

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0471
CALIBRATION DATE: 06-Nov-08

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

COEFFICIENTS:

g = -1.054401e+000
h = 1.507456e-001
i = -4.248610e-004
j = 5.550230e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.2184e-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	2653.31	0.00000	0.00000
1.0000	34.7449	2.97044	5179.60	2.97045	0.00001
4.4999	34.7249	3.27694	5373.34	3.27694	-0.00000
15.0000	34.6812	4.25679	5950.18	4.25677	-0.00002
18.4999	34.6722	4.60130	6139.99	4.60129	-0.00001
23.9999	34.6621	5.15821	6434.83	5.15824	0.00003
28.9999	34.6563	5.67904	6698.61	5.67905	0.00001
32.5001	34.6539	6.05088	6880.62	6.05086	-0.00001

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

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

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

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

