

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT		DELRAY BEACH		
2. LOCATION		(Coordinates or Station) X= 966,859 Y= 777,254		
3. DRILLING AGENCY:		ALPINE SEISMIC		
4. HOLE NO.		(As shown on drawing title and file number) DB-99-3		
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		19.6' FT		
10. SIZE AND TYPE OF BIT		3"		
11. DATUM FOR ELEVATION SHOWN		(TBM or MSL) 35.2 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		-34.0 ft.		
18. TOTAL CORE RECOVERY FOR BORING		94%		
19. SIGNATURE OF GEOLOGIST		IBRAHIM DREMALI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-34	0					SP
-35.8	1		SAND, fine-grained, little shell hash, Gray (5Y-6/1)(SP)		1	Sample #1, Depth = 1.0' 0.27 mm, 0.99 phi sorting 1.0% silt
	2					
	3					
	4				2	
	5		fine-grained, trace shell hash, Gray (5Y-6/1) (SP) from -35.8' to -43.2'			Sample #2, Depth = 5.0' 0.26 mm, 0.71 phi sorting 0.98% silt
	6					
	7					
	8				3	
-43.2	9					Sample #3, Depth = 9.0' 0.25 mm, 0.73 phi sorting 1.23% silt
	10					
	11				4	
	12					Sample #4, Depth = 11.2' 0.23 mm, 0.69 phi sorting 6.77% silt
	13					
	14		fine-grained, trace shell hash, Gray (5Y-6/1) (SP) from -43.2' to -52.4'			
	15					
	16				5	
	17					Sample #5, Depth = 15.0' 0.20 mm, 0.59 phi sorting 1.36% silt
-52.4	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.: DB99-3 S#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 173.17
SAMPLE WEIGHT AFTER WASH (GRAMS): 171.49

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	0.71	0.41	99.59
7	-1.50	2.800	1.54	0.89	99.11
10	-1.00	2.000	2.78	1.61	98.39
14	-0.50	1.400	5.25	3.03	96.97
18	0.00	1.000	8.80	5.08	94.92
25	0.50	0.710	16.32	9.42	90.58
35	1.00	0.500	29.41	16.98	83.02
45	1.50	0.355	43.81	25.30	74.70
60	2.00	0.250	74.95	43.28	56.72
80	2.50	0.180	122.65	70.83	29.17
120	3.00	0.125	162.06	93.58	6.42
170	3.50	0.090	171.32	98.93	1.07
200	3.75	0.075	171.44	99.00	1.00
230	4.00	0.063	172.30	99.50	0.50
PAN			173.16	99.99	0.01

PHI(5): -0.02 PHI(16): 0.93 PHI(25): 1.48
PHI(50): 2.12 PHI(75): 2.59 PHI(84): 2.79
PHI(95): 3.13

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.00%
SKEWNESS: -0.610 KURTOSIS: 1.164

GRAPHIC METHOD

MEAN (PHI): 1.79 SORTING: 0.93
MEAN (mm): 0.29 MEDIAN (mm): 0.23
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.89 SORTING: 0.99
MEAN (mm): 0.27

DATA FILE NAME: db99-3#1.tab

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

SAMPLE NO.: DB99-3 S#2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 5.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 202.19
SAMPLE WEIGHT AFTER WASH (GRAMS): 200.35

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	0.03	99.97
7	-1.50	2.800	0.18	0.09	99.91
10	-1.00	2.000	0.65	0.32	99.68
14	-0.50	1.400	1.33	0.66	99.34
18	0.00	1.000	2.83	1.40	98.60
25	0.50	0.710	6.36	3.15	96.85
35	1.00	0.500	19.88	9.83	90.17
45	1.50	0.355	43.80	21.66	78.34
60	2.00	0.250	101.17	50.04	49.96
80	2.50	0.180	162.68	80.46	19.54
120	3.00	0.125	194.67	96.28	3.72
170	3.50	0.090	200.11	98.97	1.03
200	3.75	0.075	200.21	99.02	0.98
230	4.00	0.063	201.23	99.53	0.47
PAN			202.19	100.00	0.00

