

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= 967196 Y= 772568		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-99-21		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 -50.0 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
-50	0					SP
	1					
	2				1	Sample #1, Depth = 3.0' 0.16 mm, 0.57 phi sorting 5.22% silt
	3		SAND, fine grained, trace shell hash, Light Gray (5Y-7/1) (SP)			
	4					
-54.9	5					
	6					
	7				2	Sample #2, Depth = 7.0' 0.17 mm, 0.60 phi sorting 2.73% silt
	8					
	9					
	10					
	11					
	12		fine-grained, little shell hash, □2" shell fragment at -58.7', Light Gray (5Y-7/1) (SP) from -54.9' to -69.0'		3	Sample #3, Depth = 13.0' 0.22mm, 0.76 phi sorting 2.39% silt
	13					
	14					
	15					
	16				4	Sample #4, Depth = 16.0' 0.18 mm, 0.63 phi sorting 2.16% silt
	17					
	18					
-69	19					
	20		End of Boring			
	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.: DB99-21#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 3.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 106.64
SAMPLE WEIGHT AFTER WASH (GRAMS): 101.18

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	0.08	0.08	99.92
7	-1.50	2.800	0.10	0.09	99.91
10	-1.00	2.000	0.22	0.21	99.79
14	-0.50	1.400	0.60	0.56	99.44
18	0.00	1.000	0.75	0.70	99.30
25	0.50	0.710	0.96	0.90	99.10
35	1.00	0.500	1.38	1.29	98.71
45	1.50	0.355	2.30	2.16	97.84
60	2.00	0.250	8.06	7.56	92.44
80	2.50	0.180	34.91	32.74	67.26
120	3.00	0.125	86.19	80.82	19.18
170	3.50	0.090	100.91	94.63	5.37
200	3.75	0.075	101.07	94.78	5.22
230	4.00	0.063	103.86	97.39	2.61
PAN			106.61	99.97	0.03

PHI(5): 1.76 PHI(16): 2.17 PHI(25): 2.35
PHI(50): 2.68 PHI(75): 2.94 PHI(84): 3.12
PHI(95): 3.77

SIEVE LOSS(g): 0.03 SILT/CLAY: 5.22%
SKEWNESS: 0.185 KURTOSIS: 1.388

GRAPHIC METHOD

MEAN (PHI): 2.70 SORTING: 0.47
MEAN (mm): 0.15 MEDIAN (mm): 0.16
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.61 SORTING: 0.57
MEAN (mm): 0.16

DATA FILE NAME: DB99-21#1.TAB

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

SAMPLE NO.: DB99-21 S#2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 7.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 110.83
SAMPLE WEIGHT AFTER WASH (GRAMS): 108.03

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	0.08	99.92
10	-1.00	2.000	0.42	0.38	99.62
14	-0.50	1.400	0.74	0.67	99.33
18	0.00	1.000	1.06	0.96	99.04
25	0.50	0.710	1.44	1.30	98.70
35	1.00	0.500	2.27	2.05	97.95
45	1.50	0.355	4.35	3.92	96.08
60	2.00	0.250	10.97	9.90	90.10
80	2.50	0.180	37.06	33.44	66.56
120	3.00	0.125	93.58	84.44	15.56
170	3.50	0.090	107.53	97.02	2.98
200	3.75	0.075	107.80	97.27	2.73
230	4.00	0.063	109.30	98.62	1.38
PAN			110.79	99.96	0.04

PHI(5): 1.59 PHI(16): 2.13 PHI(25): 2.32
PHI(50): 2.66 PHI(75): 2.91 PHI(84): 3.00
PHI(95): 3.42

SIEVE LOSS(g): 0.04 SILT/CLAY: 2.73%
SKEWNESS: -0.364 KURTOSIS: 1.278

GRAPHIC METHOD

MEAN (PHI): 2.56 SORTING: 0.43
MEAN (mm): 0.17 MEDIAN (mm): 0.16
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.56 SORTING: 0.60
MEAN (mm): 0.17

DATA FILE NAME: DB99-21#2.TAB

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

SAMPLE NO.: DB99-21#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 13.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 107.46
SAMPLE WEIGHT AFTER WASH (GRAMS): 105.02

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	0.03	0.03	99.97
7	-1.50	2.800	0.18	0.17	99.83
10	-1.00	2.000	0.29	0.27	99.73
14	-0.50	1.400	0.90	0.84	99.16
18	0.00	1.000	1.32	1.23	98.77
25	0.50	0.710	2.24	2.08	97.92
35	1.00	0.500	4.83	4.49	95.51
45	1.50	0.355	14.85	13.82	86.18
60	2.00	0.250	45.87	42.69	57.31
80	2.50	0.180	58.58	54.51	45.49
120	3.00	0.125	95.09	88.49	11.51
170	3.50	0.090	104.62	97.36	2.64
200	3.75	0.075	104.89	97.61	2.39
230	4.00	0.063	106.13	98.76	1.24
PAN			107.42	99.96	0.04

