

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT DELRAY BEACH		10. SIZE AND TYPE OF BIT 3"		
2. LOCATION (Coordinates or Station) X= 968039 Y= 777428		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NGVD		
3. DRILLING AGENCY: ALPINE SEISMIC		12. MANUFACTURER'S DESIGNATION OF DRILL ALPINE PNEUMATIC		
4. HOLE NO. (As shown on drawing title and file number) DB-99-18		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0.0 undisturbed: 0.0		
5. NAME OF DRILLER ROB SUSKO		14. TOTAL NO. OF CORE BOXES 1		
6. DIRECTION OF HOLE VERTICAL		15. ELEVATION GROUND WATER		
7. THICKNESS OF BURDEN 0.0 FT		16. DATE HOLE Started Completed 4/20/99 4/20/99		
8. DEPTH DRILLED INTO ROCK 0.0 FT		17. ELEVATION TOP OF HOLE -57.5 ft.		
9. TOTAL DEPTH OF HOLE 19.1' FT		18. TOTAL CORE RECOVERY FOR BORING 98%		
19. SIGNATURE OF GEOLOGIST IBRAHIM DREMALI				

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-57.5	0					SP
	1		SAND, fine-grained, trace shell hash, Light Gray (5Y-7/1) (SP)		1	Sample #1, Depth = 2.0' 0.16 mm, 0.56 phi sorting 1.91% silt
	2				2	Sample #2, Depth = 6.0' 0.17 mm, 0.59 phi sorting 1.41% silt
	3				3	Sample #3, Depth = 9.0' 0.15 mm, 0.54 phi sorting 2.12% silt
	4				4	Sample #4, Depth = 13.0' 0.17 mm, 0.71 phi sorting 2.47% silt
	5				5	Sample #5, Depth = 17.0' 0.17 mm, 0.80 phi sorting 4.18% silt
-68.3	11		fine-grained, little shell hash, Light Gray (5Y-7/1) (SP) from -68.3' to -76.6'			
	12					
	13					
	14					
	15					
	16					
	17					
	18					
-76.6	19		End of Boring			
	20					
	21					
	22					
	23					
	24					Note: Soils are visually classified in accordance with the Unified Soils Classification System.

GRADATION ANALYSIS REPORT
DELRAY BEACH VIBRACORES 1999
TESTED BY: RW ON: 8/99

SAMPLE NO.: DB99-18 S#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 2.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 152.64
SAMPLE WEIGHT AFTER WASH (GRAMS): 150.17

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	0.13	0.09	99.91
7	-1.50	2.800	0.25	0.16	99.84
10	-1.00	2.000	0.54	0.35	99.65
14	-0.50	1.400	0.77	0.50	99.50
18	0.00	1.000	1.13	0.74	99.26
25	0.50	0.710	1.53	1.00	99.00
35	1.00	0.500	2.35	1.54	98.46
45	1.50	0.355	3.60	2.36	97.64
60	2.00	0.250	9.37	6.14	93.86
80	2.50	0.180	37.16	24.34	75.66
120	3.00	0.125	119.65	78.39	21.61
170	3.50	0.090	149.37	97.86	2.14
200	3.75	0.075	149.72	98.09	1.91
230	4.00	0.063	151.37	99.16	0.84
PAN			152.60	99.97	0.03

PHI(5): 1.85 PHI(16): 2.27 PHI(25): 2.51
PHI(50): 2.74 PHI(75): 2.97 PHI(84): 3.14
PHI(95): 3.43

SIEVE LOSS(g): 0.04 SILT/CLAY: 1.91%
SKEWNESS: -0.228 KURTOSIS: 1.397

GRAPHIC METHOD
MEAN (PHI): 2.69 SORTING: 0.44
MEAN (mm) : 0.16 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
MEAN (PHI): 2.67 SORTING: 0.56
MEAN (mm) : 0.16

DATA FILE NAME: DB99-18#1.TAB

GRADATION ANALYSIS REPORT
 DELRAY BEACH VIBRACORES 1999
 TESTED BY: RW ON: 8/99

SAMPLE NO.: DB99-18 S#2
 SAMPLE ELEV. (FT. NGVD):
 SAMPLE DEPTH (FT.): 6.0
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 149.65
 SAMPLE WEIGHT AFTER WASH (GRAMS): 147.73

