

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

SAMPLE NO.: DB99-14 S#1  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 0.8  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 169.60  
SAMPLE WEIGHT AFTER WASH (GRAMS): 166.54

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	0.17	0.10	99.90
10	-1.00	2.000	0.43	0.25	99.75
14	-0.50	1.400	1.05	0.62	99.38
18	0.00	1.000	2.05	1.21	98.79
25	0.50	0.710	4.34	2.56	97.44
35	1.00	0.500	10.61	6.26	93.74
45	1.50	0.355	19.40	11.44	88.56
60	2.00	0.250	40.47	23.86	76.14
80	2.50	0.180	89.46	52.75	47.25
120	3.00	0.125	147.17	86.77	13.23
170	3.50	0.090	166.19	97.99	2.01
200	3.75	0.075	166.41	98.12	1.88
230	4.00	0.063	168.02	99.07	0.93
PAN			169.58	99.99	0.01

PHI(5): 0.83      PHI(16): 1.68      PHI(25): 2.02  
PHI(50): 2.45      PHI(75): 2.83      PHI(84): 2.96  
PHI(95): 3.37

SIEVE LOSS(g): 0.02      SILT/CLAY: 1.88%  
SKEWNESS: -0.555      KURTOSIS: 1.288

GRAPHIC METHOD

MEAN (PHI): 2.26      SORTING: 0.64  
MEAN (mm): 0.21      MEDIAN (mm): 0.18  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.32      SORTING: 0.74  
MEAN (mm): 0.20

DATA FILE NAME: DB99-14#1.TAB

GRADATION ANALYSIS REPORT  
DELRAY BEACH VIBRACORES 1999  
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SAMPLE NO.: DB99-14 S#2  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 2.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 194.88  
SAMPLE WEIGHT AFTER WASH (GRAMS): 189.75

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	0.04	0.02	99.98
7	-1.50	2.800	0.21	0.11	99.89
10	-1.00	2.000	1.30	0.67	99.33
14	-0.50	1.400	3.78	1.94	98.06
18	0.00	1.000	8.13	4.17	95.83
25	0.50	0.710	15.95	8.18	91.82
35	1.00	0.500	31.21	16.01	83.99
45	1.50	0.355	46.96	24.10	75.90
60	2.00	0.250	71.79	36.84	63.16
80	2.50	0.180	112.27	57.61	42.39
120	3.00	0.125	177.35	91.00	9.00
170	3.50	0.090	189.50	97.24	2.76
200	3.75	0.075	189.68	97.33	2.67
230	4.00	0.063	192.29	98.67	1.33
PAN			194.85	99.98	0.02

PHI(5): 0.10 PHI(16): 1.00 PHI(25): 1.54  
PHI(50): 2.32 PHI(75): 2.76 PHI(84): 2.90  
PHI(95): 3.32

SIEVE LOSS(g): 0.03 SILT/CLAY: 2.67%  
SKEWNESS: -0.638 KURTOSIS: 1.076

GRAPHIC METHOD

MEAN (PHI): 1.93 SORTING: 0.95  
MEAN (mm): 0.26 MEDIAN (mm): 0.20  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.04 SORTING: 0.97  
MEAN (mm): 0.24

DATA FILE NAME: DB99-14#2.TAB

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

SAMPLE NO.: DB99-14 S#3  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 2.8  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 202.69  
SAMPLE WEIGHT AFTER WASH (GRAMS): 200.22

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	1.30	0.64	99.36
5	-2.00	4.000	2.30	1.13	98.87
7	-1.50	2.800	4.11	2.03	97.97
10	-1.00	2.000	8.56	4.22	95.78
14	-0.50	1.400	17.63	8.70	91.30
18	0.00	1.000	28.86	14.24	85.76
25	0.50	0.710	48.00	23.68	76.32
35	1.00	0.500	78.93	38.94	61.06
45	1.50	0.355	103.15	50.89	49.11
60	2.00	0.250	131.77	65.01	34.99
80	2.50	0.180	167.70	82.74	17.26
120	3.00	0.125	194.44	95.93	4.07
170	3.50	0.090	200.10	98.72	1.28
200	3.75	0.075	200.19	98.77	1.23
230	4.00	0.063	201.43	99.38	0.62
PAN			202.68	100.00	0.00

PHI(5): -0.91      PHI(16): 0.09      PHI(25): 0.54  
PHI(50): 1.46      PHI(75): 2.28      PHI(84): 2.55  
PHI(95): 2.96

