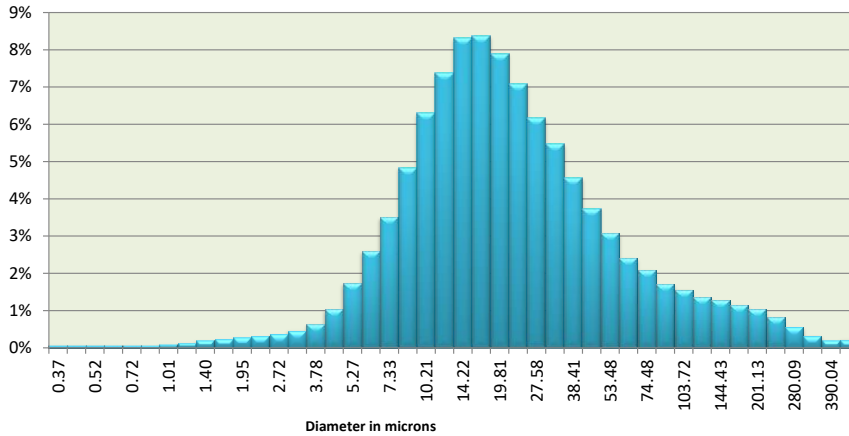


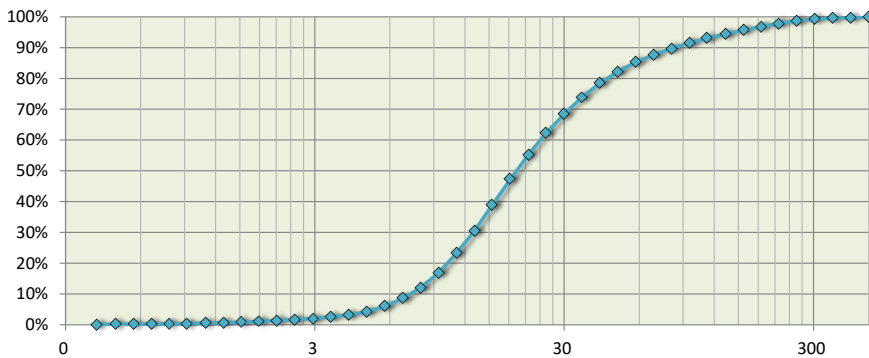
# LISST-Portable|XR Size Distribution Report

Sample Number: 292  
 Operator: Gustavo Martinez  
 Sample Notes: Biochar- Corn Stover Micronized  
 SOP Name: Fraunhofer Manual  
 SOP Note: Fraunhofer model  
 Process Date: 1/17/2025  
 Process Time: 14:28:07

**Volume Concentration**



**Cumulative Volume Distribution**



| Median Size (microns) | Volume Conc (%) | Cumulative Volume |
|-----------------------|-----------------|-------------------|
| 0.37                  | 0%              | 0.06%             |
| 0.44                  | 0%              | 0.13%             |
| 0.52                  | 0%              | 0.19%             |
| 0.61                  | 0%              | 0.26%             |
| 0.72                  | 0%              | 0.33%             |
| 0.85                  | 0%              | 0.41%             |
| 1.01                  | 0%              | 0.51%             |
| 1.19                  | 0%              | 0.65%             |
| 1.40                  | 0%              | 0.85%             |
| 1.65                  | 0%              | 1.09%             |
| 1.95                  | 0%              | 1.38%             |
| 2.30                  | 0%              | 1.70%             |
| 2.72                  | 0%              | 2.06%             |
| 3.20                  | 0%              | 2.53%             |
| 3.78                  | 1%              | 3.18%             |
| 4.46                  | 1%              | 4.22%             |
| 5.27                  | 2%              | 5.96%             |
| 6.21                  | 3%              | 8.56%             |
| 7.33                  | 4%              | 12.06%            |
| 8.65                  | 5%              | 16.90%            |
| 10.21                 | 6%              | 23.21%            |
| 12.05                 | 7%              | 30.58%            |
| 14.22                 | 8%              | 38.90%            |
| 16.78                 | 8%              | 47.27%            |
| 19.81                 | 8%              | 55.18%            |
| 23.37                 | 7%              | 62.25%            |
| 27.58                 | 6%              | 68.42%            |
| 32.55                 | 5%              | 73.89%            |
| 38.41                 | 5%              | 78.44%            |
| 45.32                 | 4%              | 82.18%            |
| 53.48                 | 3%              | 85.25%            |
| 63.11                 | 2%              | 87.67%            |
| 74.48                 | 2%              | 89.75%            |
| 87.89                 | 2%              | 91.47%            |
| 103.72                | 2%              | 93.03%            |
| 122.39                | 1%              | 94.38%            |
| 144.43                | 1%              | 95.66%            |
| 170.44                | 1%              | 96.81%            |
| 201.13                | 1%              | 97.86%            |
| 237.35                | 1%              | 98.68%            |
| 280.09                | 1%              | 99.24%            |
| 330.52                | 0%              | 99.56%            |
| 390.04                | 0%              | 99.77%            |
| 460.27                | 0%              | 99.99%            |

| Computed Statistics  |            |                   |
|----------------------|------------|-------------------|
| Optical Transmission | 96%        |                   |
| Total Volume Conc    | 14.16      | µl/l              |
| Total Mass Conc      | 37.52      | mg/l              |
| Mean Size            | 21.42      | microns           |
| Standard Deviation   | 55.91      | microns           |
| Optical Model        | Fraunhofer |                   |
| Index of Refraction  | n/a        |                   |
| Effective Density    | 2.65       | g/cm <sup>3</sup> |
| Mixer Speed          | 30         | %                 |
| Mixer Duration       | -1         | sec               |
| Ultrasonic Power     | -1         | %                 |
| Ultrasonic Duration  | -1         | sec               |
| Average Duration     | 20         | sec               |
| Sample Prep Control  | Manual     |                   |

| Computed Statistics |        |                 |
|---------------------|--------|-----------------|
| D5                  | 5.22   | microns         |
| D10                 | 7.23   | microns         |
| D16                 | 9.11   | microns         |
| D25                 | 11.55  | microns         |
| D50                 | 19.30  | microns         |
| D60                 | 24.08  | microns         |
| D75                 | 36.81  | microns         |
| D84                 | 54.31  | microns         |
| D90                 | 82.84  | microns         |
| D95                 | 143.92 | microns         |
| D60/D10             | 3.33   |                 |
| Surface Area        | 0.18   | cm <sup>2</sup> |
| Silt Ratio          | 0.00   |                 |
| Silt Volume         | 0.01   | µl/l            |

Analysis performed using laser diffraction techniques as described in AWWA Standard No. 2560D and ISO-13320-1. Instrumentation calibrated using NIST traceable standard particles.



**Sequoia Scientific, Inc**

Additional Sample Notes: