

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4921
CALIBRATION DATE: 06-Mar-07

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

COEFFICIENTS:

g = -1.006352e+000
h = 1.557769e-001
i = -6.193394e-005
j = 3.273504e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.0601e-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	2540.68	0.00000	0.00000
1.0000	34.6631	2.96411	5040.15	2.96413	0.00002
4.5000	34.6439	3.27006	5229.67	3.27004	-0.00002
14.9999	34.6029	4.24819	5793.32	4.24818	-0.00001
18.4999	34.5943	4.59208	5978.56	4.59207	-0.00001
24.0000	34.5850	5.14801	6266.13	5.14802	0.00002
28.9999	34.5797	5.66790	6523.23	5.66791	0.00001
32.5000	34.5756	6.03875	6700.38	6.03873	-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

