

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1232
CALIBRATION DATE: 31-Jul-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3881

Voffset = -0.4938

Tau20 = 1.96

A = -2.5670e-003

B = 2.2607e-004

C = -4.2390e-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

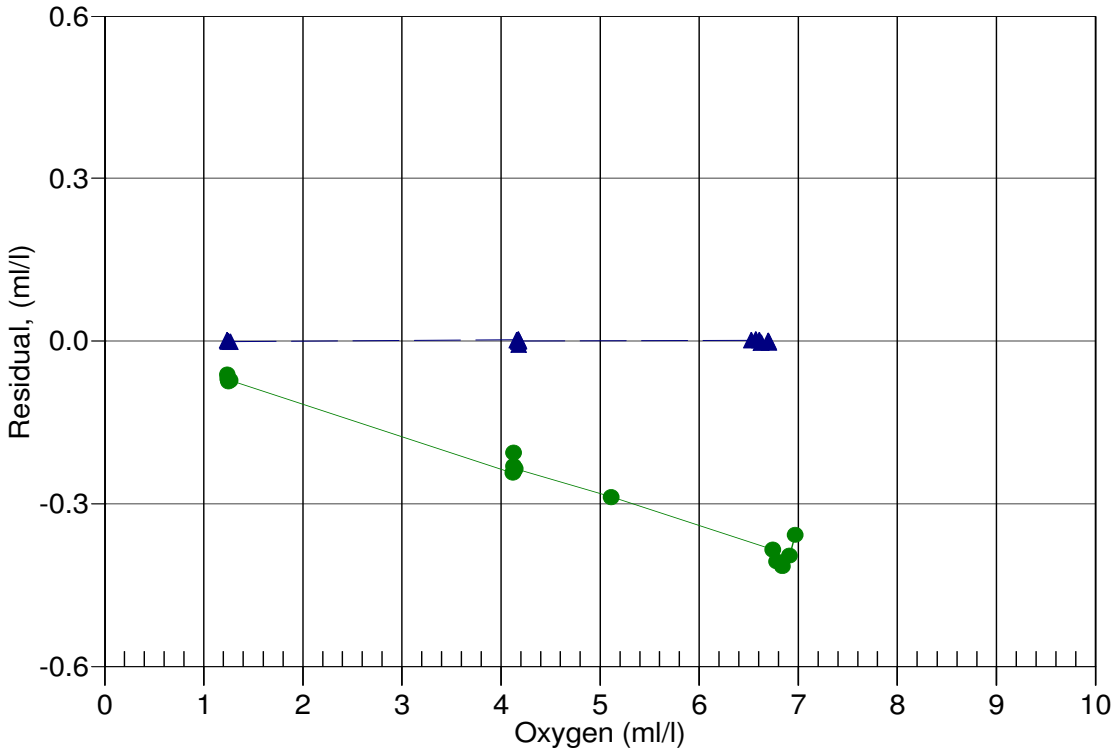
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.23	2.00	0.00	0.824	1.23	0.00
1.24	6.00	0.00	0.862	1.24	-0.00
1.24	12.00	0.01	0.920	1.24	-0.00
1.25	20.00	0.01	0.997	1.25	-0.00
1.26	26.00	0.01	1.058	1.26	-0.00
1.27	30.00	0.01	1.102	1.26	-0.00
4.16	2.00	0.00	1.607	4.16	0.00
4.17	12.00	0.01	1.927	4.17	0.00
4.17	30.00	0.01	2.501	4.17	-0.00
4.17	6.00	0.00	1.739	4.17	0.00
4.18	26.00	0.01	2.364	4.17	-0.01
4.18	20.00	0.01	2.177	4.18	0.00
6.52	30.00	0.01	3.635	6.53	0.00
6.57	26.00	0.01	3.442	6.57	0.00
6.60	20.00	0.01	3.155	6.61	0.00
6.63	12.00	0.01	2.769	6.62	-0.00
6.69	6.00	0.00	2.490	6.69	0.00
6.70	2.00	0.00	2.284	6.70	-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 [deg K]

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

Date, Delta Ox (ml/l)



● 09-May-09p 1.0602
▲ 31-Jul-09p 1.0000