

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2024
CALIBRATION DATE: 10-Dec-11

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

COEFFICIENTS:

g = -9.943546e-001
h = 1.473585e-001
i = -1.454337e-004
j = 3.729646e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 3.8161e-006

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2598.67	0.00000	0.00000
1.0000	34.8490	2.97849	5187.95	2.97850	0.00000
4.5000	34.8279	3.28571	5383.91	3.28571	0.00000
15.0000	34.7821	4.26786	5966.44	4.26784	-0.00002
18.5000	34.7708	4.61298	6157.77	4.61300	0.00001
24.0000	34.7580	5.17091	6454.74	5.17093	0.00002
29.0000	34.7478	5.69236	6720.05	5.69235	-0.00002
32.4999	34.7388	6.06399	6902.72	6.06400	0.00000

$$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$$

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

$$t = \text{temperature}[^{\circ}\text{C}]; p = \text{pressure}[\text{decibars}]; \delta = \text{CTcor}; \epsilon = \text{CPcor};$$

$$\text{Residual} = \text{instrument conductivity} - \text{bath conductivity}$$

