

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= 685444 Y= 750561				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-00-11				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 8/5/00 1559			
8. DEPTH DRILLED INTO ROCK N/A				17. ELEVATION TOP OF HOLE -10.2 ft			
9. TOTAL DEPTH OF HOLE 18.1 ft				18. TOTAL CORE RECOVERY FOR BORING 75%			
				19. SIGNATURE OF GEOLOGIST SYED KHALIL			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-10.2	0					
	1		SAND, fine-grained, trace silt, little shell hash/shell fragments between -9.0' & -9.2', Light gray (5Y-7/1) (SP-SM)		1	Sample #1, Depth = 1.0' Mean (mm): 0.14, Phi Sorting: 0.60 Silt: 5.4%
-12.4	2					
	3		SILTY SAND, fine-grained, some shell hash/shell fragments/whole shell, Gray (5Y-5/1) (SM)		3	Sample #3, Depth = 3.0' Mean (mm): 0.30, Phi Sorting: 2.26 Silt: 13.0%
-14	4					
-14.6	5		SAND, fine-grained, Light gray (5Y-7/1) (SP)		2	Sample #2, Depth = 4.0' Mean (mm): 0.13, Phi Sorting: 0.42 Silt: 3.5%
	6					
	7		SILT, some clay, some shell hash/shell fragments, some sand, fluidized between 15.9'-16.7', Gray (5Y-5/1) (ML)			
-18.3	8					
-19.3	9		SILTY CLAY, some shell hash/shell fragments/whole shell up to 3", Dark gray (5Y-4/1) (ML-CL)			
	10					
	11		CARBONATE CLAST, limestone cobbles/pebble/gravels, calcareous/carbonate fines (GP)			
	12					
-23.6	13					
	14					
	15		NO RECOVERY			
	16					
	17					
-28.3	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 23.914 N 81 54.627 W
	22					
	23					
	24					

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

SAMPLE NO.: EI-00-11#1
SAMPLE ELEV. (FT. NGVD): 1.0
SAMPLE DEPTH (FT.): 1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 98.89
SAMPLE WEIGHT AFTER WASH (GRAMS): 93.85

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	0.11	0.11	99.89
7	-1.50	2.800	0.33	0.33	99.67
10	-1.00	2.000	0.53	0.54	99.46
14	-0.50	1.400	0.91	0.92	99.08
18	0.00	1.000	1.21	1.22	98.78
25	0.50	0.710	1.55	1.57	98.43
35	1.00	0.500	1.77	1.79	98.21
45	1.50	0.355	2.02	2.04	97.96
60	2.00	0.250	2.56	2.59	97.41
80	2.50	0.180	6.05	6.12	93.88
120	3.00	0.125	58.00	58.65	41.35
170	3.50	0.090	91.90	92.93	7.07
200	3.75	0.075	93.52	94.57	5.43
230	4.00	0.063	96.32	97.40	2.60
PAN			98.89	100.00	0.00

PHI(5): 2.34 PHI(16): 2.59 PHI(25): 2.68
PHI(50): 2.92 PHI(75): 3.24 PHI(84): 3.37
PHI(95): 3.79

SIEVE LOSS(g): 0.00 SILT/CLAY: 5.43%
SKEWNESS: 0.379 KURTOSIS: 1.061

GRAPHIC METHOD

MEAN (PHI): 3.00 SORTING: 0.39
MEAN (mm): 0.12 MEDIAN (mm): 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.88 SORTING: 0.60
MEAN (mm): 0.14

DATA FILE NAME: EI-00-11#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-11#2
SAMPLE ELEV. (FT. NGVD): 4.0
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.14
SAMPLE WEIGHT AFTER WASH (GRAMS): 96.04

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	0.15	0.15	99.85
14	-0.50	1.400	0.30	0.30	99.70
18	0.00	1.000	0.39	0.39	99.61
25	0.50	0.710	0.51	0.51	99.49
35	1.00	0.500	0.65	0.66	99.34
45	1.50	0.355	0.81	0.82	99.18
60	2.00	0.250	1.15	1.16	98.84
80	2.50	0.180	4.28	4.32	95.68
120	3.00	0.125	57.84	58.34	41.66
170	3.50	0.090	93.72	94.53	5.47
200	3.75	0.075	95.64	96.47	3.53
230	4.00	0.063	97.50	98.35	1.65
PAN			99.13	99.99	0.01

