

<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= 967757 Y= 778104		<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-99-17		<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> -48.0 ft.		
<b>9. TOTAL DEPTH OF HOLE</b> 18.7' FT		<b>18. TOTAL CORE RECOVERY FOR BORING</b> 96%		
		<b>19. SIGNATURE OF GEOLOGIST</b> IBRAHIM DREMALI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-48	0					SP
	1				1	Sample #1, Depth = 2.0' 0.16 mm, 0.47 phi sorting 1.37% silt
	2					
	3					
	4					
	5					
	6				2	Sample #2, Depth = 7.0' 0.18 mm, 0.85 phi sorting 1.73% silt
	7		SAND, fine grained, trace shell hash, Light Gray (5Y-7/1) (SP)			
	8					
	9					
	10					
	11				3	Sample #3, Depth = 11.0' 0.16 mm, 0.76 phi sorting 1.54% silt
	12					
	13					
	14					
-62.8	15					
	16					
	17		fine-grained, trace shell hash, Light Gray (5Y-7/1) (SP) from -62.8' to -66.7'		4	Sample #4, Depth= 16.0' 0.19 mm, 0.67 phi sorting 1.82% silt
	18					
-66.7	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.: DB99-17 S#1  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 2.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 155.88  
SAMPLE WEIGHT AFTER WASH (GRAMS): 153.85

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	0.04	0.03	99.97
10	-1.00	2.000	0.14	0.09	99.91
14	-0.50	1.400	0.27	0.17	99.83
18	0.00	1.000	0.37	0.24	99.76
25	0.50	0.710	0.65	0.42	99.58
35	1.00	0.500	1.35	0.87	99.13
45	1.50	0.355	3.28	2.10	97.90
60	2.00	0.250	12.26	7.87	92.13
80	2.50	0.180	44.67	28.66	71.34
120	3.00	0.125	135.62	87.00	13.00
170	3.50	0.090	153.55	98.51	1.49
200	3.75	0.075	153.75	98.63	1.37
230	4.00	0.063	154.82	99.32	0.68
PAN			155.88	100.00	0.00

PHI (5): 1.75                      PHI (16): 2.20                      PHI (25): 2.41  
PHI (50): 2.68                      PHI (75): 2.90                      PHI (84): 2.97  
PHI (95): 3.35

SIEVE LOSS (g): 0.00                      SILT/CLAY: 1.37%  
SKEWNESS: -0.343                      KURTOSIS: 1.349

GRAPHIC METHOD

MEAN (PHI): 2.59                      SORTING: 0.39  
MEAN (mm): 0.17                      MEDIAN (mm): 0.16  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.61                      SORTING: 0.47  
MEAN (mm): 0.16

DATA FILE NAME: DB99-17#1.TAB

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

SAMPLE NO.: DB99-17 S#2  
 SAMPLE ELEV. (FT. NGVD):  
 SAMPLE DEPTH (FT.): 7.0  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 191.99  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 189.03

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	1.47	0.77	99.23
5	-2.00	4.000	1.72	0.90	99.10
7	-1.50	2.800	2.17	1.13	98.87
10	-1.00	2.000	2.86	1.49	98.51
14	-0.50	1.400	3.49	1.82	98.18
18	0.00	1.000	3.94	2.05	97.95
25	0.50	0.710	4.74	2.47	97.53
35	1.00	0.500	6.69	3.48	96.52
45	1.50	0.355	10.22	5.32	94.68
60	2.00	0.250	22.62	11.78	88.22
80	2.50	0.180	68.47	35.66	64.34
120	3.00	0.125	160.18	83.43	16.57
170	3.50	0.090	188.25	98.05	1.95
200	3.75	0.075	188.66	98.27	1.73
230	4.00	0.063	190.25	99.09	0.91
PAN			191.99	100.00	0.00

PHI (5): 1.41                      PHI (16): 2.09                      PHI (25): 2.28  
 PHI (50): 2.65                      PHI (75): 2.91                      PHI (84): 3.02  
 PHI (95): 3.40

