



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

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

SENSOR SERIAL NUMBER: 1842
CALIBRATION DATE: 14-Sep-22

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

COEFFICIENTS:

g = -1.001501e+000
h = 1.427003e-001
i = -1.166990e-004
j = 3.384423e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 3.0190e-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	2649.77	0.00000	0.00000
1.0000	34.4920	2.95087	5256.88	2.95088	0.00001
4.5000	34.4728	3.25549	5454.75	3.25548	-0.00001
15.0000	34.4314	4.22936	6043.19	4.22935	-0.00001
18.5000	34.4227	4.57175	6236.58	4.57175	-0.00000
24.0000	34.4130	5.12522	6536.77	5.12524	0.00002
29.0000	34.4073	5.64282	6805.15	5.64282	0.00000
32.5000	34.4030	6.01201	6990.08	6.01201	-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

