

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= 664386 Y= 764735		11. DATUM FOR ELEVATION SHOWN <sup>(TBM or MSL)</sup>		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-00-21		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: 8/15/00 Completed: 1133	
8. DEPTH DRILLED INTO ROCK		N/A		17. ELEVATION TOP OF HOLE		-8.6 ft	
9. TOTAL DEPTH OF HOLE		12.46 ft		18. TOTAL CORE RECOVERY FOR BORING		71%	
				19. SIGNATURE OF GEOLOGIST		SYED KHALIL	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-8.6	0					
-10	1		SAND, fine-grained, Light gray (5Y-7/1) (SP)		1	Sample #1 = 0.5' Mean (mm): 0.13, Phi Sorting: 0.36 Silt: 2.6%
-11.3	2		SAND, fine-grained, little silt/clay, 2" pocket of clay @ -10.1, Gray (5Y-6/1) (SP-SM)		2	Sample #2 = 1.8' Mean (mm): 0.12, Phi Sorting: 0.60 Silt: 10.5%
-13.4	3		fine-grained, Light gray (5Y-7/1) (SP-SM) from -11.3' to -13.4'			
	4					
	5		SILTY SAND, fine-grained, trace clay, Gray (5Y-5/1) (SM)		3	Sample #3 = 5.0' Mean (mm): 0.15, Phi Sorting: 1.01 Silt: 16.8%
	6				4	Sample #3 = 6.0' Mean (mm): 0.14, Phi Sorting: 1.05 Silt: 22.8%
	7		some clay, some shell hash/shell fragments, Gray (5y-5/1) (SM) from -13.8' to -17.3'			
-17.3	8					
	9					
	10					
	11		NO RECOVERY			
-21.1	12					
	13		End of Boring			
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 26.259 N 81 58.495 W
	23					
	24					

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-21#1

SAMPLE ELEV. (FT. NGVD): 0.5

SAMPLE DEPTH (FT.): 0.5

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.23

SAMPLE WEIGHT AFTER WASH (GRAMS): 94.16

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	0.03	0.03	99.97
14	-0.50	1.400	0.05	0.05	99.95
18	0.00	1.000	0.11	0.11	99.89
25	0.50	0.710	0.15	0.15	99.85
35	1.00	0.500	0.25	0.25	99.75
45	1.50	0.355	0.36	0.36	99.64
60	2.00	0.250	0.59	0.59	99.41
80	2.50	0.180	1.29	1.30	98.70
120	3.00	0.125	54.47	54.89	45.11
170	3.50	0.090	90.87	91.58	8.42
200	3.75	0.075	93.69	94.42	5.58
230	4.00	0.063	96.66	97.42	2.58
PAN			99.21	99.98	0.02

PHI (5): 2.53

PHI (16): 2.64

PHI (25): 2.72

PHI (50): 2.95

PHI (75): 3.27

PHI (84): 3.40

PHI (95): 3.80

SIEVE LOSS (g): 0.02

SILT/CLAY: 5.58%

SKEWNESS: 0.559

KURTOSIS: 0.937

## GRAPHIC METHOD

MEAN (PHI): 3.06

SORTING: 0.38

MEAN (mm): 0.12

MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.98

SORTING: 0.36

MEAN (mm): 0.13

DATA FILE NAME: EI-00-21#1.TAB

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID

ON: 9/00

SAMPLE NO.: EI-00-21#2

SAMPLE ELEV. (FT. NGVD): 1.8

SAMPLE DEPTH (FT.): 1.8

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.41

SAMPLE WEIGHT AFTER WASH (GRAMS): 89.66

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	0.00	0.00	100.00
7	-1.50	2.800	0.03	0.03	99.97
10	-1.00	2.000	0.17	0.17	99.83
14	-0.50	1.400	0.60	0.60	99.40
18	0.00	1.000	1.10	1.11	98.89
25	0.50	0.710	1.60	1.61	98.39
35	1.00	0.500	2.10	2.11	97.89
45	1.50	0.355	2.45	2.46	97.54
60	2.00	0.250	2.98	3.00	97.00
80	2.50	0.180	3.90	3.92	96.08
120	3.00	0.125	40.85	41.09	58.91
170	3.50	0.090	84.77	85.27	14.73
200	3.75	0.075	88.94	89.47	10.53
230	4.00	0.063	94.38	94.94	5.06
PAN			99.39	99.98	0.02

