



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

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

SENSOR SERIAL NUMBER: 3704
 CALIBRATION DATE: 23-Feb-23

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS: A = -4.0888e-003
 Soc = 0.4321 B = 1.8360e-004
 Voffset = -0.4814 C = -2.8112e-006
 Tau20 = 1.01 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)
1.17	2.00	0.00	0.764	1.17	0.00
1.18	6.00	0.00	0.800	1.18	-0.00
1.18	12.00	0.00	0.854	1.18	-0.00
1.20	20.00	0.00	0.931	1.20	-0.00
1.21	26.00	0.00	0.989	1.21	-0.00
1.21	30.00	0.00	1.028	1.21	0.00
3.97	2.00	0.00	1.439	3.97	0.00
3.98	6.00	0.00	1.561	3.99	0.00
4.01	12.00	0.00	1.746	4.01	0.00
4.04	20.00	0.00	1.998	4.04	-0.00
4.06	26.00	0.00	2.191	4.06	0.00
4.07	30.00	0.00	2.320	4.06	-0.01
6.81	2.00	0.00	2.120	6.80	-0.00
6.85	6.00	0.00	2.336	6.85	0.00
6.94	12.00	0.00	2.670	6.93	-0.00
7.00	30.00	0.00	3.652	7.01	0.00
7.02	20.00	0.00	3.116	7.02	-0.00
7.07	26.00	0.00	3.459	7.07	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 * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

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

