

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT		10. SIZE AND TYPE OF BIT 3"		
DELRAY BEACH				
2. LOCATION		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)		
(Coordinates or Station)		NGVD		
X= 967299 Y= 775505		12. MANUFACTURER'S DESIGNATION OF DRILL		
3. DRILLING AGENCY:		ALPINE PNEUMATIC		
ALPINE SEISMIC		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN		
4. HOLE NO. (As shown on drawing title and file number)		disturbed: 0.0 undisturbed: 0.0		
DB-99-19		14. TOTAL NO. OF CORE BOXES 1		
5. NAME OF DRILLER		15. ELEVATION GROUND WATER		
ROB SUSKO				
6. DIRECTION OF HOLE		16. DATE HOLE Started Completed		
VERTICAL		4/20/99 4/20/99		
7. THICKNESS OF BURDEN 0.0 FT		17. ELEVATION TOP OF HOLE -70.0 ft.		
8. DEPTH DRILLED INTO ROCK 0.0 FT		18. TOTAL CORE RECOVERY FOR BORING 83%		
9. TOTAL DEPTH OF HOLE 15.9' FT		19. SIGNATURE OF GEOLOGIST IBRAHIM DREMALI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-70	0					SP
	1		SAND, fine-grained, little shell hash, Light Gray (5Y-7/1) (SP)		1	Sample #1, Depth = 2.0' 0.16 mm, 0.41 phi sorting 1.47 % silt
-73.4	3					
	4				2	Sample #2, Depth = 6.0' 0.19 mm, 0.68 phi sorting 2.39% silt
	5					
	6					
	7					
	8		fine-grained, trace shell hash, Light Gray (5Y-7/1) (SP) from -73.4.8' to -83.5'			
	9				3	Sample #3, Depth = 11.0' 0.20 mm, 0.96 phi sorting 2.92% silt
	10					
	11					
-83.5	13					
	14		fine-grained, shelly sand, Gray (5Y-6/1) (SP) from -83.5' to -85.9'		4	Sample #4, Depth = 14.5' 0.26 mm, 1.51 phi sorting 4.18% silt
-85.9	15					
	16		End of Boring			
	17					
	18					
	19					
	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.: DB99-19 S#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 2.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 210.64
SAMPLE WEIGHT AFTER WASH (GRAMS): 207.71

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	0.03	0.01	99.99
10	-1.00	2.000	0.13	0.06	99.94
14	-0.50	1.400	0.19	0.09	99.91
18	0.00	1.000	0.28	0.13	99.87
25	0.50	0.710	0.41	0.19	99.81
35	1.00	0.500	0.73	0.35	99.65
45	1.50	0.355	1.51	0.72	99.28
60	2.00	0.250	7.46	3.54	96.46
80	2.50	0.180	54.00	25.64	74.36
120	3.00	0.125	174.41	82.80	17.20
170	3.50	0.090	207.24	98.39	1.61
200	3.75	0.075	207.54	98.53	1.47
230	4.00	0.063	209.13	99.28	0.72
PAN			210.64	100.00	0.00

PHI(5): 2.03 PHI(16): 2.28 PHI(25): 2.49
PHI(50): 2.71 PHI(75): 2.93 PHI(84): 3.04
PHI(95): 3.39

SIEVE LOSS(g): 0.00 SILT/CLAY: 1.47%
SKEWNESS: -0.002 KURTOSIS: 1.248

GRAPHIC METHOD

MEAN (PHI): 2.69 SORTING: 0.38
MEAN (mm): 0.15 MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.68 SORTING: 0.41
MEAN (mm): 0.16

DATA FILE NAME: DB99-19#1.TAB

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

SAMPLE NO.: DB99-19 S#2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 6.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 228.86
SAMPLE WEIGHT AFTER WASH (GRAMS): 224.36

