

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=967646 Y=779619		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-99-1		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0		
5. NAME OF DRILLER ROB SUSKO		14. TOTAL NO. OF CORE BOXES 1		
6. DIRECTION OF HOLE VERTICAL		16. DATE HOLE Started: 4/20/00 Completed: 4/20/00		
7. THICKNESS OF BURDEN 0.0 ft		17. ELEVATION TOP OF HOLE -39.4 ft		
8. DEPTH DRILLED INTO ROCK 0.0 ft		18. TOTAL CORE RECOVERY FOR BORING 97%		
9. TOTAL DEPTH OF HOLE 19.0 ft		19. SIGNATURE OF GEOLOGIST IBRAHIM DREMALI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-39.4	0					SP
	1	[Dotted pattern]	SAND, fine-grained, trace shell hash, Gray (5Y-6/1)(SP)		1	Sample #1, Depth = 2.0' 0.21 mm, 0.75 phi sorting 1.34% silt
	2				2	Sample #2, Depth = 4.0' 0.21 mm, 0.72 phi sorting 1.30% silt
-43.9	4					
	5	[Dotted pattern]	SAND, fine-grained, trace shell hash, Gray (5Y-5/1) (SP) from -43.9' to -48.4'		3	Sample #3, Depth = 7.0' 0.29 mm, 0.94 phi sorting 1.10% silt
	6					
	7					
-48.4	9					
	10	[Dotted pattern]	SAND, fine-grained, trace shell hash, <1" rock at -49.1', Gray (5Y-6/1) (SP) from -48.4' to -58.4'		4	Sample #4, Depth= 11.0' 0.20 mm, 0.65 phi sorting 1.17% silt
	11					
	12					
	13					
	14					
	15					
	16	[Dotted pattern]			5	Sample #5, Depth = 16.0' 0.26 mm, 1.28 phi sorting 3.77% silt
	17					
	18					
-58.4	19		End of Boring			
	20					
	21					
	22					Note: Soils are classified in accordance with the Unified Soils Classification System.
	23					
	24					

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

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

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 191.85
SAMPLE WEIGHT AFTER WASH (GRAMS): 189.27

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	0.35	0.18	99.82
7	-1.50	2.800	0.57	0.30	99.70
10	-1.00	2.000	1.74	0.91	99.09
14	-0.50	1.400	2.70	1.41	98.59
18	0.00	1.000	3.79	1.98	98.02
25	0.50	0.710	5.97	3.11	96.89
35	1.00	0.500	10.24	5.34	94.66
45	1.50	0.355	18.08	9.42	90.58
60	2.00	0.250	46.51	24.24	75.76
80	2.50	0.180	111.68	58.21	41.79
120	3.00	0.125	176.14	91.81	8.19
170	3.50	0.090	189.14	98.59	1.41
200	3.75	0.075	189.27	98.66	1.34
230	4.00	0.063	190.56	99.33	0.67
PAN			191.85	100.00	0.00

PHI(5): 0.92 PHI(16): 1.72 PHI(25): 2.01
PHI(50): 2.38 PHI(75): 2.75 PHI(84): 2.88
PHI(95): 3.24

SIEVE LOSS(g): 0.00 SILT/CLAY: 1.34%
SKEWNESS: -0.515 KURTOSIS: 1.282

GRAPHIC METHOD

MEAN (PHI): 2.23 SORTING: 0.58
MEAN (mm) : 0.21 MEDIAN (mm): 0.19
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.26 SORTING: 0.75
MEAN (mm) : 0.21

DATA FILE NAME: db99-1#1.tab

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

SAMPLE NO.: DB99-1 #2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 187.42
SAMPLE WEIGHT AFTER WASH (GRAMS): 185.15

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	0.05	0.03	99.97
7	-1.50	2.800	0.13	0.07	99.93
10	-1.00	2.000	0.42	0.22	99.78
14	-0.50	1.400	0.96	0.51	99.49
18	0.00	1.000	1.88	1.00	99.00
25	0.50	0.710	3.93	2.10	97.90
35	1.00	0.500	11.17	5.96	94.04
45	1.50	0.355	25.03	13.36	86.64
60	2.00	0.250	59.21	31.59	68.41
80	2.50	0.180	112.32	59.93	40.07
120	3.00	0.125	169.11	90.23	9.77
170	3.50	0.090	184.45	98.42	1.58
200	3.75	0.075	184.99	98.70	1.30
230	4.00	0.063	186.24	99.37	0.63
PAN			187.42	100.00	0.00

