

GRADATION ANALYSIS REPORT  
PALM BEACH VIBRACORE SAMPLES DECEMBER 1987

FOR: X SOIL CLASSIFICATION X CORING SAMPLES BEACH SAMPLES CONCRETE AGGREGATES

ENVIRONMENTAL STATION NATURAL SOIL FILL SAMPLES PIT SAMPLES

|                       |        |           |        |       |       |        |       |        |        |       |       |
|-----------------------|--------|-----------|--------|-------|-------|--------|-------|--------|--------|-------|-------|
| CORE NO.              | 7      | 8         | 8      |       |       |        |       |        |        |       |       |
| SAMPLE DEPTH (FT)     | 19.0   | 2.0       | 8.0    |       |       |        |       |        |        |       |       |
| U.S.C.S.              | SP     | SP        | SP     |       |       |        |       |        |        |       |       |
| DESCRIPTION           |        |           |        |       |       |        |       |        |        |       |       |
| DRY SAMPLE WT (GRAMS) | 262.93 | 181.71    | 180.62 |       |       |        |       |        |        |       |       |
| SAMPLE WT AFTER WASH  | 257.52 | 176.95    | 177.34 |       |       |        |       |        |        |       |       |
| SIEVE SIZE            | PHI    | MESH      |        |       |       |        |       |        |        |       |       |
|                       | SIZE   | SIZE (mm) |        |       |       |        |       |        |        |       |       |
|                       | GRAMS  | % RET.    | % PASS |       |       |        |       |        |        |       |       |
|                       | GRAMS  | % RET.    | % PASS |       |       |        |       |        |        |       |       |
|                       | GRAMS  | % RET.    | % PASS |       |       |        |       |        |        |       |       |
| 5                     | -2.00  | 4         | 6.91   | 2.63  | 97.37 | 0.00   | 0.00  | 100.00 | 0.42   | 0.23  | 99.77 |
| 7                     | -1.50  | 2.8       | 7.86   | 3.02  | 96.98 | 0.10   | 0.06  | 99.94  | 0.51   | 0.28  | 99.72 |
| 10                    | -1.00  | 2         | 8.64   | 3.28  | 96.71 | 0.18   | 0.10  | 99.80  | 0.64   | 0.35  | 99.65 |
| 14                    | -0.50  | 1.4       | 10.88  | 4.14  | 95.86 | 0.30   | 0.17  | 99.83  | 1.07   | 0.59  | 99.41 |
| 18                    | 0.00   | 1         | 14.50  | 5.51  | 94.49 | 0.58   | 0.32  | 99.68  | 1.39   | 0.77  | 99.23 |
| 25                    | 0.50   | 0.71      | 21.00  | 7.89  | 92.01 | 0.81   | 0.45  | 99.55  | 2.02   | 1.12  | 98.88 |
| 35                    | 1.00   | 0.5       | 33.52  | 12.75 | 87.25 | 1.72   | 0.95  | 99.05  | 4.39   | 2.43  | 97.57 |
| 45                    | 1.50   | 0.355     | 62.38  | 23.72 | 76.28 | 15.67  | 8.62  | 91.38  | 16.80  | 9.30  | 90.70 |
| 60                    | 2.00   | 0.25      | 104.65 | 39.88 | 60.12 | 38.61  | 21.25 | 78.75  | 47.47  | 26.28 | 73.72 |
| 80                    | 2.50   | 0.18      | 180.16 | 68.52 | 31.48 | 115.00 | 63.29 | 36.71  | 115.01 | 63.68 | 36.32 |
| 120                   | 3.00   | 0.125     | 225.00 | 85.95 | 14.05 | 166.37 | 91.56 | 8.44   | 167.88 | 92.95 | 7.05  |
| 170                   | 3.50   | 0.09      | 255.55 | 97.19 | 2.81  | 175.92 | 96.81 | 3.19   | 176.04 | 97.48 | 2.54  |
| 200                   | 3.75   | 0.075     | 256.61 | 97.60 | 2.40  | 176.34 | 97.04 | 2.98   | 176.41 | 97.67 | 2.33  |
| 230                   | 4.00   | 0.063     | 256.91 | 97.71 | 2.29  | 176.40 | 97.08 | 2.82   | 176.47 | 97.70 | 2.30  |
| FAN                   |        |           | 257.22 | 97.83 |       | 176.40 | 97.08 |        | 176.50 | 97.72 |       |
| SIEVE LOSS            |        |           | 0.30   |       |       | 0.55   |       |        | 0.84   |       |       |
| WEIGHTED AVE(mm)      |        |           | 0.360  |       |       | 0.190  |       |        | 0.206  |       |       |
| SILT-CLAY %           |        |           | 2.28   |       |       | 2.65   |       |        | 1.87   |       |       |

