

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0409
CALIBRATION DATE: 06-Nov-08

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

COEFFICIENTS:

g = -9.909295e-001
h = 1.383483e-001
i = -3.700127e-004
j = 4.882654e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.7926e-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	2684.82	0.00000	0.00000
1.0000	34.7449	2.97044	5362.49	2.97045	0.00001
4.4999	34.7249	3.27694	5566.18	3.27693	-0.00001
15.0000	34.6812	4.25679	6172.03	4.25678	-0.00001
18.4999	34.6722	4.60130	6371.20	4.60129	-0.00001
23.9999	34.6621	5.15821	6680.43	5.15823	0.00002
28.9999	34.6563	5.67904	6956.96	5.67906	0.00001
32.5001	34.6539	6.05088	7147.69	6.05086	-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

