

<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>2. LOCATION</b>		(Coordinates or Station) X= 966,325 Y= 769,500		
<b>3. DRILLING AGENCY:</b>		ALPINE SEISMIC		
<b>4. HOLE NO.</b>		(As shown on drawing title and file number) DB-99-10		
<b>5. NAME OF DRILLER</b>		ROB SUSKO		
<b>6. DIRECTION OF HOLE</b>		VERTICAL		
<b>7. THICKNESS OF BURDEN</b>		0.0 FT		
<b>8. DEPTH DRILLED INTO ROCK</b>		0.0 FT		
<b>9. TOTAL DEPTH OF HOLE</b>		19.0' FT		
<b>10. SIZE AND TYPE OF BIT</b>		3"		
<b>11. DATUM FOR ELEVATION SHOWN</b>		(TBM or MSL) NGVD		
<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b>		ALPINE PNEUMATIC		
<b>13. TOT NO. OF OVERBURDEN SAMPLES TAKEN</b>		disturbed: 0.0 undisturbed: 0.0		
<b>14. TOTAL NO. OF CORE BOXES</b>		1		
<b>15. ELEVATION GROUND WATER</b>				
<b>16. DATE HOLE</b>		Started Completed 4/20/99 4/20/99		
<b>17. ELEVATION TOP OF HOLE</b>		-41.0 ft.		
<b>18. TOTAL CORE RECOVERY FOR BORING</b>		96%		
<b>19. SIGNATURE OF GEOLOGIST</b>		IBRAHIM DREMLI		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-41	0					SP
	1				1	Sample #1, Depth = 2.0' 0.20 mm, 0.75 phi sorting 2.4% silt
	2					
	3		SAND, fine-grained, trace shell hash, Gray (5Y-6/1) (SP)			
	4				2	Sample #2, Depth = 4.0' 0.27 mm, 0.90 phi sorting 4.19% silt
	5					
-46.8	6		fine-grained, trace shell hash, Gray (5Y-6/1) (SP) from -46.8' to -47.5'		3	Sample #3, Depth = 6.1' 0.31 mm, 1.06 phi sorting 1.49% silt
-47.5	7					
	8					
	9				4	Sample #4, Depth = 10.0' 0.22 mm, 0.65 phi sorting 1.32% silt
	10					
	11					
	12		fine-grained, trace shell hash, Gray (5Y-6/1) (SP) from -47.5' to -60.0'			
	13					
	14					
	15				5	Sample #5, Depth = 15.0' 0.22 mm, 0.69 phi sorting 1.48% silt
	16					
	17					
	18					
-60	19		End of Boring			
	20					
	21					
	22					
	23					
	24					Note: Soils are visually 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.: DB99-10 S#1  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 2.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 190.22  
SAMPLE WEIGHT AFTER WASH (GRAMS): 185.81

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	0.09	0.05	99.95
7	-1.50	2.800	0.36	0.19	99.81
10	-1.00	2.000	0.80	0.42	99.58
14	-0.50	1.400	1.59	0.84	99.16
18	0.00	1.000	2.92	1.54	98.46
25	0.50	0.710	5.38	2.83	97.17
35	1.00	0.500	11.54	6.07	93.93
45	1.50	0.355	22.18	11.66	88.34
60	2.00	0.250	45.03	23.67	76.33
80	2.50	0.180	96.45	50.70	49.30
120	3.00	0.125	172.00	90.42	9.58
170	3.50	0.090	185.47	97.50	2.50
200	3.75	0.075	185.66	97.60	2.40
230	4.00	0.063	187.99	98.83	1.17
PAN			190.19	99.98	0.02

PHI(5): 0.84 PHI(16): 1.68 PHI(25): 2.02  
PHI(50): 2.49 PHI(75): 2.81 PHI(84): 2.92  
PHI(95): 3.32

SIEVE LOSS(g): 0.03 SILT/CLAY: 2.40%  
SKEWNESS: -0.658 KURTOSIS: 1.305

GRAPHIC METHOD

MEAN (PHI): 2.25 SORTING: 0.62  
MEAN (mm): 0.21 MEDIAN (mm): 0.18  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.30 SORTING: 0.75  
MEAN (mm): 0.20

DATA FILE NAME: DB99-10#1.TAB

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

SAMPLE NO.: DB99-10 S#2  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 4.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 174.50  
SAMPLE WEIGHT AFTER WASH (GRAMS): 167.28

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	0.34	0.19	99.81
10	-1.00	2.000	1.15	0.66	99.34
14	-0.50	1.400	2.88	1.65	98.35
18	0.00	1.000	5.08	2.91	97.09
25	0.50	0.710	11.07	6.34	93.66
35	1.00	0.500	28.53	16.35	83.65
45	1.50	0.355	50.92	29.18	70.82
60	2.00	0.250	84.33	48.33	51.67
80	2.50	0.180	127.67	73.16	26.84
120	3.00	0.125	162.24	92.97	7.03
170	3.50	0.090	168.05	96.30	3.70
200	3.75	0.075	167.19	95.81	4.19
230	4.00	0.063	170.86	97.91	2.09
PAN			174.48	99.99	0.01

PHI(5): 0.30                      PHI(16): 0.98                      PHI(25): 1.34  
PHI(50): 2.03                      PHI(75): 2.55                      PHI(84): 2.77  
PHI(95): 3.30

SIEVE LOSS(g): 0.02                      SILT/CLAY: 4.19%  
SKEWNESS: -0.256                      KURTOSIS: 1.017

GRAPHIC METHOD

MEAN (PHI): 1.88                      SORTING: 0.90  
MEAN (mm) : 0.27                      MEDIAN (mm): 0.24  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.87                      SORTING: 0.90  
MEAN (mm) : 0.27

DATA FILE NAME: DB99-10#2.TAB

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

SAMPLE NO.: DB99-10 S#3  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 6.1  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 243.27  
SAMPLE WEIGHT AFTER WASH (GRAMS): 239.73

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	0.25	0.10	99.90
5	-2.00	4.000	1.32	0.54	99.46
7	-1.50	2.800	3.50	1.44	98.56
10	-1.00	2.000	4.57	1.88	98.12
14	-0.50	1.400	8.94	3.67	96.33
18	0.00	1.000	17.35	7.13	92.87
25	0.50	0.710	30.81	12.66	87.34
35	1.00	0.500	57.13	23.48	76.52
45	1.50	0.355	89.68	36.86	63.14
60	2.00	0.250	133.53	54.89	45.11
80	2.50	0.180	185.68	76.33	23.67
120	3.00	0.125	233.10	95.82	4.18
170	3.50	0.090	239.41	98.41	1.59
200	3.75	0.075	239.65	98.51	1.49
230	4.00	0.063	241.47	99.26	0.74
PAN			243.26	100.00	0.00

PHI(5): -0.31 PHI(16): 0.65 PHI(25): 1.06  
PHI(50): 1.86 PHI(75): 2.47 PHI(84): 2.70  
PHI(95): 2.98

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.49%  
SKEWNESS: -0.518 KURTOSIS: 0.954

GRAPHIC METHOD

MEAN (PHI): 1.58 SORTING: 1.02  
MEAN (mm): 0.34 MEDIAN (mm): 0.27  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.67 SORTING: 1.06  
MEAN (mm): 0.31

DATA FILE NAME: DB99-10#3.TAB

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

SAMPLE NO.: DB99-10 S#5  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 15.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 191.15  
SAMPLE WEIGHT AFTER WASH (GRAMS): 188.42

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	0.24	0.13	99.87
7	-1.50	2.800	0.50	0.26	99.74
10	-1.00	2.000	0.94	0.49	99.51
14	-0.50	1.400	1.53	0.80	99.20
18	0.00	1.000	2.23	1.17	98.83
25	0.50	0.710	3.82	2.00	98.00
35	1.00	0.500	9.28	4.85	95.15
45	1.50	0.355	20.09	10.51	89.49
60	2.00	0.250	54.60	28.56	71.44
80	2.50	0.180	122.66	64.17	35.83
120	3.00	0.125	179.26	93.78	6.22
170	3.50	0.090	188.23	98.47	1.53
200	3.75	0.075	188.32	98.52	1.48
230	4.00	0.063	189.73	99.26	0.74
PAN			191.13	99.99	0.01

