

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= 662332 Y= 766616		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-00-23		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 1716	
8. DEPTH DRILLED INTO ROCK N/A			17. ELEVATION TOP OF HOLE -6.8 ft	
9. TOTAL DEPTH OF HOLE 19.04 ft			18. TOTAL CORE RECOVERY FOR BORING 69%	
			19. SIGNATURE OF GEOLOGIST SYED KHALIL	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-6.8	0					
	1					
	2		SAND, fine-grained, trace shell hash/shell fragments, Light gray (5Y-7/1) (SP)		1	Sample #1, Depth = 2.5' Mean (mm): 0.14, Phi Sorting: 0.40 Silt: 1.7%
	3					
-11	4					
-11.8	5		fine-grained, some shell hash/shell fragments, Gray (5Y-6/1) (SP) from -11.0' to -11.8'		2	Sample #2, Depth = 4.8' Mean (mm): 0.20, Phi Sorting: 1.21 Silt: 2.8%
	6		SAND, fine-grained, little silt, some shell hash/shell fragments/whole shell, Gray (5Y-5/1) (SP-SM)		3	Sample #3, Depth = 6.0' Mean (mm): 0.18, Phi Sorting: 1.19 Silt: 11.4%
-13.7	7				4	Sample #4, Depth = 7.0' Mean (mm): 0.23, Phi Sorting: 2.03 Silt: 18.6%
	8					
	9		SILTY SAND, fine grained, trace clay, some shell hash/shell fragments/whole shell, (SM)			
	10					
	11					
-19.1	12					
-19.9	13		CARBONATE CLASTS, limestone cobbles/pebbles/gravels, fines of lime (GP)			
	14					
	15					
	16		NO RECOVERY			
	17					
	18					
-25.8	19		End of Boring			
	20					
	21		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 26.566 N 81 58.870 W
	22					
	23					
	24					

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-23#1

SAMPLE ELEV. (FT. NGVD): 2.5

SAMPLE DEPTH (FT.): 2.5

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.74

SAMPLE WEIGHT AFTER WASH (GRAMS): 98.06

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	0.10	0.10	99.90
7	-1.50	2.800	0.18	0.18	99.82
10	-1.00	2.000	0.22	0.22	99.78
14	-0.50	1.400	0.28	0.28	99.72
18	0.00	1.000	0.36	0.36	99.64
25	0.50	0.710	0.48	0.48	99.52
35	1.00	0.500	0.59	0.59	99.41
45	1.50	0.355	0.72	0.72	99.28
60	2.00	0.250	0.93	0.93	99.07
80	2.50	0.180	2.63	2.64	97.36
120	3.00	0.125	67.08	67.25	32.75
170	3.50	0.090	97.33	97.58	2.42
200	3.75	0.075	98.00	98.26	1.74
230	4.00	0.063	98.87	99.13	0.87
PAN			99.73	99.99	0.01

PHI (5): 2.52

PHI (16): 2.60

PHI (25): 2.67

PHI (50): 2.87

PHI (75): 3.13

PHI (84): 3.28

PHI (95): 3.46

SIEVE LOSS(g): 0.01

SILT/CLAY: 1.74%

SKEWNESS: 0.361

KURTOSIS: 0.847

GRAPHIC METHOD

MEAN (PHI): 2.94

SORTING: 0.34

MEAN (mm): 0.13

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.89

SORTING: 0.40

MEAN (mm): 0.14

DATA FILE NAME: EI-00-23#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-23#2

SAMPLE ELEV. (FT. NGVD): 4.8

SAMPLE DEPTH (FT.): 4.8

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.50

SAMPLE WEIGHT AFTER WASH (GRAMS): 96.78

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	1.87	1.88	98.12
7	-1.50	2.800	3.08	3.10	96.90
10	-1.00	2.000	4.26	4.28	95.72
14	-0.50	1.400	5.54	5.57	94.43
18	0.00	1.000	7.04	7.08	92.92
25	0.50	0.710	8.72	8.76	91.24
35	1.00	0.500	10.75	10.80	89.20
45	1.50	0.355	12.63	12.69	87.31
60	2.00	0.250	15.14	15.22	84.78
80	2.50	0.180	27.84	27.98	72.02
120	3.00	0.125	79.80	80.20	19.80
170	3.50	0.090	95.75	96.23	3.77
200	3.75	0.075	96.68	97.17	2.83
230	4.00	0.063	98.14	98.63	1.37
PAN			99.50	100.00	0.00