SIEVE LOSS (g): 0.00                      SILT/CLAY: 1.73%  
 SKEWNESS: -0.529                      KURTOSIS: 1.280

GRAPHIC METHOD  
 MEAN (PHI): 2.51                      SORTING: 0.47  
 MEAN (mm) : 0.18                      MEDIAN (mm): 0.16  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD  
 MEAN (PHI): 2.49                      SORTING: 0.85  
 MEAN (mm) : 0.18

DATA FILE NAME: DB99-17#2.TAB

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

SAMPLE NO.: DB99-17 S#3  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 11.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 164.69  
SAMPLE WEIGHT AFTER WASH (GRAMS): 162.32

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	1.55	0.94	99.06
5	-2.00	4.000	1.59	0.97	99.03
7	-1.50	2.800	1.62	0.98	99.02
10	-1.00	2.000	1.71	1.04	98.96
14	-0.50	1.400	1.90	1.15	98.85
18	0.00	1.000	2.08	1.26	98.74
25	0.50	0.710	2.34	1.42	98.58
35	1.00	0.500	3.08	1.87	98.13
45	1.50	0.355	5.08	3.08	96.92
60	2.00	0.250	12.70	7.71	92.29
80	2.50	0.180	33.88	20.57	79.43
120	3.00	0.125	136.28	82.75	17.25
170	3.50	0.090	161.72	98.20	1.80
200	3.75	0.075	162.15	98.46	1.54
230	4.00	0.063	163.43	99.24	0.76
PAN			164.69	100.00	0.00

PHI(5): 1.71            PHI(16): 2.32            PHI(25): 2.54  
PHI(50): 2.74            PHI(75): 2.94            PHI(84): 3.04  
PHI(95): 3.40

SIEVE LOSS(g): 0.00            SILT/CLAY: 1.54%  
SKEWNESS: -0.515            KURTOSIS: 1.722

GRAPHIC METHOD  
MEAN (PHI): 2.64            SORTING: 0.36  
MEAN (mm) : 0.16            MEDIAN (mm): 0.15  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD  
MEAN (PHI): 2.63            SORTING: 0.76  
MEAN (mm) : 0.16

DATA FILE NAME: DB99-17#3.TAB

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

SAMPLE NO.: DB99-17 S#4  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 16.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 185.27  
SAMPLE WEIGHT AFTER WASH (GRAMS): 182.29

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	0.00	0.00	100.00
5	-2.00	4.000	0.15	0.08	99.92
7	-1.50	2.800	0.31	0.17	99.83
10	-1.00	2.000	0.83	0.45	99.55
14	-0.50	1.400	1.50	0.81	99.19
18	0.00	1.000	2.07	1.12	98.88
25	0.50	0.710	3.07	1.66	98.34
35	1.00	0.500	6.05	3.27	96.73
45	1.50	0.355	12.13	6.55	93.45
60	2.00	0.250	32.42	17.50	82.50
80	2.50	0.180	83.55	45.10	54.90
120	3.00	0.125	161.24	87.03	12.97
170	3.50	0.090	181.61	98.02	1.98
200	3.75	0.075	181.89	98.18	1.82
230	4.00	0.063	183.46	99.02	0.98
PAN			185.26	99.99	0.01

PHI(5): 1.26                      PHI(16): 1.93                      PHI(25): 2.14  
PHI(50): 2.56                      PHI(75): 2.86                      PHI(84): 2.96  
PHI(95): 3.36

