

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"			
(Coordinates or Station)				11. DATUM FOR ELEVATION SHOWN (TBM or MSL)			
2. LOCATION X= 660973 Y= 767860				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-00-12				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 Completed 8/6/00 0831			
8. DEPTH DRILLED INTO ROCK N/A				17. ELEVATION TOP OF HOLE -11.6 ft			
9. TOTAL DEPTH OF HOLE 18.2 ft				18. TOTAL CORE RECOVERY FOR BORING 58%			
				19. SIGNATURE OF GEOLOGIST SYED KHALIL			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-11.6	0					
	1		SILTY SAND, fine-grained, some shell hash/shell fragments, Gray (5Y-6/1) (SM)		1	Sample #1, Depth = 1.0' Mean (mm): 0.50, Phi Sorting: 1.87 Silt: 13.5%
-14.3	2				2	Sample #2, Depth = 2.2' Mean (mm): 0.18, Phi Sorting: 1.41 Silt: 14.0%
	3					
	4					
	5		SILTY CLAY, some shell hash/shell fragments/whole shell up to 0.5", compact, Gray (5Y-5/1) (ML-CL)			
	6					
	7					
-19.4	8		some whole shell, 2.5" gastropod @ -19.4, two 4" shells between 19.9' - 20.1', Gray (5Y-5/1) (ML-CL) from -19.4 to -21.3'			
	9					
-21.3	10		CARBONATE CLAST, limestone cobbles/pebble/gravels, calcareous/carbonate fines, hard, (5Y-5/1) (GP)			
-22.4	11					
	12					
	13					
	14		NO RECOVERY			
	15					
	16					
	17					
-29.8	18		End of Boring			
	19					
	20					
	21		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 26.765 N 81 59.124 W
	22					
	23					
	24					

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-12#1

SAMPLE ELEV. (FT. NGVD): 1.0

SAMPLE DEPTH (FT.): 1.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 92.56

SAMPLE WEIGHT AFTER WASH (GRAMS): 80.79

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	3.45	3.73	96.27
7	-1.50	2.800	6.74	7.28	92.72
10	-1.00	2.000	12.95	13.99	86.01
14	-0.50	1.400	22.50	24.31	75.69
18	0.00	1.000	31.38	33.90	66.10
25	0.50	0.710	41.55	44.89	55.11
35	1.00	0.500	47.98	51.84	48.16
45	1.50	0.355	51.20	55.32	44.68
60	2.00	0.250	54.15	58.50	41.50
80	2.50	0.180	57.18	61.78	38.22
120	3.00	0.125	68.46	73.96	26.04
170	3.50	0.090	78.81	85.14	14.86
200	3.75	0.075	80.10	86.54	13.46
230	4.00	0.063	86.32	93.26	6.74
PAN			92.55	99.99	0.01

PHI (5): -1.82

PHI (16): -0.90

PHI (25): -0.46

PHI (50): 0.87

PHI (75): 3.05

PHI (84): 3.45

PHI (95): 4.06

SIEVE LOSS (g): 0.01

SILT/CLAY: 13.46%

SKEWNESS: 0.117

KURTOSIS: 0.687

## GRAPHIC METHOD

MEAN (PHI): 1.13

SORTING: 2.18

MEAN (mm): 0.46

MEDIAN (mm): 0.55

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 0.99

SORTING: 1.87

MEAN (mm): 0.50

DATA FILE NAME: EI-00-12#1.TAB

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-12#2  
SAMPLE ELEV. (FT. NGVD): 2.2  
SAMPLE DEPTH (FT.): 2.2  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 97.75  
SAMPLE WEIGHT AFTER WASH (GRAMS): 84.74

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	1.56	1.60	98.40
7	-1.50	2.800	2.88	2.95	97.05
10	-1.00	2.000	4.35	4.45	95.55
14	-0.50	1.400	6.65	6.80	93.20
18	0.00	1.000	8.92	9.13	90.87
25	0.50	0.710	11.00	11.25	88.75
35	1.00	0.500	12.77	13.06	86.94
45	1.50	0.355	14.30	14.63	85.37
60	2.00	0.250	16.12	16.49	83.51
80	2.50	0.180	19.05	19.49	80.51
120	3.00	0.125	48.49	49.61	50.39
170	3.50	0.090	80.50	82.35	17.65
200	3.75	0.075	84.02	85.95	14.05
230	4.00	0.063	91.02	93.12	6.88
PAN			97.73	99.98	0.02

PHI (5): -0.88      PHI (16): 1.87      PHI (25): 2.59  
PHI (50): 3.01      PHI (75): 3.39      PHI (84): 3.61  
PHI (95): 4.07

SIEVE LOSS (g): 0.02      SILT/CLAY: 14.05%  
SKEWNESS: -1.620      KURTOSIS: 2.547

## GRAPHIC METHOD

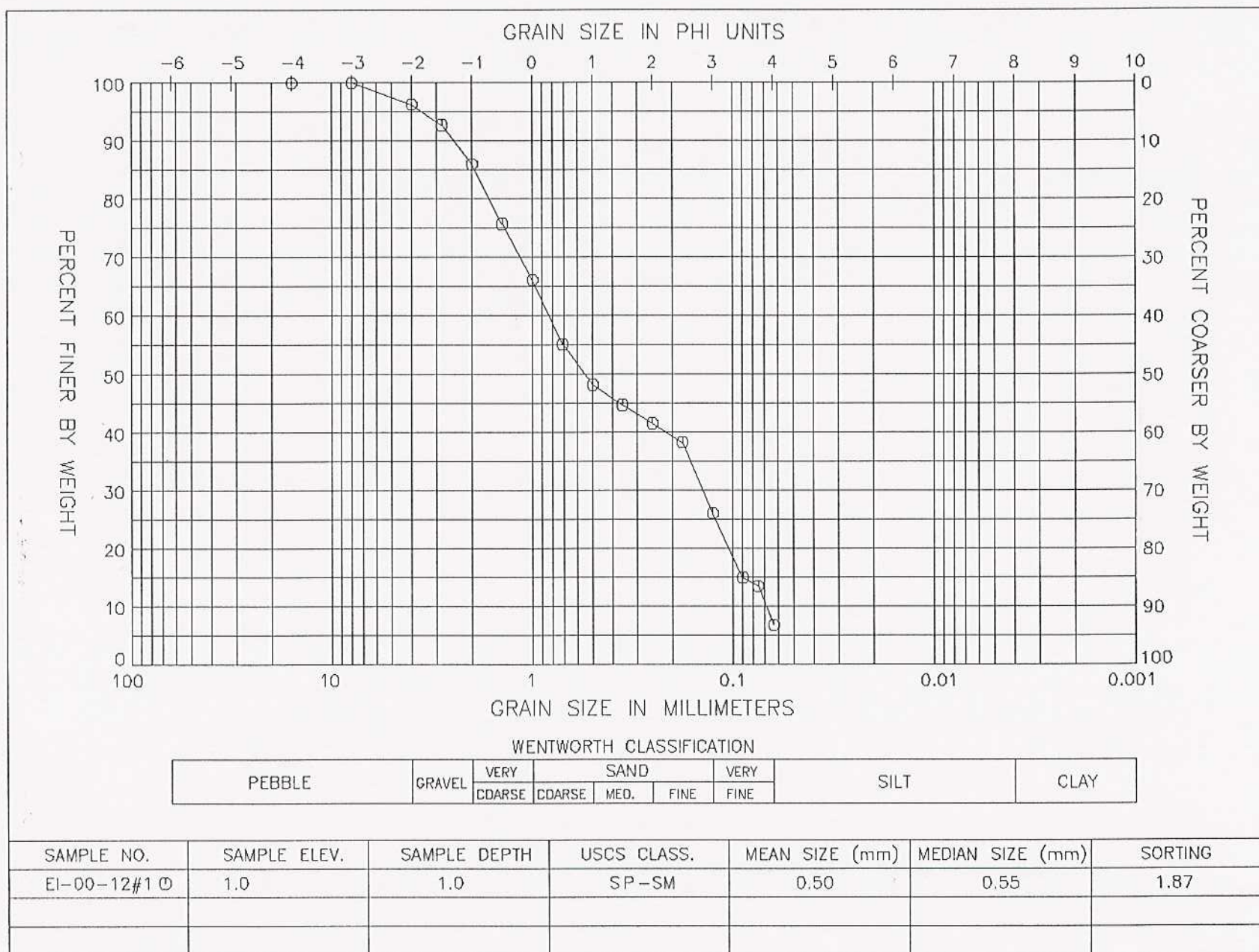
MEAN (PHI): 2.33      SORTING: 0.87  
MEAN (mm): 0.20      MEDIAN (mm): 0.12  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