SIEVE LOSS(g): 0.01      SILT/CLAY: 1.23%  
SKEWNESS: -0.356      KURTOSIS: 0.914

GRAPHIC METHOD

MEAN (PHI): 1.23      SORTING: 1.23  
MEAN (mm) : 0.43      MEDIAN (mm): 0.36  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.29      SORTING: 1.24  
MEAN (mm) : 0.41

DATA FILE NAME: DB99-14#3.TAB

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

SAMPLE NO.: DB99-14 S#4  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 3.6  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 167.28  
SAMPLE WEIGHT AFTER WASH (GRAMS): 164.95

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	0.26	0.16	99.84
10	-1.00	2.000	0.96	0.57	99.43
14	-0.50	1.400	2.33	1.39	98.61
18	0.00	1.000	4.36	2.61	97.39
25	0.50	0.710	8.21	4.91	95.09
35	1.00	0.500	19.30	11.54	88.46
45	1.50	0.355	36.74	21.96	78.04
60	2.00	0.250	75.81	45.32	54.68
80	2.50	0.180	129.20	77.24	22.76
120	3.00	0.125	161.58	96.59	3.41
170	3.50	0.090	164.90	98.58	1.42
200	3.75	0.075	164.93	98.60	1.40
230	4.00	0.063	166.11	99.30	0.70
PAN			167.28	100.00	0.00

PHI(5): 0.51	PHI(16): 1.21	PHI(25): 1.57
PHI(50): 2.07	PHI(75): 2.46	PHI(84): 2.67
PHI(95): 2.96		

SIEVE LOSS(g): 0.00	SILT/CLAY: 1.40%
SKEWNESS: -0.466	KURTOSIS: 1.117

GRAPHIC METHOD

MEAN (PHI): 1.89	SORTING: 0.73
MEAN (mm): 0.27	MEDIAN (mm): 0.24
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 1.93	SORTING: 0.79
MEAN (mm): 0.26	

DATA FILE NAME: DB99-14#4.TAB

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

SAMPLE NO.: DB99-14 S#5  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 7.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 177.38  
SAMPLE WEIGHT AFTER WASH (GRAMS): 175.04

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	0.27	0.15	99.85
7	-1.50	2.800	0.63	0.36	99.64
10	-1.00	2.000	1.40	0.79	99.21
14	-0.50	1.400	2.57	1.45	98.55
18	0.00	1.000	4.22	2.38	97.62
25	0.50	0.710	7.57	4.27	95.73
35	1.00	0.500	18.06	10.18	89.82
45	1.50	0.355	36.92	20.81	79.19
60	2.00	0.250	77.25	43.55	56.45
80	2.50	0.180	129.03	72.74	27.26
120	3.00	0.125	170.47	96.10	3.90
170	3.50	0.090	174.36	98.30	1.70
200	3.75	0.075	174.56	98.41	1.59
230	4.00	0.063	175.91	99.17	0.83
PAN			177.36	99.99	0.01

PHI(5): 0.56 PHI(16): 1.27 PHI(25): 1.59  
PHI(50): 2.11 PHI(75): 2.55 PHI(84): 2.74  
PHI(95): 2.98

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.59%  
SKEWNESS: -0.465 KURTOSIS: 1.035

GRAPHIC METHOD

MEAN (PHI): 1.93 SORTING: 0.73  
MEAN (mm): 0.26 MEDIAN (mm): 0.23  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.98 SORTING: 0.80  
MEAN (mm): 0.25

DATA FILE NAME: DB99-14#5.TAB

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

SAMPLE NO.: DB99-14 S#6  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 13.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 174.34  
SAMPLE WEIGHT AFTER WASH (GRAMS): 172.44

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	0.03	0.02	99.98
10	-1.00	2.000	0.22	0.13	99.87
14	-0.50	1.400	0.47	0.27	99.73
18	0.00	1.000	0.99	0.57	99.43
25	0.50	0.710	2.76	1.58	98.42
35	1.00	0.500	11.16	6.40	93.60
45	1.50	0.355	29.81	17.10	82.90
60	2.00	0.250	82.18	47.14	52.86
80	2.50	0.180	140.33	80.49	19.51
120	3.00	0.125	169.07	96.98	3.02
170	3.50	0.090	172.32	98.84	1.16
200	3.75	0.075	172.37	98.87	1.13
230	4.00	0.063	173.33	99.42	0.58
PAN			174.34	100.00	0.00

PHI(5): 0.85      PHI(16): 1.45      PHI(25): 1.63  
PHI(50): 2.04      PHI(75): 2.42      PHI(84): 2.61  
PHI(95): 2.94

SIEVE LOSS(g): 0.00      SILT/CLAY: 1.13%  
SKEWNESS: -0.252      KURTOSIS: 1.087

GRAPHIC METHOD

MEAN (PHI): 1.98      SORTING: 0.58  
MEAN (mm): 0.25      MEDIAN (mm): 0.24  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.99      SORTING: 0.62  
MEAN (mm): 0.25

DATA FILE NAME: DB99-14#6.TAB

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

SAMPLE NO.: DB99-14 S#7  
SAMPLE ELEV. (FT. NGVD):  
SAMPLE DEPTH (FT.): 16.6  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 164.37  
SAMPLE WEIGHT AFTER WASH (GRAMS): 162.61

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	0.44	0.27	99.73
7	-1.50	2.800	0.77	0.47	99.53
10	-1.00	2.000	3.04	1.85	98.15
14	-0.50	1.400	5.26	3.20	96.80
18	0.00	1.000	9.05	5.51	94.49
25	0.50	0.710	16.53	10.06	89.94
35	1.00	0.500	33.89	20.62	79.38
45	1.50	0.355	58.09	35.34	64.66
60	2.00	0.250	100.63	61.22	38.78
80	2.50	0.180	139.94	85.14	14.86
120	3.00	0.125	159.71	97.16	2.84
170	3.50	0.090	162.44	98.83	1.17
200	3.75	0.075	162.52	98.87	1.13
230	4.00	0.063	163.43	99.43	0.57
PAN			164.34	99.98	0.02

PHI(5): -0.11	PHI(16): 0.78	PHI(25): 1.15
PHI(50): 1.78	PHI(75): 2.29	PHI(84): 2.48
PHI(95): 2.91		

SIEVE LOSS(g): 0.03	SILT/CLAY: 1.13%
SKEWNESS: -0.452	KURTOSIS: 1.086

GRAPHIC METHOD

MEAN (PHI): 1.57	SORTING: 0.85
MEAN (mm) : 0.34	MEDIAN (mm): 0.29
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

