

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= 686439 Y= 752508		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-00-14		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: 8/6/00 Completed: 1511	
8. DEPTH DRILLED INTO ROCK		N/A		17. ELEVATION TOP OF HOLE		-8.3 ft	
9. TOTAL DEPTH OF HOLE		18.7 ft		18. TOTAL CORE RECOVERY FOR BORING		96%	
				19. SIGNATURE OF GEOLOGIST SYED KHALIL			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-8.9	0					
	1				1	Sample #1, Depth = 1.0' Mean (mm): 0.21, Phi Sorting: 1.42 Silt: 3.9%
	2		SAND, fine-grained, trace shell hash/shell fragments, trace silt from 11.2' - 12.5', Light gray (5Y-7/1) (SP)			
	3					
	4				2	Sample #2, Depth = 4.0' Mean (mm): 0.15, Phi Sorting: 0.67 Silt: 2.7%
-13.4	5		shell, zone of whole shell/shell hash/shell fragments, trace of fine sand, (SP) from -13.4' to -13.9'			
-13.9	6		fine-grained, trace shell hash/shell fragments, Gray (5Y-5/1) (SP) from -13.9' to -14.7'			
-14.7	7		shell, zone of whole shell/shell hash/shell fragments, trace of fine sand, (SP) from -14.7' to 15.1'		3	Sample #3, Depth = 7.0' Mean (mm): 0.14, Phi Sorting: 1.08 Silt: 11.2%
	8					
-17	9		SAND, fine-grained, trace shell hash/shell fragments, trace silt, Gray (5Y-5/1) (SP-SM)			
-18.5	10		SILT, some clay, some shell hash/shell fragments & whole shell, Gray (5Y-5/1) (ML)			
	11					
	12					
	13		CARBONATE CLAST, limestone cobbles/pebble/gravels, calcareous/carbonate fines, Light gray (5Y-7/1) to White (5Y-8/1) (GP)			
	14					
	15					
	16					
	17					
-27.1	18					
-27.6	19		NO RECOVERY			
	20		End of Boring			
	21					
	22		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 24.237 N 81 54.453 W
	23					
	24					

GRADATION ANALYSIS REPORT
ESTERO VC 2000
TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-14#1
SAMPLE ELEV. (FT. NGVD): 1.0
SAMPLE DEPTH (FT.): 1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 97.71
SAMPLE WEIGHT AFTER WASH (GRAMS): 94.13

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	1.20	1.23	98.77
5	-2.00	4.000	2.45	2.51	97.49
7	-1.50	2.800	4.39	4.49	95.51
10	-1.00	2.000	5.33	5.45	94.55
14	-0.50	1.400	7.10	7.27	92.73
18	0.00	1.000	9.53	9.75	90.25
25	0.50	0.710	12.32	12.61	87.39
35	1.00	0.500	14.48	14.82	85.18
45	1.50	0.355	16.28	16.66	83.34
60	2.00	0.250	19.06	19.51	80.49
80	2.50	0.180	28.35	29.01	70.99
120	3.00	0.125	77.73	79.55	20.45
170	3.50	0.090	93.19	95.37	4.63
200	3.75	0.075	93.94	96.14	3.86
230	4.00	0.063	95.88	98.13	1.87
PAN			97.70	99.99	0.01

PHI (5): -1.24 PHI (16): 1.32 PHI (25): 2.29
PHI (50): 2.71 PHI (75): 2.95 PHI (84): 3.14
PHI (95): 3.49

SIEVE LOSS (g): 0.01 SILT/CLAY: 3.86%
SKEWNESS: -1.738 KURTOSIS: 2.907

GRAPHIC METHOD

MEAN (PHI): 1.88 SORTING: 0.91
MEAN (mm): 0.27 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.22 SORTING: 1.42
MEAN (mm): 0.21

DATA FILE NAME: EI-00-14#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-14#2

