

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0815
CALIBRATION DATE: 02-Mar-07

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

COEFFICIENTS:

g = -1.080384e+000

CPcor = -9.5700e-008

h = 1.531017e-001

CTcor = 3.2500e-006

i = -4.896699e-004

WBOTC = -7.7510e-005

j = 6.204884e-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	2666.24	0.00000	0.00000
1.0000	34.9016	2.98256	5166.42	2.98255	-0.00001
4.5000	34.8807	3.29020	5358.67	3.29022	0.00002
15.0000	34.8374	4.27393	5931.29	4.27391	-0.00002
18.5000	34.8283	4.61979	6119.76	4.61979	0.00000
24.0000	34.8182	5.17888	6412.52	5.17888	-0.00000
29.0000	34.8116	5.70163	6674.45	5.70165	0.00001
32.5000	34.8058	6.07437	6854.96	6.07436	-0.00001

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

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

