

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2448
CALIBRATION DATE: 04-Dec-09

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

COEFFICIENTS:

g = -1.033497e+000
h = 1.472149e-001
i = -1.845924e-004
j = 3.723023e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 7.2604e-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	2651.43	0.00000	0.00000
1.0000	34.6427	2.96254	5209.15	2.96256	0.00002
4.5000	34.6231	3.26829	5403.94	3.26827	-0.00002
15.0000	34.5803	4.24571	5983.52	4.24571	-0.00001
18.5001	34.5709	4.58932	6174.05	4.58930	-0.00002
24.0000	34.5597	5.14466	6469.85	5.14468	0.00002
29.0000	34.5523	5.66392	6734.33	5.66396	0.00003
32.5001	34.5466	6.03427	6916.55	6.03424	-0.00003

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

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

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

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