PHI(5): 1.01	PHI(16): 1.65	PHI(25): 1.90
PHI(50): 2.30	PHI(75): 2.68	PHI(84): 2.83
PHI(95): 3.13		

SIEVE LOSS(g): 0.02	SILT/CLAY: 1.48%
SKEWNESS: -0.388	KURTOSIS: 1.110

GRAPHIC METHOD

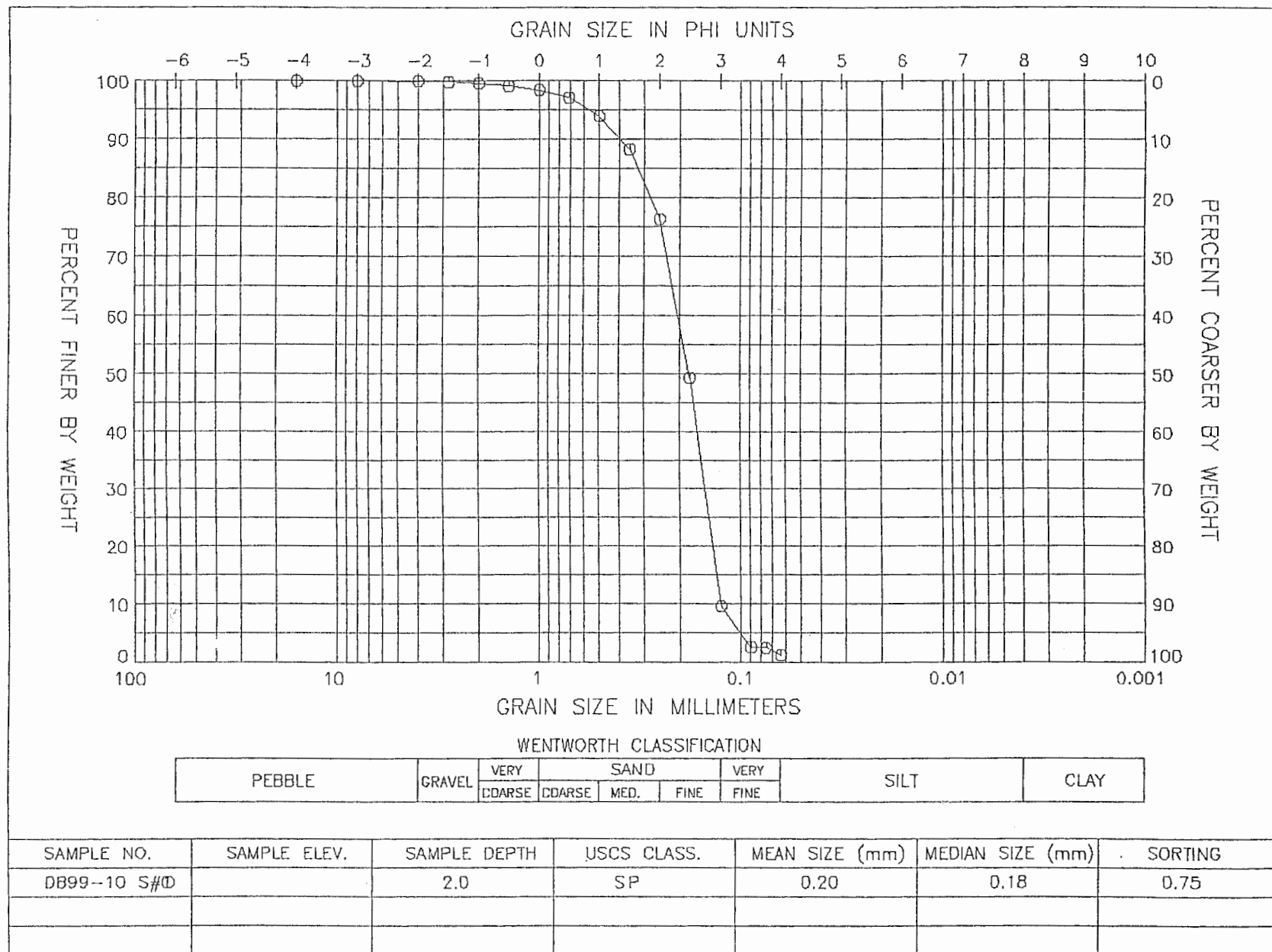
MEAN (PHI): 2.19	SORTING: 0.59
MEAN (mm): 0.22	MEDIAN (mm): 0.20
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

