

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= 661993 Y= 767598		11. DATUM FOR ELEVATION SHOWN <sup>(TBM or MSL)</sup> 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-00-01		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: 1118	
8. DEPTH DRILLED INTO ROCK	N/A		17. ELEVATION TOP OF HOLE -12.4 ft	
9. TOTAL DEPTH OF HOLE	18.5 ft		18. TOTAL CORE RECOVERY FOR BORING 52%	
			19. SIGNATURE OF GEOLOGIST SYED KHALIL	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-12.4	0					Sample #1, Depth = 0.7' Mean (mm): 0.22, Phi Sorting: 1.43 Silt: 15.7%
	1				1	
	2					
	3		SILTY SAND, fine-grained, trace clay, some shell hash/shell fragments/whole shell, Gray (5Y-5/1) (SM)		2	Sample #2, Depth = 3.0' Mean (mm): 0.27, Phi Sorting: 2.12 Silt: 24.0%
	4					
-17.4	5					
	6		SILTY CLAY, fluidized between 5.5' - 6.8', some shell hash/shell fragments/ whole shell (up to 2"), Dark gray (5Y-4/1) (ML-CL)		3	Sample #3, Depth = 6.0' Mean (mm): 0.41, Phi Sorting: 2.25 Silt: 21.6%
	7					
-20.7	8					
-21.5	9		CARBONATE CLASTS, hard, pebble/gravels embedded in fines, Dark gray (5Y-4/1) (GP)			
	10					
	11					
	12					
	13					
	14		No Recovery			
	15					
	16					
	17					
-30.9	18					
	19		End of Boring			
	20					
	21		Note:			LAT - LONG
	22		1) Soils are field visually classified in accordance with the Unified Soil Classification System.			26 26.727 N 81 58.925 W
	23					
	24					

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-01#1

SAMPLE ELEV. (FT. NGVD): 0.7

SAMPLE DEPTH (FT.): 0.7

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 86.99

SAMPLE WEIGHT AFTER WASH (GRAMS): 74.95

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	0.07	0.08	99.92
7	-1.50	2.800	0.60	0.69	99.31
10	-1.00	2.000	1.59	1.83	98.17
14	-0.50	1.400	4.36	5.01	94.99
18	0.00	1.000	8.39	9.64	90.36
25	0.50	0.710	13.99	16.08	83.92
35	1.00	0.500	19.81	22.77	77.23
45	1.50	0.355	23.77	27.32	72.68
60	2.00	0.250	27.21	31.28	68.72
80	2.50	0.180	31.86	36.62	63.38
120	3.00	0.125	48.53	55.79	44.21
170	3.50	0.090	69.78	80.22	19.78
200	3.75	0.075	73.36	84.33	15.67
230	4.00	0.063	80.61	92.67	7.33
PAN			86.98	99.99	0.01

PHI (5): -0.50

PHI (16): 0.49

PHI (25): 1.24

PHI (50): 2.85

PHI (75): 3.39

PHI (84): 3.73

PHI (95): 4.07

SIEVE LOSS(g): 0.01

SILT/CLAY: 15.67%

SKEWNESS: -0.658

KURTOSIS: 0.872

## GRAPHIC METHOD

MEAN (PHI): 2.13

SORTING: 1.62

MEAN (mm): 0.23

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.21

SORTING: 1.43

MEAN (mm): 0.22

DATA FILE NAME: EI-00-01#1.TAB



## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-01#2

SAMPLE ELEV. (FT. NGVD): 3.0

SAMPLE DEPTH (FT.): 3.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 90.64

SAMPLE WEIGHT AFTER WASH (GRAMS): 72.70

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	0.34	0.38	99.62
5	-2.00	4.000	6.47	7.14	92.86
7	-1.50	2.800	10.16	11.21	88.79
10	-1.00	2.000	13.61	15.02	84.98
14	-0.50	1.400	16.82	18.56	81.44
18	0.00	1.000	19.18	21.16	78.84
25	0.50	0.710	21.54	23.76	76.24
35	1.00	0.500	23.46	25.88	74.12
45	1.50	0.355	24.95	27.53	72.47
60	2.00	0.250	26.98	29.77	70.23
80	2.50	0.180	29.13	32.14	67.86
120	3.00	0.125	42.51	46.90	53.10
170	3.50	0.090	66.72	73.61	26.39
200	3.75	0.075	68.86	75.97	24.03
230	4.00	0.063	81.32	89.72	10.28
PAN			90.63	99.99	0.01

PHI (5): -2.32

PHI (16): -0.86

PHI (25): 0.79

PHI (50): 3.06

PHI (75): 3.65

PHI (84): 3.90

PHI (95): 4.10

SIEVE LOSS (g): 0.01

SILT/CLAY: 24.03%

SKEWNESS: -0.912

KURTOSIS: 0.920

## GRAPHIC METHOD

MEAN (PHI): 1.57

SORTING: 2.38

MEAN (mm): 0.34

MEDIAN (mm): 0.12

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 1.89

SORTING: 2.12

MEAN (mm): 0.27

DATA FILE NAME: EI-00-01#2.TAB

GRADATION ANALYSIS REPORT  
ESTERO VC 2000  
TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-01#3  
SAMPLE ELEV. (FT. NGVD): 6.0  
SAMPLE DEPTH (FT.): 6.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 144.96  
SAMPLE WEIGHT AFTER WASH (GRAMS): 119.20