SAMPLE ELEV. (FT. NGVD): 4.0

SAMPLE DEPTH (FT.): 4.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.74

SAMPLE WEIGHT AFTER WASH (GRAMS): 97.20

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	0.47	0.47	99.53
7	-1.50	2.800	0.72	0.72	99.28
10	-1.00	2.000	1.07	1.07	98.93
14	-0.50	1.400	1.43	1.43	98.57
18	0.00	1.000	1.77	1.77	98.23
25	0.50	0.710	2.01	2.02	97.98
35	1.00	0.500	2.25	2.26	97.74
45	1.50	0.355	2.66	2.67	97.33
60	2.00	0.250	3.34	3.35	96.65
80	2.50	0.180	13.47	13.51	86.49
120	3.00	0.125	78.08	78.28	21.72
170	3.50	0.090	96.02	96.27	3.73
200	3.75	0.075	97.05	97.30	2.70
230	4.00	0.063	98.45	98.71	1.29
PAN			99.73	99.99	0.01

PHI (5): 2.08

PHI (16): 2.52

PHI (25): 2.59

PHI (50): 2.78

PHI (75): 2.97

PHI (84): 3.16

PHI (95): 3.46

SIEVE LOSS (g): 0.01

SILT/CLAY: 2.70%

SKEWNESS: -0.027

KURTOSIS: 1.469

GRAPHIC METHOD

MEAN (PHI): 2.80

SORTING: 0.32

MEAN (mm): 0.14

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.72

SORTING: 0.67

MEAN (mm): 0.15

DATA FILE NAME: EI-00-14#2.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-14#3

SAMPLE ELEV. (FT. NGVD): 7.0

SAMPLE DEPTH (FT.): 7.0

SAMPLE TYPE: CORE SAMPLE
-----USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.63

SAMPLE WEIGHT AFTER WASH (GRAMS): 90.20

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	0.51	0.51	99.49
7	-1.50	2.800	1.66	1.67	98.33
10	-1.00	2.000	3.05	3.06	96.94
14	-0.50	1.400	4.36	4.38	95.62
18	0.00	1.000	5.05	5.07	94.93
25	0.50	0.710	5.61	5.63	94.37
35	1.00	0.500	5.99	6.01	93.99
45	1.50	0.355	6.34	6.36	93.64
60	2.00	0.250	6.92	6.95	93.05
80	2.50	0.180	8.63	8.66	91.34
120	3.00	0.125	37.03	37.17	62.83
170	3.50	0.090	81.91	82.21	17.79
200	3.75	0.075	88.49	88.82	11.18
230	4.00	0.063	94.76	95.11	4.89
PAN			99.62	99.99	0.01