PHI (5): 2.51 PHI (16): 2.61 PHI (25): 2.69
PHI (50): 2.92 PHI (75): 3.23 PHI (84): 3.35
PHI (95): 3.56

SIEVE LOSS(g): 0.01 SILT/CLAY: 3.53%
SKEWNESS: 0.296 KURTOSIS: 0.802

GRAPHIC METHOD

MEAN (PHI): 2.99 SORTING: 0.37
MEAN (mm): 0.13 MEDIAN (mm): 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.93 SORTING: 0.42
MEAN (mm): 0.13

DATA FILE NAME: EI-00-11#2.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 8/00

SAMPLE NO.: EI-00-11#3
SAMPLE ELEV. (FT. NGVD): 3.0
SAMPLE DEPTH (FT.): 3.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 92.41
SAMPLE WEIGHT AFTER WASH (GRAMS): 80.86

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	2.81	3.04	96.96
5	-2.00	4.000	11.57	12.52	87.48
7	-1.50	2.800	14.55	15.75	84.25
10	-1.00	2.000	16.94	18.33	81.67
14	-0.50	1.400	19.20	20.78	79.22
18	0.00	1.000	20.90	22.62	77.38
25	0.50	0.710	22.58	24.43	75.57
35	1.00	0.500	25.01	27.06	72.94
45	1.50	0.355	25.66	27.77	72.23
60	2.00	0.250	26.44	28.61	71.39
80	2.50	0.180	28.46	30.80	69.20
120	3.00	0.125	50.08	54.19	45.81
170	3.50	0.090	76.58	82.87	17.13
200	3.75	0.075	80.34	86.94	13.06
230	4.00	0.063	86.51	93.61	6.39
PAN			92.39	99.98	0.02

PHI (5): -2.79 PHI (16): -1.45 PHI (25): 0.61
PHI (50): 2.91 PHI (75): 3.36 PHI (84): 3.57
PHI (95): 4.05

SIEVE LOSS (g): 0.02 SILT/CLAY: 13.06%
SKEWNESS: -0.909 KURTOSIS: 1.018

GRAPHIC METHOD

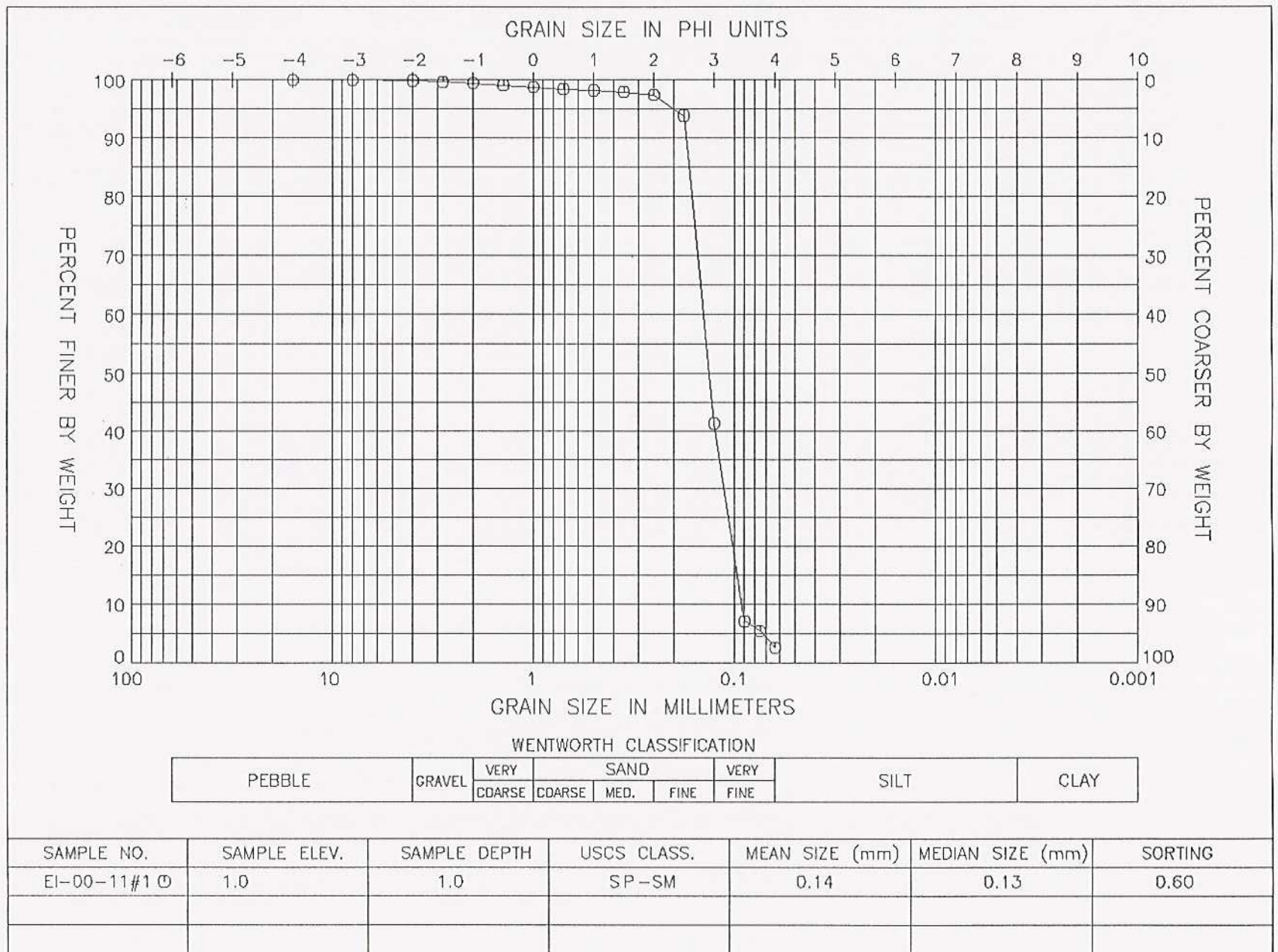
MEAN (PHI): 1.26 SORTING: 2.51
MEAN (mm): 0.42 MEDIAN (mm): 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

