

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3762
CALIBRATION DATE: 05-Jan-11

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

COEFFICIENTS:

g = -1.045751e+000
h = 1.318735e-001
i = -1.975104e-004
j = 3.256323e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.1560e-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	2819.46	0.00000	0.00000
1.0000	34.9315	2.98487	5530.58	2.98491	0.00004
4.5000	34.9114	3.29281	5737.22	3.29273	-0.00008
14.9999	34.8674	4.27721	6352.40	4.27728	0.00007
18.5000	34.8579	4.62329	6554.62	4.62329	0.00000
24.0000	34.8468	5.18266	6868.63	5.18263	-0.00003
29.0000	34.8401	5.70578	7149.49	5.70574	-0.00004
32.5000	34.8354	6.07894	7343.11	6.07897	0.00003

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

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

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

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

