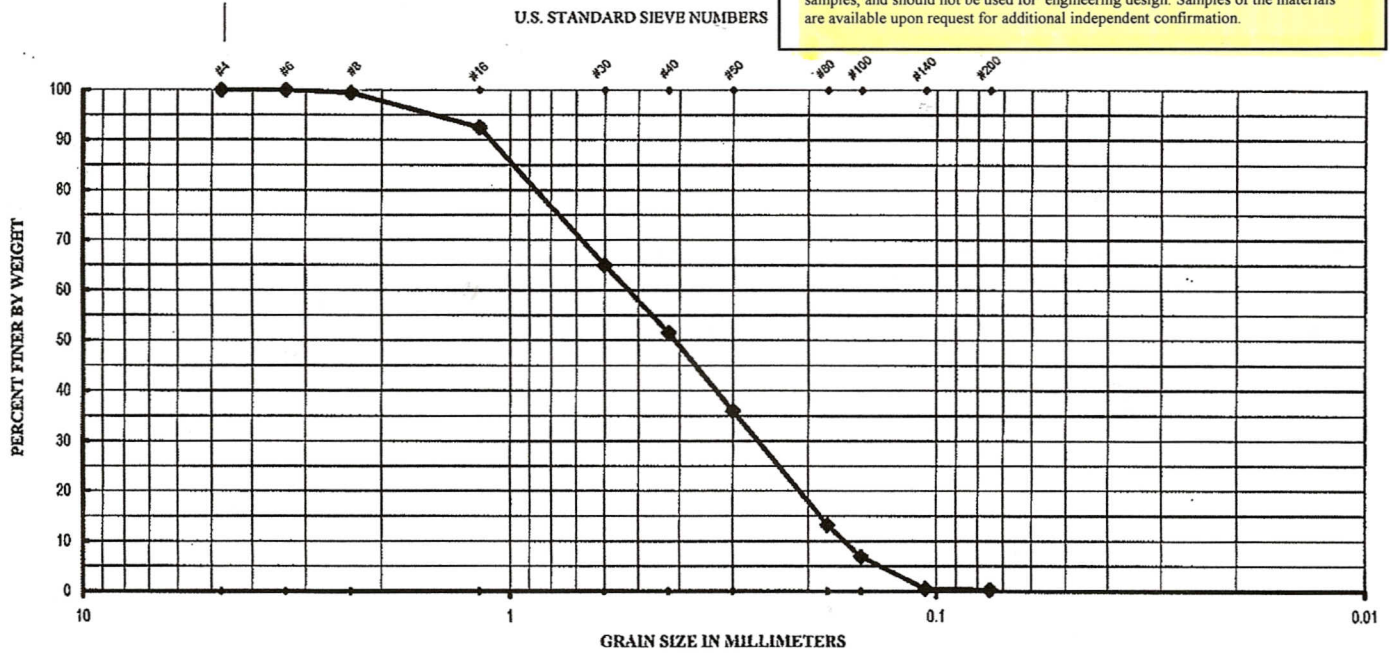
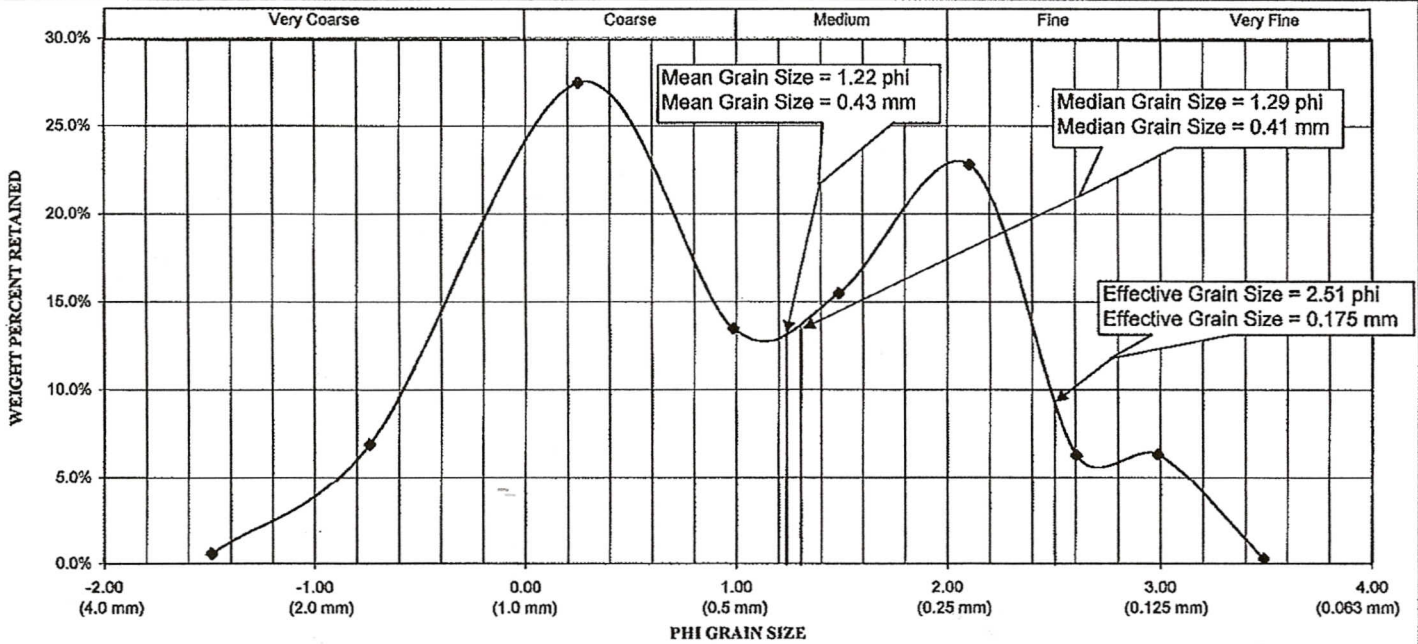


The testing data you are about to view is provided for informational purposes only. No warranty is expressed or implied regarding the characteristics of these products. The gradation of the products and their physical / mineralogical properties may vary over time. The test results represent measured properties from typical samples, and should not be used for engineering design. Samples of the materials are available upon request for additional independent confirmation.



Grain Size Distribution Curve



Frequency Distribution Curve

| Lab No. | Sample Location | | | | Soil Description | | | | Specific Gravity (SSD) | Absorption | |
|---|-------------------------------------|----------------|------|-------------------------------------|---|---|------|---------------------------------|---|------------|------|
| 1 | Haines City Mine - FDOT Silica Sand | | | | Light gray poorly graded SAND (SP) (10YR - 7/2) | | | | 2.58 | 0.3% | |
| U.S. Sieve No. | #4 | #6 | #8 | #16 | #30 | #40 | #50 | #80 | #100 | #140 | #200 |
| % Passing | 100.0 | 100.0 | 99.4 | 92.5 | 65.0 | 51.5 | 36.0 | 13.2 | 6.9 | 0.6 | 0.3 |
| Median (D ₅₀) = 0.41 mm | | Mean = 0.43 mm | | Eff. Size=D ₁₀ =0.175 mm | | Uniformity Coef. = D ₆₀ /D ₁₀ = 3.0 | | | Sorting Coef. or Phi Standard Dev. = 1.05 | | |
| RIGID WALL - CONSTANT HEAD PERMEABILITY TEST RESULTS | | | | | | CLIENT NAME: E.R. Jahna Industries, Inc. | | | | | |
| ASTM D-2434 Performed at 95% Maximum Dry Density | | | | | | PROJECT NAME: Haines City Mine - FDOT Silica Sand | | | | | |
| k = 6.7 x 10 ⁻² cm/sec | | | | k = 190 ft/day | | | | PROJECT NO.: PSL-10-3129 | | | |