PHI (5): 0.88 PHI (16): 1.57 PHI (25): 1.82
PHI (50): 2.32 PHI (75): 2.75 PHI (84): 2.90
PHI (95): 3.29

SIEVE LOSS (g): 0.00 SILT/CLAY: 1.30%
SKEWNESS: -0.364 KURTOSIS: 1.065

GRAPHIC METHOD

MEAN (PHI): 2.19 SORTING: 0.66
MEAN (mm) : 0.22 MEDIAN (mm): 0.20
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.22 SORTING: 0.72
MEAN (mm) : 0.21

DATA FILE NAME: DB99-1#2.TAB

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

SAMPLE NO.: DB99-1 S#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 7.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 177.96
SAMPLE WEIGHT AFTER WASH (GRAMS): 176.05

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	0.63	0.35	99.65
5	-2.00	4.000	0.75	0.42	99.58
7	-1.50	2.800	1.37	0.77	99.23
10	-1.00	2.000	2.15	1.21	98.79
14	-0.50	1.400	3.92	2.20	97.80
18	0.00	1.000	6.79	3.82	96.18
25	0.50	0.710	14.60	8.20	91.80
35	1.00	0.500	31.85	17.90	82.10
45	1.50	0.355	55.66	31.28	68.72
60	2.00	0.250	96.17	54.04	45.96
80	2.50	0.180	138.95	78.08	21.92
120	3.00	0.125	169.61	95.31	4.69
170	3.50	0.090	175.84	98.81	1.19
200	3.75	0.075	176.00	98.90	1.10
230	4.00	0.063	176.99	99.45	0.55
PAN			177.95	99.99	0.01

PHI(5): 0.13 PHI(16): 0.90 PHI(25): 1.27
PHI(50): 1.91 PHI(75): 2.44 PHI(84): 2.67
PHI(95): 2.99

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.10%
SKEWNESS: -0.394 KURTOSIS: 1.000

GRAPHIC METHOD

MEAN (PHI): 1.72 SORTING: 0.88
MEAN (mm) : 0.30 MEDIAN (mm): 0.27
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.78 SORTING: 0.94
MEAN (mm) : 0.29

DATA FILE NAME: DB99-1#3.TAB

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

SAMPLE NO.: DB99-1 S#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 11.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 243.76
SAMPLE WEIGHT AFTER WASH (GRAMS): 241.00

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	0.18	99.82
7	-1.50	2.800	0.65	0.27	99.73
10	-1.00	2.000	0.98	0.40	99.60
14	-0.50	1.400	1.48	0.61	99.39
18	0.00	1.000	2.09	0.86	99.14
25	0.50	0.710	3.26	1.34	98.66
35	1.00	0.500	7.65	3.14	96.86
45	1.50	0.355	18.25	7.49	92.51
60	2.00	0.250	57.06	23.41	76.59
80	2.50	0.180	134.19	55.05	44.95
120	3.00	0.125	222.37	91.22	8.78
170	3.50	0.090	240.71	98.75	1.25
200	3.75	0.075	240.90	98.83	1.17
230	4.00	0.063	242.33	99.41	0.59
PAN			243.74	99.99	0.01

PHI (5): 1.21 PHI (16): 1.77 PHI (25): 2.03
PHI (50): 2.42 PHI (75): 2.78 PHI (84): 2.90
PHI (95): 3.25

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.17%
SKEWNESS: -0.331 KURTOSIS: 1.112

GRAPHIC METHOD

MEAN (PHI): 2.31 SORTING: 0.57
MEAN (mm) : 0.20 MEDIAN (mm): 0.19
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.33 SORTING: 0.65
MEAN (mm) : 0.20

DATA FILE NAME: DB99-1#4.TAB

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

SAMPLE NO.: DB99-1 #5
 SAMPLE ELEV. (FT. NGVD):
 SAMPLE DEPTH (FT.): 16.5
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 180.90
 SAMPLE WEIGHT AFTER WASH (GRAMS): 176.29

