

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= 687200 Y= 749536		NGVD					
3. DRILLING AGENCY: Alpine Ocean Seismic Survey Inc.		12. MANUFACTURER'S DESIGNATION OF DRILL					
4. HOLE NO. (As shown on drawing title and file number)		ALPINE PNEUMATIC VIBRACORE					
EI-00-05		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN					
5. NAME OF DRILLER MAURIZIO ROSSI		Disturbed: 0.0 Undisturbed: 0.0					
6. DIRECTION OF HOLE VERTICAL		14. TOTAL NO. OF CORE BOXES					
7. THICKNESS OF BURDEN 0.0 FT		15. ELEVATION GROUND WATER					
8. DEPTH DRILLED INTO ROCK N/A		16. DATE HOLE Started Completed					
9. TOTAL DEPTH OF HOLE 17.7 ft		8/5/00 1345					
		17. ELEVATION TOP OF HOLE -9.5 ft					
		18. TOTAL CORE RECOVERY FOR BORING 73%					
		19. SIGNATURE OF GEOLOGIST SYED KHALIL					

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-9.5	0		SAND, fine-grained, White (5Y-8/1) (SP)		1	Sample #1, Depth = 0.3'
-10.1	1		fine-grained, little shell hash/shell fragments, Light gray (5Y-7/1) (SP) from -9.8' to -10.1'			Mean (mm): 0.21, Phi Sorting: 1.32 Silt: 3.1%
-10.8	2		fine-grained, 1" clayey pocket @ 1.2' Dark gray (5Y-4/1) (SP) from -10.1' to -10.8'		2	Sample #2, Depth = 2.0'
-12.1	3		SILTY SAND, fine-grained, trace shell hash/shell fragments, Gray (5Y-5/1) (SM)			Mean (mm): 0.13, Phi Sorting: 0.88 Silt: 15.3%
	4		fine-grained, little shell hash from 2.6' - 7.0, zone of large shell fragments (1") @ 5.9' - 6.3'. Gray (5Y-5/1) (SM) from -12.1' to -17.5'		3	Sample #3, Depth = 4.0'
	5					Mean (mm): 0.17, Phi Sorting: 1.41 Silt: 15.9%
-17.5	8		SAND, shell hash & shell fragments, trace silt, Dark gray (5Y-4/1) (SP)		4	Sample #4, Depth = 9.5'
-19.7	10		fine-grained, trace silt, trace shell hash/shell fragments, Dark gray (5Y-4/1) (SP) from -19.7' to -22.5'			Mean (mm): 0.16, Phi Sorting: 0.71 Silt: 5.4%
-22.5	13					
	14		NO RECOVERY			
-27.2	18		End of Boring			
	19					
	20					
	21		Note:			LAT - LONG
	22		1) Soils are field visually classified in accordance with the Unified Soil Classification System.			26 23.748 N
	23					81 54.317 W
	24					

PROJECT: Estero Beach Restoration	HOLE NUMBER:
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GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-05#1

SAMPLE ELEV. (FT. NGVD): 0.3

SAMPLE DEPTH (FT.): 0.3

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 92.99

SAMPLE WEIGHT AFTER WASH (GRAMS): 90.15

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	0.60	0.65	99.35
7	-1.50	2.800	2.36	2.54	97.46
10	-1.00	2.000	4.70	5.05	94.95
14	-0.50	1.400	7.36	7.91	92.09
18	0.00	1.000	9.69	10.42	89.58
25	0.50	0.710	11.89	12.79	87.21
35	1.00	0.500	13.96	15.01	84.99
45	1.50	0.355	15.92	17.12	82.88
60	2.00	0.250	19.04	20.48	79.52
80	2.50	0.180	28.56	30.71	69.29
120	3.00	0.125	71.15	76.51	23.49
170	3.50	0.090	89.35	96.09	3.91
200	3.75	0.075	90.07	96.86	3.14
230	4.00	0.063	91.55	98.45	1.55
PAN			92.98	99.99	0.01

