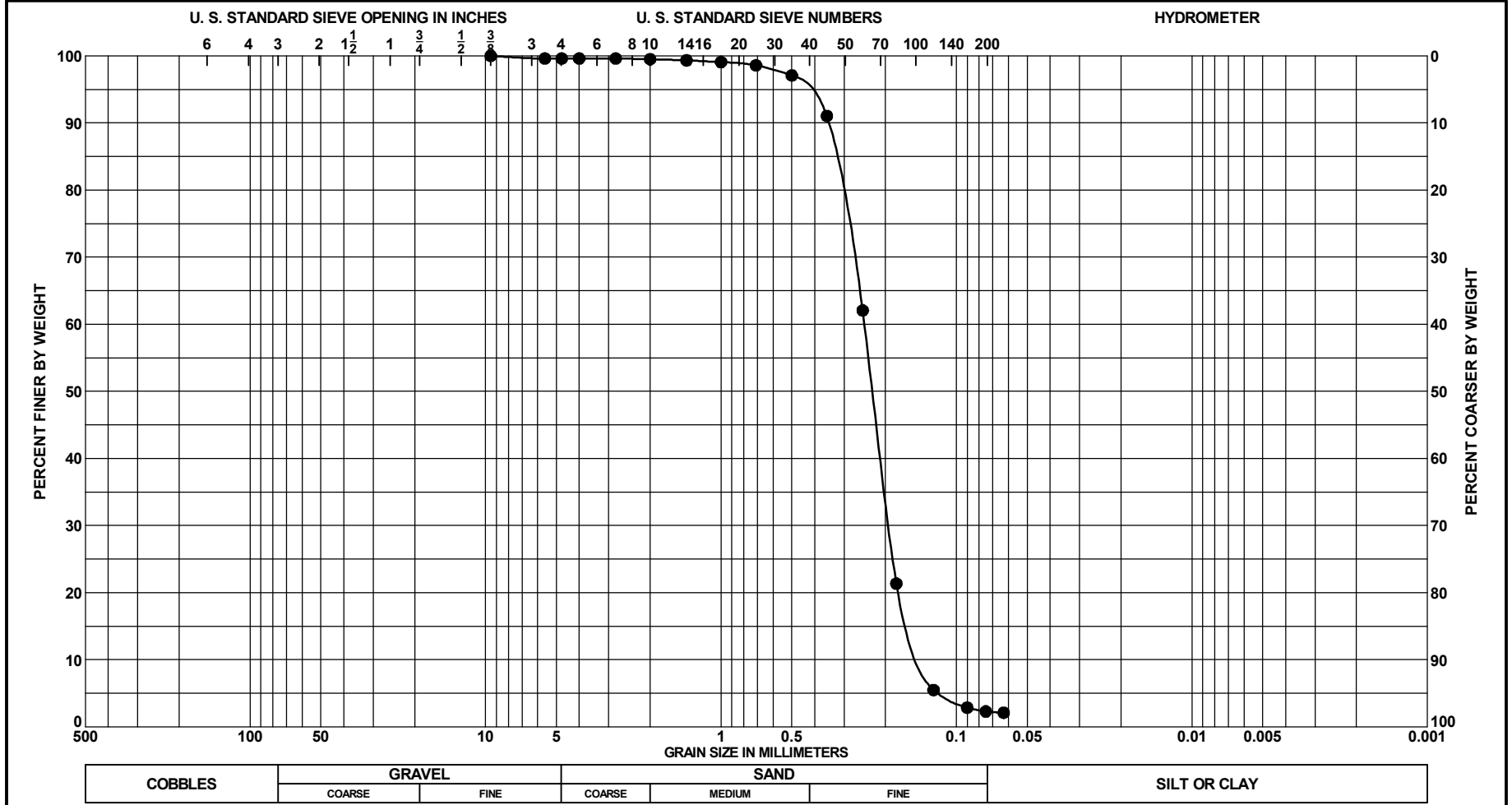


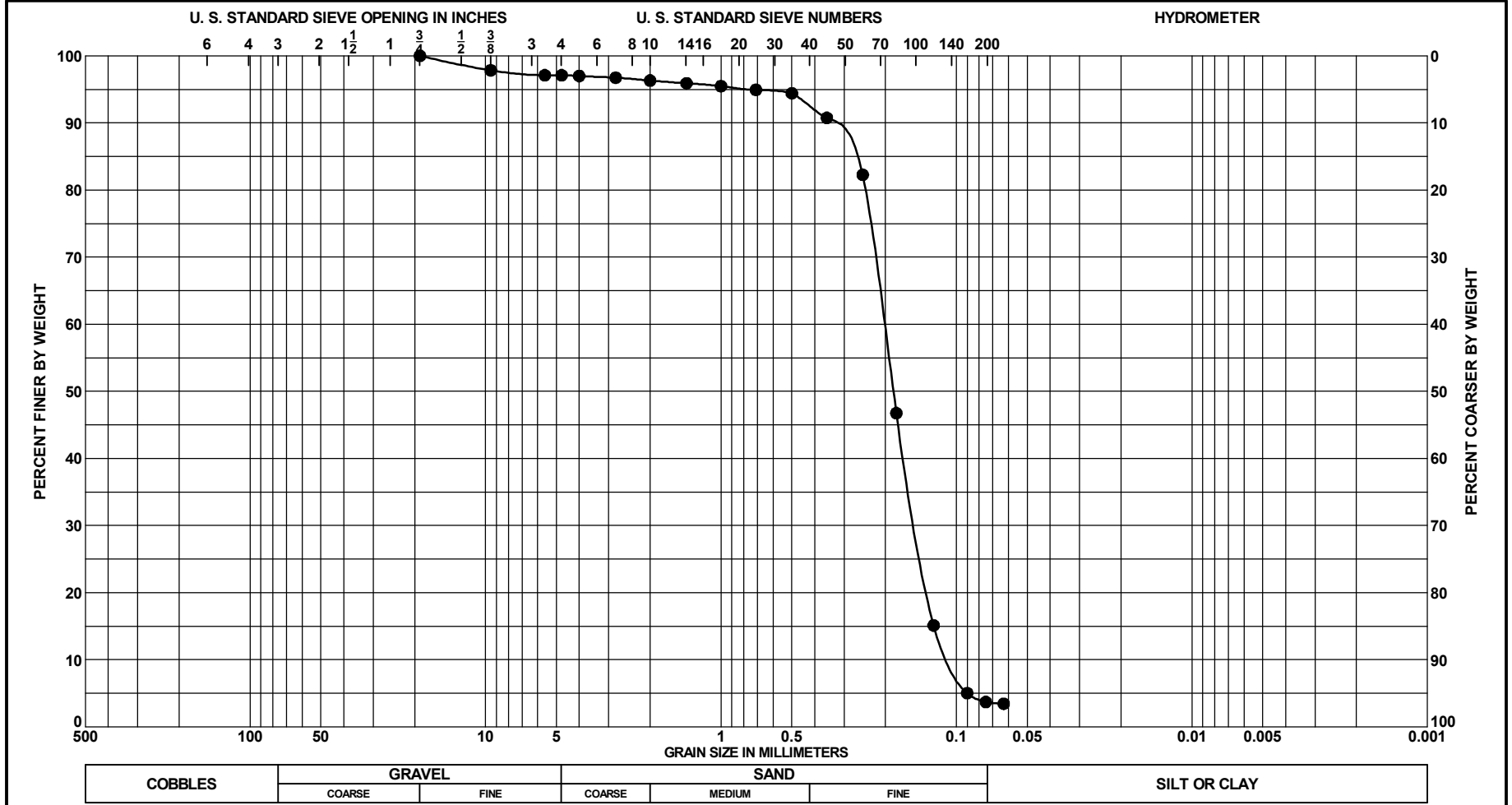
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-25
											BORING ELEV. -43.3 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010

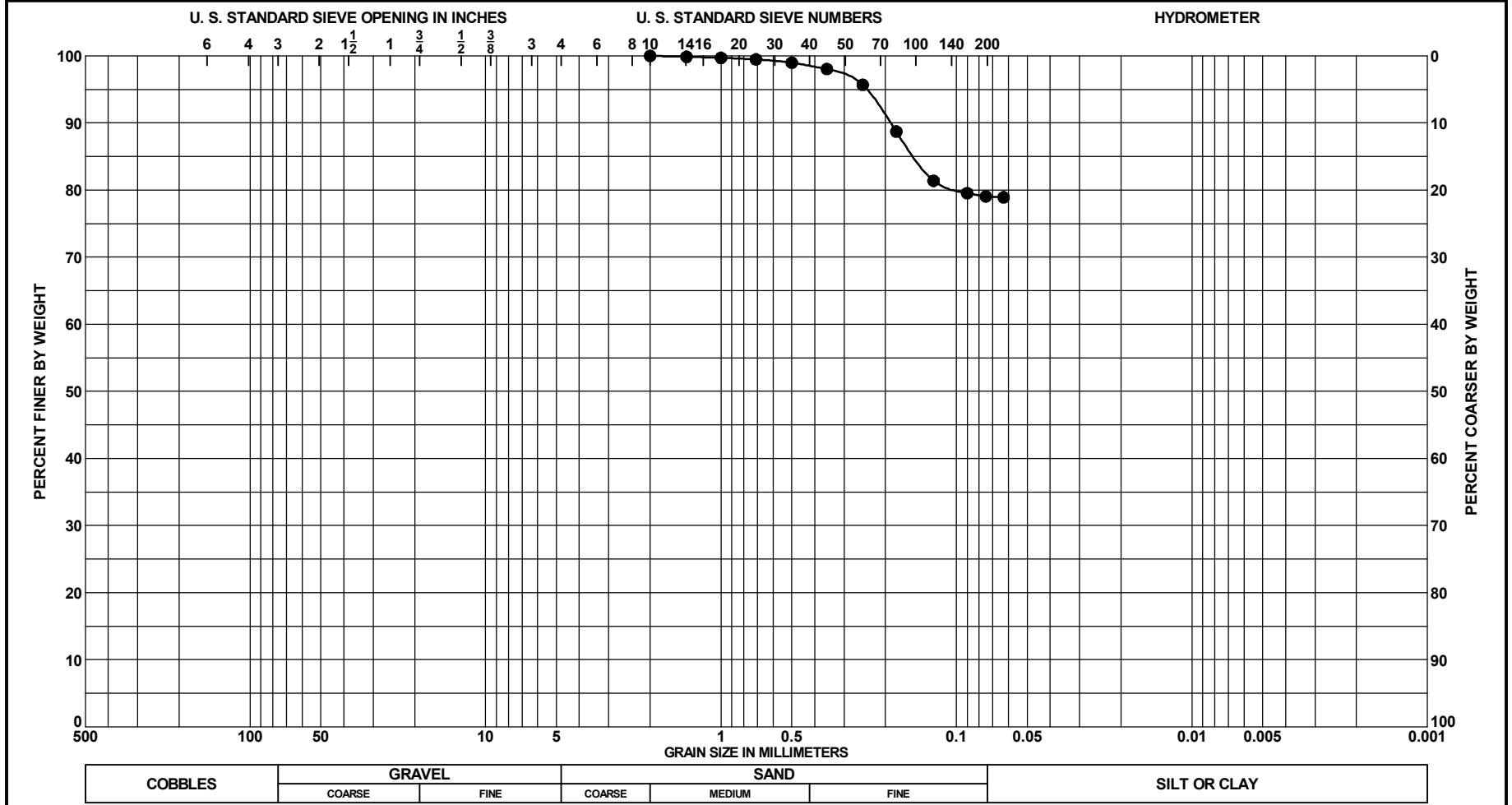


		GRAVEL		SAND			SILT OR CLAY							
		COARSE	FINE	COARSE	MEDIUM	FINE								
Sample No.	Depth	Classification				Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)				10YR 7/1	8 (est)							St. Johns County Offshore Investigation Part II
													BORING NO.	
													VB-SJSP09-25	
													BORING ELEV.	
													-43.3 Ft., NAVD88	
GRADATION CURVES												DATE		
												4/5/2010		

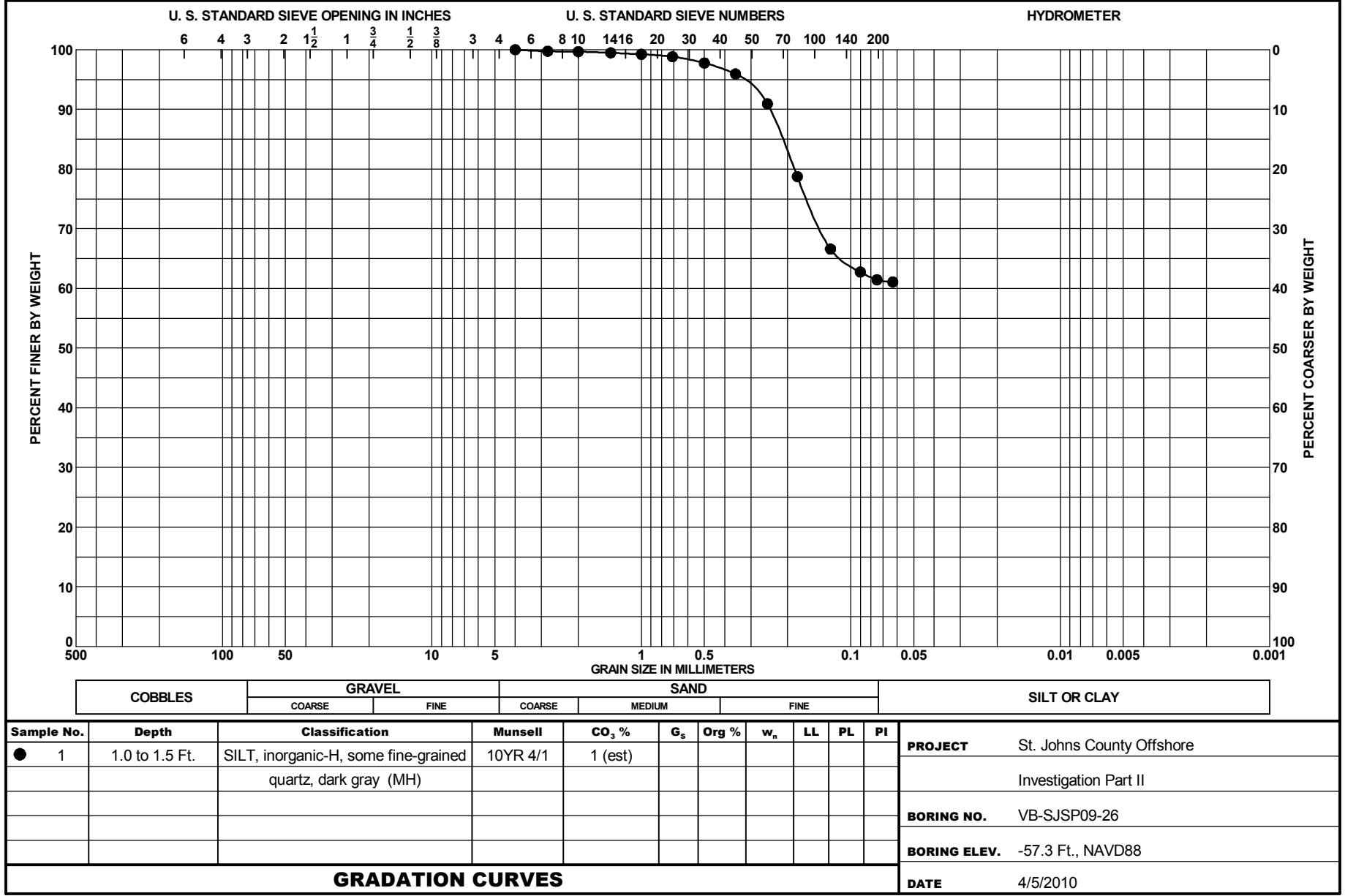




Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 5	13.0 to 13.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	8 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-25
											BORING ELEV.	-43.3 Ft., NAVD88
											DATE	4/5/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
6	17.0 to 17.5 Ft.	CLAY, inorganic-H, little fine-grained quartz, very dark gray (CH)	10YR 3/1	0 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-25
											BORING ELEV. -43.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

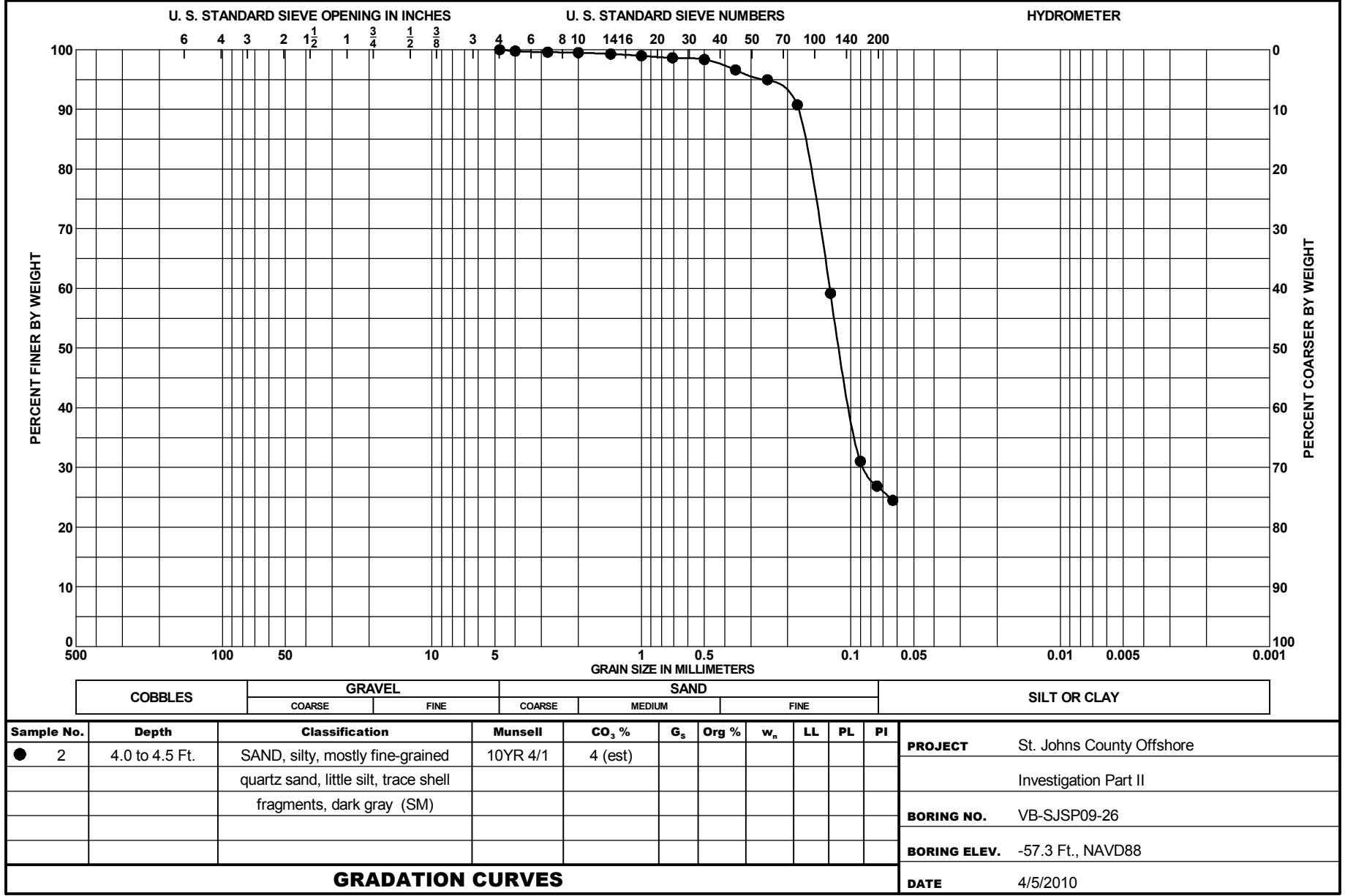


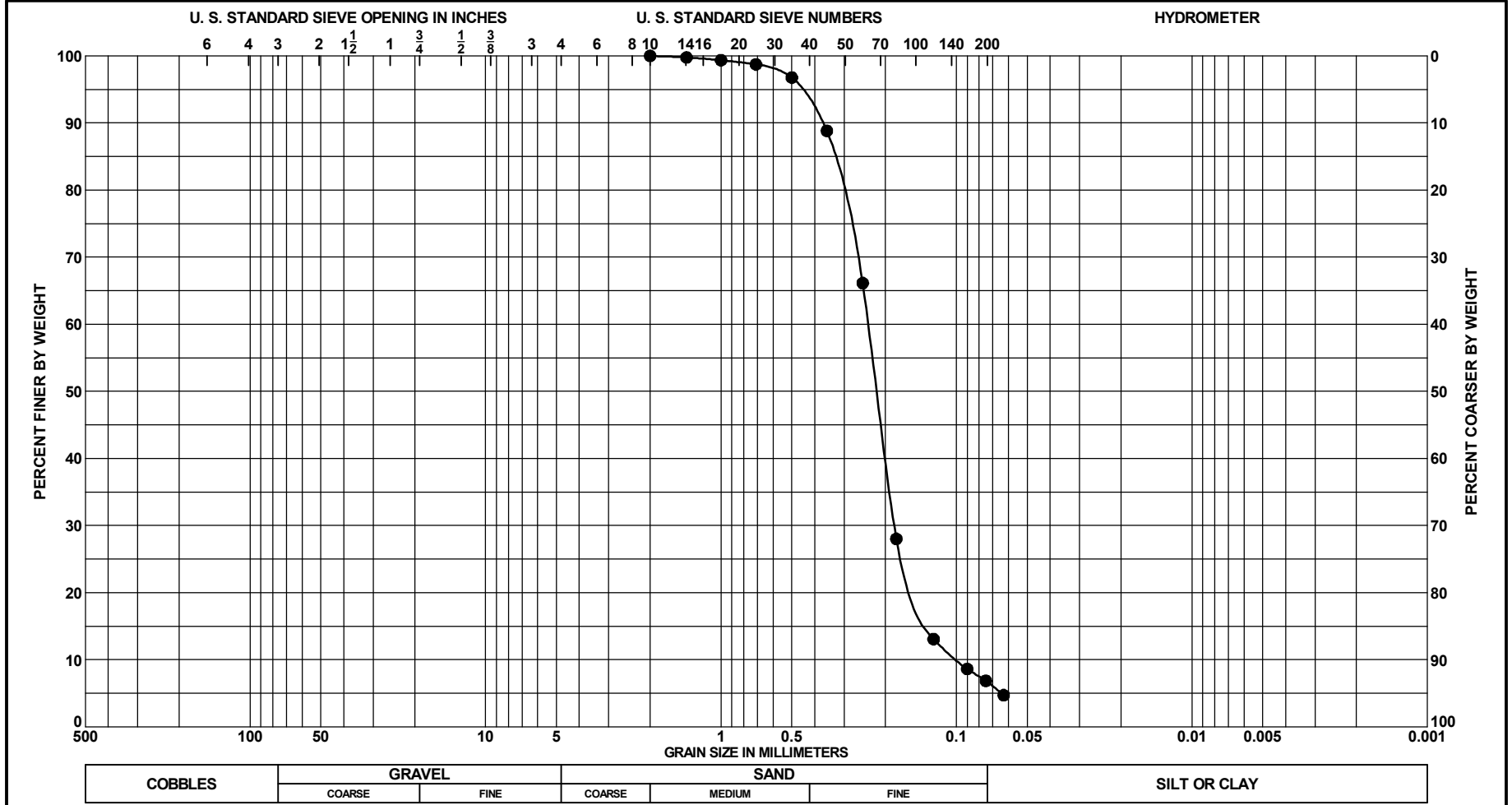
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 1	1.0 to 1.5 Ft.	SILT, inorganic-H, some fine-grained quartz, dark gray (MH)	10YR 4/1	1 (est)						

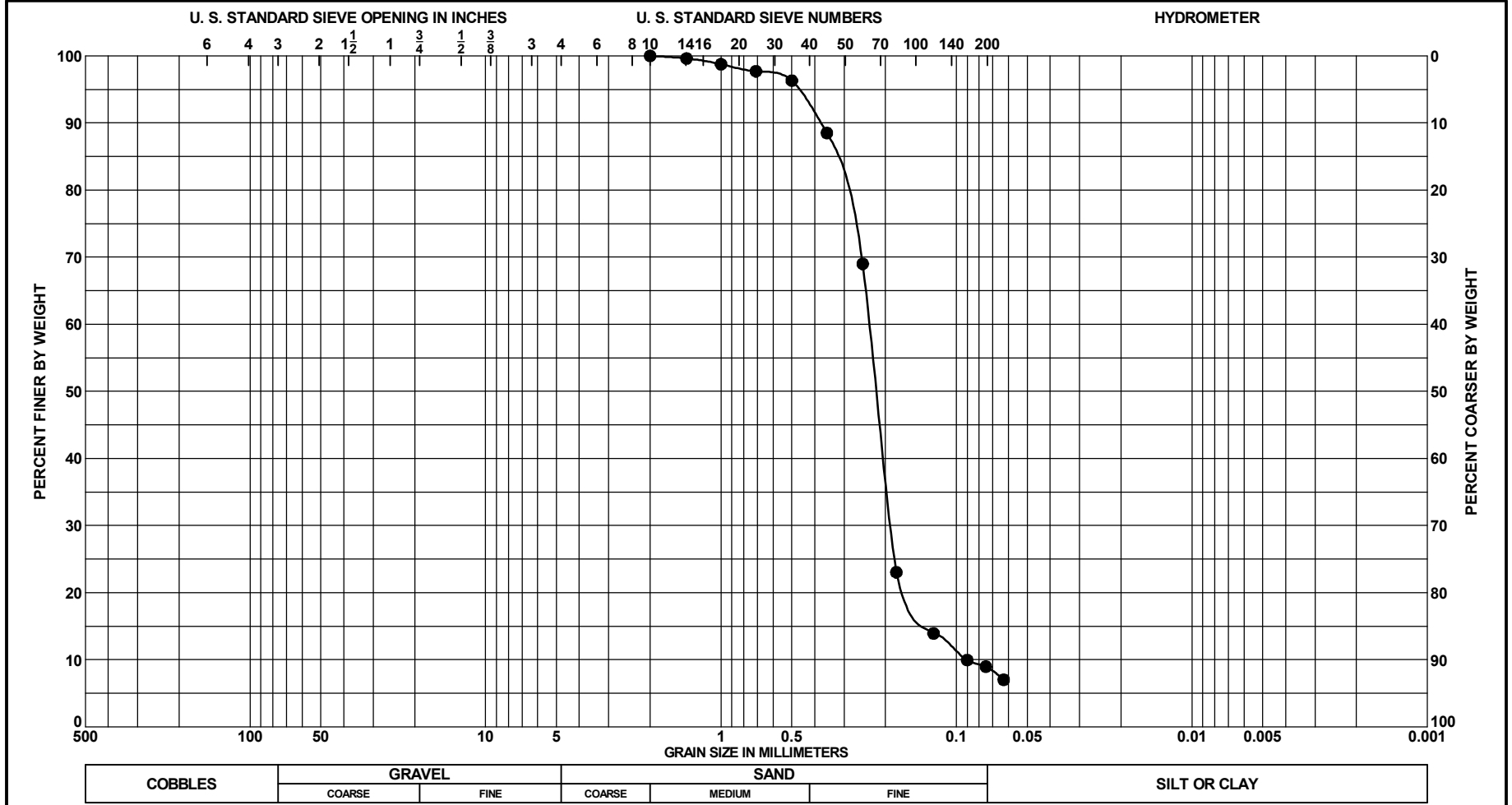
PROJECT	St. Johns County Offshore
	Investigation Part II
BORING NO.	VB-SJSP09-26
BORING ELEV.	-57.3 Ft., NAVD88
DATE	4/5/2010

GRADATION CURVES

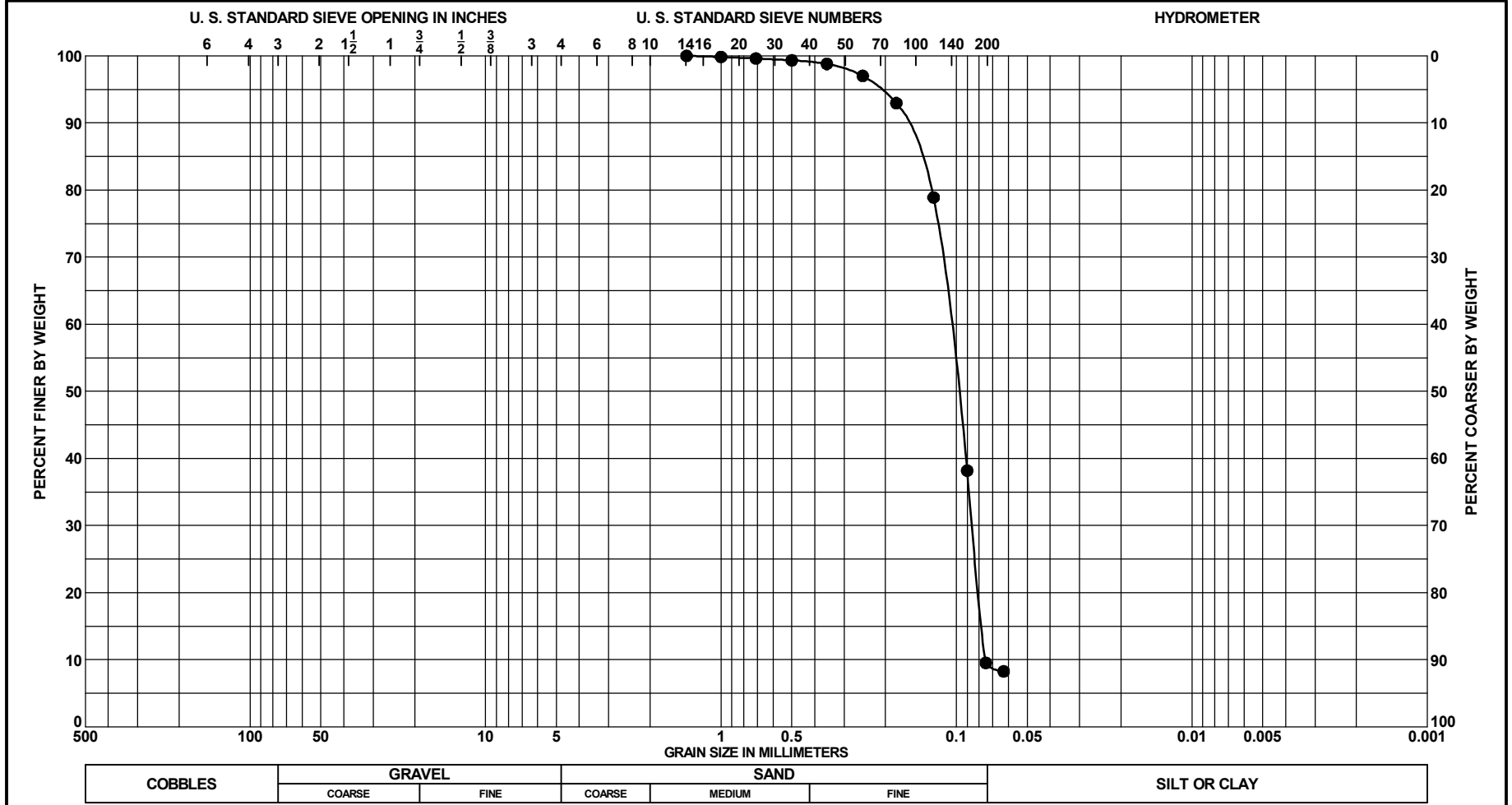




Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, light gray (SP-SM)	10YR 7/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-27
											BORING ELEV. -52.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

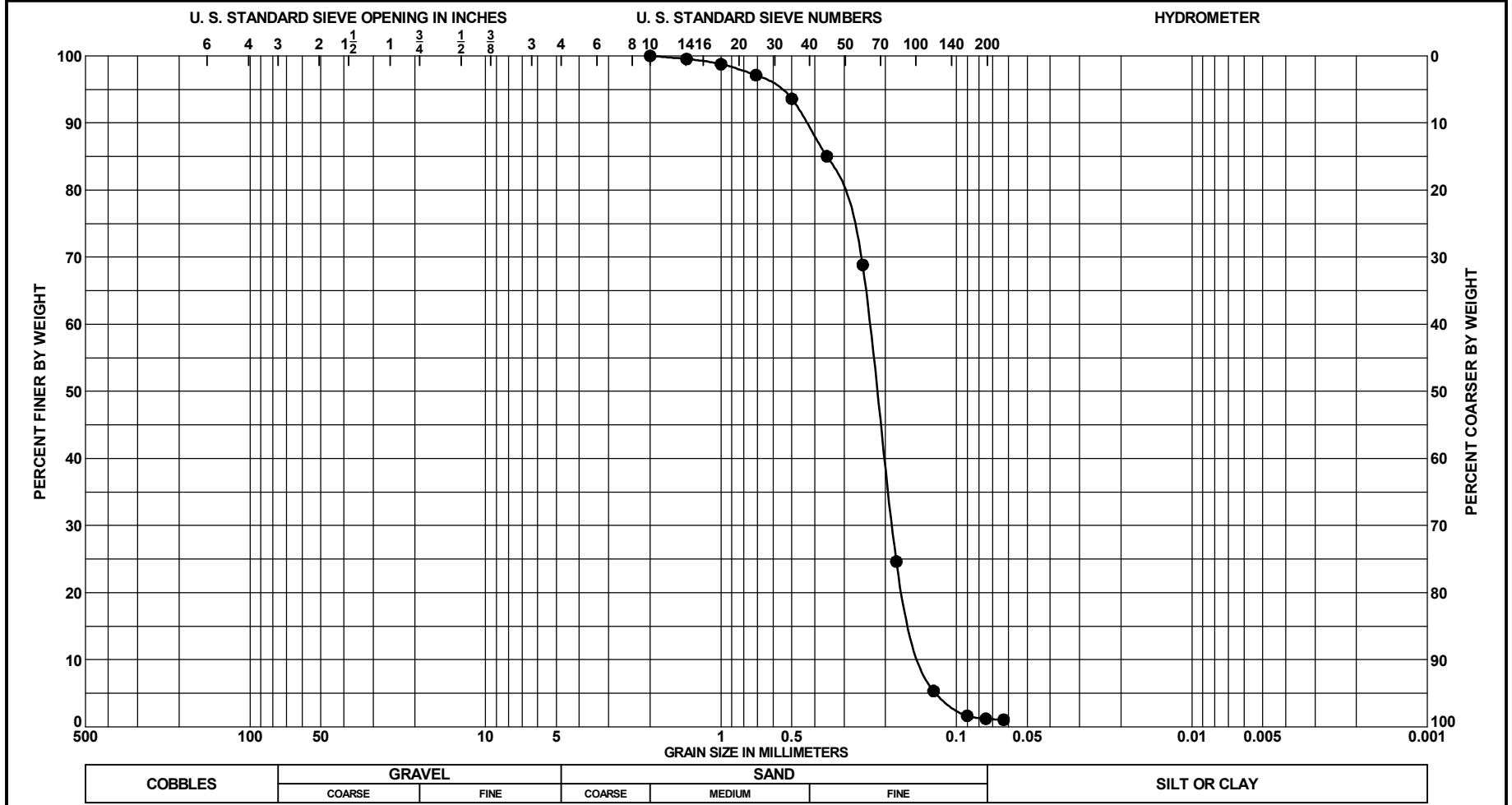


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 3	8.5 to 9.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	14 (est)							St. Johns County Offshore Investigation Part II	3/18/2010
											BORING NO.	VB-SJSP09-27
											BORING ELEV.	-52.3 Ft., NAVD88

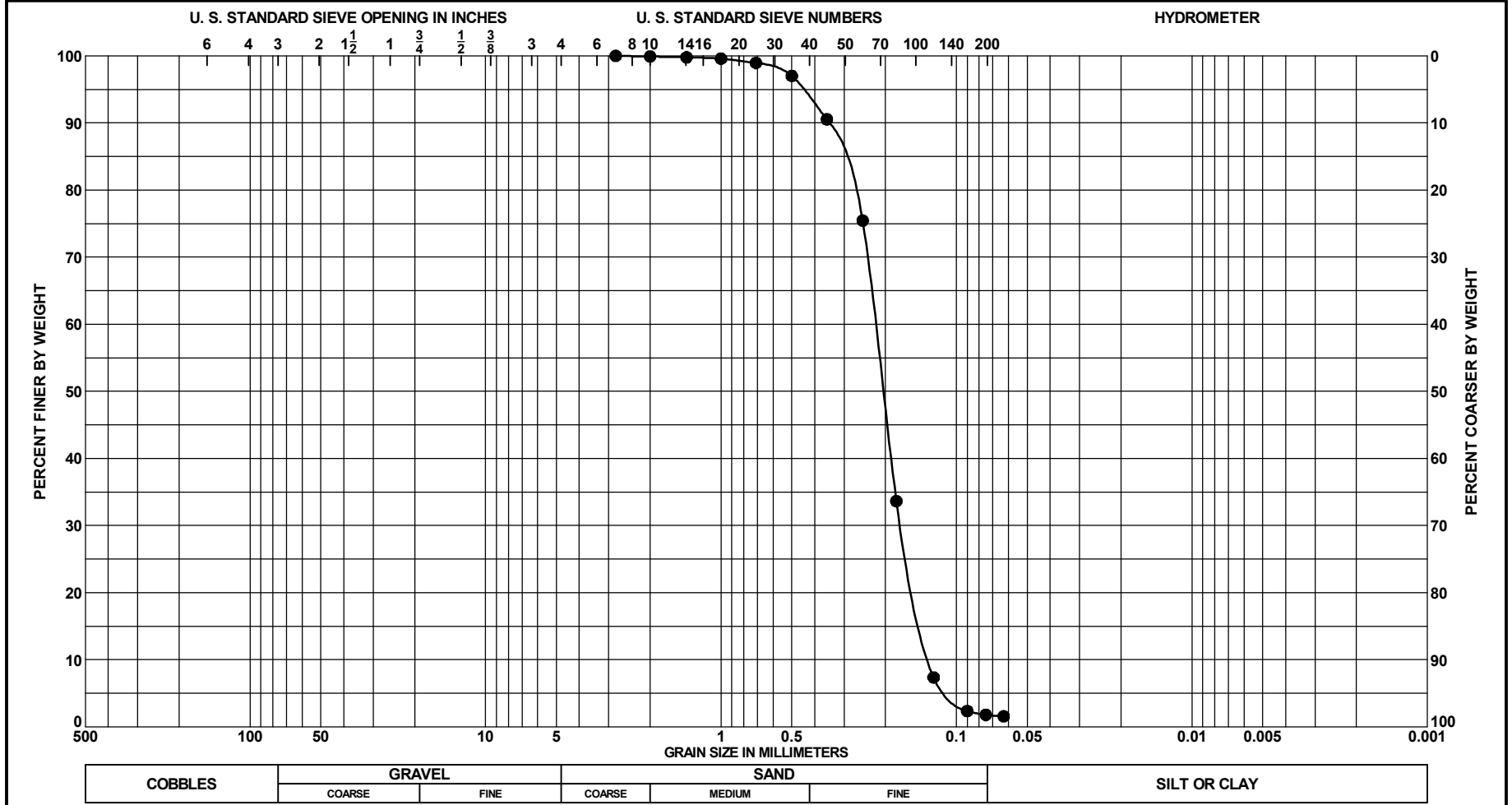


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

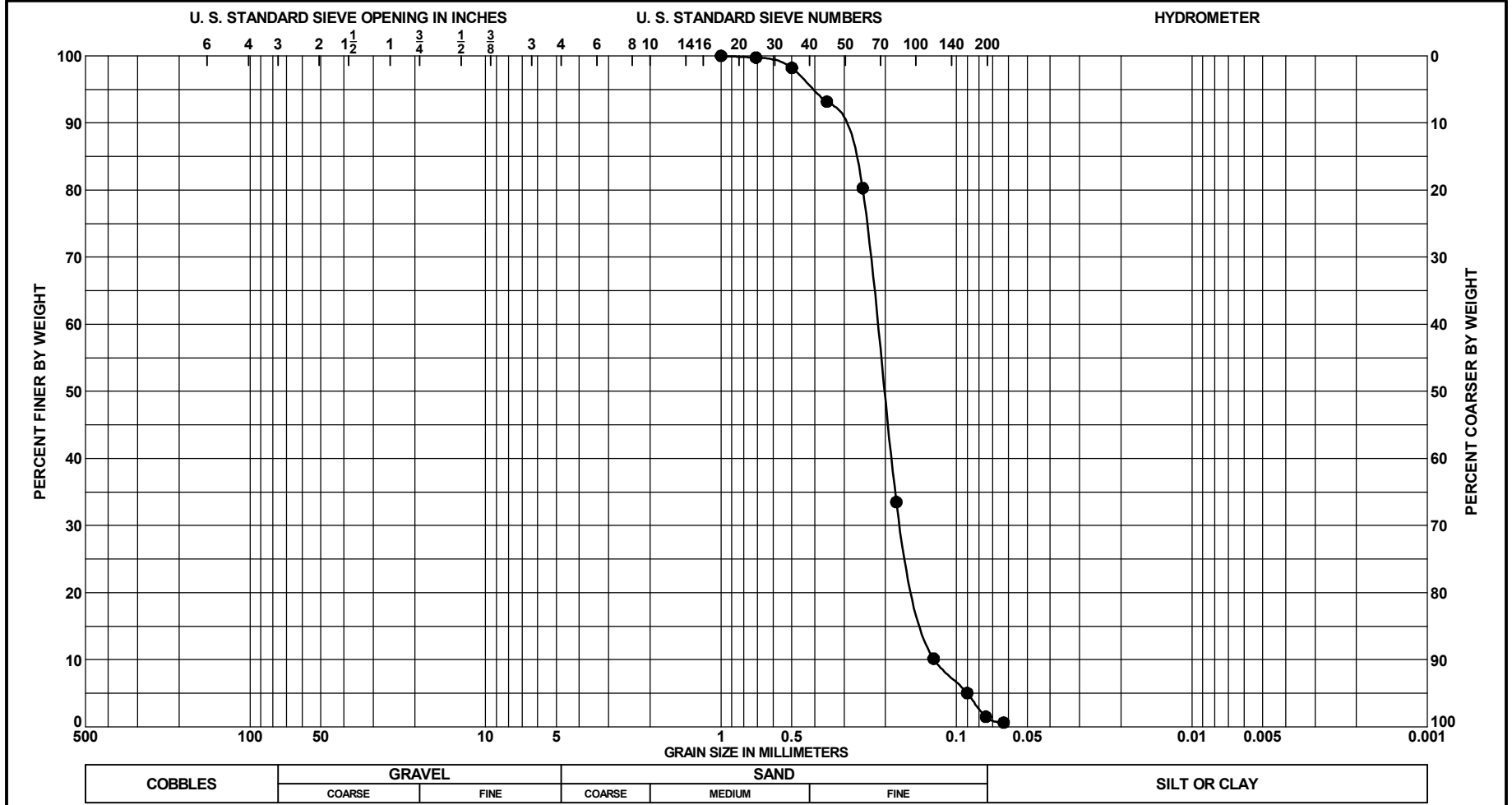
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	10.5 to 11.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, gray (SP-SM)	10YR 6/1	2 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-27
											BORING ELEV. -52.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly medium to fine-grained quartz sand, trace shell fragments, gray (SP)	10YR 6/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-28
											BORING ELEV. -47.8 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

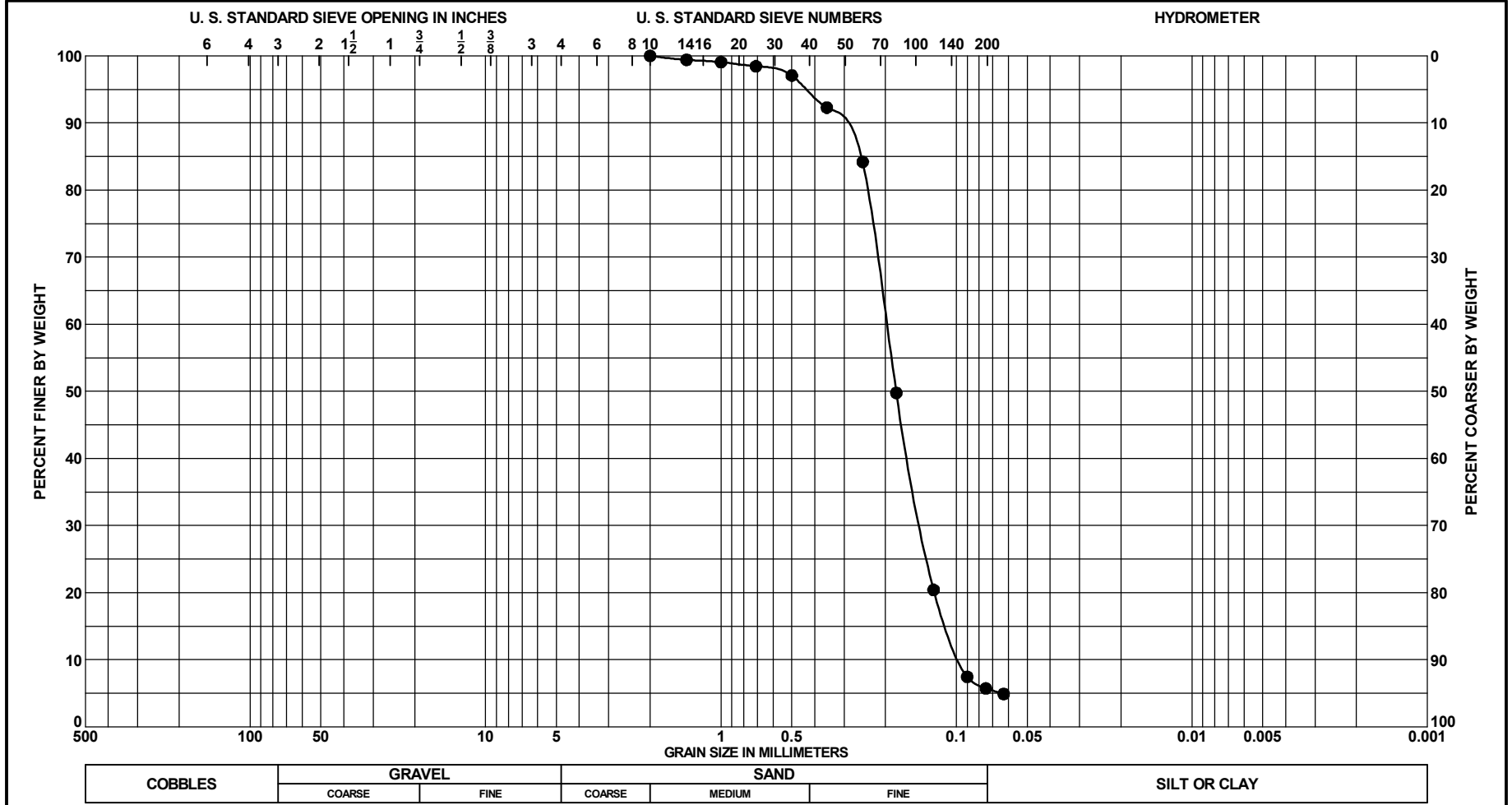


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, gray (SP)	10YR 6/1	9/4 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-28
											BORING ELEV.	-47.8 Ft., NAVD88
											DATE	3/18/2010



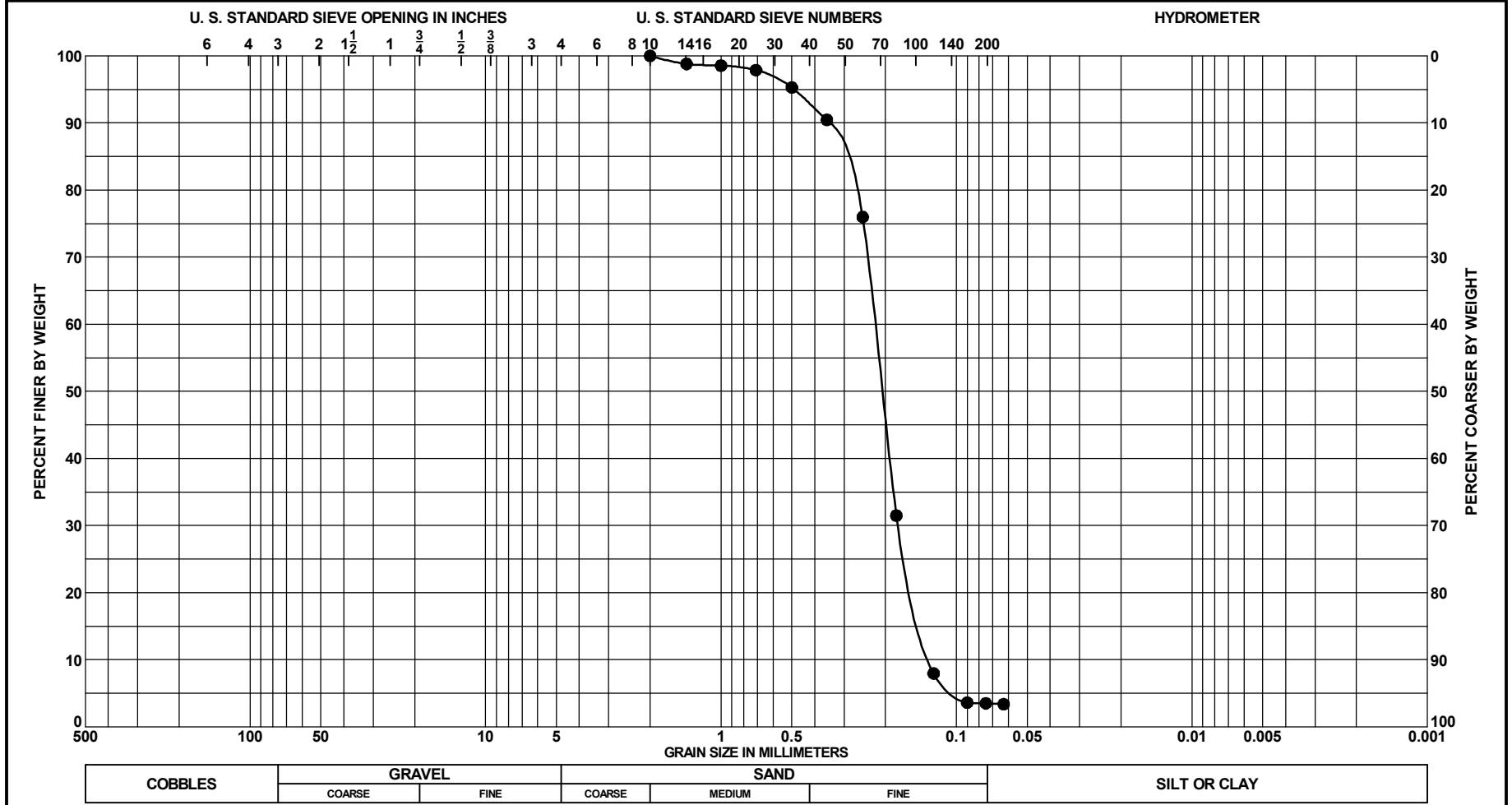
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-28
											BORING ELEV. -47.8 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010

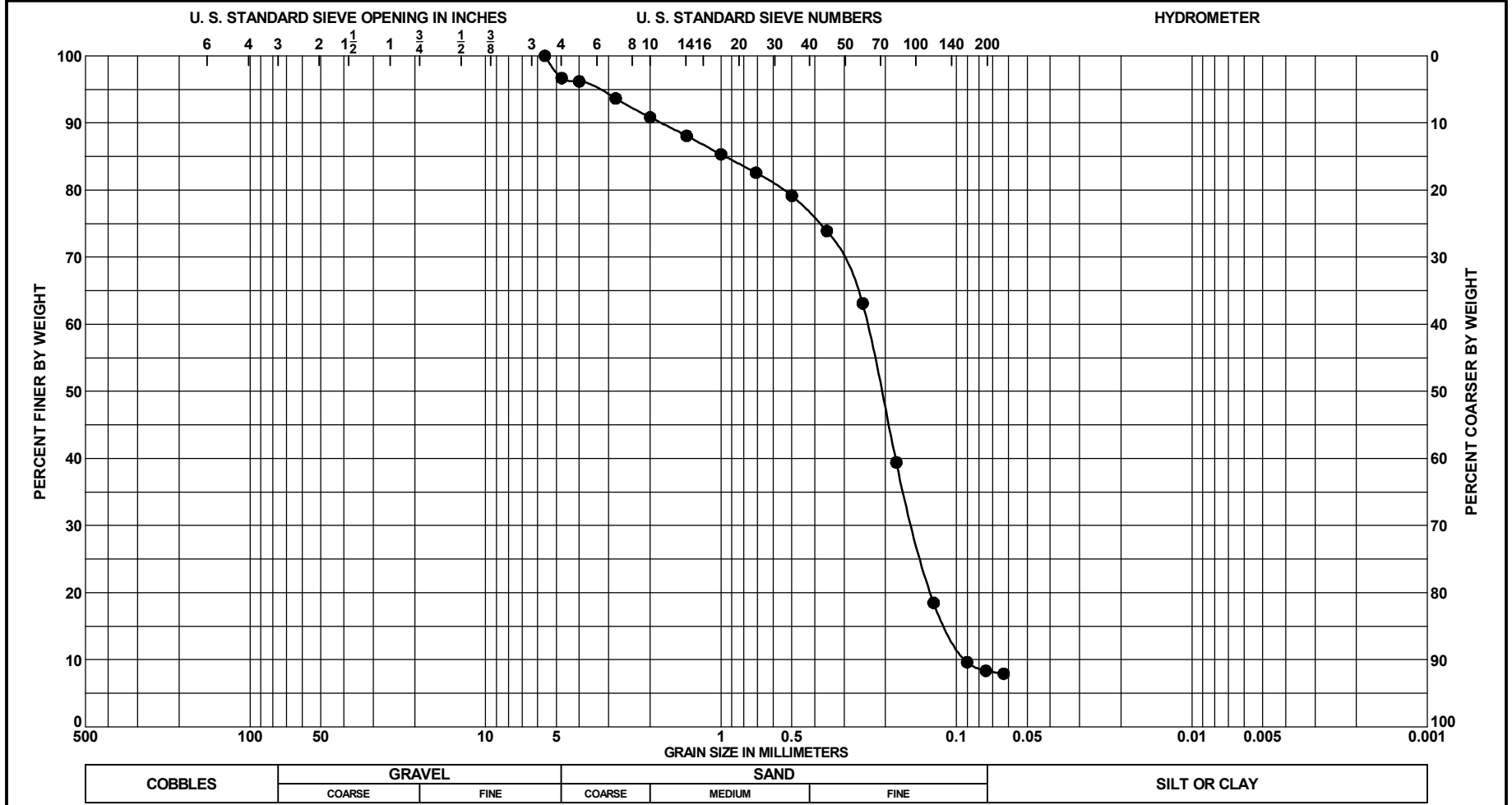


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	10.0 to 10.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, gray (SP-SM)	10YR 6/1	2 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-28
											BORING ELEV. -47.8 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

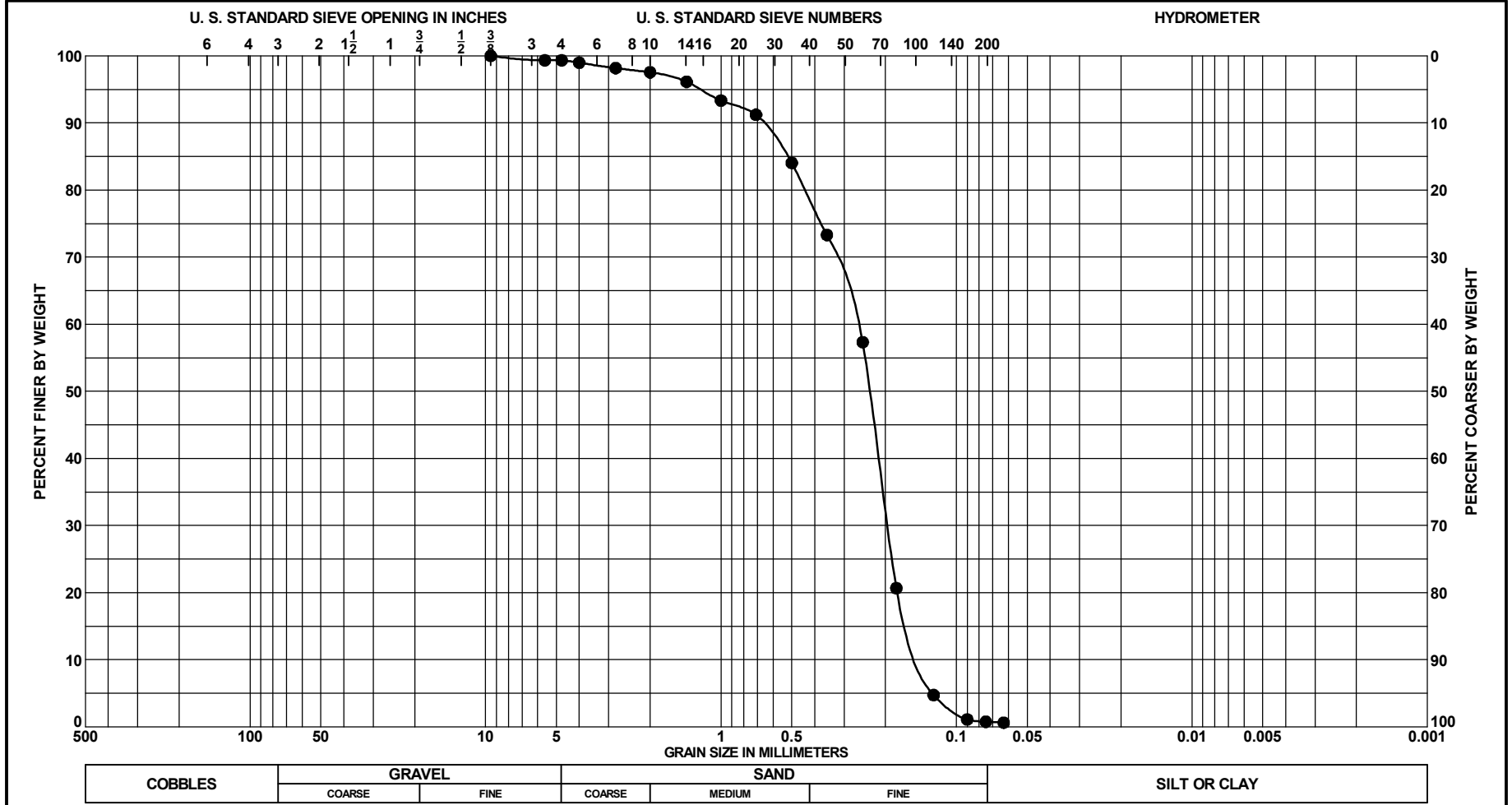


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	13.0 to 13.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-28
											BORING ELEV. -47.8 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

