



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

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

SENSOR SERIAL NUMBER: 0399
 CALIBRATION DATE: 15-Feb-23

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

COEFFICIENTS:

g = -9.755293e-001 CPcor = -9.5700e-008
 h = 1.426984e-001 CTcor = 3.2500e-006
 i = -4.690988e-004 WBOTC = 6.9909e-007
 j = 5.609861e-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	2622.38	0.00000	0.00000
1.0000	34.7516	2.97096	5275.85	2.97099	0.00003
4.5000	34.7310	3.27747	5476.35	3.27743	-0.00004
15.0000	34.6871	4.25744	6072.42	4.25745	0.00001
18.5000	34.6776	4.60195	6268.18	4.60197	0.00001
24.0000	34.6668	5.15884	6571.92	5.15882	-0.00002
29.0000	34.6588	5.67942	6843.29	5.67942	0.00000
32.5000	34.6507	6.05037	7030.03	6.05037	0.00000

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

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

