

DRILLING LOG		DIVISION: South Atlantic		INSTALLATION: Jacksonville District		SHEET 1 of 1	
1. PROJECT		ESTERO ISLAND BEACH RESTORATION		10. SIZE AND TYPE OF BIT		3 5/8"	
2. LOCATION		(Coordinates or Station) X= 665661 Y= 766095		11. DATUM FOR ELEVATION SHOWN		(TBM or MSL) NGVD	
3. DRILLING AGENCY:		Alpine Ocean Seismic Survey Inc.		12. MANUFACTURER'S DESIGNATION OF DRILL		ALPINE PNEUMATIC VIBRACORE	
4. HOLE NO.		(As shown on drawing title and file number) EI-00-03		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN		Disturbed: 0.0 Undisturbed: 0.0	
5. NAME OF DRILLER		MAURIZIO ROSSI		14. TOTAL NO. OF CORE BOXES			
6. DIRECTION OF HOLE		VERTICAL		15. ELEVATION GROUND WATER			
7. THICKNESS OF BURDEN		0.0 FT		16. DATE HOLE		Started: 8/5/00 Completed: 1643	
8. DEPTH DRILLED INTO ROCK		N/A		17. ELEVATION TOP OF HOLE		-15.9 ft	
9. TOTAL DEPTH OF HOLE		19.4 ft		18. TOTAL CORE RECOVERY FOR BORING		85%	
				19. SIGNATURE OF GEOLOGIST		SYED KHALIL	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-15.9	0					
	1		SILTY CLAY, some shell hash/shell fragments/whole shell (1"), Gray (5Y-5/1) (ML-CL)		1	Sample #1, Depth = 1' Mean (mm): 0.38, Phi Sorting: 2.30 Silt: 25.5%
-19.9	4		SILTY SAND, fine-grained, (mixed zone) some clay, trace shell hash/shell fragments, Dark gray (5Y-4/1) (SM)		2	Sample #2, Depth = 4.3' Mean (mm): 0.16, Phi Sorting: 0.96 Silt: 15.8%
-20.4	5		fine-grained, Light gray (5Y-7/1) to White (5Y-8/1) (SM) from -19.9' to -20.4'		3	Sample #3, Depth = 6.4' Mean (mm): 0.15, Phi Sorting: 0.75 Silt: 13.7%
-23.3	7		SAND, fine-grained, trace silt, Gray (5Y-5/1) (SP)			
-23.9	8		CLAY, Mottled yellowish brown (10Y-5/6), hard, compact (CL)			
-24.7	9		SILTY GRAVEL, hard compact calcareous/carbonates. White (5Y-8/1) (GM)			
-26.8	11		CARBONATE CLASTS, hard, compact, cobble to pebble size in calcareous fines/lime mud, White (5Y-8/1) (GP)			
-28.3	12		CARBONATE CLASTS, cobble size, Brownish yellow, (10Y-6/6) (GW)			
-28.9	13		SAND, fine-grained, trace silt, Brown (10Y-5/3) (SP)			
-30.9	15		CARBONATE/SILICIAN CLASTS, cobble to pebble size, embedded in fine-grained sand, Brown (10Y-5/3) (GP)			
-32.5	16					
	17		NO RECOVERY			
-35.3	19		End of Boring			
	20		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 26.479 N 81 58.259 W
	21					
	22					
	23					
	24					

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-03#1

SAMPLE ELEV. (FT. NGVD): 1.0

SAMPLE DEPTH (FT.): 1.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 97.61

SAMPLE WEIGHT AFTER WASH (GRAMS): 74.48

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	3.04	3.11	96.89
5	-2.00	4.000	8.99	9.21	90.79
7	-1.50	2.800	14.19	14.54	85.46
10	-1.00	2.000	19.10	19.57	80.43
14	-0.50	1.400	23.25	23.82	76.18
18	0.00	1.000	25.88	26.51	73.49
25	0.50	0.710	28.78	29.48	70.52
35	1.00	0.500	31.88	32.66	67.34
45	1.50	0.355	34.96	35.82	64.18
60	2.00	0.250	38.73	39.68	60.32
80	2.50	0.180	43.60	44.67	55.33
120	3.00	0.125	54.11	55.43	44.57
170	3.50	0.090	68.95	70.64	29.36
200	3.75	0.075	72.72	74.50	25.50
230	4.00	0.063	85.18	87.26	12.74
PAN			97.61	100.00	0.00

