

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1242
CALIBRATION DATE: 17-Apr-12

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

COEFFICIENTS:

g = -1.052789e+000
h = 1.540284e-001
i = -1.594785e-004
j = 3.834814e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8400e-005

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	2616.52	0.00000	0.00000
1.0000	34.9254	2.98440	5116.62	2.98444	0.00004
4.5000	34.9048	3.29225	5307.57	3.29222	-0.00003
15.0000	34.8606	4.27647	5876.09	4.27644	-0.00003
18.5000	34.8510	4.62247	6063.10	4.62247	-0.00000
24.0000	34.8405	5.18183	6353.54	5.18185	0.00002
29.0000	34.8344	5.70495	6613.38	5.70500	0.00005
32.5000	34.8308	6.07823	6792.52	6.07819	-0.00004

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

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

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

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

