

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1805
CALIBRATION DATE: 21-Jan-12

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

COEFFICIENTS:

g = -9.810342e-001
h = 1.397671e-001
i = -3.455382e-004
j = 5.301445e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.1929e-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	2654.49	0.00000	0.00000
0.9999	34.6395	2.96228	5318.05	2.96225	-0.00003
4.4999	34.6186	3.26790	5519.44	3.26794	0.00005
15.0000	34.5744	4.24507	6117.76	4.24506	-0.00001
18.5000	34.5650	4.58862	6314.27	4.58861	-0.00001
24.0000	34.5546	5.14398	6619.17	5.14398	-0.00000
29.0000	34.5485	5.66337	6891.66	5.66338	0.00001
32.5000	34.5449	6.03399	7079.39	6.03399	-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

