

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 PTT SAMPLES

| CORE NO. | 19 | 19 | 19 |
|-------------------|-----|-----|------|
| SAMPLE DEPTH (FT) | 3.0 | 9.0 | 15.0 |

| U.S.C.S. DESCRIPTION | SP | SP | SP |
|----------------------|----|----|----|
|----------------------|----|----|----|

| DRY SAMPLE WT (GRAMS) | 344.4 | 300.09 | 322.10 |
|-----------------------|-------|--------|--------|
| SAMPLE WT AFTER WASH | 341.5 | 294.25 | 317.38 |

| STIEVE SIZE | PIU SIZE | MESH SIZE (mm) | GRAMS | % RET. | % PASS | GRAMS | % RET. | % PASS | GRAMS | % RET. | % PASS |
|-------------|----------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | -2.00 | 4 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100.00 | 1.00 | 0.31 | 99.69 |
| 7 | -1.50 | 2.5 | 0.10 | 0.03 | 99.97 | 0.40 | 0.13 | 99.87 | 1.31 | 0.41 | 99.59 |
| 10 | -1.00 | 2 | 0.35 | 0.10 | 99.90 | 0.61 | 0.20 | 99.80 | 1.60 | 0.50 | 99.50 |
| 14 | -0.50 | 1.4 | 0.75 | 0.22 | 99.78 | 0.62 | 0.27 | 99.73 | 2.50 | 0.78 | 99.22 |
| 18 | 0.00 | 1 | 1.39 | 0.40 | 99.60 | 1.12 | 0.37 | 99.63 | 3.41 | 1.08 | 98.92 |
| 25 | 0.50 | 0.71 | 2.36 | 0.69 | 99.31 | 1.49 | 0.50 | 99.50 | 4.52 | 1.40 | 98.60 |
| 35 | 1.00 | 0.5 | 5.20 | 1.51 | 98.49 | 2.90 | 1.00 | 99.00 | 7.34 | 2.28 | 97.72 |
| 45 | 1.50 | 0.355 | 13.88 | 4.61 | 95.39 | 16.53 | 5.51 | 94.49 | 15.00 | 4.66 | 95.34 |
| 60 | 2.00 | 0.25 | 52.30 | 15.19 | 84.81 | 80.08 | 30.02 | 69.98 | 41.61 | 12.92 | 87.08 |
| 80 | 2.50 | 0.10 | 184.00 | 53.43 | 46.57 | 200.21 | 68.72 | 31.28 | 174.13 | 54.06 | 45.94 |
| 120 | 3.00 | 0.125 | 294.59 | 85.54 | 14.46 | 252.54 | 87.52 | 12.48 | 239.74 | 80.64 | 19.36 |
| 170 | 3.50 | 0.09 | 339.40 | 98.55 | 1.45 | 292.14 | 97.85 | 2.15 | 314.65 | 97.69 | 2.31 |
| 200 | 3.75 | 0.075 | 340.80 | 98.95 | 1.05 | 293.05 | 97.65 | 2.35 | 316.20 | 98.17 | 1.83 |
| 230 | 4.00 | 0.063 | 340.83 | 99.90 | 0.10 | 293.32 | 97.74 | 2.26 | 316.69 | 98.32 | 1.68 |
| PAN | | | 341.30 | 99.10 | | 293.34 | 97.75 | | 317.03 | 98.43 | |

| STIEVE LOSS | 0.20 | 0.91 | 0.35 |
|------------------|-------|-------|-------|
| WEIGHTED AVE(mm) | 0.172 | 0.166 | 0.173 |
| SILT-CLAY % | 0.98 | 2.04 | 1.72 |

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PALM BEACH VIBRACORE SAMPLES DECEMBER 1987

