

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

SAMPLE NO.: DB99-6 S#1
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 187.41
SAMPLE WEIGHT AFTER WASH (GRAMS): 184.27

| 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 | 0.45 | 0.24 | 99.76 |
| 7 | -1.50 | 2.800 | 1.01 | 0.54 | 99.46 |
| 10 | -1.00 | 2.000 | 3.16 | 1.69 | 98.31 |
| 14 | -0.50 | 1.400 | 6.00 | 3.20 | 96.80 |
| 18 | 0.00 | 1.000 | 10.24 | 5.46 | 94.54 |
| 25 | 0.50 | 0.710 | 16.66 | 8.89 | 91.11 |
| 35 | 1.00 | 0.500 | 28.80 | 15.37 | 84.63 |
| 45 | 1.50 | 0.355 | 42.62 | 22.74 | 77.26 |
| 60 | 2.00 | 0.250 | 70.26 | 37.49 | 62.51 |
| 80 | 2.50 | 0.180 | 123.01 | 65.64 | 34.36 |
| 120 | 3.00 | 0.125 | 174.89 | 93.32 | 6.68 |
| 170 | 3.50 | 0.090 | 183.99 | 98.18 | 1.82 |
| 200 | 3.75 | 0.075 | 184.09 | 98.23 | 1.77 |
| 230 | 4.00 | 0.063 | 185.80 | 99.14 | 0.86 |
| PAN | | | 187.37 | 99.98 | 0.02 |

PHI(5): -0.10 PHI(16): 1.04 PHI(25): 1.58
PHI(50): 2.22 PHI(75): 2.67 PHI(84): 2.83
PHI(95): 3.17

SIEVE LOSS(g): 0.04 SILT/CLAY: 1.77%
SKEWNESS: -0.768 KURTOSIS: 1.229

GRAPHIC METHOD

MEAN (PHI): 1.83 SORTING: 0.89
MEAN (mm): 0.28 MEDIAN (mm): 0.21
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.97 SORTING: 0.99
MEAN (mm): 0.25

DATA FILE NAME: DB99-6#1.TAB

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SAMPLE NO.: DB99-6 S#2
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 2.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 170.07
SAMPLE WEIGHT AFTER WASH (GRAMS): 168.08

| 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 | 0.67 | 0.39 | 99.61 |
| 7 | -1.50 | 2.800 | 1.93 | 1.13 | 98.87 |
| 10 | -1.00 | 2.000 | 5.57 | 3.28 | 96.72 |
| 14 | -0.50 | 1.400 | 11.21 | 6.59 | 93.41 |
| 18 | 0.00 | 1.000 | 19.26 | 11.32 | 88.68 |
| 25 | 0.50 | 0.710 | 32.81 | 19.29 | 80.71 |
| 35 | 1.00 | 0.500 | 54.61 | 32.11 | 67.89 |
| 45 | 1.50 | 0.355 | 80.13 | 47.12 | 52.88 |
| 60 | 2.00 | 0.250 | 119.23 | 70.11 | 29.89 |
| 80 | 2.50 | 0.180 | 153.17 | 90.06 | 9.94 |
| 120 | 3.00 | 0.125 | 166.17 | 97.71 | 2.29 |
| 170 | 3.50 | 0.090 | 167.90 | 98.72 | 1.28 |
| 200 | 3.75 | 0.075 | 167.95 | 98.75 | 1.25 |
| 230 | 4.00 | 0.063 | 169.04 | 99.39 | 0.61 |
| PAN | | | 170.03 | 99.98 | 0.02 |

PHI(5): -0.74 PHI(16): 0.29 PHI(25): 0.72
PHI(50): 1.56 PHI(75): 2.12 PHI(84): 2.35
PHI(95): 2.82

SIEVE LOSS(g): 0.04 SILT/CLAY: 1.25%
SKEWNESS: -0.507 KURTOSIS: 1.043

GRAPHIC METHOD

MEAN (PHI): 1.26 SORTING: 1.03
MEAN (mm): 0.42 MEDIAN (mm): 0.34
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.35 SORTING: 1.06
MEAN (mm): 0.39

