

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0703

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 15-Jun-13

COEFFICIENTS

Soc = 0.4007

Voffset = -0.6985

Tau20 = 1.44

A = -2.0811e-003

B = 1.0531e-004

C = -2.3308e-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)
1.26	2.00	0.00	1.025	1.26	-0.00
1.28	6.00	0.00	1.067	1.28	-0.00
1.29	12.00	0.00	1.131	1.29	0.00
1.30	20.00	0.00	1.220	1.31	0.00
1.31	26.00	0.00	1.291	1.32	0.00
1.32	30.00	0.00	1.343	1.32	0.00
3.99	2.00	0.00	1.731	3.99	-0.00
4.00	12.00	0.00	2.040	4.00	-0.00
4.02	6.00	0.00	1.859	4.01	-0.00
4.05	20.00	0.00	2.315	4.05	0.00
4.08	30.00	0.00	2.686	4.08	-0.00
4.08	26.00	0.00	2.537	4.08	-0.00
6.76	2.00	0.00	2.449	6.76	0.00
6.77	6.00	0.00	2.658	6.78	0.00
6.82	12.00	0.00	2.987	6.82	0.00
6.84	20.00	0.00	3.430	6.84	-0.00
6.85	30.00	0.00	4.031	6.85	-0.00
6.86	26.00	0.00	3.787	6.86	-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)