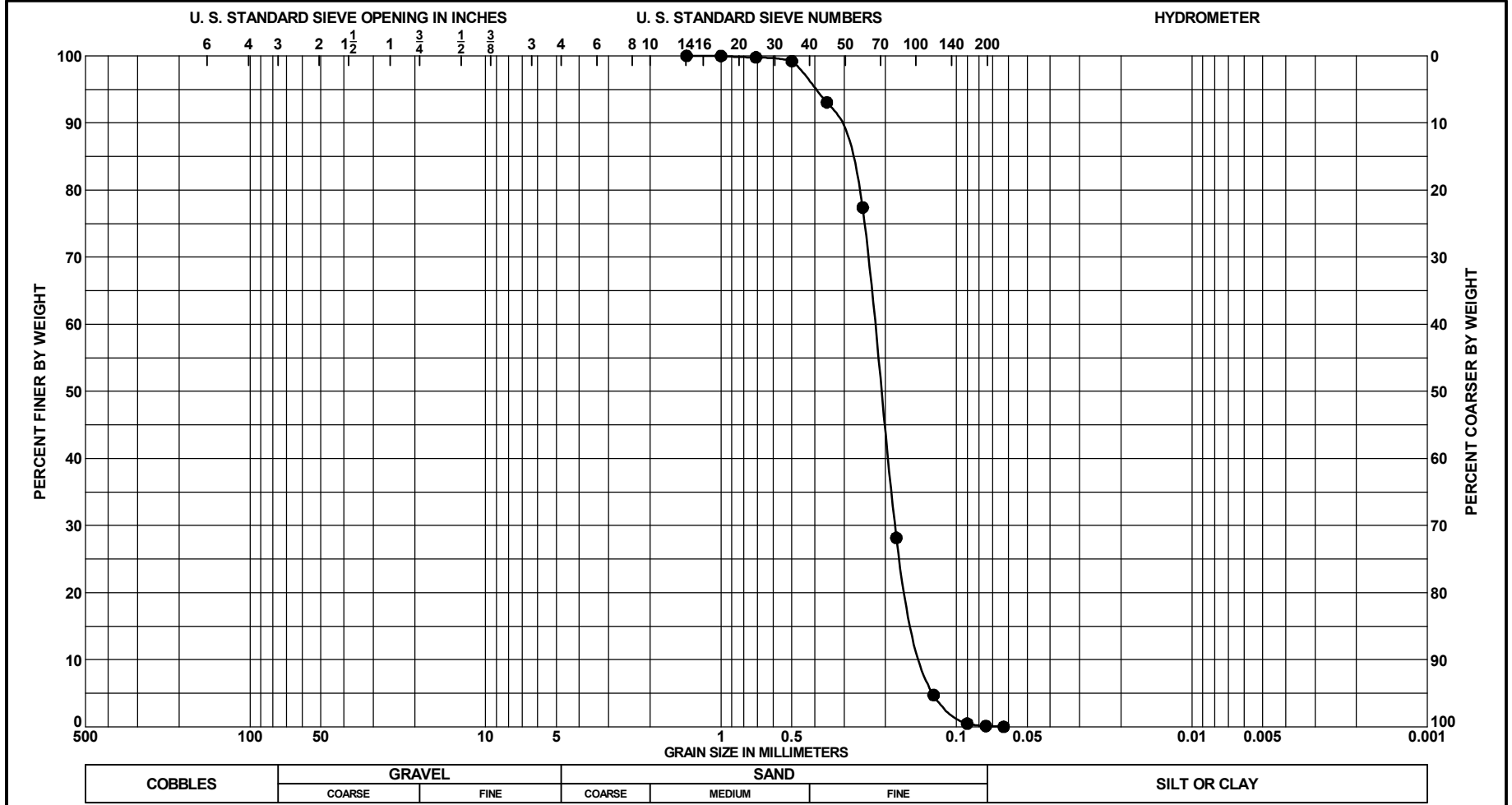


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 5	15.0 to 15.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little coarse to medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	21 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-28
											BORING ELEV. -47.8 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

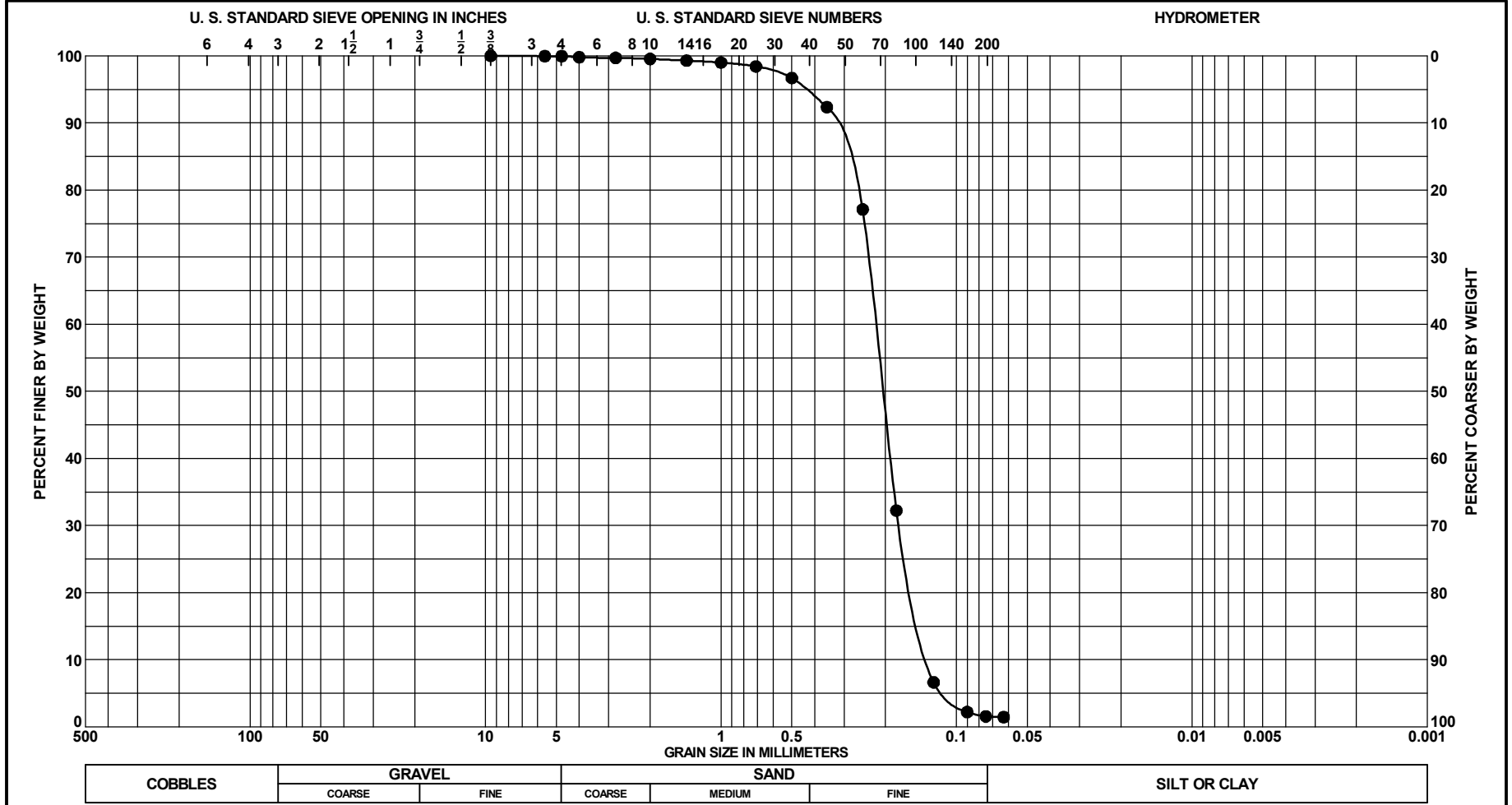


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION		
											COARSE	FINE	
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, light gray (SP)	10YR 7/1	11 (est)									
GRADATION CURVES												PROJECT	St. Johns County Offshore Investigation Part II
												BORING NO.	VB-SJSP09-29
												BORING ELEV.	-46.2 Ft., NAVD88
												DATE	4/5/2010

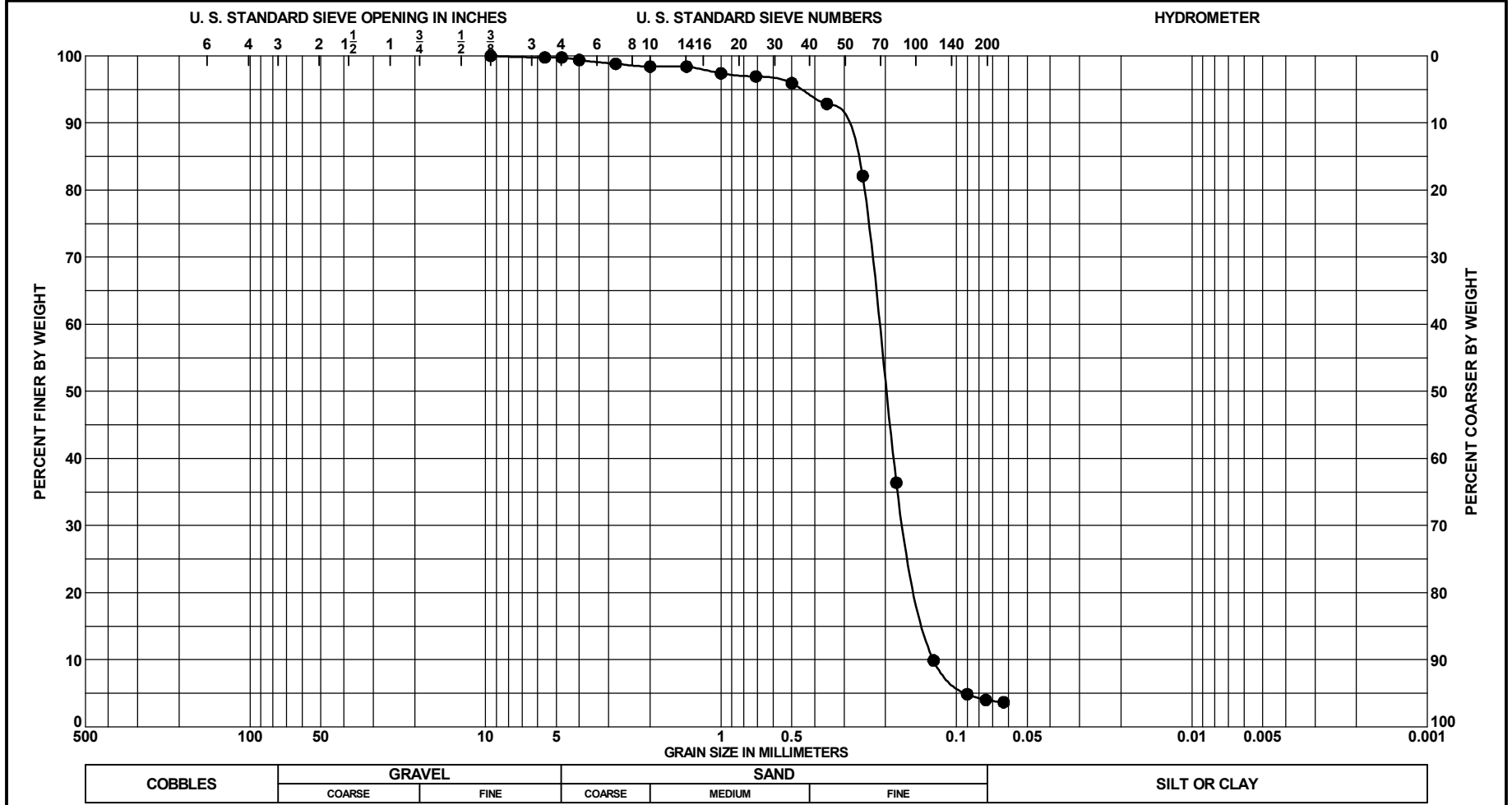


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

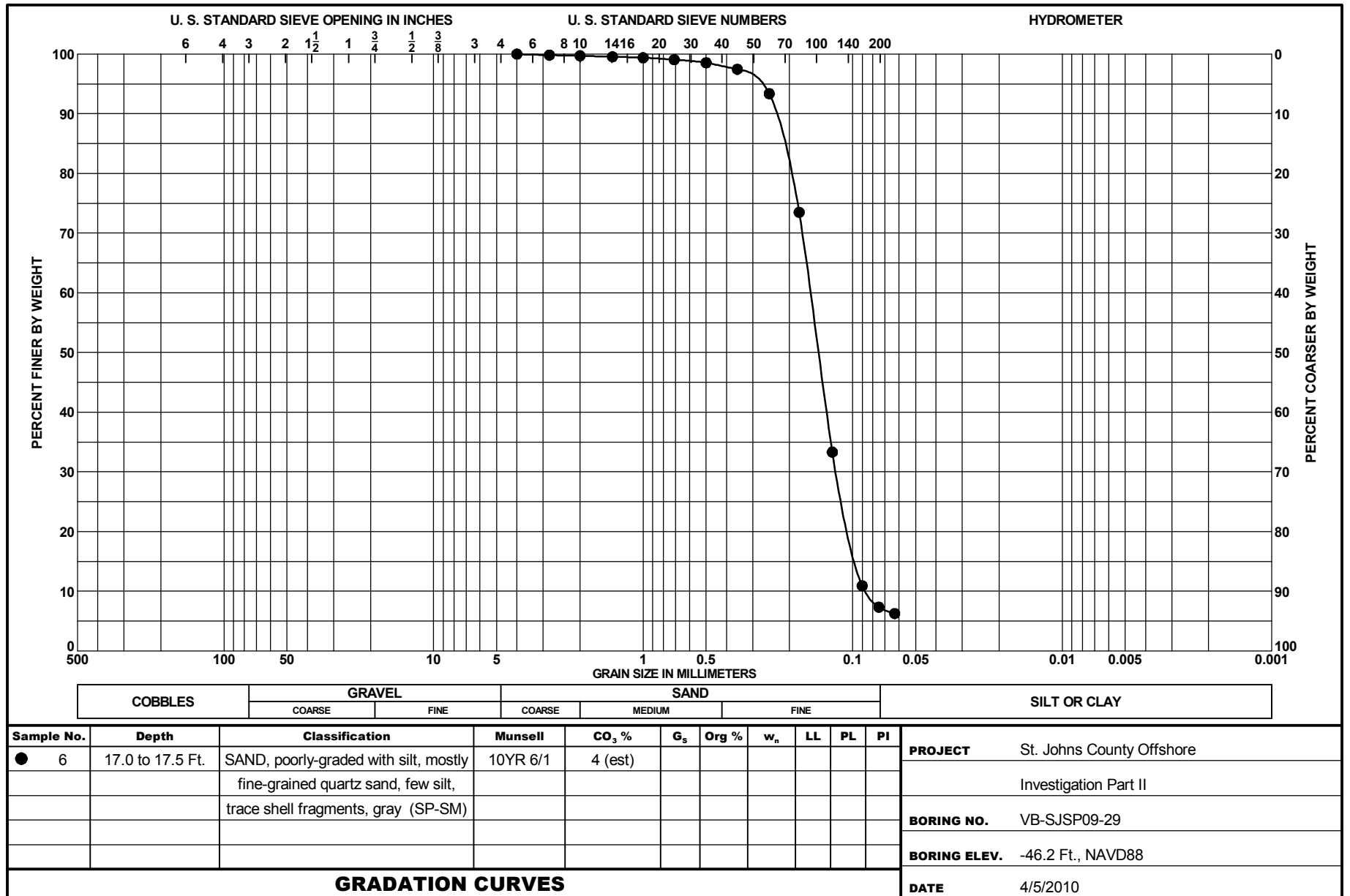
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3-Post	9.0 to 9.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-29
											BORING ELEV. -46.2 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010

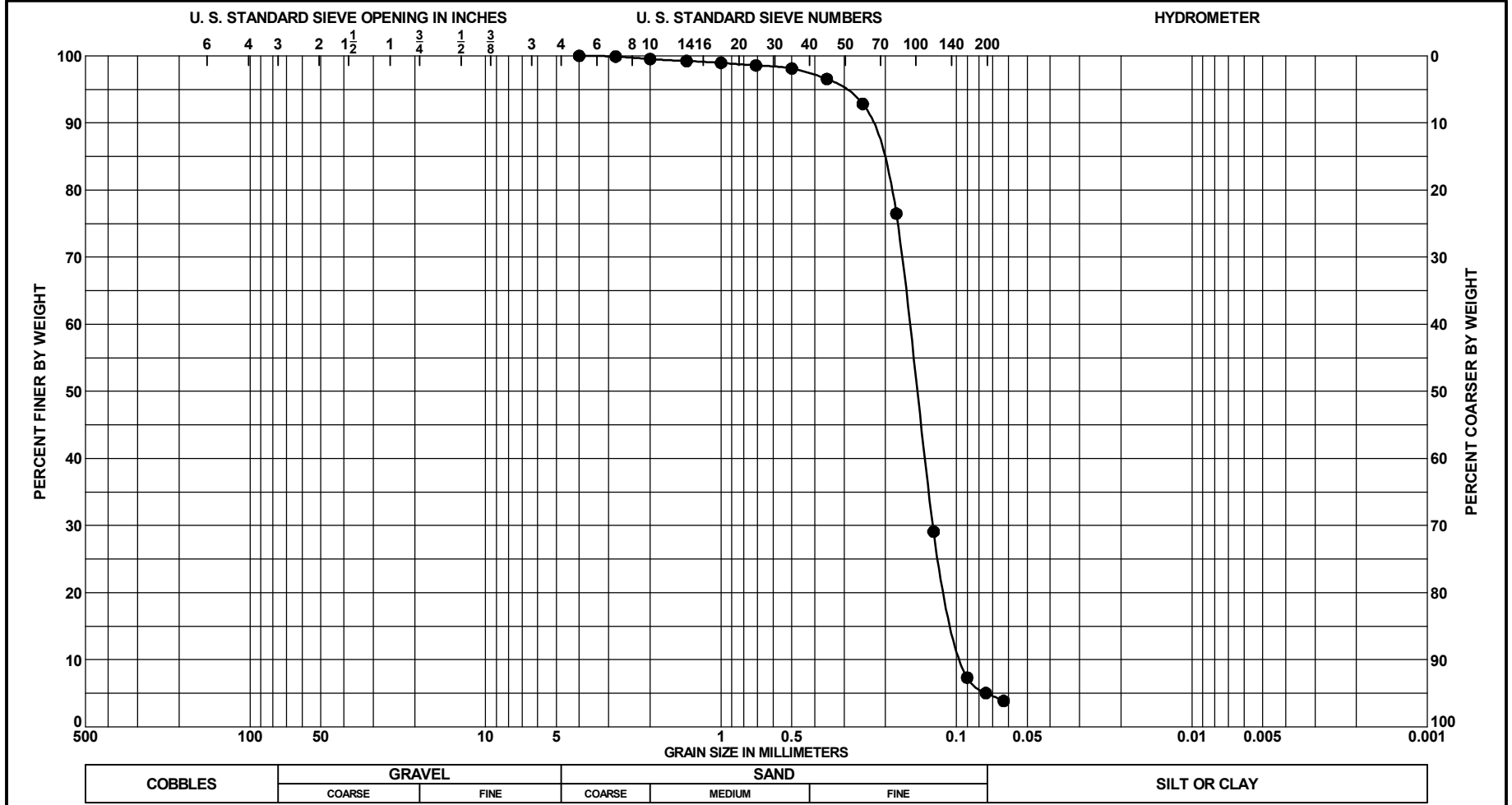


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	12.0 to 12.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, light gray (SP)	10YR 7/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-29
											BORING ELEV. -46.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

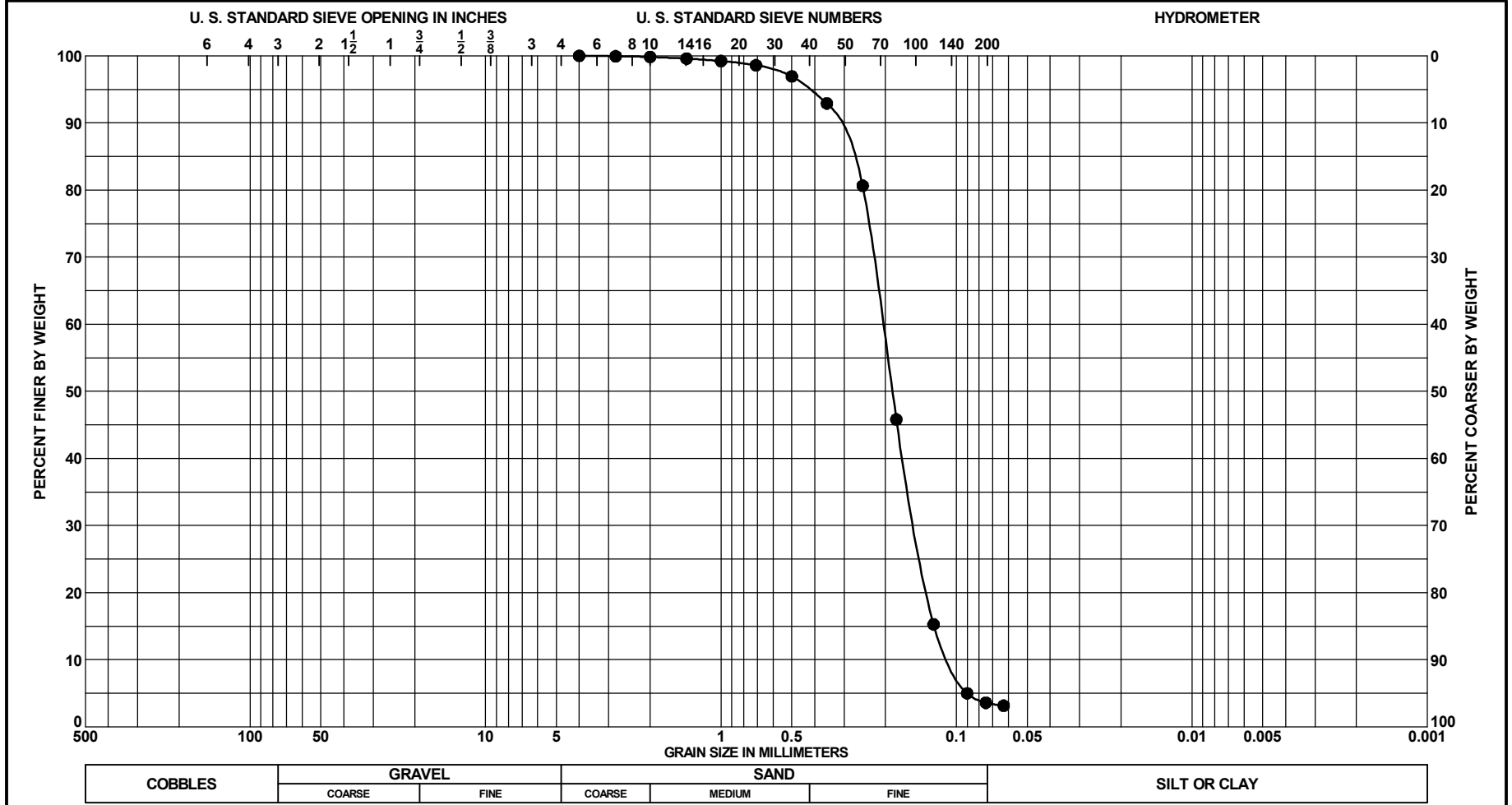


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 5	15.0 to 15.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-29
											BORING ELEV. -46.2 Ft., NAVD88
											DATE 4/5/2010

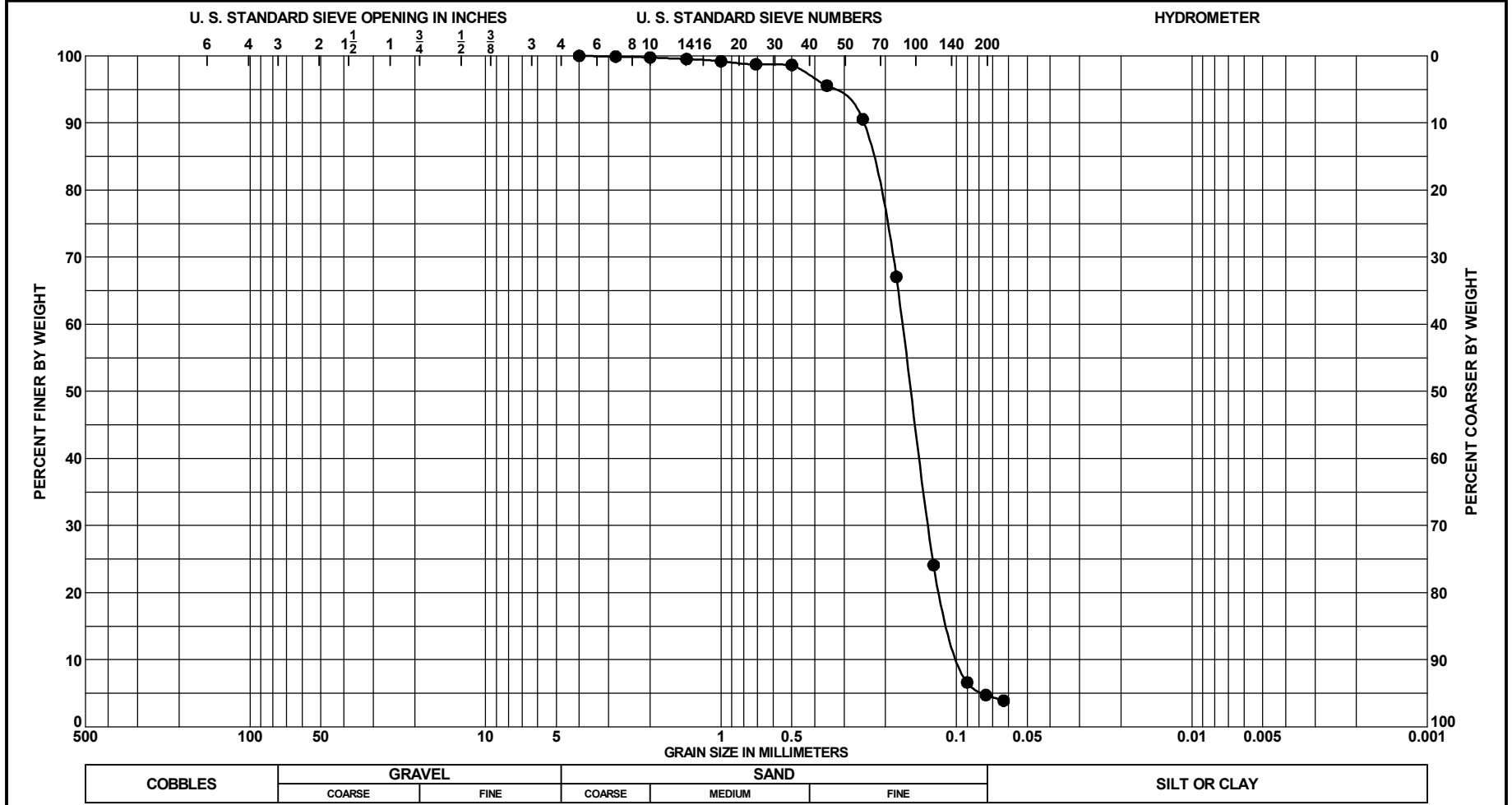




Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 7	18.5 to 18.9 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, gray (SP-SM)	10YR 6/1	3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-29
											BORING ELEV. -46.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

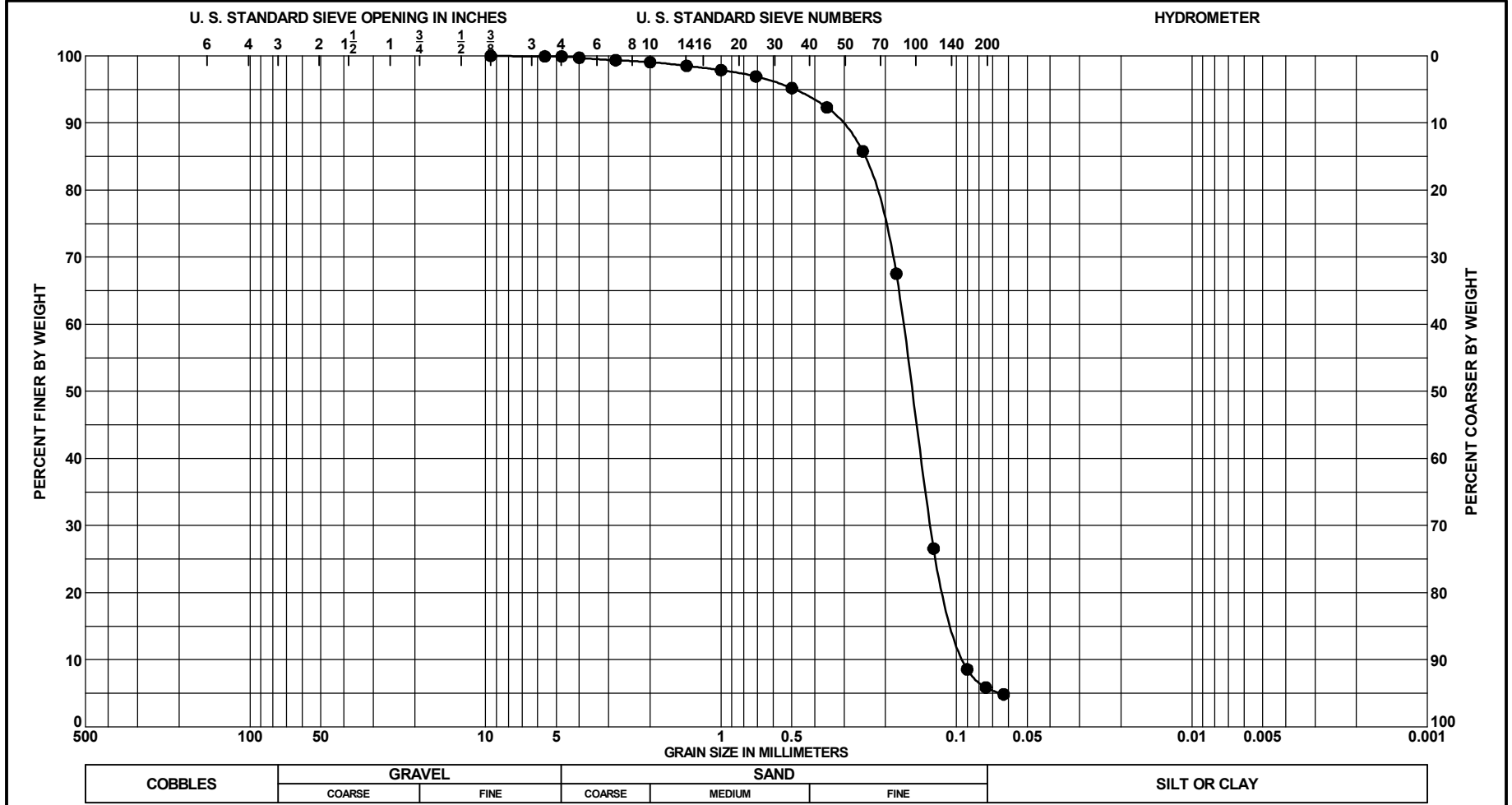


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.5 to 2.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-30
											BORING ELEV. -55.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



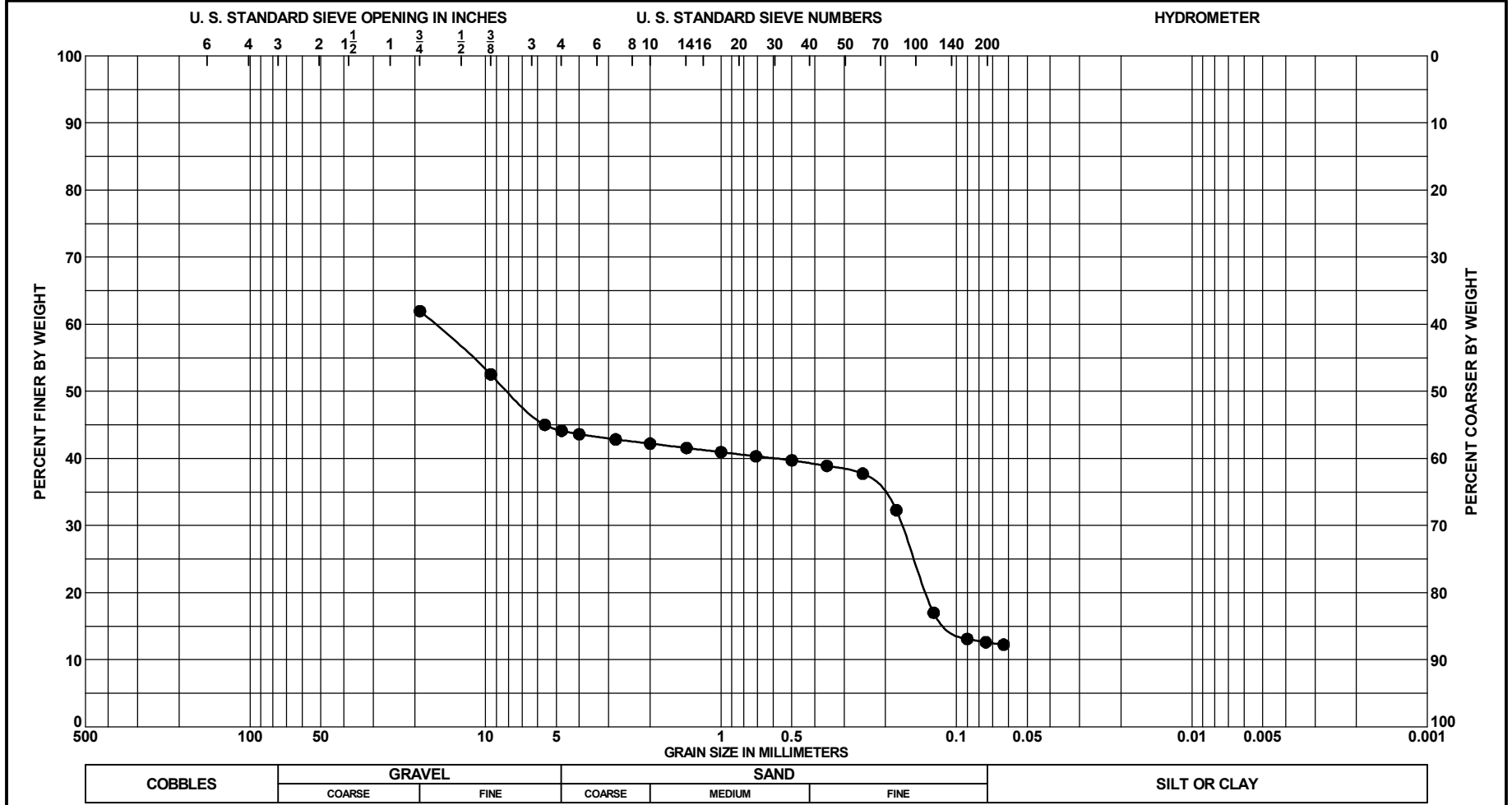
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, trace silt, gray (SP)	10YR 5/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-30
											BORING ELEV. -55.1 Ft., NAVD88
											DATE 4/5/2010

GRADATION CURVES



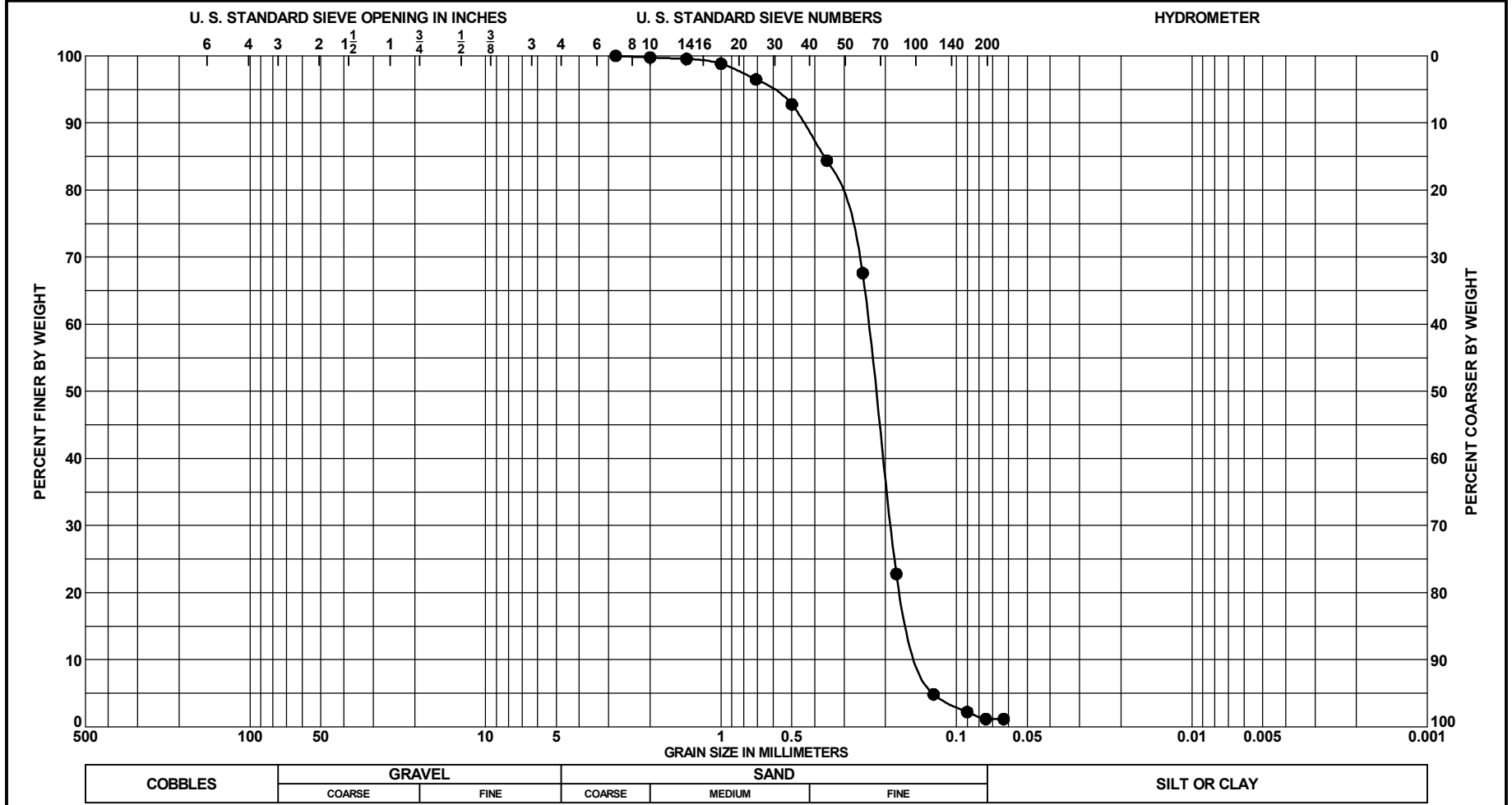
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-30
											BORING ELEV. -55.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

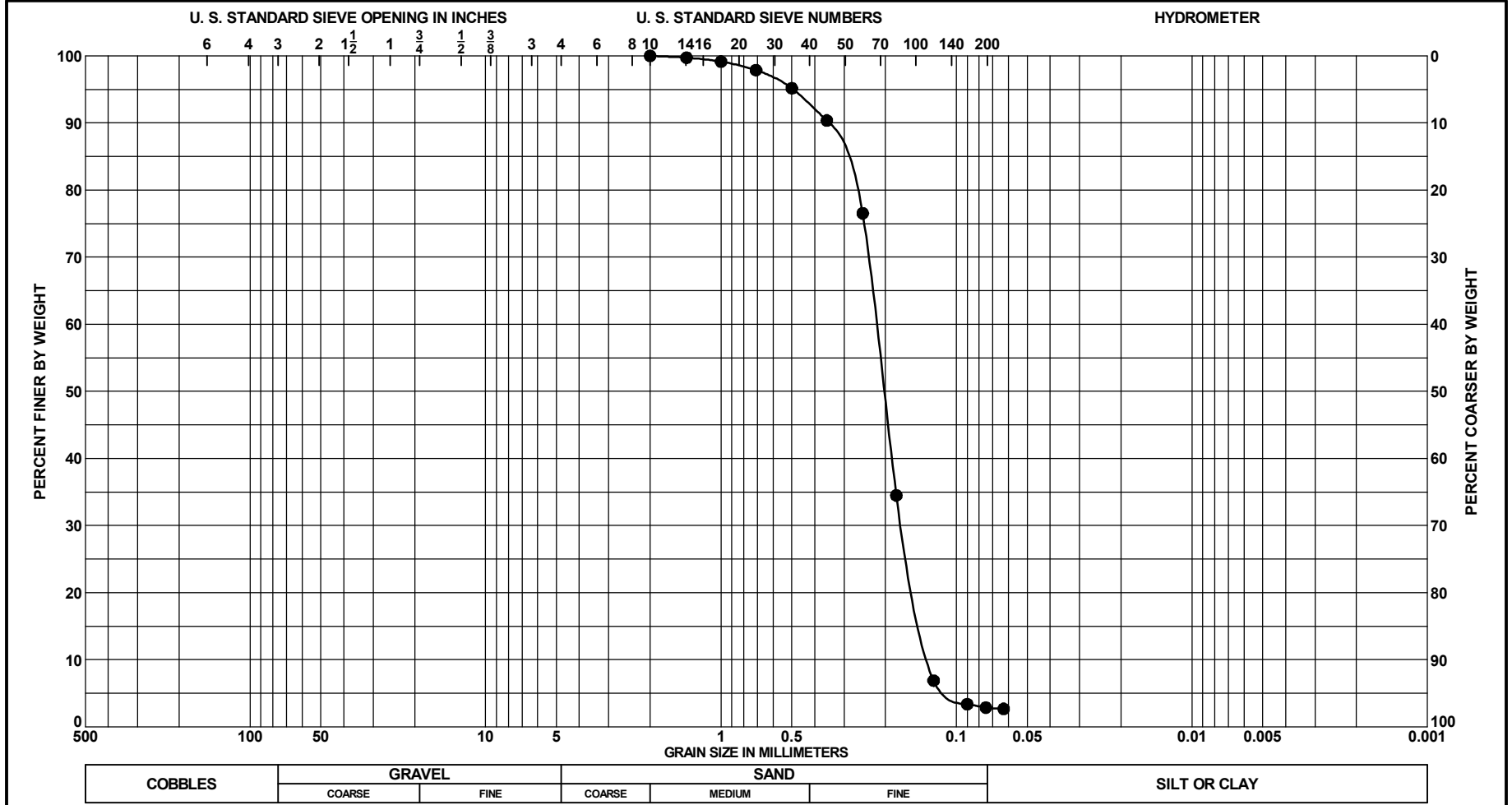


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	8.0 to 8.5 Ft.	SAND, silty, mostly coarse-grav. to med. sand-size limerock frag, little fine-grained quartz sand, little silt, few med. sand-size shell frag., light gray (SM)	10YR 7/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-30
											BORING ELEV. -55.1 Ft., NAVD88
											DATE 4/5/2010

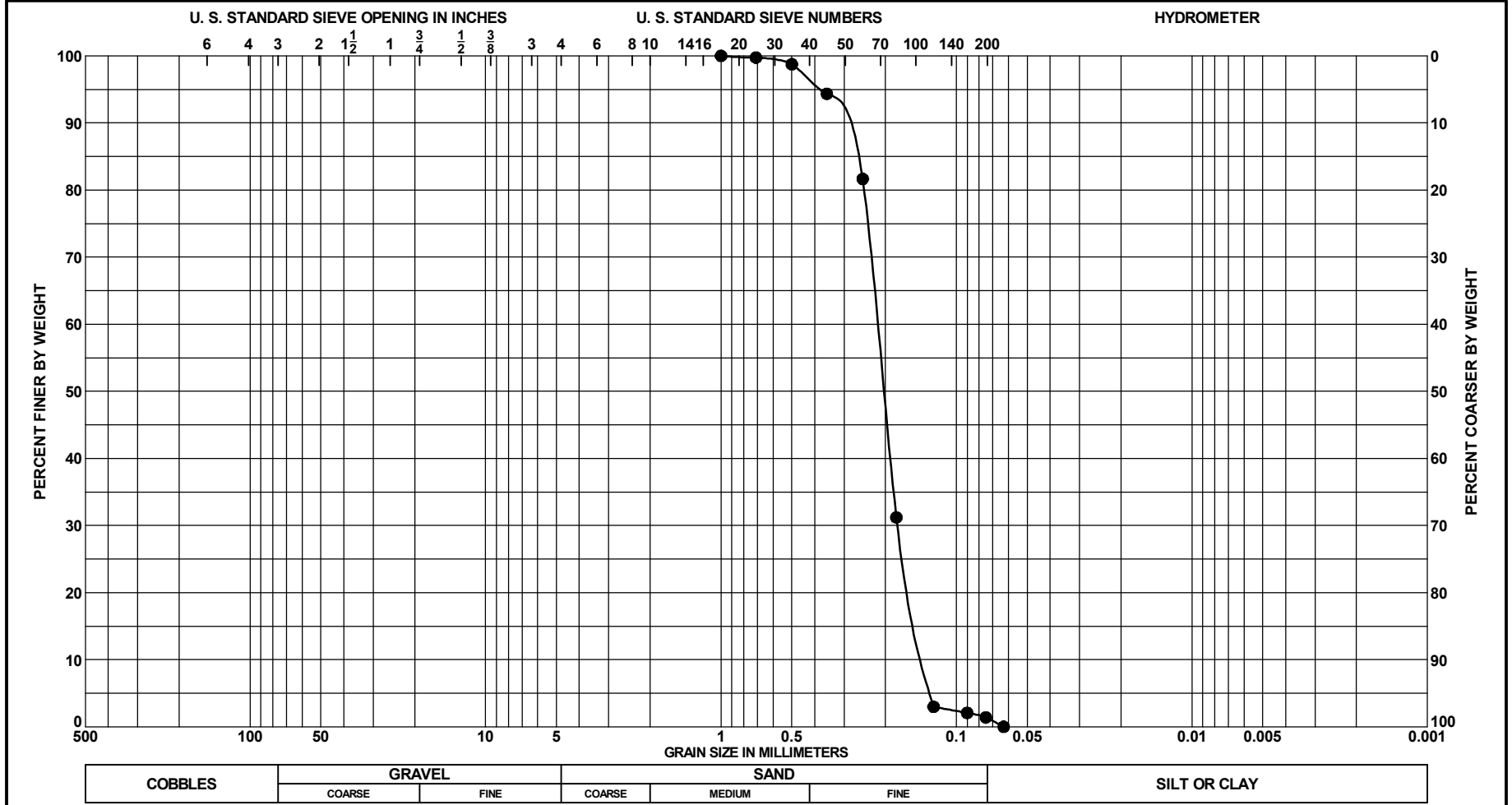
GRADATION CURVES



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION		
											COARSE	FINE	
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	8 (est)									
GRADATION CURVES												PROJECT	St. Johns County Offshore
													Investigation Part II
												BORING NO.	VB-SJSP09-31
												BORING ELEV.	-48.2 Ft., NAVD88
												DATE	3/18/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, light gray (SP)	10YR 7/1	12/4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-31
											BORING ELEV. -48.2 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



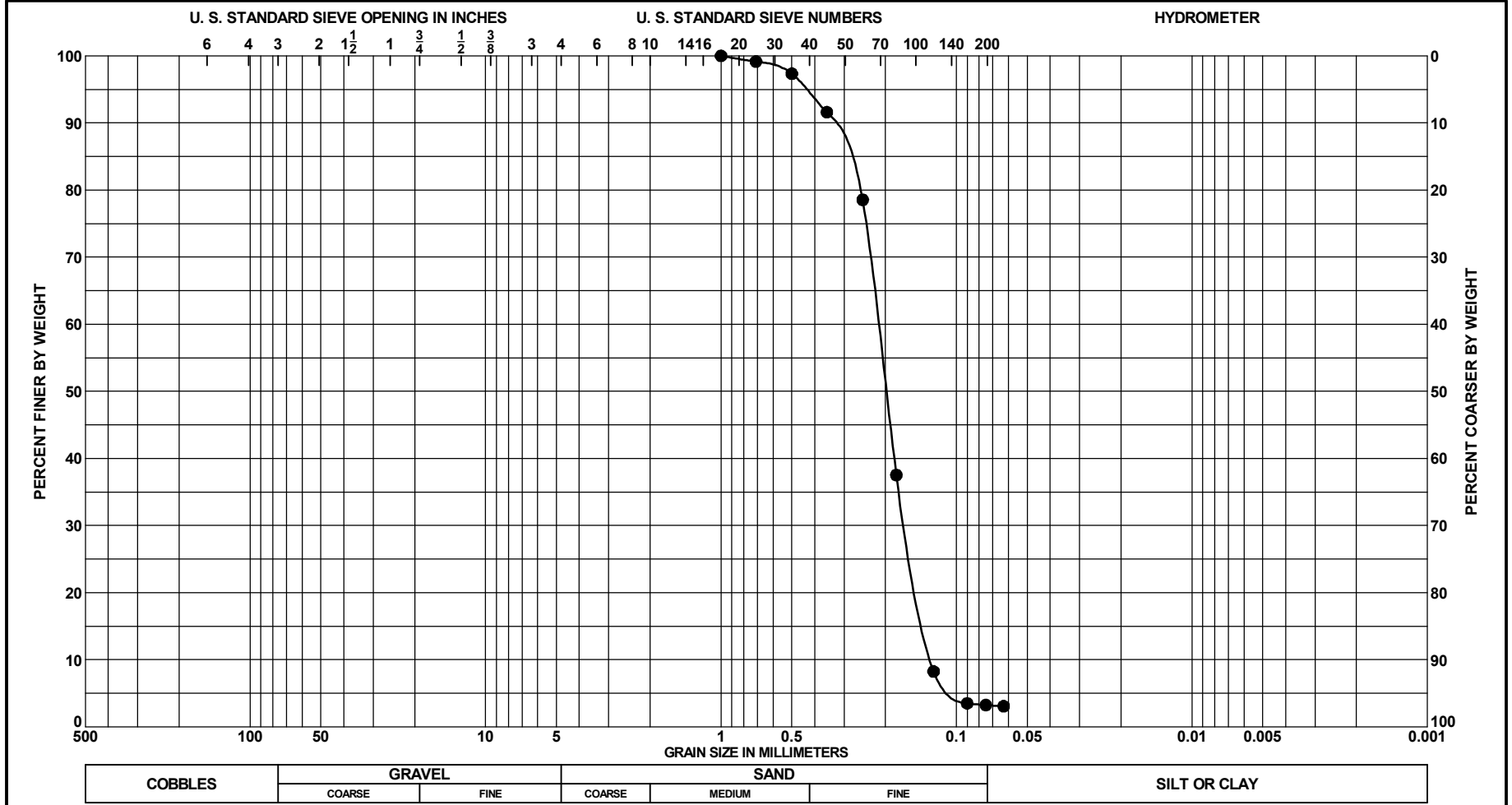
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1							

PROJECT	St. Johns County Offshore Investigation Part II
BORING NO.	VB-SJSP09-31
BORING ELEV.	-48.2 Ft., NAVD88

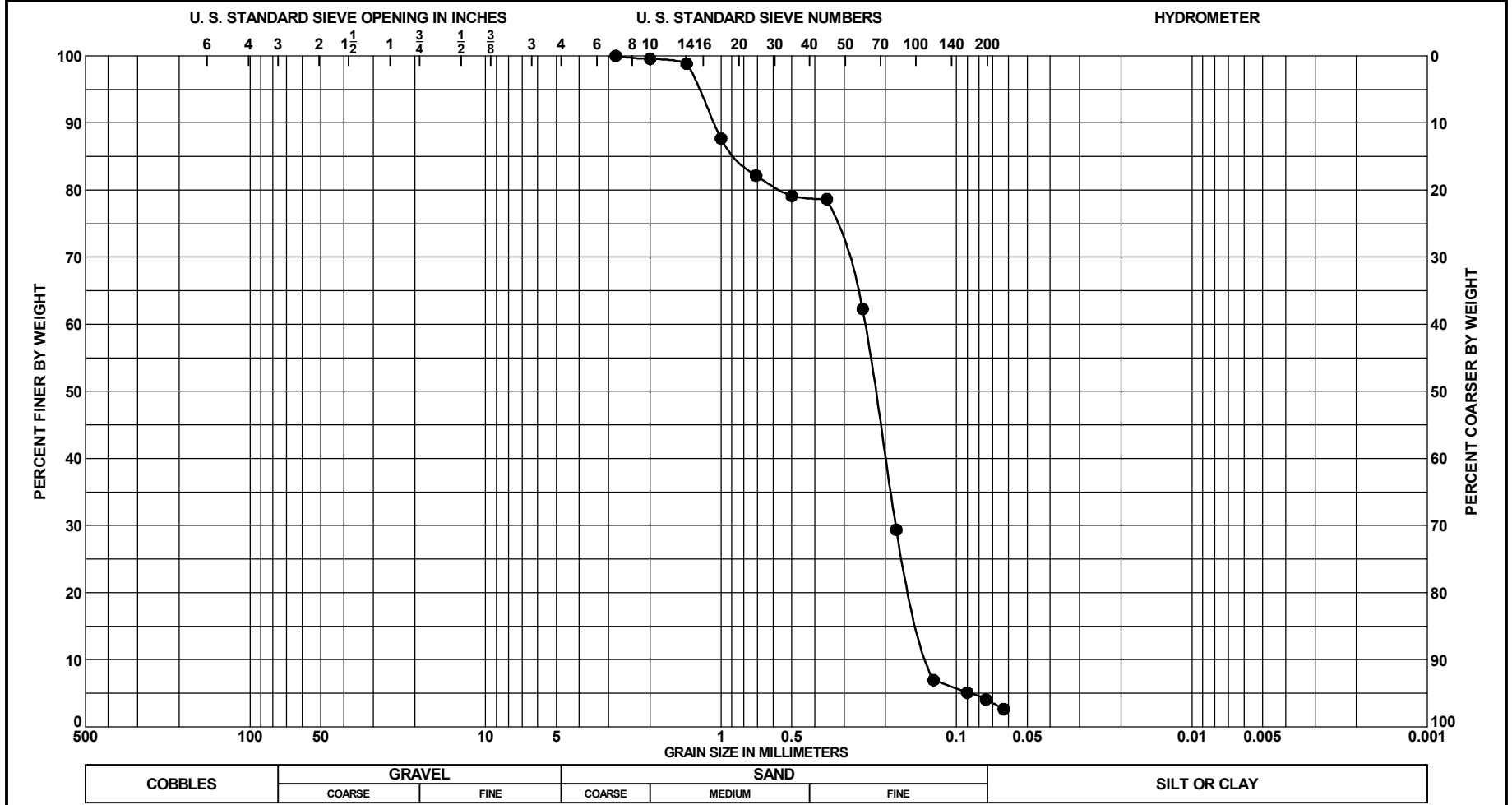
GRADATION CURVES

DATE	4/6/2010
-------------	----------



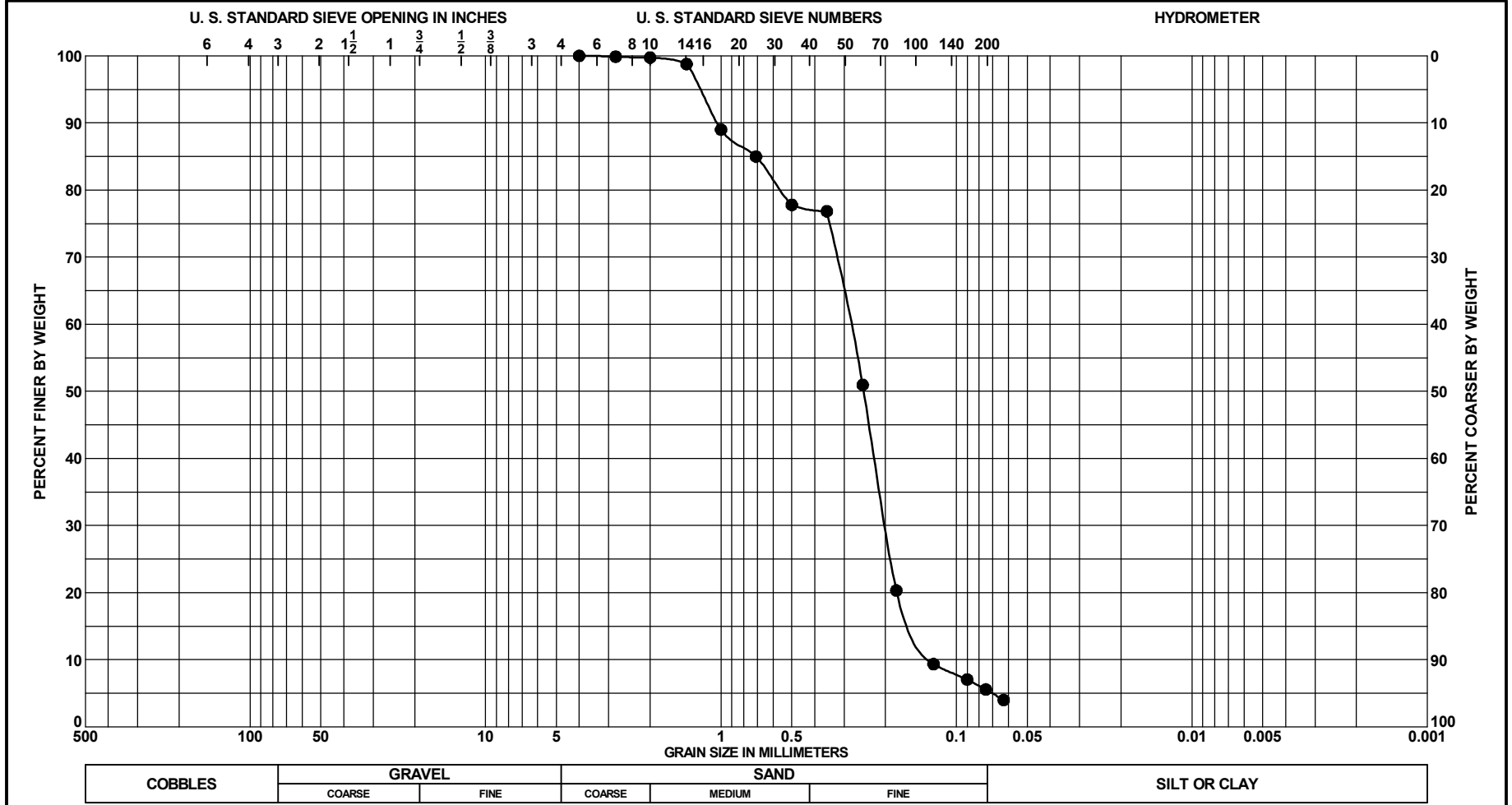
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	10.0 to 10.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments. trace silt, light gray (SP)	10YR 7/1	8 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-31
											BORING ELEV. -48.2 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

