

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2332
CALIBRATION DATE: 05-Jan-11

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

COEFFICIENTS:

g = -9.959562e-001
h = 1.497155e-001
i = -4.710053e-005
j = 3.044515e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 5.3329e-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	2578.36	0.00000	0.00000
1.0000	34.9315	2.98487	5146.78	2.98486	-0.00001
4.5000	34.9114	3.29281	5341.18	3.29281	0.00000
14.9999	34.8674	4.27721	5919.08	4.27723	0.00002
18.5000	34.8579	4.62329	6108.96	4.62328	-0.00001
24.0000	34.8468	5.18266	6403.68	5.18266	-0.00000
29.0000	34.8401	5.70578	6667.16	5.70576	-0.00002
32.5000	34.8354	6.07894	6848.75	6.07896	0.00002

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

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

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

