

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT		DELRAY BEACH		10. SIZE AND TYPE OF BIT 3"
2. LOCATION		(Coordinates or Station) X= 965546 Y= 766131		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NGVD
3. DRILLING AGENCY:		ALPINE SEISMIC		12. MANUFACTURER'S DESIGNATION OF DRILL ALPINE PNEUMATIC
4. HOLE NO. (As shown on drawing title and file number)		DB-99-28		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0.0 undisturbed: 0.0
5. NAME OF DRILLER		ROB SUSKO		14. TOTAL NO. OF CORE BOXES 1
6. DIRECTION OF HOLE		VERTICAL		15. ELEVATION GROUND WATER
7. THICKNESS OF BURDEN 0.0 FT		16. DATE HOLE Started Completed 4/20/99 4/20/99		17. ELEVATION TOP OF HOLE -47.3 ft.
8. DEPTH DRILLED INTO ROCK 0.0 FT		18. TOTAL CORE RECOVERY FOR BORING 97%		19. SIGNATURE OF GEOLOGIST IBRAHIM DREMALI
9. TOTAL DEPTH OF HOLE 18.9' FT				

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-47.3	0					SP
	1					
	2					
	3					
	4		SAND, fine-grained, trace shell hash, Gray (5Y-5/1) (SP)		1	Sample #1, Depth = 4.0' 0.33 mm, 0.79 phi sorting 1.45% silt
	5					
	6					
	7					
-55.2	8		fine-grained, shelly sand, Gray (5Y-5/1) (SP) from -55.2' to -55.6'		2	Sample #2, Depth = 8.1' 0.33 mm, 0.97 phi sorting 2.0% silt
	9					
	10					
	11					
	12				3	
	13		fine-grained, trace shell hash, Gray (5Y-6/1) (SP) from -55.6' to -66.2'			Sample #3, Depth = 13.0' 0.23 mm, 0.66 phi sorting 1.73% silt
	14					
	15					
	16					
	17				4	Sample #4, Depth = 17.0' 0.22 mm, 0.92 phi sorting 4.07% silt
	18					
-66.2	19		End of Boring			
	20					
	21					
	22					Note: Soils are classified in accordance with the Unified Soils Classification System.
	23					
	24					

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

SAMPLE NO.: DB99-28#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 113.93
SAMPLE WEIGHT AFTER WASH (GRAMS): 112.32

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	0.00	0.00	100.00
5	-2.00	4.000	0.00	0.00	100.00
7	-1.50	2.800	0.04	0.04	99.96
10	-1.00	2.000	0.13	0.11	99.89
14	-0.50	1.400	0.44	0.39	99.61
18	0.00	1.000	4.43	3.89	96.11
25	0.50	0.710	11.12	9.76	90.24
35	1.00	0.500	25.05	21.99	78.01
45	1.50	0.355	43.10	37.83	62.17
60	2.00	0.250	77.18	67.74	32.26
80	2.50	0.180	102.74	90.18	9.82
120	3.00	0.125	111.32	97.71	2.29
170	3.50	0.090	112.24	98.52	1.48
200	3.75	0.075	112.28	98.55	1.45
230	4.00	0.063	113.10	99.27	0.73
PAN			113.92	99.99	0.01

PHI(5): 0.09 PHI(16): 0.76 PHI(25): 1.10
PHI(50): 1.70 PHI(75): 2.16 PHI(84): 2.36
PHI(95): 2.82

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.45%
SKEWNESS: -0.306 KURTOSIS: 1.047

GRAPHIC METHOD

MEAN (PHI): 1.55 SORTING: 0.80
MEAN (mm) : 0.34 MEDIAN (mm): 0.31
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.59 SORTING: 0.79
MEAN (mm) : 0.33

DATA FILE NAME: DB99-28#1.TAB

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

SAMPLE NO.: DB99-28#2
 SAMPLE ELEV. (FT. NGVD):
 SAMPLE DEPTH (FT.): 8.1
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 90.49
 SAMPLE WEIGHT AFTER WASH (GRAMS): 88.76