PHI (5): 2.51

PHI (16): 2.66

PHI (25): 2.78

PHI (50): 3.10

PHI (75): 3.38

PHI (84): 3.49

PHI (95): 4.00

SIEVE LOSS(g): 0.02

SILT/CLAY: 10.53%

SKEWNESS: 0.384

KURTOSIS: 1.016

## GRAPHIC METHOD

MEAN (PHI): 3.15

SORTING: 0.41

MEAN (mm): 0.11

MEDIAN (mm): 0.12

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 3.01

SORTING: 0.60

MEAN (mm): 0.12

DATA FILE NAME: EI-00-21#2.TAB

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-21#3  
SAMPLE ELEV. (FT. NGVD): 5.0  
SAMPLE DEPTH (FT.): 5.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.63  
SAMPLE WEIGHT AFTER WASH (GRAMS): 83.69

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	0.50	0.50	99.50
7	-1.50	2.800	0.81	0.81	99.19
10	-1.00	2.000	1.37	1.38	98.62
14	-0.50	1.400	2.22	2.23	97.77
18	0.00	1.000	3.51	3.52	96.48
25	0.50	0.710	4.96	4.98	95.02
35	1.00	0.500	6.47	6.49	93.51
45	1.50	0.355	7.92	7.95	92.05
60	2.00	0.250	9.79	9.83	90.17
80	2.50	0.180	13.73	13.78	86.22
120	3.00	0.125	50.12	50.31	49.69
170	3.50	0.090	80.29	80.59	19.41
200	3.75	0.075	82.91	83.22	16.78
230	4.00	0.063	91.46	91.80	8.20
PAN			99.60	99.97	0.03

PHI (5): 0.51      PHI (16): 2.53      PHI (25): 2.65  
PHI (50): 3.00      PHI (75): 3.41      PHI (84): 3.77  
PHI (95): 4.09

SIEVE LOSS(g): 0.03      SILT/CLAY: 16.78%  
SKEWNESS: -1.120      KURTOSIS: 1.949

## GRAPHIC METHOD

MEAN (PHI): 2.78      SORTING: 0.62  
MEAN (mm): 0.15      MEDIAN (mm): 0.13  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.76      SORTING: 1.01  
MEAN (mm): 0.15

DATA FILE NAME: EI-00-21#3.TAB

## GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-21#4

SAMPLE ELEV. (FT. NGVD): 6.0

SAMPLE DEPTH (FT.): 6.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 95.63

SAMPLE WEIGHT AFTER WASH (GRAMS): 74.80

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	0.03	0.03	99.97
7	-1.50	2.800	0.29	0.30	99.70
10	-1.00	2.000	0.67	0.70	99.30
14	-0.50	1.400	1.35	1.41	98.59
18	0.00	1.000	2.94	3.07	96.93
25	0.50	0.710	5.21	5.45	94.55
35	1.00	0.500	7.82	8.18	91.82
45	1.50	0.355	10.04	10.50	89.50
60	2.00	0.250	12.41	12.98	87.02
80	2.50	0.180	15.08	15.77	84.23
120	3.00	0.125	36.26	37.92	62.08
170	3.50	0.090	68.58	71.71	28.29
200	3.75	0.075	73.86	77.24	22.76
230	4.00	0.063	84.99	88.87	11.13
PAN			95.61	99.98	0.02

