

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0204
CALIBRATION DATE: 05-Mar-11

SBE 45 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.033836e+000
h = 1.581939e-001
i = -1.765784e-004
j = 3.831102e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.5040e-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	2557.33	0.00000	0.00000
0.9999	34.7049	2.96734	5027.84	2.96730	-0.00004
4.5000	34.6833	3.27341	5215.77	3.27346	0.00005
15.0000	34.6364	4.25187	5774.70	4.25187	0.00000
18.5000	34.6272	4.59598	5958.53	4.59597	-0.00001
23.9999	34.6171	5.15225	6243.95	5.15224	-0.00001
29.0000	34.6108	5.67244	6499.19	5.67245	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

