



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

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

SENSOR SERIAL NUMBER: 2712
CALIBRATION DATE: 07-May-22

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4904
Voffset = -0.5218
Tau20 = 1.21
A = -3.9904e-003
B = 1.8305e-004
C = -2.8442e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4
D2 = -4.64803e-2
H1 = -3.300000e-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)
1.16	6.00	0.00	0.799	1.16	-0.00
1.16	2.00	0.00	0.769	1.17	0.00
1.16	12.00	0.00	0.845	1.16	-0.00
1.17	30.00	0.00	0.985	1.16	-0.00
1.17	20.00	0.00	0.906	1.16	-0.00
1.17	26.00	0.00	0.953	1.17	-0.00
3.93	6.00	0.00	1.458	3.93	0.00
3.93	30.00	0.00	2.085	3.93	-0.00
3.93	2.00	0.00	1.357	3.93	0.00
3.94	12.00	0.00	1.616	3.94	0.00
3.94	26.00	0.00	1.982	3.94	0.00
3.94	20.00	0.00	1.824	3.94	-0.00
6.71	2.00	0.00	1.945	6.71	-0.00
6.74	6.00	0.00	2.128	6.74	-0.00
6.79	12.00	0.00	2.406	6.79	-0.00
6.80	30.00	0.00	3.228	6.80	0.00
6.83	20.00	0.00	2.777	6.83	-0.00
6.84	26.00	0.00	3.055	6.84	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

