

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2022
CALIBRATION DATE: 22-Nov-15

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

COEFFICIENTS:

g = -9.869890e-001
h = 1.391578e-001
i = -1.716018e-004
j = 3.362322e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.8990e-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	2664.73	0.00000	0.00000
1.0000	34.6838	2.96572	5328.78	2.96574	0.00002
4.5000	34.6647	3.27183	5530.31	3.27181	-0.00002
15.0000	34.6227	4.25037	6129.41	4.25035	-0.00002
18.5000	34.6138	4.59440	6326.25	4.59440	0.00001
24.0000	34.6042	5.15055	6631.74	5.15057	0.00002
29.0000	34.5992	5.67075	6904.86	5.67074	-0.00001
32.5000	34.5965	6.04198	7093.08	6.04188	-0.00010

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

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

Conductivity (S/m) = $(g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$

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

