

## New MANTECH Turbidity Flow Cell and Method

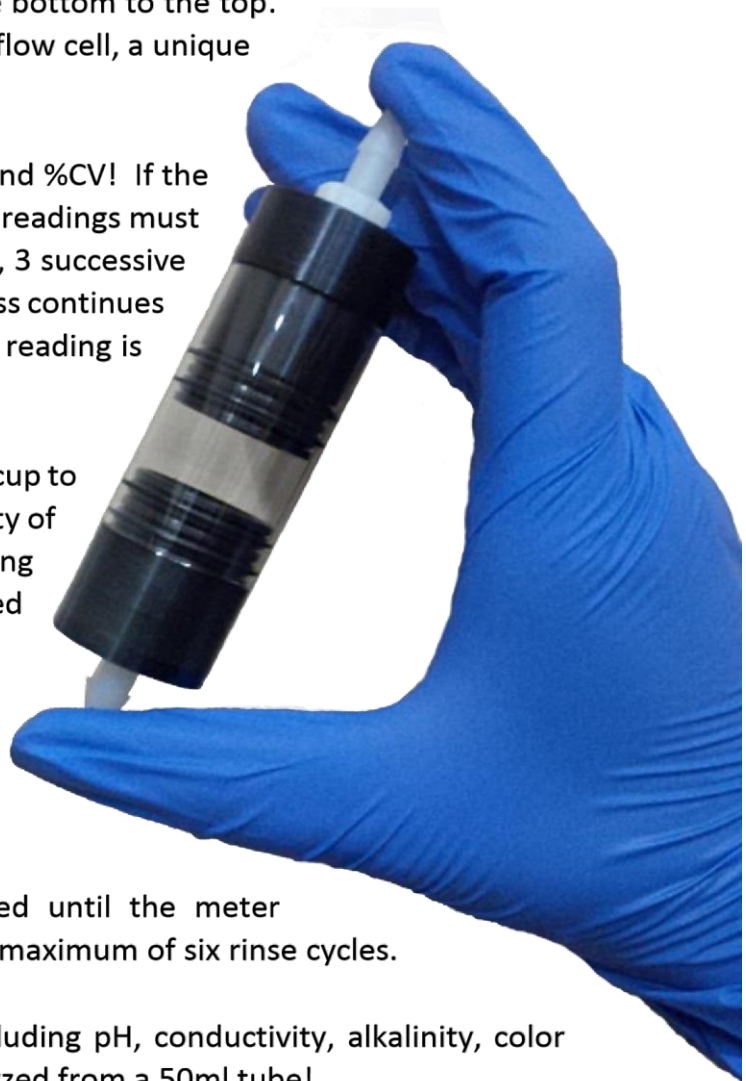
MDL: 0.1NTU

Range: <0.5 – 2,000NTU

Calibrations only required every 1-3 months. STABLE!

### Why does MANTECH's automated turbidity work so well?

- The sample is mixed to ensure homogeneity.
- The sample fills the flow cell from the bottom to the top. After the sample is pumped in to the flow cell, a unique "Clear Bubbles" method is employed.
- Stability is determined by averaging and %CV! If the turbidity is >1.5NTU, the 3 successive readings must have CV = <2% and if turbidity is <1.5, 3 successive readings must have CV = <10%. Process continues for up to 6 repeats at which time the reading is taken.
- The sample is returned to the sample cup to eliminate dilution effects. The integrity of the sample is maintained, allowing additional parameters to be measured after turbidity analysis is complete.
- Excellent and stable calibrations as it requires stability of CV% = <5% for each standard.
- Using IntelliRinse™, the cell is rinsed until the meter reading reaches a defined value, to a maximum of six rinse cycles.
- Easily add additional parameters including pH, conductivity, alkalinity, color and fluoride, all of which can be analyzed from a 50ml tube!



**Summary of Turbidity Data**

DI Water	TAP Water	0.1 NTU	0.5 NTU	1 NTU	5 NTU	10 NTU
0.014	0.097	0.119	0.502	0.994	4.926	10.012
0.012	0.086	0.111	0.5	0.993	4.944	10.059
0.016	0.107	0.119	0.499	0.993	4.944	10.029
0.019	0.111	0.111	0.499	0.993	4.955	10.062
0.014	0.132	0.115	0.5	0.992	4.948	10.043
0.014	0.1	0.111	0.502	0.997	4.949	10.109
0.012	0.214	0.116	0.502	1.012	4.962	10.05
0.015	0.146	0.114	0.5	0.998	4.958	10.085
0.01	0.226	0.113	0.502	0.996	4.962	10.06
0.01	0.201	0.11	0.503	1.004	5.094	10.051



Multiparameter system with one TitraSip™. Analyzes pH, conductivity, alkalinity, fluoride and turbidity from a single sample.