

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1804

CALIBRATION DATE: 30-Sep-16

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

## COEFFICIENTS:

g = -9.778114e-001

h = 1.385809e-001

i = -2.073343e-004

j = 3.896163e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 2.7581e-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	2658.86	0.00000	0.00000
1.0000	34.8769	2.98065	5344.47	2.98066	0.00001
4.5000	34.8565	3.28814	5547.28	3.28815	0.00000
15.0000	34.8141	4.27137	6150.10	4.27135	-0.00002
18.5000	34.8053	4.61707	6348.12	4.61706	-0.00001
24.0000	34.7959	5.17593	6655.45	5.17595	0.00002
29.0000	34.7913	5.69868	6930.17	5.69870	0.00002
32.5000	34.7892	6.07180	7119.51	6.07178	-0.00002

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

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

