

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0475

CALIBRATION DATE: 29-Sep-15

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.042217e+000

h = 1.411223e-001

i = -3.642792e-004

j = 4.927969e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -8.3216e-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	2726.12	0.00000	0.00000
1.0000	34.8291	2.97695	5347.12	2.97696	0.00000
4.5000	34.8090	3.28410	5547.83	3.28411	0.00001
15.0000	34.7667	4.26617	6145.33	4.26614	-0.00003
18.4999	34.7573	4.61138	6341.88	4.61140	0.00002
24.0000	34.7476	5.16954	6647.17	5.16955	0.00001
29.0000	34.7424	5.69158	6920.31	5.69157	-0.00001
32.4999	34.7387	6.06398	7108.67	6.06405	0.00007

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

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