PHI (5): -1.01

PHI (16): 1.23

PHI (25): 2.22

PHI (50): 2.71

PHI (75): 2.98

PHI (84): 3.19

PHI (95): 3.47

SIEVE LOSS (g): 0.01

SILT/CLAY: 3.14%

SKEWNESS: -1.512

KURTOSIS: 2.410

GRAPHIC METHOD

MEAN (PHI): 1.92

SORTING: 0.98

MEAN (mm): 0.26

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.25

SORTING: 1.32

MEAN (mm): 0.21

DATA FILE NAME: EI-00-05#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-05#2
SAMPLE ELEV. (FT. NGVD): 2.0
SAMPLE DEPTH (FT.): 2.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 98.43
SAMPLE WEIGHT AFTER WASH (GRAMS): 90.44

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	0.60	0.61	99.39
7	-1.50	2.800	0.83	0.84	99.16
10	-1.00	2.000	1.40	1.42	98.58
14	-0.50	1.400	2.08	2.11	97.89
18	0.00	1.000	2.56	2.60	97.40
25	0.50	0.710	3.22	3.27	96.73
35	1.00	0.500	3.78	3.84	96.16
45	1.50	0.355	4.16	4.23	95.77
60	2.00	0.250	4.86	4.94	95.06
80	2.50	0.180	6.35	6.45	93.55
120	3.00	0.125	33.91	34.45	65.55
170	3.50	0.090	83.20	84.53	15.47
200	3.75	0.075	83.39	84.72	15.28
230	4.00	0.063	94.35	95.86	4.14
PAN			98.42	99.99	0.01

PHI (5): 2.02 PHI (16): 2.67 PHI (25): 2.83
PHI (50): 3.16 PHI (75): 3.40 PHI (84): 3.49
PHI (95): 3.98

SIEVE LOSS (g): 0.01 SILT/CLAY: 15.28%
SKEWNESS: -0.375 KURTOSIS: 1.400

GRAPHIC METHOD

MEAN (PHI): 3.06 SORTING: 0.41
MEAN (mm): 0.12 MEDIAN (mm): 0.11
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.98 SORTING: 0.88
MEAN (mm): 0.13

DATA FILE NAME: EI-00-05#2.TAB

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

SAMPLE NO.: EI-00-05#3
SAMPLE ELEV. (FT. NGVD): 4.0
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 92.54
SAMPLE WEIGHT AFTER WASH (GRAMS): 78.25

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	1.86	2.01	97.99
7	-1.50	2.800	3.78	4.08	95.92
10	-1.00	2.000	5.28	5.71	94.29
14	-0.50	1.400	6.80	7.35	92.65
18	0.00	1.000	7.82	8.45	91.55
25	0.50	0.710	8.73	9.43	90.57
35	1.00	0.500	9.58	10.35	89.65
45	1.50	0.355	10.32	11.15	88.85
60	2.00	0.250	11.35	12.26	87.74
80	2.50	0.180	14.00	15.13	84.87
120	3.00	0.125	46.98	50.77	49.23
170	3.50	0.090	75.11	81.16	18.84
200	3.75	0.075	77.85	84.13	15.87
230	4.00	0.063	85.35	92.24	7.76
PAN			92.54	100.00	0.00

PHI (5): -1.22 PHI (16): 2.51 PHI (25): 2.64
PHI (50): 2.99 PHI (75): 3.40 PHI (84): 3.74
PHI (95): 4.09

SIEVE LOSS (g): 0.00 SILT/CLAY: 15.87%
SKEWNESS: -2.535 KURTOSIS: 2.859

GRAPHIC METHOD

MEAN (PHI): 2.42 SORTING: 0.61
MEAN (mm): 0.19 MEDIAN (mm): 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.57 SORTING: 1.41
MEAN (mm): 0.17

DATA FILE NAME: EI-00-05#3.TAB

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

SAMPLE NO.: EI-00-05#4
SAMPLE ELEV. (FT. NGVD): 9.0
SAMPLE DEPTH (FT.): 9.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.83
SAMPLE WEIGHT AFTER WASH (GRAMS): 95.25

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	0.00	0.00	100.00
14	-0.50	1.400	0.00	0.00	100.00
18	0.00	1.000	0.03	0.03	99.97
25	0.50	0.710	0.18	0.18	99.82
35	1.00	0.500	1.65	1.65	98.35
45	1.50	0.355	8.12	8.13	91.87
60	2.00	0.250	19.95	19.98	80.02
80	2.50	0.180	32.69	32.75	67.25
120	3.00	0.125	64.01	64.12	35.88
170	3.50	0.090	89.78	89.93	10.07
200	3.75	0.075	94.43	94.59	5.41
230	4.00	0.063	97.46	97.63	2.37
PAN			99.82	99.99	0.01

