

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3766  
CALIBRATION DATE: 21-Nov-15

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

## COEFFICIENTS:

g = -1.047691e+000  
h = 1.346544e-001  
i = -9.597128e-005  
j = 2.819770e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -1.0064e-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	2790.18	0.00000	0.00000
1.0000	34.6169	2.96054	5449.56	2.96053	-0.00001
4.5000	34.5962	3.26600	5652.62	3.26601	0.00001
15.0000	34.5541	4.24284	6257.06	4.24284	0.00001
18.5001	34.5453	4.58629	6455.87	4.58630	0.00001
24.0000	34.5366	5.14160	6764.64	5.14158	-0.00002
29.0000	34.5309	5.66081	7040.81	5.66082	0.00001
32.5000	34.5282	6.03141	7231.27	6.03141	0.00000

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

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

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