DATA FILE NAME: DB99-6#2.TAB

GRADATION ANALYSIS REPORT
DELRAY BEACH VIBRACORES 1999
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SAMPLE NO.: DB99-6 S#3
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 171.44
SAMPLE WEIGHT AFTER WASH (GRAMS): 169.89

| 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 | 0.35 | 0.20 | 99.80 |
| 10 | -1.00 | 2.000 | 0.76 | 0.44 | 99.56 |
| 14 | -0.50 | 1.400 | 1.55 | 0.90 | 99.10 |
| 18 | 0.00 | 1.000 | 2.92 | 1.70 | 98.30 |
| 25 | 0.50 | 0.710 | 6.45 | 3.76 | 96.24 |
| 35 | 1.00 | 0.500 | 17.06 | 9.95 | 90.05 |
| 45 | 1.50 | 0.355 | 37.50 | 21.87 | 78.13 |
| 60 | 2.00 | 0.250 | 85.48 | 49.86 | 50.14 |
| 80 | 2.50 | 0.180 | 139.83 | 81.56 | 18.44 |
| 120 | 3.00 | 0.125 | 165.27 | 96.40 | 3.60 |
| 170 | 3.50 | 0.090 | 169.71 | 98.99 | 1.01 |
| 200 | 3.75 | 0.075 | 169.80 | 99.04 | 0.96 |
| 230 | 4.00 | 0.063 | 170.60 | 99.51 | 0.49 |
| PAN | | | 171.41 | 99.98 | 0.02 |

PHI(5): 0.60 PHI(16): 1.25 PHI(25): 1.56
PHI(50): 2.00 PHI(75): 2.40 PHI(84): 2.58
PHI(95): 2.95

SIEVE LOSS(g): 0.03 SILT/CLAY: 0.96%
SKEWNESS: -0.340 KURTOSIS: 1.147

GRAPHIC METHOD

MEAN (PHI): 1.88 SORTING: 0.66
MEAN (mm): 0.27 MEDIAN (mm): 0.25
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.91 SORTING: 0.73
MEAN (mm): 0.27

DATA FILE NAME: DB99-6#3.TAB

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

SAMPLE NO.: DB99-6 S#4
SAMPLE ELEV. (FT. NGVD):
SAMPLE DEPTH (FT.): 6.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 187.86
SAMPLE WEIGHT AFTER WASH (GRAMS): 186.24

| 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 | 0.70 | 0.37 | 99.63 |
| 5 | -2.00 | 4.000 | 1.45 | 0.77 | 99.23 |
| 7 | -1.50 | 2.800 | 2.37 | 1.26 | 98.74 |
| 10 | -1.00 | 2.000 | 3.67 | 1.95 | 98.05 |
| 14 | -0.50 | 1.400 | 5.28 | 2.81 | 97.19 |
| 18 | 0.00 | 1.000 | 7.27 | 3.87 | 96.13 |
| 25 | 0.50 | 0.710 | 10.80 | 5.75 | 94.25 |
| 35 | 1.00 | 0.500 | 21.31 | 11.34 | 88.66 |
| 45 | 1.50 | 0.355 | 39.55 | 21.05 | 78.95 |
| 60 | 2.00 | 0.250 | 84.72 | 45.10 | 54.90 |
| 80 | 2.50 | 0.180 | 144.58 | 76.96 | 23.04 |
| 120 | 3.00 | 0.125 | 181.01 | 96.35 | 3.65 |
| 170 | 3.50 | 0.090 | 186.07 | 99.05 | 0.95 |
| 200 | 3.75 | 0.075 | 186.13 | 99.08 | 0.92 |
| 230 | 4.00 | 0.063 | 187.05 | 99.57 | 0.43 |
| PAN | | | 187.86 | 100.00 | 0.00 |

PHI(5): 0.30 PHI(16): 1.24 PHI(25): 1.58
PHI(50): 2.08 PHI(75): 2.47 PHI(84): 2.68
PHI(95): 2.97

SIEVE LOSS(g): 0.00 SILT/CLAY: 0.92%
SKEWNESS: -0.616 KURTOSIS: 1.231

GRAPHIC METHOD

MEAN (PHI): 1.85 SORTING: 0.72
MEAN (mm): 0.28 MEDIAN (mm): 0.24
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.91 SORTING: 0.92
MEAN (mm): 0.27

DATA FILE NAME: DB99-6#4.TAB

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

SAMPLE NO.: DB99-6 S#4
SAMPLE ELEV. (FT. NGVD): .
SAMPLE DEPTH (FT.): 12.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 185.69
SAMPLE WEIGHT AFTER WASH (GRAMS): 182.17

| 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 | 0.08 | 0.04 | 99.96 |
| 10 | -1.00 | 2.000 | 0.33 | 0.18 | 99.82 |
| 14 | -0.50 | 1.400 | 0.70 | 0.38 | 99.62 |
| 18 | 0.00 | 1.000 | 1.18 | 0.64 | 99.36 |
| 25 | 0.50 | 0.710 | 2.45 | 1.32 | 98.68 |
| 35 | 1.00 | 0.500 | 7.56 | 4.07 | 95.93 |
| 45 | 1.50 | 0.355 | 20.31 | 10.94 | 89.06 |
| 60 | 2.00 | 0.250 | 63.60 | 34.25 | 65.75 |
| 80 | 2.50 | 0.180 | 131.21 | 70.66 | 29.34 |
| 120 | 3.00 | 0.125 | 173.84 | 93.62 | 6.38 |
| 170 | 3.50 | 0.090 | 181.83 | 97.92 | 2.08 |
| 200 | 3.75 | 0.075 | 182.05 | 98.04 | 1.96 |
| 230 | 4.00 | 0.063 | 183.89 | 99.03 | 0.97 |
| PAN | | | 185.68 | 99.99 | 0.01 |