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	1.77	1.22	98.78
5	-2.00	4.000	15.95	11.00	89.00
7	-1.50	2.800	22.63	15.61	84.39
10	-1.00	2.000	30.13	20.79	79.21
14	-0.50	1.400	37.24	25.69	74.31
18	0.00	1.000	42.50	29.32	70.68
25	0.50	0.710	46.61	32.15	67.85
35	1.00	0.500	50.67	34.95	65.05
45	1.50	0.355	55.48	38.27	61.73
60	2.00	0.250	63.57	43.85	56.15
80	2.50	0.180	72.76	50.19	49.81
120	3.00	0.125	91.70	63.26	36.74
170	3.50	0.090	107.74	74.32	25.68
200	3.75	0.075	113.70	78.44	21.56
230	4.00	0.063	130.82	90.25	9.75
PAN			144.95	99.99	0.01

PHI(5): -2.61 PHI(16): -1.46 PHI(25): -0.57  
PHI(50): 2.48 PHI(75): 3.54 PHI(84): 3.87  
PHI(95): 4.10

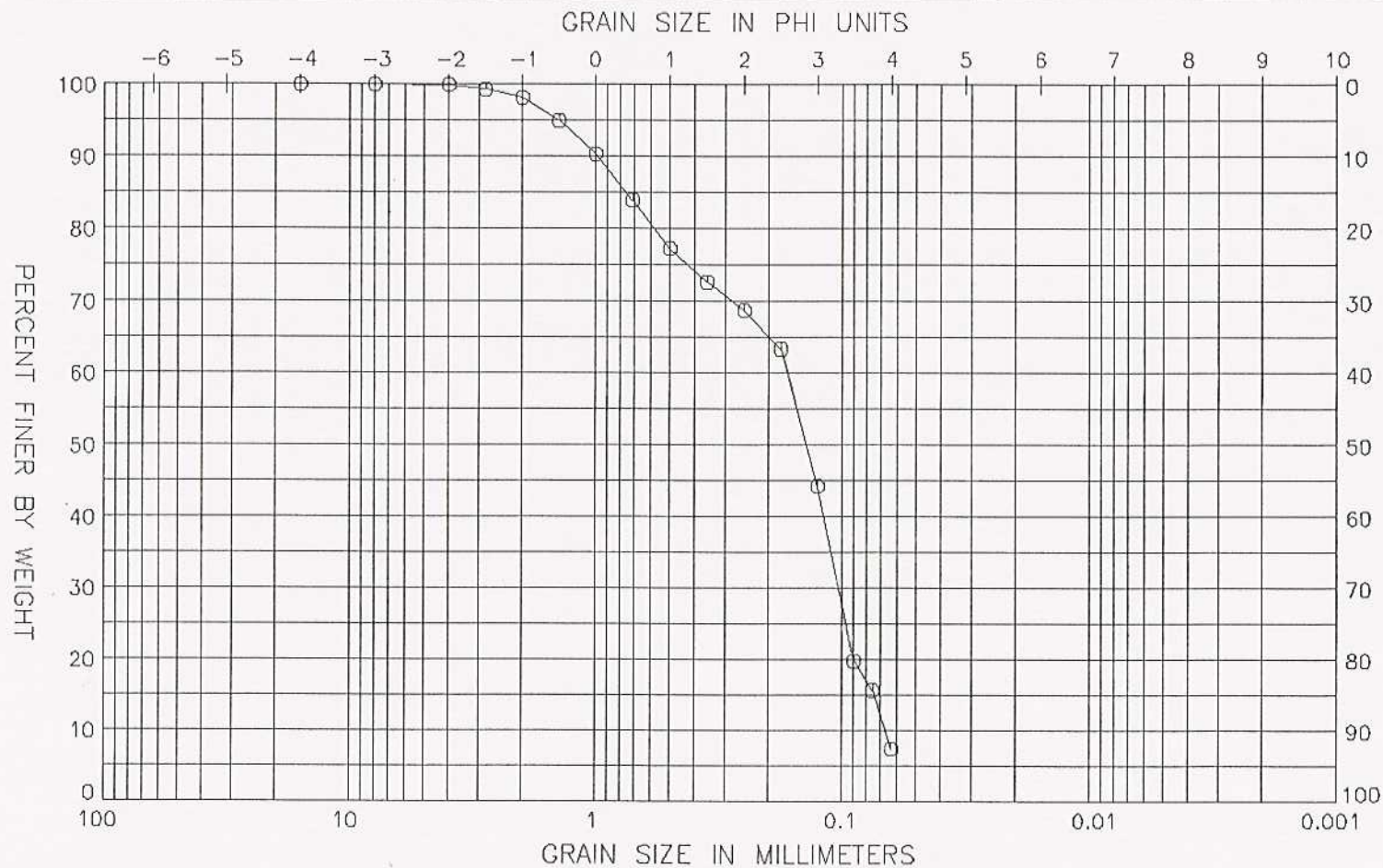
SIEVE LOSS(g): 0.01 SILT/CLAY: 21.56%  
SKEWNESS: -0.653 KURTOSIS: 0.669

