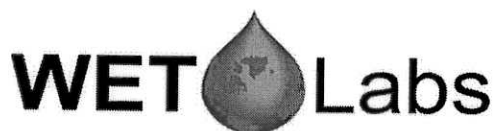


PO Box 518  
620 Applegate St.  
Philomath, OR 97370



(541) 929-5650  
Fax (541) 929-5277  
[www.wetlabs.com](http://www.wetlabs.com)

## NTU Characterization Sheet

Date: 11/17/2014

S/N: NTURTD-648

### Nephelometric Turbidity Unit (NTU) Scale Factor

Turbidity units expressed in NTU can be derived using the equation:

$$\text{NTU} = \text{Scale Factor} \times (\text{Output} - \text{Dark Counts})$$

	ASV1	ASV2	ASV4 (default)		Digital
Dark Counts	0.073	0.043	0.028	V	48 counts
NTU Solution Value	3.69	1.85	0.93	V	3038 counts
Scale Factor (SF)	6	13	25	NTU/V	0.0076 NTU/count
Maximum Output	4.98	4.98	4.98	V	16380 counts
Resolution	0.79	0.79	0.79	mV	1.0 counts
Ambient temperature during calibration		22	°C		

**Dark Counts:** Signal output of the meter in clean water with black tape over detector.

**SF:** Scale factor is determined using the following equation:  $SF = xx \div (\text{Output} - \text{Dark Counts})$ , where xx is the value of a Formazin concentration. For example:  $12.2 \div (2011 - 50) = 0.0062$ .

**Maximum Output:** The meter's maximum signal output capability.

**Resolution:** standard deviation of 1 minute of collected data.