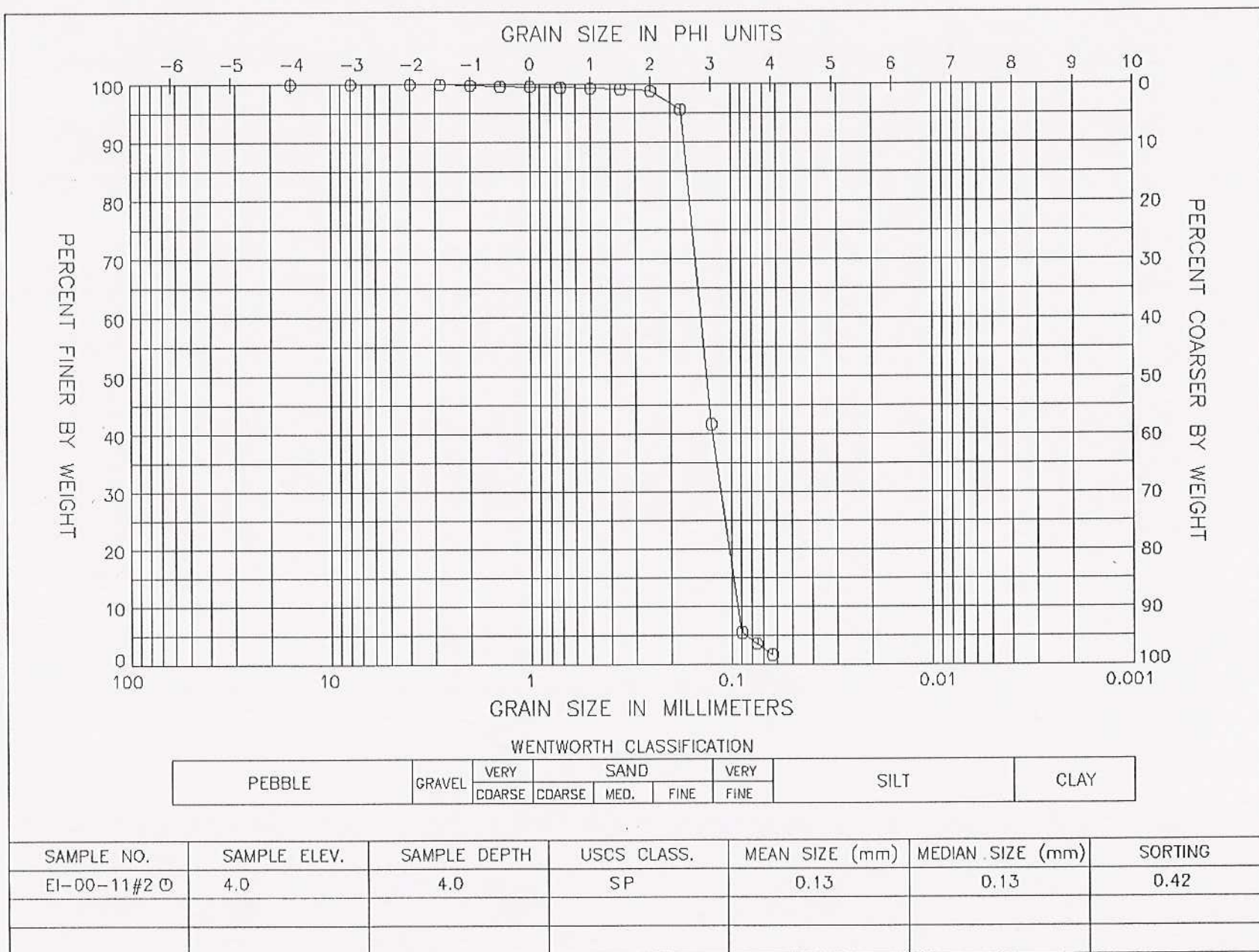
MEAN (PHI): 1.73 SORTING: 2.26
MEAN (mm): 0.30