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	0.09	0.06	99.94
10	-1.00	2.000	0.26	0.17	99.83
14	-0.50	1.400	0.67	0.45	99.55
18	0.00	1.000	1.12	0.75	99.25
25	0.50	0.710	1.90	1.27	98.73
35	1.00	0.500	3.55	2.37	97.63
45	1.50	0.355	6.18	4.13	95.87
60	2.00	0.250	15.51	10.36	89.64
80	2.50	0.180	50.81	33.95	66.05
120	3.00	0.125	124.90	83.46	16.54
170	3.50	0.090	147.35	98.46	1.54
200	3.75	0.075	147.54	98.59	1.41
230	4.00	0.063	148.66	99.34	0.66
PAN			149.62	99.98	0.02

PHI (5): 1.57 PHI (16): 2.12 PHI (25): 2.31
 PHI (50): 2.66 PHI (75): 2.91 PHI (84): 3.02
 PHI (95): 3.38

SIEVE LOSS(g): 0.03 SILT/CLAY: 1.41%
 SKEWNESS: -0.412 KURTOSIS: 1.231

GRAPHIC METHOD
 MEAN (PHI): 2.55 SORTING: 0.45
 MEAN (mm) : 0.17 MEDIAN (mm): 0.16
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
 MEAN (PHI): 2.57 SORTING: 0.59
 MEAN (mm) : 0.17

DATA FILE NAME: DB99-18#2.TAB

GRADATION ANALYSIS REPORT
DELRAY BEACH VIBRACORES 1999
TESTED BY: RW ON: 8/99

SAMPLE NO.: DB99-18 S#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 9.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 162.43
SAMPLE WEIGHT AFTER WASH (GRAMS): 159.99

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	0.06	0.04	99.96
7	-1.50	2.800	0.18	0.11	99.89
10	-1.00	2.000	0.33	0.20	99.80
14	-0.50	1.400	0.58	0.36	99.64
18	0.00	1.000	0.88	0.54	99.46
25	0.50	0.710	1.34	0.82	99.18
35	1.00	0.500	2.16	1.33	98.67
45	1.50	0.355	3.83	2.36	97.64
60	2.00	0.250	9.12	5.61	94.39
80	2.50	0.180	27.86	17.15	82.85
120	3.00	0.125	113.28	69.74	30.26
170	3.50	0.090	157.75	97.12	2.88
200	3.75	0.075	158.99	97.88	2.12
230	4.00	0.063	161.16	99.22	0.78
PAN			162.38	99.97	0.03

PHI(5): 1.91 PHI(16): 2.45 PHI(25): 2.57
PHI(50): 2.81 PHI(75): 3.10 PHI(84): 3.26
PHI(95): 3.46

SIEVE LOSS(g): 0.05 SILT/CLAY: 2.12%
SKEWNESS: -0.318 KURTOSIS: 1.223

GRAPHIC METHOD

MEAN (PHI): 2.78 SORTING: 0.41
MEAN (mm) : 0.15 MEDIAN (mm): 0.14
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.77 SORTING: 0.54
MEAN (mm) : 0.15

DATA FILE NAME: DB99-18#3.TAB

GRADATION ANALYSIS REPORT
DELRAY BEACH VIBRACORES 1999
TESTED BY: RW ON: 8/99

SAMPLE NO.: DB99-18 S#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 13.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 196.30
SAMPLE WEIGHT AFTER WASH (GRAMS): 192.49

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	0.33	0.17	99.83
7	-1.50	2.800	0.90	0.46	99.54
10	-1.00	2.000	1.31	0.67	99.33
14	-0.50	1.400	1.91	0.97	99.03
18	0.00	1.000	2.93	1.49	98.51
25	0.50	0.710	4.29	2.19	97.81
35	1.00	0.500	6.70	3.41	96.59
45	1.50	0.355	11.07	5.64	94.36
60	2.00	0.250	22.68	11.55	88.45
80	2.50	0.180	60.38	30.76	69.24
120	3.00	0.125	157.39	80.18	19.82
170	3.50	0.090	190.68	97.14	2.86
200	3.75	0.075	191.45	97.53	2.47
230	4.00	0.063	193.76	98.71	1.29
PAN			196.28	99.99	0.01