PHI (5): 1.26 PHI (16): 1.83 PHI (25): 2.20
PHI (50): 2.77 PHI (75): 3.21 PHI (84): 3.39
PHI (95): 3.78

SIEVE LOSS(g): 0.01 SILT/CLAY: 5.41%
SKEWNESS: -0.327 KURTOSIS: 1.021

GRAPHIC METHOD

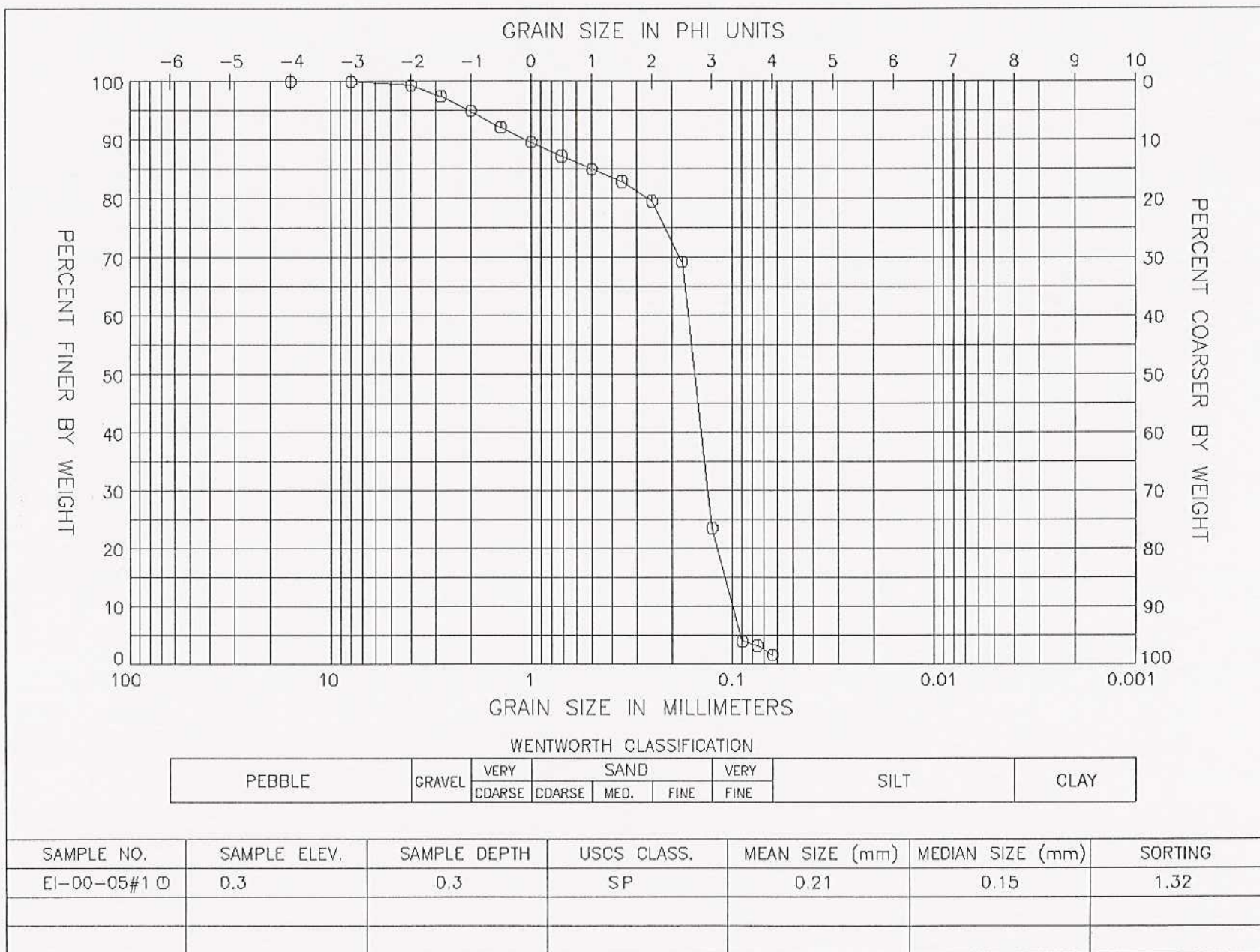
MEAN (PHI): 2.61 SORTING: 0.78
MEAN (mm): 0.16 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