PHI(5): 1.03 PHI(16): 1.54 PHI(25): 1.69
PHI(50): 2.31 PHI(75): 2.80 PHI(84): 2.93
PHI(95): 3.37

SIEVE LOSS(g): 0.04 SILT/CLAY: 2.39%
SKEWNESS: -0.161 KURTOSIS: 0.866

GRAPHIC METHOD

MEAN (PHI): 2.24 SORTING: 0.70
MEAN (mm): 0.21 MEDIAN (mm): 0.20
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.20 SORTING: 0.76
MEAN (mm): 0.22

DATA FILE NAME: DB99-21#3.TAB

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

SAMPLE NO.: DB99-21#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 16.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 102.66
SAMPLE WEIGHT AFTER WASH (GRAMS): 100.56

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	0.11	0.11	99.89
7	-1.50	2.800	0.20	0.19	99.81
10	-1.00	2.000	0.34	0.33	99.67
14	-0.50	1.400	0.56	0.55	99.45
18	0.00	1.000	0.89	0.87	99.13
25	0.50	0.710	1.48	1.44	98.56
35	1.00	0.500	2.62	2.55	97.45
45	1.50	0.355	4.89	4.76	95.24
60	2.00	0.250	15.76	15.35	84.65
80	2.50	0.180	45.77	44.58	55.42
120	3.00	0.125	88.95	86.65	13.35
170	3.50	0.090	100.22	97.62	2.38
200	3.75	0.075	100.44	97.84	2.16
230	4.00	0.063	101.57	98.94	1.06
PAN			102.65	99.99	0.01

PHI(5): 1.51 PHI(16): 2.01 PHI(25): 2.17
PHI(50): 2.56 PHI(75): 2.86 PHI(84): 2.97
PHI(95): 3.38

SIEVE LOSS(g): 0.01 SILT/CLAY: 2.16%
SKEWNESS: -0.248 KURTOSIS: 1.100

GRAPHIC METHOD

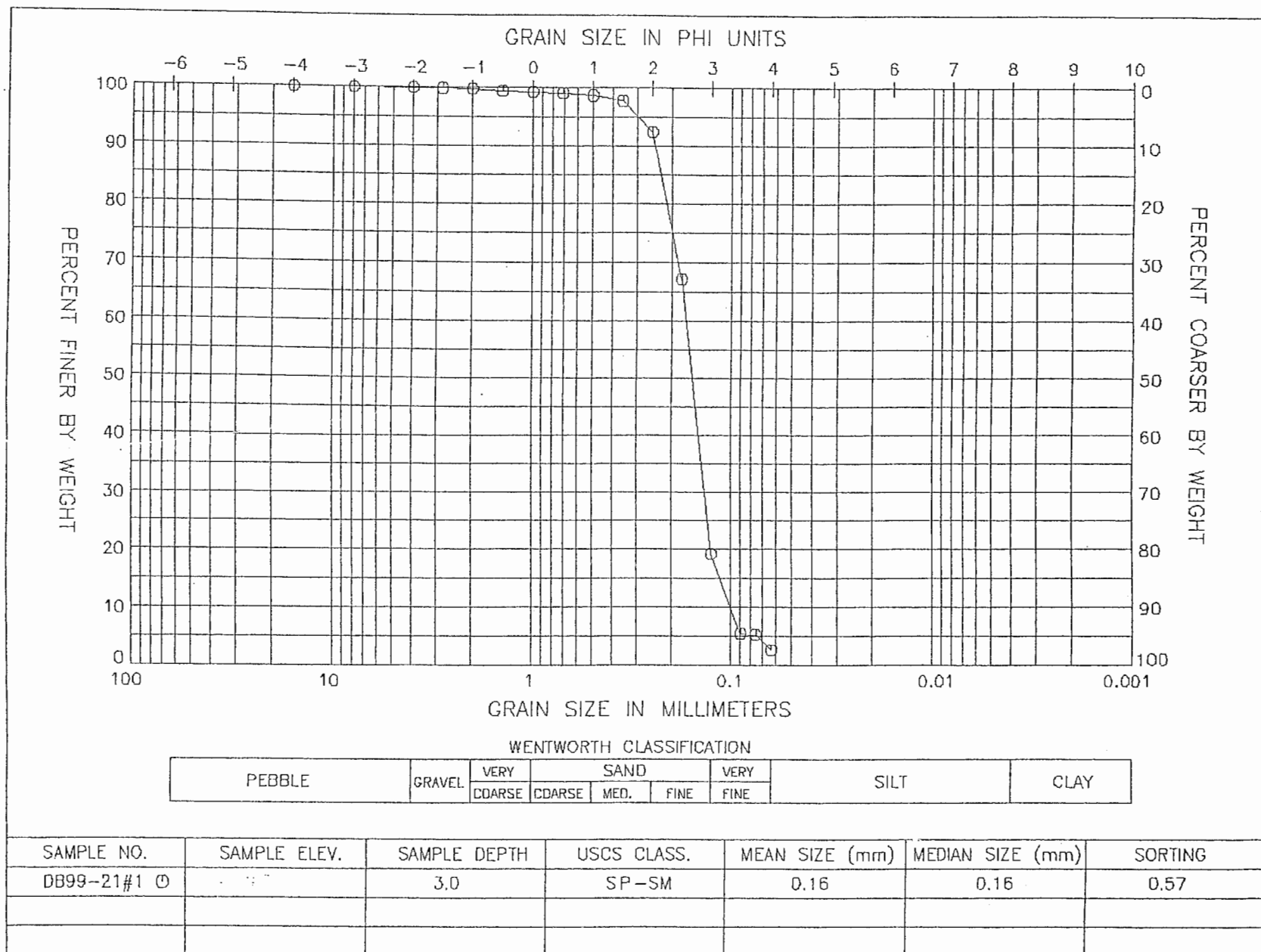
MEAN (PHI): 2.49 SORTING: 0.48
MEAN (mm): 0.18 MEDIAN (mm): 0.17
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

