

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= 660982 Y= 766890				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-00-18				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 8/15/00 0916			
8. DEPTH DRILLED INTO ROCK N/A				17. ELEVATION TOP OF HOLE -7.3 ft			
9. TOTAL DEPTH OF HOLE 18.08ft				18. TOTAL CORE RECOVERY FOR BORING 81%			
				19. SIGNATURE OF GEOLOGIST SYED KHALIL			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-7.3	0		SAND, fine-grained, some shell hash/shell fragments & whole shell, Light gray (5Y-7/1) (SP)		1	Sample #1, Depth = 0.3' Mean (mm): 0.42, Phi Sorting: 1.86 Silt: 1.6%
-7.8	1		fine-grained, trace shell hash/shell fragments, Light gray (5Y-7/1) (SP) from -7.8' to -11.2'		2	Sample #2 = 2.0' Mean (mm): 0.14, Phi Sorting: 0.49 Silt: 1.7%
-11.2	2					Sample #3 = 4.0' Mean (mm): 0.26, Phi Sorting: 1.61 Silt: 5.5%
	3					
	4		SAND, fine-grained, trace shell hash/shell fragments, Gray (5Y-6/1) (SP-SM)		3	
	5		mix zone, fine-grained, little silt, little shell hash/shell fragments & whole shell, Gray (5Y-5/1) (SP-SM) from -11.5' to -13.1'		4	Sample #4 = 4.8' Mean (mm): 0.23, Phi Sorting: 1.80 Silt: 10.6%
-13.1	6				5	Sample #5 = 6.1' Mean (mm): 0.19, Phi Sorting: 1.79 Silt: 24.7%
	7					
	8					
	9					
	10		SILTY SAND, some clay, some shell hash/shell fragments & whole shell, Gray (5Y-5/1) (SM)			
	11					
	12					
	13					
-21.7	14					
	15					
	16		NO RECOVERY			
	17					
-25.4	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 26.607 N 81 59.122 W
	22					
	23					
	24					

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-18#1
SAMPLE ELEV. (FT. NGVD): 0.3
SAMPLE DEPTH (FT.): 0.3
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 97.28
SAMPLE WEIGHT AFTER WASH (GRAMS): 95.80

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	6.56	6.74	93.26
7	-1.50	2.800	12.01	12.35	87.65
10	-1.00	2.000	16.53	16.99	83.01
14	-0.50	1.400	21.71	22.32	77.68
18	0.00	1.000	26.68	27.43	72.57
25	0.50	0.710	32.24	33.14	66.86
35	1.00	0.500	37.37	38.41	61.59
45	1.50	0.355	41.22	42.37	57.63
60	2.00	0.250	45.13	46.39	53.61
80	2.50	0.180	54.76	56.29	43.71
120	3.00	0.125	86.57	88.99	11.01
170	3.50	0.090	95.38	98.05	1.95
200	3.75	0.075	95.74	98.42	1.58
230	4.00	0.063	96.51	99.21	0.79
PAN			97.27	99.99	0.01

PHI (5): -2.26 PHI (16): -1.11 PHI (25): -0.24
PHI (50): 2.18 PHI (75): 2.79 PHI (84): 2.92
PHI (95): 3.33

SIEVE LOSS (g): 0.01 SILT/CLAY: 1.58%
SKEWNESS: -0.817 KURTOSIS: 0.758

GRAPHIC METHOD

MEAN (PHI): 1.01 SORTING: 2.02
MEAN (mm): 0.50 MEDIAN (mm): 0.22
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.27 SORTING: 1.86
MEAN (mm): 0.42

DATA FILE NAME: EI-00-18#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-18#2

SAMPLE ELEV. (FT. NGVD): 2.0

SAMPLE DEPTH (FT.): 2.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 90.01

SAMPLE WEIGHT AFTER WASH (GRAMS): 88.66

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	0.09	0.10	99.90
7	-1.50	2.800	0.20	0.22	99.78
10	-1.00	2.000	0.36	0.40	99.60
14	-0.50	1.400	0.49	0.54	99.46
18	0.00	1.000	0.64	0.71	99.29
25	0.50	0.710	0.85	0.94	99.06
35	1.00	0.500	1.10	1.22	98.78
45	1.50	0.355	1.39	1.54	98.46
60	2.00	0.250	1.88	2.09	97.91
80	2.50	0.180	4.95	5.50	94.50
120	3.00	0.125	62.72	69.68	30.32
170	3.50	0.090	87.45	97.16	2.84
200	3.75	0.075	88.51	98.33	1.67
230	4.00	0.063	89.29	99.21	0.79
PAN			89.99	99.98	0.02

