

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0113  
 CALIBRATION DATE: 28-Nov-12

SBE 43 OXYGEN CALIBRATION DATA

**COEFFICIENTS**

Soc = 0.3658  
 Voffset = -0.5750  
 Tau20 = 2.73

A = -2.5727e-003  
 B = 1.7769e-004  
 C = -2.4525e-006  
 E nominal = 0.036

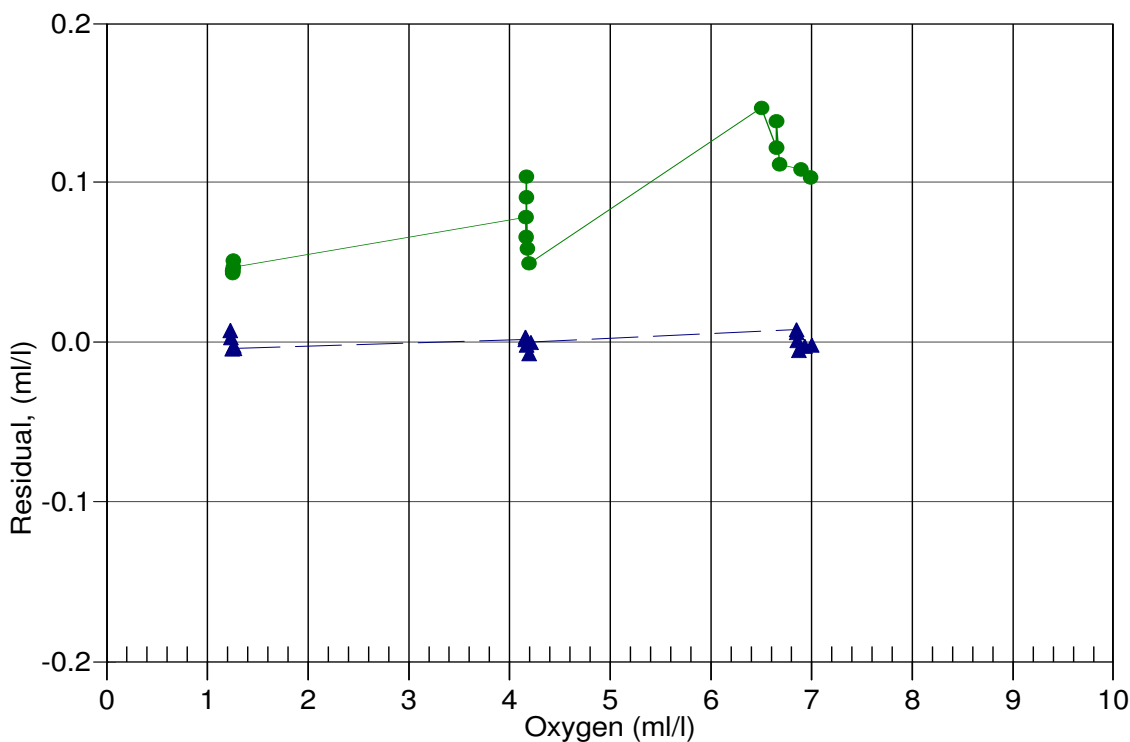
**NOMINAL DYNAMIC COEFFICIENTS**

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	0.04	0.926	1.24	0.01
1.24	6.00	0.04	0.967	1.24	0.00
1.25	12.00	0.04	1.029	1.24	-0.00
1.26	26.00	0.04	1.175	1.26	-0.00
1.26	20.00	0.04	1.117	1.26	-0.00
1.26	30.00	0.04	1.216	1.26	-0.00
4.15	6.00	0.04	1.892	4.15	0.00
4.16	2.00	0.04	1.756	4.16	0.00
4.17	12.00	0.04	2.101	4.17	-0.00
4.19	30.00	0.04	2.704	4.19	-0.01
4.21	20.00	0.04	2.385	4.21	-0.00
4.21	26.00	0.04	2.583	4.21	-0.00
6.85	30.00	0.04	4.061	6.85	0.01
6.85	20.00	0.04	3.521	6.86	0.01
6.86	12.00	0.04	3.087	6.86	0.00
6.87	26.00	0.04	3.849	6.87	-0.01
6.93	6.00	0.04	2.771	6.93	-0.00
7.00	2.00	0.04	2.562	7.00	-0.00

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



● 11-Feb-12 0.9820  
 ▲ 28-Nov-12 1.0000