

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= 686602 Y= 750381		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)		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN		Disturbed: 0.0 Undisturbed: 0.0			
EI-00-09		14. TOTAL NO. OF CORE BOXES					
5. NAME OF DRILLER MAURIZIO ROSSI		15. ELEVATION GROUND WATER					
6. DIRECTION OF HOLE VERTICAL		16. DATE HOLE		Started Completed			
		8/5/00 1516					
7. THICKNESS OF BURDEN 0.0 FT		17. ELEVATION TOP OF HOLE -8.4 ft					
8. DEPTH DRILLED INTO ROCK N/A		18. TOTAL CORE RECOVERY FOR BORING 76%					
9. TOTAL DEPTH OF HOLE 18.7 ft		19. SIGNATURE OF GEOLOGIST SYED KHALIL					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-8.4	0		SAND, fine-grained, trace shell hash, Light gray (5Y-7/1) (SP)		1	Sample #1, Depth = 0.3' Mean (mm): 0.21, Phi Sorting: 1.43 Silt: 3.9%
-9.2	1		shell, hash/fragments, some sand, Light gray (5Y-7/1) (SP) from -9.2' to -10.4'		2	Sample #2, Depth = 1.5' Mean (mm): 0.56, Phi Sorting: 1.66 Silt: 1.8%
-10.4	2					
	3				3	Sample #3, Depth = 3.5' Mean (mm): 0.16, Phi Sorting: 1.19 Silt: 8.0%
	4		SAND, fine-grained, trace shell hash/shell fragments, Dark gray (5Y-4/1) (SP-SM)			
	5					
	6					
-14.9	7		SILTY SAND, trace shell hash/fragments to 15.9', some shell hash/fragments from 15.9' to 16.7', Dark gray (5Y-4/1) (SM)		4	Sample #4, Depth = 8.0' Mean (mm): 0.16, Phi Sorting: 1.70 Silt: 26.7%
	8					
-17.7	9					
	10		SILT, some clay, trace shell hash/shell fragments, 3" whole shell @ 19.1' to 19.4', Dark gray (5Y-4/1) (ML)			
	11					
-21.2	12					
	13		some clay, trace shell hash/shell fragments/whole shell, Dark gray (5Y-3/1) from -21.2' to -22.8'			
-22.8	14					
	15					
	16		NO RECOVERY			
	17					
-27.1	18					
	19		End of Boring			
	20					
	21		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 23.891 N 81 54.419 W
	22					
	23					
	24					

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

SAMPLE NO.: EI-00-09#1
SAMPLE ELEV. (FT. NGVD): 0.3
SAMPLE DEPTH (FT.): 0.3
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.50
SAMPLE WEIGHT AFTER WASH (GRAMS): 96.55

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	1.87	1.88	98.12
5	-2.00	4.000	2.83	2.84	97.16
7	-1.50	2.800	4.37	4.39	95.61
10	-1.00	2.000	5.13	5.16	94.84
14	-0.50	1.400	6.41	6.44	93.56
18	0.00	1.000	8.49	8.53	91.47
25	0.50	0.710	11.25	11.31	88.69
35	1.00	0.500	13.83	13.90	86.10
45	1.50	0.355	15.89	15.97	84.03
60	2.00	0.250	19.66	19.76	80.24
80	2.50	0.180	27.36	27.50	72.50
120	3.00	0.125	73.99	74.36	25.64
170	3.50	0.090	95.57	96.05	3.95
200	3.75	0.075	95.63	96.11	3.89
230	4.00	0.063	98.00	98.50	1.50
PAN			99.50	100.00	0.00

PHI (5): -1.10 PHI (16): 1.50 PHI (25): 2.34
PHI (50): 2.74 PHI (75): 3.01 PHI (84): 3.22
PHI (95): 3.48

SIEVE LOSS (g): 0.00 SILT/CLAY: 3.89%
SKEWNESS: -1.808 KURTOSIS: 2.775

GRAPHIC METHOD

MEAN (PHI): 1.97 SORTING: 0.86
MEAN (mm): 0.26 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.27 SORTING: 1.43
MEAN (mm): 0.21

