

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0385
CALIBRATION DATE: 18-Dec-10

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

COEFFICIENTS:

g = -1.084822e+000

CPcor = -9.5700e-008

h = 1.557734e-001

CTcor = 3.2500e-006

i = -4.062853e-004

WBOTC = -7.8271e-005

j = 5.457680e-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	2647.13	0.00000	0.00000
1.0000	34.8301	2.97703	5117.28	2.97700	-0.00003
4.5000	34.8097	3.28416	5307.49	3.28420	0.00004
15.0000	34.7665	4.26615	5874.05	4.26616	0.00001
18.4999	34.7572	4.61136	6060.54	4.61137	0.00000
24.0000	34.7469	5.16944	6350.30	5.16941	-0.00003
29.0000	34.7399	5.69121	6609.61	5.69123	0.00002

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

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