PHI(5): 1.36 PHI(16): 2.12 PHI(25): 2.35
PHI(50): 2.69 PHI(75): 2.95 PHI(84): 3.11
PHI(95): 3.44

SIEVE LOSS(g): 0.02 SILT/CLAY: 2.47%
SKEWNESS: -0.598 KURTOSIS: 1.427

GRAPHIC METHOD

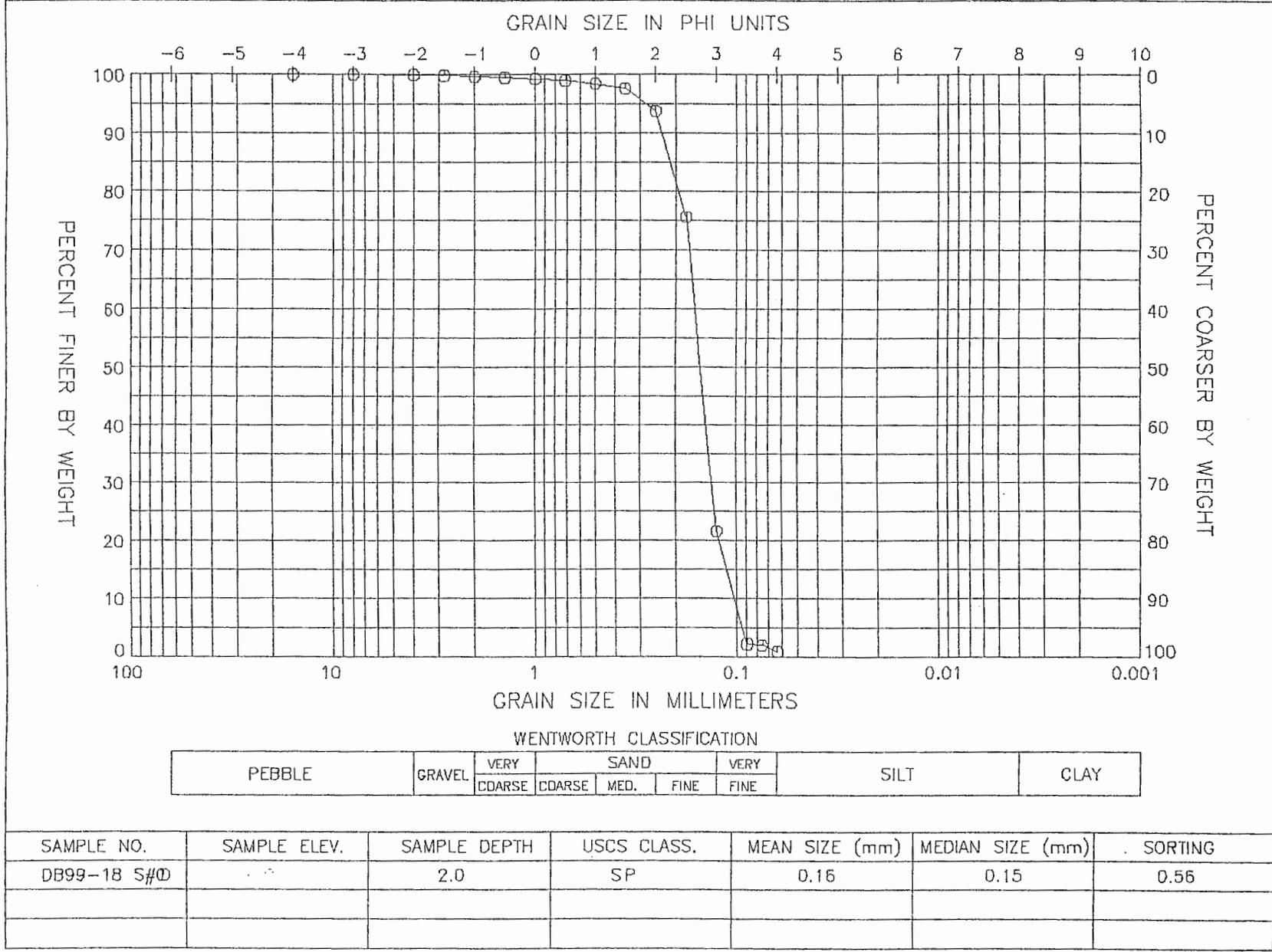
MEAN (PHI): 2.54 SORTING: 0.50
MEAN (mm): 0.17 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