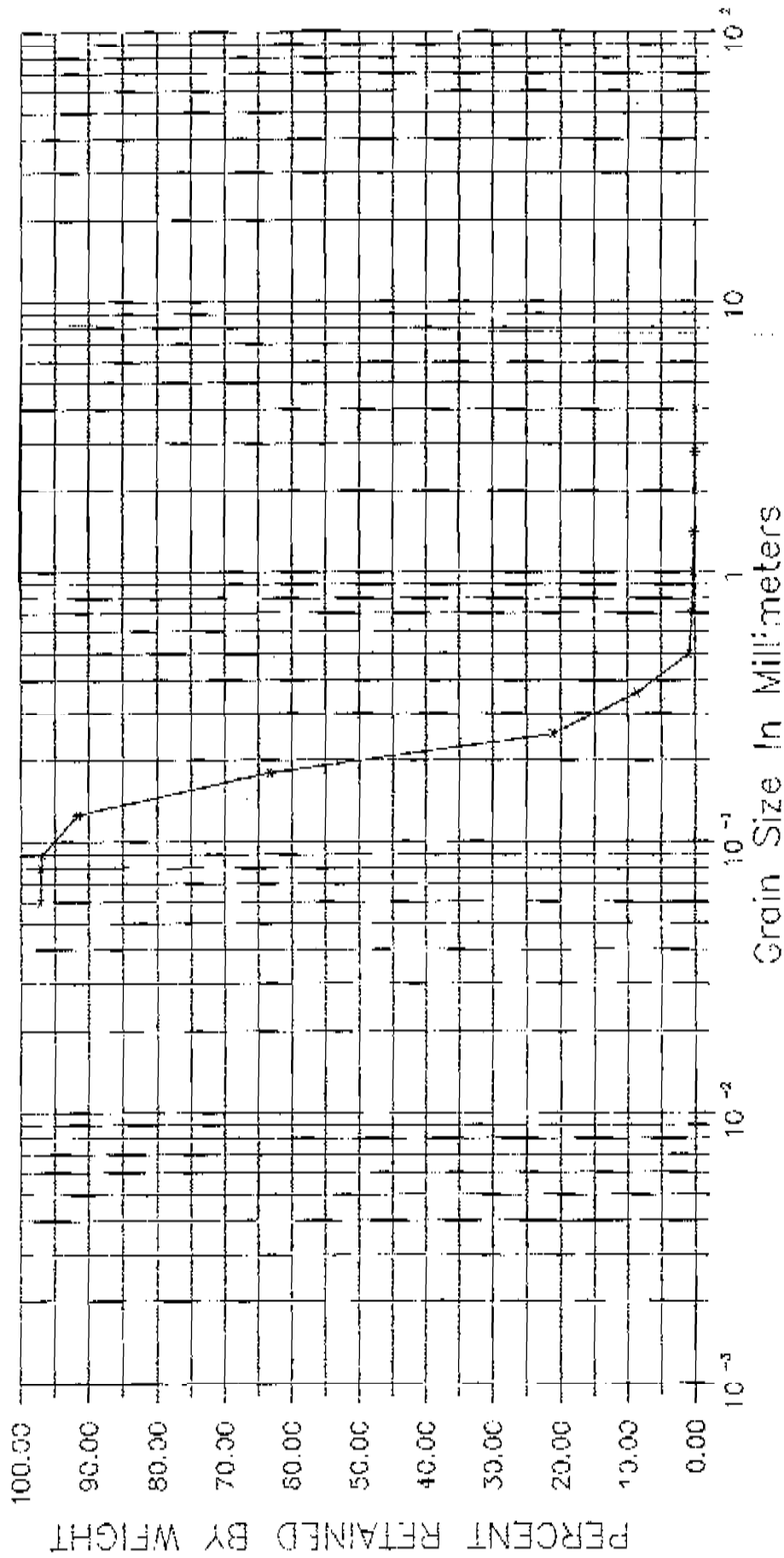
GRADATION ANALYSIS REPORT  
PALM BEACH VIBROCORE SAMPLES DECEMBER 1987

FOR:    X SOIL CLASSIFICATION    X CORING SAMPLES            BEACH SAMPLES            CONCRETE AGGREGATES

         ENVIRONMENTAL STATION    NATURAL SOIL            FILL SAMPLES            PIT SAMPLES

| CORE NO.                | 8      |                   |        |        |        | 8      |        |        |        |        | 9      |       |        |        |   |
|-------------------------|--------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|---|
| SAMPLE DEPTH (FT)       | 19.7   |                   |        |        |        | 19.0   |        |        |        |        | 8.2    |       |        |        |   |
| U.S.C.S.<br>DESCRIPTION | SP     |                   |        |        |        | SP     |        |        |        |        | SP     |       |        |        |   |
| DRY SAMPLE WT (GRAMS)   | 235.87 |                   |        |        |        | 241.82 |        |        |        |        | 222.05 |       |        |        |   |
| SAMPLE WT AFTER WASH    | 231.91 |                   |        |        |        | 237.51 |        |        |        |        | 218.45 |       |        |        |   |
| SIEVE<br>SIZE           | PHI    | MESH<br>SIZE (mm) | GRAMS  | % RET. | % PASS | GRAMS  | % RET. | % PASS | GRAMS  | % RET. | % PASS | GRAMS | % RET. | % PASS |   |
| 5                       | -2.00  | 4                 | 2.79   | 1.18   | 98.82  | "      | 0.00   | 0.00   | 100.00 | "      | 2.32   | 1.04  | 98.96  | "      | " |
| 7                       | -1.50  | 2.8               | 4.87   | 2.06   | 97.94  | "      | 0.11   | 0.05   | 99.95  | "      | 2.60   | 1.17  | 98.83  | "      | " |
| 10                      | -1.00  | 2                 | 9.00   | 3.82   | 96.18  | "      | 0.82   | 0.34   | 99.66  | "      | 2.78   | 1.25  | 98.75  | "      | " |
| 14                      | -0.50  | 1.4               | 15.92  | 6.75   | 93.25  | "      | 1.04   | 0.78   | 99.24  | "      | 3.26   | 1.47  | 98.53  | "      | " |
| 18                      | 0.00   | 1                 | 30.31  | 12.85  | 87.15  | "      | 3.51   | 1.45   | 98.55  | "      | 4.26   | 1.92  | 98.08  | "      | " |