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	0.34	0.19	99.81
5	-2.00	4.000	1.06	0.59	99.41
7	-1.50	2.800	1.57	0.87	99.13
10	-1.00	2.000	2.32	1.28	98.72
14	-0.50	1.400	3.13	1.73	98.27
18	0.00	1.000	3.92	2.17	97.83
25	0.50	0.710	7.65	4.23	95.77
35	1.00	0.500	10.76	5.95	94.05
45	1.50	0.355	20.37	11.26	88.74
60	2.00	0.250	60.59	33.49	66.51
80	2.50	0.180	123.23	68.12	31.88
120	3.00	0.125	168.13	92.94	7.06
170	3.50	0.090	176.05	97.32	2.68
200	3.75	0.075	176.23	97.42	2.58
230	4.00	0.063	178.58	98.71	1.29
PAN			180.89	99.99	0.01

PHI (5): 0.72 PHI (16): 1.61 PHI (25): 1.81
 PHI (50): 2.24 PHI (75): 2.64 PHI (84): 2.82
 PHI (95): 3.24

SIEVE LOSS (g): 0.01 SILT/CLAY: 2.58%
 SKEWNESS: -0.426 KURTOSIS: 1.240

GRAPHIC METHOD

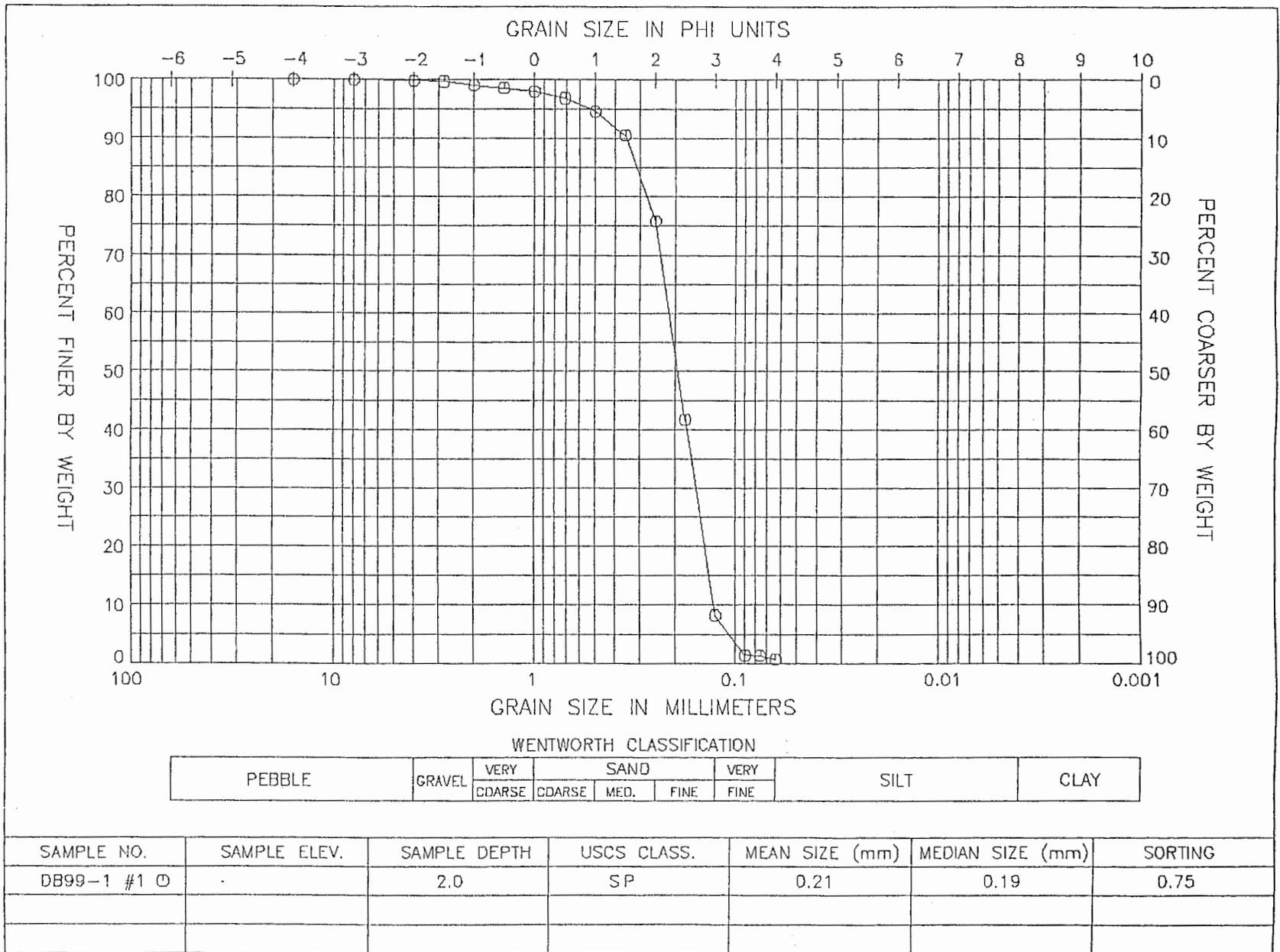
MEAN (PHI): 2.12 SORTING: 0.61
 MEAN (mm) : 0.23 MEDIAN (mm): 0.21
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

