

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1245
CALIBRATION DATE: 18-Apr-12

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

COEFFICIENTS:

g = -1.057192e+000
h = 1.629827e-001
i = -7.554942e-005
j = 3.728514e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -3.0022e-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	2547.32	0.00000	0.00000
1.0000	34.7981	2.97456	4965.46	2.97456	0.00000
4.4999	34.7775	3.28142	5150.37	3.28141	-0.00000
14.9999	34.7332	4.26249	5700.86	4.26248	-0.00001
18.5000	34.7237	4.60741	5881.96	4.60740	-0.00001
24.0000	34.7132	5.16498	6163.25	5.16500	0.00002
29.0000	34.7074	5.68649	6414.92	5.68648	-0.00001

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

$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

