

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

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-57.5	0					SP
	1				1	Sample #1, Depth = 2.0' 0.16 mm, 0.56 phi sorting 1.91% silt
	2					
	3					
	4					
	5				2	Sample #2, Depth = 6.0' 0.17 mm, 0.59 phi sorting 1.41% silt
	6		SAND, fine-grained, trace shell hash, Light Gray (5Y-7/1) (SP)			
	7					
	8					
	9				3	Sample #3, Depth = 9.0' 0.15 mm, 0.54 phi sorting 2.12% silt
	10					
-68.3	11					
	12					
	13				4	Sample #4, Depth = 13.0' 0.17 mm, 0.71 phi sorting 2.47% silt
	14					
	15		fine-grained, little shell hash, Light Gray (5Y-7/1) (SP) from -68.3' to -76.6'			
	16					
	17				5	Sample #5, Depth = 17.0' 0.17 mm, 0.80 phi sorting 4.18% silt
	18					
-76.6	19					
	20		End of Boring			
	21					
	22					
	23					
	24					Note: Soils are visually classified in accordance with the Unified Soils Classification System.

PROJECT: Delray Beach

HOLE NUMBER:

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

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

SAMPLE NO.: DB99-18 S#5  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 17.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 232.19  
SAMPLE WEIGHT AFTER WASH (GRAMS): 223.13

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	0.56	0.24	99.76
5	-2.00	4.000	0.78	0.34	99.66
7	-1.50	2.800	1.24	0.53	99.47
10	-1.00	2.000	1.63	0.70	99.30
14	-0.50	1.400	2.39	1.03	98.97
18	0.00	1.000	3.69	1.59	98.41
25	0.50	0.710	6.07	2.61	97.39
35	1.00	0.500	10.31	4.44	95.56
45	1.50	0.355	17.24	7.42	92.58
60	2.00	0.250	33.48	14.42	85.58
80	2.50	0.180	76.87	33.11	66.89
120	3.00	0.125	182.72	78.69	21.31
170	3.50	0.090	221.51	95.40	4.60
200	3.75	0.075	222.48	95.82	4.18
230	4.00	0.063	227.66	98.05	1.95
PAN			232.19	100.00	0.00

PHI(5): 1.09 PHI(16): 2.04 PHI(25): 2.28  
PHI(50): 2.69 PHI(75): 2.96 PHI(84): 3.16  
PHI(95): 3.49

SIEVE LOSS(g): 0.00 SILT/CLAY: 4.18%  
SKEWNESS: -0.706 KURTOSIS: 1.451

GRAPHIC METHOD

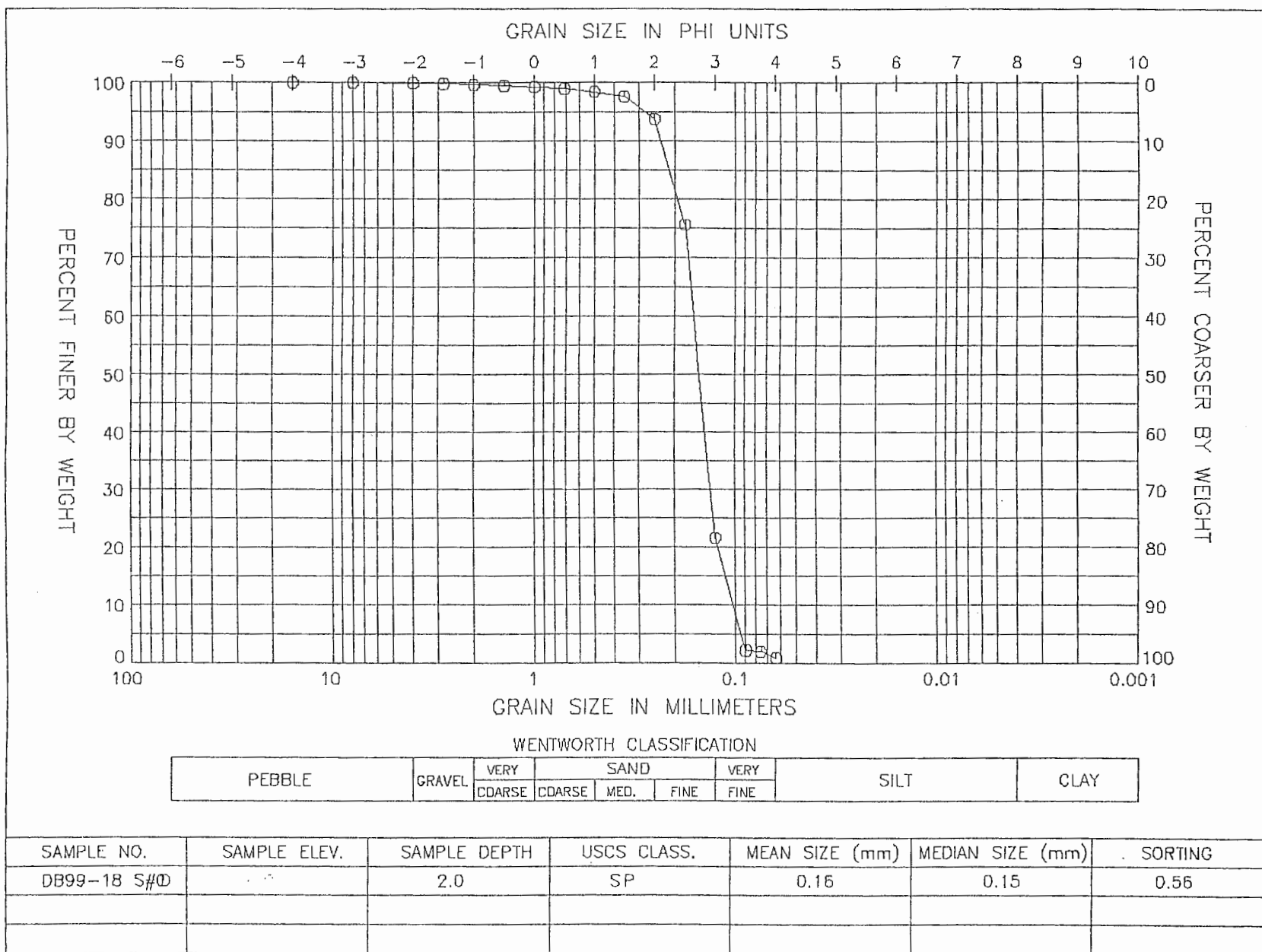
MEAN (PHI): 2.49 SORTING: 0.56  
MEAN (mm): 0.18 MEDIAN (mm): 0.16  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

