

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1851

CALIBRATION DATE: 29-Sep-16

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.028831e+000

h = 1.403803e-001

i = -6.126620e-005

j = 2.813336e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 2.6784e-006

BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2706.72	0.00000	0.00000
0.9999	34.7728	2.97259	5329.97	2.97260	0.00001
4.5000	34.7532	3.27936	5529.53	3.27934	-0.00001
15.0000	34.7111	4.26007	6123.23	4.26007	0.00000
18.4999	34.7024	4.60488	6318.42	4.60488	0.00001
23.9999	34.6929	5.16229	6621.48	5.16229	0.00001
29.0000	34.6882	5.68369	6892.55	5.68368	-0.00002
32.5000	34.6862	6.05586	7079.51	6.05587	0.00001

$f = \text{Instrument Output(Hz)} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

t = temperature (°C); p = pressure (decibars); $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Conductivity (S/m) = $(g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity

