

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: 2321
CALIBRATION DATE: 05-Feb-14

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

COEFFICIENTS:

g = -9.763819e-001

CPcor = -9.5700e-008

h = 1.316593e-001

CTcor = 3.2500e-006

i = -1.133606e-004

WBOTC = -4.1294e-006

j = 2.897235e-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 | 2724.32 | 0.00000 | 0.00000 |
| 1.0000 | 34.7364 | 2.96979 | 5469.62 | 2.96979 | 0.00000 |
| 4.5000 | 34.7166 | 3.27624 | 5677.16 | 3.27624 | -0.00000 |
| 15.0000 | 34.6741 | 4.25601 | 6294.07 | 4.25601 | -0.00000 |
| 18.5000 | 34.6649 | 4.60045 | 6496.72 | 4.60044 | -0.00001 |
| 24.0000 | 34.6546 | 5.15723 | 6811.26 | 5.15724 | 0.00002 |
| 29.0000 | 34.6484 | 5.67791 | 7092.40 | 5.67790 | -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