PHI (5): -0.05

PHI (16): 2.63

PHI (25): 2.79

PHI (50): 3.14

PHI (75): 3.42

PHI (84): 3.57

PHI (95): 4.00

SIEVE LOSS (g): 0.01

SILT/CLAY: 11.18%

SKEWNESS: -2.491

KURTOSIS: 2.618

GRAPHIC METHOD

MEAN (PHI): 2.66

SORTING: 0.47

MEAN (mm): 0.16

MEDIAN (mm): 0.11

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

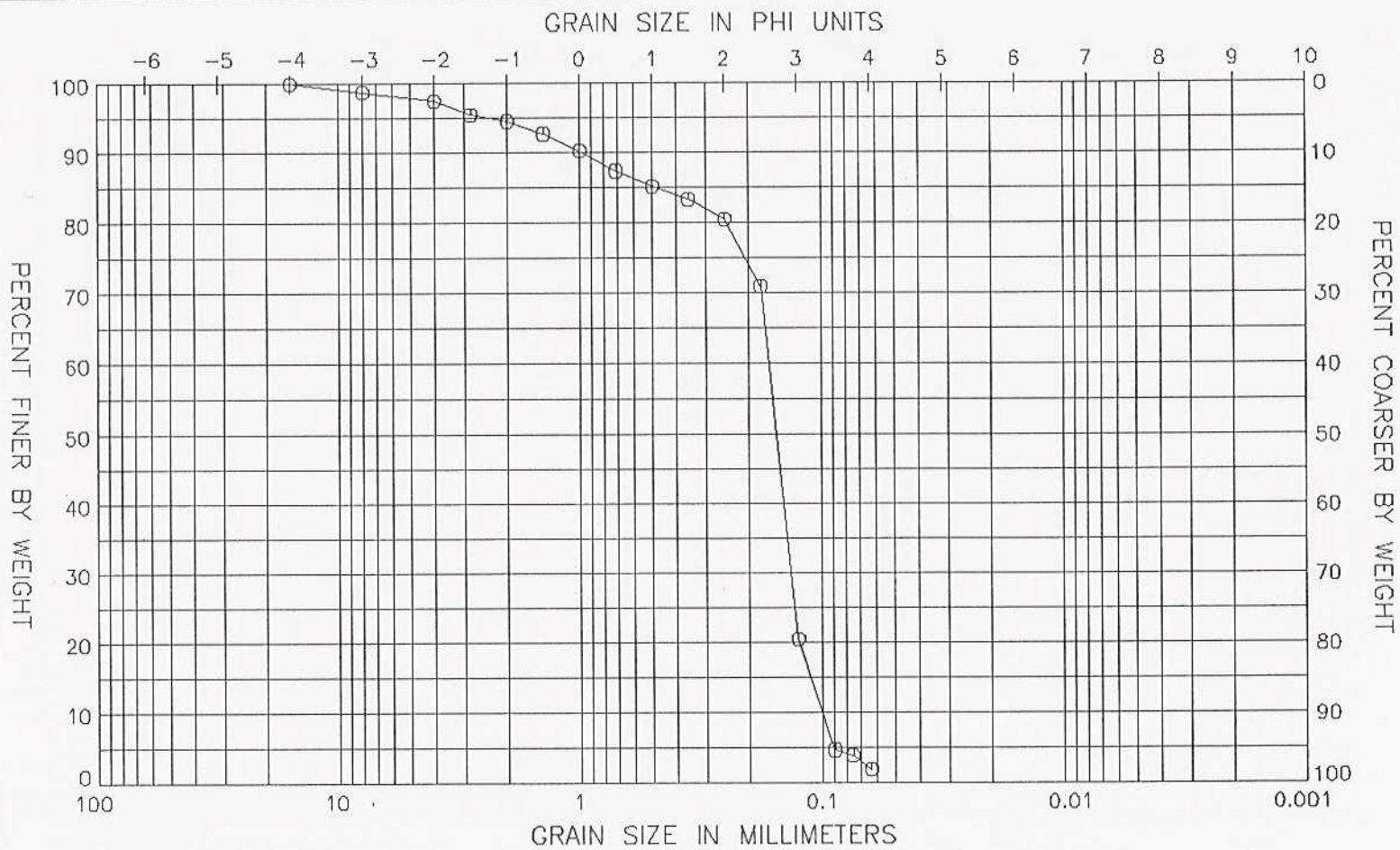
MEAN (PHI): 2.87

SORTING: 1.09

MEAN (mm): 0.14

DATA FILE NAME: EI-00-14#3.TAB

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

