

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0827
CALIBRATION DATE: 18-Apr-12

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

COEFFICIENTS:

g = -1.037166e+000
h = 1.589762e-001
i = -1.383588e-004
j = 3.966750e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.7313e-005

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	2555.75	0.00000	0.00000
1.0000	34.7981	2.97456	5018.70	2.97458	0.00002
4.4999	34.7775	3.28142	5206.53	3.28139	-0.00002
14.9999	34.7332	4.26249	5765.61	4.26248	-0.00000
18.5000	34.7237	4.60741	5949.47	4.60740	-0.00001
24.0000	34.7132	5.16498	6235.01	5.16500	0.00002
29.0000	34.7074	5.68649	6490.44	5.68649	0.00000
32.5000	34.7042	6.05865	6666.59	6.05864	-0.00001

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

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

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

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

