

# Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA  
 Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1666  
 CALIBRATION DATE: 18-Jun-13

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.5568  
 Voffset = -0.5064  
 Tau20 = 1.25

A = -3.6000e-003  
 B = 1.5437e-004  
 C = -3.0760e-006  
 E nominal = 0.036

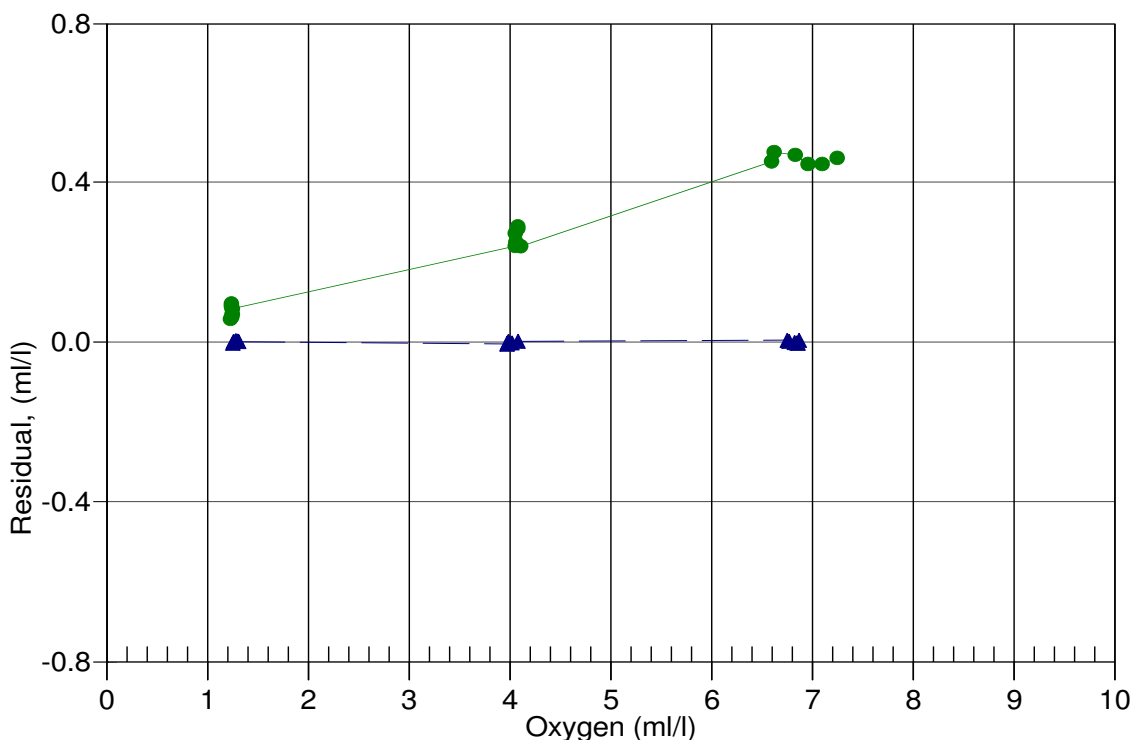
### NOMINAL DYNAMIC COEFFICIENTS

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)
1.25	2.00	0.00	0.740	1.25	-0.00
1.26	6.00	0.00	0.770	1.26	0.00
1.27	12.00	0.00	0.817	1.27	0.00
1.28	20.00	0.00	0.882	1.29	0.00
1.30	26.00	0.00	0.937	1.30	0.00
1.31	30.00	0.00	0.976	1.31	0.00
3.97	2.00	0.00	1.247	3.96	-0.01
3.97	12.00	0.00	1.477	3.97	-0.00
3.98	6.00	0.00	1.341	3.98	0.00
4.02	20.00	0.00	1.681	4.01	-0.00
4.08	26.00	0.00	1.855	4.08	0.00
4.08	30.00	0.00	1.967	4.08	0.00
6.75	6.00	0.00	1.922	6.75	0.00
6.77	2.00	0.00	1.771	6.77	0.00
6.82	12.00	0.00	2.173	6.82	-0.00
6.84	20.00	0.00	2.505	6.83	-0.00
6.86	30.00	0.00	2.961	6.85	-0.00
6.86	26.00	0.00	2.777	6.87	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)



● 28-Feb-12 0.9384  
 ▲ 18-Jun-13 1.0000