

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0093
CALIBRATION DATE: 01-Feb-17

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

COEFFICIENTS:

g = -1.021220e+000
h = 1.564149e-001
i = -2.451766e-004
j = 4.670887e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.2350e-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	2557.46	0.00000	0.00000
1.0000	34.8035	2.97498	5055.29	2.97499	0.00001
4.5000	34.7835	3.28193	5245.00	3.28192	-0.00001
15.0000	34.7408	4.26333	5809.27	4.26331	-0.00002
18.5000	34.7317	4.60836	5994.74	4.60836	0.00001
24.0000	34.7217	5.16611	6282.64	5.16613	0.00002
29.0000	34.7157	5.68769	6540.02	5.68768	-0.00001
32.5000	34.7116	6.05979	6717.27	6.05951	-0.00029

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

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

