

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT		DELRAY BEACH		
2. LOCATION (Coordinates or Station)		X= 966,225 Y= 772,375		
3. DRILLING AGENCY:		ALPINE SEISMIC		
4. HOLE NO. (As shown on drawing title and file number)		DB-99-8		
5. NAME OF DRILLER		ROB SUSKO		
6. DIRECTION OF HOLE		VERTICAL		
7. THICKNESS OF BURDEN		0.0 FT		
8. DEPTH DRILLED INTO ROCK		0.0 FT		
9. TOTAL DEPTH OF HOLE		18.3' FT		
10. SIZE AND TYPE OF BIT		3"		
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)		NGVD		
12. MANUFACTURER'S DESIGNATION OF DRILL		ALPINE PNEUMATIC		
13. TOT NO. OF OVERBURDEN SAMPLES TAKEN		disturbed: 0.0 undisturbed: 0.0		
14. TOTAL NO. OF CORE BOXES		1		
15. ELEVATION GROUND WATER				
16. DATE HOLE		Started	Completed	
		4/20/99	4/20/99	
17. ELEVATION TOP OF HOLE		-32.3 ft.		
18. TOTAL CORE RECOVERY FOR BORING		92%		
19. SIGNATURE OF GEOLOGIST		IBRAHIM DREMAI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-32.3	0		SAND, medium-grained, little shell hash, Gray (5Y-6/1) (SP)		1	SP Sample #1, Depth = 0.2' 0.50 mm, 1.61 phi sorting 0.66% silt
	1					
	2					
	3		fine-grained, little shell hash, Gray (5Y-6/1) (SP) from -32.7' to -37.4'		2	Sample #2, Depth = 3.0' 0.23 mm, 0.73 phi sorting 1.16% silt
	4					
-37.4	5					
	6					
	7					
	8				3	Sample #3, Depth = 7.0' 0.23 mm, 0.61 phi sorting 1.78% silt
	9					
	10					
	11		fine-grained, trace shell hash, Gray (5Y-5/1) (SP) from -37.4' to -50.6'		4	Sample #4, Depth = 11.0' 0.24 mm, 0.70 phi sorting 1.13% silt
	12					
	13					
	14					
	15					
	16				5	Sample #5, Depth = 16.0' 0.27 mm, 0.86 phi sorting 1.66% silt
	17					
-50.6	18					
	19		End of Boring			
	20					
	21					
	22					
	23					
	24					

Note: Soils are 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.: DB99-8 S#1
SAMPLE ELEV. (FT. NGVD): . . .
SAMPLE DEPTH (FT.): 0.2
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 142.73
SAMPLE WEIGHT AFTER WASH (GRAMS): 141.82

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	1.29	0.90	99.10
5	-2.00	4.000	8.04	5.63	94.37
7	-1.50	2.800	11.61	8.13	91.87
10	-1.00	2.000	18.35	12.86	87.14
14	-0.50	1.400	28.26	19.80	80.20
18	0.00	1.000	37.94	26.58	73.42
25	0.50	0.710	48.93	34.28	65.72
35	1.00	0.500	63.16	44.25	55.75
45	1.50	0.355	74.46	52.17	47.83
60	2.00	0.250	90.29	63.26	36.74
80	2.50	0.180	113.98	79.86	20.14
120	3.00	0.125	136.61	95.71	4.29
170	3.50	0.090	141.72	99.29	0.71
200	3.75	0.075	141.79	99.34	0.66
230	4.00	0.063	142.26	99.67	0.33
PAN			142.72	99.99	0.01

PHI(5): -2.13	PHI(16): -0.77	PHI(25): -0.12
PHI(50): 1.36	PHI(75): 2.35	PHI(84): 2.63
PHI(95): 2.98		

SIEVE LOSS(g): 0.01	SILT/CLAY: 0.66%
SKEWNESS: -0.553	KURTOSIS: 0.848

GRAPHIC METHOD

MEAN (PHI): 0.81	SORTING: 1.70
MEAN (mm) : 0.57	MEDIAN (mm): 0.39
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 1.01	SORTING: 1.61
MEAN (mm) : 0.50	

DATA FILE NAME: DB99-8#1.TAB

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

SAMPLE NO.: DB99-8 S#2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 3.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 208.65
SAMPLE WEIGHT AFTER WASH (GRAMS): 206.33