SIEVE LOSS(g): 0.01                      SILT/CLAY: 1.82%  
SKEWNESS: -0.475                      KURTOSIS: 1.193

GRAPHIC METHOD

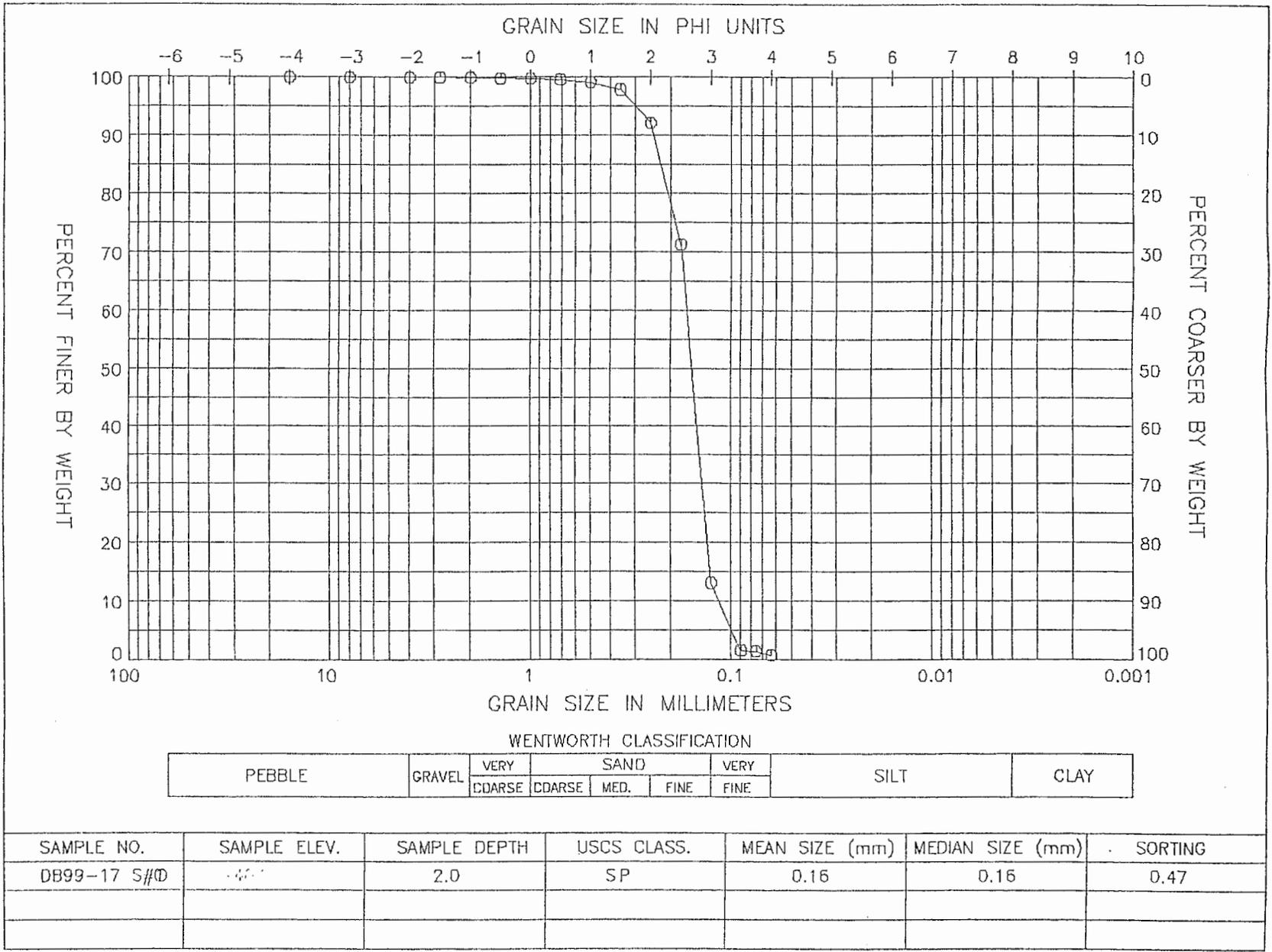
MEAN (PHI): 2.42                      SORTING: 0.52  
MEAN (mm) : 0.19                      MEDIAN (mm): 0.17  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