PHI(5): 0.64 PHI(16): 1.26 PHI(25): 1.56
PHI(50): 2.00 PHI(75): 2.41 PHI(84): 2.61
PHI(95): 2.96

SIEVE LOSS(g): 0.00 SILT/CLAY: 0.98%
SKEWNESS: -0.296 KURTOSIS: 1.117

GRAPHIC METHOD

MEAN (PHI): 1.89 SORTING: 0.68
MEAN (mm): 0.27 MEDIAN (mm): 0.25
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.93 SORTING: 0.71
MEAN (mm): 0.26

DATA FILE NAME: DB99-3#2.TAB

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

SAMPLE NO.: DB99-3 S#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 9.
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 196.14
SAMPLE WEIGHT AFTER WASH (GRAMS): 193.99

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	0.26	0.13	99.87
7	-1.50	2.800	0.36	0.18	99.82
10	-1.00	2.000	0.88	0.45	99.55
14	-0.50	1.400	1.67	0.85	99.15
18	0.00	1.000	3.00	1.53	98.47
25	0.50	0.710	6.84	3.49	96.51
35	1.00	0.500	16.80	8.57	91.43
45	1.50	0.355	35.70	18.20	81.80
60	2.00	0.250	93.46	47.65	52.35
80	2.50	0.180	153.80	78.41	21.59
120	3.00	0.125	186.01	94.84	5.16
170	3.50	0.090	193.35	98.58	1.42
200	3.75	0.075	193.72	98.77	1.23
230	4.00	0.063	194.96	99.40	0.60
PAN			196.11	99.98	0.02

PHI(5): 0.65 PHI(16): 1.39 PHI(25): 1.62
PHI(50): 2.04 PHI(75): 2.44 PHI(84): 2.67
PHI(95): 3.02

SIEVE LOSS(g): 0.03 SILT/CLAY: 1.23%
SKEWNESS: -0.316 KURTOSIS: 1.173

GRAPHIC METHOD

MEAN (PHI): 1.95 SORTING: 0.64
MEAN (mm) : 0.26 MEDIAN (mm): 0.24
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.98 SORTING: 0.73
MEAN (mm) : 0.25

DATA FILE NAME: DB99-3#3.TAB

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

SAMPLE NO.: DB99-3#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 11.2
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 114.85
SAMPLE WEIGHT AFTER WASH (GRAMS): 107.17

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	0.00	0.00	100.00
7	-1.50	2.800	0.16	0.14	99.86
10	-1.00	2.000	0.28	0.24	99.76
14	-0.50	1.400	0.44	0.38	99.62
18	0.00	1.000	0.76	0.66	99.34
25	0.50	0.710	1.47	1.28	98.72
35	1.00	0.500	4.85	4.22	95.78
45	1.50	0.355	16.46	14.33	85.67
60	2.00	0.250	45.80	39.88	60.12
80	2.50	0.180	82.36	71.71	28.29
120	3.00	0.125	104.33	90.84	9.16
170	3.50	0.090	107.02	93.18	6.82
200	3.75	0.075	107.07	93.23	6.77
230	4.00	0.063	110.95	96.60	3.40
PAN			114.81	99.97	0.03

PHI(5): 1.04 PHI(16): 1.53 PHI(25): 1.71
PHI(50): 2.16 PHI(75): 2.59 PHI(84): 2.82
PHI(95): 3.88

SIEVE LOSS(g): 0.04 SILT/CLAY: 6.77%
SKEWNESS: 0.467 KURTOSIS: 1.328

GRAPHIC METHOD

MEAN (PHI): 2.29 SORTING: 0.64
MEAN (mm): 0.20 MEDIAN (mm): 0.22
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.11 SORTING: 0.69
MEAN (mm): 0.23

DATA FILE NAME: DB99-3#4.TAB

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

SAMPLE NO.: DB99-3 S#5
SAMPLE ELEV. (FT. NGVD): -
SAMPLE DEPTH (FT.): 15.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 174.13
SAMPLE WEIGHT AFTER WASH (GRAMS): 171.92