| 25                      | 0.50   | 0.71              | 47.95  | 20.33  | 79.67  | "      | 6.41   | 2.85   | 97.35  | "      | 5.61   | 2.55  | 97.47  | "      | " |
| 35                      | 1.00   | 0.5               | 77.83  | 33.00  | 67.00  | "      | 13.72  | 5.67   | 94.33  | "      | 10.51  | 4.73  | 95.27  | "      | " |
| 45                      | 1.50   | 0.355             | 101.78 | 43.15  | 56.85  | "      | 28.47  | 11.77  | 88.23  | "      | 25.51  | 11.49 | 88.51  | "      | " |
| 60                      | 2.00   | 0.25              | 120.03 | 50.91  | 49.09  | "      | 68.41  | 28.28  | 71.71  | "      | 68.81  | 30.99 | 69.01  | "      | " |
| 80                      | 2.50   | 0.18              | 188.55 | 80.36  | 19.64  | "      | 163.86 | 67.78  | 32.24  | "      | 161.10 | 72.55 | 27.45  | "      | " |
| 120                     | 3.00   | 0.125             | 222.10 | 94.16  | 5.84   | "      | 211.10 | 87.30  | 12.70  | "      | 201.40 | 89.70 | 9.30   | "      | " |
| 170                     | 3.50   | 0.09              | 230.51 | 97.73  | 2.27   | "      | 235.88 | 97.34  | 2.66   | "      | 217.05 | 97.75 | 2.25   | "      | " |
| 200                     | 3.75   | 0.075             | 231.05 | 97.96  | 2.04   | "      | 236.61 | 97.05  | 2.15   | "      | 217.80 | 98.09 | 1.91   | "      | " |
| 250                     | 4.00   | 0.063             | 231.23 | 98.03  | 1.97   | "      | 236.50 | 97.97  | 2.03   | "      | 217.81 | 98.14 | 1.86   | "      | " |
| PAN                     |        |                   | 231.30 | 98.06  |        | "      | 236.99 | 98.00  |        | "      | 218.30 | 98.31 |        | "      | " |
| SIEVE LOSS              | 0.61   |                   |        |        |        | 0.02   |        |        |        |        | 0.15   |       |        |        |   |
| WEIGHTED AVE(mm)        | 0.464  |                   |        |        |        | 0.217  |        |        |        |        | 0.252  |       |        |        |   |
| SILT-CLAY %             | 1.78   |                   |        |        |        | 2.15   |        |        |        |        | 1.83   |       |        |        |   |

