

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2325
CALIBRATION DATE: 05-Jan-11

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

COEFFICIENTS:

g = -9.849727e-001

CPcor = -9.5700e-008

h = 1.391073e-001

CTcor = 3.2500e-006

i = -5.448834e-005

WBOTC = -5.9812e-006

j = 2.566827e-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	2660.78	0.00000	0.00000
1.0000	34.9315	2.98487	5333.70	2.98487	0.00000
4.5000	34.9114	3.29281	5535.88	3.29281	-0.00000
14.9999	34.8674	4.27721	6136.94	4.27722	0.00001
18.5000	34.8579	4.62329	6334.43	4.62328	-0.00001
24.0000	34.8468	5.18266	6640.97	5.18268	0.00002
29.0000	34.8401	5.70578	6915.02	5.70576	-0.00002
32.5000	34.8354	6.07894	7103.90	6.07895	0.00001

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

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

