

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2448

CALIBRATION DATE: 19-Sep-15

SBE 37 CONDUCTIVITY CALIBRATION DATA

PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.029648e+000

h = 1.466942e-001

i = -1.980299e-004

j = 3.855155e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 7.2604e-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	2651.43	0.00000	0.00000
1.0000	34.6824	2.96561	5218.45	2.96562	0.00001
4.5000	34.6625	3.27164	5413.80	3.27163	-0.00001
14.9999	34.6202	4.25009	5995.02	4.25008	-0.00000
18.5000	34.6114	4.59411	6186.11	4.59411	-0.00001
24.0000	34.6017	5.15022	6482.80	5.15023	0.00001
29.0000	34.5965	5.67036	6748.12	5.67035	-0.00000
32.5001	34.5931	6.04147	6931.02	6.04146	-0.00000

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

Conductivity = $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$ Siemens / meter

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

Residual = instrument conductivity - bath conductivity

