



Sea-Bird Scientific  
13431 NE 20<sup>th</sup> Street  
Bellevue, WA 98005  
USA

+1 425-643-9866  
seabird@seabird.com  
www.seabird.com

SENSOR SERIAL NUMBER: 0023  
CALIBRATION DATE: 20-Jan-21

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

#### COEFFICIENTS:

g = -9.937559e-001  
h = 1.544975e-001  
i = -3.081677e-004  
j = 4.949387e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 3.2807e-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	2539.98	0.00000	0.00000
1.0000	34.7316	2.96941	5069.56	2.96943	0.00001
4.5000	34.7115	3.27581	5261.22	3.27580	-0.00001
15.0001	34.6694	4.25551	5831.17	4.25549	-0.00002
18.5000	34.6608	4.59996	6018.47	4.59996	-0.00000
24.0000	34.6520	5.15688	6309.22	5.15689	0.00001
29.0000	34.6473	5.67775	6569.17	5.67777	0.00003
32.5000	34.6447	6.04944	6748.33	6.04942	-0.00002

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

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

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

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

