

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2100
 CALIBRATION DATE: 25-Jun-13

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3771
 Voffset = -0.6699
 Tau20 = 1.40

A = -2.9007e-003
 B = 9.6195e-005
 C = -1.9388e-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)
1.31	2.00	0.00	1.032	1.31	-0.00
1.32	6.00	0.00	1.076	1.32	-0.00
1.33	12.00	0.00	1.149	1.33	-0.00
1.34	20.00	0.00	1.251	1.34	0.00
1.35	26.00	0.00	1.330	1.35	0.00
1.36	30.00	0.00	1.391	1.36	0.00
4.04	2.00	0.00	1.783	4.04	-0.00
4.05	6.00	0.00	1.920	4.05	-0.00
4.08	12.00	0.00	2.139	4.08	-0.00
4.11	20.00	0.00	2.445	4.11	-0.00
4.14	26.00	0.00	2.693	4.14	0.00
4.16	30.00	0.00	2.875	4.17	0.00
6.90	12.00	0.00	3.157	6.90	0.00
6.90	2.00	0.00	2.571	6.90	0.00
6.92	20.00	0.00	3.660	6.92	-0.00
6.92	6.00	0.00	2.809	6.93	0.00
6.95	26.00	0.00	4.068	6.95	0.00
6.96	30.00	0.00	4.351	6.95	-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)

