

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: 2002
CALIBRATION DATE: 02-Jul-10

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

COEFFICIENTS:

g = -1.035228e+000
h = 1.462012e-001
i = -2.119280e-004
j = 4.121887e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.7929e-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	2663.21	0.00000	0.00000
1.0000	34.7050	2.96736	5231.97	2.96737	0.00001
4.5000	34.6853	3.27358	5427.52	3.27357	-0.00001
15.0000	34.6426	4.25255	6009.27	4.25255	-0.00000
18.5000	34.6334	4.59672	6200.49	4.59669	-0.00003
24.0000	34.6231	5.15305	6497.43	5.15313	0.00008
29.0000	34.6171	5.67335	6762.84	5.67328	-0.00007
32.5000	34.6129	6.04452	6945.85	6.04454	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

