

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

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

SENSOR SERIAL NUMBER: 1242
CALIBRATION DATE: 16-Dec-09

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

COEFFICIENTS:

g = -1.051367e+000

CPcor = -9.5700e-008

h = 1.535862e-001

CTcor = 3.2500e-006

i = -4.194094e-005

WBOTC = -2.8400e-005

j = 2.931513e-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	2616.43	0.00000	0.00000
1.0000	34.6298	2.96154	5102.53	2.96155	0.00001
4.5000	34.6099	3.26716	5292.69	3.26716	-0.00000
15.0000	34.5676	4.24432	5858.86	4.24430	-0.00002
18.5000	34.5586	4.58786	6045.13	4.58785	-0.00001
24.0000	34.5482	5.14313	6334.43	5.14316	0.00003
28.9999	34.5411	5.66228	6593.18	5.66229	0.00001
32.5000	34.5356	6.03255	6771.55	6.03254	-0.00001

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

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