PHI (5): 2.43

PHI (16): 2.58

PHI (25): 2.65

PHI (50): 2.85

PHI (75): 3.10

PHI (84): 3.26

PHI (95): 3.46

SIEVE LOSS(g): 0.02

SILT/CLAY: 1.67%

SKEWNESS: 0.286

KURTOSIS: 0.953

GRAPHIC METHOD

MEAN (PHI): 2.92

SORTING: 0.34

MEAN (mm): 0.13

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.84

SORTING: 0.49

MEAN (mm): 0.14

DATA FILE NAME: EI-00-18#2.TAB

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

SAMPLE NO.: EI-00-18#3
SAMPLE ELEV. (FT. NGVD): 4.0
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 92.43
SAMPLE WEIGHT AFTER WASH (GRAMS): 87.54

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	0.59	0.64	99.36
5	-2.00	4.000	3.32	3.59	96.41
7	-1.50	2.800	4.92	5.32	94.68
10	-1.00	2.000	6.91	7.48	92.52
14	-0.50	1.400	9.89	10.70	89.30
18	0.00	1.000	13.26	14.35	85.65
25	0.50	0.710	17.05	18.45	81.55
35	1.00	0.500	20.86	22.57	77.43
45	1.50	0.355	24.29	26.28	73.72
60	2.00	0.250	29.22	31.61	68.39
80	2.50	0.180	37.19	40.24	59.76
120	3.00	0.125	68.46	74.07	25.93
170	3.50	0.090	85.88	92.91	7.09
200	3.75	0.075	87.39	94.55	5.45
230	4.00	0.063	89.96	97.33	2.67
PAN			92.42	99.99	0.01

PHI (5): -1.59 PHI (16): 0.20 PHI (25): 1.33
PHI (50): 2.64 PHI (75): 3.02 PHI (84): 3.26
PHI (95): 3.79

SIEVE LOSS (g): 0.01 SILT/CLAY: 5.45%
SKEWNESS: -1.010 KURTOSIS: 1.300

GRAPHIC METHOD

MEAN (PHI): 1.66 SORTING: 1.53
MEAN (mm): 0.32 MEDIAN (mm): 0.16
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.95 SORTING: 1.61
MEAN (mm): 0.26

DATA FILE NAME: EI-00-18#3.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-18#4

SAMPLE ELEV. (FT. NGVD): 5.8

SAMPLE DEPTH (FT.): 5.8

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 98.65

SAMPLE WEIGHT AFTER WASH (GRAMS): 88.65

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	1.46	1.48	98.52
5	-2.00	4.000	5.18	5.25	94.75
7	-1.50	2.800	7.02	7.12	92.88
10	-1.00	2.000	8.79	8.91	91.09
14	-0.50	1.400	11.26	11.41	88.59
18	0.00	1.000	13.67	13.86	86.14
25	0.50	0.710	16.95	17.18	82.82
35	1.00	0.500	21.19	21.48	78.52
45	1.50	0.355	23.48	23.80	76.20
60	2.00	0.250	25.15	25.49	74.51
80	2.50	0.180	27.50	27.88	72.12
120	3.00	0.125	53.69	54.42	45.58
170	3.50	0.090	85.14	86.31	13.69
200	3.75	0.075	88.24	89.45	10.55
230	4.00	0.063	93.58	94.86	5.14
PAN			98.64	99.99	0.01

PHI (5): -2.07

PHI (16): 0.32

PHI (25): 1.85

PHI (50): 2.92

PHI (75): 3.32

PHI (84): 3.46

PHI (95): 4.01

SIEVE LOSS (g): 0.01

SILT/CLAY: 10.55%

SKEWNESS: -1.239

KURTOSIS: 1.695

GRAPHIC METHOD

MEAN (PHI): 1.73

SORTING: 1.57

MEAN (mm): 0.30

MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.13

SORTING: 1.80

MEAN (mm): 0.23

DATA FILE NAME: EI-00-18#4.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID

ON: 9/00

SAMPLE NO.: EI-00-18#5

SAMPLE ELEV. (FT. NGVD): 6.1

SAMPLE DEPTH (FT.): 6.1

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 98.42

SAMPLE WEIGHT AFTER WASH (GRAMS): 74.91

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	0.98	1.00	99.00
5	-2.00	4.000	4.06	4.13	95.87
7	-1.50	2.800	6.35	6.45	93.55
10	-1.00	2.000	7.92	8.05	91.95
14	-0.50	1.400	10.05	10.21	89.79
18	0.00	1.000	11.95	12.14	87.86
25	0.50	0.710	13.79	14.01	85.99
35	1.00	0.500	15.46	15.71	84.29
45	1.50	0.355	16.91	17.18	82.82
60	2.00	0.250	18.38	18.68	81.32
80	2.50	0.180	20.64	20.97	79.03
120	3.00	0.125	38.97	39.60	60.40
170	3.50	0.090	70.25	71.38	28.62
200	3.75	0.075	74.12	75.31	24.69
230	4.00	0.063	86.54	87.93	12.07
PAN			98.40	99.98	0.02

PHI (5): -1.81

PHI (16): 1.10

PHI (25): 2.61

PHI (50): 3.16

PHI (75): 3.73

PHI (84): 3.92

PHI (95): 4.14

SIEVE LOSS (g): 0.02

SILT/CLAY: 24.69%

