

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0453
 CALIBRATION DATE: 16-Jan-16

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

COEFFICIENTS:

g = -9.993490e-001
 h = 1.342051e-001
 i = -3.611017e-004
 j = 4.563495e-005

CPcor = -9.5700e-008
 CTcor = 3.2500e-006
 WBOTC = 4.5697e-007

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	2735.40	0.00000	0.00000
1.0000	34.6293	2.96150	5445.09	2.96151	0.00001
4.5000	34.6086	3.26705	5650.59	3.26704	-0.00002
15.0000	34.5648	4.24401	6261.70	4.24401	-0.00000
18.5000	34.5551	4.58744	6462.47	4.58744	-0.00000
24.0000	34.5446	5.14266	6774.13	5.14268	0.00002
29.0000	34.5385	5.66192	7052.71	5.66190	-0.00001
32.5000	34.5352	6.03249	7244.76	6.03249	0.00000

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

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

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

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

