

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2691
CALIBRATION DATE: 15-Dec-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.4418
Voffset = -0.4941
Tau20 = 1.21

A = -4.4700e-003
B = 2.2494e-004
C = -3.1722e-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)
1.15	6.00	0.00	0.799	1.15	0.00
1.16	2.00	0.00	0.767	1.16	-0.00
1.17	12.00	0.00	0.854	1.17	-0.00
1.17	26.00	0.00	0.971	1.17	0.00
1.17	30.00	0.00	1.005	1.17	-0.00
1.17	20.00	0.00	0.922	1.17	-0.00
3.91	26.00	0.00	2.084	3.91	0.00
3.91	20.00	0.00	1.923	3.92	0.00
3.92	30.00	0.00	2.203	3.92	0.00
3.92	6.00	0.00	1.534	3.92	-0.00
3.93	2.00	0.00	1.421	3.93	-0.00
3.94	12.00	0.00	1.708	3.94	-0.00
6.66	6.00	0.00	2.260	6.66	0.00
6.68	12.00	0.00	2.555	6.68	-0.00
6.70	2.00	0.00	2.073	6.70	-0.00
6.70	30.00	0.00	3.412	6.70	-0.00
6.72	20.00	0.00	2.947	6.72	-0.00
6.76	26.00	0.00	3.245	6.76	-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

