

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3777
CALIBRATION DATE: 20-Aug-10

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

COEFFICIENTS:

g = -1.050281e+000
h = 1.354281e-001
i = -9.907678e-005
j = 2.688454e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -5.5036e-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	2785.69	0.00000	0.00000
1.0000	34.8433	2.97805	5448.74	2.97805	-0.00000
4.5000	34.8232	3.28531	5651.96	3.28532	0.00001
15.0000	34.7797	4.26760	6256.75	4.26759	-0.00000
18.5000	34.7698	4.61287	6455.62	4.61287	0.00000
24.0000	34.7585	5.17098	6764.43	5.17096	-0.00002
29.0000	34.7501	5.69269	7040.58	5.69273	0.00003
32.5000	34.7438	6.06478	7230.87	6.06476	-0.00002

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

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

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

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

