

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: 4590
CALIBRATION DATE: 03-Jun-08

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

COEFFICIENTS:

g = -1.011241e+000
h = 1.406159e-001
i = -2.855369e-005
j = 2.545584e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.8062e-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	2680.89	0.00000	0.00000
1.0000	35.2704	3.01105	5337.53	3.01108	0.00003
4.5000	35.2504	3.32161	5538.83	3.32158	-0.00003
15.0002	35.2070	4.31445	6137.53	4.31443	-0.00002
18.5000	35.1979	4.66349	6334.31	4.66348	-0.00000
24.0000	35.1874	5.22768	6639.76	5.22770	0.00002
29.0001	35.1809	5.75528	6912.88	5.75530	0.00003
32.5000	35.1762	6.13160	7101.06	6.13157	-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]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