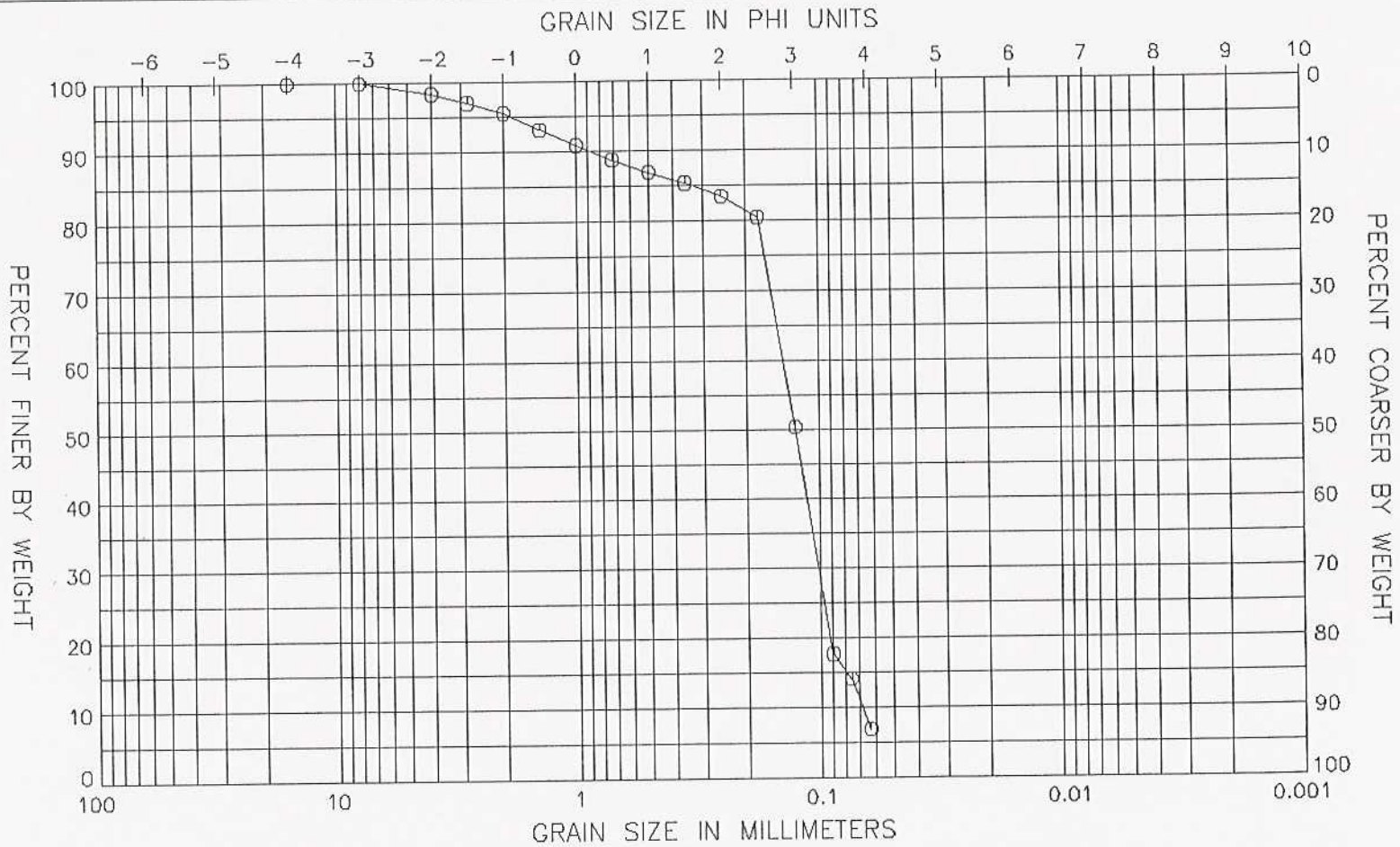
MEAN (PHI): 2.51      SORTING: 1.41  
MEAN (mm): 0.18

DATA FILE NAME: EI-00-12#2.TAB

# GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



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-00-12#2 O	2.2	2.2	SP-SM	0.18	0.12	1.41



