



April 26, 2011

Gahagan & Bryant Associates, Inc
3802 West Bay to Bay Boulevard
Suite B-22
Tampa, FL 33629-6826

**Re: Jupiter Island '10 Sand Search
Detail Cores**

American Vibracore Services, Inc. is pleased to submit this report regarding the completion of the vibracore field work phase of this project.

Overview

American Vibracore Services, Inc. (AVS) under contract from Gahagan & Bryant Associates, Inc. (GBA), conducted vibracore sampling operations offshore Jupiter Island, Florida on October, 12th, 2010. A total of 18 vibracores were collected.

Equipment

AVS's 85 foot steel hulled research vessel "Thunderforce" was used as a work platform for vibracore operations. AVS's large pneumatic coring machine was used to take all the vibracore samples. A penetrometer was used to record all coring.

Core Processing and Laboratory Testing

All cores collected from the project were transported to our US Army Corps of Engineers certified lab where they were split, logged, photographed and preserved. Laboratory testing was conducted in the form of grain size analyses, calcium carbonate content and Munsell color designation.

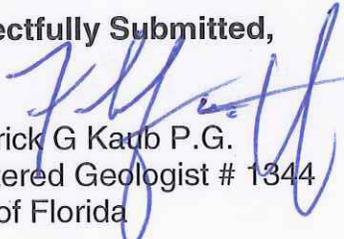
Reporting

The penetrometer logs and laboratory analysis results are all contained in this report.

Closing

We appreciate the opportunity to be of service to GBA on this project and look forward to a continued relationship.

Respectfully Submitted,


Frederick G Kaub P.G.
Registered Geologist # 1344
State of Florida

4/28/2011

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Penetrometer Logs



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -54.5'navd

Core Identifier JIVC10-1

Coordinate System

Start Time 07:33:52

State Plane Coordinates (SPC)

End Time 07:37:25

Penetration 09.9'

966208.37 X

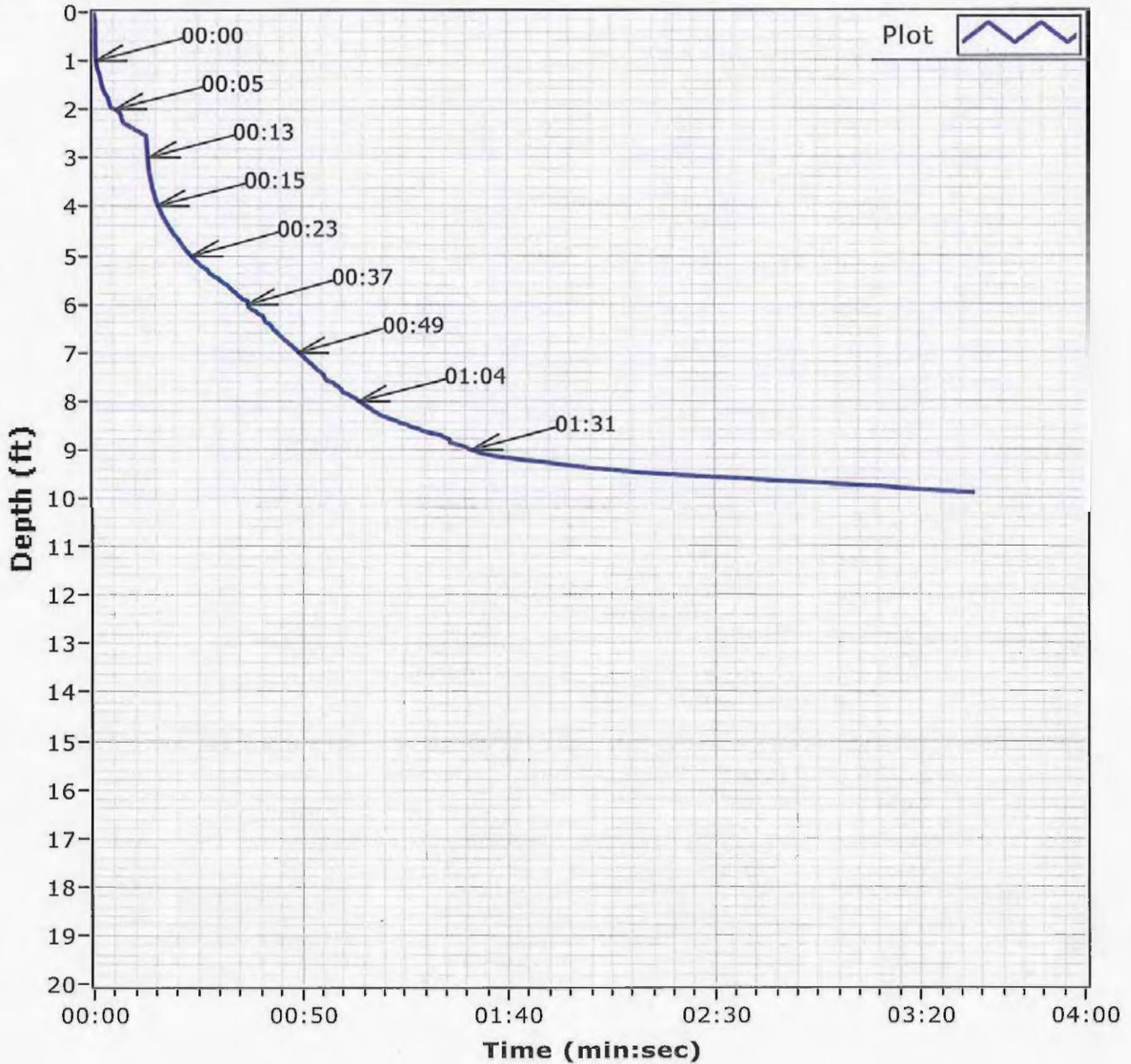
Total Time 00:03:33

Recovery 8.2'

977533.44 Y

Florida East Zone

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -47.9'navd

Core Identifier JIVC10-2

Coordinate System

State Plane Coordinates (SPC)

967144.49 X

977891.95 Y

Florida East Zone

Start Time 07:56:59

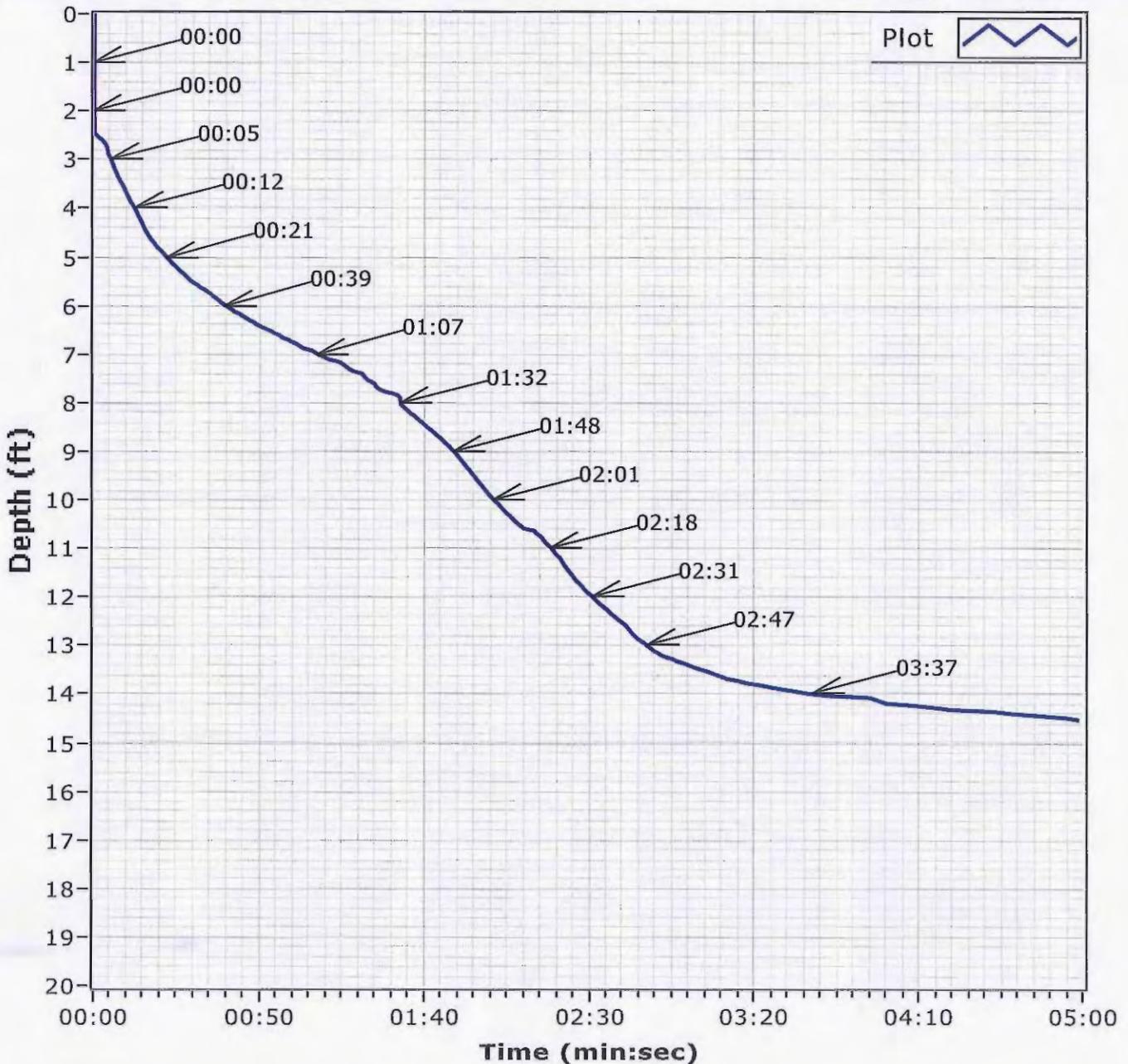
End Time 08:01:57

Total Time 00:04:58

Penetration 14.5'

Recovery 12.3'

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -45.3'navd

Core Identifier JIVC10-3

Coordinate System

Start Time 08:19:13

State Plane Coordinates (SPC)

End Time 08:23:49

Penetration 12.3'

968103.22

X

Total Time 00:04:36

Recovery 10.8'

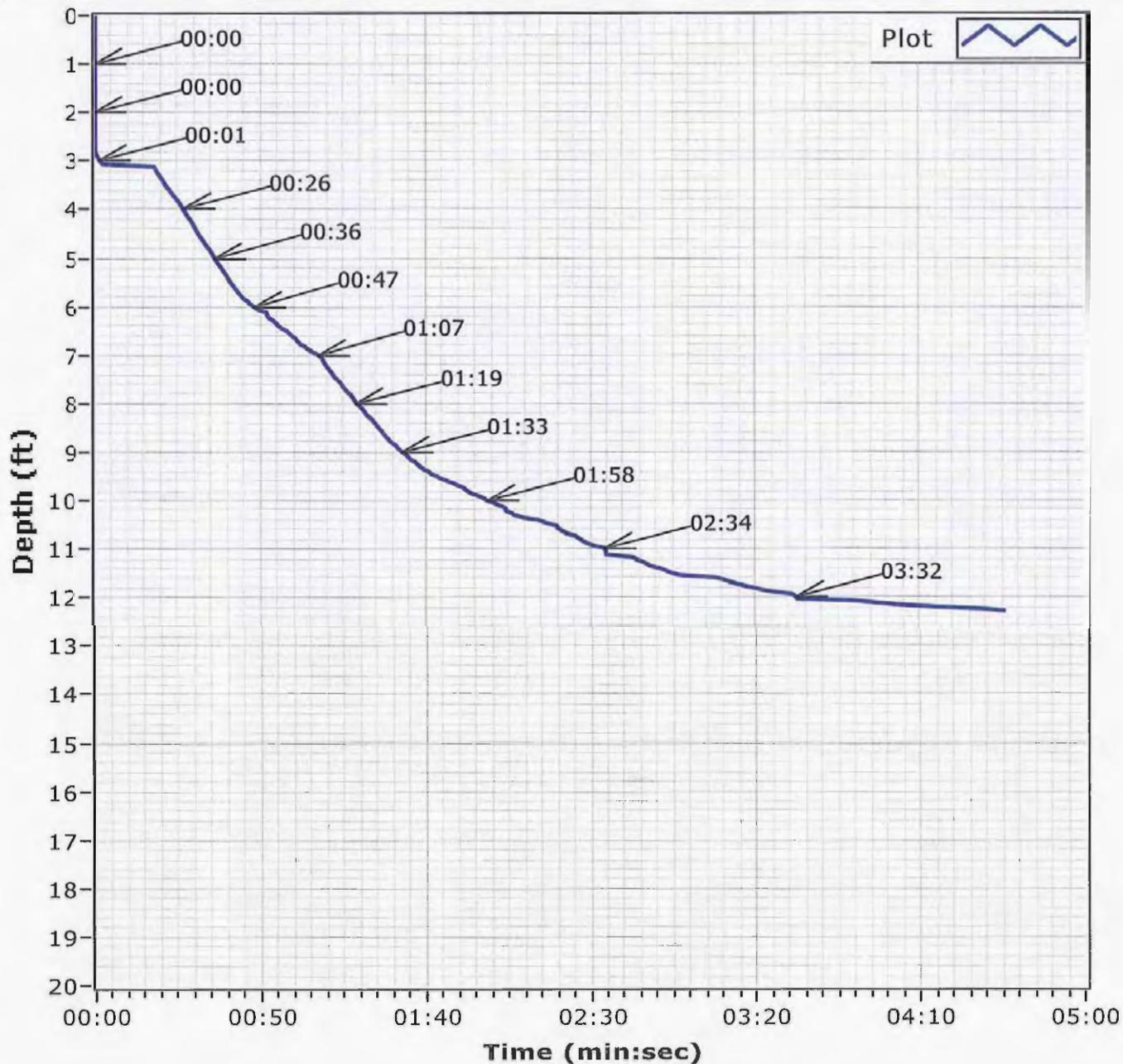
978129.49

Y

Florida East

Zone

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -52.5'navd

Core Identifier JIVC10-4

Coordinate System

Start Time 09:17:20

State Plane Coordinates (SPC)

End Time 09:21:12

Penetration 12.2'

965539.51 X

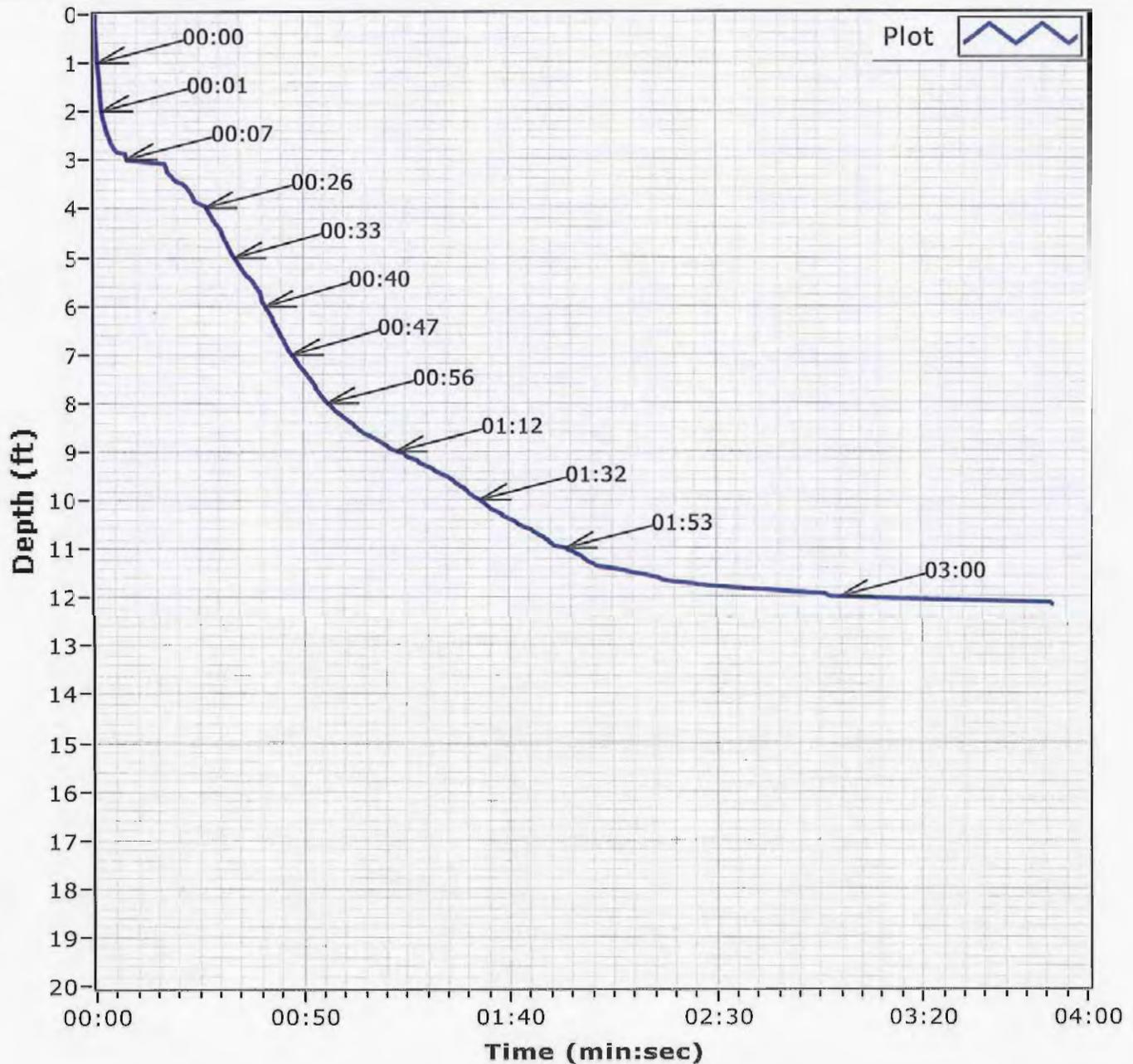
Total Time 00:03:52

Recovery 12.2'

976274.12 Y

Florida East Zone

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -46.9'navd

Core Identifier JIVC10-5

Coordinate System

State Plane Coordinates (SPC)

966481.18 X

976620.55 Y

Florida East Zone

Start Time 09:00:42

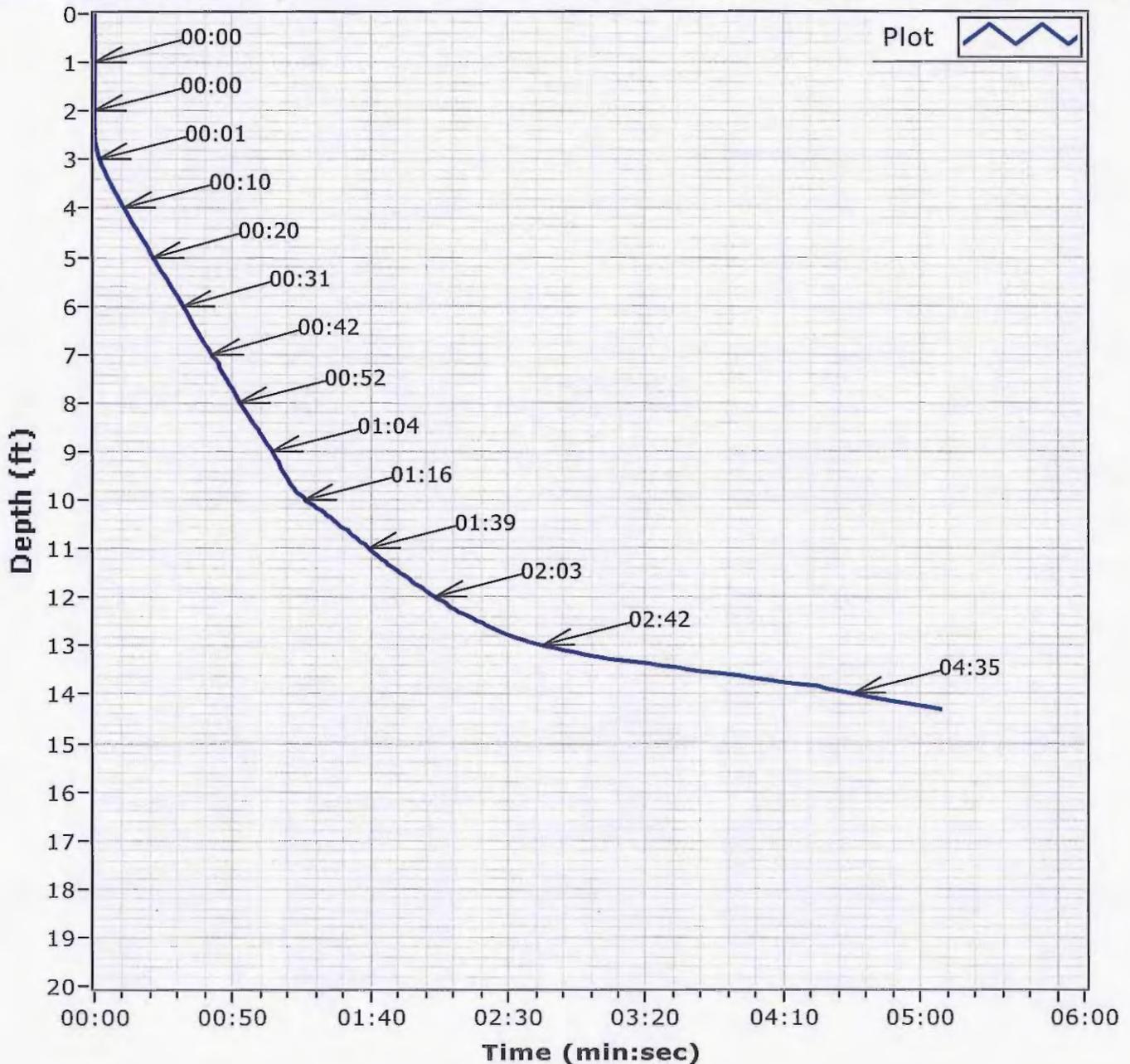
End Time 09:05:50

Total Time 00:05:07

Penetration 14.3'

Recovery 14.3'

Comments



Project

Juiter Island '10



Date 10/12/2010

Water Depth -58.9'navd

Core Identifier JIVC10-8A

Coordinate System

State Plane Coordinates (SPC)

964892.31 X

975014.98 Y

Florida East Zone

Start Time 11:17:07

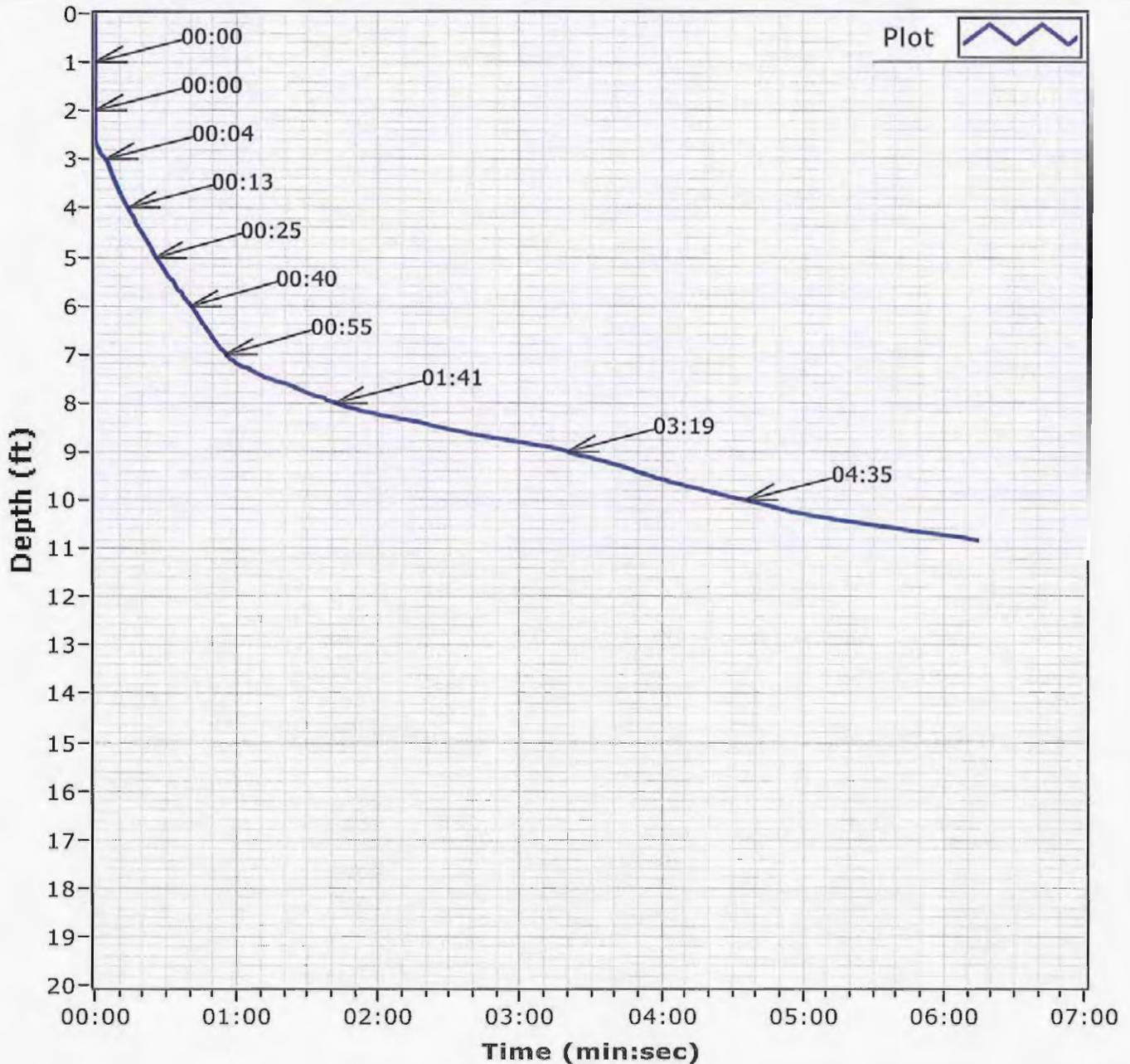
End Time 11:23:21

Total Time 00:06:14

Penetration 10.8'

Recovery 8.8'

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -55.0'navd

Core Identifier JIVC10-13

Coordinate System

State Plane Coordinates (SPC)

965214.09

X

974084.27

Y

Florida East

Zone

Start Time 11:44:09

End Time 11:47:19

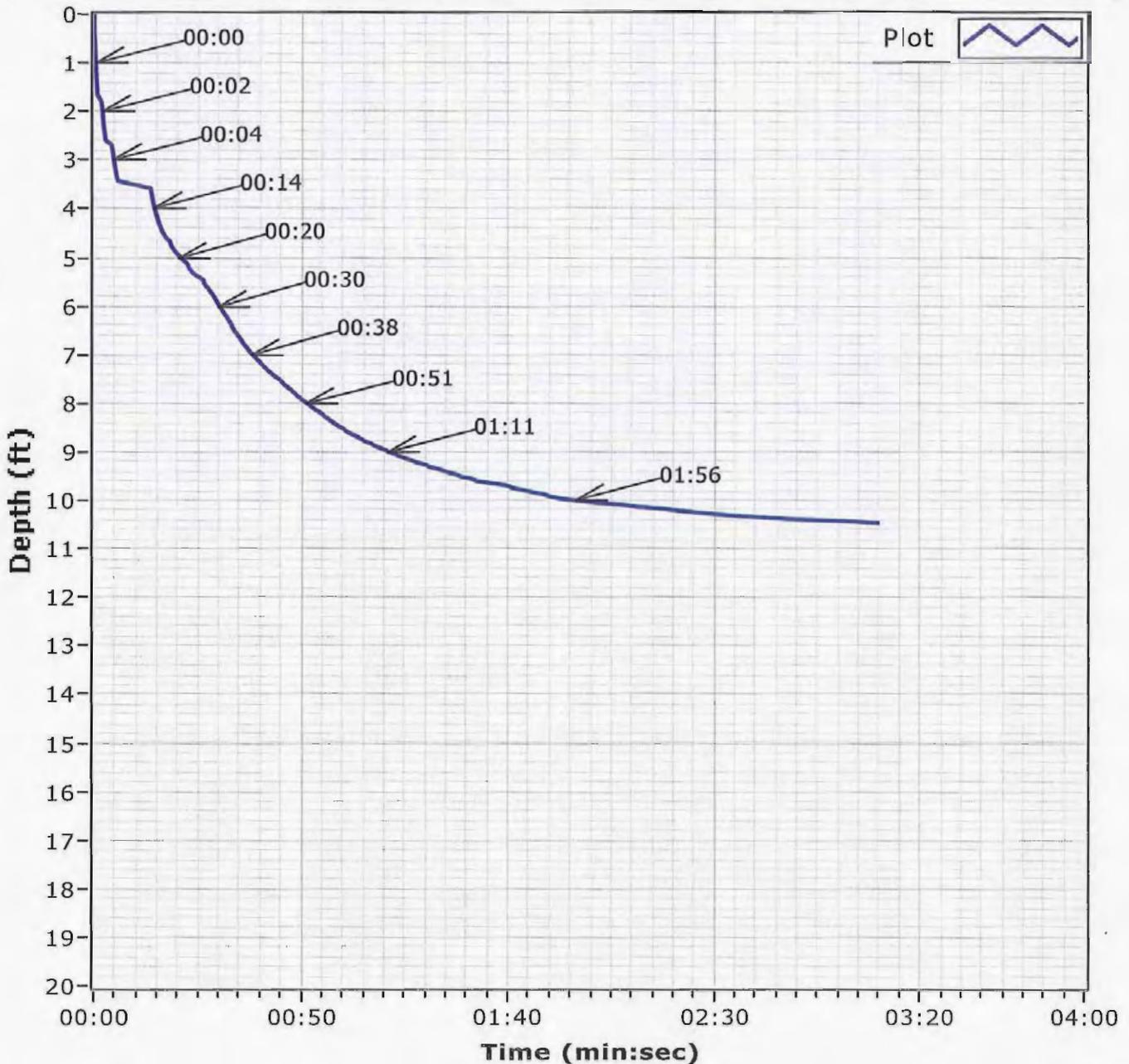
Total Time 00:03:10

Penetration 10.5'

Recovery 9.0'

Comments

Empty rectangular box for comments.



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -41.6'navd

Core Identifier JIVC10-15C

Coordinate System

State Plane Coordinates (SPC)

967371.27 X

975179.11 Y

Florida East Zone

Start Time 12:00:05

End Time 12:03:19

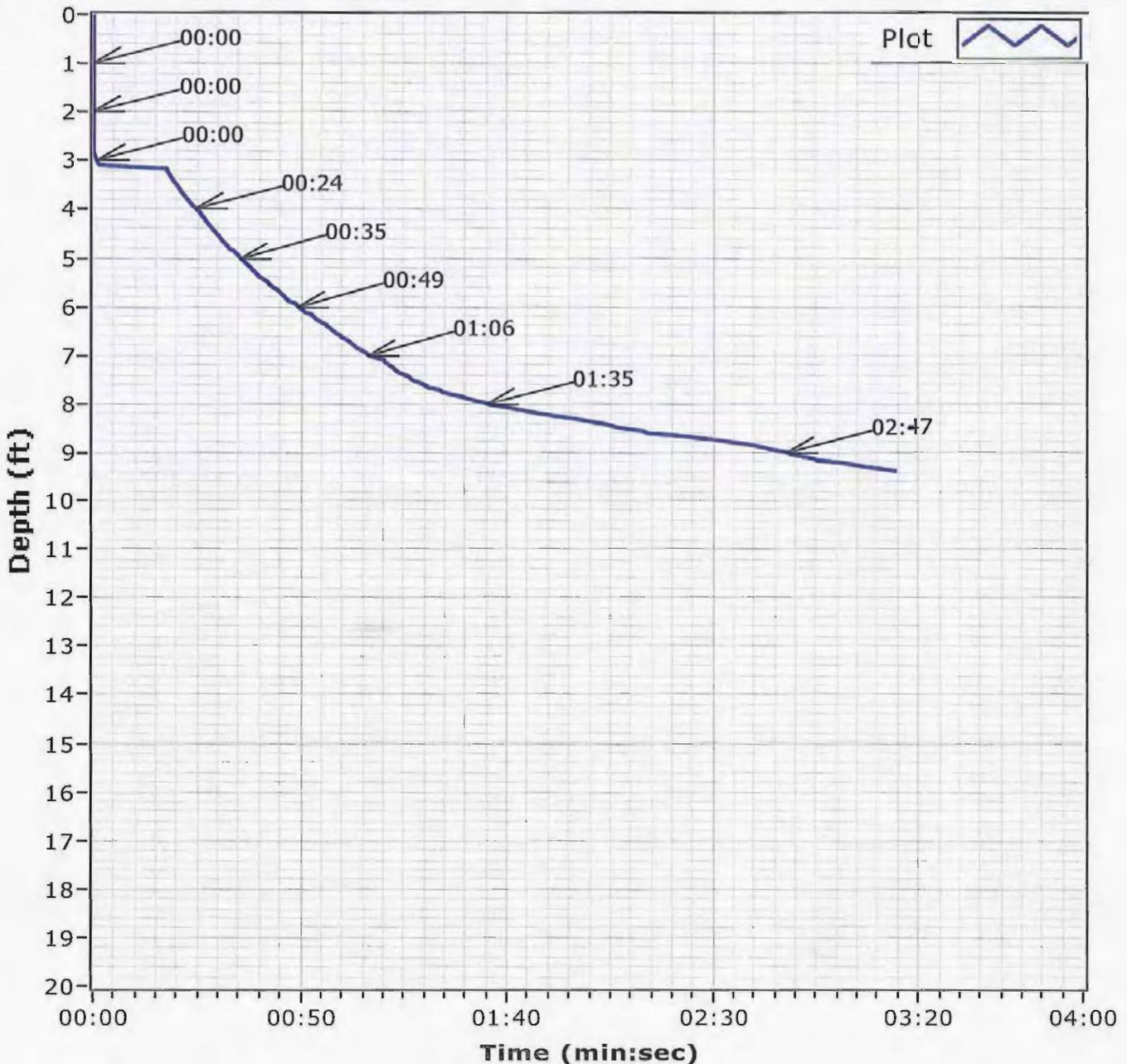
Total Time 00:03:14

Penetration 09.4'

Recovery 8.9'

Comments

[Empty comment box]



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -56.3'navd

Core Identifier JIVC10-17

Coordinate System

Start Time 14:26:03

State Plane Coordinates (SPC)

End Time 14:29:32

Penetration 11.8'

965470.75

X

Total Time 00:03:29

Recovery 10.0'

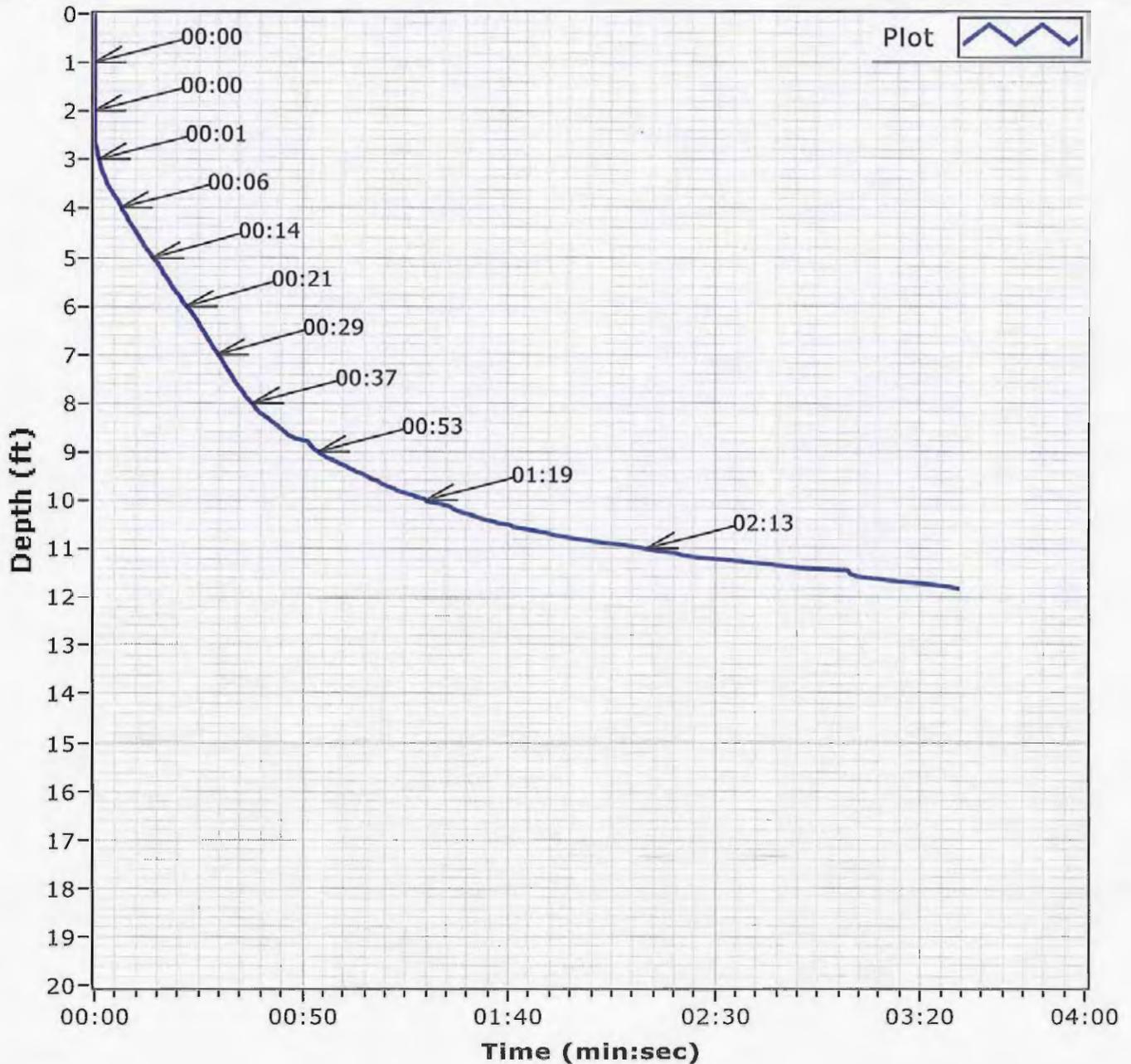
973153.07

Y

Florida East

Zone

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -54.8'navd

Core Identifier JIVC10-20

Coordinate System

Start Time 13:59:22

State Plane Coordinates (SPC)

End Time 14:00:59

Penetration 09.5'

965798.21 X

Total Time 00:01:36

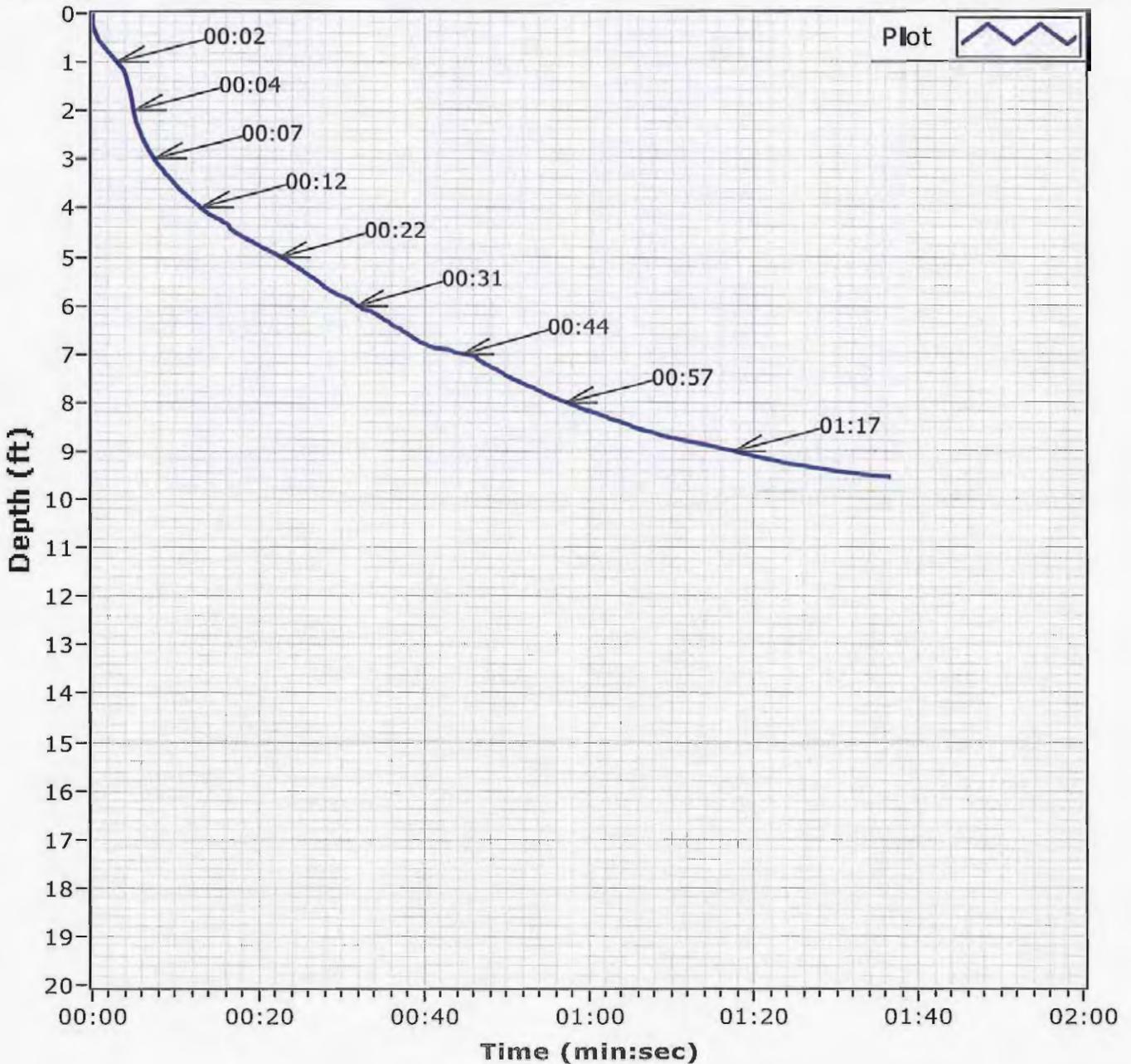
Recovery 9.1'

972192.11 Y

Florida East Zone

Comments

[Empty comment box]



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -51.9'navd

Core Identifier JIVC10-22

Coordinate System

State Plane Coordinates (SPC)

967714.94 X

972800.41 Y

Florida East Zone

Start Time 12:57:20

End Time 13:00:41

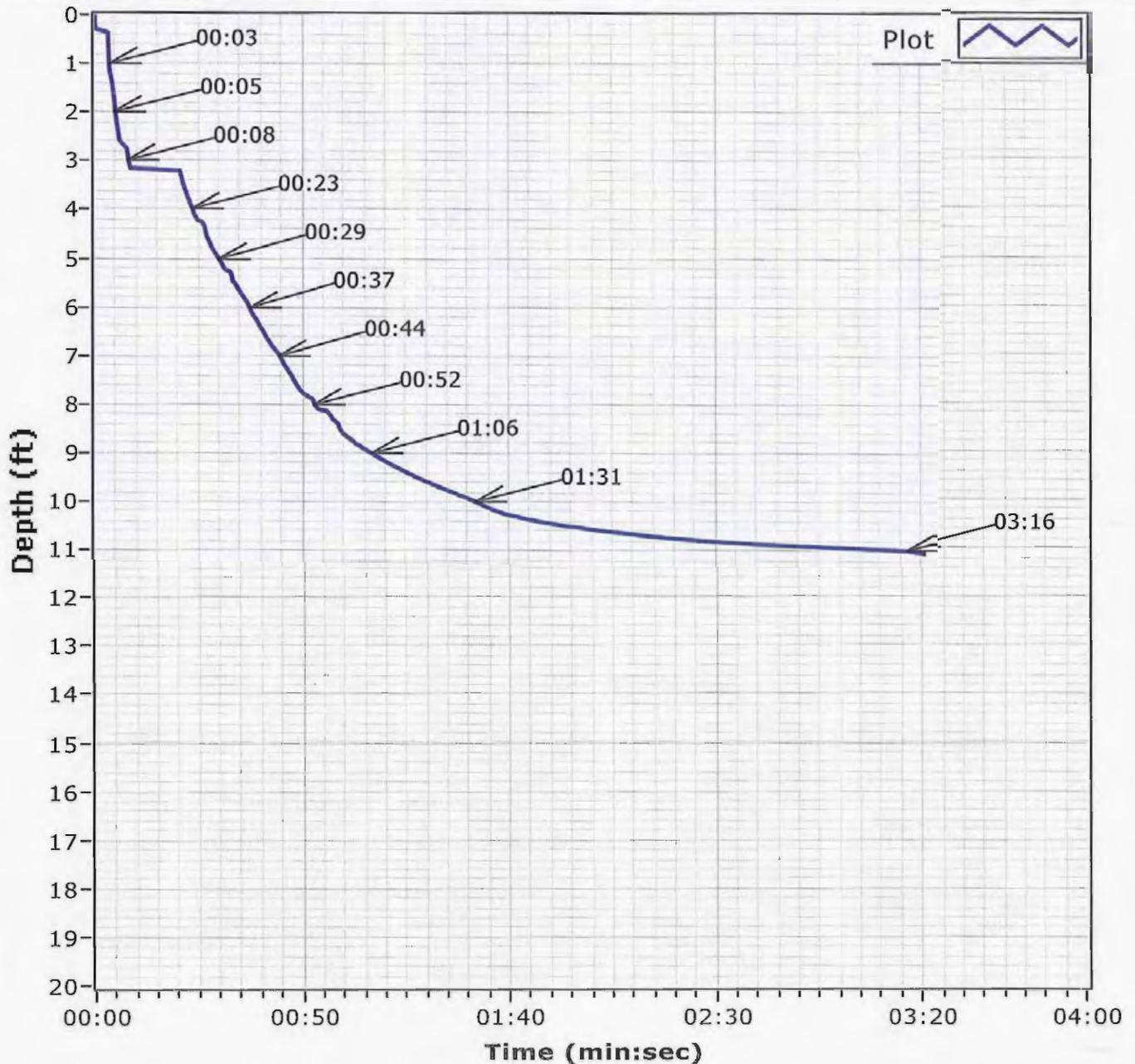
Total Time 00:03:21

Penetration 11.1'

Recovery 10.4'

Comments

[Empty comment box]



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -52.6'navd

Core Identifier JIVC10-26

Coordinate System

State Plane Coordinates (SPC)

967966.33

X

971857.07

Y

Florida East

Zone

Start Time 13:12:44

End Time 13:15:25

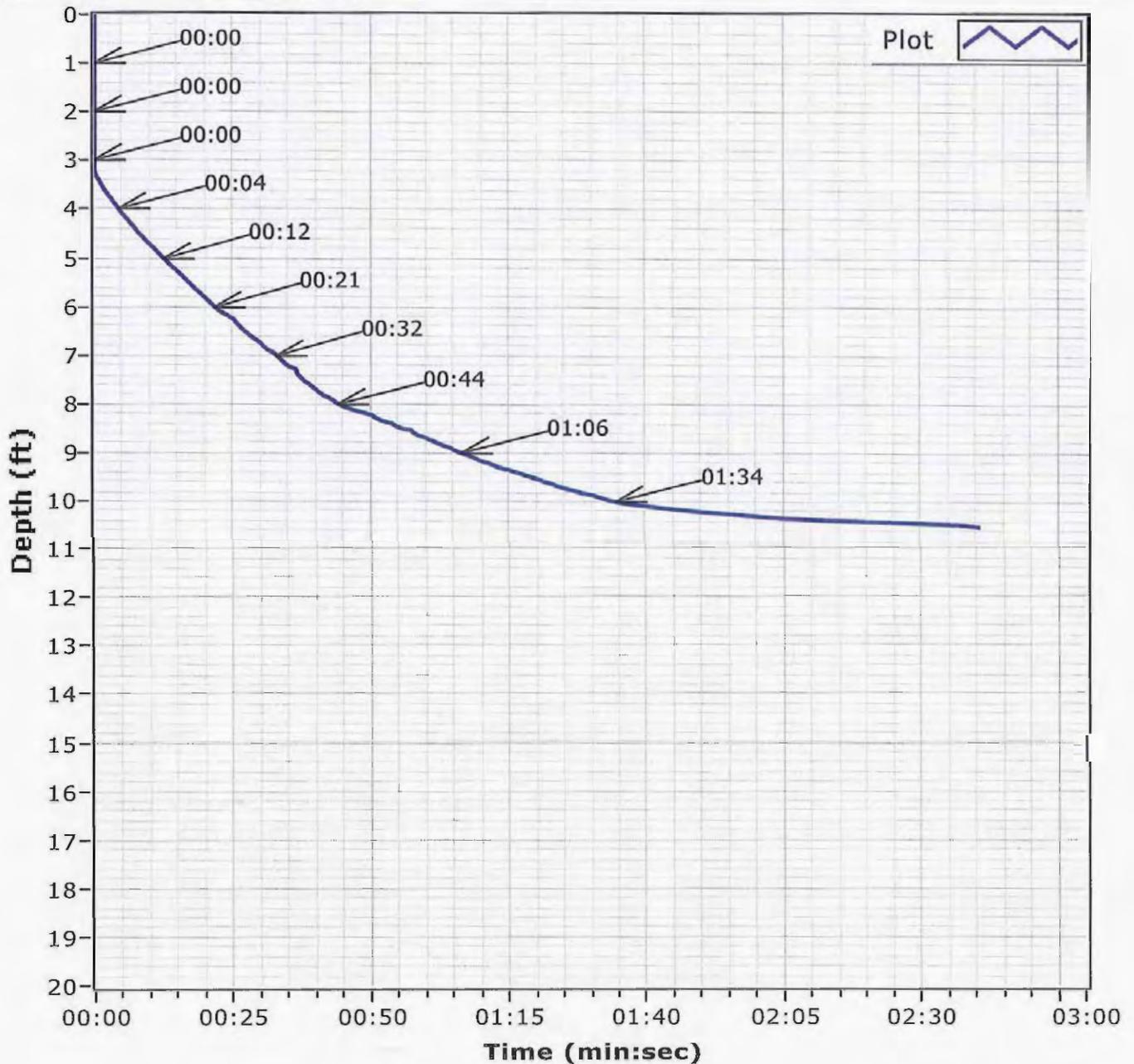
Total Time 00:02:40

Penetration 10.5'

Recovery 10.5'

Comments

Empty rectangular box for comments.



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -52.0'navd

Core Identifier JIVC10-29

Coordinate System

State Plane Coordinates (SPC)

967392.1 X

970633.8 Y

Florida East Zone

Start Time 13:42:38

End Time 13:45:56

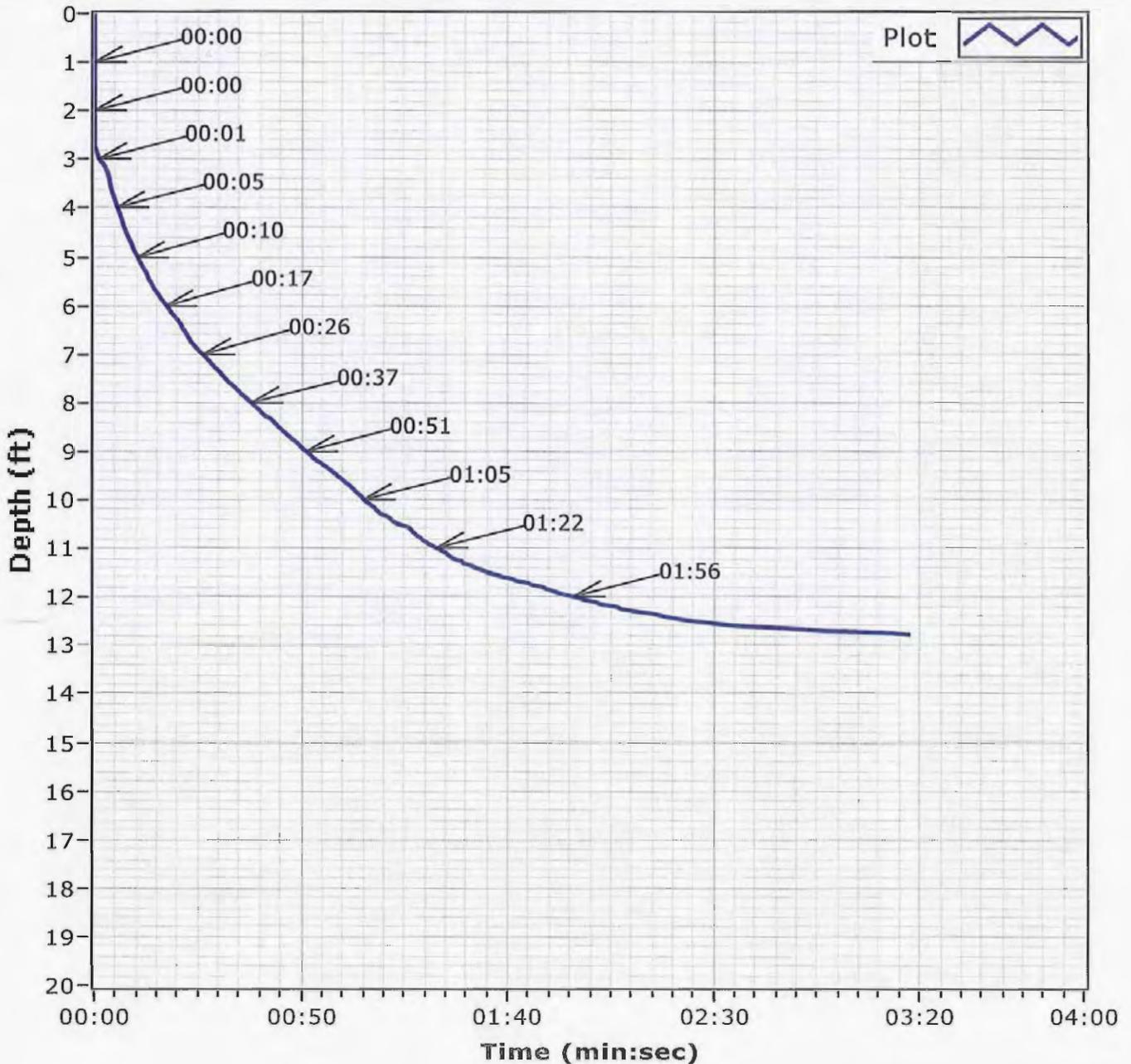
Total Time 00:03:17

Penetration 12.8'

Recovery 12.0'

Comments

[Empty comment box]



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -52.2'navd

Core Identifier JIVC10-30

Coordinate System

State Plane Coordinates (SPC)

968326.65

X

970866.08

Y

Florida East

Zone

Start Time 13:25:56

End Time 13:29:49

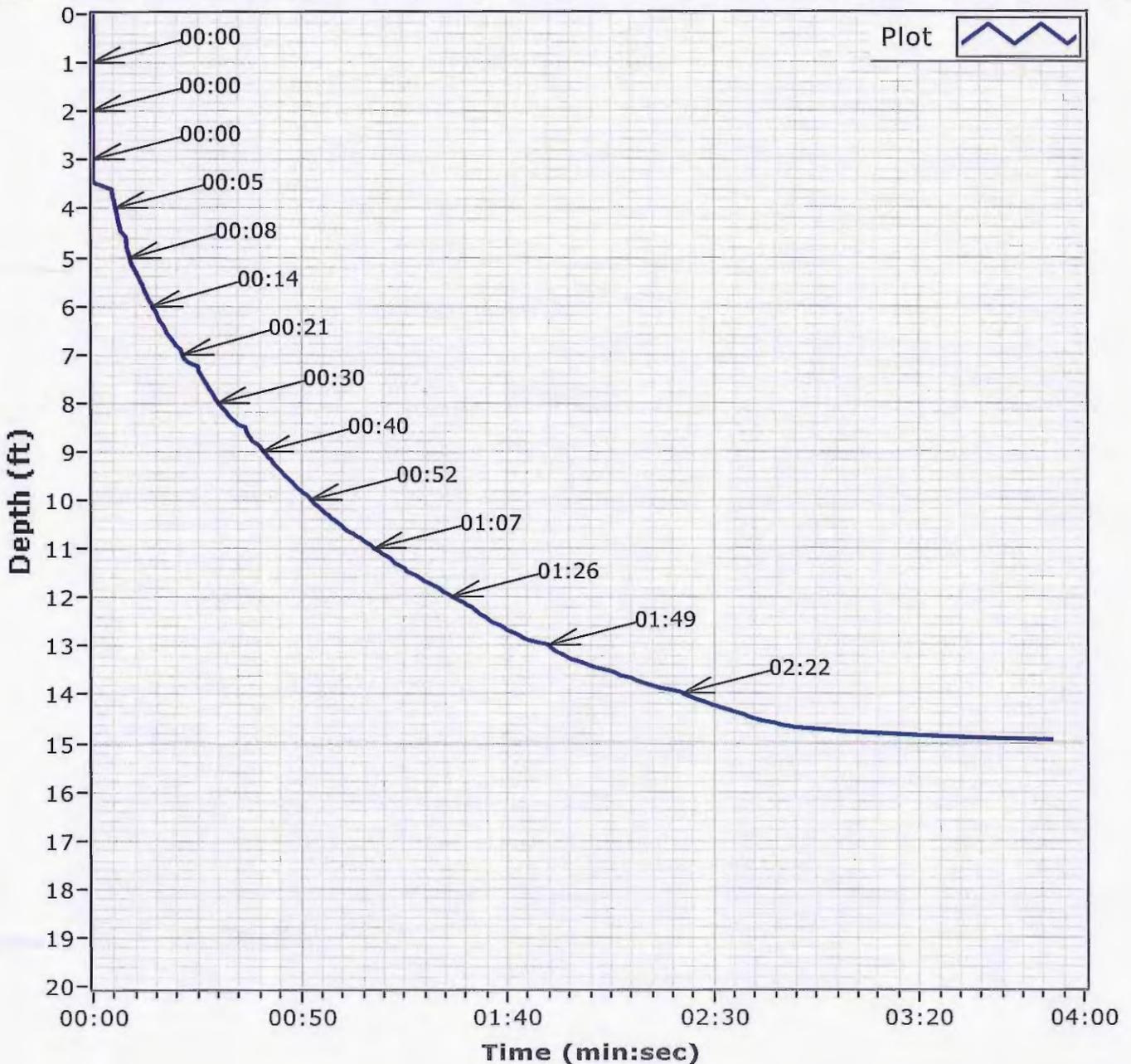
Total Time 00:03:52

Penetration 14.9'

Recovery 12.2'

Comments

Empty rectangular box for comments.



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -53.2'navd

Core Identifier JIVC10-36

Coordinate System

State Plane Coordinates (SPC)

968367.47 X

974065.7 Y

Florida East Zone

Start Time 12:38:49

End Time 12:42:28

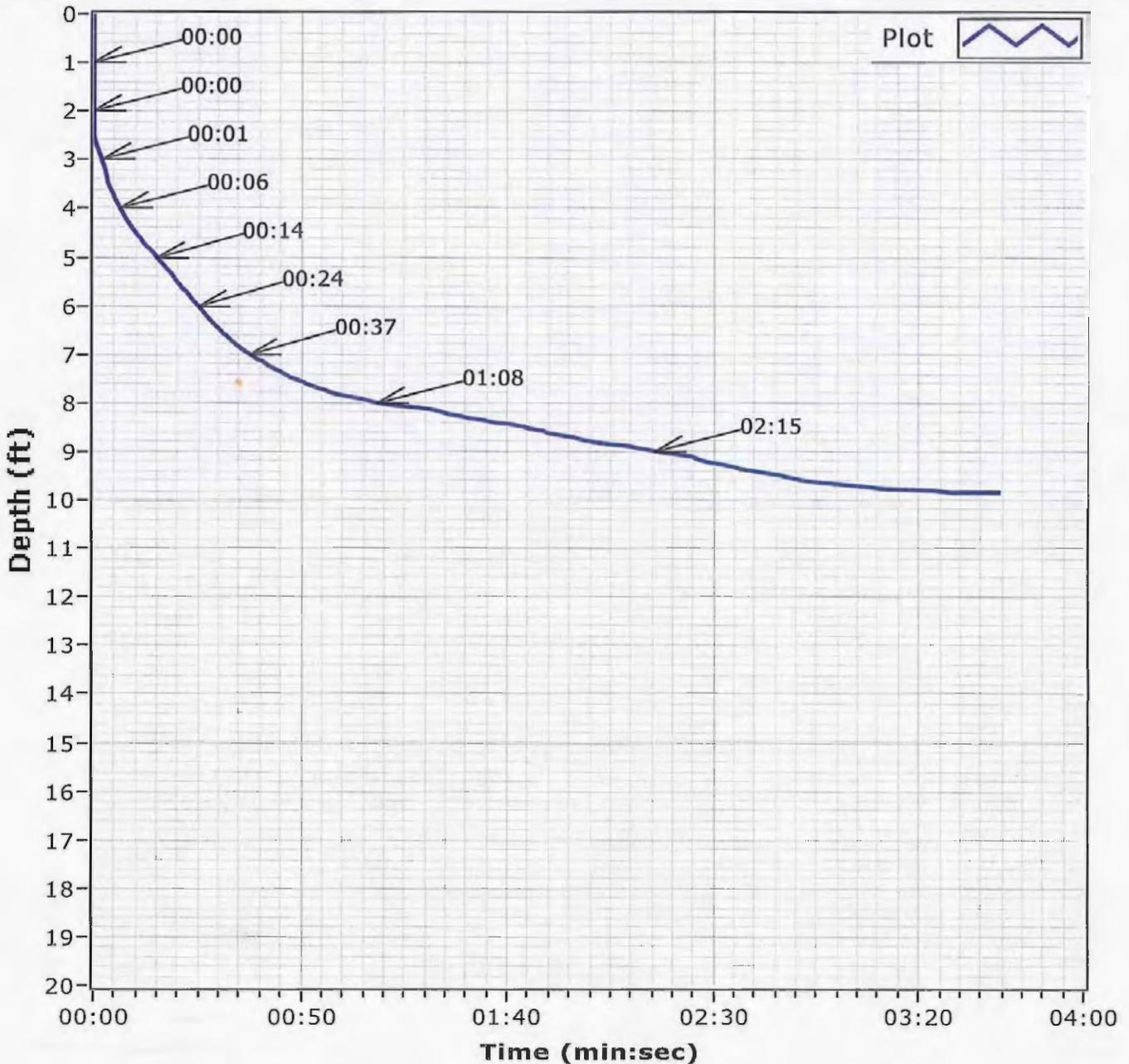
Total Time 00:03:39

Penetration 09.8'

Recovery 7.3'

Comments

Empty comment box.



