

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: 0360
CALIBRATION DATE: 24-Jan-15

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

COEFFICIENTS:

g = -1.003729e+000
h = 1.359847e-001
i = -2.420176e-004
j = 3.515853e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 5.5203e-007

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	2720.81	0.00000	0.00000
1.0000	34.8430	2.97803	5416.75	2.97802	-0.00001
4.5000	34.8230	3.28529	5621.29	3.28531	0.00002
15.0000	34.7803	4.26766	6229.50	4.26766	-0.00001
18.5000	34.7711	4.61302	6429.40	4.61302	0.00000
24.0000	34.7611	5.17132	6739.70	5.17132	-0.00001
29.0000	34.7555	5.69348	7017.19	5.69348	0.00000
32.5000	34.7520	6.06604	7208.39	6.06592	-0.00012

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

$$\text{Conductivity} = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p) \text{ Siemens / meter}$$

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

Residual = instrument conductivity - bath conductivity

