



Sea-Bird GmbH  
 Postfach 1167  
 87401 Kempten  
 Germany

+49 831 9 60994 701  
 seabird.eu@seabird.com  
 www.seabird.com

SENSOR SERIAL NUMBER: 0286  
 CALIBRATION DATE: 14-Feb-23

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

COEFFICIENTS:

g = -1.016791e+000      CPcor = -9.5700e-008  
 h = 1.598792e-001      CTcor = 3.2500e-006  
 i = -3.037117e-004      WBOTC = 2.6402e-007  
 j = 4.936321e-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	2525.42	0.00000	0.00000
1.0000	34.8501	2.97858	5003.44	2.97857	-0.00001
4.5000	34.8296	3.28586	5191.69	3.28586	0.00001
15.0000	34.7865	4.26834	5751.68	4.26834	-0.00000
18.5000	34.7773	4.61375	5935.75	4.61377	0.00002
24.0000	34.7675	5.17217	6221.51	5.17215	-0.00002
29.0001	34.7620	5.69444	6477.09	5.69444	0.00000
32.5000	34.7576	6.06691	6653.17	6.06691	0.00000

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

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

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

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

