

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0471
CALIBRATION DATE: 07-Jul-10

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

COEFFICIENTS:

g = -1.053396e+000
h = 1.505463e-001
i = -4.143894e-004
j = 5.522676e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.2184e-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	2653.59	0.00000	0.00000
0.9999	34.6588	2.96377	5177.29	2.96377	-0.00001
4.5000	34.6390	3.26964	5370.91	3.26966	0.00002
15.0000	34.5960	4.24744	5947.29	4.24741	-0.00003
18.5000	34.5867	4.59119	6136.95	4.59119	0.00001
24.0000	34.5767	5.14691	6431.53	5.14691	-0.00000
29.0000	34.5708	5.66662	6695.12	5.66665	0.00004
32.5000	34.5676	6.03751	6876.89	6.03748	-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]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