PHI (5): -0.72	PHI (16): 2.03	PHI (25): 2.38
PHI (50): 2.71	PHI (75): 2.95	PHI (84): 3.12
PHI (95): 3.46		

SIEVE LOSS (g): 0.00	SILT/CLAY: 2.83%
SKEWNESS: -2.464	KURTOSIS: 3.023

GRAPHIC METHOD

MEAN (PHI): 2.12

SORTING: 0.54

MEAN (mm): 0.23

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.36

SORTING: 1.21

MEAN (mm): 0.20

DATA FILE NAME: EI-00-23#2.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-23#3

SAMPLE ELEV. (FT. NGVD): 6.0

SAMPLE DEPTH (FT.): 6.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 98.01

SAMPLE WEIGHT AFTER WASH (GRAMS): 87.53

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	0.69	0.70	99.30
7	-1.50	2.800	1.45	1.48	98.52
10	-1.00	2.000	2.35	2.40	97.60
14	-0.50	1.400	3.82	3.90	96.10
18	0.00	1.000	5.58	5.69	94.31
25	0.50	0.710	8.14	8.31	91.69
35	1.00	0.500	11.15	11.38	88.62
45	1.50	0.355	13.79	14.07	85.93
60	2.00	0.250	17.01	17.36	82.64
80	2.50	0.180	23.50	23.98	76.02
120	3.00	0.125	59.54	60.75	39.25
170	3.50	0.090	84.22	85.93	14.07
200	3.75	0.075	86.88	88.64	11.36
230	4.00	0.063	92.60	94.48	5.52
PAN			97.99	99.98	0.02

PHI (5): -0.19

PHI (16): 1.79

PHI (25): 2.51

PHI (50): 2.85

PHI (75): 3.28

PHI (84): 3.46

PHI (95): 4.02

SIEVE LOSS(g): 0.02

SILT/CLAY: 11.36%

SKEWNESS: -1.126

KURTOSIS: 2.246

GRAPHIC METHOD

MEAN (PHI): 2.39

SORTING: 0.83

MEAN (mm): 0.19

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.50

SORTING: 1.19

MEAN (mm): 0.18

DATA FILE NAME: EI-00-23#3.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-23#4

SAMPLE ELEV. (FT. NGVD): 7.0

SAMPLE DEPTH (FT.): 7.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 76.79

SAMPLE WEIGHT AFTER WASH (GRAMS): 63.27

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	2.64	3.44	96.56
5	-2.00	4.000	5.30	6.90	93.10
7	-1.50	2.800	7.47	9.73	90.27
10	-1.00	2.000	8.58	11.17	88.83
14	-0.50	1.400	9.83	12.80	87.20
18	0.00	1.000	11.91	15.51	84.49
25	0.50	0.710	13.99	18.22	81.78
35	1.00	0.500	15.93	20.74	79.26
45	1.50	0.355	17.50	22.79	77.21
60	2.00	0.250	19.01	24.76	75.24
80	2.50	0.180	20.94	27.27	72.73
120	3.00	0.125	31.49	41.01	58.99
170	3.50	0.090	59.36	77.30	22.70
200	3.75	0.075	62.49	81.38	18.62
230	4.00	0.063	69.92	91.05	8.95
PAN			76.76	99.96	0.04

