



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

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

SENSOR SERIAL NUMBER: 0092
CALIBRATION DATE: 29-Mar-17

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

COEFFICIENTS:

g = -9.815262e-001
h = 1.502985e-001
i = -1.695733e-004
j = 3.860393e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.1539e-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	2556.70	0.00000	0.00000
1.0000	34.7547	2.97120	5125.78	2.97121	0.00001
4.5000	34.7351	3.27782	5319.97	3.27781	-0.00001
15.0000	34.6931	4.25810	5897.25	4.25811	0.00001
18.5000	34.6842	4.60273	6086.89	4.60275	0.00002
24.0000	34.6745	5.15986	6381.19	5.15983	-0.00003
29.0000	34.6695	5.68097	6644.36	5.68099	0.00001
32.5000	34.6666	6.05283	6825.68	6.05275	-0.00009

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

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

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

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