PHI (5): 0.41

PHI (16): 2.51

PHI (25): 2.71

PHI (50): 3.18

PHI (75): 3.65

PHI (84): 3.90

PHI (95): 4.13

SIEVE LOSS (g): 0.02

SILT/CLAY: 22.76%

SKEWNESS: -1.309

KURTOSIS: 1.624

## GRAPHIC METHOD

MEAN (PHI): 2.82

SORTING: 0.70

MEAN (mm): 0.14

MEDIAN (mm): 0.11

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

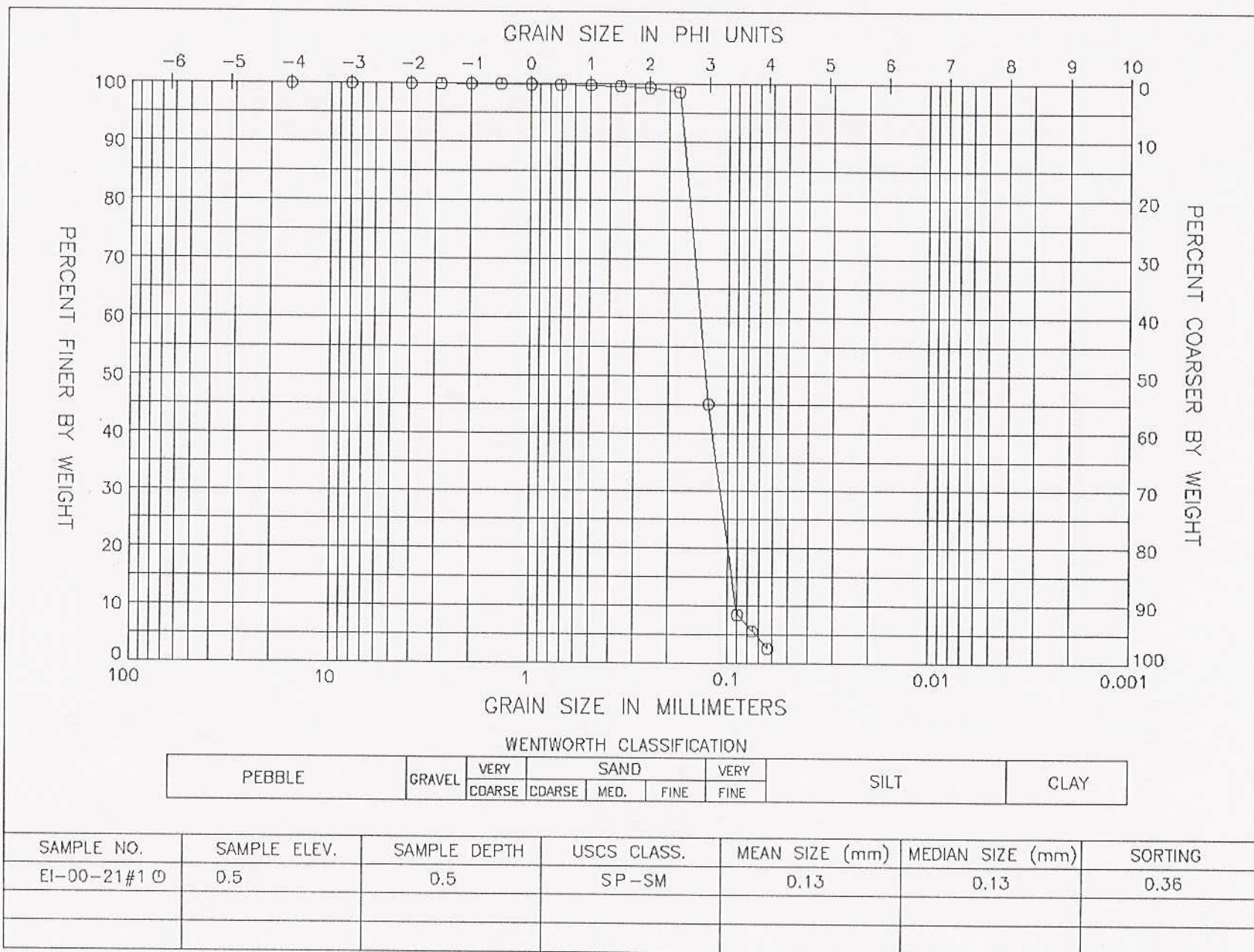
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SORTING: 1.05