PHI (5): -2.55

PHI (16): 0.09

PHI (25): 2.05

PHI (50): 3.12

PHI (75): 3.47

PHI (84): 3.82

PHI (95): 4.10

SIEVE LOSS (g): 0.03

SILT/CLAY: 18.62%

SKEWNESS: -1.260

KURTOSIS: 1.920

GRAPHIC METHOD

MEAN (PHI): 1.72

SORTING: 1.86

MEAN (mm): 0.30

MEDIAN (mm): 0.11

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

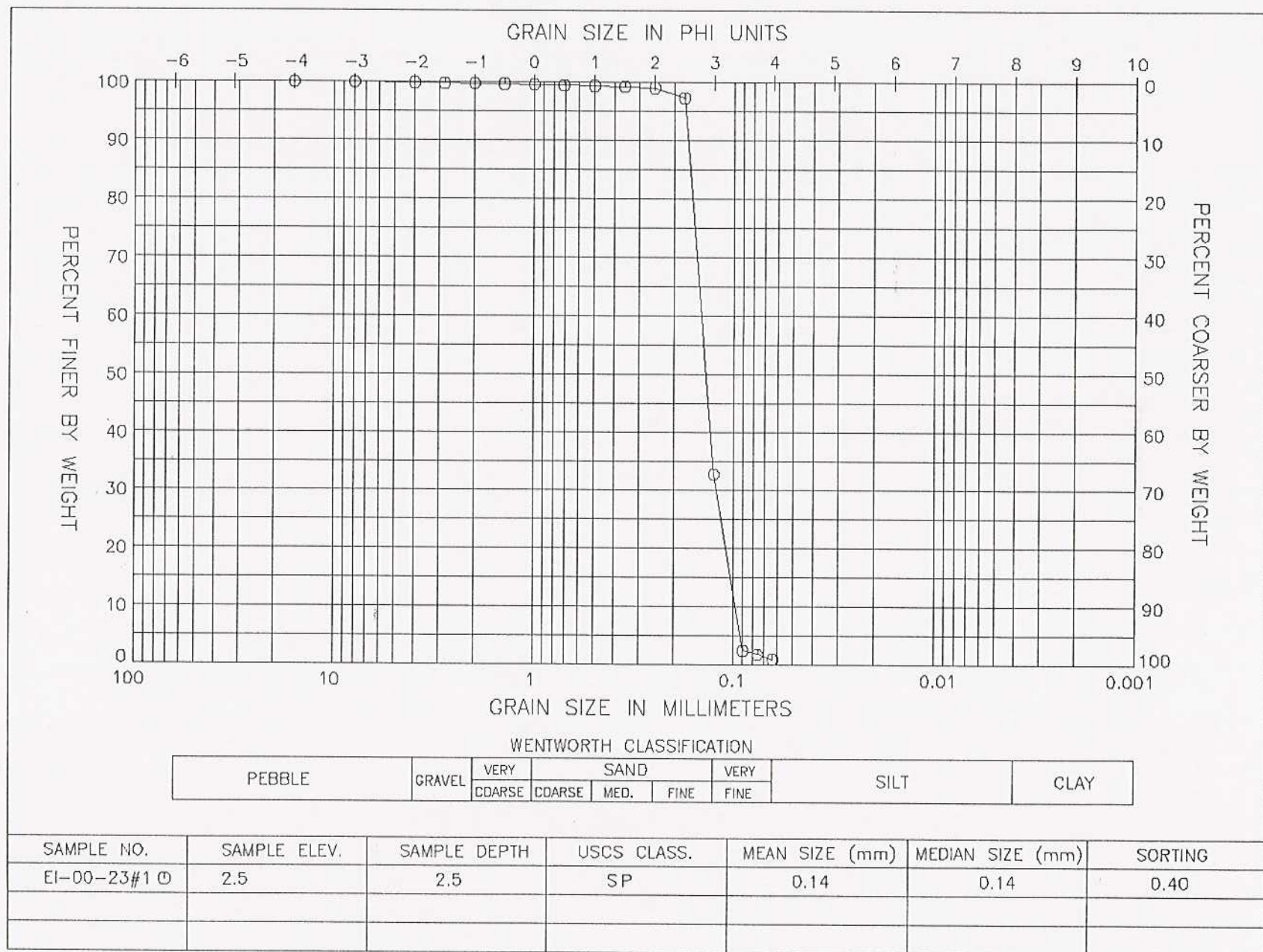
MEAN (PHI): 2.12

SORTING: 2.03

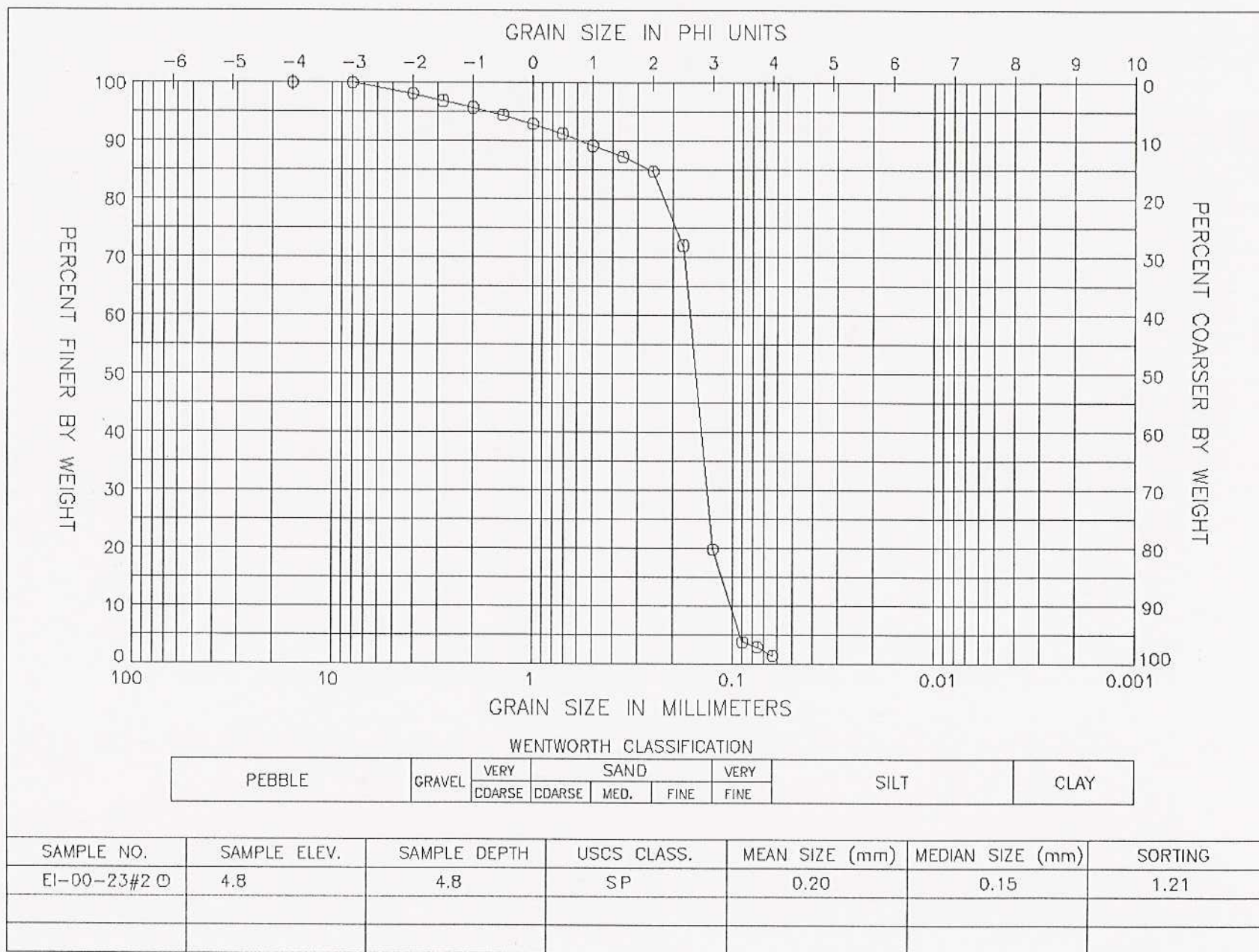
MEAN (mm): 0.23

DATA FILE NAME: EI-00-23#4.TAB

