

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0140
CALIBRATION DATE: 22-Jun-12

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5142
Voffset = -0.5080
Tau20 = 1.29

A = -2.2817e-003
B = 1.2728e-004
C = -2.3886e-006
E nominal = 0.036

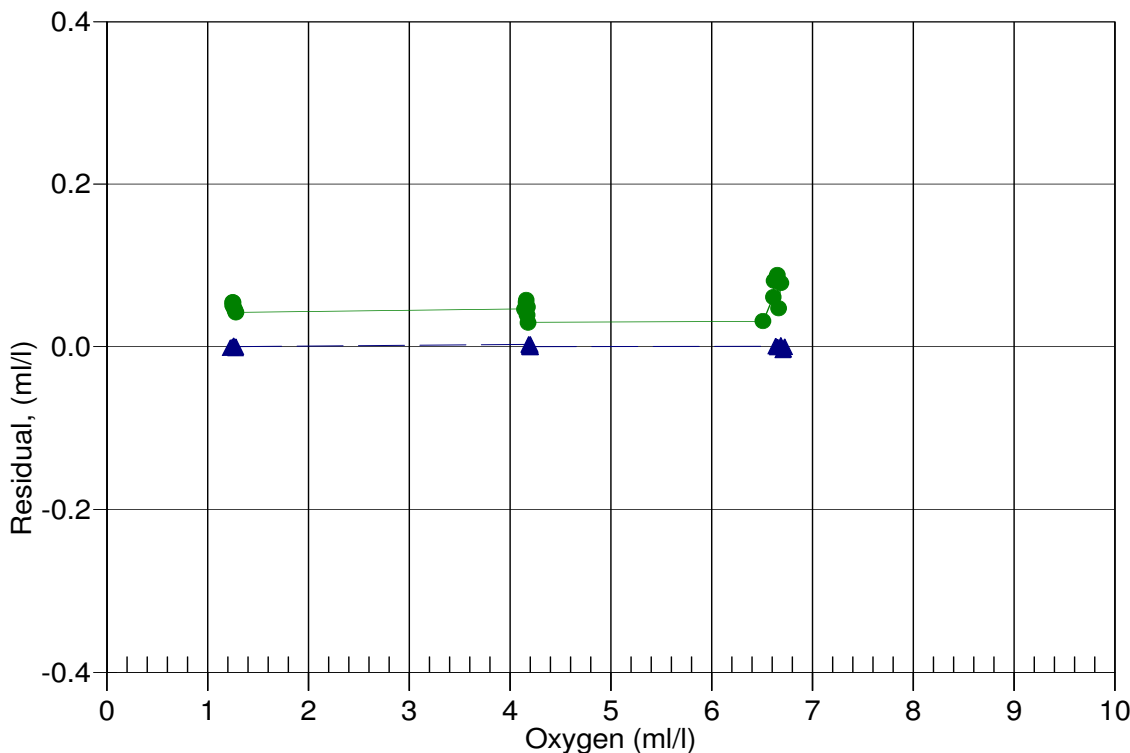
NOMINAL DYNAMIC COEFFICIENTS

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	0.17	0.756	1.23	-0.00
1.23	6.00	0.15	0.786	1.23	-0.00
1.24	12.00	0.13	0.834	1.24	-0.00
1.26	20.00	0.11	0.899	1.26	0.00
1.28	26.00	0.10	0.952	1.27	-0.00
1.28	30.00	0.07	0.987	1.28	0.00
4.18	20.00	0.11	1.806	4.19	0.00
4.19	6.00	0.15	1.455	4.19	0.00
4.20	12.00	0.13	1.606	4.20	0.00
4.20	26.00	0.10	1.970	4.20	-0.00
4.20	30.00	0.06	2.083	4.20	0.00
4.20	2.00	0.17	1.357	4.20	0.00
6.63	6.00	0.15	2.005	6.63	0.00
6.65	30.00	0.05	3.001	6.65	-0.00
6.69	20.00	0.11	2.583	6.69	0.00
6.70	26.00	0.09	2.839	6.70	-0.00
6.71	12.00	0.13	2.263	6.71	-0.00
6.72	2.00	0.17	1.866	6.72	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)



● 18-Aug-10 0.9892
▲ 22-Jun-12 1.0000