

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0416
CALIBRATION DATE: 08-Dec-10

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

COEFFICIENTS:

g = -9.665220e-001
h = 1.382798e-001
i = -3.681245e-004
j = 4.882338e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.4403e-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	2652.32	0.00000	0.00000
1.0000	34.8691	2.98005	5353.63	2.98004	-0.00001
4.5000	34.8459	3.28724	5558.27	3.28726	0.00002
15.0000	34.7996	4.26978	6166.90	4.26975	-0.00003
18.5000	34.7888	4.61511	6366.88	4.61511	-0.00001
24.0000	34.7775	5.17349	6677.38	5.17353	0.00003
29.0001	34.7685	5.69538	6954.82	5.69538	0.00000
32.5000	34.7632	6.06778	7146.08	6.06777	-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