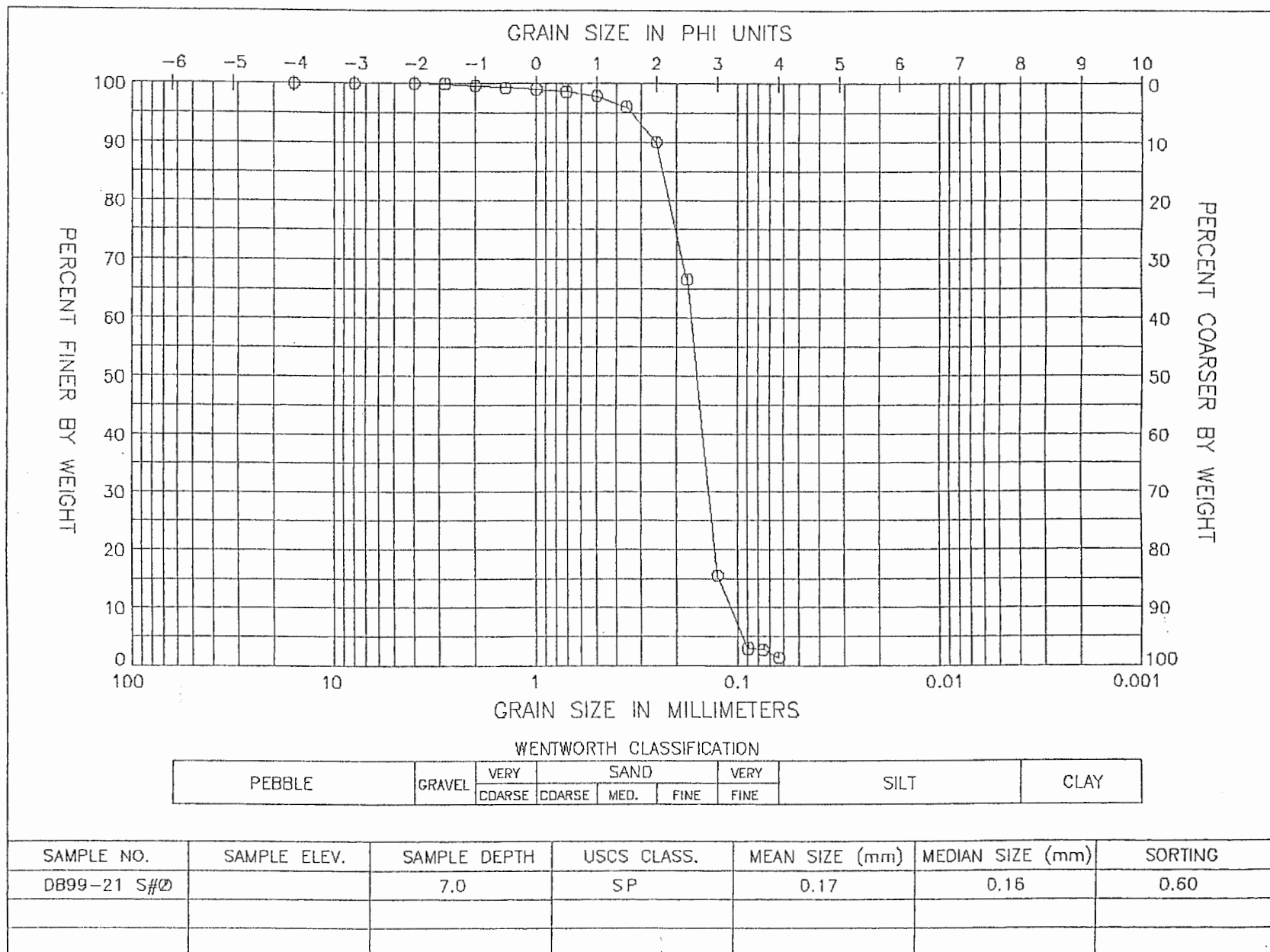
MEAN (PHI): 2.46 SORTING: 0.63
MEAN (mm): 0.18