DATA FILE NAME: EI-00-09#1.TAB

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

SAMPLE NO.: EI-00-09#2
SAMPLE ELEV. (FT. NGVD): 1.5
SAMPLE DEPTH (FT.): 1.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 97.36
SAMPLE WEIGHT AFTER WASH (GRAMS): 95.73

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	0.67	0.69	99.31
5	-2.00	4.000	4.72	4.85	95.15
7	-1.50	2.800	9.79	10.06	89.94
10	-1.00	2.000	16.27	16.71	83.29
14	-0.50	1.400	25.01	25.69	74.31
18	0.00	1.000	32.03	32.90	67.10
25	0.50	0.710	39.00	40.06	59.94
35	1.00	0.500	45.62	46.86	53.14
45	1.50	0.355	51.88	53.29	46.71
60	2.00	0.250	61.76	63.43	36.57
80	2.50	0.180	81.76	83.98	16.02
120	3.00	0.125	93.14	95.67	4.33
170	3.50	0.090	95.48	98.07	1.93
200	3.75	0.075	95.63	98.22	1.78
230	4.00	0.063	96.46	99.07	0.93
PAN			97.35	99.99	0.01

PHI (5): -1.99 PHI (16): -1.05 PHI (25): -0.54
PHI (50): 1.24 PHI (75): 2.28 PHI (84): 2.50
PHI (95): 2.97

SIEVE LOSS (g): 0.01 SILT/CLAY: 1.78%
SKEWNESS: -0.423 KURTOSIS: 0.720

GRAPHIC METHOD

MEAN (PHI): 0.74 SORTING: 1.78
MEAN (mm): 0.60 MEDIAN (mm): 0.42
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.85 SORTING: 1.66
MEAN (mm): 0.56

DATA FILE NAME: EI-00-09#2.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-09#3

SAMPLE ELEV. (FT. NGVD): 3.5

SAMPLE DEPTH (FT.): 3.5

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 93.64

SAMPLE WEIGHT AFTER WASH (GRAMS): 86.96

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	1.55	1.66	98.34
7	-1.50	2.800	2.30	2.46	97.54
10	-1.00	2.000	3.42	3.65	96.35
14	-0.50	1.400	4.61	4.92	95.08
18	0.00	1.000	5.62	6.00	94.00
25	0.50	0.710	6.50	6.94	93.06
35	1.00	0.500	7.54	8.05	91.95
45	1.50	0.355	8.40	8.97	91.03
60	2.00	0.250	9.32	9.95	90.05
80	2.50	0.180	11.70	12.49	87.51
120	3.00	0.125	52.56	56.13	43.87
170	3.50	0.090	83.37	89.03	10.97
200	3.75	0.075	86.19	92.04	7.96
230	4.00	0.063	90.21	96.34	3.66
PAN			93.63	99.99	0.01

PHI (5): -0.46

PHI (16): 2.54

PHI (25): 2.64

PHI (50): 2.93

PHI (75): 3.29

PHI (84): 3.42

PHI (95): 3.92

SIEVE LOSS (g): 0.01

SILT/CLAY: 7.96%

SKEWNESS: -2.719

KURTOSIS: 2.794

GRAPHIC METHOD

MEAN (PHI): 2.47

SORTING: 0.44

MEAN (mm): 0.18

MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.66

SORTING: 1.19

MEAN (mm): 0.16

DATA FILE NAME: EI-00-09#3.TAB

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

SAMPLE NO.: EI-00-09#4
SAMPLE ELEV. (FT. NGVD): 8.0
SAMPLE DEPTH (FT.): 8.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.70
SAMPLE WEIGHT AFTER WASH (GRAMS): 81.85

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	0.43	0.43	99.57
5	-2.00	4.000	4.70	4.71	95.29
7	-1.50	2.800	6.45	6.47	93.53
10	-1.00	2.000	8.12	8.14	91.86
14	-0.50	1.400	9.52	9.55	90.45
18	0.00	1.000	10.26	10.29	89.71
25	0.50	0.710	10.92	10.95	89.05
35	1.00	0.500	11.43	11.46	88.54
45	1.50	0.355	11.91	11.95	88.05
60	2.00	0.250	12.86	12.90	87.10
80	2.50	0.180	14.58	14.62	85.38
120	3.00	0.125	34.28	34.38	65.62
170	3.50	0.090	70.10	70.31	29.69
200	3.75	0.075	73.13	73.35	26.65
230	4.00	0.063	90.44	90.72	9.28
PAN			99.68	99.98	0.02