PHI (5): -2.69

PHI (16): -1.35

PHI (25): -0.28

PHI (50): 2.75

PHI (75): 3.76

PHI (84): 3.94

PHI (95): 4.15

SIEVE LOSS (g): 0.00

SILT/CLAY: 25.50%

SKEWNESS: -0.763

KURTOSIS: 0.694

## GRAPHIC METHOD

MEAN (PHI): 1.36

SORTING: 2.65

MEAN (mm): 0.39

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 1.40

SORTING: 2.30

MEAN (mm): 0.38

DATA FILE NAME: EI-00-03#1.TAB

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-03#2

SAMPLE ELEV. (FT. NGVD): 4.3

SAMPLE DEPTH (FT.): 4.3

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.08

SAMPLE WEIGHT AFTER WASH (GRAMS): 83.95

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.32	0.32	99.68
7	-1.50	2.800	0.62	0.63	99.37
10	-1.00	2.000	1.03	1.04	98.96
14	-0.50	1.400	1.39	1.40	98.60
18	0.00	1.000	1.68	1.70	98.30
25	0.50	0.710	2.05	2.07	97.93
35	1.00	0.500	3.74	3.77	96.23
45	1.50	0.355	10.18	10.27	89.73
60	2.00	0.250	20.90	21.09	78.91
80	2.50	0.180	30.65	30.93	69.07
120	3.00	0.125	54.63	55.14	44.86
170	3.50	0.090	78.92	79.65	20.35
200	3.75	0.075	83.41	84.18	15.82
230	4.00	0.063	91.40	92.25	7.75
PAN			99.07	99.99	0.01

PHI (5): 1.09

PHI (16): 1.76

PHI (25): 2.20

PHI (50): 2.89

PHI (75): 3.41

PHI (84): 3.74

PHI (95): 4.09

SIEVE LOSS (g): 0.01

SILT/CLAY: 15.82%

SKEWNESS: -0.308

KURTOSIS: 1.016

## GRAPHIC METHOD

MEAN (PHI): 2.72

SORTING: 0.99

MEAN (mm): 0.15

MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.63

SORTING: 0.96

MEAN (mm): 0.16

DATA FILE NAME: EI-00-03#2.TAB



## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-03#3

SAMPLE ELEV. (FT. NGVD): 6.4

SAMPLE DEPTH (FT.): 6.4

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 96.98

SAMPLE WEIGHT AFTER WASH (GRAMS): 95.29

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.00	0.00	100.00
7	-1.50	2.800	0.00	0.00	100.00
10	-1.00	2.000	0.00	0.00	100.00
14	-0.50	1.400	0.00	0.00	100.00
18	0.00	1.000	0.01	0.01	99.99
25	0.50	0.710	0.12	0.12	99.88
35	1.00	0.500	1.04	1.07	98.93
45	1.50	0.355	5.12	5.28	94.72
60	2.00	0.250	18.95	19.54	80.46
80	2.50	0.180	31.80	32.79	67.21
120	3.00	0.125	56.82	58.59	41.41
170	3.50	0.090	82.59	85.16	14.84
200	3.75	0.075	83.69	86.30	13.70
230	4.00	0.063	95.76	98.75	1.25
PAN			96.97	99.99	0.01