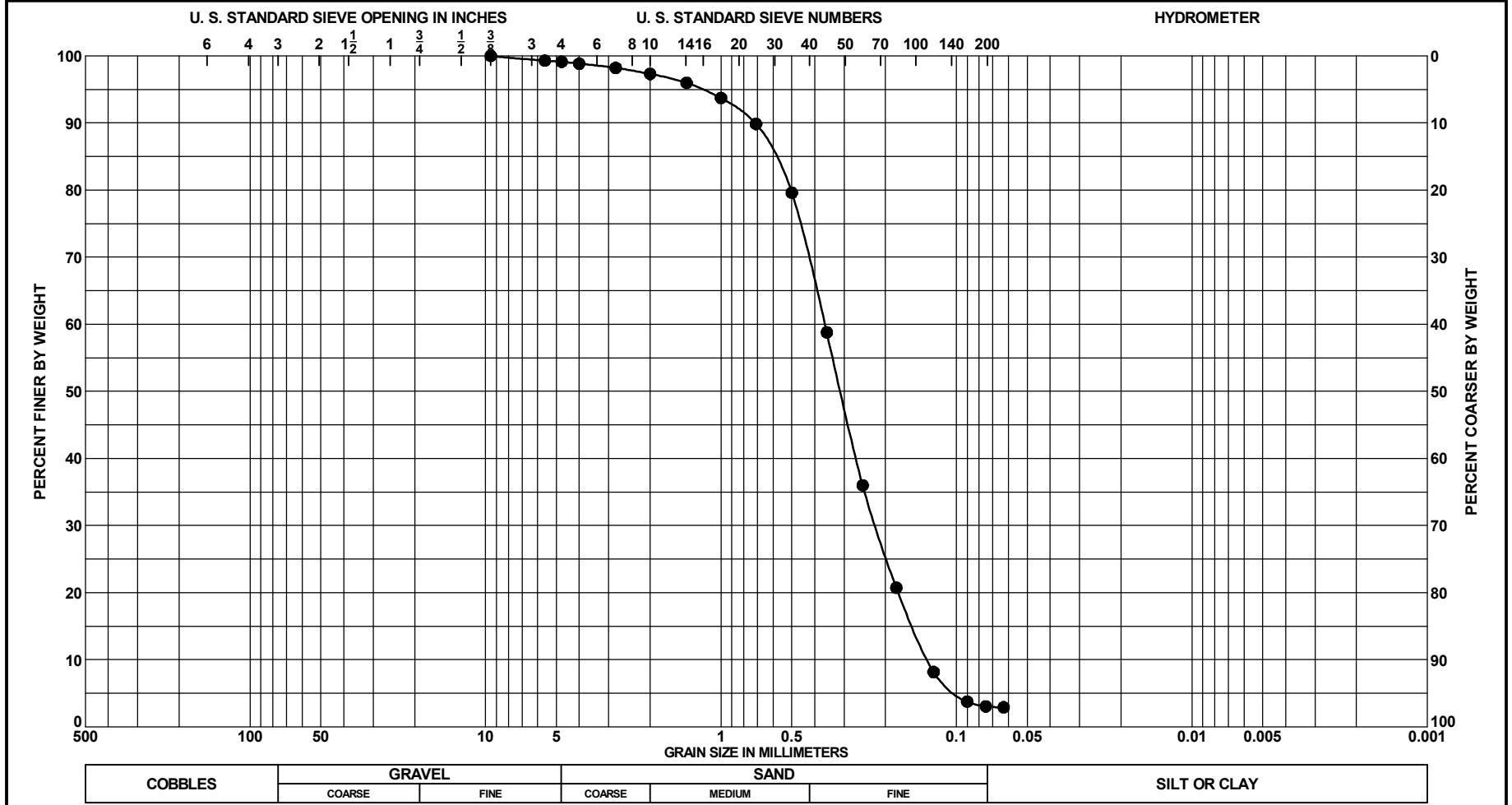


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

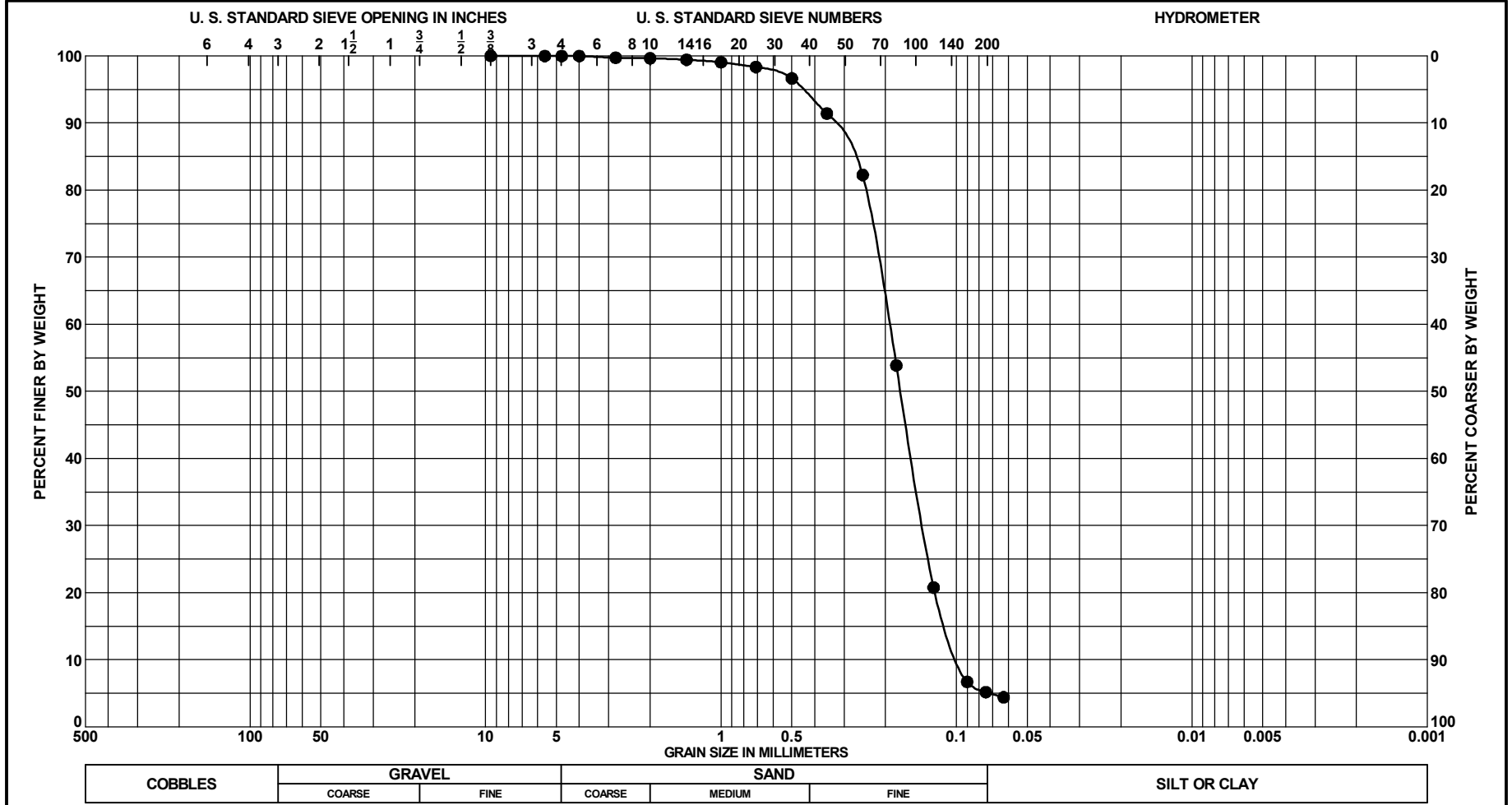
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	13.5 to 14.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace shell, gray (SP)	10YR 6/1	10 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-31
											BORING ELEV. -48.2 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



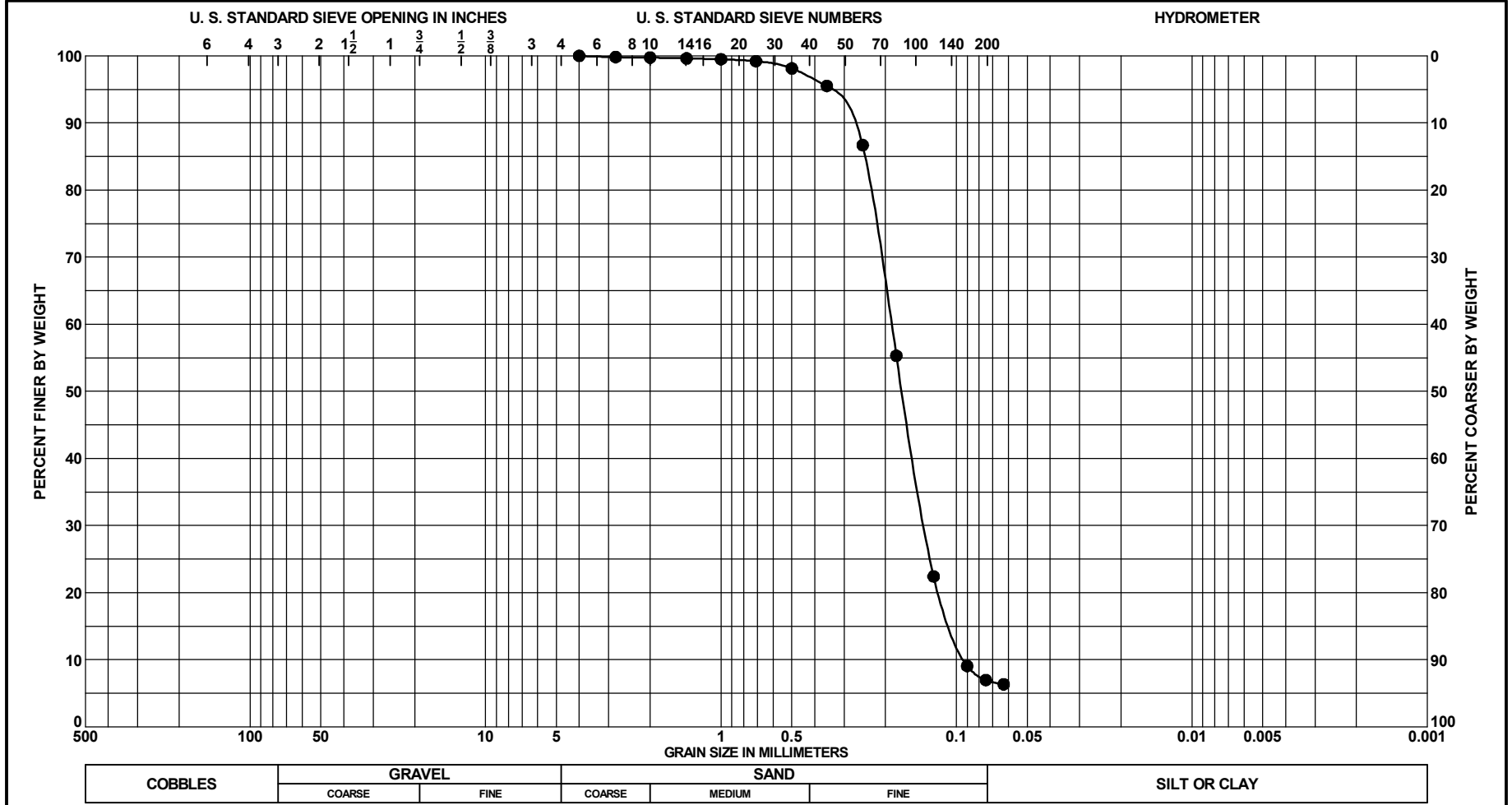
		GRAVEL		SAND							SILT OR CLAY				
		COARSE	FINE	COARSE	MEDIUM	FINE									
Sample No.	Depth	Classification				Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT	St. Johns County Offshore
● 5	15.0 to 15.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell fragments, few silt, gray (SP-SM)				10YR 6/1	9 (est)							Investigation Part II	
														BORING NO.	VB-SJSP09-31
														BORING ELEV.	-48.2 Ft., NAVD88
GRADATION CURVES													DATE	3/18/2010	



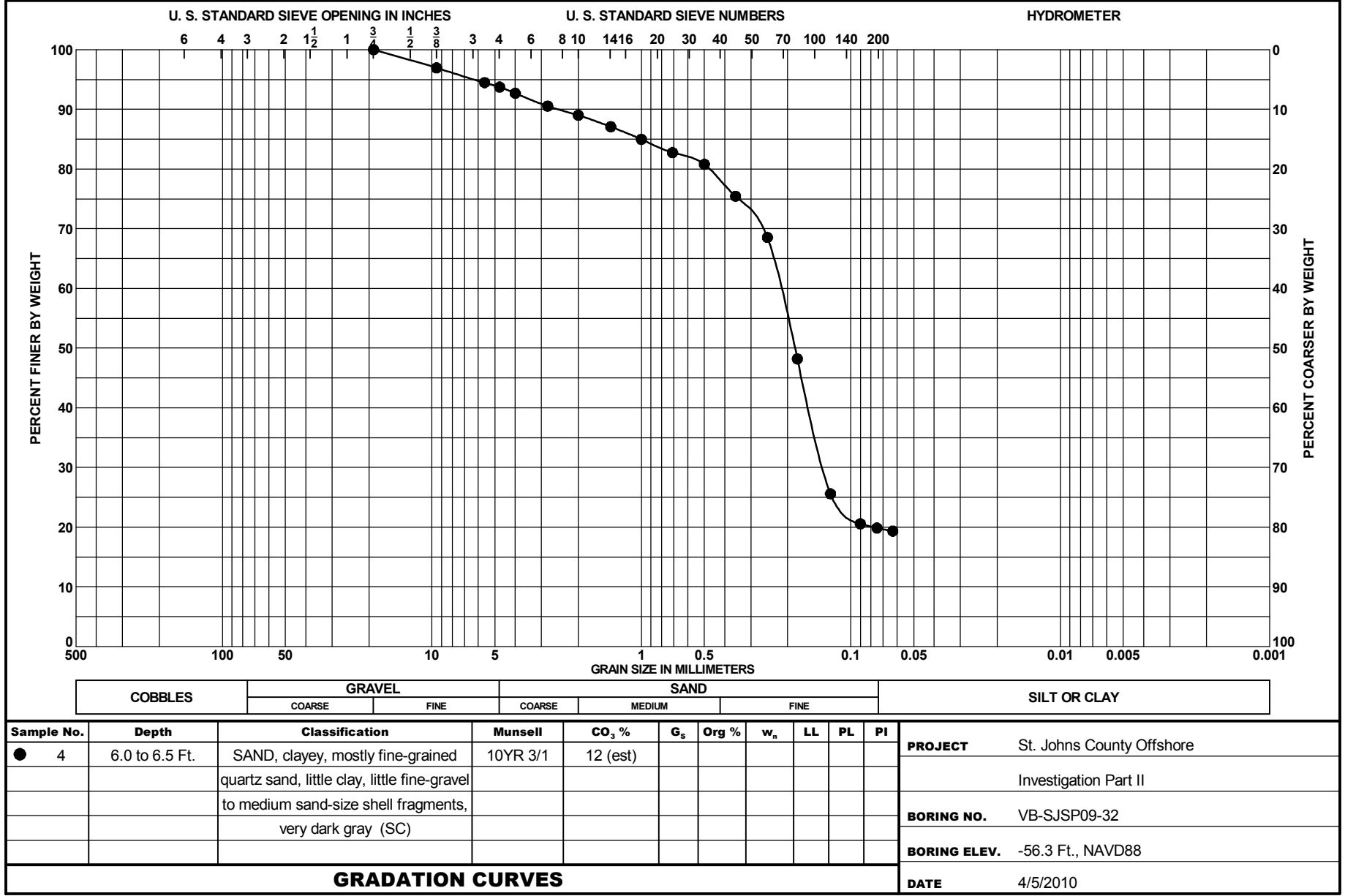
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, light gray (SP)	10YR 7/1	15 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-32
											BORING ELEV. -56.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

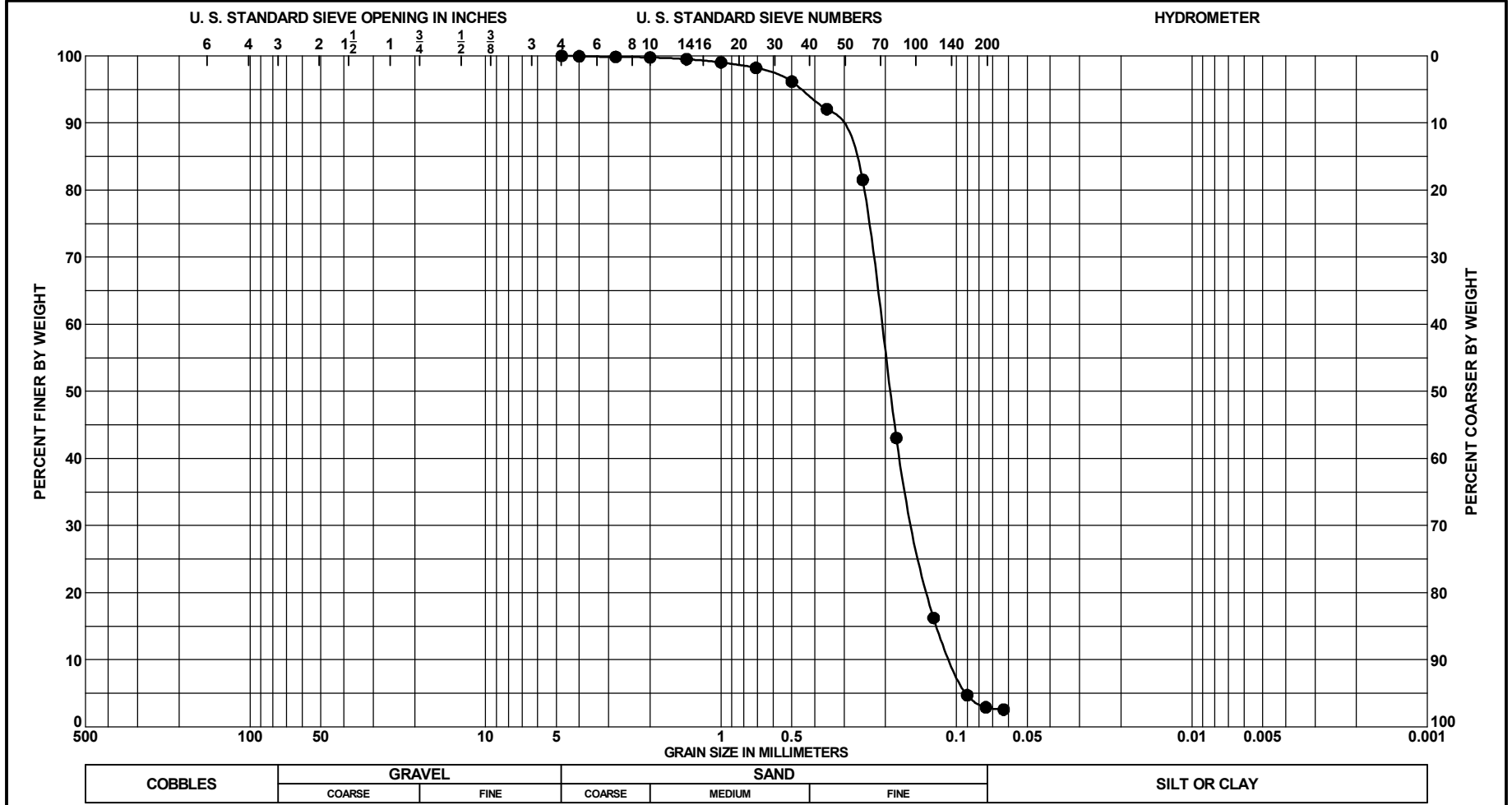


		GRAVEL		SAND			SILT OR CLAY								
		COARSE	FINE	COARSE	MEDIUM	FINE									
Sample No.	Depth	Classification				Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT	St. Johns County Offshore
● 2	2.5 to 3.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)				10YR 6/1	5 (est)							Investigation Part II	
														BORING NO.	VB-SJSP09-32
														BORING ELEV.	-56.3 Ft., NAVD88
GRADATION CURVES													DATE	4/5/2010	



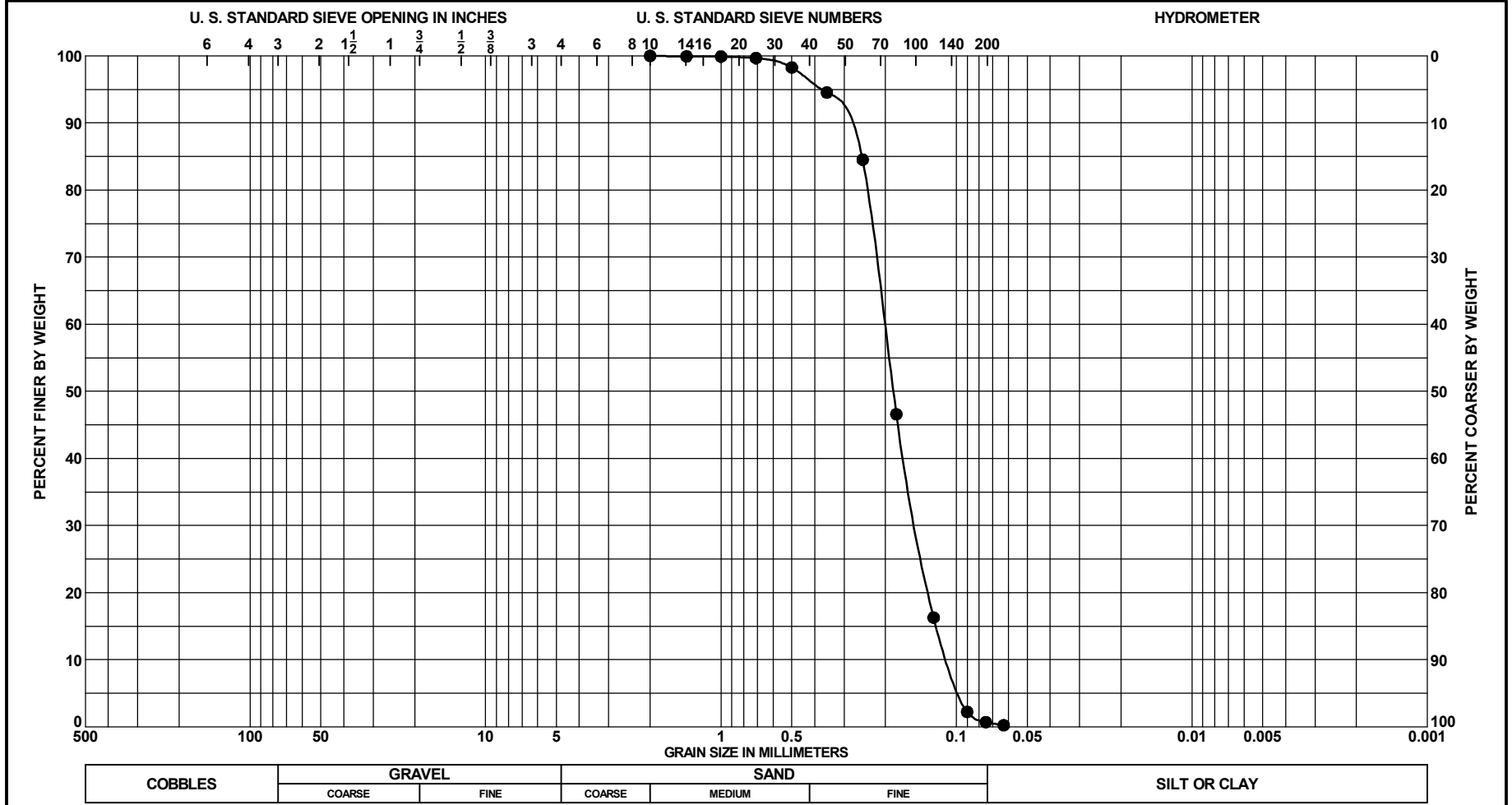
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 3	4.5 to 5.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	5 (est)							PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-32
											BORING ELEV.	-56.3 Ft., NAVD88
GRADATION CURVES											DATE	4/5/2010





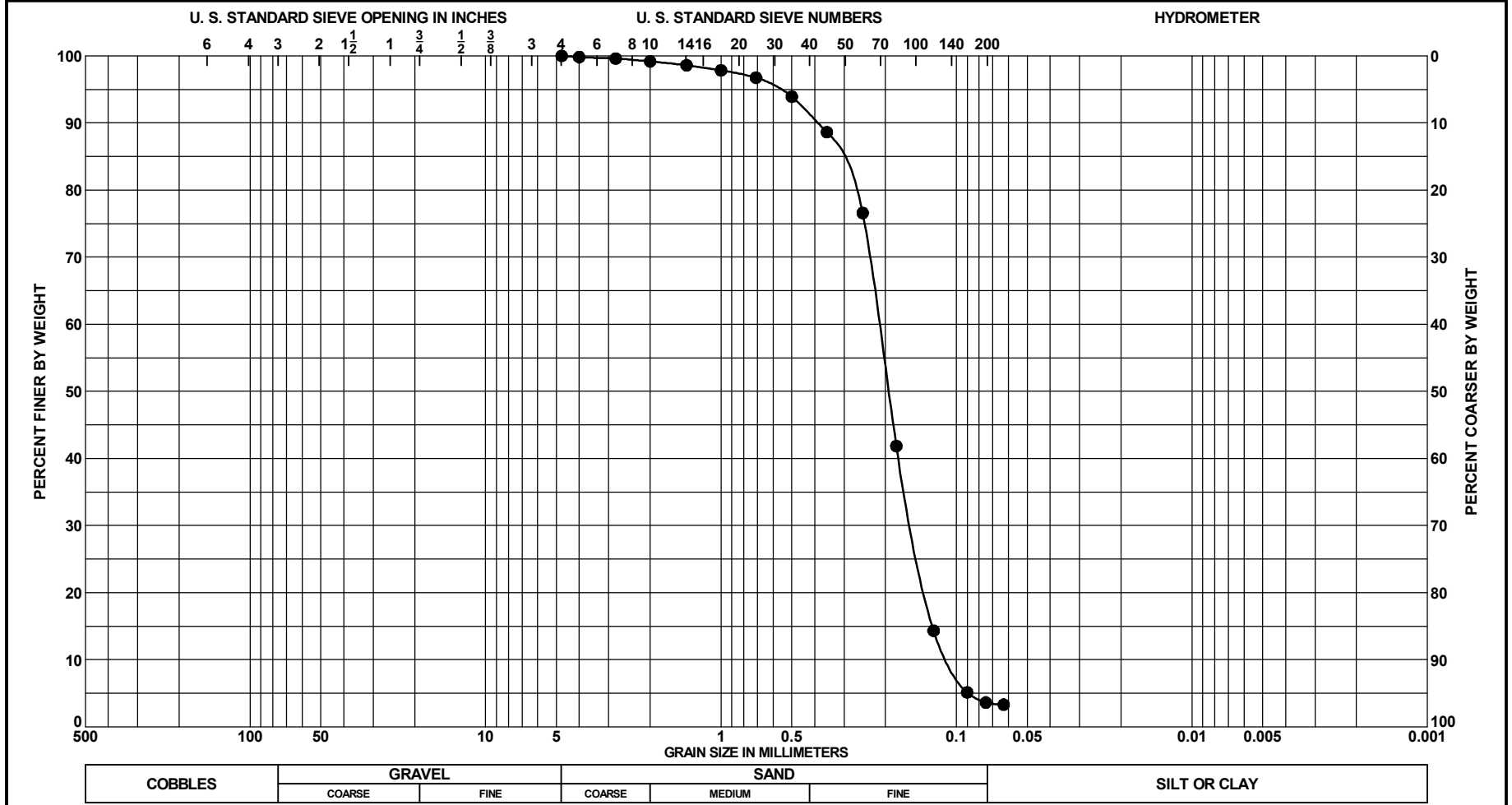
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, light gray (SP)	10YR 7/1	14/6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-33
											BORING ELEV. -55.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



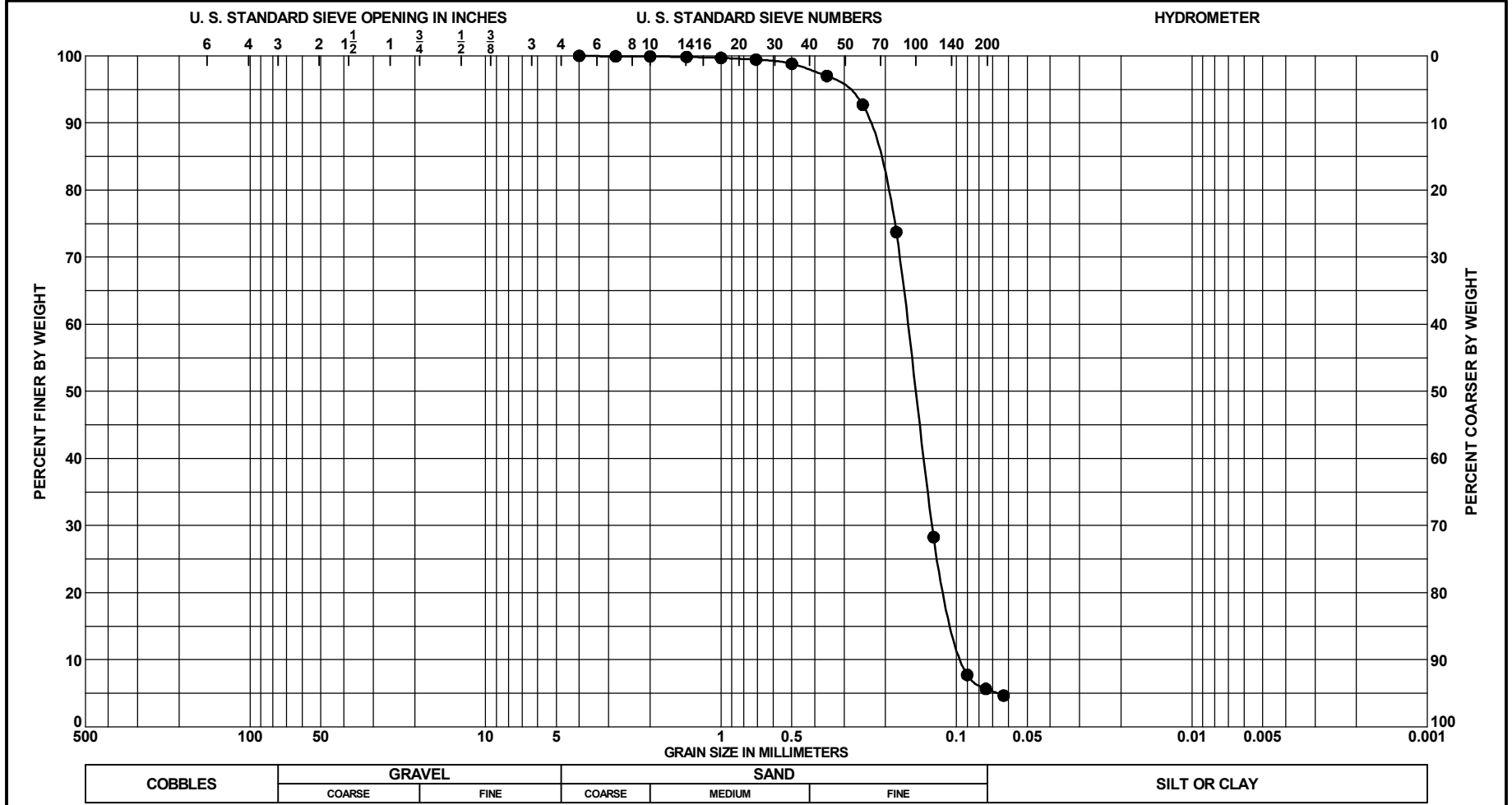
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

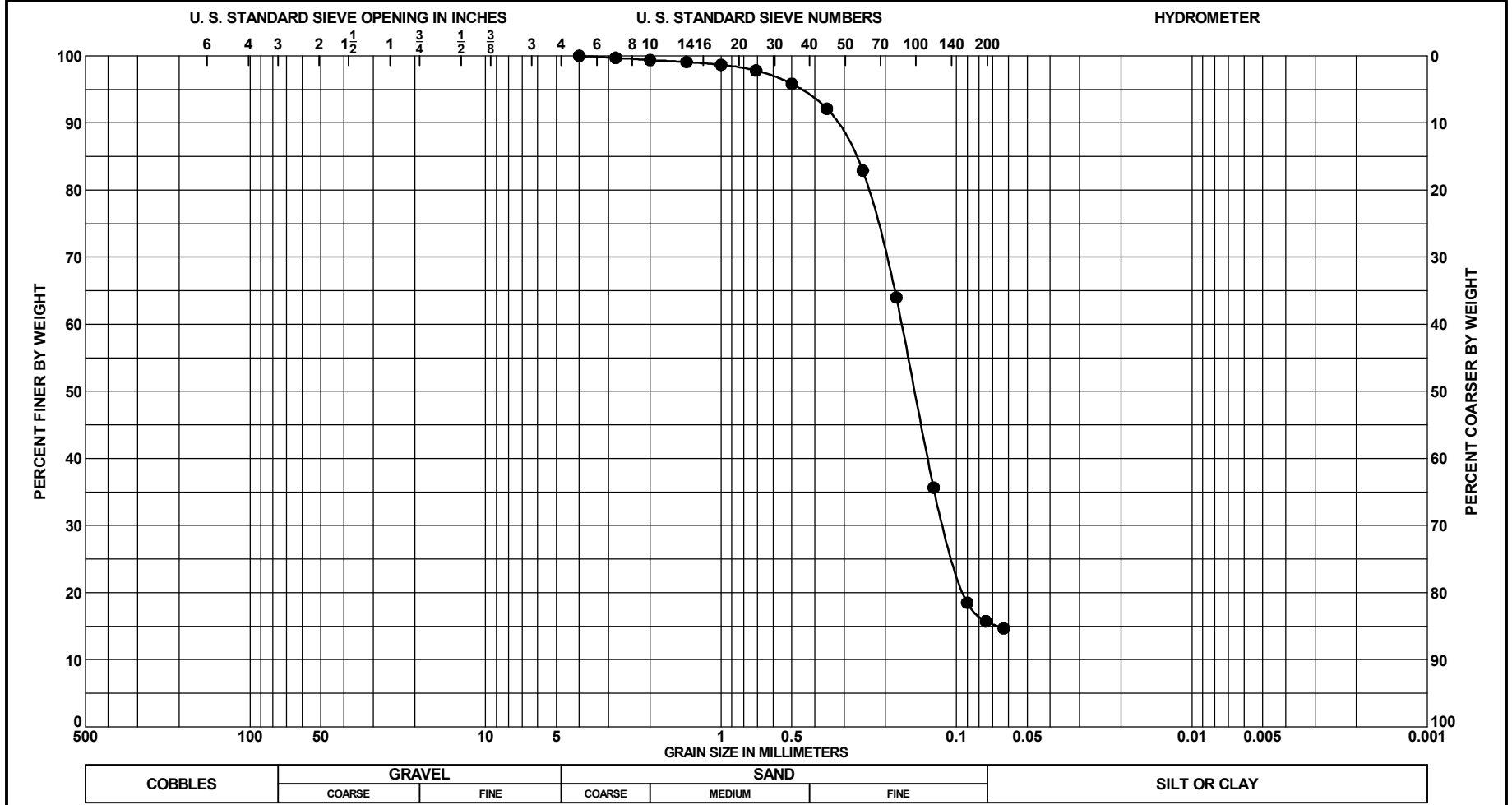
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1-Post	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-33
											BORING ELEV. -55.2 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

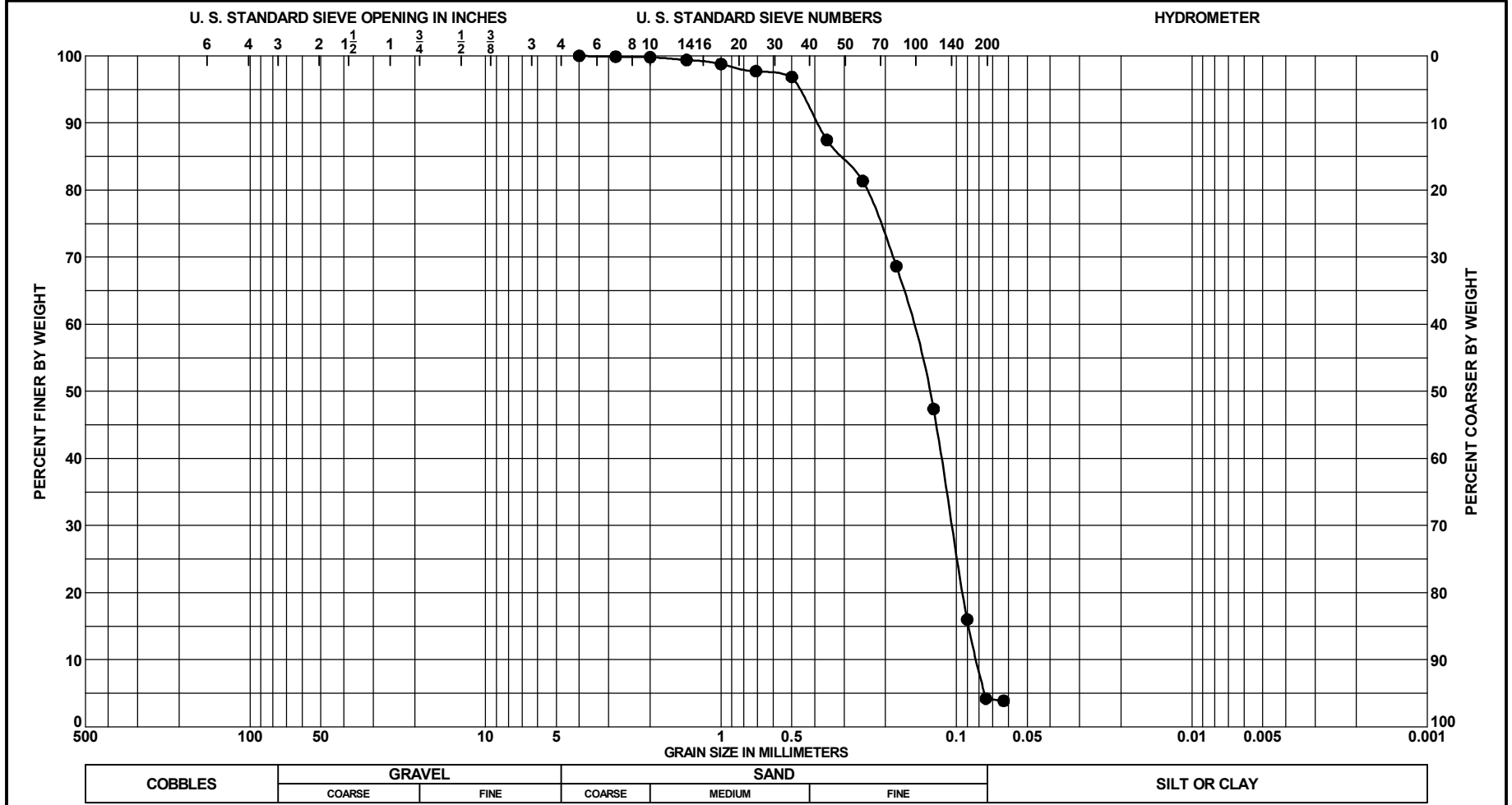
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-33
											BORING ELEV. -55.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



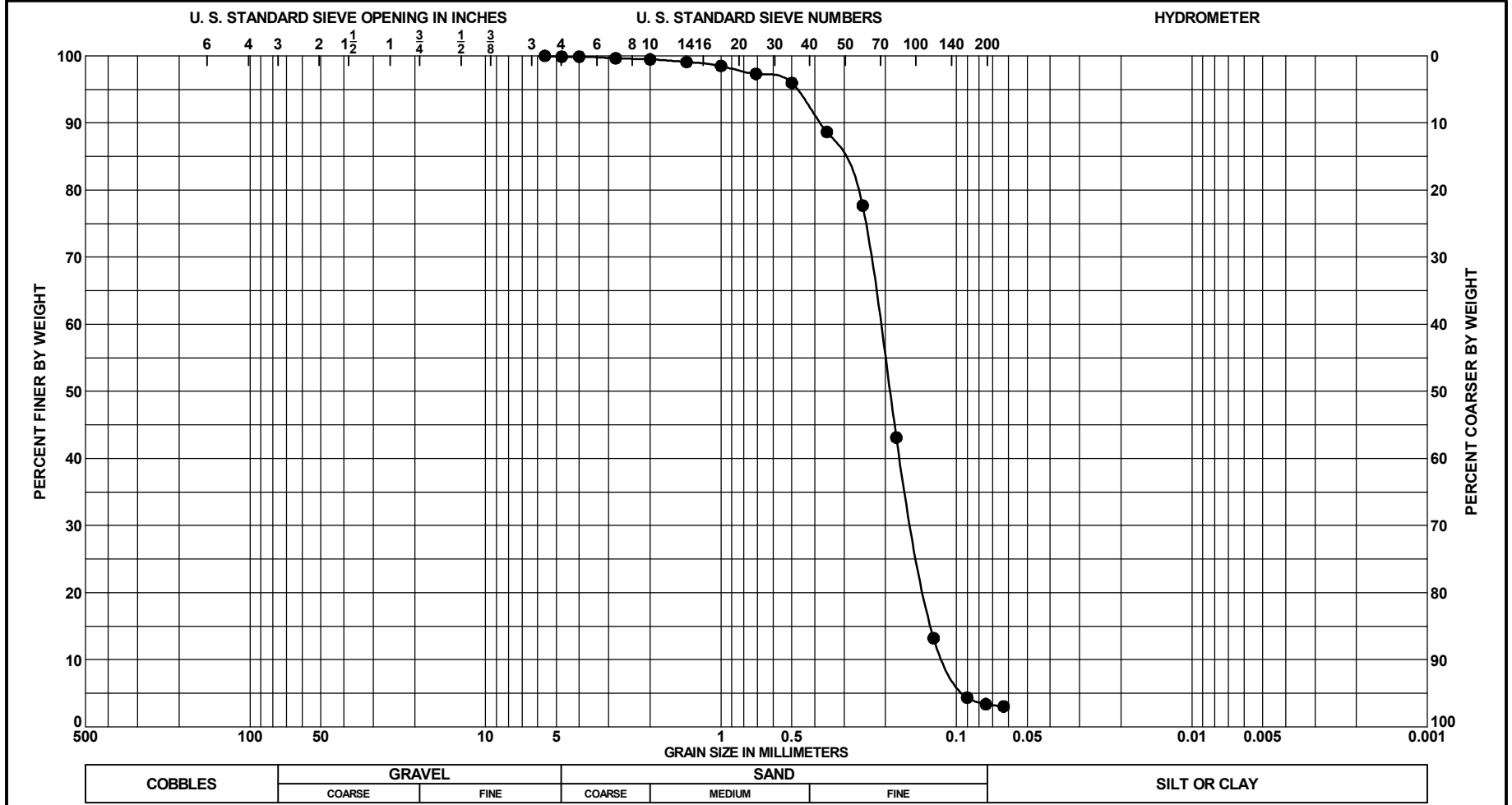


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

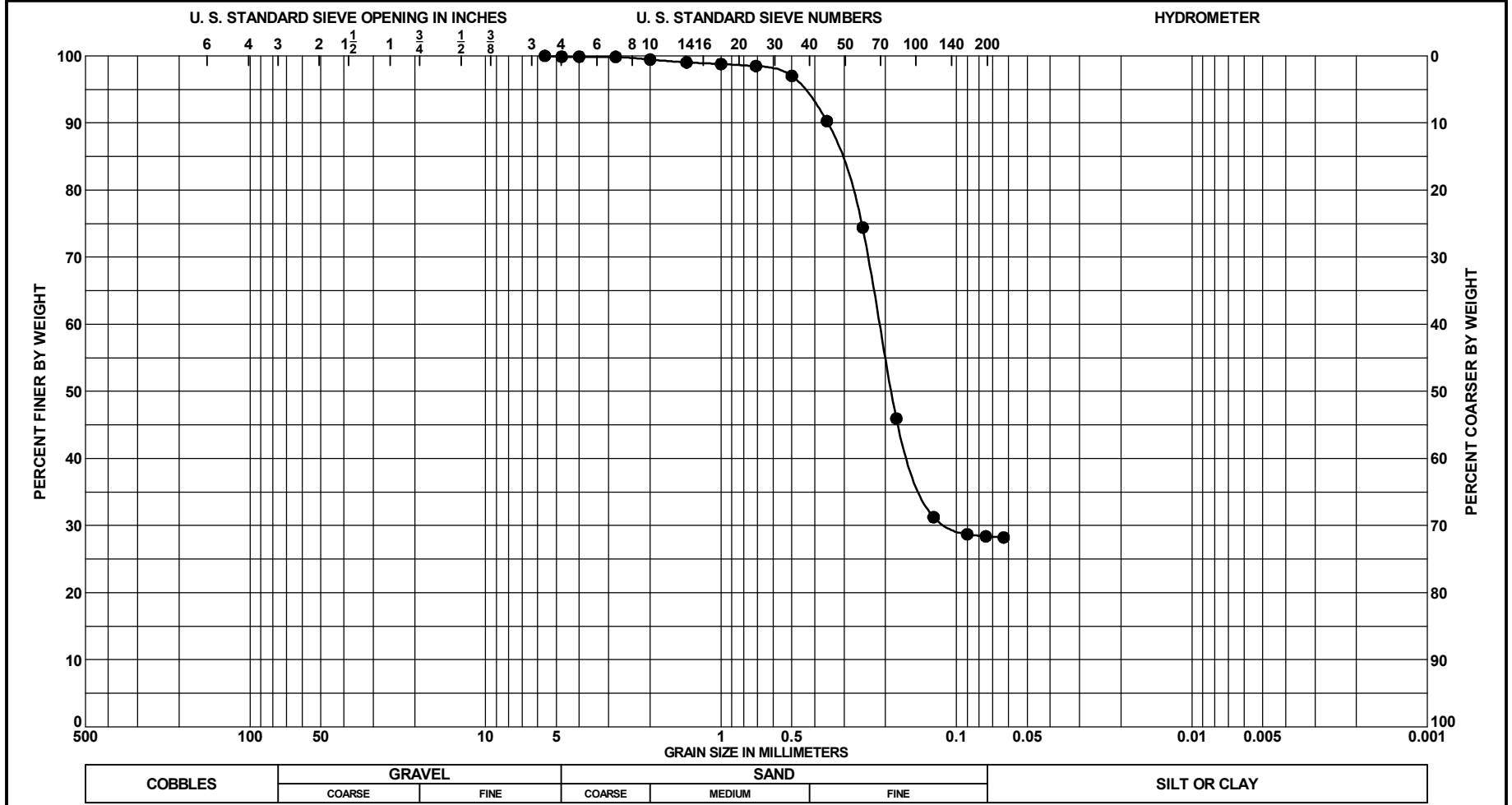
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	10.0 to 10.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, few medium sand-size shell fragments, gray (SM)	10YR 5/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-33
											BORING ELEV. -55.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



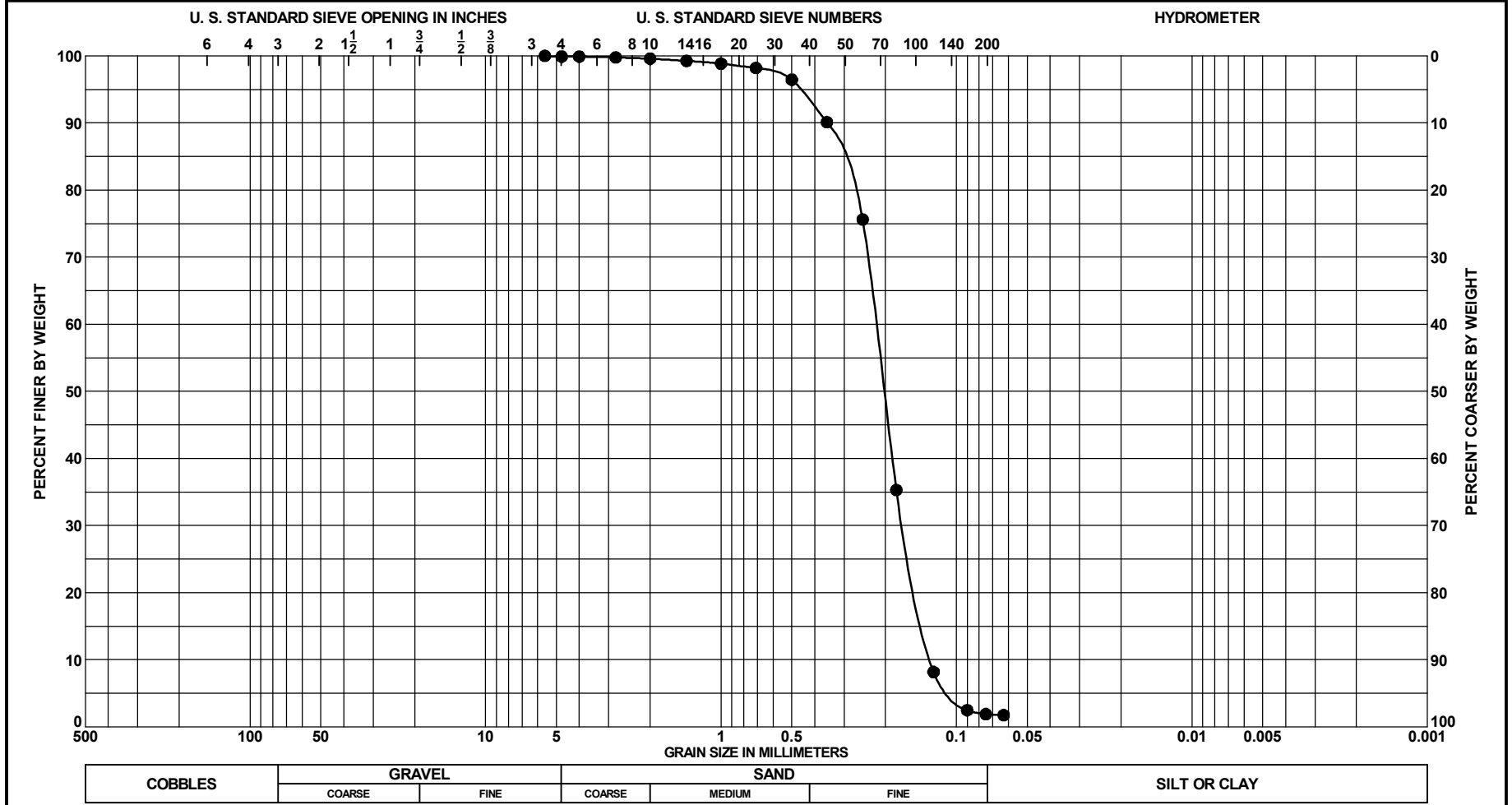
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-34
											BORING ELEV. -55.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



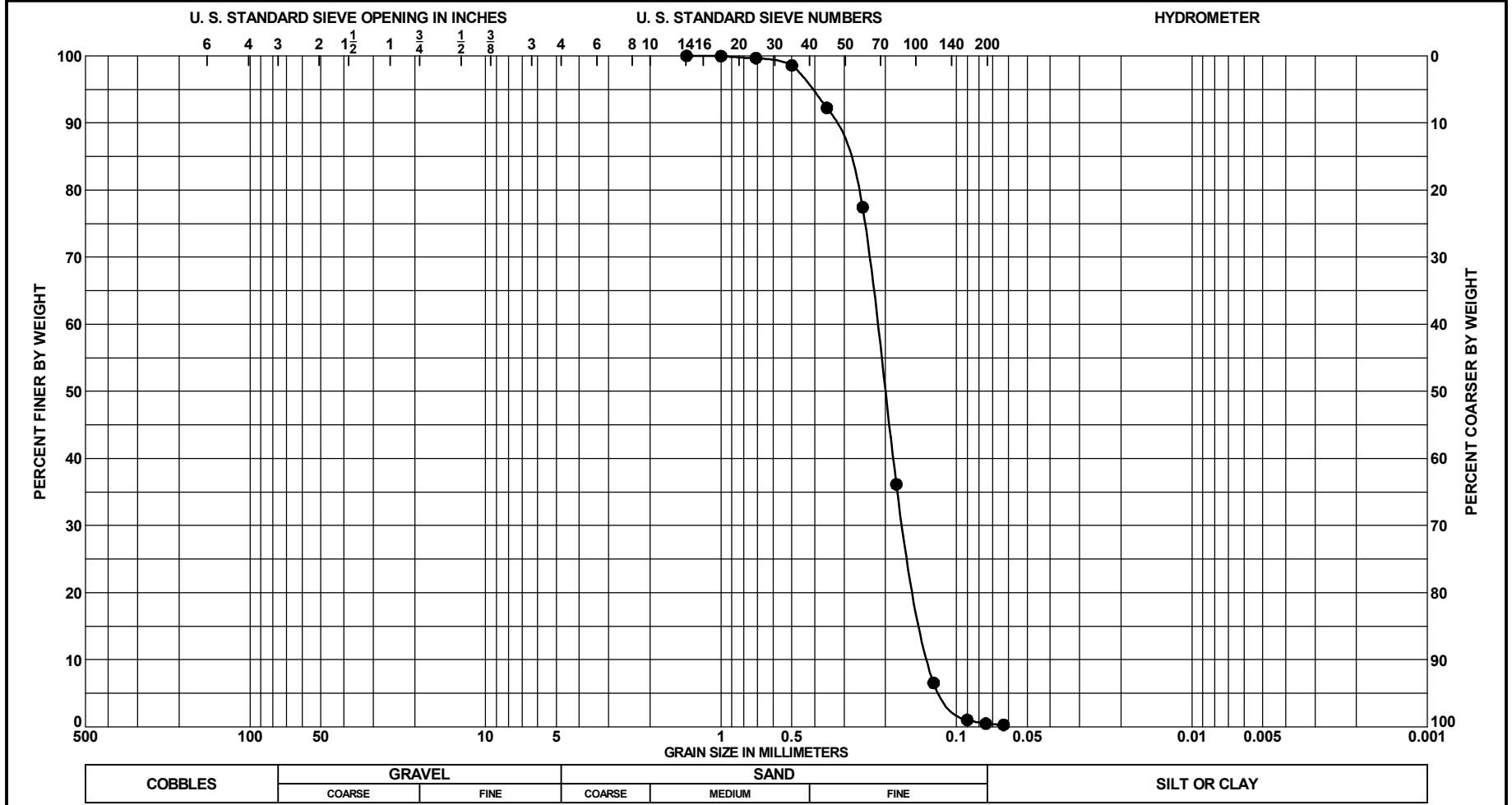
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-34
											BORING ELEV. -55.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



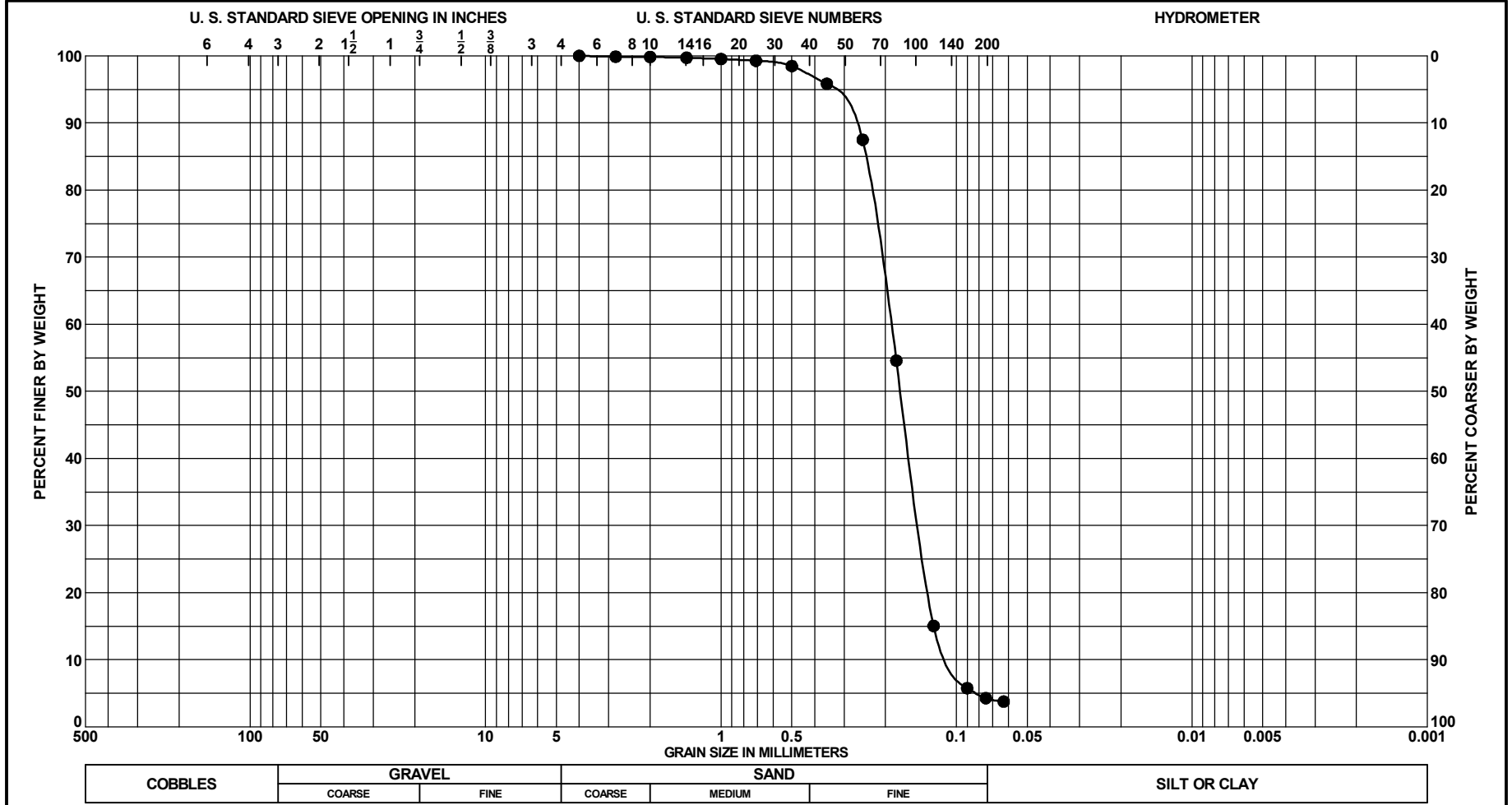
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	8.0 to 8.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, dark gray (SM)	10YR 4/1	1 (est)							St. Johns County Offshore
											Investigation Part II
											BORING NO. VB-SJSP09-34
											BORING ELEV. -55.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