PHI(5): 1.07 PHI(16): 1.61 PHI(25): 1.80
PHI(50): 2.22 PHI(75): 2.59 PHI(84): 2.79
PHI(95): 3.16

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.96%
SKEWNESS: -0.173 KURTOSIS: 1.082

GRAPHIC METHOD

MEAN (PHI): 2.17 SORTING: 0.59
MEAN (mm) : 0.22 MEDIAN (mm): 0.22
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.17 SORTING: 0.63
MEAN (mm) : 0.22

DATA FILE NAME: DB99-6#5.TAB

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

SAMPLE NO.: DB99-6 S#6
SAMPLE ELEV. (FT. NGVD): -
SAMPLE DEPTH (FT.): 14.6
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 220.83
SAMPLE WEIGHT AFTER WASH (GRAMS): 217.05

| 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 | 0.26 | 0.12 | 99.88 |
| 7 | -1.50 | 2.800 | 1.83 | 0.83 | 99.17 |
| 10 | -1.00 | 2.000 | 4.03 | 1.82 | 98.18 |
| 14 | -0.50 | 1.400 | 7.66 | 3.47 | 96.53 |
| 18 | 0.00 | 1.000 | 13.49 | 6.11 | 93.89 |
| 25 | 0.50 | 0.710 | 22.95 | 10.39 | 89.61 |
| 35 | 1.00 | 0.500 | 44.51 | 20.16 | 79.84 |
| 45 | 1.50 | 0.355 | 81.75 | 37.02 | 62.98 |
| 60 | 2.00 | 0.250 | 138.33 | 62.64 | 37.36 |
| 80 | 2.50 | 0.180 | 187.21 | 84.78 | 15.22 |
| 120 | 3.00 | 0.125 | 213.87 | 96.85 | 3.15 |
| 170 | 3.50 | 0.090 | 216.84 | 98.19 | 1.81 |
| 200 | 3.75 | 0.075 | 216.96 | 98.25 | 1.75 |
| 230 | 4.00 | 0.063 | 218.89 | 99.12 | 0.88 |
| PAN | | | 220.82 | 100.00 | 0.00 |

PHI(5): -0.21 PHI(16): 0.79 PHI(25): 1.14
PHI(50): 1.75 PHI(75): 2.28 PHI(84): 2.48
PHI(95): 2.92

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.75%
SKEWNESS: -0.468 KURTOSIS: 1.131

