

CERTIFICATE OF CALIBRATION



All equipment and standards used are of known accuracy and traceable to national standards. Details of test equipment and standards relevant to this certificate are available upon request.

55 Central Avenue
West Molesey
Surrey KT8 2QZ
United Kingdom

T +44 (0)20 8481 9000
E sales@chelsea.co.uk

chelsea.co.uk

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Job Number: 215586
Description: Chlorophyll Aquatracka MKIII
Part Number: 0088-3598C
Serial Number: 06-5601-001

REPORT

The fluorimeter was exposed to various concentrations of Chlorophyll-a dissolved in acetone in addition to pure water and pure acetone. The following formula was derived from the readings to relate instrument output to chlorophyll-a concentration.

$$[\text{Conc}] = (8.9490\text{E-}03 \times 10^{\text{output}}) - 1.9248\text{E-}02$$

Where:

Conc. = Fluorophor concentration in ug/L
Output Aquatracka output in Volts

The above formula can be used in the range 0 - 100 micrograms per litre to an uncertainty of 0.02 micrograms per litre plus 3% of value.

NOTES:

The above formula has been derived using Chlorophyll-a dissolved in acetone. No guarantee is given as to the performance of the instrument to biologically active chlorophyll in sea-water. The zero offset has been determined in the laboratory using purified water from a reverse osmosis/ion exchange column. It is possible that purer water may be found in clean deep ocean conditions. Under these conditions, the offset shown in the above formula should be replaced by the antilogarithm of the Aquatracka output in the purest water found, multiplied by the scale factor.