



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

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

SENSOR SERIAL NUMBER: 0037
CALIBRATION DATE: 12-Oct-23

SBE 49 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.009191e+000
h = 1.425341e-001
i = -2.535899e-004
j = 4.207340e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-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	2664.42	0.0000	0.00000
1.0000	34.6350	2.96194	5281.44	2.9620	0.00003
4.5002	34.6237	3.26836	5480.64	3.2683	-0.00003
15.0000	34.6046	4.24838	6073.27	4.2484	-0.00003
18.5000	34.6022	4.59302	6268.08	4.5930	0.00000
24.0000	34.6020	5.15026	6570.50	5.1503	0.00004
29.0000	34.6037	5.67140	6840.82	5.6714	-0.00002
32.5000	34.6030	6.04299	7026.79	6.0425	-0.00048

f = Instrument Output (Hz) / 1000.0

t = temperature (°C); p = pressure (decibars); δ = CTcor; ϵ = 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

