

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0154

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 18-Jun-13

COEFFICIENTS

Soc = 0.4959

Voffset = -0.5172

Tau20 = 1.30

A = -4.0284e-003

B = 2.0286e-004

C = -3.1105e-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

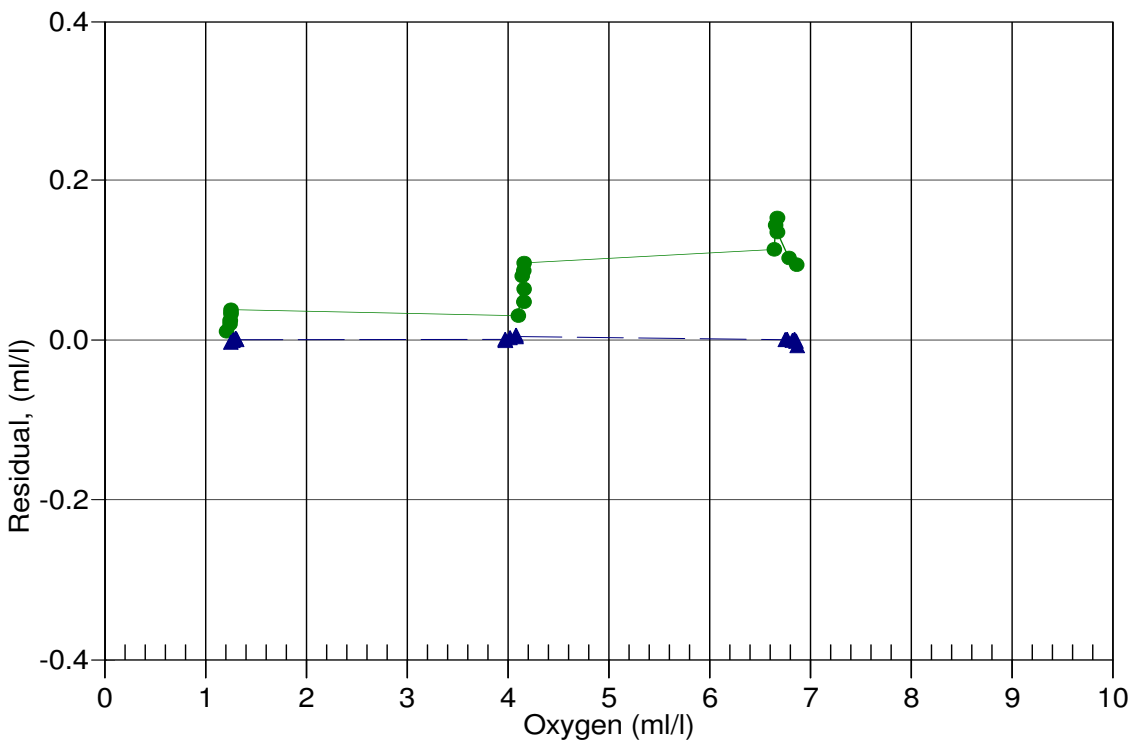
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.25	2.00	0.00	0.779	1.25	-0.00
1.26	6.00	0.00	0.813	1.26	-0.00
1.27	12.00	0.00	0.864	1.27	-0.00
1.28	20.00	0.00	0.934	1.28	0.00
1.30	26.00	0.00	0.990	1.30	0.00
1.31	30.00	0.00	1.028	1.31	0.00
3.97	2.00	0.00	1.351	3.97	0.00
3.97	12.00	0.00	1.606	3.97	-0.00
3.98	6.00	0.00	1.455	3.98	-0.00
4.02	20.00	0.00	1.823	4.02	0.00
4.08	26.00	0.00	2.000	4.08	0.01
4.08	30.00	0.00	2.109	4.08	0.00
6.75	6.00	0.00	2.107	6.75	0.00
6.77	2.00	0.00	1.937	6.77	0.00
6.82	12.00	0.00	2.385	6.82	-0.00
6.84	20.00	0.00	2.738	6.84	0.00
6.86	30.00	0.00	3.190	6.85	-0.00
6.86	26.00	0.00	3.008	6.86	-0.01

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)



01-Feb-12 0.9824
18-Jun-13 1.0000