

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3423

CALIBRATION DATE: 12-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -9.952414e-001

h = 1.343164e-001

i = -2.043145e-004

j = 3.615996e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -7.1543e-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	2725.21	0.00000	0.00000
1.0000	34.6976	2.96678	5432.09	2.96682	0.00003
4.5000	34.6778	3.27294	5637.27	3.27291	-0.00003
15.0000	34.6354	4.25176	6247.46	4.25173	-0.00003
18.5000	34.6259	4.59583	6447.95	4.59582	-0.00001
24.0000	34.6147	5.15194	6759.12	5.15201	0.00007
29.0000	34.6081	5.67204	7037.23	5.67201	-0.00004
32.5000	34.6022	6.04286	7228.67	6.04256	-0.00030

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

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

