

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0818

CALIBRATION DATE: 25-Sep-15

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.069770e+000

h = 1.549342e-001

i = -4.102114e-004

j = 5.670329e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -7.3731e-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	2635.66	0.00000	0.00000
1.0000	34.7223	2.96869	5115.81	2.96870	0.00000
4.5000	34.7029	3.27508	5306.43	3.27507	-0.00001
15.0000	34.6604	4.25451	5874.12	4.25451	0.00001
18.5000	34.6514	4.59885	6060.94	4.59886	0.00001
24.0000	34.6420	5.15556	6351.18	5.15555	-0.00001
29.0000	34.6369	5.67623	6610.93	5.67622	-0.00001
32.5000	34.6342	6.04782	6790.12	6.04782	0.00001

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

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

