WET●Labs

ECO Chlorophyll Fluorometer Characterization Sheet

Date: 9/22/2008   PRECAL   S/N: FLNTU-873

Chlorophyll concentration expressed in µg/l can be derived using the equation:

CHL (µg/l) = Scale Factor * (Output - Dark counts)

	Analog		**Digital**
Dark counts	0.075	V	56 counts
Scale Factor (SF)	7	µg/l/V	0.0089 µg/l/count
Maximum Output	4.98	V	4121 counts
Resolution	0.5	mV	1.1 counts

Ambient temperature during characterization   21.5 °C

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

SF: Determined using the following equation: SF = x ÷ (output - dark counts), where x is the concentration of the solution used during instrument characterization. SF is used to derive instrument output concentration from the raw signal output of the fluo

Maximum Output: Maximum signal output the fluorometer is capable of.

Resolution: Standard deviation of 1 minute of collected data.

The relationship between fluorescence and chlorophyll-a concentrations in-situ is highly variable. The scale factor listed on this document was determined using a mono-culture of phytoplankton (Thalassiosira weissflogii). The population was assumed to be