

Sea-Bird Electronics, Inc.

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

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1804
CALIBRATION DATE: 15-Jan-12

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

COEFFICIENTS:

g = -9.766026e-001

CPcor = -9.5700e-008

h = 1.382799e-001

CTcor = 3.2500e-006

i = -1.514472e-004

WBOTC = 2.7581e-006

j = 3.475442e-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	2658.97	0.00000	0.00000
1.0000	34.9333	2.98501	5348.95	2.98503	0.00002
4.5000	34.9128	3.29293	5551.98	3.29291	-0.00002
15.0000	34.8683	4.27732	6155.42	4.27730	-0.00002
18.4999	34.8589	4.62340	6353.64	4.62338	-0.00002
24.0000	34.8481	5.18283	6661.25	5.18286	0.00003
29.0000	34.8417	5.70601	6936.18	5.70603	0.00002
32.5002	34.8371	6.07923	7125.58	6.07920	-0.00003

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

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

