

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0470
CALIBRATION DATE: 29-Oct-13

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

COEFFICIENTS:

g = -1.049789e+000

CPcor = -9.5700e-008

h = 1.462550e-001

CTcor = 3.2500e-006

i = -5.419305e-004

WBOTC = -7.6926e-005

j = 5.948037e-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	2690.87	0.00000	0.00000
1.0000	34.7748	2.97276	5266.36	2.97281	0.00005
4.5000	34.7548	3.27949	5463.88	3.27957	0.00008
15.0000	34.7117	4.26014	6051.58	4.25961	-0.00053
18.5000	34.7027	4.60492	6245.53	4.60523	0.00031
24.0000	34.6929	5.16230	6545.98	5.16246	0.00017
29.0000	34.6877	5.68362	6814.82	5.68364	0.00002
32.5000	34.6849	6.05566	7000.25	6.05557	-0.00009

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

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

