

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0219
CALIBRATION DATE: 01-Feb-17

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

COEFFICIENTS:

g = -1.029281e+000
h = 1.585523e-001
i = 1.206371e-004
j = 2.764274e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.4451e-005

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	2544.68	0.00000	0.00000
1.0000	34.8035	2.97498	5005.11	2.97500	0.00002
4.5000	34.7835	3.28193	5192.41	3.28192	-0.00002
15.0000	34.7408	4.26333	5749.71	4.26330	-0.00003
18.5000	34.7317	4.60836	5932.96	4.60836	0.00001
24.0000	34.7217	5.16611	6217.50	5.16615	0.00004
29.0000	34.7157	5.68769	6471.93	5.68767	-0.00002
32.5000	34.7116	6.05979	6647.21	6.05948	-0.00032

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

t = temperature (°C); p = pressure (decibars); $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

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

Residual (Siemens/meter) = instrument conductivity - bath conductivity

