

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1876
CALIBRATION DATE: 28-Feb-17

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.5249
Voffset = -0.5207
Tau20 = 1.27

A = -3.7261e-003
B = 1.7588e-004
C = -2.5681e-006
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	0.739	1.10	-0.00
1.12	6.00	0.00	0.769	1.12	-0.00
1.12	12.00	0.00	0.811	1.12	-0.00
1.17	20.00	0.00	0.880	1.17	-0.00
1.18	26.00	0.00	0.928	1.19	0.00
1.19	30.00	0.00	0.962	1.20	0.01
3.91	6.00	0.00	1.391	3.91	0.00
3.92	2.00	0.00	1.297	3.91	-0.00
3.93	12.00	0.00	1.537	3.93	-0.00
3.96	20.00	0.00	1.738	3.96	-0.00
3.99	26.00	0.00	1.893	3.99	0.00
4.03	30.00	0.00	2.008	4.04	0.00
6.76	6.00	0.00	2.026	6.77	0.01
6.80	2.00	0.00	1.868	6.80	-0.00
6.82	12.00	0.00	2.286	6.82	-0.00
6.89	20.00	0.00	2.636	6.89	-0.00
6.95	26.00	0.00	2.909	6.95	0.00
6.95	30.00	0.00	3.082	6.95	-0.01

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

