



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: 2643  
 CALIBRATION DATE: 30-Mar-24

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:            A = -2.6597e-003  
 Soc = 0.5319                B = 9.5896e-005  
 Voffset = -0.5170         C = -1.9333e-006  
 Tau20 = 0.93                E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS  
 D1 = 1.92634e-4         H1 = -3.300000e-2  
 D2 = -4.64803e-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)
1.14	2.00	0.00	0.739	1.14	-0.00
1.14	6.00	0.00	0.766	1.14	-0.00
1.15	12.00	0.00	0.810	1.15	0.00
1.17	20.00	0.00	0.873	1.17	0.00
1.18	26.00	0.00	0.924	1.18	0.00
1.18	30.00	0.00	0.960	1.19	0.01
3.94	2.01	0.00	1.285	3.93	-0.00
3.95	6.00	0.00	1.380	3.95	-0.00
3.98	12.00	0.00	1.529	3.97	-0.00
4.01	20.00	0.00	1.738	4.01	0.00
4.03	30.00	0.00	2.017	4.03	0.00
4.03	26.00	0.00	1.906	4.04	0.00
6.75	2.01	0.00	1.836	6.75	-0.00
6.81	6.00	0.00	2.006	6.81	0.01
6.86	12.00	0.00	2.266	6.86	0.00
6.96	20.00	0.00	2.636	6.96	-0.00
6.99	26.00	0.00	2.926	7.00	0.00
7.00	30.00	0.00	3.124	7.00	-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<sup>2</sup> + C \* T<sup>3</sup>) \* Oxsol(T,S) \* exp(E \* P / K)

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