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -46.4'navd

Core Identifier JIVC10-50

Coordinate System

Start Time 15:04:09

State Plane Coordinates (SPC)

End Time 15:08:06

Penetration 13.2'

968725.55 X

Total Time 00:03:57

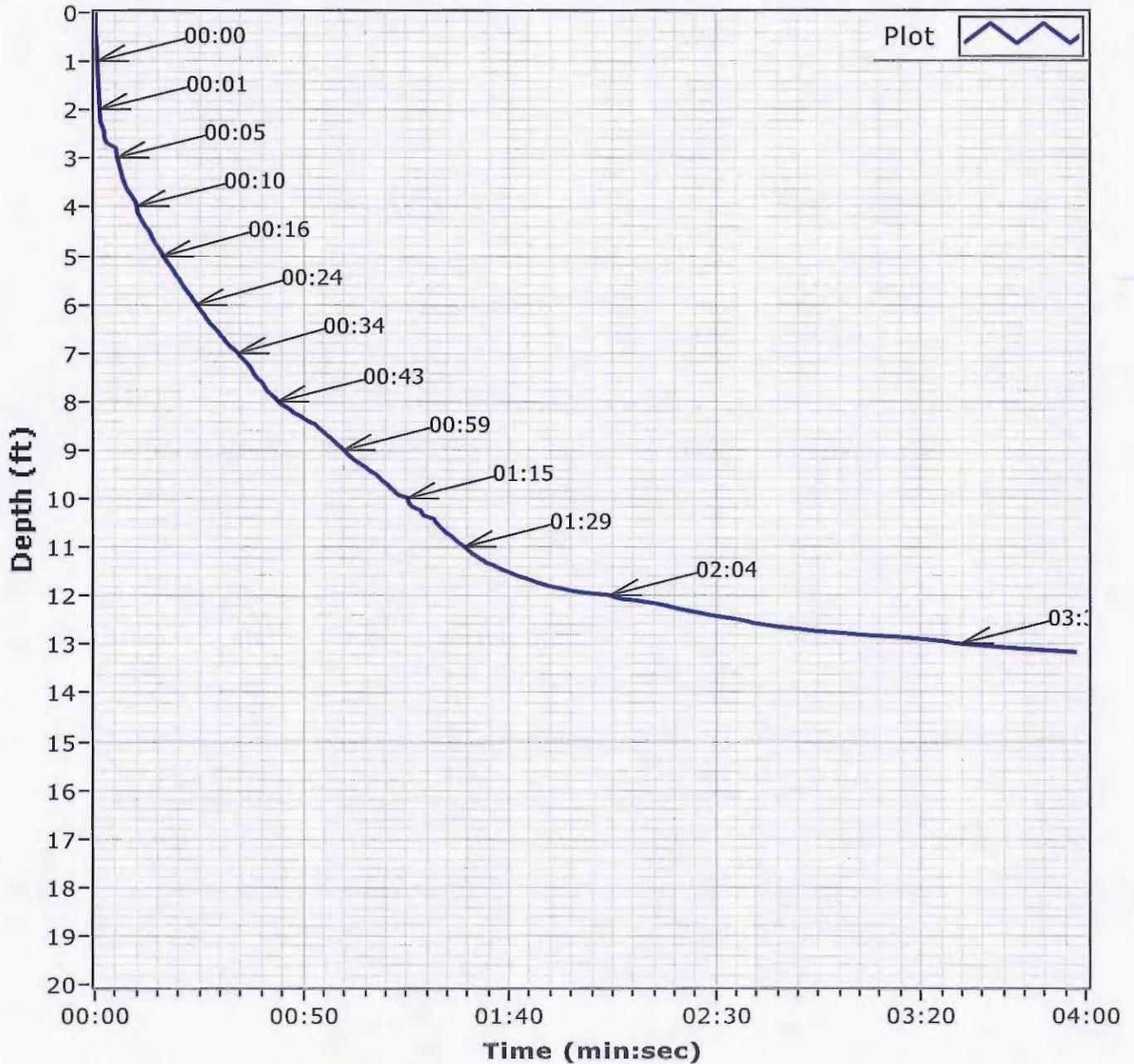
Recovery 11.4'

978358.41 Y

Florida East Zone

Comments

Empty rectangular box for comments.



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -48.2'navd

Core Identifier JIVC10-51

Coordinate System

Start Time 14:47:33

State Plane Coordinates (SPC)

End Time 14:52:42

Penetration 12.4'

968895.87 X

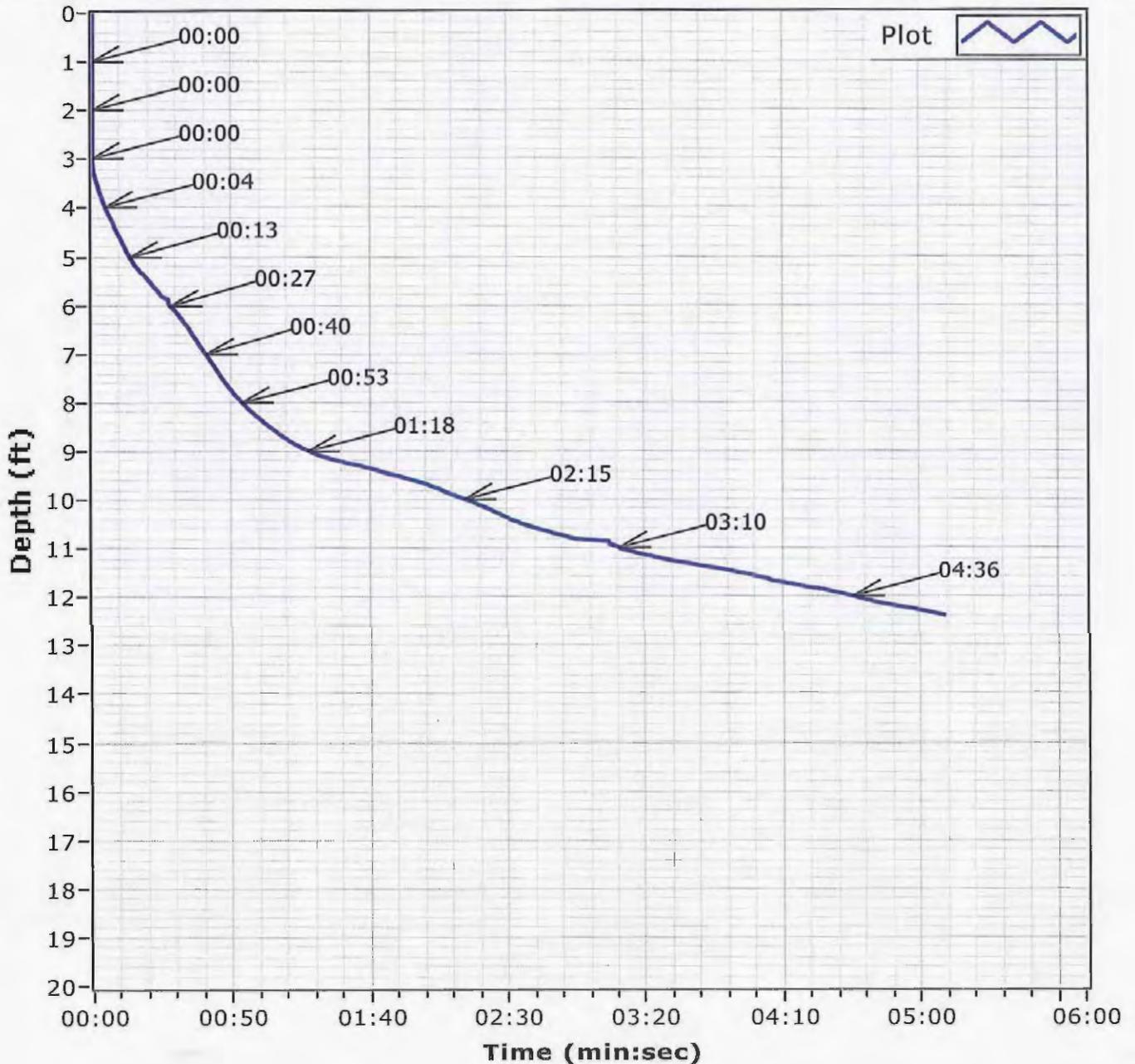
Total Time 00:05:09

Recovery 10.5'

977372.042 Y

Florida East Zone

Comments



Project

Jupiter Island '10



Date 10/12/2010

Water Depth -48.6'navd

Core Identifier JIVC10-52

Coordinate System

State Plane Coordinates (SPC)

968452.29 X

979325.82 Y

Florida East Zone

Start Time 15:33:06

End Time 15:36:31

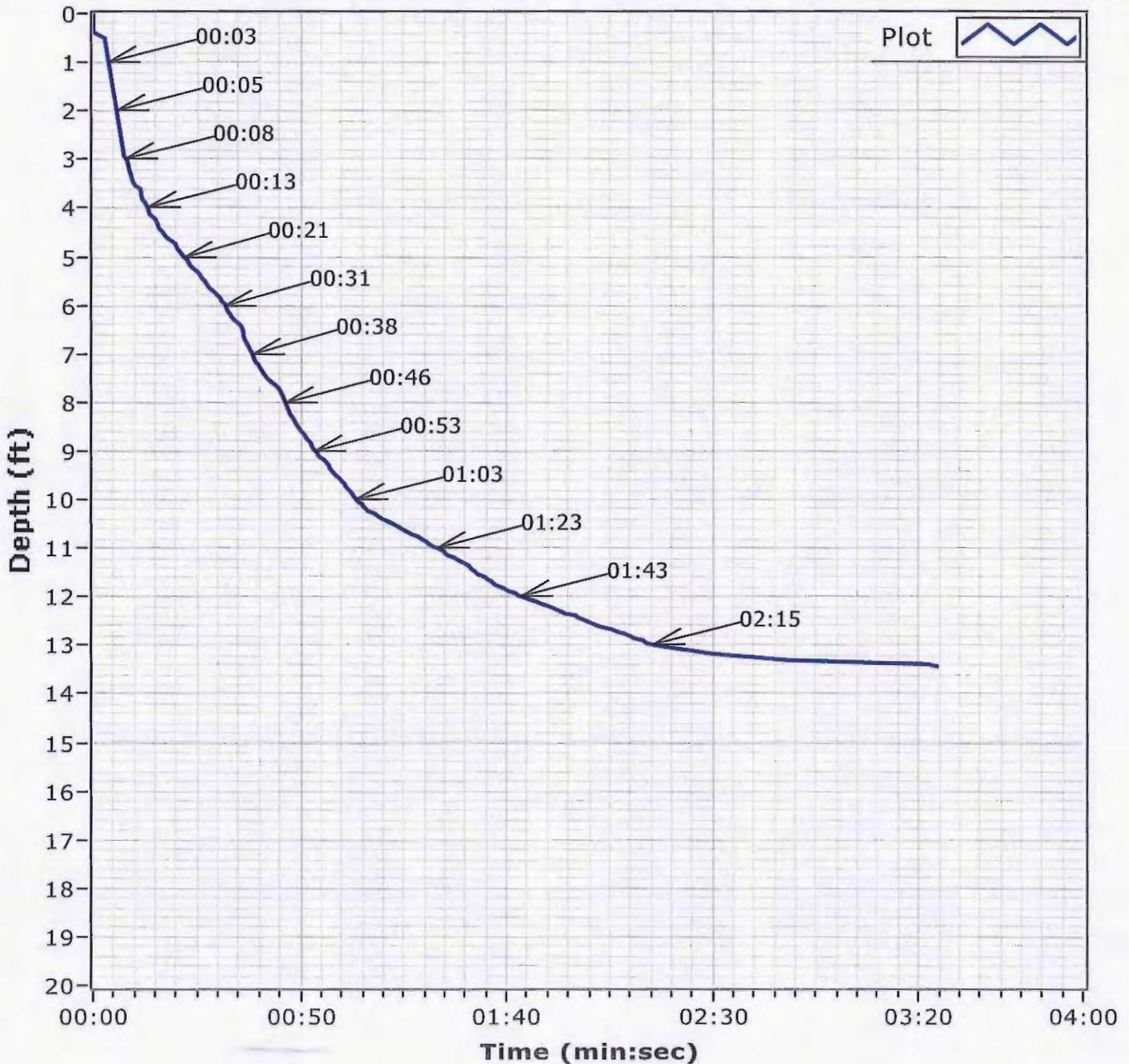
Total Time 00:03:24

Penetration 13.4'

Recovery 11.6'

Comments

Empty rectangular box for comments.



Vibracore Logs



DRILLING LOG		DIVISION		INSTALLATION		SHEET 1	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL				9. SIZE AND TYPE OF BIT 3.0 In.		OF 1 SHEETS	
2. BORING DESIGNATION JIVC-10-1		3. LOCATION COORDINATES X = 966208. Y = 977533.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore	
4. NAME OF DRILLER BM		5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		6. THICKNESS OF OVERBURDEN 0.0 Ft.		7. DEPTH DRILLED INTO ROCK 0.0 Ft.	
8. TOTAL DEPTH OF BORING 9.9 Ft.		9. DEG. FROM VERTICAL		10. BEARING		11. STARTED 10-12-10 07:33	
12. TOTAL SAMPLES		13. TOTAL NUMBER CORE BOXES		14. ELEVATION GROUND WATER		15. COMPLETED 10-12-10 07:37	
16. ELEVATION TOP OF BORING -54.5 Ft.		17. TOTAL RECOVERY FOR BORING 8.2 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR FK			

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-54.5	0.0					
			Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-56.8	2.3					
-57.0	2.5		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell up to 3/4", (SW).		S-2 (4')	Sample #S-2 (4'), Depth = 4.0'
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with 1" shell @7.5' and 2" shell @7.9', (SW).		S-3 (6')	Sample #S-3 (6'), Depth = 6.0'
-62.7	8.2				S-4 (8')	Sample #S-4 (8'), Depth = 8.0'
			End of Boring			

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JIVC-10-2		LOCATION COORDINATES X = 967144. Y = 977892.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input checked="" type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER BM			12. TOTAL SAMPLES	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			13. TOTAL NUMBER CORE BOXES	
6. THICKNESS OF OVERBURDEN 0.0 Ft.			14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.			15. DATE BORING	
8. TOTAL DEPTH OF BORING 14.5 Ft.			16. ELEVATION TOP OF BORING -47.9 Ft.	
			17. TOTAL RECOVERY FOR BORING 12.3 Ft.	
			18. SIGNATURE AND TITLE OF INSPECTOR FK	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-47.9	0.0					
-48.5	0.6		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-1 (0.5')	Sample #S-1 (0.5'), Depth = 0.5'
-48.7	0.8		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SP).			
-49.3	1.4		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).			
-49.5	1.6		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SP).			
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash zone between 6.2' to 6.5', (SW).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-55.2	7.3				S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash zones between 8.7' to 9.0' and 9.8' to 9.9', (SW).			
-60.2	12.3				S-4 (12')	Sample #S-4 (12'), Depth = 12.0'
			End of Boring			

FLORIDA DEP ROSS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/30/11

DRILLING LOG		DIVISION	INSTALLATION		SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL			9. SIZE AND TYPE OF BIT 3.0 In.		
2. BORING DESIGNATION JIVC-10-3			10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983
3. DRILLING AGENCY			11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER BM			12. TOTAL SAMPLES		DISTURBED UNDISTURBED (UD)
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			13. TOTAL NUMBER CORE BOXES		14. ELEVATION GROUND WATER
6. THICKNESS OF OVERBURDEN 0.0 Ft.			15. DATE BORING		STARTED 10-12-10 08:19
7. DEPTH DRILLED INTO ROCK 0.0 Ft.			16. ELEVATION TOP OF BORING -45.3 Ft.		COMPLETED 10-12-10 08:23
8. TOTAL DEPTH OF BORING 12.3 Ft.			17. TOTAL RECOVERY FOR BORING 10.8 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR FK



ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-45.3	0.0					
			Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-1 (2')	Sample #S-1 (2'), Depth = 2.0'
					S-2 (6')	Sample #S-2 (6'), Depth = 6.0'
-52.6	7.3					
-52.7	7.4		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SP).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
-53.6	8.3		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).			
-53.7	8.4		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SP).			
-54.2	8.9		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).			
-54.6	9.3		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).			
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SP).		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'
-56.1	10.8		Sand (fine to medium) and shell, dk grey 10YR with 1" shell at 10.6', (SP).			
			End of Boring			

FLORIDA DEP ROSS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JIVC-10-4		LOCATION COORDINATES X = 965540. Y = 976274.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER Vibracore
4. NAME OF DRILLER BM			12. TOTAL SAMPLES	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			13. TOTAL NUMBER CORE BOXES	
6. THICKNESS OF OVERBURDEN 0.0 Ft.			14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.			15. DATE BORING	
8. TOTAL DEPTH OF BORING 12.2 Ft.			16. ELEVATION TOP OF BORING -52.5 Ft.	
			17. TOTAL RECOVERY FOR BORING 12.2 Ft.	
			18. SIGNATURE AND TITLE OF INSPECTOR FK	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-52.5	0.0					
			Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-57.4	4.9		Sand (fine to medium) and shell, greyish brown 10YR 5/2, (SW).		S-2 (6')	Sample #S-2 (6'), Depth = 6.0'
-60.3	7.8		Sand (fine to medium) and shell, brown 10YR 5/3 with grey mottles, (SW).			
-61.3	8.8		Sand (fine to medium) with some shell, lt brownish grey 10YR 6/2, (SW).		S-3 (9')	Sample #S-3 (9'), Depth = 9.0'
-62.1	9.6		Sand (fine to medium) and shell, dk grey 10YR 4/1 (finer grained), (SW).		S-4 (11.5')	Sample #S-4 (11.5'), Depth = 11.5'
-64.5	12.0		End of Boring			

FLORIDA DEP ROSS, JUPITER ISLAND 10 DETAIL PHASE GRJ FL DEP ROSS GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL				OF 1 SHEETS
2. BORING DESIGNATION JVC-10-5		LOCATION COORDINATES X = 966481. Y = 976621.		9. SIZE AND TYPE OF BIT 3.0 In.
3. DRILLING AGENCY		CONTRACTOR FILE NO.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
4. NAME OF DRILLER BM				HORIZONTAL NAD 1983
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	VERTICAL NAVD 88
6. THICKNESS OF OVERBURDEN 0.0 Ft.				11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				12. TOTAL SAMPLES DISTURBED UNDISTURBED (UD)
8. TOTAL DEPTH OF BORING 14.3 Ft.				13. TOTAL NUMBER CORE BOXES
				14. ELEVATION GROUND WATER
				15. DATE BORING STARTED COMPLETED 10-12-10 09:00 10-12-10 09:05
				16. ELEVATION TOP OF BORING -46.9 Ft.
				17. TOTAL RECOVERY FOR BORING 14.3 Ft.
				18. SIGNATURE AND TITLE OF INSPECTOR FK

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-46.9	0.0					
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash, (SW).		S-1 (0.5')	Sample #S-1 (0.5'), Depth = 0.5'
-51.7	4.8		Sand (fine to medium) with some shell, dk grey 10YR 4/1, (SP).		S-2 (5.5')	Sample #S-2 (5.5'), Depth = 5.5'
-53.3	6.4		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash from 7.5' to 8.2' and shell up to 2.5", (SP).			
-54.9	8.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash from 7.5' to 8.2' and shell up to 2.5", (SP).			
-56.2	9.3		Sand (fine to medium) and shell, grey to brown 10YR 5/1 and 5/2, (SW).		S-3 (9')	Sample #S-3 (9'), Depth = 9.0'
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash from 9.9' 10.4', 11.5' to 11.9' and 12.6' to 12.8', (SW).		S-4 (12')	Sample #S-4 (12'), Depth = 12.0'
-60.9	14.0					
			End of Boring			

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL						9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JIVC-10-8A		LOCATION COORDINATES X = 964892. Y = 975015.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983	VERTICAL NAVD 88
3. DRILLING AGENCY				CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL	
4. NAME OF DRILLER BM				12. TOTAL SAMPLES		<input type="checkbox"/> DISTURBED	<input type="checkbox"/> UNDISTURBED (UD)
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL	BEARING	13. TOTAL NUMBER CORE BOXES	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				14. ELEVATION GROUND WATER		15. DATE BORING	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				16. ELEVATION TOP OF BORING -58.9 Ft.		STARTED 10-12-10 11:17	COMPLETED 10-12-10 11:23
8. TOTAL DEPTH OF BORING 10.8 Ft.				17. TOTAL RECOVERY FOR BORING 8.8 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR FK	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-58.9	0.0					
-59.7	0.8		Sand (fine to medium), dk grey 10YR 4/1, (SW).		S-1 (0.5')	Sample #S-1 (0.5'), Depth = 0.5'
-60.1	1.2		Sand (fine to medium) with some shell, dk grey 10YR 4/1, (SW).			
-60.3	1.4		Sand (fine to medium), grey 10YR 6/1, (SP).			
				Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash @ 3.2' to 3.7', 2" shell @ 4.1', (SW).		S-2 (3')
					S-3 (5')	Sample #S-3 (5'), Depth = 5.0'
-64.9	6.0					
			Sand (fine to medium) and shell, grey 10YR 6/1, (SP-SM).		S-4 (7')	Sample #S-4 (7'), Depth = 7.0'
-67.7	8.8					
			End of Boring			

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL				9. SIZE AND TYPE OF BIT 3.0 In.
2. BORING DESIGNATION JIVC-10-13		LOCATION COORDINATES X = 965214. Y = 974084.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
3. DRILLING AGENCY		CONTRACTOR FILE NO.		HORIZONTAL NAD 1983
4. NAME OF DRILLER BM				VERTICAL NAVD 88
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore
6. THICKNESS OF OVERBURDEN 0.0 Ft.				<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				12. TOTAL SAMPLES
8. TOTAL DEPTH OF BORING 10.5 Ft.				DISTURBED
				UNDISTURBED (UD)
				13. TOTAL NUMBER CORE BOXES
				14. ELEVATION GROUND WATER
				15. DATE BORING
				STARTED 10-12-10 11:44
				COMPLETED 10-12-10 11:47
				16. ELEVATION TOP OF BORING -55.0 Ft.
				17. TOTAL RECOVERY FOR BORING 9 Ft.
				18. SIGNATURE AND TITLE OF INSPECTOR FK

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-55.0	0.0					
		•••••	Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-1	Sample #S-1, Depth = 1.0'
		•••••			S-2 (3')	Sample #S-2 (3'), Depth = 3.0'
-59.3	4.3	•••••				
		•••••	Sand (fine to medium) with some shell, dk grey 10YR 4/1 with bands of lighter sand and lt grey mottling 10YR 6/1, (SP).		S-3 (6')	Sample #S-3 (6'), Depth = 6.0'
		•••••			S-4 (8')	Sample #S-4 (8'), Depth = 8.0'
-64.0	9.0	•••••				
			End of Boring			

FLORIDA DEP ROSS. JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS			
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.					
2. BORING DESIGNATION JIVC-10-15C		LOCATION COORDINATES X = 967371. Y = 975179.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983		VERTICAL NAVD 88	
3. DRILLING AGENCY				CONTRACTOR FILE NO.				11. MANUFACTURER'S DESIGNATION OF DRILL	
4. NAME OF DRILLER BM				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	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES		DISTURBED		UNDISTURBED (UD)	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. ELEVATION GROUND WATER		15. DATE BORING		STARTED 10-12-10 12:00	
8. TOTAL DEPTH OF BORING 9.4 Ft.				16. ELEVATION TOP OF BORING -41.6 Ft.		COMPLETED 10-12-10 12:03		17. TOTAL RECOVERY FOR BORING 8.9 Ft.	
				18. SIGNATURE AND TITLE OF INSPECTOR FK					

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-41.6	0.0					0	
			Sand (fine to medium) and shell, grey 10YR 5/1, (SP).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'	
-43.4	1.8						
-43.9	2.3			Sand (fine to medium) and shell, dk greyish brown 10YR 5/2, (SW).			
				Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-2 (3')	Sample #S-2 (3'), Depth = 3.0'
-45.1	3.5						
			Sand (fine to medium) and shell, dk grey 10YR 4/1 with 2- 1" shells @ 6.8', (SP).		S-3 (6')	Sample #S-3 (6'), Depth = 6.0'	
-50.5	8.9				S-4 (8')	Sample #S-4 (8'), Depth = 8.0'	
			End of Boring			10	

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.		10. COORDINATE SYSTEM/DATUM Florida State Plane East HORIZONTAL NAD 1983 VERTICAL NAVD 88	
2. BORING DESIGNATION JIVC-10-17		LOCATION COORDINATES X = 965471. Y = 973153.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER Vibracore <input type="checkbox"/> MANUAL HAMMER			
3. DRILLING AGENCY		CONTRACTOR FILE NO.		12. TOTAL SAMPLES DISTURBED UNDISTURBED (UD)			
4. NAME OF DRILLER BM				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 0.0 Ft.				15. DATE BORING STARTED COMPLETED 10-12-10 14:26 10-12-10 14:29			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				16. ELEVATION TOP OF BORING -56.3 Ft.			
8. TOTAL DEPTH OF BORING 11.8 Ft.				17. TOTAL RECOVERY FOR BORING 10 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR FK			

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-56.3	0.0					
-57.5	1.2	●●●●●	Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).			
-59.3	3.0		Sand (fine to medium) and shell, greyish brown 10YR 5/2, (SP).		S-1 (2')	Sample #S-1 (2'), Depth = 2.0'
-62.3	6.0		Sand (fine to medium), dk grey 10YR 4/1, (SP).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-66.3	10.0		Sand (fine to medium) with some shell, dk grey 10YR 4/1 with shell hash @ 8.3' to 8.4', 3/4" shell @ 8.0', (SP).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
			End of Boring		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION JIVC-10-20		LOCATION COORDINATES X = 965798. Y = 972192.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983	
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER Vibracore		12. TOTAL SAMPLES	
4. NAME OF DRILLER BM				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 0.0 Ft.		7. DEPTH DRILLED INTO ROCK 0.0 Ft.		15. DATE BORING		STARTED 10-12-10 13:59 COMPLETED 10-12-10 14:00	
8. TOTAL DEPTH OF BORING 9.5 Ft.				16. ELEVATION TOP OF BORING -54.8 Ft.			
17. TOTAL RECOVERY FOR BORING 9.1 Ft.				18. SIGNATURE AND TITLE OF INSPECTOR FK			

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-54.8	0.0					
-56.3	1.5		Sand (fine to medium) and shell, grey 7.5YR 6/1, (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-57.4	2.6		Sand (fine to medium) and shell, greyish brown 10YR 5/2 with 1.5" shell @ 2.1', (SP).		S-2 (3')	Sample #S-2 (3'), Depth = 3.0'
-59.0	4.2		Sand (fine to medium), dk grey 10YR 4/1, (SP).		S-3 (5')	Sample #S-3 (5'), Depth = 5.0'
-63.9	9.1		Sand (fine to medium) and shell, grey 7.5 YR 5/1, (SP).		S-4 (8')	Sample #S-4 (8'), Depth = 8.0'
			End of Boring			

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL						9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JIVC-10-22		LOCATION COORDINATES X = 967715. Y = 972800.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983 VERTICAL NAVD 88	
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER BM				12. TOTAL SAMPLES		DISTURBED UNDISTURBED (UD)	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. ELEVATION GROUND WATER			
8. TOTAL DEPTH OF BORING 11.1 Ft.				15. DATE BORING		STARTED 10-12-10 12:57 COMPLETED 10-12-10 13:00	
				16. ELEVATION TOP OF BORING -51.9 Ft.		17. TOTAL RECOVERY FOR BORING 10.4 Ft.	
				18. SIGNATURE AND TITLE OF INSPECTOR FK			

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	CORE SAMPLE	REMARKS
-51.9	0.0					
-54.5	2.6		Sand (fine to medium) and shell, grey 7.5YR 5/1, (SP).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-58.7	6.8		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-2 (4')	Sample #S-2 (4'), Depth = 4.0'
-60.1	8.2		Sand (fine to medium) and shell, grey 7.5YR 6/1, (SW).		S-3 (7')	Sample #S-3 (7'), Depth = 7.0'
-62.3	10.4		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'
			End of Boring			

FLORIDA DEP ROSS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION JIVC-10-26		LOCATION COORDINATES X = 967966. Y = 971857.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983	
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER BM				12. TOTAL SAMPLES		DISTURBED	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. ELEVATION GROUND WATER			
8. TOTAL DEPTH OF BORING 10.5 Ft.				15. DATE BORING		STARTED 10-12-10 13:12 COMPLETED 10-12-10 13:15	
				16. ELEVATION TOP OF BORING -52.6 Ft.		17. TOTAL RECOVERY FOR BORING 10.5 Ft.	
				18. SIGNATURE AND TITLE OF INSPECTOR FK			

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	NO. OF SAMPLES	REMARKS
-52.6	0.0					
			Sand (fine to medium) and shell, grey 7.5 YR 6/1 with 1.5" shell @ 2.7', (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-55.6	3.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 with 1.5" shell @ 3.7', (SW).		S-2 (4')	Sample #S-2 (4'), Depth = 4.0'
-59.6	7.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 with 1.5" shell @ 8.2', (SW).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
-61.1	8.5		Sand (fine to medium) and shell, greyish brown 7.5YR 4/1, (SP).		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'
-63.1	10.5		End of Boring			

FLORIDA DEP ROSS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS			
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.					
2. BORING DESIGNATION JIVC-10-29		LOCATION COORDINATES X = 967392. Y = 970634.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983		VERTICAL NAVD 88	
3. DRILLING AGENCY				CONTRACTOR FILE NO.					
4. NAME OF DRILLER BM				11. MANUFACTURER'S DESIGNATION OF DRILL 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		DISTURBED UNDISTURBED (UD)	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES					
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. ELEVATION GROUND WATER					
8. TOTAL DEPTH OF BORING 12.8 Ft.				15. DATE BORING		STARTED		COMPLETED	
				10-12-10 13:42		10-12-10 13:45			
				16. ELEVATION TOP OF BORING -52.0 Ft.		17. TOTAL RECOVERY FOR BORING 12 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR FK					

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-52.0	0.0					
-53.3	1.3		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-1	Sample #S-1, Depth = 1.0'
-55.8	3.8		Sand (fine to medium) and shell, grey 10YR 4/1 with 3/4" shell @ 2.8', (SW).			
-59.0	7.0		Sand (fine to medium) and shell, grey 7.5YR 5/1, (SW).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-61.0	9.0		Sand (fine to medium) and shell, grey 7.5YR 6/1 with 1 3/4" shell @ 8.7', (SW).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
-64.0	12.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 with 1.5" shell @ 10.0', (SW).		S-4 (11')	Sample #S-4 (11'), Depth = 11.0'
			End of Boring			

FLORIDA DEP ROSS JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION JIVC-10-30				LOCATION COORDINATES X = 968327. Y = 970866.		10. COORDINATE SYSTEM/DATUM Florida State Plane East	
3. DRILLING AGENCY				CONTRACTOR FILE NO.		HORIZONTAL NAD 1983	
4. NAME OF DRILLER BM				11. MANUFACTURER'S DESIGNATION OF DRILL			
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				12. TOTAL SAMPLES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
8. TOTAL DEPTH OF BORING 14.9 Ft.				14. ELEVATION GROUND WATER			
				15. DATE BORING		STARTED 10-12-10 13:25	
				16. ELEVATION TOP OF BORING -52.2 Ft.		COMPLETED 10-12-10 13:29	
				17. TOTAL RECOVERY FOR BORING 12.2 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR FK			



ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	NO. OF SAMPLES	REMARKS
-52.2	0.0					
-55.2	3.0		Sand (fine to medium) and shell, grey 7.5 YR 6/1, (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-58.1	5.9		Sand (fine to medium) and shell, dk grey 10 YR 4/1 with 1" shell @ 5.5', (SW).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-62.2	10.0		Silty sand w trace of shell, grey 7.5 YR 6/1 with 1 1/4" shell frag @ 9.5', (SM-SC).		S-3 (9')	Sample #S-3 (9'), Depth = 9.0'
-64.4	12.2		Sand (fine to medium) and shell, dk grey 10 YR 4/1, (SP).		S-4 (12')	Sample #S-4 (12'), Depth = 12.0'

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE.CPJ FL DEP ROSS.GDT 4/30/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS					
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.							
2. BORING DESIGNATION JIVC-10-36		LOCATION COORDINATES X = 968367. Y = 974066.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983		VERTICAL NAVD 88			
3. DRILLING AGENCY				CONTRACTOR FILE NO.							
4. NAME OF DRILLER BM				11. MANUFACTURER'S DESIGNATION OF DRILL 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		DISTURBED		UNDISTURBED (UD)	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES				14. ELEVATION GROUND WATER			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				15. DATE BORING				STARTED 10-12-10 12:38		COMPLETED 10-12-10 12:42	
8. TOTAL DEPTH OF BORING 9.8 Ft.				16. ELEVATION TOP OF BORING -53.2 Ft.				17. TOTAL RECOVERY FOR BORING 7.3 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR FK							

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-53.2	0.0					
-55.2	2.0		Sand (fine to medium) and shell, grey 7.5 YR 6/1, (SW).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-57.2	4.0		Sand (fine to medium) and shell, dk grey 10 YR 4/1, (SP).		S-2 (3')	Sample #S-2 (3'), Depth = 3.0'
-59.2	6.0		Sand (fine to medium) and shell, grey 7.5 YR 6/1, (SW).		S-3 (5')	Sample #S-3 (5'), Depth = 5.0'
-60.5	7.3		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-4 (7')	Sample #S-4 (7'), Depth = 7.0'
			End of Boring			

FLORIDA DEP ROSS - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/30/11

DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS					
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 				9. SIZE AND TYPE OF BIT 3.0 In.							
2. BORING DESIGNATION JIVC-10-50		LOCATION COORDINATES X = 968726, Y = 978358.		10. COORDINATE SYSTEM/DATUM Florida State Plane East		HORIZONTAL NAD 1983		VERTICAL NAVD 88			
3. DRILLING AGENCY				CONTRACTOR FILE NO.							
4. NAME OF DRILLER BM				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		<input type="checkbox"/> DISTURBED <input type="checkbox"/> UNDISTURBED (UD)	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES				14. ELEVATION GROUND WATER			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				15. DATE BORING				STARTED 10-12-10 15:04 COMPLETED 10-12-10 15:08			
8. TOTAL DEPTH OF BORING 13.2 Ft.				16. ELEVATION TOP OF BORING -46.4 Ft.				17. TOTAL RECOVERY FOR BORING 11.4 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR FK							

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-46.4	0.0					
-49.4	3.0		Dk grey 10YR 4/1, (SP).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-51.4	5.0		Grey 7.5 YR 6/1 with more shell hash, (SP).		S-2 (4')	Sample #S-2 (4'), Depth = 4.0'
-56.4	10.0		Dk grey 10YR 4/1, (SW).		S-3 (7')	Sample #S-3 (7'), Depth = 7.0'
-57.8	11.4		Grey 7.5 YR 5/1 with more shell hash, (SP).		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'
			End of Boring			

FLORIDA DEP ROSS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JVC-10-51		LOCATION COORDINATES X = 968896. Y = 977372.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER BM			12. TOTAL SAMPLES DISTURBED _____ UNDISTURBED (UD) _____	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	BEARING	13. TOTAL NUMBER CORE BOXES
6. THICKNESS OF OVERBURDEN 0.0 Ft.		7. DEPTH DRILLED INTO ROCK 0.0 Ft.		14. ELEVATION GROUND WATER
8. TOTAL DEPTH OF BORING 12.4 Ft.		15. DATE BORING 10-12-10 14:47		COMPLETED 10-12-10 14:52
16. ELEVATION TOP OF BORING -48.2 Ft.			17. TOTAL RECOVERY FOR BORING 10.5 Ft.	
18. SIGNATURE AND TITLE OF INSPECTOR FK				

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-48.2	0.0					
-51.2	3.0		Sand (fine to medium) and shell, grey 7.5 YR 6/1, (SP).		S-1 (2')	Sample #S-1 (2'), Depth = 2.0'
-54.2	6.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 with broken shell frags @ 4.3', (SP).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-57.2	9.0		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SW).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
-58.7	10.5		Sand (fine to medium) and shell, grey 7.5YR 6/1, (SW).		S-4 (10')	Sample #S-4 (10'), Depth = 10.0'
			End of Boring			

FLORIDA DEP ROSS JUPITER ISLAND 10 DETAIL PHASE GP.J FL DEP ROSS.GDT 4/28/11

DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Jupiter Island 10 Detail Phase Jupiter Island, FL 			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JIVC-10-52		LOCATION COORDINATES X = 968452. Y = 979326.		10. COORDINATE SYSTEM/DATUM Florida State Plane East
3. DRILLING AGENCY		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL Vibracore <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER BM			12. TOTAL SAMPLES DISTURBED UNDISTURBED (UD)	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL	13. TOTAL NUMBER CORE BOXES	
6. THICKNESS OF OVERBURDEN 0.0 Ft.		14. ELEVATION GROUND WATER		15. DATE BORING STARTED 10-12-10 15:33 COMPLETED 10-12-10 15:36
7. DEPTH DRILLED INTO ROCK 0.0 Ft.		16. ELEVATION TOP OF BORING -48.6 Ft.		17. TOTAL RECOVERY FOR BORING 11.6 Ft.
8. TOTAL DEPTH OF BORING 13.4 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR FK		

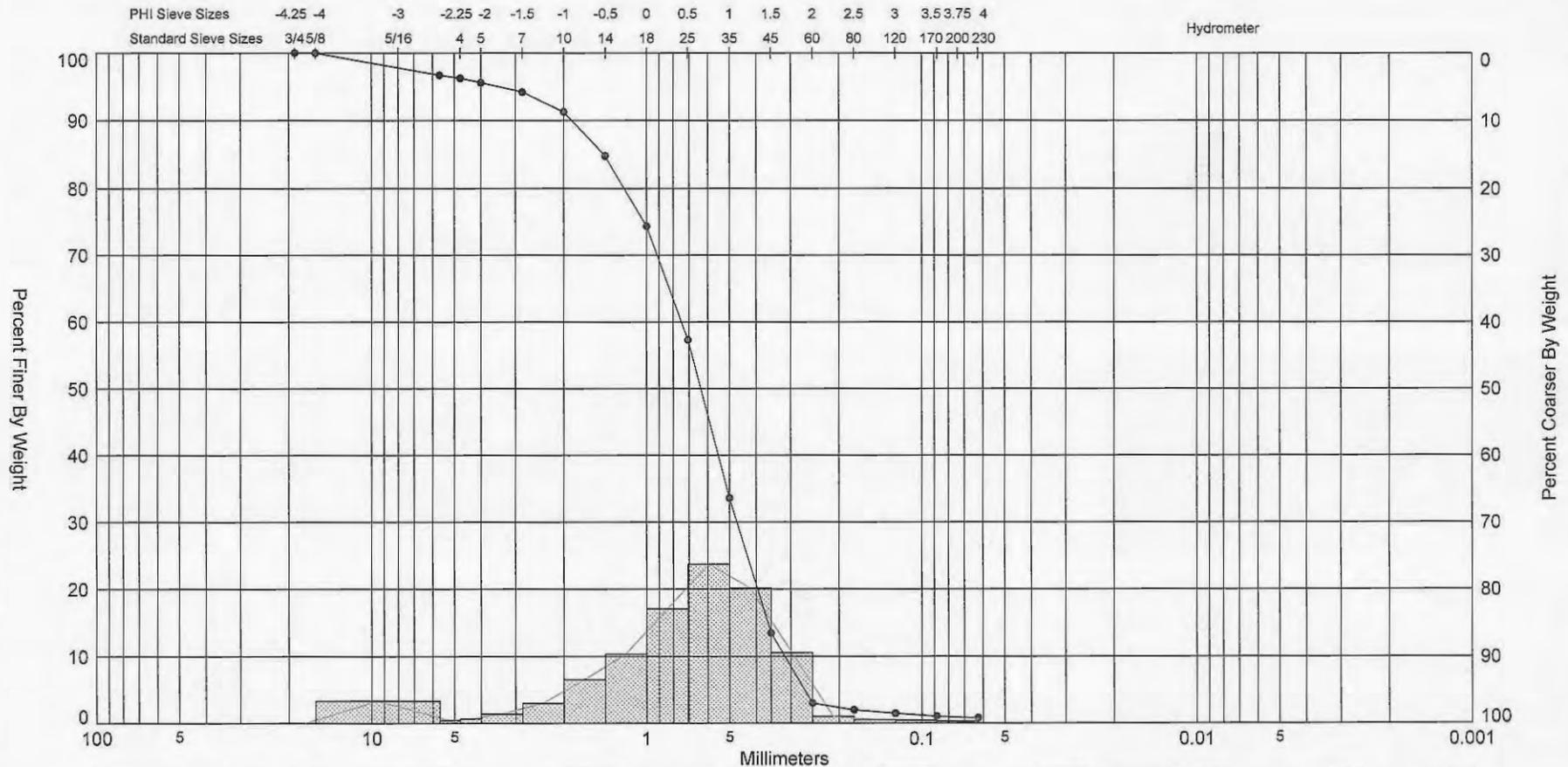
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-48.6	0.0					
-50.6	2.0		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-1 (1')	Sample #S-1 (1'), Depth = 1.0'
-54.6	6.0		Sand (fine to medium) and shell, dk grey 10YR 4/1 1" shells @ 3.8' and 4.5', (SW).		S-2 (5')	Sample #S-2 (5'), Depth = 5.0'
-57.6	9.0		Sand (fine to medium) and shell, dk grey 10YR 4/1, (SP).		S-3 (8')	Sample #S-3 (8'), Depth = 8.0'
-60.2	11.6		Sand (fine to medium) and shell, dk grey 10YR 4/1 with shell hash @ 9.4' to 9.5', (SW).		S-4 (11')	Sample #S-4 (11'), Depth = 11.0'
			End of Boring			

FLORIDA DEP ROSS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/28/11

Sieve Graph



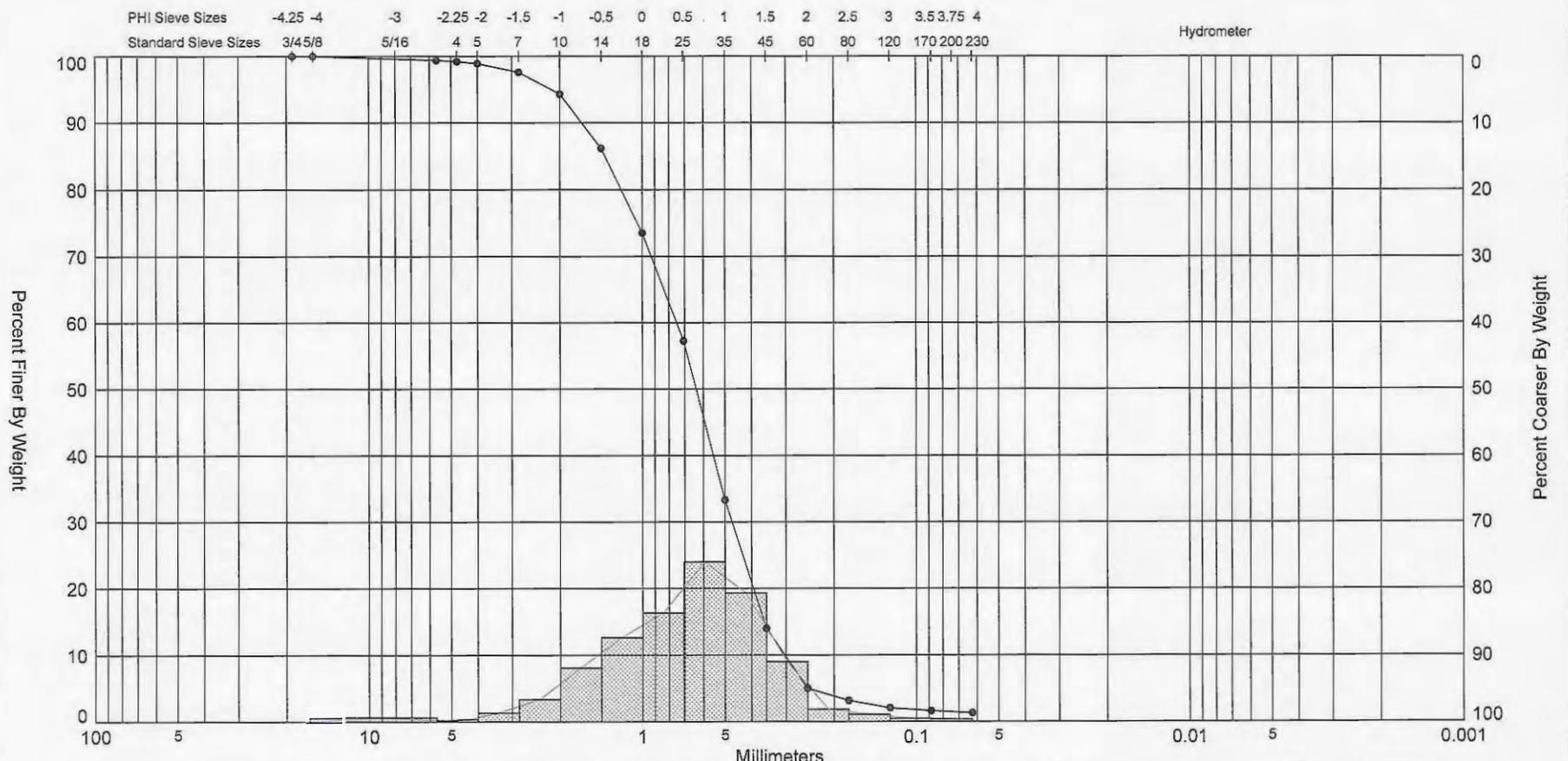
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-1 #S-1 (1')	—●—	-55.5	SW	#230 - 0.77		82.50	0.65	0.45	-1.16	5.24	1.14	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 3%												Analysis Date:	11-30-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	966208.
														Northing (Y, ft):	977533.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

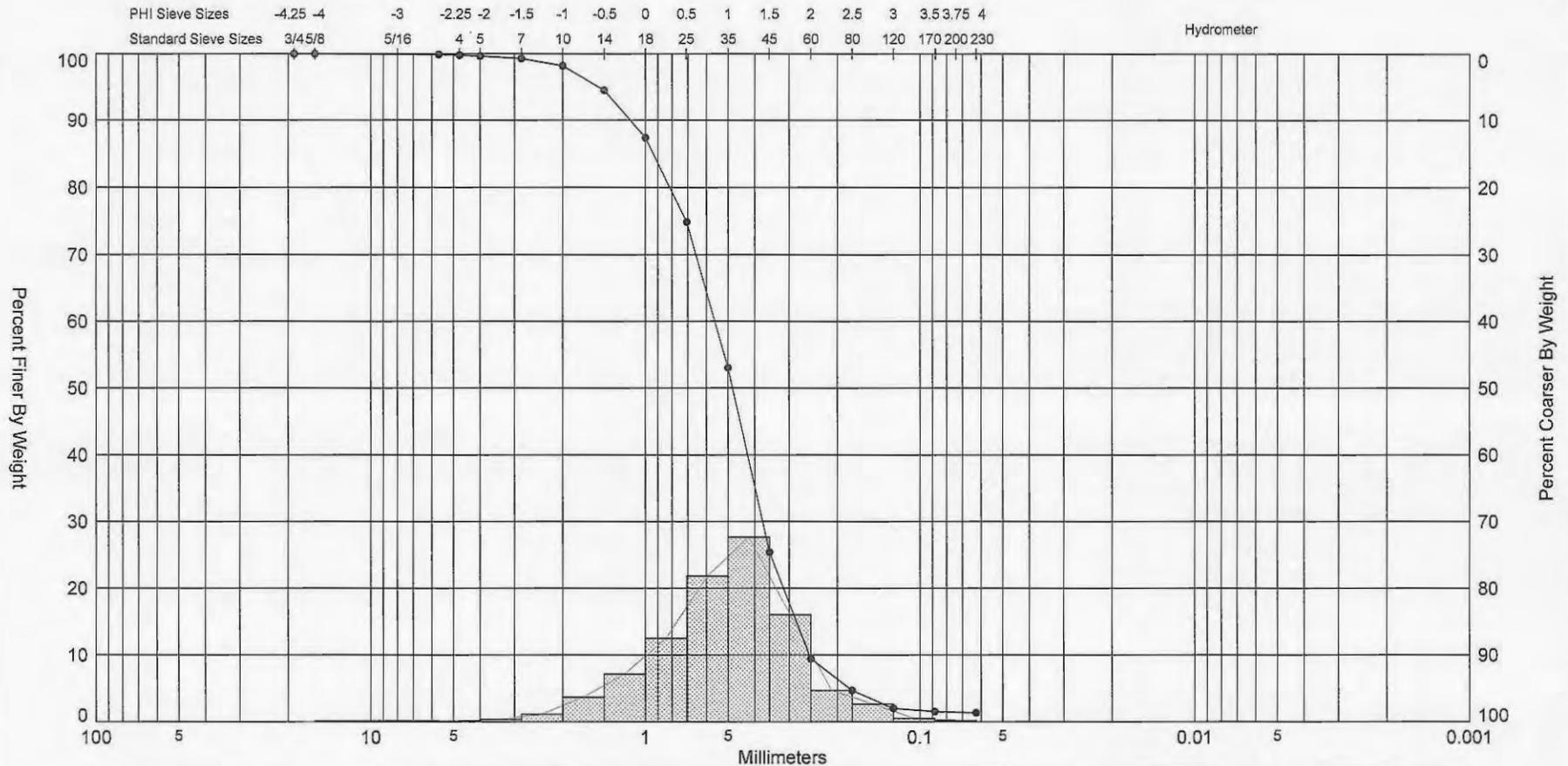
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-1 #S-2 (4')	—●—	-58.5	SW	#230 - 1.28			0.65	0.54	-0.41	4.21	0.98	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-12-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	966208.
												Northing (Y, ft):	977533.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

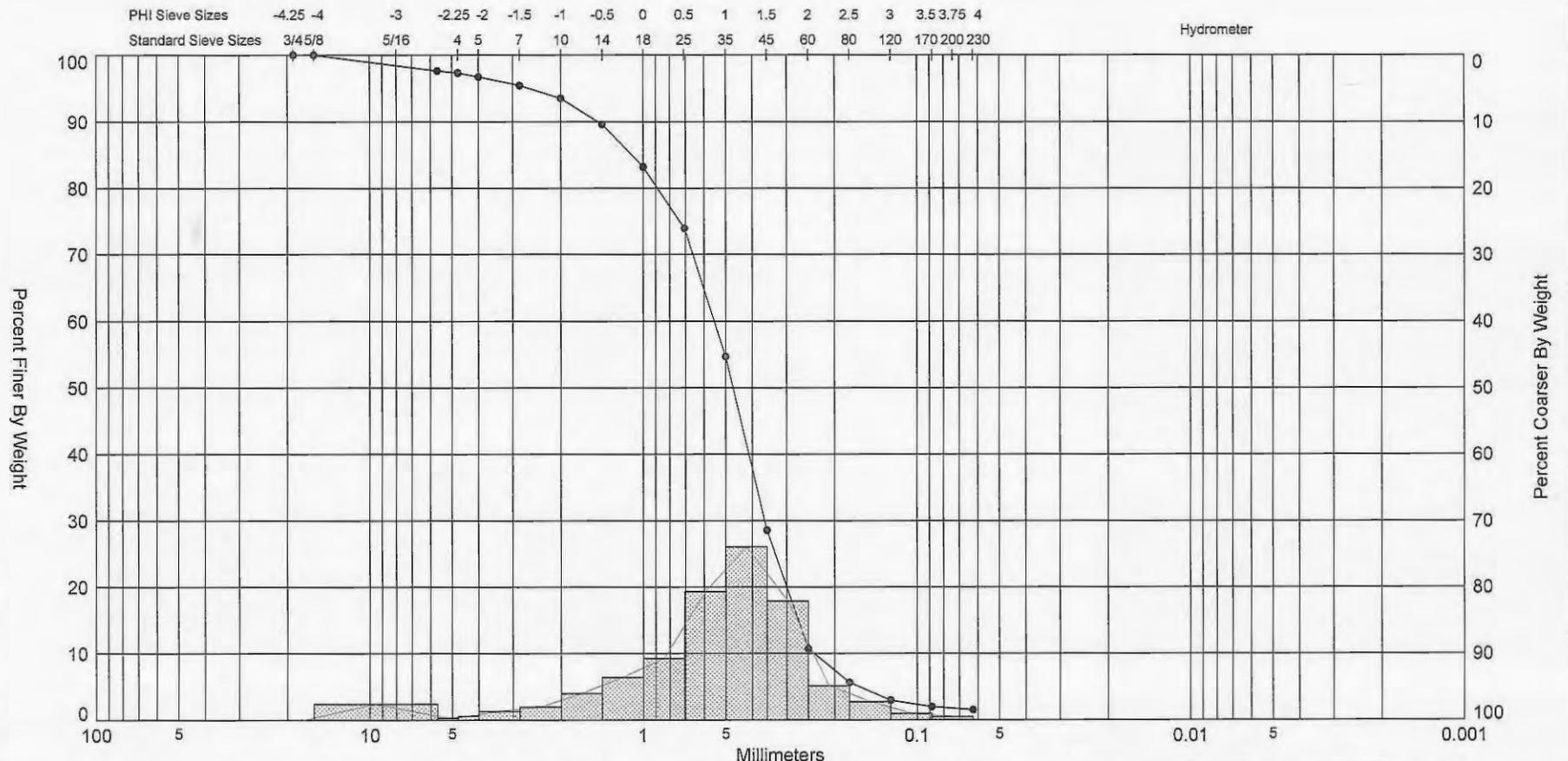
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-1 #S-3 (6')	—●—	-60.5	SW	#230 - 1.35		79.20	1.05	0.96	-0.43	4.14	0.86	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-08-10
Depths and elevations based on measured values												Analyzed By:	JR
 <div style="display: inline-block; vertical-align: middle; margin-left: 20px;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	966208.
												Northing (Y, ft):	977533.
												Horizontal System:	NAD 1983
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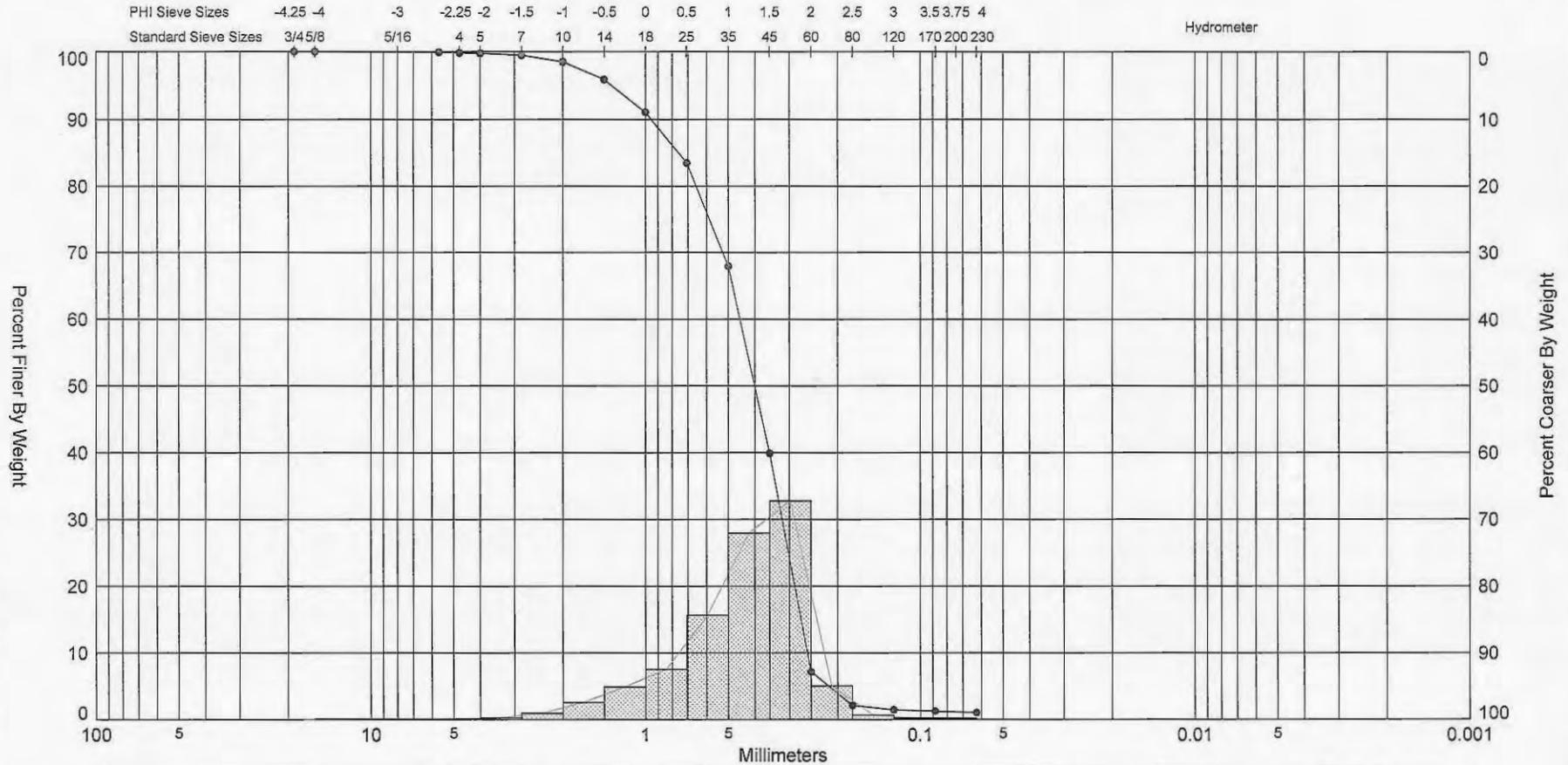
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-1 #S-4 (8')	—●—	-62.5	SW	#230 - 1.49			1.09	0.87	-1.22	5.59	1.17	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 5%												Analysis Date:	11-12-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	966208.
												Northing (Y, ft):	977533.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

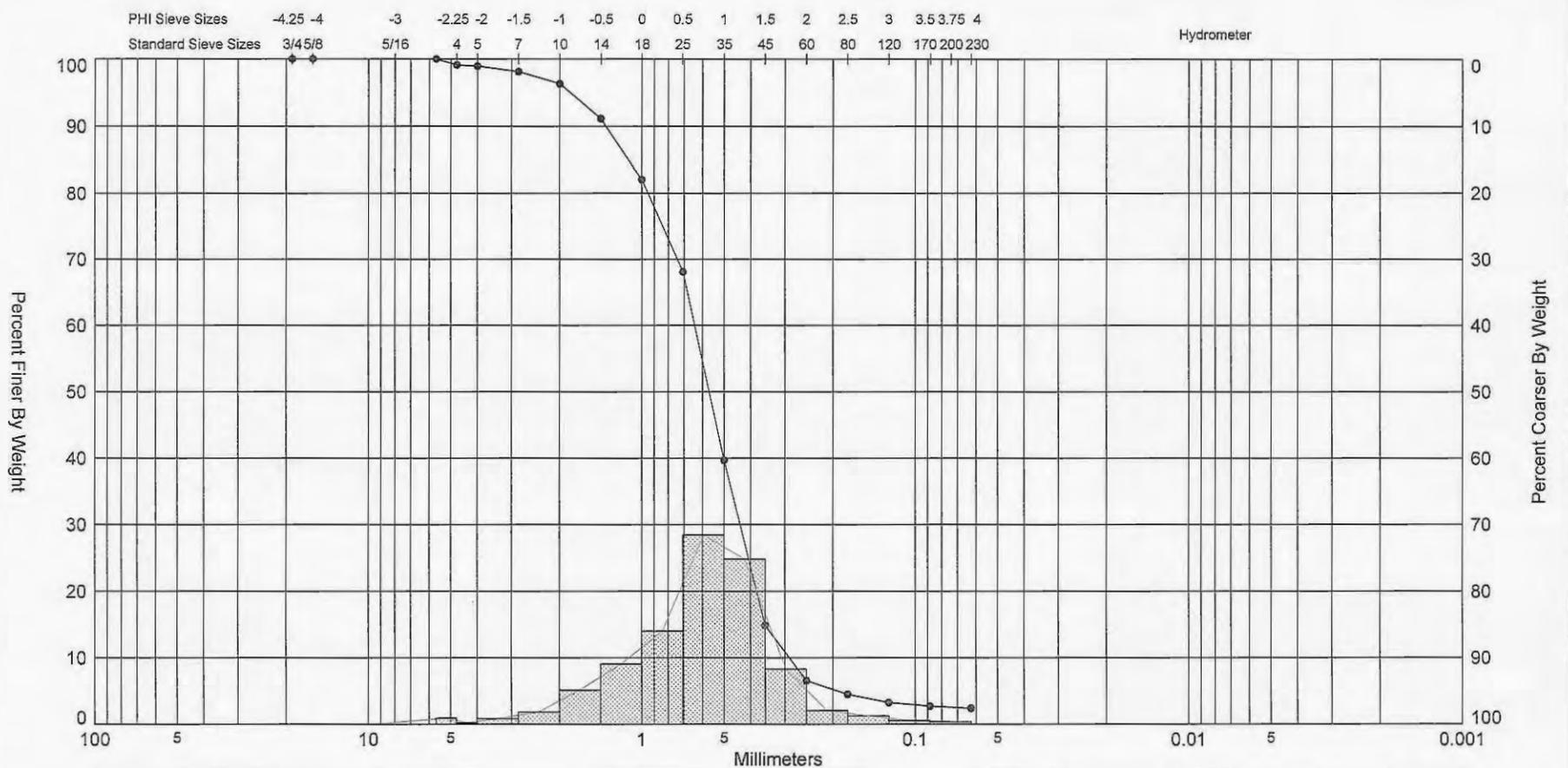
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-2 #S-1 (0.5')	—●—	-48.4	SP	#230 - 1.03			1.32	1.16	-1.08	5.29	0.79	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content =>1%												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967144.
												Northing (Y, ft):	977892.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

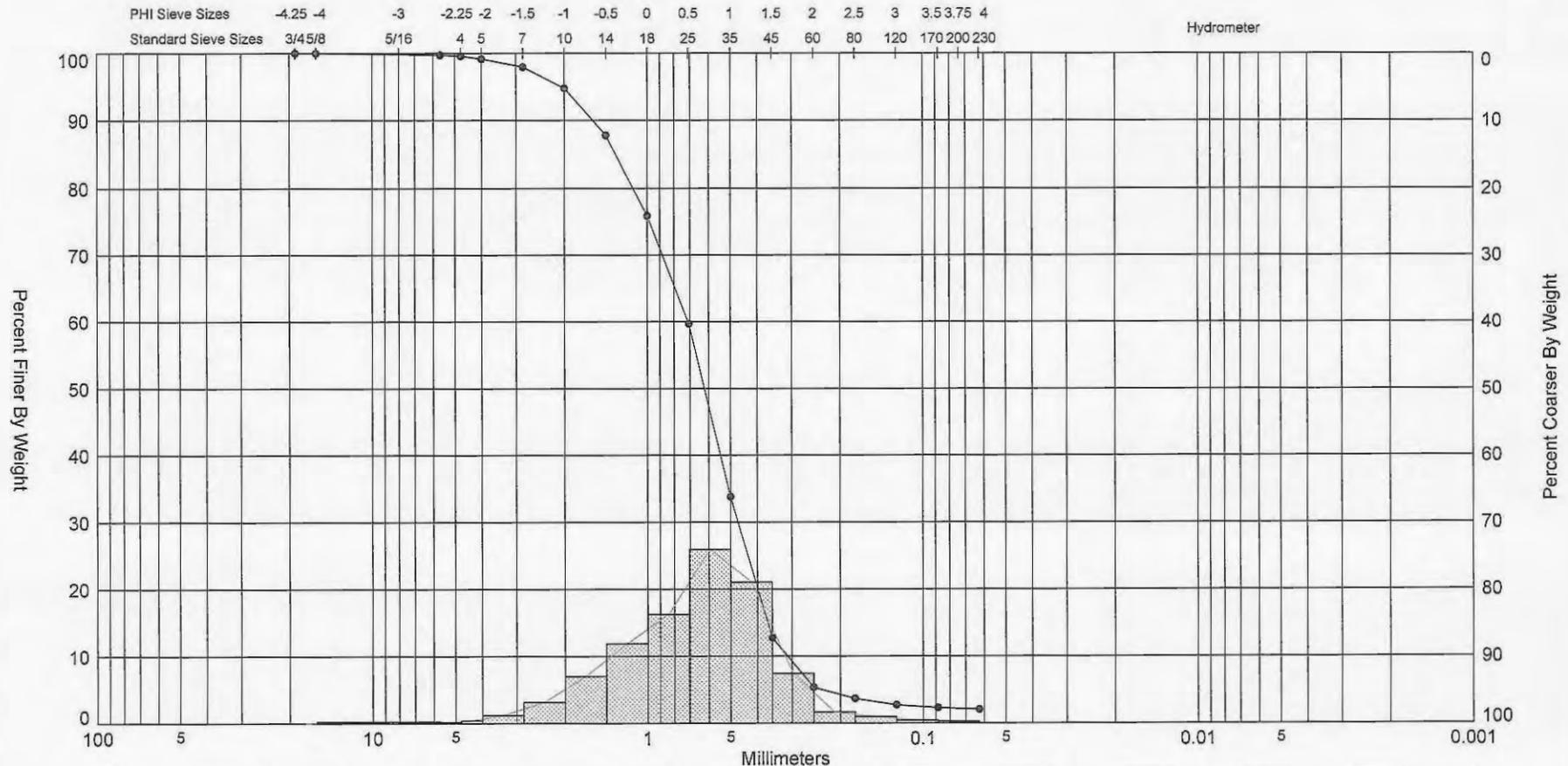
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



