



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

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

SENSOR SERIAL NUMBER: 0385
 CALIBRATION DATE: 08-Feb-24

SBE 45 CONDUCTIVITY CALIBRATION DATA
 PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.989167e-001 CPcor = -9.5700e-008
 h = 1.356012e-001 CTcor = 3.2500e-006
 i = -5.545107e-004 WBOTC = 2.7605e-007
 j = 5.217677e-005

| 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 | 2725.45 | 0.00000 | 0.00000 |
| 1.0000 | 34.5582 | 2.95600 | 5430.08 | 2.95597 | -0.00003 |
| 4.5000 | 34.5388 | 3.26111 | 5635.62 | 3.26114 | 0.00003 |
| 15.0000 | 34.4969 | 4.23656 | 6246.74 | 4.23657 | 0.00002 |
| 18.5000 | 34.4879 | 4.57948 | 6447.57 | 4.57948 | -0.00000 |
| 24.0000 | 34.4776 | 5.13378 | 6759.30 | 5.13376 | -0.00002 |
| 29.0000 | 34.4711 | 5.65211 | 7038.00 | 5.65210 | -0.00000 |
| 32.5000 | 34.4663 | 6.02182 | 7230.03 | 6.02183 | 0.00001 |

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

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

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

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

