

Gradation Analysis Report

Proj Name: Central Boca
 Sample: CBVC-01-25#1
 Date: 4/11/01
 By: ID

COASTAL PLANNING & ENGINEERING, INC.

2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation: -62.80 Feet Easting: 963038.40 State Plane 1983
 Reference: NGVD Northing: 728277.60 FLA East Feet

USCS: SW Munsel Dry: 5Y 6/1 Munsel Wet: 5Y 5/1
 Comments: 0

Dry Wt. 53.68 Percent Silt: 2.89
 Wash Wt. 52.18

| Sieve Size | PHI Size | mm Size | Grams Retained | % Weight Retained | Cum. Grams Retained | C % Weight Retained |
|------------|----------|---------|----------------|-------------------|---------------------|---------------------|
| 3/4 | -4.250 | 19.027 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5/8 | -4.000 | 16.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5/16 | -3.250 | 9.514 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | -3.000 | 8.000 | 0.100 | 0.186 | 0.100 | 0.186 |
| 5 | -2.000 | 4.000 | 0.130 | 0.242 | 0.230 | 0.428 |
| 7 | -1.500 | 2.828 | 0.150 | 0.279 | 0.380 | 0.708 |
| 10 | -1.000 | 2.000 | 0.410 | 0.764 | 0.790 | 1.472 |
| 14 | -0.500 | 1.414 | 0.450 | 0.838 | 1.240 | 2.310 |
| 18 | 0.000 | 1.000 | 0.830 | 1.546 | 2.070 | 3.856 |
| 25 | 0.500 | 0.707 | 1.750 | 3.260 | 3.820 | 7.116 |
| 35 | 1.000 | 0.500 | 2.730 | 5.086 | 6.550 | 12.202 |
| 45 | 1.500 | 0.354 | 3.160 | 5.887 | 9.710 | 18.089 |
| 60 | 2.000 | 0.250 | 6.050 | 11.270 | 15.760 | 29.359 |
| 80 | 2.500 | 0.177 | 13.210 | 24.609 | 28.970 | 53.968 |
| 120 | 3.000 | 0.125 | 19.000 | 35.395 | 47.970 | 89.363 |
| 170 | 3.500 | 0.088 | 3.990 | 7.433 | 51.960 | 96.796 |
| 200 | 3.750 | 0.074 | 0.150 | 0.279 | 52.110 | 97.075 |
| 230 | 4.000 | 0.063 | 0.040 | 0.075 | 52.150 | 97.150 |
| Pan | Pan | 0.053 | 1.510 | 2.813 | 53.660 | 99.963 |

PHI 5 PHI 16 PHI 25 PHI 50 PHI 75 PHI 84 PHI 95
 0.18 1.32 1.81 2.42 2.80 2.92 3.33

Median phi: 2.42 Median mm: 0.19

| | Mean phi | Mean mm | Sorting | Skewness | Kurtosis |
|---------|----------|---------|---------|----------|----------|
| Graphic | 2.04 | 0.24 | 0.89 | -0.72 | 1.32 |
| Moment | 2.12 | 0.23 | 1.10 | -0.62 | 2.01 |

Gradation Analysis Report

Proj Name: Central Boca
 Sample: CBVC-01-25#2
 Date: 4/11/01
 By: ID

COASTAL PLANNING & ENGINEERING, INC.

2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation: -65.30 Feet Easting: 963038.40 State Plane 1983
 Reference: NGVD Northing: 728277.60 FLA East Feet

USCS: SW Munsel Dry: 5Y 6/1 Munsel Wet: 5Y 4/1
 Comments: 0

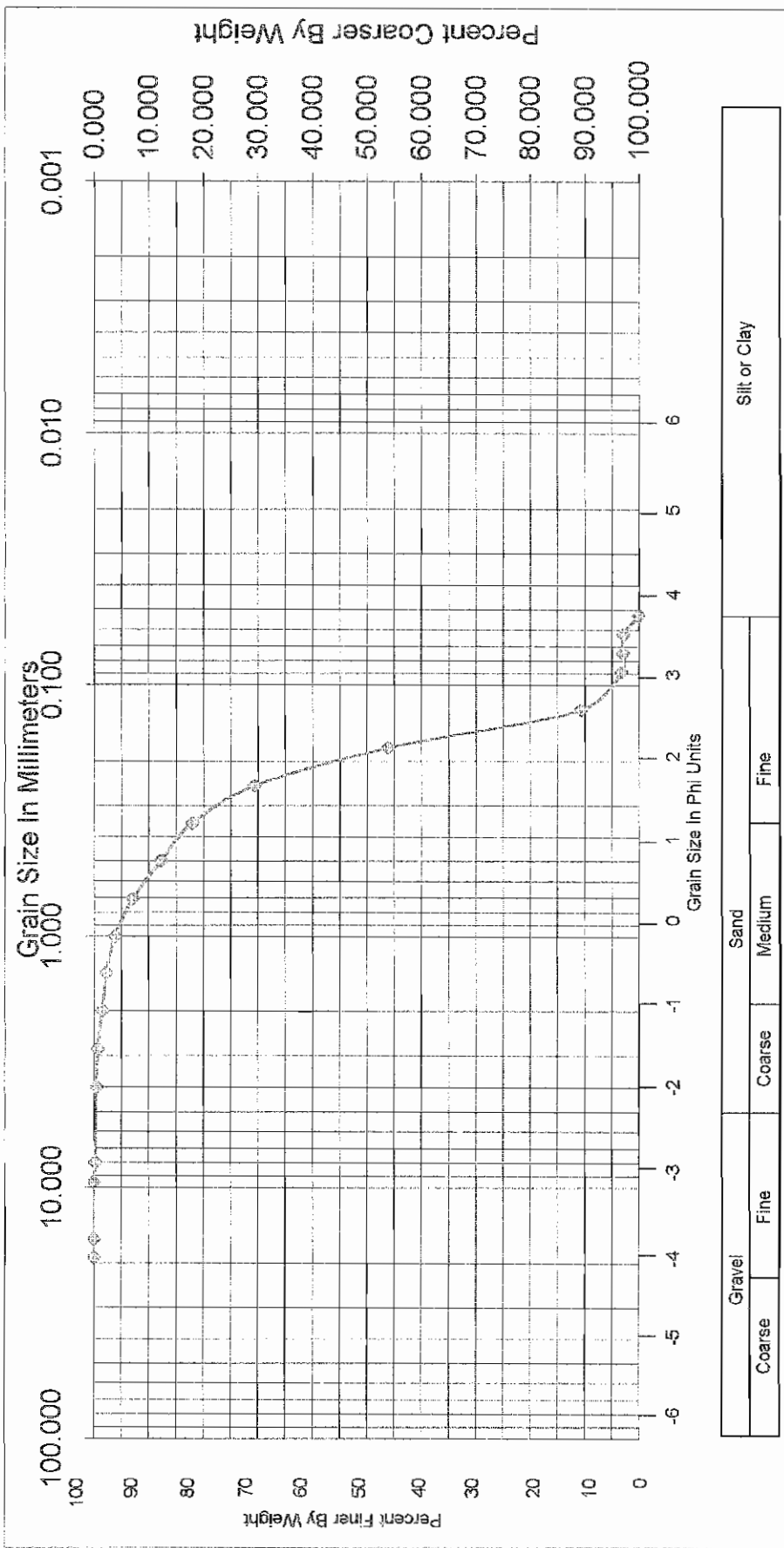
Dry Wt. 53.74 Percent Silt: 3.05
 Wash Wt. 52.14

| Sieve Size | PHI Size | mm Size | Grams Retained | % Weight Retained | Cum. Grams Retained | C % Weight Retained |
|------------|----------|---------|----------------|-------------------|---------------------|---------------------|
| 3/4 | -4.250 | 19.027 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5/8 | -4.000 | 16.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5/16 | -3.250 | 9.514 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | -3.000 | 8.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 | -2.000 | 4.000 | 0.030 | 0.056 | 0.030 | 0.056 |
| 7 | -1.500 | 2.828 | 0.400 | 0.744 | 0.430 | 0.800 |
| 10 | -1.000 | 2.000 | 0.550 | 1.023 | 0.980 | 1.824 |
| 14 | -0.500 | 1.414 | 0.990 | 1.842 | 1.970 | 3.666 |
| 18 | 0.000 | 1.000 | 1.660 | 3.089 | 3.630 | 6.755 |
| 25 | 0.500 | 0.707 | 2.570 | 4.782 | 6.200 | 11.537 |
| 35 | 1.000 | 0.500 | 3.850 | 7.164 | 10.050 | 18.701 |
| 45 | 1.500 | 0.354 | 5.280 | 9.825 | 15.330 | 28.526 |
| 60 | 2.000 | 0.250 | 8.140 | 15.147 | 23.470 | 43.673 |
| 80 | 2.500 | 0.177 | 14.450 | 26.889 | 37.920 | 70.562 |
| 120 | 3.000 | 0.125 | 11.870 | 22.088 | 49.790 | 92.650 |
| 170 | 3.500 | 0.088 | 2.200 | 4.094 | 51.990 | 96.744 |
| 200 | 3.750 | 0.074 | 0.100 | 0.186 | 52.090 | 96.930 |
| 230 | 4.000 | 0.063 | 0.040 | 0.074 | 52.130 | 97.004 |
| Pan | Pan | 0.053 | 1.600 | 2.977 | 53.730 | 99.981 |

PHI 5 PHI 16 PHI 25 PHI 50 PHI 75 PHI 84 PHI 95
 -0.28 0.81 1.32 2.12 2.60 2.80 3.28

Median phi: 2.12 Median mm: 0.23

| | Mean phi | Mean mm | Sorting | Skewness | Kurtosis |
|---------|----------|---------|---------|----------|----------|
| Graphic | 1.75 | 0.30 | 1.04 | -0.55 | 1.14 |
| Moment | 1.81 | 0.29 | 1.26 | -0.46 | 1.75 |



| Sample No. | Depth | Description | USCS | % Silt | Median | Mean | Skew | Kurt | Sort | PL | LL | PI | Sample Information | | | |
|--------------|-------|-------------|------|--------|--------|------|-------|------|------|----|----|----|--------------------|---------------------------|--|--|
| CBVC-01-25#1 | 2.0 | | SW | 2.89 | 0.19 | 0.23 | -0.62 | 2.01 | 1.1 | NA | NA | NA | Project Name: | Central Boca | | |
| | | | | | | | | | | | | | Sample Type: | VibraCores | | |
| | | | | | | | | | | | | | Collection Date: | 4/11/01 | | |
| | | | | | | | | | | | | | Analysis By: | ID | | |
| | | | | | | | | | | | | | Easting (X): | 963038.40 Feet | | |
| | | | | | | | | | | | | | Northing (Y): | 728277.60 Feet | | |
| | | | | | | | | | | | | | Sample Elevation: | -62.8 NGVD | | |
| | | | | | | | | | | | | | Coord. System: | State Plane 1983 FLA East | | |

COASTAL PLANNING & ENGINEERING, INC.

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 BOCA RATON, FLORIDA 33431