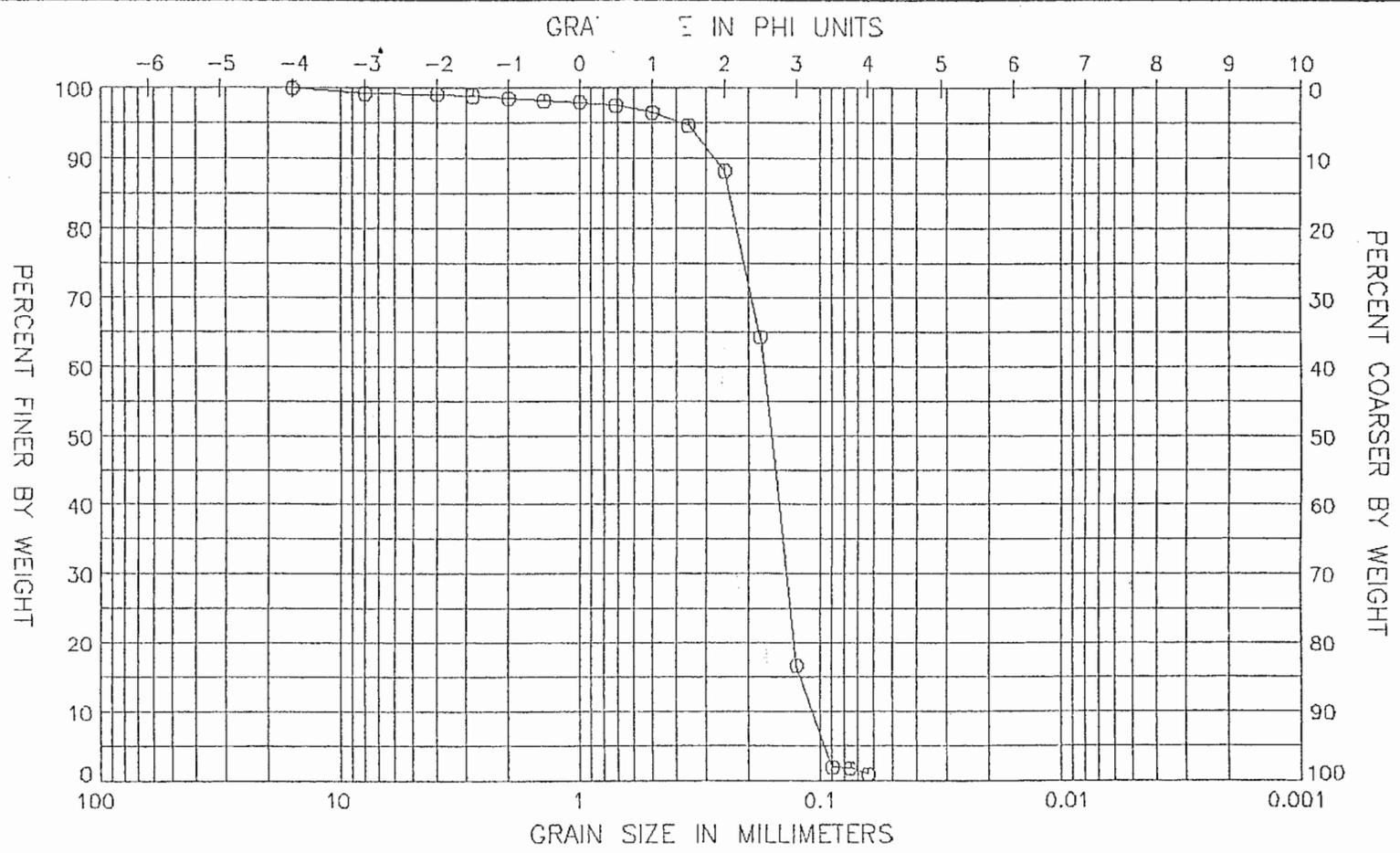
MEAN (PHI): 2.43                      SORTING: 0.67  
MEAN (mm) : 0.19

DATA FILE NAME: DB99-17#4.TAB

GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
DELRAY BEACH VIBRACORES 1999

