

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= 661151 Y= 765917		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-00-27		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 8/16/00 0918	
8. DEPTH DRILLED INTO ROCK		N/A		17. ELEVATION TOP OF HOLE		-6.5 ft	
9. TOTAL DEPTH OF HOLE		19.93 ft		18. TOTAL CORE RECOVERY FOR BORING		42%	
				19. SIGNATURE OF GEOLOGIST		SYED KHALIL	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-6.5	0					
	1		SAND, fine-grained, trace shell hash/shell fragments, Gray (5Y-6/1) (SP)		1	Sample #1, Depth = 1.5' Mean (mm): 0.13, Phi Sorting: 0.44 Silt: 3.0%
-9.5	3		fine-grained, trace silt, trace shell hash/shell fragments, Gray (5Y-6/1) (SP) from -9.5' to -11.2'		2	Sample #2, Depth = 4.0' Mean (mm): 0.19, Phi Sorting: 1.10 Silt: 3.8%
-11.2	5		SAND, fine-grained, little silt, trace shell hash/shell fragments, Gray (5Y-6/1) (SP-SM)		3	Sample #3, Depth = 6.0' Mean (mm): 0.15, Phi Sorting: 1.18 Silt: 11.2%
-14.3	8		SILTY SAND, fine grained, trace clay, trace shell hash/shell fragments/whole shell, (SM)		4	Sample #4, Depth = 8.0' Mean (mm): 0.23, Phi Sorting: 1.95 Silt: 19.8%
-15.1	9					
	10					
	11					
	12					
	13					
	14		NO RECOVERY			
	15					
	16					
	17					
	18					
	19					
-26.4	20		End of Boring			
	21		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			LAT - LONG 26 26.451 N 81 59.088 W
	22					
	23					
	24					

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

SAMPLE NO.: EI-00-27#1
SAMPLE ELEV. (FT. NGVD): 1.5
SAMPLE DEPTH (FT.): 1.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 98.92
SAMPLE WEIGHT AFTER WASH (GRAMS): 96.17

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	0.04	0.04	99.96
7	-1.50	2.800	0.11	0.11	99.89
10	-1.00	2.000	0.19	0.19	99.81
14	-0.50	1.400	0.29	0.29	99.71
18	0.00	1.000	0.39	0.39	99.61
25	0.50	0.710	0.54	0.55	99.45
35	1.00	0.500	0.69	0.70	99.30
45	1.50	0.355	0.93	0.94	99.06
60	2.00	0.250	1.27	1.28	98.72
80	2.50	0.180	2.53	2.56	97.44
120	3.00	0.125	50.59	51.14	48.86
170	3.50	0.090	93.06	94.08	5.92
200	3.75	0.075	95.91	96.96	3.04
230	4.00	0.063	97.53	98.59	1.41
PAN			98.90	99.98	0.02

PHI (5): 2.53 PHI (16): 2.64 PHI (25): 2.73
PHI (50): 2.99 PHI (75): 3.28 PHI (84): 3.38
PHI (95): 3.58

SIEVE LOSS(g): 0.02 SILT/CLAY: 3.04%
SKEWNESS: 0.173 KURTOSIS: 0.791

GRAPHIC METHOD

MEAN (PHI): 3.02 SORTING: 0.37
MEAN (mm): 0.12 MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.98 SORTING: 0.44
MEAN (mm): 0.13

DATA FILE NAME: EI-00-27#1.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-27#2

SAMPLE ELEV. (FT. NGVD): 4.0

SAMPLE DEPTH (FT.): 4.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 99.09

SAMPLE WEIGHT AFTER WASH (GRAMS): 95.54

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	0.00	0.00	100.00
5	-2.00	4.000	0.10	0.10	99.90
7	-1.50	2.800	0.63	0.64	99.36
10	-1.00	2.000	1.36	1.37	98.63
14	-0.50	1.400	3.08	3.11	96.89
18	0.00	1.000	5.79	5.84	94.16
25	0.50	0.710	8.89	8.97	91.03
35	1.00	0.500	12.35	12.46	87.54
45	1.50	0.355	15.45	15.59	84.41
60	2.00	0.250	19.24	19.42	80.58
80	2.50	0.180	28.70	28.96	71.04
120	3.00	0.125	68.10	68.73	31.27
170	3.50	0.090	93.69	94.55	5.45
200	3.75	0.075	95.30	96.18	3.82
230	4.00	0.063	97.26	98.16	1.84
PAN			99.08	99.99	0.01