SKEWNESS: -1.417

KURTOSIS: 2.174

GRAPHIC METHOD

MEAN (PHI): 2.10

SORTING: 1.41

MEAN (mm): 0.23

MEDIAN (mm): 0.11

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

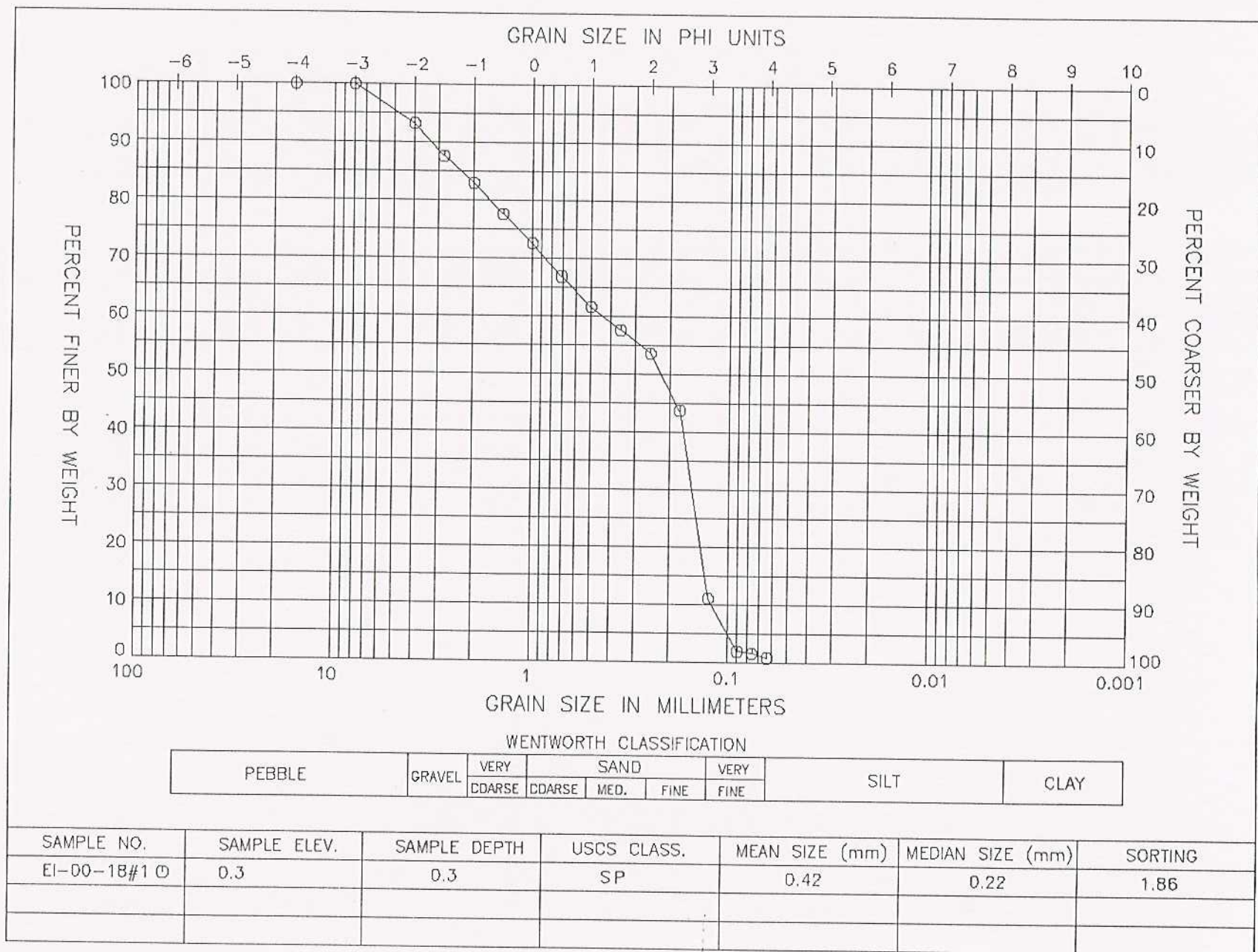
MEAN (PHI): 2.38

SORTING: 1.79

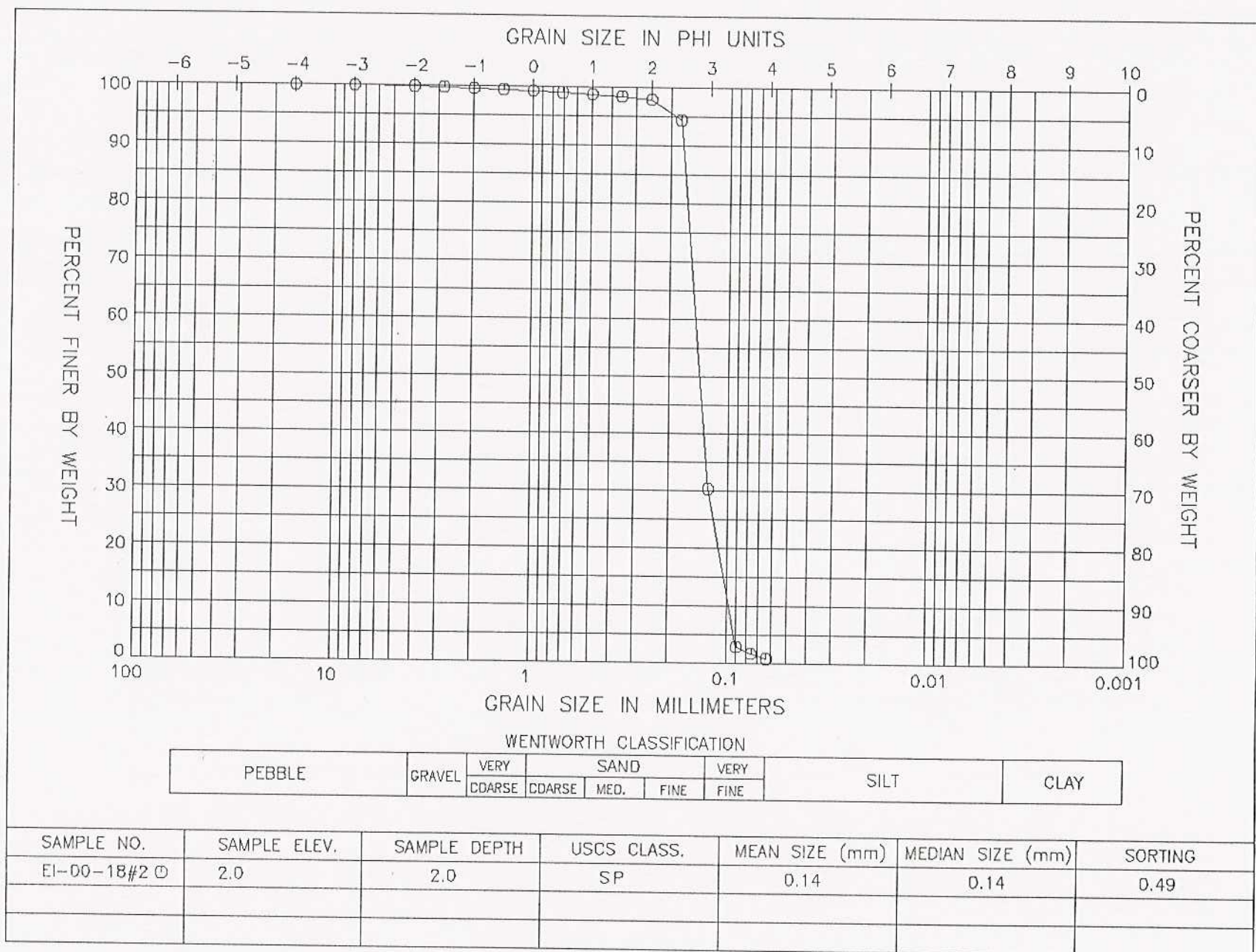
MEAN (mm): 0.19

DATA FILE NAME: EI-00-18#5.TAB

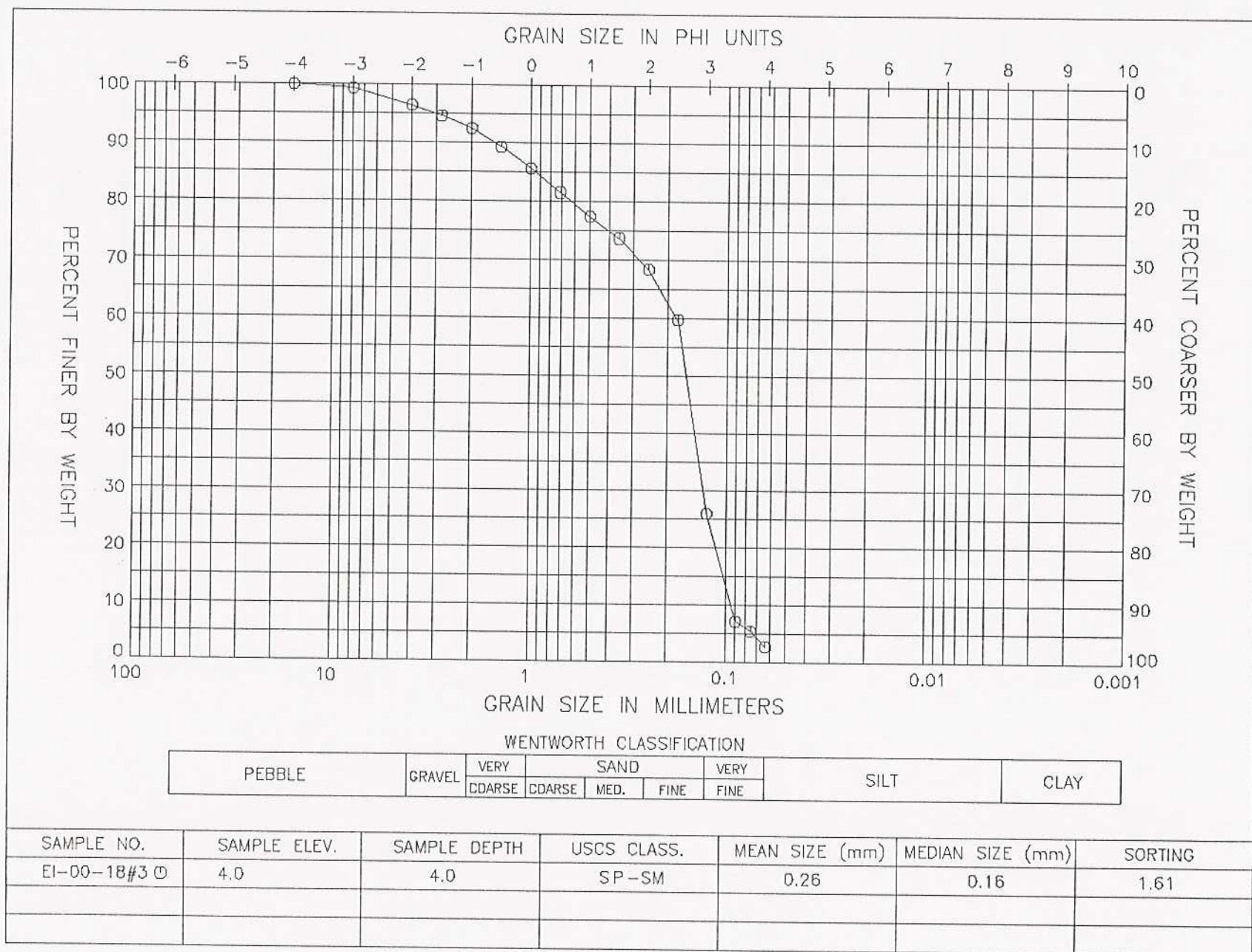
GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