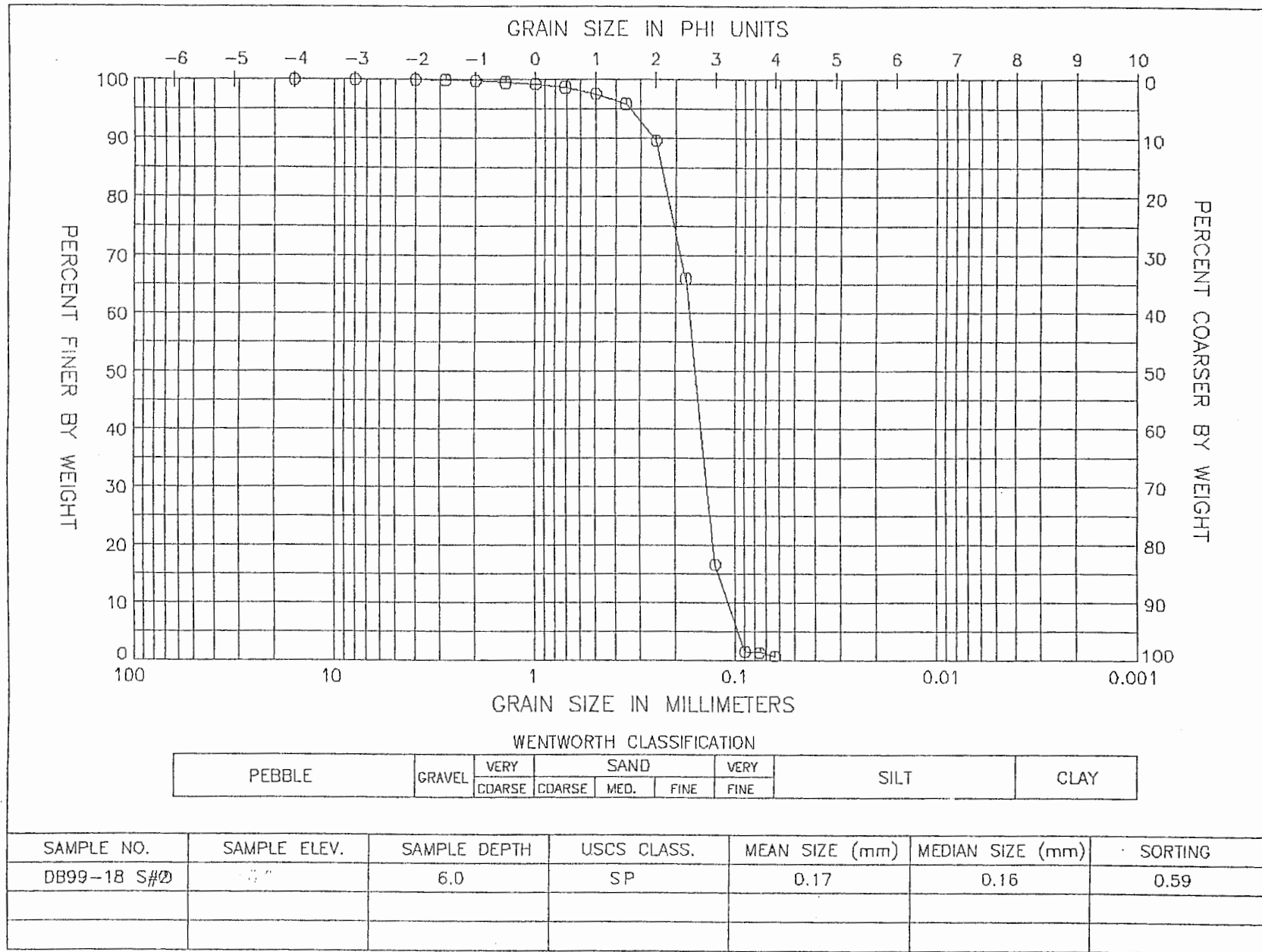
MEAN (PHI): 2.52 SORTING: 0.80  
MEAN (mm): 0.17