PHI (5): 1.47

PHI (16): 1.88

PHI (25): 2.21

PHI (50): 2.83

PHI (75): 3.31

PHI (84): 3.48

PHI (95): 3.92

SIEVE LOSS (g): 0.01

SILT/CLAY: 13.70%

SKEWNESS: -0.172

KURTOSIS: 0.913

## GRAPHIC METHOD

MEAN (PHI): 2.72

SORTING: 0.80

MEAN (mm): 0.15

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

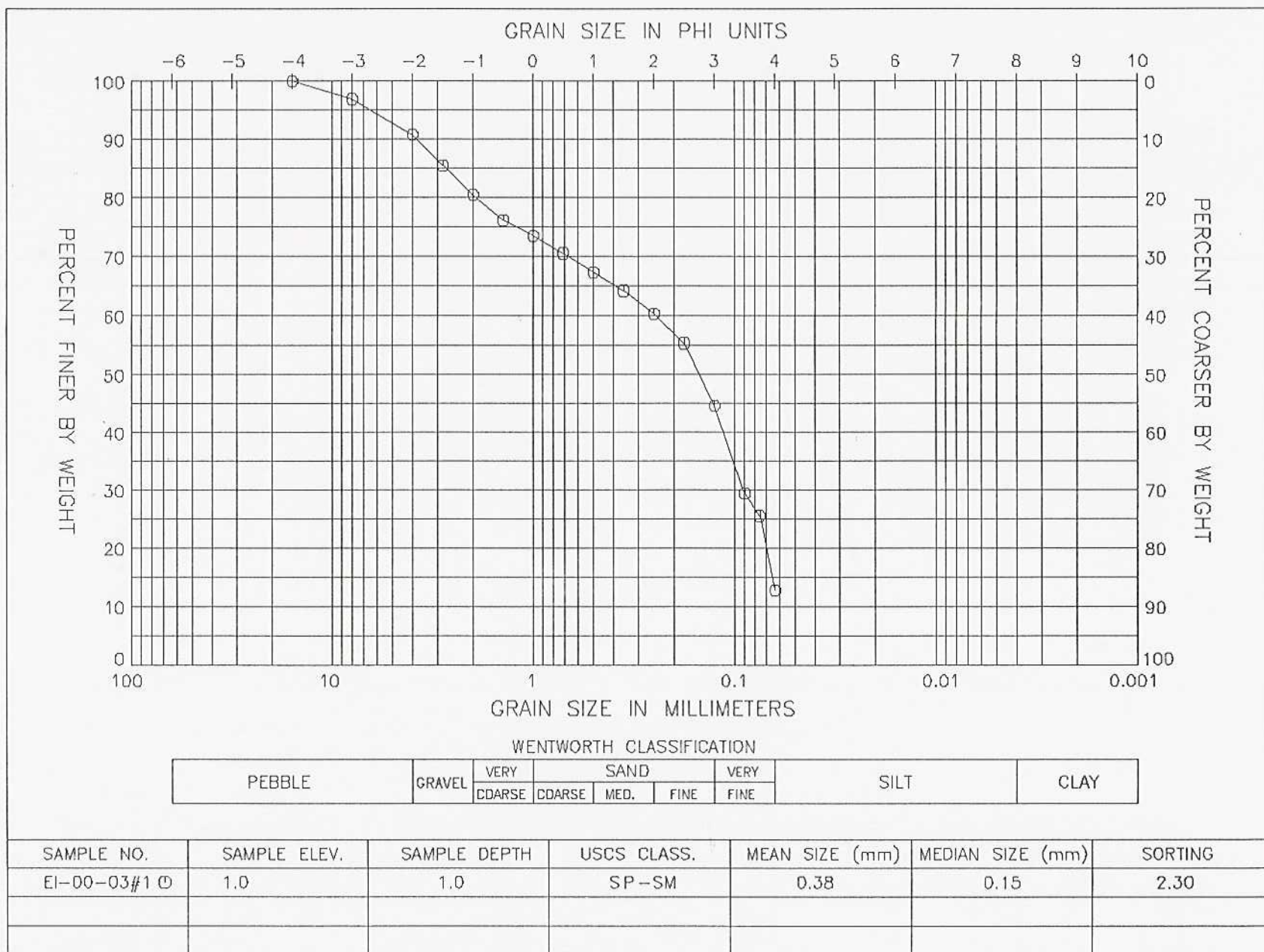
MEAN (PHI): 2.74

SORTING: 0.75

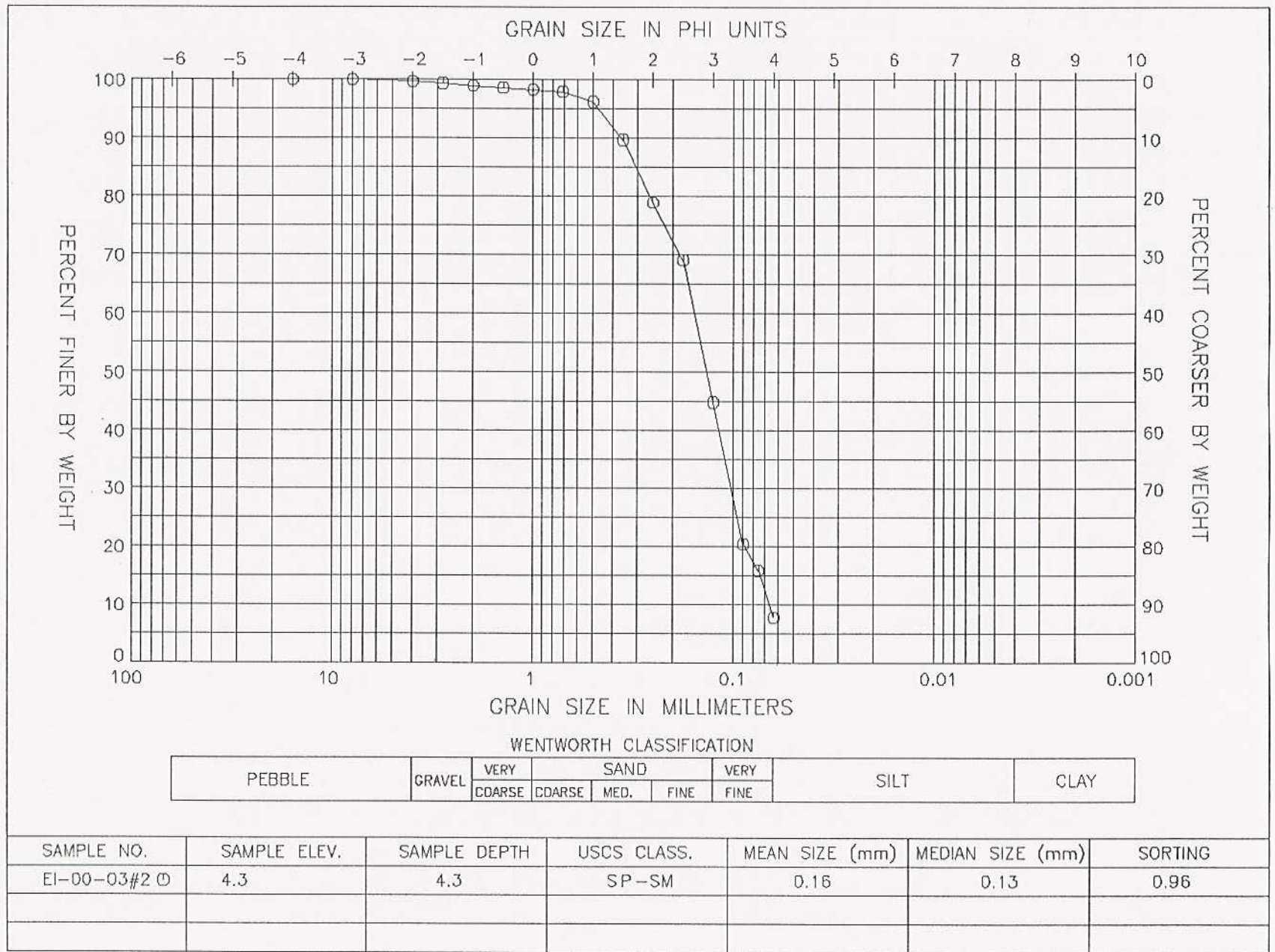
MEAN (mm): 0.15

DATA FILE NAME: EI-00-03#3.TAB

# GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE  
ESTERO VC 2000





GRAIN SIZE DISTRIBUTION CURVE  
ESTERO VC 2000

