

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2085
CALIBRATION DATE: 04-Feb-14

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5119

Voffset = -0.5045

Tau20 = 1.57

A = -3.6304e-003

B = 1.7775e-004

C = -3.0256e-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

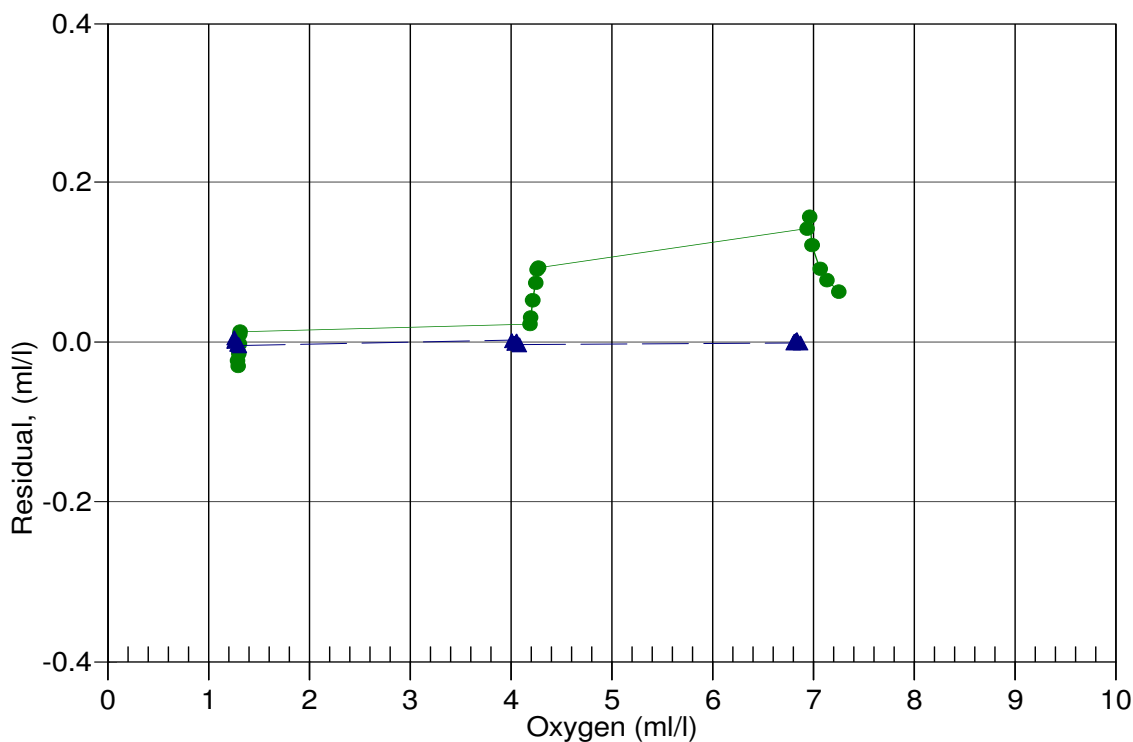
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.25	5.80	0.00	0.789	1.25	0.00
1.25	2.00	0.00	0.760	1.26	0.00
1.26	12.00	0.00	0.839	1.26	0.00
1.28	20.00	0.00	0.908	1.28	-0.00
1.30	25.99	0.00	0.962	1.29	-0.00
1.30	30.00	0.00	0.999	1.30	-0.00
4.00	12.00	0.00	1.567	4.01	0.00
4.03	2.00	0.00	1.323	4.03	-0.00
4.03	20.00	0.00	1.775	4.03	-0.00
4.04	5.85	0.00	1.422	4.04	-0.00
4.05	26.00	0.00	1.939	4.06	0.00
4.08	30.00	0.00	2.059	4.08	-0.00
6.80	12.00	0.00	2.307	6.80	-0.00
6.81	5.88	0.00	2.051	6.81	0.00
6.82	30.00	0.00	3.104	6.82	0.00
6.83	2.00	0.00	1.892	6.83	-0.00
6.83	26.00	0.00	2.922	6.83	0.00
6.87	20.00	0.00	2.668	6.87	-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)



30-Mar-12 0.9857
04-Feb-14 1.0000