# MECHANICAL ANALYSIS CHART

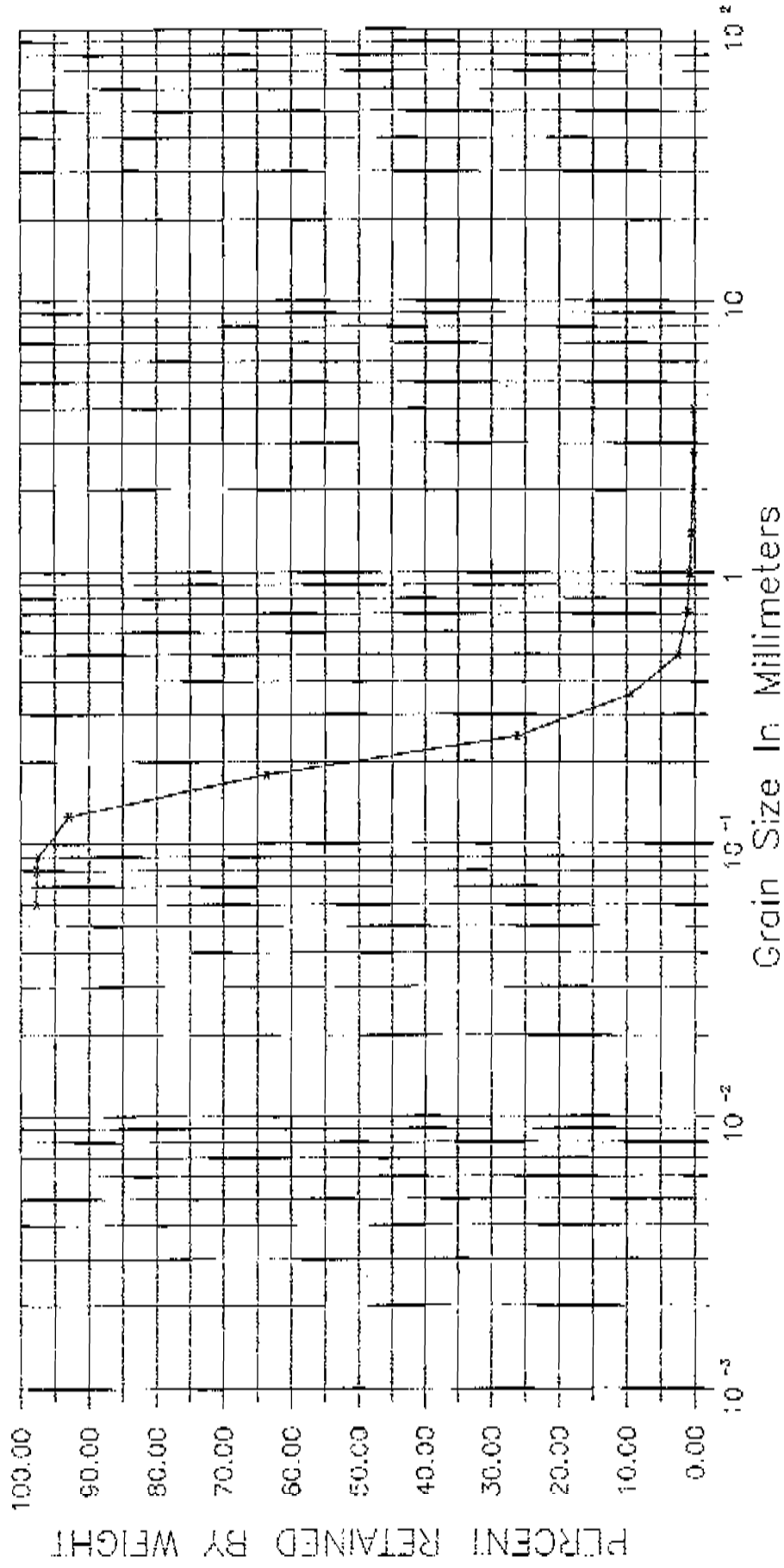


| SILT OR CLAY | SAND |        |        | GRAVEL |        |
|--------------|------|--------|--------|--------|--------|
|              | FINE | MEDIUM | COARSE | FINE   | COARSE |

## SAMPLE NO. CLASSIFICATION

| B  | MEAN                           | MEDIAN  | SCRTING |
|----|--------------------------------|---------|---------|
| 2' | 0.20                           | 0.21 mm | 50      |
|    | GREY POORLY GRADED SAND - (SP) |         |         |

