

# Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 3979  
CALIBRATION DATE: 05-Oct-16

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

## COEFFICIENTS:

g = -1.020681e+000  
h = 1.481647e-001  
i = -1.519759e-004  
j = 3.654824e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -9.2326e-006

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	2626.23	0.00000	0.00000
1.0000	34.8210	2.97633	5190.53	2.97634	0.00001
4.4999	34.8013	3.28344	5385.51	3.28343	-0.00001
15.0000	34.7590	4.26533	5965.59	4.26533	0.00000
18.5000	34.7503	4.61056	6156.30	4.61056	0.00000
24.0000	34.7409	5.16865	6452.39	5.16865	0.00000
29.0001	34.7364	5.69071	6717.24	5.69071	-0.00001
32.5000	34.7342	6.06329	6899.86	6.06329	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