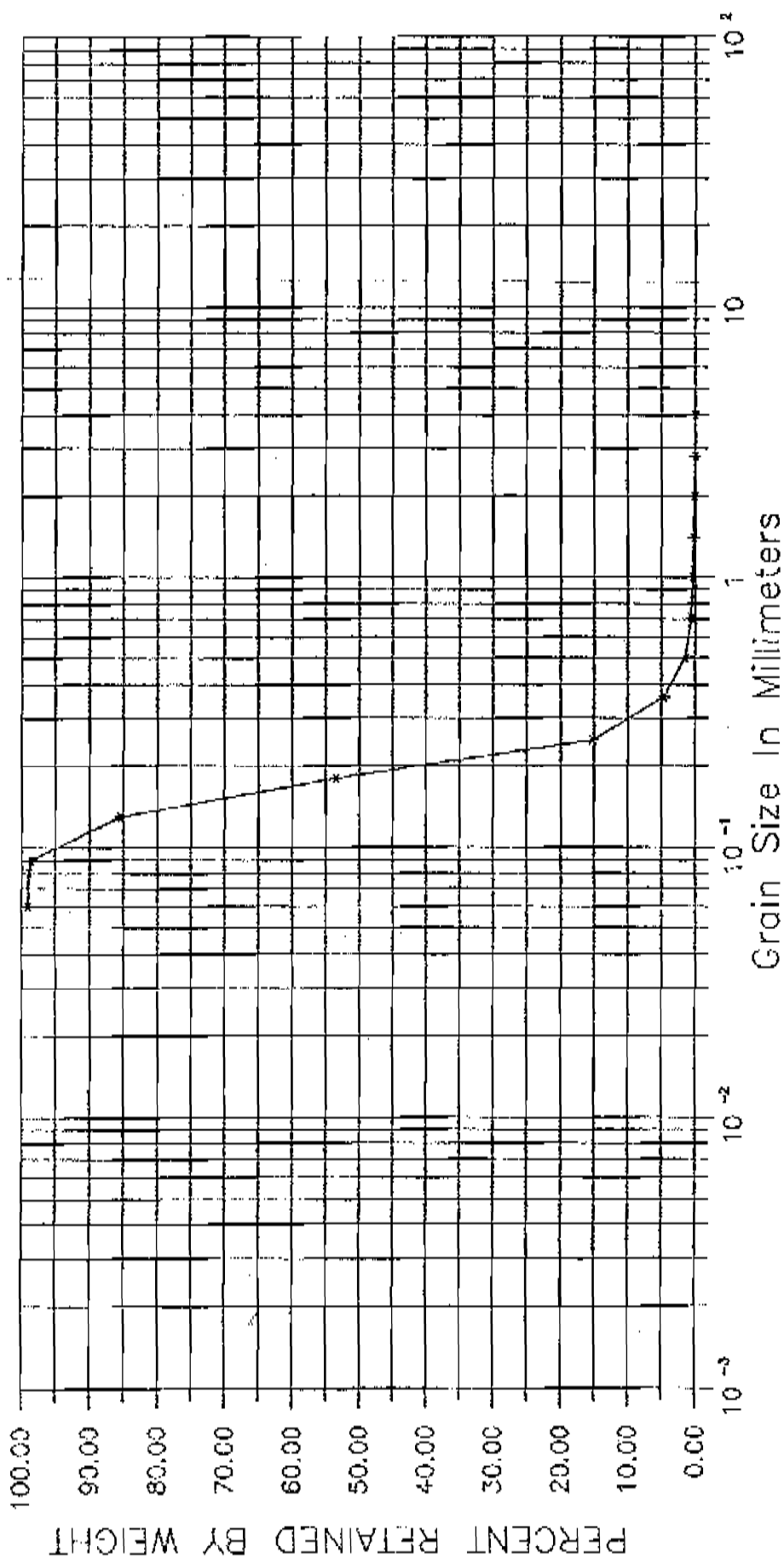
FOR: X SOIL CLASSIFICATION X CORING SAMPLES BEACH SAMPLES CONCRETE AGGREGATES
ENVIRONMENTAL STATION NATURAL SOIL FILL SAMPLES PIT SAMPLES

| CORE NO. | 19 | 20 | 20 |
|----------------------|------|-----|-----|
| SAMPLE DEPTH (FT) | 19.0 | 3.0 | 9.0 |
| U.S.C.S. DESCRIPTION | SP | SP | SP |

| DRY SAMPLE WT (GRAMS) | 296.21 | 271.32 | 281.50 |
|-----------------------|--------|--------|--------|
| SAMPLE WT AFTER WASH | 288.72 | 267.62 | 278.71 |