# MECHANICAL ANALYSIS CHART

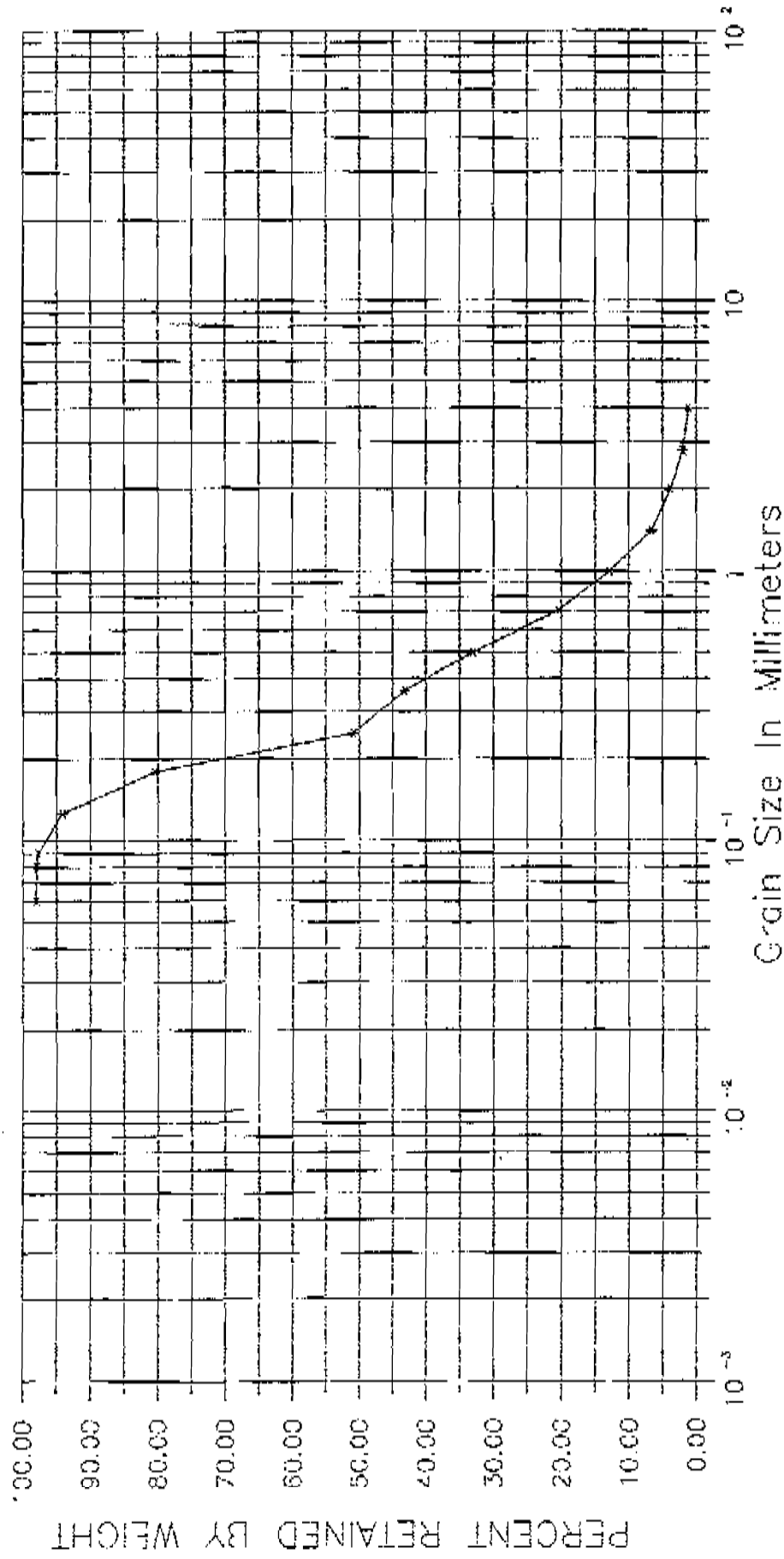


| SILT OR CLAY | SAND |        |        |  | GRAVEL |        |
|--------------|------|--------|--------|--|--------|--------|
|              | FINE | MEDIUM | COARSE |  | FINE   | COARSE |

SAMPLE NO. CLASSIFICATION

|    |                                |        |         |
|----|--------------------------------|--------|---------|
| 8  | MEAN                           | MEDIAN | SORTING |
| 8' | 2.1mm                          | 0.25mm | 5.5     |
|    | 0.25mm                         | 0.25mm | 5.5     |
|    | GREY POORLY GRADED SAND - (SP) |        |         |

