

Sea-Bird Scientific 13431 NE 20th Street Bellevue, WA 98005 USA +1 425-643-9866 seabird@seabird.com www.seabird.com

SENSOR SERIAL NUMBER: 3200

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 26-Feb-25

COEFFICIENTS: A = -2.8453e-03 NOMINAL DYNAMIC COEFFICIENTS

Soc = 0.4954 B = 1.2844e-04 D1 = 1.92634e-4 H1 = -3.300000e-2

Voffset = -0.5073 C = -2.3904e-06 D2 = -4.64803e-2 H2 = 5.00000e+3

Tau20 = 1.22 E nominal = 0.036 H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.13	2.13	0.00	0.744	1.12	-0.00
1.13	6.00	0.00	0.772	1.13	-0.00
1.13	20.00	0.00	0.875	1.13	-0.00
1.13	12.00	0.00	0.816	1.13	-0.00
1.14	26.00	0.00	0.925	1.14	0.00
1.14	30.00	0.00	0.960	1.15	0.00
3.87	20.00	0.00	1.768	3.87	0.00
3.87	26.00	0.00	1.927	3.88	0.00
3.88	2.09	0.00	1.322	3.88	0.00
3.88	6.00	0.00	1.419	3.88	0.00
3.88	12.00	0.00	1.567	3.88	-0.00
3.88	30.00	0.00	2.042	3.88	0.00
6.63	2.07	0.00	1.899	6.62	-0.00
6.64	6.00	0.00	2.068	6.65	0.00
6.66	12.00	0.00	2.326	6.66	-0.00
6.69	30.00	0.00	3.150	6.69	-0.00
6.71	20.00	0.00	2.689	6.71	-0.00
6.73	26.00	0.00	2.973	6.73	0.00

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 * T^2 + C * T^3) * Oxsol(T,S) * exp(E * P / K)

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