| STEVE SIZE | PHI SIZE | MESH SIZE (mm) | GRAMS | % RET. | % PASS | GRAMS | % RET. | % PASS | GRAMS | % RET. | % PASS |
|------------------|----------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | -2.00 | 4 | 0.28 | 0.00 | 99.91 | 1.00 | 0.87 | 99.63 | 0.25 | 0.09 | 99.91 |
| 7 | -1.50 | 2.0 | 0.28 | 0.00 | 99.91 | 1.40 | 0.52 | 99.48 | 0.43 | 0.15 | 99.85 |
| | -1.00 | 2 | 0.63 | 0.22 | 99.78 | 1.87 | 0.69 | 99.31 | 0.53 | 0.20 | 99.30 |
| 14 | -0.50 | 1.4 | 0.75 | 0.25 | 99.75 | 2.68 | 0.99 | 99.01 | 0.91 | 0.32 | 99.68 |
| 18 | 0.00 | 1 | 0.84 | 0.28 | 99.72 | 3.12 | 1.13 | 98.85 | 1.27 | 0.45 | 99.55 |
| 25 | 0.50 | 0.71 | 1.39 | 0.47 | 99.53 | 3.82 | 1.41 | 98.59 | 20.10 | 7.14 | 92.86 |
| 35 | 1.00 | 0.5 | 1.69 | 0.57 | 99.43 | 5.13 | 1.89 | 98.11 | 4.93 | 1.75 | 98.25 |
| 45 | 1.50 | 0.355 | 3.08 | 1.04 | 98.96 | 8.65 | 3.26 | 96.74 | 12.85 | 4.49 | 95.51 |
| 60 | 2.00 | 0.25 | 10.32 | 3.48 | 96.52 | 24.80 | 9.14 | 90.86 | 45.25 | 16.07 | 83.93 |
| 80 | 2.50 | 0.18 | 96.80 | 32.51 | 67.49 | 137.65 | 50.73 | 49.27 | 180.71 | 57.09 | 42.91 |
| 120 | 3.00 | 0.125 | 175.80 | 59.35 | 40.65 | 228.36 | 83.43 | 16.57 | 243.62 | 86.54 | 13.46 |
| 170 | 3.50 | 0.09 | 284.90 | 96.18 | 3.82 | 265.85 | 97.91 | 2.09 | 276.72 | 98.30 | 1.70 |
| 200 | 3.75 | 0.075 | 287.15 | 96.94 | 3.06 | 266.04 | 98.05 | 1.95 | 277.85 | 98.70 | 1.30 |
| 230 | 4.00 | 0.063 | 287.56 | 97.08 | 2.92 | 268.97 | 98.40 | 1.60 | 278.25 | 98.85 | 1.15 |
| PAN | | | 288.16 | 97.28 | | 267.12 | 98.45 | | 278.38 | 98.87 | |
| LOSS | | | 0.58 | | | 0.50 | | | 0.30 | | |
| WEIGHTED AVE(mm) | | | 0.140 | | | 0.170 | | | 0.185 | | |
| SILT-CLAY % | | | 2.87 | | | 1.78 | | | 1.16 | | |