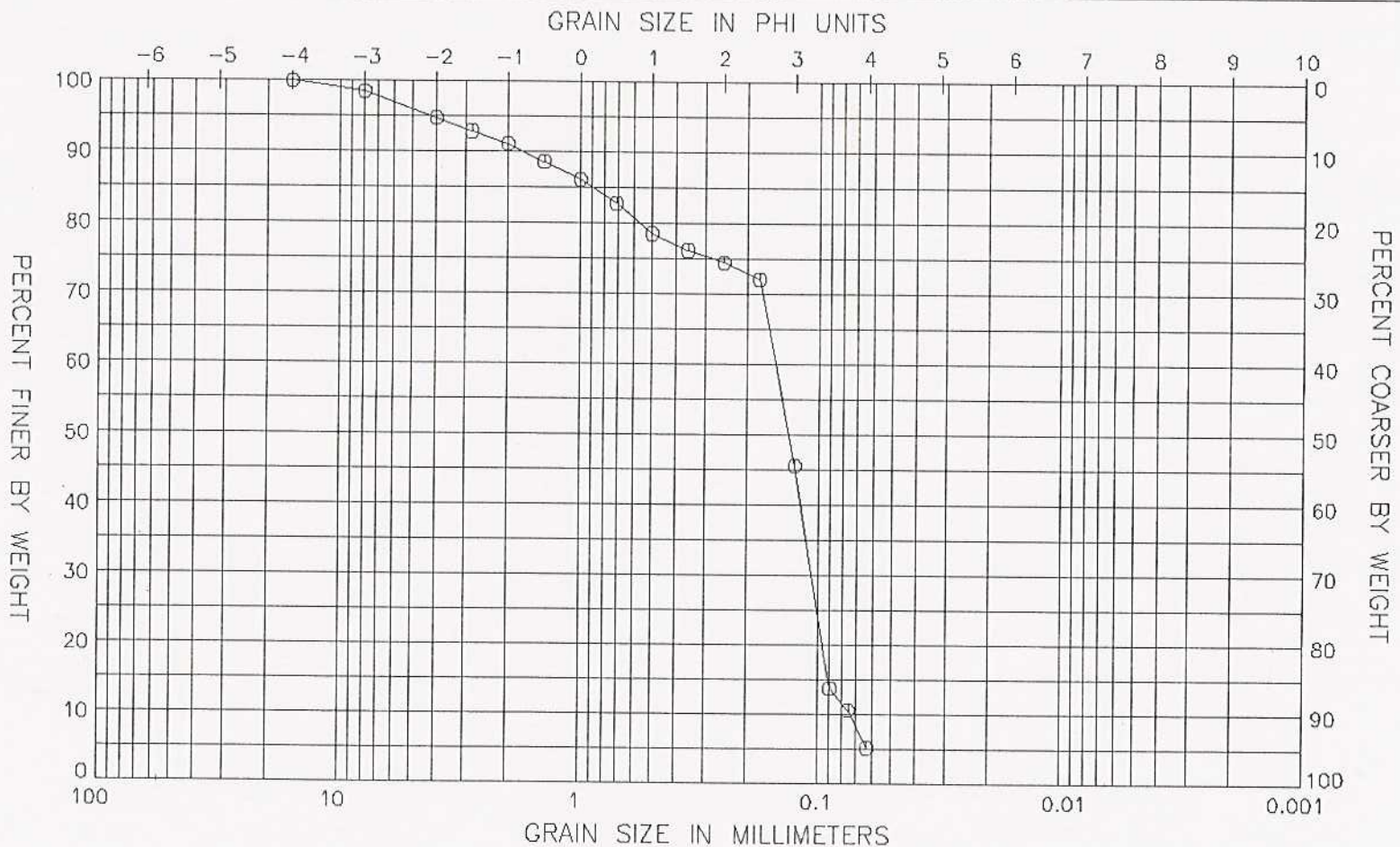
GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

