

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0815
CALIBRATION DATE: 13-Mar-07

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

COEFFICIENTS:

g = -1.076621e+000

CPcor = -9.5700e-008

h = 1.524931e-001

CTcor = 3.2500e-006

i = -4.167113e-004

WBOTC = -7.7510e-005

j = 5.625003e-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	2665.58	0.00000	0.00000
1.0000	34.8600	2.97934	5168.54	2.97933	-0.00001
4.5000	34.8392	3.28667	5360.95	3.28668	0.00001
15.0000	34.7945	4.26922	5934.00	4.26923	0.00001
18.5000	34.7847	4.61463	6122.58	4.61464	0.00001
24.0000	34.7740	5.17303	6415.57	5.17305	0.00002
29.0000	34.7682	5.69533	6677.74	5.69524	-0.00009
32.5000	34.7655	6.06813	6858.73	6.06818	0.00005

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

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

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

Residual = instrument conductivity - bath conductivity