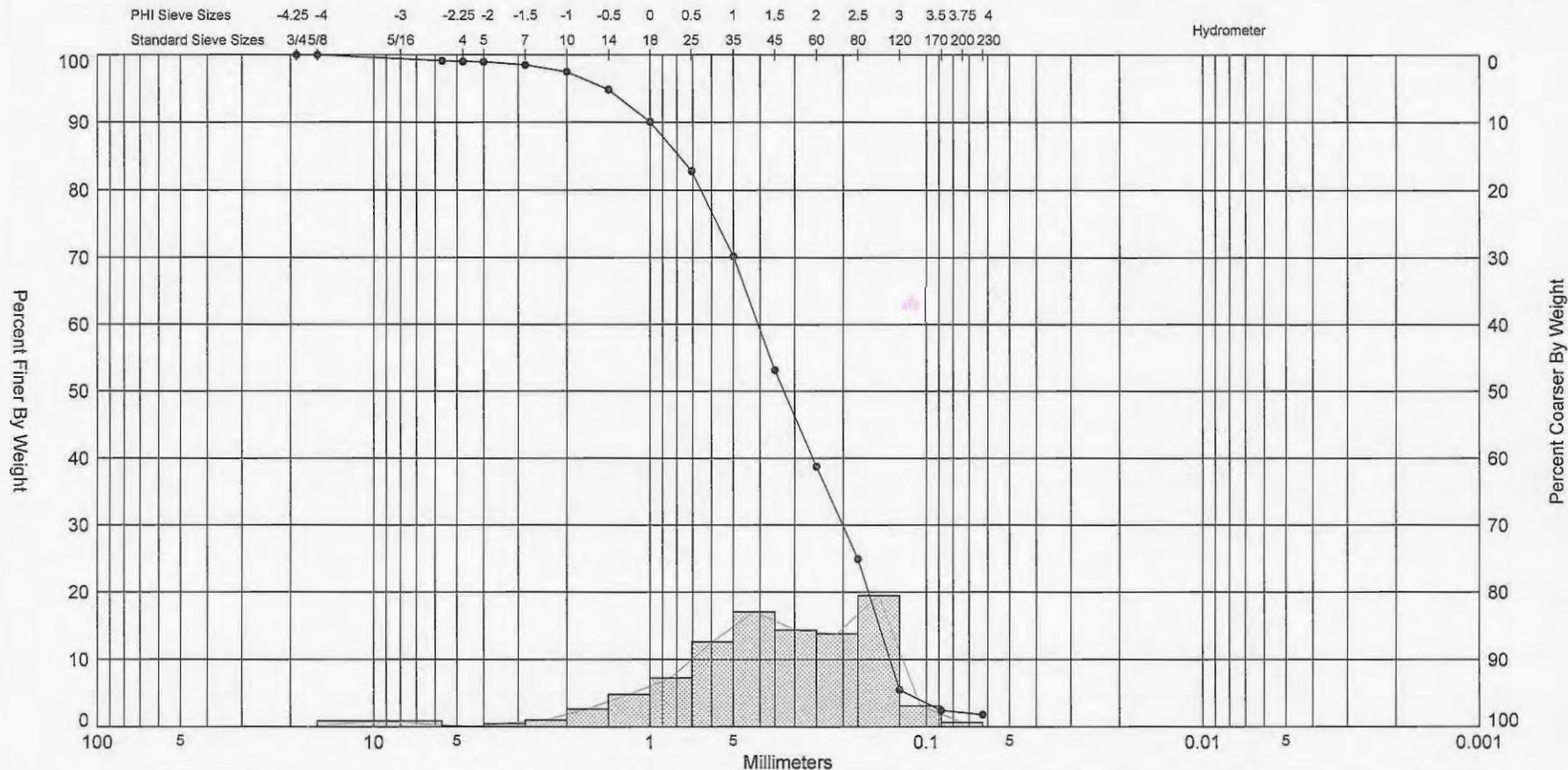
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JVC-10-2 #S-2 (5')	—●—	-52.9	SW	#230 - 2.38		84.60	0.82	0.71	-0.47	4.55	0.89	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-22-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967144.
												Northing (Y, ft):	977892.
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SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



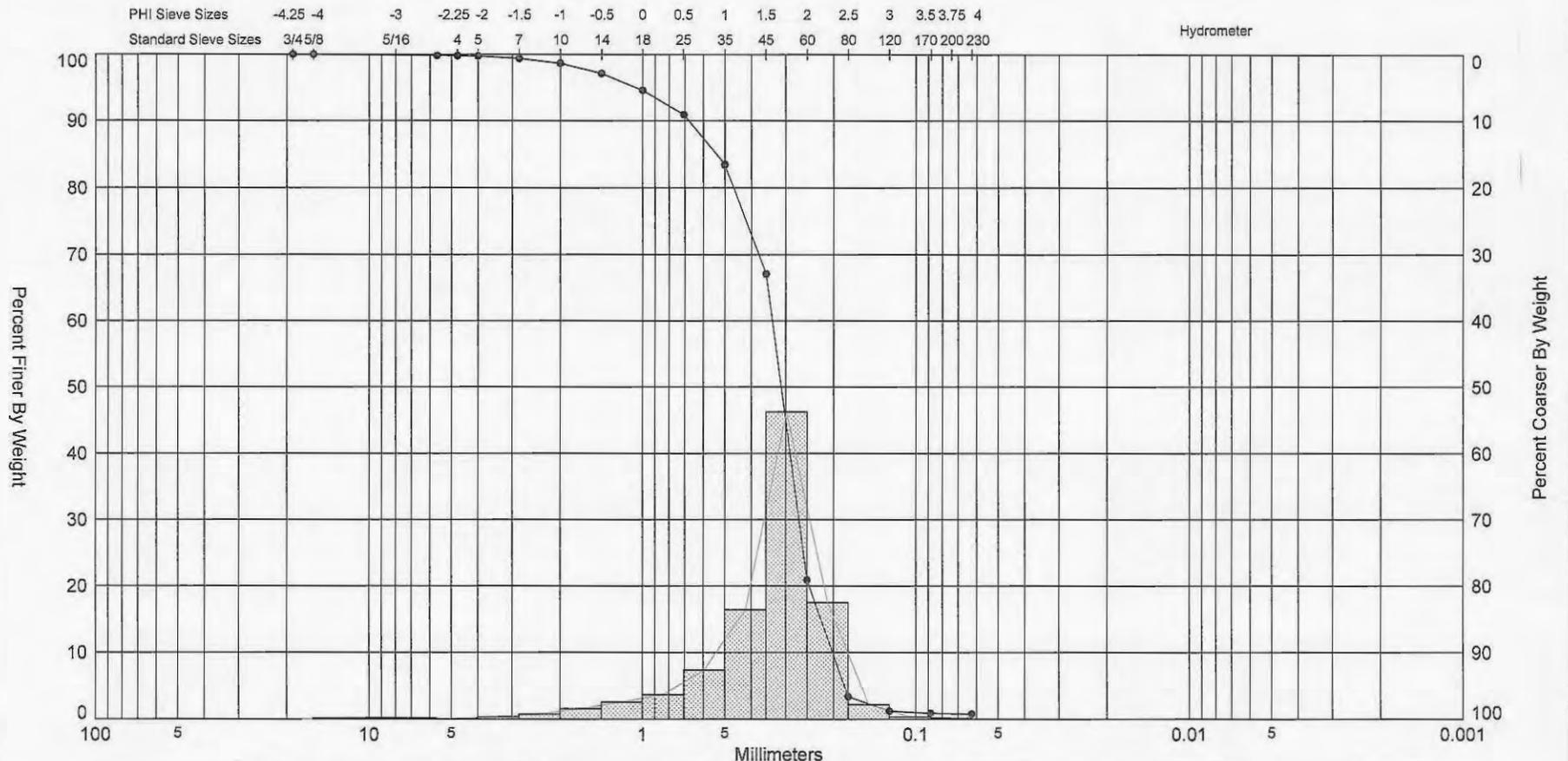
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-2 #S-4 (12')	—●—	-59.9	SW	#230 - 1.79		70.40	1.61	1.49	-0.92	4.49	1.17	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-05-10
Depths and elevations based on measured values												Analyzed By:	JR
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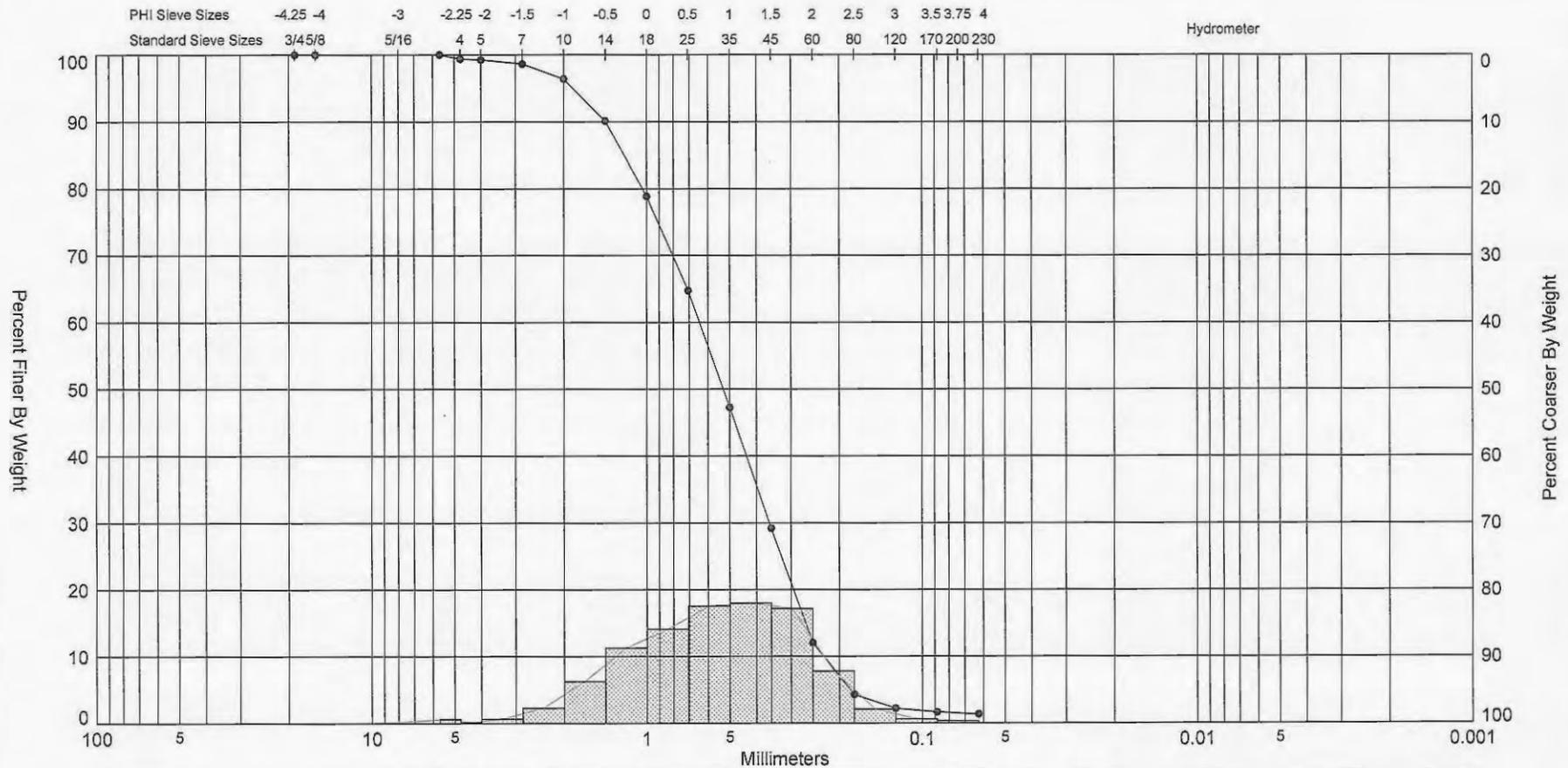
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-3 #S-1 (2')	—●—	-47.3	SP	#230 - 0.77			1.69	1.52	-1.78	8.21	0.77	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0 %												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	968103.
												Northing (Y, ft):	978129.
												Horizontal System:	NAD 1983
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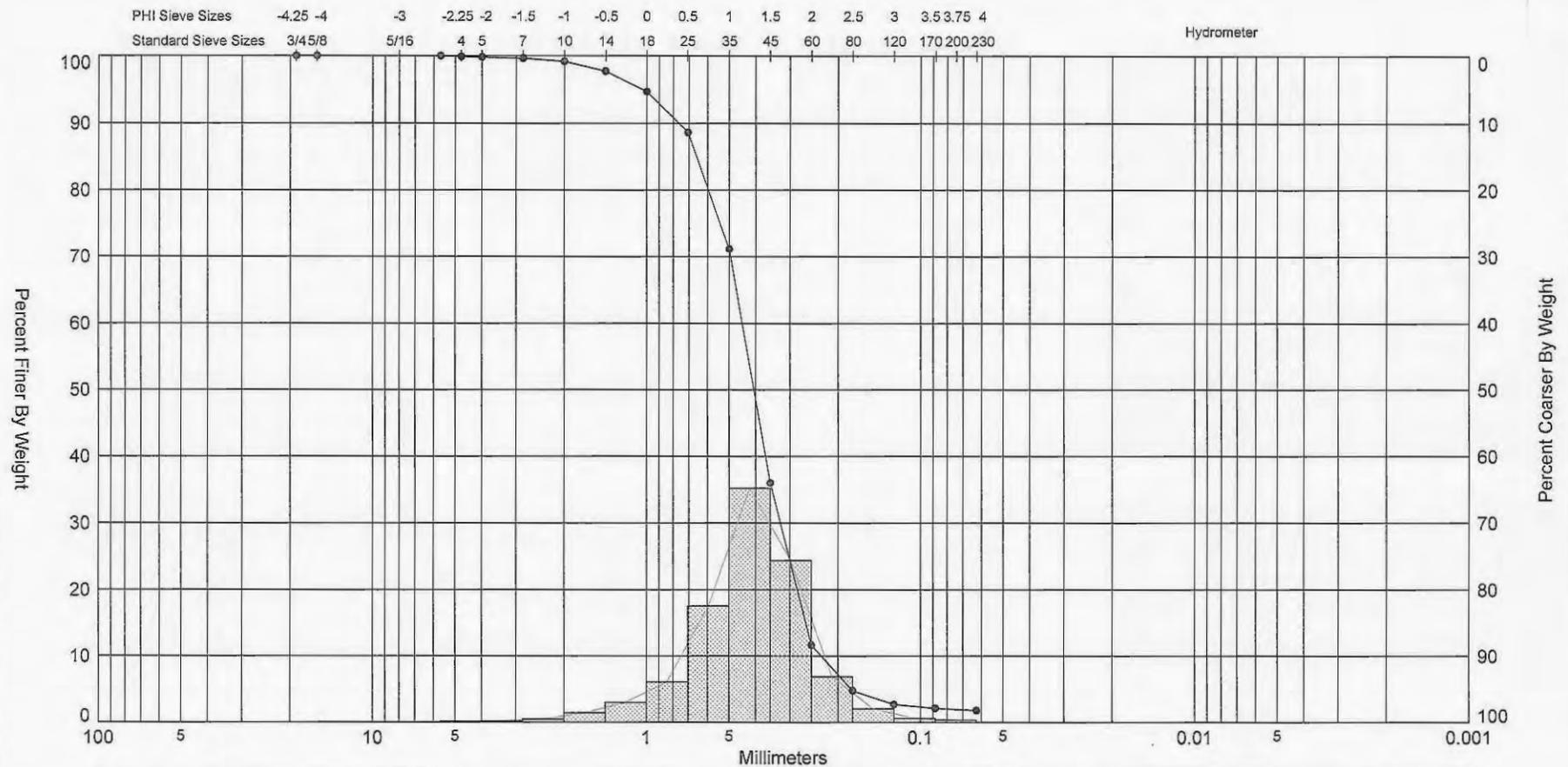
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-3 #S-3 (8')	—○—	-53.3	SW	#230 - 1.31		83.90	0.92	0.83	-0.29	2.99	1.02	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1 %												Analysis Date:	11-22-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	968103.
												Northing (Y, ft):	978129.
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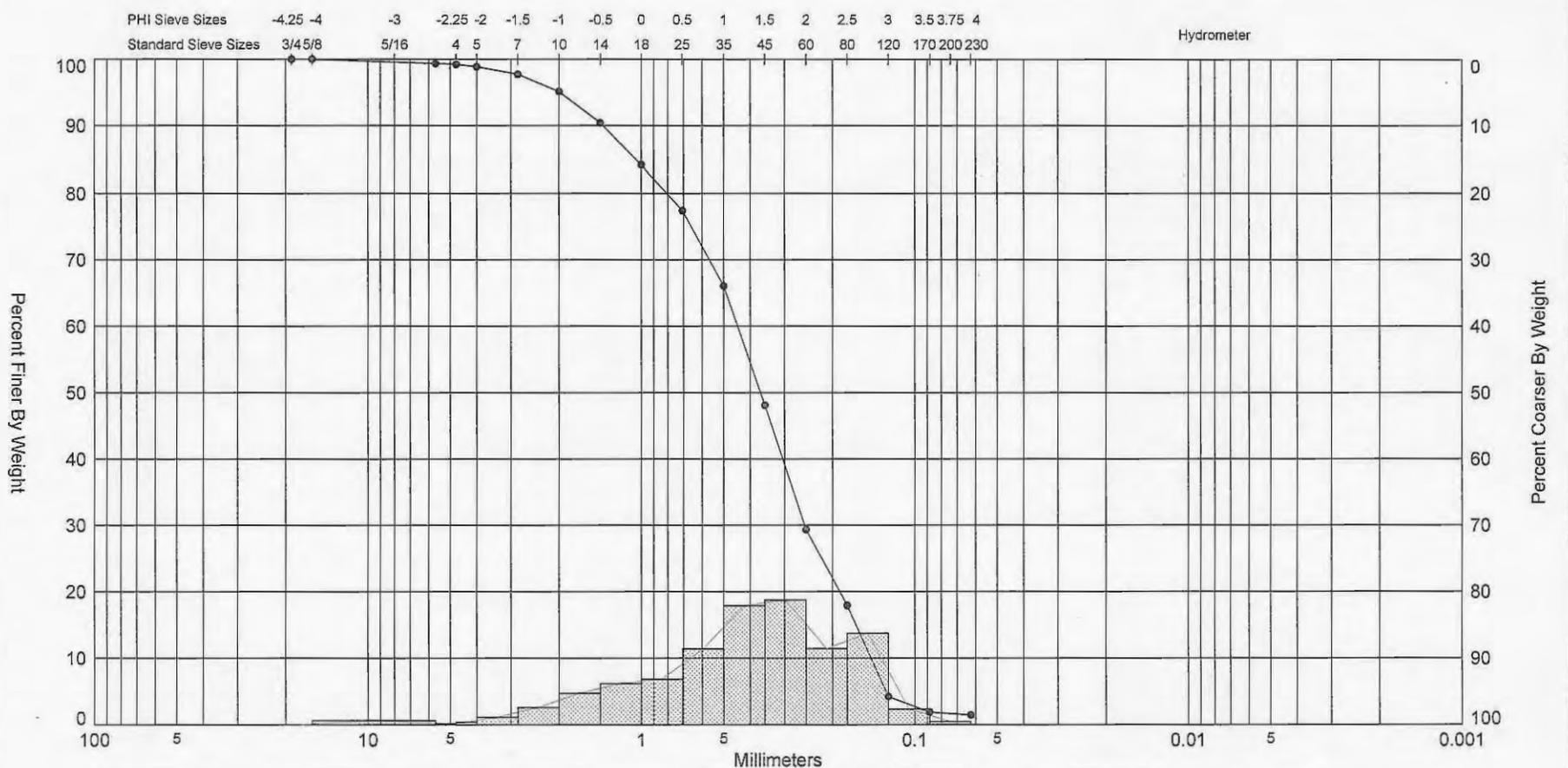
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-3 #S-4 (10')	—●—	-55.3	SP	#230 - 1.81			1.3	1.25	-0.6	5.4	0.72	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content =>1 %												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	968103.
												Northing (Y, ft):	978129.
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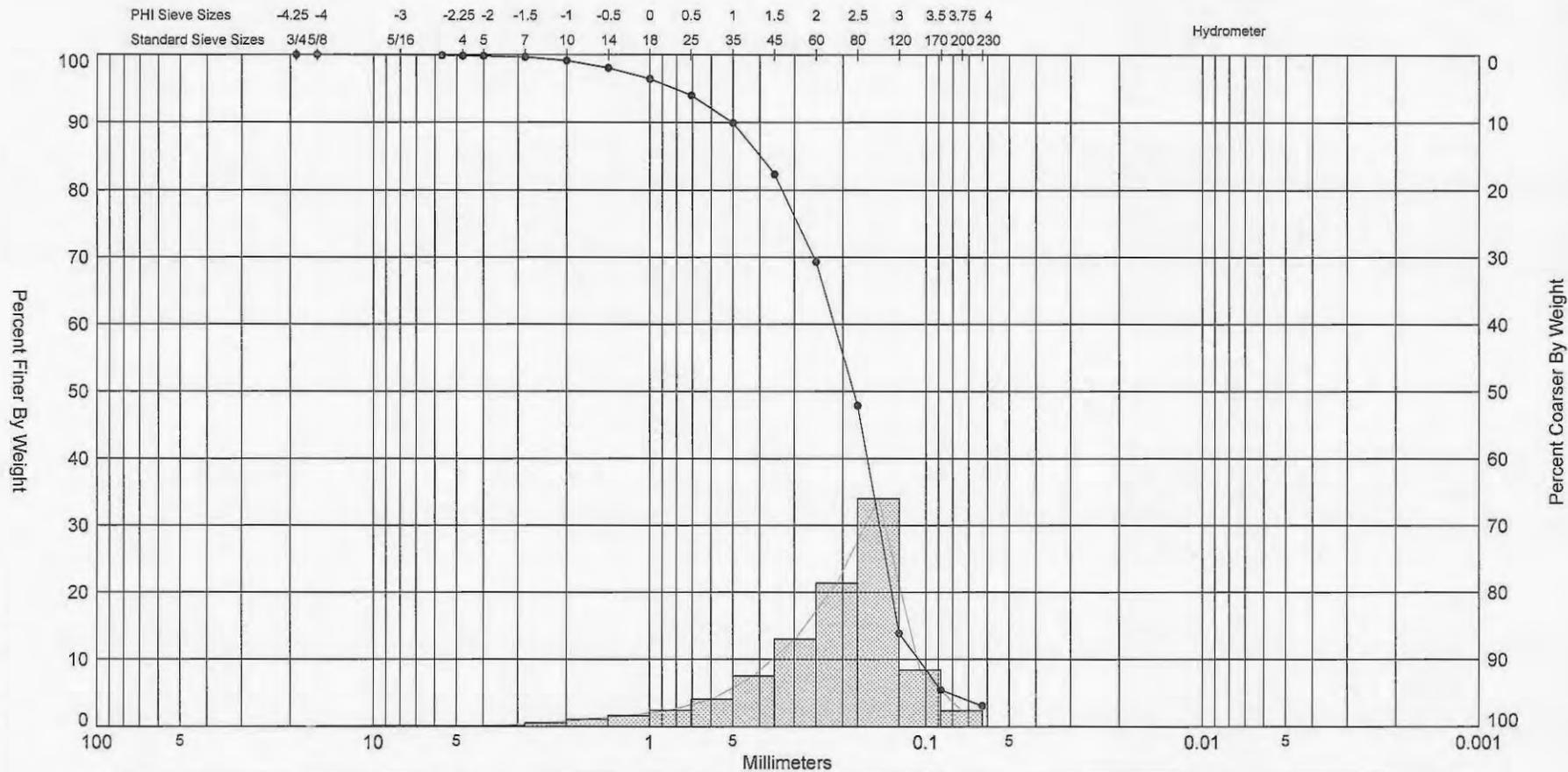
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-4 #S-3 (9')	—○—	-61.5	SW	#230 - 1.45			1.45	1.26	-0.77	3.59	1.22	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 1%												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	965540.
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												Horizontal System:	NAD 1983
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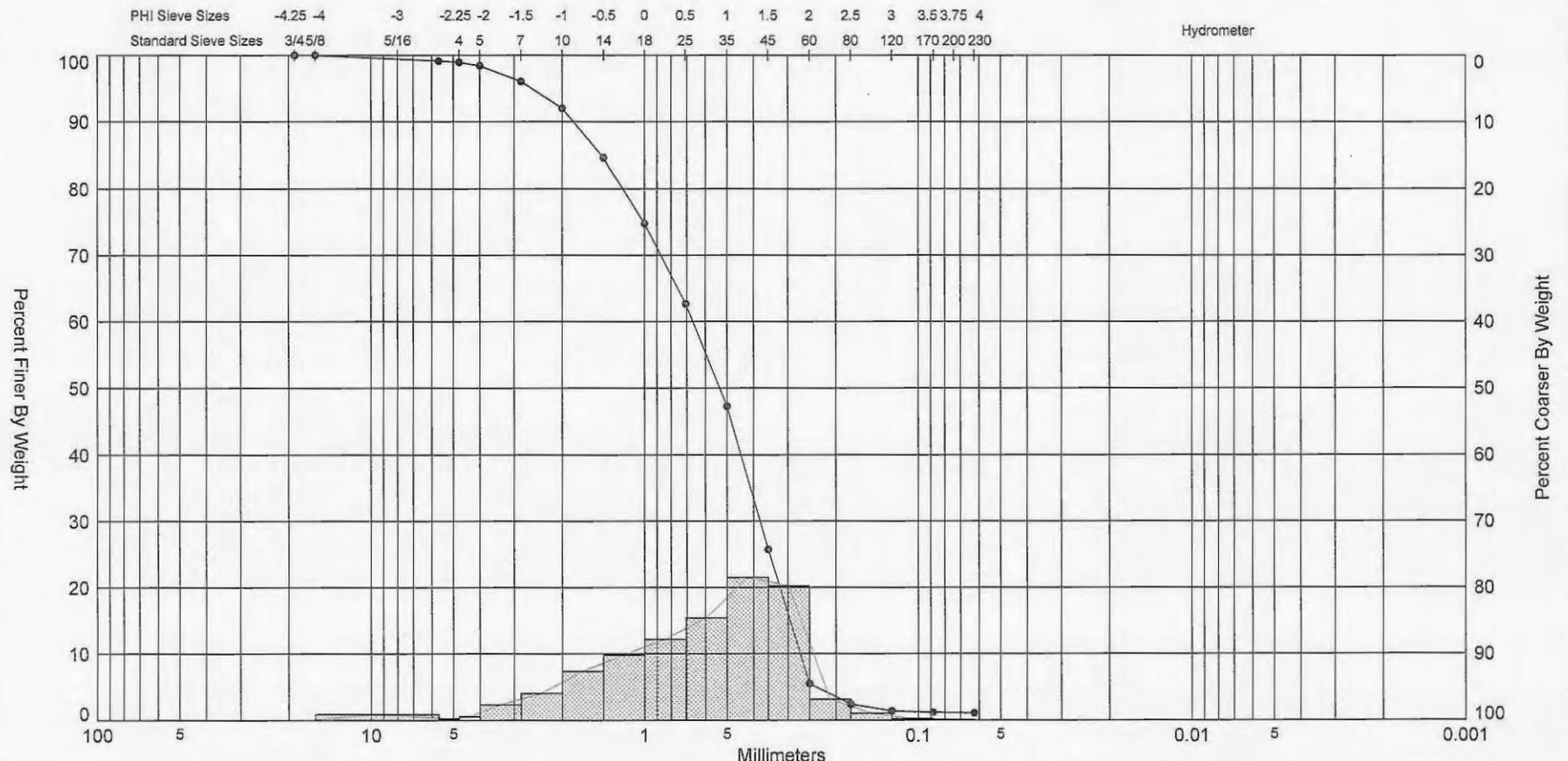
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-4 #S-4 (11.5')	—●—	-64.0	SW	#230 - 3.10		66.80	2.45	2.18	-1.45	6.07	0.94	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-05-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	965540.
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												Horizontal System:	NAD 1983
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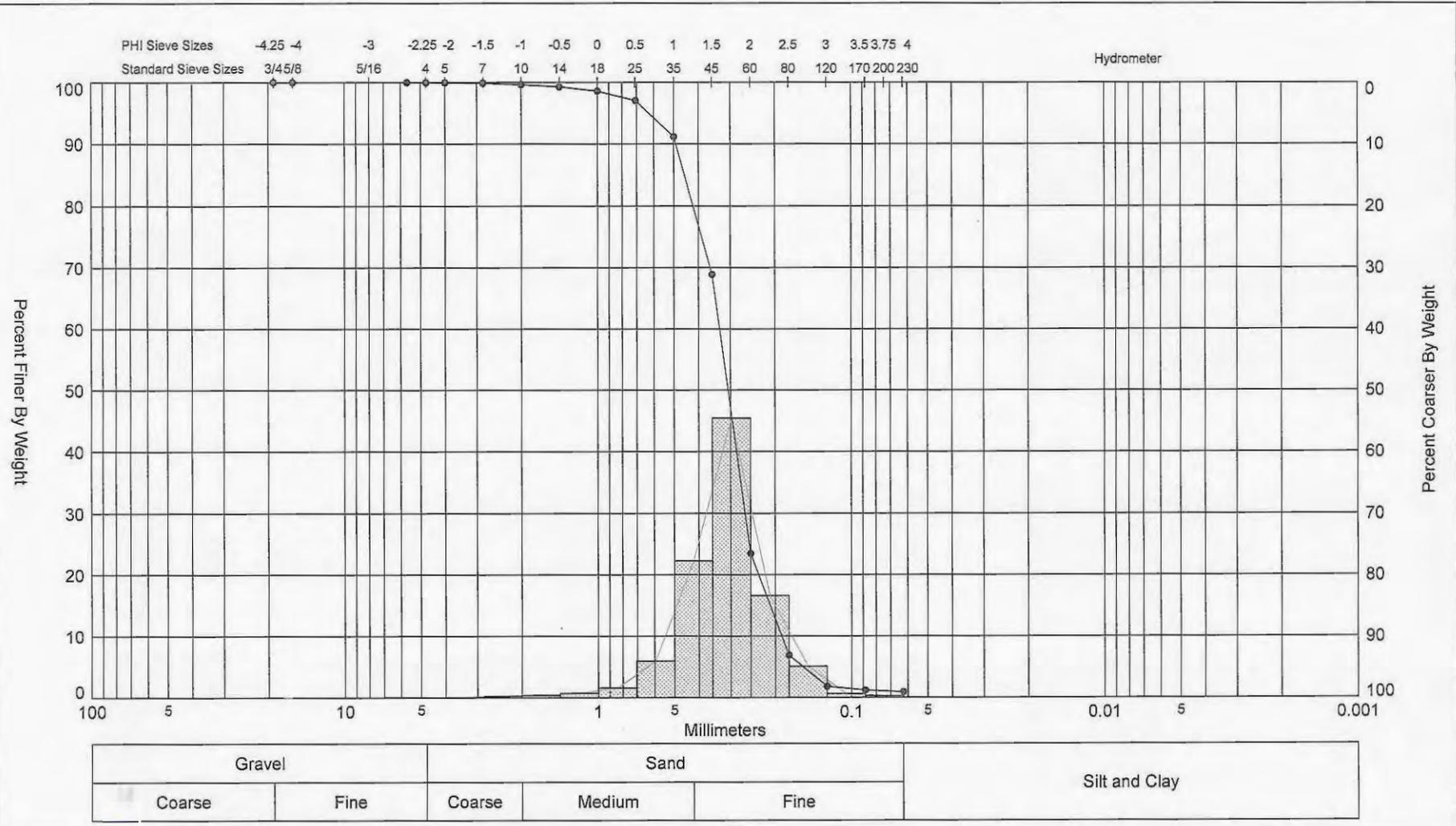
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-5 #S-1 (0.5')	—●—	-47.4	SW	#230 - 1.07			0.91	0.67	-0.8	3.61	1.1	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 2%												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	966481.
												Northing (Y, ft):	976621.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

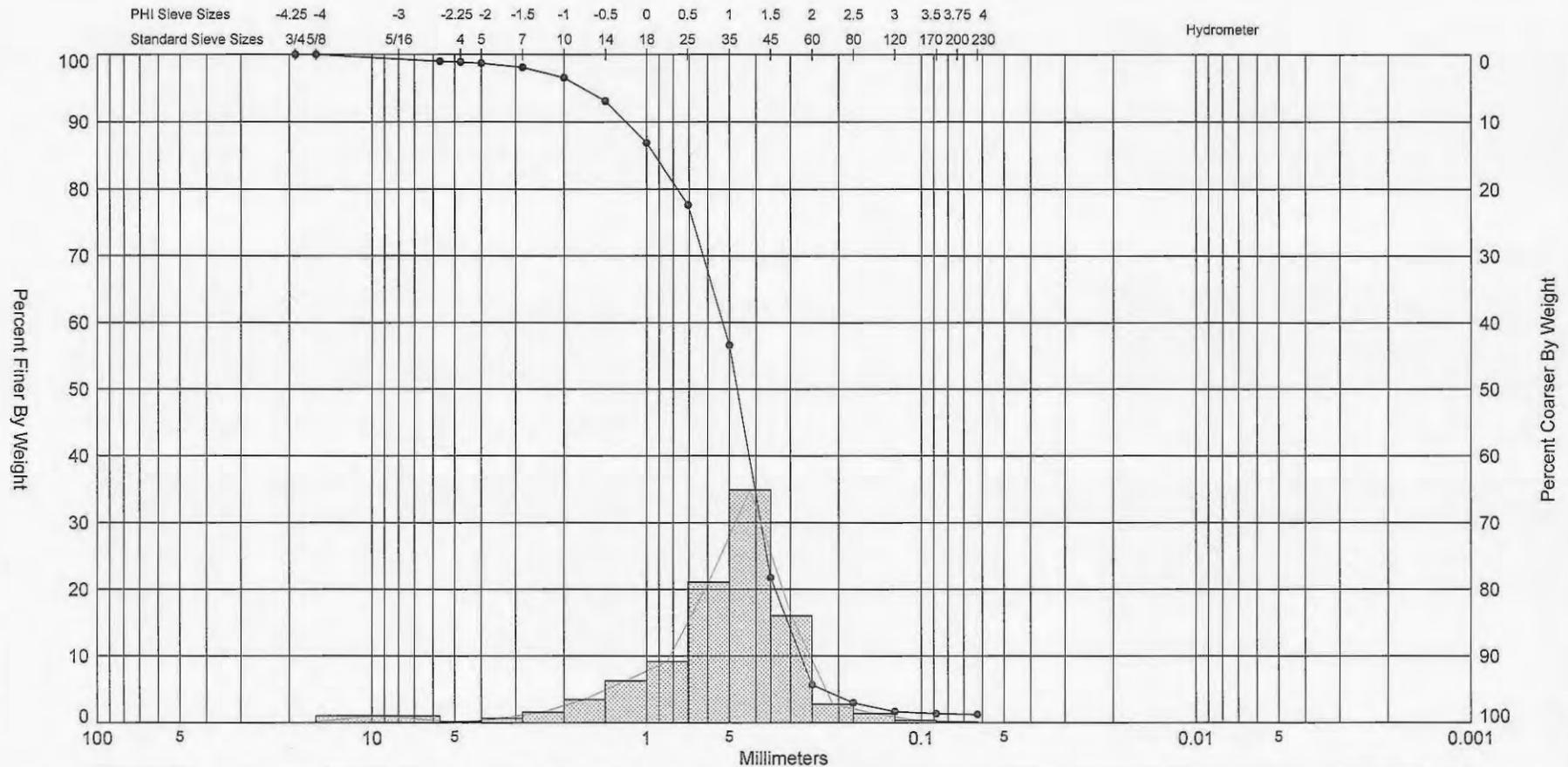
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-5 #S-2 (5.5')	—●—	-52.4	SP	#230 - 0.88		61.90	1.71	1.67	-0.95	8.1	0.6	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-08-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	966481.
												Northing (Y, ft):	976621.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

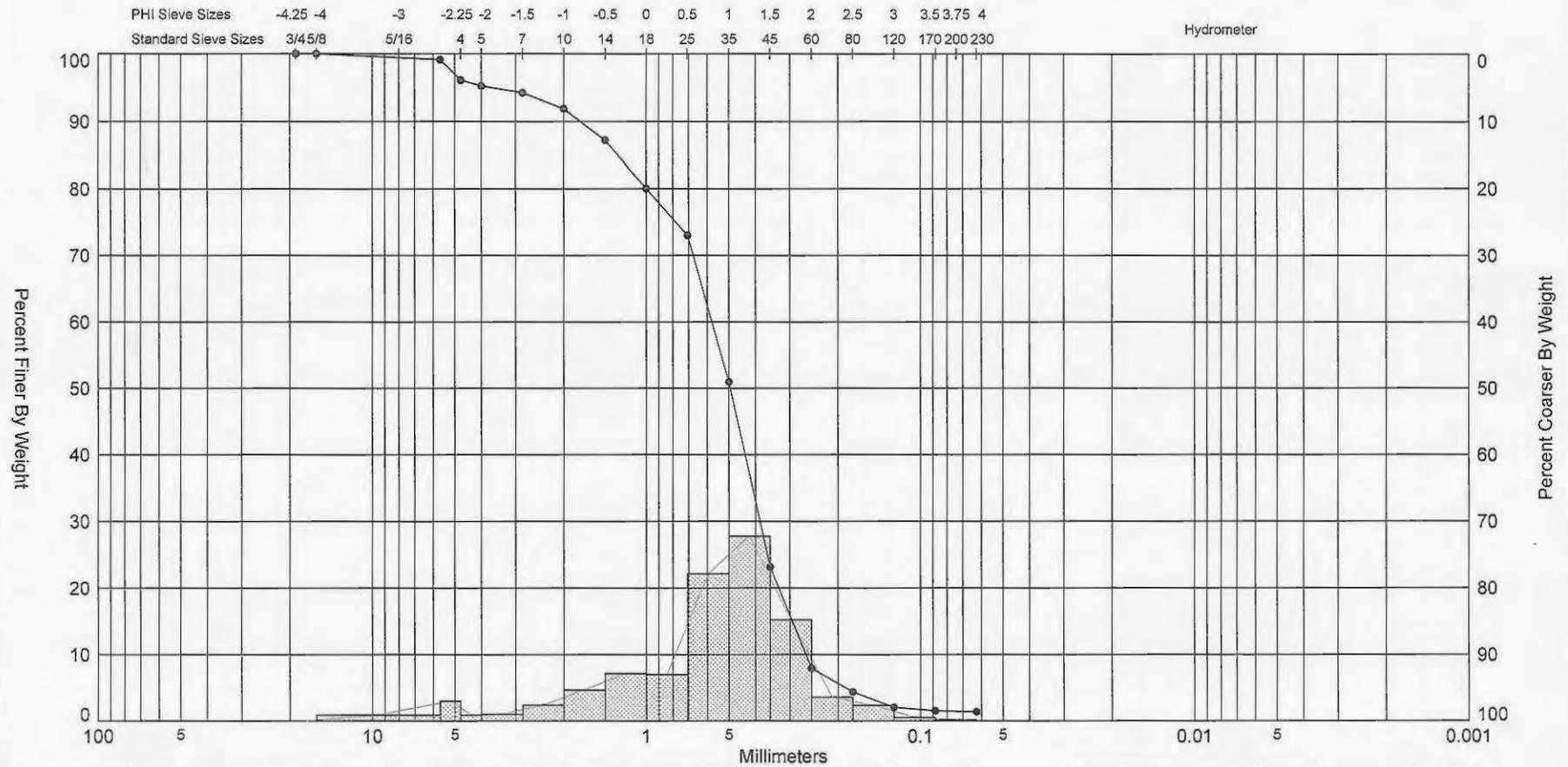
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-5 #S-3 (9')	—●—	-55.9	SW	#230 - 1.21			1.09	0.91	-1.4	7.13	0.91	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 2%												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	966481.
												Northing (Y, ft):	976621.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

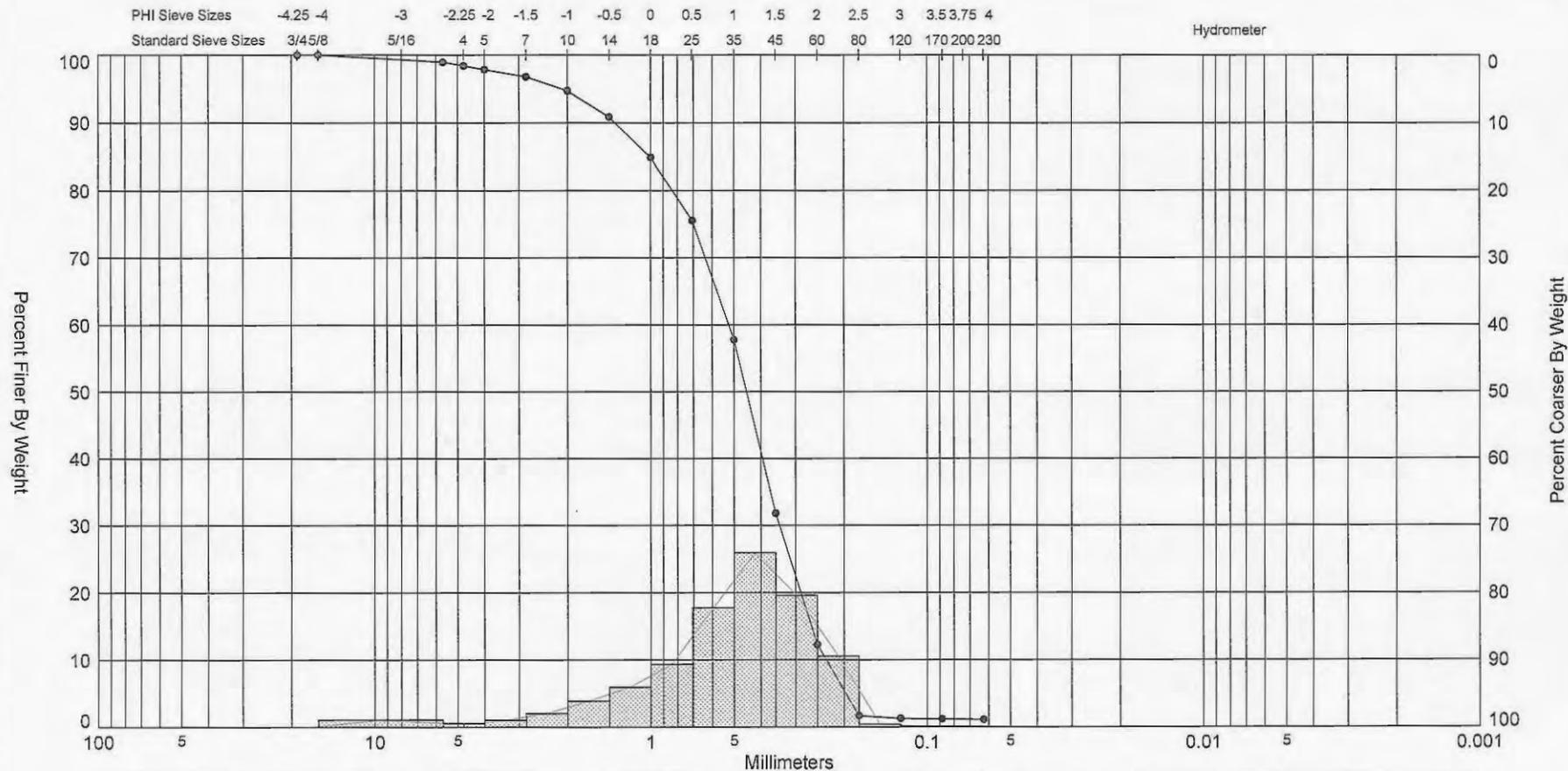
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-5 #S-4 (12')	—●—	-58.9	SW	#230 - 1.37		79.70	1.02	0.76	-1.13	4.61	1.15	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 4%												Analysis Date:	11-22-10
Depths and elevations based on measured values												Analyzed By:	JR
 <p style="font-weight: bold; margin-top: 10px;">American Vibracore Services, Inc.</p> <p>1215 Wallace Drive Delray Beach, FL 33444</p>												Easting (X, ft):	966481.
												Northing (Y, ft):	976621.
												Horizontal System:	NAD 1983
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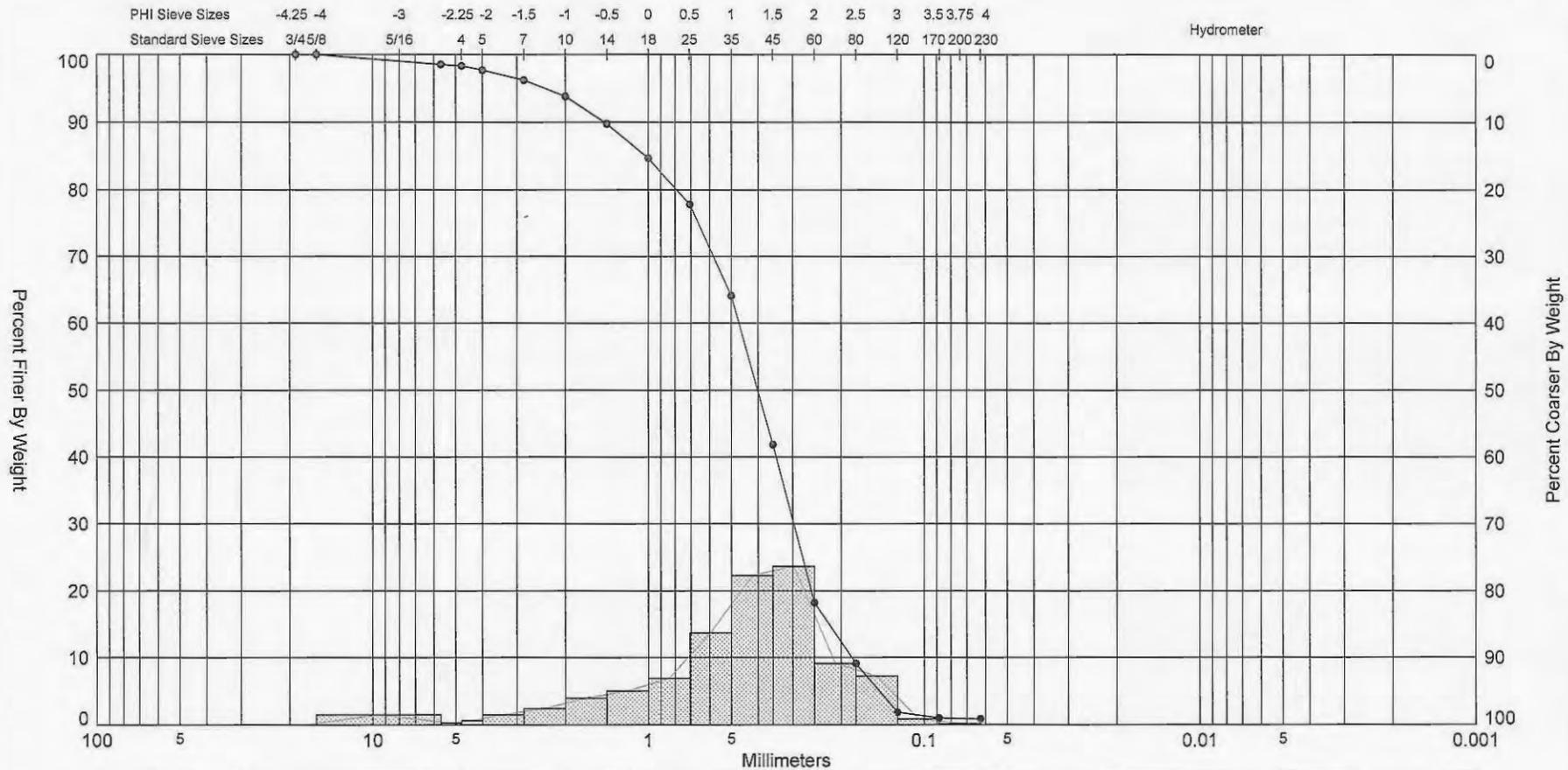
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-8A #S-1 (0.5')	—○—	-59.4	SW	#230 - 1.09			1.15	0.94	-1.32	5.49	1.05	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 3%												Analysis Date:	11-11-10
Depths and elevations based on measured values												Analyzed By:	JR
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	964892.
												Northing (Y, ft):	975015.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

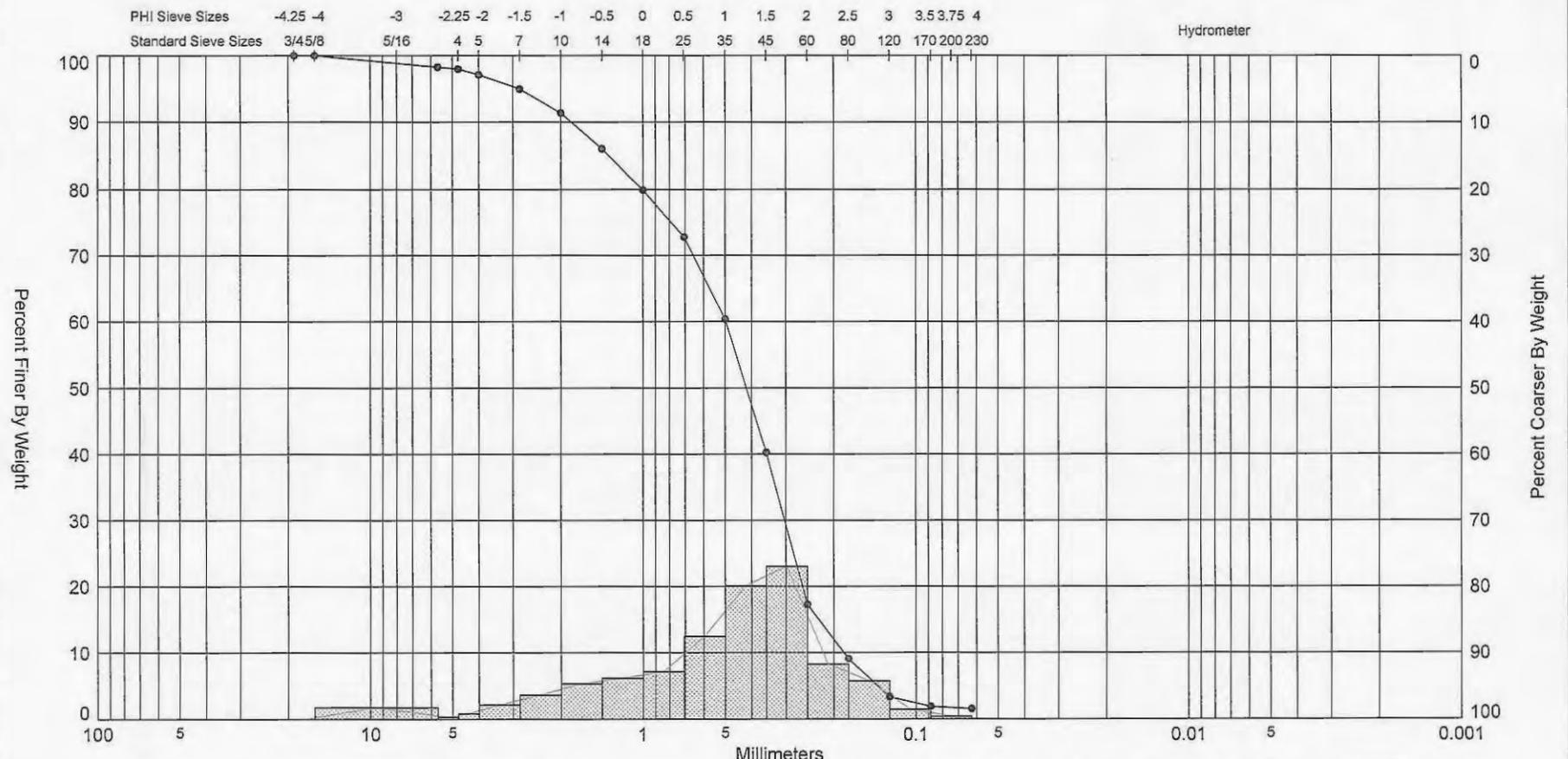
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-8A #S-2 (3')	—●—	-61.9	SW	#230 - 0.85		74.30	1.32	1.09	-1.17	4.91	1.19	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 3%												Analysis Date:	11-22-10
Depths and elevations based on measured values												Analyzed By:	JR
 AMERICAN VIBROCURE SERVICES												Easting (X, ft):	964892.
												Northing (Y, ft):	975015.
												Horizontal System:	NAD 1983
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American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444													

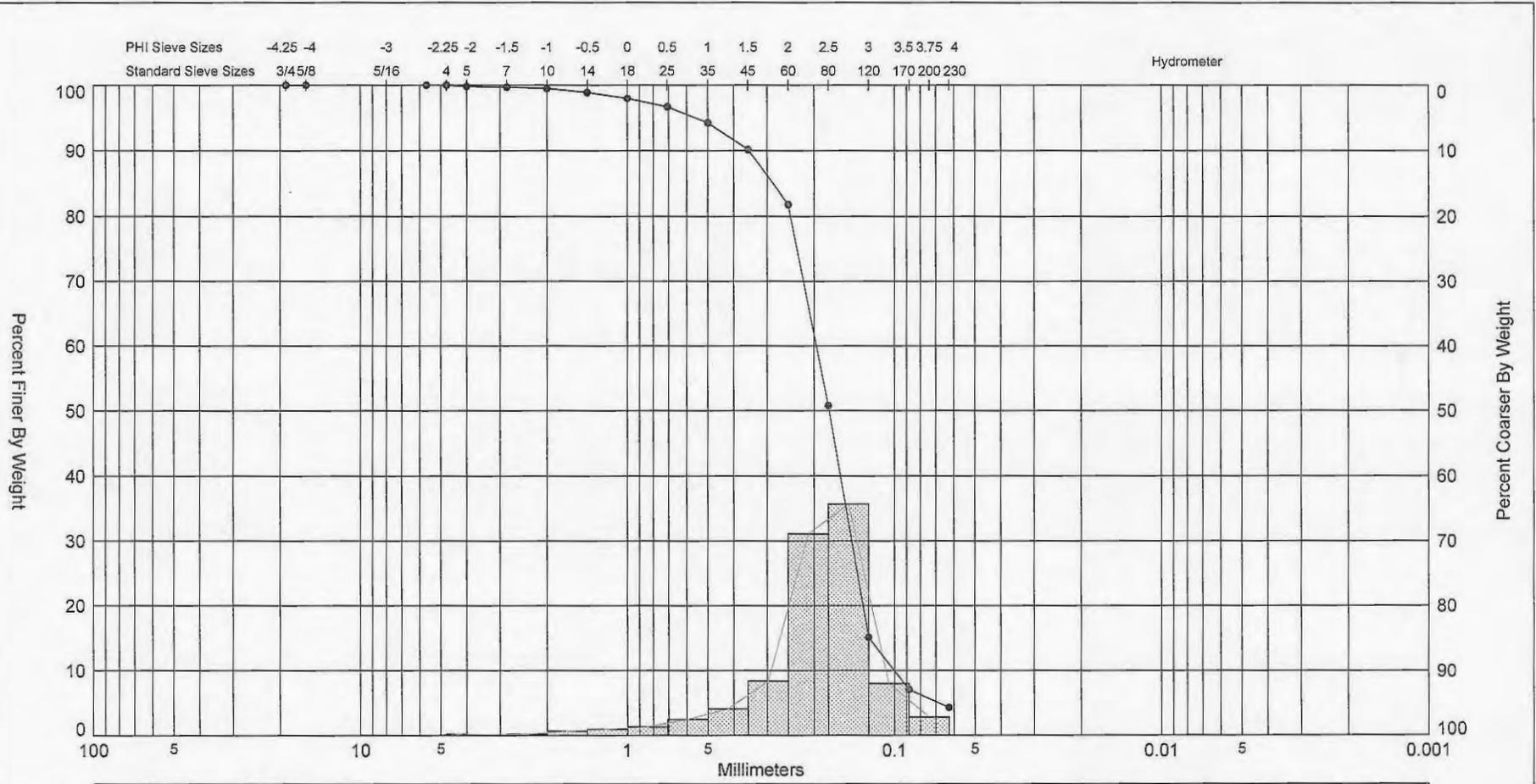
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-8A #S-3 (5')	—●—	-63.9	SW	#230 - 1.53			1.26	0.96	-0.96	4	1.28	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 3%												Analysis Date:	11-12-10
Depths and elevations based on measured values												Analyzed By:	JR
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	964892.
												Northing (Y, ft):	975015.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

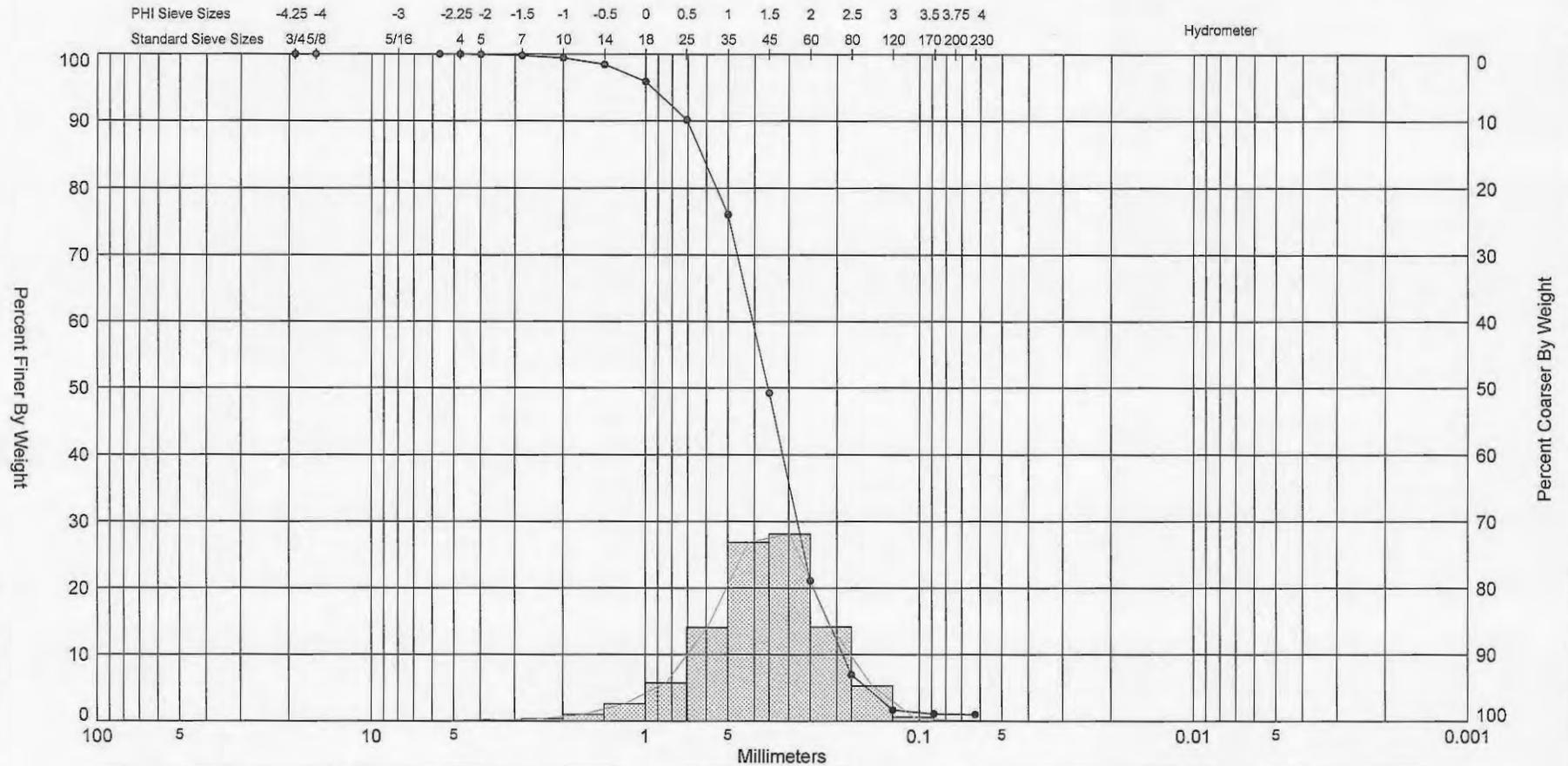
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-8A #S-4 (7')	—●—	-65.9	SP-SM	#230 - 4.29		62.00	2.51	2.35	-1.8	8.63	0.78	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-08-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	964892.
												Northing (Y, ft):	975015.
												Horizontal System:	NAD 1983
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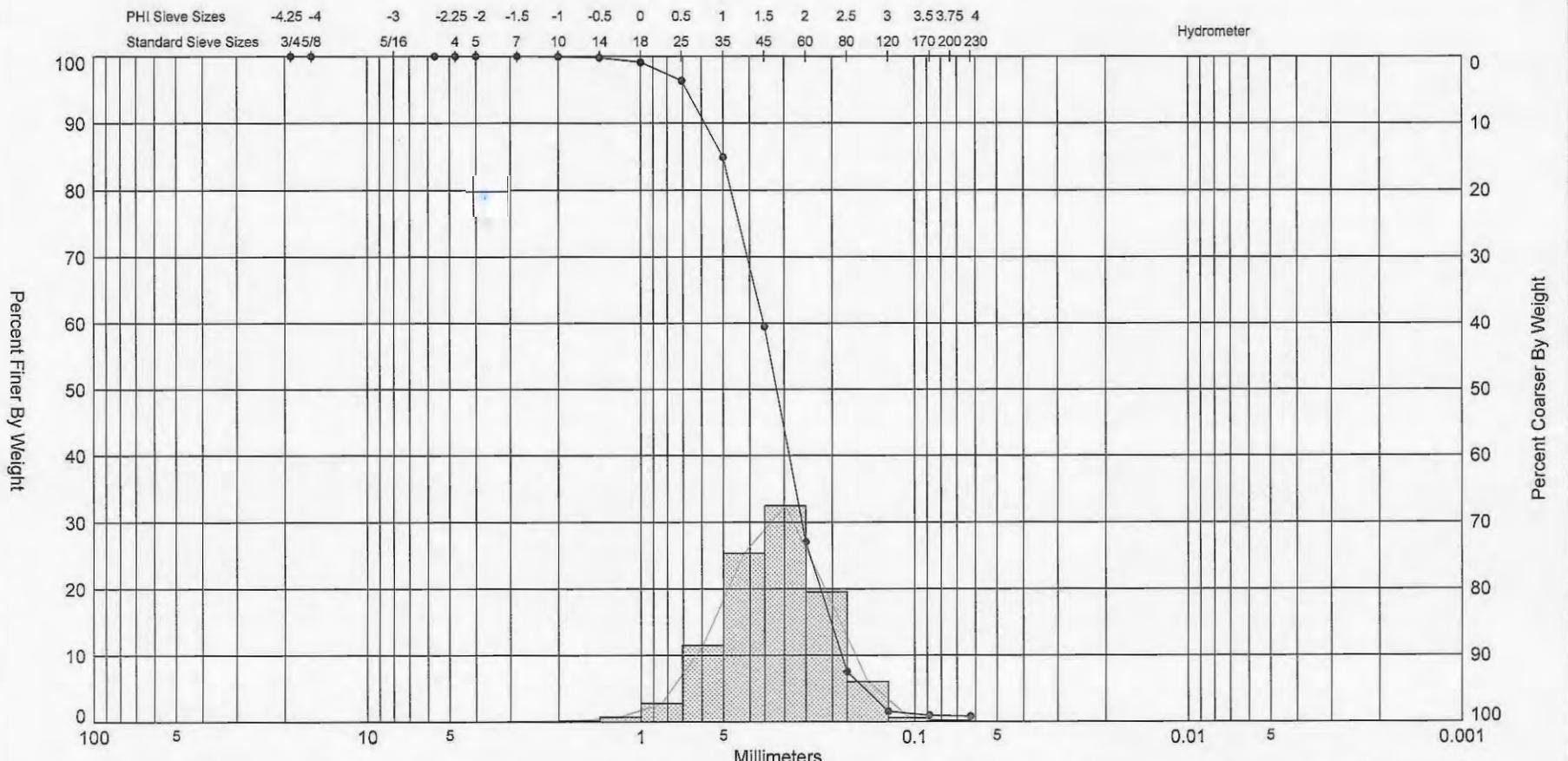
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-13 #S-1	—●—	-56.0	SP	#230 - 1.00			1.49	1.43	-0.58	4.12	0.75	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-12-10
Depths and elevations based on measured values												Analyzed By:	JR
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	965214.
												Northing (Y, ft):	974084.
												Horizontal System:	NAD 1983
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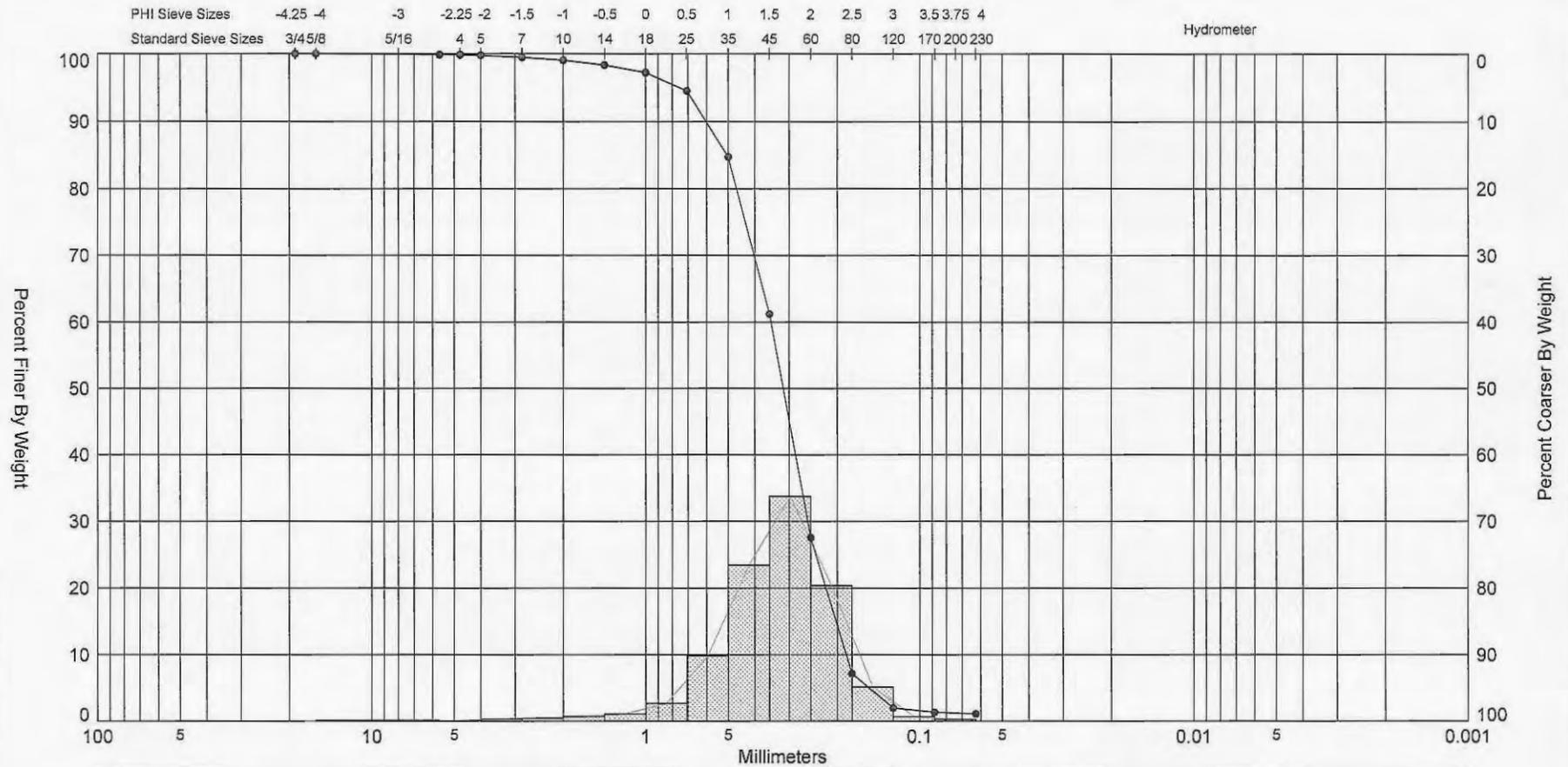
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-13 #S-2 (3')	—○—	-58.0	SP	#230 - 0.75		64.30	1.65	1.62	-0.22	3.44	0.63	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-30-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	965214.
												Northing (Y, ft):	974084.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