PHI (5): -1.92 PHI (16): 2.53 PHI (25): 2.76
PHI (50): 3.22 PHI (75): 3.77 PHI (84): 3.90
PHI (95): 4.06

SIEVE LOSS (g): 0.02 SILT/CLAY: 26.65%
SKEWNESS: -3.136 KURTOSIS: 2.424

GRAPHIC METHOD

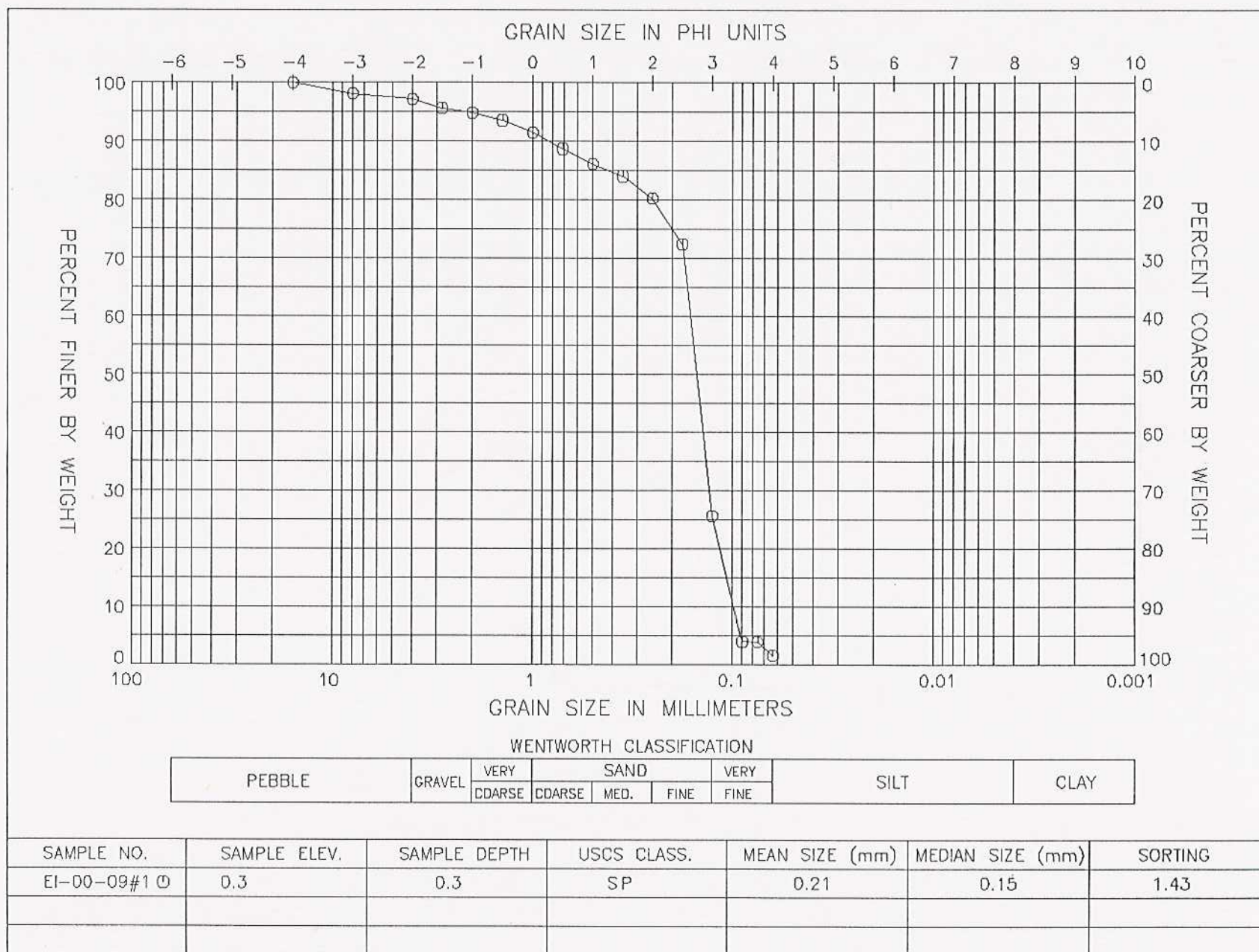
MEAN (PHI): 2.36 SORTING: 0.68
MEAN (mm): 0.19 MEDIAN (mm): 0.11
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

