

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

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

SENSOR SERIAL NUMBER: 2003
CALIBRATION DATE: 31-Dec-08

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.644042e-001
h = 1.342729e-001
i = -2.763637e-004
j = 4.221302e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.6935e-006

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	2684.13	0.00000	0.00000
1.0000	34.8102	2.97549	5422.05	2.97549	0.00000
4.5000	34.7900	3.28249	5628.44	3.28248	-0.00000
15.0000	34.7467	4.26398	6241.63	4.26394	-0.00004
18.5000	34.7376	4.60905	6443.06	4.60913	0.00008
29.0000	34.7206	5.68841	7034.52	5.68833	-0.00007
32.5000	34.7171	6.06065	7226.94	6.06069	0.00004

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

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

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

Residual = instrument conductivity - bath conductivity