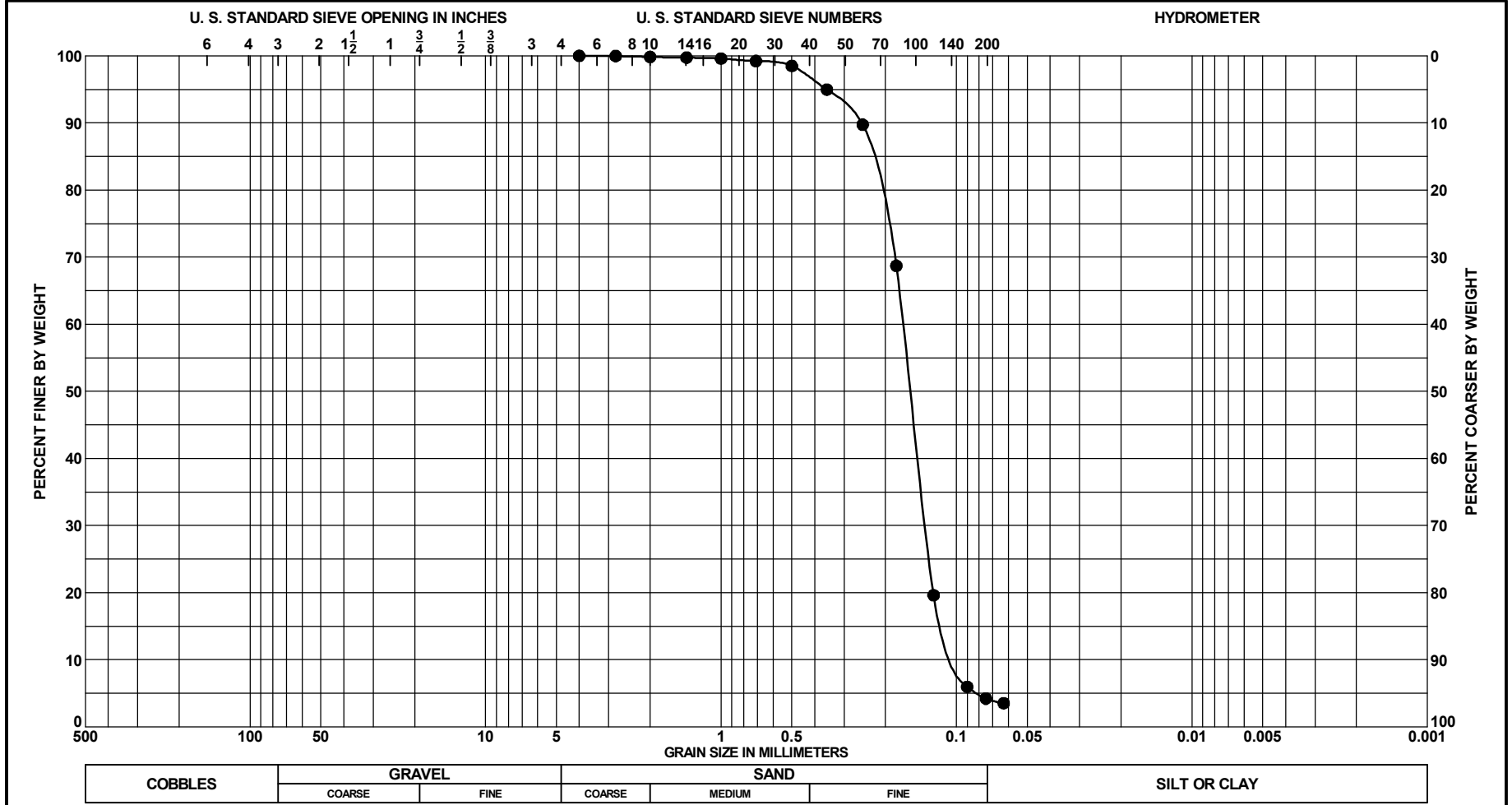
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, gray (SP)	10YR 6/1	8/5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-35
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



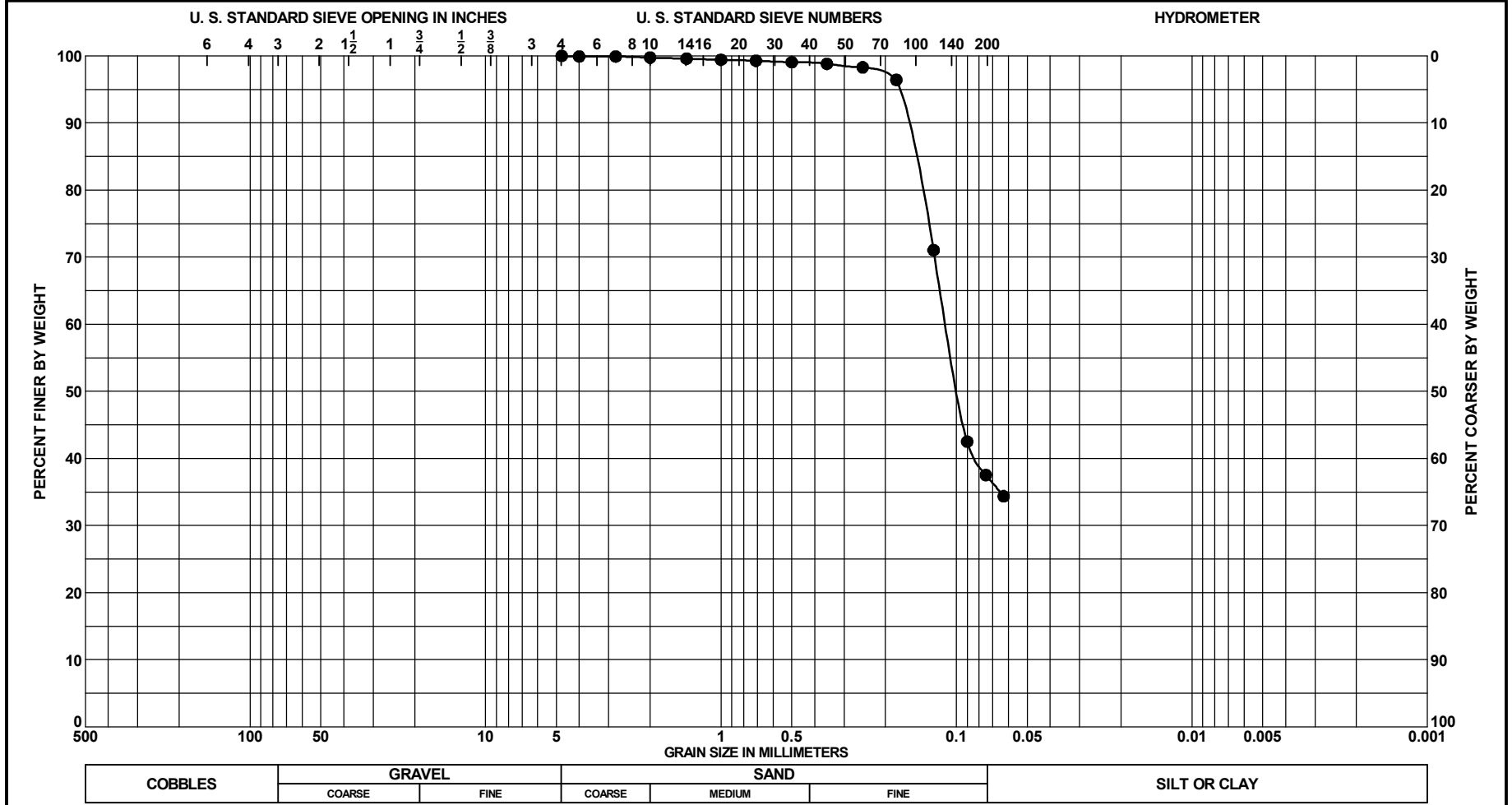
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 1-Post	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-35
											BORING ELEV.	-53.6 Ft., NAVD88
											DATE	4/6/2010



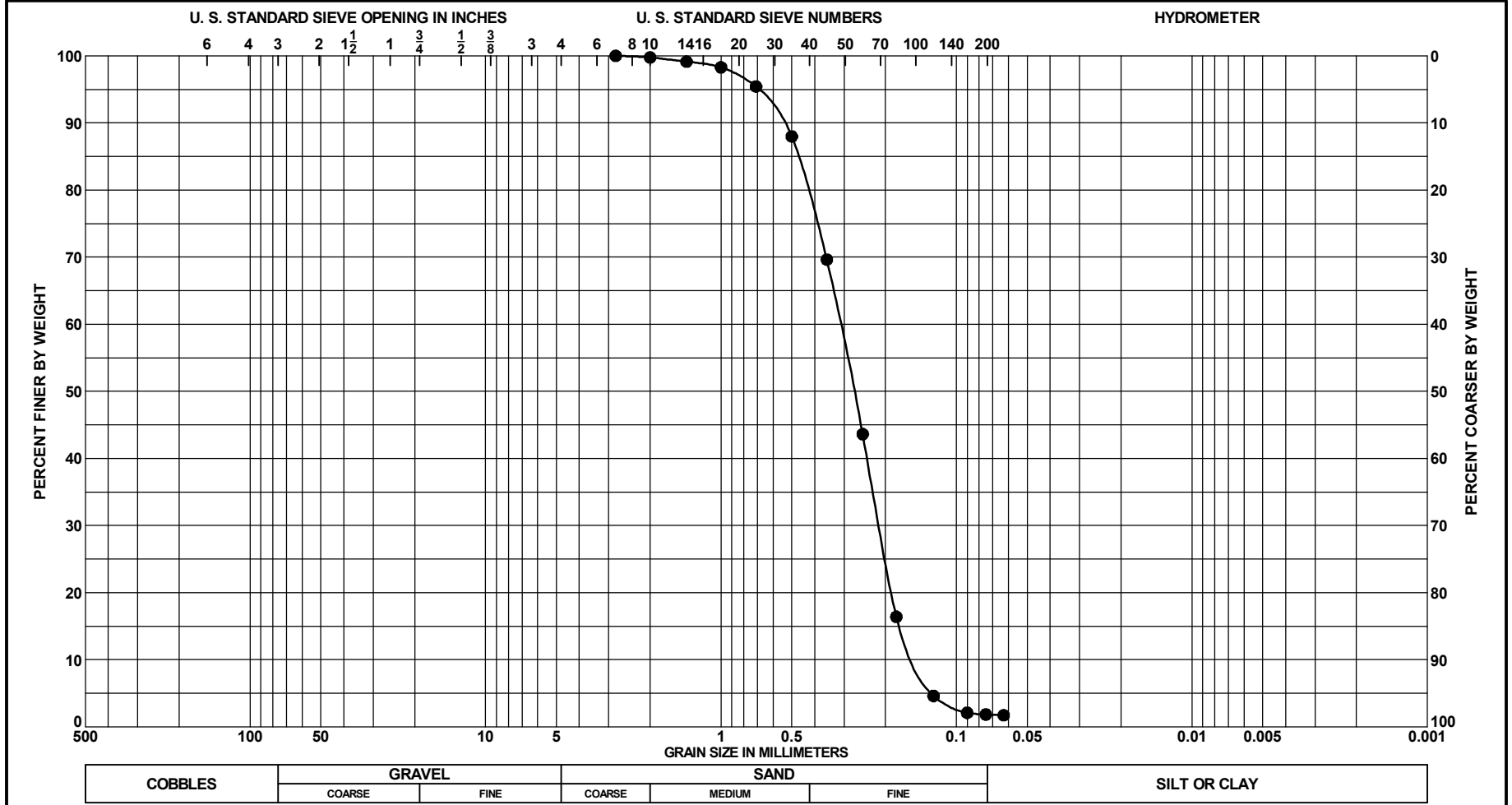
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	5.0 to 5.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, trace silt, gray (SP)	10YR 6/1	3 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-35
											BORING ELEV.	-53.6 Ft., NAVD88
											DATE	4/5/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, trace silt, grayish brown (SP)	10YR 5/2	3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-35
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

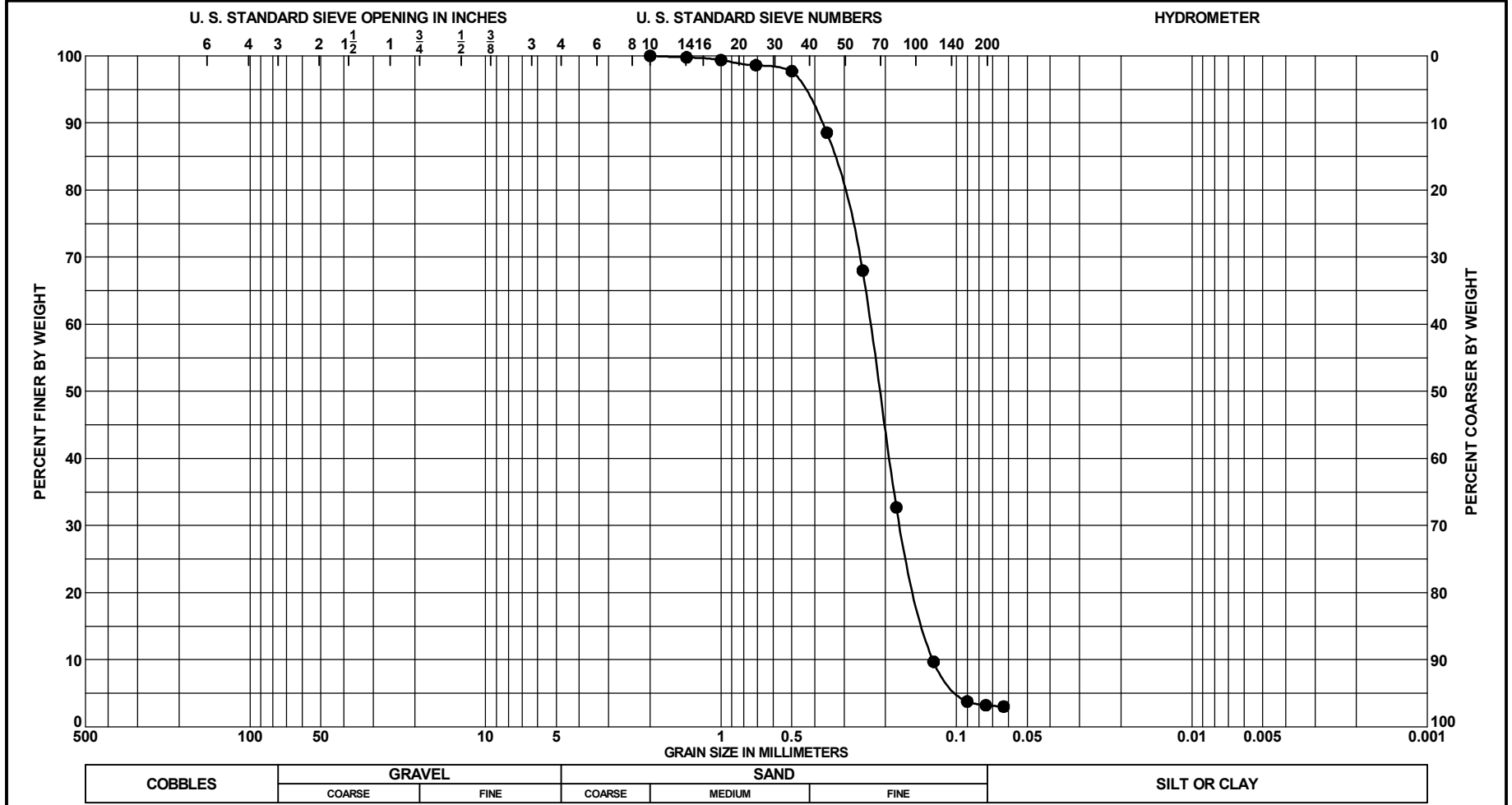


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	8.0 to 8.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, some clay, dark greenish gray (SC)	10GY 4/1	2 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-35
											BORING ELEV. -53.6 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

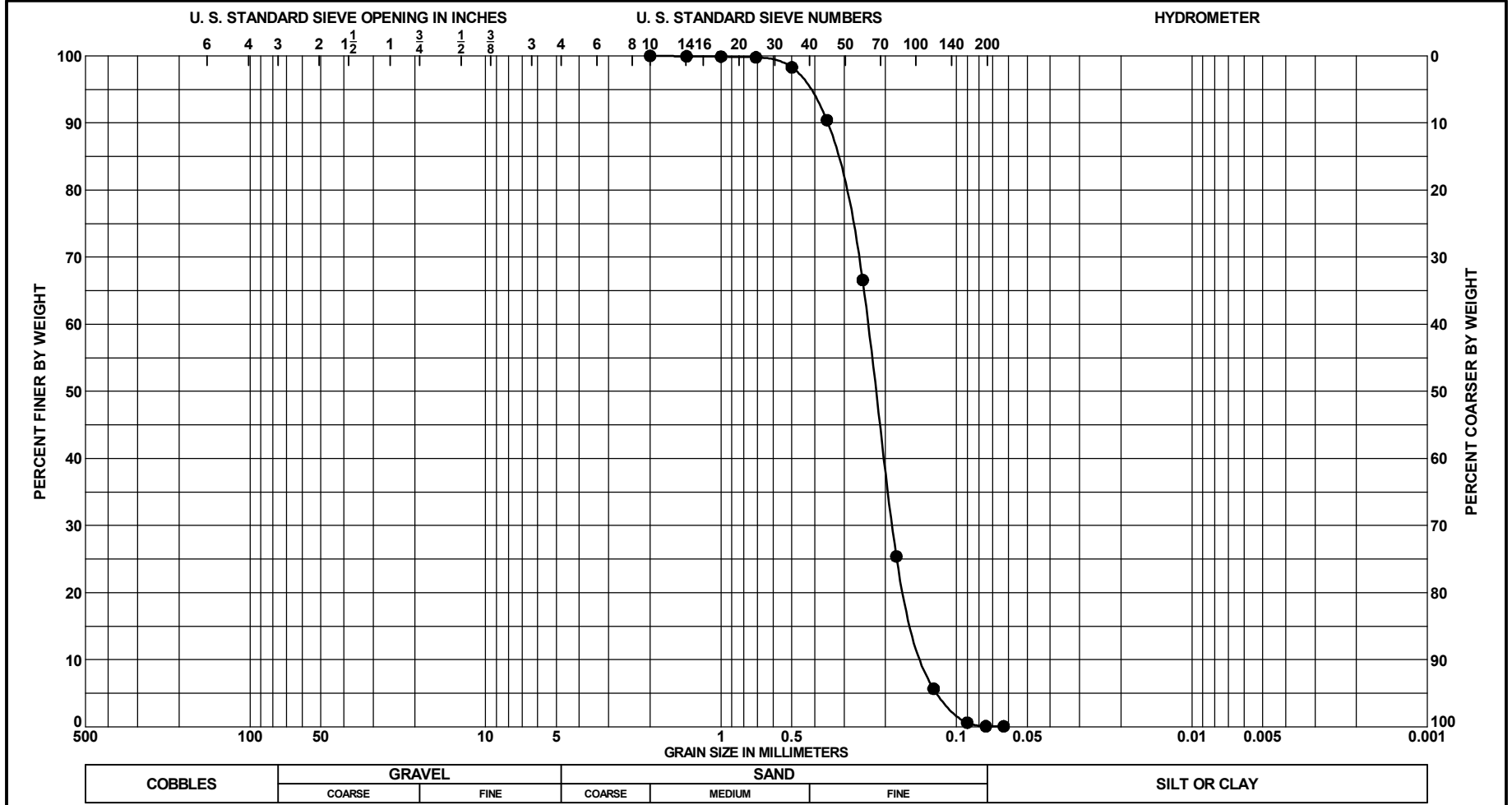


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, light gray (SP)	10YR 7/1	17 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-36
											BORING ELEV. -51.6 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

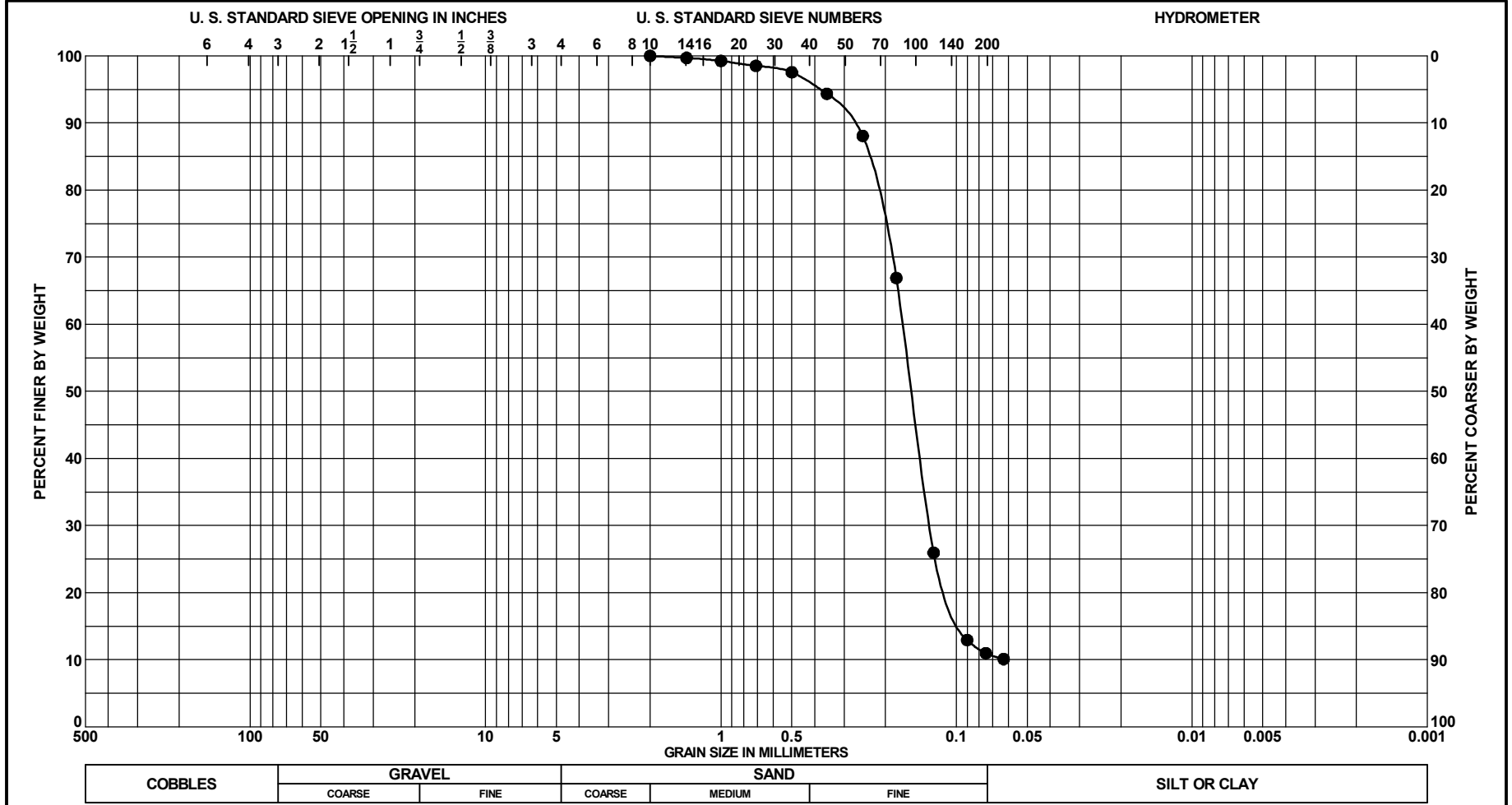


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, light gray (SP)	10YR 7/1	10/2 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-36
											BORING ELEV.	-51.6 Ft., NAVD88
											DATE	3/18/2010

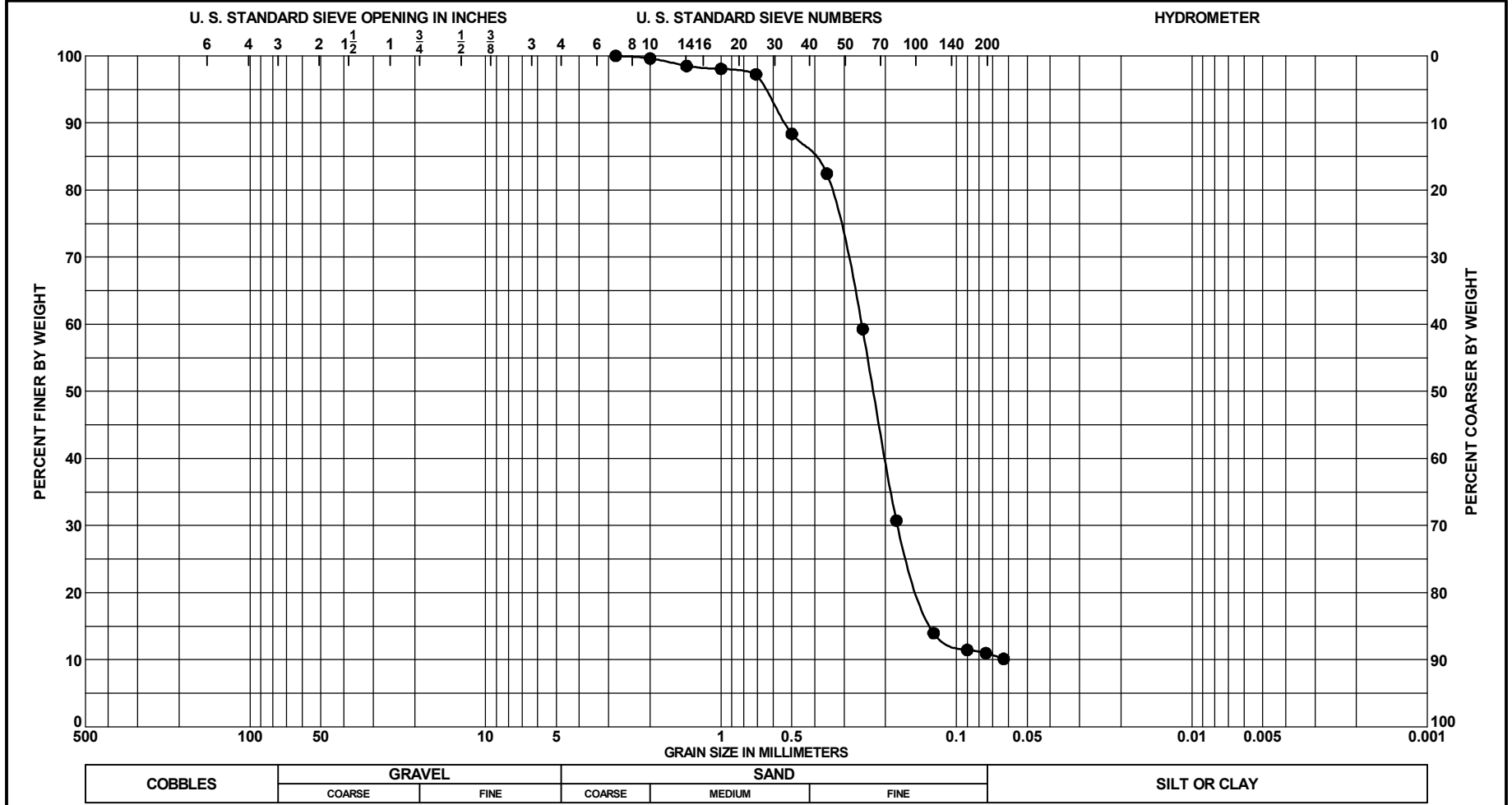


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-36
											BORING ELEV. -51.6 Ft., NAVD88
											DATE 4/6/2010

GRADATION CURVES

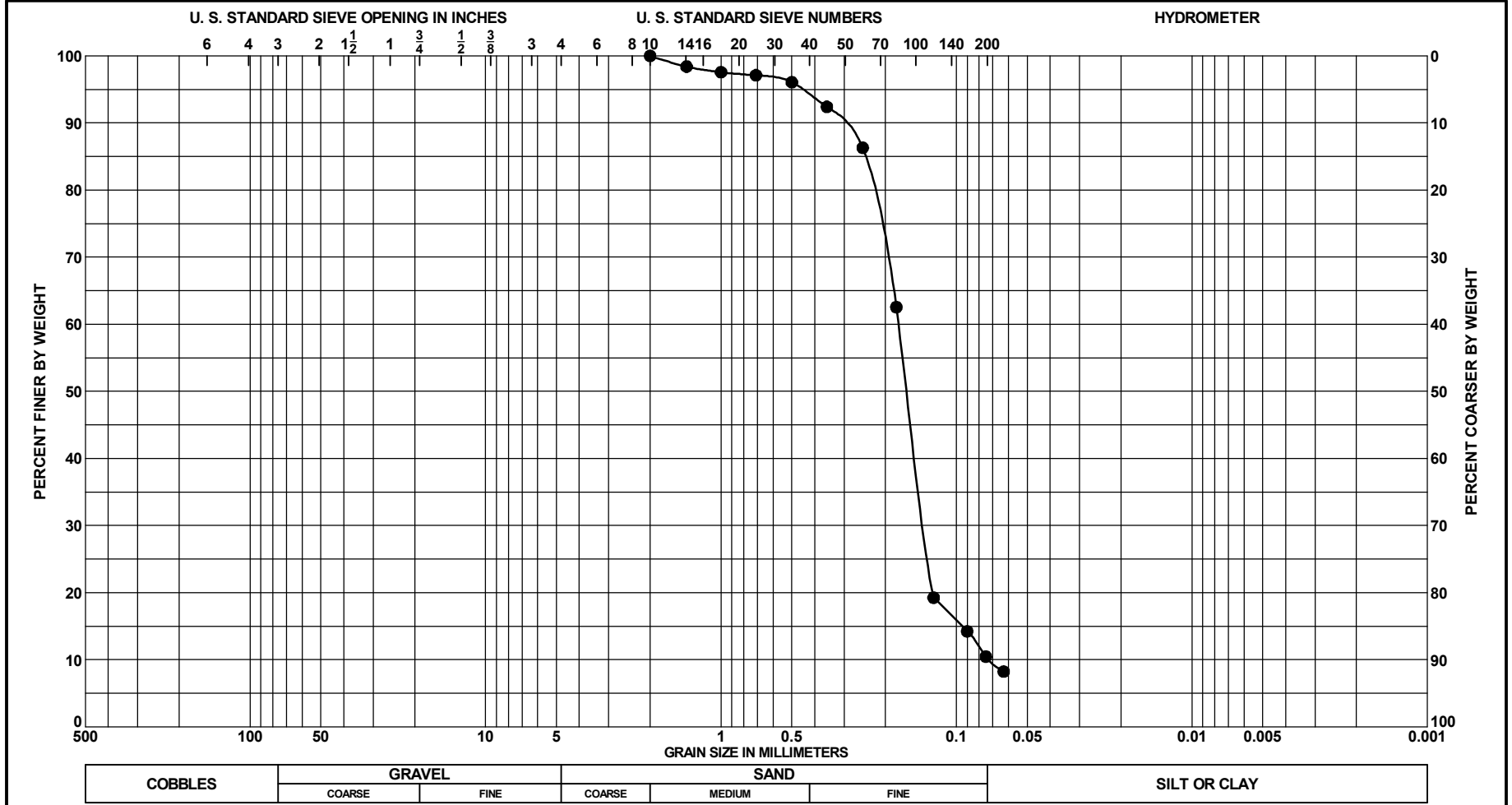


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-36
											BORING ELEV. -51.6 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



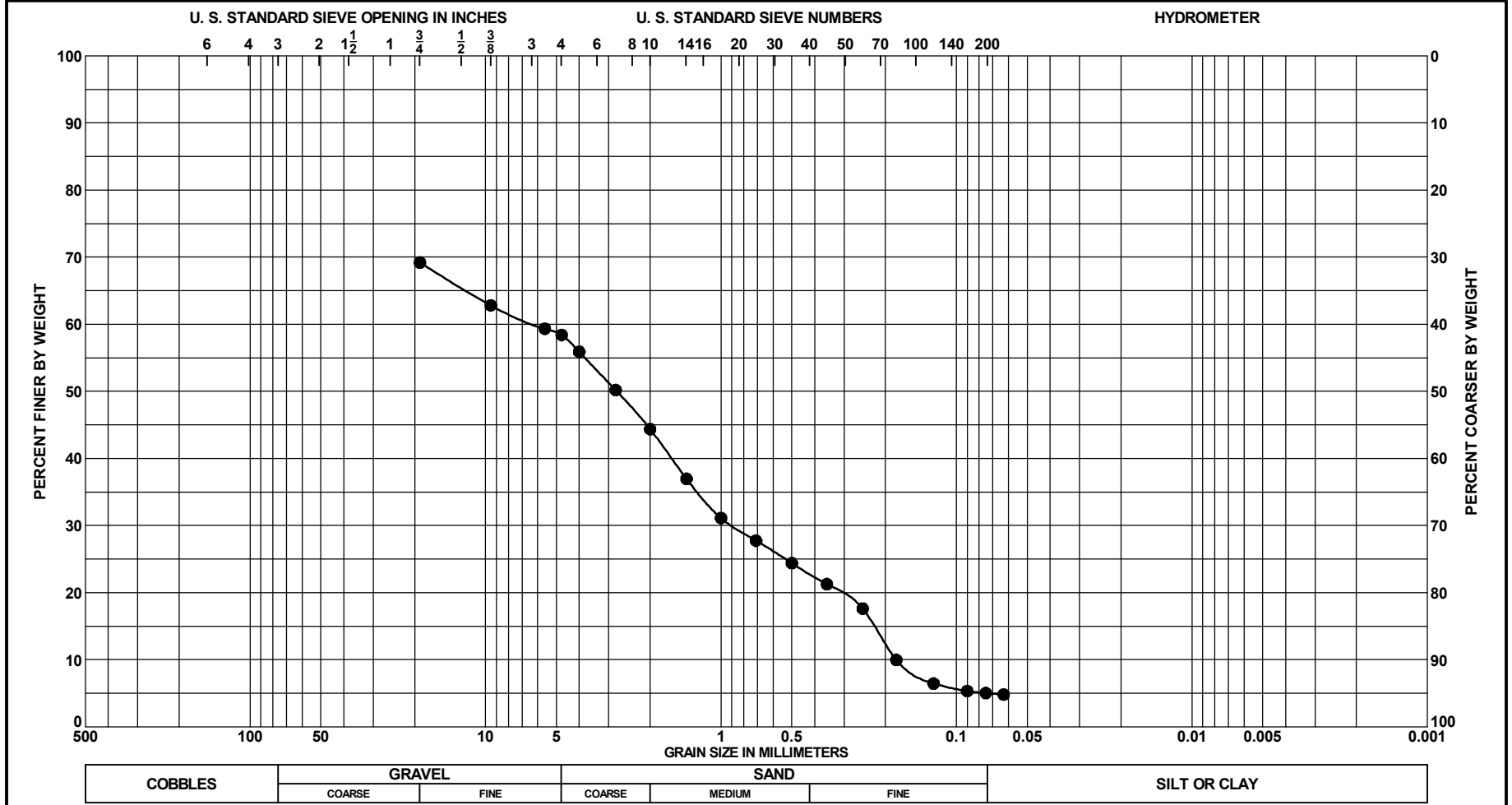
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	10.5 to 11.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	9 (est)							St. Johns County Offshore
											Investigation Part II
											BORING NO. VB-SJSP09-36
											BORING ELEV. -51.6 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



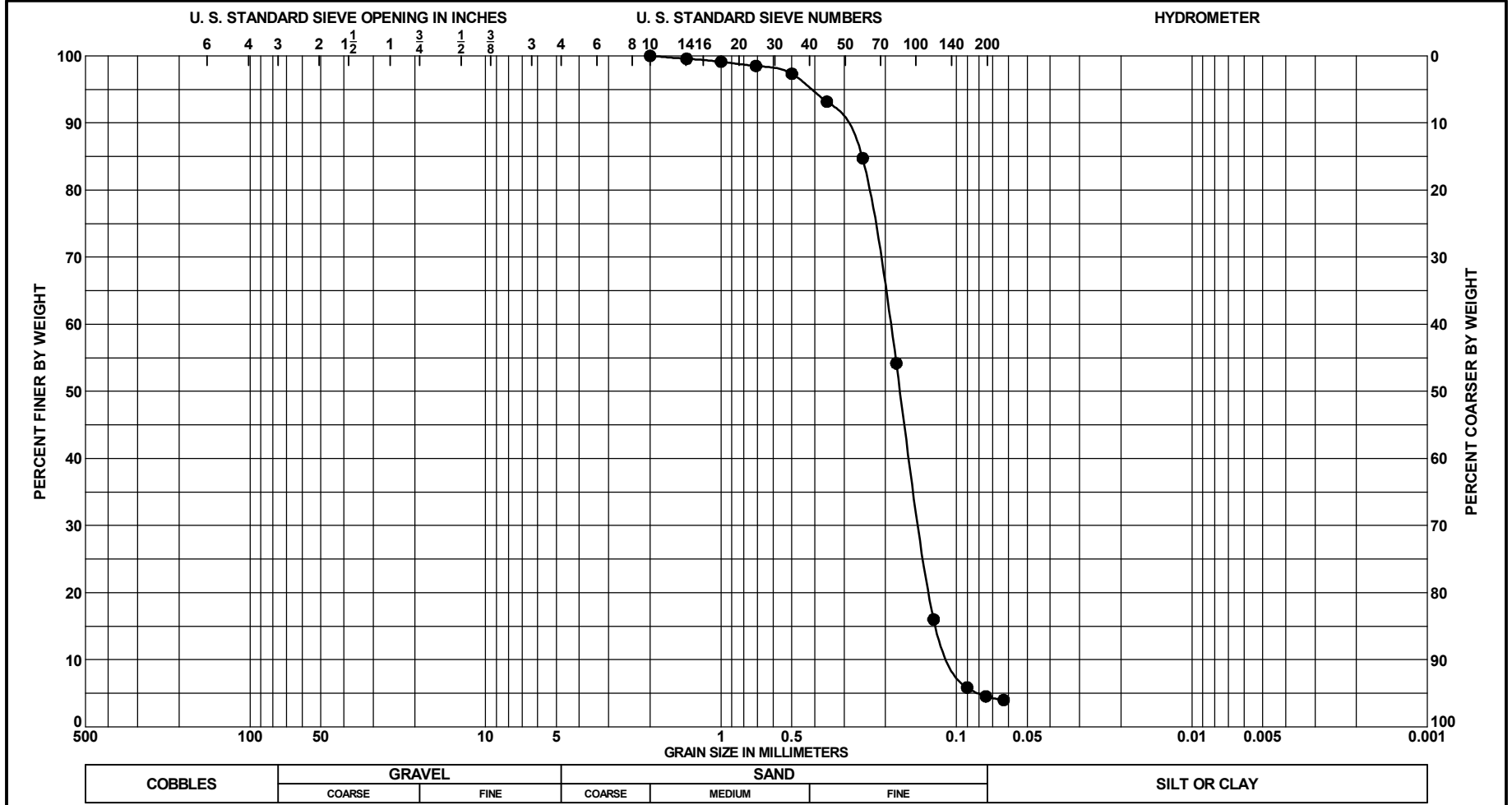
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	9 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-37
											BORING ELEV. -61.1 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

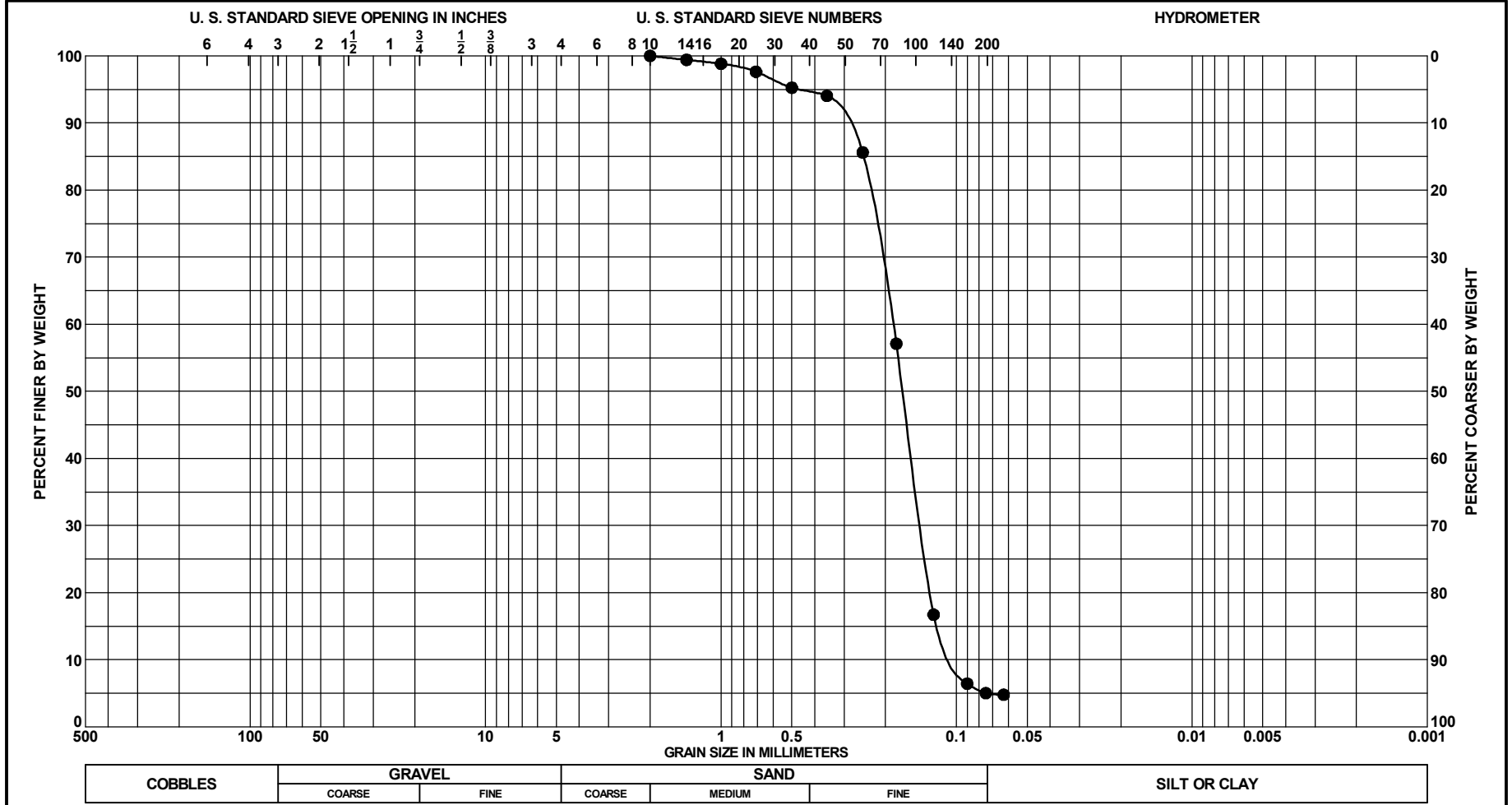


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

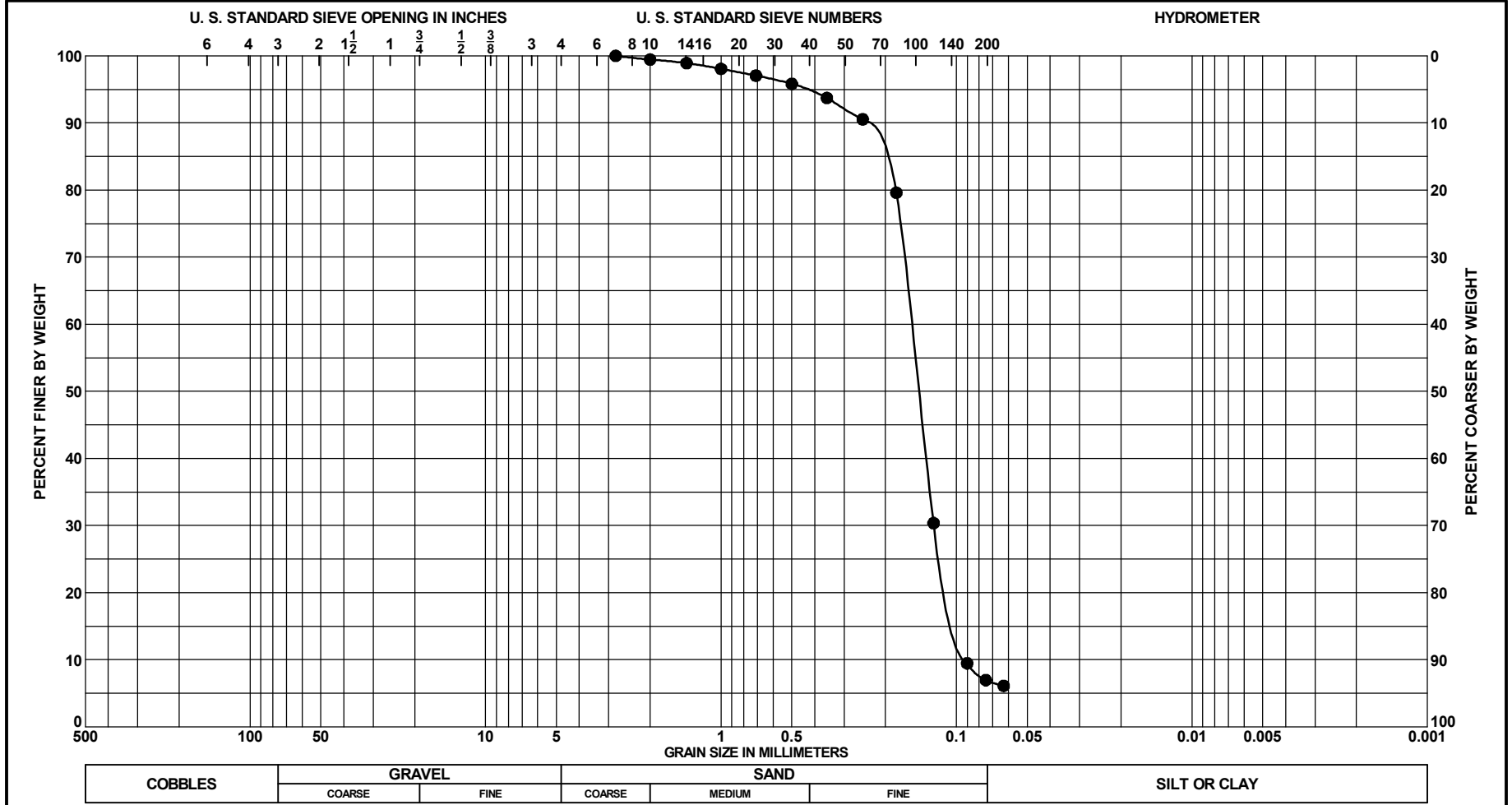
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly coarse-gravel to medium sand-size shell fragments, little fine-grained quartz, few silt, gray (SP-SM)	10YR 6/1	76 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-37
											BORING ELEV. -61.1 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



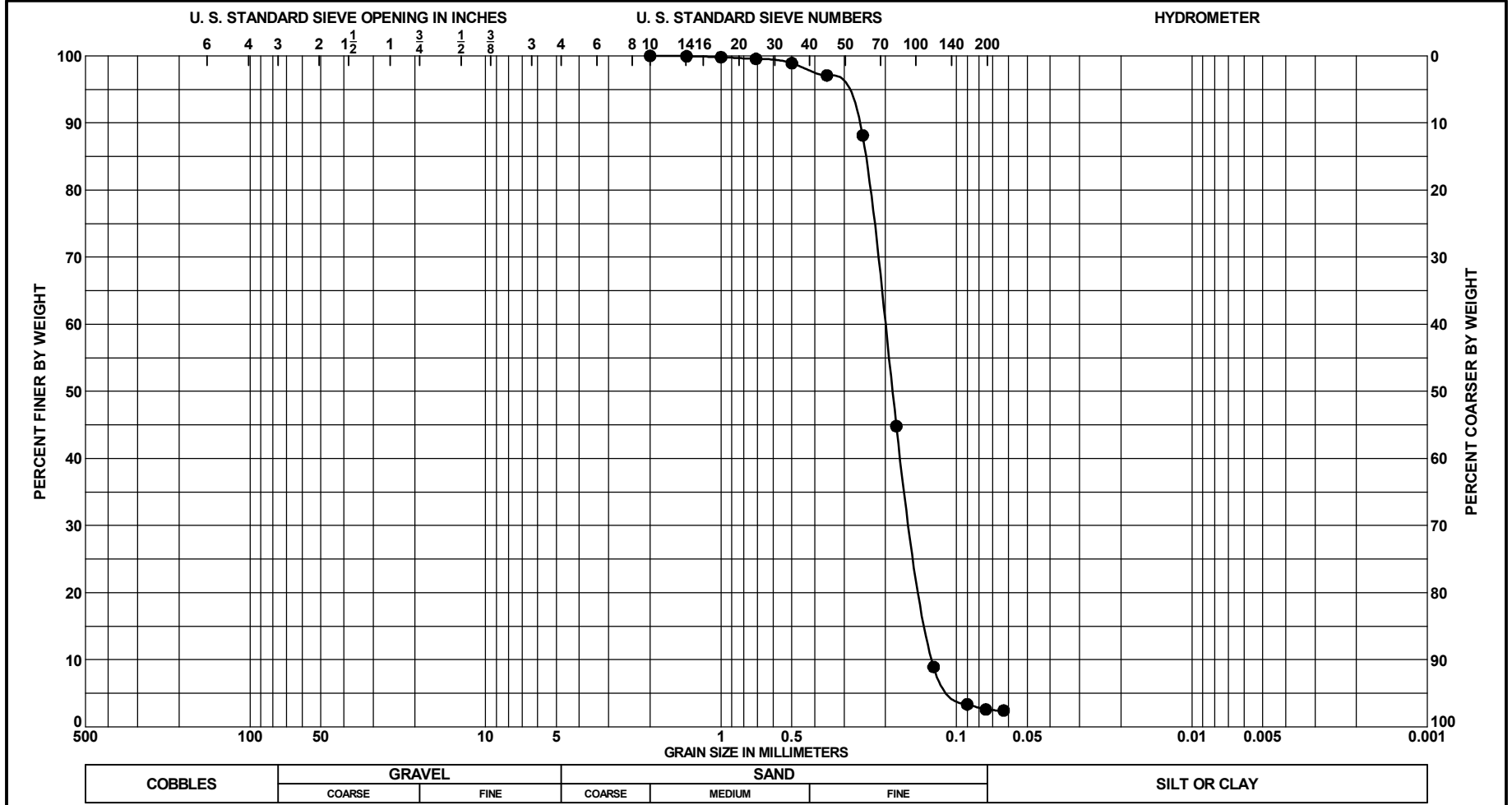
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	0.5 to 1.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	9 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-38
											BORING ELEV.	-64.4 Ft., NAVD88
											DATE	3/18/2010

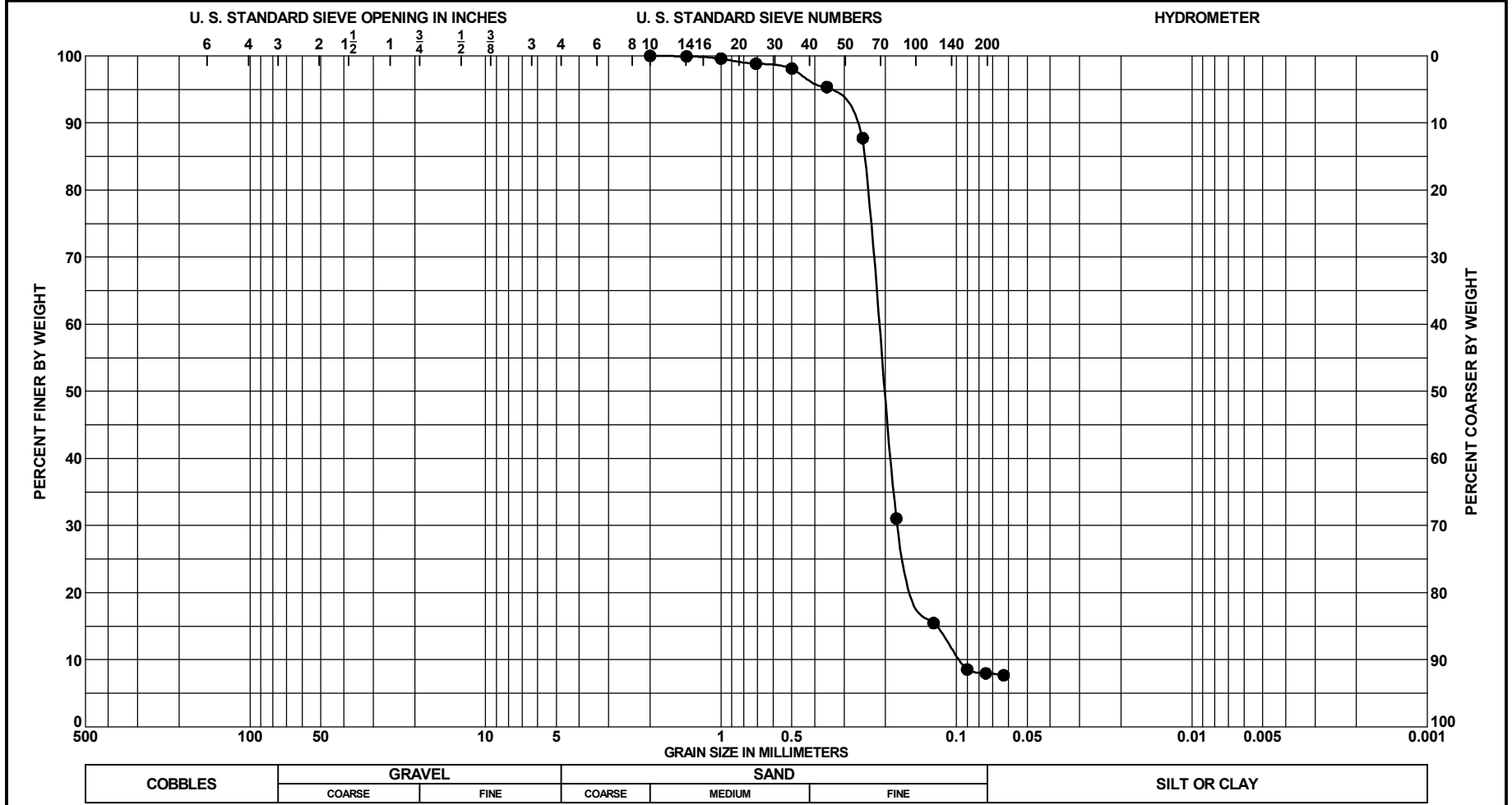


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	1.5 to 2.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	10 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-38
											BORING ELEV. -64.4 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

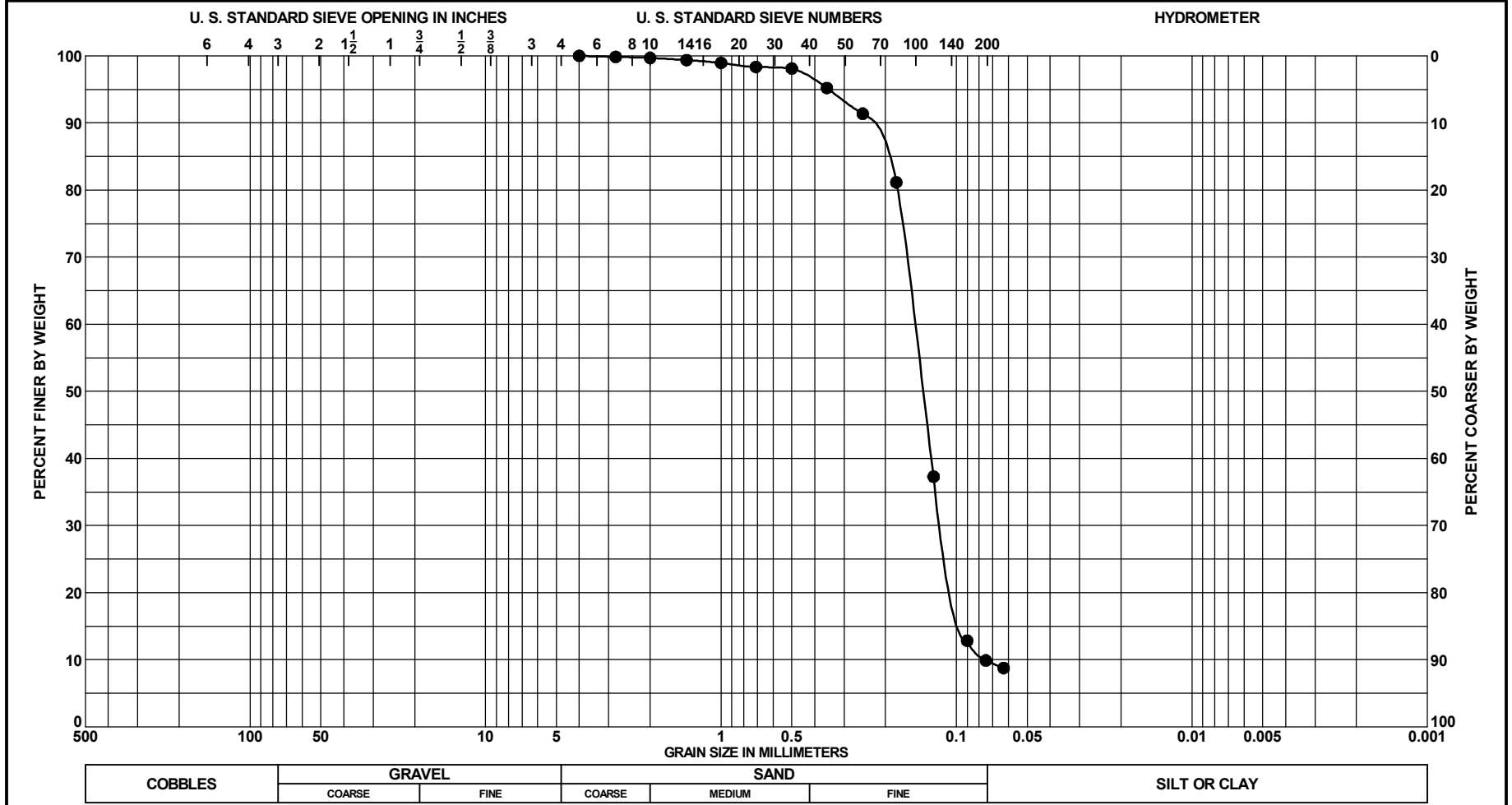


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, gray (SP-SM)	10YR 6/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-38
											BORING ELEV. -64.4 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

