

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: 1245
CALIBRATION DATE: 10-Dec-09

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

COEFFICIENTS:

g = -1.057466e+000
h = 1.631446e-001
i = -1.235357e-004
j = 4.120814e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -3.0022e-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	2547.14	0.00000	0.00000
1.0000	34.8076	2.97529	4965.78	2.97531	0.00002
4.5000	34.7880	3.28232	5150.76	3.28230	-0.00002
15.0000	34.7451	4.26380	5701.43	4.26379	-0.00001
18.4999	34.7356	4.60881	5882.54	4.60879	-0.00002
24.0000	34.7245	5.16648	6163.84	5.16651	0.00003
29.0000	34.7173	5.68793	6415.44	5.68795	0.00002
32.5001	34.7134	6.06008	6588.97	6.06006	-0.00002

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

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