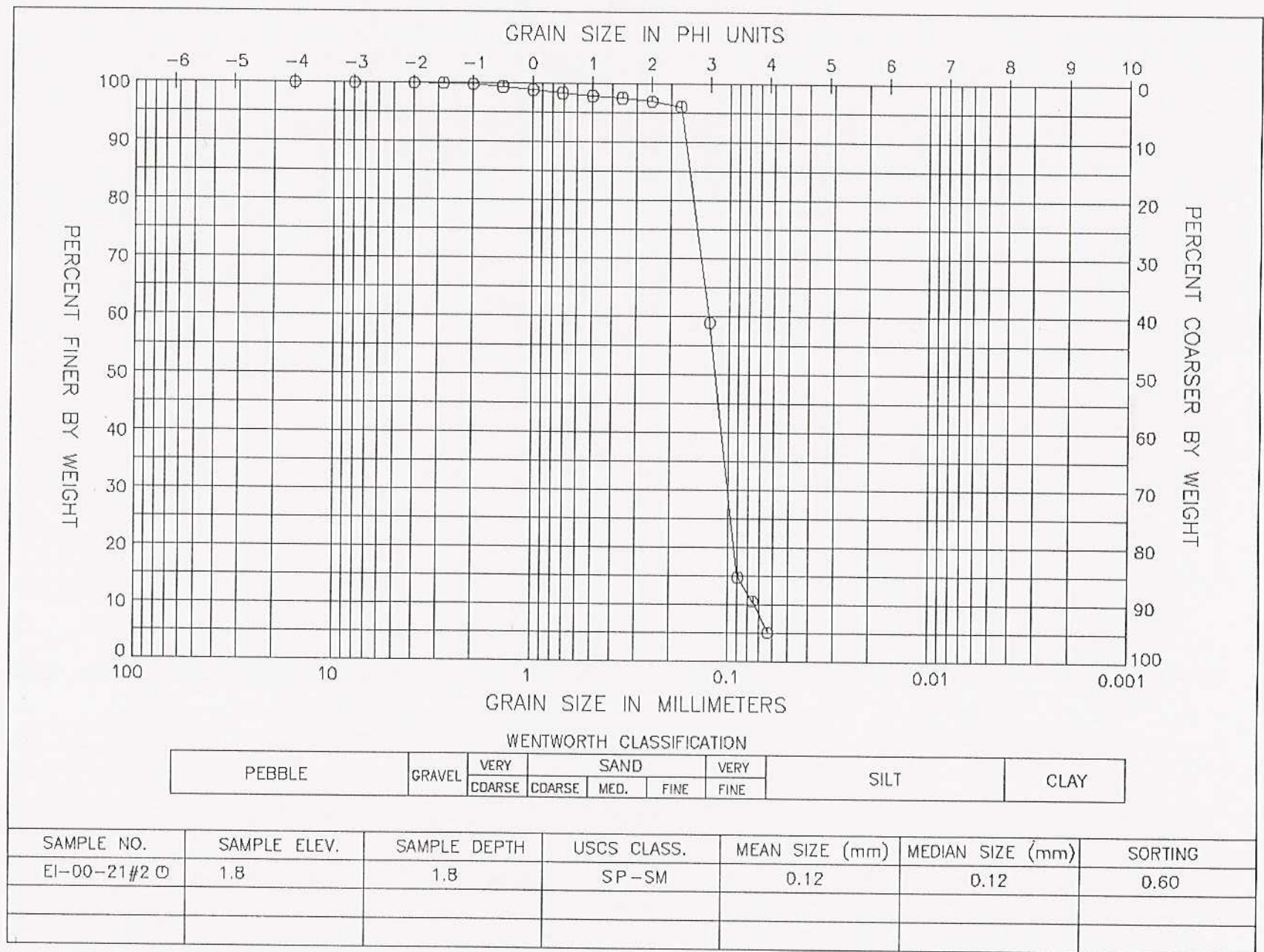
MEAN (mm): 0.14

DATA FILE NAME: EI-00-21#4.TAB