PHI (5): -0.15

PHI (16): 1.55

PHI (25): 2.29

PHI (50): 2.76

PHI (75): 3.12

PHI (84): 3.30

PHI (95): 3.57

SIEVE LOSS(g): 0.01

SILT/CLAY: 3.82%

SKEWNESS: -1.213

KURTOSIS: 1.841

GRAPHIC METHOD

MEAN (PHI): 2.21

SORTING: 0.87

MEAN (mm): 0.22

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.43

SORTING: 1.10

MEAN (mm): 0.19

DATA FILE NAME: EI-00-27#2.TAB

GRADATION ANALYSIS REPORT

ESTERO VC 2000

TESTED BY: ID ON: 9/00

SAMPLE NO.: EI-00-27#3

SAMPLE ELEV. (FT. NGVD): 6.0

SAMPLE DEPTH (FT.): 6.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.85

SAMPLE WEIGHT AFTER WASH (GRAMS): 88.95

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	0.68	0.68	99.32
5	-2.00	4.000	2.61	2.61	97.39
7	-1.50	2.800	3.15	3.15	96.85
10	-1.00	2.000	3.75	3.76	96.24
14	-0.50	1.400	4.14	4.15	95.85
18	0.00	1.000	4.52	4.53	95.47
25	0.50	0.710	4.81	4.82	95.18
35	1.00	0.500	5.15	5.16	94.84
45	1.50	0.355	5.44	5.45	94.55
60	2.00	0.250	5.88	5.89	94.11
80	2.50	0.180	7.29	7.30	92.70
120	3.00	0.125	50.86	50.94	49.06
170	3.50	0.090	85.84	85.97	14.03
200	3.75	0.075	88.64	88.77	11.23
230	4.00	0.063	94.36	94.50	5.50
PAN			99.84	99.99	0.01

PHI (5): 0.77

PHI (16): 2.60

PHI (25): 2.70

PHI (50): 2.99

PHI (75): 3.34

PHI (84): 3.47

PHI (95): 4.02

SIEVE LOSS(g): 0.01

SILT/CLAY: 11.23%

SKEWNESS: -1.363

KURTOSIS: 2.081

GRAPHIC METHOD

MEAN (PHI): 2.77

SORTING: 0.44

MEAN (mm): 0.15

MEDIAN (mm): 0.13

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.77

SORTING: 1.18

MEAN (mm): 0.15

DATA FILE NAME: EI-00-27#3.TAB

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

SAMPLE NO.: EI-00-27#4
SAMPLE ELEV. (FT. NGVD): 8.0
SAMPLE DEPTH (FT.): 8.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 99.08
SAMPLE WEIGHT AFTER WASH (GRAMS): 80.92

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	1.96	1.98	98.02
5	-2.00	4.000	5.43	5.48	94.52
7	-1.50	2.800	8.10	8.18	91.82
10	-1.00	2.000	10.67	10.77	89.23
14	-0.50	1.400	13.38	13.50	86.50
18	0.00	1.000	15.75	15.90	84.10
25	0.50	0.710	17.82	17.99	82.01
35	1.00	0.500	19.74	19.92	80.08
45	1.50	0.355	21.47	21.67	78.33
60	2.00	0.250	23.50	23.72	76.28
80	2.50	0.180	26.80	27.05	72.95
120	3.00	0.125	45.76	46.18	53.82
170	3.50	0.090	75.22	75.92	24.08
200	3.75	0.075	79.46	80.20	19.80
230	4.00	0.063	89.54	90.37	9.63
PAN			99.06	99.98	0.02