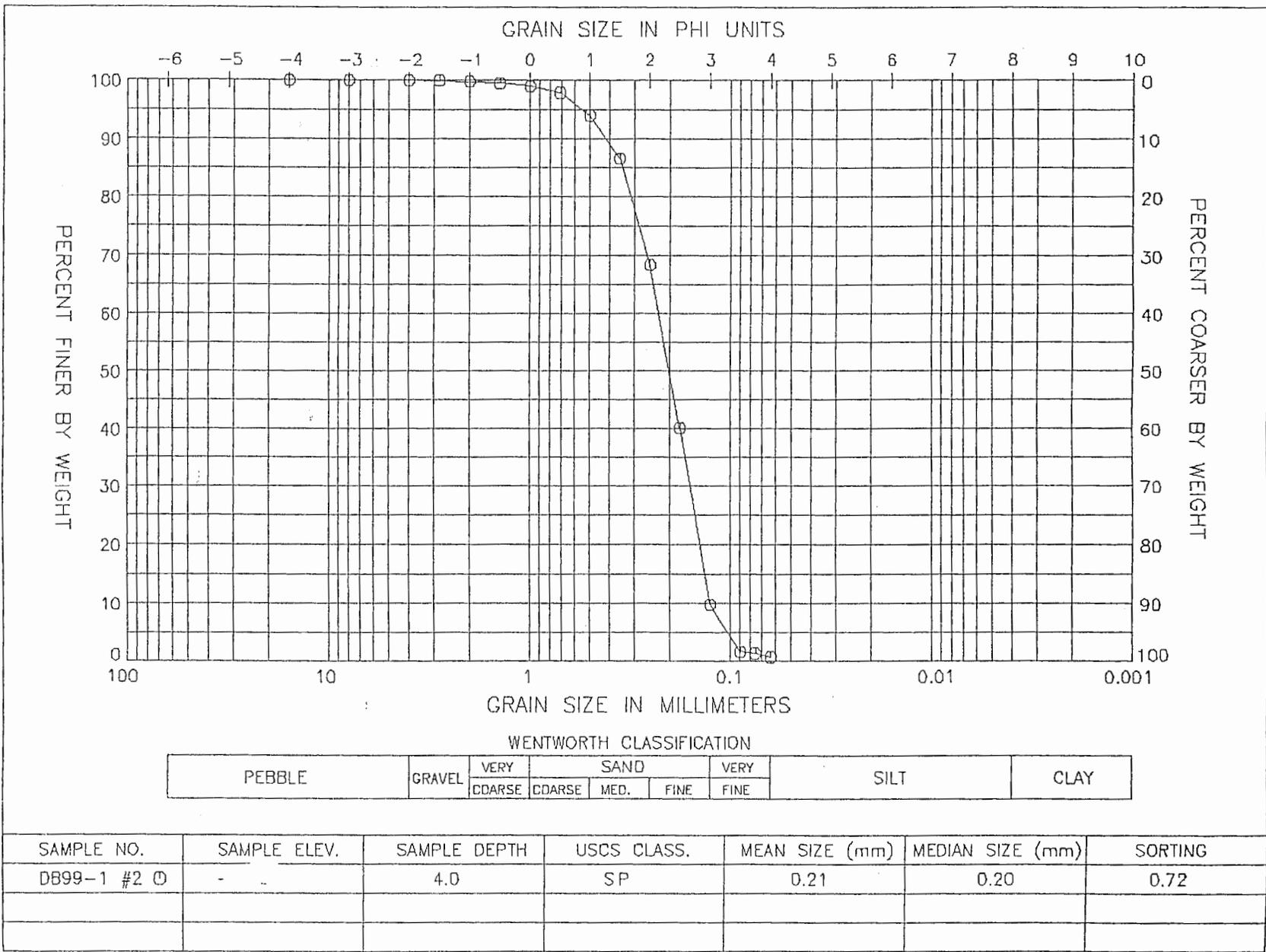
MEAN (PHI): 2.13 SORTING: 0.83
 MEAN (mm) : 0.23

