

## **WETSTAR Characterization**

Job #: 0005009  
Serial #: WS3S-652P  
Date: 05/16/00

**SHORT TERM NOISE: .233 mV/Hour**

Standard deviation of voltage output with air in the instrument's flow tube.  
Samples taken at a one second interval over approximately thirty seconds.

**LONG TERM STABILITY: .371 mV/Hour**

Deviation of voltage output over a twelve hour period with air in the flow tube.  
Five samples collected per hour. Ambient temperature is constant.

**FULL SCALE VOLTAGE: 5.24717 Volts**

**TEMPERATURE STABILITY: 78.0 mV @ 24 °C  
74.0 mV @ 2 °C**

Voltage output of the instrument with water in the flowtubes. Instrument is placed  
in a water bath and the ambient temperature is recorded.

### **INSTRUMENT RESPONSE:**

Pure water: .076 Volts  
[copro.]<sub>1</sub> = .5 mg/l 3.018 Volts

Voltage output of the instrument with sample in the flow tube. The output is  
average voltage over thirty second interval, one sample per second.  
[copro.] refers to coproporphyrin tetramethyl ester concentration.

Note: .5 mg/l of copro. is approximately equal to 50 ug/l of chlorophyll in a  
*Thalassiosira weissflogii* phytoplankton culture.