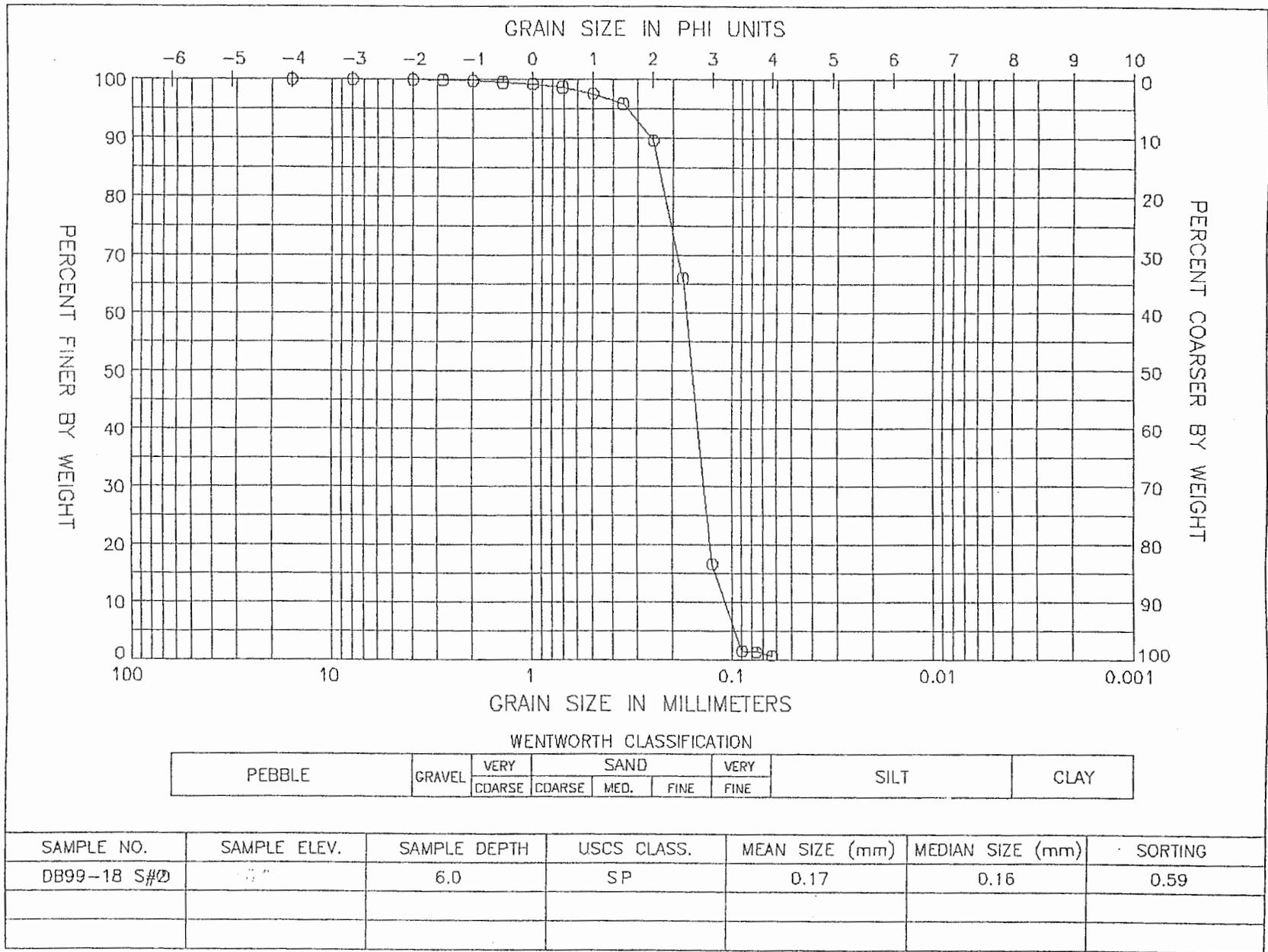
MEAN (PHI): 2.56 SORTING: 0.71
MEAN (mm): 0.17

