

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: 3937
CALIBRATION DATE: 12-Jun-09

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

COEFFICIENTS:

g = -1.018374e+000

CPcor = -9.5700e-008

h = 1.434170e-001

CTcor = 3.2500e-006

i = -1.444573e-004

WBOTC = 8.0028e-006

j = 3.296943e-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	2665.90	0.00000	0.00000
0.9999	34.5767	2.95742	5262.31	2.95737	-0.00005
4.4999	34.5537	3.26237	5459.64	3.26244	0.00007
15.0001	34.5082	4.23781	6046.65	4.23780	-0.00001
18.5000	34.4972	4.58058	6239.53	4.58055	-0.00003
24.0001	34.4853	5.13481	6539.12	5.13483	0.00002
29.0000	34.4753	5.65272	6806.79	5.65273	0.00001
32.5000	34.4654	6.02168	6991.03	6.02167	-0.00001

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

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