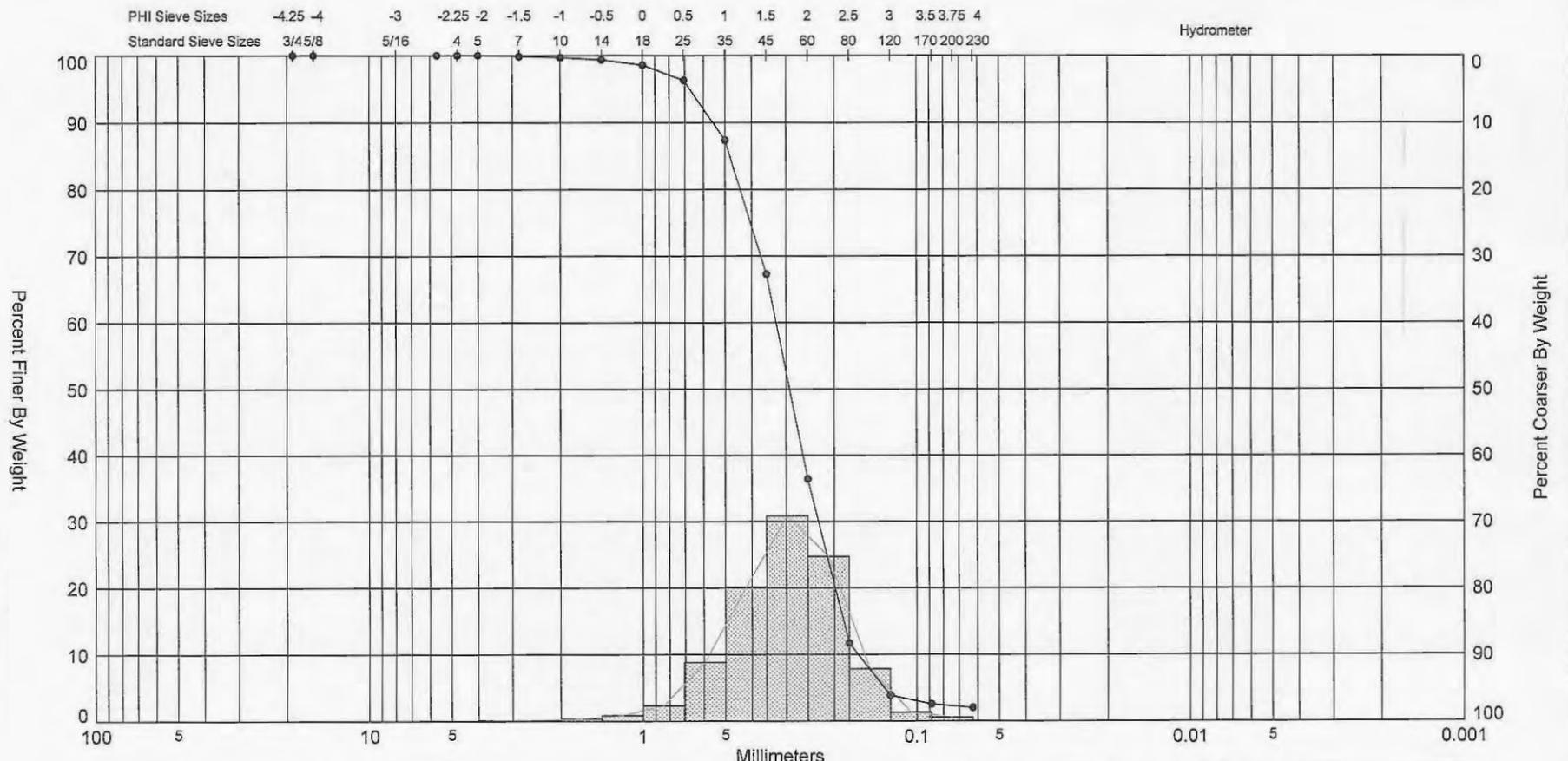
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



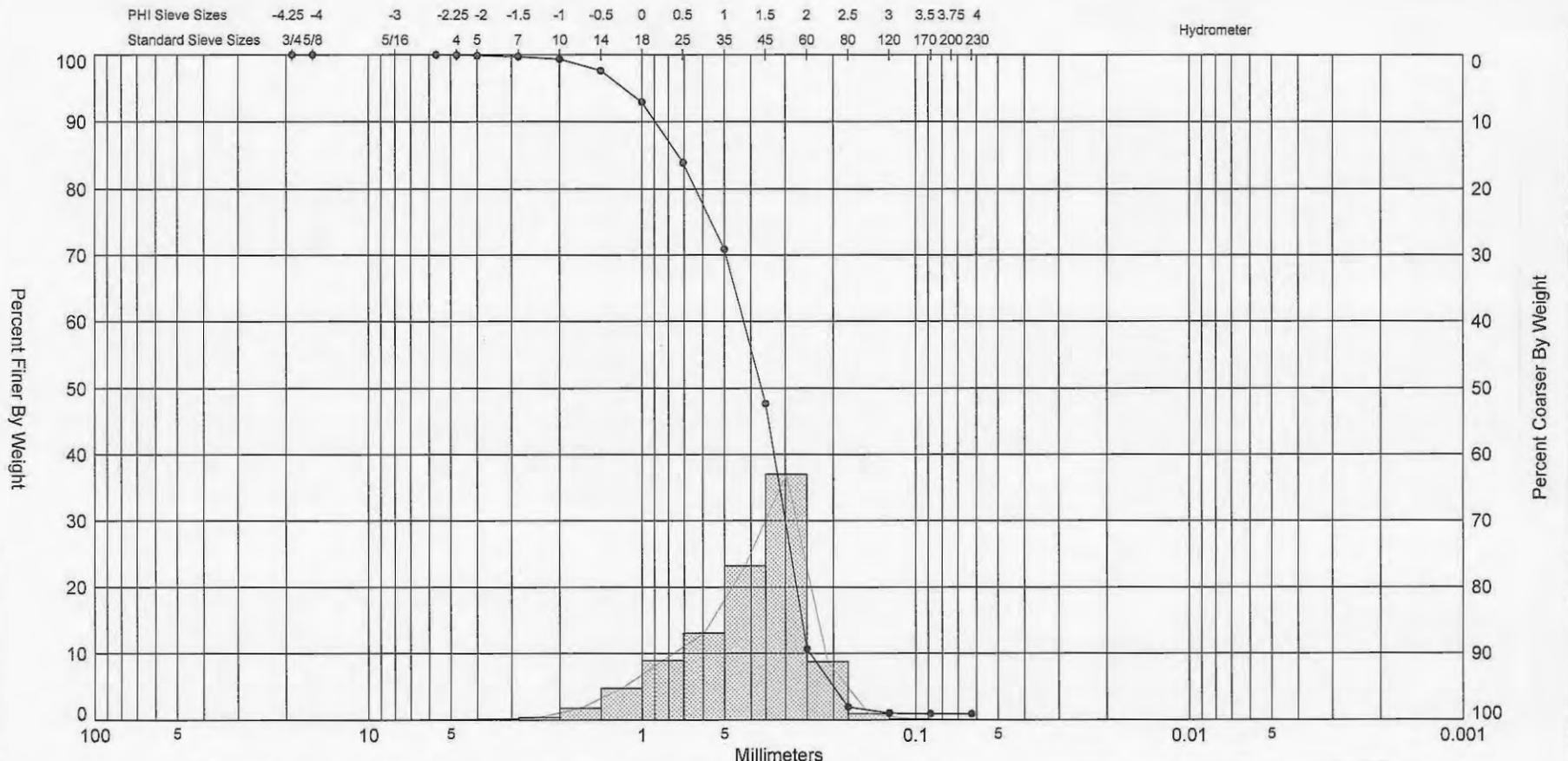
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-13 #S-3 (6')	—●—	-61.0	SP	#230 - 1.06		67.20	1.67	1.59	-1.31	8.18	0.73	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-08-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	965214.
												Northing (Y, ft):	974084.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



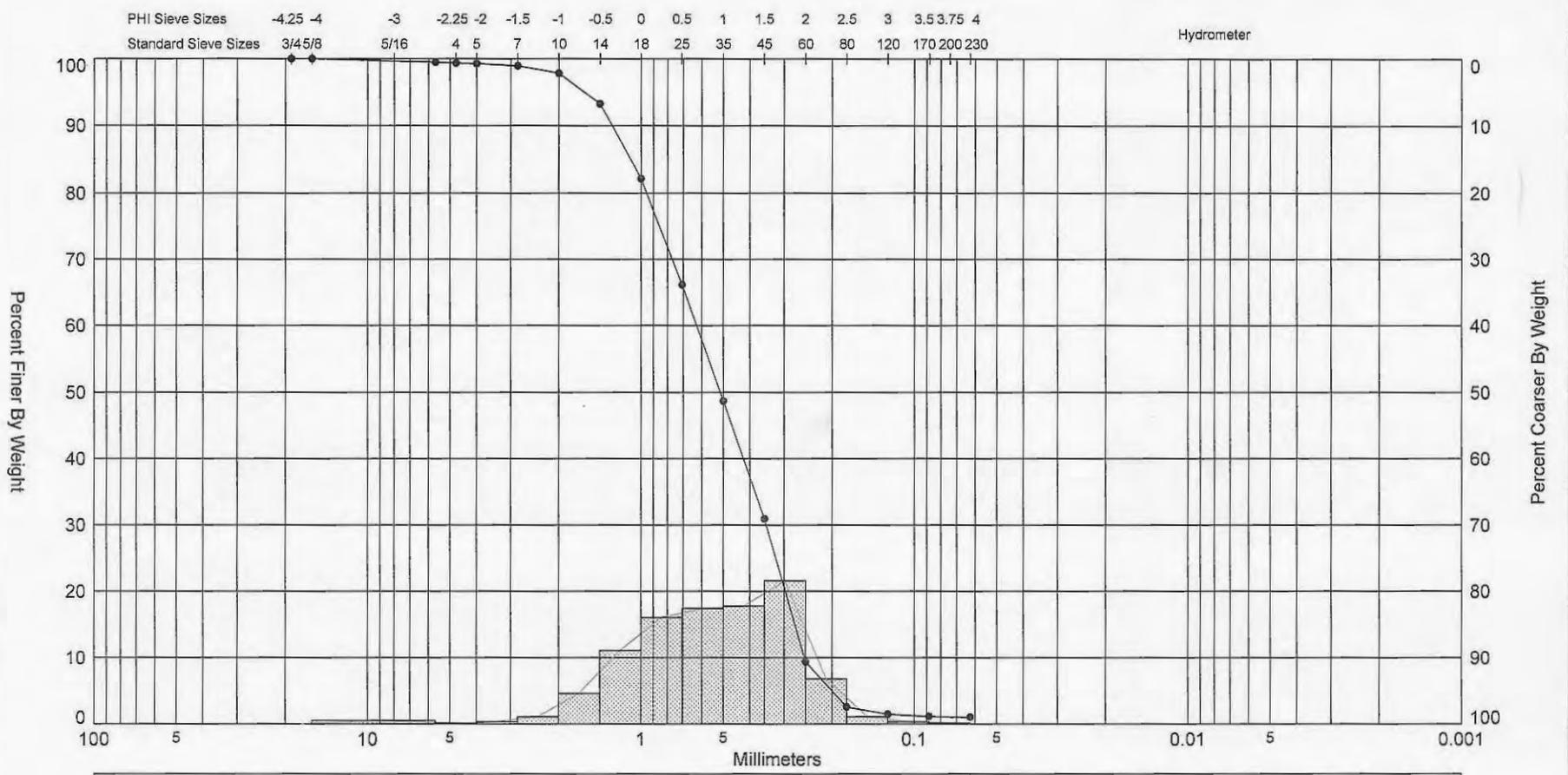
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-15C #S-1 (1')	—●—	-42.6	SP	#230 - 0.88			1.45	1.26	-0.96	4.07	0.75	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-12-10		
Depths and elevations based on measured values												Analyzed By:	JR		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967371.
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														Horizontal System:	NAD 1983
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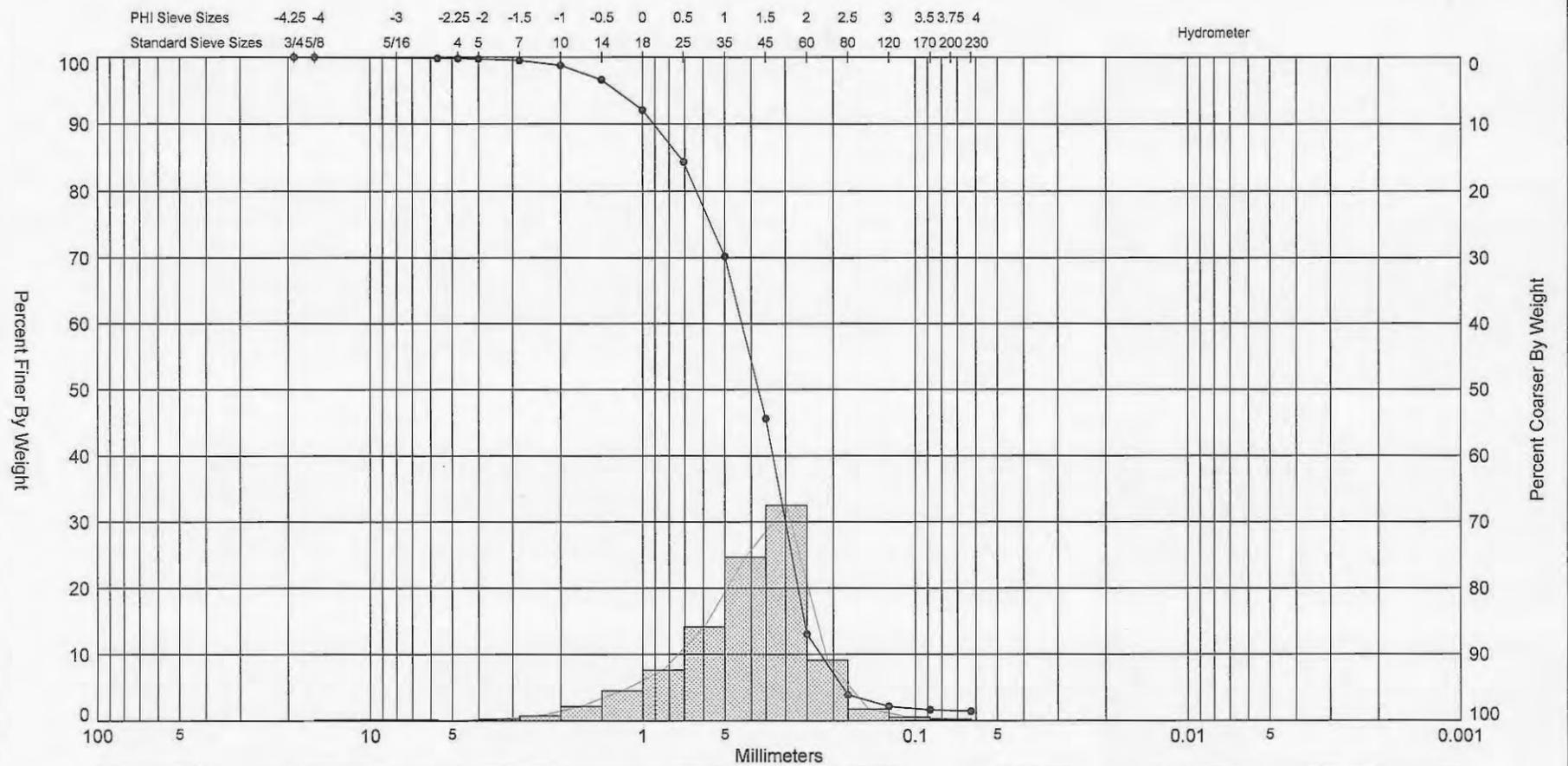
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JJVC-10-15C #S-2 (3')	—●—	-44.6	SW	#230 - 1.01		82.30	0.96	0.88	-0.58	4.02	0.95	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content =>1%												Analysis Date:	11-30-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBROCURE SERVICES												American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967371.
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														Horizontal System:	NAD 1983
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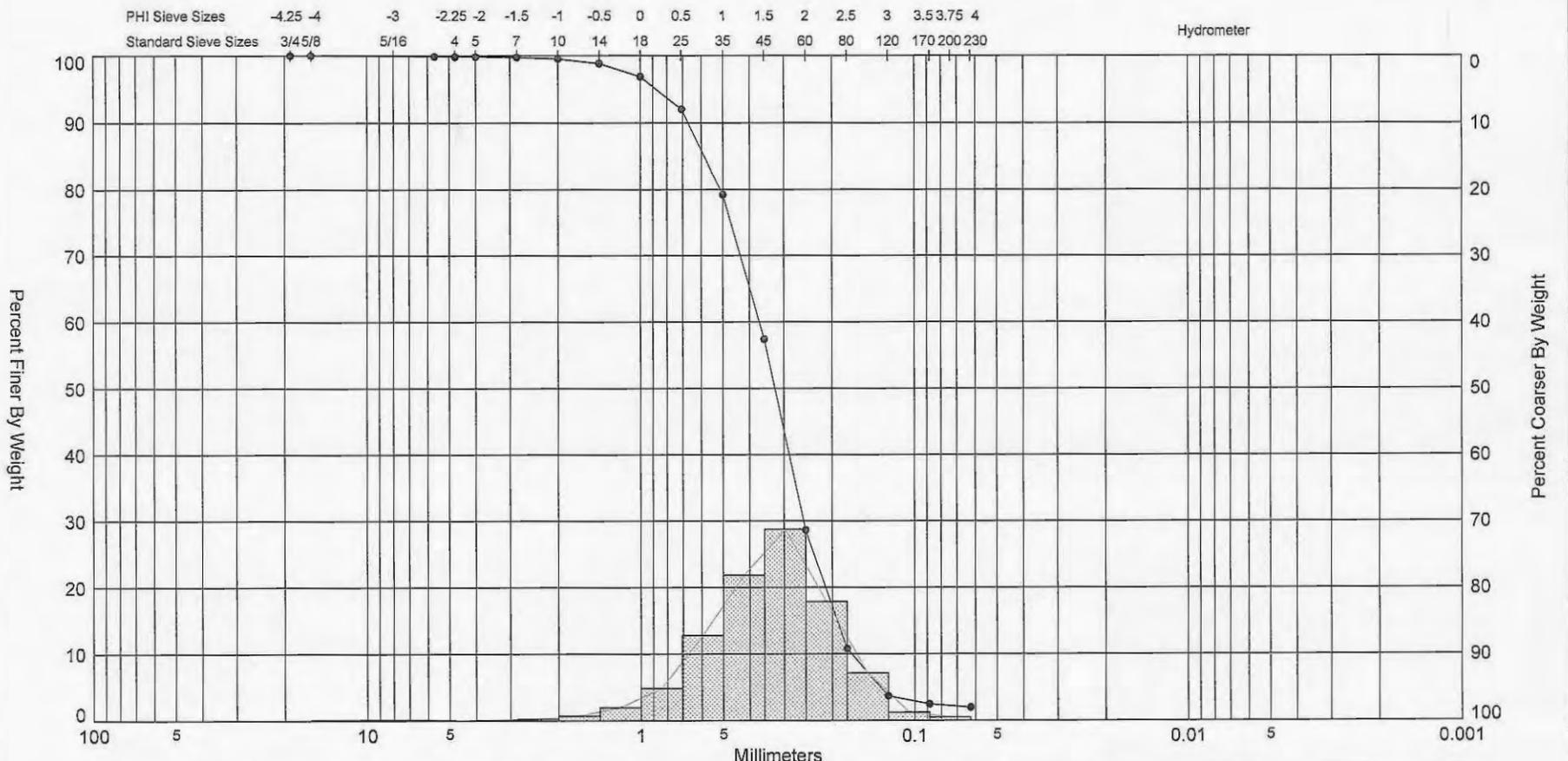
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-15C #S-4 (8')	—●—	-49.6	SP	#230 - 1.40		75.10	1.41	1.25	-0.98	5.34	0.82	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-08-10
Depths and elevations based on measured values												Analyzed By:	JR
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967371.
												Northing (Y, ft):	975179.
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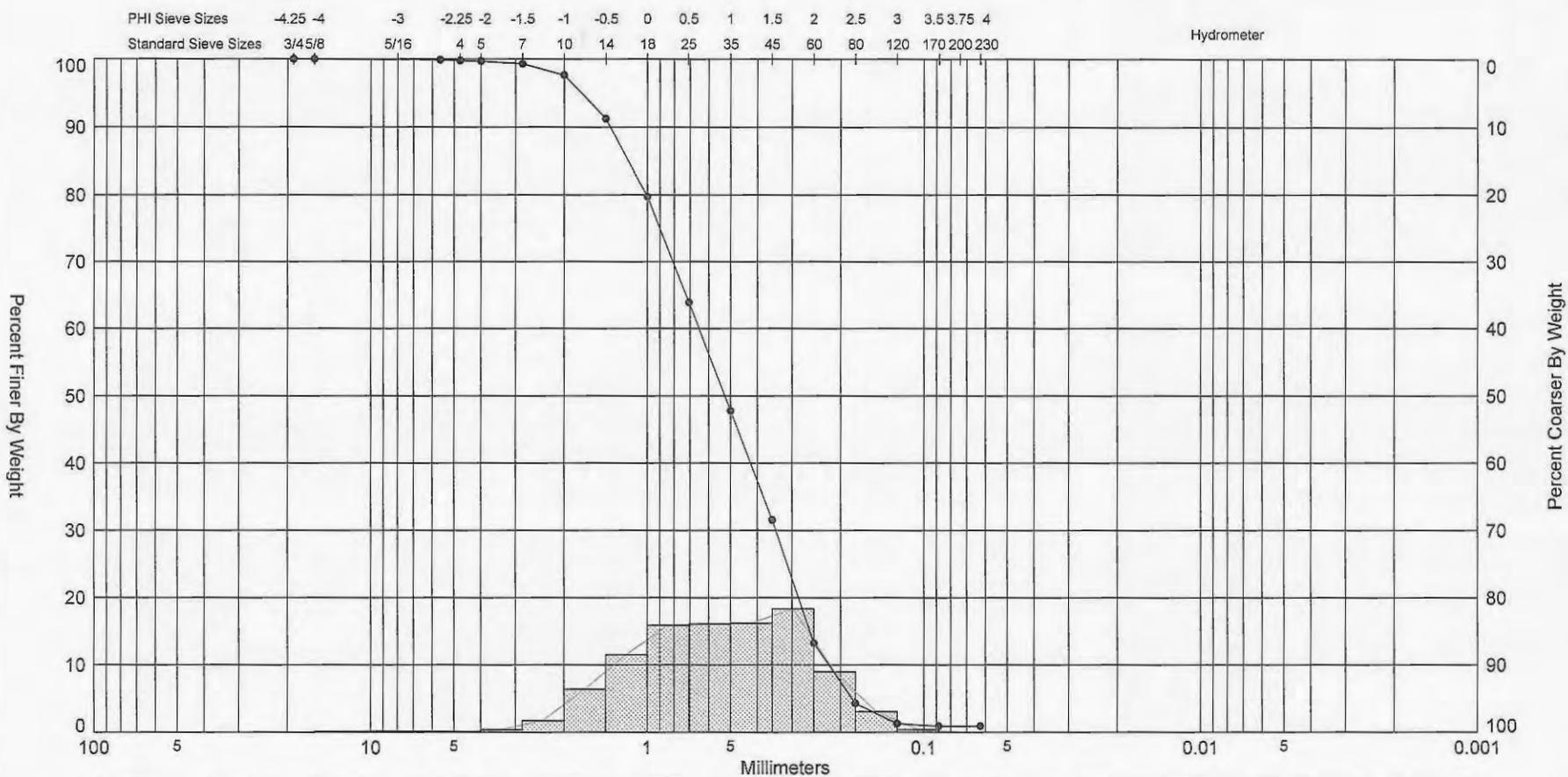
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-17 #S-4 (10')	—●—	-66.3	SP	#230 - 1.97		70.20	1.63	1.55	-0.71	5.52	0.79	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-30-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	965471.
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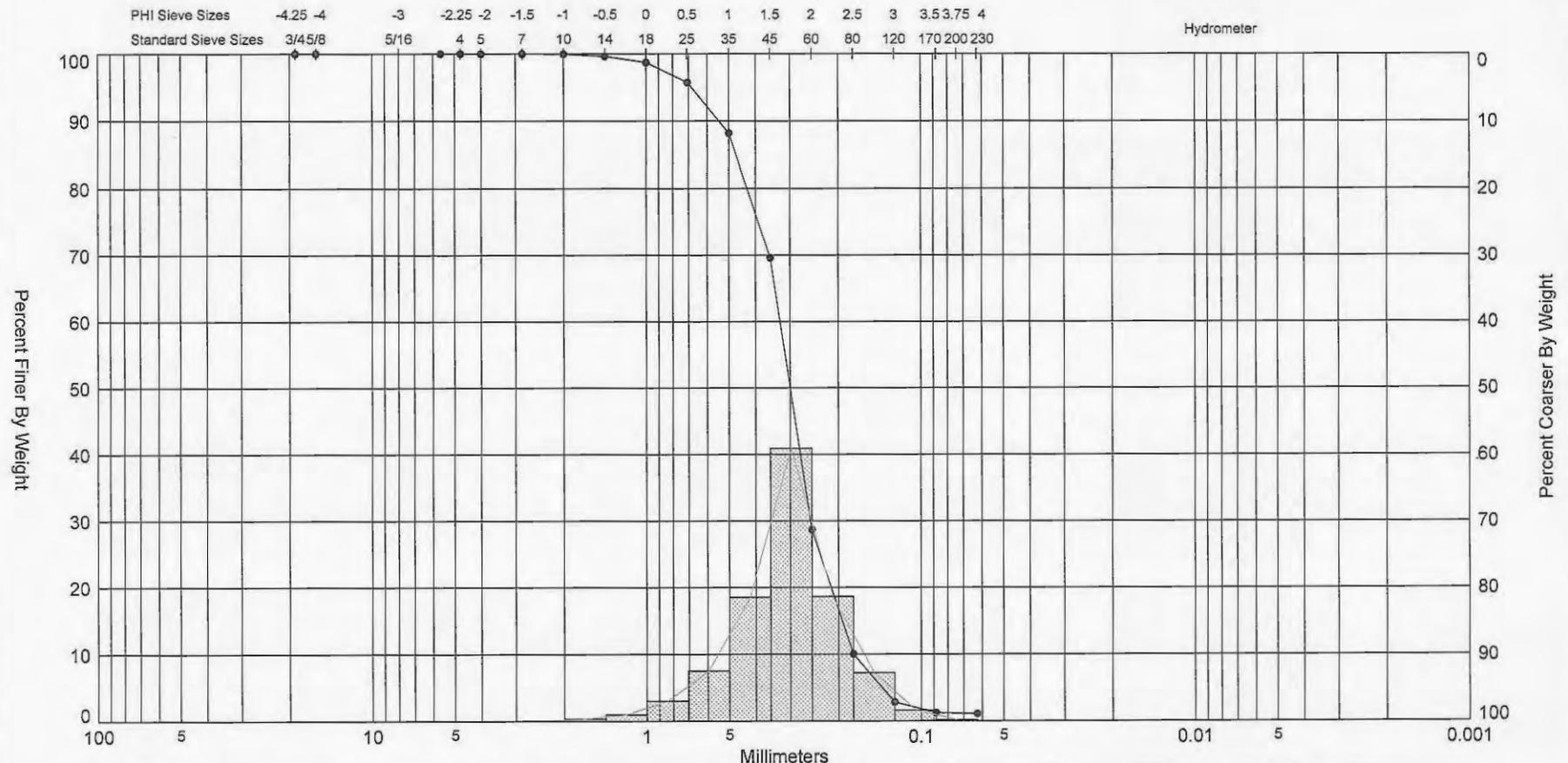
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-20 #S-1 (1')	—●—	-55.8	SW	#230 - 0.89			0.93	0.88	-0.25	2.71	0.99	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	965798.
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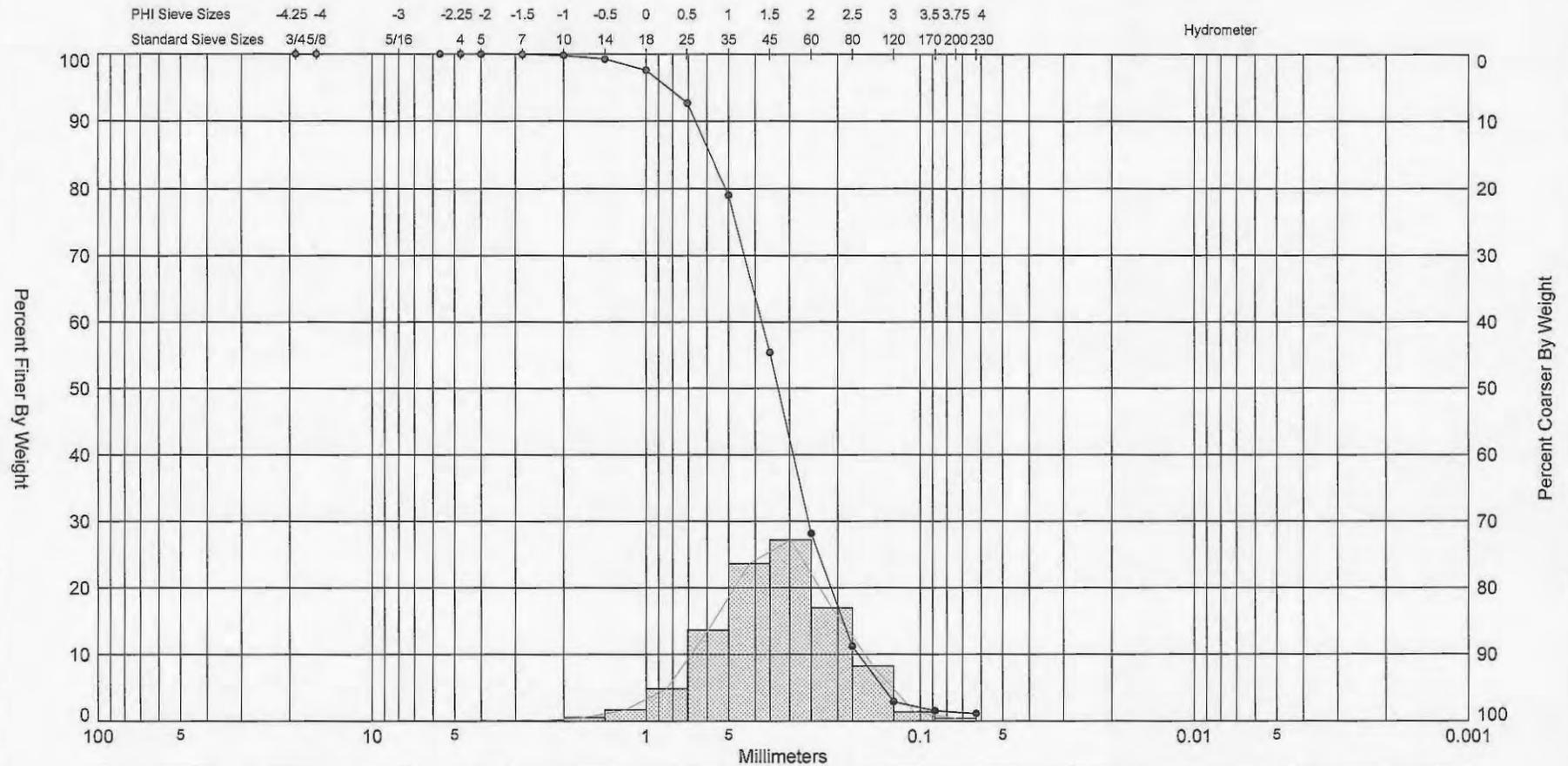
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-20 #S-3 (5')	—●—	-59.8	SP	#230 - 1.04			1.74	1.7	-0.47	4.38	0.64	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
 American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Easting (X, ft):	965798.
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												Horizontal System:	NAD 1983
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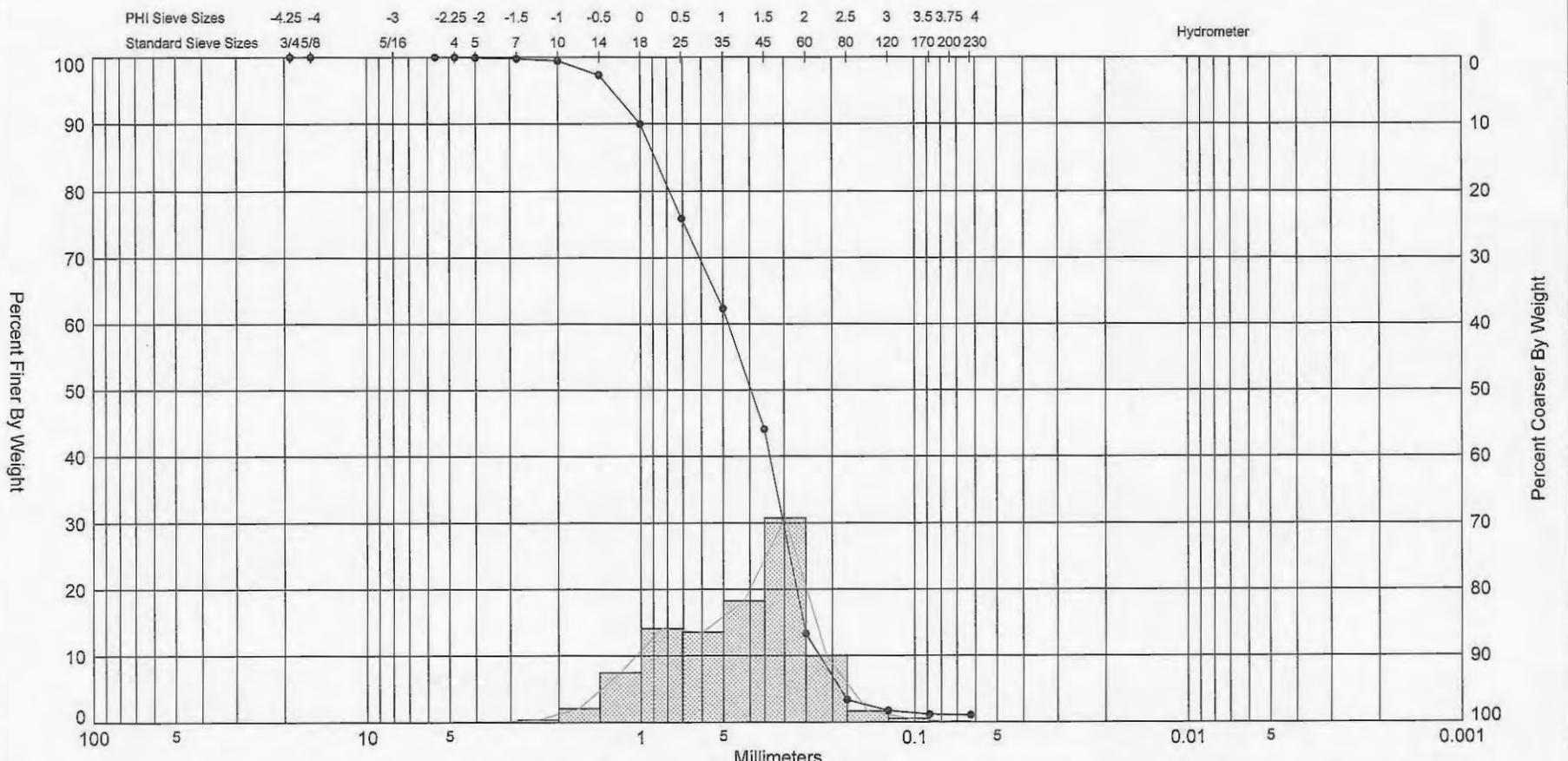
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-20 #S-4 (8')	—●—	-62.8	SP	#230 - 1.13		70.50	1.6	1.56	-0.26	3.48	0.76	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-08-10		
Depths and elevations based on measured values												Analyzed By:	JR		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	965798.
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														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

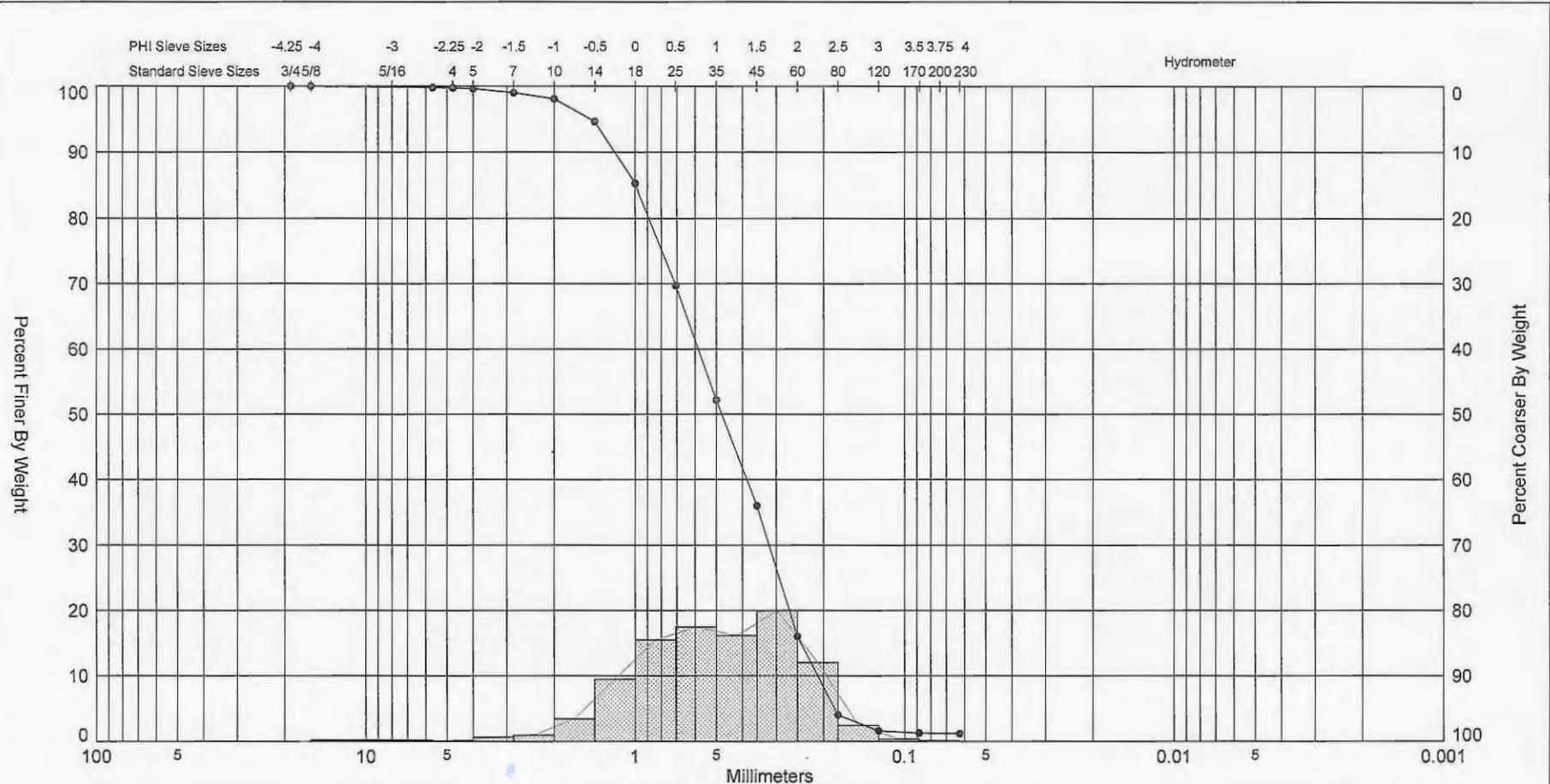
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE, GPJ, FL DEP ROSS, GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-22 #S-1 (1')	—●—	-52.9	SP	#230 - 1.05			1.34	1.16	-0.44	2.82	0.84	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967715.
												Northing (Y, ft):	972800.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

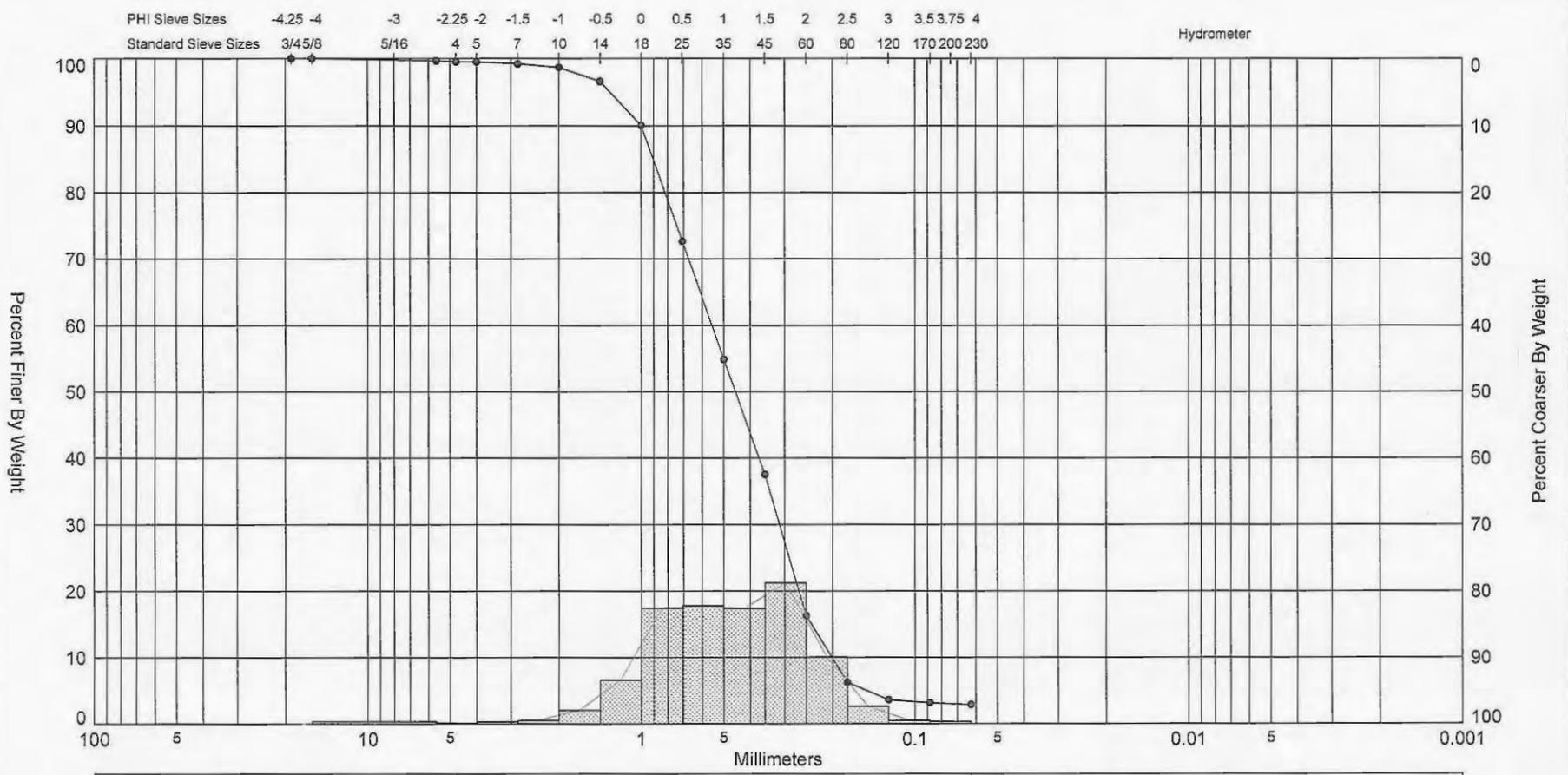
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-22 #S-2 (4')	—●—	-55.9	SW	#230 - 1.15		79.00	1.07	1	-0.45	3.35	0.96	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = >1%												Analysis Date:	11-30-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967715.
														Northing (Y, ft):	972800.
														Horizontal System:	NAD 1983
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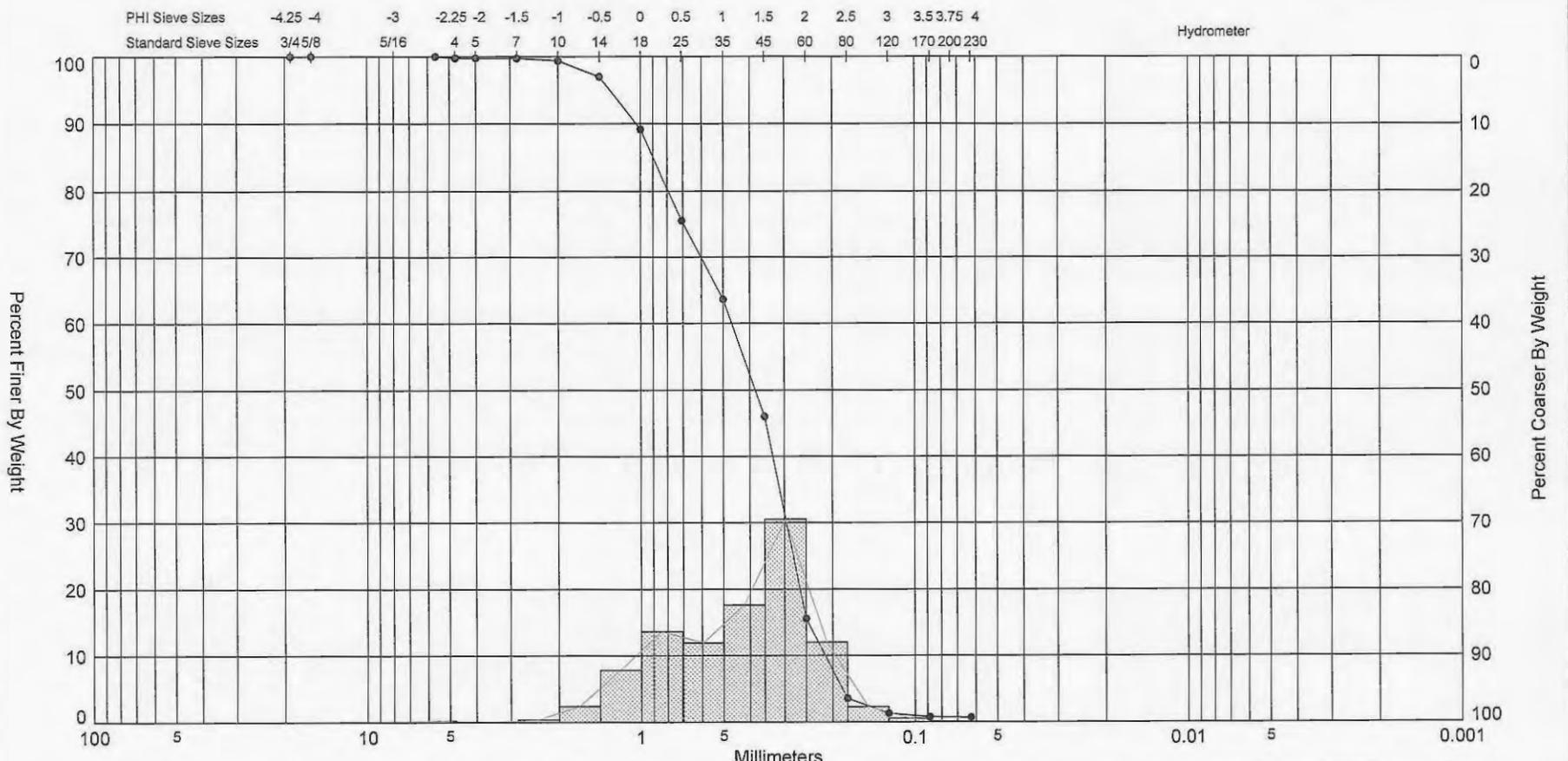
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-22 #S-3 (7')	—●—	-58.9	SW	#230 - 2.89			1.14	1.06	-0.5	4.35	0.91	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content =>1%												Analysis Date:	11-17-10
Depths and elevations based on measured values												Analyzed By:	CA
						American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967715.
												Northing (Y, ft):	972800.
												Horizontal System:	NAD 1983
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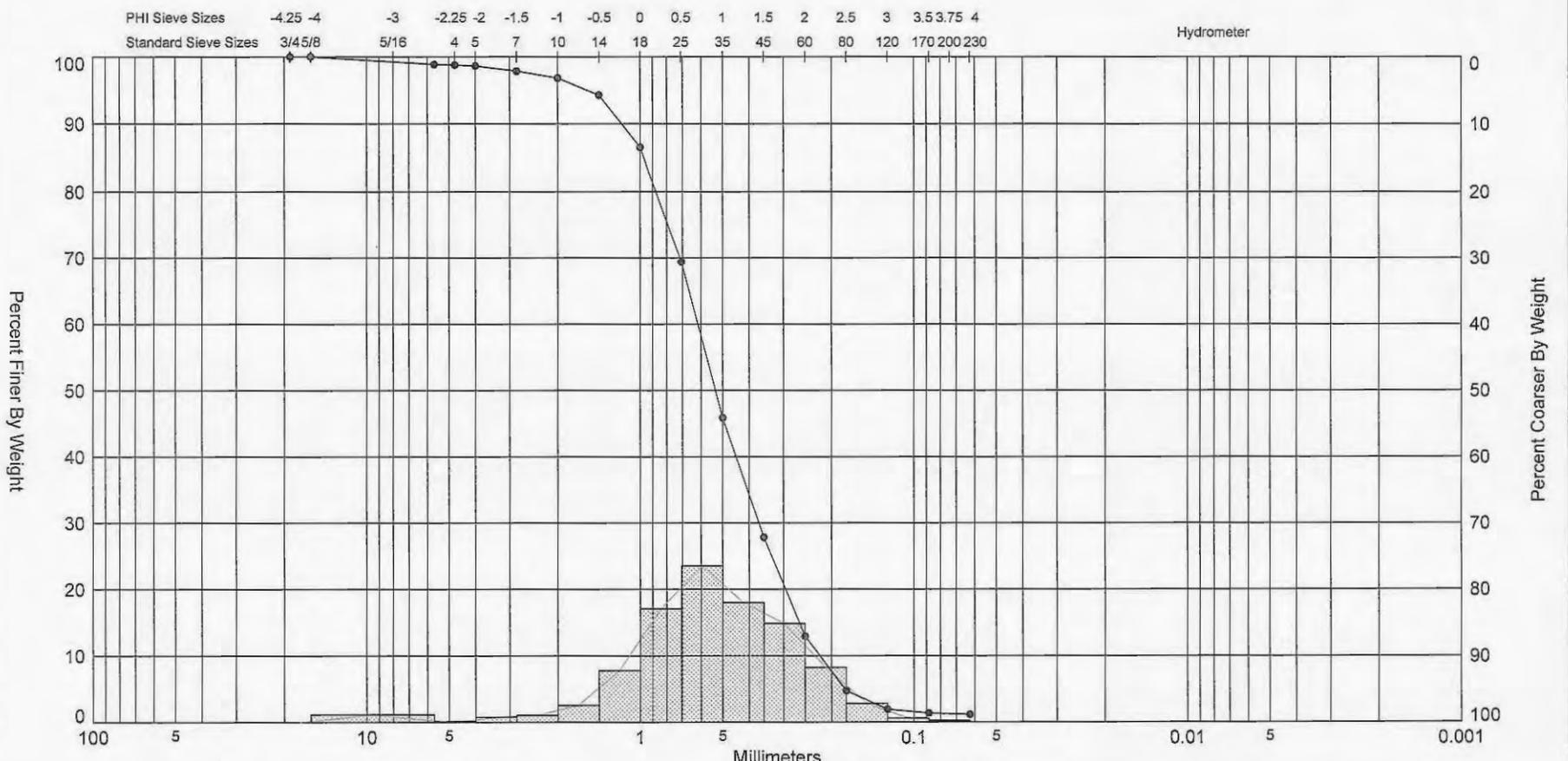
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-26 #S-1 (1')	—●—	-53.6	SW	#230 - 0.67			1.39	1.19	-0.53	2.99	0.88	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-17-10		
Depths and elevations based on measured values												Analyzed By:	CA		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967966.
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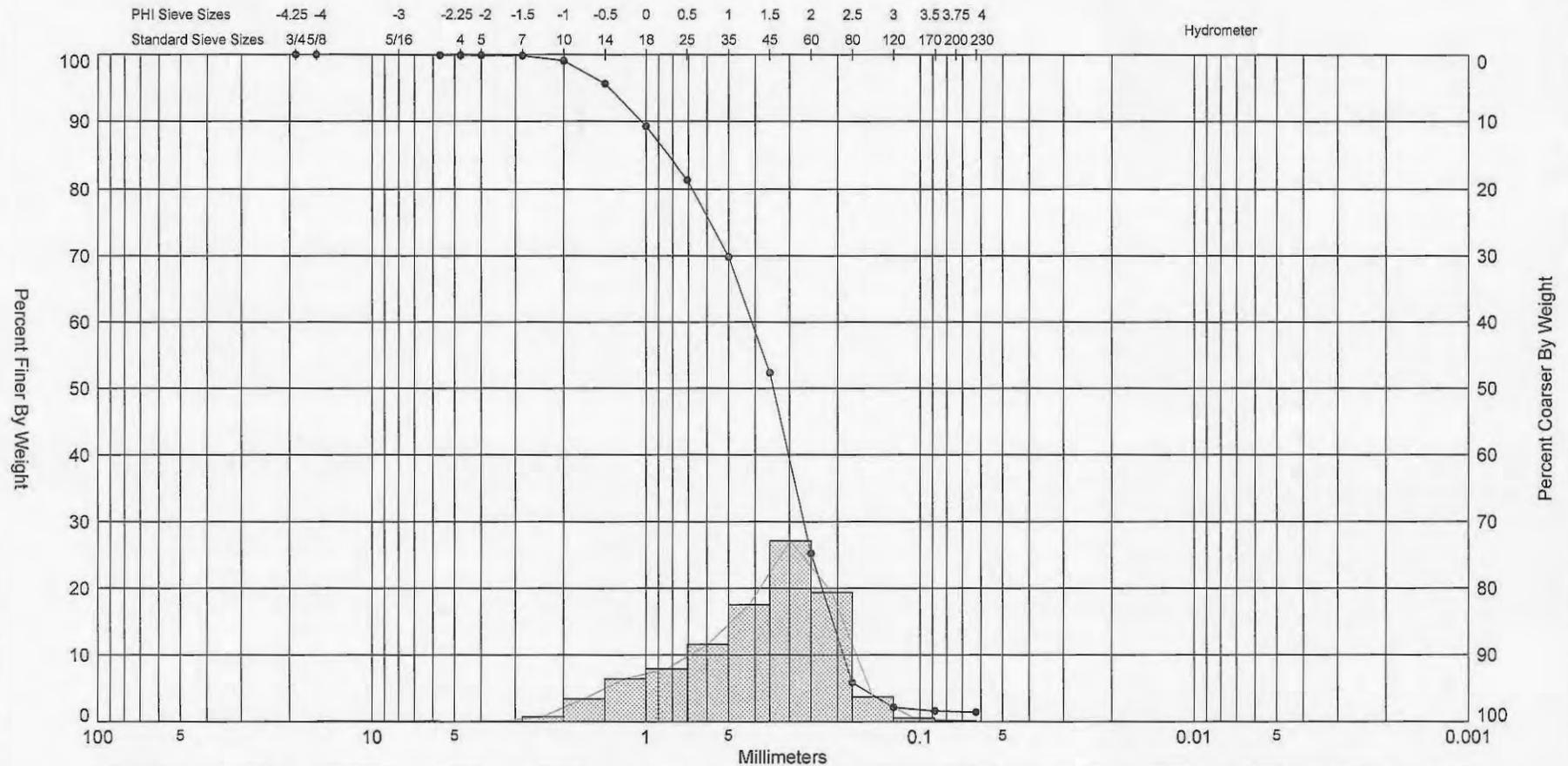
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



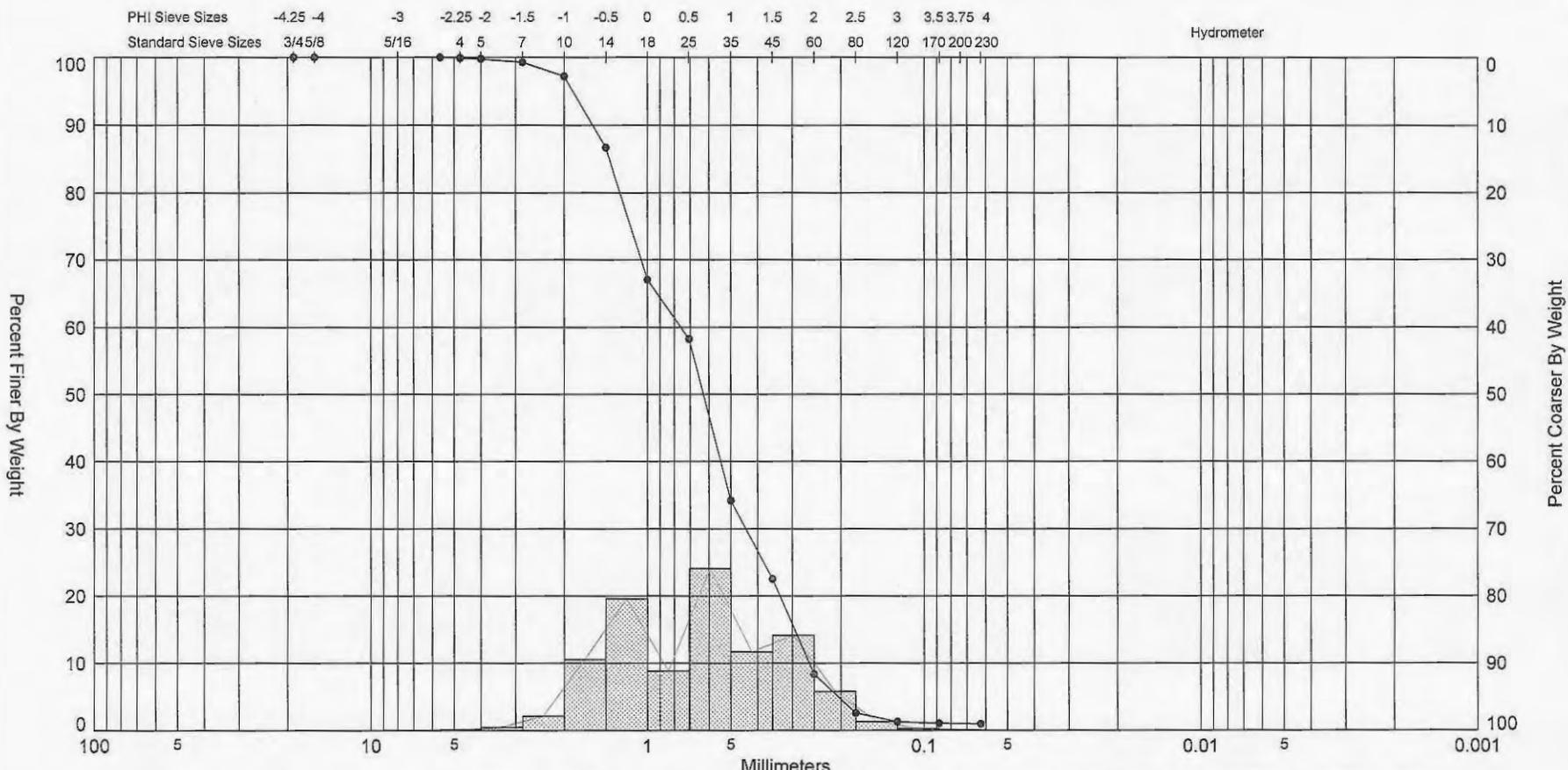
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-26 #S-3 (8')	—●—	-60.6	SW	#230 - 1.12		79.00	0.91	0.9	-0.8	5.54	1	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 3%												Analysis Date:	11-30-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967966.
														Northing (Y, ft):	971857.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