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	0.11	0.05	99.95
7	-1.50	2.800	0.44	0.19	99.81
10	-1.00	2.000	1.09	0.48	99.52
14	-0.50	1.400	2.05	0.90	99.10
18	0.00	1.000	3.25	1.42	98.58
25	0.50	0.710	4.79	2.09	97.91
35	1.00	0.500	8.09	3.53	96.47
45	1.50	0.355	15.83	6.92	93.08
60	2.00	0.250	40.98	17.91	82.09
80	2.50	0.180	102.82	44.93	55.07
120	3.00	0.125	205.61	89.84	10.16
170	3.50	0.090	222.83	97.37	2.63
200	3.75	0.075	223.40	97.61	2.39
230	4.00	0.063	226.59	99.01	0.99
PAN			228.84	99.99	0.01

PHI(5): 1.22 PHI(16): 1.91 PHI(25): 2.13
PHI(50): 2.56 PHI(75): 2.83 PHI(84): 2.93
PHI(95): 3.34

SIEVE LOSS(g): 0.02 SILT/CLAY: 2.39%
SKEWNESS: -0.542 KURTOSIS: 1.239

GRAPHIC METHOD

MEAN (PHI): 2.39 SORTING: 0.51
MEAN (mm): 0.19 MEDIAN (mm): 0.17
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.41 SORTING: 0.68
MEAN (mm): 0.19

DATA FILE NAME: DB99-19#2.TAB

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

SAMPLE NO.: DB99-19 S#3
SAMPLE ELEV. (FT. NGVD): -
SAMPLE DEPTH (FT.): 11.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 188.15
SAMPLE WEIGHT AFTER WASH (GRAMS): 183.48

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	0.60	0.32	99.68
5	-2.00	4.000	1.49	0.79	99.21
7	-1.50	2.800	2.33	1.24	98.76
10	-1.00	2.000	3.96	2.10	97.90
14	-0.50	1.400	5.81	3.09	96.91
18	0.00	1.000	7.57	4.02	95.98
25	0.50	0.710	9.30	4.94	95.06
35	1.00	0.500	12.49	6.64	93.36
45	1.50	0.355	19.19	10.20	89.80
60	2.00	0.250	41.91	22.27	77.73
80	2.50	0.180	82.32	43.75	56.25
120	3.00	0.125	168.83	89.73	10.27
170	3.50	0.090	182.13	96.80	3.20
200	3.75	0.075	182.65	97.08	2.92
230	4.00	0.063	185.36	98.52	1.48
PAN			188.13	99.99	0.01

PHI(5): 0.52	PHI(16): 1.74	PHI(25): 2.06
PHI(50): 2.57	PHI(75): 2.84	PHI(84): 2.94
PHI(95): 3.37		

SIEVE LOSS(g): 0.02	SILT/CLAY: 2.92%
SKEWNESS: -1.041	KURTOSIS: 1.508

GRAPHIC METHOD

MEAN (PHI): 2.23	SORTING: 0.60
MEAN (mm): 0.21	MEDIAN (mm): 0.17
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 2.30	SORTING: 0.96
MEAN (mm): 0.20	

DATA FILE NAME: DB99-19#3.TAB

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

SAMPLE NO.: DB99-19 S#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 14.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 210.68
SAMPLE WEIGHT AFTER WASH (GRAMS): 203.74

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	4.25	2.02	97.98
5	-2.00	4.000	6.42	3.05	96.95
7	-1.50	2.800	10.16	4.82	95.18
10	-1.00	2.000	15.22	7.22	92.78
14	-0.50	1.400	21.09	10.01	89.99
18	0.00	1.000	25.27	11.99	88.01
25	0.50	0.710	29.37	13.94	86.06
35	1.00	0.500	35.10	16.66	83.34
45	1.50	0.355	43.30	20.55	79.45
60	2.00	0.250	62.41	29.62	70.38
80	2.50	0.180	95.58	45.37	54.63
120	3.00	0.125	182.03	86.40	13.60
170	3.50	0.090	200.80	95.31	4.69
200	3.75	0.075	201.87	95.82	4.18
230	4.00	0.063	207.17	98.33	1.67
PAN			210.64	99.98	0.02

