

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0072  
CALIBRATION DATE: 16-Oct-12

SBE 43 OXYGEN CALIBRATION DATA

**COEFFICIENTS**

Soc = 0.4404

Voffset = -0.5102

Tau20 = 2.48

A = -1.9717e-003

B = 9.1213e-005

C = -1.0816e-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

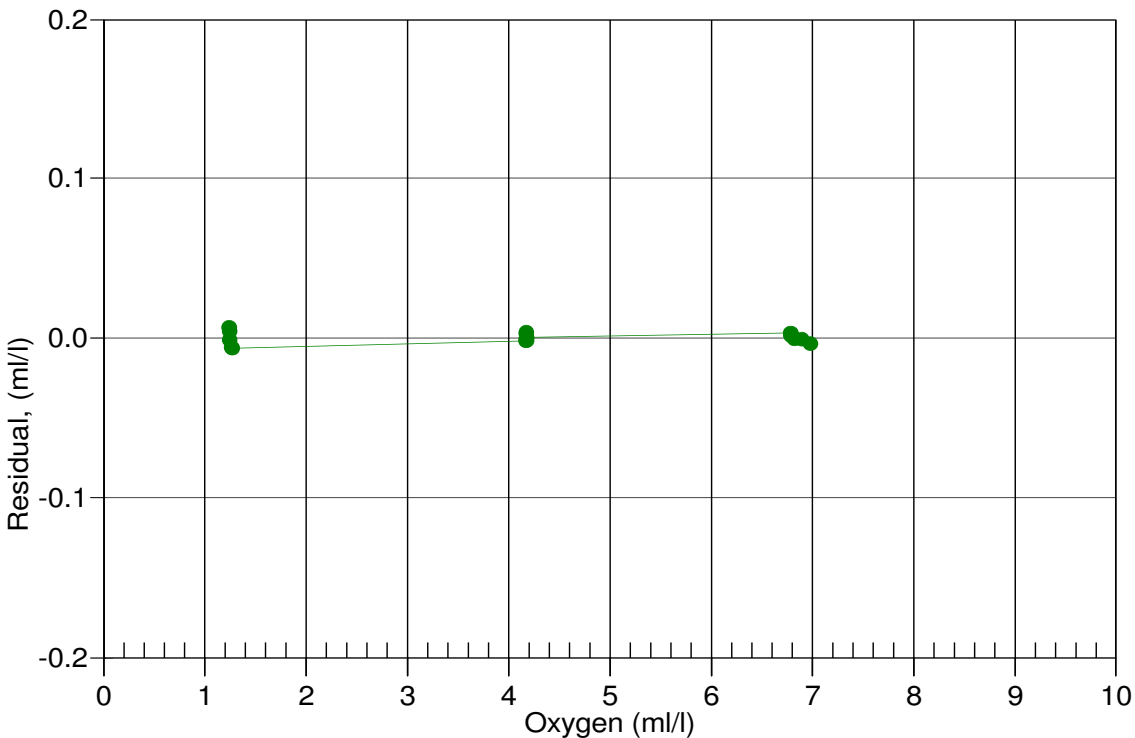
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.24	2.00	0.04	0.803	1.24	0.01
1.24	6.00	0.04	0.839	1.25	0.00
1.25	12.00	0.04	0.890	1.25	-0.00
1.26	20.00	0.04	0.963	1.25	-0.01
1.27	26.00	0.04	1.019	1.26	-0.01
1.27	30.00	0.04	1.056	1.26	-0.01
4.17	26.00	0.04	2.192	4.17	-0.00
4.17	20.00	0.04	2.017	4.17	-0.00
4.17	2.00	0.04	1.494	4.18	0.00
4.18	6.00	0.04	1.610	4.18	0.00
4.18	30.00	0.04	2.315	4.18	-0.00
4.18	12.00	0.04	1.785	4.18	0.00
6.78	26.00	0.04	3.248	6.78	0.00
6.78	30.00	0.04	3.443	6.79	0.00
6.79	20.00	0.04	2.962	6.79	0.00
6.82	12.00	0.04	2.591	6.82	-0.00
6.89	6.00	0.04	2.323	6.89	-0.00
6.98	2.00	0.04	2.153	6.97	-0.00

$$\text{Oxygen (ml/l)} = \text{Soc} * (\text{V} + \text{Voffset}) * (1.0 + \text{A} * \text{T} + \text{B} * \text{T}^2 + \text{C} * \text{T}^3) * \text{OxSol}(\text{T},\text{S}) * \exp(\text{E} * \text{P} / \text{K})$$

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)



16-Oct-12 1.0000