



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

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

SENSOR SERIAL NUMBER: 2023
CALIBRATION DATE: 06-May-21

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

COEFFICIENTS:

g = -1.034283e+000
h = 1.483120e-001
i = 1.911024e-004
j = 2.110711e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.5476e-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	2635.74	0.00000	0.00000
0.9998	34.7227	2.96871	5168.34	2.96872	0.00001
4.4999	34.7028	3.27506	5361.29	3.27506	-0.00000
14.9999	34.6608	4.25454	5935.41	4.25452	-0.00002
18.5000	34.6523	4.59896	6124.23	4.59897	0.00001
23.9999	34.6432	5.15571	6417.40	5.15572	0.00002
28.9999	34.6382	5.67641	6679.61	5.67640	-0.00001
32.5000	34.6354	6.04800	6860.39	6.04789	-0.00011

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

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

