

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: 1251

CALIBRATION DATE: 29-Sep-15

SBE 37 CONDUCTIVITY CALIBRATION DATA

PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.031864e+000

h = 1.509572e-001

i = -9.952526e-005

j = 3.393935e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -2.8251e-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	2615.53	0.00000	0.00000
1.0000	34.8291	2.97695	5146.75	2.97697	0.00001
4.5000	34.8090	3.28410	5339.68	3.28409	-0.00001
15.0000	34.7667	4.26617	5913.86	4.26614	-0.00004
18.4999	34.7573	4.61138	6102.68	4.61140	0.00002
24.0000	34.7476	5.16954	6395.91	5.16956	0.00002
29.0000	34.7424	5.69158	6658.21	5.69157	-0.00001
32.4999	34.7387	6.06398	6839.04	6.06397	-0.00000

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

Conductivity = $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$ Siemens / meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

