

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0455
CALIBRATION DATE: 23-Dec-15

SBE 45 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.859693e-001
h = 1.283661e-001
i = -3.877539e-004
j = 4.517744e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.9947e-008

BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2779.34	0.00000	0.00000
1.0000	34.6107	2.96006	5560.89	2.96007	0.00001
4.5000	34.5913	3.26558	5771.57	3.26557	-0.00001
15.0000	34.5479	4.24216	6397.74	4.24215	-0.00001
18.5000	34.5200	4.58328	6602.15	4.58329	0.00000
24.0000	34.5109	5.13819	6921.38	5.13820	0.00001
29.0001	34.5065	5.65727	7206.77	5.65726	-0.00000
32.5000	34.5045	6.02774	7403.51	6.02779	0.00006

$$f = \text{Instrument Output(Hz)} * \text{sqrt}(1.0 + \text{WBOTC} * t) / 1000.0$$

t = temperature (°C); p = pressure (decibars); δ = CTcor; ϵ = CPcor;

$$\text{Conductivity (S/m)} = (g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$$

$$\text{Residual (Siemens/meter)} = \text{instrument conductivity} - \text{bath conductivity}$$

