



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

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

SENSOR SERIAL NUMBER: 4254
CALIBRATION DATE: 22-Nov-20

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

COEFFICIENTS:

g = -1.013088e+000
h = 1.504813e-001
i = -1.927964e-004
j = 4.344276e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.9558e-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	2596.21	0.00000	0.00000
1.0000	34.6037	2.95952	5135.37	2.95954	0.00002
4.5000	34.5851	3.26505	5328.21	3.26503	-0.00002
15.0000	34.5446	4.24179	5901.72	4.24180	0.00000
18.5000	34.5368	4.58527	6090.22	4.58526	-0.00001
24.0000	34.5285	5.14053	6382.85	5.14053	0.00001
29.0000	34.5250	5.65995	6644.53	5.65997	0.00002
32.5000	34.5236	6.03069	6824.93	6.03068	-0.00001

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

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