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	0.09	0.10	99.90
5	-2.00	4.000	0.39	0.43	99.57
7	-1.50	2.800	0.82	0.91	99.09
10	-1.00	2.000	1.94	2.14	97.86
14	-0.50	1.400	3.50	3.87	96.13
18	0.00	1.000	5.65	6.24	93.76
25	0.50	0.710	9.76	10.79	89.21
35	1.00	0.500	19.07	21.07	78.93
45	1.50	0.355	32.05	35.42	64.58
60	2.00	0.250	54.99	60.77	39.23
80	2.50	0.180	77.41	85.55	14.45
120	3.00	0.125	87.63	96.84	3.16
170	3.50	0.090	88.61	97.92	2.08
200	3.75	0.075	88.68	98.00	2.00
230	4.00	0.063	89.58	99.00	1.00
PAN			90.47	99.98	0.02

PHI(5): -0.26 PHI(16): 0.75 PHI(25): 1.14
 PHI(50): 1.79 PHI(75): 2.29 PHI(84): 2.47
 PHI(95): 2.92

SIEVE LOSS(g): 0.02 SILT/CLAY: 2.00%
 SKEWNESS: -0.535 KURTOSIS: 1.133

GRAPHIC METHOD
 MEAN (PHI): 1.53 SORTING: 0.86
 MEAN (mm) : 0.35 MEDIAN (mm): 0.29
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
 MEAN (PHI): 1.62 SORTING: 0.97
 MEAN (mm) : 0.33

DATA FILE NAME: DB99-28#2.TAB

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

SAMPLE NO.: DB99-28#3
 SAMPLE ELEV. (FT. NGVD):
 SAMPLE DEPTH (FT.): 13.0
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 116.61
 SAMPLE WEIGHT AFTER WASH (GRAMS): 114.69

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	0.05	0.04	99.96
7	-1.50	2.800	0.24	0.21	99.79
10	-1.00	2.000	0.49	0.42	99.58
14	-0.50	1.400	0.88	0.75	99.25
18	0.00	1.000	1.40	1.20	98.80
25	0.50	0.710	2.44	2.09	97.91
35	1.00	0.500	5.67	4.86	95.14
45	1.50	0.355	13.53	11.60	88.40
60	2.00	0.250	44.79	38.41	61.59
80	2.50	0.180	87.07	74.67	25.33
120	3.00	0.125	111.74	95.82	4.18
170	3.50	0.090	114.49	98.18	1.82
200	3.75	0.075	114.59	98.27	1.73
230	4.00	0.063	115.60	99.13	0.87
PAN			116.59	99.98	0.02

PHI(5): 1.01 PHI(16): 1.58 PHI(25): 1.75
 PHI(50): 2.16 PHI(75): 2.51 PHI(84): 2.72
 PHI(95): 2.98

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.73%
 SKEWNESS: -0.289 KURTOSIS: 1.065

GRAPHIC METHOD
 MEAN (PHI): 2.09 SORTING: 0.57
 MEAN (mm) : 0.23 MEDIAN (mm): 0.22
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
 MEAN (PHI): 2.10 SORTING: 0.66
 MEAN (mm) : 0.23

DATA FILE NAME: DB99-28#3.TAB

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

SAMPLE NO.: DB99-28#4
 SAMPLE ELEV. (FT. NGVD):
 SAMPLE DEPTH (FT.): 17.0
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 114.47
 SAMPLE WEIGHT AFTER WASH (GRAMS): 109.91

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	1.22	1.07	98.93
5	-2.00	4.000	1.32	1.15	98.85
7	-1.50	2.800	1.45	1.27	98.73
10	-1.00	2.000	1.62	1.42	98.58
14	-0.50	1.400	1.96	1.71	98.29
18	0.00	1.000	2.31	2.02	97.98
25	0.50	0.710	3.11	2.72	97.28
35	1.00	0.500	5.55	4.85	95.15
45	1.50	0.355	11.92	10.41	89.59
60	2.00	0.250	32.63	28.51	71.49
80	2.50	0.180	65.98	57.64	42.36
120	3.00	0.125	101.31	88.50	11.50
170	3.50	0.090	109.64	95.78	4.22
200	3.75	0.075	109.81	95.93	4.07
230	4.00	0.063	112.18	98.00	2.00
PAN			114.49	100.02	-0.02