DATA FILE NAME: DB99-21#4.TAB

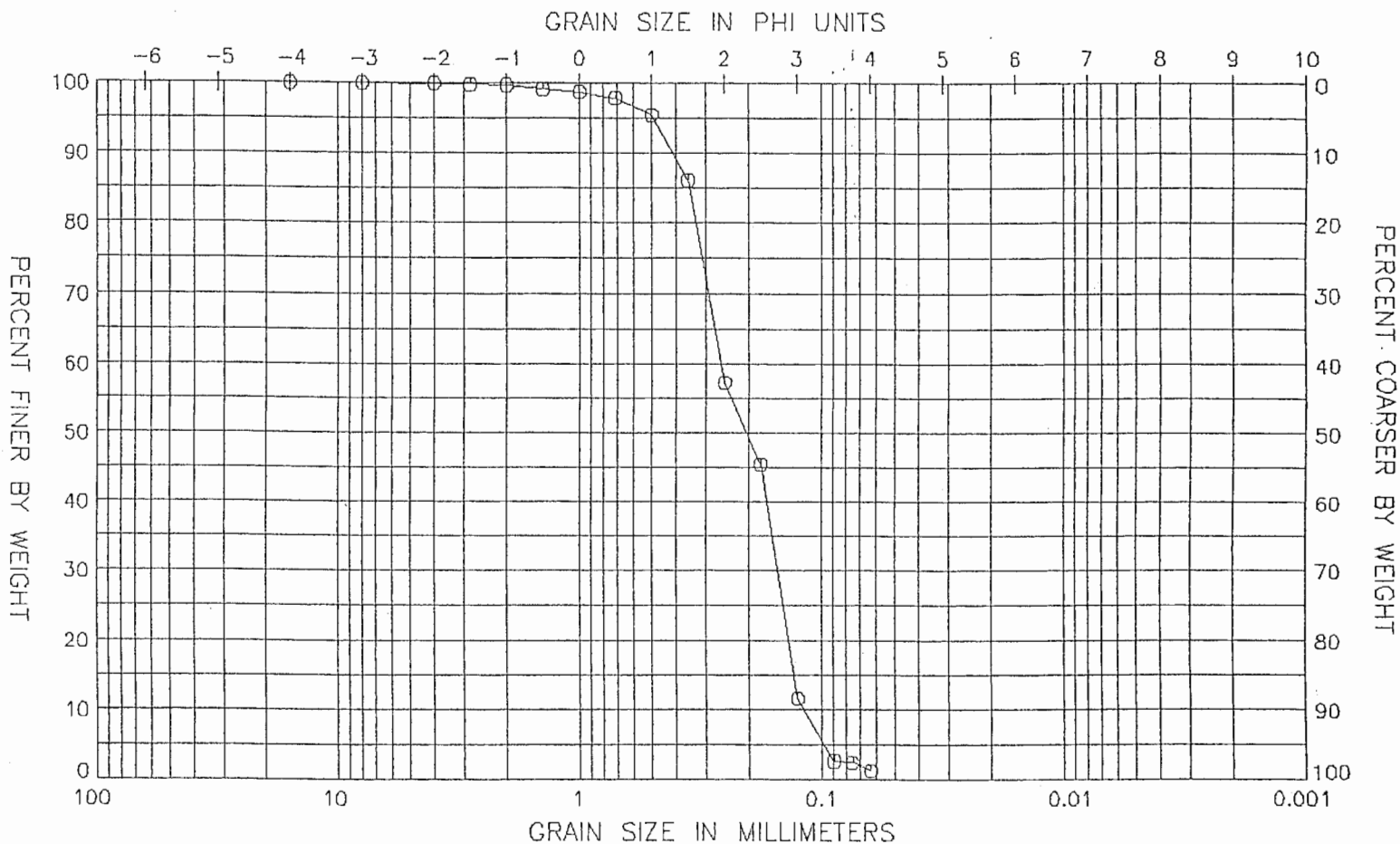
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	VERY	SAND			VERY	SILT	CLAY
		COARSE	COARSE	MED.	FINE	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
DB99-21#3 O		13.0	SP	0.22	0.20	0.76

GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999