PHI(5): -1.46 PHI(16): 0.88 PHI(25): 1.75
PHI(50): 2.56 PHI(75): 2.86 PHI(84): 2.97
PHI(95): 3.48

SIEVE LOSS(g): 0.04 SILT/CLAY: 4.18%
SKEWNESS: -1.479 KURTOSIS: 1.816

GRAPHIC METHOD

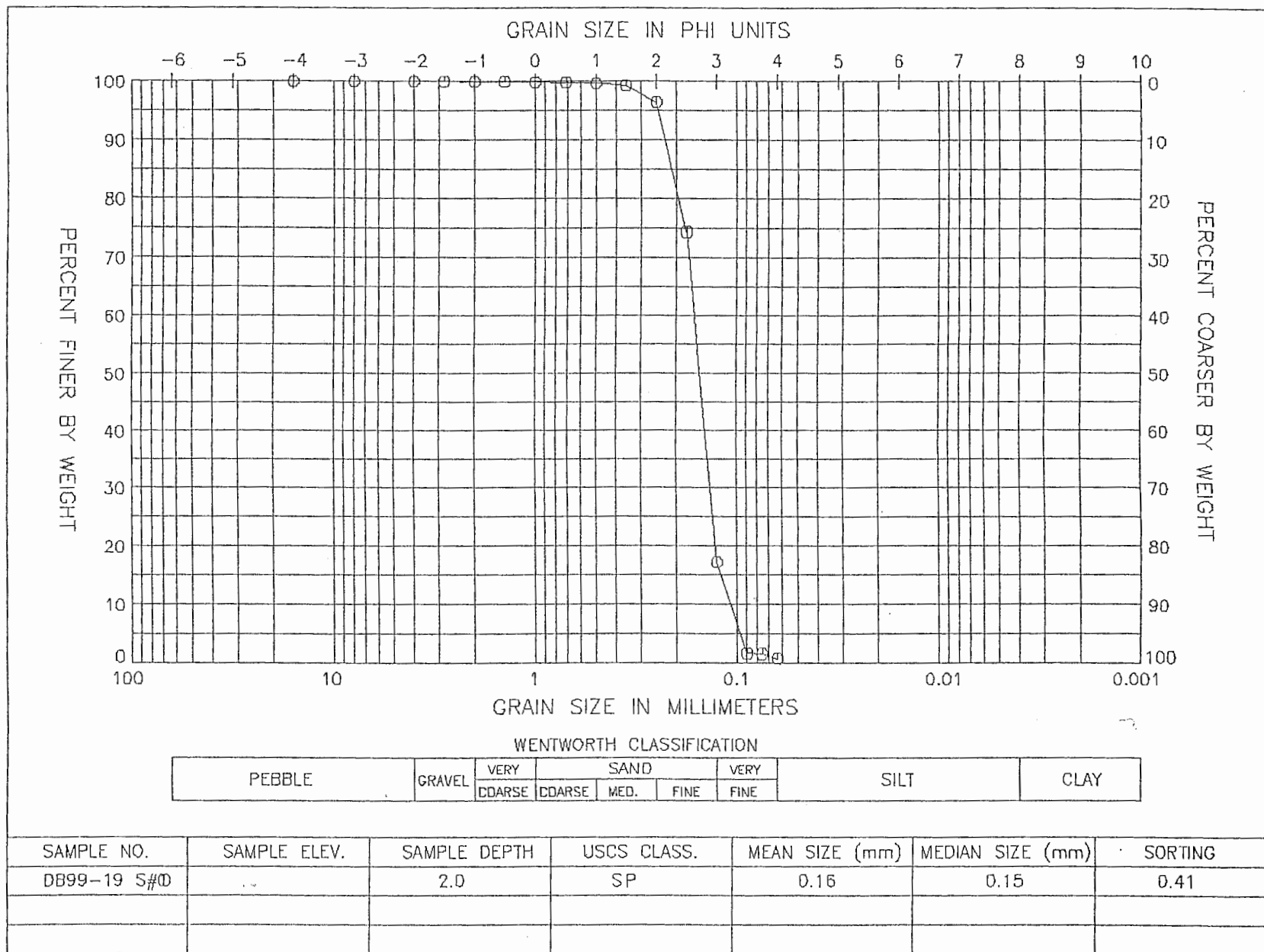
MEAN (PHI): 1.69 SORTING: 1.05
MEAN (mm): 0.31 MEDIAN (mm): 0.17
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