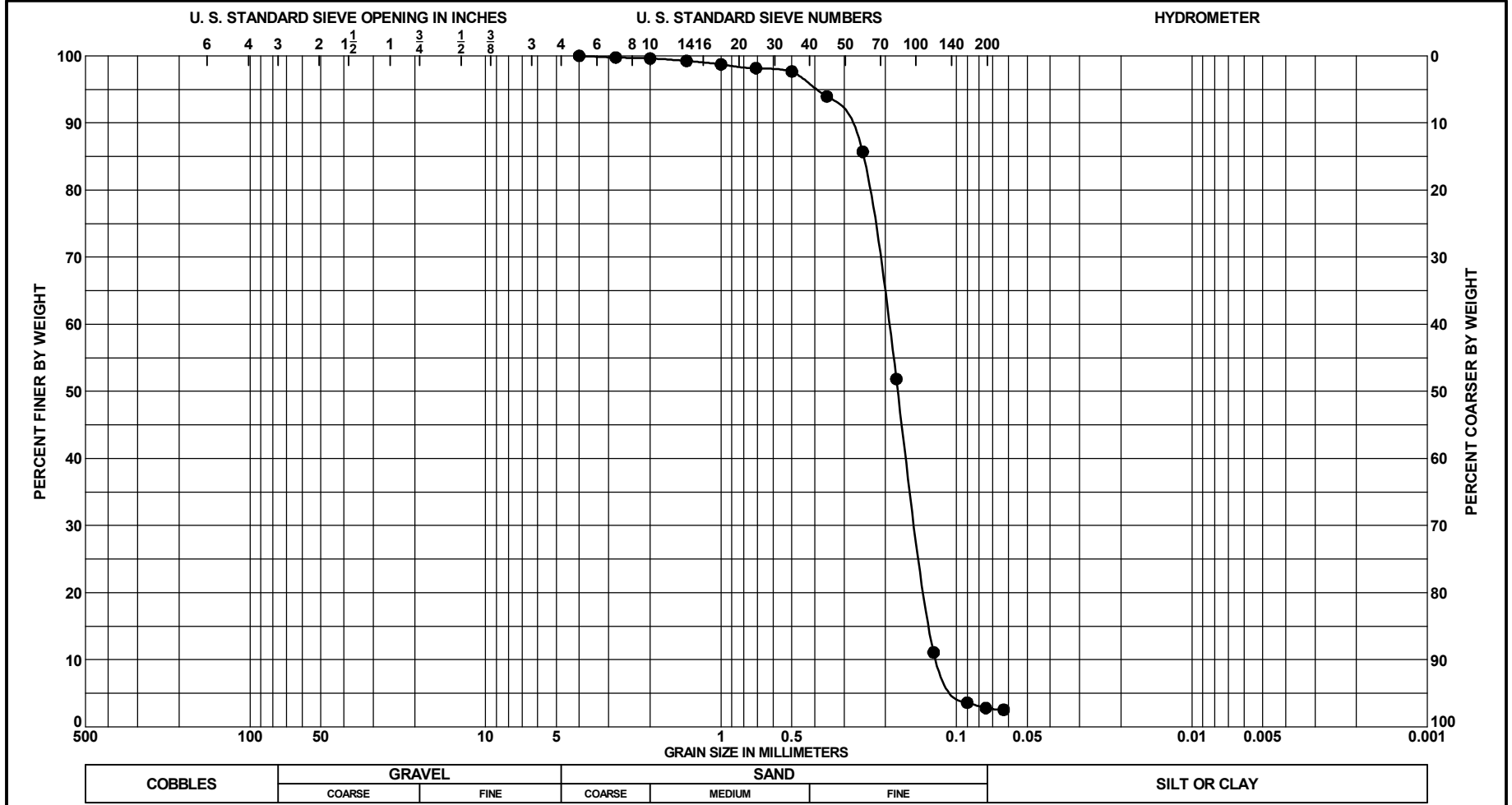




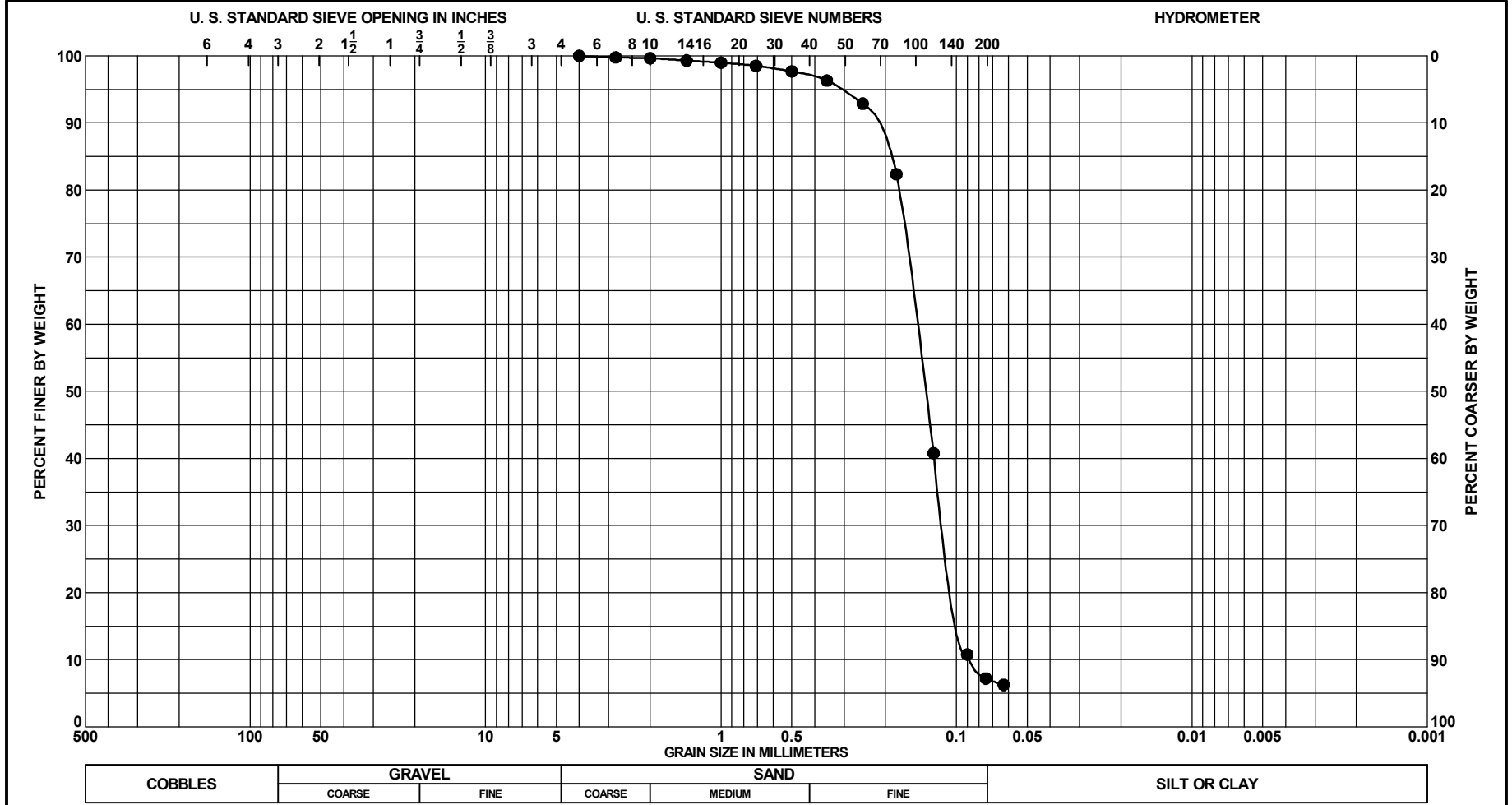
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	10 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-39
											BORING ELEV. -51.5 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



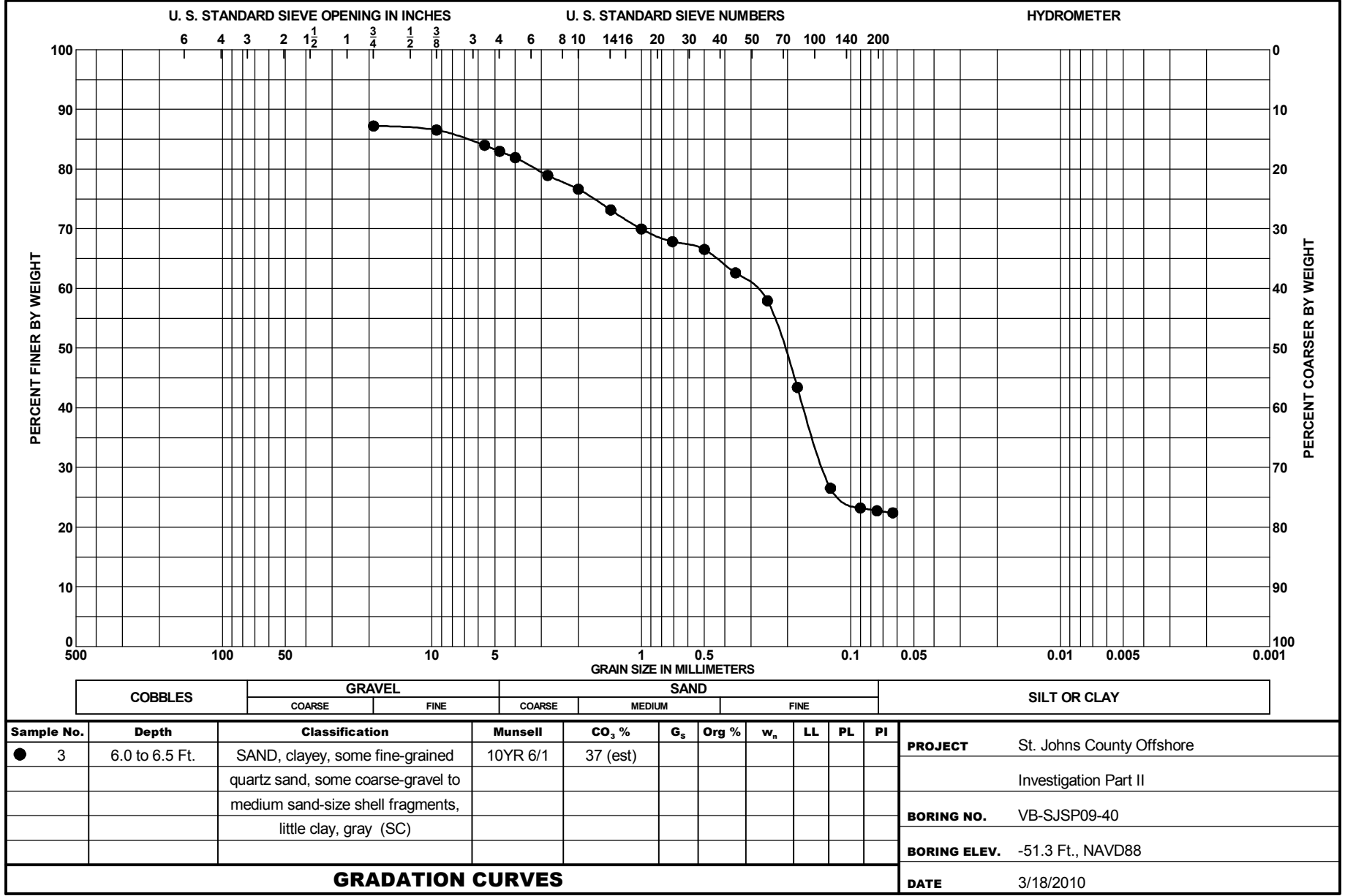
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 3	10.0 to 10.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	11 (est)							PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-39
											BORING ELEV.	-51.5 Ft., NAVD88
GRADATION CURVES											DATE	3/18/2010

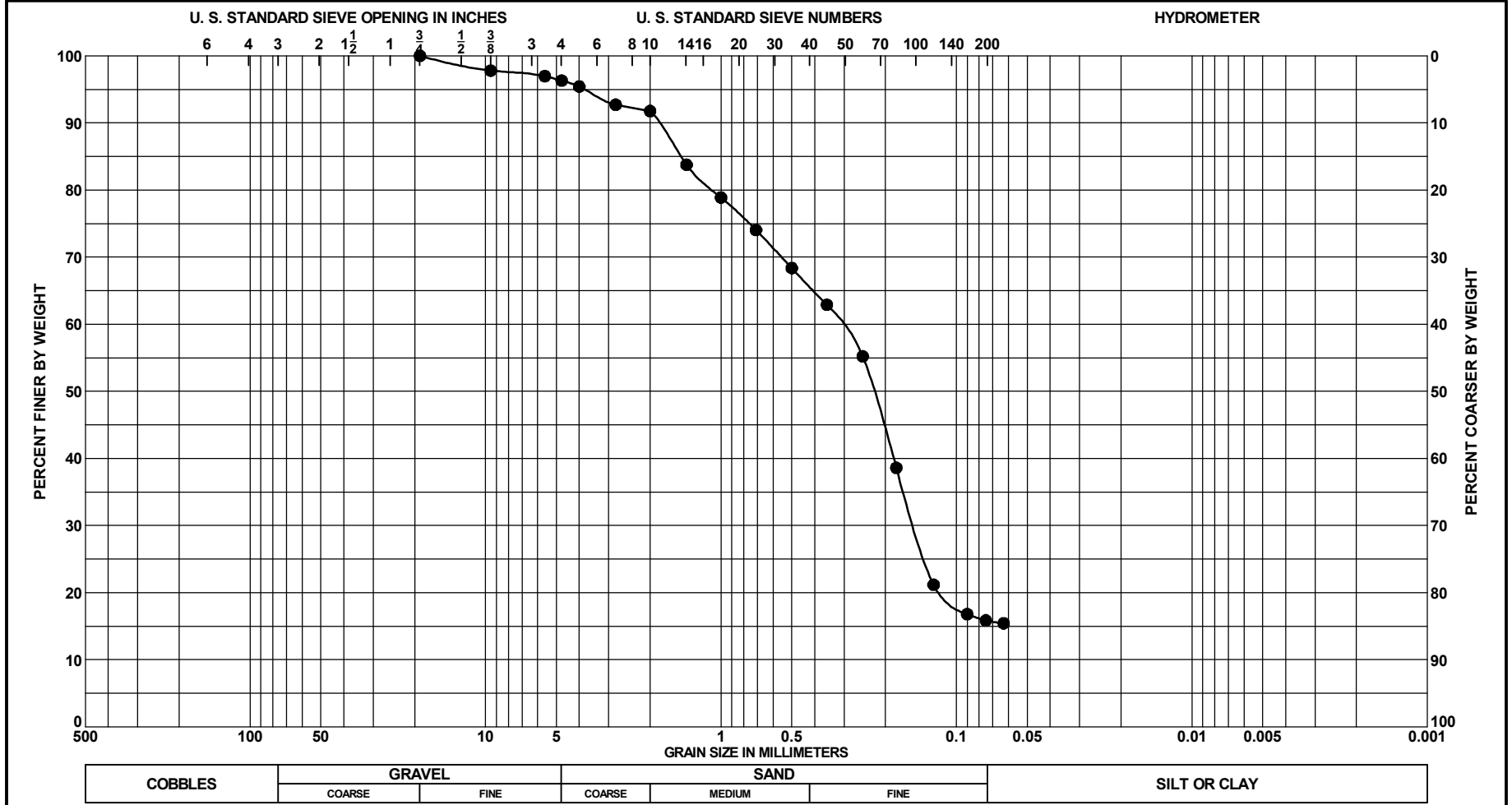


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, gray (SP)	10YR 6/1	7 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-40
											BORING ELEV.	-51.3 Ft., NAVD88
											DATE	3/18/2010

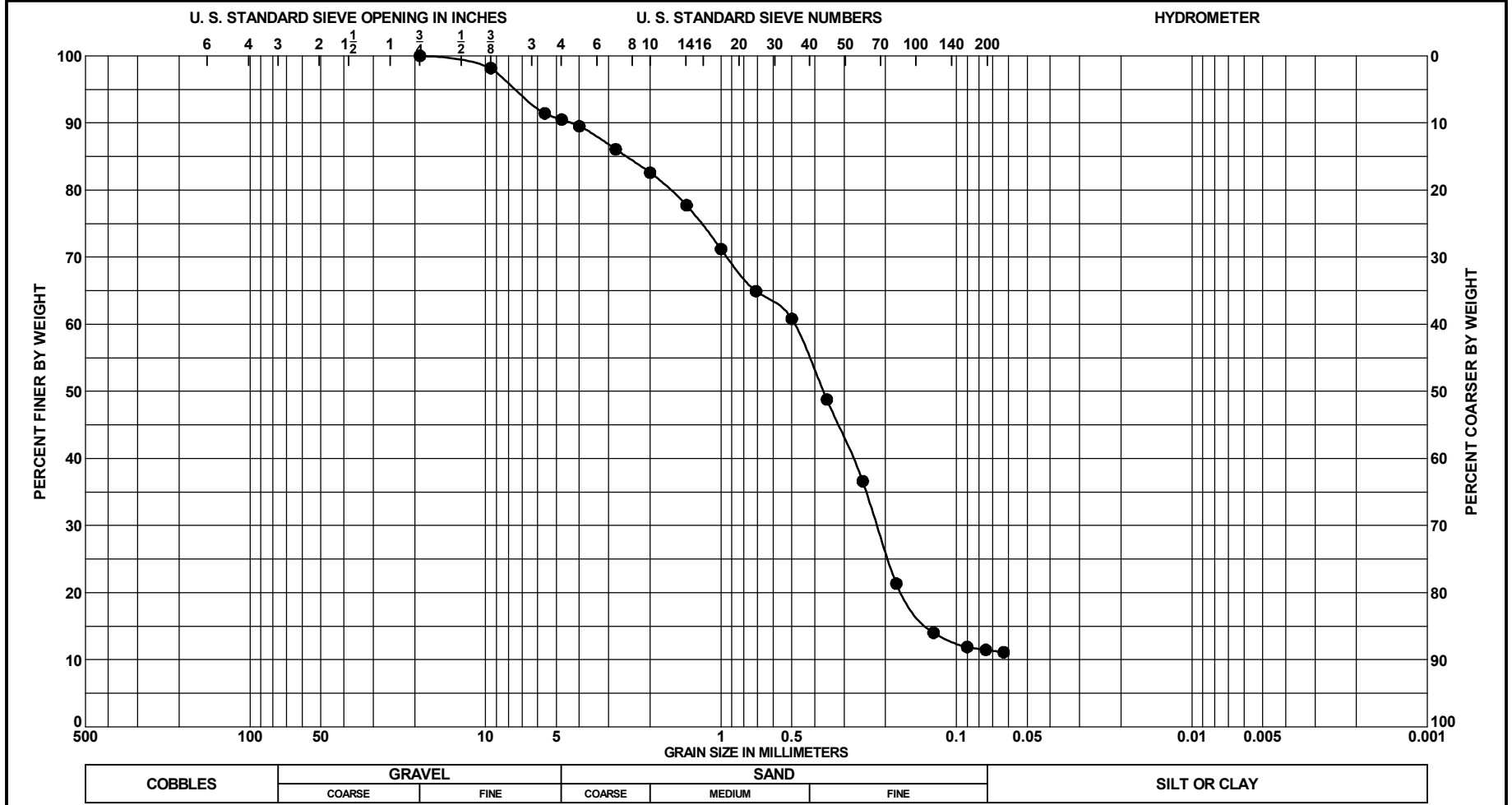


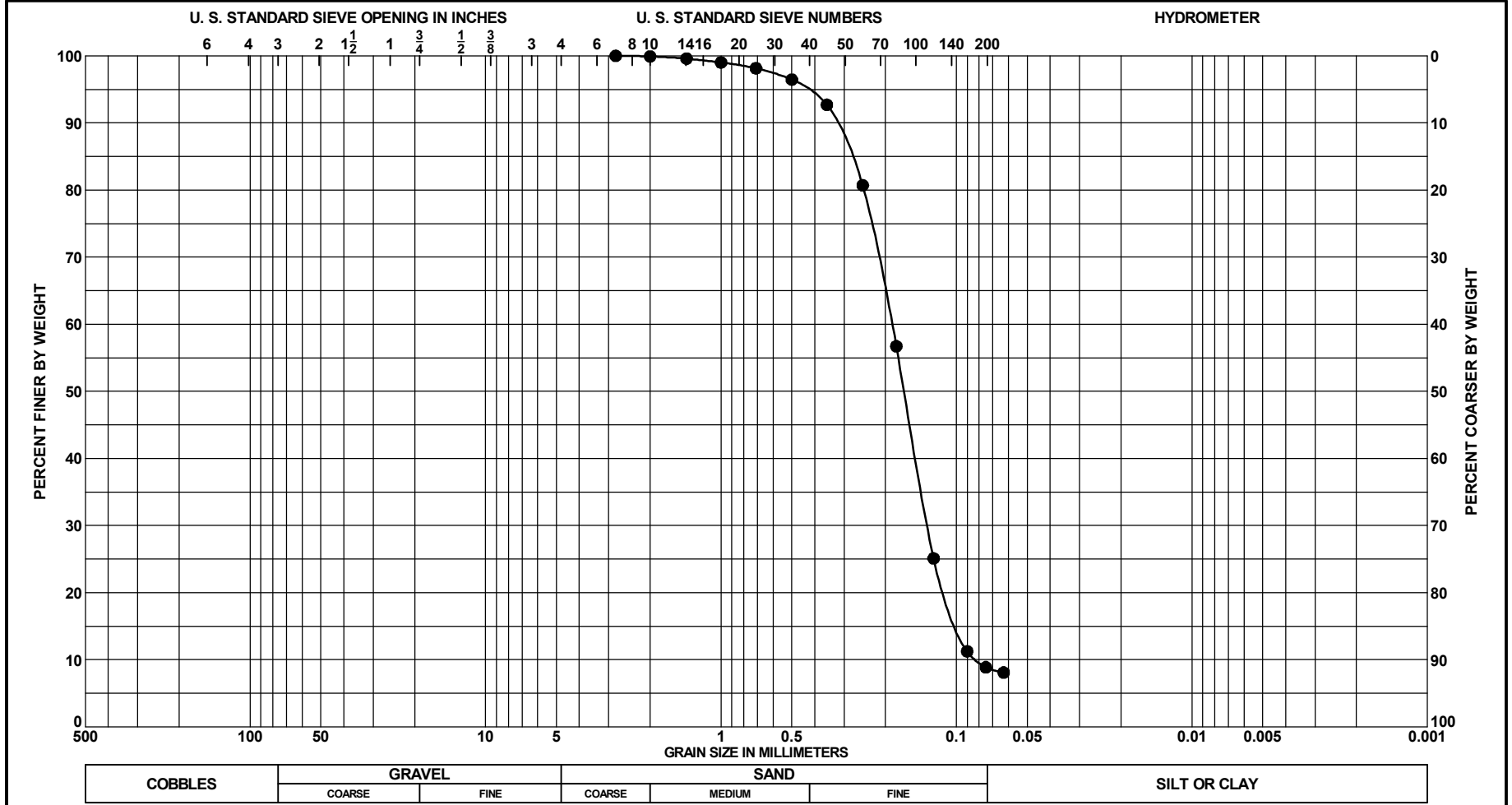
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few medium to fine sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-40
											BORING ELEV. -51.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



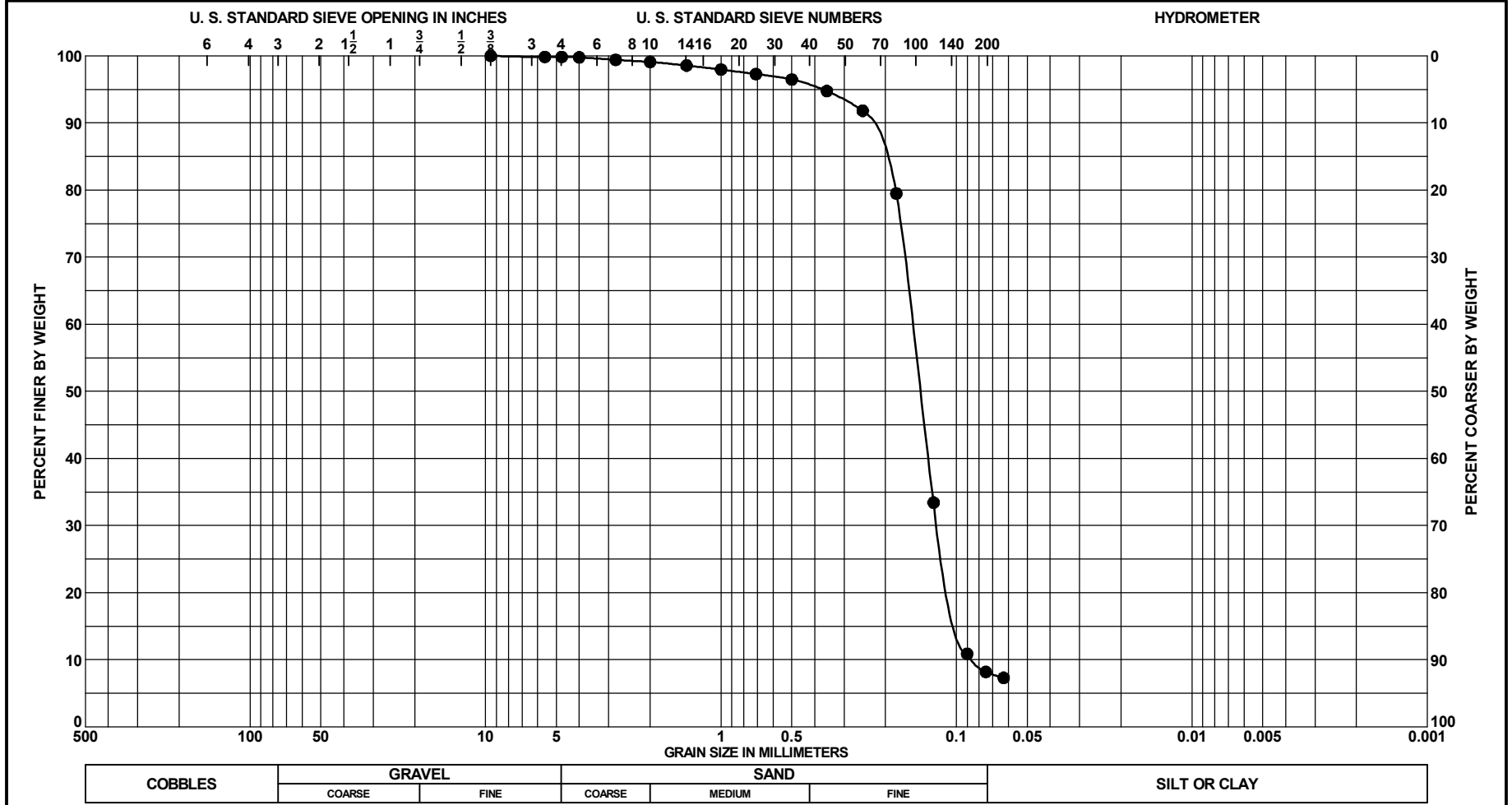


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little coarse to medium sand-size shell fragments, little silt, light gray (SM)	10YR 7/1	24 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-41
											BORING ELEV. -65.0 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

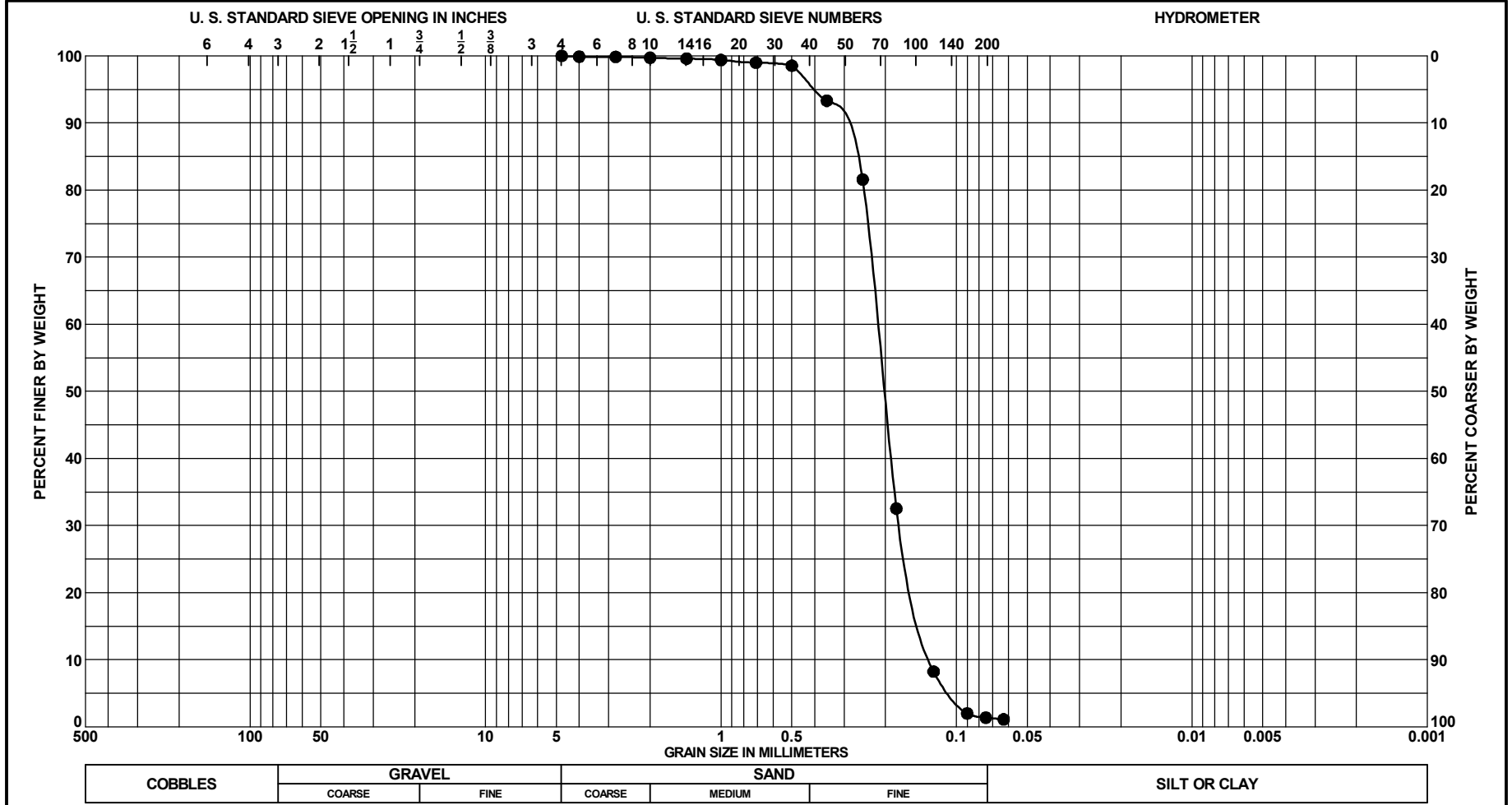




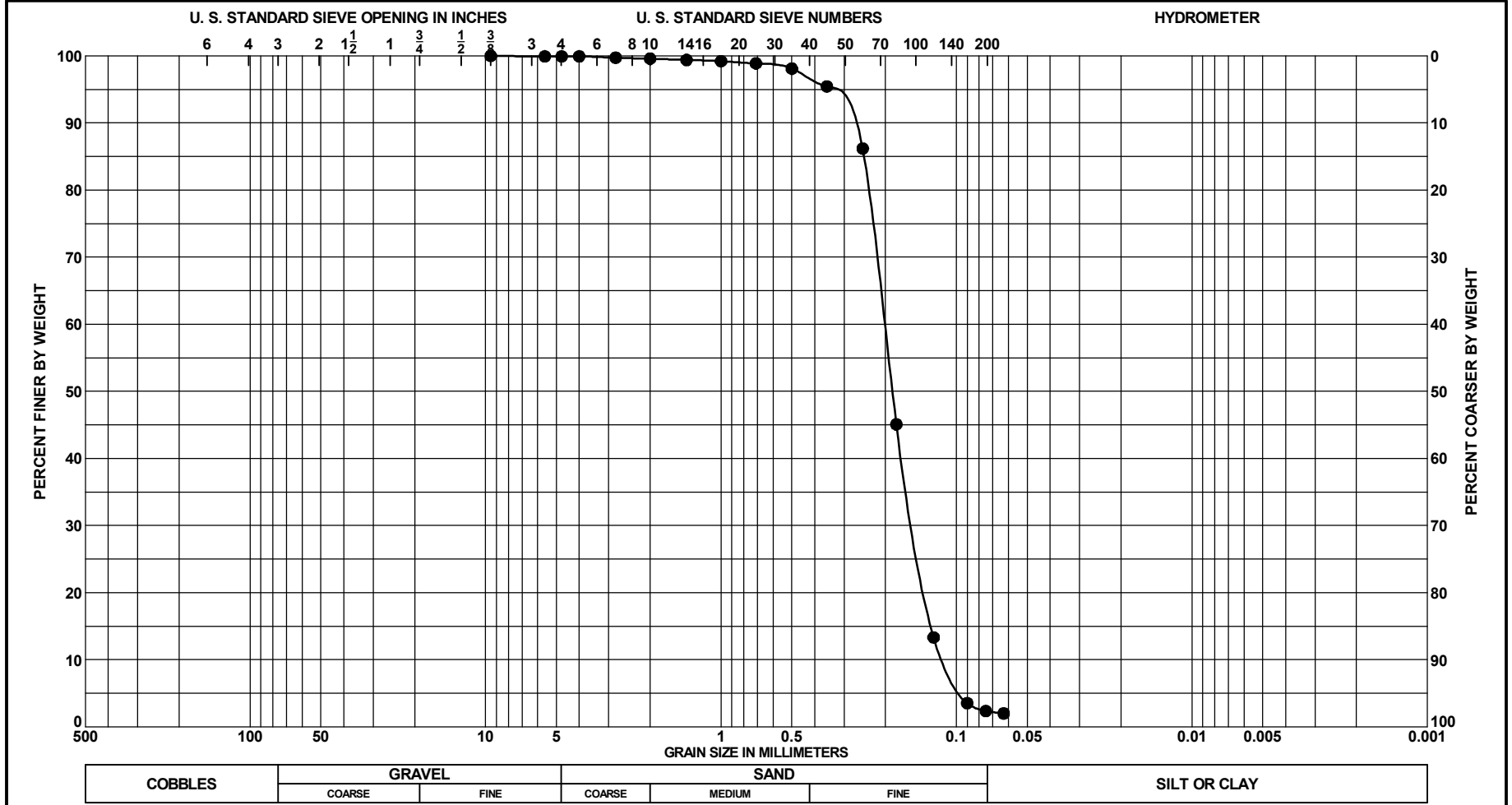
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	5 (est)							PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-42
											BORING ELEV.	-60.7 Ft., NAVD88
GRADATION CURVES											DATE	3/18/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-42
											BORING ELEV. -60.7 Ft., NAVD88
											DATE 3/18/2010

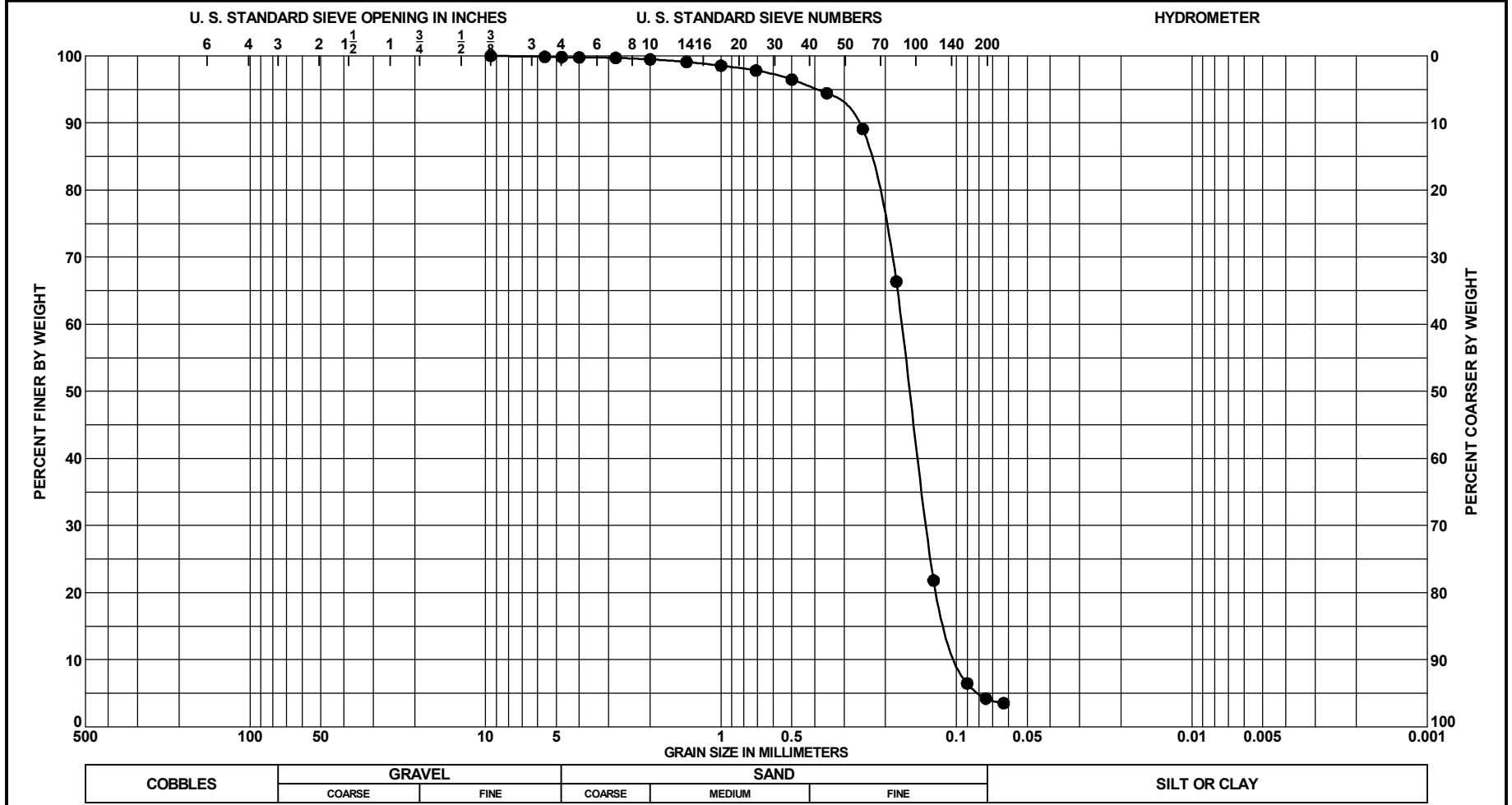


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, light gray (SP)	10YR 7/1	3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-43
											BORING ELEV. -52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



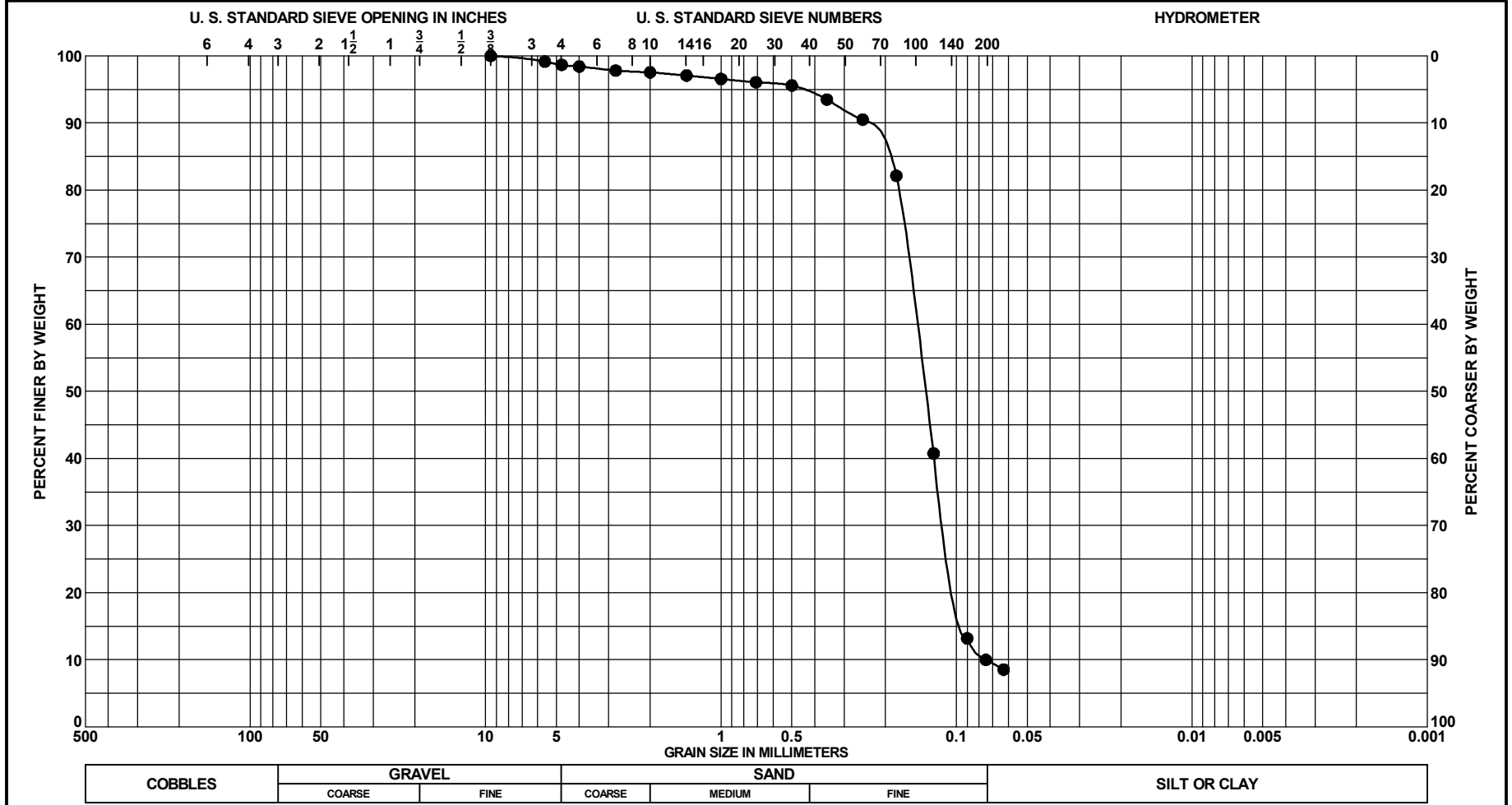
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, light gray (SP)	10YR 7/1	8/6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-43
											BORING ELEV. -52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

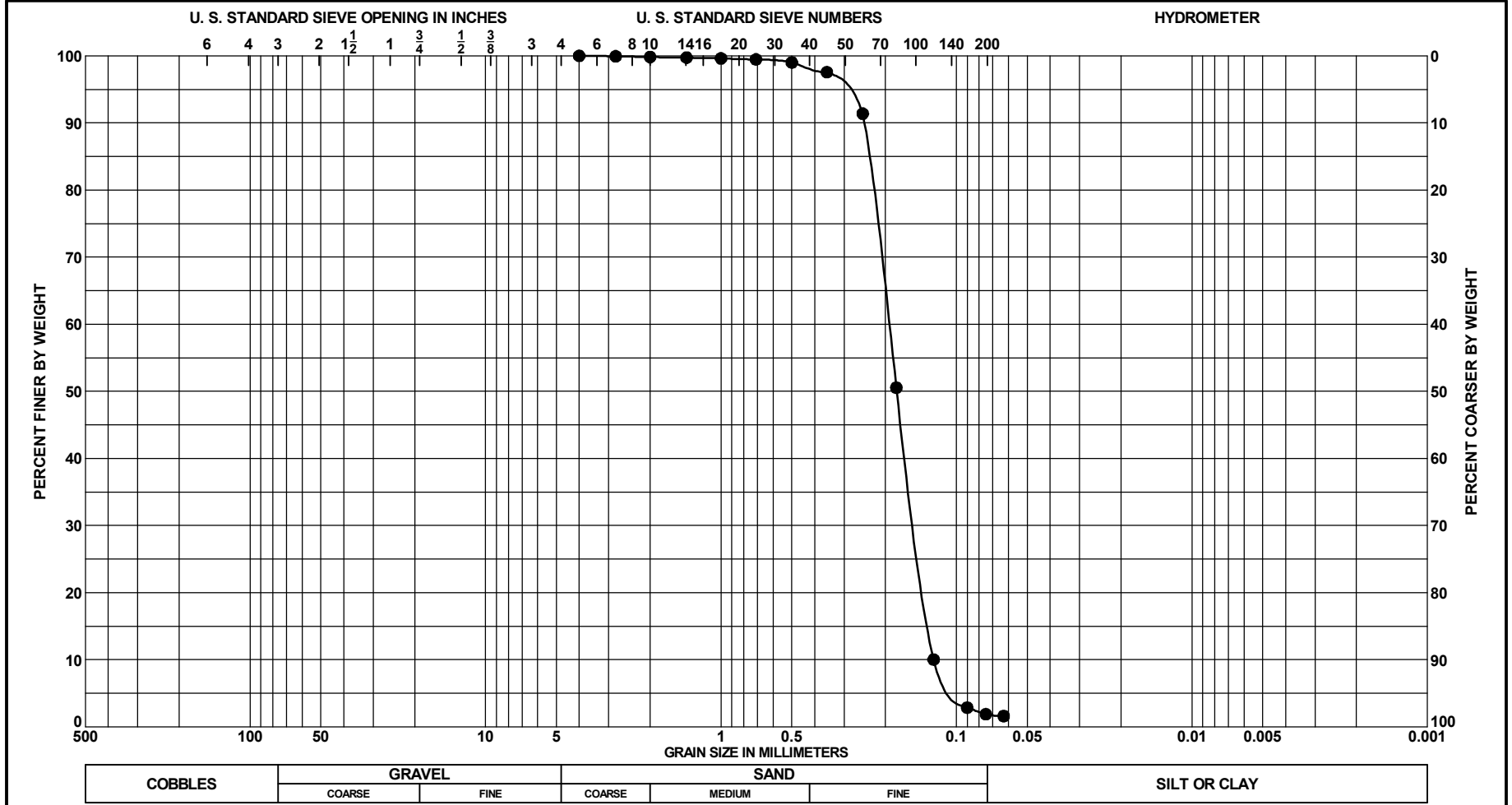


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

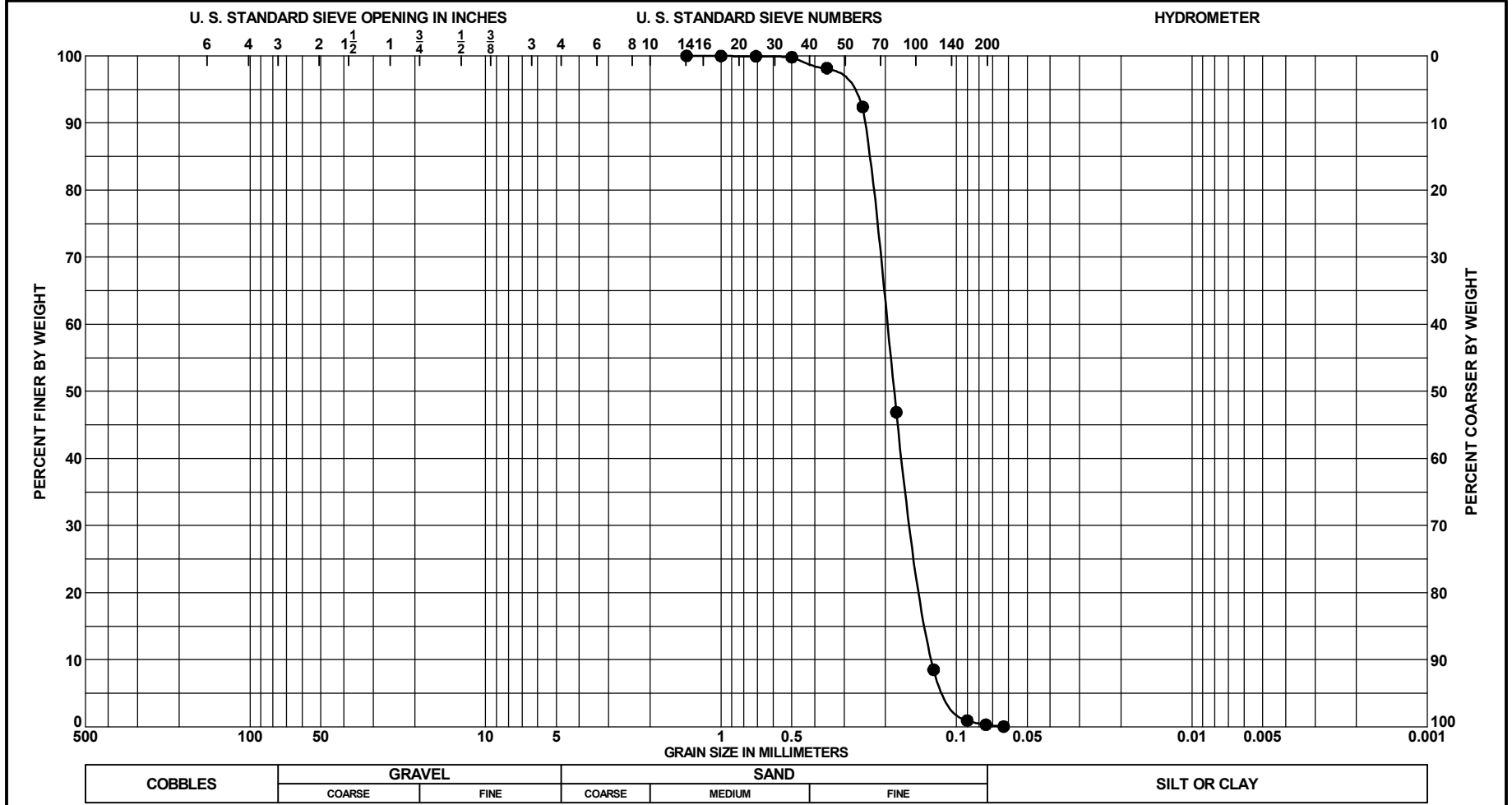
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	5.5 to 6.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-43
											BORING ELEV. -52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



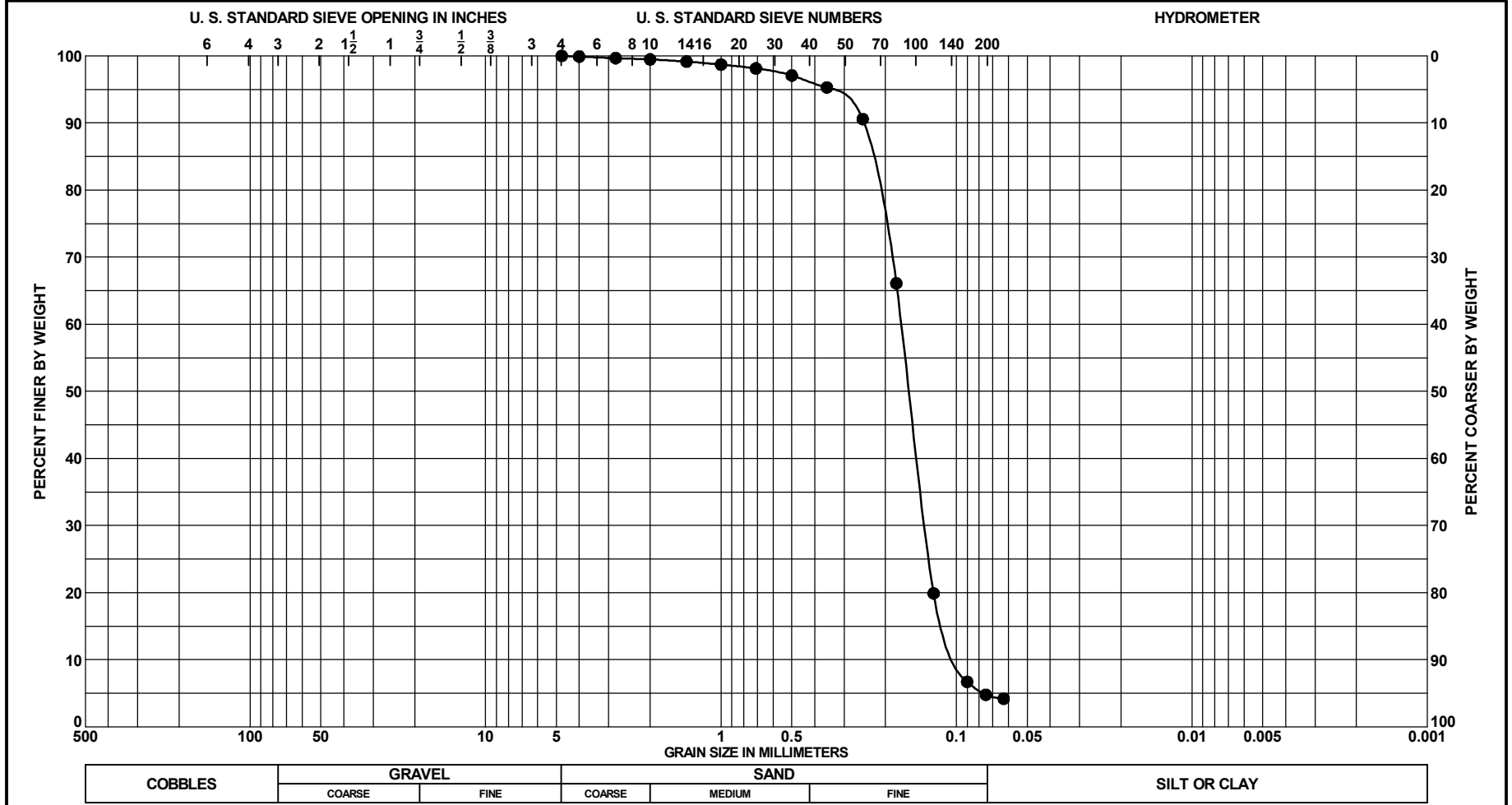
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 4	6.5 to 7.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 5/1	6 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-43
											BORING ELEV.	-52.9 Ft., NAVD88
											DATE	4/5/2010



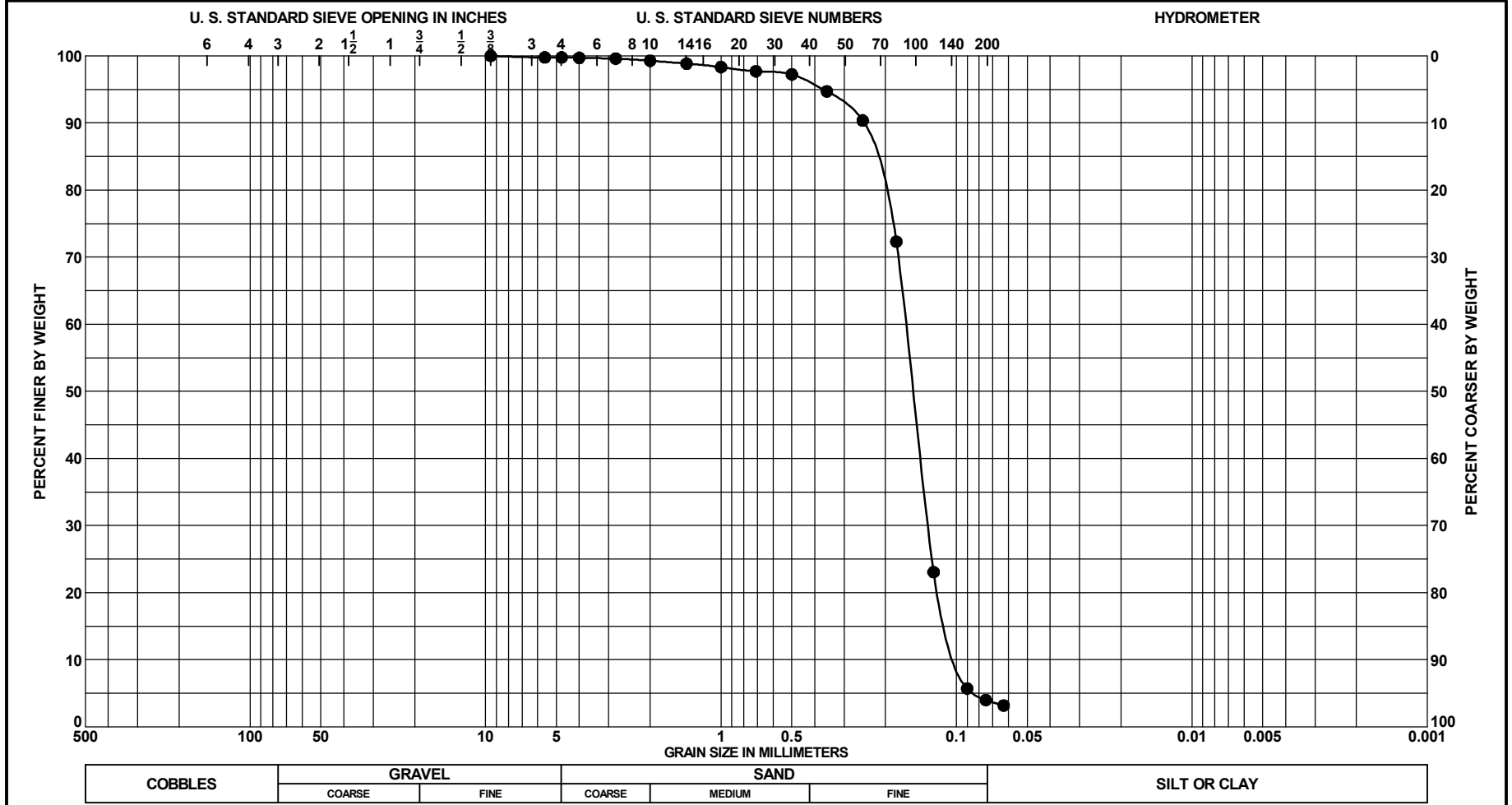
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few fine sand-size shell fragments, gray (SP)	10YR 6/1	6/3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-44
											BORING ELEV. -51.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



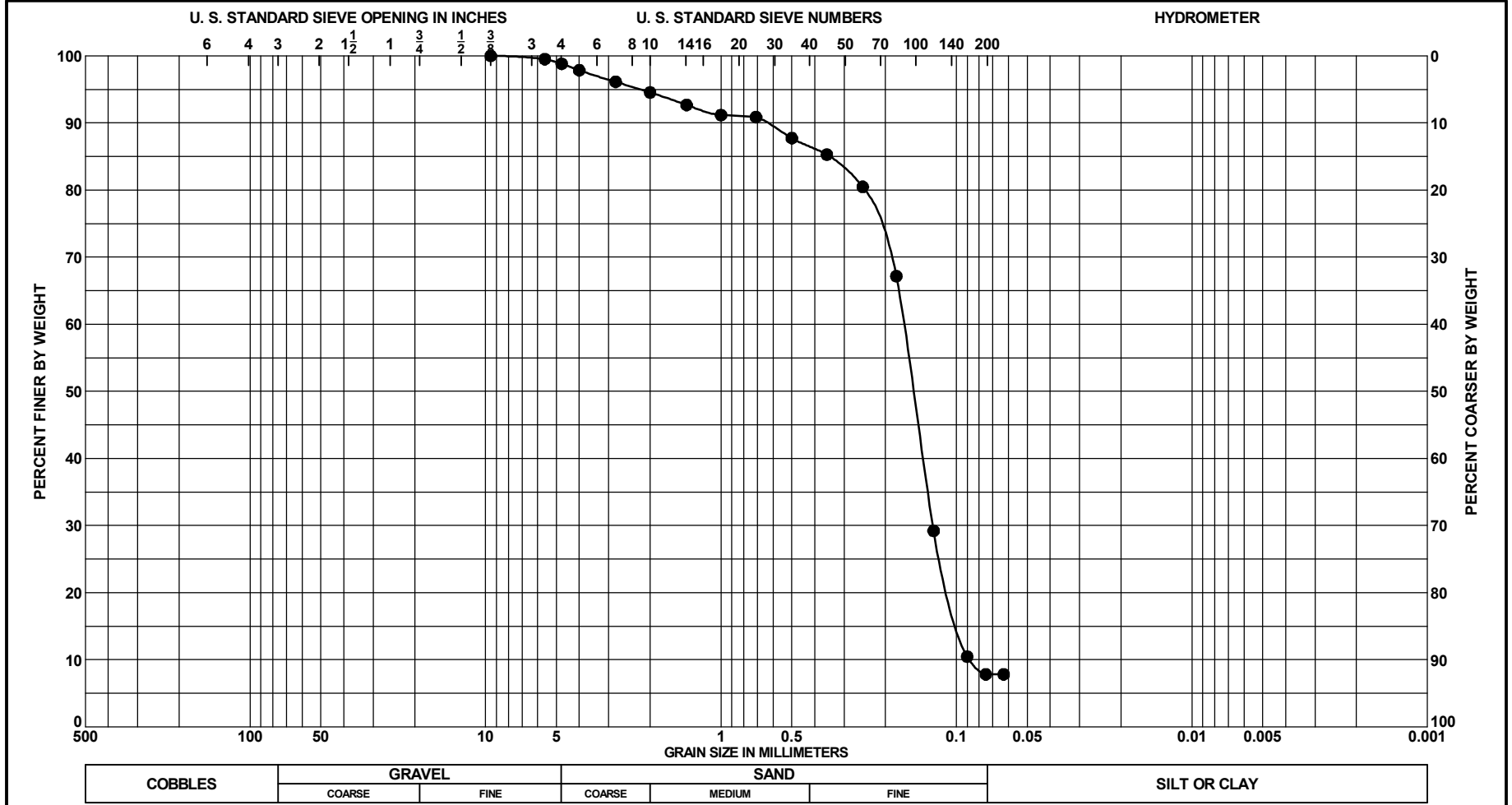
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION		
											COBBLES	SILT OR CLAY	
● 1-Post	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1										
GRADATION CURVES												PROJECT	St. Johns County Offshore
													Investigation Part II
												BORING NO.	VB-SJSP09-44
												BORING ELEV.	-51.1 Ft., NAVD88
												DATE	4/6/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 2	5.5 to 6.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	5 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-44
											BORING ELEV.	-51.1 Ft., NAVD88
											DATE	4/5/2010