PHI (5): -2.14 PHI (16): 0.02 PHI (25): 2.19
PHI (50): 3.06 PHI (75): 3.48 PHI (84): 3.84
PHI (95): 4.11

SIEVE LOSS (g): 0.02 SILT/CLAY: 19.80%
SKEWNESS: -1.087 KURTOSIS: 1.983

GRAPHIC METHOD

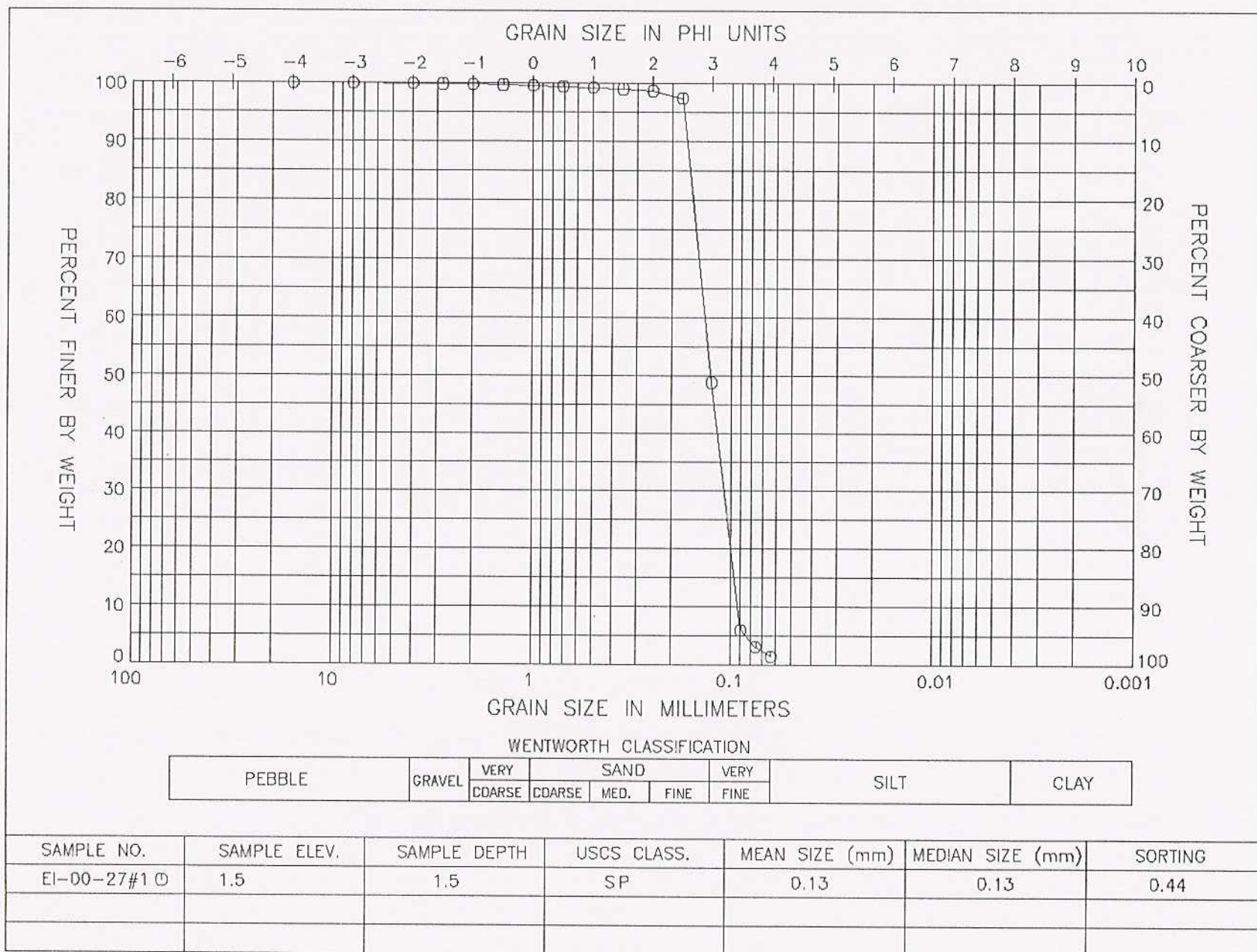
MEAN (PHI): 1.78 SORTING: 1.91
MEAN (mm): 0.29 MEDIAN (mm): 0.12
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

