

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: 09-Apr-09

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

COEFFICIENTS:

g = -9.961323e-001

CPcor = -9.5700e-008

h = 1.355803e-001

CTcor = 3.2500e-006

i = -1.706755e-005

WBOTC = -6.3041e-006

j = 2.307601e-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	2709.53	0.00000	0.00000
1.0000	34.8873	2.98145	5404.85	2.98145	-0.00000
4.5000	34.8676	3.28909	5609.06	3.28910	0.00001
15.0000	34.8246	4.27252	6216.20	4.27250	-0.00003
18.5000	34.8152	4.61824	6415.74	4.61824	-0.00000
24.0000	34.8045	5.17706	6725.46	5.17708	0.00002
29.0000	34.7982	5.69969	7002.40	5.69970	0.00001
32.5001	34.7940	6.07255	7193.27	6.07254	-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]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