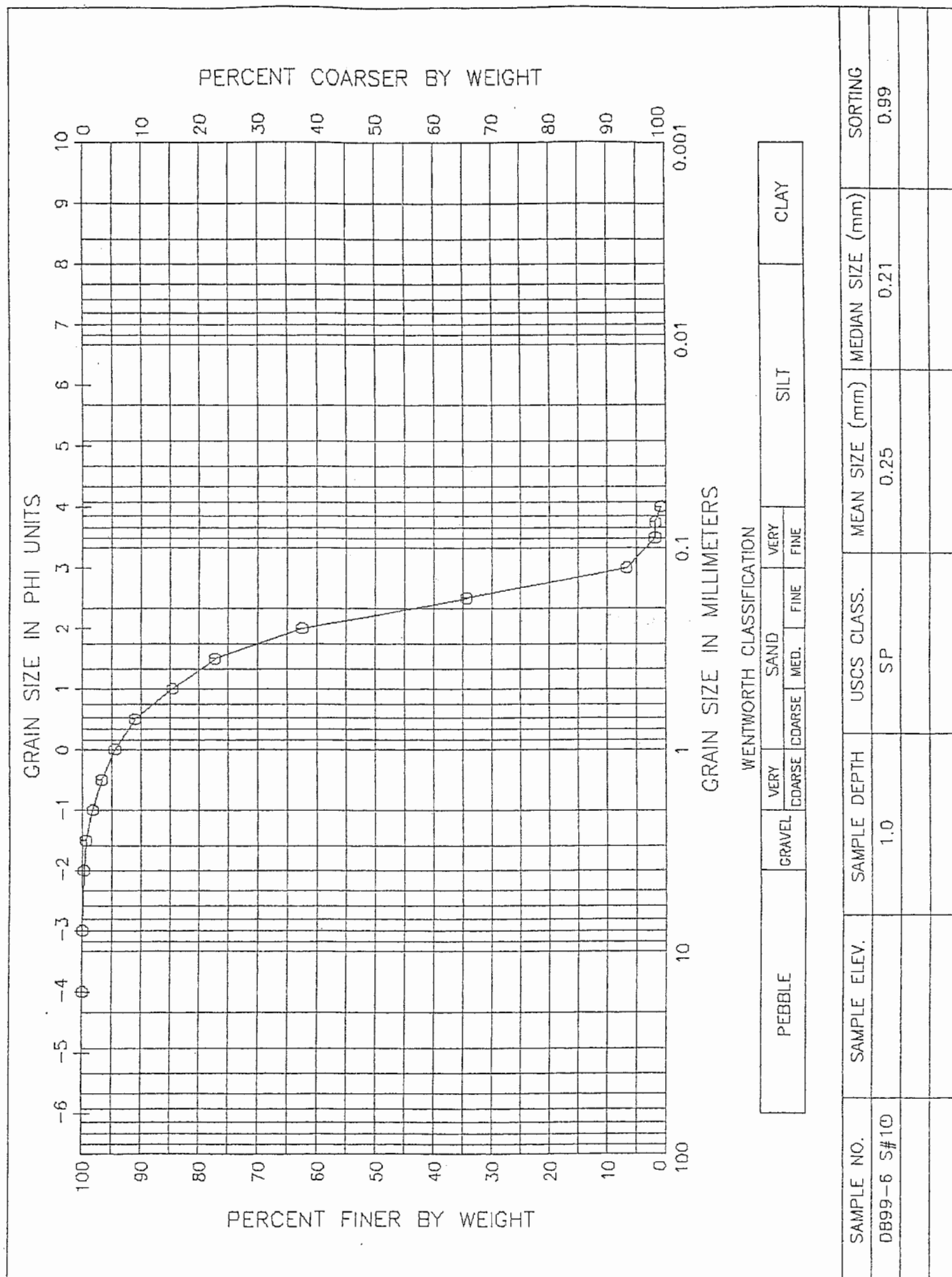
GRAPHIC METHOD

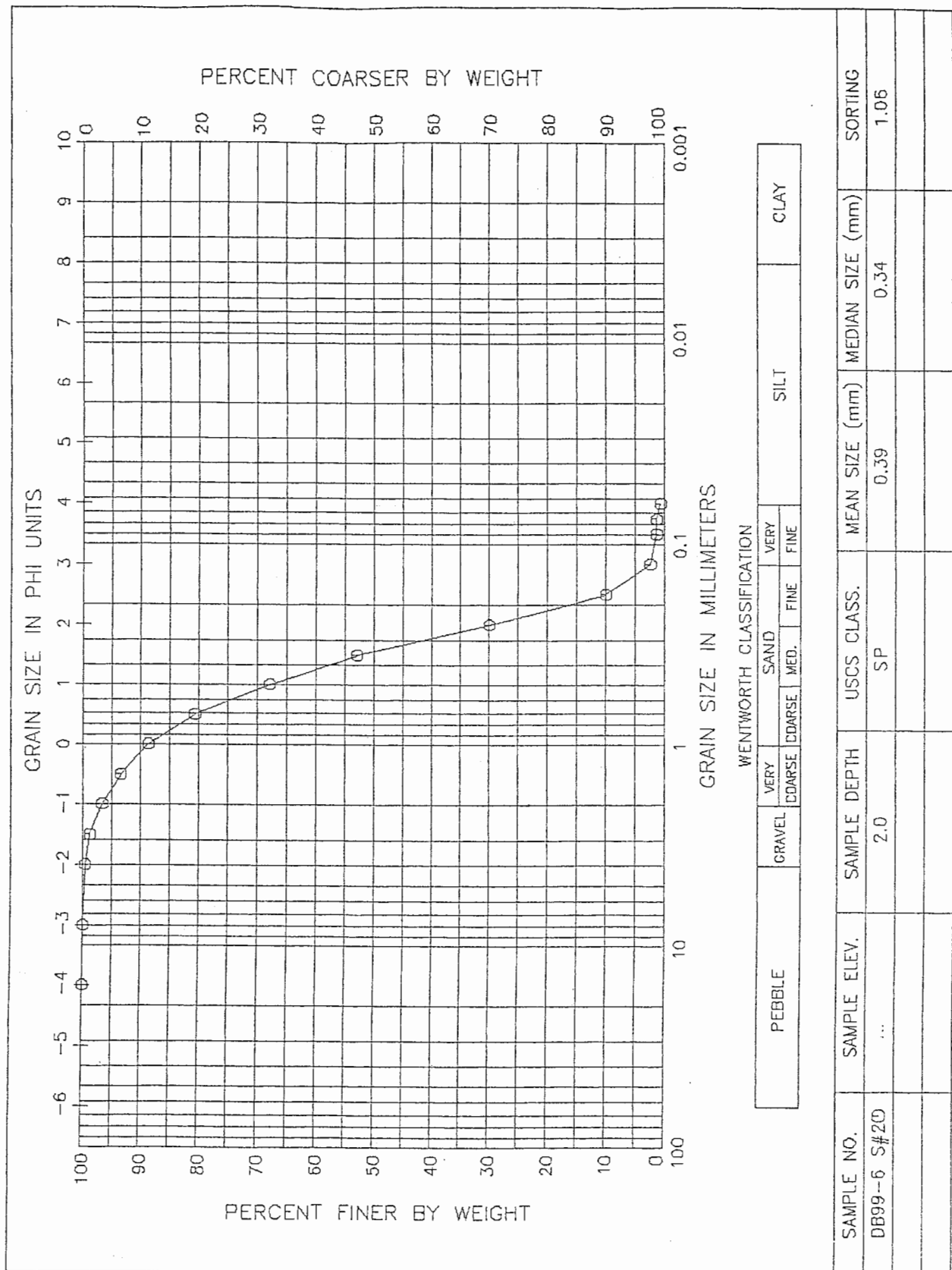
MEAN (PHI): 1.55 SORTING: 0.85
MEAN (mm): 0.34 MEDIAN (mm): 0.30
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

