

SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

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

SENSOR SERIAL NUMBER: 3531
CALIBRATION DATE: 02-Dec-10

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

COEFFICIENTS:

g = -9.862563e-001
h = 1.331630e-001
i = -1.653907e-004
j = 3.247782e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -4.6806e-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	2723.75	0.00000	0.00000
1.0000	34.6559	2.96356	5444.99	2.96358	0.00002
4.5000	34.6360	3.26938	5651.06	3.26937	-0.00002
15.0000	34.5927	4.24708	6263.72	4.24706	-0.00001
18.5000	34.5835	4.59081	6465.04	4.59080	-0.00001
24.0000	34.5732	5.14645	6777.51	5.14647	0.00003
29.0000	34.5673	5.66611	7056.84	5.66611	-0.00000
32.5000	34.5632	6.03683	7249.34	6.03682	-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