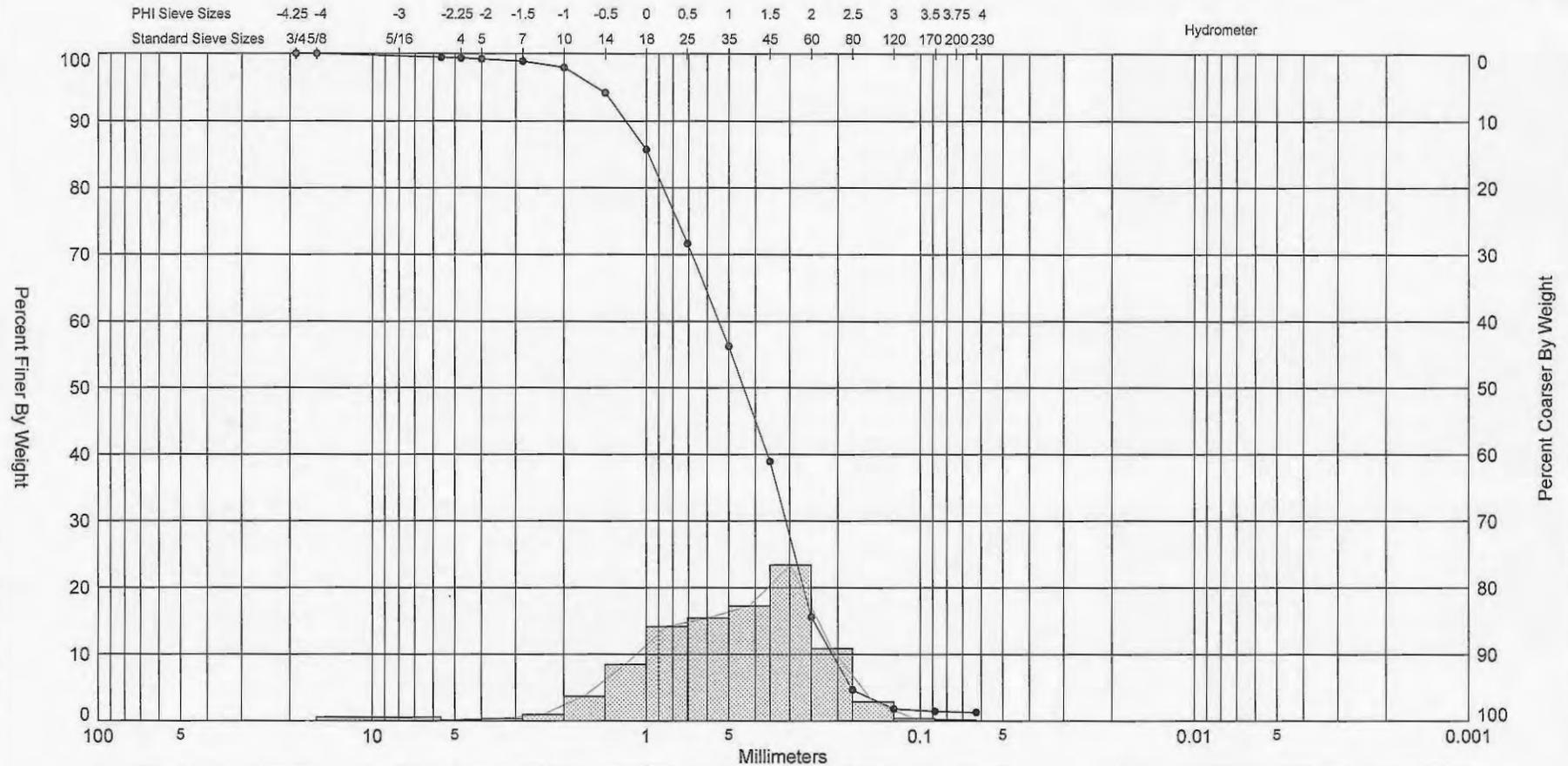
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-29 #S-2 (5')	—●—	-57.0	SW	#230 - 0.94			0.67	0.61	0.05	2.39	0.98	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-16-10		
Depths and elevations based on measured values												Analyzed By:	CA		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	967392.
														Northing (Y, ft):	970634.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

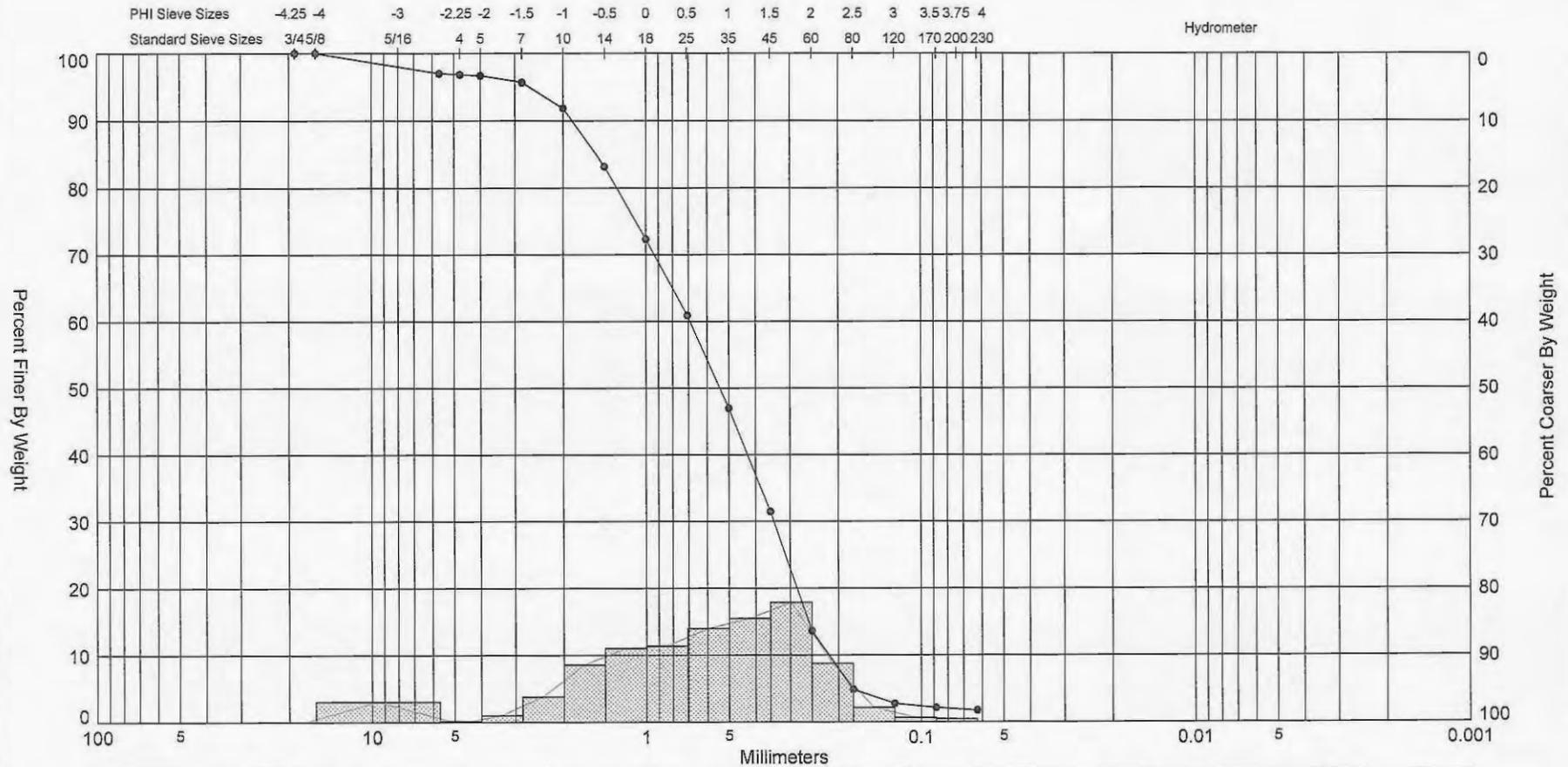
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-29 #S-3 (8')	—●—	-60.0	SW	#230 - 1.31			1.18	1.04	-0.72	4.24	0.99	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
						American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	967392.
												Northing (Y, ft):	970634.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

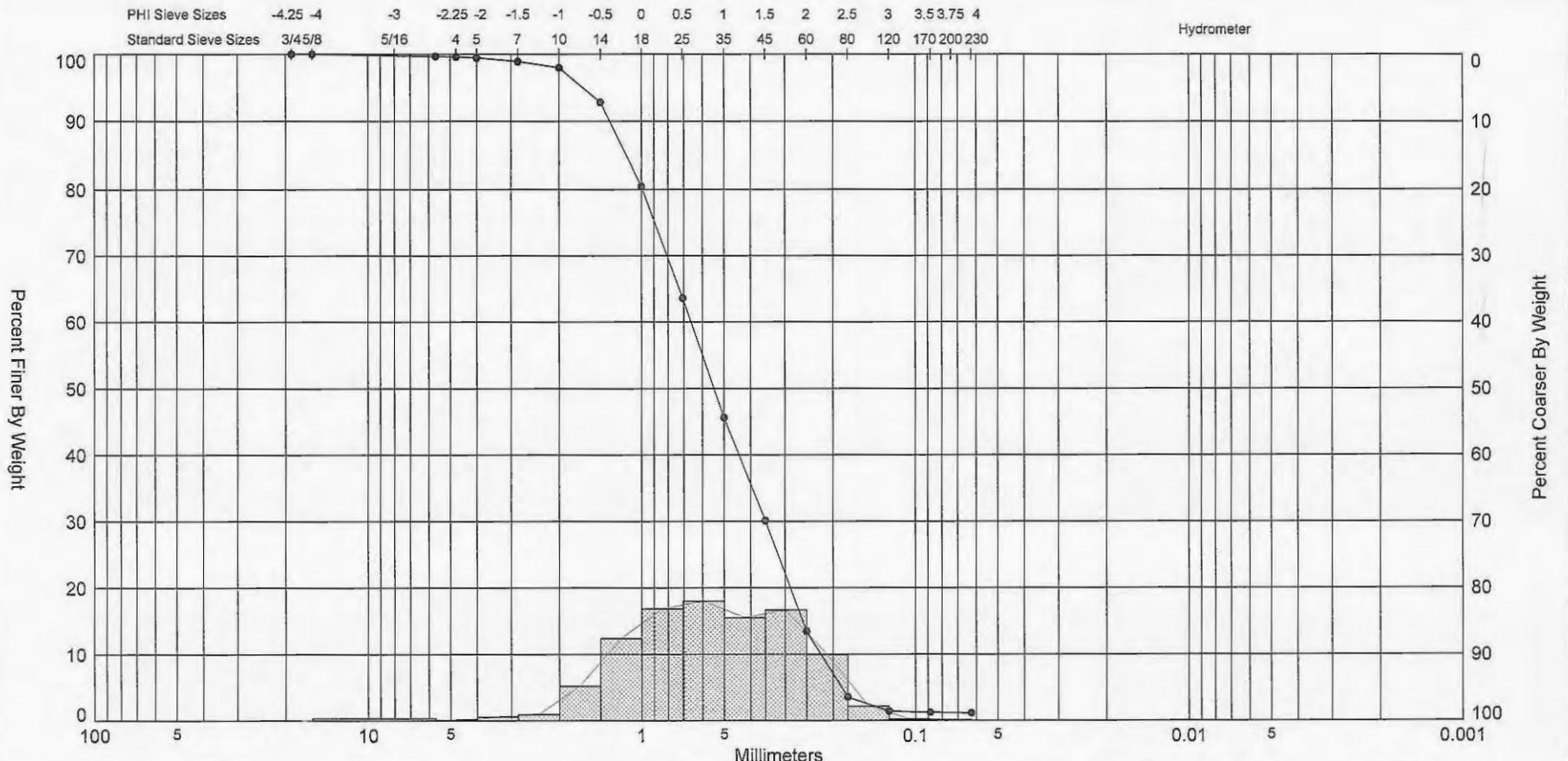
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-29 #S-4 (11')	—●—	-63.0	SW	#230 - 1.72		85.30	0.89	0.68	-0.81	3.93	1.29	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 6%												Analysis Date:	11-09-10
Depths and elevations based on measured values												Analyzed By:	JR
 American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Easting (X, ft):	967392.
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												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

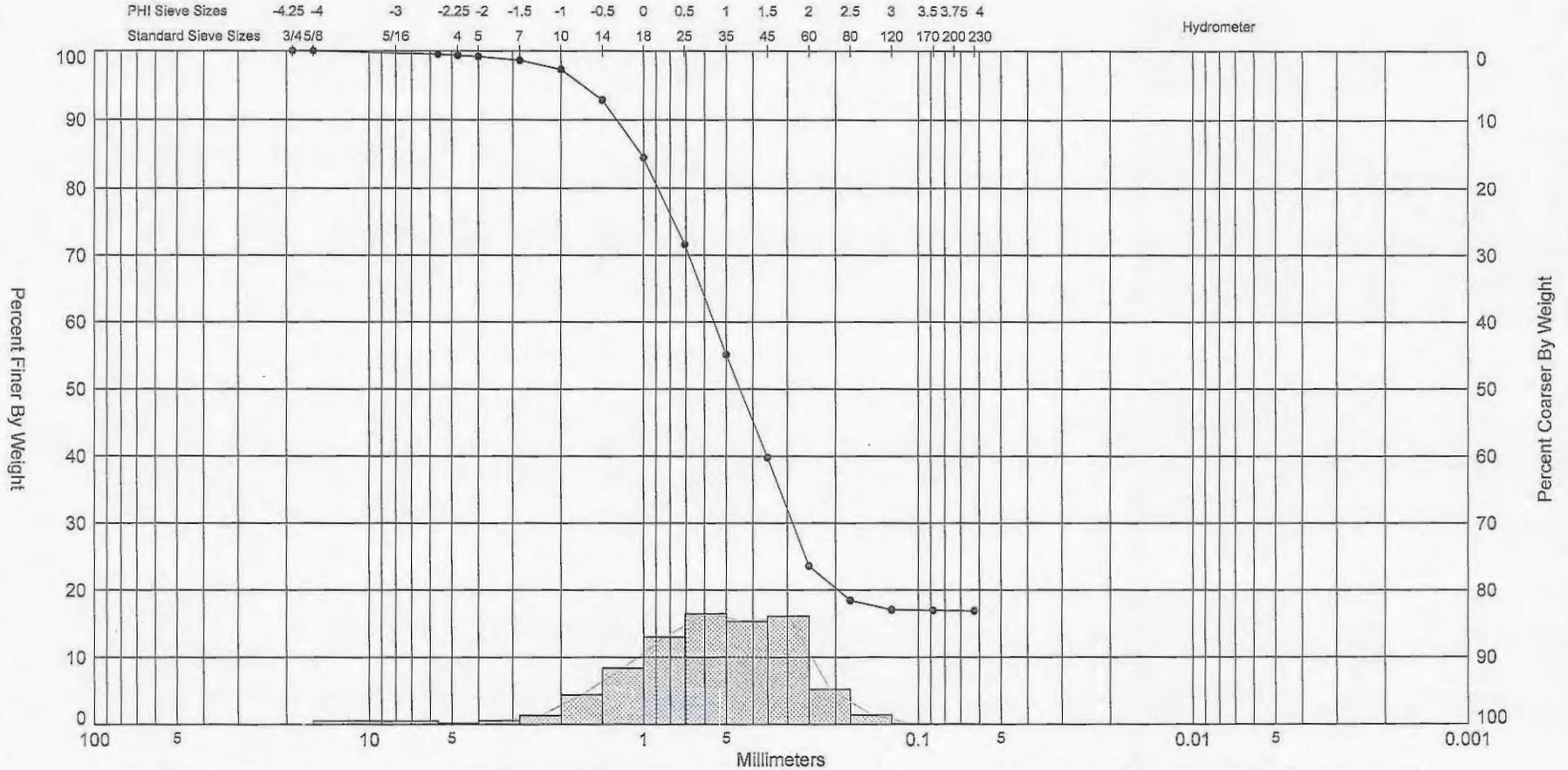
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-30 #S-2 (5')	—●—	-57.2	SW	#230 - 1.12		81.00	0.88	0.86	-0.33	3.3	0.98	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-30-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	968327.
												Northing (Y, ft):	970866.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

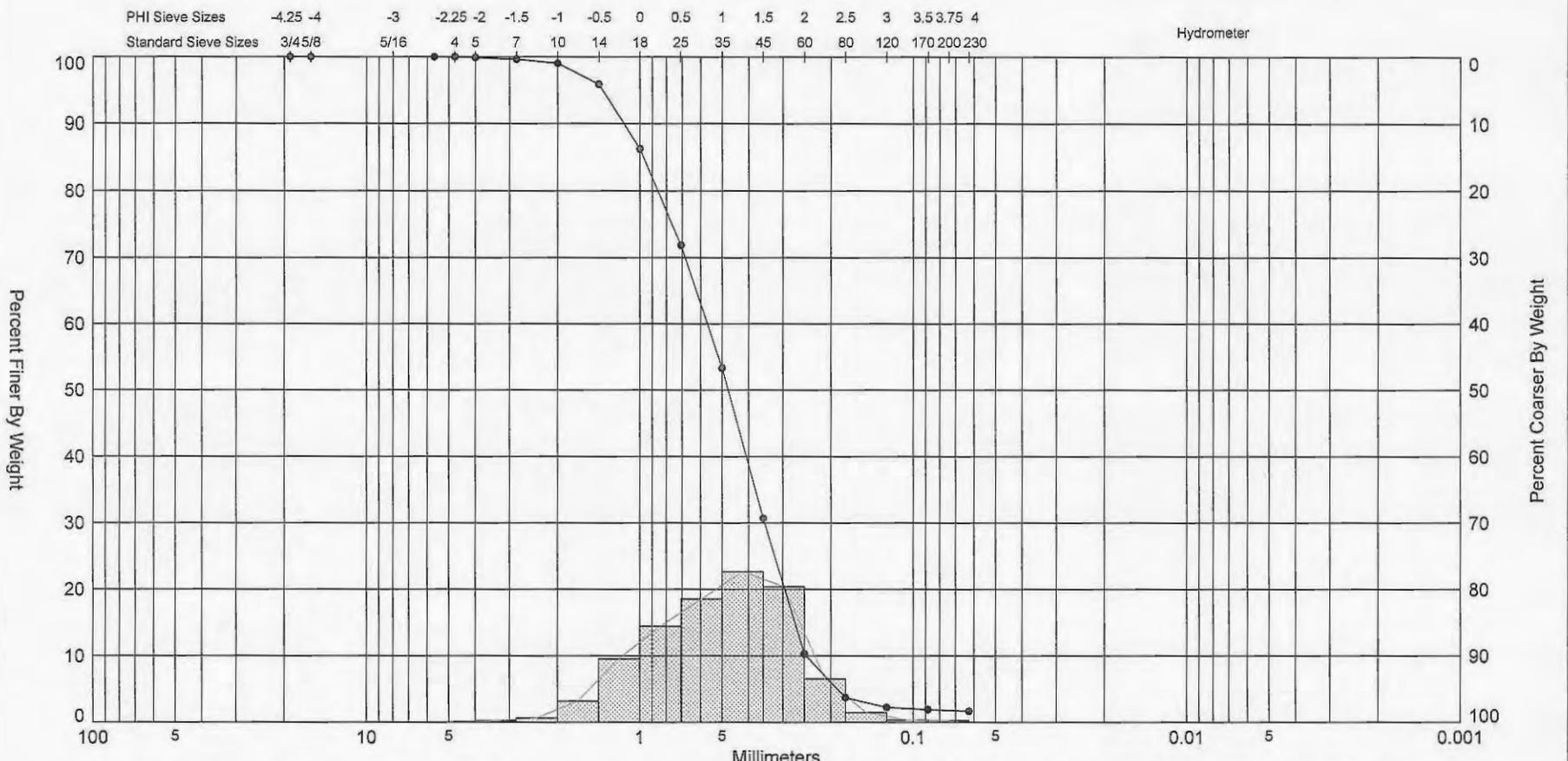
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/30/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-30 #S-3 (9')	—○—	-61.2	SM-SC	#230 - 16.93			1.17	0.83	-0.69	4.19	0.97	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 1%												Analysis Date:	11-18-10
Depths and elevations based on measured values												Analyzed By:	CA
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	968327.
												Northing (Y, ft):	970866.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

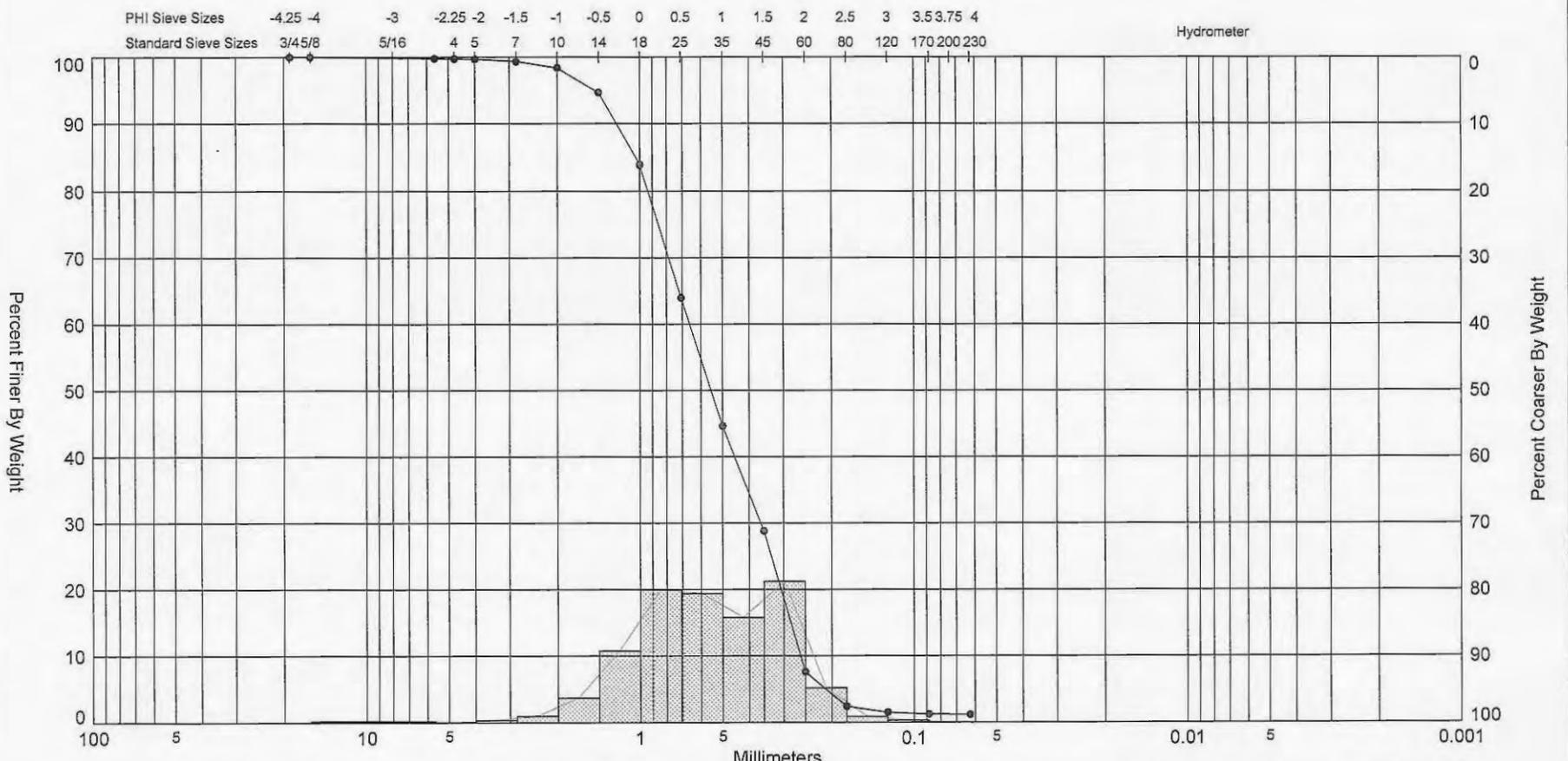
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-30 #S-4 (12')	—●—	-64.2	SP	#230 - 1.67		78.50	1.07	0.98	-0.24	3.03	0.85	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-09-10
Depths and elevations based on measured values												Analyzed By:	JR
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	968327.
												Northing (Y, ft):	970866.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

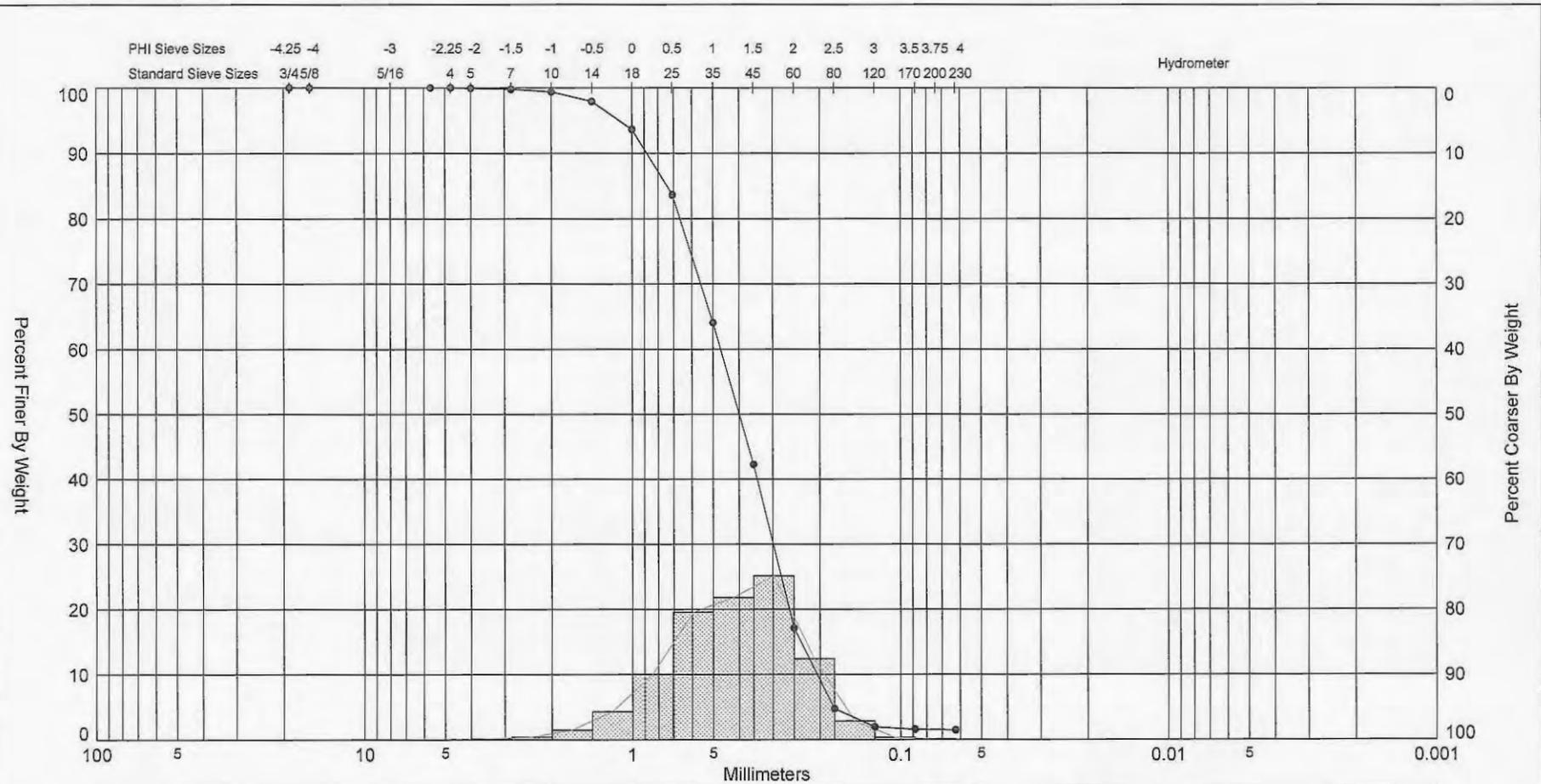
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE, GPJ, FL DEP ROSS, GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-36 #S-1 (1')	—●—	-54.2	SW	#230 - 1.16			0.86	0.85	-0.33	3.48	0.88	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content =>1%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	968367.
												Northing (Y, ft):	974066.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

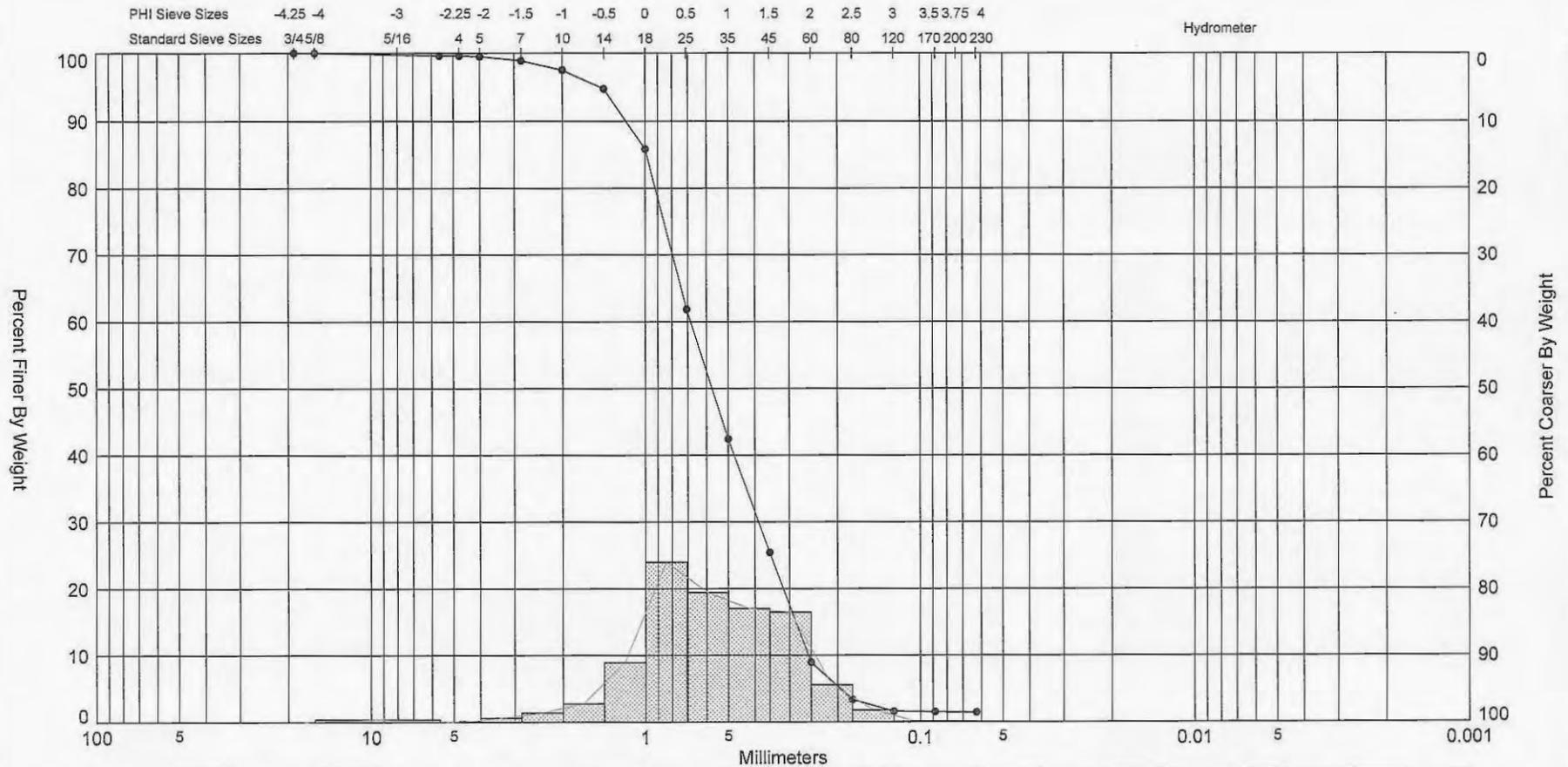
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-36 #S-2 (3')	—●—	-56.2	SP	#230 - 1.45		73.10	1.32	1.24	-0.43	3.34	0.79	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-30-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBROCORE SERVICES												American Vibrocore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	968367.
														Northing (Y, ft):	974066.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

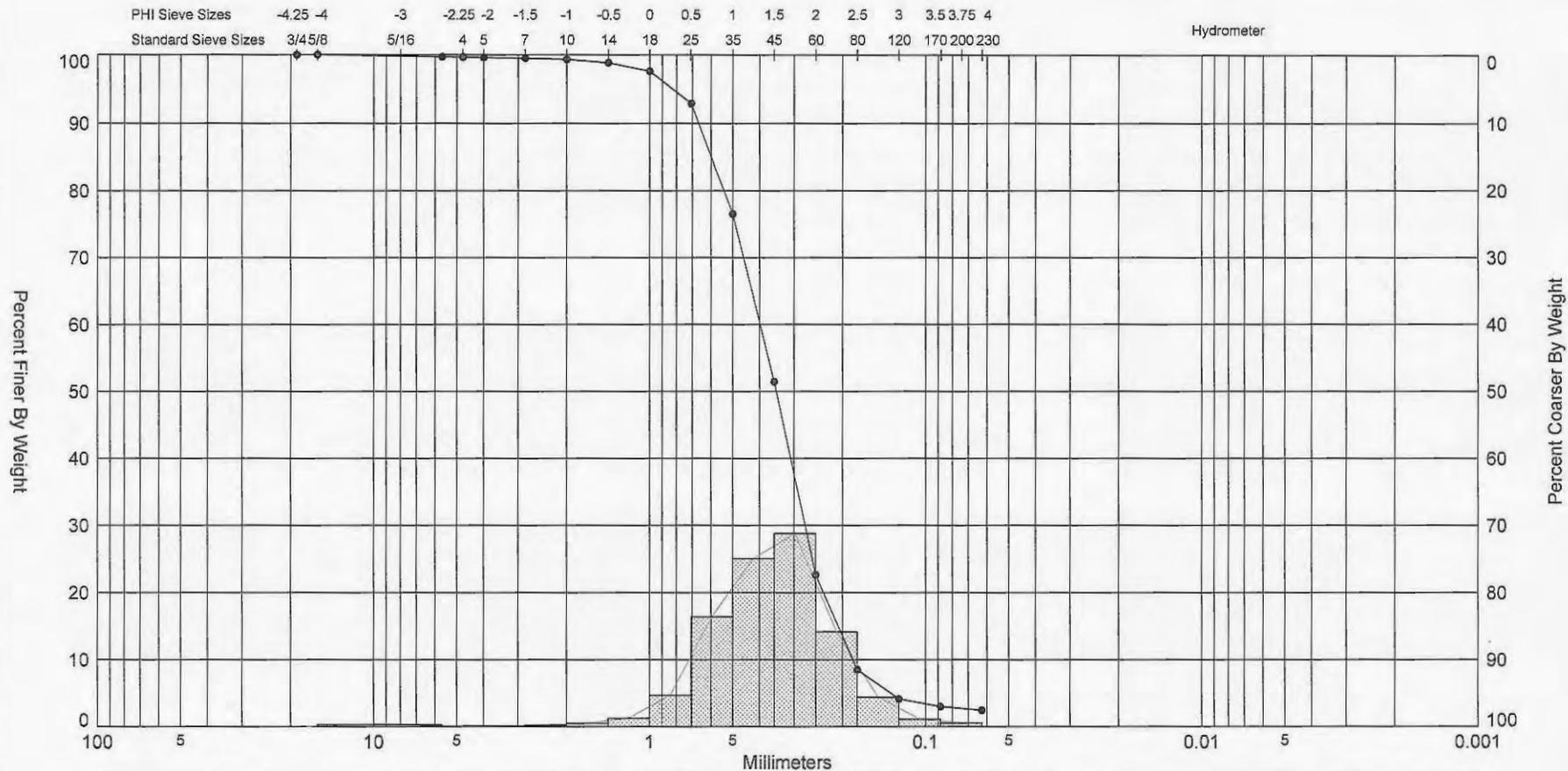
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-36 #S-3 (5')	—●—	-58.2	SW	#230 - 1.43			0.8	0.81	-0.42	4.23	0.89	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-16-10
Depths and elevations based on measured values												Analyzed By:	CA
												Easting (X, ft):	968367.
												Northing (Y, ft):	974066.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444													

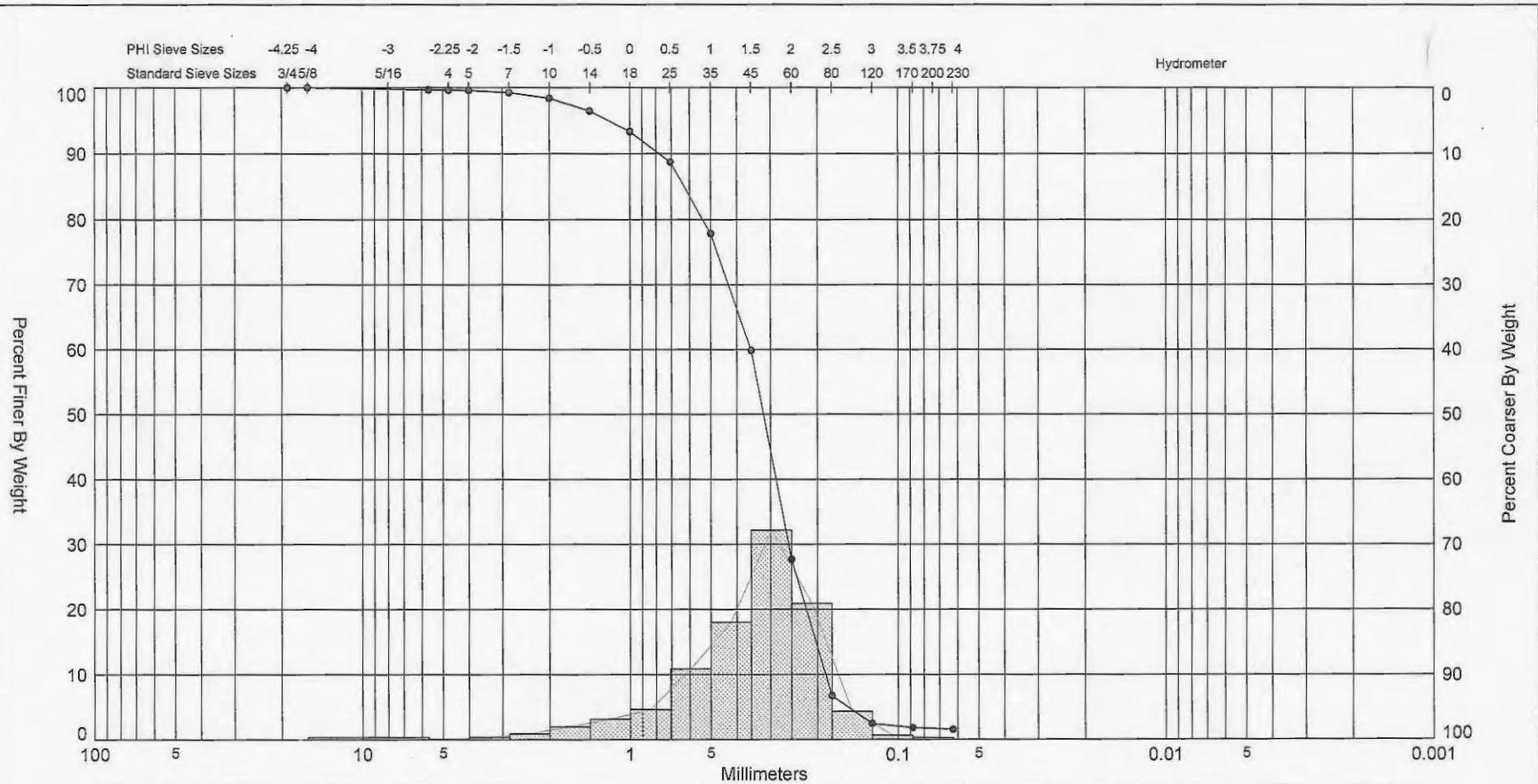
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-36 #S-4 (7')	—○—	-60.2	SP	#230 - 2.44		68.40	1.52	1.46	-0.88	7.84	0.77	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content => >1%												Analysis Date:	11-09-10		
Depths and elevations based on measured values												Analyzed By:	JR		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	968367.
														Northing (Y, ft):	974066.
														Horizontal System:	NAD 1983
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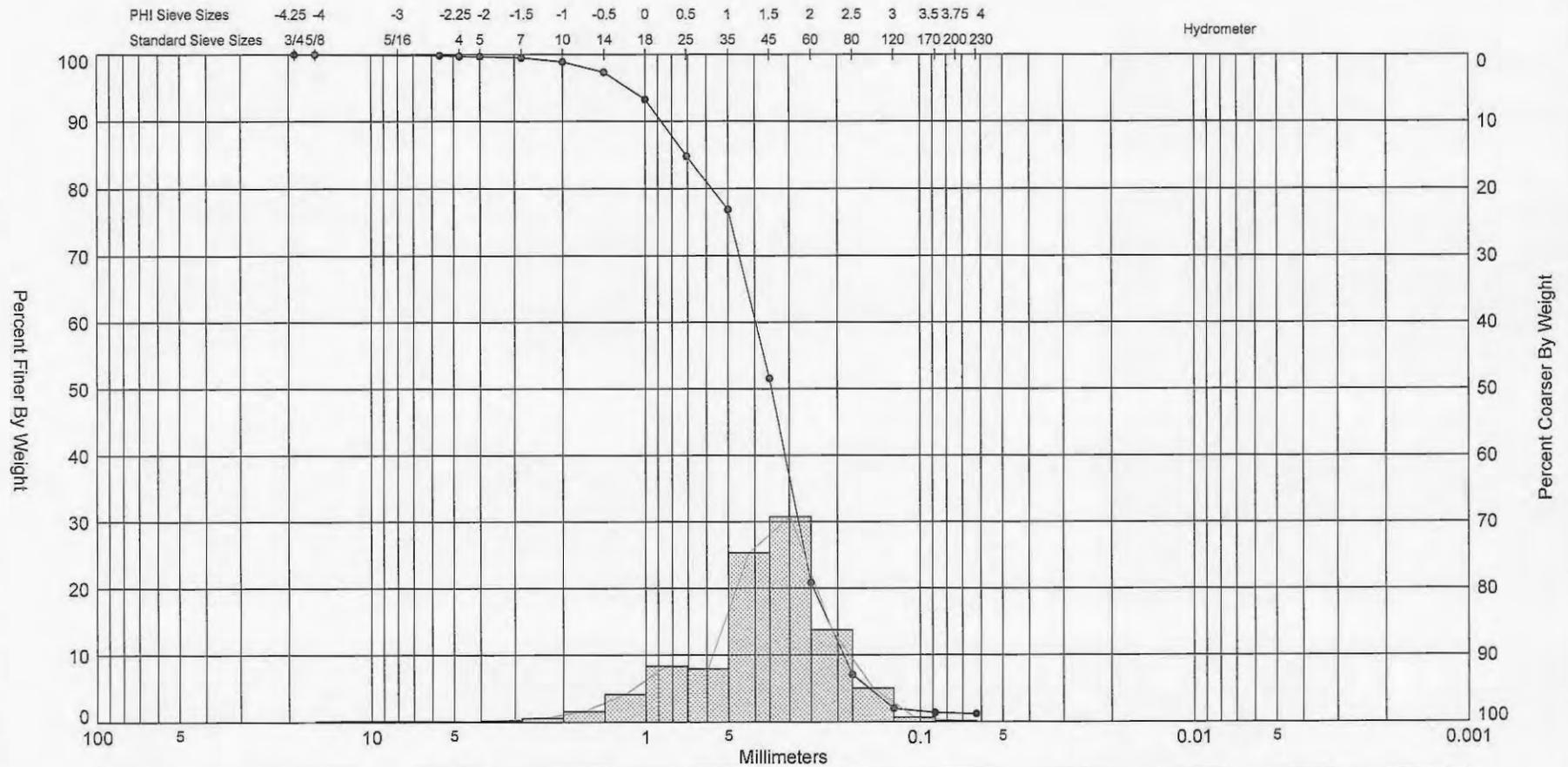
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-50 #S-3 (7')	—●—	-53.4	SW	#230 - 1.53		68.90	1.65	1.47	-1.36	6.47	0.88	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-09-10
Depths and elevations based on measured values												Analyzed By:	JR
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	968726.
												Northing (Y, ft):	978358.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

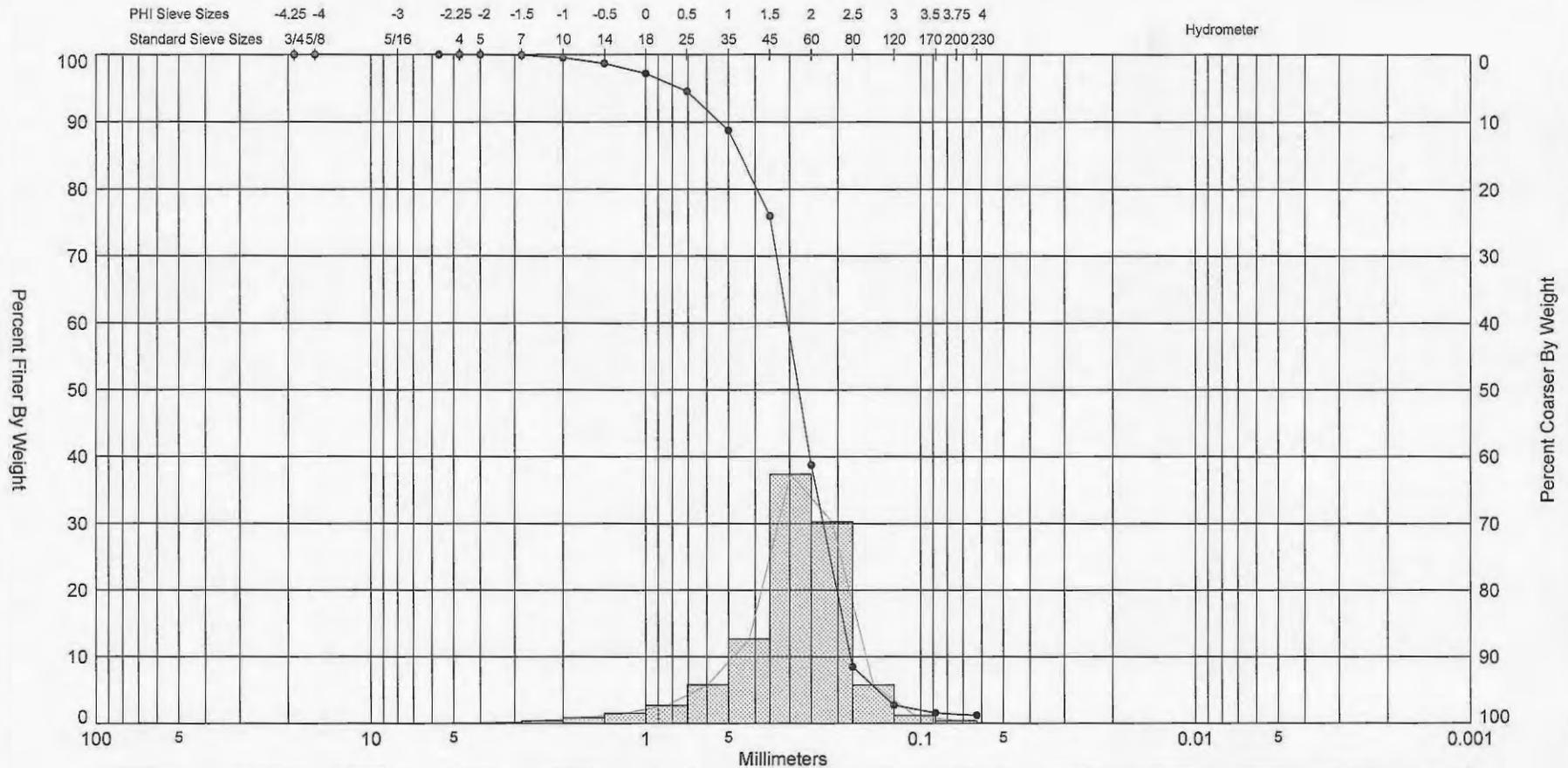
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-50 #S-4 (10')	—●—	-56.4	SP	#230 - 1.18			1.53	1.39	-0.97	5.2	0.85	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content =>1%												Analysis Date:	11-17-10
Depths and elevations based on measured values												Analyzed By:	CA
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	968726.
												Northing (Y, ft):	978358.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

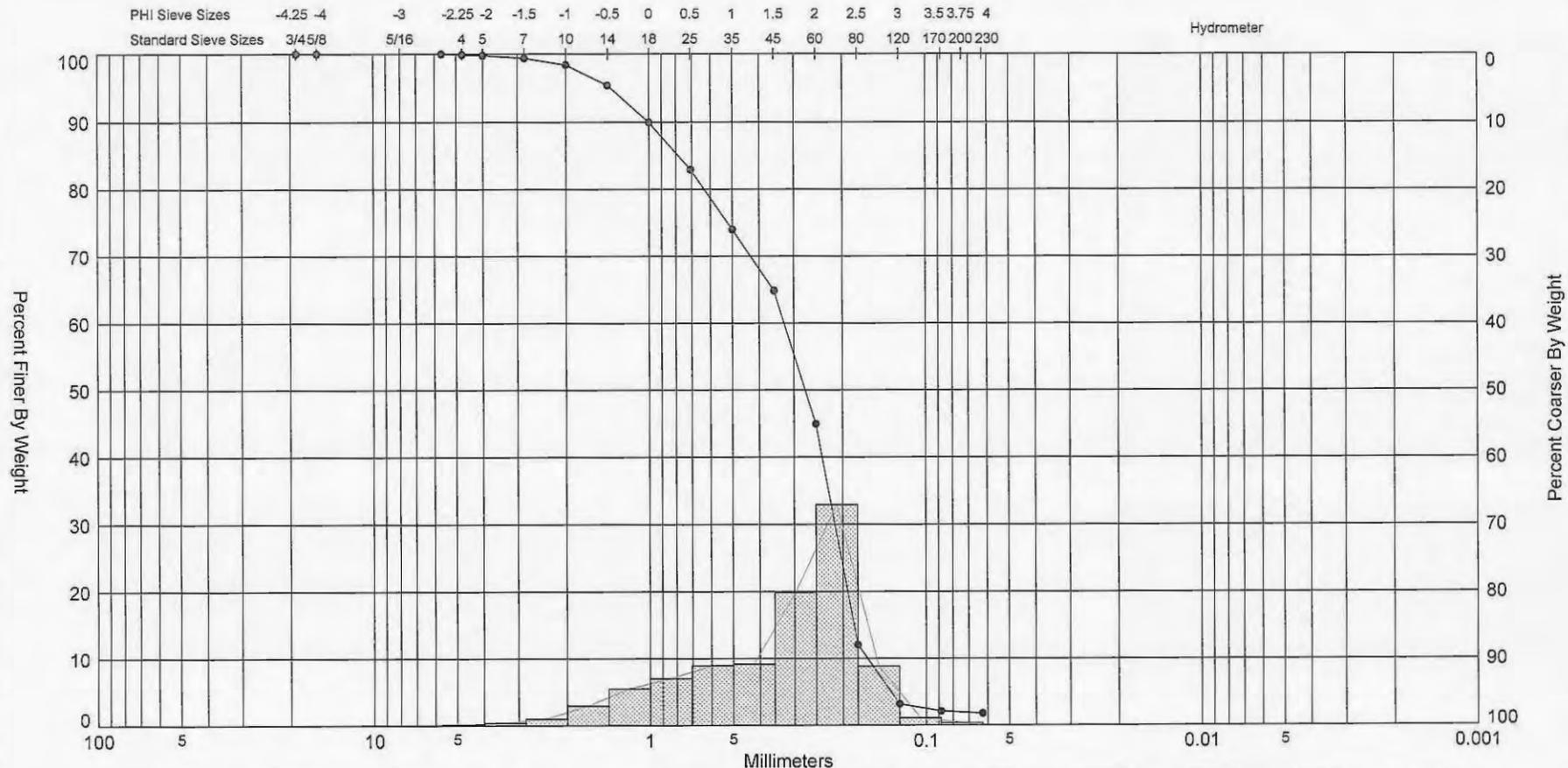
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-51 #S-2 (5')	—●—	-53.2	SP	#230 - 1.18		64.20	1.85	1.76	-1.19	6.04	0.7	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	11-30-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	968896.
												Northing (Y, ft):	977372.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

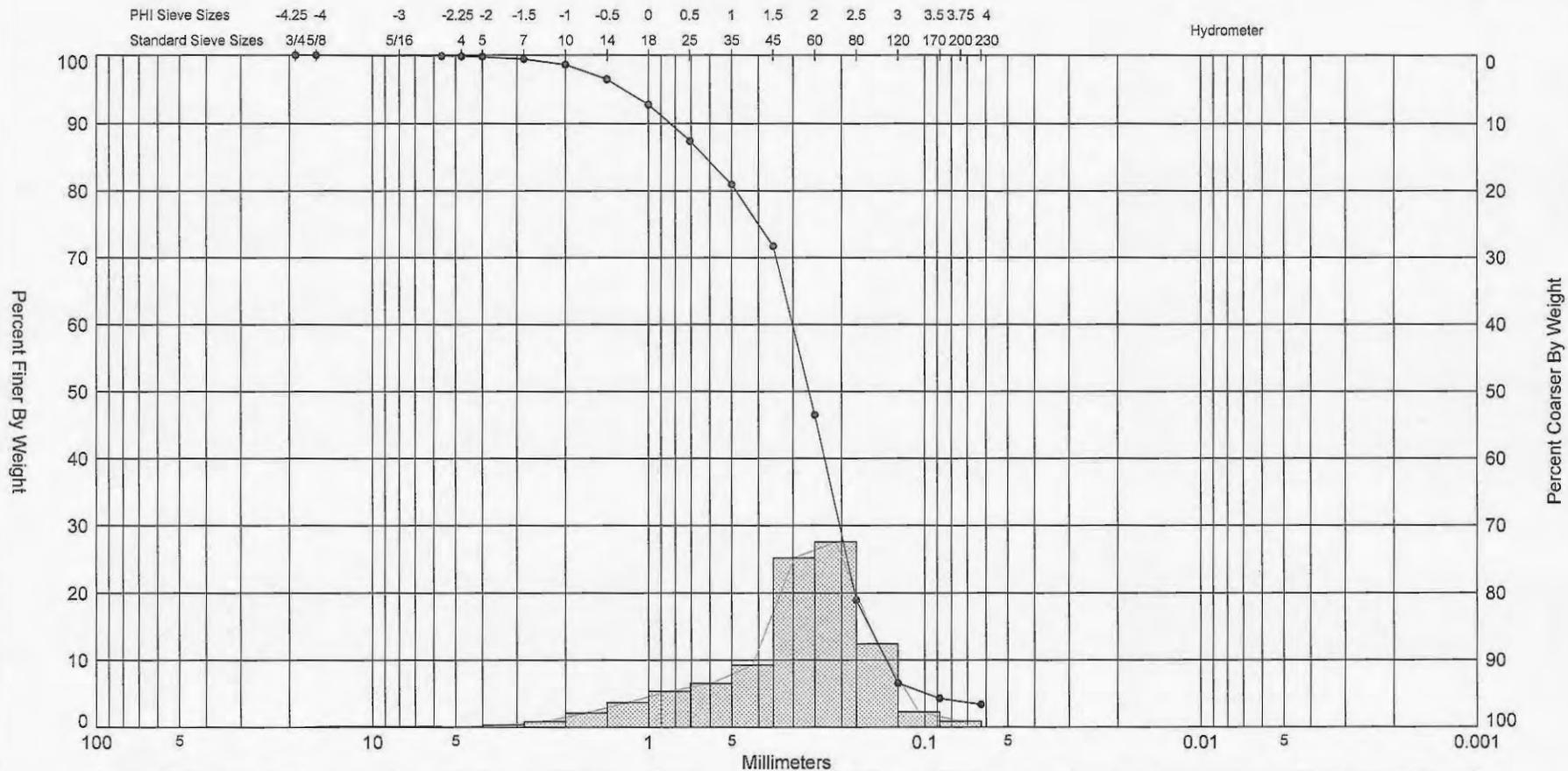
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-51 #S-3 (8')	—●—	-56.2	SW	#230 - 1.78		75.80	1.87	1.55	-0.96	3.43	1.02	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-10-10
Depths and elevations based on measured values												Analyzed By:	JR
 AMERICAN VIBRACORE SERVICES												Easting (X, ft):	968896.
												Northing (Y, ft):	977372.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444													

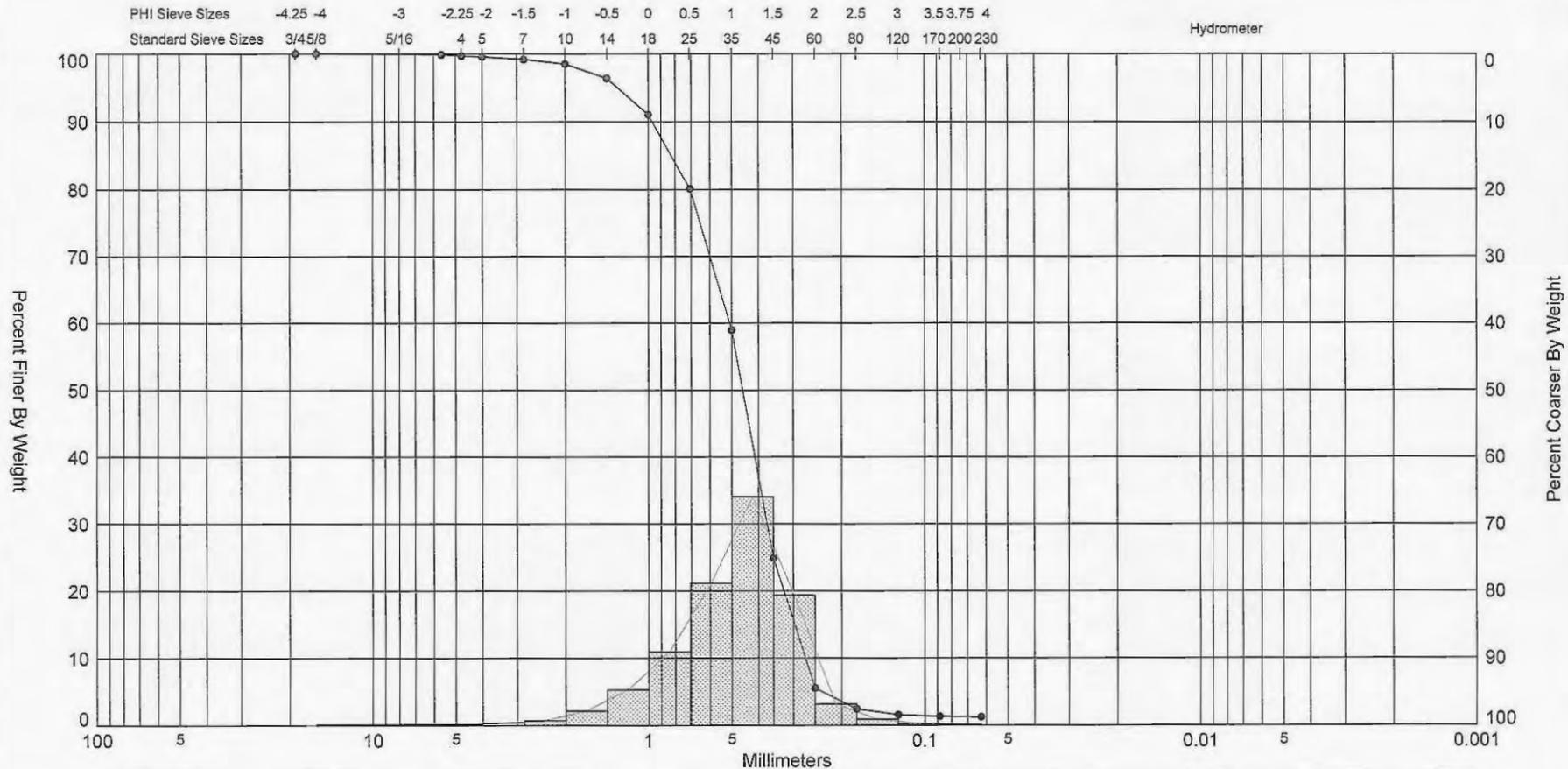
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JIVC-10-51 #S-4 (10')	—●—	-58.2	SW	#230 - 3.38			1.93	1.7	-1.13	4.7	0.98	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = >1%												Analysis Date:	11-17-10
Depths and elevations based on measured values												Analyzed By:	CA
 AMERICAN VIBRACORE SERVICES												Easting (X, ft):	968896.
												Northing (Y, ft):	977372.
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444													

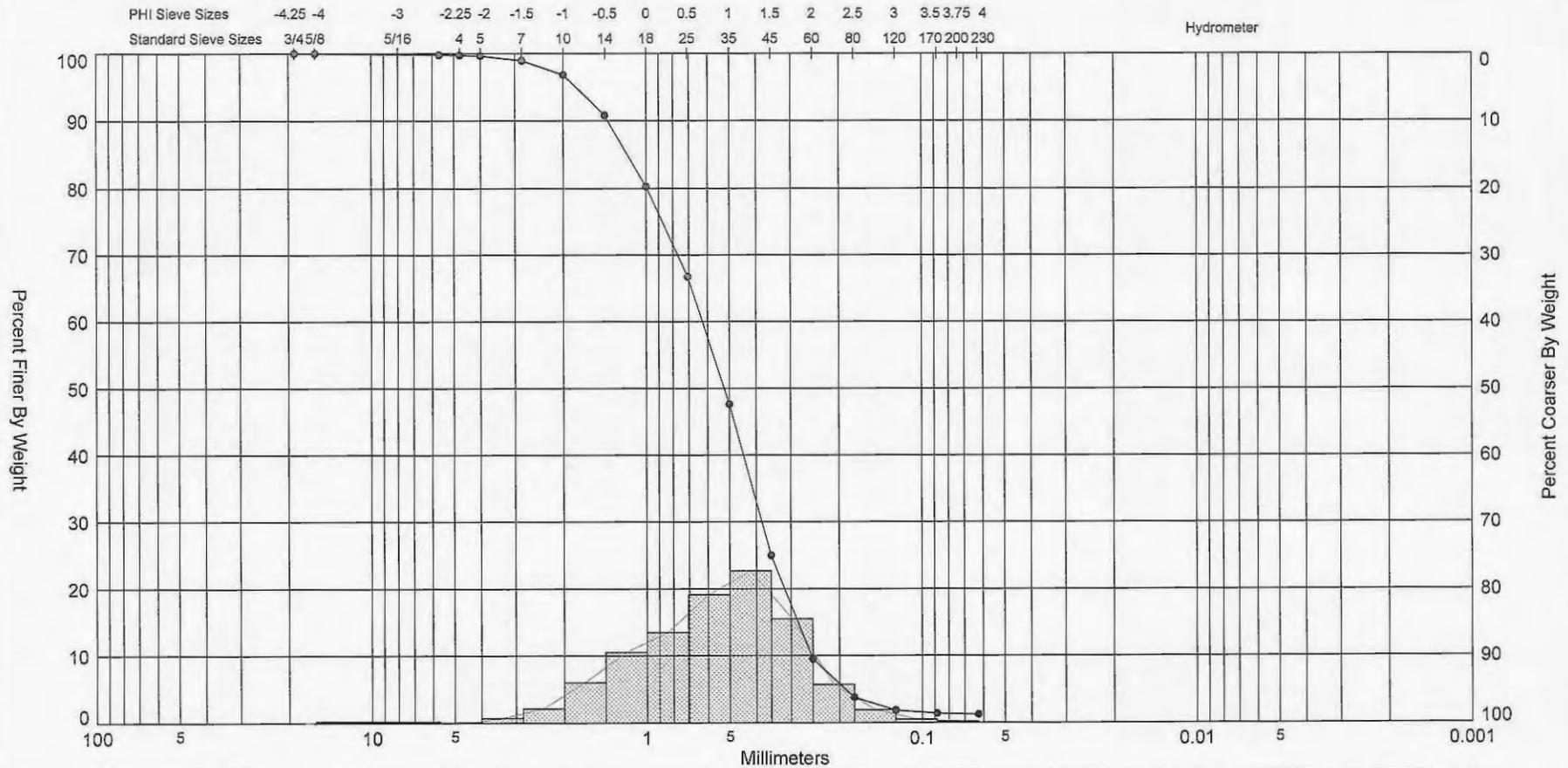
SIEVE ANALYSIS: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