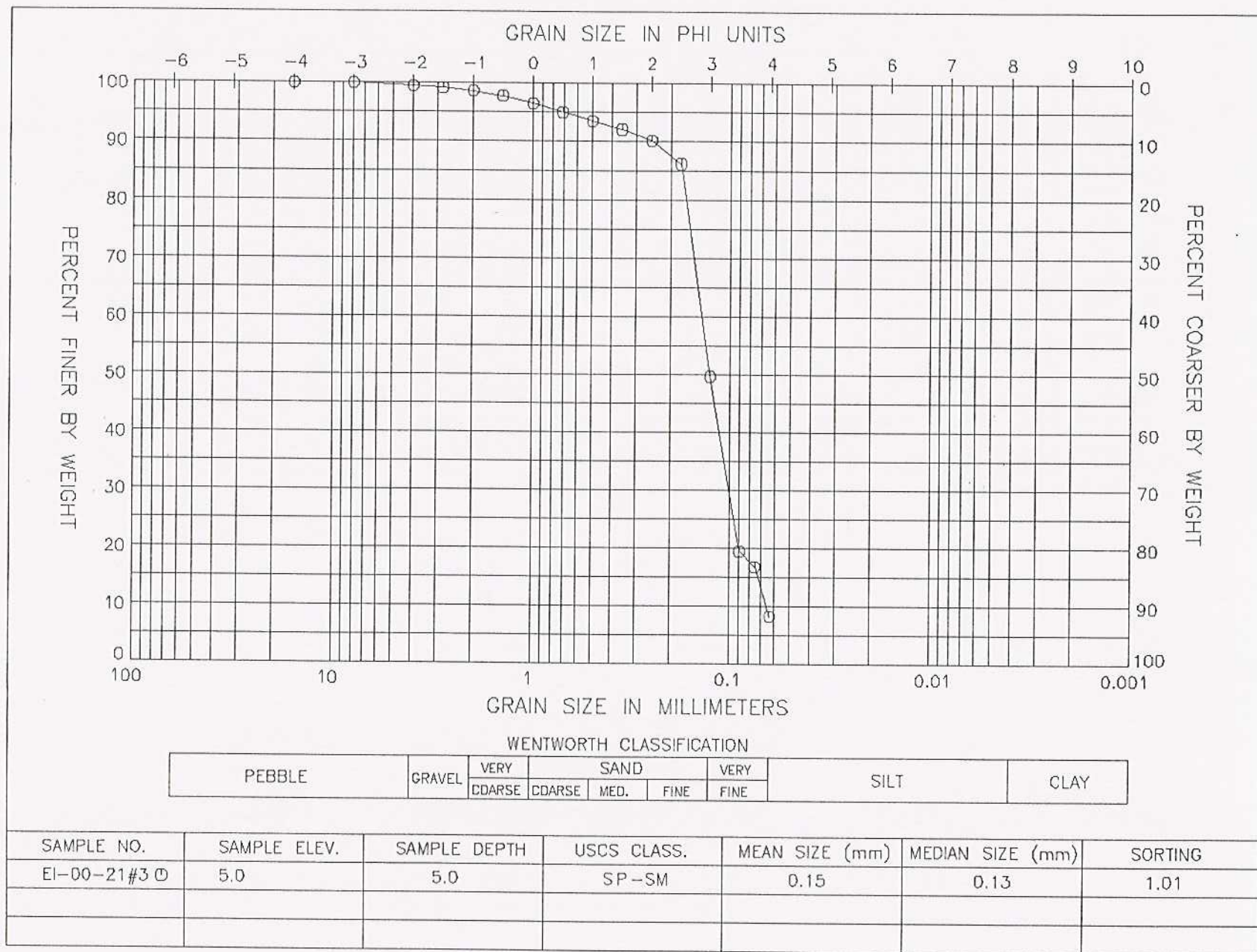
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