

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1348
CALIBRATION DATE: 03-Jul-12

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5514

Voffset = -0.5114

Tau20 = 1.34

A = -3.6914e-003

B = 1.7009e-004

C = -3.0484e-006

E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4 H1 = -3.30000e-2

D2 = -4.64803e-2 H2 = 5.00000e+3

H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.23	2.00	0.16	0.742	1.22	-0.00
1.23	6.00	0.14	0.773	1.23	-0.00
1.24	12.00	0.13	0.818	1.24	-0.00
1.25	26.00	0.09	0.926	1.25	-0.00
1.26	20.00	0.11	0.880	1.25	-0.00
1.26	30.00	0.08	0.962	1.26	-0.00
4.17	2.00	0.16	1.301	4.18	0.01
4.18	26.00	0.09	1.896	4.18	0.00
4.18	30.00	0.08	2.004	4.18	-0.00
4.18	12.00	0.12	1.544	4.18	0.00
4.18	6.00	0.14	1.399	4.19	0.01
4.19	20.00	0.11	1.744	4.19	0.00
6.72	12.00	0.12	2.169	6.72	-0.00
6.72	20.00	0.11	2.487	6.72	-0.01
6.74	6.00	0.14	1.939	6.74	-0.00
6.78	30.00	0.08	2.933	6.78	-0.00
6.78	2.00	0.16	1.791	6.78	-0.00
6.82	26.00	0.08	2.768	6.82	0.00

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

V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU], K = temperature [Kelvin]

OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