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	0.00	0.00	100.00
5	-2.00	4.000	0.02	0.01	99.99
7	-1.50	2.800	0.03	0.02	99.98
10	-1.00	2.000	0.23	0.13	99.87
14	-0.50	1.400	0.46	0.26	99.74
18	0.00	1.000	0.81	0.47	99.53
25	0.50	0.710	1.59	0.91	99.09
35	1.00	0.500	4.76	2.73	97.27
45	1.50	0.355	12.33	7.08	92.92
60	2.00	0.250	44.00	25.27	74.73
80	2.50	0.180	106.52	61.17	38.83
120	3.00	0.125	161.03	92.48	7.52
170	3.50	0.090	171.51	98.50	1.50
200	3.75	0.075	171.77	98.64	1.36
230	4.00	0.063	172.98	99.34	0.66
PAN			174.11	99.99	0.01

PHI(5): 1.26 PHI(16): 1.75 PHI(25): 1.99
PHI(50): 2.34 PHI(75): 2.72 PHI(84): 2.86
PHI(95): 3.21

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.36%
SKEWNESS: -0.195 KURTOSIS: 1.097

GRAPHIC METHOD

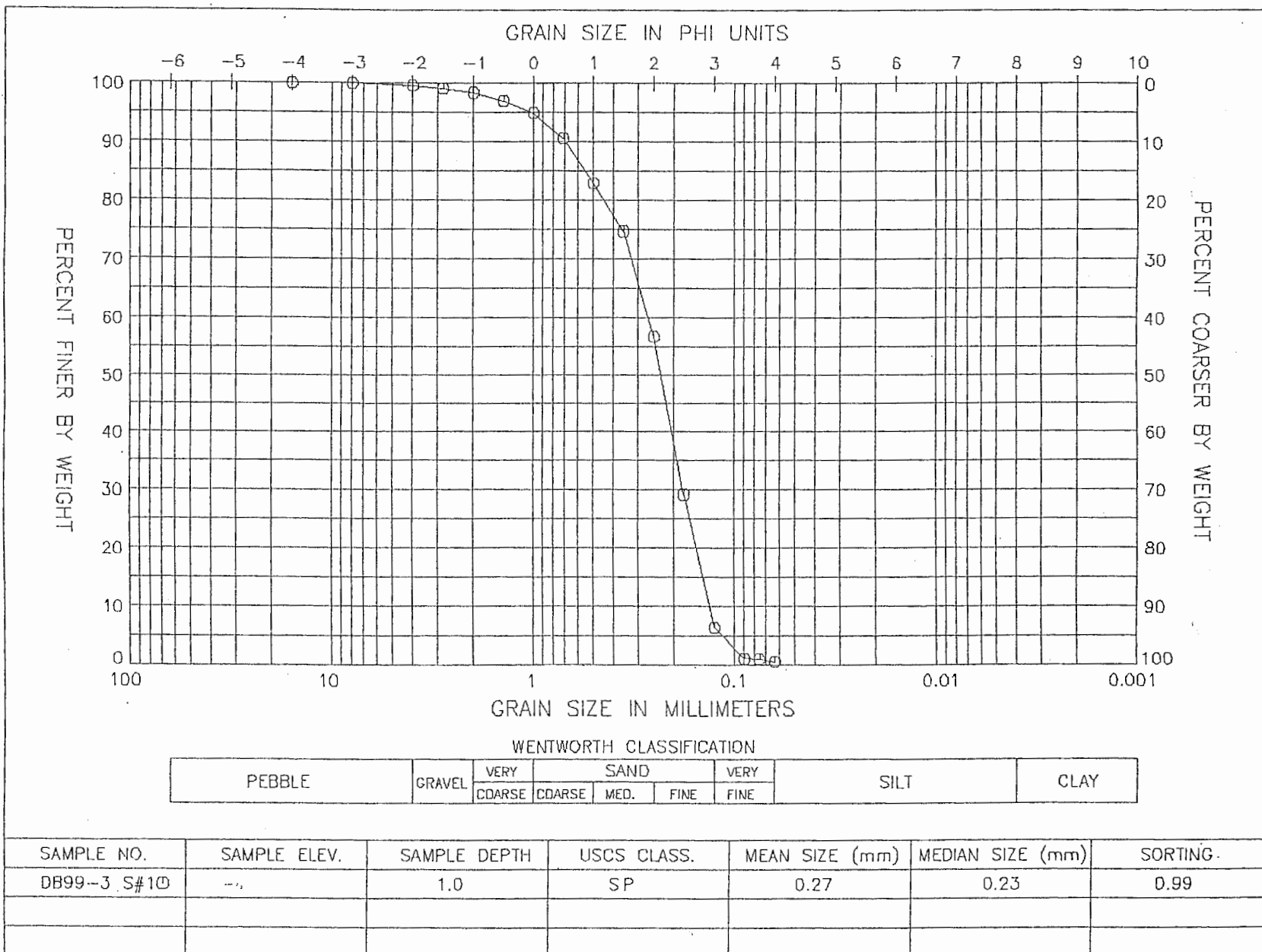
MEAN (PHI): 2.28 SORTING: 0.56
MEAN (mm): 0.21 MEDIAN (mm): 0.20
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