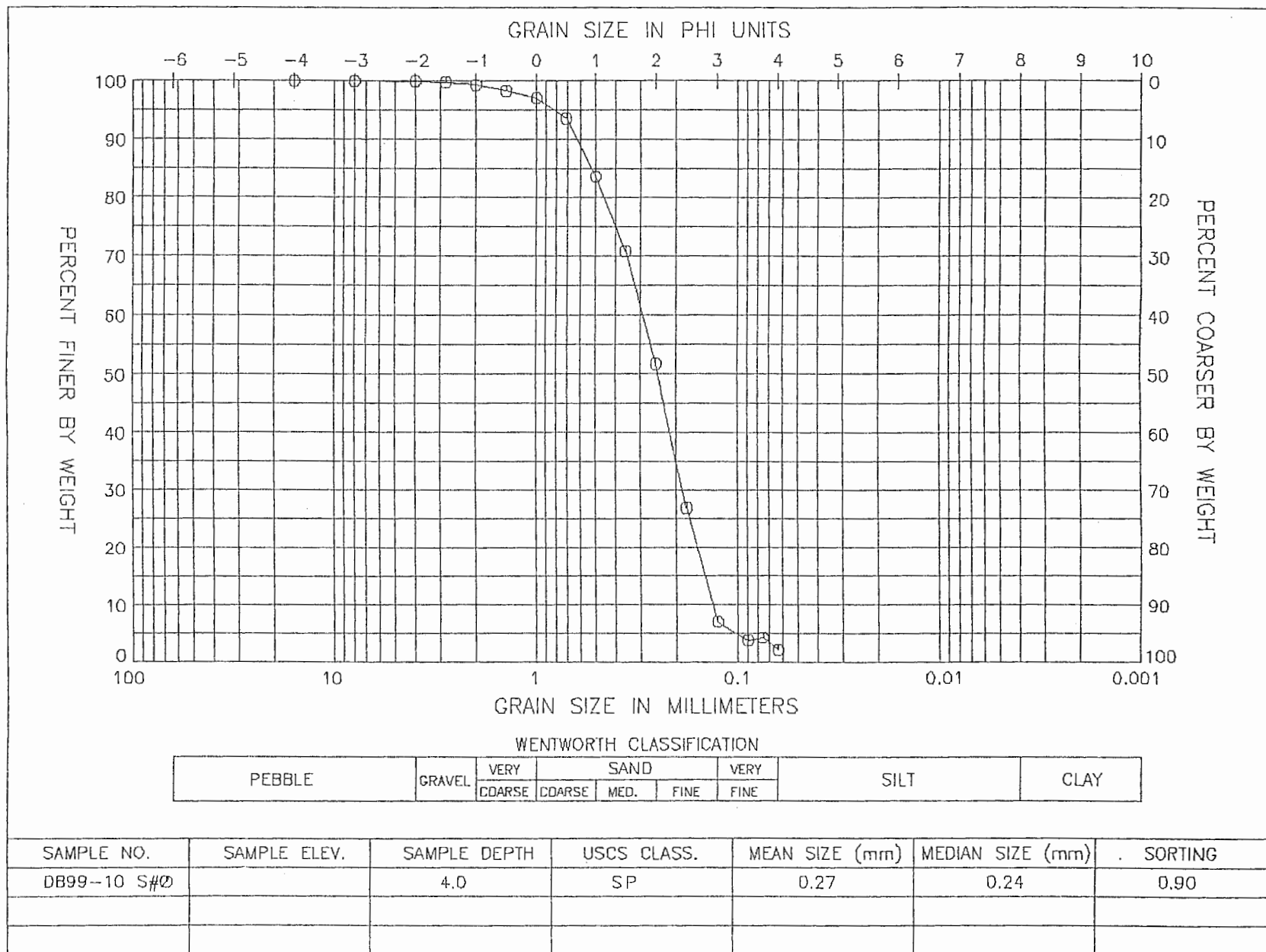
MEAN (PHI): 2.21	SORTING: 0.69
MEAN (mm): 0.22	