PHI(5): 1.01 PHI(16): 1.65 PHI(25): 1.90
 PHI(50): 2.37 PHI(75): 2.78 PHI(84): 2.93
 PHI(95): 3.45

SIEVE LOSS(g): -0.02 SILT/CLAY: 4.07%
 SKEWNESS: -0.218 KURTOSIS: 1.135

GRAPHIC METHOD

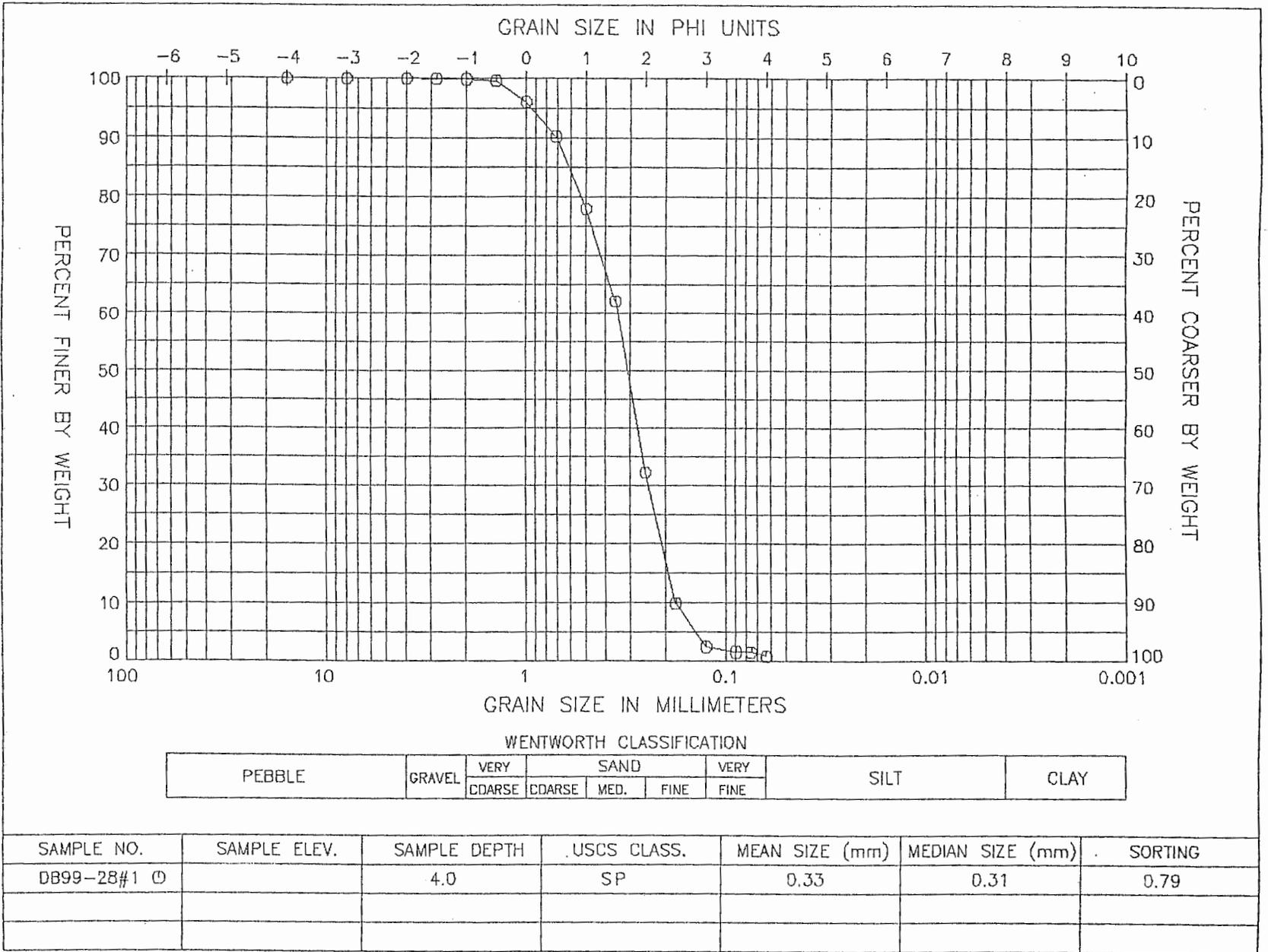
MEAN (PHI): 2.28 SORTING: 0.64
 MEAN (mm) : 0.21 MEDIAN (mm): 0.19
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