DATA FILE NAME: DB99-18#5.TAB

# GRAIN SIZE DISTRIBUTION CURVE DELRAY BEACH VIBRACORES 1999

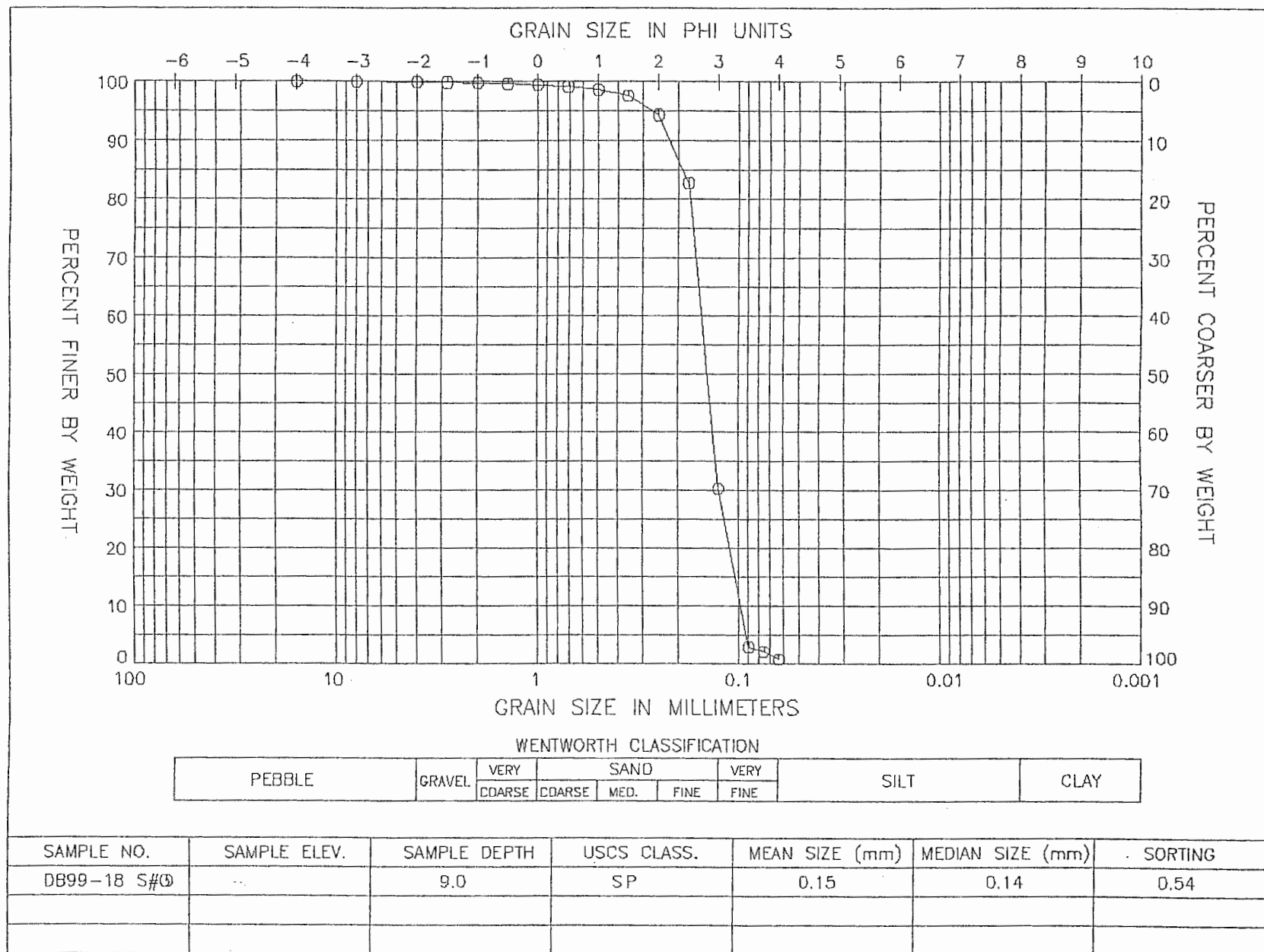


# GRAIN SIZE DISTRIBUTION CURVE DELRAY BEACH VIBRACORES 1999

