

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3424

CALIBRATION DATE: 11-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.002096e+000

h = 1.377949e-001

i = -6.678244e-004

j = 7.236938e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -6.3041e-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	2709.51	0.00000	0.00000
1.0000	34.7672	2.97217	5399.94	2.97226	0.00009
4.5000	34.7476	3.27888	5603.86	3.27878	-0.00010
15.0000	34.7053	4.25944	6210.31	4.25935	-0.00008
18.5000	34.6965	4.60419	6409.60	4.60428	0.00009
24.0000	34.6868	5.16149	6718.61	5.16151	0.00002
29.0000	34.6813	5.68269	6994.77	5.68268	-0.00001
32.5001	34.6783	6.05465	7185.06	6.05464	-0.00001

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

Conductivity = $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$ Siemens / meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