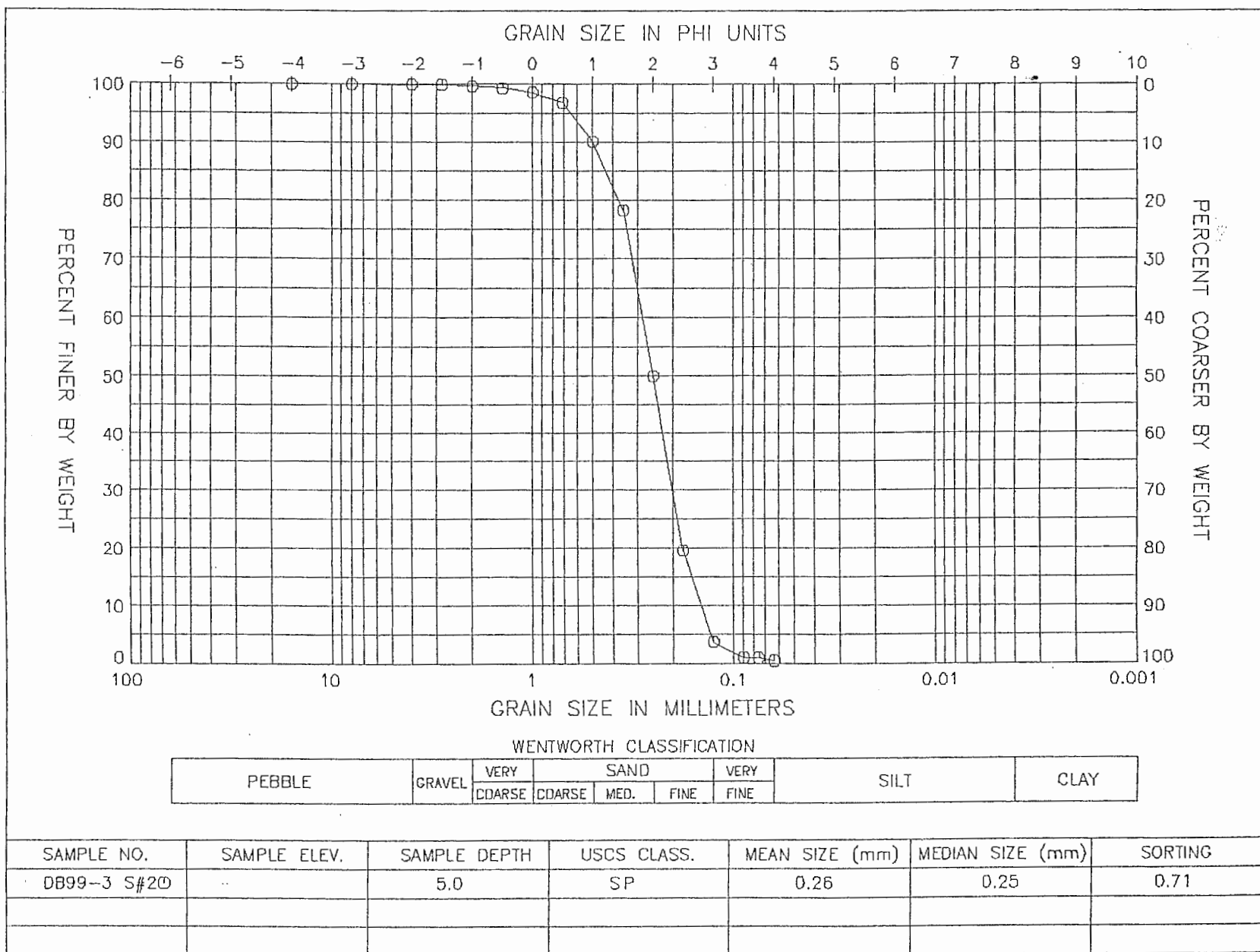
MEAN (PHI): 2.30 SORTING: 0.59
MEAN (mm): 0.20