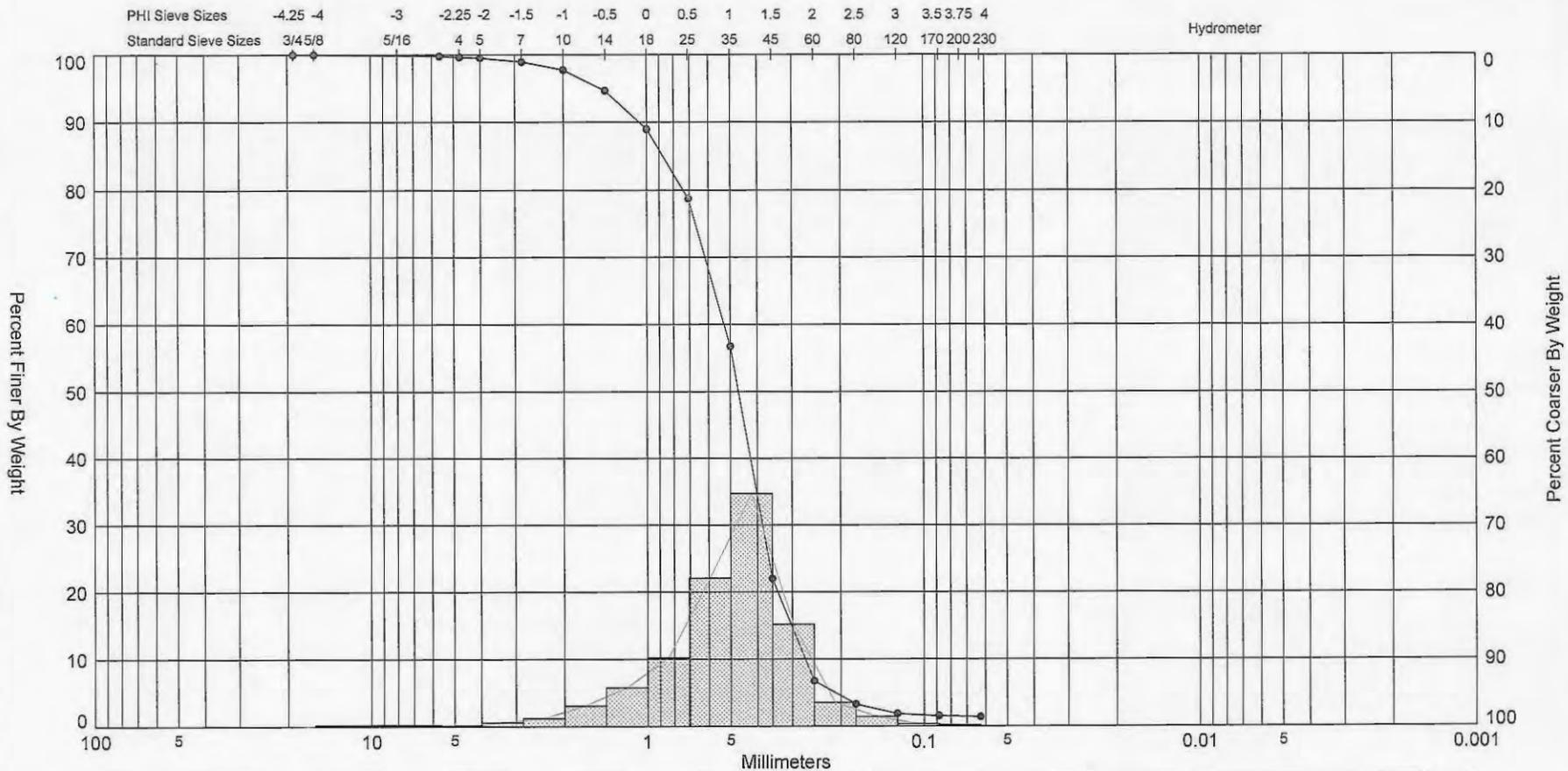
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-52 #S-1 (1')	—●—	-49.6	SP	#230 - 1.20			1.13	1.01	-0.96	5.8	0.76	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	11-17-10		
Depths and elevations based on measured values												Analyzed By:	CA		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	968452.
														Northing (Y, ft):	979326.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



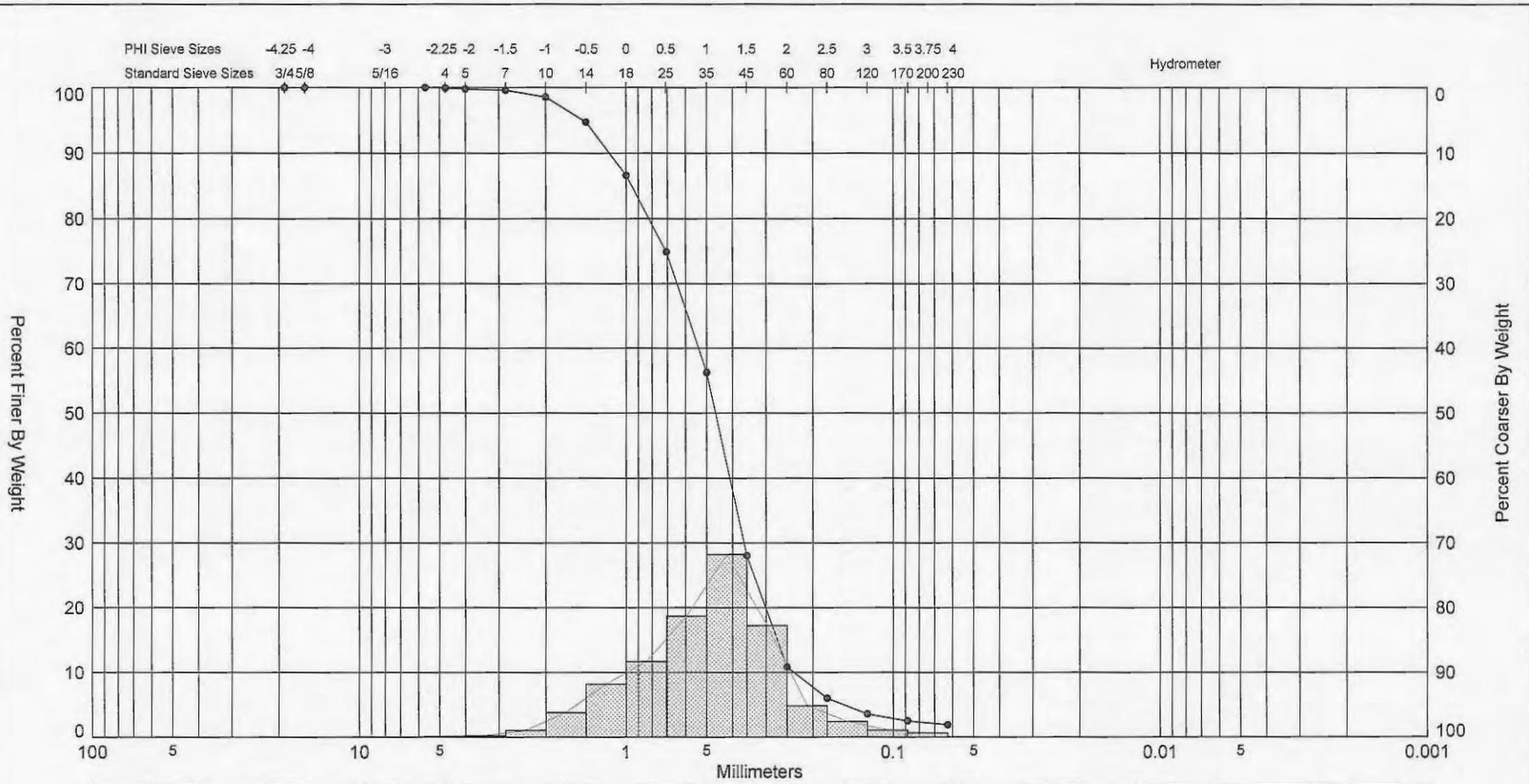
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
JIVC-10-52 #S-3 (8')	—●—	-56.6	SP	#230 - 1.37			1.1	0.96	-0.9	5.62	0.82	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = >1%												Analysis Date:	11-17-10		
Depths and elevations based on measured values												Analyzed By:	CA		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	968452.
														Northing (Y, ft):	979326.
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Sieve Report



Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-1 #S-1 (1')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 966208.	Northing (ft): 977533.	Coordinate System: Florida State Plane East	Elevation (ft): -55.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 3%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
212.30	210.76			#230 - 0.77		82.50	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	6.98	3.29	6.98	3.29	
4	-2.25	4.76	0.91	0.43	7.89	3.72	
5	-2.00	4.00	1.41	0.66	9.30	4.38	
7	-1.50	2.83	2.96	1.39	12.26	5.77	
10	-1.00	2.00	6.30	2.97	18.56	8.74	
14	-0.50	1.41	13.84	6.52	32.40	15.26	
18	0.00	1.00	21.96	10.34	54.36	25.61	
25	0.50	0.71	36.31	17.10	90.67	42.71	
35	1.00	0.50	50.29	23.69	140.96	66.40	
45	1.50	0.35	42.71	20.12	183.67	86.51	
60	2.00	0.25	22.34	10.52	206.01	97.04	
80	2.50	0.18	2.15	1.01	208.16	98.05	
120	3.00	0.13	1.08	0.51	209.24	98.56	
170	3.50	0.09	0.91	0.43	210.15	98.99	
230	4.00	0.06	0.52	0.24	210.67	99.23	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.90	1.44	1.21	0.65	-0.03	-0.46	-1.78
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.45	0.73	1.14	-1.16	5.24	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-1 #S-2 (4')

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft): 966208.	Northing (ft): 977533.	Coordinate System: Florida State Plane East	Elevation (ft): -58.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
267.00	263.65			#230 - 1.28			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	1.65	0.62	1.65	0.62	
4	-2.25	4.76	0.45	0.17	2.10	0.79	
5	-2.00	4.00	0.88	0.33	2.98	1.12	
7	-1.50	2.83	3.55	1.33	6.53	2.45	
10	-1.00	2.00	8.87	3.32	15.40	5.77	
14	-0.50	1.41	21.56	8.07	36.96	13.84	
18	0.00	1.00	33.70	12.62	70.66	26.46	
25	0.50	0.71	43.52	16.30	114.18	42.76	
35	1.00	0.50	63.91	23.94	178.09	66.70	
45	1.50	0.35	51.54	19.30	229.63	86.00	
60	2.00	0.25	24.00	8.99	253.63	94.99	
80	2.50	0.18	4.92	1.84	258.55	96.84	
120	3.00	0.13	2.95	1.10	261.50	97.94	
170	3.50	0.09	1.20	0.45	262.70	98.39	
230	4.00	0.06	0.89	0.33	263.59	98.72	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.00	1.45	1.22	0.65	-0.06	-0.41	-1.12
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.54	0.69	0.98	-0.41	4.21	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-1 #S-3 (6')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 966208.	Northing (ft): 977533.	Coordinate System: Florida State Plane East	Elevation (ft): -60.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
224.23	221.40			#230 - 1.35		79.20	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.27	0.12	0.27	0.12	
4	-2.25	4.76	0.17	0.08	0.44	0.20	
5	-2.00	4.00	0.32	0.14	0.76	0.34	
7	-1.50	2.83	0.78	0.35	1.54	0.69	
10	-1.00	2.00	2.50	1.11	4.04	1.80	
14	-0.50	1.41	8.29	3.70	12.33	5.50	
18	0.00	1.00	15.98	7.13	28.31	12.63	
25	0.50	0.71	28.09	12.53	56.40	25.15	
35	1.00	0.50	48.94	21.83	105.34	46.98	
45	1.50	0.35	61.94	27.62	167.28	74.60	
60	2.00	0.25	35.82	15.97	203.10	90.58	
80	2.50	0.18	10.59	4.72	213.69	95.30	
120	3.00	0.13	6.02	2.68	219.71	97.98	
170	3.50	0.09	1.09	0.49	220.80	98.47	
230	4.00	0.06	0.40	0.18	221.20	98.65	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.47	1.79	1.51	1.05	0.49	0.13	-0.57
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Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.96	0.51	0.86	-0.43	4.14

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-1 #S-4 (8')

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft): 966208.	Northing (ft): 977533.	Coordinate System: Florida State Plane East	Elevation (ft): -62.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 5%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
221.70	218.42			#230 - 1.49			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	5.24	2.36	5.24	2.36	
4	-2.25	4.76	0.67	0.30	5.91	2.67	
5	-2.00	4.00	1.29	0.58	7.20	3.25	
7	-1.50	2.83	2.86	1.29	10.06	4.54	
10	-1.00	2.00	4.25	1.92	14.31	6.45	
14	-0.50	1.41	8.73	3.94	23.04	10.39	
18	0.00	1.00	14.21	6.41	37.25	16.80	
25	0.50	0.71	20.48	9.24	57.73	26.04	
35	1.00	0.50	42.77	19.29	100.50	45.33	
45	1.50	0.35	57.85	26.09	158.35	71.43	
60	2.00	0.25	39.63	17.88	197.98	89.30	
80	2.50	0.18	11.25	5.07	209.23	94.38	
120	3.00	0.13	5.98	2.70	215.21	97.07	
170	3.50	0.09	2.14	0.97	217.35	98.04	
230	4.00	0.06	1.04	0.47	218.39	98.51	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.62	1.85	1.60	1.09	0.44	-0.06	-1.38
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.87	0.55	1.17	-1.22	5.59	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-2 #S-1 (0.5')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 967144.	Northing (ft): 977892.	Coordinate System: Florida State Plane East	Elevation (ft): -48.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
425.20	420.90			#230 - 1.03			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.43	0.10	0.43	0.10	
4	-2.25	4.76	0.34	0.08	0.77	0.18	
5	-2.00	4.00	0.38	0.09	1.15	0.27	
7	-1.50	2.83	1.13	0.27	2.28	0.54	
10	-1.00	2.00	4.12	0.97	6.40	1.51	
14	-0.50	1.41	10.93	2.57	17.33	4.08	
18	0.00	1.00	20.74	4.88	38.07	8.95	
25	0.50	0.71	32.11	7.55	70.18	16.51	
35	1.00	0.50	66.40	15.62	136.58	32.12	
45	1.50	0.35	118.93	27.97	255.51	60.09	
60	2.00	0.25	139.25	32.75	394.76	92.84	
80	2.50	0.18	21.47	5.05	416.23	97.89	
120	3.00	0.13	2.79	0.66	419.02	98.55	
170	3.50	0.09	0.86	0.20	419.88	98.75	
230	4.00	0.06	0.96	0.23	420.84	98.97	

<div style="writing-mode: vertical-rl; transform: rotate(180deg); position: absolute; left: -100px; top: 50%; font-size: 8px;"> GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT - 4/29/11 </div>
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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.21	1.87	1.73	1.32	0.77	0.47	-0.41
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.16	0.45	0.79	-1.08	5.29	

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-2 #S-2 (5')

Analysis Date: 11-22-10

Analyzed By: JR

Easting (ft): 967144.	Northing (ft): 977892.	Coordinate System: Florida State Plane East	Elevation (ft): -52.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
203.20	198.45			#230 - 2.38		84.60	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	1.82	0.90	1.82	0.90	
5	-2.00	4.00	0.40	0.20	2.22	1.09	
7	-1.50	2.83	1.68	0.83	3.90	1.92	
10	-1.00	2.00	3.77	1.86	7.67	3.77	
14	-0.50	1.41	10.37	5.10	18.04	8.88	
18	0.00	1.00	18.39	9.05	36.43	17.93	
25	0.50	0.71	28.42	13.99	64.85	31.91	
35	1.00	0.50	57.72	28.41	122.57	60.32	
45	1.50	0.35	50.47	24.84	173.04	85.16	
60	2.00	0.25	16.90	8.32	189.94	93.47	
80	2.50	0.18	4.16	2.05	194.10	95.52	
120	3.00	0.13	2.51	1.24	196.61	96.76	
170	3.50	0.09	1.11	0.55	197.72	97.30	
230	4.00	0.06	0.65	0.32	198.37	97.62	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.37	1.48	1.30	0.82	0.25	-0.11	-0.88
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.71	0.61	0.89	-0.47	4.55	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ - FL DEP ROSS.GDT - 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-2 #S-3 (8')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 967144.	Northing (ft): 977892.	Coordinate System: Florida State Plane East	Elevation (ft): -55.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
279.20	273.50			#230 - 2.05			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.73	0.26	0.73	0.26	
4	-2.25	4.76	0.43	0.15	1.16	0.42	
5	-2.00	4.00	1.22	0.44	2.38	0.85	
7	-1.50	2.83	3.34	1.20	5.72	2.05	
10	-1.00	2.00	8.80	3.15	14.52	5.20	
14	-0.50	1.41	19.54	7.00	34.06	12.20	
18	0.00	1.00	33.20	11.89	67.26	24.09	
25	0.50	0.71	45.35	16.24	112.61	40.33	
35	1.00	0.50	72.31	25.90	184.92	66.23	
45	1.50	0.35	58.70	21.02	243.62	87.26	
60	2.00	0.25	20.66	7.40	264.28	94.66	
80	2.50	0.18	4.64	1.66	268.92	96.32	
120	3.00	0.13	2.69	0.96	271.61	97.28	
170	3.50	0.09	1.18	0.42	272.79	97.70	
230	4.00	0.06	0.69	0.25	273.48	97.95	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.10	1.42	1.21	0.69	0.03	-0.34	-1.03
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.56	0.68	0.92	-0.38	4.1	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT - 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-2 #S-4 (12')

Analysis Date: 11-05-10

Analyzed By: JR

Easting (ft): 967144.	Northing (ft): 977892.	Coordinate System: Florida State Plane East	Elevation (ft): -59.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
199.23	195.81			#230 - 1.79		70.40	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	1.78	0.89	1.78	0.89	
4	-2.25	4.76	0.24	0.12	2.02	1.01	
5	-2.00	4.00	0.10	0.05	2.12	1.06	
7	-1.50	2.83	0.91	0.46	3.03	1.52	
10	-1.00	2.00	2.01	1.01	5.04	2.53	
14	-0.50	1.41	5.25	2.64	10.29	5.16	
18	0.00	1.00	9.51	4.77	19.80	9.94	
25	0.50	0.71	14.46	7.26	34.26	17.20	
35	1.00	0.50	25.13	12.61	59.39	29.81	
45	1.50	0.35	33.98	17.06	93.37	46.87	
60	2.00	0.25	28.62	14.37	121.99	61.23	
80	2.50	0.18	27.60	13.85	149.59	75.08	
120	3.00	0.13	38.72	19.43	188.31	94.52	
170	3.50	0.09	6.14	3.08	194.45	97.60	
230	4.00	0.06	1.21	0.61	195.66	98.21	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.08	2.73	2.50	1.61	0.81	0.42	-0.53
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.49	0.36	1.17	-0.92	4.49	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-3 #S-1 (2')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft):

968103.

Northing (ft):

978129.

Coordinate System:

Florida State Plane East

Elevation (ft):

-47.3 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0 %

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
280.08	277.99			#230 - 0.77			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.49	0.17	0.49	0.17	
4	-2.25	4.76	0.04	0.01	0.53	0.19	
5	-2.00	4.00	0.24	0.09	0.77	0.27	
7	-1.50	2.83	0.97	0.35	1.74	0.62	
10	-1.00	2.00	2.06	0.74	3.80	1.36	
14	-0.50	1.41	4.39	1.57	8.19	2.92	
18	0.00	1.00	7.07	2.52	15.26	5.45	
25	0.50	0.71	10.23	3.65	25.49	9.10	
35	1.00	0.50	20.67	7.38	46.16	16.48	
45	1.50	0.35	45.97	16.41	92.13	32.89	
60	2.00	0.25	129.43	46.21	221.56	79.11	
80	2.50	0.18	49.08	17.52	270.64	96.63	
120	3.00	0.13	6.07	2.17	276.71	98.80	
170	3.50	0.09	0.91	0.32	277.62	99.12	
230	4.00	0.06	0.31	0.11	277.93	99.23	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.45	2.14	1.96	1.69	1.26	0.97	-0.09
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.52	0.35	0.77	-1.78	8.21	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-3 #S-2 (6')

Analysis Date: 11-05-10

Analyzed By: JR

Easting (ft): 968103.	Northing (ft): 978129.	Coordinate System: Florida State Plane East	Elevation (ft): -51.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0 %
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
203.34	201.25			#230 - 1.04		66.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.16	0.08	0.16	0.08	
5	-2.00	4.00	0.07	0.03	0.23	0.11	
7	-1.50	2.83	0.15	0.07	0.38	0.19	
10	-1.00	2.00	0.67	0.33	1.05	0.52	
14	-0.50	1.41	1.69	0.83	2.74	1.35	
18	0.00	1.00	3.66	1.80	6.40	3.15	
25	0.50	0.71	6.89	3.39	13.29	6.54	
35	1.00	0.50	14.52	7.14	27.81	13.68	
45	1.50	0.35	31.06	15.27	58.87	28.95	
60	2.00	0.25	79.56	39.13	138.43	68.08	
80	2.50	0.18	53.60	26.36	192.03	94.44	
120	3.00	0.13	7.84	3.86	199.87	98.29	
170	3.50	0.09	1.06	0.52	200.93	98.81	
230	4.00	0.06	0.29	0.14	201.22	98.96	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.57	2.30	2.13	1.77	1.37	1.08	0.27

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.66	0.32	0.7	-1.31	6.28

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-3 #S-3 (8')

Analysis Date: 11-22-10

Analyzed By: JR

Easting (ft): 968103.	Northing (ft): 978129.	Coordinate System: Florida State Plane East	Elevation (ft): -53.3 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1 %
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
245.20	242.09			#230 - 1.31		83.90	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	1.50	0.61	1.50	0.61	
5	-2.00	4.00	0.34	0.14	1.84	0.75	
7	-1.50	2.83	1.54	0.63	3.38	1.38	
10	-1.00	2.00	5.50	2.24	8.88	3.62	
14	-0.50	1.41	15.31	6.24	24.19	9.87	
18	0.00	1.00	27.59	11.25	51.78	21.12	
25	0.50	0.71	34.57	14.10	86.35	35.22	
35	1.00	0.50	43.03	17.55	129.38	52.77	
45	1.50	0.35	44.17	18.01	173.55	70.78	
60	2.00	0.25	42.12	17.18	215.67	87.96	
80	2.50	0.18	19.13	7.80	234.80	95.76	
120	3.00	0.13	5.06	2.06	239.86	97.82	
170	3.50	0.09	1.40	0.57	241.26	98.39	
230	4.00	0.06	0.72	0.29	241.98	98.69	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.45	1.88	1.62	0.92	0.14	-0.23	-0.89
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.83	0.56	1.02	-0.29	2.99	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-3 #S-4 (10')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 968103.	Northing (ft): 978129.	Coordinate System: Florida State Plane East	Elevation (ft): -55.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1 %
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
283.00	278.16			#230 - 1.81			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.30	0.11	0.30	0.11	
5	-2.00	4.00	0.24	0.08	0.54	0.19	
7	-1.50	2.83	0.48	0.17	1.02	0.36	
10	-1.00	2.00	1.32	0.47	2.34	0.83	
14	-0.50	1.41	3.96	1.40	6.30	2.23	
18	0.00	1.00	8.55	3.02	14.85	5.25	
25	0.50	0.71	17.23	6.09	32.08	11.34	
35	1.00	0.50	49.60	17.53	81.68	28.86	
45	1.50	0.35	99.56	35.18	181.24	64.04	
60	2.00	0.25	68.82	24.32	250.06	88.36	
80	2.50	0.18	19.44	6.87	269.50	95.23	
120	3.00	0.13	5.83	2.06	275.33	97.29	
170	3.50	0.09	1.65	0.58	276.98	97.87	
230	4.00	0.06	0.91	0.32	277.89	98.19	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.48	1.91	1.73	1.30	0.89	0.63	-0.04
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Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.25	0.42	0.72	-0.6	5.4

GRANULARMETRIC REPORT: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-4 #S-1 (1')

Analysis Date: 11-22-10

Analyzed By: JR

Easting (ft): 965540.	Northing (ft): 976274.	Coordinate System: Florida State Plane East	Elevation (ft): -53.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
217.40	216.15			#230 - 0.61		78.80	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	1.06	0.49	1.06	0.49	
5	-2.00	4.00	0.53	0.24	1.59	0.73	
7	-1.50	2.83	2.54	1.17	4.13	1.90	
10	-1.00	2.00	4.47	2.06	8.60	3.96	
14	-0.50	1.41	11.21	5.16	19.81	9.11	
18	0.00	1.00	18.80	8.65	38.61	17.76	
25	0.50	0.71	30.48	14.02	69.09	31.78	
35	1.00	0.50	50.24	23.11	119.33	54.89	
45	1.50	0.35	60.02	27.61	179.35	82.50	
60	2.00	0.25	32.85	15.11	212.20	97.61	
80	2.50	0.18	2.83	1.30	215.03	98.91	
120	3.00	0.13	0.74	0.34	215.77	99.25	
170	3.50	0.09	0.19	0.09	215.96	99.34	
230	4.00	0.06	0.12	0.06	216.08	99.39	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.91	1.55	1.36	0.89	0.26	-0.10	-0.90
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.74	0.60	0.86	-0.84	3.92	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-4 #S-2 (6')

Analysis Date: 11-11-10

Analyzed By: JR

Eastings (ft): 965540.	Northing (ft): 976274.	Coordinate System: Florida State Plane East	Elevation (ft): -58.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
314.50	310.19			#230 - 1.44			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	1.12	0.36	1.12	0.36	
4	-2.25	4.76	0.22	0.07	1.34	0.43	
5	-2.00	4.00	0.76	0.24	2.10	0.67	
7	-1.50	2.83	2.17	0.69	4.27	1.36	
10	-1.00	2.00	6.68	2.12	10.95	3.48	
14	-0.50	1.41	15.34	4.88	26.29	8.36	
18	0.00	1.00	25.71	8.17	52.00	16.53	
25	0.50	0.71	38.74	12.32	90.74	28.85	
35	1.00	0.50	66.56	21.16	157.30	50.02	
45	1.50	0.35	70.57	22.44	227.87	72.45	
60	2.00	0.25	51.70	16.44	279.57	88.89	
80	2.50	0.18	17.39	5.53	296.96	94.42	
120	3.00	0.13	10.49	3.34	307.45	97.76	
170	3.50	0.09	1.81	0.58	309.26	98.33	
230	4.00	0.06	0.70	0.22	309.96	98.56	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Moment Statistics	Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.59	1.85	1.58	1.00	0.34	-0.03	-0.84
	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	0.9	0.54	0.98	-0.52	4.01		

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-4 #S-3 (9')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 965540.	Northing (ft): 976274.	Coordinate System: Florida State Plane East	Elevation (ft): -61.5 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/3	Comments: Visual Shell Content = 1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
315.40	310.95			#230 - 1.45			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	1.99	0.63	1.99	0.63	
4	-2.25	4.76	0.45	0.14	2.44	0.77	
5	-2.00	4.00	1.16	0.37	3.60	1.14	
7	-1.50	2.83	3.57	1.13	7.17	2.27	
10	-1.00	2.00	8.16	2.59	15.33	4.86	
14	-0.50	1.41	14.89	4.72	30.22	9.58	
18	0.00	1.00	19.43	6.16	49.65	15.74	
25	0.50	0.71	21.60	6.85	71.25	22.59	
35	1.00	0.50	35.86	11.37	107.11	33.96	
45	1.50	0.35	56.54	17.93	163.65	51.89	
60	2.00	0.25	59.21	18.77	222.86	70.66	
80	2.50	0.18	35.97	11.40	258.83	82.06	
120	3.00	0.13	43.30	13.73	302.13	95.79	
170	3.50	0.09	7.31	2.32	309.44	98.11	
230	4.00	0.06	1.38	0.44	310.82	98.55	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Moment Statistics	Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.97	2.57	2.19	1.45	0.61	0.02	-0.99
	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	1.26	0.42	1.22	-0.77	3.59		

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-4 #S-4 (11.5')

Analysis Date: 11-05-10

Analyzed By: JR

Easting (ft): 965540.	Northing (ft): 976274.	Coordinate System: Florida State Plane East	Elevation (ft): -64.0 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
240.98	234.18			#230 - 3.10		66.80	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.23	0.10	0.23	0.10	
4	-2.25	4.76	0.16	0.07	0.39	0.16	
5	-2.00	4.00	0.10	0.04	0.49	0.20	
7	-1.50	2.83	0.34	0.14	0.83	0.34	
10	-1.00	2.00	1.29	0.54	2.12	0.88	
14	-0.50	1.41	2.57	1.07	4.69	1.95	
18	0.00	1.00	3.97	1.65	8.66	3.59	
25	0.50	0.71	5.82	2.42	14.48	6.01	
35	1.00	0.50	9.84	4.08	24.32	10.09	
45	1.50	0.35	18.19	7.55	42.51	17.64	
60	2.00	0.25	31.48	13.06	73.99	30.70	
80	2.50	0.18	51.53	21.38	125.52	52.09	
120	3.00	0.13	81.95	34.01	207.47	86.09	
170	3.50	0.09	20.29	8.42	227.76	94.51	
230	4.00	0.06	5.74	2.38	233.50	96.90	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ - FL DEP ROSS.GDT - 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.60	2.97	2.84	2.45	1.78	1.39	0.29
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.18	0.22	0.94	-1.45	6.07	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-5 #S-1 (0.5')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 966481.	Northing (ft): 976621.	Coordinate System: Florida State Plane East	Elevation (ft): -47.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 2%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
262.80	260.07			#230 - 1.07			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	2.30	0.88	2.30	0.88	
4	-2.25	4.76	0.51	0.19	2.81	1.07	
5	-2.00	4.00	1.41	0.54	4.22	1.61	
7	-1.50	2.83	6.20	2.36	10.42	3.96	
10	-1.00	2.00	10.61	4.04	21.03	8.00	
14	-0.50	1.41	19.33	7.36	40.36	15.36	
18	0.00	1.00	25.79	9.81	66.15	25.17	
25	0.50	0.71	32.00	12.18	98.15	37.35	
35	1.00	0.50	40.50	15.41	138.65	52.76	
45	1.50	0.35	56.54	21.51	195.19	74.27	
60	2.00	0.25	53.10	20.21	248.29	94.48	
80	2.50	0.18	8.20	3.12	256.49	97.60	
120	3.00	0.13	2.74	1.04	259.23	98.64	
170	3.50	0.09	0.50	0.19	259.73	98.83	
230	4.00	0.06	0.25	0.10	259.98	98.93	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.08	1.74	1.52	0.91	-0.01	-0.47	-1.37
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.67	0.63	1.1	-0.8	3.61	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ - FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-5 #S-2 (5.5')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 966481.	Northing (ft): 976621.	Coordinate System: Florida State Plane East	Elevation (ft): -52.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g): 281.77	Wash Weight (g): 279.41	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 0.88	Organics (%):	Carbonates (%): 61.90	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.07	0.02	0.07	0.02
4	-2.25	4.76	0.07	0.02	0.14	0.05
5	-2.00	4.00	0.05	0.02	0.19	0.07
7	-1.50	2.83	0.19	0.07	0.38	0.13
10	-1.00	2.00	0.63	0.22	1.01	0.36
14	-0.50	1.41	1.01	0.36	2.02	0.72
18	0.00	1.00	1.94	0.69	3.96	1.41
25	0.50	0.71	4.34	1.54	8.30	2.95
35	1.00	0.50	16.65	5.91	24.95	8.85
45	1.50	0.35	62.73	22.26	87.68	31.12
60	2.00	0.25	128.13	45.47	215.81	76.59
80	2.50	0.18	46.70	16.57	262.51	93.16
120	3.00	0.13	14.24	5.05	276.75	98.22
170	3.50	0.09	1.79	0.64	278.54	98.85
230	4.00	0.06	0.74	0.26	279.28	99.12

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.68	2.22	1.98	1.71	1.36	1.16	0.67
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.67	0.31	0.6	-0.95	8.1	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT - 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-5 #S-3 (9')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 966481.	Northing (ft): 976621.	Coordinate System: Florida State Plane East	Elevation (ft): -55.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/1	Comments: Visual Shell Content = 2%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
395.60	390.90			#230 - 1.21			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	3.95	1.00	3.95	1.00	
4	-2.25	4.76	0.45	0.11	4.40	1.11	
5	-2.00	4.00	0.66	0.17	5.06	1.28	
7	-1.50	2.83	2.47	0.62	7.53	1.90	
10	-1.00	2.00	6.11	1.54	13.64	3.45	
14	-0.50	1.41	13.61	3.44	27.25	6.89	
18	0.00	1.00	24.86	6.28	52.11	13.17	
25	0.50	0.71	36.23	9.16	88.34	22.33	
35	1.00	0.50	83.28	21.05	171.62	43.38	
45	1.50	0.35	137.93	34.87	309.55	78.25	
60	2.00	0.25	63.43	16.03	372.98	94.28	
80	2.50	0.18	10.88	2.75	383.86	97.03	
120	3.00	0.13	5.26	1.33	389.12	98.36	
170	3.50	0.09	1.26	0.32	390.38	98.68	
230	4.00	0.06	0.43	0.11	390.81	98.79	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.13	1.68	1.45	1.09	0.56	0.15	-0.77
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.91	0.53	0.91	-1.4	7.13	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-5 #S-4 (12')

Analysis Date: 11-22-10

Analyzed By: JR

Easting (ft): 966481.	Northing (ft): 976621.	Coordinate System: Florida State Plane East	Elevation (ft): -58.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 4%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
261.40	258.19			#230 - 1.37		79.70	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	2.32	0.89	2.32	0.89	
4	-2.25	4.76	7.85	3.00	10.17	3.89	
5	-2.00	4.00	2.31	0.88	12.48	4.77	
7	-1.50	2.83	2.56	0.98	15.04	5.75	
10	-1.00	2.00	6.16	2.36	21.20	8.11	
14	-0.50	1.41	12.23	4.68	33.43	12.79	
18	0.00	1.00	18.71	7.16	52.14	19.95	
25	0.50	0.71	18.36	7.02	70.50	26.97	
35	1.00	0.50	57.81	22.12	128.31	49.09	
45	1.50	0.35	72.54	27.75	200.85	76.84	
60	2.00	0.25	39.80	15.23	240.65	92.06	
80	2.50	0.18	9.34	3.57	249.99	95.64	
120	3.00	0.13	6.11	2.34	256.10	97.97	
170	3.50	0.09	1.34	0.51	257.44	98.49	
230	4.00	0.06	0.37	0.14	257.81	98.63	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.41	1.74	1.47	1.02	0.36	-0.28	-1.88

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.76	0.59	1.15	-1.13	4.61

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-8A #S-1 (0.5')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft): 964892.	Northing (ft): 975015.	Coordinate System: Florida State Plane East	Elevation (ft): -59.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 3%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
336.20	332.60			#230 - 1.09			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	3.67	1.09	3.67	1.09	
4	-2.25	4.76	1.82	0.54	5.49	1.63	
5	-2.00	4.00	1.88	0.56	7.37	2.19	
7	-1.50	2.83	3.51	1.04	10.88	3.24	
10	-1.00	2.00	6.86	2.04	17.74	5.28	
14	-0.50	1.41	13.05	3.88	30.79	9.16	
18	0.00	1.00	20.01	5.95	50.80	15.11	
25	0.50	0.71	31.42	9.35	82.22	24.46	
35	1.00	0.50	59.72	17.76	141.94	42.22	
45	1.50	0.35	87.32	25.97	229.26	68.19	
60	2.00	0.25	65.79	19.57	295.05	87.76	
80	2.50	0.18	35.50	10.56	330.55	98.32	
120	3.00	0.13	1.41	0.42	331.96	98.74	
170	3.50	0.09	0.31	0.09	332.27	98.83	
230	4.00	0.06	0.27	0.08	332.54	98.91	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.34	1.90	1.67	1.15	0.52	0.05	-1.07
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.94	0.52	1.05	-1.32	5.49	

GRANULARMETRIC REPORT, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-8A #S-2 (3')

Analysis Date: 11-22-10

Analyzed By: JR

Easting (ft): 964892.	Northing (ft): 975015.	Coordinate System: Florida State Plane East	Elevation (ft): -61.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 3%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
197.50	195.98			#230 - 0.85		74.30	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	2.92	1.48	2.92	1.48	
4	-2.25	4.76	0.45	0.23	3.37	1.71	
5	-2.00	4.00	1.26	0.64	4.63	2.34	
7	-1.50	2.83	2.95	1.49	7.58	3.84	
10	-1.00	2.00	4.78	2.42	12.36	6.26	
14	-0.50	1.41	7.84	3.97	20.20	10.23	
18	0.00	1.00	9.99	5.06	30.19	15.29	
25	0.50	0.71	13.67	6.92	43.86	22.21	
35	1.00	0.50	27.06	13.70	70.92	35.91	
45	1.50	0.35	43.92	22.24	114.84	58.15	
60	2.00	0.25	46.67	23.63	161.51	81.78	
80	2.50	0.18	18.01	9.12	179.52	90.90	
120	3.00	0.13	14.30	7.24	193.82	98.14	
170	3.50	0.09	1.70	0.86	195.52	99.00	
230	4.00	0.06	0.31	0.16	195.83	99.15	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.78	2.12	1.86	1.32	0.60	0.05	-1.26

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.09	0.47	1.19	-1.17	4.91

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-8A #S-3 (5')

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft):

964892.

Northing (ft):

975015.

Coordinate System:

Florida State Plane East

Elevation (ft):

-63.9 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 3%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
316.60	311.80			#230 - 1.53			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	5.47	1.73	5.47	1.73	
4	-2.25	4.76	0.91	0.29	6.38	2.02	
5	-2.00	4.00	2.72	0.86	9.10	2.87	
7	-1.50	2.83	6.76	2.14	15.86	5.01	
10	-1.00	2.00	11.53	3.64	27.39	8.65	
14	-0.50	1.41	16.80	5.31	44.19	13.96	
18	0.00	1.00	19.38	6.12	63.57	20.08	
25	0.50	0.71	22.57	7.13	86.14	27.21	
35	1.00	0.50	39.41	12.45	125.55	39.66	
45	1.50	0.35	63.58	20.08	189.13	59.74	
60	2.00	0.25	72.75	22.98	261.88	82.72	
80	2.50	0.18	26.09	8.24	287.97	90.96	
120	3.00	0.13	18.02	5.69	305.99	96.65	
170	3.50	0.09	4.64	1.47	310.63	98.11	
230	4.00	0.06	1.12	0.35	311.75	98.47	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.86

2.08

1.83

1.26

0.35

-0.33

-1.50

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.96

0.51

1.28

-0.96

4

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-8A #S-4 (7')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 964892.	Northing (ft): 975015.	Coordinate System: Florida State Plane East	Elevation (ft): -65.9 NAVD 88
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USCS: SP-SM	Munsell: Wet - 10 YR-6/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
326.80	313.57			#230 - 4.29		62.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.66	0.20	0.66	0.20	
7	-1.50	2.83	0.31	0.09	0.97	0.30	
10	-1.00	2.00	0.72	0.22	1.69	0.52	
14	-0.50	1.41	2.03	0.62	3.72	1.14	
18	0.00	1.00	2.94	0.90	6.66	2.04	
25	0.50	0.71	4.27	1.31	10.93	3.34	
35	1.00	0.50	7.89	2.41	18.82	5.76	
45	1.50	0.35	13.33	4.08	32.15	9.84	
60	2.00	0.25	27.33	8.36	59.48	18.20	
80	2.50	0.18	101.55	31.07	161.03	49.27	
120	3.00	0.13	116.48	35.64	277.51	84.92	
170	3.50	0.09	26.08	7.98	303.59	92.90	
230	4.00	0.06	9.20	2.82	312.79	95.71	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.87	2.99	2.86	2.51	2.11	1.87	0.84
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.35	0.20	0.78	-1.8	8.63	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-13 #S-1

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft): 965214.	Northing (ft): 974084.	Coordinate System: Florida State Plane East	Elevation (ft): -56.0 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g): 367.10	Wash Weight (g): 363.50	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.00	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.18	0.05	0.18	0.05
7	-1.50	2.83	0.63	0.17	0.81	0.22
10	-1.00	2.00	1.27	0.35	2.08	0.57
14	-0.50	1.41	3.66	1.00	5.74	1.56
18	0.00	1.00	9.48	2.58	15.22	4.15
25	0.50	0.71	20.99	5.72	36.21	9.86
35	1.00	0.50	51.54	14.04	87.75	23.90
45	1.50	0.35	98.71	26.89	186.46	50.79
60	2.00	0.25	103.20	28.11	289.66	78.90
80	2.50	0.18	51.82	14.12	341.48	93.02
120	3.00	0.13	19.49	5.31	360.97	98.33
170	3.50	0.09	2.16	0.59	363.13	98.92
230	4.00	0.06	0.30	0.08	363.43	99.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.69	2.18	1.93	1.49	1.02	0.72	0.07
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.43	0.37	0.75	-0.58	4.12	

GRANULARMETRIC REPORT, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-13 #S-2 (3')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft):
965214.

Northing (ft):
974084.

Coordinate System:
Florida State Plane East

Elevation (ft):
-58.0 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
241.80	239.95			#230 - 0.78		64.30	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.11	0.05	0.11	0.05	
14	-0.50	1.41	0.38	0.16	0.49	0.20	
18	0.00	1.00	1.65	0.68	2.14	0.89	
25	0.50	0.71	6.63	2.74	8.77	3.63	
35	1.00	0.50	27.79	11.49	36.56	15.12	
45	1.50	0.35	61.35	25.37	97.91	40.49	
60	2.00	0.25	78.45	32.44	176.36	72.94	
80	2.50	0.18	47.28	19.55	223.64	92.49	
120	3.00	0.13	14.46	5.98	238.10	98.47	
170	3.50	0.09	1.45	0.60	239.55	99.07	
230	4.00	0.06	0.36	0.15	239.91	99.22	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.71	2.28	2.05	1.65	1.19	1.02	0.56
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Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.62	0.33	0.63	-0.22	3.44

GRANULARMETRIC REPORT, JUPITER ISLAND 10 DETAIL PHASE GP J FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-13 #S-3 (6')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft):

965214.

Northing (ft):

974084.

Coordinate System:

Florida State Plane East

Elevation (ft):

-61.0 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
277.51	274.78		0.98	#230 - 1.08		67.20	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.40	0.14	0.40	0.14	
4	-2.25	4.76	0.04	0.01	0.44	0.16	
5	-2.00	4.00	0.26	0.09	0.70	0.25	
7	-1.50	2.83	0.79	0.28	1.49	0.54	
10	-1.00	2.00	1.18	0.43	2.67	0.96	
14	-0.50	1.41	1.95	0.70	4.62	1.66	
18	0.00	1.00	3.04	1.10	7.66	2.76	
25	0.50	0.71	7.46	2.69	15.12	5.45	
35	1.00	0.50	27.31	9.84	42.43	15.29	
45	1.50	0.35	65.13	23.47	107.56	38.76	
60	2.00	0.25	93.53	33.70	201.09	72.46	
80	2.50	0.18	56.57	20.38	257.66	92.85	
120	3.00	0.13	14.33	5.16	271.99	98.01	
170	3.50	0.09	1.82	0.66	273.81	98.67	
230	4.00	0.06	0.71	0.26	274.52	98.92	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.71	2.28	2.06	1.67	1.21	1.02	0.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.59	0.33	0.73	-1.31	8.18

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-13 #S-4 (8')

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft): 965214.	Northing (ft): 974084.	Coordinate System: Florida State Plane East	Elevation (ft): -63.0 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
310.90	304.98			#230 - 2.01			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.43	0.14	0.43	0.14	0.14
10	-1.00	2.00	0.54	0.17	0.97	0.31	0.31
14	-0.50	1.41	1.06	0.34	2.03	0.65	0.65
18	0.00	1.00	2.53	0.81	4.56	1.47	1.47
25	0.50	0.71	7.14	2.30	11.70	3.76	3.76
35	1.00	0.50	27.52	8.85	39.22	12.61	12.61
45	1.50	0.35	62.55	20.12	101.77	32.73	32.73
60	2.00	0.25	95.85	30.83	197.62	63.56	63.56
80	2.50	0.18	76.93	24.74	274.55	88.31	88.31
120	3.00	0.13	24.38	7.84	298.93	96.15	96.15
170	3.50	0.09	4.08	1.31	303.01	97.46	97.46
230	4.00	0.06	1.65	0.53	304.66	97.99	97.99

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.41	2.23	1.78	1.31	1.08	0.57
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.72	0.30	0.69	-0.57	4.73	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-15C #S-1 (1')

Analysis Date: 11-12-10

Analyzed By: JR

Easting (ft): 967371.	Northing (ft): 975179.	Coordinate System: Florida State Plane East	Elevation (ft): -42.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
405.20	401.70			#230 - 0.88			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.19	0.05	0.19	0.05	
5	-2.00	4.00	0.39	0.10	0.58	0.14	
7	-1.50	2.83	0.55	0.14	1.13	0.28	
10	-1.00	2.00	1.53	0.38	2.66	0.66	
14	-0.50	1.41	7.01	1.73	9.67	2.39	
18	0.00	1.00	19.29	4.76	28.96	7.15	
25	0.50	0.71	36.20	8.93	65.16	16.08	
35	1.00	0.50	52.86	13.05	118.02	29.13	
45	1.50	0.35	93.99	23.20	212.01	52.32	
60	2.00	0.25	149.97	37.01	361.98	89.33	
80	2.50	0.18	35.43	8.74	397.41	98.08	
120	3.00	0.13	3.65	0.90	401.06	98.98	
170	3.50	0.09	0.54	0.13	401.60	99.11	
230	4.00	0.06	0.02	0.00	401.62	99.12	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.32	1.93	1.81	1.45	0.84	0.50	-0.23
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.26	0.42	0.75	-0.96	4.07	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-15C #S-2 (3')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 967371.	Northing (ft): 975179.	Coordinate System: Florida State Plane East	Elevation (ft): -44.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.00	178.22			#230 - 1.01		82.30	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.86	0.48	0.86	0.48	0.48
4	-2.25	4.76	0.24	0.13	1.10	0.61	0.61
5	-2.00	4.00	0.15	0.08	1.25	0.69	0.69
7	-1.50	2.83	0.62	0.34	1.87	1.04	1.04
10	-1.00	2.00	1.99	1.11	3.86	2.14	2.14
14	-0.50	1.41	8.24	4.58	12.10	6.72	6.72
18	0.00	1.00	19.96	11.09	32.06	17.81	17.81
25	0.50	0.71	28.91	16.06	60.97	33.87	33.87
35	1.00	0.50	31.36	17.42	92.33	51.29	51.29
45	1.50	0.35	32.05	17.81	124.38	69.10	69.10
60	2.00	0.25	38.78	21.54	163.16	90.64	90.64
80	2.50	0.18	12.23	6.79	175.39	97.44	97.44
120	3.00	0.13	1.97	1.09	177.36	98.53	98.53
170	3.50	0.09	0.59	0.33	177.95	98.86	98.86
230	4.00	0.06	0.24	0.13	178.19	98.99	98.99

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.32	1.85	1.64	0.96	0.22	-0.08	-0.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.88	0.54	0.95	-0.58	4.02

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-15C #S-3 (6')

Analysis Date: 11-16-10

Analyzed By: JR

Easting (ft): 967371.	Northing (ft): 975179.	Coordinate System: Florida State Plane East	Elevation (ft): -47.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
395.80	391.00			#230 - 1.22			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.25	0.06	0.25	0.06	
4	-2.25	4.76	0.09	0.02	0.34	0.09	
5	-2.00	4.00	0.28	0.07	0.62	0.16	
7	-1.50	2.83	0.82	0.21	1.44	0.36	
10	-1.00	2.00	2.13	0.54	3.57	0.90	
14	-0.50	1.41	5.16	1.30	8.73	2.21	
18	0.00	1.00	10.43	2.64	19.16	4.84	
25	0.50	0.71	19.71	4.98	38.87	9.82	
35	1.00	0.50	43.29	10.94	82.16	20.76	
45	1.50	0.35	94.09	23.77	176.25	44.53	
60	2.00	0.25	158.25	39.98	334.50	84.51	
80	2.50	0.18	48.26	12.19	382.76	96.71	
120	3.00	0.13	7.18	1.81	389.94	98.52	
170	3.50	0.09	0.96	0.24	390.90	98.76	
230	4.00	0.06	0.08	0.02	390.98	98.78	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GRJ - FL DEP ROSS.GDT - 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.43	1.99	1.88	1.57	1.09	0.78	0.02
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.41	0.38	0.72	-1.32	6.33	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-15C #S-4 (8')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 967371.	Northing (ft): 975179.	Coordinate System: Florida State Plane East	Elevation (ft): -49.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
276.47	272.85			#230 - 1.40		75.10	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.50	0.18	0.50	0.18	
4	-2.25	4.76	0.04	0.01	0.54	0.20	
5	-2.00	4.00	0.18	0.07	0.72	0.26	
7	-1.50	2.83	0.69	0.25	1.41	0.51	
10	-1.00	2.00	2.11	0.76	3.52	1.27	
14	-0.50	1.41	5.99	2.17	9.51	3.44	
18	0.00	1.00	12.53	4.53	22.04	7.97	
25	0.50	0.71	21.16	7.65	43.20	15.63	
35	1.00	0.50	39.18	14.17	82.38	29.80	
45	1.50	0.35	68.17	24.66	150.55	54.45	
60	2.00	0.25	89.88	32.51	240.43	86.96	
80	2.50	0.18	25.23	9.13	265.66	96.09	
120	3.00	0.13	4.88	1.77	270.54	97.86	
170	3.50	0.09	1.45	0.52	271.99	98.38	
230	4.00	0.06	0.62	0.22	272.61	98.60	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.44	1.95	1.82	1.41	0.83	0.51	-0.33
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.25	0.42	0.82	-0.98	5.34	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-17 #S-1 (2')

Analysis Date: 11-16-10

Analyzed By: JR

Easting (ft): 965471.	Northing (ft): 973153.	Coordinate System: Florida State Plane East	Elevation (ft): -58.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
421.20	417.70			#230 - 0.86			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.42	0.10	0.42	0.10	
10	-1.00	2.00	0.28	0.07	0.70	0.17	
14	-0.50	1.41	1.17	0.28	1.87	0.44	
18	0.00	1.00	4.22	1.00	6.09	1.45	
25	0.50	0.71	14.85	3.53	20.94	4.97	
35	1.00	0.50	51.44	12.21	72.38	17.18	
45	1.50	0.35	114.62	27.21	187.00	44.40	
60	2.00	0.25	140.40	33.33	327.40	77.73	
80	2.50	0.18	63.16	15.00	390.56	92.73	
120	3.00	0.13	22.14	5.26	412.70	97.98	
170	3.50	0.09	3.33	0.79	416.03	98.77	
230	4.00	0.06	1.54	0.37	417.57	99.14	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.72	2.21	1.96	1.58	1.14	0.95	0.50
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.55	0.34	0.66	-0.25	4.28	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-17 #S-2 (5')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 965471.	Northing (ft): 973153.	Coordinate System: Florida State Plane East	Elevation (ft): -61.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
278.57	275.76			#230 - 1.10		66.70	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.09	0.03	0.09	0.03	
10	-1.00	2.00	0.17	0.06	0.26	0.09	
14	-0.50	1.41	0.79	0.28	1.05	0.38	
18	0.00	1.00	3.13	1.12	4.18	1.50	
25	0.50	0.71	8.67	3.11	12.85	4.61	
35	1.00	0.50	26.85	9.64	39.70	14.25	
45	1.50	0.35	62.28	22.36	101.98	36.61	
60	2.00	0.25	97.89	35.14	199.87	71.75	
80	2.50	0.18	52.67	18.91	252.54	90.66	
120	3.00	0.13	19.24	6.91	271.78	97.56	
170	3.50	0.09	2.93	1.05	274.71	98.61	
230	4.00	0.06	0.80	0.29	275.51	98.90	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.81	2.32	2.09	1.69	1.24	1.04	0.52
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.65	0.32	0.66	-0.37	3.99	

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-17 #S-3 (8')

Analysis Date: 11-16-10

Analyzed By: JR

Easting (ft): 965471.	Northing (ft): 973153.	Coordinate System: Florida State Plane East	Elevation (ft): -64.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
311.30	307.80			#230 - 1.15			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.36	0.12	0.36	0.12	
5	-2.00	4.00	0.12	0.04	0.48	0.15	
7	-1.50	2.83	0.41	0.13	0.89	0.29	
10	-1.00	2.00	0.52	0.17	1.41	0.45	
14	-0.50	1.41	1.35	0.43	2.76	0.89	
18	0.00	1.00	3.99	1.28	6.75	2.17	
25	0.50	0.71	10.94	3.51	17.69	5.68	
35	1.00	0.50	32.23	10.35	49.92	16.04	
45	1.50	0.35	69.21	22.23	119.13	38.27	
60	2.00	0.25	104.84	33.68	223.97	71.95	
80	2.50	0.18	60.85	19.55	284.82	91.49	
120	3.00	0.13	19.42	6.24	304.24	97.73	
170	3.50	0.09	2.63	0.84	306.87	98.58	
230	4.00	0.06	0.86	0.28	307.73	98.85	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.78	2.31	2.08	1.67	1.20	1.00	0.40

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.61	0.33	0.71	-0.78	5.54

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-17 #S-4 (10')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 965471.	Northing (ft): 973153.	Coordinate System: Florida State Plane East	Elevation (ft): -66.3 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g): 194.20	Wash Weight (g): 190.47	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.97	Organics (%):	Carbonates (%): 70.20	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.28	0.14	0.28	0.14
4	-2.25	4.76	0.07	0.04	0.35	0.18
5	-2.00	4.00	0.00	0.00	0.35	0.18
7	-1.50	2.83	0.16	0.08	0.51	0.26
10	-1.00	2.00	0.47	0.24	0.98	0.50
14	-0.50	1.41	1.34	0.69	2.32	1.19
18	0.00	1.00	3.81	1.96	6.13	3.16
25	0.50	0.71	9.37	4.82	15.50	7.98
35	1.00	0.50	24.85	12.80	40.35	20.78
45	1.50	0.35	42.37	21.82	82.72	42.60
60	2.00	0.25	55.87	28.77	138.59	71.36
80	2.50	0.18	34.68	17.86	173.27	89.22
120	3.00	0.13	13.80	7.11	187.07	96.33
170	3.50	0.09	2.38	1.23	189.45	97.55
230	4.00	0.06	0.92	0.47	190.37	98.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.35	2.10	1.63	1.10	0.81	0.19
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.55	0.34	0.79	-0.71	5.52	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-20 #S-1 (1')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft):

965798.

Northing (ft):

972192.

Coordinate System:

Florida State Plane East

Elevation (ft):

-55.8 NAVD 88

USCS:

SW

Munsell:

Wet - 7.5 YR-6/1

Comments: Visual Shell Content = >1%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
346.50	343.40			#230 - 0.89			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.40	0.12	0.40	0.12	
4	-2.25	4.76	0.40	0.12	0.80	0.23	
5	-2.00	4.00	0.30	0.09	1.10	0.32	
7	-1.50	2.83	1.30	0.38	2.40	0.69	
10	-1.00	2.00	5.90	1.70	8.30	2.40	
14	-0.50	1.41	22.10	6.38	30.40	8.77	
18	0.00	1.00	39.80	11.49	70.20	20.26	
25	0.50	0.71	55.00	15.87	125.20	36.13	
35	1.00	0.50	55.70	16.08	180.90	52.21	
45	1.50	0.35	56.20	16.22	237.10	68.43	
60	2.00	0.25	63.50	18.33	300.60	86.75	
80	2.50	0.18	31.00	8.95	331.60	95.70	
120	3.00	0.13	10.50	3.03	342.10	98.73	
170	3.50	0.09	1.30	0.38	343.40	99.11	
230	4.00	0.06	0.00	0.00	343.40	99.11	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.46	1.92	1.68	0.93	0.15	-0.19	-0.80

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.88	0.54	0.99	-0.25	2.71

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT - 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
Sample Name: JIVC-10-20 #S-2 (3')
Analysis Date: 11-30-10
Analyzed By: ML

Easting (ft): 965798. Northing (ft): 972192. Coordinate System: Florida State Plane East Elevation (ft): -57.8 NAVD 88

USCS: SP Munsell: Wet - 10 YR-4/1 Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
208.60	206.16			#230 - 1.20		69.20	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.12	0.06	0.12	0.06	0.06
10	-1.00	2.00	0.32	0.15	0.44	0.21	0.21
14	-0.50	1.41	1.68	0.81	2.12	1.02	1.02
18	0.00	1.00	4.43	2.12	6.55	3.14	3.14
25	0.50	0.71	10.38	4.98	16.93	8.12	8.12
35	1.00	0.50	24.04	11.52	40.97	19.64	19.64
45	1.50	0.35	39.29	18.84	80.26	38.48	38.48
60	2.00	0.25	60.17	28.84	140.43	67.32	67.32
80	2.50	0.18	46.69	22.38	187.12	89.70	89.70
120	3.00	0.13	16.50	7.91	203.62	97.61	97.61
170	3.50	0.09	1.82	0.87	205.44	98.49	98.49
230	4.00	0.06	0.65	0.31	206.09	98.80	98.80

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.84	2.37	2.17	1.70	1.14
	0.84	0.84	0.84	0.84	0.19
	1.61	0.33	0.76	-0.58	3.6

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-20 #S-3 (5')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): 965798.	Northing (ft): 972192.	Coordinate System: Florida State Plane East	Elevation (ft): -59.8 NAVD 88
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USCS: SP	Munsell: Wet - 7.5 YR-5/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
403.10	398.90			#230 - 1.04			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.10	0.02	0.10	0.02	
7	-1.50	2.83	0.00	0.00	0.10	0.02	
10	-1.00	2.00	0.10	0.02	0.20	0.05	
14	-0.50	1.41	1.30	0.32	1.50	0.37	
18	0.00	1.00	3.80	0.94	5.30	1.31	
25	0.50	0.71	11.90	2.95	17.20	4.27	
35	1.00	0.50	30.50	7.57	47.70	11.83	
45	1.50	0.35	74.80	18.56	122.50	30.39	
60	2.00	0.25	165.00	40.93	287.50	71.32	
80	2.50	0.18	75.10	18.63	362.60	89.95	
120	3.00	0.13	29.30	7.27	391.90	97.22	
170	3.50	0.09	6.40	1.59	398.30	98.81	
230	4.00	0.06	0.60	0.15	398.90	98.96	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.85	2.34	2.10	1.74	1.35	1.11	0.55
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.7	0.31	0.64	-0.47	4.38	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-20 #S-4 (8')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 965798.	Northing (ft): 972192.	Coordinate System: Florida State Plane East	Elevation (ft): -62.8 NAVD 88
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USCS: SP	Munsell: Wet - 7.5 YR-5/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
342.90	339.26			#230 - 1.13		70.50	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.07	0.02	0.07	0.02	
7	-1.50	2.83	0.13	0.04	0.20	0.06	
10	-1.00	2.00	0.48	0.14	0.68	0.20	
14	-0.50	1.41	1.91	0.56	2.59	0.76	
18	0.00	1.00	5.86	1.71	8.45	2.46	
25	0.50	0.71	16.74	4.88	25.19	7.35	
35	1.00	0.50	46.77	13.64	71.96	20.99	
45	1.50	0.35	81.01	23.62	152.97	44.61	
60	2.00	0.25	93.32	27.21	246.29	71.83	
80	2.50	0.18	58.26	16.99	304.55	88.82	
120	3.00	0.13	28.30	8.25	332.85	97.07	
170	3.50	0.09	4.76	1.39	337.61	98.46	
230	4.00	0.06	1.40	0.41	339.01	98.87	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.87	2.36	2.09	1.60	1.08	0.82	0.26
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.56	0.34	0.76	-0.26	3.48	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-22 #S-1 (1')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft):

967715.

Northing (ft):

972800.