DATA FILE NAME: DB99-1#5.TAB

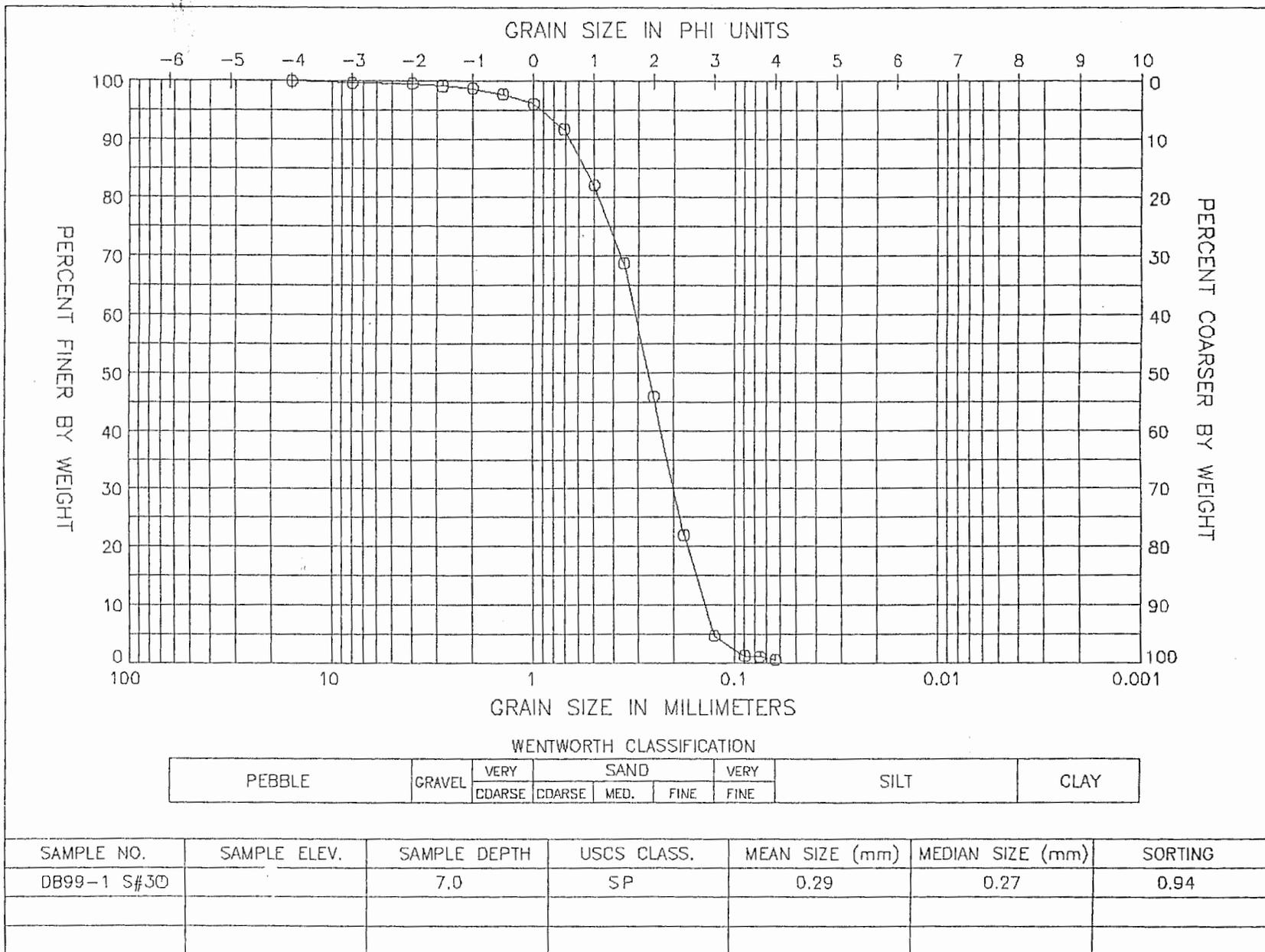
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