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	0.28	0.13	99.87
7	-1.50	2.800	0.50	0.24	99.76
10	-1.00	2.000	0.95	0.46	99.54
14	-0.50	1.400	1.95	0.93	99.07
18	0.00	1.000	3.51	1.68	98.32
25	0.50	0.710	6.61	3.17	96.83
35	1.00	0.500	15.23	7.30	92.70
45	1.50	0.355	29.83	14.30	85.70
60	2.00	0.250	69.28	33.20	66.80
80	2.50	0.180	144.61	69.31	30.69
120	3.00	0.125	199.81	95.76	4.24
170	3.50	0.090	206.14	98.80	1.20
200	3.75	0.075	206.24	98.84	1.16
230	4.00	0.063	207.46	99.43	0.57
PAN			208.62	99.99	0.01

PHI(5): 0.72	PHI(16): 1.55	PHI(25): 1.78
PHI(50): 2.23	PHI(75): 2.61	PHI(84): 2.78
PHI(95): 2.99		

SIEVE LOSS(g): 0.03	SILT/CLAY: 1.16%
SKEWNESS: -0.615	KURTOSIS: 1.125

GRAPHIC METHOD

MEAN (PHI): 0.00	SORTING: 0.62
MEAN (mm): 1.00	MEDIAN (mm): 0.21
NOTE: MEAN WAS CALCULATED USING POINT METHOD	

MOMENT METHOD

MEAN (PHI): 2.11	SORTING: 0.73
MEAN (mm): 0.23	

DATA FILE NAME: DB99-8#2.TAB

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

SAMPLE NO.: DB99-8 S#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 7.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 209.88
SAMPLE WEIGHT AFTER WASH (GRAMS): 206.56

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	0.12	0.06	99.94
10	-1.00	2.000	0.27	0.13	99.87
14	-0.50	1.400	0.62	0.30	99.70
18	0.00	1.000	1.26	0.60	99.40
25	0.50	0.710	2.91	1.39	98.61
35	1.00	0.500	9.40	4.48	95.52
45	1.50	0.355	25.29	12.05	87.95
60	2.00	0.250	78.76	37.53	62.47
80	2.50	0.180	160.02	76.24	23.76
120	3.00	0.125	201.90	96.20	3.80
170	3.50	0.090	205.92	98.11	1.89
200	3.75	0.075	206.15	98.22	1.78
230	4.00	0.063	207.99	99.10	0.90
PAN			209.86	99.99	0.01

PHI (5): 1.03	PHI (16): 1.58	PHI (25): 1.75
PHI (50): 2.16	PHI (75): 2.48	PHI (84): 2.69
PHI (95): 2.97		

SIEVE LOSS(g): 0.02	SILT/CLAY: 1.78%
SKEWNESS: -0.285	KURTOSIS: 1.087

GRAPHIC METHOD

MEAN (PHI): 2.09	SORTING: 0.56
MEAN (mm): 0.24	MEDIAN (mm): 0.22
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 2.10	SORTING: 0.61
MEAN (mm): 0.23	

DATA FILE NAME: DB99-8#3.TAB

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

SAMPLE NO.: PB99-8 S#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 11.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 200.96
SAMPLE WEIGHT AFTER WASH (GRAMS): 198.74

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	0.43	0.21	99.79
7	-1.50	2.800	0.61	0.30	99.70
10	-1.00	2.000	1.37	0.68	99.32
14	-0.50	1.400	2.11	1.05	98.95
18	0.00	1.000	2.98	1.48	98.52
25	0.50	0.710	5.74	2.86	97.14
35	1.00	0.500	13.01	6.47	93.53
45	1.50	0.355	28.49	14.18	85.82
60	2.00	0.250	79.80	39.71	60.29
80	2.50	0.180	153.40	76.33	23.67
120	3.00	0.125	194.28	96.68	3.32
170	3.50	0.090	198.58	98.82	1.18
200	3.75	0.075	198.68	98.87	1.13
230	4.00	0.063	199.82	99.43	0.57
PAN			200.96	100.00	0.00

PHI(5): 0.80	PHI(16): 1.54	PHI(25): 1.71
PHI(50): 2.14	PHI(75): 2.48	PHI(84): 2.69
PHI(95): 2.96		

SIEVE LOSS(g): 0.00	SILT/CLAY: 1.13%
SKEWNESS: -0.456	KURTOSIS: 1.151

GRAPHIC METHOD

MEAN (PHI): 2.02	SORTING: 0.58
MEAN (mm) : 0.25	MEDIAN (mm): 0.23
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 2.05	SORTING: 0.70
MEAN (mm) : 0.24	