DATA FILE NAME: DB99-10#5.TAB

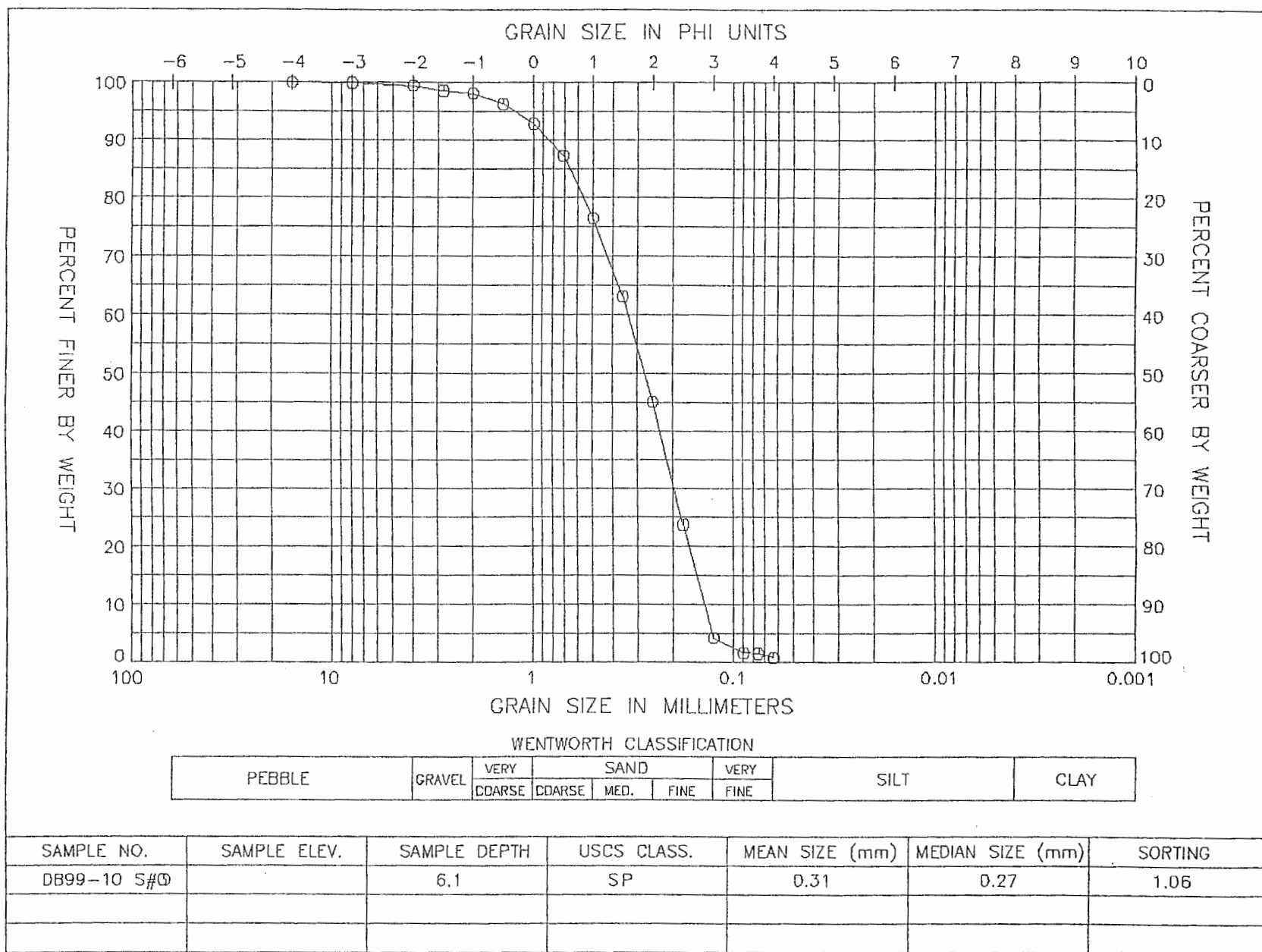
GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
 DELRAY BEACH VIBRACORES 1999