DATA FILE NAME: DB99-3#5.TAB

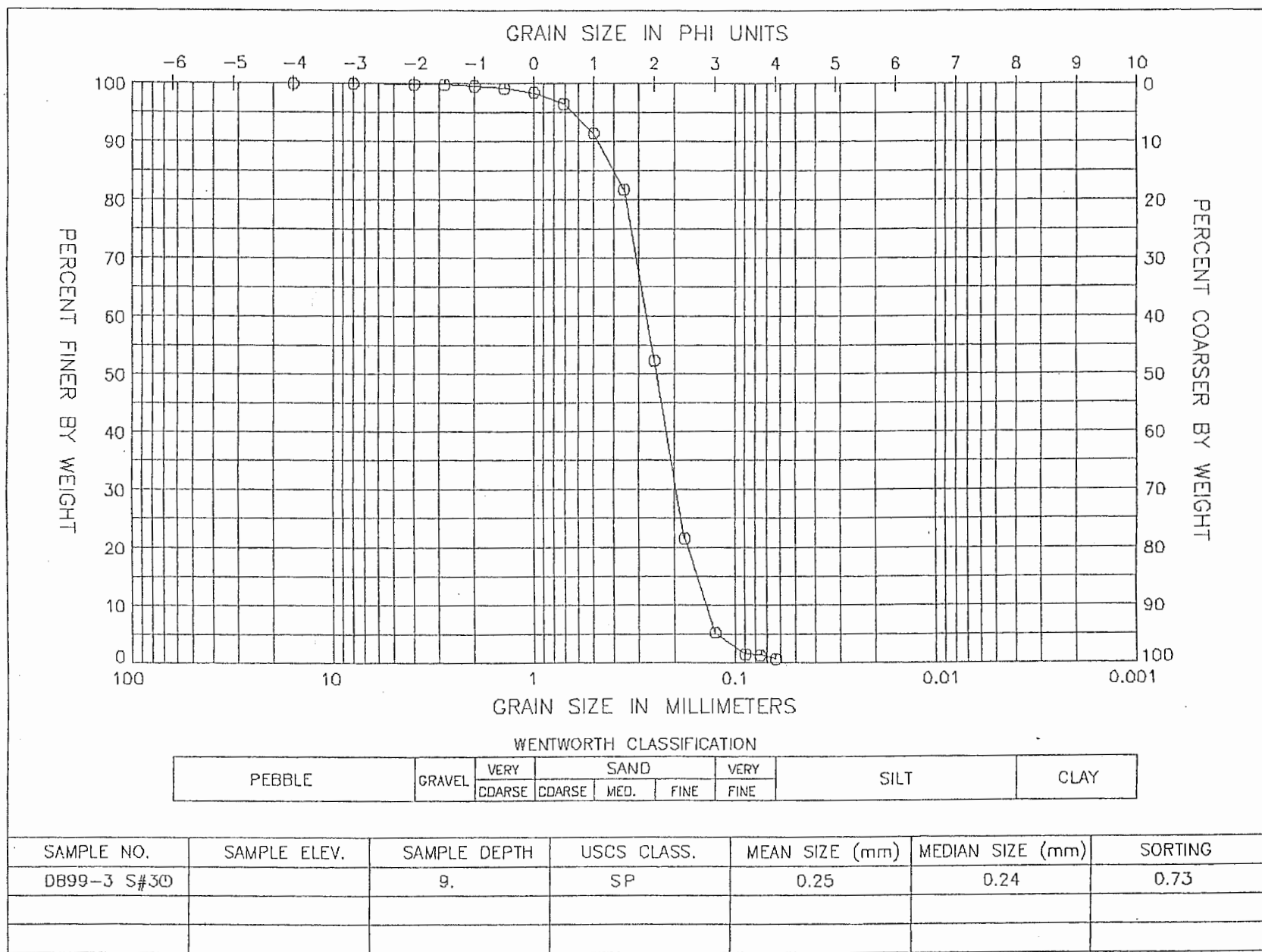
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