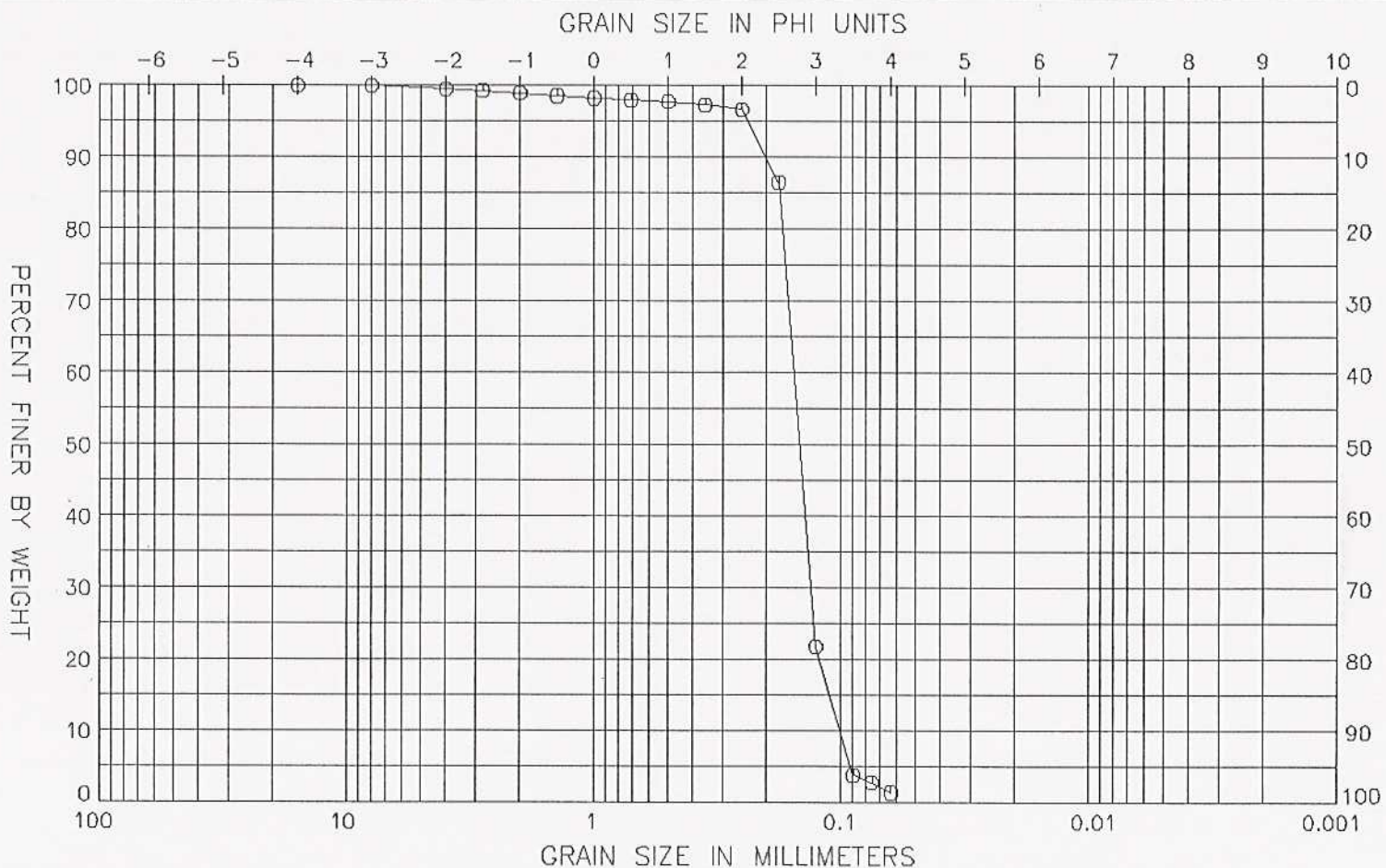


WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	VERY	SAND			VERY	SILT	CLAY
		COARSE	COARSE	MED.	FINE	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
EI-00-14#1 Ⓟ	1.0	1.0	SP	0.21	0.15	1.42

PERCENT COARSER BY WEIGHT



WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	VERY	SAND			VERY	SILT	CLAY
		COARSE	COARSE	MED.	FINE	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
EI-00-14#2 Ⓟ	4.0	4.0	SP	0.15	0.15	0.67

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

