

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: 3424
CALIBRATION DATE: 30-May-07

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

COEFFICIENTS:

g = -9.986792e-001
h = 1.363548e-001
i = -2.126452e-004
j = 3.693375e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.3041e-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	2709.53	0.00000	0.00000
1.0000	34.8962	2.98214	5404.64	2.98216	0.00002
4.5000	34.8755	3.28976	5608.82	3.28975	-0.00001
15.0000	34.8316	4.27329	6216.01	4.27325	-0.00004
18.4999	34.8223	4.61907	6415.55	4.61906	-0.00001
24.0000	34.8124	5.17811	6725.30	5.17814	0.00003
29.0000	34.8073	5.70101	7002.27	5.70105	0.00004
32.5000	34.8048	6.07421	7193.17	6.07417	-0.00004

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

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