DATA FILE NAME: EI-00-11#3.TAB

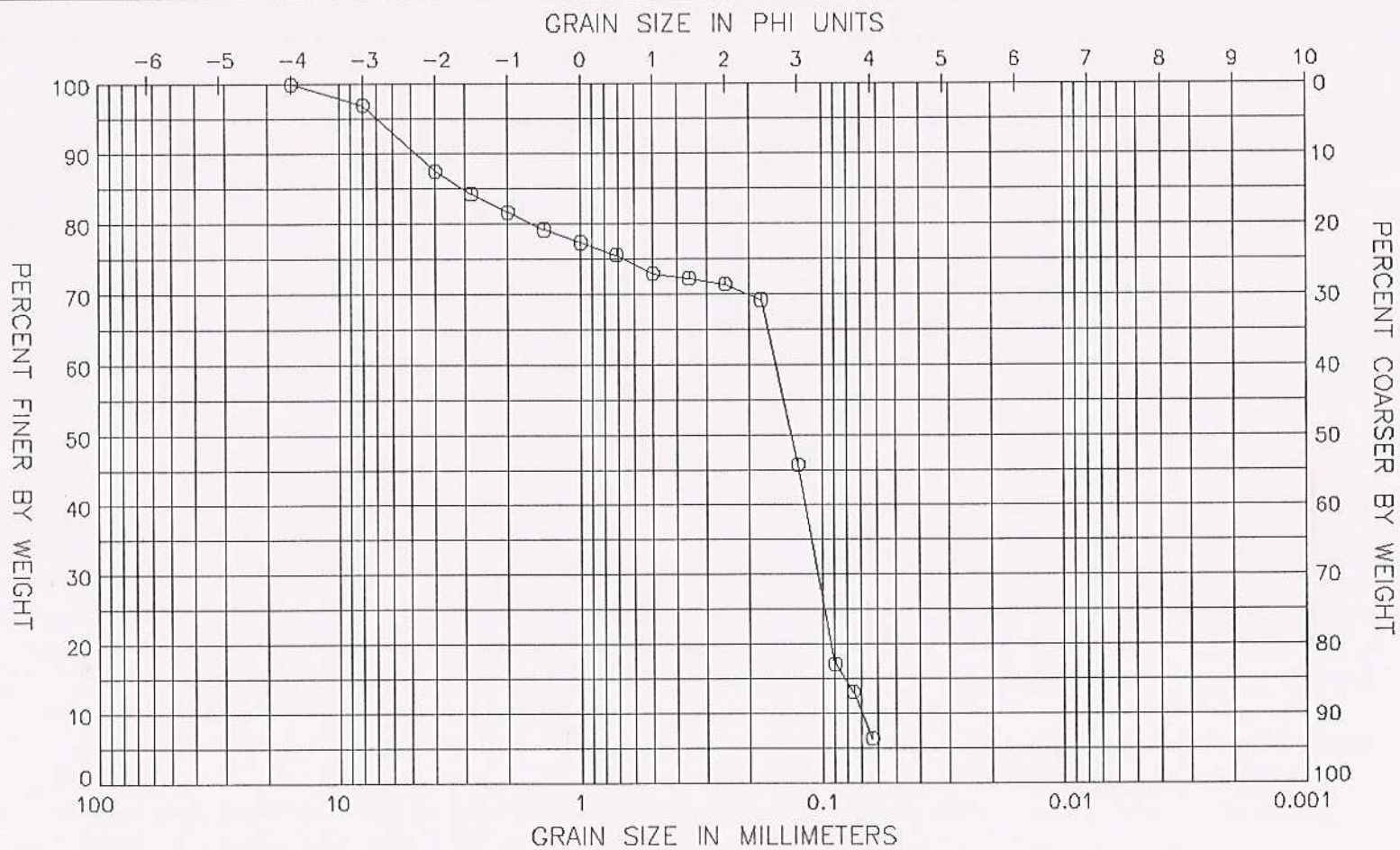
GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



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-00-11#3	3.0	3.0	SP-SM	0.30	0.13	2.26