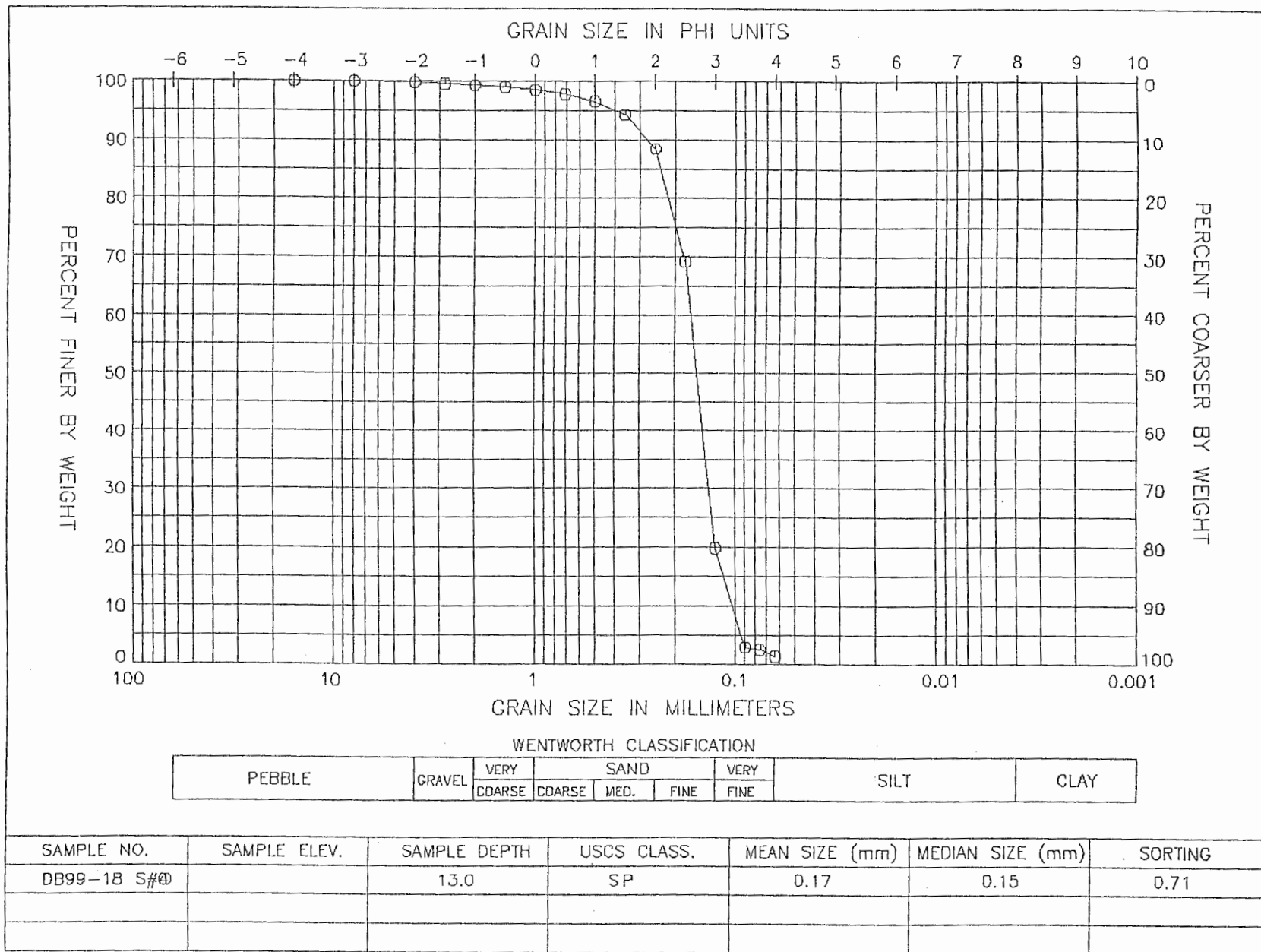




GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



# GRAIN SIZE DISTRIBUTION CURVE DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999

