

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1865
CALIBRATION DATE: 28-Jan-17

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

COEFFICIENTS:

g = -9.763701e-001
h = 1.346249e-001
i = -9.933533e-005
j = 3.076137e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.0729e-006

| BATH TEMP (° C) | BATH SAL (PSU) | BATH COND (S/m) | INSTRUMENT OUTPUT (Hz) | INSTRUMENT COND (S/m) | RESIDUAL (S/m) |
|--------------------|-------------------|--------------------|---------------------------|--------------------------|-------------------|
| 22.0000 | 0.0000 | 0.00000 | 2693.43 | 0.00000 | 0.00000 |
| 1.0000 | 34.7428 | 2.97028 | 5407.14 | 2.97027 | -0.00001 |
| 4.5000 | 34.7230 | 3.27679 | 5612.19 | 3.27681 | 0.00002 |
| 14.9999 | 34.6804 | 4.25669 | 6221.48 | 4.25666 | -0.00003 |
| 18.5000 | 34.6710 | 4.60117 | 6421.65 | 4.60117 | 0.00000 |
| 24.0000 | 34.6608 | 5.15805 | 6732.27 | 5.15807 | 0.00003 |
| 29.0000 | 34.6549 | 5.67885 | 7009.89 | 5.67884 | -0.00001 |
| 32.5000 | 34.6501 | 6.05028 | 7201.12 | 6.05022 | -0.00006 |

$f = \text{Instrument Output(Hz)} * \text{sqrt}(1.0 + \text{WBOTC} * t) / 1000.0$

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

Conductivity (S/m) = $(g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity