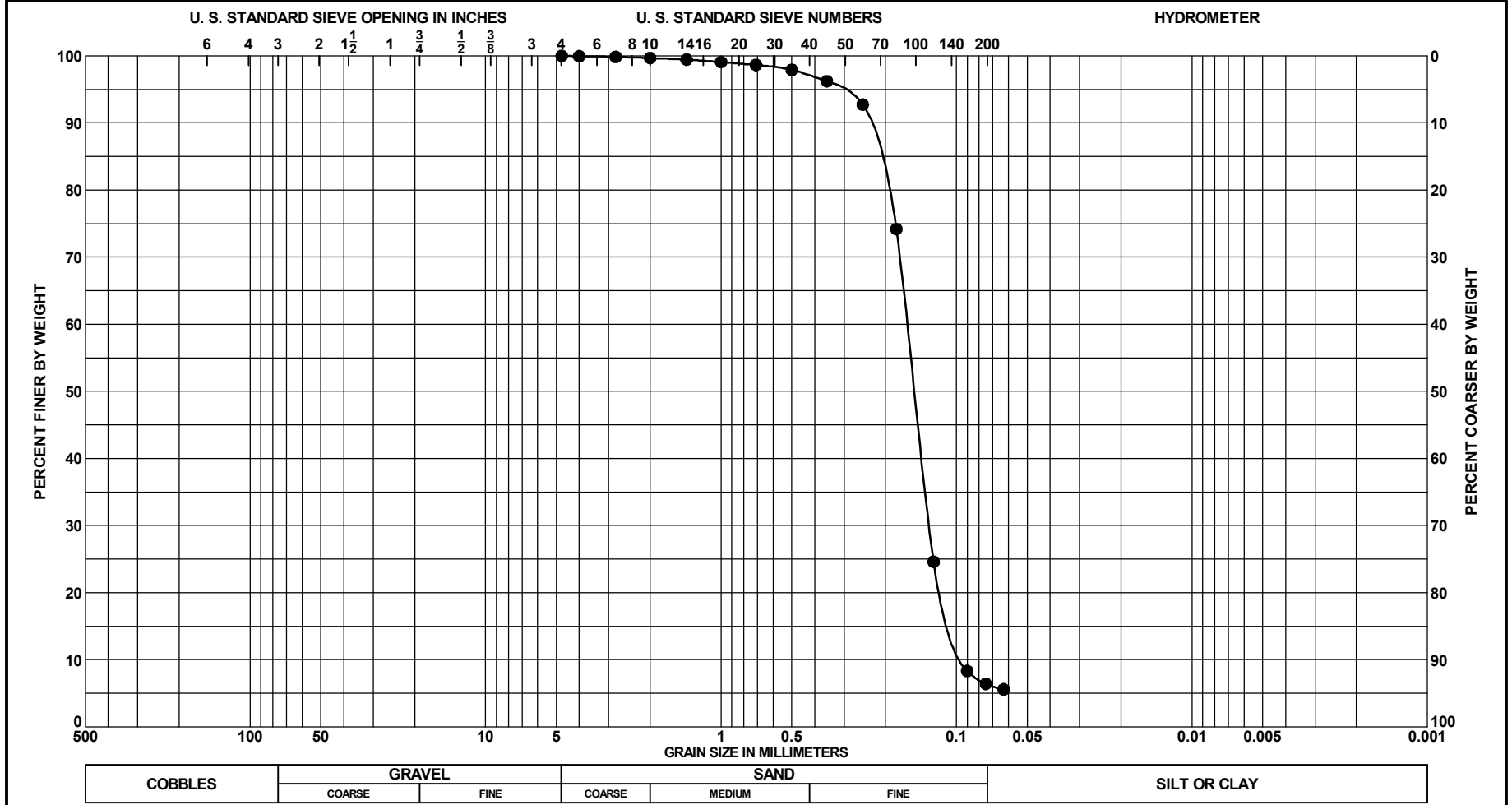


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 3	6.5 to 7.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 5/1	5 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-44
											BORING ELEV.	-51.1 Ft., NAVD88
											DATE	4/5/2010

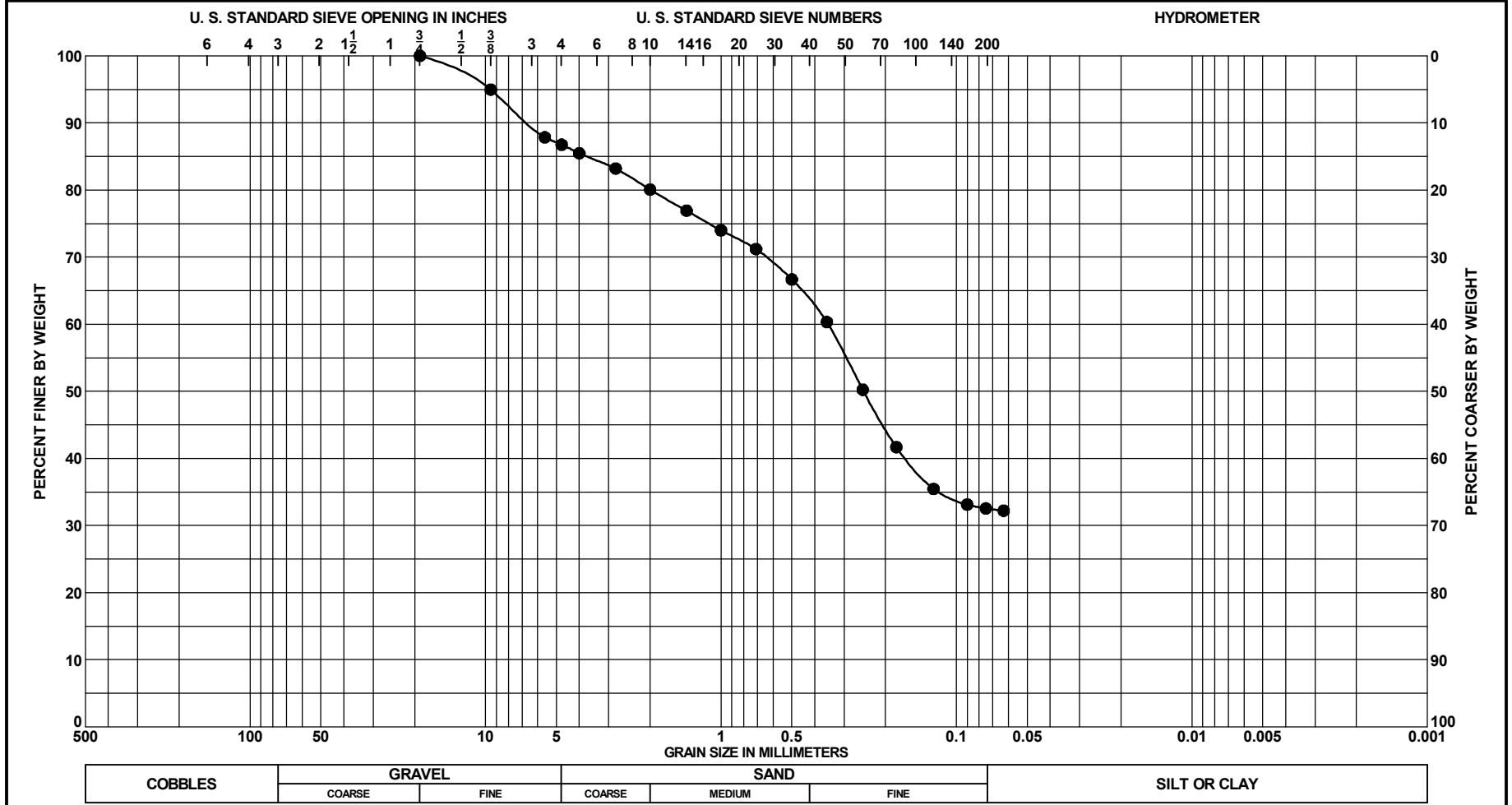


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	8.0 to 8.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little coarse to medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	12 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-44
											BORING ELEV. -51.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

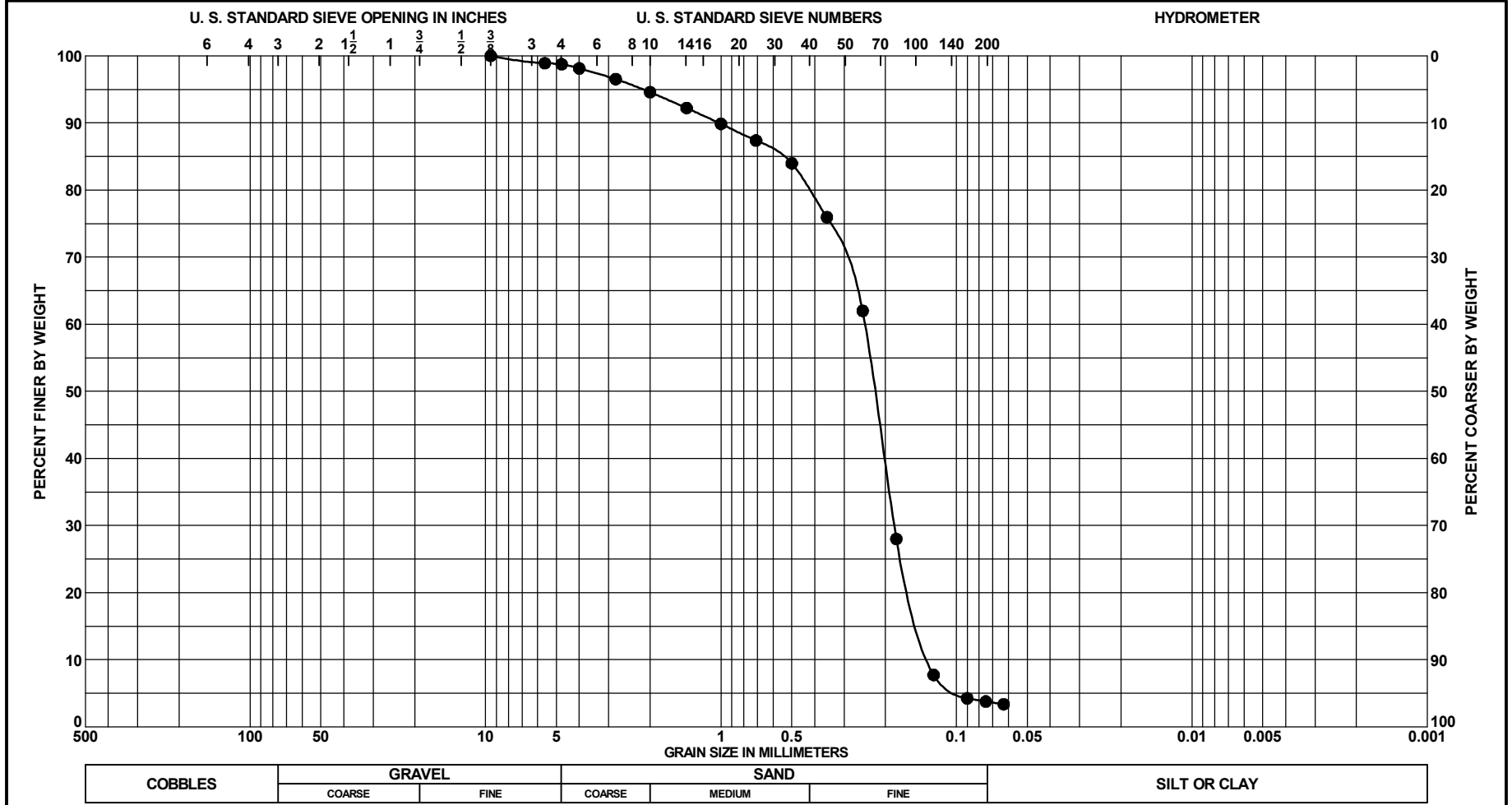


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 5	9.0 to 9.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, dark gray (SP-SM)	10YR 4/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-44
											BORING ELEV. -51.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

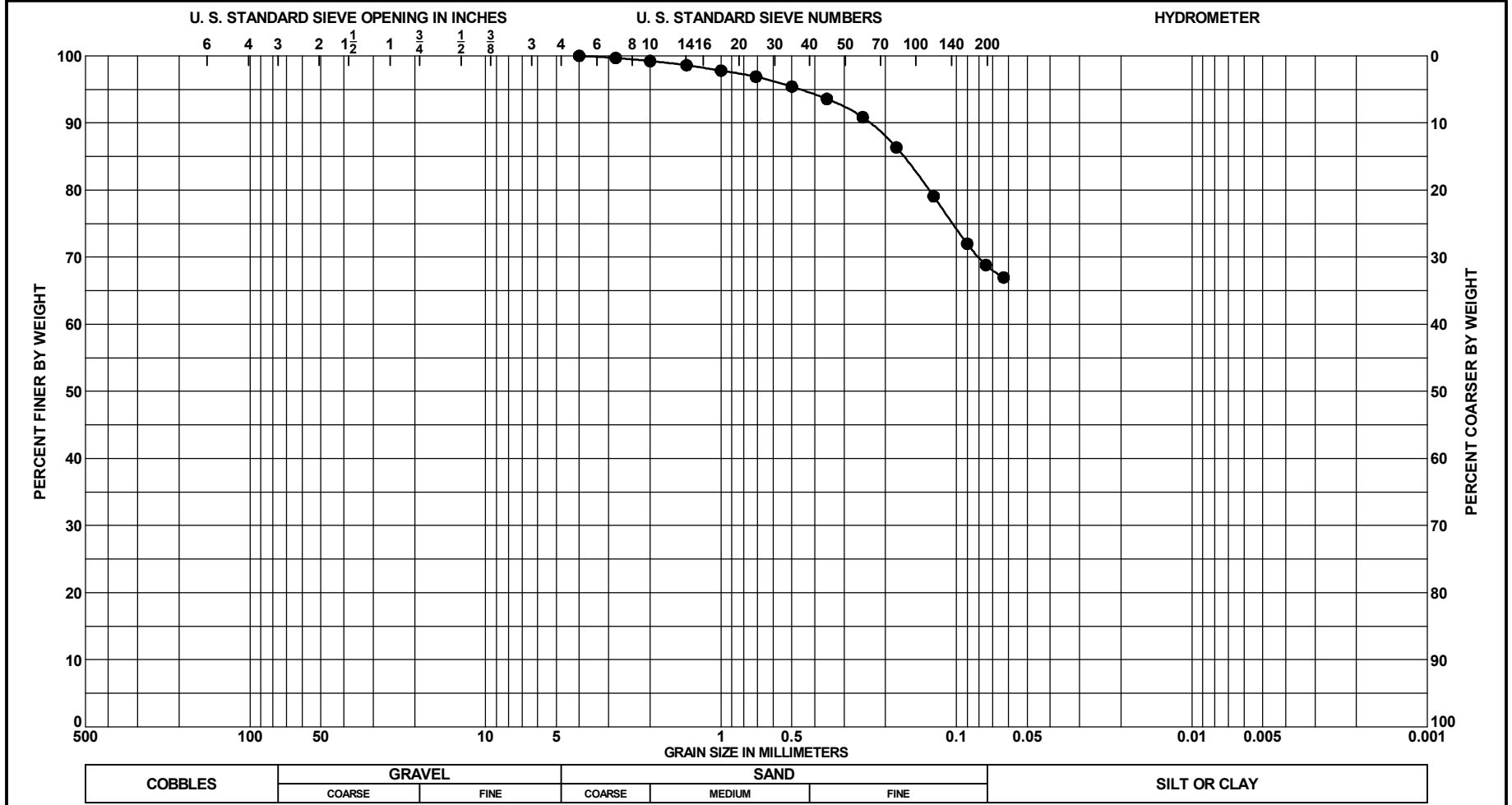


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, clayey, some fine-grained quartz sand, some clay, some fine-gravel to medium sand-size shell fragments, dark bluish gray (SC)	5B 4/1	31 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-45
											BORING ELEV. -54.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

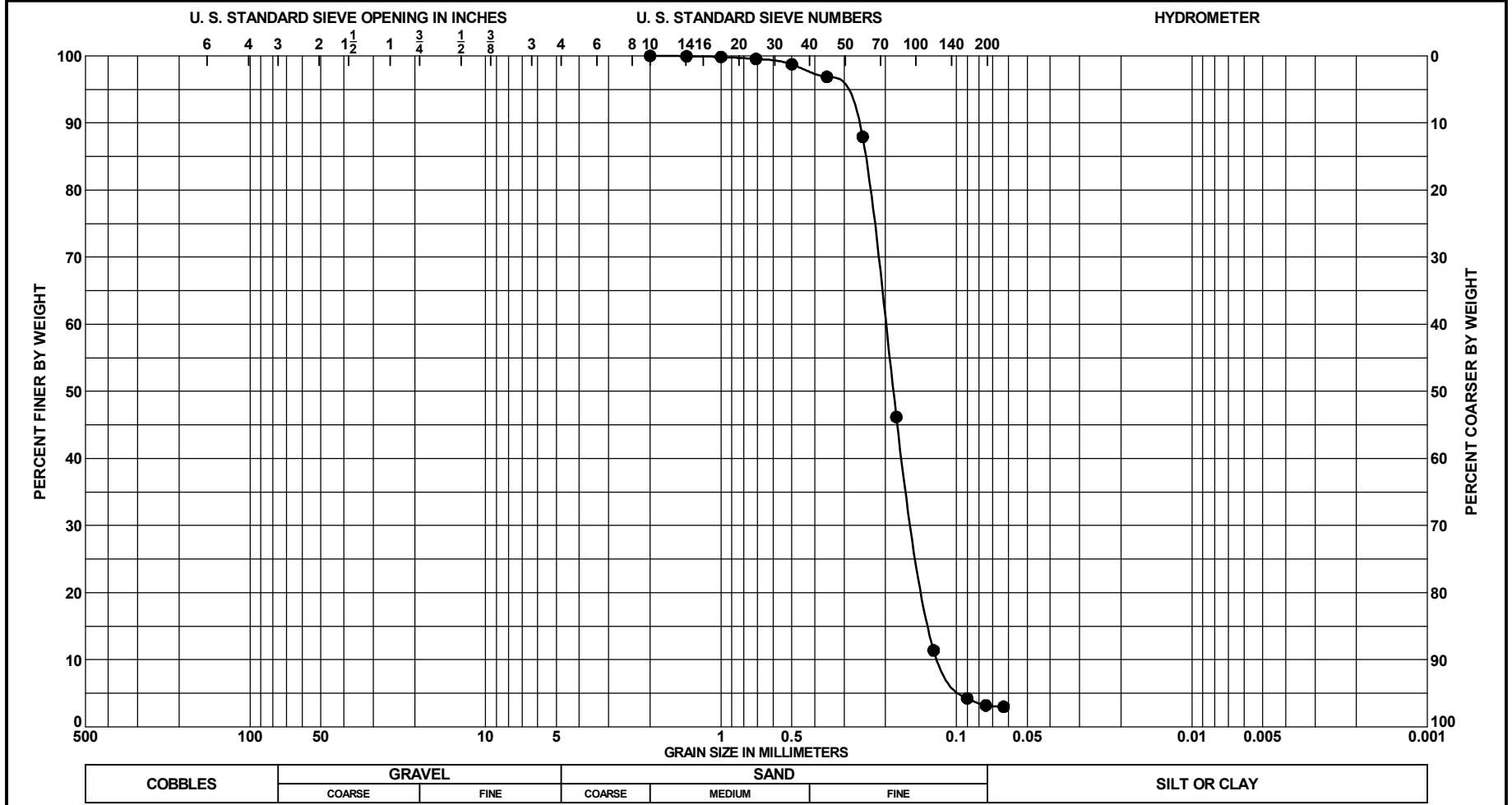


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COBBLES	SILT OR CLAY
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little coarse to medium sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	24 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-45
											BORING ELEV.	-54.1 Ft., NAVD88
											DATE	4/5/2010

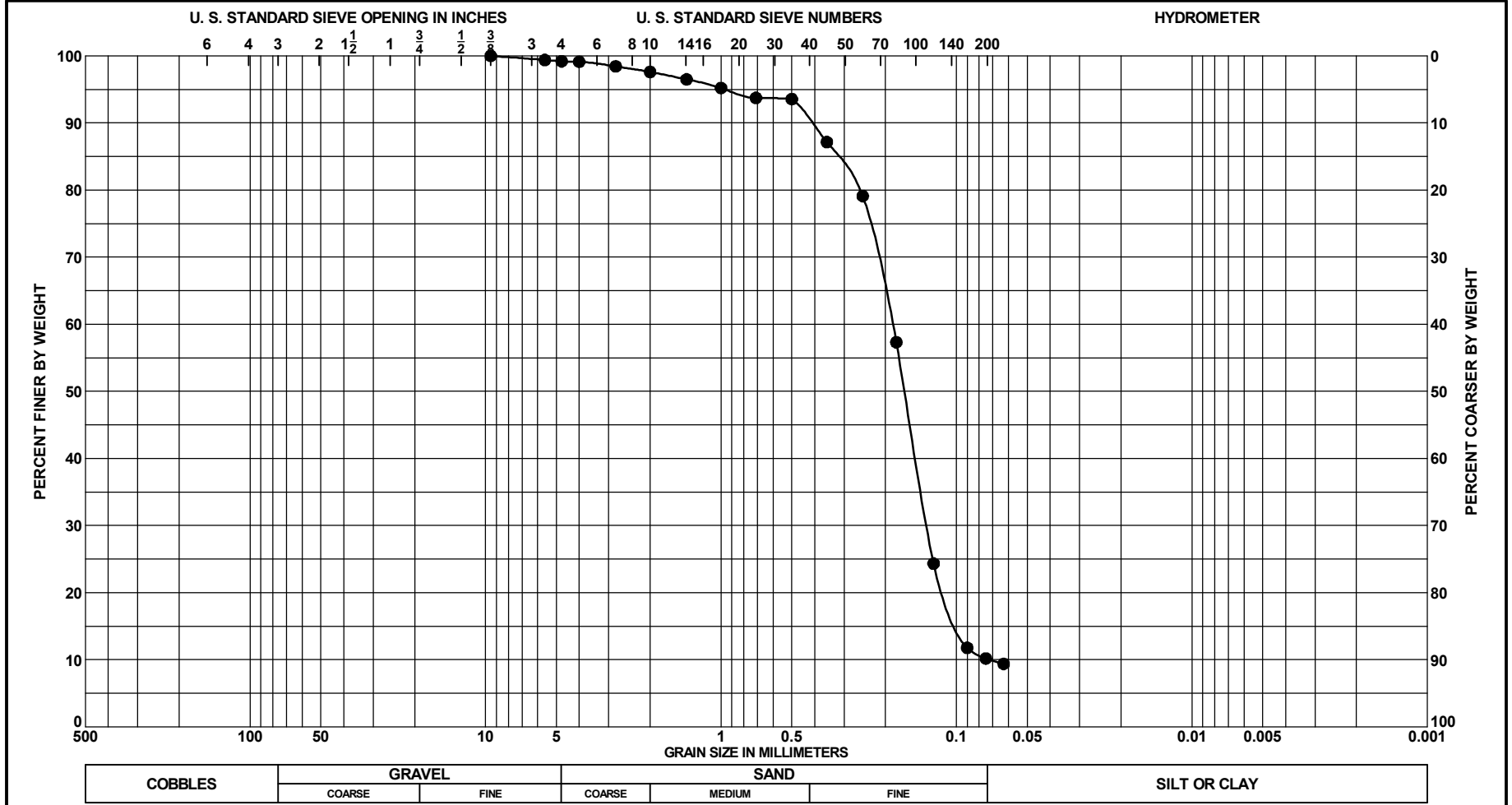


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	7.0 to 7.5 Ft.	SILT, inorganic-H, little fine-grained quartz, few medium sand-size shell fragments, dark bluish gray (MH)	5B 4/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-45
											BORING ELEV. -54.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

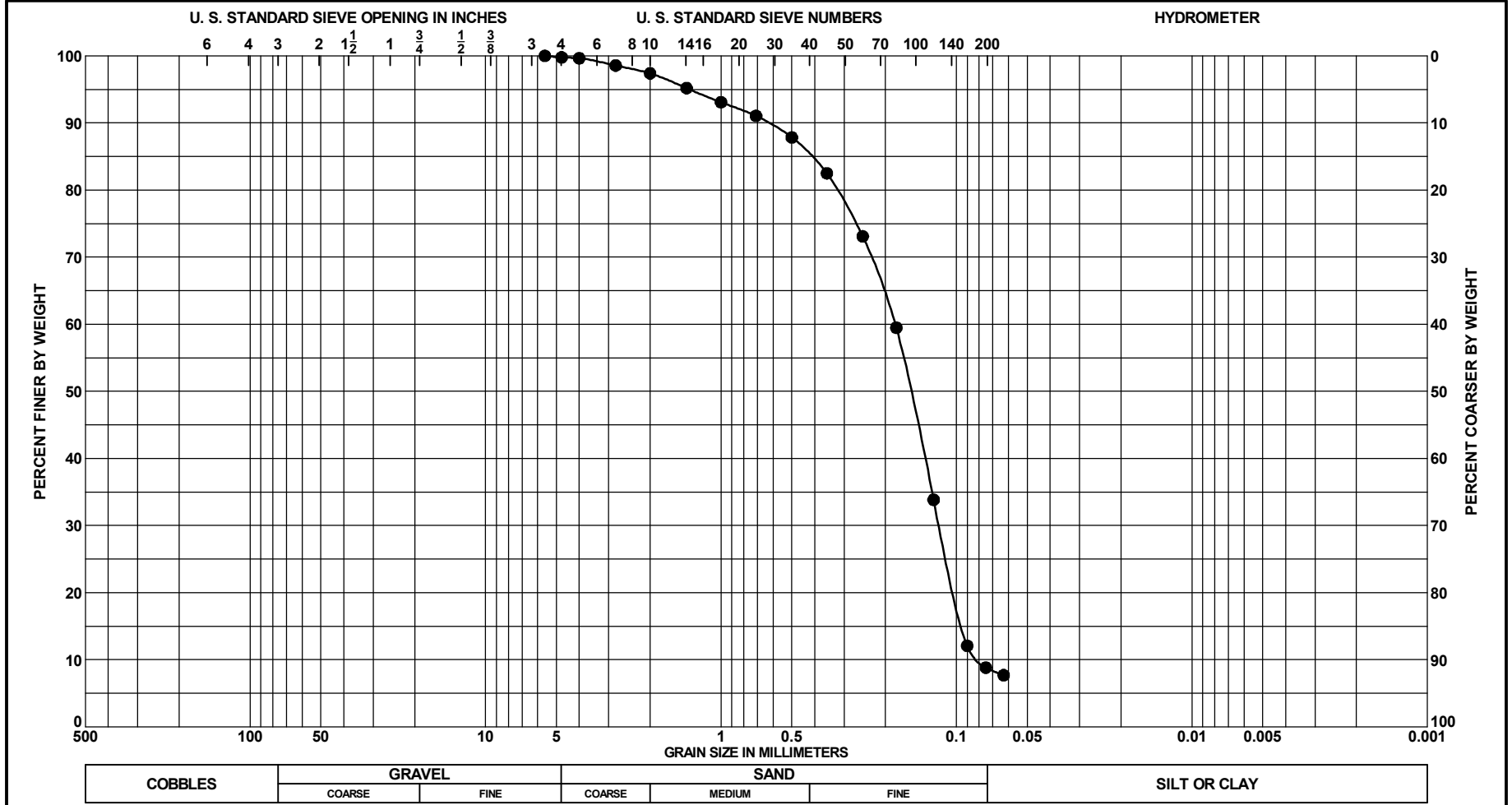


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, gray (SP)	10YR 6/1	1 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-46
											BORING ELEV. -54.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



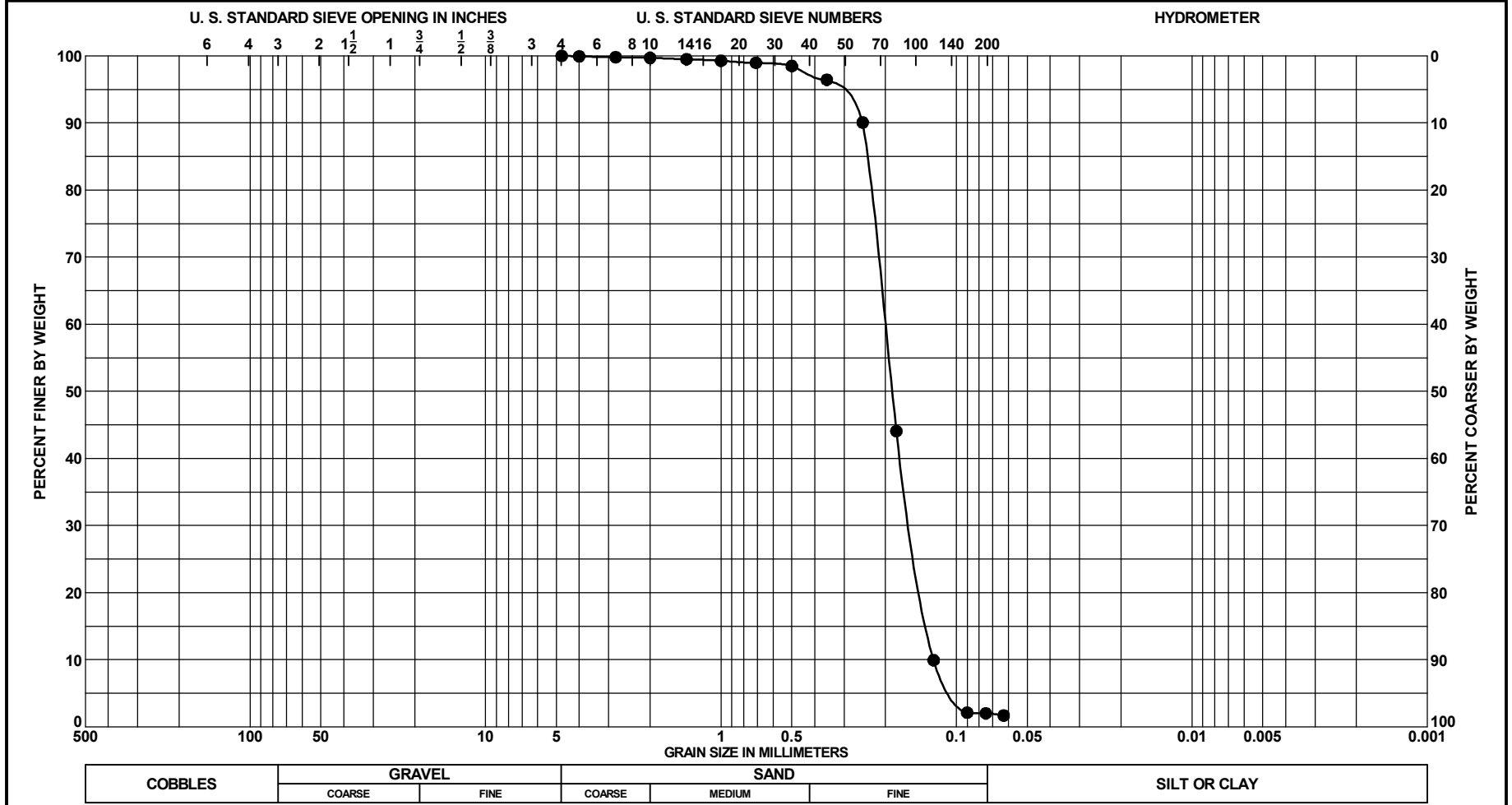
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	8 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-46
											BORING ELEV. -54.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010

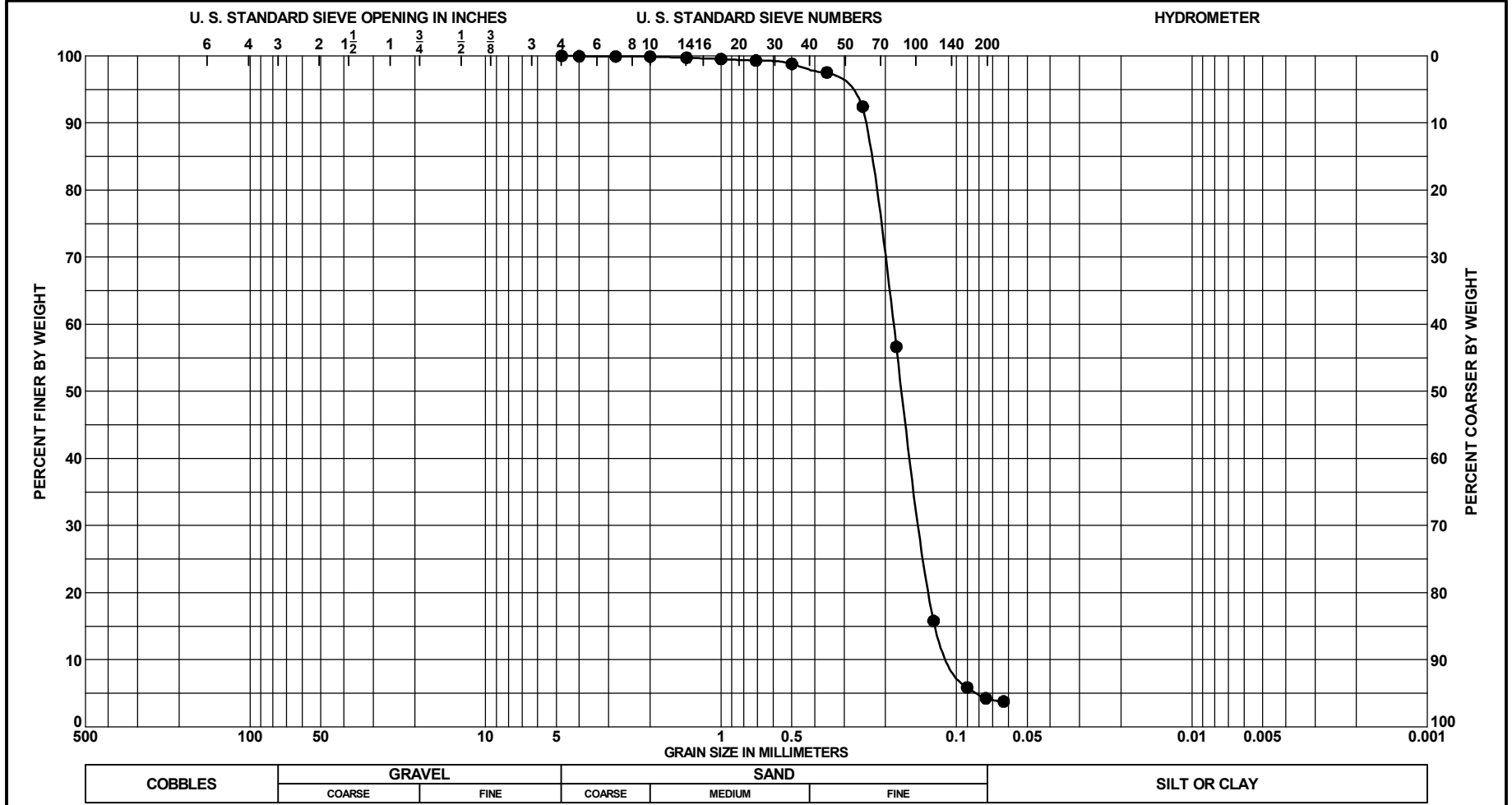


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

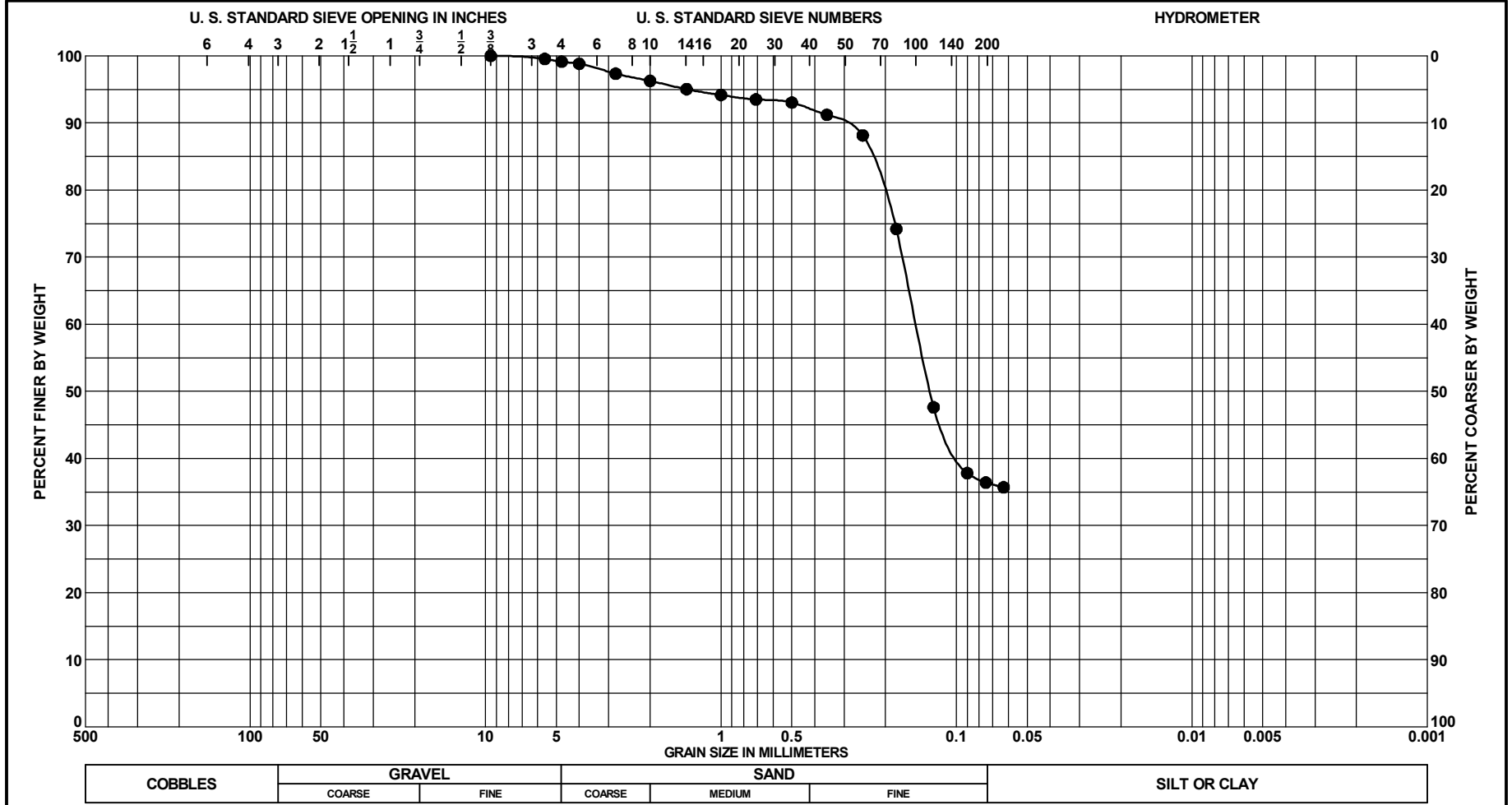
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	7.0 to 7.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 6/1	14 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-46
											BORING ELEV. -54.3 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



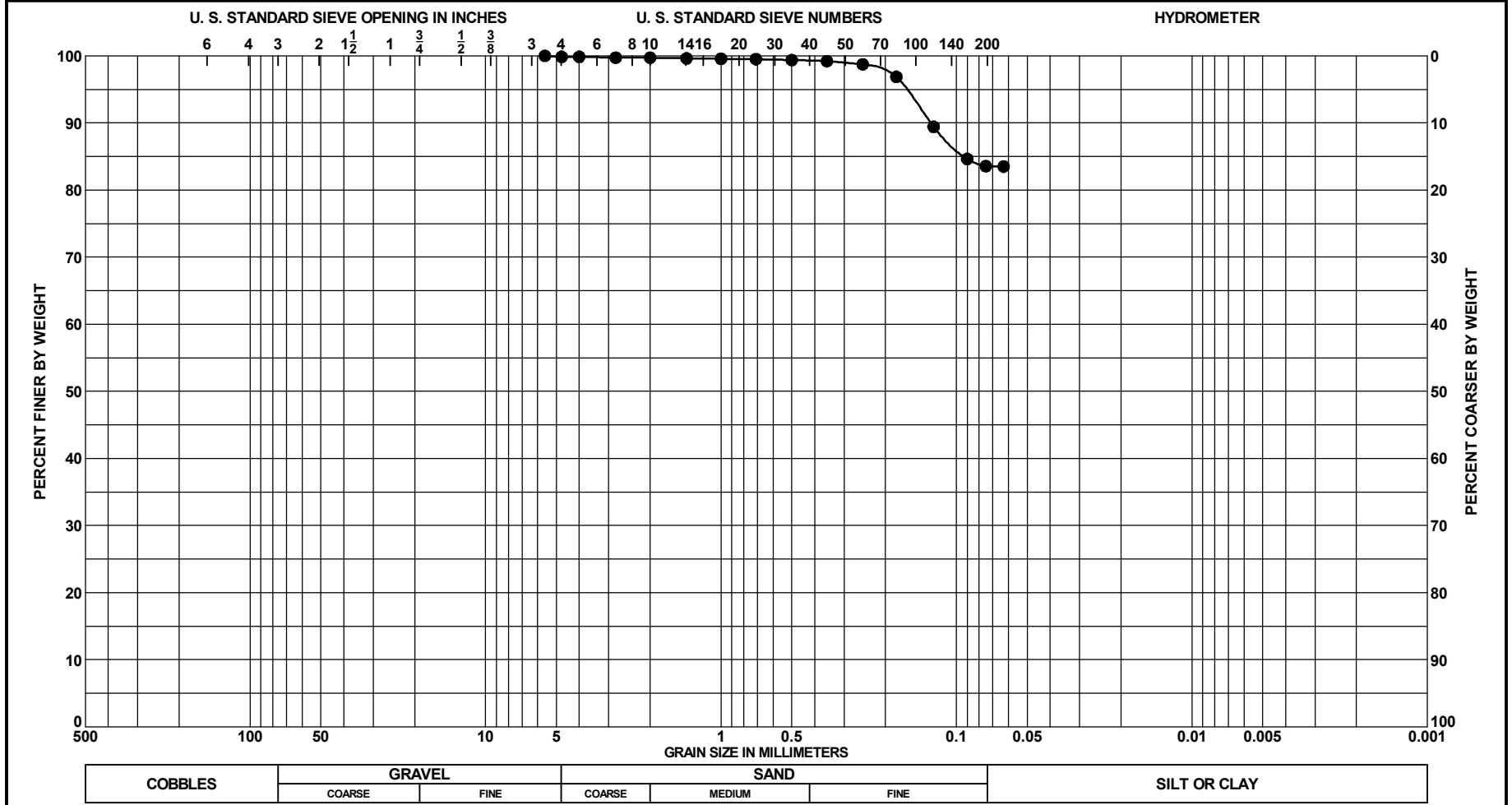
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, gray (SP)	10YR 6/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-47
											BORING ELEV. -51.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



		GRAVEL		SAND			SILT OR CLAY							
		COARSE	FINE	COARSE	MEDIUM	FINE								
Sample No.	Depth	Classification				Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, trace silt, gray (SP)				10YR 5/1	4 (est)							St. Johns County Offshore Investigation Part II
													BORING NO.	
													VB-SJSP09-47	
													BORING ELEV.	
													-51.9 Ft., NAVD88	
GRADATION CURVES													DATE	
													4/5/2010	



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	4.0 to 4.5 Ft.	SAND, silty, mostly fine-grained quartz sand, some silt, few medium sand-size shell fragments, gray (SM)	10YR 5/1	8 (est)							St. Johns County Offshore
											Investigation Part II
											BORING NO. VB-SJSP09-47
											BORING ELEV. -51.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

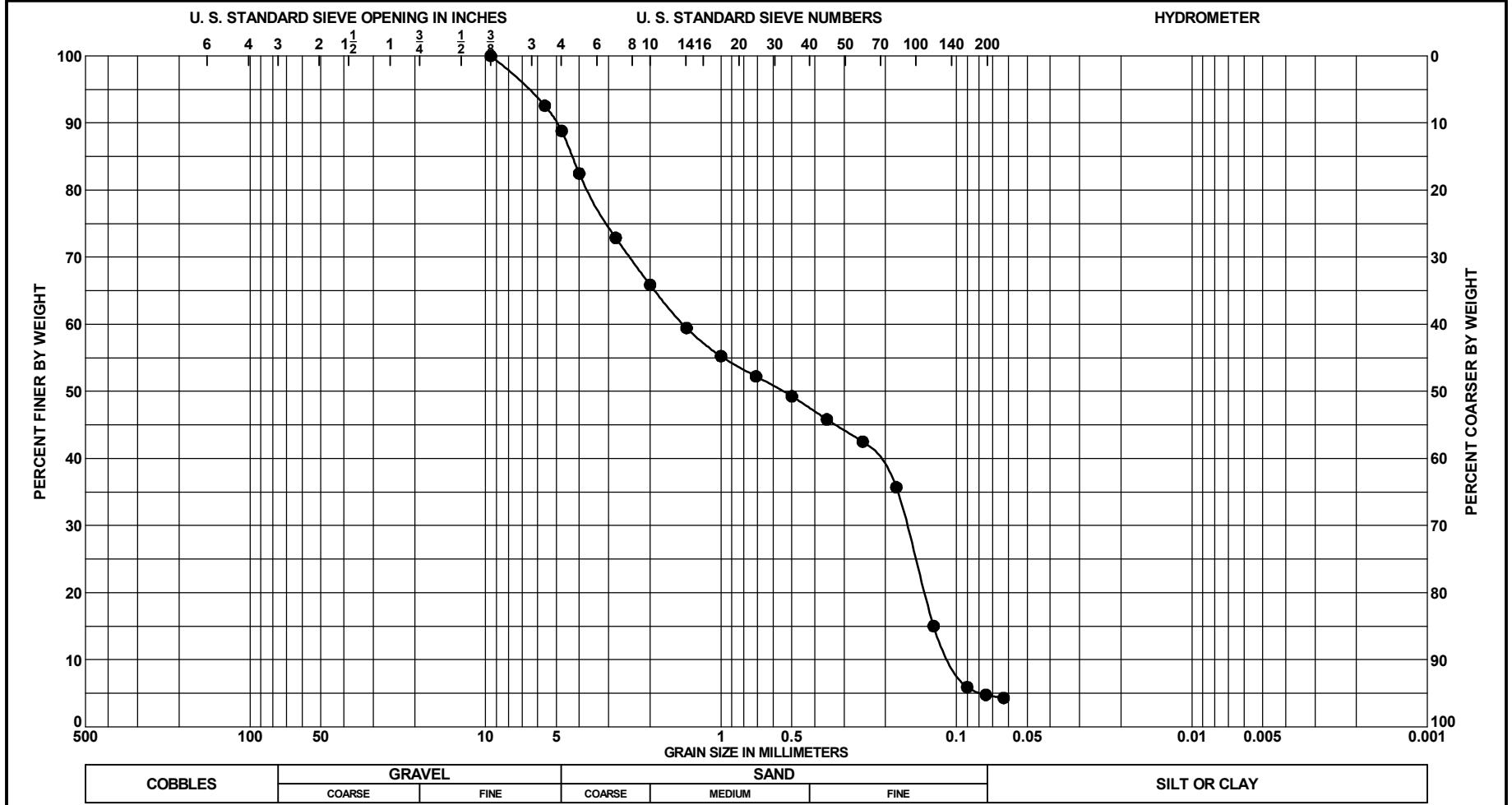


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 4	7.0 to 7.5 Ft.	CLAY, inorganic-H, little fine-grained quartz, dark bluish gray (CH)	5B 4/1	0 (est)						

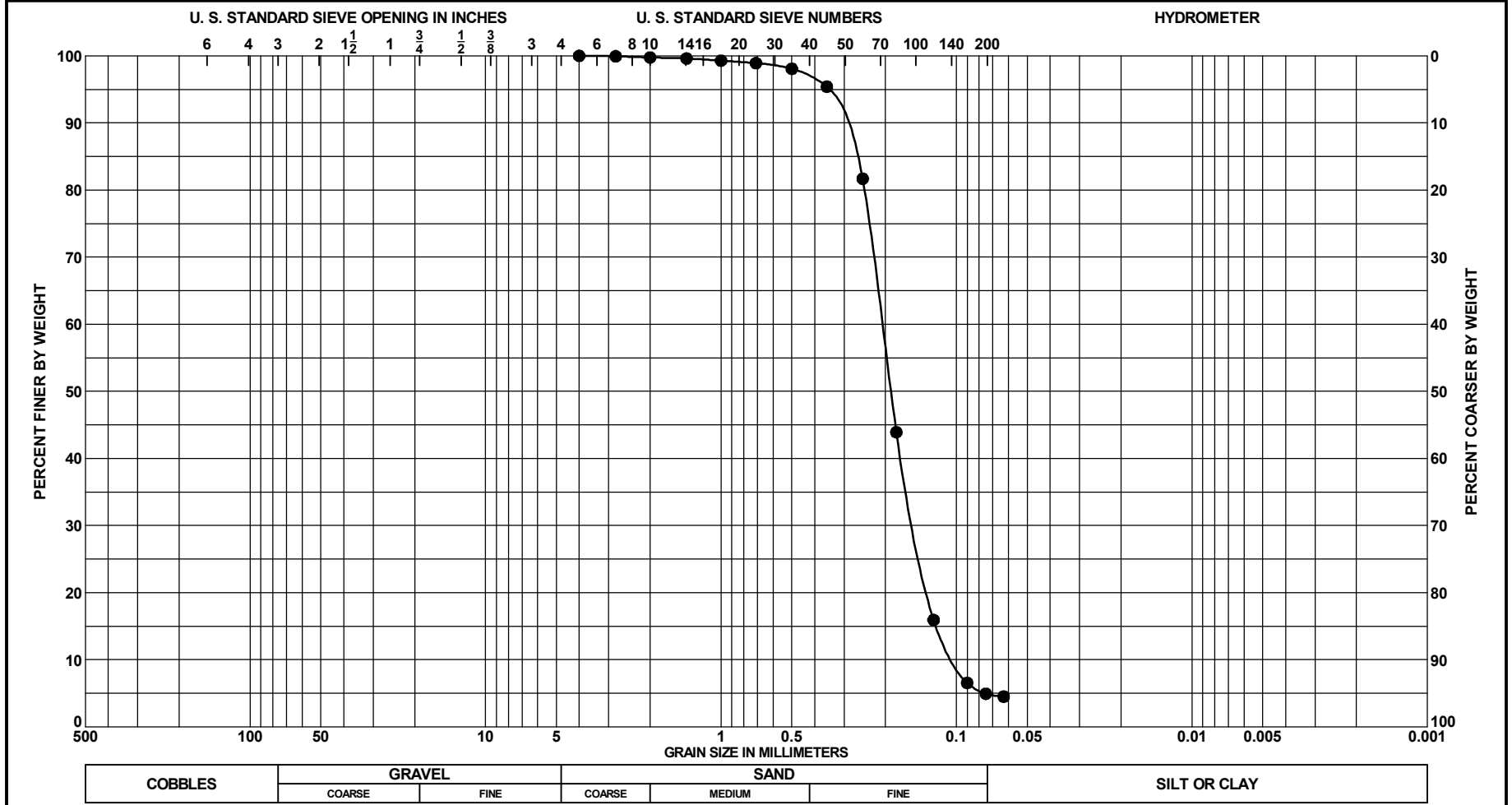
PROJECT	St. Johns County Offshore Investigation Part II
BORING NO.	VB-SJSP09-47
BORING ELEV.	-51.9 Ft., NAVD88

GRADATION CURVES											DATE	4/5/2010
-------------------------	--	--	--	--	--	--	--	--	--	--	-------------	----------

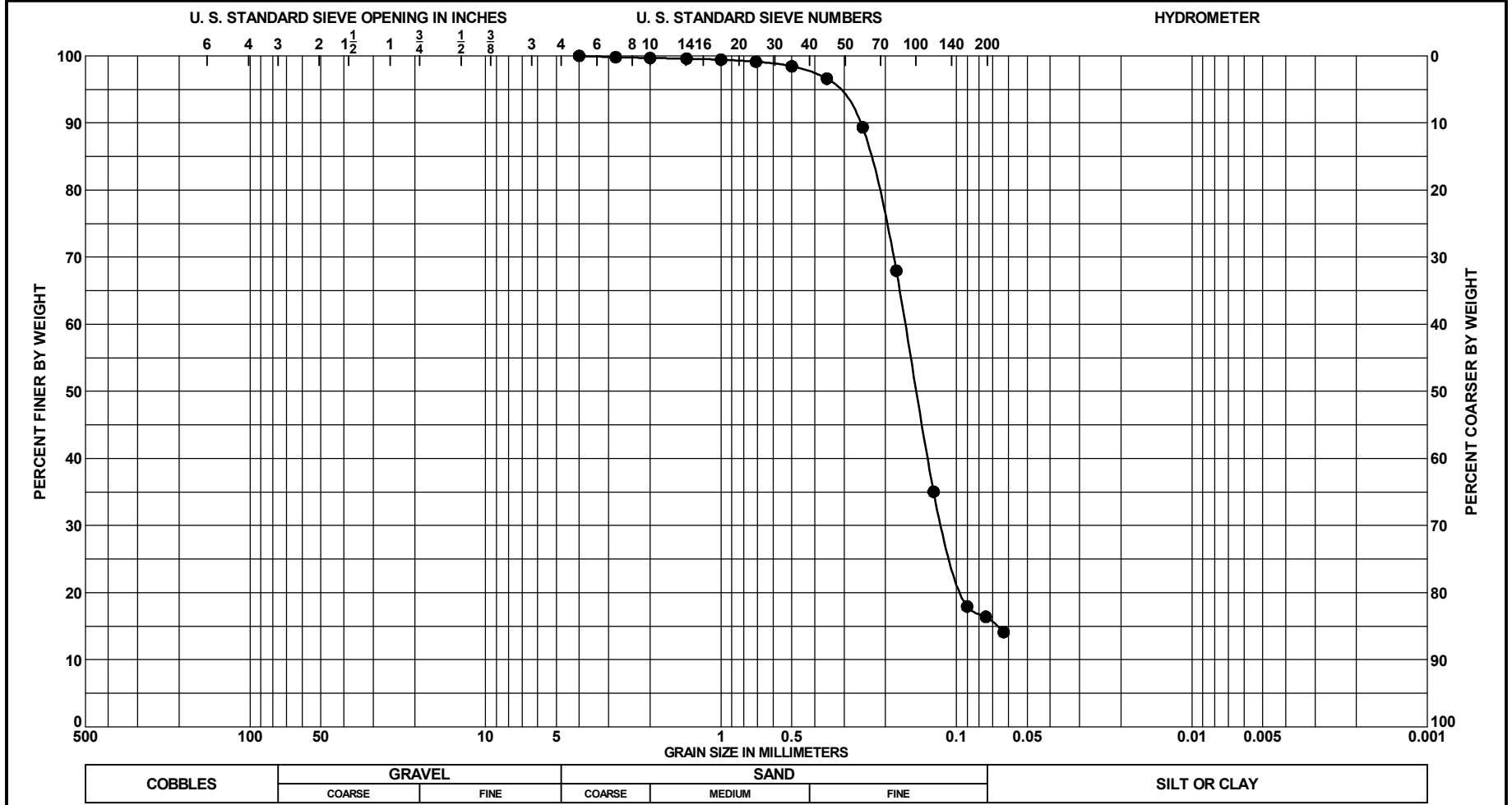


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

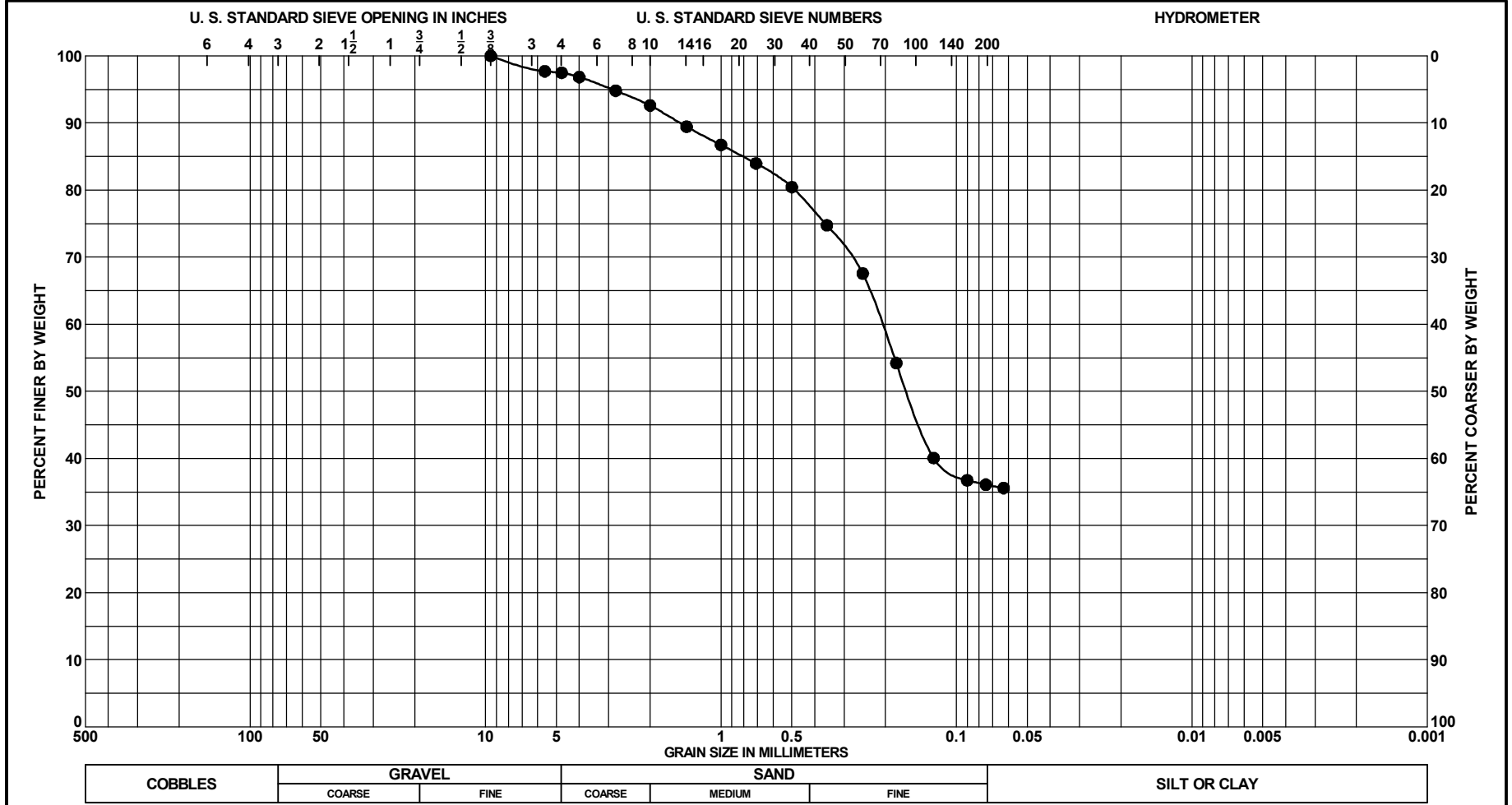
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, some fine-gravel to medium sand-size shell fragments, trace silt, gray (SP)	10YR 5/1	44 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-48
											BORING ELEV. -57.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



