

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0223

SBE 43F OXYGEN CALIBRATION DATA

CALIBRATION DATE: 13-Sep-11

## COEFFICIENTS

Soc = 2.2684e-004 (DI)

Foffset = -827.70

Tau20 = 1.72

A = -3.6182e-003

B = 2.3018e-004

C = -3.8091e-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(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.20	2.00	0.00	1380.99	1.21	0.00
1.22	6.00	0.00	1456.53	1.22	0.01
1.23	12.00	0.00	1559.56	1.23	0.00
1.24	20.00	0.00	1695.58	1.24	0.00
1.25	26.00	0.00	1803.20	1.25	0.00
1.25	30.00	0.00	1876.31	1.25	0.00
4.14	6.00	0.00	2947.03	4.13	-0.01
4.15	12.00	0.00	3289.56	4.14	-0.01
4.17	20.00	0.00	3746.68	4.17	-0.00
4.17	26.00	0.00	4080.80	4.17	-0.00
4.17	30.00	0.00	4320.97	4.17	-0.00
4.18	2.00	0.00	2740.99	4.17	-0.01
6.85	30.00	0.00	6559.67	6.85	0.00
6.89	26.00	0.00	6207.80	6.89	0.00
6.93	20.00	0.00	5679.78	6.93	0.00
6.96	12.00	0.00	4968.58	6.96	0.01
7.05	6.00	0.00	4447.75	7.05	0.00
7.12	2.00	0.00	4095.71	7.13	0.01

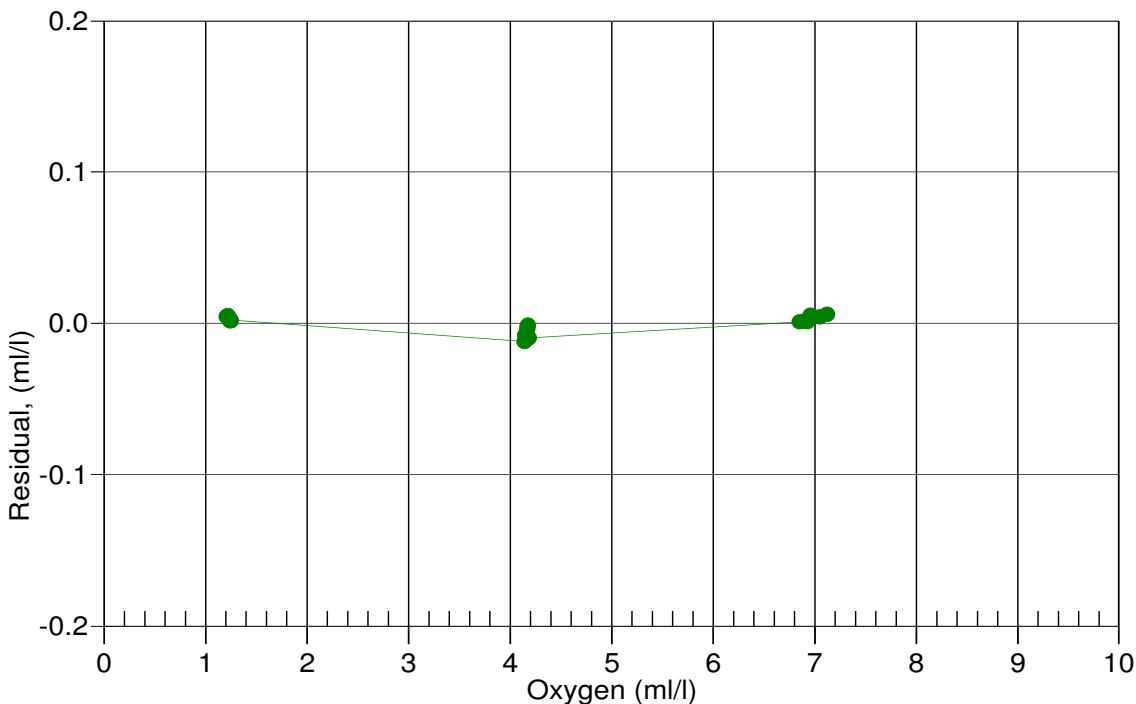
Oxygen (ml/l) = Soc \* (F + Foffset) \* (1.0 + A \* T + B \* T<sup>2</sup> + C \* T<sup>3</sup>) \* OxSol(T,S) \* exp(E \* P / K)

F = frequency output from SBE43F, T = temperature [deg C], S = salinity [PSU] K = temperature [deg K]

OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar]

Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)



13-Sep-11 1.0000