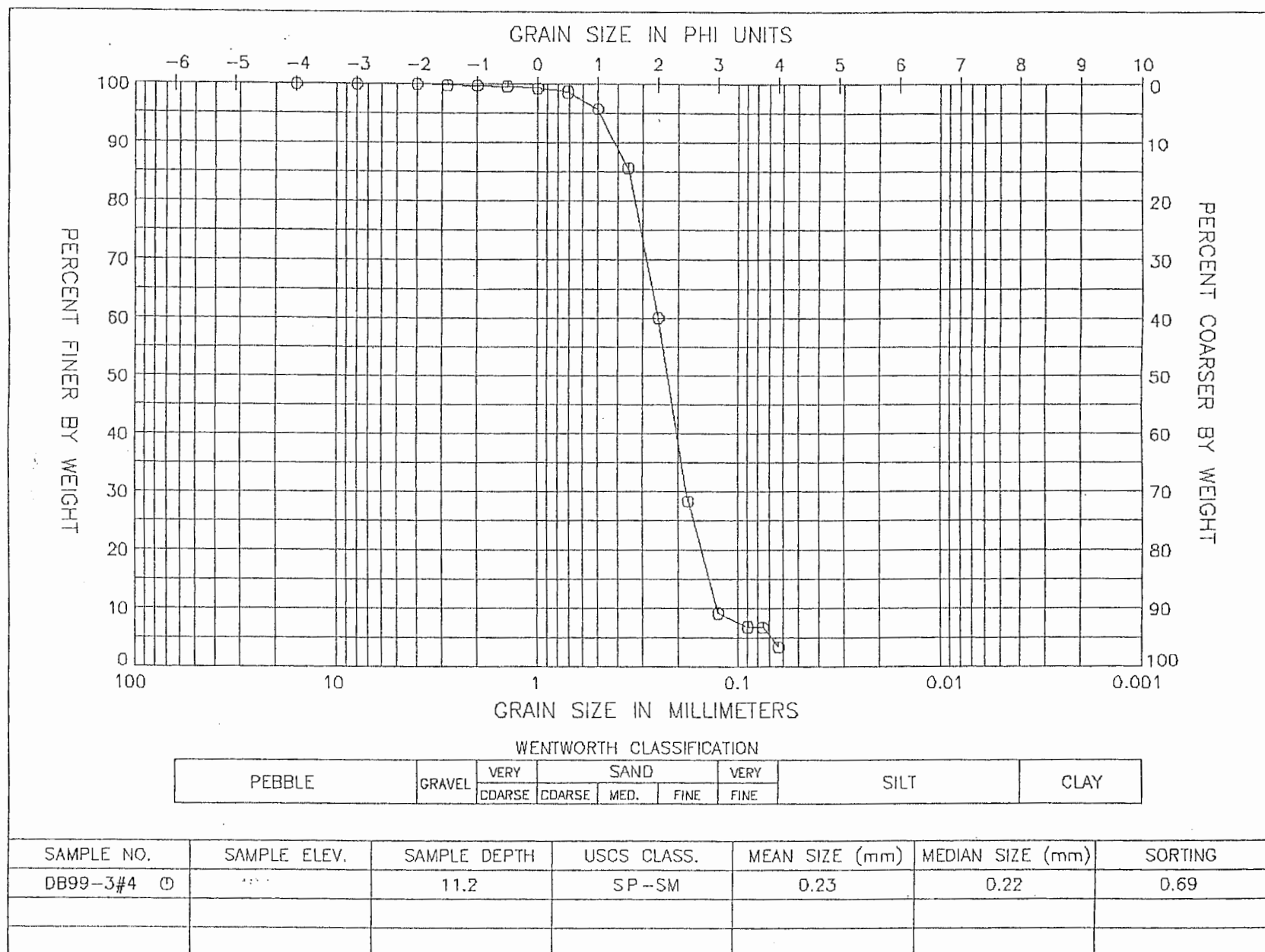
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
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GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999