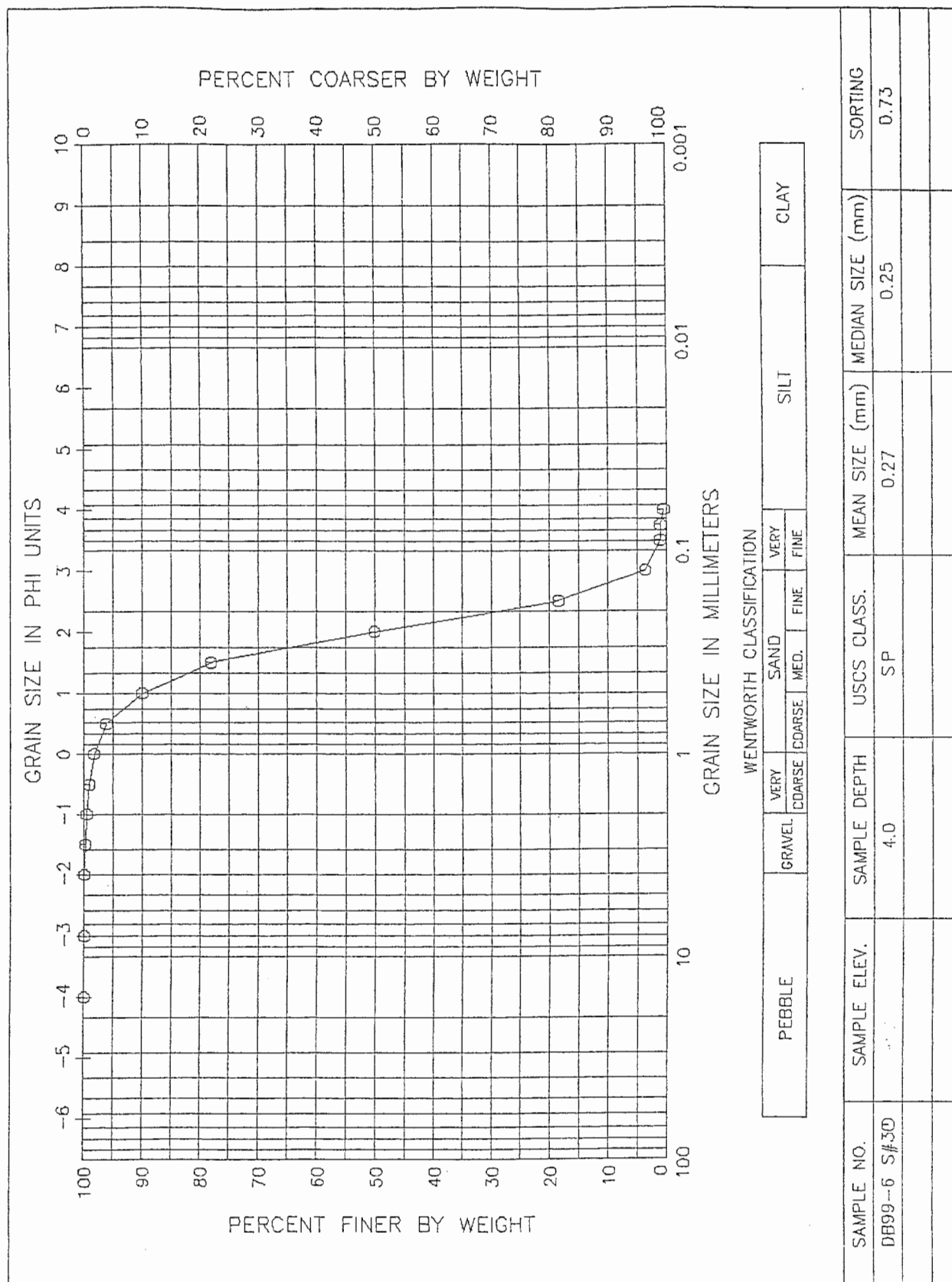
MEAN (PHI): 1.62 SORTING: 0.94
MEAN (mm): 0.33

