

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0826
CALIBRATION DATE: 10-Jul-10

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

COEFFICIENTS:

g = -1.057745e+000
h = 1.560001e-001
i = -5.241369e-005
j = 3.023389e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.7407e-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	2604.14	0.00000	0.00000
1.0000	34.7094	2.96770	5071.54	2.96770	0.00001
4.5000	34.6857	3.27361	5260.17	3.27362	0.00000
15.0000	34.6345	4.25166	5821.82	4.25164	-0.00002
18.5000	34.6242	4.59563	6006.69	4.59563	-0.00000
24.0000	34.6124	5.15164	6293.84	5.15165	0.00002
29.0000	34.6027	5.67126	6550.59	5.67127	0.00001
32.5000	34.5949	6.04173	6727.53	6.04172	-0.00001

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

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

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

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

