

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1678
CALIBRATION DATE: 15-Jan-12

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.839567e-001

CPcor = -9.5700e-008

h = 1.370953e-001

CTcor = 3.2500e-006

i = -1.461698e-004

WBOTC = 4.8508e-006

j = 3.433735e-005

| BATH TEMP (ITS-90) | BATH SAL (PSU) | BATH COND (Siemens/m) | INST FREQ (Hz) | INST COND (Siemens/m) | RESIDUAL (Siemens/m) |
|-----------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------------|
| 22.0000 | 0.0000 | 0.00000 | 2680.30 | 0.00000 | 0.00000 |
| 1.0000 | 34.9333 | 2.98501 | 5376.52 | 2.98503 | 0.00002 |
| 4.5000 | 34.9128 | 3.29293 | 5580.18 | 3.29291 | -0.00002 |
| 15.0000 | 34.8683 | 4.27732 | 6185.55 | 4.27731 | -0.00001 |
| 18.4999 | 34.8589 | 4.62340 | 6384.42 | 4.62340 | 0.00000 |
| 24.0000 | 34.8481 | 5.18283 | 6693.03 | 5.18285 | 0.00002 |
| 29.0000 | 34.8417 | 5.70601 | 6968.86 | 5.70600 | -0.00001 |

$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