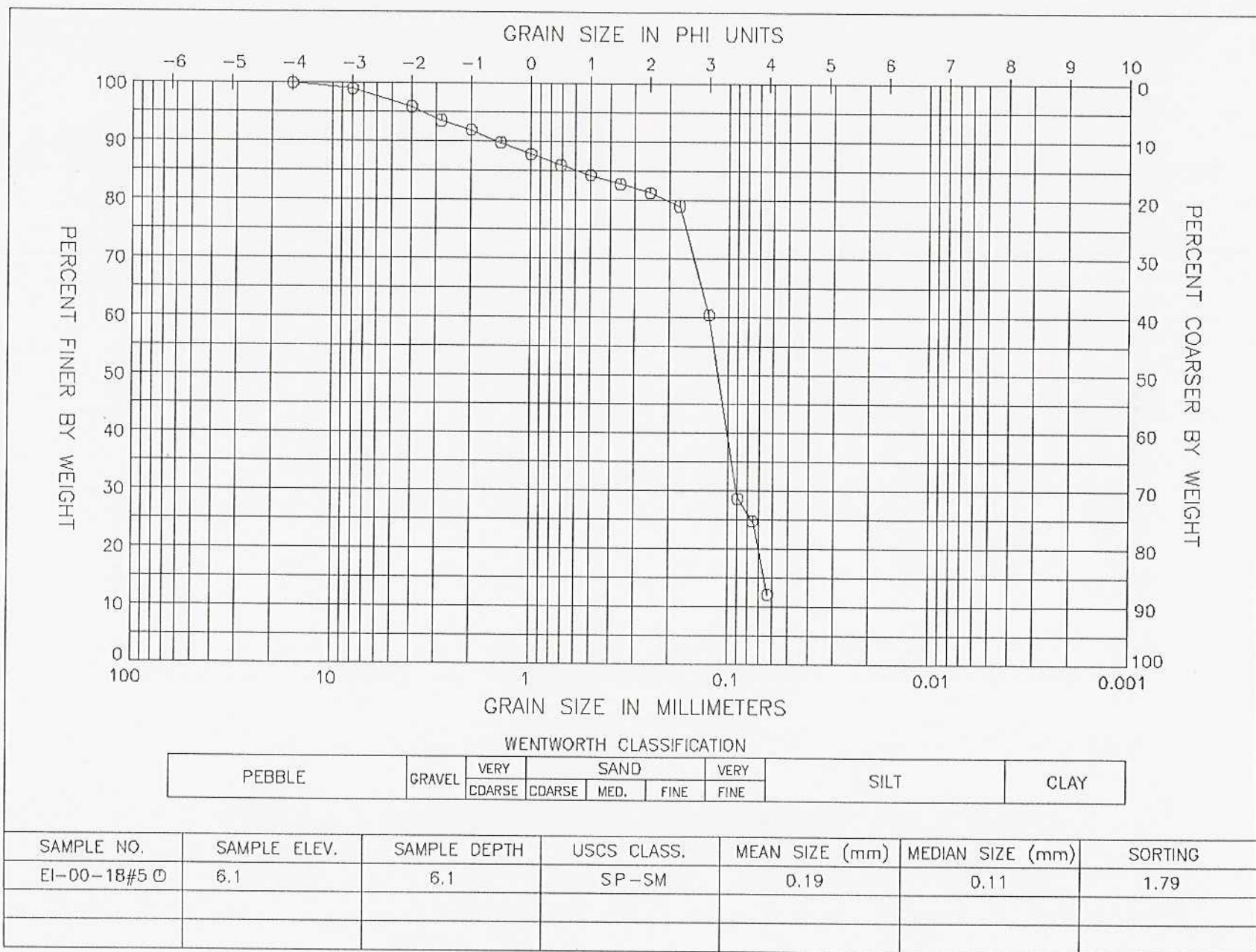


WENTWORTH CLASSIFICATION

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-00-18#4 D	5.8	5.8	SP-SM	0.23	0.13	1.80

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000



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VC - 00 # 18

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VC - 00 # 18

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VC - 00 # 18

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VC - 00 # 18