DATA FILE NAME: DB99-8#4.TAB

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

SAMPLE NO.: DB99-8 S#5
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 16.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 220.45
SAMPLE WEIGHT AFTER WASH (GRAMS): 216.93

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	0.55	0.25	99.75
7	-1.50	2.800	0.93	0.42	99.58
10	-1.00	2.000	2.22	1.01	98.99
14	-0.50	1.400	4.46	2.02	97.98
18	0.00	1.000	8.12	3.68	96.32
25	0.50	0.710	16.52	7.49	92.51
35	1.00	0.500	29.75	13.50	86.50
45	1.50	0.355	48.66	22.07	77.93
60	2.00	0.250	103.07	46.75	53.25
80	2.50	0.180	176.17	79.91	20.09
120	3.00	0.125	213.21	96.72	3.28
170	3.50	0.090	216.72	98.31	1.69
200	3.75	0.075	216.79	98.34	1.66
230	4.00	0.063	218.62	99.17	0.83
PAN			220.44	100.00	0.00

PHI(5): 0.17 PHI(16): 1.15 PHI(25): 1.56
PHI(50): 2.05 PHI(75): 2.43 PHI(84): 2.62
PHI(95): 2.95

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.66%
SKEWNESS: -0.662 KURTOSIS: 1.313

GRAPHIC METHOD

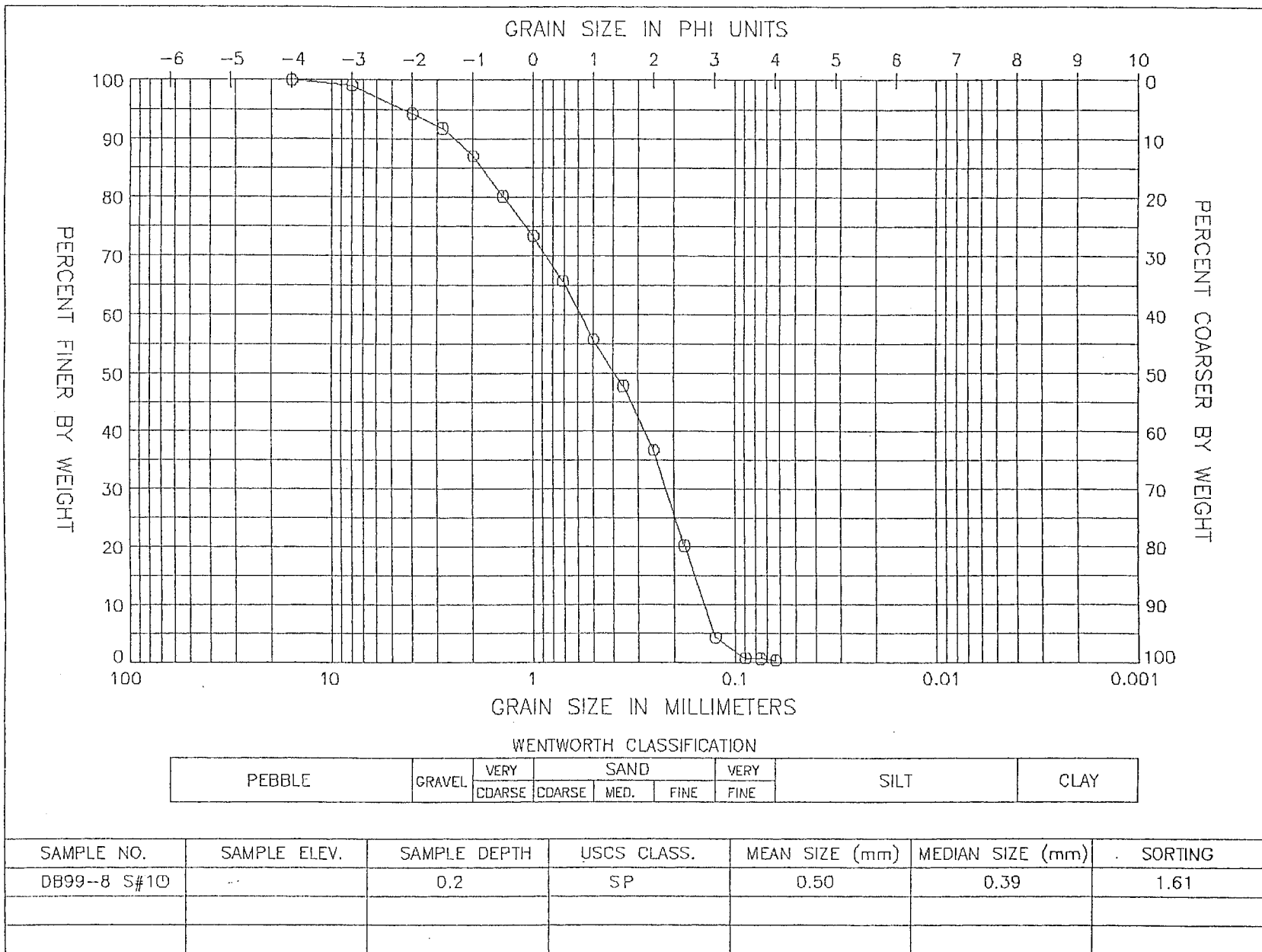
MEAN (PHI): 1.79 SORTING: 0.74
MEAN (mm): 0.29 MEDIAN (mm): 0.24
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