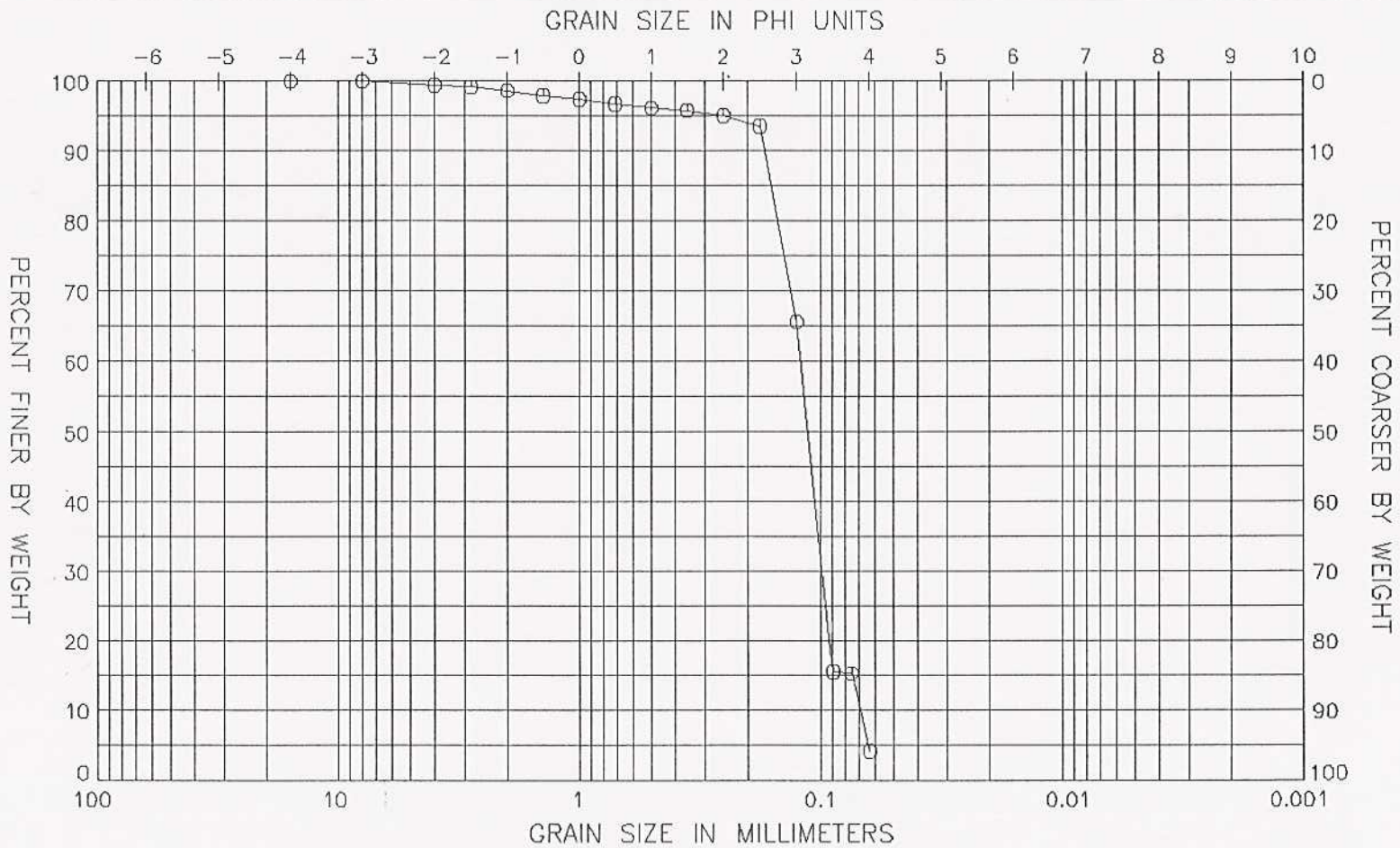
MEAN (PHI): 2.64 SORTING: 0.71
MEAN (mm): 0.16

