

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2945
CALIBRATION DATE: 09-Nov-16

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.4557
Voffset = -0.5000
Tau20 = 1.16

A = -2.3178e-003
B = 1.2728e-004
C = -1.6623e-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)
1.11	2.00	0.00	0.752	1.11	0.00
1.11	6.00	0.00	0.783	1.11	0.00
1.13	12.00	0.00	0.832	1.13	0.00
1.14	20.00	0.00	0.898	1.14	0.00
1.16	26.00	0.00	0.950	1.16	-0.00
1.18	30.00	0.00	0.990	1.18	0.00
3.89	6.00	0.00	1.489	3.89	0.00
3.90	12.00	0.00	1.648	3.90	0.00
3.90	2.00	0.00	1.388	3.90	0.00
3.94	20.00	0.00	1.871	3.94	-0.00
3.97	26.00	0.00	2.039	3.97	-0.00
3.99	30.00	0.00	2.156	3.99	-0.00
6.68	2.00	0.00	2.020	6.68	-0.00
6.69	12.00	0.00	2.470	6.69	-0.00
6.70	6.00	0.00	2.206	6.70	0.00
6.77	20.00	0.00	2.855	6.77	-0.00
6.80	26.00	0.00	3.141	6.81	0.00
6.82	30.00	0.00	3.331	6.82	-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

