

<b>DRILLING LOG</b>		<b>DIVISION:</b> South Atlantic	<b>INSTALLATION:</b> Jacksonville District	<b>SHEET</b> 1 of 1
<b>1. PROJECT</b> DELRAY BEACH		<b>10. SIZE AND TYPE OF BIT</b> 3"		
<b>2. LOCATION</b> (Coordinates or Station) X= 967196 Y= 772568		<b>11. DATUM FOR ELEVATION SHOWN</b> (TBM or MSL) NGVD		
<b>3. DRILLING AGENCY:</b> ALPINE SEISMIC		<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> ALPINE PNEUMATIC		
<b>4. HOLE NO.</b> (As shown on drawing title and file number) DB-99-21		<b>13. TOT NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 0.0 undisturbed: 0.0		
<b>5. NAME OF DRILLER</b> ROB SUSKO		<b>14. TOTAL NO. OF CORE BOXES</b> 1		
<b>6. DIRECTION OF HOLE</b> VERTICAL		<b>15. ELEVATION GROUND WATER</b>		
<b>7. THICKNESS OF BURDEN</b> 0.0 FT		<b>16. DATE HOLE</b> Started Completed 4/20/99 4/20/99		
<b>8. DEPTH DRILLED INTO ROCK</b> 0.0 FT		<b>17. ELEVATION TOP OF HOLE</b> -50.0 ft.		
<b>9. TOTAL DEPTH OF HOLE</b> 19.0' FT		<b>18. TOTAL CORE RECOVERY FOR BORING</b> 97%		
		<b>19. SIGNATURE OF GEOLOGIST</b> IBRAHIM DREMALI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS	
-50	0					SP	
	1					1	Sample #1, Depth = 3.0' 0.16 mm, 0.57 phi sorting 5.22% silt
	2			SAND, fine grained, trace shell hash, Light Gray (5Y-7/1) (SP)			
	3						
	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' 0.22 mm, 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		End of Boring				
	20						
	21						
	22					Note: Soils are classified in accordance with the Unified Soils Classification System.	
	23						
	24						

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

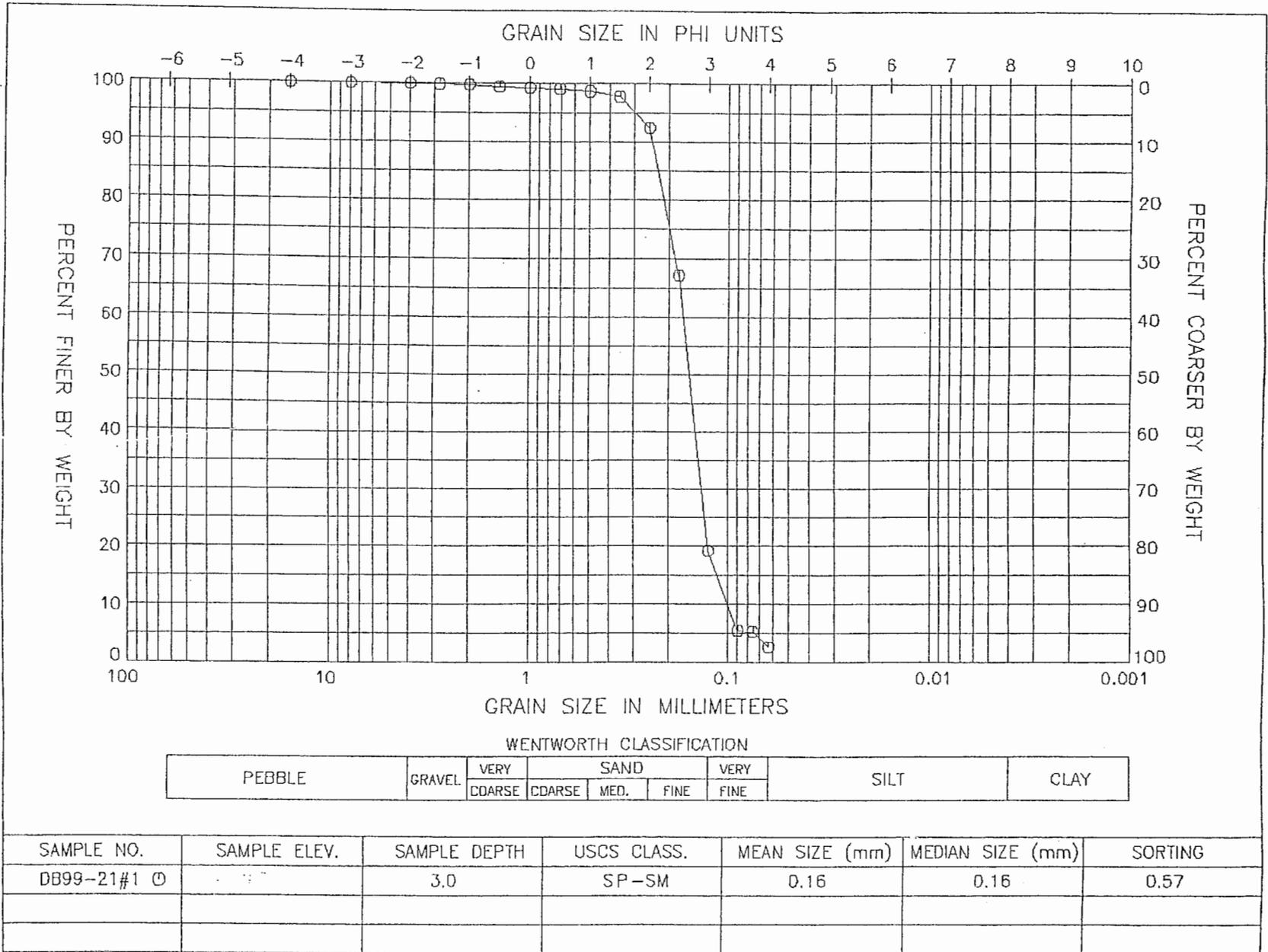
MEAN (PHI): 2.49                              SORTING: 0.48  
MEAN (mm) : 0.18                              MEDIAN (mm): 0.17  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

