

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0361
CALIBRATION DATE: 13-Nov-12

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

COEFFICIENTS:

g = -9.863362e-001	CPcor = -9.5700e-008
h = 1.385080e-001	CTcor = 3.2500e-006
i = -1.836439e-004	WBOTC = 1.5603e-007
j = 3.410943e-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	2670.93	0.00000	0.00000
1.0000	34.7551	2.97123	5345.50	2.97123	0.00000
4.5000	34.7349	3.27780	5547.94	3.27780	0.00000
15.0000	34.6919	4.25796	6149.82	4.25795	-0.00001
18.5000	34.6828	4.60257	6347.60	4.60257	0.00001
24.0000	34.6727	5.15962	6654.57	5.15964	0.00002
29.0000	34.6672	5.68064	6929.01	5.68062	-0.00002
32.5000	34.6640	6.05243	7118.21	6.05244	0.00001

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

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

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

