



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

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

SENSOR SERIAL NUMBER: 2132
 CALIBRATION DATE: 14-Jul-21

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
 Soc = 0.4761
 Voffset = -0.4922
 Tau20 = 0.95
 A = -4.2890e-003
 B = 1.1452e-004
 C = -1.2235e-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)
1.17	12.00	0.00	0.831	1.17	-0.00
1.17	2.00	0.00	0.750	1.18	0.00
1.18	6.00	0.00	0.782	1.17	-0.00
1.18	20.00	0.00	0.903	1.18	-0.00
1.20	26.00	0.00	0.961	1.20	-0.00
1.21	30.00	0.00	1.006	1.22	0.00
3.97	2.00	0.00	1.361	3.97	0.00
3.98	6.00	0.00	1.474	3.98	-0.00
3.99	12.00	0.00	1.647	3.99	0.00
4.00	20.00	0.00	1.882	4.00	-0.00
4.05	26.00	0.00	2.077	4.05	-0.00
4.10	30.00	0.00	2.223	4.10	0.01
6.78	2.00	0.00	1.976	6.78	0.00
6.81	6.00	0.00	2.170	6.81	-0.01
6.87	12.00	0.00	2.481	6.88	0.01
6.94	20.00	0.00	2.902	6.94	-0.00
7.00	26.00	0.00	3.235	7.00	-0.00
7.08	30.00	0.00	3.477	7.08	-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