# MECHANICAL ANALYSIS CHART



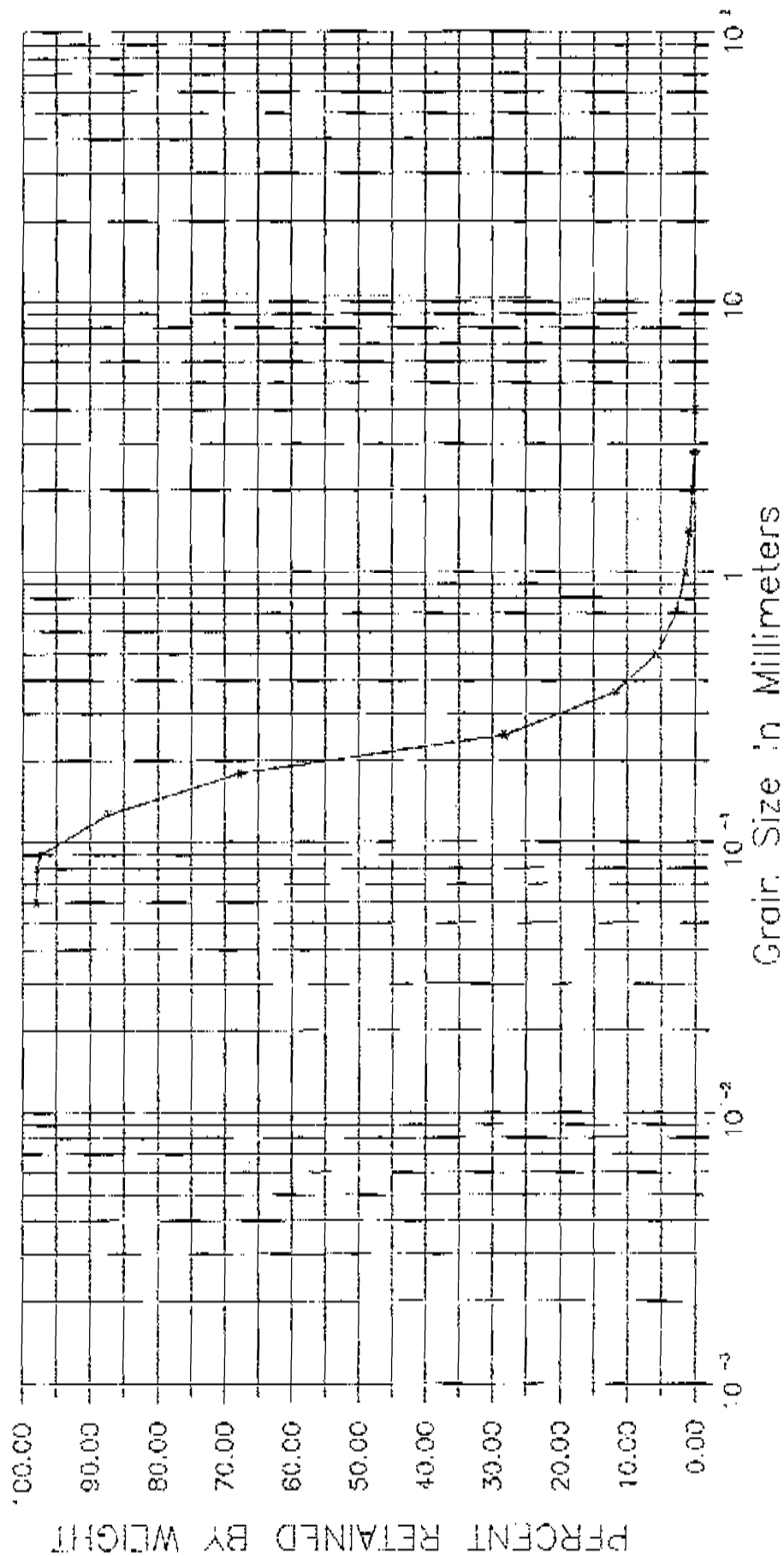
| SILT OR CLAY | SAND |        |        |      | GRAVEL |  |
|--------------|------|--------|--------|------|--------|--|
|              | FINE | MEDIUM | COARSE | FINE | COARSE |  |

SAMPLE NO.

CLASSIFICATION

| 8     | MEAN   | MEDIAN          | SORTING         |
|-------|--|-----------------|-----------------|
| 13.7' | <del>24.4</del>                                | <del>26.4</del> | <del>1.22</del> |
|       | .33mm  | .25mm           | 1.24            |
|       | GREY POORLY GRADED SAND & SHELL FRAGMENTS (SP) |                 |                 |

# MECHANICAL ANALYSIS CHART



| SILT OR CLAY | SAND |        |        | GRAVEL |        |
|--------------|------|--------|--------|--------|--------|
|              | FINE | MEDIUM | COARSE | FINE   | COARSE |

SAMPLE NO.

CLASSIFICATION

| Ø     | MEAN                           | MEDIAN | SORTING |
|-------|--------------------------------|--------|---------|
| 19.0' | 22.44                          | 2.14   | 6.6     |
|       | 21.00                          | 2.14   | 6.5     |
|       | GREY POORLY GRADED SAND - (SP) |        |         |