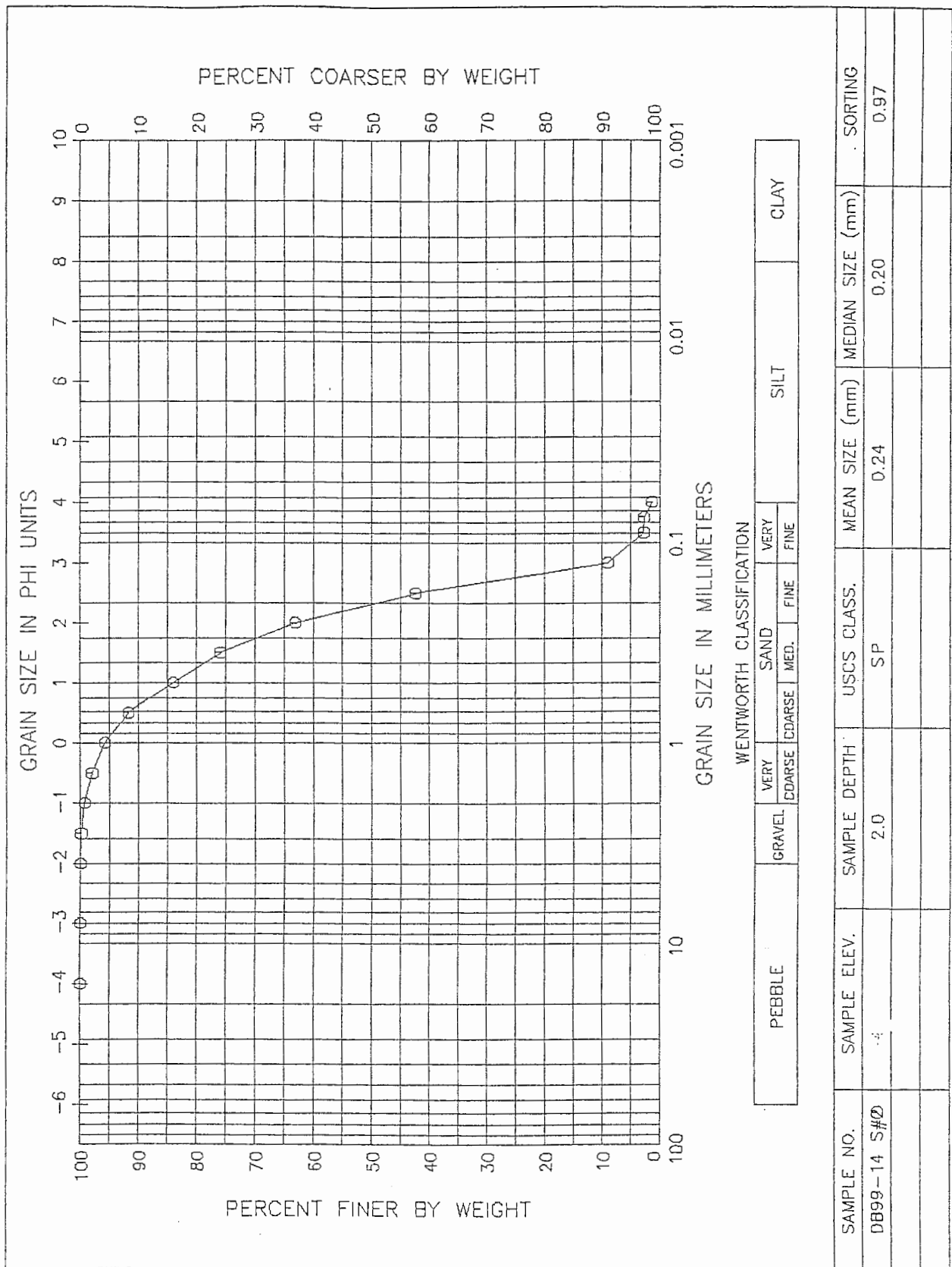
MOMENT METHOD

