



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: 1638  
 CALIBRATION DATE: 28-Jan-23

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:            A = -3.7578e-003  
 Soc = 0.5013                B = 1.7773e-004  
 Voffset = -0.5179          C = -2.9973e-006  
 Tau20 = 1.06                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)
1.10	2.00	0.00	0.745	1.10	-0.00
1.11	6.00	0.00	0.775	1.10	-0.00
1.12	12.00	0.00	0.821	1.12	-0.00
1.14	20.00	0.00	0.885	1.14	0.00
1.15	26.00	0.00	0.935	1.15	0.00
1.16	30.00	0.00	0.970	1.16	-0.00
3.86	2.00	0.00	1.318	3.85	-0.00
3.87	6.00	0.00	1.420	3.87	0.00
3.90	12.00	0.00	1.575	3.90	0.00
3.91	20.00	0.00	1.780	3.91	0.00
3.92	26.00	0.00	1.940	3.92	0.00
3.93	30.00	0.00	2.052	3.93	-0.00
6.67	2.00	0.00	1.903	6.67	0.00
6.72	6.00	0.00	2.083	6.72	0.00
6.76	12.00	0.00	2.350	6.75	-0.00
6.77	30.02	0.00	3.162	6.77	0.00
6.80	20.00	0.00	2.710	6.79	-0.00
6.82	26.00	0.00	2.990	6.82	-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

