

PO Box 518
620 Applegate St.
Philomath, OR 97370



(541) 929-5650
Fax (541) 929-5277
www.wetlabs.com

NTU Characterization Sheet

Date: 4/20/2010

S/N: NTURTD-139

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		Digital
Dark Counts	0.081	0.045	0.028	V	55 counts
NTU Solution Value	4.32	2.18	1.10	V	3544 counts
Scale Factor (SF)	6	13	25	NTU/V	0.0077 NTU/count
Maximum Output	4.99	4.99	4.98	V	16322 counts
Resolution	0.4	0.4	0.4	mV	1.0 counts
Ambient temperature during calibration		22.3	°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: Maximum signal output the meter is capable of.

Resolution: standard deviation of 1 minute of collected data.