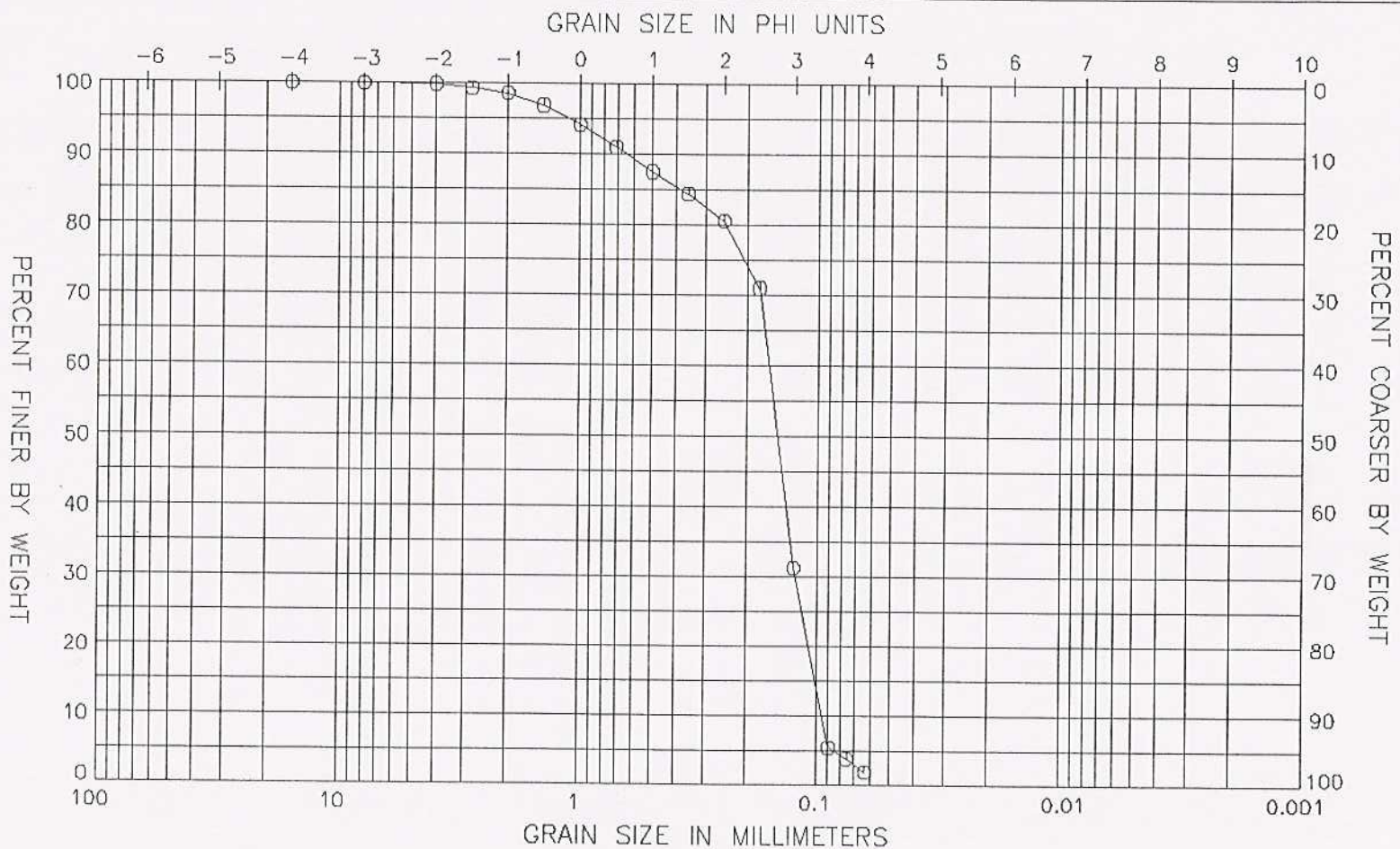
MEAN (PHI): 2.14 SORTING: 1.95
MEAN (mm): 0.23

