



Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 1805
CALIBRATION DATE: 19-Jun-18

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

COEFFICIENTS:

g = -9.801560e-001
h = 1.393170e-001
i = -1.869726e-004
j = 4.148677e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.1929e-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 | 2654.35 | 0.00000 | 0.00000 |
| 1.0000 | 34.8276 | 2.97684 | 5325.98 | 2.97685 | 0.00001 |
| 4.5000 | 34.8082 | 3.28404 | 5527.80 | 3.28402 | -0.00001 |
| 15.0000 | 34.7661 | 4.26611 | 6127.54 | 4.26609 | -0.00001 |
| 18.5000 | 34.7573 | 4.61139 | 6324.52 | 4.61139 | 0.00001 |
| 24.0000 | 34.7475 | 5.16952 | 6630.16 | 5.16953 | 0.00001 |
| 29.0000 | 34.7424 | 5.69158 | 6903.35 | 5.69157 | -0.00000 |
| 32.5001 | 34.7391 | 6.06406 | 7091.59 | 6.06406 | -0.00000 |

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

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

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

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

