PO Box 518
620 Applegate St.
Philomath, OR 97370

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

ECO CDOM Fluorometer Characterization Sheet

Date: 2/23/2007 Customer: Kachemak Bay Reasearch Reserve

Job #: 702004 SO #: 694 S/N:# FLCDS-677

CDOM (Quinine Dihydrate Equivalent) concentration expressed in ppb can be derived using the equation:

CDOM (QSDE) = Scale Factor * (Output - Dark Counts)

	Analog Range 1	Analog Range 2 (default)	Analog Range 4		Digital	
Dark Counts	0.052	0.028	0.013	V	40	counts
Scale Factor (SF)	25	50	100	ppb/V	0.0302	ppb/count
Maximum Output	4.95	4.95	4.95	V	16337	counts
Resolution	2.5	2.5	2.5	mV	2.0	counts

Ambient temperature during characterization 21.5 ℃

Analog Range: 1 (most sensitive, 0–4,000 counts), 2 (midrange, 0–8,000 counts), 4 (entire range, 0–16,000 counts).

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 fluorometer.

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

Resolution: Standard deviation of 1 minute of collected data.