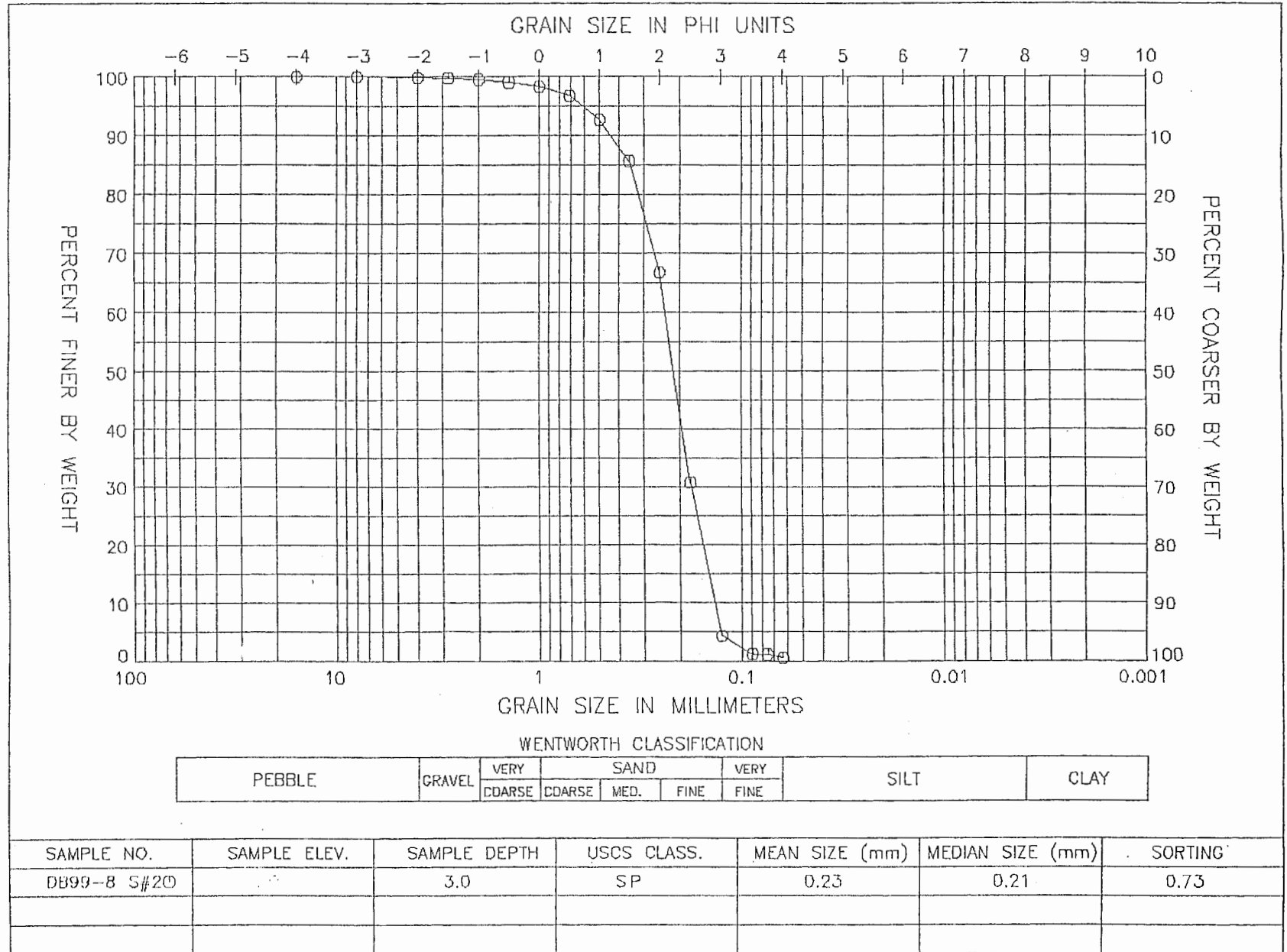
MEAN (PHI): 1.87 SORTING: 0.86
MEAN (mm): 0.27

