



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

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

SENSOR SERIAL NUMBER: 4278
CALIBRATION DATE: 12-Jul-25

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4726
Voffset = -0.5284
Tau20 = 1.00
A = -3.0312e-03
B = 1.0193e-04
C = -1.9471e-06
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4
D2 = -4.64803e-2
H1 = -3.300000e-2
H2 = 5.00000e+3
H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.15	2.00	0.00	0.781	1.15	-0.00
1.16	12.00	0.00	0.860	1.15	-0.00
1.16	6.00	0.00	0.813	1.15	-0.00
1.16	20.00	0.00	0.930	1.16	-0.00
1.18	26.00	0.00	0.990	1.18	0.00
1.19	30.00	0.00	1.031	1.19	0.00
3.93	2.00	0.00	1.393	3.93	-0.00
3.94	6.00	0.00	1.500	3.94	0.00
3.95	12.00	0.00	1.666	3.95	0.00
3.97	20.00	0.00	1.898	3.97	-0.00
3.99	26.00	0.00	2.086	4.00	0.01
4.00	30.00	0.00	2.217	4.00	0.00
6.71	2.00	0.00	2.004	6.71	-0.00
6.73	6.00	0.00	2.189	6.73	0.00
6.77	12.00	0.00	2.478	6.77	0.00
6.79	30.00	0.00	3.392	6.79	-0.01
6.82	20.00	0.00	2.877	6.81	-0.01
6.85	26.00	0.00	3.202	6.86	0.01

V = instrument output (volts); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

Residual (ml/l) = instrument oxygen - bath oxygen