Coordinate System:

Florida State Plane East

Elevation (ft):

-52.9 NAVD 88

USCS:

SP

Munsell:

Wet - 7.5 YR-5/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
305.20	302.60			#230 - 1.05			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.20	0.07	0.20	0.07	
7	-1.50	2.83	0.40	0.13	0.60	0.20	
10	-1.00	2.00	1.10	0.36	1.70	0.56	
14	-0.50	1.41	6.40	2.10	8.10	2.65	
18	0.00	1.00	22.60	7.40	30.70	10.06	
25	0.50	0.71	43.00	14.09	73.70	24.15	
35	1.00	0.50	41.30	13.53	115.00	37.68	
45	1.50	0.35	55.70	18.25	170.70	55.93	
60	2.00	0.25	93.90	30.77	264.60	86.70	
80	2.50	0.18	30.40	9.96	295.00	96.66	
120	3.00	0.13	5.00	1.64	300.00	98.30	
170	3.50	0.09	1.70	0.56	301.70	98.85	
230	4.00	0.06	0.30	0.10	302.00	98.95	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.42	1.96	1.81	1.34	0.53	0.21	-0.34
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.16	0.45	0.84	-0.44	2.82	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-22 #S-2 (4')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 967715.	Northing (ft): 972800.	Coordinate System: Florida State Plane East	Elevation (ft): -55.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
241.80	239.10			#230 - 1.15		79.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.52	0.22	0.52	0.22	
4	-2.25	4.76	0.10	0.04	0.62	0.26	
5	-2.00	4.00	0.32	0.13	0.94	0.39	
7	-1.50	2.83	1.48	0.61	2.42	1.00	
10	-1.00	2.00	2.25	0.93	4.67	1.93	
14	-0.50	1.41	8.27	3.42	12.94	5.35	
18	0.00	1.00	22.88	9.46	35.82	14.81	
25	0.50	0.71	37.46	15.49	73.28	30.31	
35	1.00	0.50	42.37	17.52	115.65	47.83	
45	1.50	0.35	39.09	16.17	154.74	64.00	
60	2.00	0.25	48.31	19.98	203.05	83.97	
80	2.50	0.18	29.09	12.03	232.14	96.00	
120	3.00	0.13	5.87	2.43	238.01	98.43	
170	3.50	0.09	0.78	0.32	238.79	98.76	
230	4.00	0.06	0.24	0.10	239.03	98.85	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.46	2.00	1.78	1.07	0.33	0.04	-0.55
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1	0.50	0.96	-0.45	3.35	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-22 #S-3 (7')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 967715.	Northing (ft): 972800.	Coordinate System: Florida State Plane East	Elevation (ft): -58.9 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
345.70	341.70			#230 - 2.89			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	1.20	0.35	1.20	0.35	
4	-2.25	4.76	0.50	0.14	1.70	0.49	
5	-2.00	4.00	0.10	0.03	1.80	0.52	
7	-1.50	2.83	1.00	0.29	2.80	0.81	
10	-1.00	2.00	1.80	0.52	4.60	1.33	
14	-0.50	1.41	7.10	2.05	11.70	3.38	
18	0.00	1.00	22.70	6.57	34.40	9.95	
25	0.50	0.71	60.00	17.36	94.40	27.31	
35	1.00	0.50	61.50	17.79	155.90	45.10	
45	1.50	0.35	60.10	17.39	216.00	62.48	
60	2.00	0.25	73.40	21.23	289.40	83.71	
80	2.50	0.18	34.70	10.04	324.10	93.75	
120	3.00	0.13	9.10	2.63	333.20	96.38	
170	3.50	0.09	1.50	0.43	334.70	96.82	
230	4.00	0.06	1.00	0.29	335.70	97.11	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.74	2.01	1.79	1.14	0.43	0.17	-0.38
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.06	0.48	0.91	-0.5	4.35	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ - FL DEP ROSS GDT - 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-22 #S-4 (10')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 967715.	Northing (ft): 972800.	Coordinate System: Florida State Plane East	Elevation (ft): -61.9 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
337.20	331.74			#230 - 1.70		75.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	1.42	0.42	1.42	0.42	
5	-2.00	4.00	0.29	0.09	1.71	0.51	
7	-1.50	2.83	0.98	0.29	2.69	0.80	
10	-1.00	2.00	1.58	0.47	4.27	1.27	
14	-0.50	1.41	4.64	1.38	8.91	2.64	
18	0.00	1.00	12.97	3.85	21.88	6.49	
25	0.50	0.71	34.48	10.23	56.36	16.71	
35	1.00	0.50	69.99	20.76	126.35	37.47	
45	1.50	0.35	73.96	21.93	200.31	59.40	
60	2.00	0.25	65.37	19.39	265.68	78.79	
80	2.50	0.18	42.85	12.71	308.53	91.50	
120	3.00	0.13	16.95	5.03	325.48	96.52	
170	3.50	0.09	4.02	1.19	329.50	97.72	
230	4.00	0.06	1.96	0.58	331.46	98.30	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.85	2.20	1.90	1.29	0.70	0.47	-0.19
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.26	0.42	0.9	-0.38	4.12	

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-26 #S-1 (1')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 967966.	Northing (ft): 971857.	Coordinate System: Florida State Plane East	Elevation (ft): -53.6 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
342.80	340.80			#230 - 0.67			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.80	0.23	0.80	0.23	
5	-2.00	4.00	0.00	0.00	0.80	0.23	
7	-1.50	2.83	0.10	0.03	0.90	0.26	
10	-1.00	2.00	1.30	0.38	2.20	0.64	
14	-0.50	1.41	8.20	2.39	10.40	3.03	
18	0.00	1.00	26.80	7.82	37.20	10.85	
25	0.50	0.71	46.70	13.62	83.90	24.47	
35	1.00	0.50	40.80	11.90	124.70	36.38	
45	1.50	0.35	60.30	17.59	185.00	53.97	
60	2.00	0.25	104.50	30.48	289.50	84.45	
80	2.50	0.18	41.10	11.99	330.60	96.44	
120	3.00	0.13	7.80	2.28	338.40	98.72	
170	3.50	0.09	1.90	0.55	340.30	99.27	
230	4.00	0.06	0.20	0.06	340.50	99.33	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.44	1.99	1.84	1.39	0.52	0.19	-0.37
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Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.19	0.44	0.88	-0.53	2.99

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-26 #S-2 (4')

Analysis Date: 11-08-10

Analyzed By: JR

Easting (ft): 967966.	Northing (ft): 971857.	Coordinate System: Florida State Plane East	Elevation (ft): -56.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 4%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
305.05	301.71			#230 - 1.16		82.50	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	5.56	1.82	5.56	1.82	
4	-2.25	4.76	0.69	0.23	6.25	2.05	
5	-2.00	4.00	1.48	0.49	7.73	2.53	
7	-1.50	2.83	3.49	1.14	11.22	3.68	
10	-1.00	2.00	5.62	1.84	16.84	5.52	
14	-0.50	1.41	16.39	5.37	33.23	10.89	
18	0.00	1.00	38.43	12.60	71.66	23.49	
25	0.50	0.71	50.73	16.63	122.39	40.12	
35	1.00	0.50	50.21	16.46	172.60	56.58	
45	1.50	0.35	42.35	13.88	214.95	70.46	
60	2.00	0.25	50.77	16.64	265.72	87.11	
80	2.50	0.18	28.01	9.18	293.73	96.29	
120	3.00	0.13	6.09	2.00	299.82	98.29	
170	3.50	0.09	1.14	0.37	300.96	98.66	
230	4.00	0.06	0.54	0.18	301.50	98.84	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.43	1.91	1.64	0.80	0.05	-0.30	-1.14
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.73	0.60	1.15	-0.77	4.3	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-26 #S-3 (8')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 967966.	Northing (ft): 971857.	Coordinate System: Florida State Plane East	Elevation (ft): -60.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 3%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
279.40	276.42			#230 - 1.12		79.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	3.18	1.14	3.18	1.14	
4	-2.25	4.76	0.20	0.07	3.38	1.21	
5	-2.00	4.00	0.46	0.16	3.84	1.37	
7	-1.50	2.83	2.14	0.77	5.98	2.14	
10	-1.00	2.00	2.90	1.04	8.88	3.18	
14	-0.50	1.41	7.07	2.53	15.95	5.71	
18	0.00	1.00	21.76	7.79	37.71	13.50	
25	0.50	0.71	47.76	17.09	85.47	30.59	
35	1.00	0.50	65.81	23.55	151.28	54.14	
45	1.50	0.35	50.34	18.02	201.62	72.16	
60	2.00	0.25	41.58	14.88	243.20	87.04	
80	2.50	0.18	23.08	8.26	266.28	95.30	
120	3.00	0.13	7.79	2.79	274.07	98.09	
170	3.50	0.09	1.61	0.58	275.68	98.67	
230	4.00	0.06	0.58	0.21	276.26	98.88	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.48	1.90	1.60	0.91	0.34	0.07	-0.64
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.9	0.54	1	-0.8	5.54	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT - 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-26 #S-4 (10')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): 967966.	Northing (ft): 971857.	Coordinate System: Florida State Plane East	Elevation (ft): -62.6 NAVD 88
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USCS: SP	Munsell: Wet - 7.5 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
310.20	304.40			#230 - 2.13			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.10	0.03	0.10	0.03	
10	-1.00	2.00	1.10	0.35	1.20	0.39	
14	-0.50	1.41	4.20	1.35	5.40	1.74	
18	0.00	1.00	15.50	5.00	20.90	6.74	
25	0.50	0.71	39.10	12.60	60.00	19.34	
35	1.00	0.50	52.20	16.83	112.20	36.17	
45	1.50	0.35	67.40	21.73	179.60	57.90	
60	2.00	0.25	78.50	25.31	258.10	83.20	
80	2.50	0.18	33.40	10.77	291.50	93.97	
120	3.00	0.13	9.60	3.09	301.10	97.07	
170	3.50	0.09	1.70	0.55	302.80	97.61	
230	4.00	0.06	0.80	0.26	303.60	97.87	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.67	2.04	1.84	1.32	0.67	0.37	-0.17
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.23	0.43	0.81	-0.22	2.95	

GRANULARMETRIC REPORT: JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
 Sample Name: JIVC-10-29 #S-1
 Analysis Date: 11-30-10
 Analyzed By: ML

Easting (ft): 967392. Northing (ft): 970634. Coordinate System: Florida State Plane East Elevation (ft): -53.0 NAVD 88

USCS: SW Munsell: Wet - 10 YR-4/1 Comments: Visual Shell Content = >1%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
288.00	284.10			#230 - 1.42		72.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.29	0.10	0.29	0.10	
4	-2.25	4.76	0.00	0.00	0.29	0.10	
5	-2.00	4.00	0.03	0.01	0.32	0.11	
7	-1.50	2.83	0.14	0.05	0.46	0.16	
10	-1.00	2.00	2.22	0.77	2.68	0.93	
14	-0.50	1.41	9.86	3.42	12.54	4.35	
18	0.00	1.00	18.35	6.37	30.89	10.73	
25	0.50	0.71	22.71	7.89	53.60	18.61	
35	1.00	0.50	33.32	11.57	86.92	30.18	
45	1.50	0.35	50.44	17.51	137.36	47.69	
60	2.00	0.25	78.07	27.11	215.43	74.80	
80	2.50	0.18	55.77	19.36	271.20	94.17	
120	3.00	0.13	10.67	3.70	281.87	97.87	
170	3.50	0.09	1.56	0.54	283.43	98.41	
230	4.00	0.06	0.49	0.17	283.92	98.58	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.61	2.24	2.01	1.54	0.78	0.33	-0.45
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.32	0.40	0.92	-0.75	3.43	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-29 #S-2 (5')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): 967392.	Northing (ft): 970634.	Coordinate System: Florida State Plane East	Elevation (ft): -57.0 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-5/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
350.20	346.90			#230 - 0.94			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.30	0.09	0.30	0.09	
5	-2.00	4.00	0.50	0.14	0.80	0.23	
7	-1.50	2.83	1.60	0.46	2.40	0.69	
10	-1.00	2.00	7.40	2.11	9.80	2.80	
14	-0.50	1.41	36.90	10.54	46.70	13.34	
18	0.00	1.00	68.60	19.59	115.30	32.92	
25	0.50	0.71	30.90	8.82	146.20	41.75	
35	1.00	0.50	84.30	24.07	230.50	65.82	
45	1.50	0.35	40.80	11.65	271.30	77.47	
60	2.00	0.25	49.60	14.16	320.90	91.63	
80	2.50	0.18	20.30	5.80	341.20	97.43	
120	3.00	0.13	4.60	1.31	345.80	98.74	
170	3.50	0.09	0.80	0.23	346.60	98.97	
230	4.00	0.06	0.30	0.09	346.90	99.06	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.29	1.73	1.39	0.67	-0.20	-0.43	-0.90
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.61	0.66	0.98	0.05	2.39

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-29 #S-3 (8')

Analysis Date: 11-16-10

Analyzed By: CA

Eastling (ft): 967392.	Northing (ft): 970634.	Coordinate System: Florida State Plane East	Elevation (ft): -60.0 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
329.40	325.10			#230 - 1.31			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	1.80	0.55	1.80	0.55	
4	-2.25	4.76	0.30	0.09	2.10	0.64	
5	-2.00	4.00	0.50	0.15	2.60	0.79	
7	-1.50	2.83	1.10	0.33	3.70	1.12	
10	-1.00	2.00	3.10	0.94	6.80	2.06	
14	-0.50	1.41	12.20	3.70	19.00	5.77	
18	0.00	1.00	27.90	8.47	46.90	14.24	
25	0.50	0.71	46.50	14.12	93.40	28.35	
35	1.00	0.50	50.80	15.42	144.20	43.78	
45	1.50	0.35	56.90	17.27	201.10	61.05	
60	2.00	0.25	77.00	23.38	278.10	84.43	
80	2.50	0.18	35.90	10.90	314.00	95.32	
120	3.00	0.13	9.40	2.85	323.40	98.18	
170	3.50	0.09	1.20	0.36	324.60	98.54	
230	4.00	0.06	0.50	0.15	325.10	98.69	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.49	1.99	1.80	1.18	0.38	0.06	-0.60
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.04	0.49	0.99	-0.72	4.24	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-29 #S-4 (11')

Analysis Date: 11-09-10

Analyzed By: JR

Easting (ft): 967392.	Northing (ft): 970634.	Coordinate System: Florida State Plane East	Elevation (ft): -63.0 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 6%
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Dry Weight (g): 209.39	Wash Weight (g): 205.84	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.72	Organics (%):	Carbonates (%): 85.30	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	6.38	3.05	6.38	3.05
4	-2.25	4.76	0.34	0.16	6.72	3.21
5	-2.00	4.00	0.30	0.14	7.02	3.35
7	-1.50	2.83	2.08	0.99	9.10	4.35
10	-1.00	2.00	7.96	3.80	17.06	8.15
14	-0.50	1.41	17.92	8.56	34.98	16.71
18	0.00	1.00	23.06	11.01	58.04	27.72
25	0.50	0.71	23.85	11.39	81.89	39.11
35	1.00	0.50	29.20	13.95	111.09	53.05
45	1.50	0.35	32.38	15.46	143.47	68.52
60	2.00	0.25	37.44	17.88	180.91	86.40
80	2.50	0.18	18.34	8.76	199.25	95.16
120	3.00	0.13	4.43	2.12	203.68	97.27
170	3.50	0.09	1.27	0.61	204.95	97.88
230	4.00	0.06	0.83	0.40	205.78	98.28

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.49	1.93	1.68	0.89	-0.12	-0.54	-1.41
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.68	0.62	1.29	-0.81	3.93	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-30 #S-1 (1')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): 968327.	Northing (ft): 970866.	Coordinate System: Florida State Plane East	Elevation (ft): -53.2 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
258.30	255.60			#230 - 2.17			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.20	0.08	0.20	0.08	
4	-2.25	4.76	0.10	0.04	0.30	0.12	
5	-2.00	4.00	0.20	0.08	0.50	0.19	
7	-1.50	2.83	0.70	0.27	1.20	0.46	
10	-1.00	2.00	3.10	1.20	4.30	1.66	
14	-0.50	1.41	14.50	5.61	18.80	7.28	
18	0.00	1.00	30.80	11.92	49.60	19.20	
25	0.50	0.71	37.20	14.40	86.80	33.60	
35	1.00	0.50	33.40	12.93	120.20	46.54	
45	1.50	0.35	36.20	14.01	156.40	60.55	
60	2.00	0.25	62.80	24.31	219.20	84.86	
80	2.50	0.18	28.10	10.88	247.30	95.74	
120	3.00	0.13	4.60	1.78	251.90	97.52	
170	3.50	0.09	0.70	0.27	252.60	97.79	
230	4.00	0.06	0.10	0.04	252.70	97.83	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.47	1.98	1.80	1.12	0.20	-0.13	-0.70
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.96	0.51	0.98	-0.36	2.49	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-30 #S-2 (5')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft):

968327.

Northing (ft):

970866.

Coordinate System:

Florida State Plane East

Elevation (ft):

-57.2 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = >1%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
248.50	245.78			#230 - 1.12		81.00	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.81	0.33	0.81	0.33	
4	-2.25	4.76	0.16	0.06	0.97	0.39	
5	-2.00	4.00	0.43	0.17	1.40	0.56	
7	-1.50	2.83	1.33	0.54	2.73	1.10	
10	-1.00	2.00	2.28	0.92	5.01	2.02	
14	-0.50	1.41	12.84	5.17	17.85	7.18	
18	0.00	1.00	30.75	12.37	48.60	19.56	
25	0.50	0.71	41.85	16.84	90.45	36.40	
35	1.00	0.50	44.75	18.01	135.20	54.41	
45	1.50	0.35	38.48	15.48	173.68	69.89	
60	2.00	0.25	41.44	16.68	215.12	86.57	
80	2.50	0.18	24.65	9.92	239.77	96.49	
120	3.00	0.13	5.25	2.11	245.02	98.60	
170	3.50	0.09	0.51	0.21	245.53	98.80	
230	4.00	0.06	0.18	0.07	245.71	98.88	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.42

1.92

1.65

0.88

0.16

-0.14

-0.71

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.86

0.55

0.98

-0.33

3.3

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-30 #S-3 (9')

Analysis Date: 11-18-10

Analyzed By: CA

Easting (ft): <p style="text-align: center;">968327.</p>	Northing (ft): <p style="text-align: center;">970866.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-61.2 NAVD 88</p>
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USCS: <p style="text-align: center;">SM-SC</p>	Munsell: <p style="text-align: center;">Wet - 7.5 YR-6/1</p>	Comments: Visual Shell Content = 1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
329.00	273.60			#230 - 16.93			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	1.60	0.49	1.60	0.49	
4	-2.25	4.76	0.60	0.18	2.20	0.67	
5	-2.00	4.00	0.60	0.18	2.80	0.85	
7	-1.50	2.83	1.80	0.55	4.60	1.40	
10	-1.00	2.00	4.40	1.34	9.00	2.74	
14	-0.50	1.41	14.30	4.35	23.30	7.08	
18	0.00	1.00	27.60	8.39	50.90	15.47	
25	0.50	0.71	42.60	12.95	93.50	28.42	
35	1.00	0.50	54.30	16.50	147.80	44.92	
45	1.50	0.35	50.40	15.32	198.20	60.24	
60	2.00	0.25	53.10	16.14	251.30	76.38	
80	2.50	0.18	17.00	5.17	268.30	81.55	
120	3.00	0.13	4.50	1.37	272.80	82.92	
170	3.50	0.09	0.30	0.09	273.10	83.01	
230	4.00	0.06	0.20	0.06	273.30	83.07	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		1.96	1.17	0.37	0.02	-0.74
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.83	0.56	0.97	-0.69	4.19	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 5/1/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-30 #S-4 (12')

Analysis Date: 11-09-10

Analyzed By: JR

Easting (ft): 968327.	Northing (ft): 970866.	Coordinate System: Florida State Plane East	Elevation (ft): -64.2 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
313.46	308.38			#230 - 1.67		78.50	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.34	0.11	0.34	0.11	
7	-1.50	2.83	0.82	0.26	1.16	0.37	
10	-1.00	2.00	1.96	0.63	3.12	1.00	
14	-0.50	1.41	9.91	3.16	13.03	4.16	
18	0.00	1.00	29.97	9.56	43.00	13.72	
25	0.50	0.71	45.22	14.43	88.22	28.14	
35	1.00	0.50	58.09	18.53	146.31	46.68	
45	1.50	0.35	71.03	22.66	217.34	69.34	
60	2.00	0.25	63.89	20.38	281.23	89.72	
80	2.50	0.18	20.58	6.57	301.81	96.28	
120	3.00	0.13	4.60	1.47	306.41	97.75	
170	3.50	0.09	1.04	0.33	307.45	98.08	
230	4.00	0.06	0.76	0.24	308.21	98.33	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.40	1.86	1.64	1.07	0.39	0.08	-0.46
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.98	0.51	0.85	-0.24	3.03	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-36 #S-1 (1')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): 968367.	Northing (ft): 974066.	Coordinate System: Florida State Plane East	Elevation (ft): -54.2 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
329.00	325.30			#230 - 1.16			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.70	0.21	0.70	0.21	
4	-2.25	4.76	0.10	0.03	0.80	0.24	
5	-2.00	4.00	0.20	0.06	1.00	0.30	
7	-1.50	2.83	1.10	0.33	2.10	0.64	
10	-1.00	2.00	3.20	0.97	5.30	1.61	
14	-0.50	1.41	12.20	3.71	17.50	5.32	
18	0.00	1.00	35.40	10.76	52.90	16.08	
25	0.50	0.71	65.70	19.97	118.60	36.05	
35	1.00	0.50	63.70	19.36	182.30	55.41	
45	1.50	0.35	51.90	15.78	234.20	71.19	
60	2.00	0.25	69.80	21.22	304.00	92.40	
80	2.50	0.18	17.10	5.20	321.10	97.60	
120	3.00	0.13	2.90	0.88	324.00	98.48	
170	3.50	0.09	1.00	0.30	325.00	98.78	
230	4.00	0.06	0.20	0.06	325.20	98.84	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.25	1.80	1.59	0.86	0.22	0.00	-0.54
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.85	0.55	0.88	-0.33	3.48

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-36 #S-2 (3')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 968367.	Northing (ft): 974066.	Coordinate System: Florida State Plane East	Elevation (ft): -56.2 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
217.30	214.20			#230 - 1.45		73.10	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.16	0.07	0.16	0.07	0.07
7	-1.50	2.83	0.31	0.14	0.47	0.22	0.22
10	-1.00	2.00	0.88	0.40	1.35	0.62	0.62
14	-0.50	1.41	3.20	1.47	4.55	2.09	2.09
18	0.00	1.00	9.19	4.23	13.74	6.32	6.32
25	0.50	0.71	21.86	10.06	35.60	16.38	16.38
35	1.00	0.50	42.45	19.54	78.05	35.92	35.92
45	1.50	0.35	47.33	21.78	125.38	57.70	57.70
60	2.00	0.25	54.72	25.18	180.10	82.88	82.88
80	2.50	0.18	26.99	12.42	207.09	95.30	95.30
120	3.00	0.13	6.07	2.79	213.16	98.09	98.09
170	3.50	0.09	0.75	0.35	213.91	98.44	98.44
230	4.00	0.06	0.23	0.11	214.14	98.55	98.55

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.49	2.05	1.84	1.32	0.72	0.48	-0.16
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.24	0.42	0.79	-0.43	3.34	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
 Sample Name: JIVC-10-36 #S-3 (5')
 Analysis Date: 11-16-10
 Analyzed By: CA

Easting (ft): 968367. Northing (ft): 974066. Coordinate System: Florida State Plane East Elevation (ft): -58.2 NAVD 88

USCS: SW Munsell: Wet - 7.5 YR-6/1 Comments: Visual Shell Content = >1%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
306.70	302.80			#230 - 1.43			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	1.20	0.39	1.20	0.39	
4	-2.25	4.76	0.00	0.00	1.20	0.39	
5	-2.00	4.00	0.40	0.13	1.60	0.52	
7	-1.50	2.83	1.80	0.59	3.40	1.11	
10	-1.00	2.00	4.20	1.37	7.60	2.48	
14	-0.50	1.41	8.50	2.77	16.10	5.25	
18	0.00	1.00	27.40	8.93	43.50	14.18	
25	0.50	0.71	73.50	23.96	117.00	38.15	
35	1.00	0.50	59.60	19.43	176.60	57.58	
45	1.50	0.35	52.20	17.02	228.80	74.60	
60	2.00	0.25	50.50	16.47	279.30	91.07	
80	2.50	0.18	17.10	5.58	296.40	96.64	
120	3.00	0.13	5.50	1.79	301.90	98.43	
170	3.50	0.09	0.20	0.07	302.10	98.50	
230	4.00	0.06	0.20	0.07	302.30	98.57	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	2.35	1.79	1.51	0.80	0.23	0.04	-0.55
	0.81	0.57	0.89	-0.42	4.23		

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-36 #S-4 (7')

Analysis Date: 11-09-10

Analyzed By: JR

Easting (ft): 968367.	Northing (ft): 974066.	Coordinate System: Florida State Plane East	Elevation (ft): -60.2 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
278.50	271.80			#230 - 2.44		68.40	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.83	0.30	0.83	0.30	
4	-2.25	4.76	0.10	0.04	0.93	0.33	
5	-2.00	4.00	0.18	0.06	1.11	0.40	
7	-1.50	2.83	0.25	0.09	1.36	0.49	
10	-1.00	2.00	0.53	0.19	1.89	0.68	
14	-0.50	1.41	1.33	0.48	3.22	1.16	
18	0.00	1.00	3.51	1.26	6.73	2.42	
25	0.50	0.71	13.04	4.68	19.77	7.10	
35	1.00	0.50	45.59	16.37	65.36	23.47	
45	1.50	0.35	69.91	25.10	135.27	48.57	
60	2.00	0.25	80.20	28.80	215.47	77.37	
80	2.50	0.18	39.39	14.14	254.86	91.51	
120	3.00	0.13	12.19	4.38	267.05	95.89	
170	3.50	0.09	3.12	1.12	270.17	97.01	
230	4.00	0.06	1.54	0.55	271.71	97.56	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.23	1.96	1.52	1.03	0.77	0.28
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.46	0.36	0.77	-0.88	7.84	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
Sample Name: JIVC-10-50 #S-1 (1')
Analysis Date: 11-30-10
Analyzed By: ML

Easting (ft): 968726. Northing (ft): 978358. Coordinate System: Florida State Plane East Elevation (ft): -47.4 NAVD 88

USCS: SP Munsell: Wet - 10 YR-4/1 Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
201.40	199.39			#230 - 1.05		59.10	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.08	0.04	0.08	0.04	0.04
10	-1.00	2.00	0.20	0.10	0.28	0.14	0.14
14	-0.50	1.41	0.66	0.33	0.94	0.47	0.47
18	0.00	1.00	1.83	0.91	2.77	1.38	1.38
25	0.50	0.71	4.21	2.09	6.98	3.47	3.47
35	1.00	0.50	10.39	5.16	17.37	8.62	8.62
45	1.50	0.35	24.52	12.17	41.89	20.80	20.80
60	2.00	0.25	87.04	43.22	128.93	64.02	64.02
80	2.50	0.18	60.11	29.85	189.04	93.86	93.86
120	3.00	0.13	9.00	4.47	198.04	98.33	98.33
170	3.50	0.09	0.93	0.46	198.97	98.79	98.79
230	4.00	0.06	0.31	0.15	199.28	98.95	98.95

Phi 5 Phi 16 Phi 25 Phi 50 Phi 75 Phi 84 Phi 95

2.63 2.33 2.18 1.84 1.55 1.30 0.65

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.78	0.29	0.58	-1.16	6.31

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-50 #S-2 (4')

Analysis Date: 11-16-10

Analyzed By: CA

Easting (ft): <p style="text-align: center;">968726.</p>	Northing (ft): <p style="text-align: center;">978358.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-50.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 7.5 YR-6/1</p>	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
407.80	403.80			#230 - 1.08			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.20	0.05	0.20	0.05	
7	-1.50	2.83	1.10	0.27	1.30	0.32	
10	-1.00	2.00	2.90	0.71	4.20	1.03	
14	-0.50	1.41	8.80	2.16	13.00	3.19	
18	0.00	1.00	17.70	4.34	30.70	7.53	
25	0.50	0.71	28.20	6.92	58.90	14.44	
35	1.00	0.50	35.10	8.61	94.00	23.05	
45	1.50	0.35	77.70	19.05	171.70	42.10	
60	2.00	0.25	160.00	39.23	331.70	81.34	
80	2.50	0.18	59.50	14.59	391.20	95.93	
120	3.00	0.13	10.80	2.65	402.00	98.58	
170	3.50	0.09	1.10	0.27	403.10	98.85	
230	4.00	0.06	0.30	0.07	403.40	98.92	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.47	2.09	1.92	1.60	1.05	0.59	-0.29
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.39	0.38	0.81	-1.08	4.29	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-50 #S-3 (7')

Analysis Date: 11-09-10

Analyzed By: JR

Easting (ft): 968726.	Northing (ft): 978358.	Coordinate System: Florida State Plane East	Elevation (ft): -53.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
354.40	349.10			#230 - 1.53		68.90	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	1.13	0.32	1.13	0.32	
4	-2.25	4.76	0.19	0.05	1.32	0.37	
5	-2.00	4.00	0.13	0.04	1.45	0.41	
7	-1.50	2.83	1.19	0.34	2.64	0.74	
10	-1.00	2.00	3.12	0.88	5.76	1.63	
14	-0.50	1.41	6.78	1.91	12.54	3.54	
18	0.00	1.00	11.09	3.13	23.63	6.67	
25	0.50	0.71	16.39	4.62	40.02	11.29	
35	1.00	0.50	38.50	10.86	78.52	22.16	
45	1.50	0.35	63.81	18.01	142.33	40.16	
60	2.00	0.25	113.96	32.16	256.29	72.32	
80	2.50	0.18	74.16	20.93	330.45	93.24	
120	3.00	0.13	15.36	4.33	345.81	97.58	
170	3.50	0.09	2.27	0.64	348.08	98.22	
230	4.00	0.06	0.90	0.25	348.98	98.47	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.70	2.28	2.06	1.65	1.08	0.72	-0.27
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.47	0.36	0.88	-1.36	6.47	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-50 #S-4 (10')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 968726.	Northing (ft): 978358.	Coordinate System: Florida State Plane East	Elevation (ft): -56.4 NAVD 88
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USCS: SP	Munsell: Wet - 7.5 YR-5/1	Comments: Visual Shell Content = >1%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
499.20	493.60			#230 - 1.18			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.80	0.16	0.80	0.16	
4	-2.25	4.76	0.60	0.12	1.40	0.28	
5	-2.00	4.00	0.20	0.04	1.60	0.32	
7	-1.50	2.83	1.00	0.20	2.60	0.52	
10	-1.00	2.00	3.00	0.60	5.60	1.12	
14	-0.50	1.41	7.90	1.58	13.50	2.70	
18	0.00	1.00	20.50	4.11	34.00	6.81	
25	0.50	0.71	41.80	8.37	75.80	15.18	
35	1.00	0.50	39.60	7.93	115.40	23.12	
45	1.50	0.35	126.50	25.34	241.90	48.46	
60	2.00	0.25	153.40	30.73	395.30	79.19	
80	2.50	0.18	68.60	13.74	463.90	92.93	
120	3.00	0.13	25.20	5.05	489.10	97.98	
170	3.50	0.09	3.30	0.66	492.40	98.64	
230	4.00	0.06	0.90	0.18	493.30	98.82	



Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.70	2.18	1.93	1.53	1.04	0.55	-0.22
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.39	0.38	0.85	-0.97	5.2	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-51 #S-1 (2')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 968896.	Northing (ft): 977372.	Coordinate System: Florida State Plane East	Elevation (ft): -50.2 NAVD 88
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USCS: SP	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
342.50	339.10			#230 - 1.14			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.49	5.62	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.10	0.03	0.10	0.03	
7	-1.50	2.83	0.00	0.00	0.10	0.03	
10	-1.00	2.00	0.20	0.06	0.30	0.09	
14	-0.50	1.41	0.90	0.26	1.20	0.35	
18	0.00	1.00	2.90	0.85	4.10	1.20	
25	0.50	0.71	12.80	3.74	16.90	4.93	
35	1.00	0.50	38.70	11.30	55.60	16.23	
45	1.50	0.35	75.90	22.16	131.50	38.39	
60	2.00	0.25	168.50	49.20	300.00	87.59	
80	2.50	0.18	34.60	10.10	334.60	97.69	
120	3.00	0.13	1.20	0.35	335.80	98.04	
170	3.50	0.09	2.10	0.61	337.90	98.66	
230	4.00	0.06	0.70	0.20	338.60	98.86	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.37	1.96	1.87	1.62	1.20	0.99	0.50
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.51	0.35	0.56	-0.71	5.45	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-51 #S-2 (5')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 968896.	Northing (ft): 977372.	Coordinate System: Florida State Plane East	Elevation (ft): -53.2 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g): 259.30	Wash Weight (g): 256.36	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.18	Organics (%):	Carbonates (%): 64.20	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.09	0.23	0.09
10	-1.00	2.00	0.98	0.38	1.21	0.47
14	-0.50	1.41	2.17	0.84	3.38	1.30
18	0.00	1.00	3.89	1.50	7.27	2.80
25	0.50	0.71	6.91	2.66	14.18	5.47
35	1.00	0.50	15.01	5.79	29.19	11.26
45	1.50	0.35	32.88	12.68	62.07	23.94
60	2.00	0.25	96.80	37.33	158.87	61.27
80	2.50	0.18	78.45	30.25	237.32	91.52
120	3.00	0.13	14.96	5.77	252.28	97.29
170	3.50	0.09	3.00	1.16	255.28	98.45
230	4.00	0.06	0.97	0.37	256.25	98.82

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.80	2.38	2.23	1.85	1.51	1.19	0.41
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.76	0.30	0.7	-1.19	6.04	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
Sample Name: JIVC-10-51 #S-3 (8')
Analysis Date: 11-10-10
Analyzed By: JR

Easting (ft): 968896. Northing (ft): 977372. Coordinate System: Florida State Plane East Elevation (ft): -56.2 NAVD 88

USCS: SW Munsell: Wet - 10 YR-4/1 Comments: Visual Shell Content =>1%

Dry Weight (g): 242.20	Wash Weight (g): 237.93	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.78	Organics (%):	Carbonates (%): 75.80	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.27	0.11	0.27	0.11
5	-2.00	4.00	0.26	0.11	0.53	0.22
7	-1.50	2.83	0.95	0.39	1.48	0.61
10	-1.00	2.00	2.41	1.00	3.89	1.61
14	-0.50	1.41	7.15	2.95	11.04	4.56
18	0.00	1.00	13.27	5.48	24.31	10.04
25	0.50	0.71	17.05	7.04	41.36	17.08
35	1.00	0.50	21.64	8.93	63.00	26.01
45	1.50	0.35	22.24	9.18	85.24	35.19
60	2.00	0.25	48.17	19.89	133.41	55.08
80	2.50	0.18	79.62	32.87	213.03	87.96
120	3.00	0.13	21.41	8.84	234.44	96.80
170	3.50	0.09	2.64	1.09	237.08	97.89
230	4.00	0.06	0.81	0.33	237.89	98.22

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.44	2.30	1.87	0.94	0.42	-0.46

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.55	0.34	1.02	-0.96	3.43

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-51 #S-4 (10')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 968896.	Northing (ft): 977372.	Coordinate System: Florida State Plane East	Elevation (ft): -58.2 NAVD 88
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USCS: SW	Munsell: Wet - 7.5 YR-6/1	Comments: Visual Shell Content = >1%
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Dry Weight (g): 346.20	Wash Weight (g): 335.20	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 3.38	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.49	5.62	0.50	0.14	0.50	0.14
4	-2.25	4.76	0.10	0.03	0.60	0.17
5	-2.00	4.00	0.20	0.06	0.80	0.23
7	-1.50	2.83	1.20	0.35	2.00	0.58
10	-1.00	2.00	2.90	0.84	4.90	1.42
14	-0.50	1.41	7.40	2.14	12.30	3.55
18	0.00	1.00	12.70	3.67	25.00	7.22
25	0.50	0.71	18.50	5.34	43.50	12.56
35	1.00	0.50	22.40	6.47	65.90	19.04
45	1.50	0.35	32.00	9.24	97.90	28.28
60	2.00	0.25	87.30	25.22	185.20	53.50
80	2.50	0.18	95.50	27.59	280.70	81.08
120	3.00	0.13	42.90	12.39	323.60	93.47
170	3.50	0.09	7.80	2.25	331.40	95.73
230	4.00	0.06	3.10	0.90	334.50	96.62

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.34	2.62	2.39	1.93	1.32	0.77	-0.30

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.7	0.31	0.98	-1.13	4.7

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-52 #S-1 (1')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft): 968452.	Northing (ft): 979326.	Coordinate System: Florida State Plane East	Elevation (ft): -49.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g): 392.90	Wash Weight (g): 389.00	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.20	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.49	5.62	0.50	0.13	0.50	0.13
4	-2.25	4.76	0.70	0.18	1.20	0.31
5	-2.00	4.00	0.60	0.15	1.80	0.46
7	-1.50	2.83	1.50	0.38	3.30	0.84
10	-1.00	2.00	2.80	0.71	6.10	1.55
14	-0.50	1.41	8.30	2.11	14.40	3.67
18	0.00	1.00	20.80	5.29	35.20	8.96
25	0.50	0.71	42.90	10.92	78.10	19.88
35	1.00	0.50	83.10	21.15	161.20	41.03
45	1.50	0.35	133.80	34.05	295.00	75.08
60	2.00	0.25	76.10	19.37	371.10	94.45
80	2.50	0.18	12.30	3.13	383.40	97.58
120	3.00	0.13	3.50	0.89	386.90	98.47
170	3.50	0.09	0.90	0.23	387.80	98.70
230	4.00	0.06	0.40	0.10	388.20	98.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.09	1.73	1.50	1.13	0.62	0.32	-0.37
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.01	0.50	0.76	-0.96	5.8

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-52 #S-2 (5')

Analysis Date: 11-30-10

Analyzed By: ML

Easting (ft): 968452.	Northing (ft): 979326.	Coordinate System: Florida State Plane East	Elevation (ft): -53.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = >1%
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Dry Weight (g): 268.60	Wash Weight (g): 265.36	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 1.22	Organics (%):	Carbonates (%): 82.80	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.59	0.22	0.59	0.22
4	-2.25	4.76	0.11	0.04	0.70	0.26
5	-2.00	4.00	0.27	0.10	0.97	0.36
7	-1.50	2.83	1.90	0.71	2.87	1.07
10	-1.00	2.00	5.76	2.14	8.63	3.21
14	-0.50	1.41	16.17	6.02	24.80	9.23
18	0.00	1.00	28.19	10.50	52.99	19.73
25	0.50	0.71	36.32	13.52	89.31	33.25
35	1.00	0.50	51.36	19.12	140.67	52.37
45	1.50	0.35	60.89	22.67	201.56	75.04
60	2.00	0.25	41.59	15.48	243.15	90.52
80	2.50	0.18	15.34	5.71	258.49	96.24
120	3.00	0.13	5.15	1.92	263.64	98.15
170	3.50	0.09	1.29	0.48	264.93	98.63
230	4.00	0.06	0.38	0.14	265.31	98.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.39	1.79	1.50	0.94	0.19	-0.18	-0.85
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.82	0.57	0.96	-0.39	3.42	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-52 #S-3 (8')

Analysis Date: 11-17-10

Analyzed By: CA

Easting (ft):

968452.

Northing (ft):

979326.

Coordinate System:

Florida State Plane East

Elevation (ft):

-56.6 NAVD 88

USCS:

SP

Munsell:

Wet - 7.5 YR-5/1

Comments: Visual Shell Content = >1%

Dry Weight (g):

415.10

Wash Weight (g):

410.20

Pan Retained (g):

Sieve Loss (%):

Fines (%):

#230 - 1.37

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.49

5.62

0.90

0.22

0.90

0.22

4

-2.25

4.76

0.60

0.14

1.50

0.36

5

-2.00

4.00

0.50

0.12

2.00

0.48

7

-1.50

2.83

2.50

0.60

4.50

1.08

10

-1.00

2.00

5.00

1.20

9.50

2.29

14

-0.50

1.41

12.60

3.04

22.10

5.32

18

0.00

1.00

23.80

5.73

45.90

11.06

25

0.50

0.71

42.30

10.19

88.20

21.25

35

1.00

0.50

91.60

22.07

179.80

43.31

45

1.50

0.35

144.10

34.71

323.90

78.03

60

2.00

0.25

63.20

15.23

387.10

93.25

80

2.50

0.18

14.50

3.49

401.60

96.75

120

3.00

0.13

5.80

1.40

407.40

98.15

170

3.50

0.09

1.40

0.34

408.80

98.48

230

4.00

0.06

0.60

0.14

409.40

98.63

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.25

1.70

1.46

1.10

0.58

0.24

-0.55

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.96

0.51

0.82

-0.9

5.62

GRANULARMETRIC REPORT, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-52 #S-4 (11')

Analysis Date: 11-11-10

Analyzed By: JR

Easting (ft):

968452.

Northing (ft):

979326.

Coordinate System:

Florida State Plane East

Elevation (ft):

-59.6 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):

202.45

Wash Weight (g):

198.78

Pan Retained (g):

Sieve Loss (%):

Fines (%):

#230 - 1.91

Organics (%):

Carbonates (%):

84.00

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.17

0.08

0.17

0.08

5

-2.00

4.00

0.28

0.14

0.45

0.22

7

-1.50

2.83

0.38

0.19

0.83

0.41

10

-1.00

2.00

2.15

1.06

2.98

1.47

14

-0.50

1.41

7.68

3.79

10.66

5.27

18

0.00

1.00

16.51

8.16

27.17

13.42

25

0.50

0.71

23.63

11.67

50.80

25.09

35

1.00

0.50

37.76

18.65

88.56

43.74

45

1.50

0.35

57.13

28.22

145.69

71.96

60

2.00

0.25

34.82

17.20

180.51

89.16

80

2.50

0.18

9.75

4.82

190.26

93.98

120

3.00

0.13

4.92

2.43

195.18

96.41

170

3.50

0.09

2.16

1.07

197.34

97.48

230

4.00

0.06

1.24

0.61

198.58

98.09

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.71

1.85

1.59

1.11

0.50

0.11

-0.54

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1

0.50

0.89

-0.16

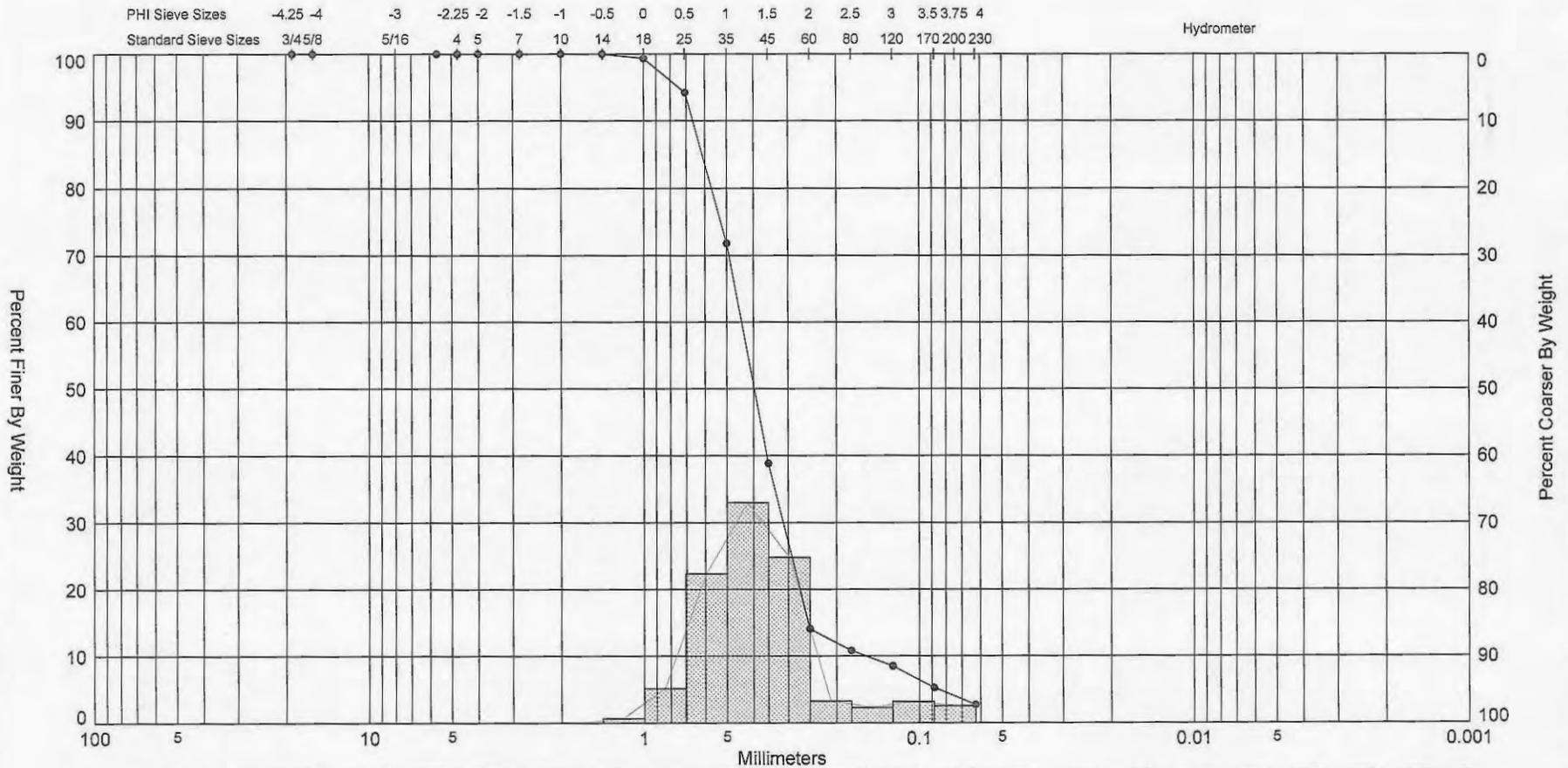
3.65

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ - FL DEP ROSS.GDT 4/29/11

Post CC Sieve Graph



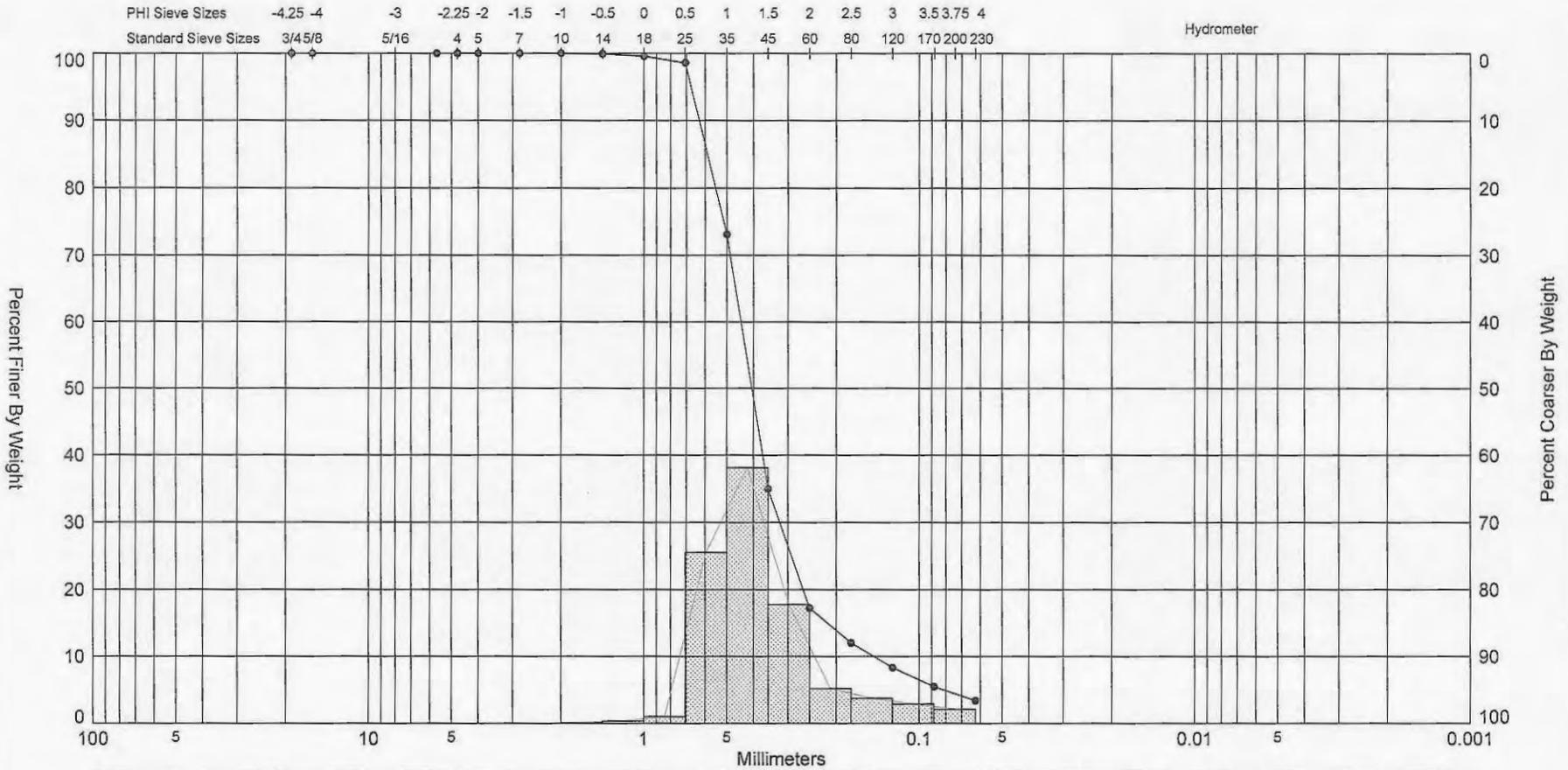
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GOT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
VC-10-1 PCC #S-1 (1')	—●—		SP	#230 - 2.75			1.33	1.4	1.14	4.87	0.74	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	12-06-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	
														Northing (Y, ft):	
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

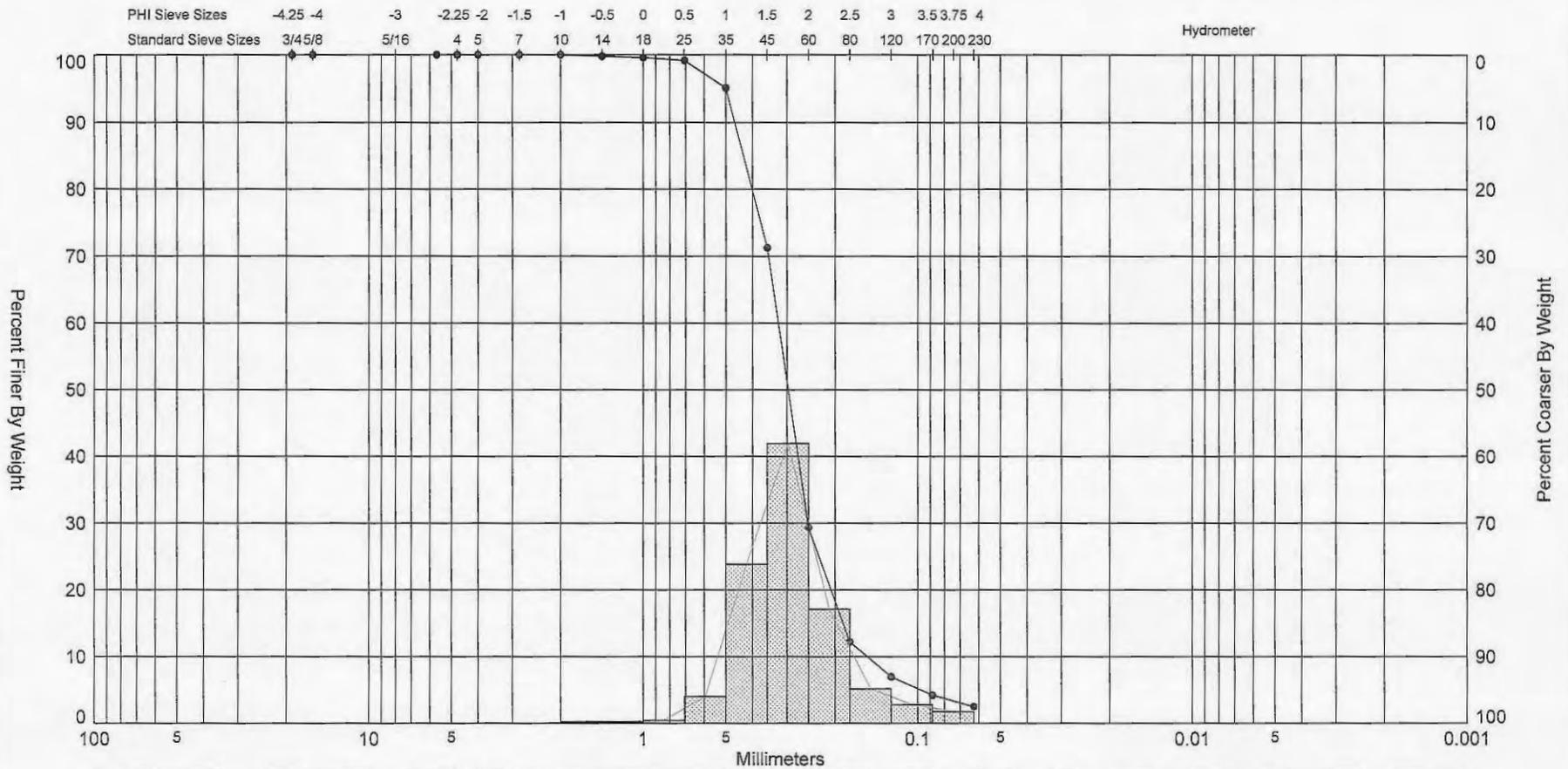
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-2 PCC #S-1 (5')	—●—		SP	#230 - 3.36			1.3	1.42	1.32	4.98	0.71	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0 %												Analysis Date:	12-02-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

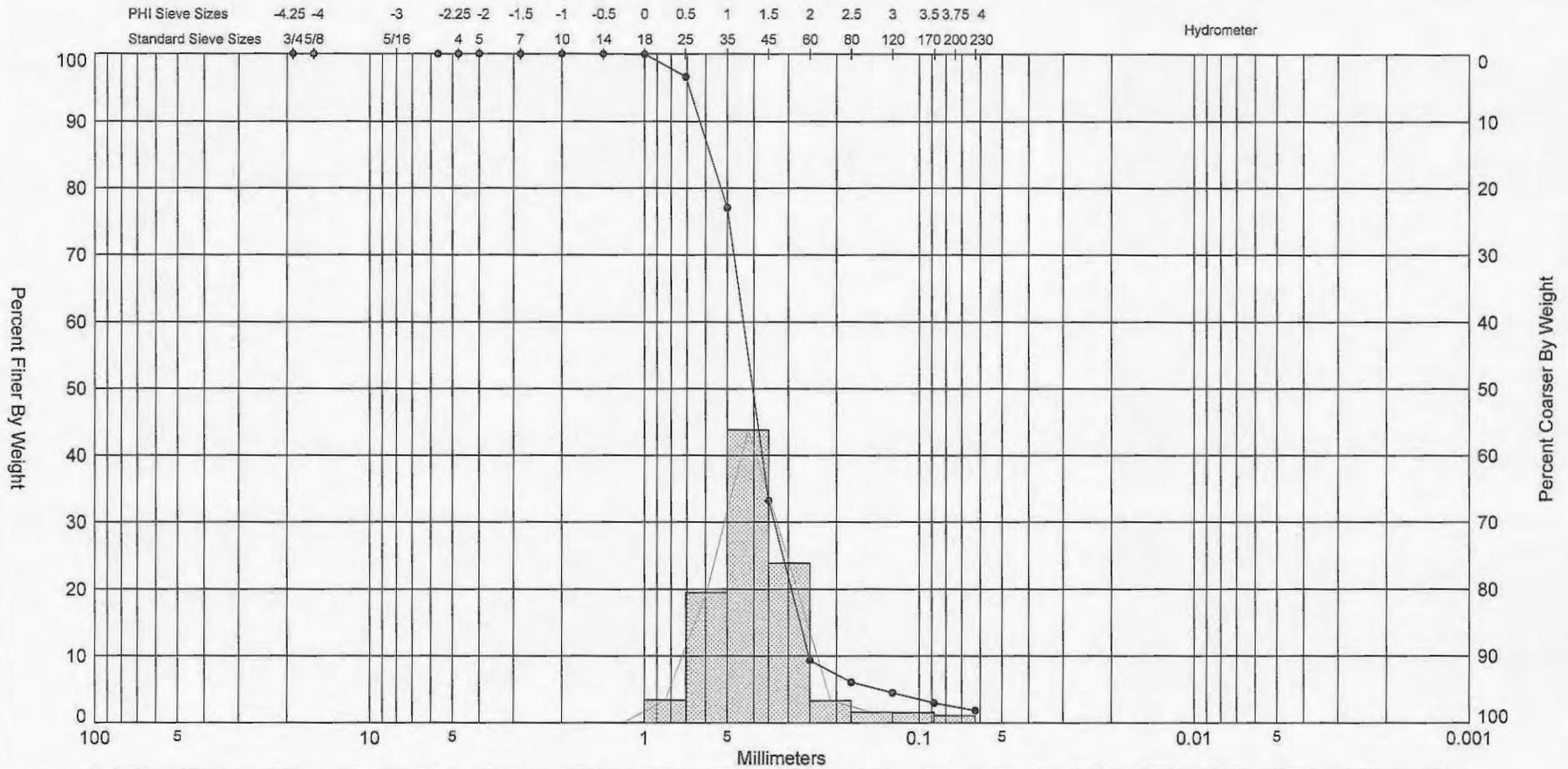
SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-3 PCC #S-1 (8')	—●—		SP	#230 - 2.50			1.75	1.79	0.6	4.99	0.6	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0 %												Analysis Date:	12-02-10
Depths and elevations based on measured values												Analyzed By:	ML
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

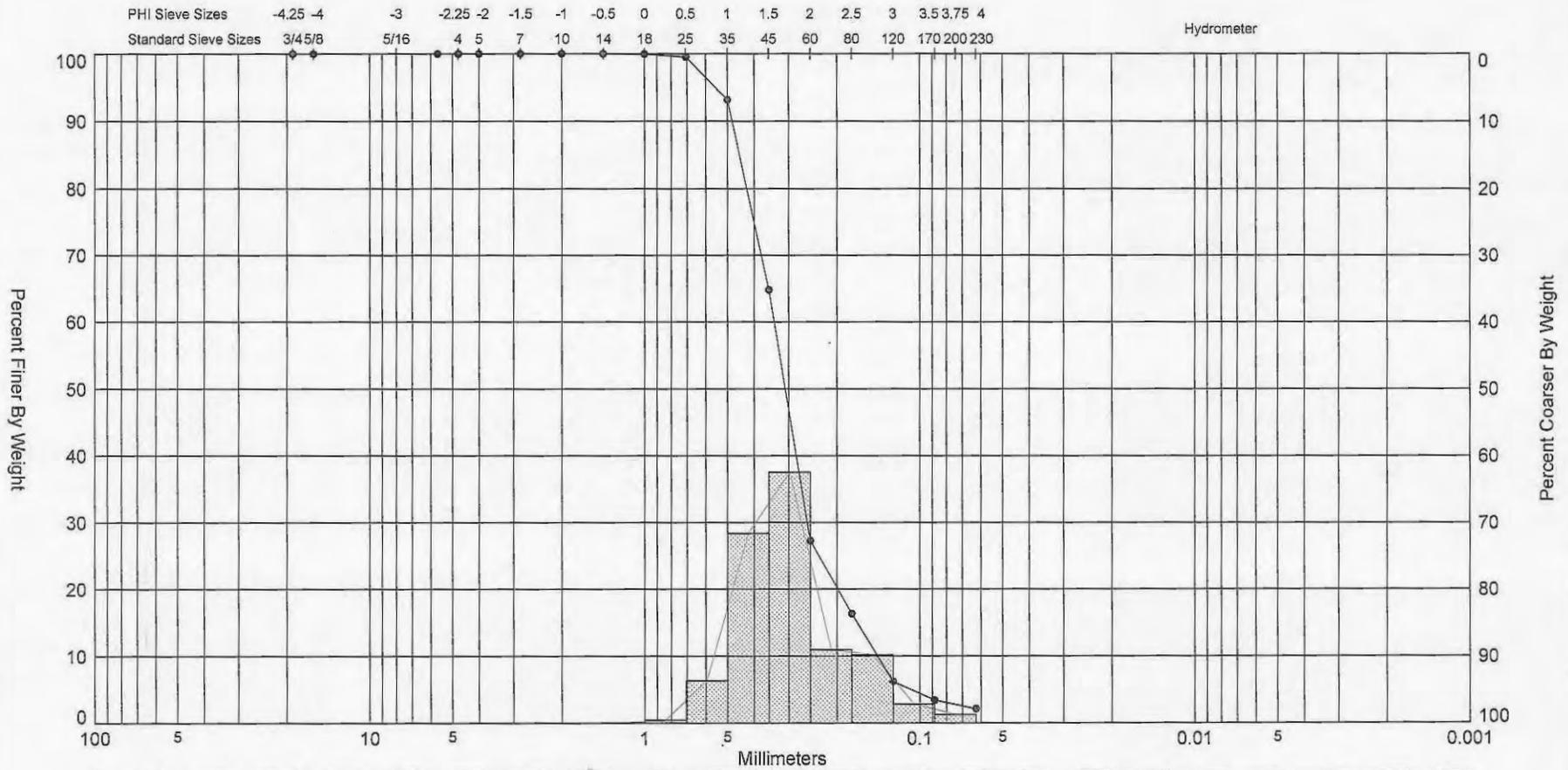
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-4 PCC #S-1 (1)	—●—		SP	#230 - 1.84			1.31	1.35	1.28	6.49	0.58	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-02-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

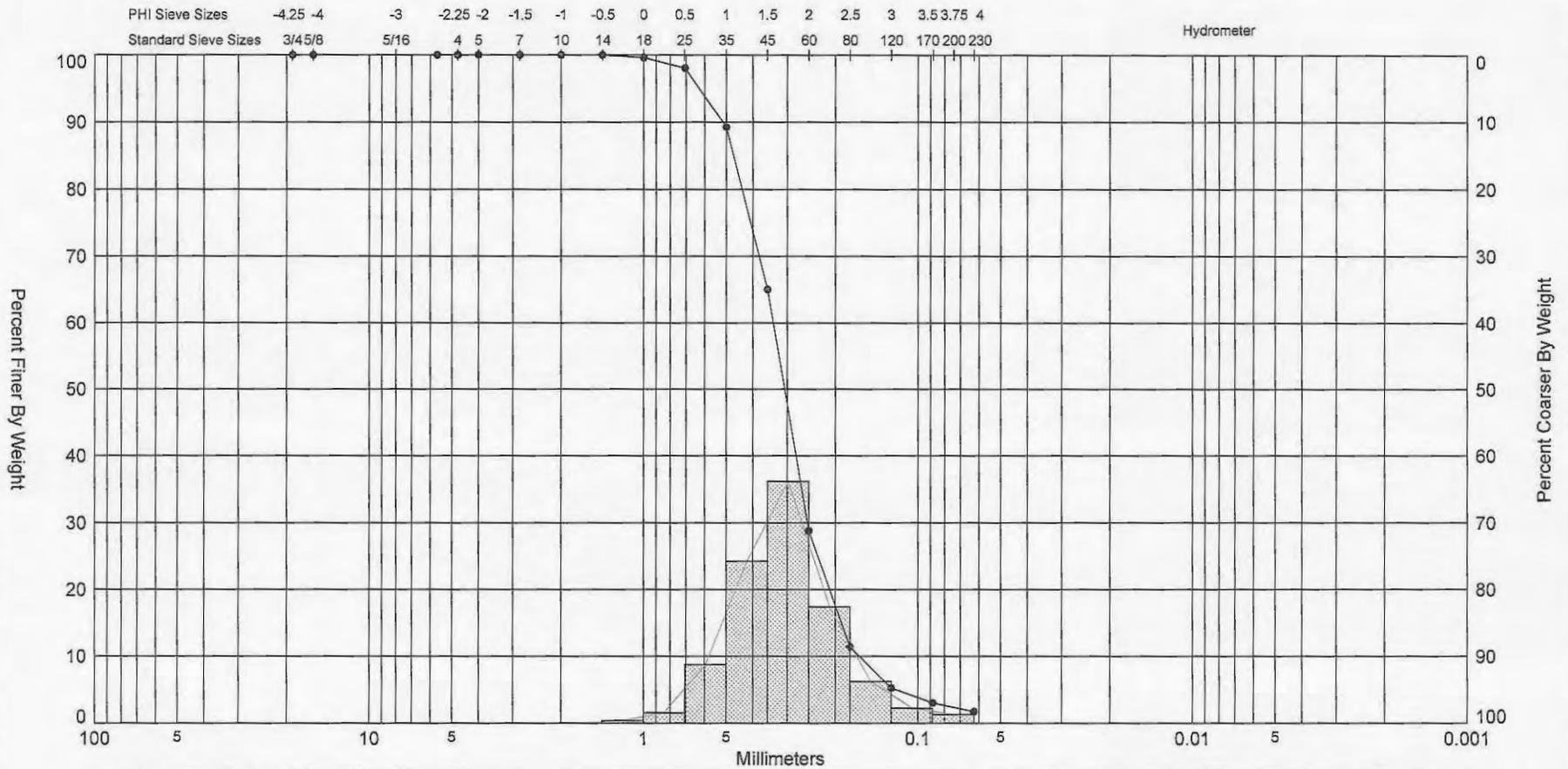
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



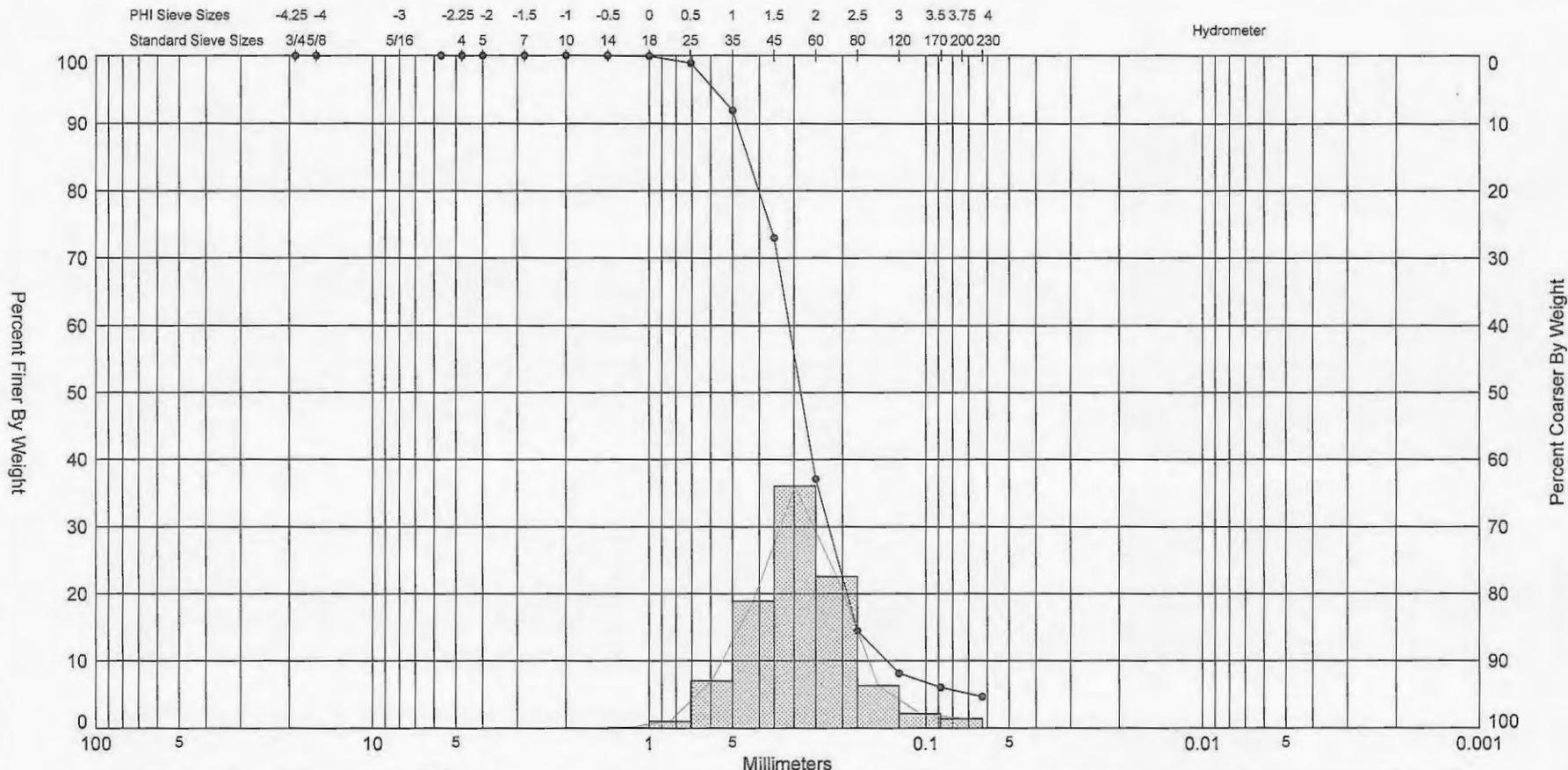
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-8A PCC #S-1 (3")	—●—		SP	#230 - 2.10			1.7	1.76	0.74	3.6	0.63	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-02-10
Depths and elevations based on measured values												Analyzed By:	ML
							American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT 4/29/11



