

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2026
CALIBRATION DATE: 09-Dec-11

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

COEFFICIENTS:

g = -9.270927e-001

CPcor = -9.5700e-008

h = 1.444393e-001

CTcor = 3.2500e-006

i = -1.342849e-004

WBOTC = -3.7810e-006

j = 4.471928e-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	2534.06	0.00000	0.00000
1.0000	34.9860	2.98908	5197.87	2.98911	0.00003
4.4999	34.9656	3.29741	5397.38	3.29738	-0.00002
15.0000	34.9212	4.28312	5989.70	4.28307	-0.00004
18.5000	34.9111	4.62958	6184.06	4.62961	0.00003
24.0000	34.8997	5.18966	6485.44	5.18967	0.00001
29.0000	34.8919	5.71330	6754.60	5.71333	0.00002
32.5000	34.8848	6.08658	6939.80	6.08656	-0.00002

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

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

