

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2132
CALIBRATION DATE: 18-Jan-14

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4457

Voffset = -0.5027

Tau20 = 1.26

A = -3.7233e-003

B = 1.6903e-004

C = -2.6563e-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

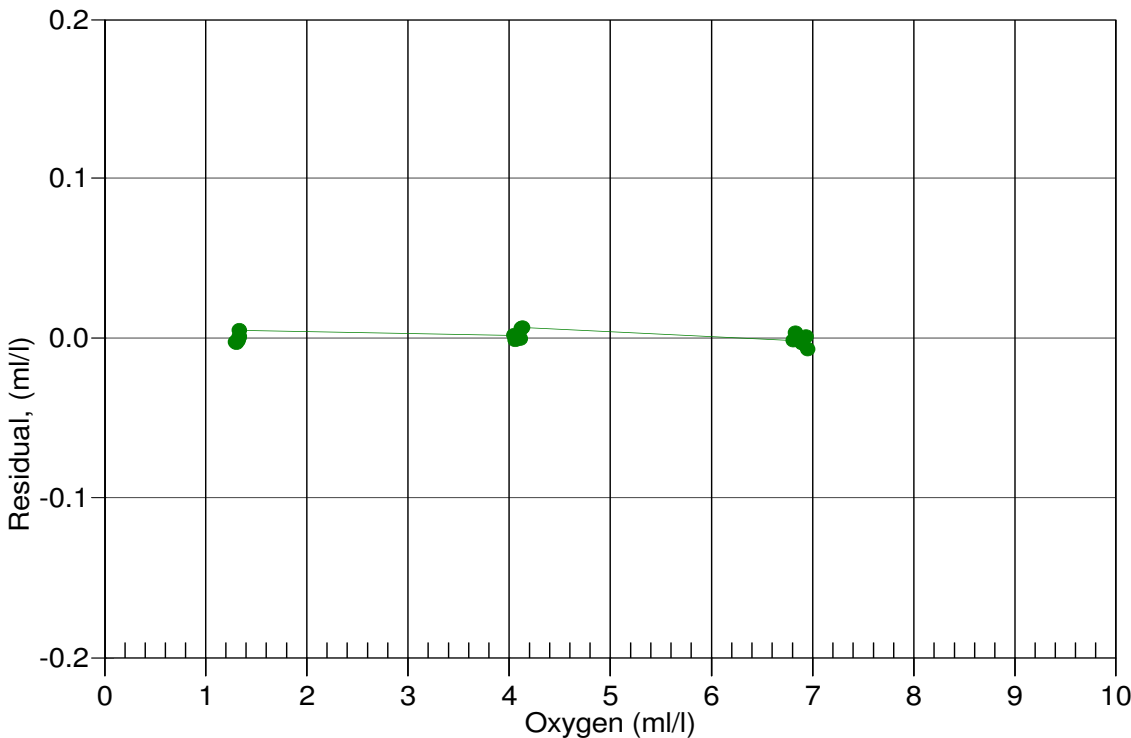
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.29	2.00	0.00	0.803	1.29	-0.00
1.30	6.00	0.00	0.843	1.30	-0.00
1.32	12.00	0.00	0.904	1.31	-0.00
1.33	20.00	0.00	0.985	1.33	0.00
1.33	26.00	0.00	1.045	1.33	0.00
1.33	30.00	0.00	1.089	1.34	0.00
4.05	2.00	0.00	1.448	4.05	0.00
4.06	6.00	0.00	1.565	4.06	-0.00
4.08	12.00	0.00	1.749	4.08	0.00
4.11	20.00	0.00	1.993	4.11	-0.00
4.12	26.00	0.00	2.182	4.12	0.01
4.13	30.00	0.00	2.315	4.14	0.01
6.81	2.00	0.00	2.092	6.81	-0.00
6.83	6.00	0.00	2.293	6.84	0.00
6.86	12.00	0.00	2.597	6.86	0.00
6.89	20.00	0.00	3.003	6.89	-0.00
6.93	26.00	0.00	3.325	6.93	0.00
6.95	30.00	0.00	3.544	6.95	-0.01

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

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)



18-Jan-14 1.0000