

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0361  
CALIBRATION DATE: 04-Mar-14

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

## COEFFICIENTS:

g = -9.819008e-001	CPcor = -9.5700e-008
h = 1.378158e-001	CTcor = 3.2500e-006
i = -1.182360e-004	WBOTC = 1.5603e-007
j = 2.861639e-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	2670.30	0.00000	0.00000
1.0000	34.6943	2.96653	5348.96	2.96652	-0.00001
4.5000	34.6742	3.27264	5551.68	3.27265	0.00002
15.0000	34.6317	4.25136	6154.37	4.25135	-0.00000
18.4999	34.6229	4.59546	6352.43	4.59546	-0.00000
23.9999	34.6133	5.15175	6659.87	5.15175	0.00000
29.0000	34.6083	5.67207	6934.78	5.67207	0.00000

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

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

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

Residual = instrument conductivity - bath conductivity

Date, Slope Correction