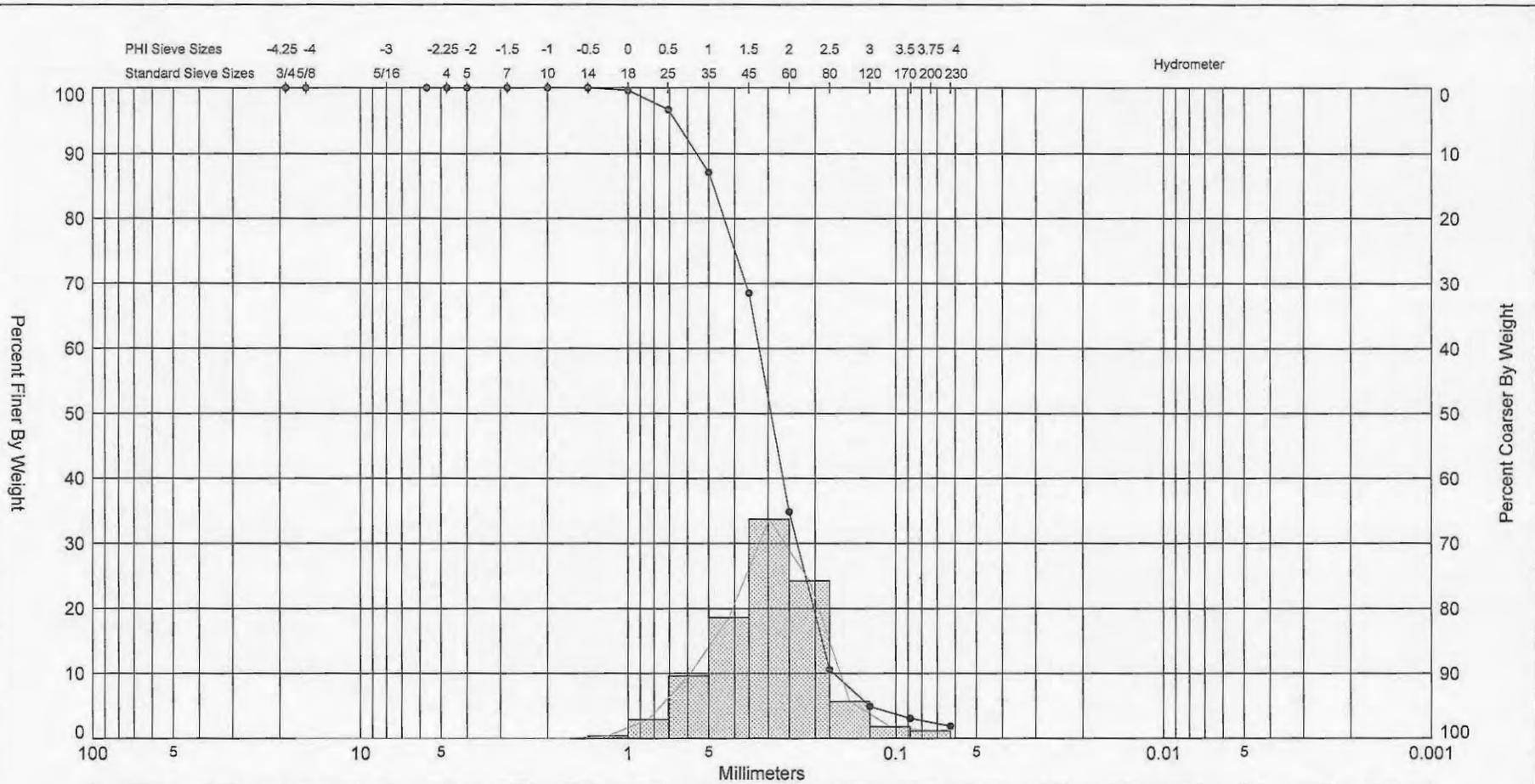
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-20 PCC #S-1 (3)	●—			#230 - 4.66			1.82	1.81	0.34	3.82	0.62	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-03-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

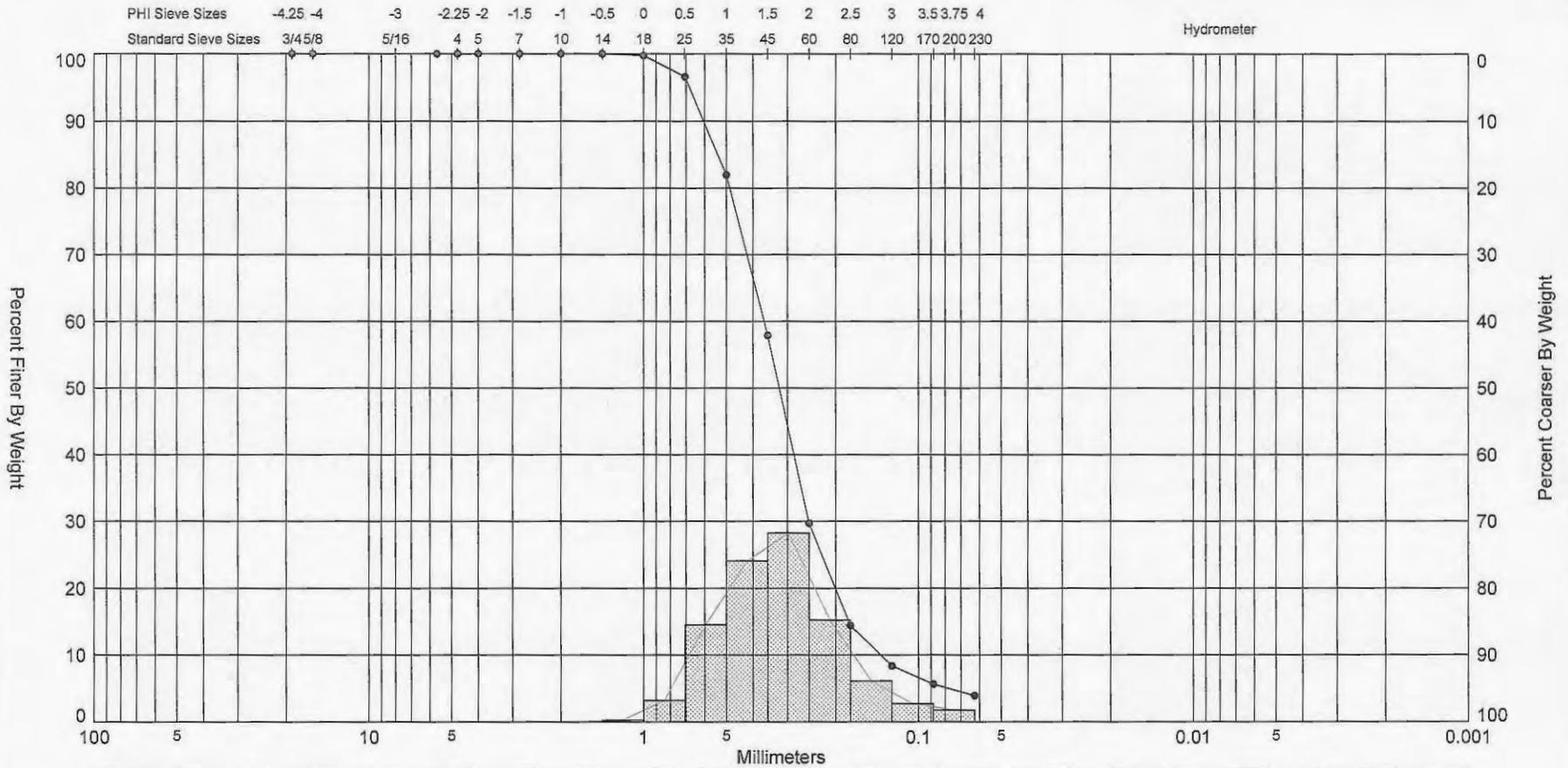
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



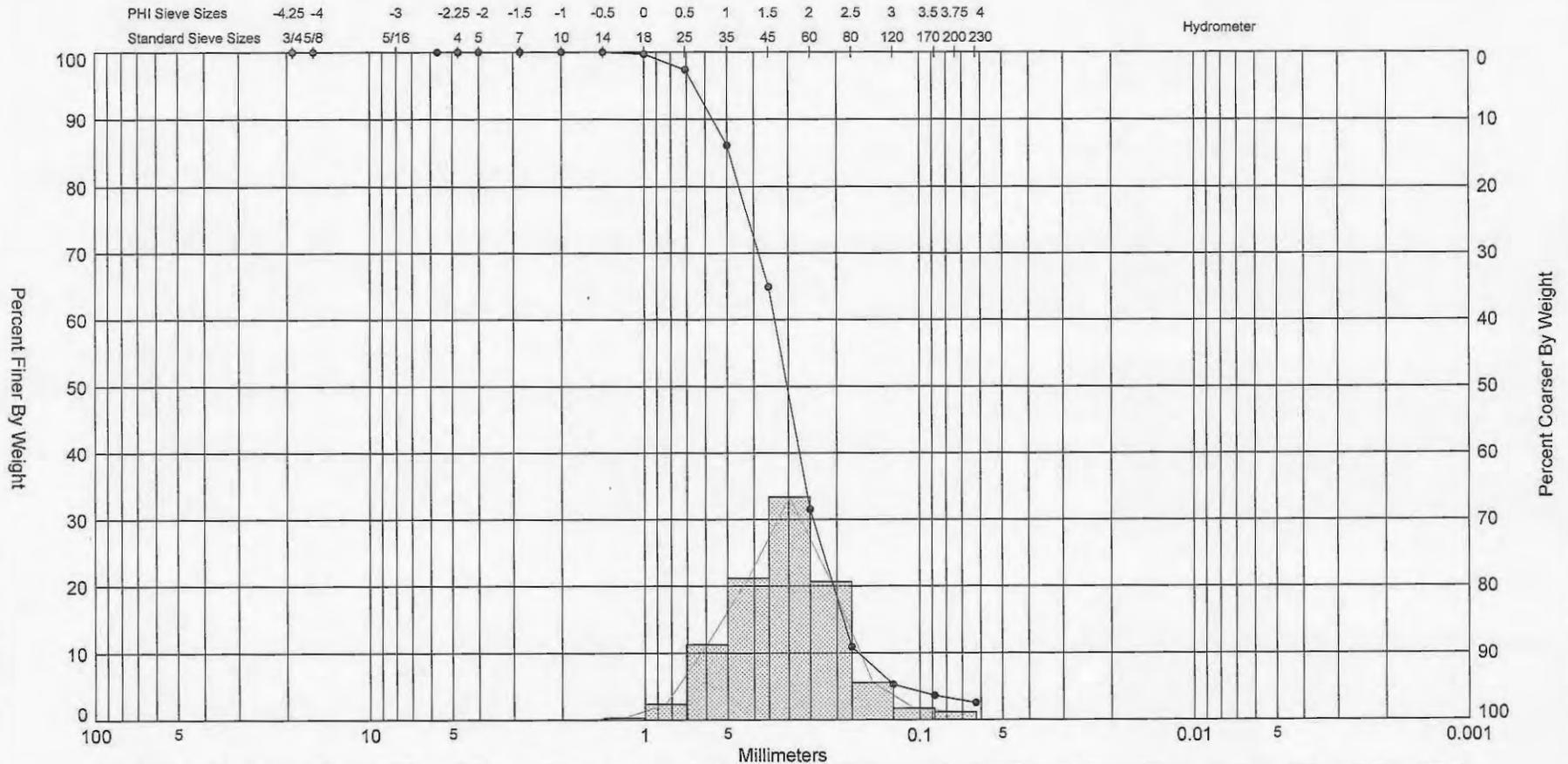
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-22 PCC #S-1 (4')	—●—		SP	#230 - 1.90			1.77	1.74	0.03	3.58	0.66	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-06-10
Depths and elevations based on measured values												Analyzed By:	ML
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

SIEVE ANALYSIS, JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



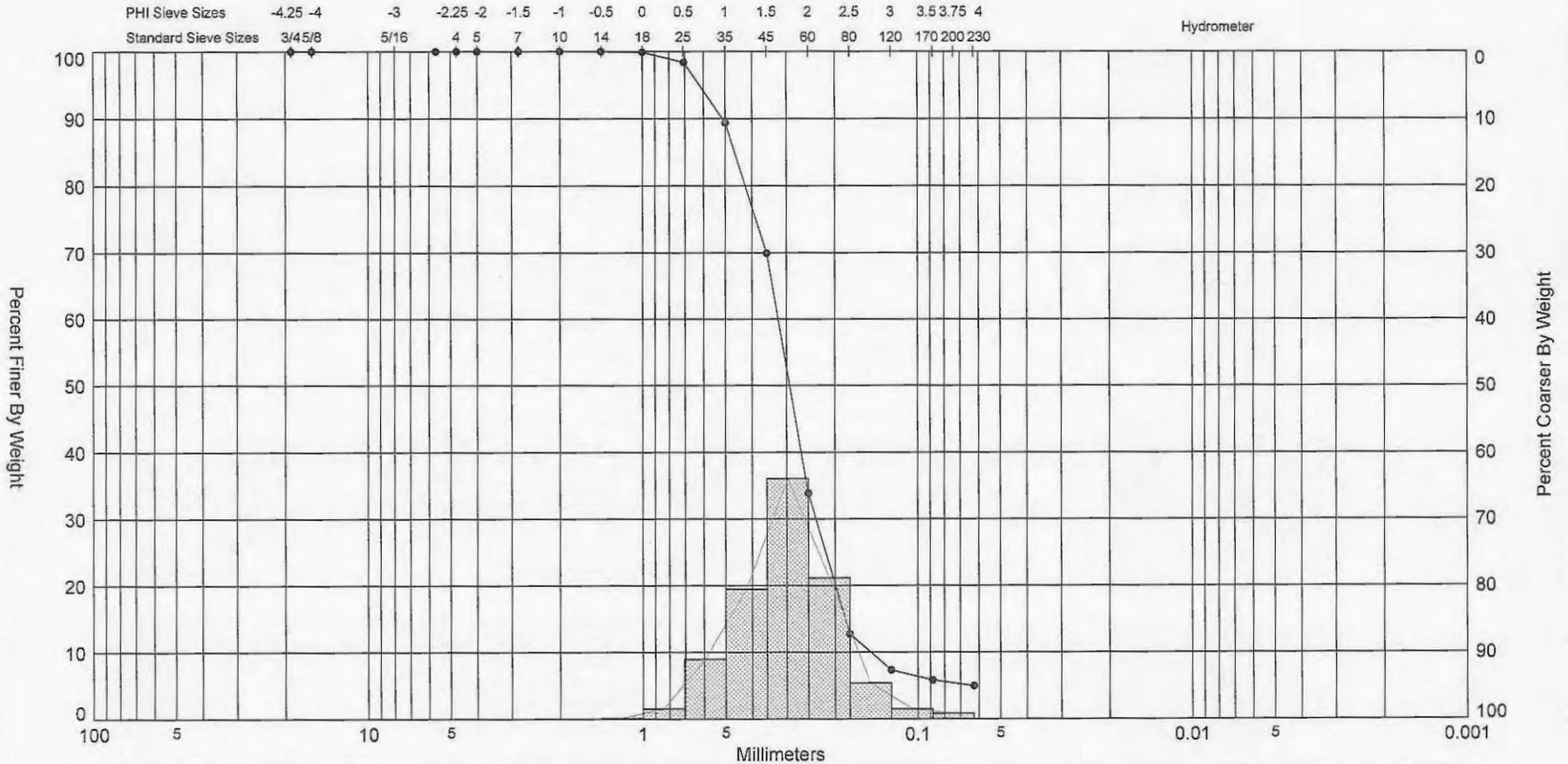
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-30 PCC #S-1 (5")	—●—		SP	#230 - 2.52			1.72	1.7	0.19	3.52	0.65	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-07-10
Depths and elevations based on measured values												Analyzed By:	ML
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

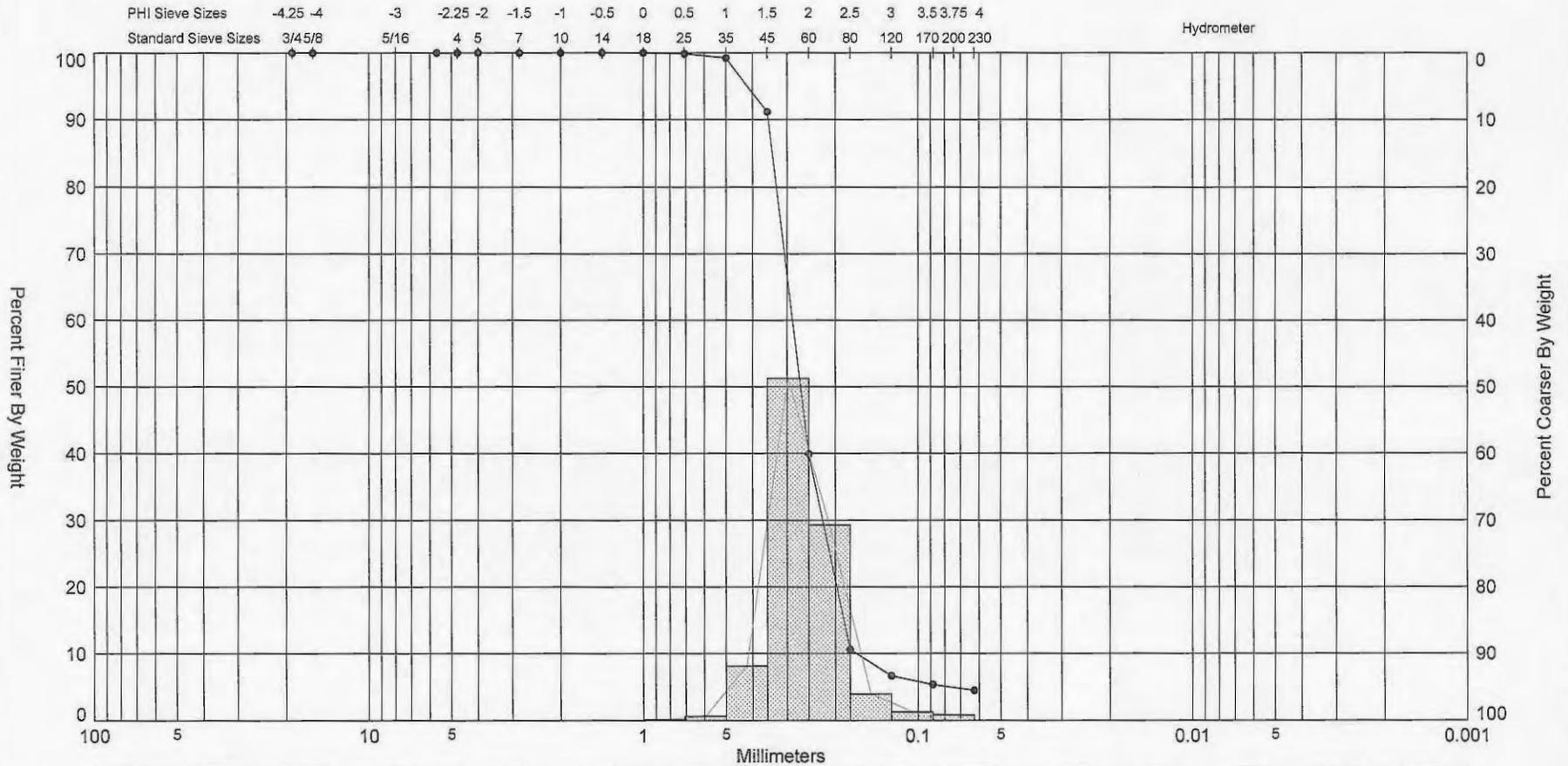
SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



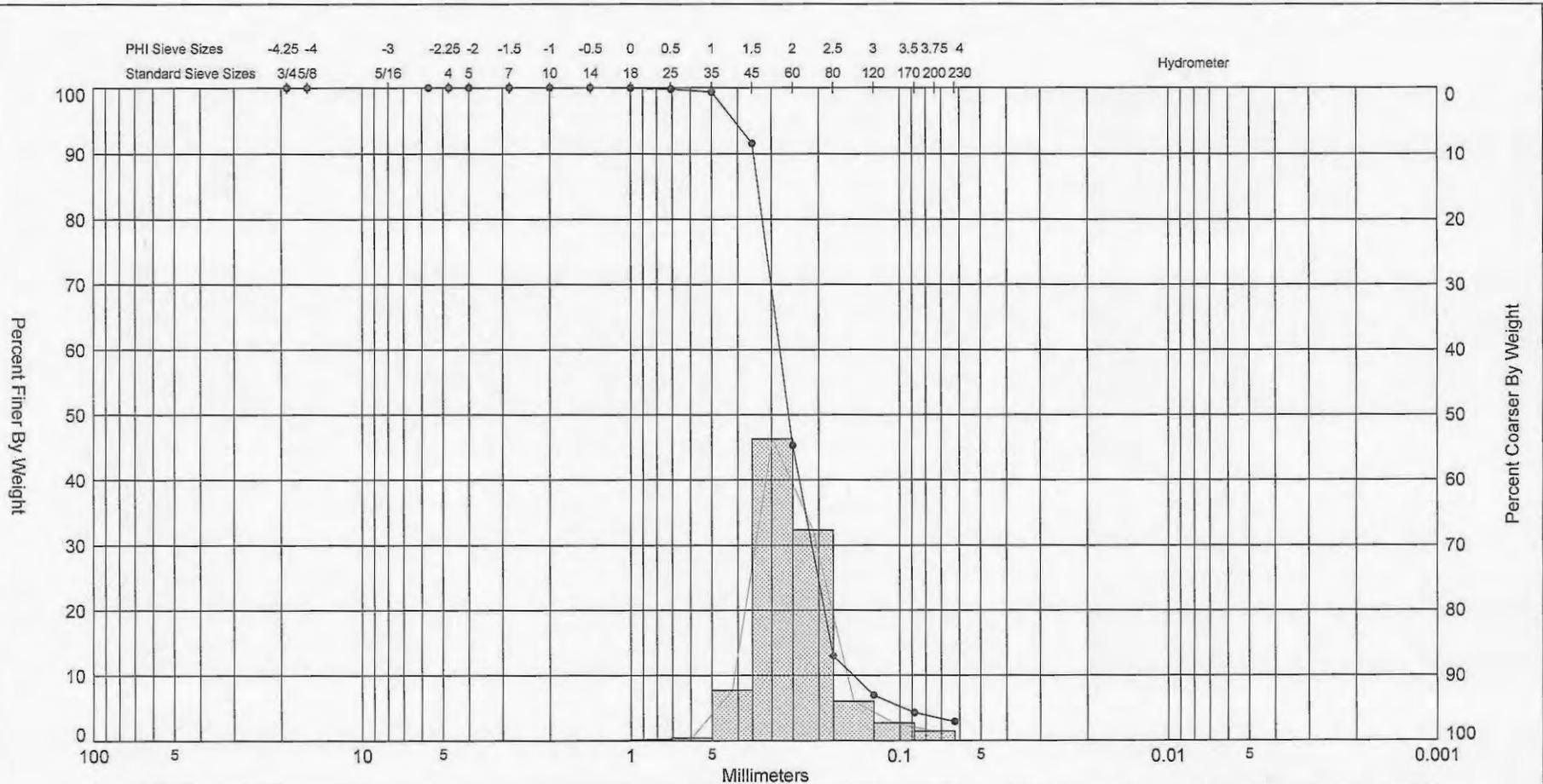
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
VC-10-36 PCC #S-1 (3 rd)	●—			#230 - 4.97			1.78	1.74	0.18	3.69	0.61	Project Name:	Jupiter Island 10 Detail Phase		
Comments: Visual Shell Content = 0%												Analysis Date:	12-03-10		
Depths and elevations based on measured values												Analyzed By:	ML		
 AMERICAN VIBROCURE SERVICES												American Vibrocure Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		Easting (X, ft):	
														Northing (Y, ft):	
														Horizontal System:	NAD 1983
														Vertical System:	NAVD 88

SIEVE ANALYSIS - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



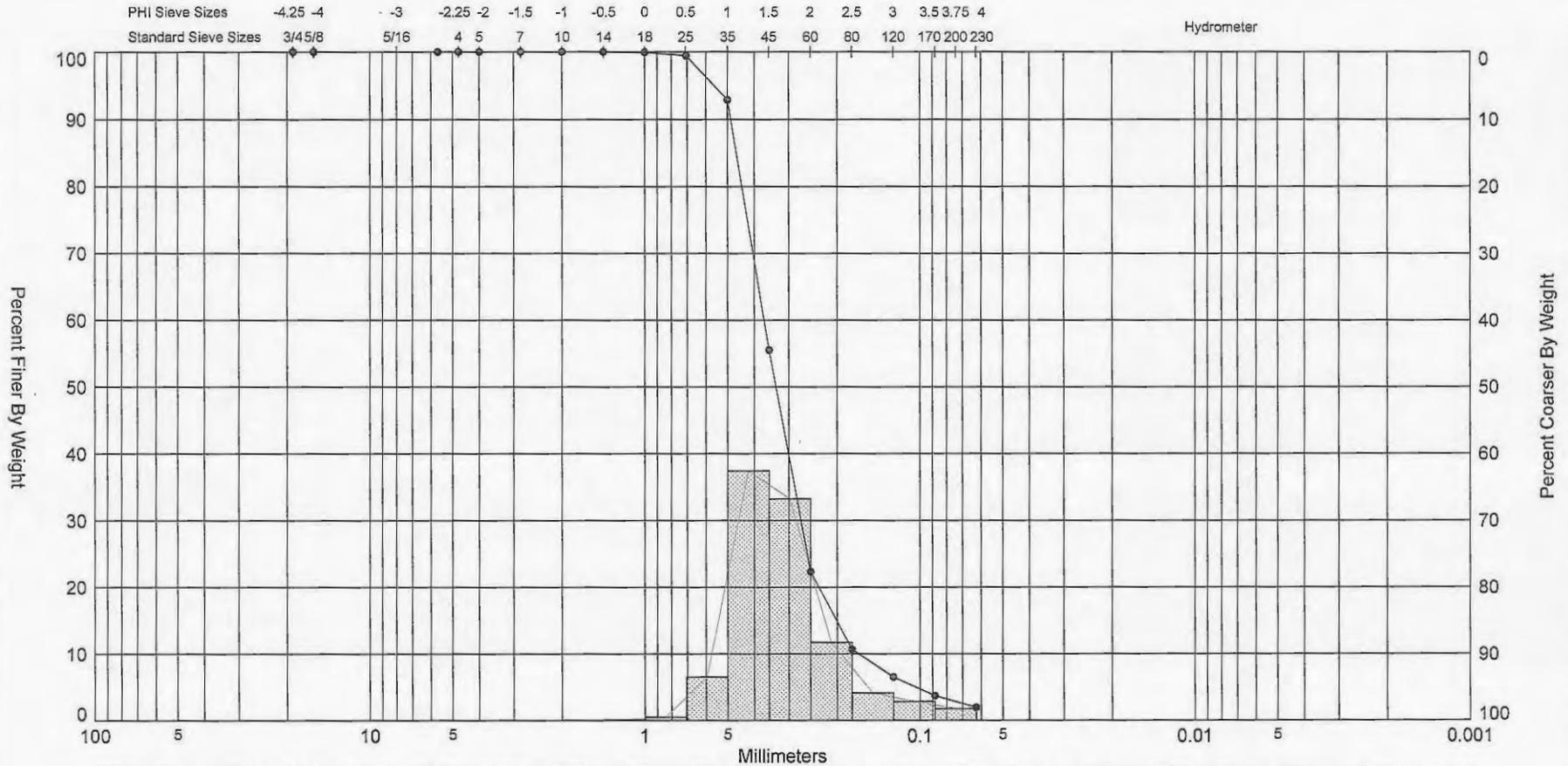
SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-51 PCC #S-1 (5')	○—		SP	#230 - 2.88			1.95	2	0.89	5.32	0.48	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-07-10
Depths and elevations based on measured values												Analyzed By:	ML
							American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

SIEVE ANALYSIS JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
VC-10-52 PCC #S-1 (5')	●—		SP	#230 - 1.95			1.58	1.66	1.11	4.78	0.61	Project Name:	Jupiter Island 10 Detail Phase
Comments: Visual Shell Content = 0%												Analysis Date:	12-07-10
Depths and elevations based on measured values												Analyzed By:	ML
 <div style="display: inline-block; vertical-align: middle;"> <p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p> </div>												Easting (X, ft):	
												Northing (Y, ft):	
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

Post CC Sieve Report



Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-1 PCC #S-1 (1')

Analysis Date: 12-06-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

Munsell:

Comments: Visual Shell Content = 0%

SP

Wet - 10 YR-4/1

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
14.92	14.57			#230 - 2.75			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.10	0.67	0.10	0.67	
25	0.50	0.71	0.77	5.16	0.87	5.83	
35	1.00	0.50	3.33	22.32	4.20	28.15	
45	1.50	0.35	4.92	32.98	9.12	61.13	
60	2.00	0.25	3.70	24.80	12.82	85.92	
80	2.50	0.18	0.49	3.28	13.31	89.21	
120	3.00	0.13	0.34	2.28	13.65	91.49	
170	3.50	0.09	0.48	3.22	14.13	94.71	
230	4.00	0.06	0.38	2.55	14.51	97.25	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.56	1.96	1.78	1.33	0.93	0.73	0.42
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.4	0.38	0.74	1.14	4.87	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-2 PCC #S-1 (5')

Analysis Date: 12-02-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-5/1

Comments: Visual Shell Content = 0 %

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
14.30	13.88			#230 - 3.36			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.01	0.07	0.01	0.07	
18	0.00	1.00	0.05	0.35	0.06	0.42	
25	0.50	0.71	0.14	0.98	0.20	1.40	
35	1.00	0.50	3.65	25.52	3.85	26.92	
45	1.50	0.35	5.45	38.11	9.30	65.03	
60	2.00	0.25	2.54	17.76	11.84	82.80	
80	2.50	0.18	0.74	5.17	12.58	87.97	
120	3.00	0.13	0.53	3.71	13.11	91.68	
170	3.50	0.09	0.41	2.87	13.52	94.55	
230	4.00	0.06	0.30	2.10	13.82	96.64	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.61

2.12

1.78

1.30

0.96

0.79

0.57

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.42

0.37

0.71

1.32

4.98

GRANULARMETRIC REPORT, JUPITER ISLAND 10 DETAIL PHASE.GPJ, FL DEP ROSS.GDT, 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-4 PCC #S-1 (1')

Analysis Date: 12-02-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

Munsell:

Comments: Visual Shell Content =0%

SP

Wet - 10 YR-4/1

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
20.10	19.75			#230 - 1.84			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.01	0.05	0.01	0.05	
25	0.50	0.71	0.68	3.38	0.69	3.43	
35	1.00	0.50	3.92	19.50	4.61	22.94	
45	1.50	0.35	8.81	43.83	13.42	66.77	
60	2.00	0.25	4.80	23.88	18.22	90.65	
80	2.50	0.18	0.66	3.28	18.88	93.93	
120	3.00	0.13	0.32	1.59	19.20	95.52	
170	3.50	0.09	0.31	1.54	19.51	97.06	
230	4.00	0.06	0.22	1.09	19.73	98.16	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	2.84	1.86	1.67	1.31	1.02	0.82	0.54
	1.35	0.39	0.58	1.28	6.49		

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-5 PCC #S-1 (12')

Analysis Date: 12-02-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
18.64	17.84			#230 - 4.45			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.02	0.11	0.02	0.11	
18	0.00	1.00	0.03	0.16	0.05	0.27	
25	0.50	0.71	0.23	1.23	0.28	1.50	
35	1.00	0.50	2.95	15.83	3.23	17.33	
45	1.50	0.35	7.42	39.81	10.65	57.14	
60	2.00	0.25	4.77	25.59	15.42	82.73	
80	2.50	0.18	1.03	5.53	16.45	88.25	
120	3.00	0.13	0.77	4.13	17.22	92.38	
170	3.50	0.09	0.39	2.09	17.61	94.47	
230	4.00	0.06	0.20	1.07	17.81	95.55	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.75	2.12	1.85	1.41	1.10	0.96	0.61
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.48	0.36	0.62	1.07	5.05	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-8A PCC #S-1 (3')

Analysis Date: 12-02-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
23.84	23.39			#230 - 2.10			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.01	0.04	0.01	0.04	
25	0.50	0.71	0.11	0.46	0.12	0.50	
35	1.00	0.50	1.50	6.29	1.62	6.80	
45	1.50	0.35	6.77	28.40	8.39	35.19	
60	2.00	0.25	8.95	37.54	17.34	72.73	
80	2.50	0.18	2.61	10.95	19.95	83.68	
120	3.00	0.13	2.42	10.15	22.37	93.83	
170	3.50	0.09	0.67	2.81	23.04	96.64	
230	4.00	0.06	0.30	1.26	23.34	97.90	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.21

2.52

2.10

1.70

1.32

1.16

0.86

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.76

0.30

0.63

0.74

3.6

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-13 PCC #S-1 (3')

Analysis Date: 12-03-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
29.99	28.87			#230 - 3.87			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.01	0.03	0.01	0.03	
25	0.50	0.71	0.15	0.50	0.16	0.53	
35	1.00	0.50	2.30	7.67	2.46	8.20	
45	1.50	0.35	7.60	25.34	10.06	33.54	
60	2.00	0.25	10.84	36.15	20.90	69.69	
80	2.50	0.18	5.20	17.34	26.10	87.03	
120	3.00	0.13	1.94	6.47	28.04	93.50	
170	3.50	0.09	0.52	1.73	28.56	95.23	
230	4.00	0.06	0.27	0.90	28.83	96.13	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.43	2.41	2.15	1.73	1.33	1.15	0.79
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.73	0.30	0.59	0.53	3.73	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-15C PCC #S-1 (3')

Analysis Date: 12-06-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
14.64	14.39			#230 - 1.84			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.02	0.14	0.02	0.14	
25	0.50	0.71	0.39	2.66	0.41	2.80	
35	1.00	0.50	1.01	6.90	1.42	9.70	
45	1.50	0.35	2.82	19.26	4.24	28.96	
60	2.00	0.25	6.99	47.75	11.23	76.71	
80	2.50	0.18	2.34	15.98	13.57	92.69	
120	3.00	0.13	0.39	2.66	13.96	95.36	
170	3.50	0.09	0.24	1.64	14.20	96.99	
230	4.00	0.06	0.17	1.16	14.37	98.16	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.23	1.98	1.72	1.40	1.16	0.66
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.7	0.31	0.58	0.29	4.96	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-17 PCC #S-1 (10')

Analysis Date: 12-06-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
25.68	25.29			#230 - 1.71			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.10	0.39	0.10	0.39	
25	0.50	0.71	0.40	1.56	0.50	1.95	
35	1.00	0.50	2.25	8.76	2.75	10.71	
45	1.50	0.35	6.23	24.26	8.98	34.97	
60	2.00	0.25	9.30	36.21	18.28	71.18	
80	2.50	0.18	4.47	17.41	22.75	88.59	
120	3.00	0.13	1.59	6.19	24.34	94.78	
170	3.50	0.09	0.57	2.22	24.91	97.00	
230	4.00	0.06	0.33	1.29	25.24	98.29	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.05	2.37	2.11	1.71	1.29	1.11	0.67
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.72	0.30	0.64	0.38	3.87	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-20 PCC #S-1 (3')

Analysis Date: 12-03-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

Munsell:

Comments: Visual Shell Content = 0%

Wet - 10 YR-4/1

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
26.37	25.17			#230 - 4.66			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.02	0.08	0.02	0.08	
25	0.50	0.71	0.27	1.02	0.29	1.10	
35	1.00	0.50	1.84	6.98	2.13	8.08	
45	1.50	0.35	4.98	18.89	7.11	26.96	
60	2.00	0.25	9.49	35.99	16.60	62.95	
80	2.50	0.18	5.96	22.60	22.56	85.55	
120	3.00	0.13	1.66	6.30	24.22	91.85	
170	3.50	0.09	0.56	2.12	24.78	93.97	
230	4.00	0.06	0.36	1.37	25.14	95.34	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.88

2.47

2.27

1.82

1.45

1.21

0.78

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.81

0.29

0.62

0.34

3.82

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-22 PCC #S-1 (4')

Analysis Date: 12-06-10

Analyzed By: ML

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):
		Florida State Plane East	

USCS: SP	Munsell: Wet - 10 YR-4/1	Comments: Visual Shell Content = 0%
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
17.87	17.56			#230 - 1.90			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.07	0.39	0.07	0.39	
25	0.50	0.71	0.52	2.91	0.59	3.30	
35	1.00	0.50	1.71	9.57	2.30	12.87	
45	1.50	0.35	3.33	18.63	5.63	31.51	
60	2.00	0.25	6.02	33.69	11.65	65.19	
80	2.50	0.18	4.33	24.23	15.98	89.42	
120	3.00	0.13	1.01	5.65	16.99	95.08	
170	3.50	0.09	0.33	1.85	17.32	96.92	
230	4.00	0.06	0.21	1.18	17.53	98.10	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.39	2.20	1.77	1.33	1.08	0.59
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.74	0.30	0.66	0.03	3.58	

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-26 PCC #S-1 (8')

Analysis Date: 12-06-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):

18.43

Wash Weight (g):

17.74

Pan Retained (g):

Sieve Loss (%):

Fines (%):

#230 - 3.91

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size
(Phi)

Sieve Size
(Millimeters)

Grams
Retained

% Weight
Retained

Cum. Grams
Retained

C. % Weight
Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.00

0.00

0.00

0.00

18

0.00

1.00

0.05

0.27

0.05

0.27

25

0.50

0.71

0.59

3.20

0.64

3.47

35

1.00

0.50

2.68

14.54

3.32

18.01

45

1.50

0.35

4.44

24.09

7.76

42.11

60

2.00

0.25

5.20

28.21

12.96

70.32

80

2.50

0.18

2.81

15.25

15.77

85.57

120

3.00

0.13

1.12

6.08

16.89

91.64

170

3.50

0.09

0.50

2.71

17.39

94.36

230

4.00

0.06

0.32

1.74

17.71

96.09

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.68

2.45

2.15

1.64

1.15

0.93

0.55

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.64

0.32

0.73

0.48

3.35

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-29 PCC #S-1 (1')

Analysis Date: 12-03-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
22.72	22.14			#230 - 2.73			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.07	0.31	0.07	0.31	
25	0.50	0.71	0.27	1.19	0.34	1.50	
35	1.00	0.50	1.13	4.97	1.47	6.47	
45	1.50	0.35	3.81	16.77	5.28	23.24	
60	2.00	0.25	7.60	33.45	12.88	56.69	
80	2.50	0.18	6.94	30.55	19.82	87.24	
120	3.00	0.13	1.62	7.13	21.44	94.37	
170	3.50	0.09	0.45	1.98	21.89	96.35	
230	4.00	0.06	0.21	0.92	22.10	97.27	

GRANULARMETRIC REPORT JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.16	2.45	2.30	1.90	1.53	1.28	0.85
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.87	0.27	0.6	-0.04	3.92	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-3 PCC #S-1 (8')

Analysis Date: 12-02-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0 %

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
14.41	14.08			#230 - 2.50			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.03	0.21	0.03	0.21	
18	0.00	1.00	0.03	0.21	0.06	0.42	
25	0.50	0.71	0.06	0.42	0.12	0.83	
35	1.00	0.50	0.58	4.02	0.70	4.86	
45	1.50	0.35	3.44	23.87	4.14	28.73	
60	2.00	0.25	6.04	41.92	10.18	70.65	
80	2.50	0.18	2.47	17.14	12.65	87.79	
120	3.00	0.13	0.75	5.20	13.40	92.99	
170	3.50	0.09	0.40	2.78	13.80	95.77	
230	4.00	0.06	0.25	1.73	14.05	97.50	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.36

2.39

2.13

1.75

1.42

1.23

1.00

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.79

0.29

0.6

0.6

4.99

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase
 Sample Name: JIVC-10-30 PCC #S-1 (5')
 Analysis Date: 12-07-10
 Analyzed By: ML

Easting (ft): Northing (ft): Coordinate System: Elevation (ft):
Florida State Plane East

USCS: Munsell: Comments: Visual Shell Content = 0%
SP Wet - 10 YR-4/1

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
16.24	15.88			#230 - 2.52			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.05	0.31	0.05	0.31	
25	0.50	0.71	0.38	2.34	0.43	2.65	
35	1.00	0.50	1.83	11.27	2.26	13.92	
45	1.50	0.35	3.44	21.18	5.70	35.10	
60	2.00	0.25	5.42	33.37	11.12	68.47	
80	2.50	0.18	3.35	20.63	14.47	89.10	
120	3.00	0.13	0.91	5.60	15.38	94.70	
170	3.50	0.09	0.27	1.66	15.65	96.37	
230	4.00	0.06	0.18	1.11	15.83	97.48	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS GDT 4/29/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.09	2.38	2.16	1.72	1.26	1.05	0.60
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.7	0.31	0.65	0.19	3.52	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-36 PCC #S-1 (3')

Analysis Date: 12-03-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

Munsell:

Comments: Visual Shell Content = 0%

Wet - 10 YR-4/1

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
22.34	21.27			#230 - 4.97			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.03	0.13	0.03	0.13	
25	0.50	0.71	0.34	1.52	0.37	1.66	
35	1.00	0.50	2.00	8.95	2.37	10.61	
45	1.50	0.35	4.35	19.47	6.72	30.08	
60	2.00	0.25	8.06	36.08	14.78	66.16	
80	2.50	0.18	4.72	21.13	19.50	87.29	
120	3.00	0.13	1.20	5.37	20.70	92.66	
170	3.50	0.09	0.34	1.52	21.04	94.18	
230	4.00	0.06	0.19	0.85	21.23	95.03	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP CROSS GDT 4/29/11

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.98	2.42	2.21	1.78	1.37	1.14	0.69
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.74	0.30	0.61	0.18	3.69	

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-51 PCC #S-1 (5')

Analysis Date: 12-07-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
30.16	29.36			#230 - 2.88			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.01	0.03	0.01	0.03	
25	0.50	0.71	0.05	0.17	0.06	0.20	
35	1.00	0.50	0.13	0.43	0.19	0.63	
45	1.50	0.35	2.34	7.76	2.53	8.39	
60	2.00	0.25	13.96	46.29	16.49	54.68	
80	2.50	0.18	9.75	32.33	26.24	87.00	
120	3.00	0.13	1.82	6.03	28.06	93.04	
170	3.50	0.09	0.81	2.69	28.87	95.72	
230	4.00	0.06	0.42	1.39	29.29	97.12	

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.37

2.45

2.31

1.95

1.68

1.58

1.28

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

2

0.25

0.48

0.89

5.32

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 Detail Phase

Sample Name: JIVC-10-52 PCC #S-1 (5')

Analysis Date: 12-07-10

Analyzed By: ML

Easting (ft):

Northing (ft):

Coordinate System:

Elevation (ft):

Florida State Plane East

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments: Visual Shell Content = 0%

Dry Weight (g):

14.37

Wash Weight (g):

14.12

Pan Retained (g):

Sieve Loss (%):

Fines (%):

#230 - 1.95

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.00

0.00

0.00

0.00

18

0.00

1.00

0.01

0.07

0.01

0.07

25

0.50

0.71

0.07

0.49

0.08

0.56

35

1.00

0.50

0.94

6.54

1.02

7.10

45

1.50

0.35

5.37

37.37

6.39

44.47

60

2.00

0.25

4.77

33.19

11.16

77.66

80

2.50

0.18

1.68

11.69

12.84

89.35

120

3.00

0.13

0.59

4.11

13.43

93.46

170

3.50

0.09

0.41

2.85

13.84

96.31

230

4.00

0.06

0.25

1.74

14.09

98.05

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.27

2.27

1.96

1.58

1.24

1.12

0.84

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.66

0.32

0.61

1.11

4.78

GRANULARMETRIC REPORT - JUPITER ISLAND 10 DETAIL PHASE.GPJ FL DEP ROSS.GDT 4/29/11

Calcium Carbonate Testing



**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 12/3/2010

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID: CA-15

PROJECT: Jupiter Island 10 Detail Phase

SAMPLED BY: AVS

DATE: 10-29-10

TESTED BY: Michael Lenz

DATE: 12/3/2010

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
JIVC-10-20 (3.0) ft	85.53	26.37	69.2
JIVC-10-22 (4.0) ft	85.03	17.87	79.0
JIVC-10-26 (8.0) ft	87.78	18.43	79.0
JIVC-10-29 (1.0) ft	81.03	22.72	72.0
JIVC-10-30 (5.0) ft	85.49	16.24	81.0
JIVC-10-36 (3.0) ft	82.97	22.34	73.1
JIVC-10-50 (1.0) ft	86.57	35.39	59.1
JIVC-10-51 (5.0) ft	84.35	30.16	64.2
JIVC-10-52 (5.0) ft	83.32	14.37	82.8

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth

Professional Engineer # 44653

State of Florida

REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method

DATE: 12/1/2010

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID: CA-14

PROJECT: Jupiter Island 10 Detail Phase

SAMPLED BY: AVS

DATE: 10-29-10

TESTED BY: Michael Lenz

DATE: 12/1/2010

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
JIVC-10-2 (5.0) ft	92.61	14.30	84.6
JIVC-10-3 (8.0) ft	89.58	14.41	83.9
JIVC-10-4 (1.0) ft	94.60	20.10	78.8
JIVC-10-5 (12.0) ft	91.94	18.64	79.7
JIVC-10-8A (3.0) ft	92.80	23.84	74.3
JIVC-10-10 (1.0) ft	85.24	14.92	82.5
JIVC-10-13 (3.0) ft	84.06	29.99	64.3
JIVC-10-15C (3.0) ft	82.70	14.64	82.3
JIVC-10-17 (10.0) ft	86.31	25.68	70.2

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth

Professional Engineer # 44653

State of Florida

**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 11/12/2010

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID: CA-13

PROJECT: Jupiter Island 10 Detail Phase

SAMPLED BY: AVS

DATE: 10-29-10

TESTED BY: Michael Lenz

DATE: 11/12/2010

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
JIVC-10-17 (5.0) ft	62.30	20.75	66.7
JIVC-10-20 (8.0) ft	62.12	18.34	70.5
JIVC-10-36 (7.0) ft	61.61	19.47	68.4

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth

Professional Engineer # 44653

State of Florida

**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 11/10/2010

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID: CA-12

PROJECT: Jupiter Island 10 Detail Phase

SAMPLED BY: AVS

DATE: 10-29-10

TESTED BY: Michael Lenz

DATE: 11/10/2010

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
JIVC-10-3 (6.0) ft	57.07	19.42	66.0
JIVC-10-5 (5.5) ft	62.60	23.88	61.9
JIVC-10-8A (7.0) ft	62.25	23.63	62.0
JIVC-10-10 (6.0) ft	60.90	12.68	79.2
JIVC-10-15C (8.0) ft	61.85	15.38	75.1

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth
Professional Engineer # 44653
State of Florida

**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 11/10/2010

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID: CA-12

PROJECT: Jupiter Island 10 Detail Phase

SAMPLED BY: AVS

DATE: 10-29-10

TESTED BY: Michael Lenz

DATE: 11/10/2010

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
JIVC-10-3 (6.0) ft	57.07	19.42	66.0
JIVC-10-5 (5.5) ft	62.60	23.88	61.9
JIVC-10-8A (7.0) ft	62.25	23.63	62.0
JIVC-10-10 (6.0) ft	60.90	12.68	79.2
JIVC-10-15C (8.0) ft	61.85	15.38	75.1

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth
Professional Engineer # 44653
State of Florida

Photo-documentation



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 1

0.0 - 2.0 FEET

TOP

BOTTOM

TABSEE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 1

2.0 - 4.0 FEET

TOP

BOTTOM

TABBER




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

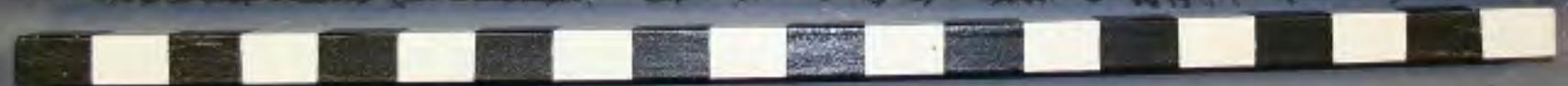
JIVC 10 - 1

4.0 - 6.0 FEET

TOP

BOTTOM

TABSEE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 1

6.0 - 8.0 FEET

TOP

BOTTOM

TABBER




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 1

8.0 - 8.2 FEET

TOP

BOTTOM

TABBE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

0.0 - 2.0 FEET

TOP

BOTTOM

TABBLE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

2.0 - 4.0 FEET

TOP

BOTTOM

TABBE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

4.0 - 6.0 FEET

TOP

BOTTOM

TABSE6



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

6.0 - 8.0 FEET

TOP

BOTTOM



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

8.0 - 10.0 FEET

TOP

BOTTOM

TABBER




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

10.0 - 12.0 FEET

TOP

BOTTOM

TABBER




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 2

12.0 - 12.3 FEET

TOP

BOTTOM

TABBEE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-3

0.0 - 2.0 FEET

TOP

BOTTOM

TABBEE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-3

2.0 - 4.0 FEET

TOP

BOTTOM

TABBEE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 3

4.0 - 6.0 FEET

TOP

BOTTOM

TABBER




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 3

6.0 - 8.0 FEET

TOP

BOTTOM

TABBEE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

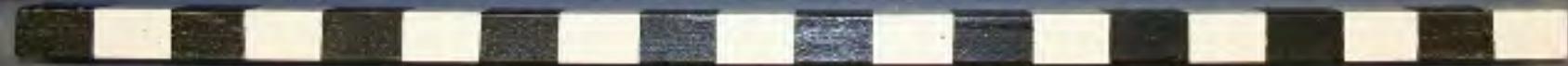
JIVC-10-3

8.0 - 10.0 FEET

TOP

BOTTOM

TABBE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 3

10.0 - 10.8 FEET

TOP

BOTTOM

TABBEE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

0.0 - 2.0 FEET

TOP

BOTTOM

TABBEE



AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

2.0 - 4.0 FEET

TOP

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TABBEE




AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

4.0 - 6.0 FEET

TOP

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

6.0 - 8.0 FEET

TOP

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

8.0 - 10.0 FEET

TOP

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-4

10.0 - 12.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 5

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 5

2.0 - 4.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 5

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 5

6.0 - 8.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 5

8.0 - 10.0 FEET

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SERVICES

JUPITER ISLAND 10/2010

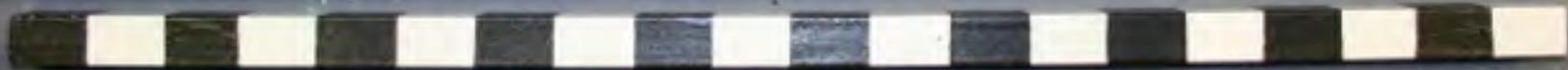
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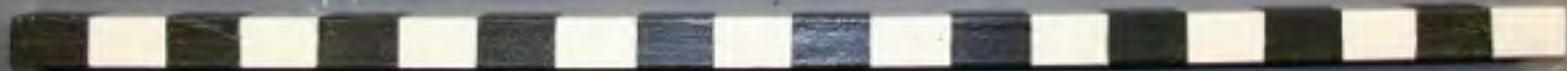
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JUPITER ISLAND 10/2010

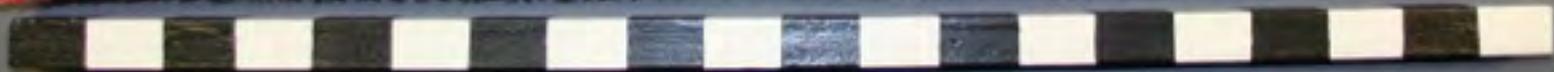
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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 8 A

2.0 - 4.0 FEET

TOP

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 8 A

4.0 - 6.0 FEET

TOP

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 8 A

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 8 A

8.0 - 8.8 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 13

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 13

2.0 - 4.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 13

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 13

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
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JUPITER ISLAND 10/2010

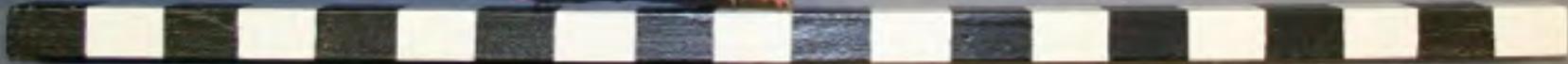
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JUPITER ISLAND 10/2010

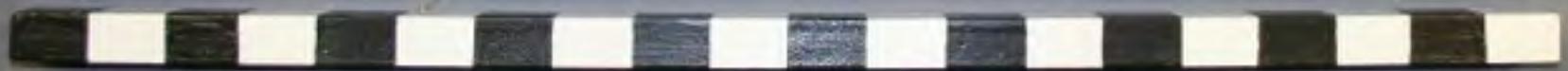
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SERVICES

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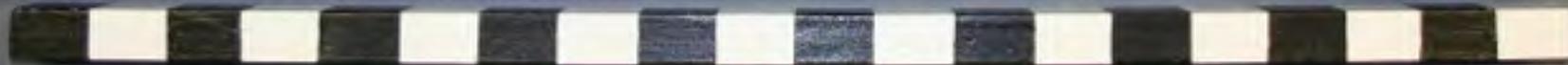
JIVC 10 - 15C

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 15C

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 15C

6.0 - 8.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC10-15C

8.0 - 8.9 FEET

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AVS
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SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 17

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

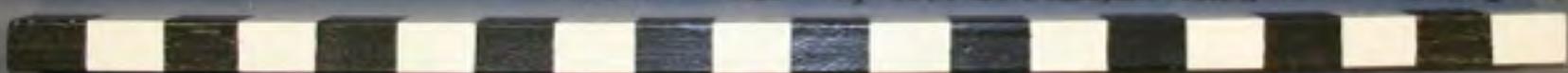
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AMERICAN VIBRACORE
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JUPITER ISLAND 10/2010

JIVC 10 - 17

4.0 - 6.0 FEET

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JUPITER ISLAND 10/2010

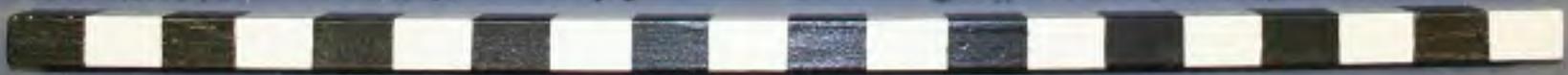
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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 17

8.0 - 10.0 FEET

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JUPITER ISLAND 10/2010

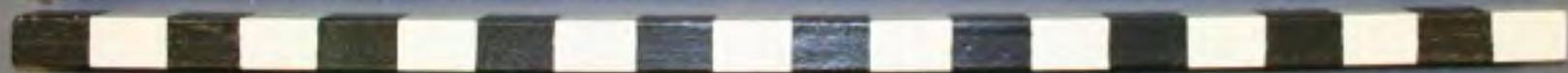
JIVC 10 - 20

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JUPITER ISLAND 10/2010

JIVC 10 - 20

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 20

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 20

6.0 - 8.0 FEET

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SERVICES

JUPITER ISLAND 10/2010

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JIVC 10 - 22

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AMERICAN VIBRACORE
SERVICES

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JIVC 10 - 22

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 22

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 22

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
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JUPITER ISLAND 10/2010

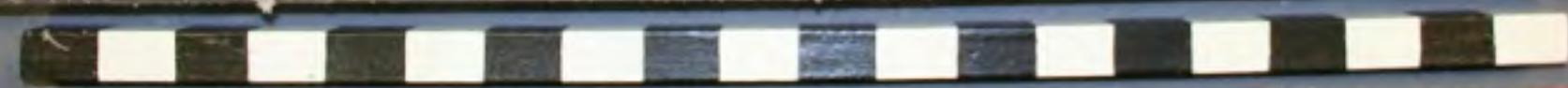
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JUPITER ISLAND 10/2010

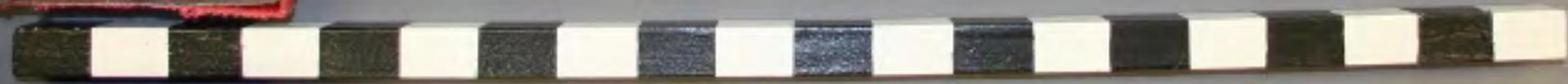
JIVC 10 - 22

10.0 - 10.4 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 26

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

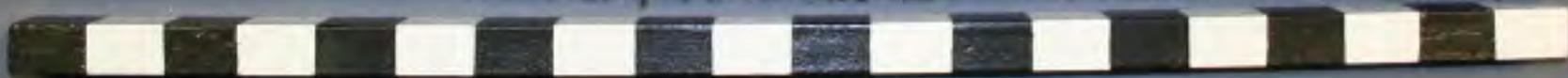
JIVC 10-26

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AMERICAN VIBRACORE
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JUPITER ISLAND 10/2010

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SERVICES

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JIVC 10 - 26

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SERVICES

JUPITER ISLAND 10/2010

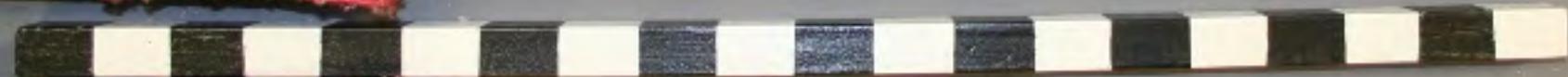
JIVC 10 - 26

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AVS
AMERICAN VIBRACORE
SERVICE

JUPITER ISLAND 10/2010

JIVC 10-29

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 29

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-29

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-29

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 29

8.0 - 10.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 29

10.0 - 12.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 30

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 30

2.0 - 4.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 30

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 30

6.0 - 8.0 FEET

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SERVICES

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8.0 - 10.0 FEET

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JIVC 10 - 30

10.0 - 12.0 FEET

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SERVICES

JUPITER ISLAND 10/2010

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12.0 - 12.2 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10 - 36

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

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2.0 - 4.0 FEET

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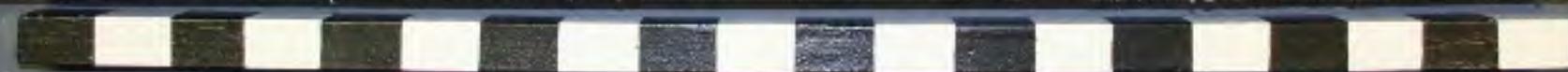
JIVC 10 - 36

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AVS
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JUPITER ISLAND 10/2010

JIVC 10 - 36

6.0 - 7.3 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-50

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-50

2.0 - 4.0 FEET

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AMERICAN VIBRACORE
CORPORATION

JUPITER ISLAND 10/2010

JIVC 10-50

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
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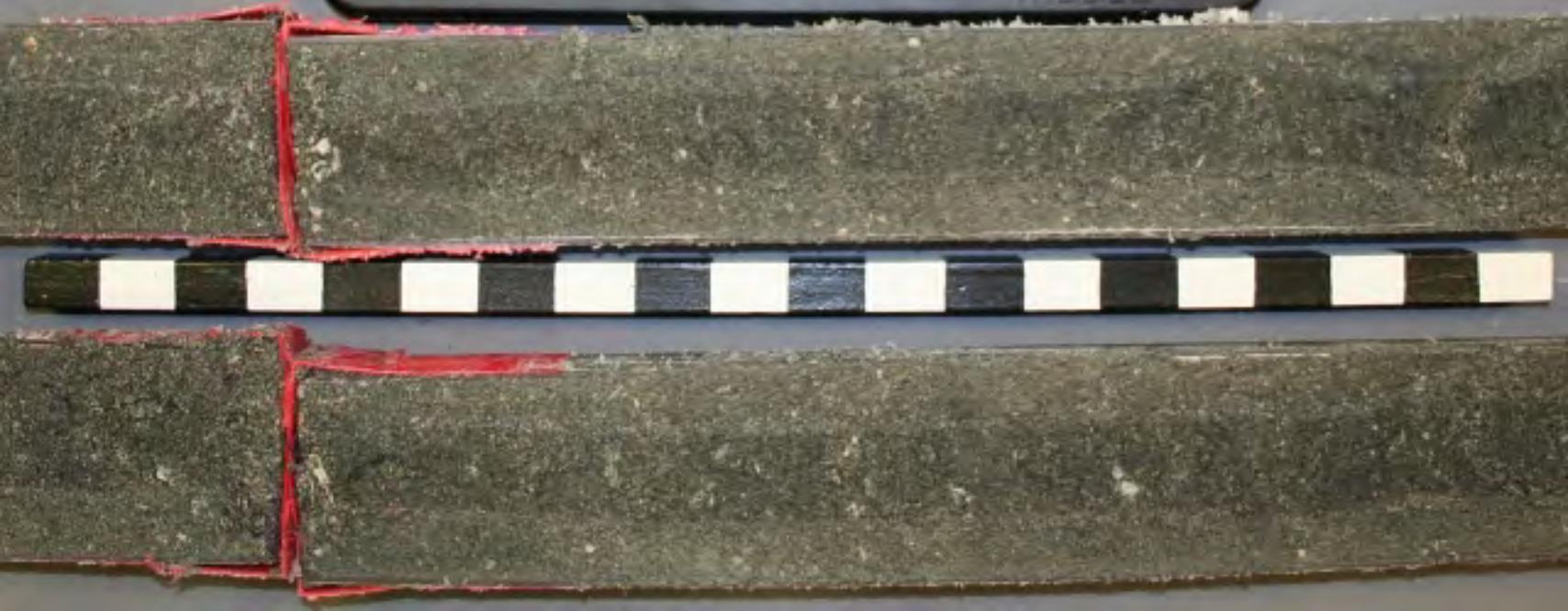
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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-50

8.0 - 10.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-50

10.0 - 11.4 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-51

0.0 - 2.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-51

2.0 - 4.0 FEET

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AMERICAN VIBRACORE
SERVICE

JUPITER ISLAND 10/2010

JIVC 10-51

4.0 - 6.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-51

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
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JUPITER ISLAND 10/2010

JIVC-10-51

8.0 - 10.0 FEET

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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-51

8.0 - 10.5 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-52

0.0 - 2.0 FEET

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JUPITER ISLAND 10/2010

JIVC 10-52

2.0 - 4.0 FEET

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BOTTOM

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-52

4.0 - 6.0 FEET

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AVS
AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-52

6.0 - 8.0 FEET

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AMERICAN VIBRACORE
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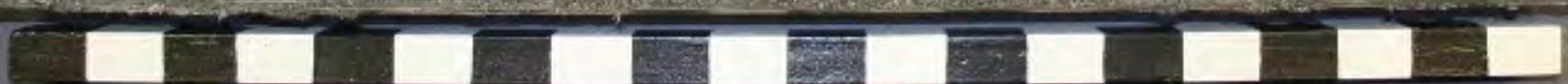
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AMERICAN VIBRACORE
SERVICES

JUPITER ISLAND 10/2010

JIVC 10-52

10.0 - 11.6 FEET

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