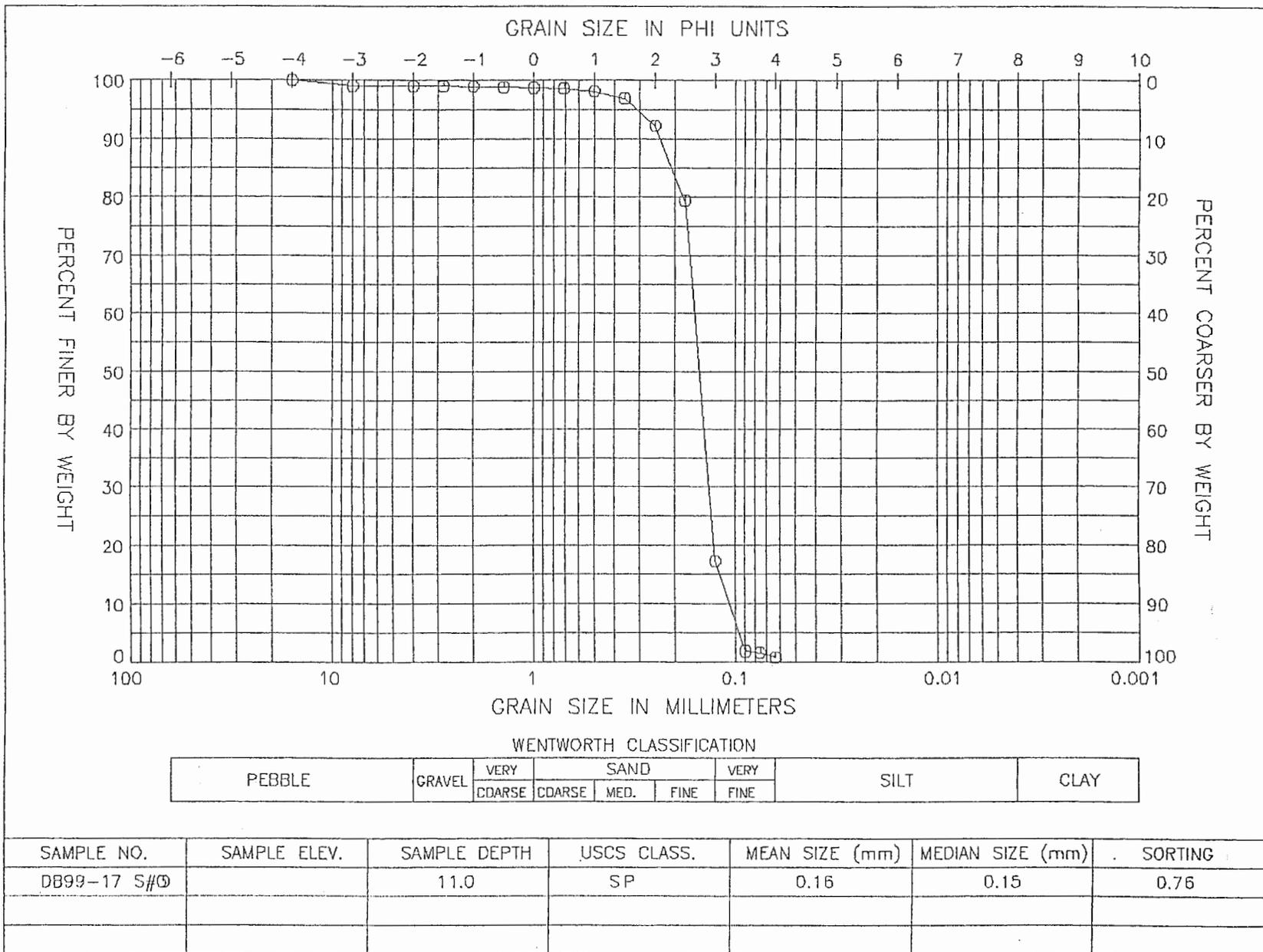


WENTWORTH CLASSIFICATION

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
DB99-17 S#0		7.0	SP	0.18	0.16	0.85

GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999