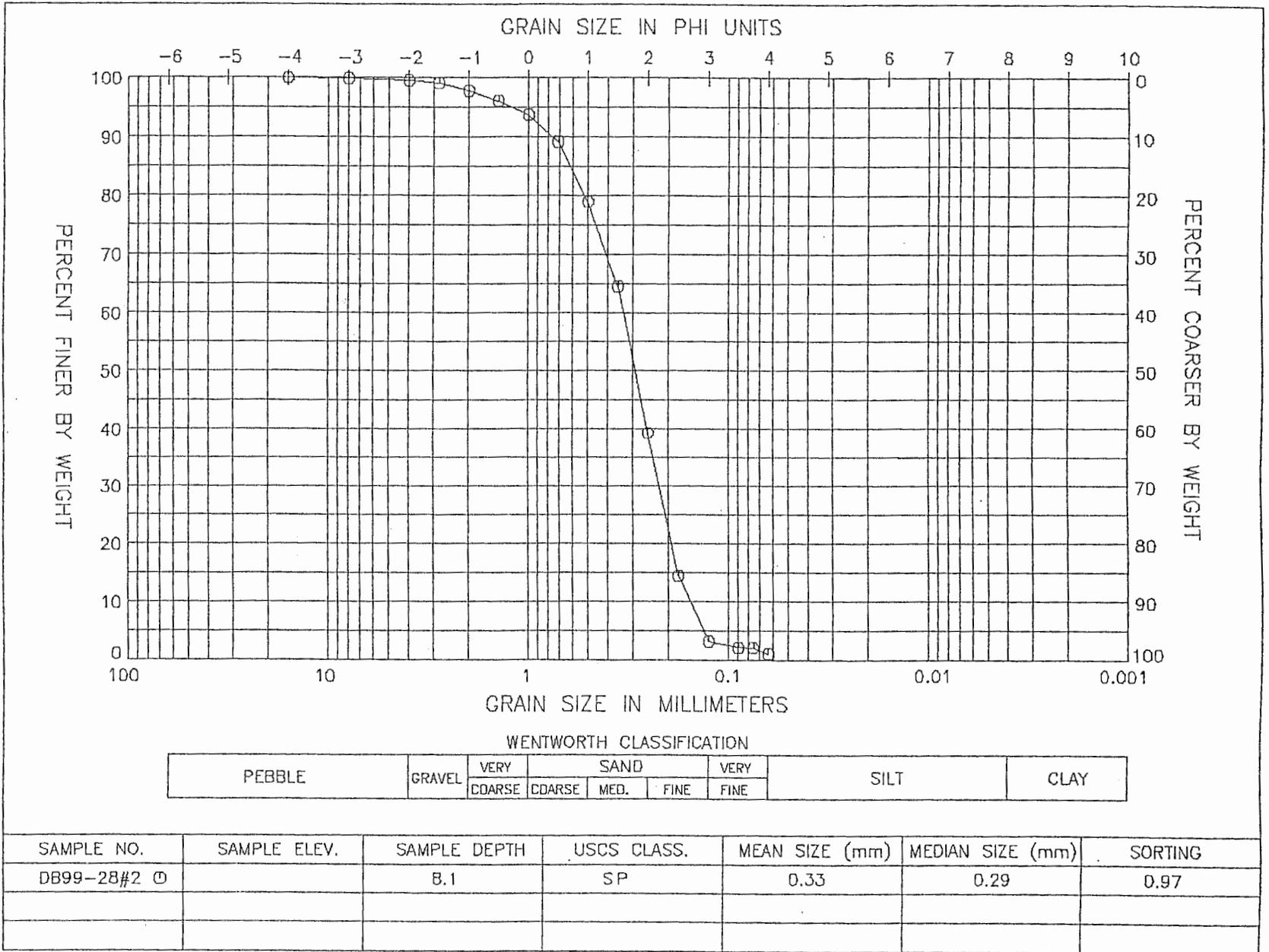
MEAN (PHI): 2.23 SORTING: 0.92
 MEAN (mm) : 0.21