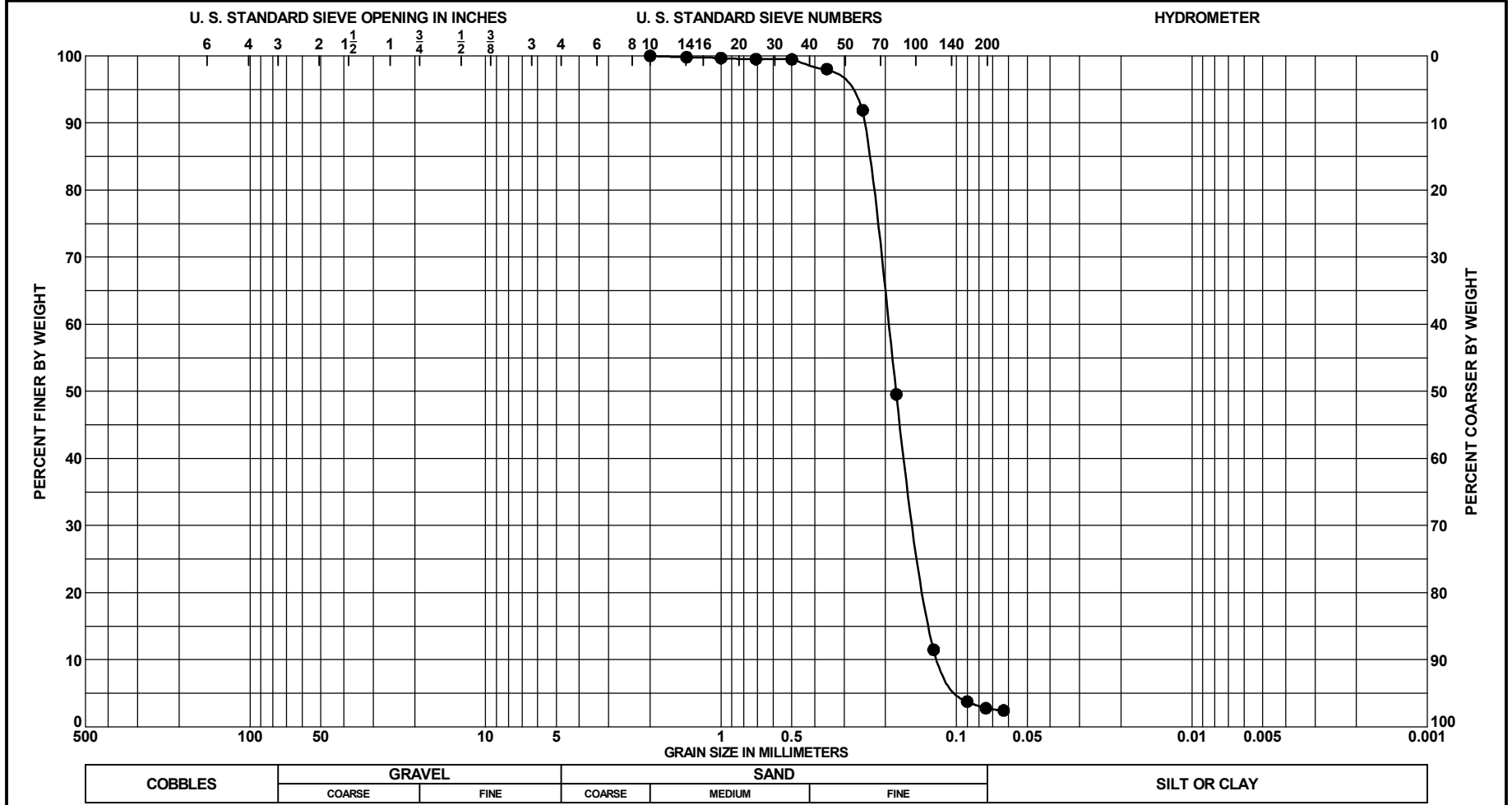
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	0.5 to 1.0 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	5 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-49
											BORING ELEV.	-61.2 Ft., NAVD88
											DATE	4/5/2010



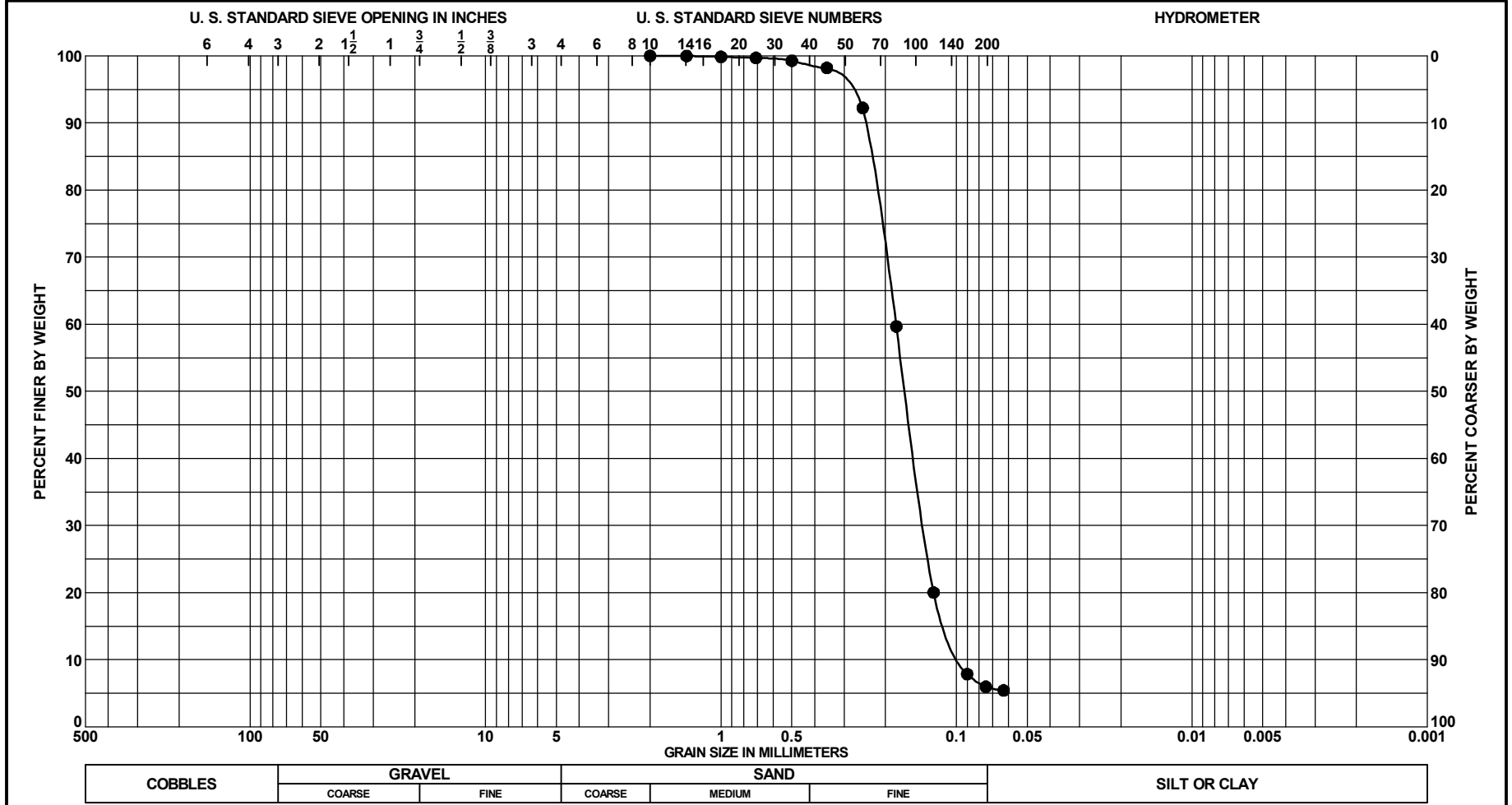
		GRAVEL		SAND			SILT OR CLAY								
		COARSE	FINE	COARSE	MEDIUM	FINE									
Sample No.	Depth	Classification					Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 2	3.0 to 3.5 Ft.	SAND, silty, mostly fine-grained quartz sand, little silt, trace shell fragments, gray (SM)					10YR 6/1	3 (est)							St. Johns County Offshore Investigation Part II
														BORING NO. VB-SJSP09-49	
														BORING ELEV. -61.2 Ft., NAVD88	
GRADATION CURVES														DATE 4/5/2010	



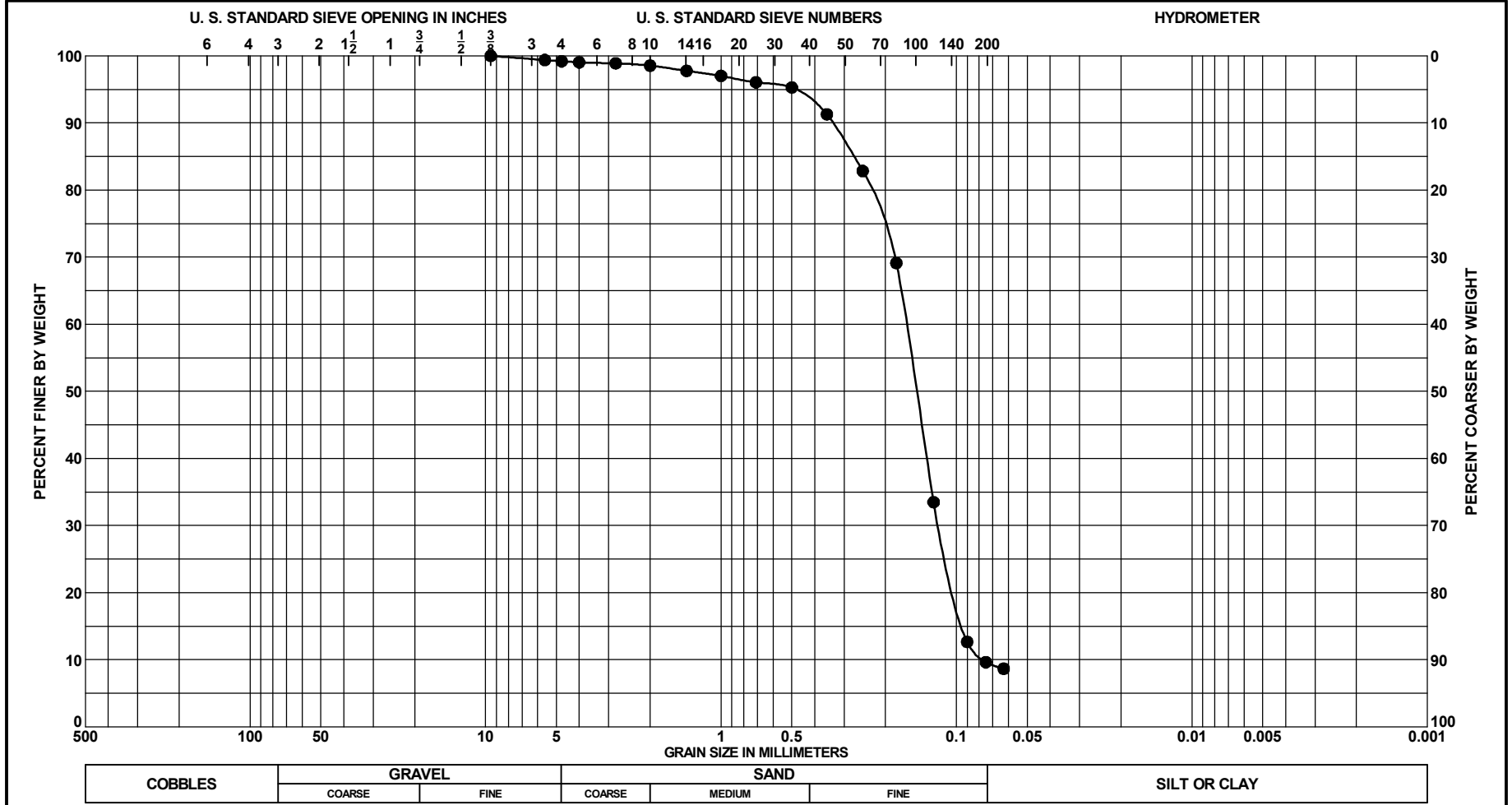
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 3	9.0 to 9.5 Ft.	SAND, clayey, some fine-grained quartz sand, some clay, some coarse to medium sand-size limerock fragments, gray (SC)	10YR 5/1	1 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-49
											BORING ELEV.	-61.2 Ft., NAVD88
											DATE	4/5/2010



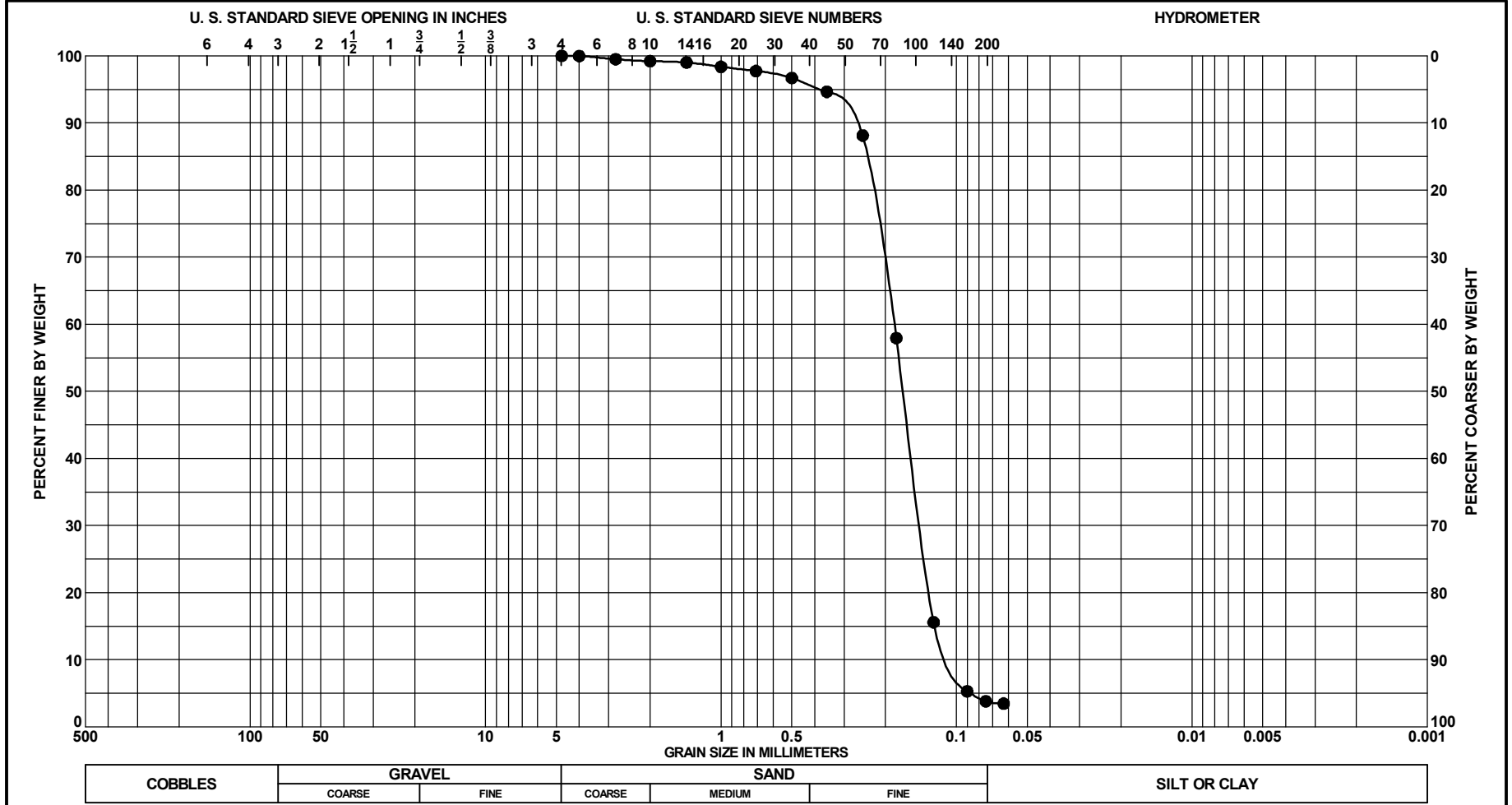
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.0 to 2.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, gray (SP)	10YR 6/1	1 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-50
											BORING ELEV. -48.4 Ft., NAVD88
											DATE 3/18/2010



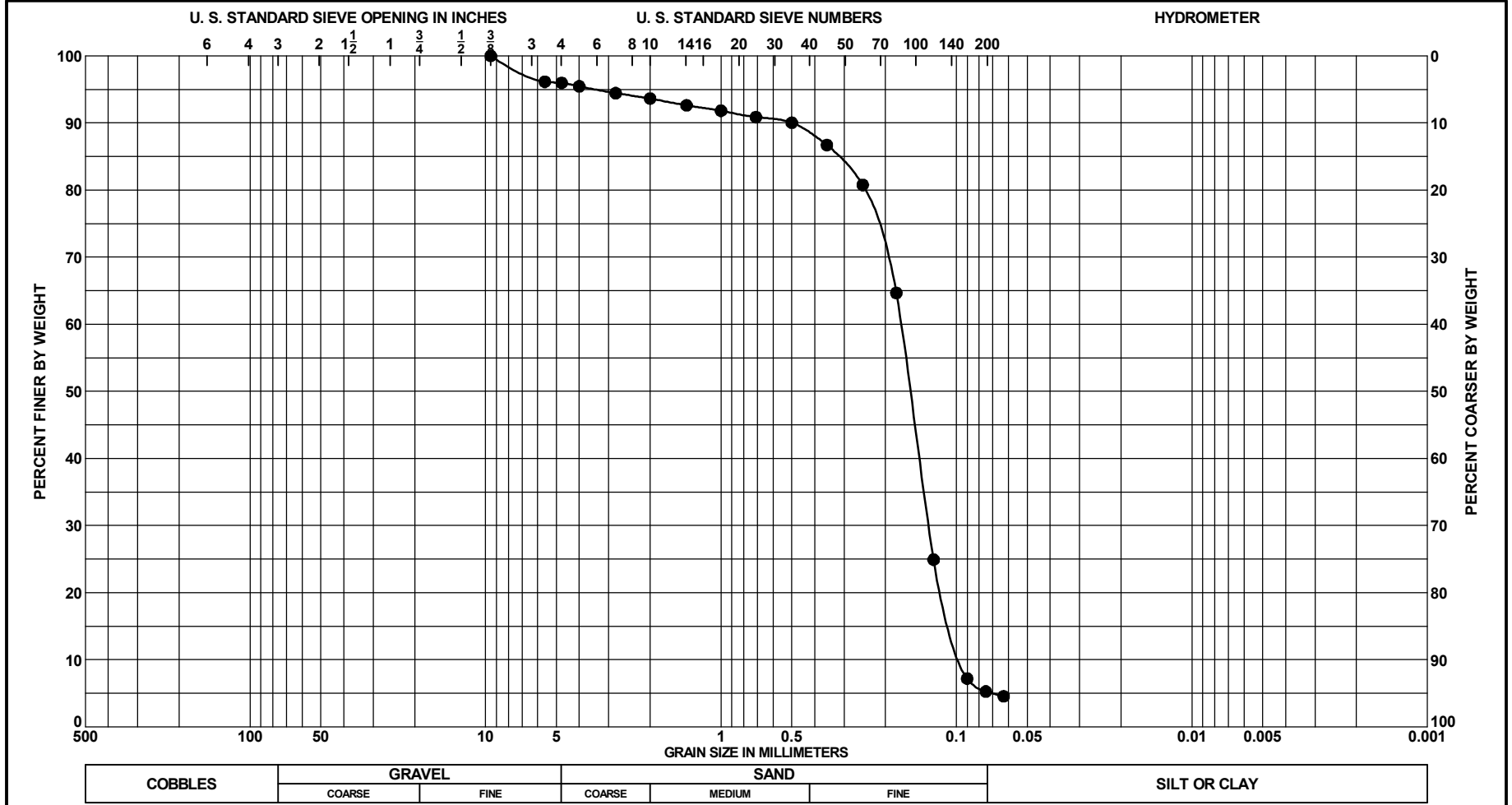
		GRAVEL		SAND			SILT OR CLAY							
		COARSE	FINE	COARSE	MEDIUM	FINE								
Sample No.	Depth	Classification				Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, gray (SP-SM)				10YR 6/1	1 (est)							St. Johns County Offshore
														Investigation Part II
														BORING NO. VB-SJSP09-50
														BORING ELEV. -48.4 Ft., NAVD88
GRADATION CURVES													DATE 3/18/2010	



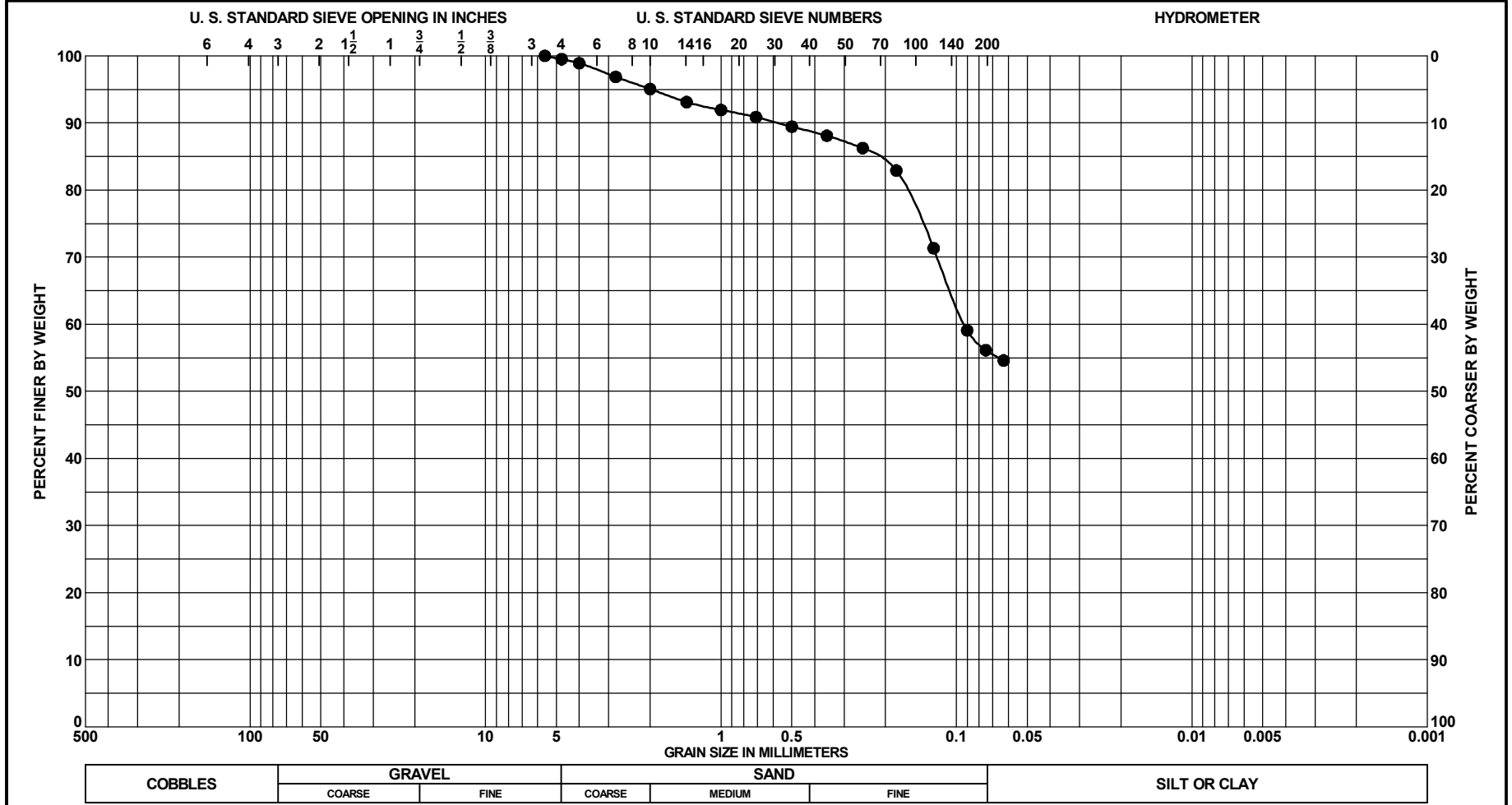
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	8.0 to 8.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, few medium sand-size shell fragments, gray (SP-SM)	10YR 6/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-50
											BORING ELEV. -48.4 Ft., NAVD88
GRADATION CURVES											DATE 3/18/2010



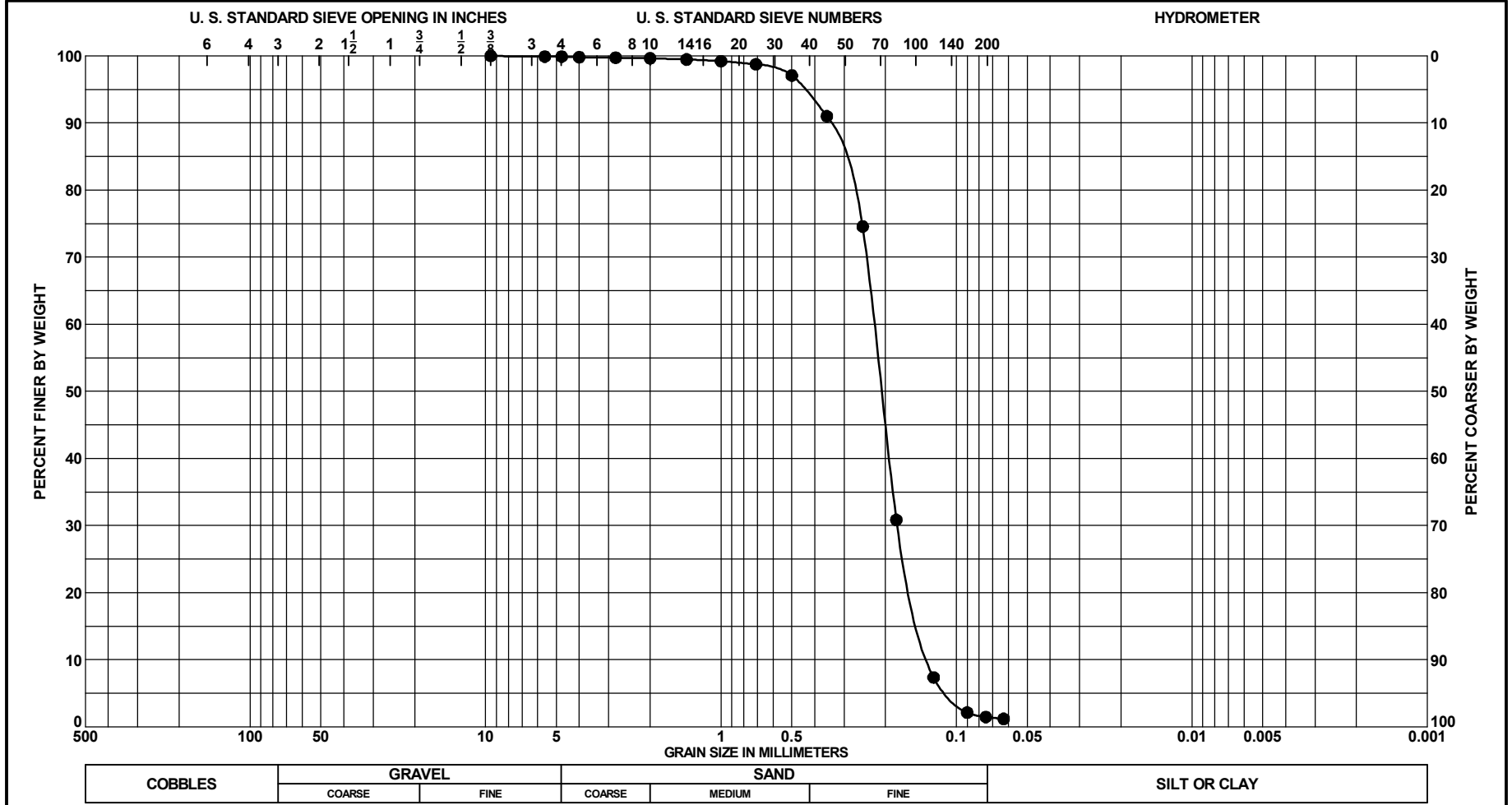
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	7 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-51
											BORING ELEV. -56.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



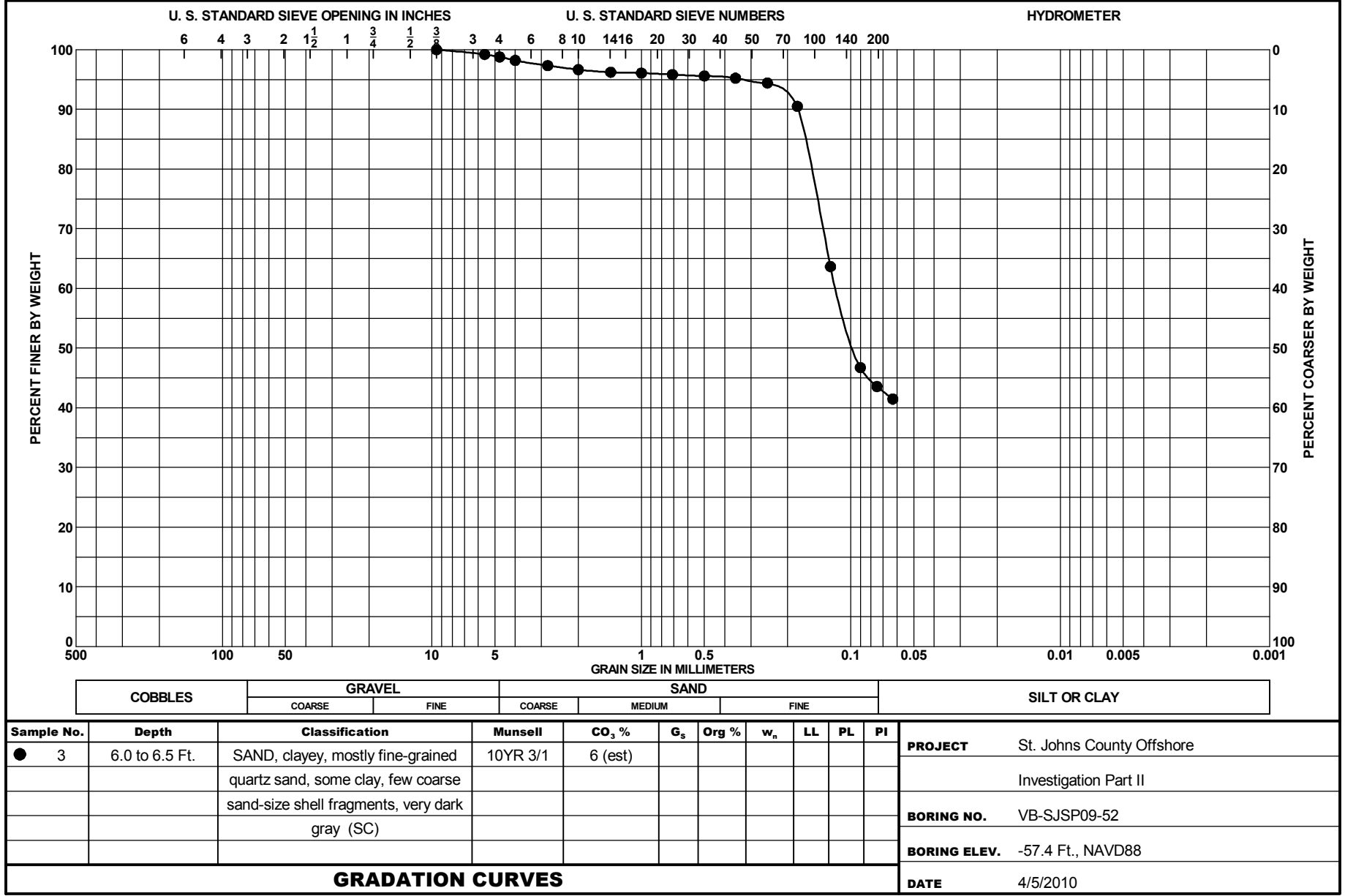
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	3.5 to 4.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, little coarse to medium sand-size shell fragments, few silt, gray (SP-SM)	10YR 5/1	14 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-51
											BORING ELEV. -56.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	6.0 to 6.5 Ft.	CLAY, inorganic-H, some fine-grained quartz, few coarse to medium sand-size shell fragments, dark gray (CH)	10YR 4/1	9 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-51
											BORING ELEV. -56.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



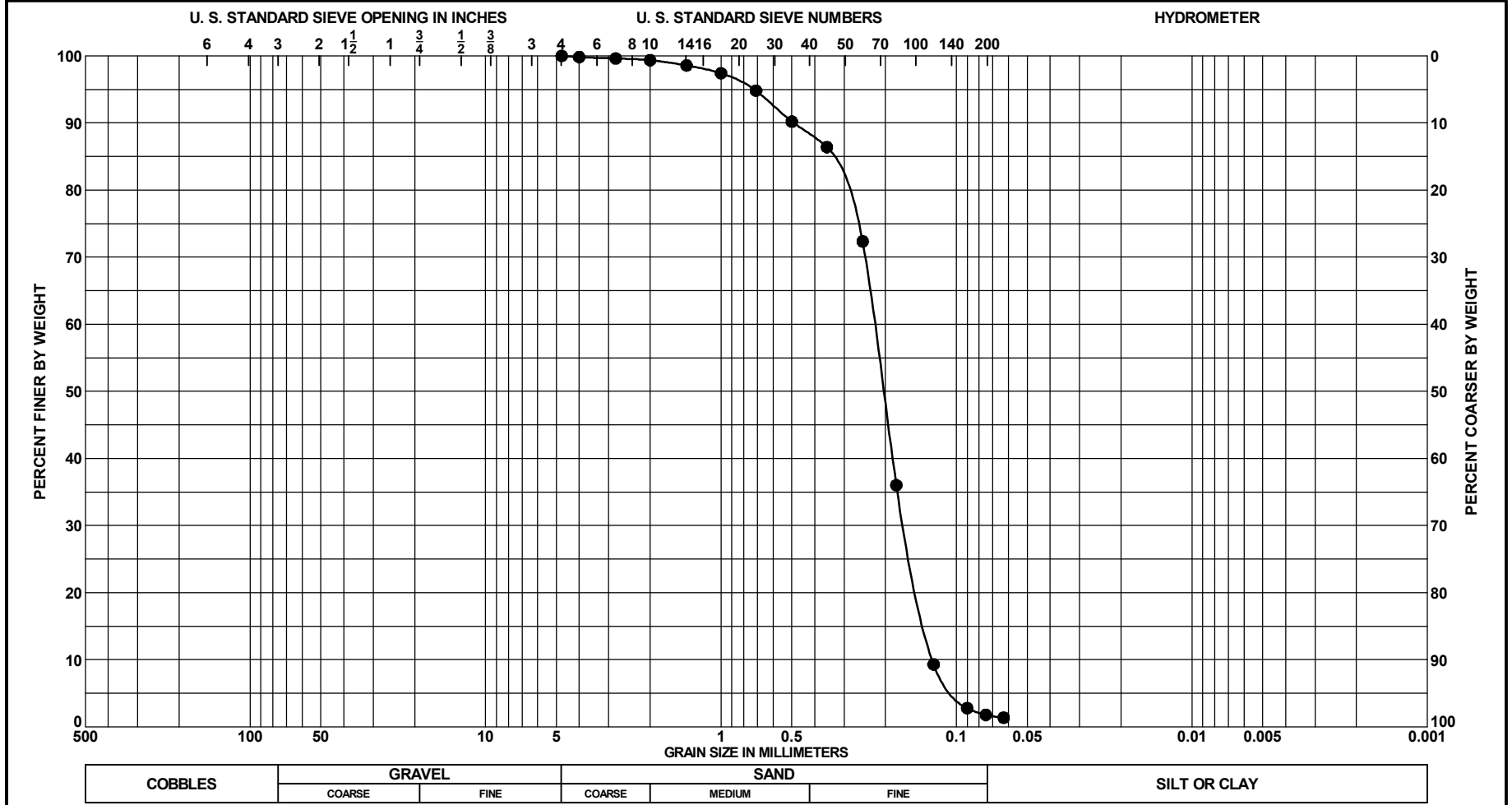
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, white (SP)	10YR 8/1	4 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-52
											BORING ELEV.	-57.4 Ft., NAVD88
											DATE	4/5/2010



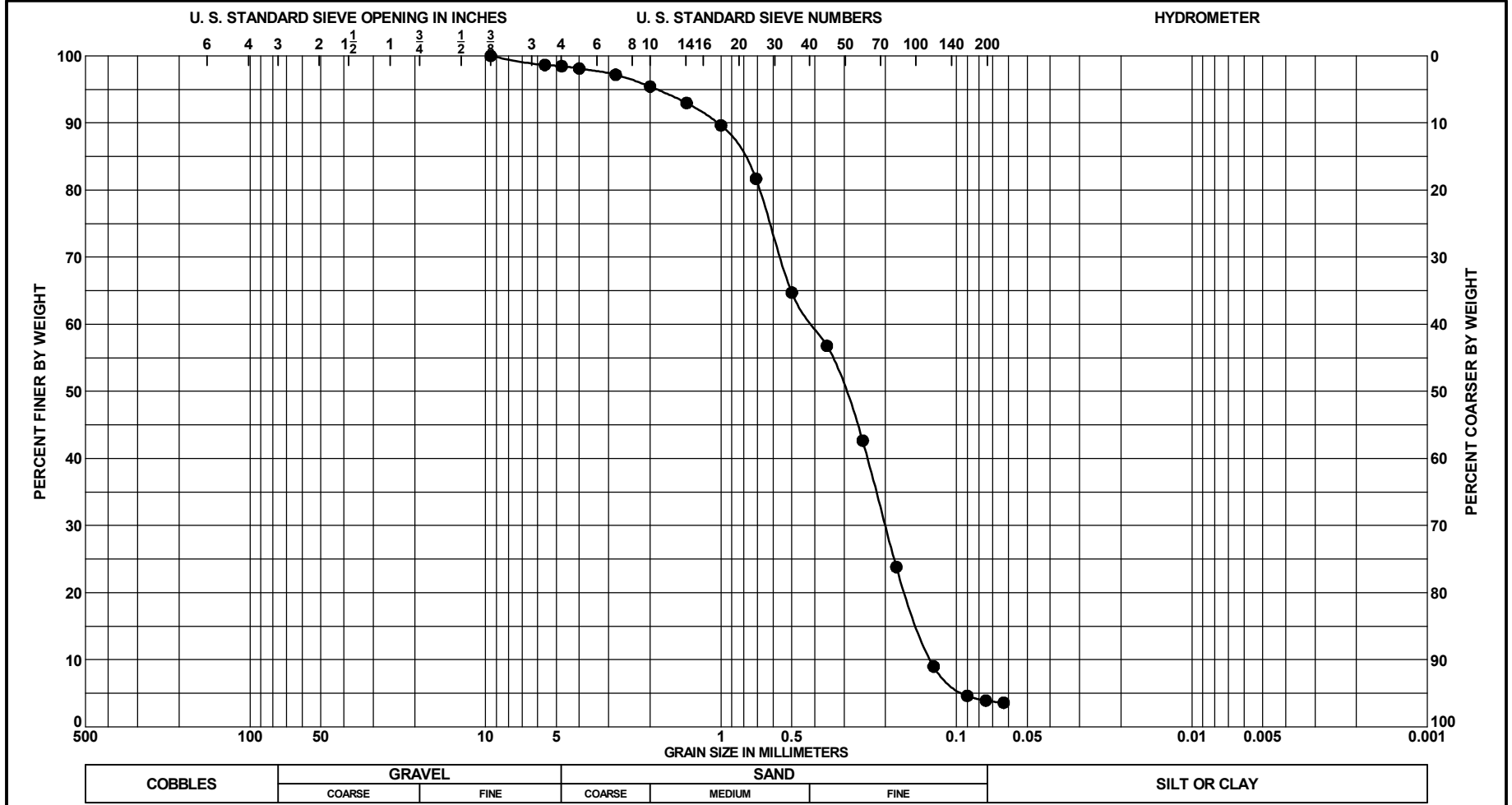
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI
● 3	6.0 to 6.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, some clay, few coarse sand-size shell fragments, very dark gray (SC)	10YR 3/1	6 (est)						

PROJECT	St. Johns County Offshore
	Investigation Part II
BORING NO.	VB-SJSP09-52
BORING ELEV.	-57.4 Ft., NAVD88
DATE	4/5/2010

GRADATION CURVES

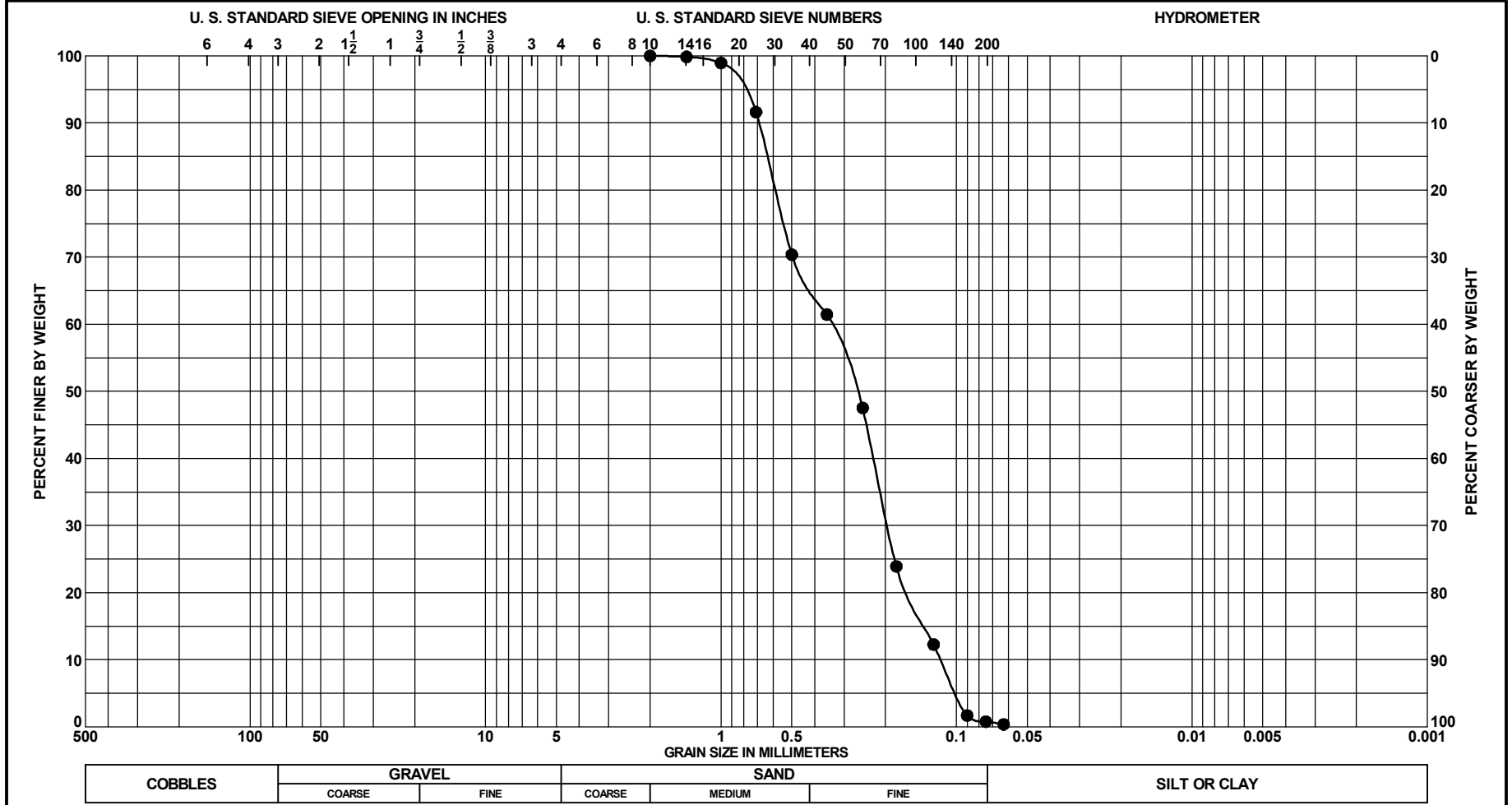


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	3.0 to 3.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, light gray (SP)	10YR 7/1	12 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-53
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

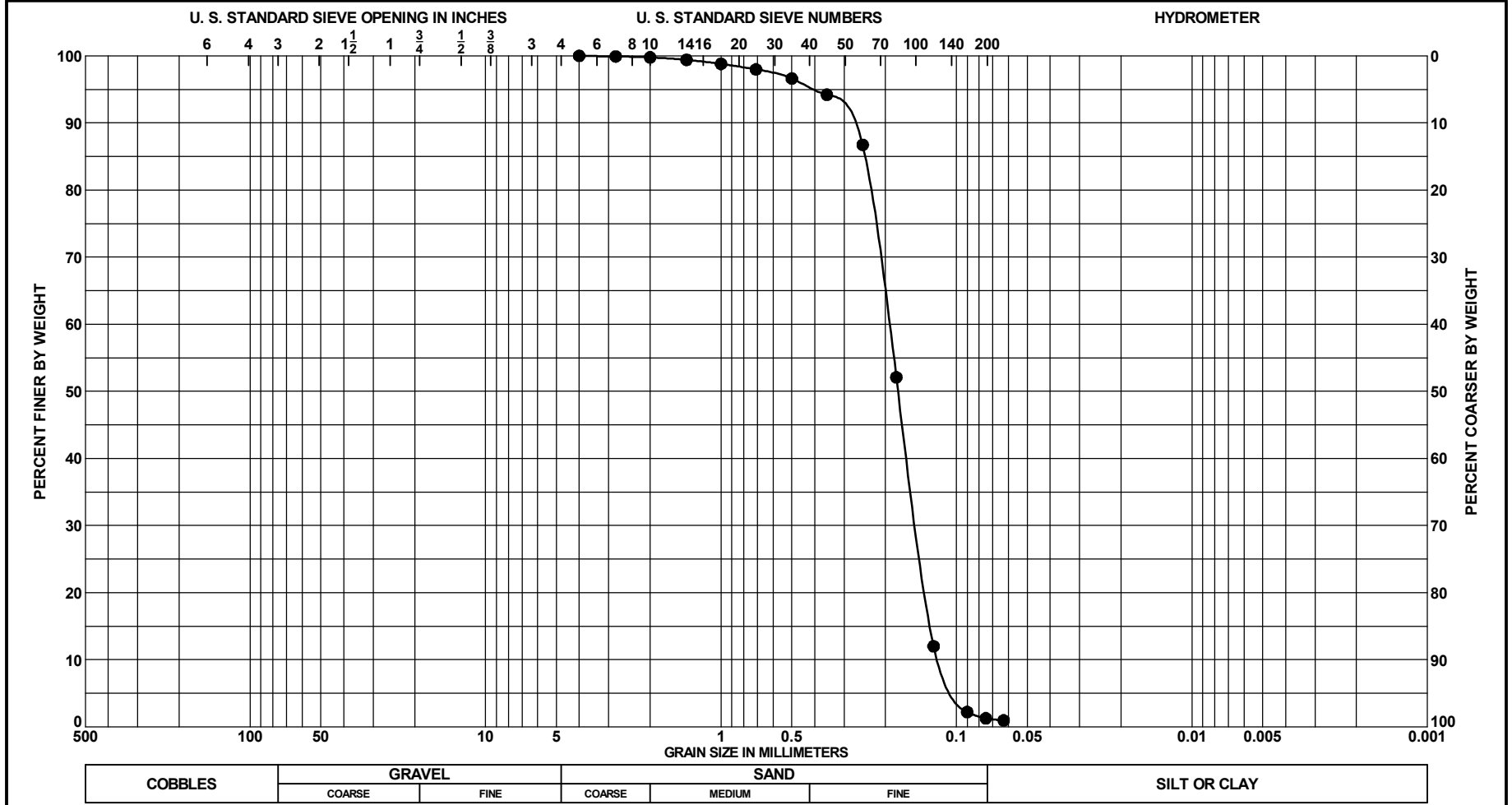


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

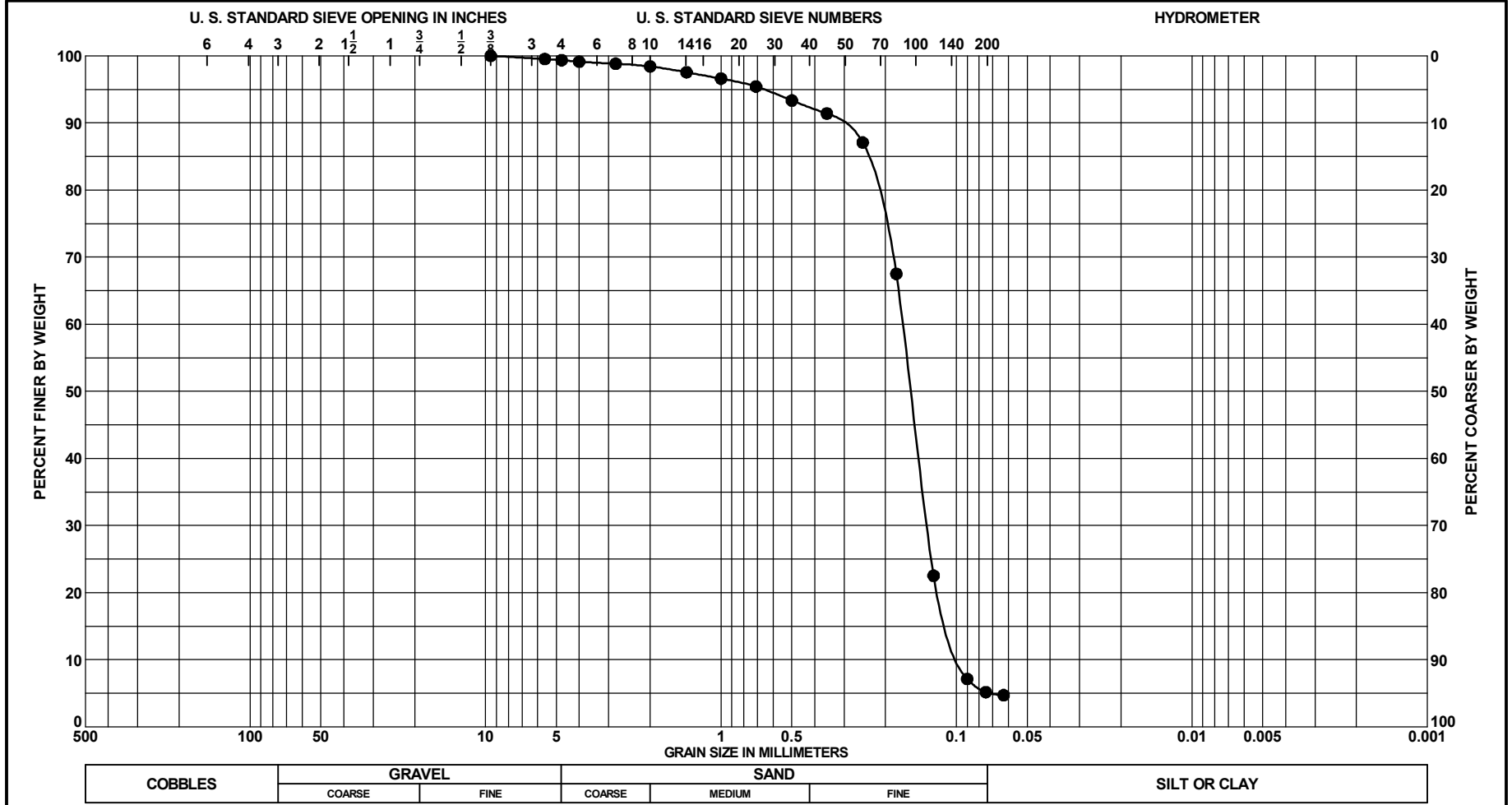
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	25/20 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-53
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



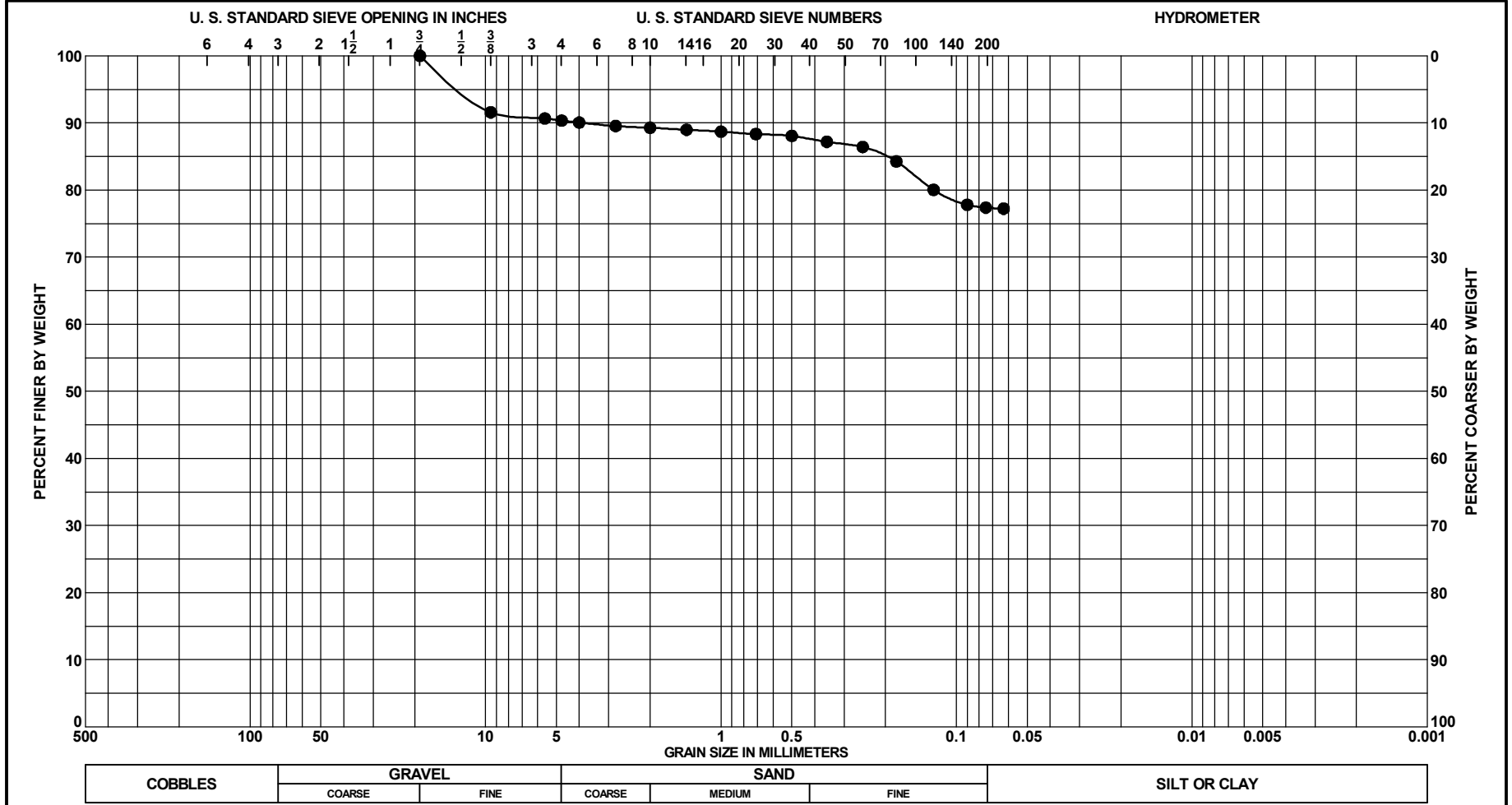
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2-Post	6.0 to 6.5 Ft.	SAND, poorly-graded, mostly medium to fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-53
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010



