

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0256
CALIBRATION DATE: 17-Nov-12

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

COEFFICIENTS:

g = -9.818433e-001	CPcor = -9.5700e-008
h = 1.394485e-001	CTcor = 3.2500e-006
i = -4.486095e-004	WBOTC = 8.1422e-007
j = 5.359903e-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	2661.23	0.00000	0.00000
1.0000	34.7997	2.97468	5343.22	2.97466	-0.00002
4.5000	34.7794	3.28159	5546.08	3.28160	0.00002
15.0000	34.7362	4.26283	6148.96	4.26284	0.00002
18.5000	34.7264	4.60773	6346.93	4.60772	-0.00001
24.0000	34.7151	5.16523	6654.15	5.16523	-0.00000
29.0001	34.7073	5.68648	6928.64	5.68647	-0.00002
32.5000	34.6993	6.05789	7117.55	6.05790	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