DATA FILE NAME: EI-00-05#4.TAB

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

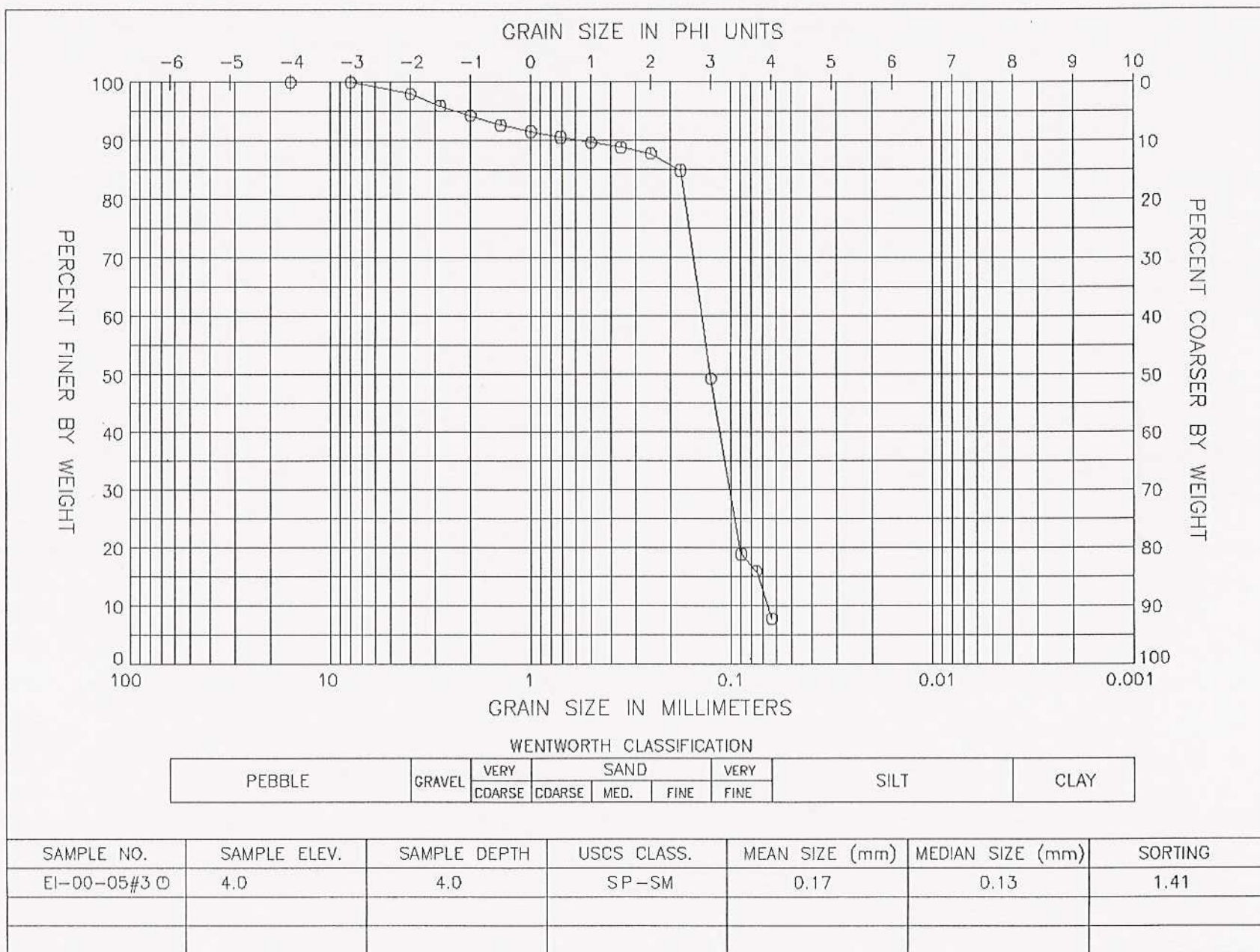


WENTWORTH CLASSIFICATION

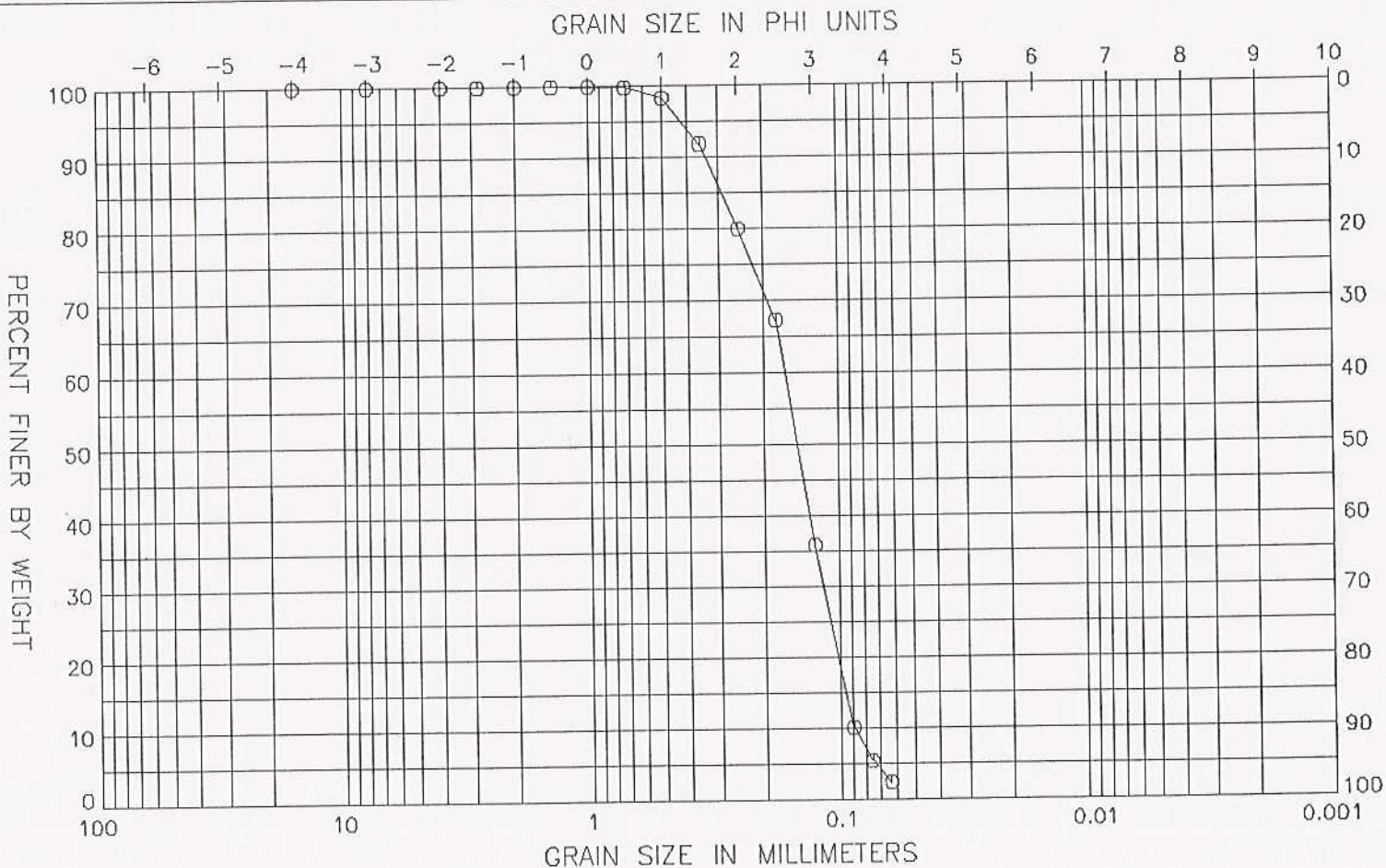
PEBBLE	GRAVEL	SAND				SILT	CLAY
		VERY COARSE	COARSE	MED.	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
EI-00-05#2 ①	2.0	2.0	SP-SM	0.13	0.11	0.88

GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



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-00-05#4 0	9.0	9.0	SP-SM	0.15	0.15	0.71

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