DATA FILE NAME: DB99-18#4.TAB

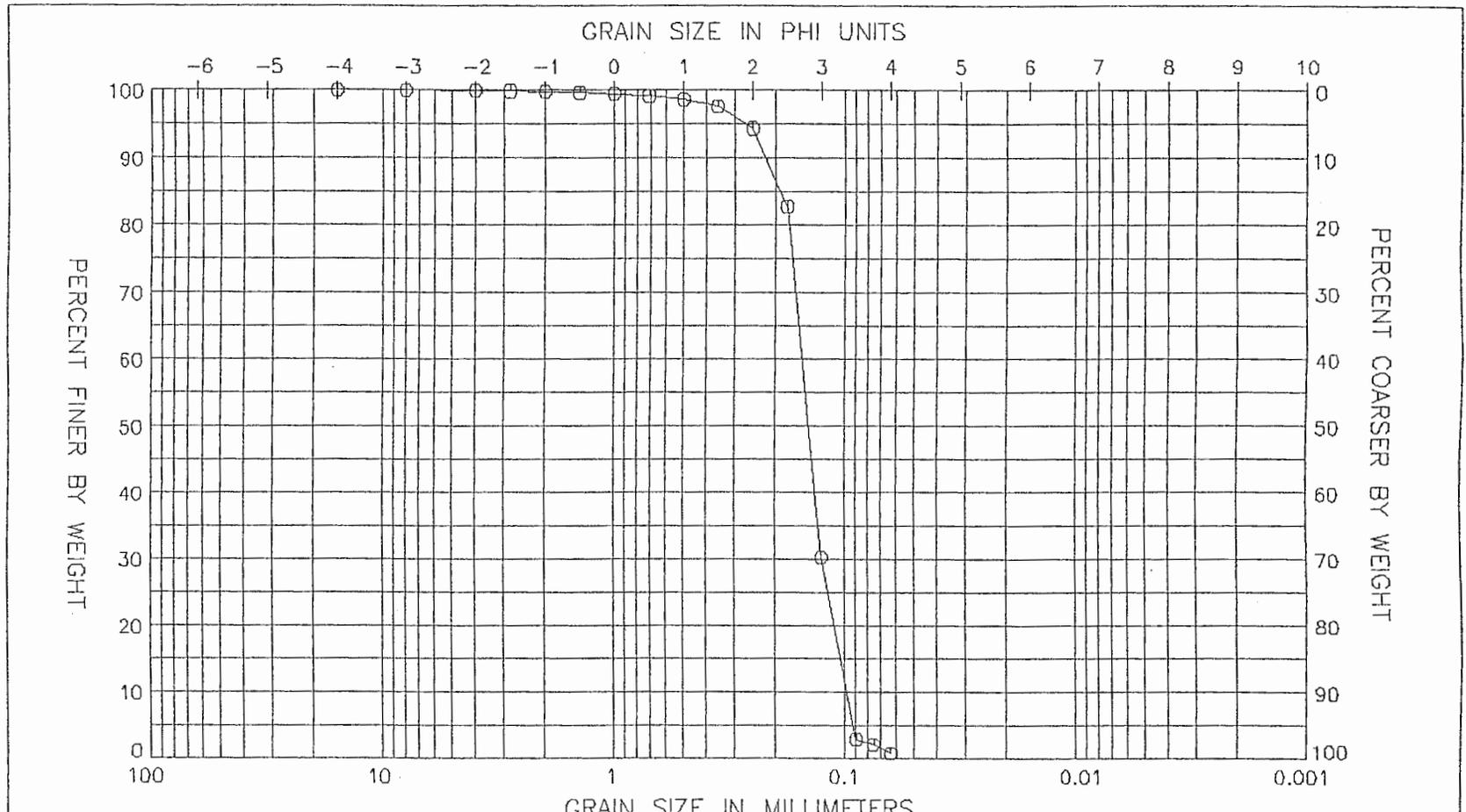
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