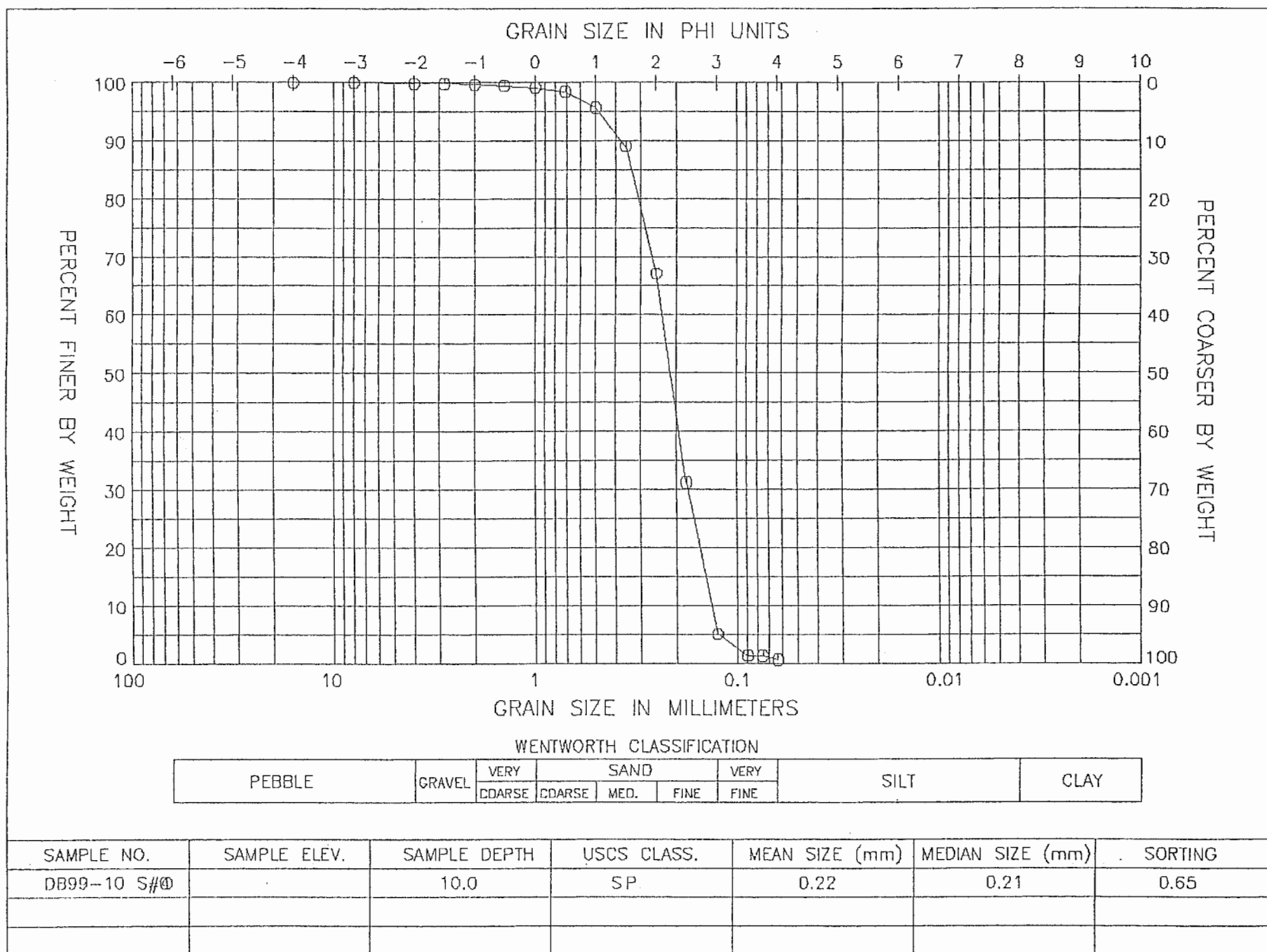


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