DATA FILE NAME: DB99-8#5.TAB

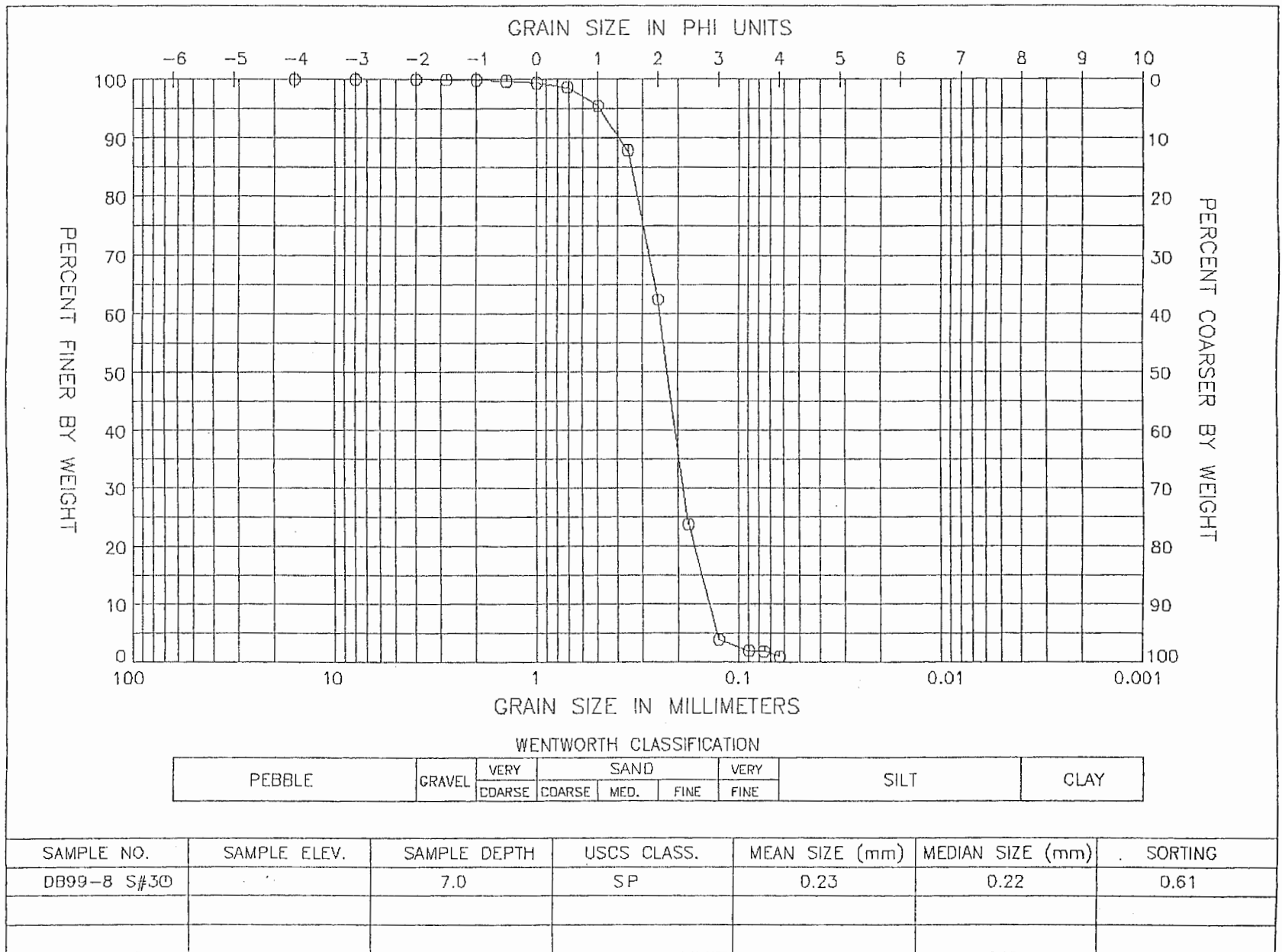
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