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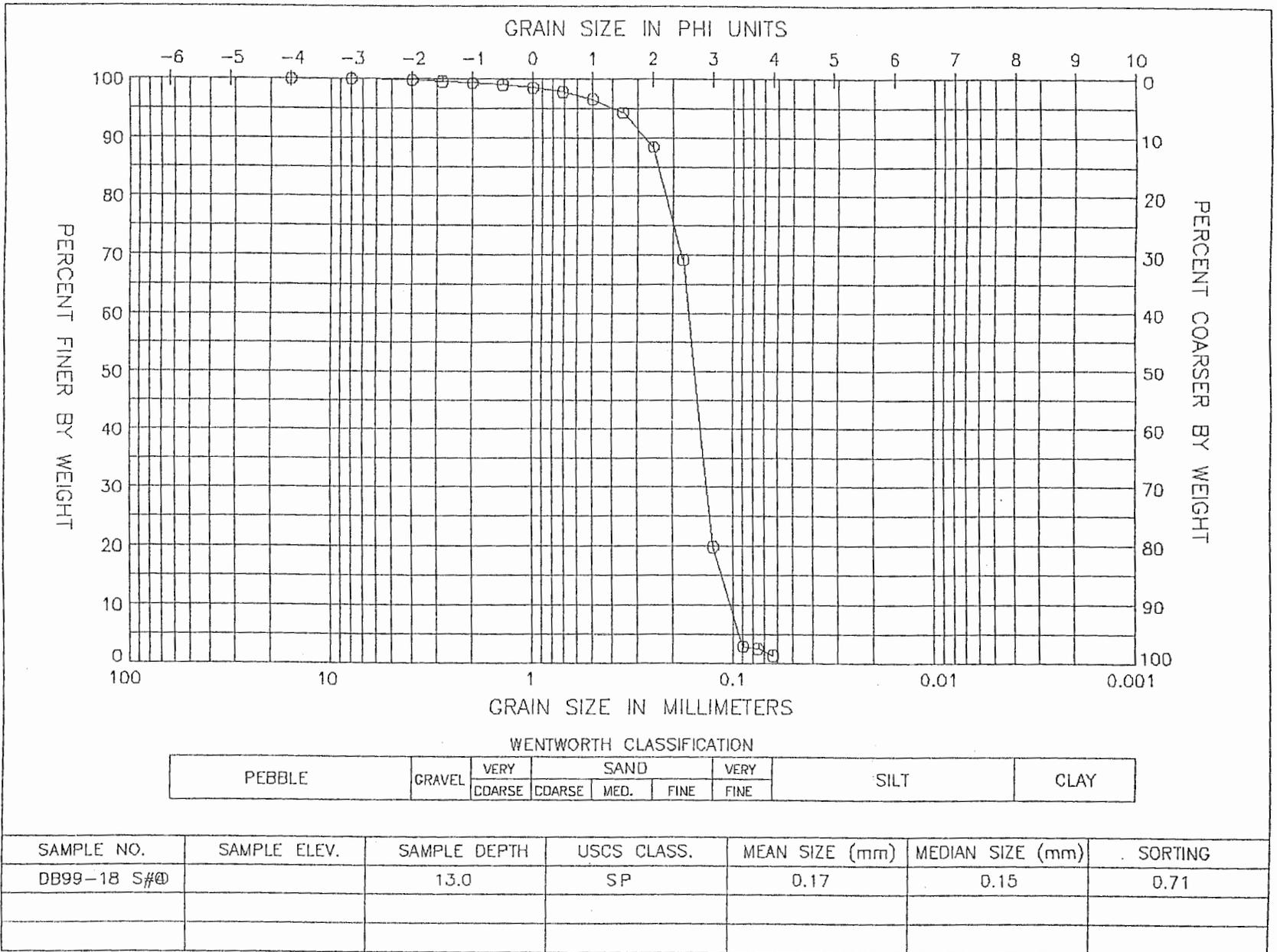


WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	SAND				SILT	CLAY
		VERY COARSE	COARSE	MED. FINE	VERY FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
DB99-18 S#0		9.0	SP	0.15	0.14	0.54

GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



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