

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4078
CALIBRATION DATE: 10-Dec-11

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.035391e+000
h = 1.484928e-001
i = -1.113864e-004
j = 3.355715e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -1.0787e-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	2641.43	0.00000	0.00000
1.0000	34.8530	2.97880	5193.65	2.97881	0.00001
4.5000	34.8327	3.28612	5388.05	3.28611	-0.00001
15.0000	34.7889	4.26861	5966.49	4.26860	-0.00001
18.4999	34.7787	4.61391	6156.63	4.61390	-0.00000
24.0000	34.7660	5.17197	6451.83	5.17199	0.00002
29.0000	34.7568	5.69367	6715.74	5.69367	-0.00000
32.5000	34.7491	6.06560	6897.55	6.06559	-0.00001

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

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

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

Residual = instrument conductivity - bath conductivity

