



# Turbidity

## SEAL Application ML-904

### ▶ SCOPE AND APPLICATION

*This method covers the determination of turbidity in wastewater, surface and drinking waters.*

Applicable Range: 0.5 – 200 NTU

*This method is equivalent to Standard Method 2130 B, ASTM D1889, and EPA 180.1 (White Light), ISO 7027 and EN 27027 (Infrared).*

### ▶ METHOD DESCRIPTION

In this method, a comparison of the light intensity scattered by the sample is compared to the light intensity scattered by a reference sample. The amount of scattered light is read as nephelometric turbidity units (NTU) and the higher the NTU the more turbid the sample.

### ▶ METHOD PERFORMANCE

This data was collected on a Hach TU5200 meter equipped with a flowcell. This uses a laser light source where the reading is done in a 360° x 90° angle. The light source is projected from the bottom of the cell and the detector is located 360° around the cuvette. There was a debubbler function on during the tests.

Standard (NTU)	Average (NTU)	Standard Deviation*	RSD (%)**	Recovery (%)
0.50	0.76	0.002	0.41	111.8
1.00	1.17	0.005	0.48	94.4
5.00	5.25	0.016	0.33	95.5
10.00	10.40	0.047	0.49	95.6
20.00	20.50	0.045	0.24	95.3
50.00	50.80	0.042	0.09	95.1
100.00	103.90	0.270	0.28	97.5
200.00	213.80	0.362	0.18	100.4

\* Standard deviation based on the entire population.

\*\* Relative standard deviation calculated by dividing the standard deviation by the mean and multiplying by 100.