MECHANICAL ANALYSIS CHART



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

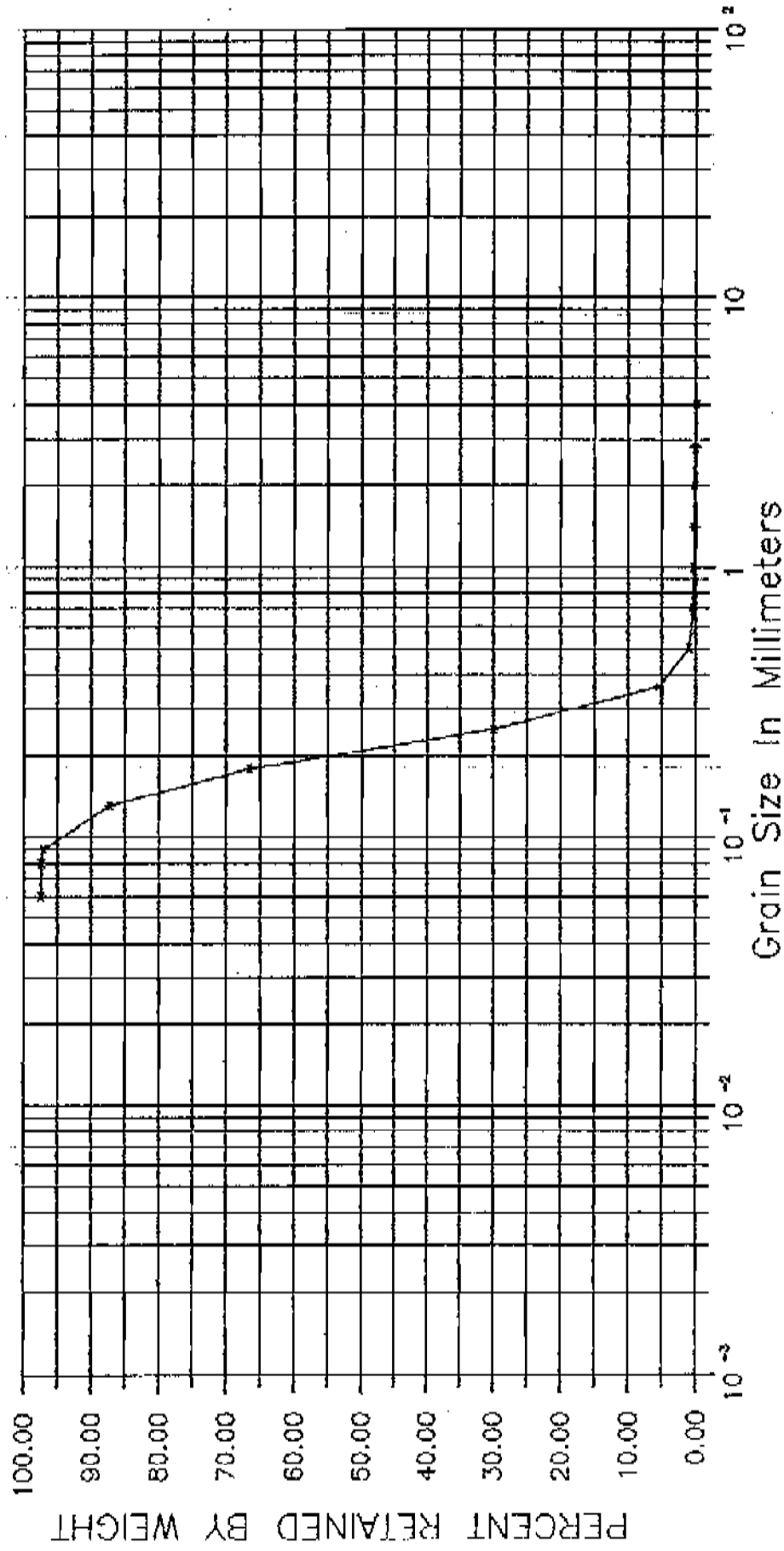
SAMPLE NO.

CLASSIFICATION

| | | | |
|----|--|---------|---------|
| 14 | MEAN | MEDIAN | SORTING |
| 3 | 0.17 mm | 0.10 mm | 0.42 |
| | 0.17 mm | 0.10 mm | 0.38 |
| | GREY POORLY GRAVED SAND & SCATTERED SHELL - (SP) | | |

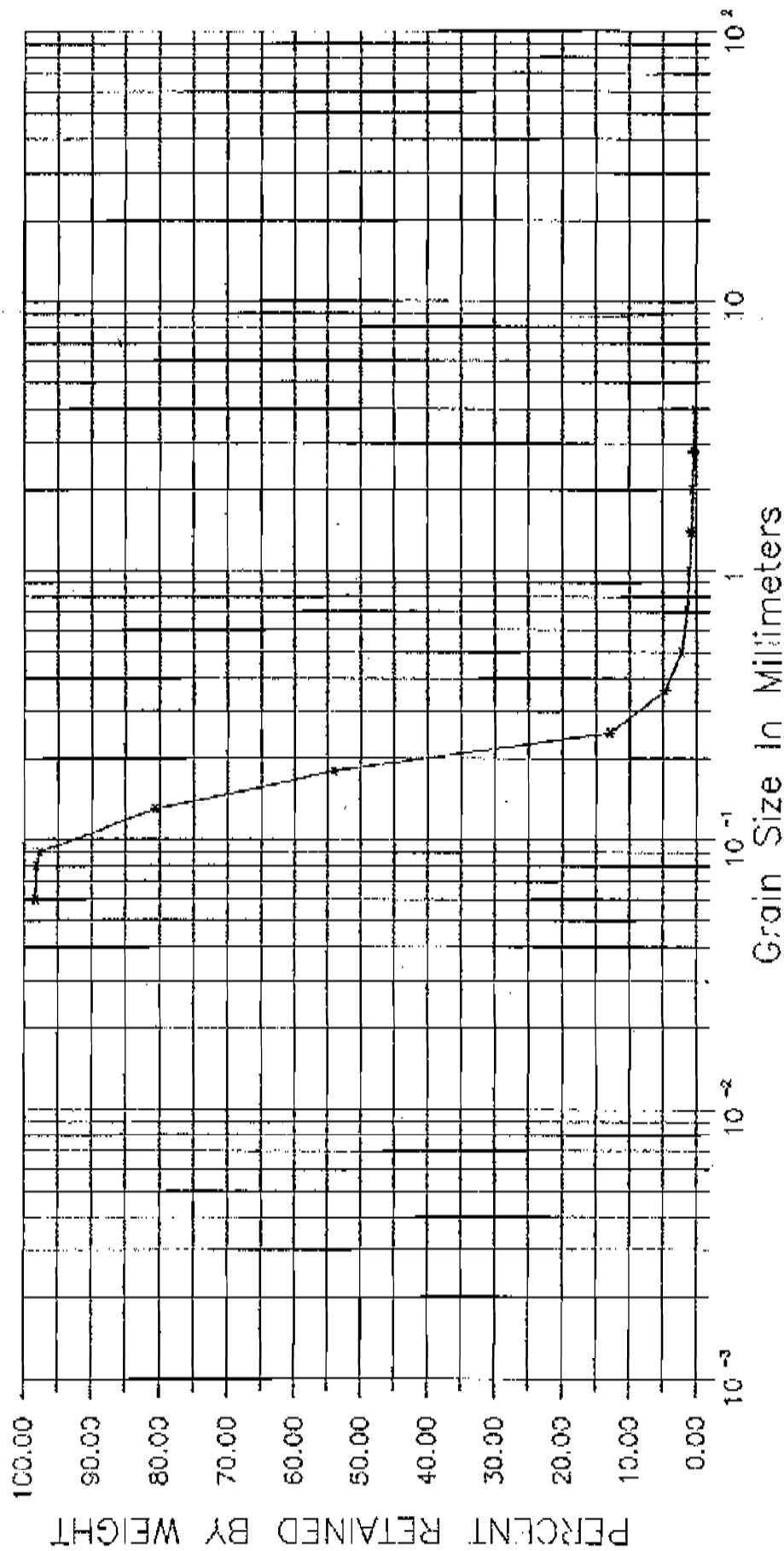
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MECHANICAL ANALYSIS CHART

[illegible]

| SAMPLE NO. | CLASSIFICATION | | |
|------------|--|--------|---------|
| | MEAN | MEDIAN | SORTING |
| 19 | | | |
| 91 | 21.00 | 21.00 | 55 |
| | 21.00 | 21.00 | 55 |
| | RED POORLY GRADED SAND & SCATTERED SHELLS (SP) | | |

