

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2328
CALIBRATION DATE: 01-Jan-11

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

COEFFICIENTS:

g = -1.047538e+000
h = 1.581581e-001
i = -5.147168e-005
j = 3.131740e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 6.5429e-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	2572.79	0.00000	0.00000
1.0000	34.6933	2.96645	5029.34	2.96646	0.00000
4.5000	34.6733	3.27256	5216.72	3.27256	0.00000
15.0000	34.6301	4.25118	5774.35	4.25116	-0.00002
18.5000	34.6209	4.59524	5957.74	4.59522	-0.00002
24.0000	34.6101	5.15133	6242.53	5.15137	0.00004
29.0000	34.6041	5.67146	6497.26	5.67146	-0.00000
32.5000	34.5996	6.04246	6672.86	6.04245	-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 = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

