

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

SENSOR SERIAL NUMBER: 0343

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 05-Dec-23

COEFFICIENTS: Tcor = -0.0014 NOMINAL DYNAMIC COEFFICIENTS
Soc = 0.5058 Pcor = 1.350e-04 D1 = 1.92634e-4 H1 = -3.300000e-2
Boc = 0.0000 D2 = -4.64803e-2 H2 = 5.00000e+3
Voffset = -0.5209 H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.20	20.00	0.00	0.908	1.21	0.01
1.21	12.00	0.00	0.845	1.21	0.01
1.21	26.00	0.00	0.960	1.21	0.00
1.22	6.00	0.00	0.801	1.22	0.00
1.22	30.00	0.00	0.996	1.22	-0.00
1.22	2.00	0.00	0.771	1.22	-0.01
3.98	20.00	0.00	1.800	4.00	0.02
3.98	12.00	0.00	1.591	4.01	0.03
3.99	6.00	0.00	1.437	4.00	0.01
3.99	26.00	0.00	1.963	3.99	-0.01
3.99	2.00	0.00	1.335	3.97	-0.03
4.00	30.00	0.00	2.077	3.99	-0.01
6.78	2.00	0.00	1.902	6.73	-0.04
6.82	30.01	0.00	3.172	6.79	-0.03
6.82	6.00	0.00	2.085	6.83	0.01
6.85	12.00	0.00	2.361	6.90	0.04
6.89	20.00	0.00	2.731	6.91	0.02
6.94	26.00	0.00	3.026	6.93	-0.01

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

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

Oxygen (ml/l) = (Soc \* (V + Voffset)) \* exp(Tcor \* T) \* Oxsat(T, S) \* exp(Pcor \* P)

 $Residual \; (ml/l) = instrument \; oxygen \; \text{-} \; bath \; oxygen \;$ 

