

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0463
CALIBRATION DATE: 21-Nov-12

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4972

Voffset = -0.4781

Tau20 = 1.39

A = -1.7679e-003

B = 1.0410e-004

C = -2.1469e-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

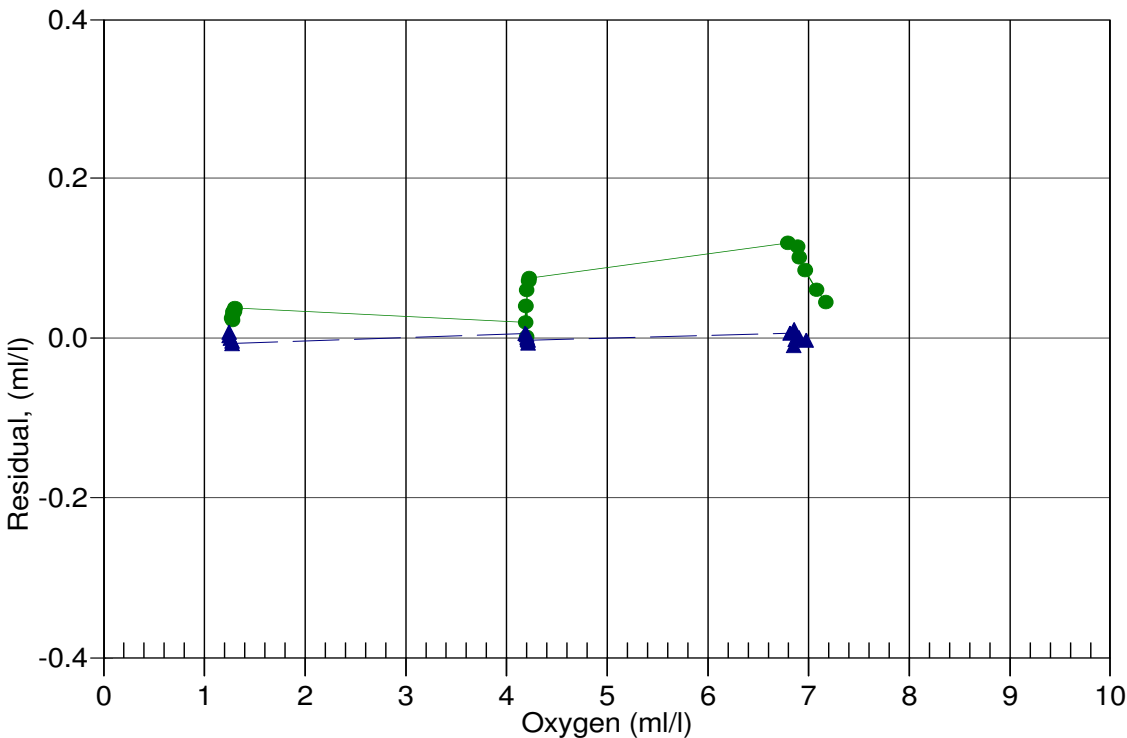
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.24	2.00	0.04	0.739	1.25	0.01
1.24	6.00	0.04	0.768	1.25	0.00
1.26	12.00	0.04	0.818	1.26	-0.00
1.27	20.00	0.04	0.883	1.27	-0.00
1.27	26.00	0.04	0.933	1.27	-0.01
1.27	30.00	0.04	0.968	1.27	-0.01
4.18	6.00	0.04	1.453	4.19	0.01
4.20	12.00	0.04	1.611	4.20	0.00
4.21	2.00	0.04	1.355	4.21	0.00
4.21	20.00	0.04	1.823	4.21	-0.00
4.21	26.00	0.04	1.988	4.20	-0.01
4.21	30.00	0.04	2.107	4.21	-0.00
6.81	30.00	0.04	3.117	6.82	0.01
6.85	12.00	0.04	2.322	6.84	-0.01
6.85	20.00	0.04	2.672	6.86	0.01
6.87	26.00	0.04	2.944	6.87	-0.00
6.90	6.00	0.04	2.084	6.90	0.00
6.98	2.00	0.04	1.932	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)



● 14-Mar-12 0.9879
▲ 21-Nov-12 1.0000