

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: 0416
CALIBRATION DATE: 15-Apr-09

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

COEFFICIENTS:

g = -9.657487e-001

CPcor = -9.5700e-008

h = 1.381644e-001

CTcor = 3.2500e-006

i = -3.492200e-004

WBOTC = -8.4403e-005

j = 4.752180e-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	2651.97	0.00000	0.00000
1.0000	34.6073	2.95980	5340.41	2.95982	0.00002
4.4999	34.5880	3.26529	5544.46	3.26529	0.00000
15.0000	34.5459	4.24194	6151.18	4.24189	-0.00005
18.5001	34.5369	4.58530	6350.59	4.58526	-0.00003
24.0000	34.5267	5.14029	6660.14	5.14033	0.00004
28.9999	34.5209	5.65934	6936.94	5.65943	0.00008
32.5000	34.5175	6.02975	7127.68	6.02968	-0.00007

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

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

