

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3767
CALIBRATION DATE: 22-Dec-10

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

COEFFICIENTS:

g = -1.050534e+000
h = 1.527566e-001
i = -2.285236e-004
j = 4.179800e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.4102e-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	2625.36	0.00000	0.00000
1.0000	34.6342	2.96188	5126.38	2.96192	0.00004
4.5000	34.6138	3.26750	5317.40	3.26747	-0.00003
15.0000	34.5695	4.24453	5886.04	4.24448	-0.00005
18.4999	34.5596	4.58797	6073.06	4.58795	-0.00001
23.9999	34.5476	5.14304	6363.47	5.14315	0.00011
29.0000	34.5399	5.66212	6623.10	5.66207	-0.00005

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

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

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

Residual = instrument conductivity - bath conductivity

