

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1805
CALIBRATION DATE: 16-Dec-10

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

COEFFICIENTS:

g = -9.832931e-001

CPcor = -9.5700e-008

h = 1.406068e-001

CTcor = 3.2500e-006

i = -5.869355e-004

WBOTC = 1.1929e-006

j = 7.166740e-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	2654.39	0.00000	0.00000
0.9999	34.5784	2.95755	5314.90	2.95765	0.00010
4.5000	34.5584	3.26278	5516.04	3.26273	-0.00005
15.0000	34.5145	4.23849	6113.84	4.23834	-0.00015
18.5000	34.5048	4.58148	6310.16	4.58141	-0.00007
24.0000	34.4937	5.13591	6614.79	5.13613	0.00021
28.9999	34.4867	5.65437	6886.71	5.65444	0.00007
32.5000	34.4821	6.02427	7073.97	6.02415	-0.00011

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

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

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

Residual = instrument conductivity - bath conductivity