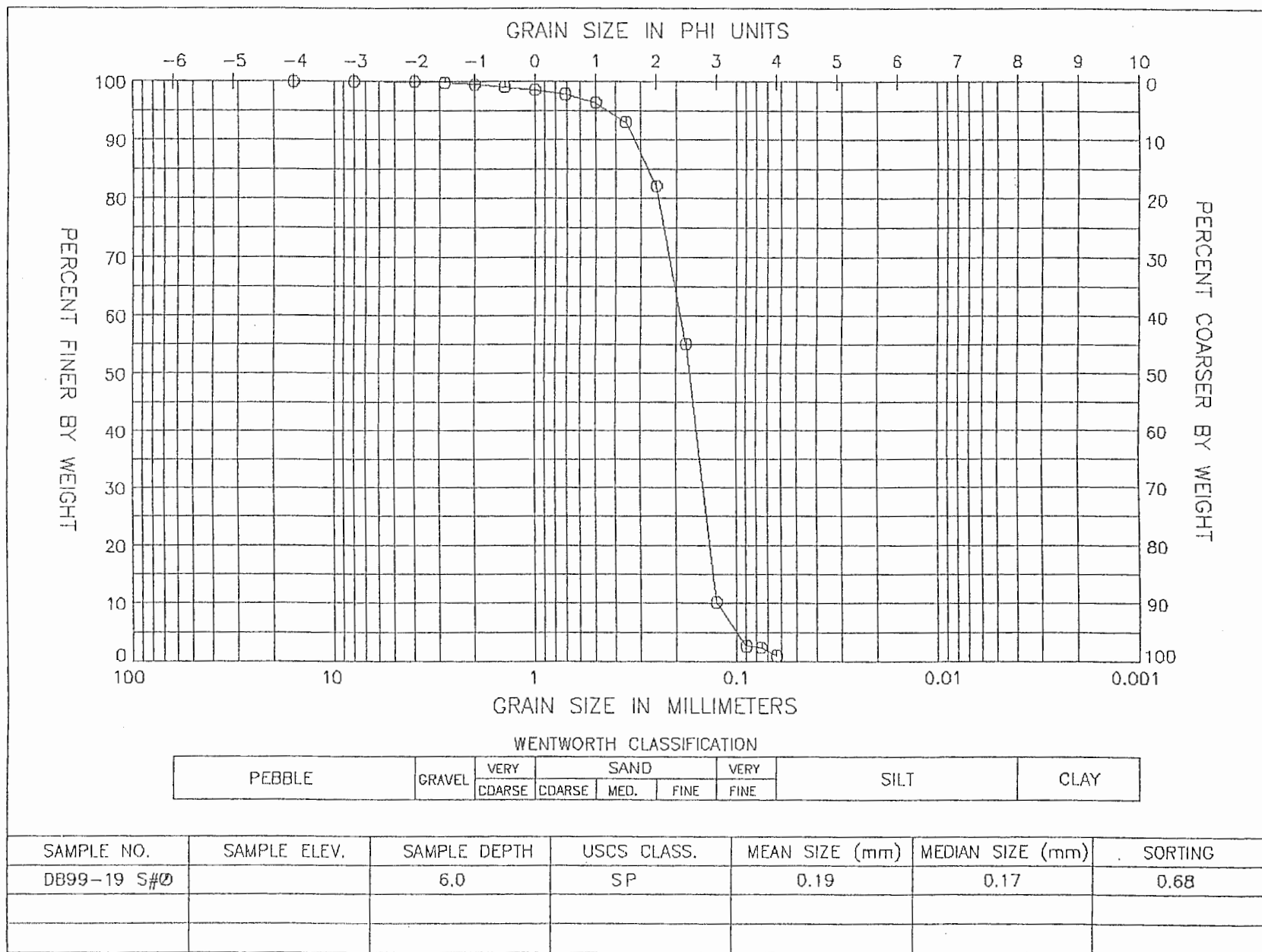
MEAN (PHI): 1.97 SORTING: 1.51
MEAN (mm): 0.26