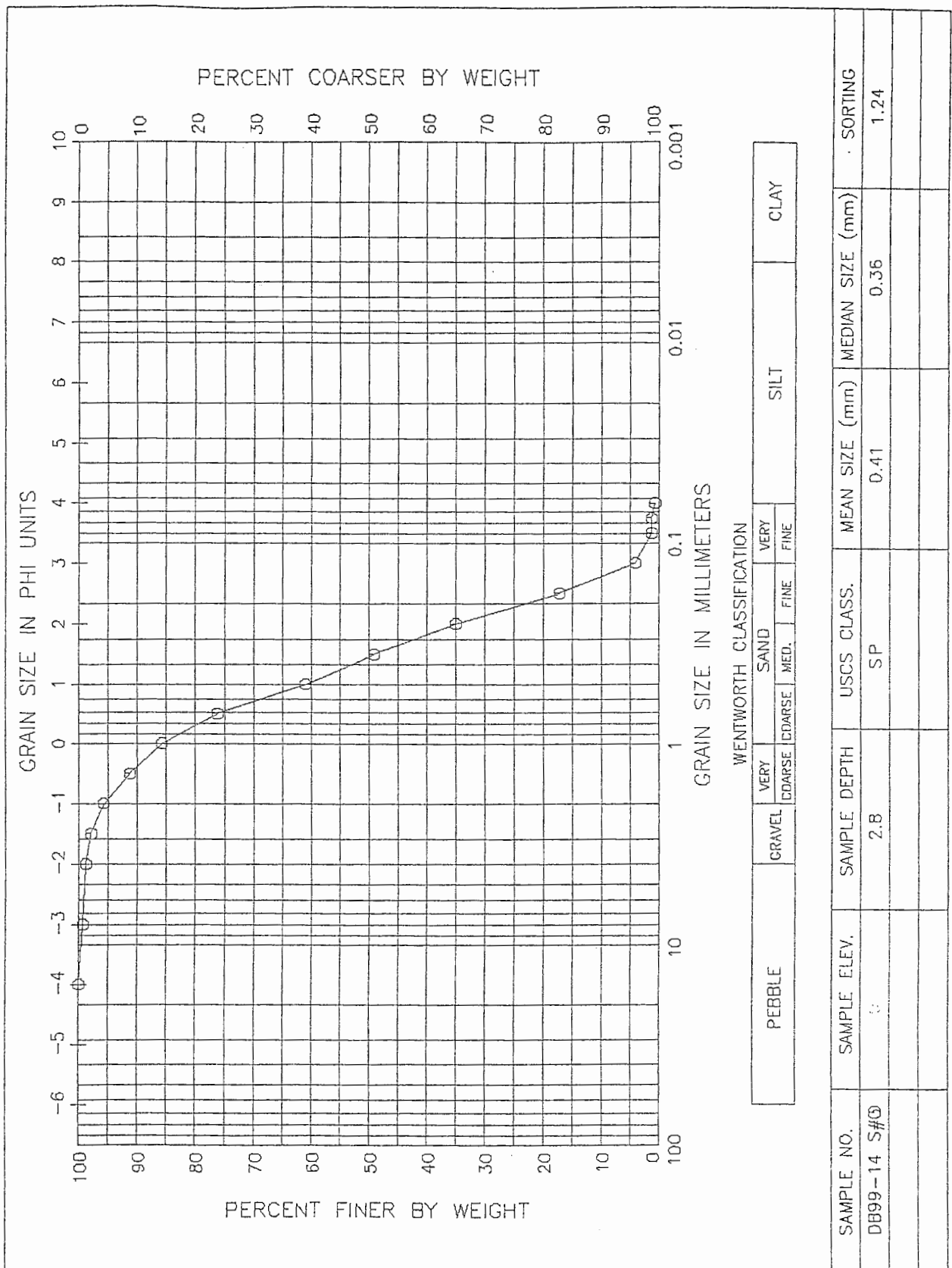
MEAN (PHI): 1.64	SORTING: 0.92
MEAN (mm) : 0.32	