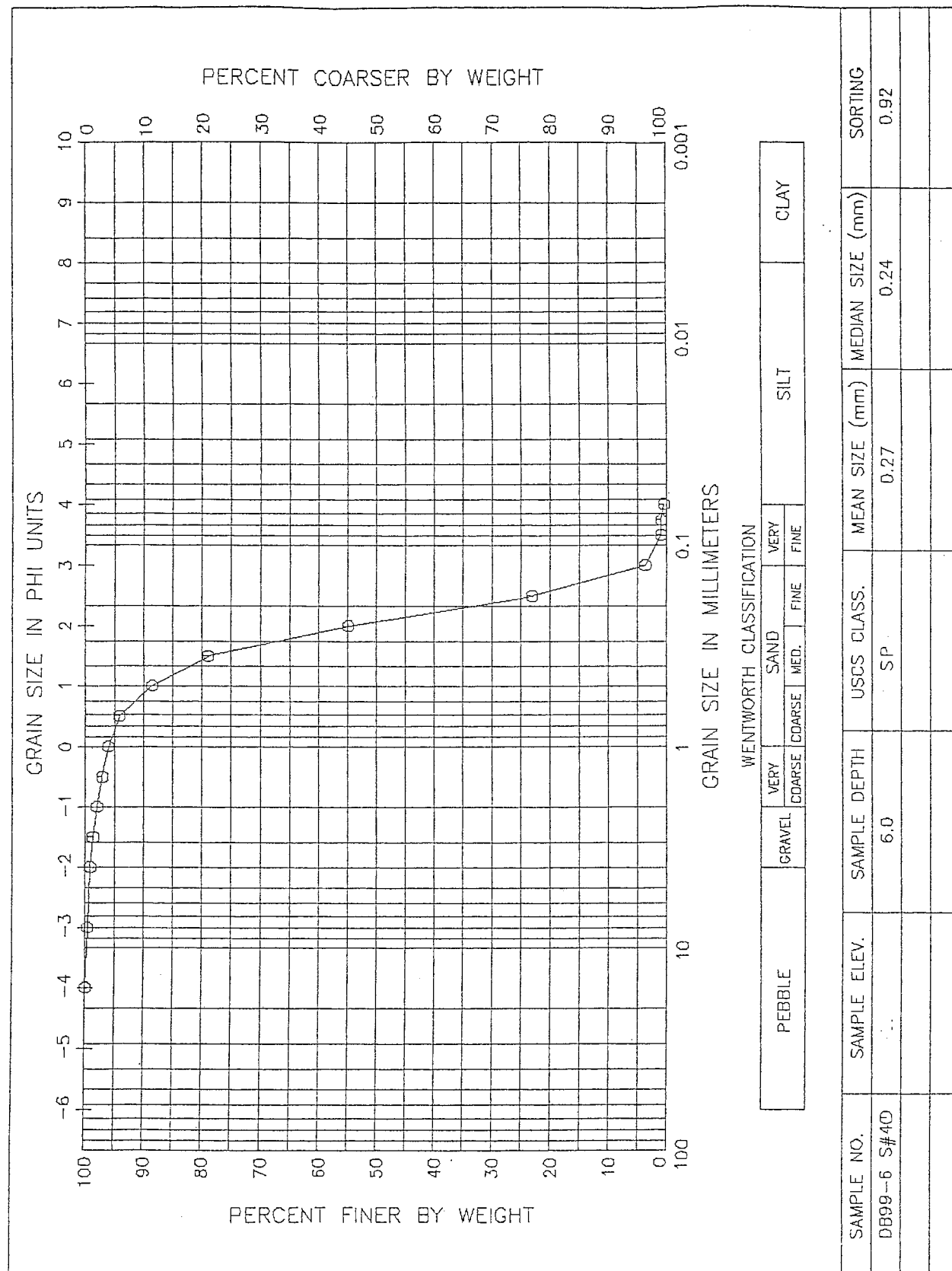
DATA FILE NAME: DB99-6#6.TAB



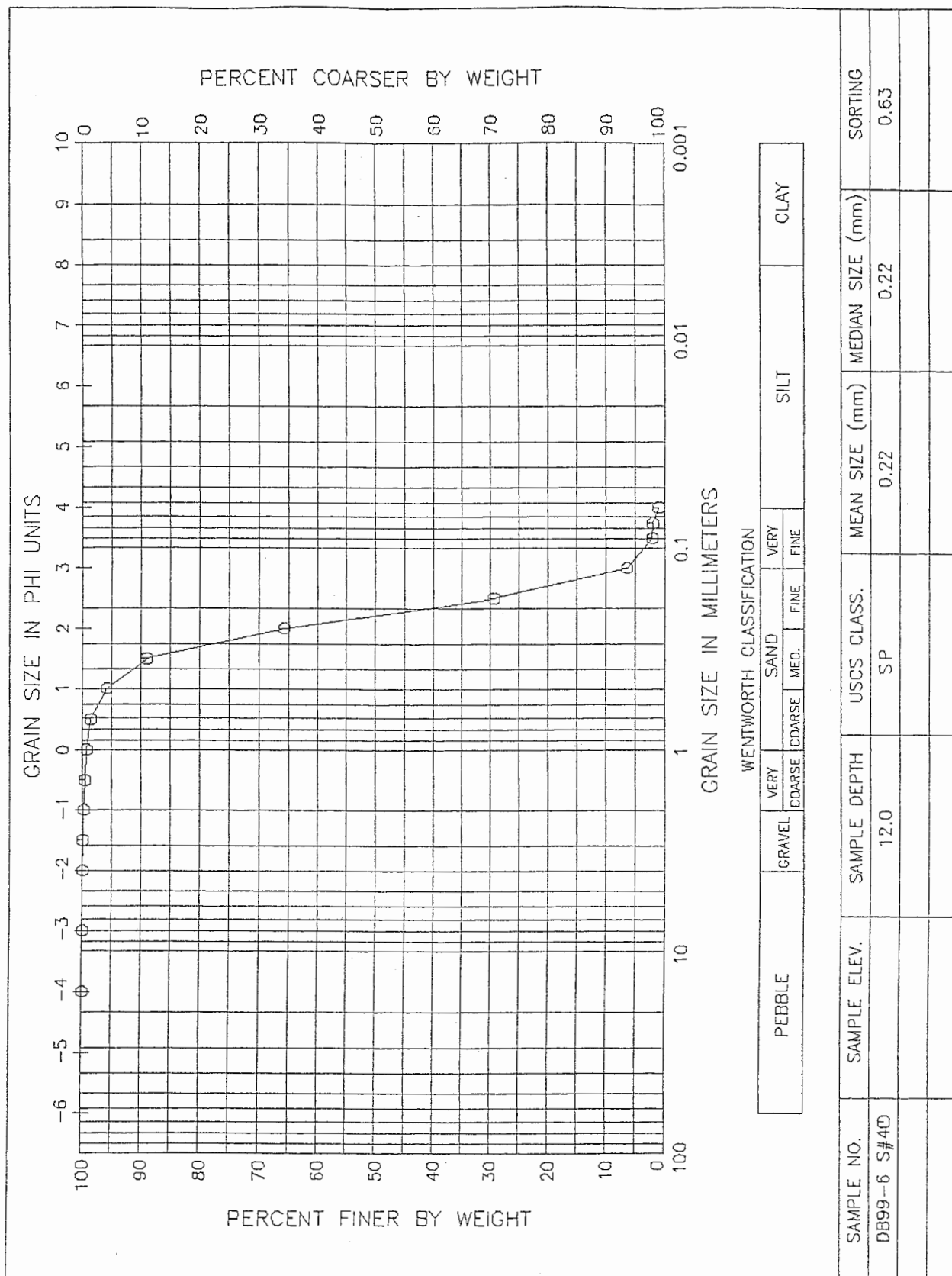


GRAIN SIZE DISTRIBUTION CURVE
 DELRAY BEACH VIBRACORES 1999

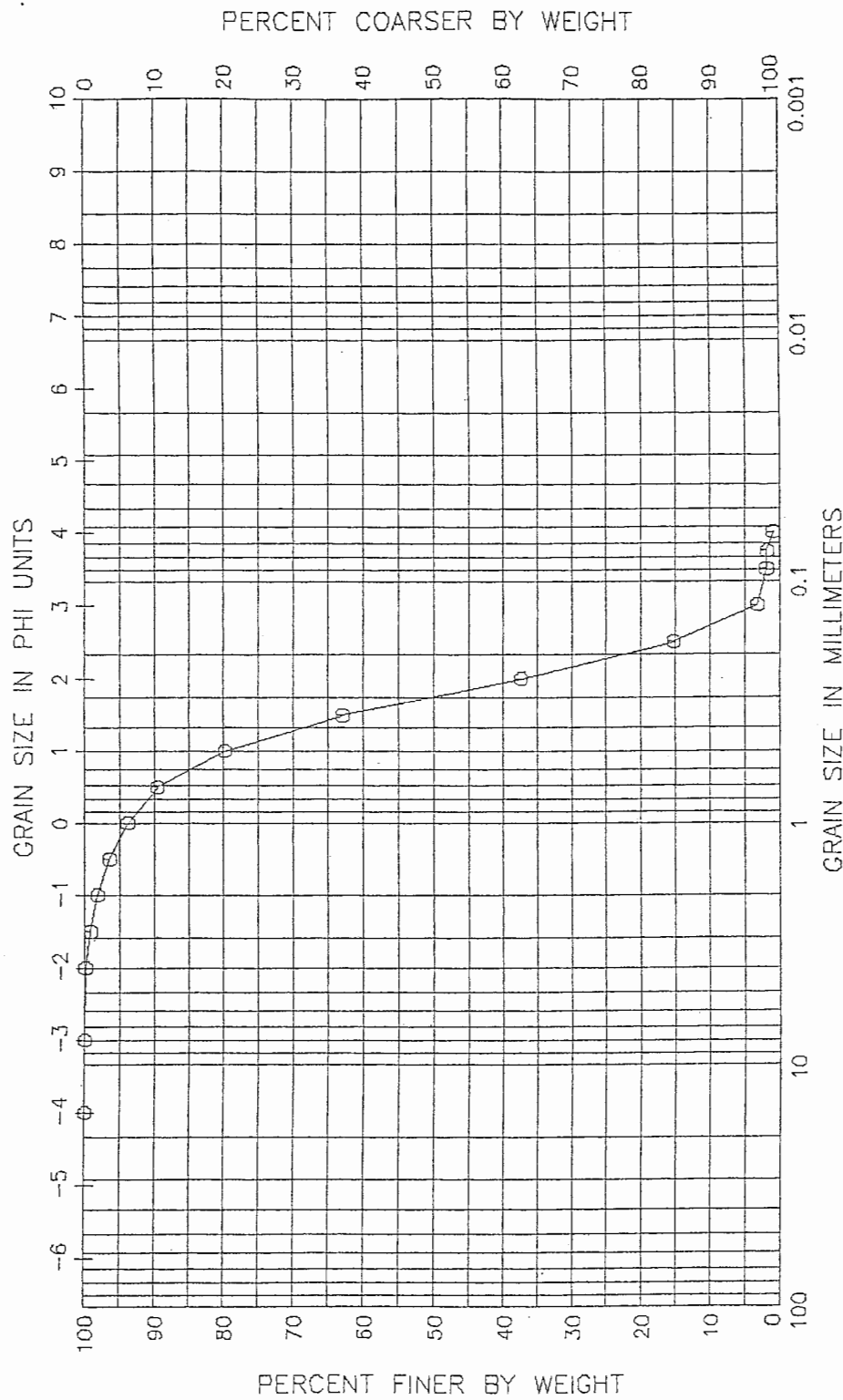




GRAIN SIZE DISTRIBUTION CURVE
DELRAY BEACH VIBRACORES 1999



GRAIN SIZE DISTRIBUTION CURVE
DELRAY BEACH VIBRACORES 1999



| SAMPLE NO. | SAMPLE ELEV. | SAMPLE DEPTH | USCS CLASS. | MEAN SIZE (mm) | MEDIAN SIZE (mm) | SORTING |
|-------------|--------------|--------------|-------------|----------------|------------------|---------|
| D899-6 S#60 | | 14.6 | SP | 0.33 | 0.30 | 0.94 |
| | | | | | | |
| | | | | | | |

GRAIN SIZE DISTRIBUTION CURVE
DELRAY BEACH VIBRACORES 1999