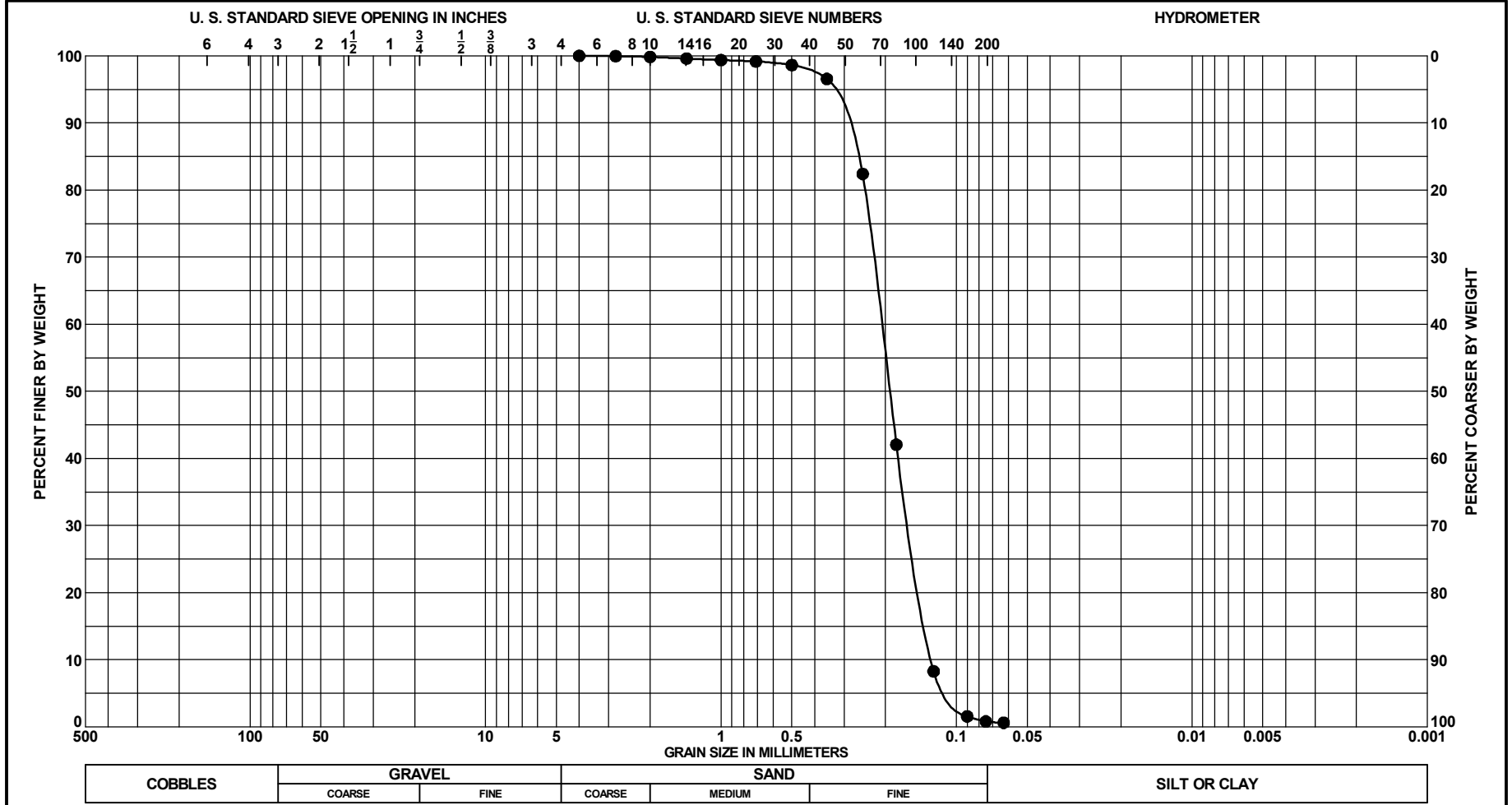
		GRAVEL		SAND			SILT OR CLAY							
		COARSE	FINE	COARSE	MEDIUM	FINE								
Sample No.	Depth	Classification				Munsell	CO₃ %	G_s	Org %	w_n	LL	PL	PI	PROJECT
● 3	9.0 to 9.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)				10YR 7/1	7 (est)							St. Johns County Offshore Investigation Part II
													BORING NO.	
													VB-SJSP09-53	
													BORING ELEV.	
													-55.3 Ft., NAVD88	
GRADATION CURVES													DATE	
													4/5/2010	



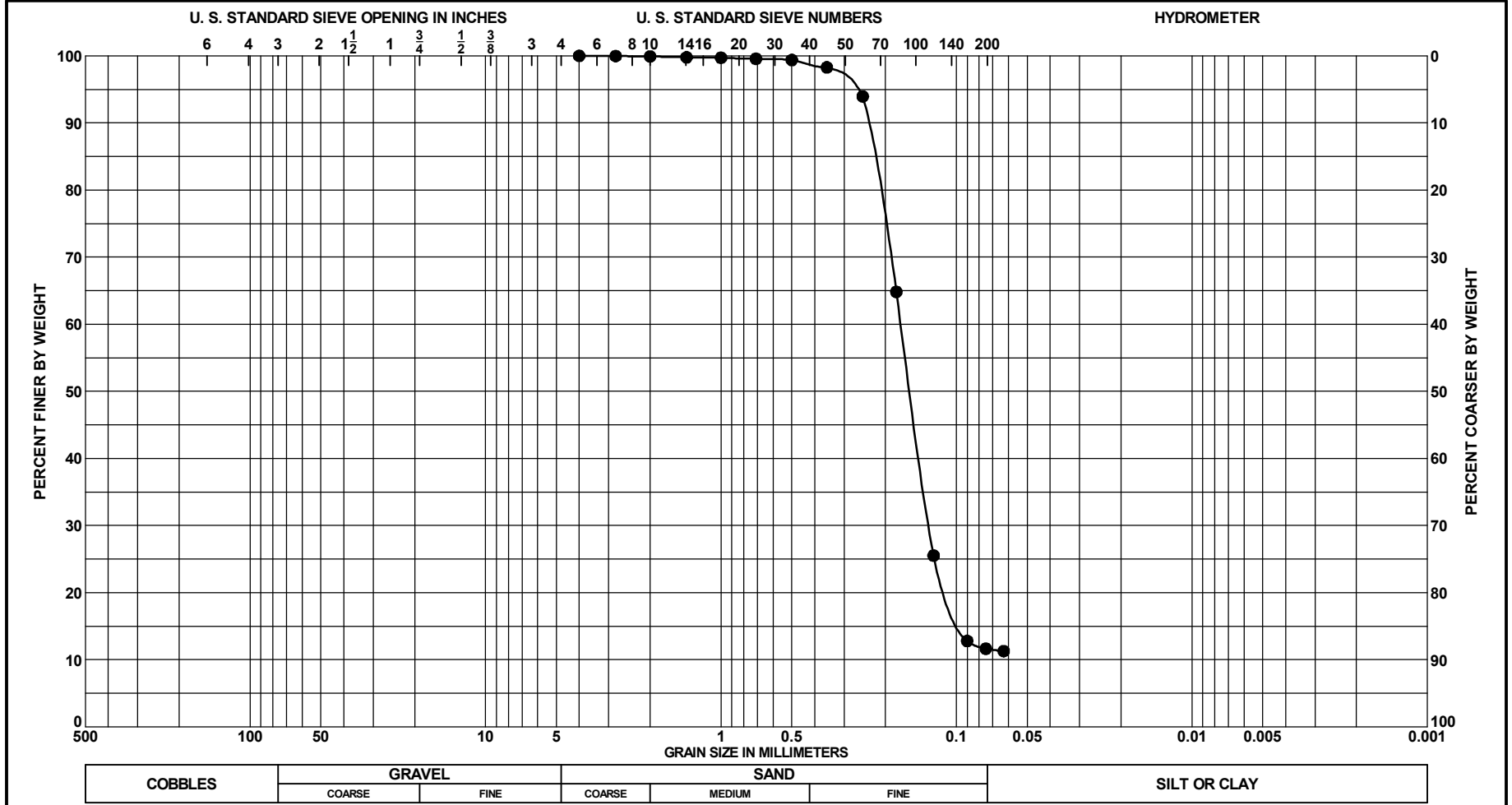
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	SOIL CLASSIFICATION	
											COARSE	FINE
● 4	10.0 to 10.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 6/1	8 (est)								
GRADATION CURVES											PROJECT	St. Johns County Offshore
												Investigation Part II
											BORING NO.	VB-SJSP09-53
											BORING ELEV.	-55.3 Ft., NAVD88
											DATE	4/5/2010



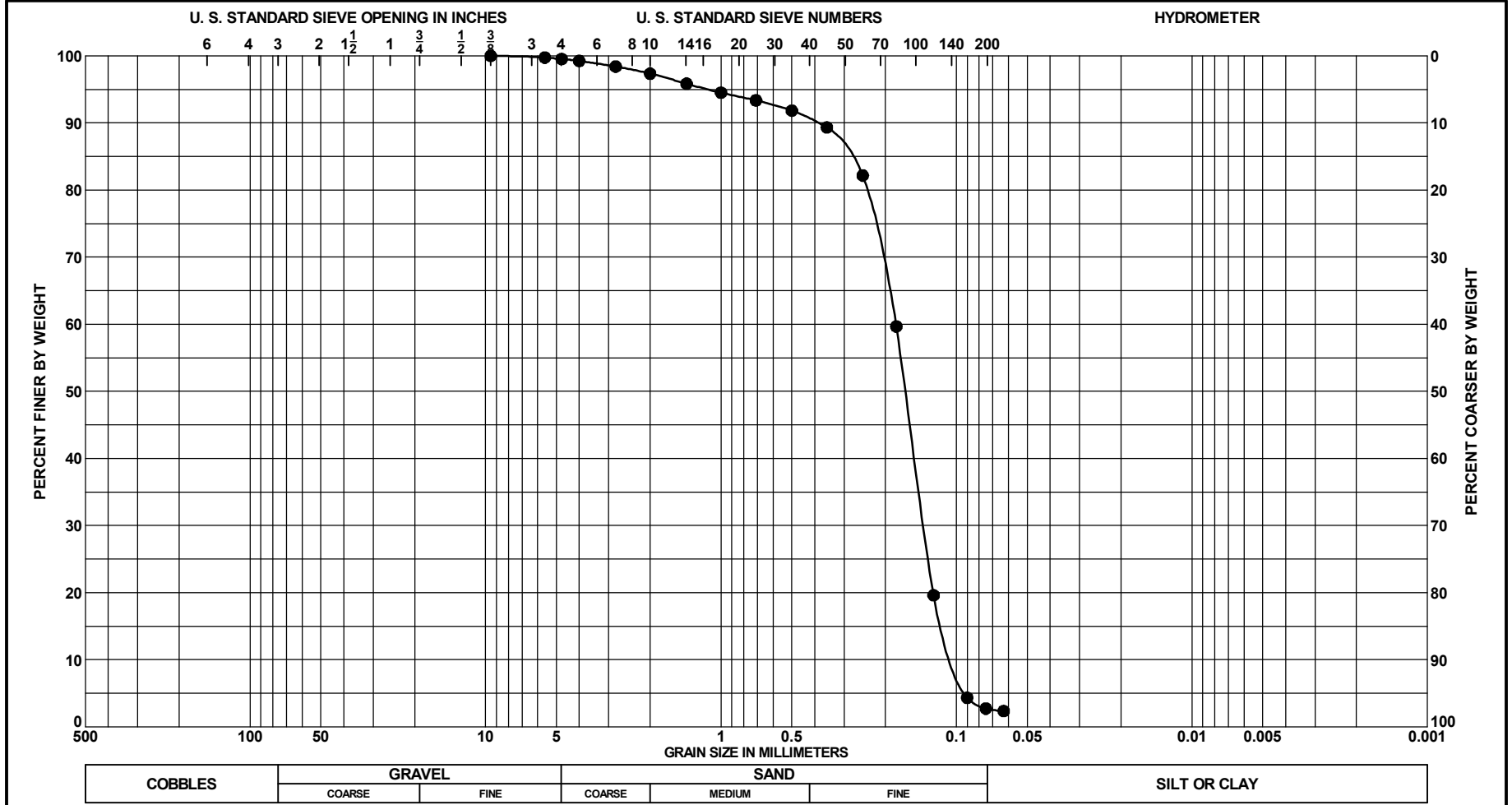
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 5	12.0 to 12.5 Ft.	SILT, inorganic-H, few fine-grained quartz, few fine gravel-size limerock, dark bluish gray (MH)	5B 4/1	0 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-53
											BORING ELEV. -55.3 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



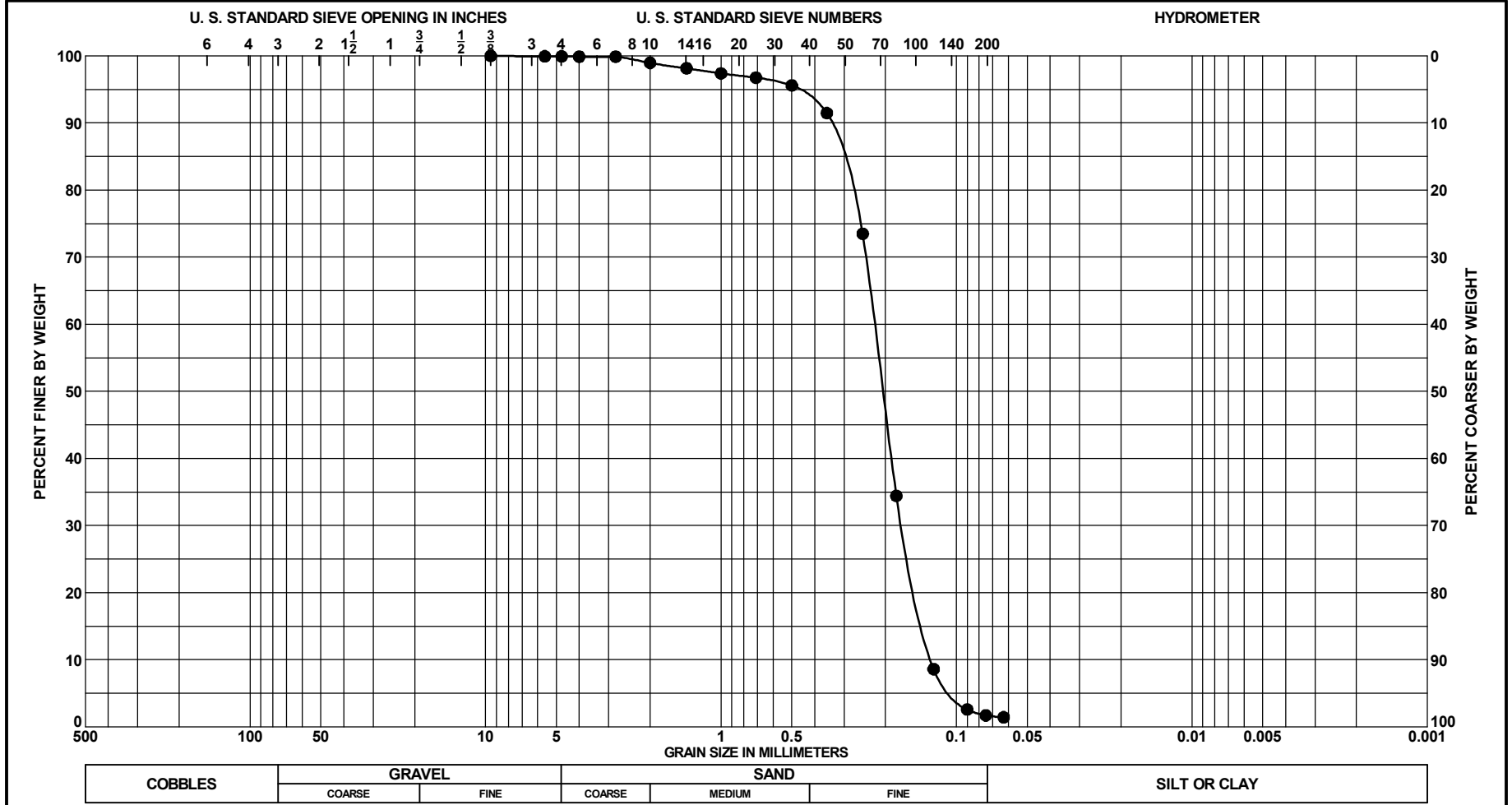
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, light greenish gray (SP)	10Y 8/1	3 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-54
											BORING ELEV. -51.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

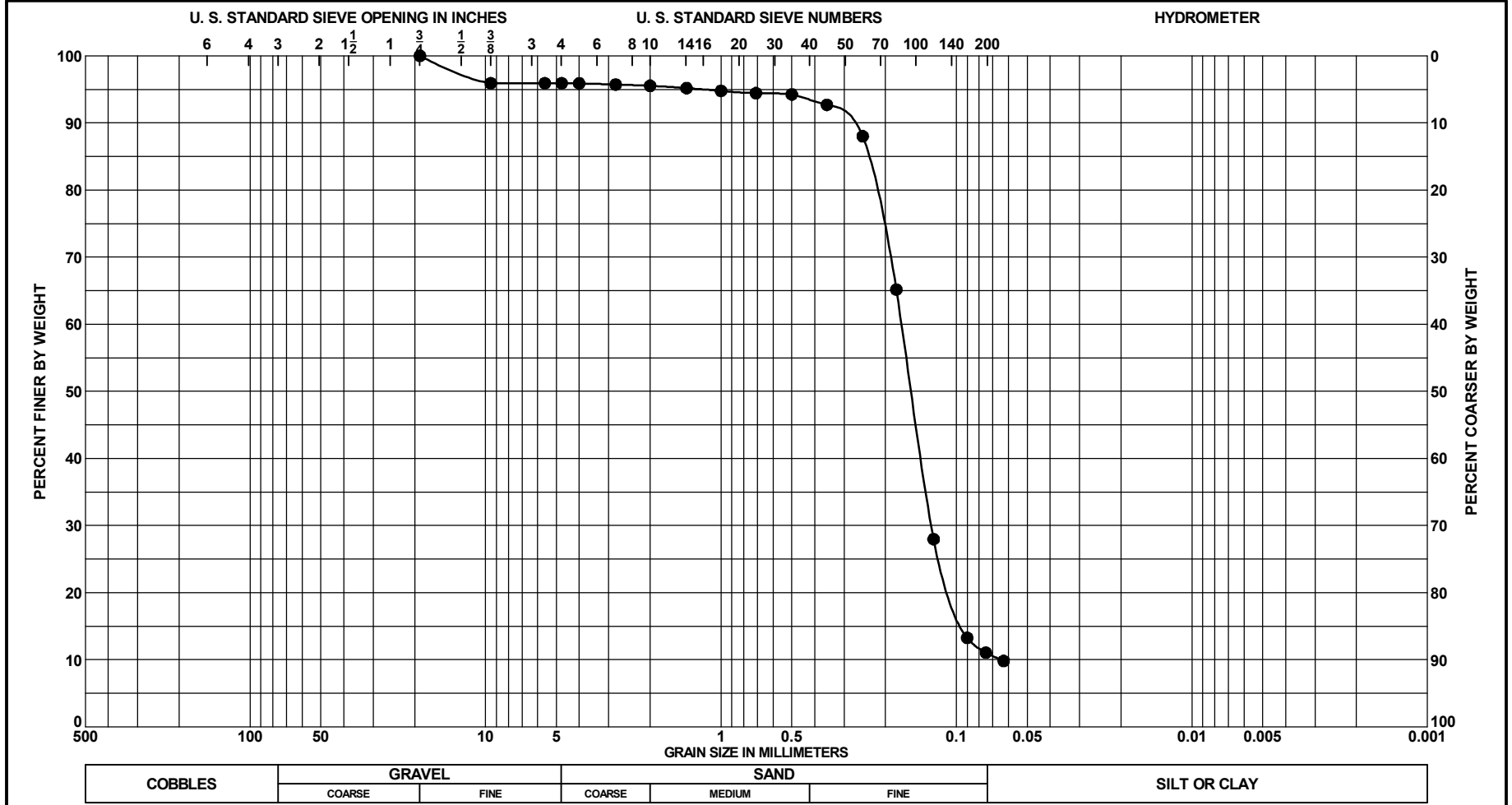


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 2	3.5 to 4.0 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, light greenish gray (SP-SM)	10Y 8/1	3 (est)							PROJECT	St. Johns County Offshore Investigation Part II
											BORING NO.	VB-SJSP09-54
											BORING ELEV.	-51.4 Ft., NAVD88
											DATE	4/5/2010

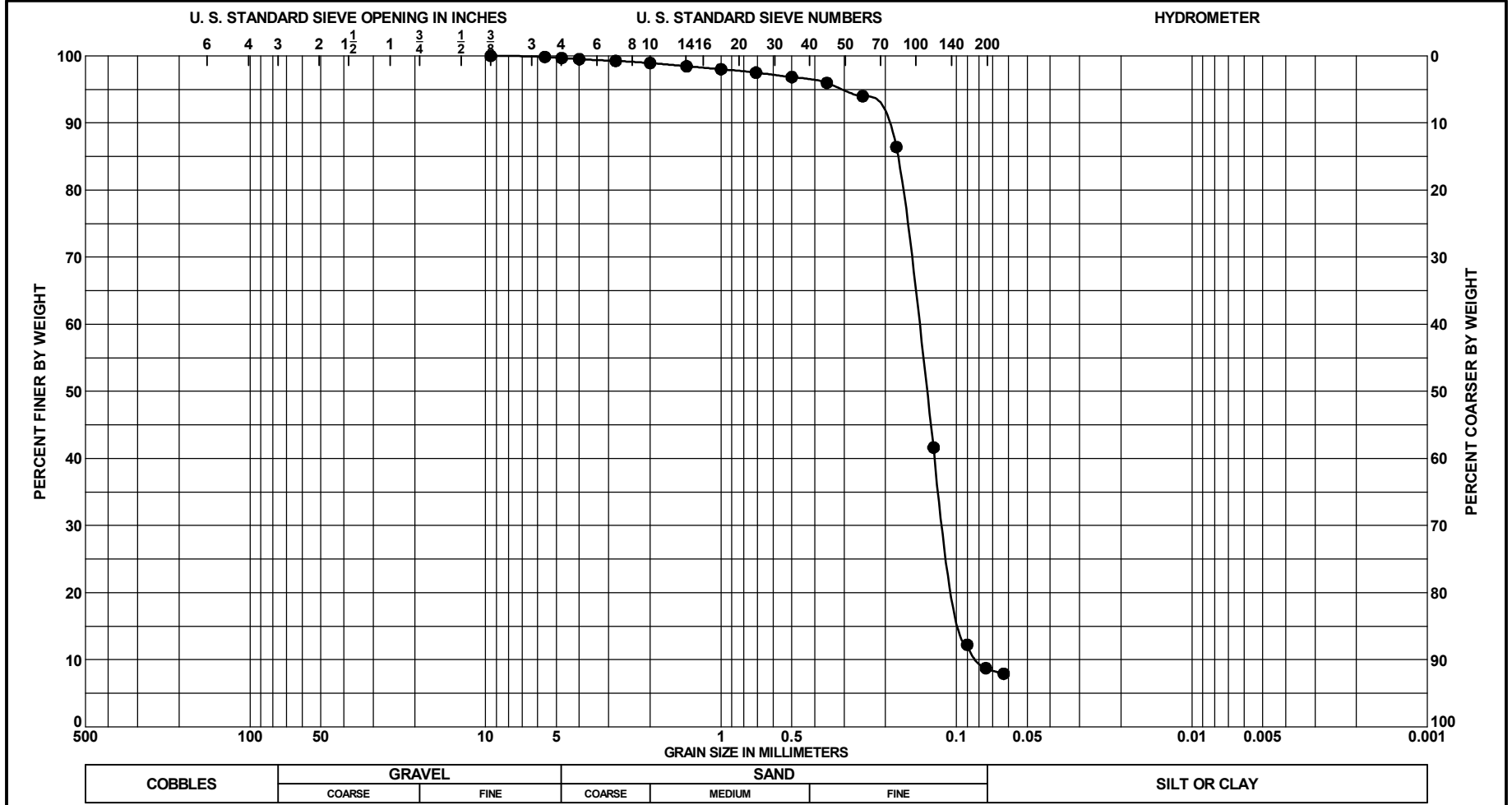


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	5.0 to 5.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	10 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-54
											BORING ELEV. -51.4 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

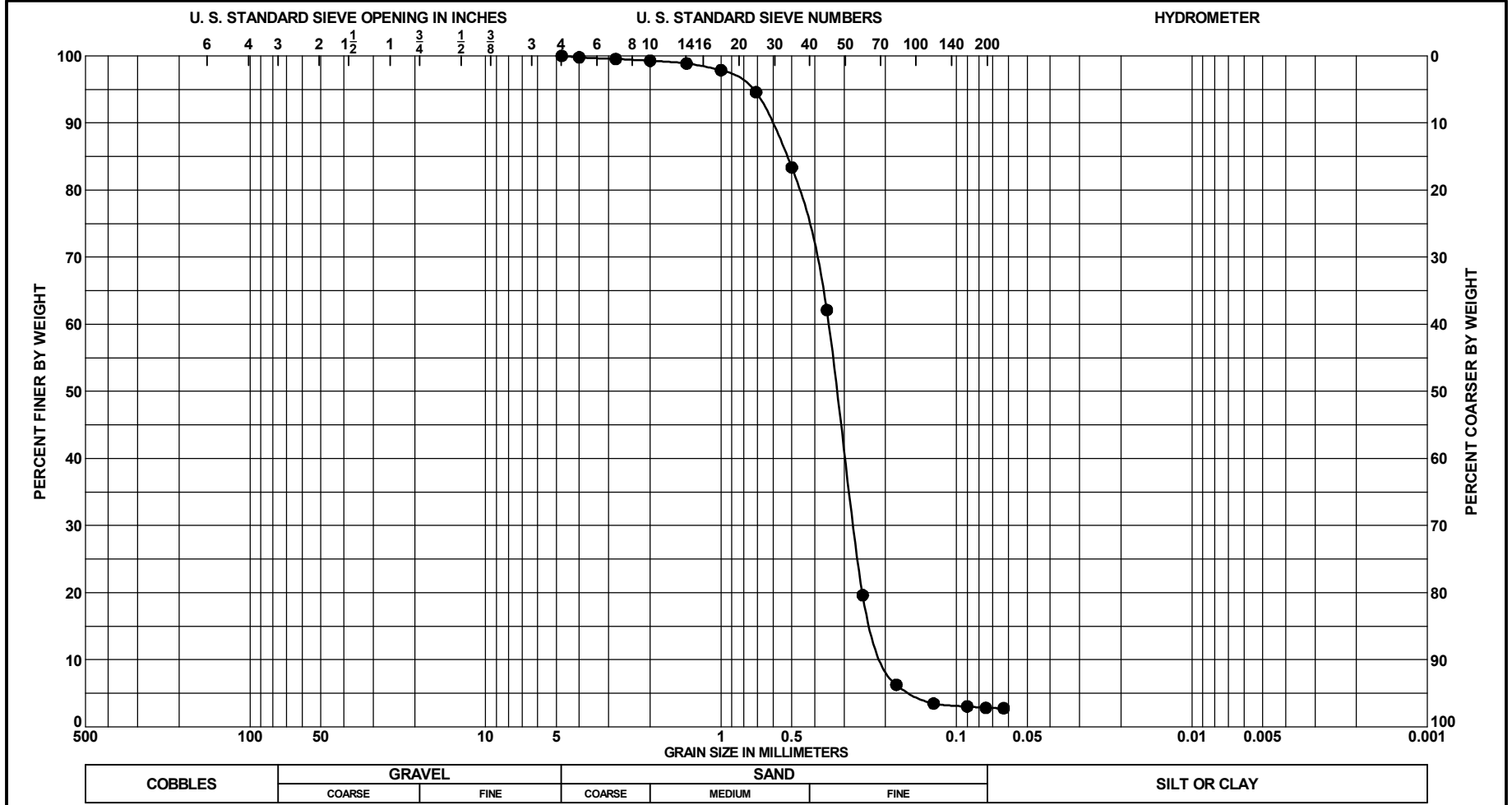




Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	GRADATION CURVES	
											PROJECT	DATE
● 2	3.0 to 3.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, gray (SP-SM)	10YR 5/1	4 (est)							St. Johns County Offshore Investigation Part II	4/5/2010
											BORING NO.	VB-SJSP09-55
											BORING ELEV.	-59.1 Ft., NAVD88

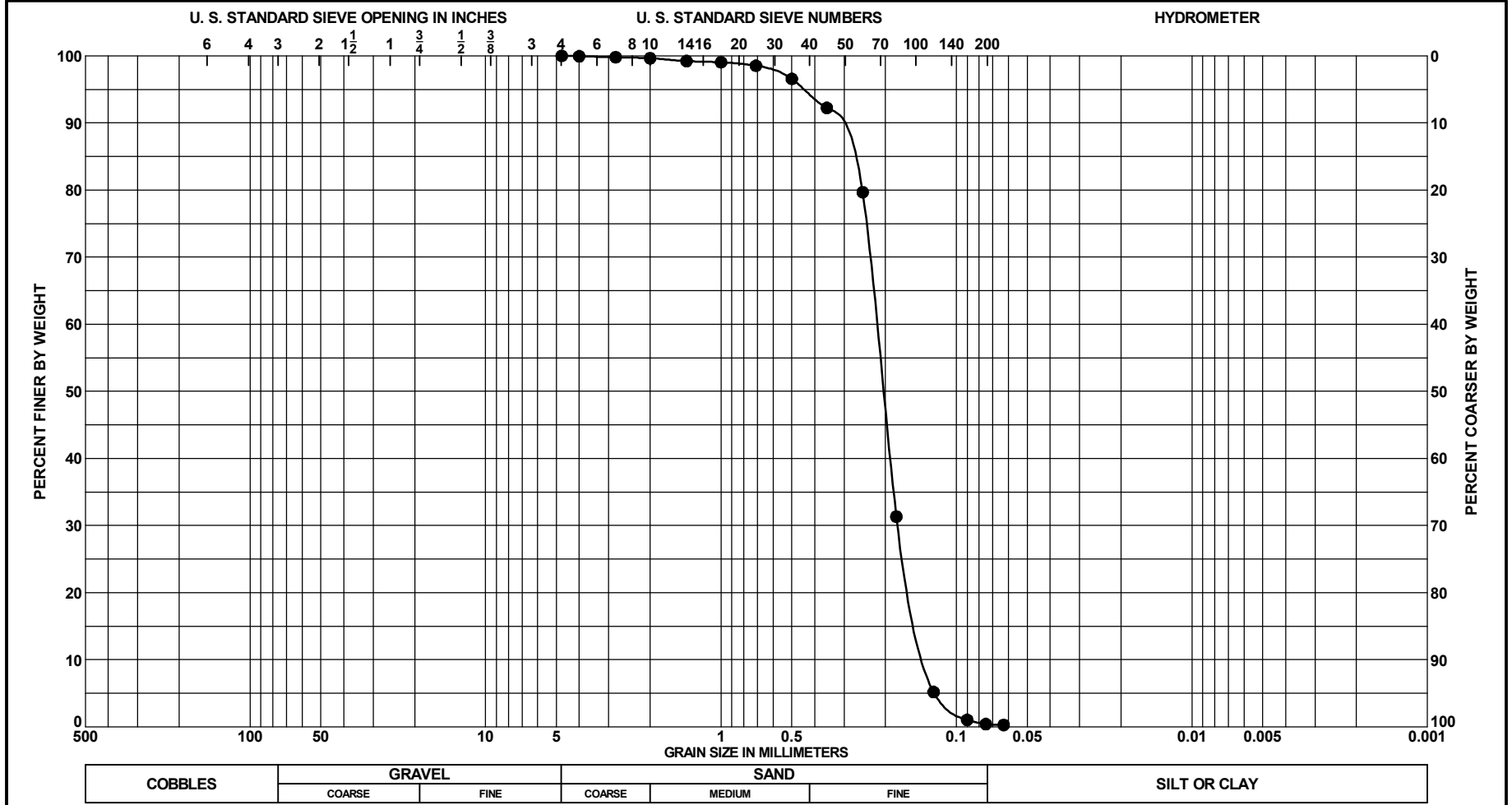


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	5.0 to 5.5 Ft.	SAND, poorly-graded with silt, mostly fine-grained quartz sand, few silt, trace shell fragments, gray (SP-SM)	10YR 5/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-55
											BORING ELEV. -59.1 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

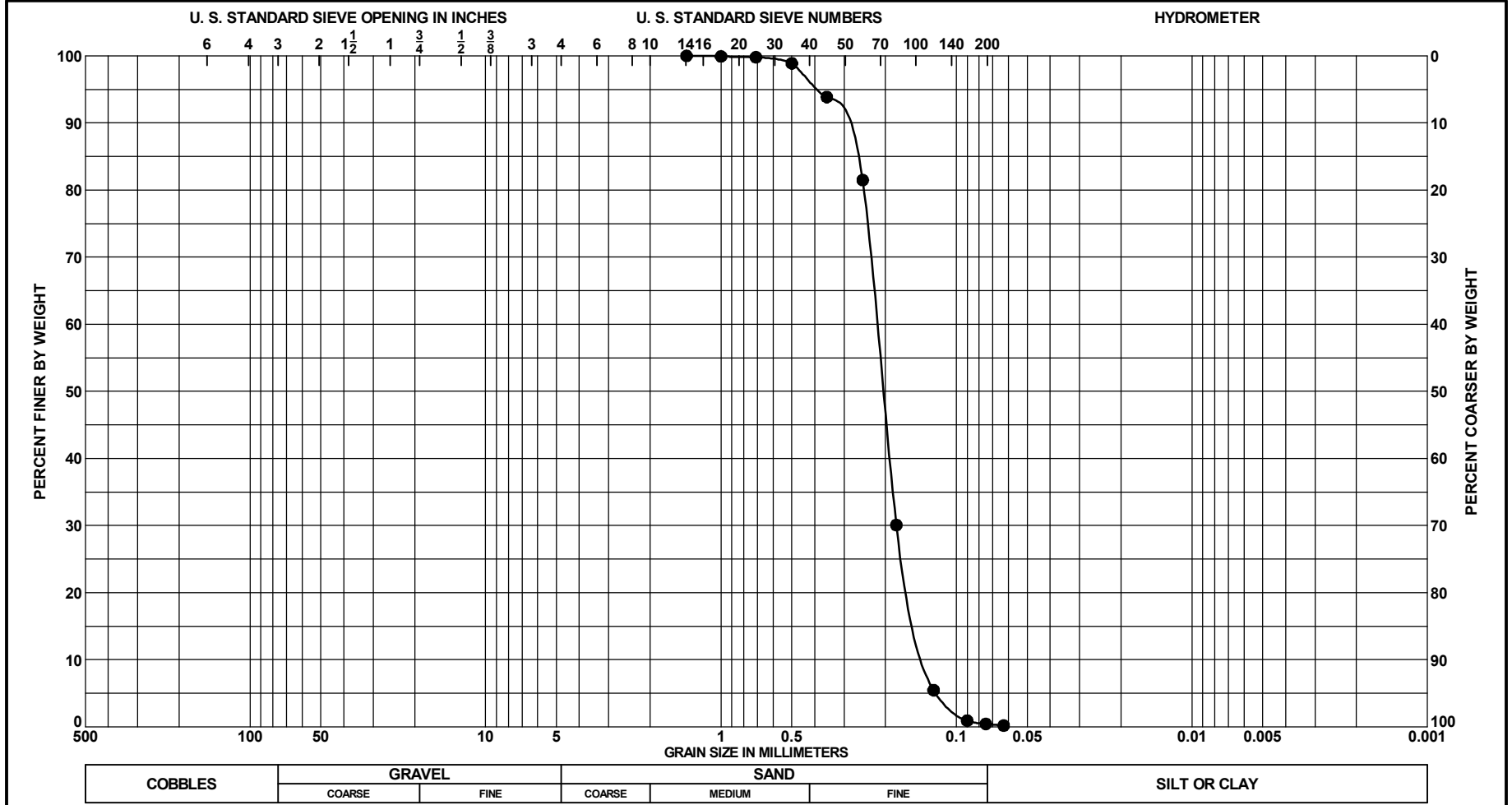


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	2.5 to 3.0 Ft.	SAND, poorly-graded, mostly medium to fine-grained quartz sand, light gray (SP)	10YR 7/1	2 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

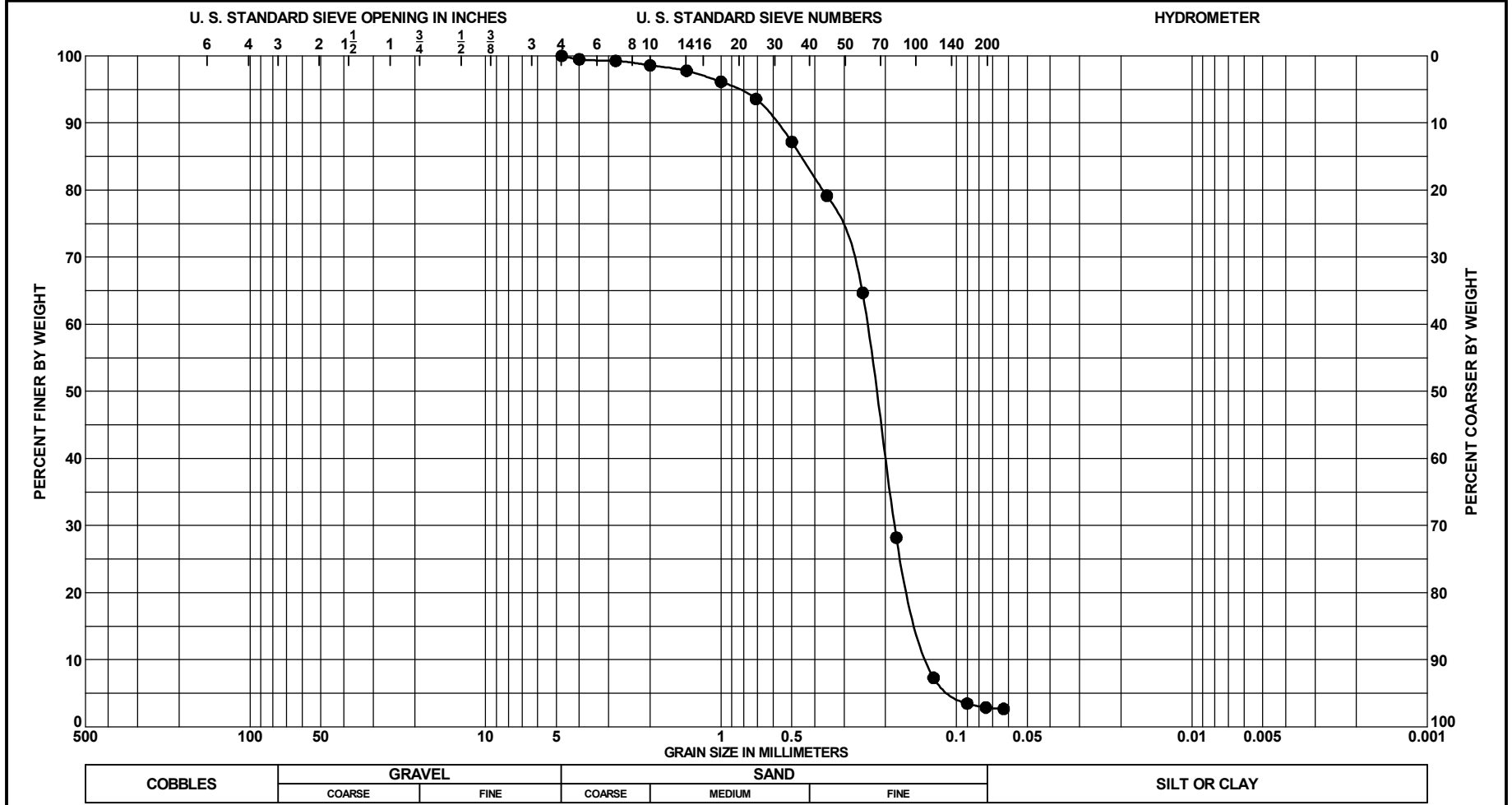


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	5.0 to 5.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, light gray (SP)	10YR 7/1	6/5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



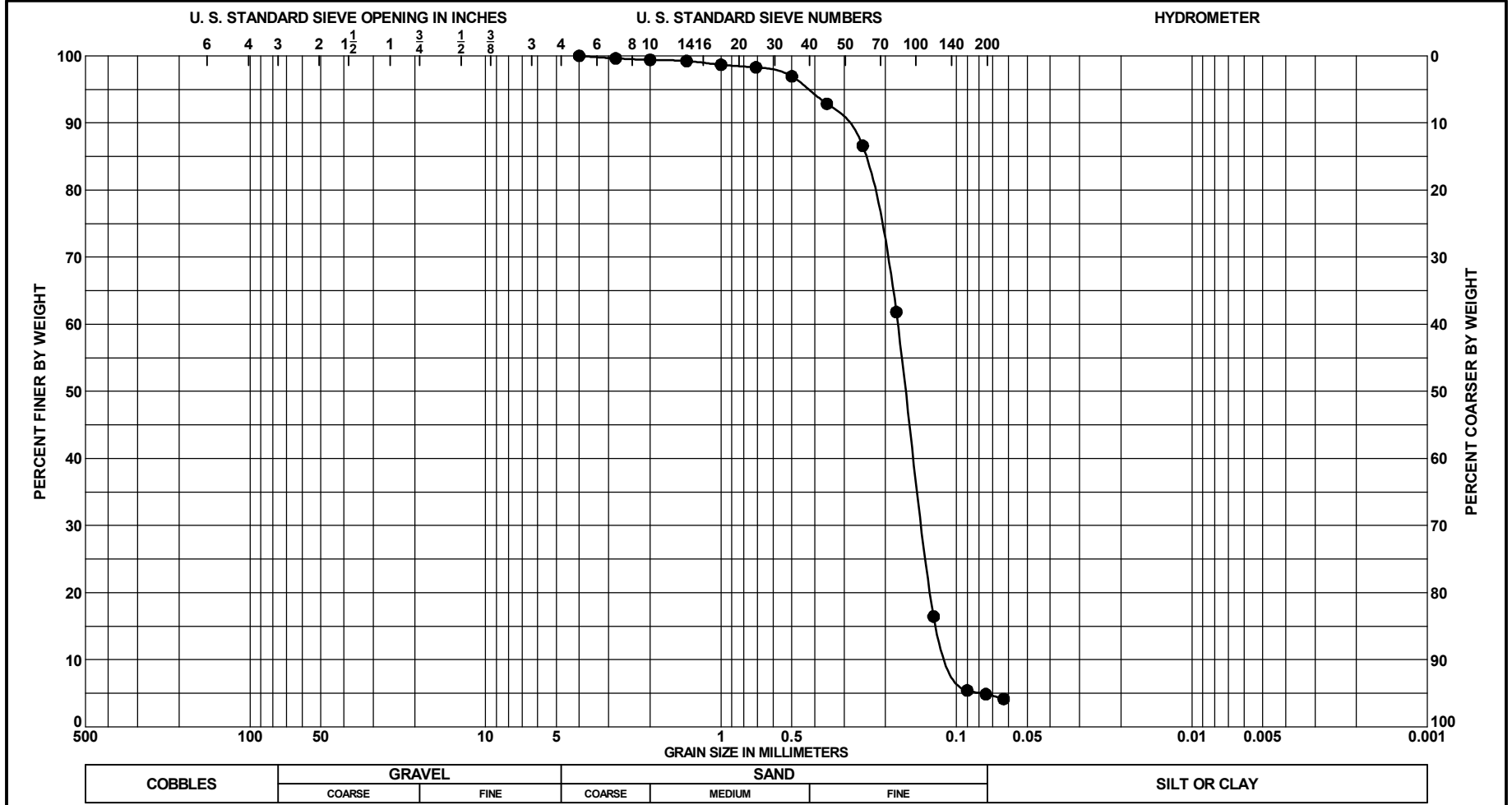
COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2-Post	5.0 to 5.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, light gray (SP)	10YR 7/1								St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/6/2010

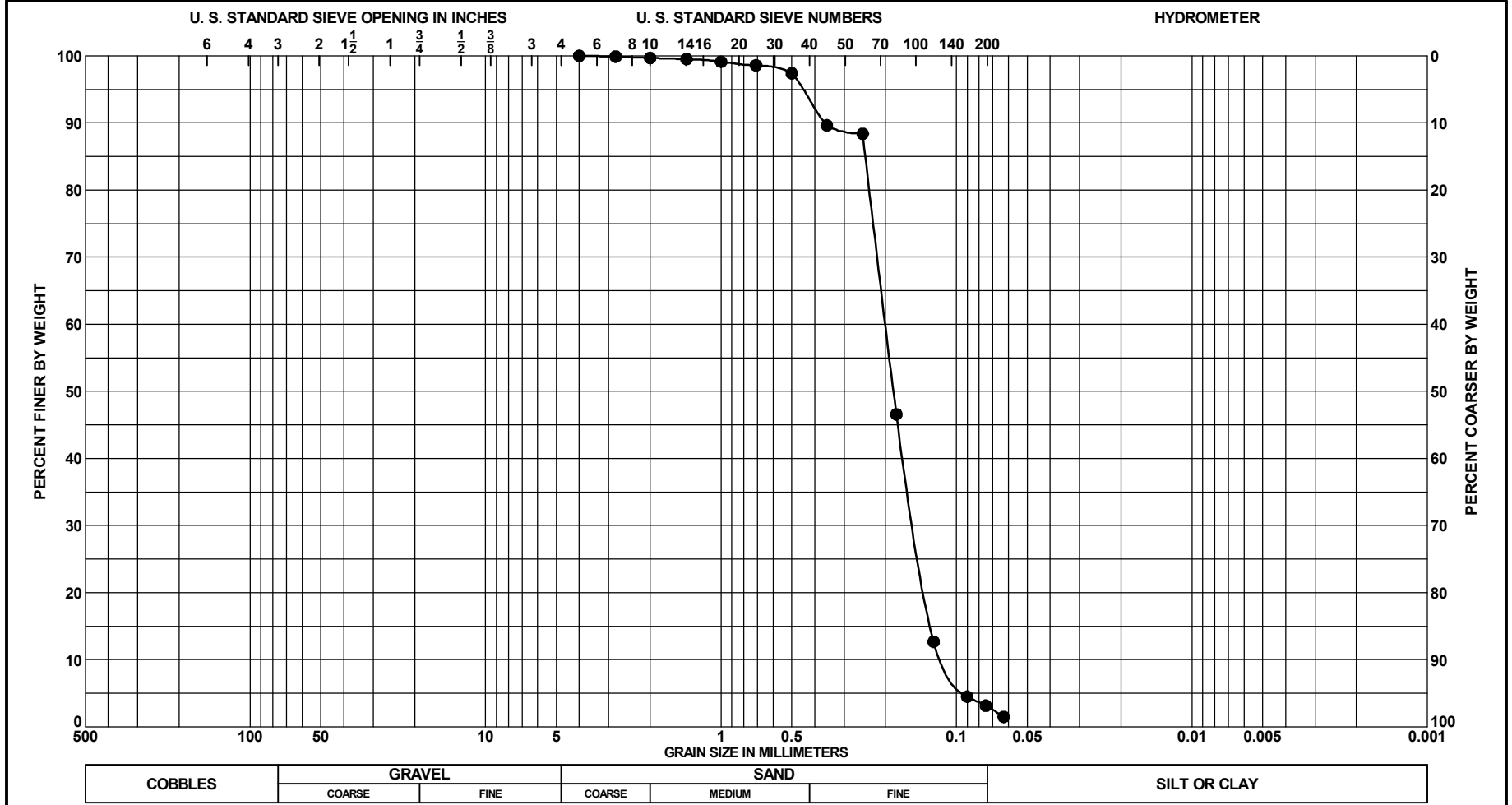


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	8.0 to 8.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium sand-size shell fragments, trace silt, light gray (SP)	10YR 7/1	20 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
											DATE 4/5/2010

GRADATION CURVES

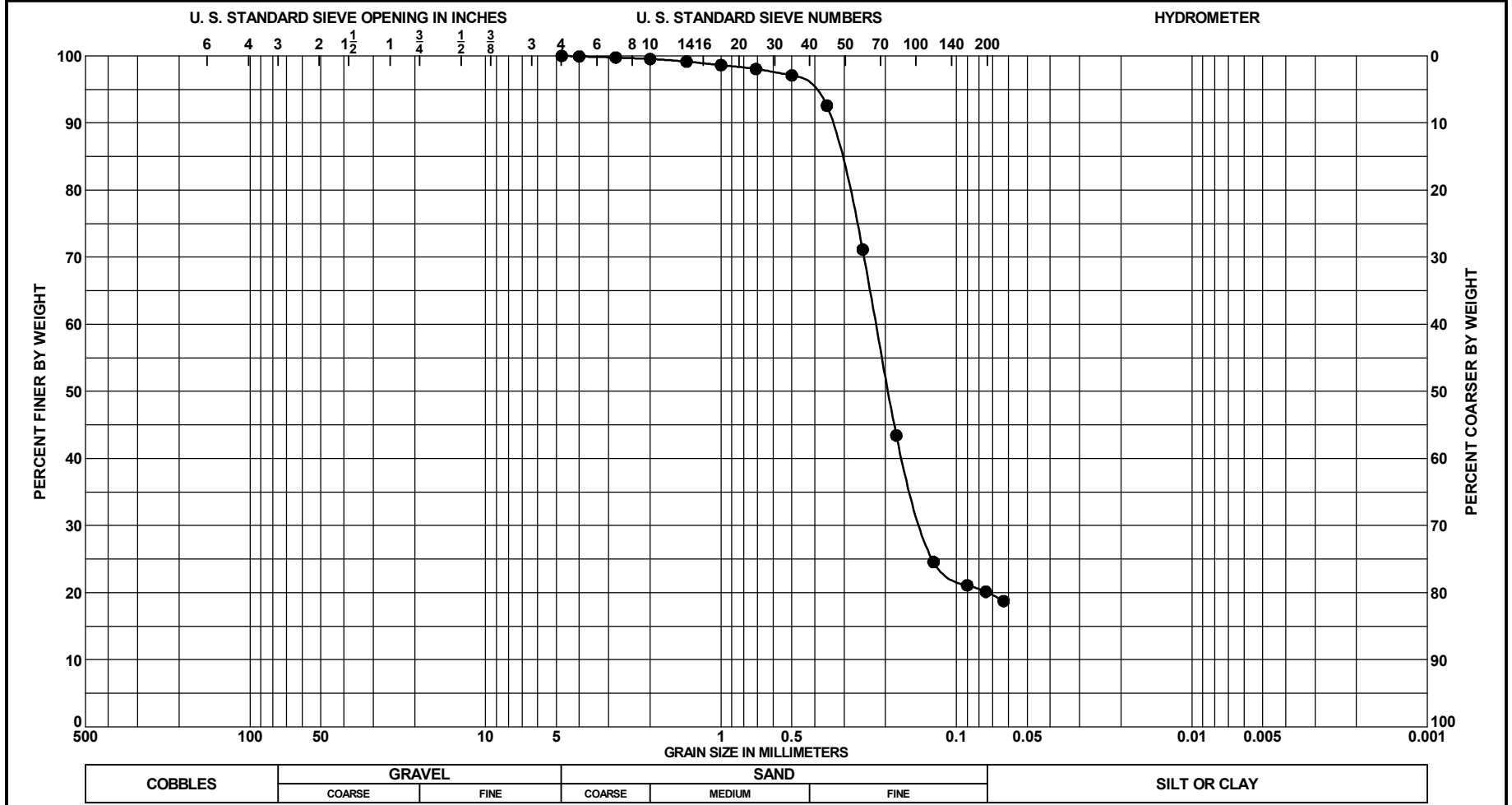


Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 4	9.0 to 9.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, few medium sand-size shell fragments, trace silt, gray (SP)	10YR 5/1	5 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



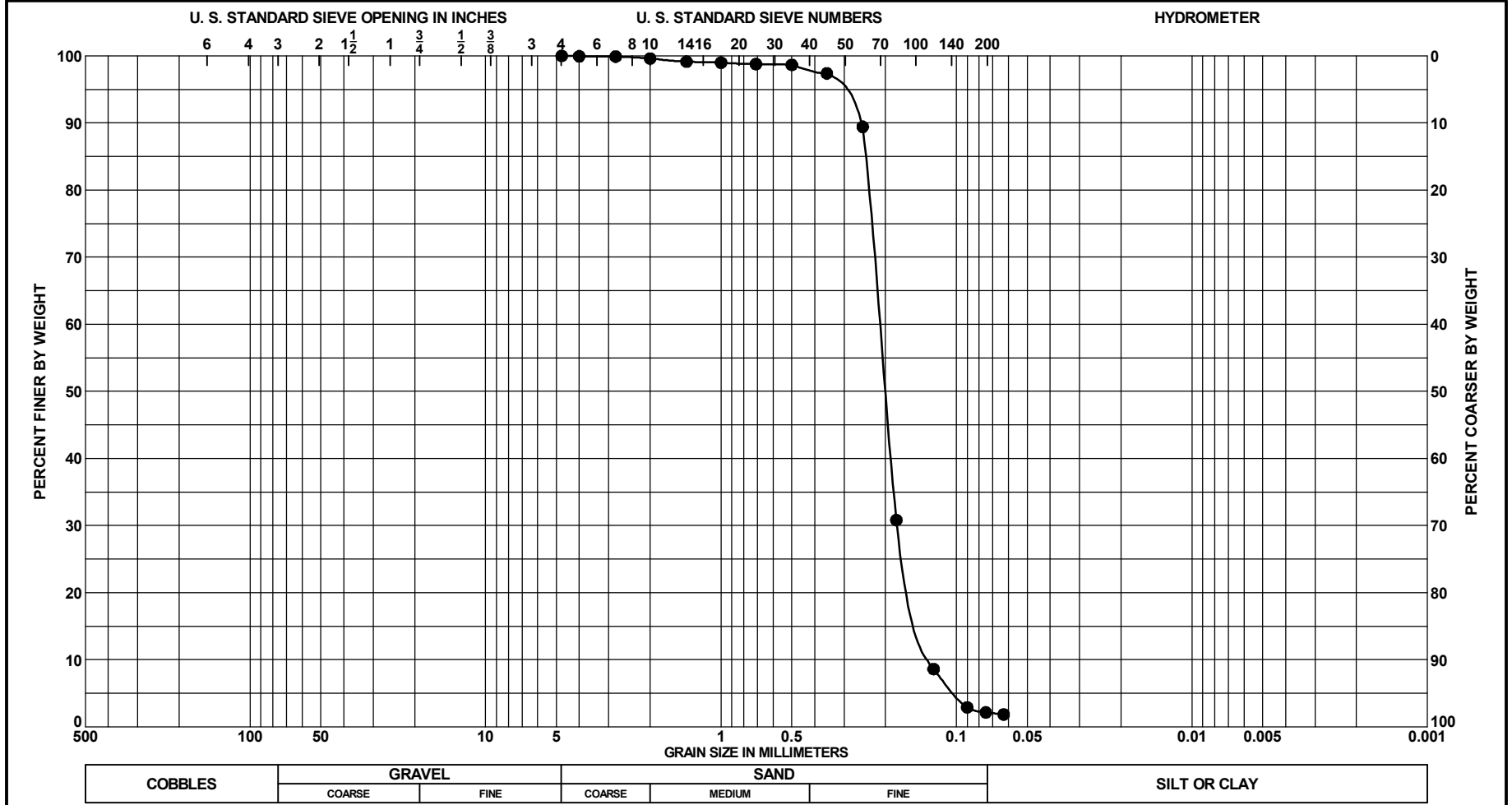
Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 5	12.0 to 12.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, little medium to fine sand-size shell fragments, trace silt, gray (SP)	10YR 5/1	18 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-56
											BORING ELEV. 52.9 Ft., NAVD88
											DATE 4/5/2010

GRADATION CURVES

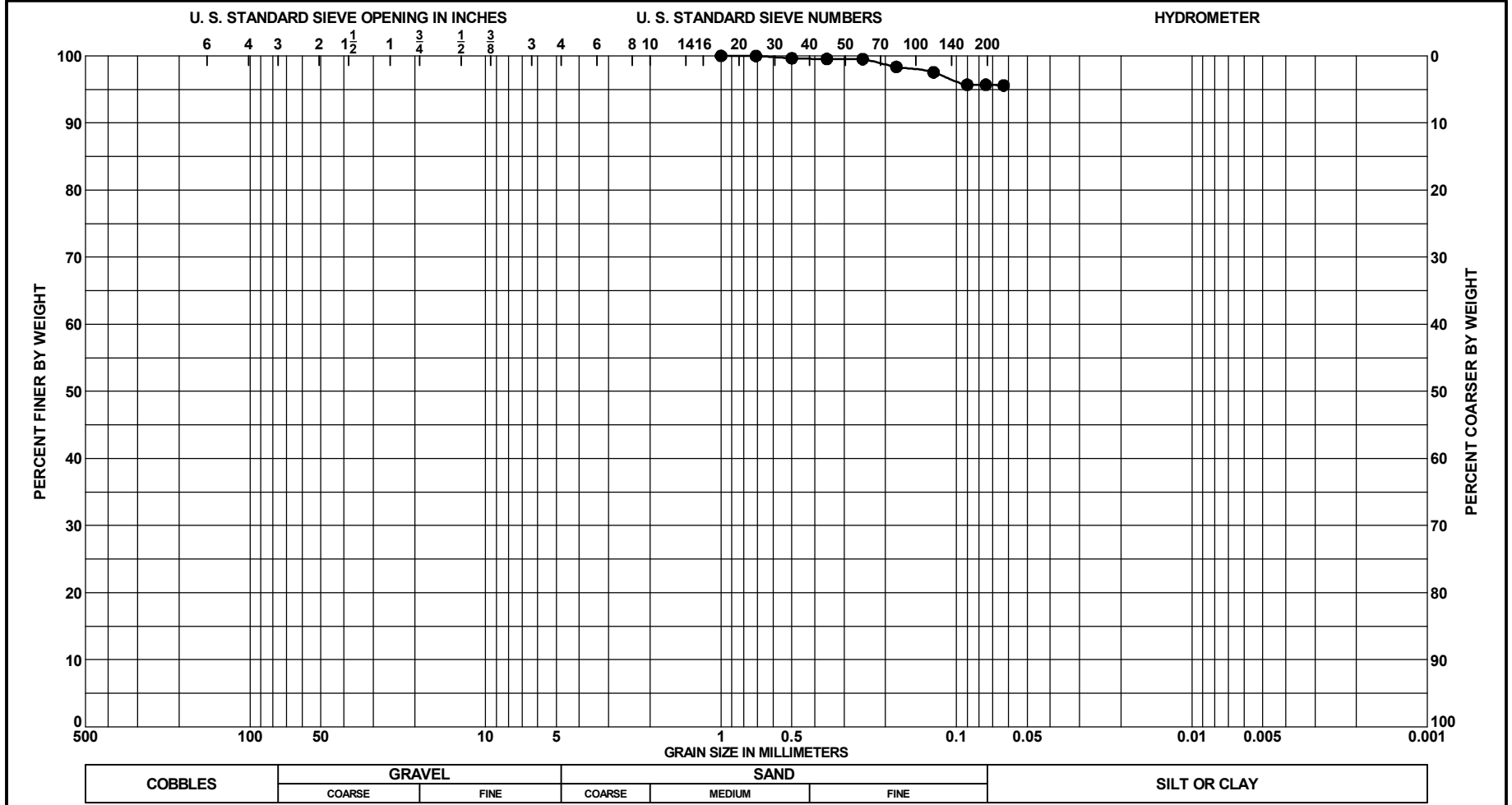


COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 2	4.0 to 4.5 Ft.	SAND, clayey, mostly fine-grained quartz sand, little clay, few medium sand-size shell fragments, pale brown (SC)	10YR 6/3	6 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-57
											BORING ELEV. -62.2 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 1	1.0 to 1.5 Ft.	SAND, poorly-graded, mostly fine-grained quartz sand, trace shell fragments, white (SP)	10YR 8/1	4 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-58
											BORING ELEV. -58.5 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Sample No.	Depth	Classification	Munsell	CO ₃ %	G _s	Org %	w _n	LL	PL	PI	PROJECT
● 3	5.0 to 5.5 Ft.	SILT, inorganic-H, trace fine-grained quartz, gray (MH)	10YR 5/1	0 (est)							St. Johns County Offshore Investigation Part II
											BORING NO. VB-SJSP09-58
											BORING ELEV. -58.5 Ft., NAVD88
GRADATION CURVES											DATE 4/5/2010

