

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3423
CALIBRATION DATE: 14-Apr-12

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

COEFFICIENTS:

g = -9.976229e-001
h = 1.346595e-001
i = -2.331702e-004
j = 3.932202e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.1543e-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	2725.55	0.00000	0.00000
1.0000	34.8466	2.97831	5435.93	2.97832	0.00001
4.5000	34.8260	3.28555	5641.27	3.28554	-0.00001
15.0000	34.7817	4.26782	6251.77	4.26781	-0.00000
18.4999	34.7722	4.61314	6452.36	4.61315	0.00001
24.0000	34.7619	5.17143	6763.71	5.17143	-0.00000
29.0000	34.7559	5.69354	7042.05	5.69354	-0.00000

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

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

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

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

