



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

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

SENSOR SERIAL NUMBER: 4077
CALIBRATION DATE: 20-Nov-20

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.5721
Voffset = -0.4904
Tau20 = 1.30
A = -4.2310e-003
B = 1.4849e-004
C = -2.3566e-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)
1.15	6.00	0.00	0.725	1.15	-0.00
1.15	2.08	0.00	0.700	1.15	-0.00
1.16	12.00	0.00	0.768	1.16	-0.00
1.17	20.00	0.00	0.825	1.17	-0.00
1.17	26.00	0.00	0.871	1.17	0.00
1.18	30.00	0.00	0.903	1.18	0.00
3.98	2.08	0.00	1.218	3.98	-0.00
4.00	6.00	0.00	1.310	4.00	0.00
4.01	12.00	0.00	1.452	4.01	-0.00
4.01	20.00	0.00	1.644	4.01	-0.00
4.02	26.00	0.00	1.797	4.03	0.00
4.03	30.00	0.00	1.905	4.04	0.00
6.82	2.07	0.00	1.735	6.82	-0.00
6.83	6.00	0.00	1.891	6.84	0.00
6.87	12.00	0.00	2.137	6.86	-0.00
6.89	20.00	0.00	2.469	6.88	-0.00
6.92	30.00	0.00	2.913	6.91	-0.00
6.92	26.00	0.00	2.737	6.92	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