DATA FILE NAME: DB99-14#7.TAB

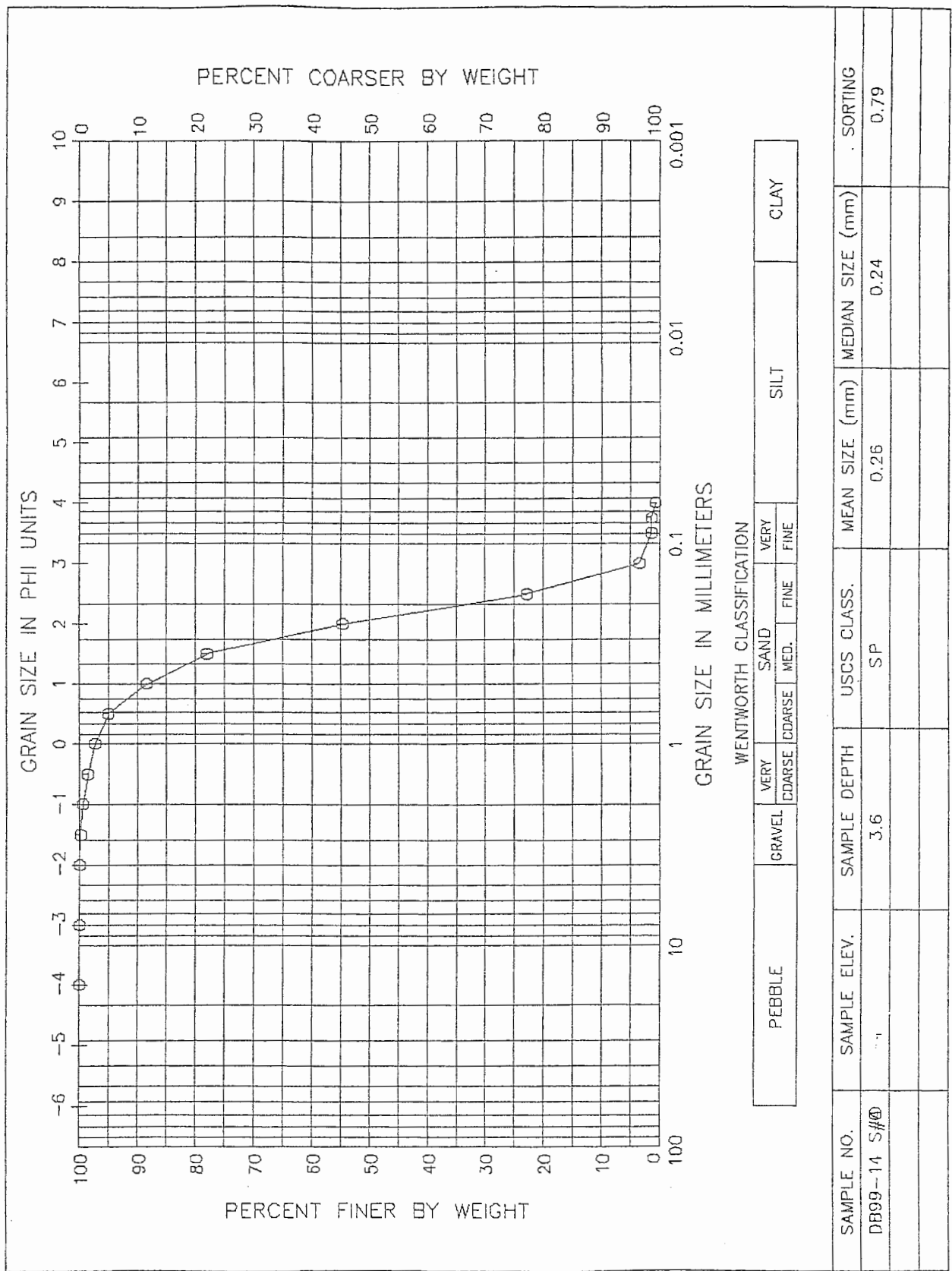




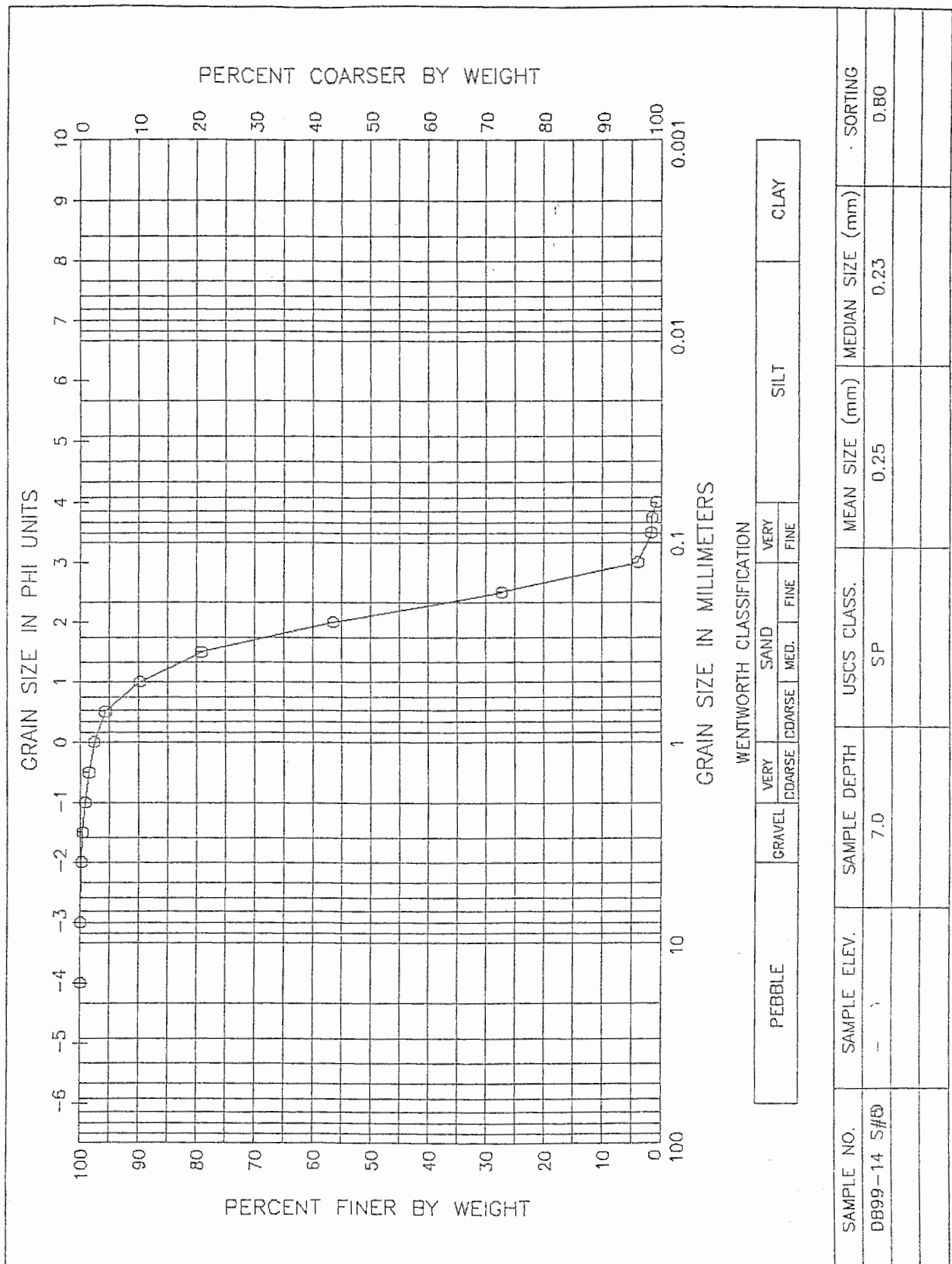


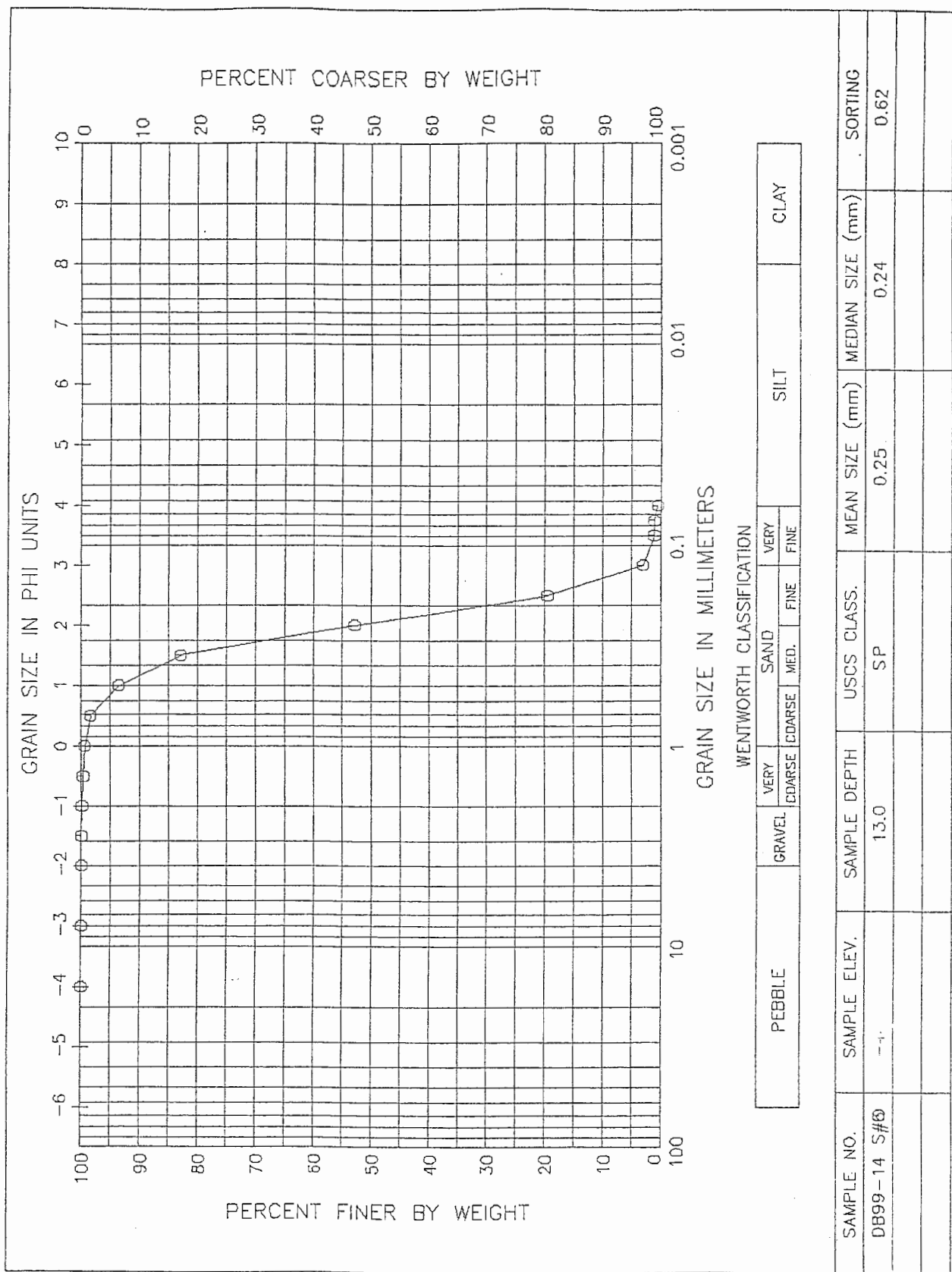