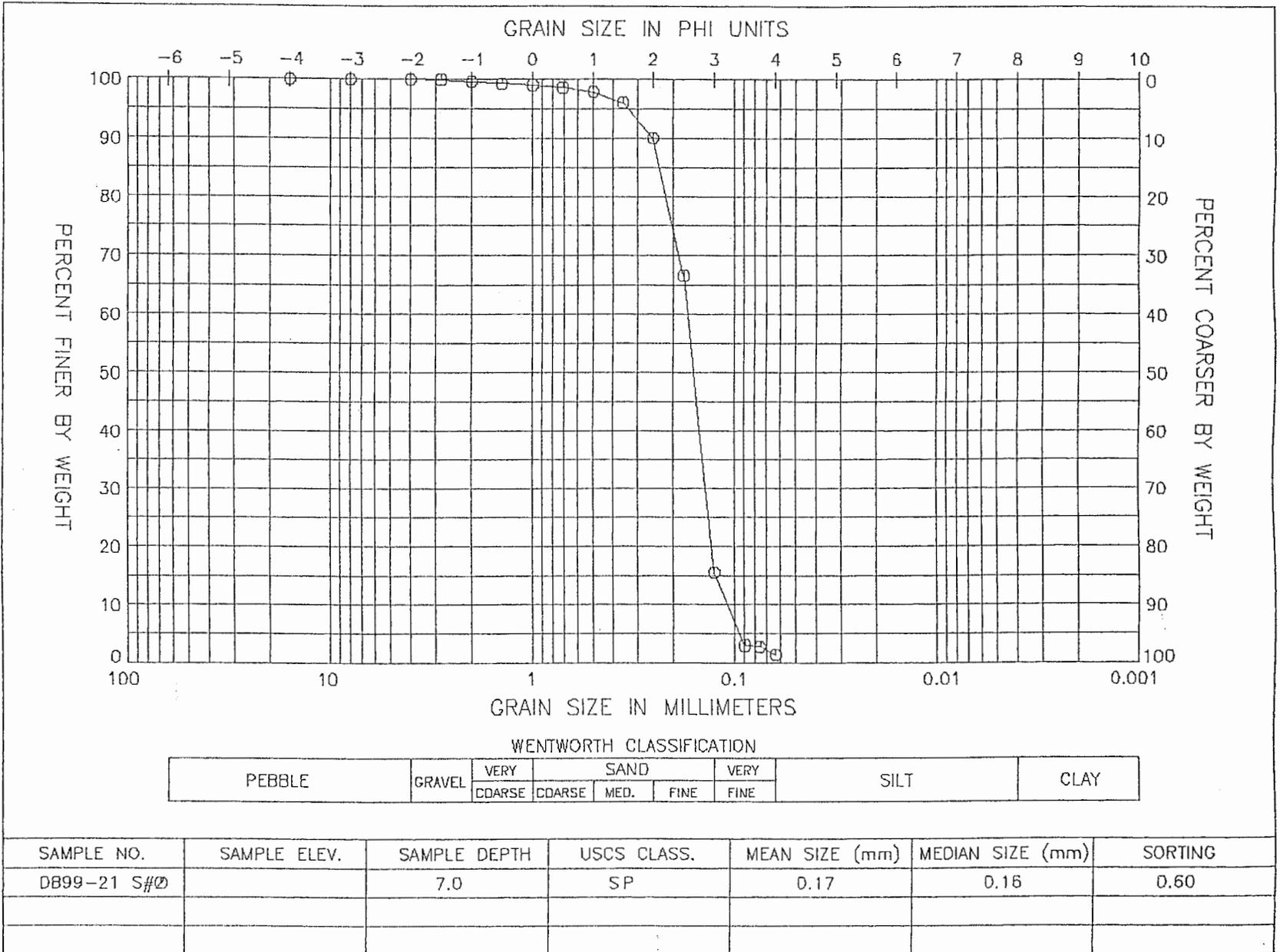
MEAN (PHI): 2.46                              SORTING: 0.63  
MEAN (mm) : 0.18

