

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2945
CALIBRATION DATE: 09-Dec-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.4614
Voffset = -0.4902
Tau20 = 1.03

A = -3.6247e-003
B = 1.9256e-004
C = -3.2028e-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)
1.14	2.00	0.00	0.746	1.14	-0.00
1.15	20.00	0.00	0.890	1.15	0.00
1.15	6.00	0.00	0.781	1.15	-0.00
1.17	12.00	0.00	0.833	1.17	-0.00
1.17	26.00	0.00	0.946	1.17	-0.00
1.18	30.00	0.00	0.982	1.17	-0.00
3.94	6.00	0.00	1.485	3.94	-0.00
3.94	2.00	0.00	1.378	3.94	0.00
3.94	30.00	0.00	2.139	3.94	-0.00
3.94	12.00	0.00	1.649	3.94	0.00
3.95	20.00	0.00	1.866	3.95	0.00
3.96	26.00	0.00	2.033	3.96	-0.00
6.70	6.00	0.00	2.183	6.70	-0.00
6.71	2.00	0.00	2.002	6.71	0.00
6.72	20.00	0.00	2.829	6.72	-0.00
6.73	12.00	0.00	2.465	6.73	-0.00
6.74	30.00	0.00	3.317	6.75	0.00
6.75	26.00	0.00	3.120	6.75	-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

