

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0661
CALIBRATION DATE: 02-Jul-10

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

COEFFICIENTS:

g = -1.043146e+000
h = 1.564299e-001
i = -1.641314e-004
j = 3.958289e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.7375e-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	2584.43	0.00000	0.00000
1.0000	34.7050	2.96736	5060.50	2.96738	0.00003
4.5000	34.6853	3.27358	5249.62	3.27356	-0.00002
15.0000	34.6426	4.25255	5812.56	4.25253	-0.00003
18.5000	34.6334	4.59672	5997.72	4.59671	-0.00001
24.0000	34.6231	5.15305	6285.27	5.15307	0.00002
29.0000	34.6171	5.67335	6542.51	5.67340	0.00004
32.5000	34.6129	6.04452	6719.81	6.04448	-0.00004

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

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