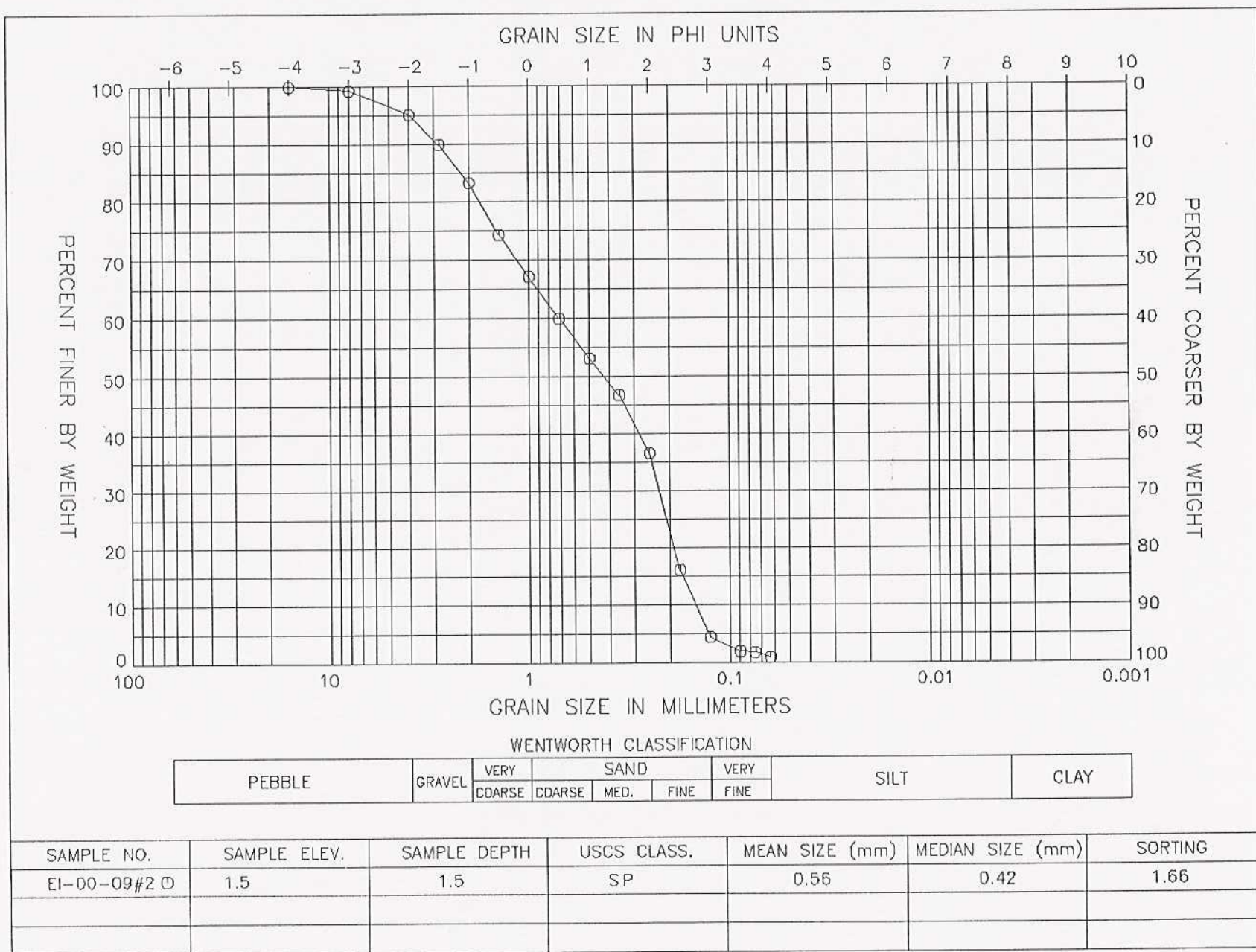
MEAN (PHI): 2.62 SORTING: 1.70
MEAN (mm): 0.16