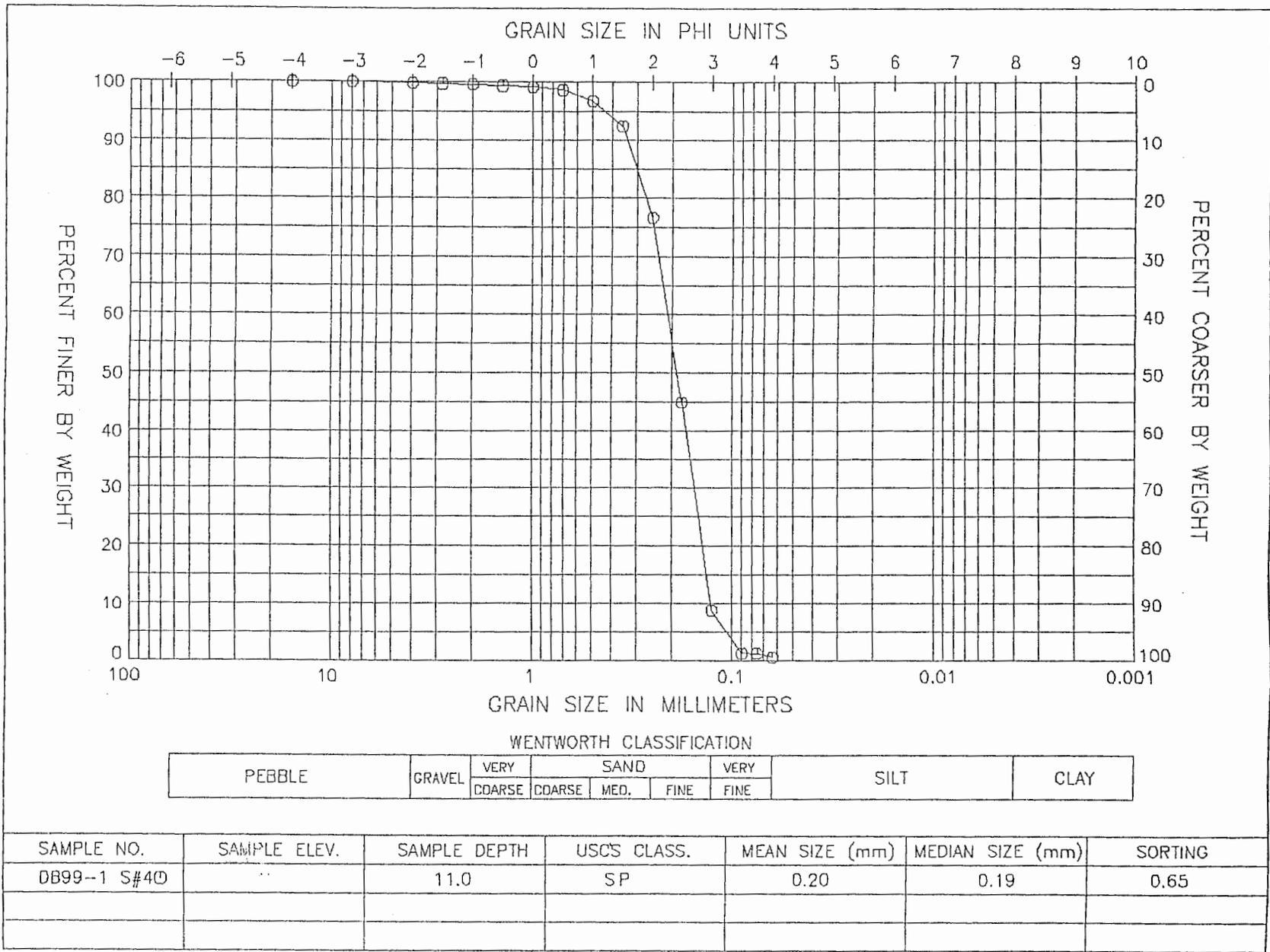
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999

