

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2448
CALIBRATION DATE: 25-Nov-10

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

COEFFICIENTS:

g = -1.031948e+000
h = 1.471855e-001
i = -2.778333e-004
j = 4.494448e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 7.2604e-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	2651.45	0.00000	0.00000
1.0000	34.7026	2.96717	5216.56	2.96721	0.00003
4.5000	34.6828	3.27337	5411.79	3.27335	-0.00002
15.0000	34.6399	4.25226	5992.61	4.25223	-0.00003
18.5000	34.6309	4.59642	6183.56	4.59639	-0.00003
23.9999	34.6206	5.15271	6480.00	5.15276	0.00004
28.9999	34.6144	5.67295	6745.04	5.67300	0.00005
32.5000	34.6085	6.04384	6927.54	6.04379	-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]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