DATA FILE NAME: EI-00-09#4.TAB

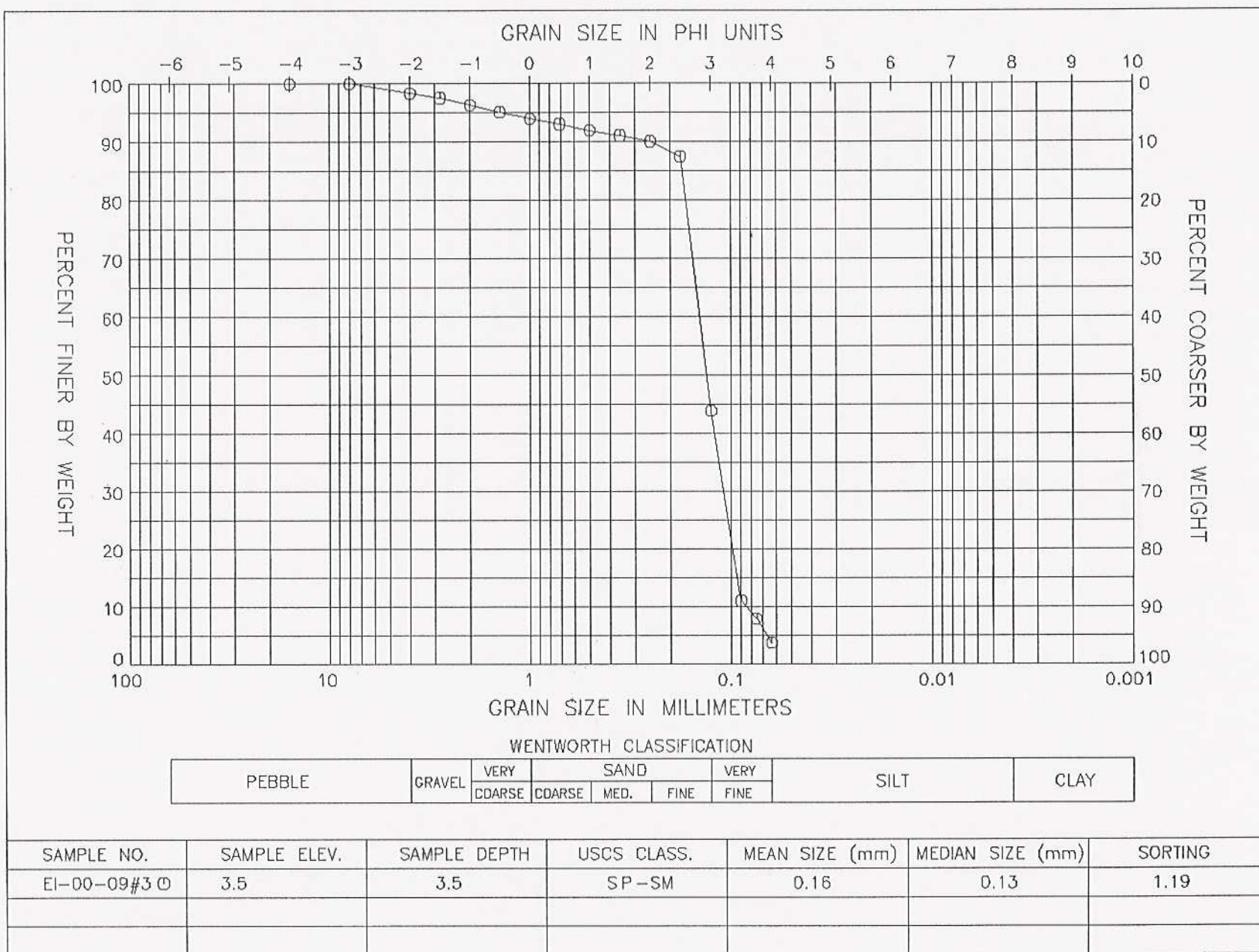
GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