DATA FILE NAME: DB99-28#4.TAB

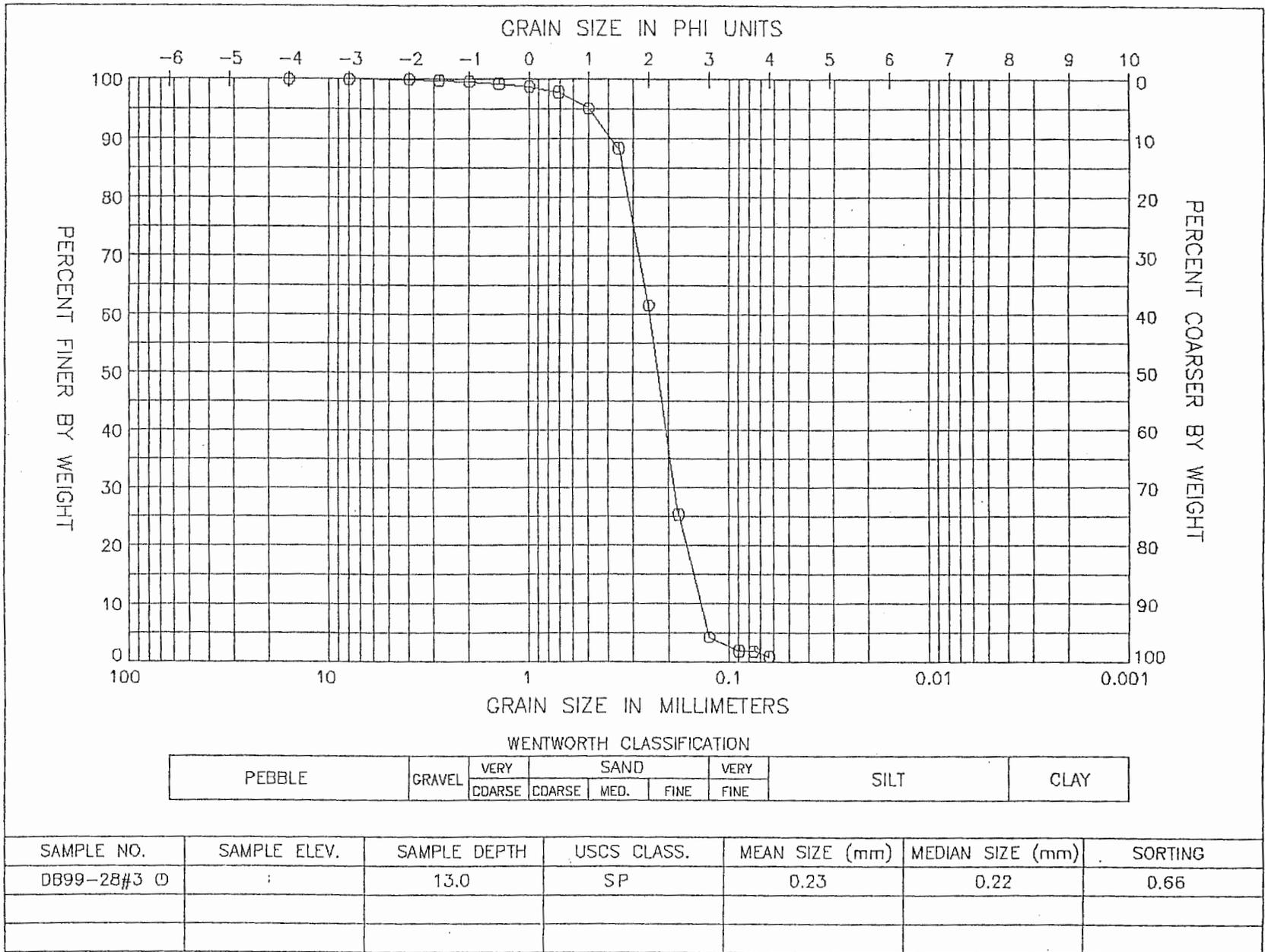
GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999



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