DATA FILE NAME: DB99-21#4.TAB

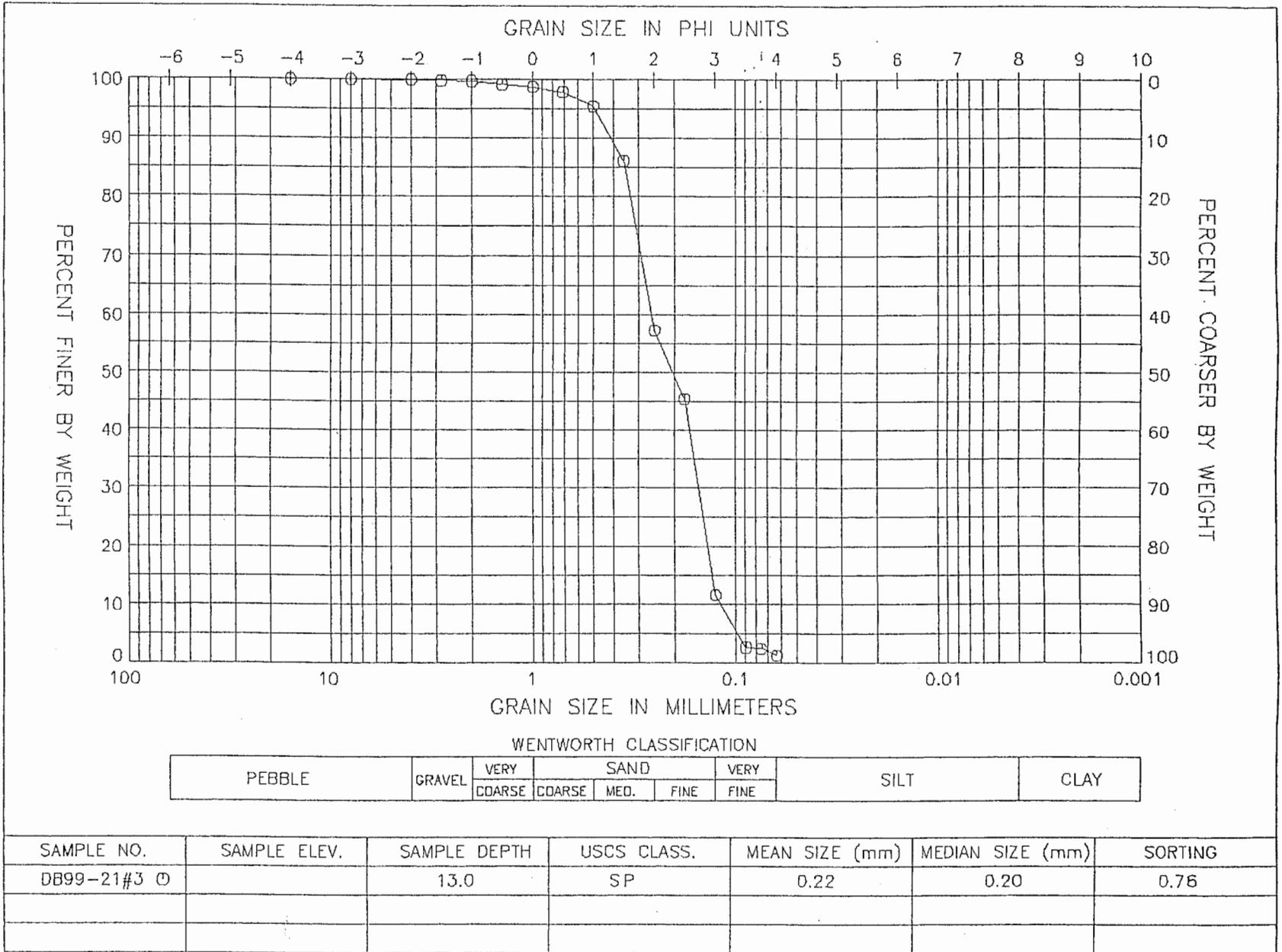
GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
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