MECHANICAL ANALYSIS CHART



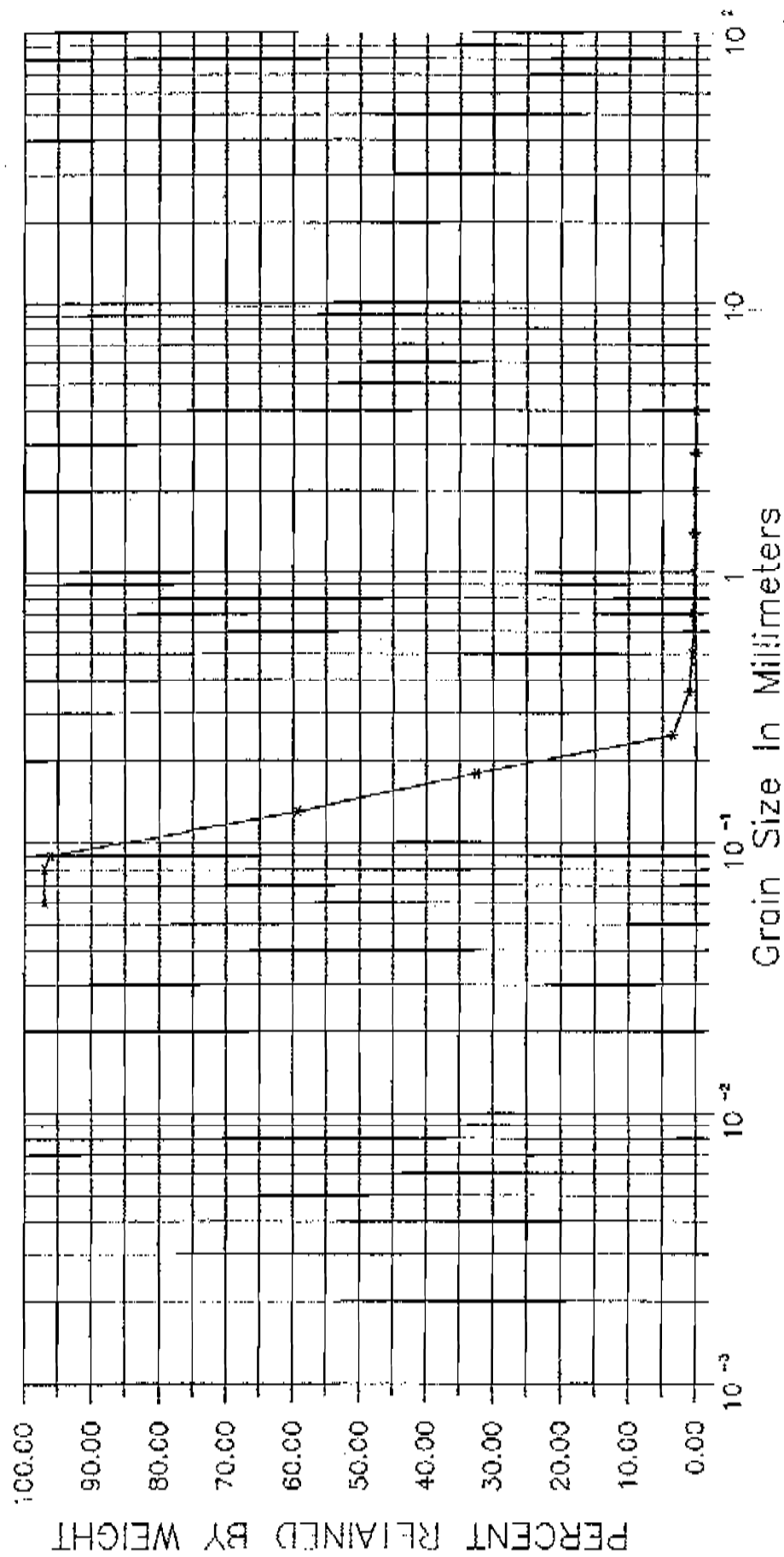
| SILT OR CLAY | | SAND | | GRAVEL | |
|--------------|--------|------|--------|--------|--------|
| FINE | COARSE | FINE | COARSE | FINE | COARSE |

SAMPLE NO.

CLASSIFICATION

| 19 | MEAN | MEDIAN | SORTING |
|-----|--|---------|---------|
| 157 | 0.075 mm | 0.15 mm | |
| | 0.17 mm | 0.30 mm | |
| | GREY POORLY GRADED SAND & SCATTERED SHELL - (SP) | | |

MECHANICAL ANALYSIS CHART



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

| CLASSIFICATION | | | |
|----------------|--|----------|---------|
| SAMPLE NO. | MEAN | MEDIAN | SORTING |
| 19 | 0.075 mm | 0.425 mm | 0.85 |
| 197 | 0.15 mm | 0.85 mm | 1.54 |
| | GREEN POORLY GRADED SAND & SCATTERED SHELLS (SP) | | |