

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: 2025
CALIBRATION DATE: 05-Jan-11

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

COEFFICIENTS:

g = -1.015464e+000

CPcor = -9.5700e-008

h = 1.404563e-001

CTcor = 3.2500e-006

i = -1.368431e-004

WBOTC = 9.2934e-007

j = 3.408399e-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	2689.95	0.00000	0.00000
1.0000	34.6607	2.96393	5318.31	2.96394	0.00001
4.4999	34.6408	3.26978	5518.01	3.26978	-0.00000
14.9999	34.5975	4.24759	6111.94	4.24757	-0.00002
18.4999	34.5883	4.59137	6307.16	4.59135	-0.00001
23.9999	34.5779	5.14706	6610.23	5.14708	0.00002
29.0000	34.5716	5.66673	6881.20	5.66676	0.00003
32.5000	34.5675	6.03749	7067.94	6.03747	-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

