



Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

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

SENSOR SERIAL NUMBER: 0045
CALIBRATION DATE: 04-Jul-23

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

COEFFICIENTS:

g = -1.022587e+000
h = 1.485954e-001
i = -2.124788e-004
j = 3.680138e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 9.5198e-008

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	2625.98	0.00000	0.00000
1.0000	34.5569	2.95590	5176.32	2.95586	-0.00004
4.5000	34.5373	3.26098	5370.58	3.26103	0.00005
15.0000	34.4970	4.23657	5948.50	4.23657	-0.00000
18.5000	34.4887	4.57957	6138.54	4.57957	0.00000
24.0000	34.4798	5.13407	6433.61	5.13407	-0.00001
29.0000	34.4751	5.65269	6697.55	5.65267	-0.00001
32.5000	34.4719	6.02269	6879.50	6.02270	0.00001

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

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

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

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

