

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1876
CALIBRATION DATE: 12-Nov-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.5250

Voffset = -0.5151

Tau20 = 1.55

A = -2.6795e-003

B = 1.7186e-004

C = -3.0625e-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	6.00	0.00	0.772	1.16	-0.00
1.17	20.00	0.00	0.869	1.17	-0.00
1.18	26.00	0.00	0.913	1.18	-0.00
1.18	12.00	0.00	0.818	1.18	-0.00
1.19	30.00	0.00	0.946	1.19	-0.00
1.19	2.00	0.00	0.750	1.19	-0.00
3.92	20.00	0.00	1.700	3.92	0.00
3.93	2.00	0.00	1.293	3.93	0.00
3.93	12.00	0.00	1.521	3.93	-0.00
3.93	30.00	0.00	1.945	3.94	0.01
3.94	6.00	0.00	1.385	3.94	-0.00
3.95	26.00	0.00	1.849	3.95	0.00
6.65	2.00	0.00	1.831	6.65	-0.00
6.70	12.00	0.00	2.228	6.70	-0.00
6.70	20.00	0.00	2.542	6.71	0.00
6.70	6.00	0.00	1.997	6.70	-0.00
6.74	30.00	0.00	2.963	6.74	0.00
6.74	26.00	0.00	2.792	6.74	-0.01

V = instrument output (volts); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsat(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * Oxsat(T,S) * exp(E * P / K)

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

