

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3424
CALIBRATION DATE: 18-Aug-10

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

COEFFICIENTS:

g = -9.992458e-001
h = 1.362747e-001
i = -1.394205e-004
j = 3.163539e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.3041e-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	2709.51	0.00000	0.00000
1.0000	34.8062	2.97518	5397.13	2.97518	-0.00000
4.5000	34.7862	3.28216	5600.89	3.28216	-0.00001
14.9999	34.7429	4.26355	6206.80	4.26356	0.00001
18.5000	34.7335	4.60857	6405.92	4.60859	0.00002
23.9999	34.7232	5.16630	6714.98	5.16628	-0.00001
29.0000	34.7167	5.68784	6991.31	5.68781	-0.00002
32.5001	34.7112	6.05974	7181.69	6.05976	0.00002

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

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

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

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

