

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0819
CALIBRATION DATE: 07-Dec-07

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

COEFFICIENTS:

g = -1.096744e+000

CPcor = -9.5700e-008

h = 1.562854e-001

CTcor = 3.2500e-006

i = -5.307930e-004

WBOTC = -7.4742e-005

j = 6.426885e-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	2659.40	0.00000	0.00000
1.0000	34.7346	2.96965	5118.03	2.96965	0.00001
4.5000	34.7139	3.27601	5307.60	3.27603	0.00001
15.0000	34.6706	4.25563	5872.43	4.25552	-0.00010
18.5000	34.6618	4.60008	6058.51	4.60014	0.00006
24.0000	34.6525	5.15695	6347.50	5.15699	0.00004
29.0000	34.6477	5.67780	6606.16	5.67779	-0.00002
32.5000	34.6451	6.04950	6784.63	6.04950	-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