DATA FILE NAME: DB99-19#4.TAB

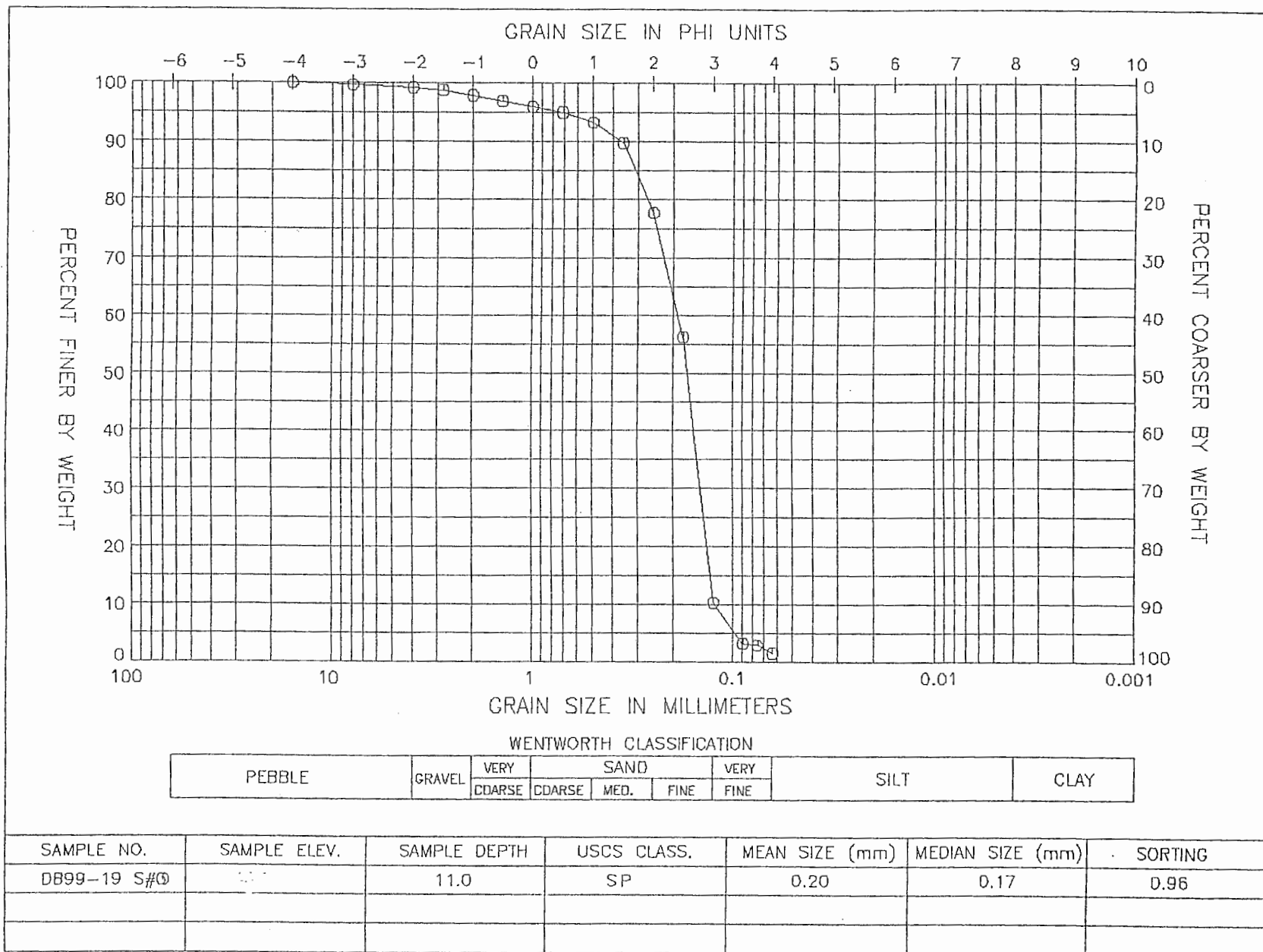
GRAIN SIZE DISTRIBUTION CURVE DELRAY BEACH VIBRACORES 1999



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