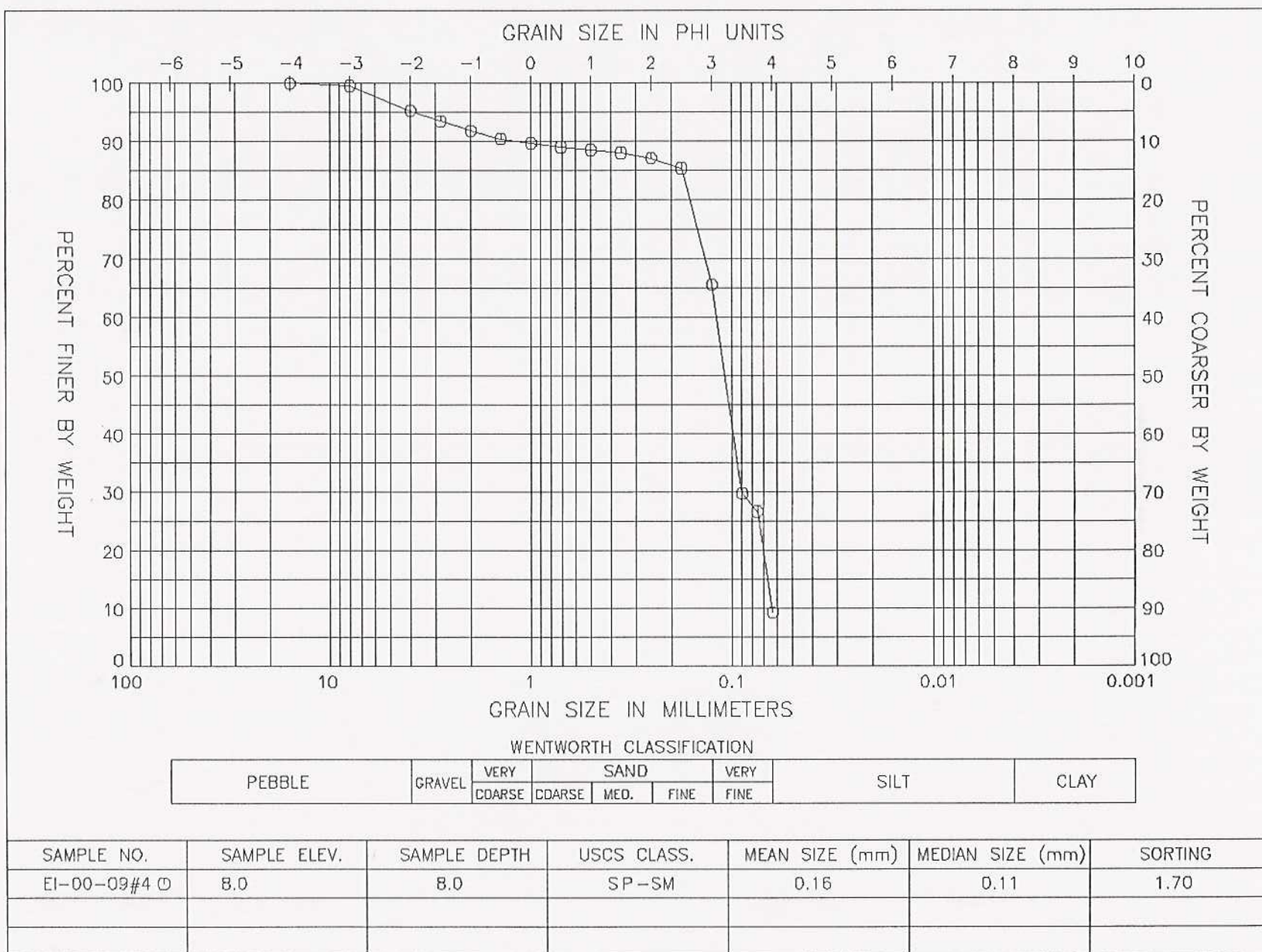
GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000







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VC-00 #9