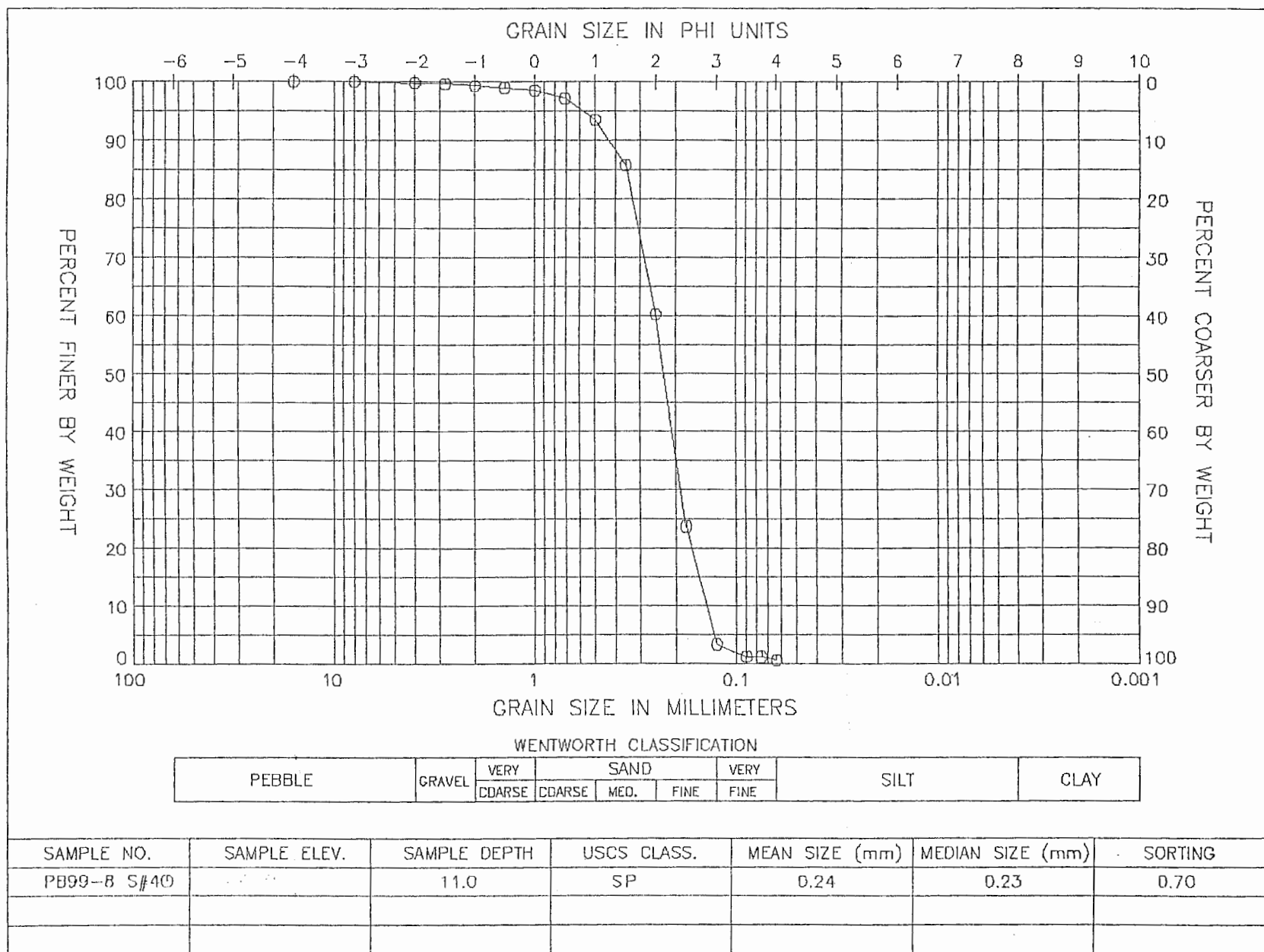
GRAIN SIZE DISTRIBUTION CURVE DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999