DATA FILE NAME: EI-00-27#4.TAB

GRAIN SIZE DISTRIBUTION CURVE ESTERO VC 2000



GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

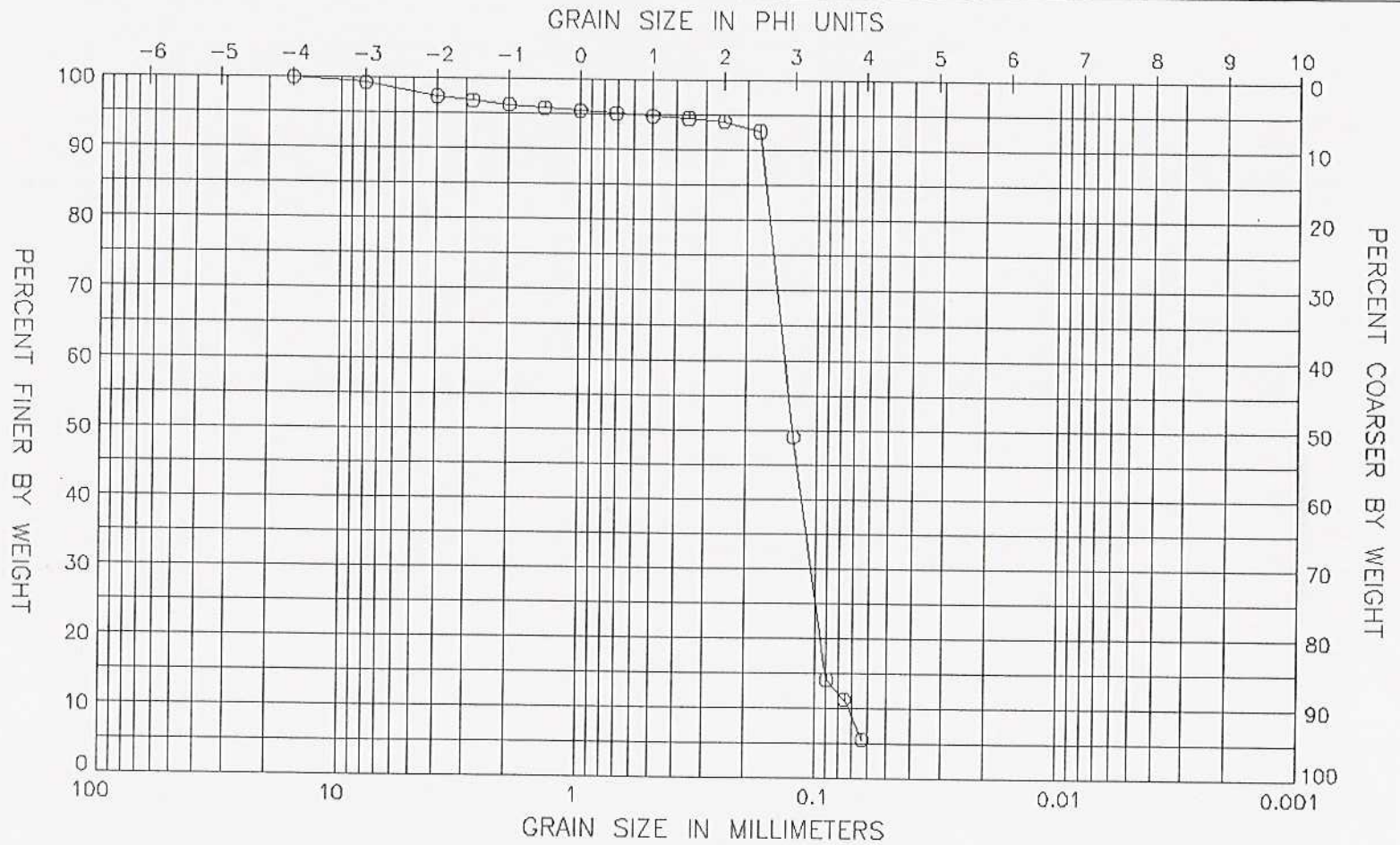


WENTWORTH CLASSIFICATION

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-00-27#2	4.0	4.0	SP	0.19	0.15	1.10

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-00-27#3	6.0	6.0	SP-SM	0.15	0.13	1.18

GRAIN SIZE DISTRIBUTION CURVE
ESTERO VC 2000

