

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: 0476
CALIBRATION DATE: 30-Oct-13

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

COEFFICIENTS:

g = -1.054869e+000
h = 1.475493e-001
i = -1.517056e-004
j = 3.457546e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -9.2499e-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	2675.52	0.00000	0.00000
1.0000	34.6908	2.96626	5217.81	2.96627	0.00001
4.4999	34.6708	3.27234	5412.08	3.27233	-0.00001
15.0000	34.6279	4.25094	5990.42	4.25092	-0.00002
18.5000	34.6190	4.59501	6180.67	4.59500	-0.00001
24.0000	34.6093	5.15123	6476.15	5.15125	0.00002
29.0000	34.6046	5.67153	6740.52	5.67154	0.00001
32.5000	34.6022	6.04286	6922.85	6.04285	-0.00001

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

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

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

Residual = instrument conductivity - bath conductivity