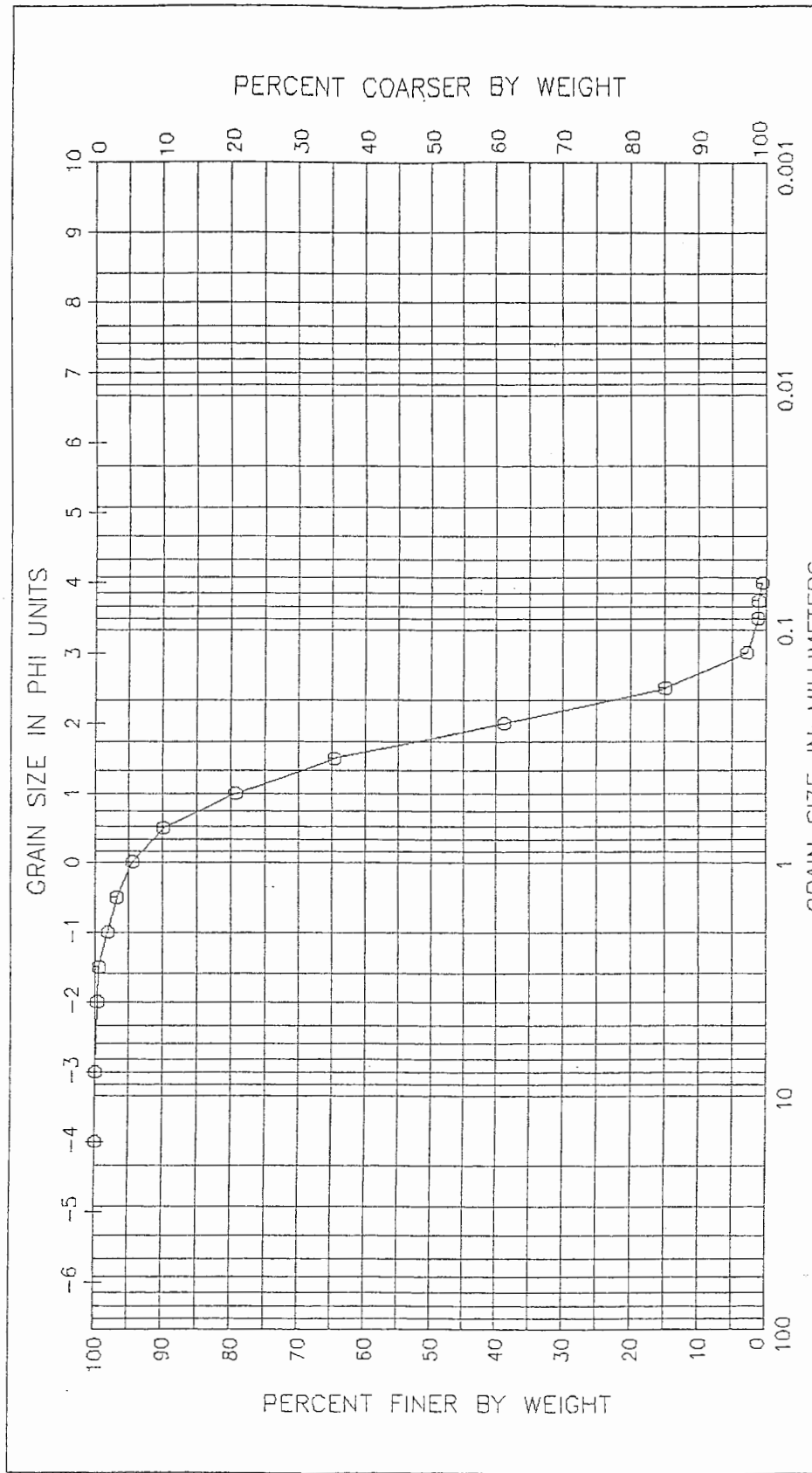
GRAIN SIZE DISTRIBUTION CURVE  
DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE  
DELRAY BEACH VIBRACORES 1999







GRAIN SIZE DISTRIBUTION CURVE  
DELRAY BEACH VIBRACORES 1999

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
DB99-14 SHD		16.6	SP	0.32	0.29	0.92