GRAPHIC METHOD  
MEAN (PHI): 1.28 SORTING: 2.67  
MEAN (mm): 0.41 MEDIAN (mm): 0.18  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD  
MEAN (PHI): 1.28 SORTING: 2.25  
MEAN (mm): 0.41

DATA FILE NAME: EI-00-01#3.TAB

PERCENT COARSER BY WEIGHT



WENTWORTH CLASSIFICATION

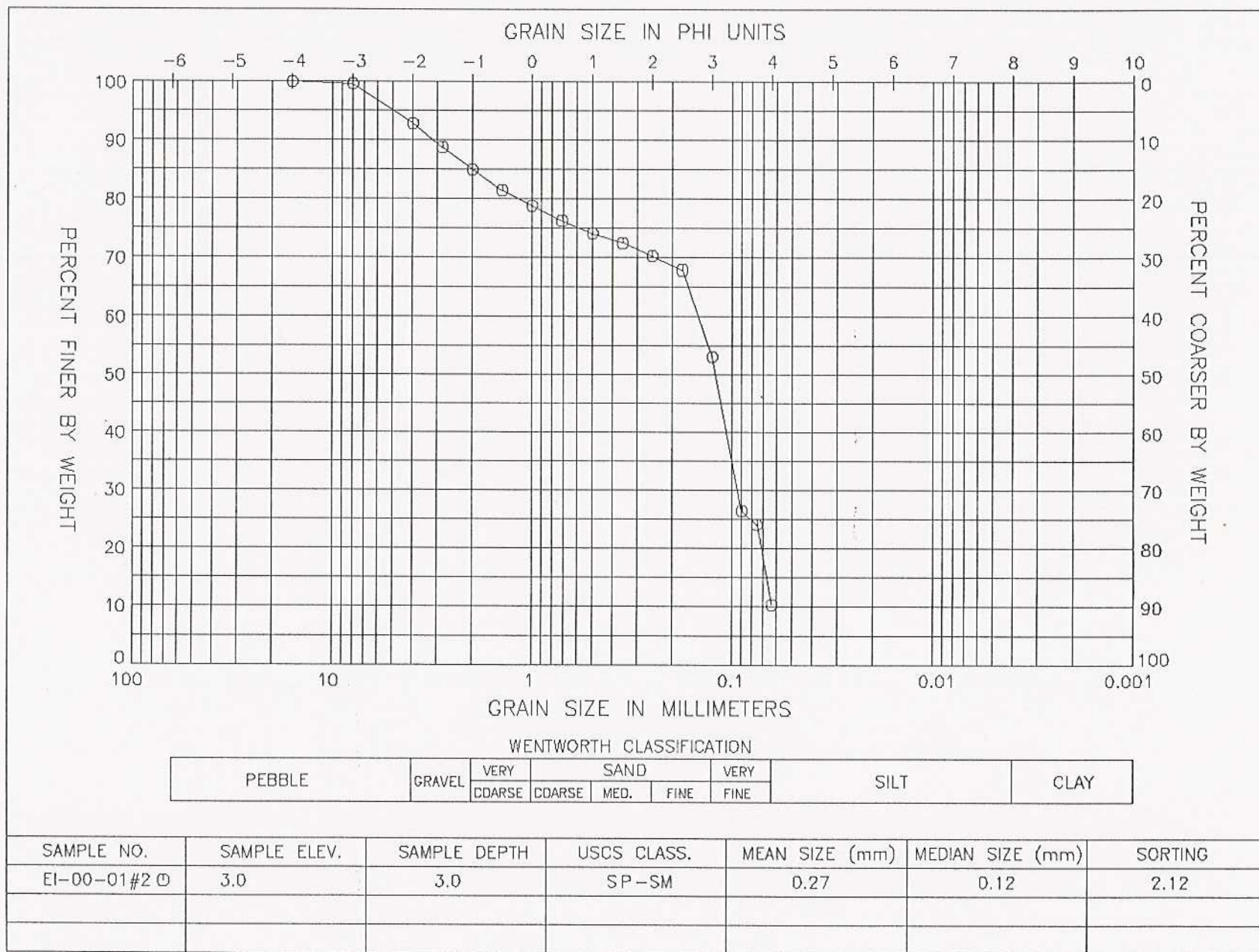
PEBBLE	GRAVEL	VERY	SAND			VERY	SILT	CLAY
		COARSE	COARSE	MED.	FINE	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
EI-00-01#1 $\odot$	0.7	0.7	SP-SM	0.22	0.14	1.43

GRAIN SIZE DISTRIBUTION CURVE  
ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE  
ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE  
ESTERO VC 2000

