

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3424
CALIBRATION DATE: 24-Aug-10

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

COEFFICIENTS:

g = -9.955461e-001
h = 1.356316e-001
i = -7.400342e-005
j = 2.663487e-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	2709.49	0.00000	0.00000
1.0000	34.6842	2.96575	5396.83	2.96575	0.00001
4.5000	34.6645	3.27181	5600.60	3.27180	-0.00001
15.0000	34.6218	4.25027	6206.54	4.25026	-0.00001
18.5000	34.6126	4.59425	6405.68	4.59425	-0.00000
24.0000	34.6024	5.15031	6714.82	5.15033	0.00002
29.0000	34.5965	5.67036	6991.23	5.67035	-0.00001

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

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

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

Residual = instrument conductivity - bath conductivity

