

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: 3777
CALIBRATION DATE: 03-Jun-08

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

COEFFICIENTS:

g = -1.049570e+000

CPcor = -9.5700e-008

h = 1.352139e-001

CTcor = 3.2500e-006

i = -4.257289e-005

WBOTC = -5.5036e-006

j = 2.285970e-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	2785.65	0.00000	0.00000
1.0000	35.2704	3.01105	5470.99	3.01109	0.00004
4.5000	35.2504	3.32161	5675.46	3.32156	-0.00005
15.0002	35.2070	4.31445	6284.10	4.31444	-0.00001
18.5000	35.1979	4.66349	6484.25	4.66350	0.00001
24.0000	35.1874	5.22768	6795.01	5.22768	0.00000
29.0001	35.1809	5.75528	7072.98	5.75529	0.00001
32.5000	35.1762	6.13160	7264.56	6.13159	-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