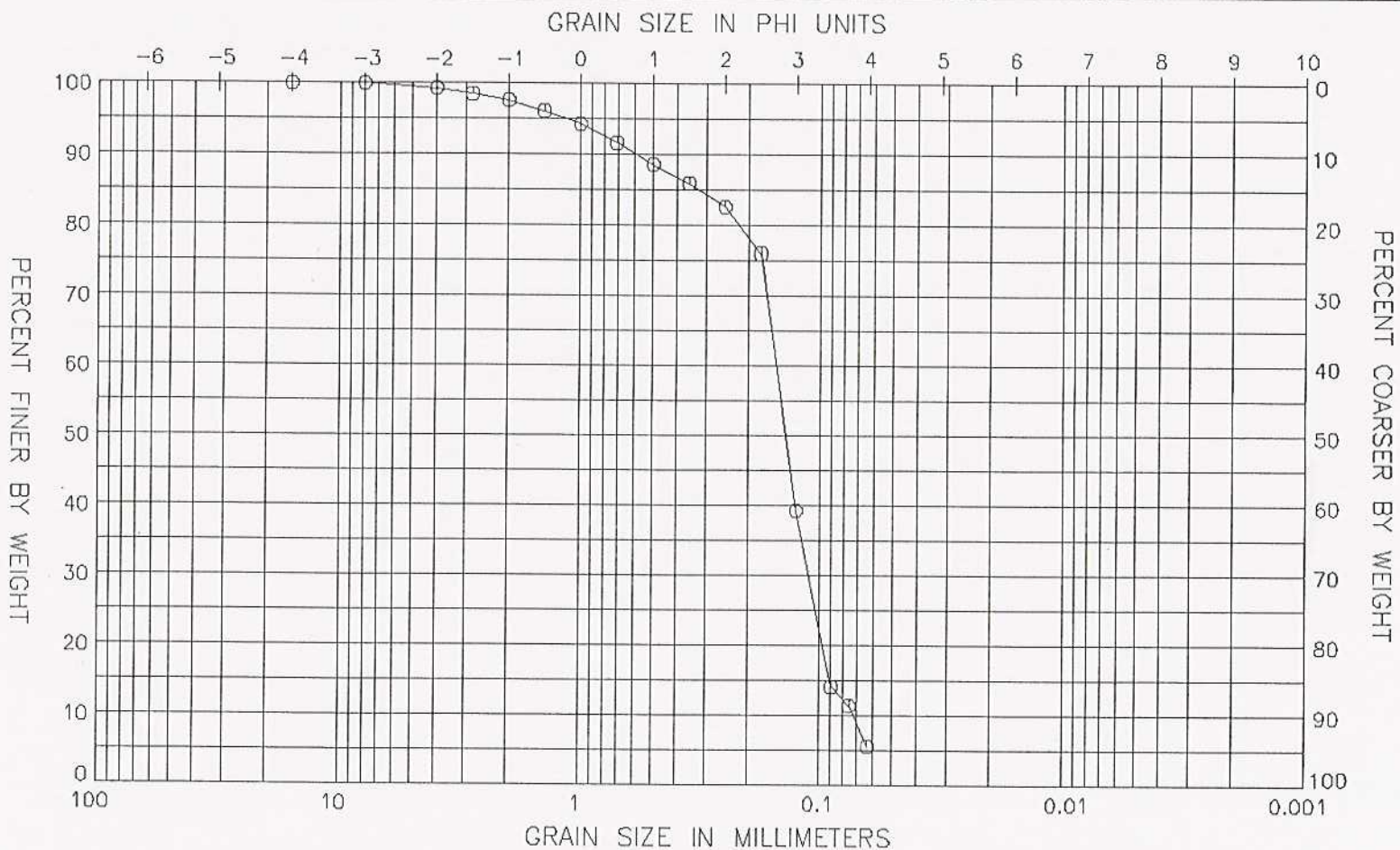
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WENTWORTH CLASSIFICATION

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-00-23#3 D	6.0	6.0	SP-SM	0.18	0.14	1.19

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

