

# 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: 0539  
CALIBRATION DATE: 12-Oct-12

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.4467

Voffset = -0.4565

Tau20 = 1.25

A = -2.7589e-003

B = 1.5473e-004

C = -2.4982e-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

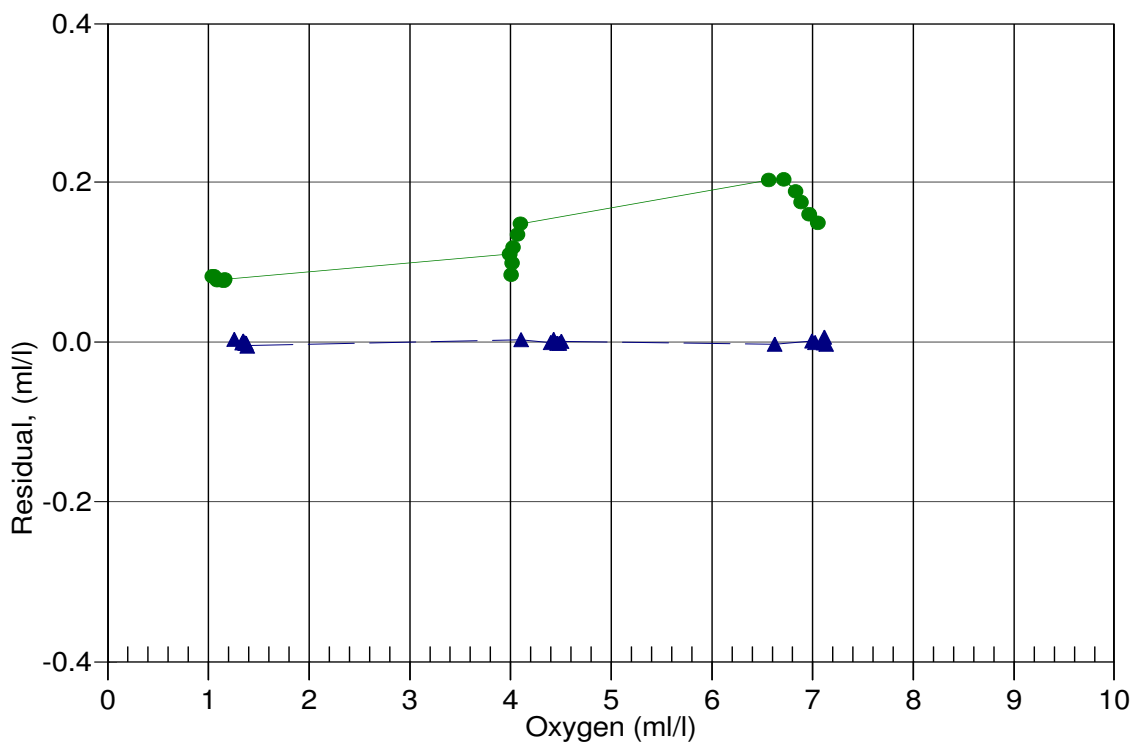
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.26	2.00	0.04	0.749	1.26	0.00
1.33	6.00	0.04	0.803	1.33	-0.00
1.34	12.00	0.04	0.862	1.35	0.00
1.36	20.00	0.04	0.943	1.36	-0.00
1.37	26.00	0.04	1.004	1.37	-0.00
1.38	30.00	0.04	1.046	1.38	-0.00
4.10	2.00	0.04	1.411	4.10	0.00
4.40	6.00	0.04	1.601	4.40	-0.00
4.43	12.00	0.04	1.792	4.43	0.00
4.46	20.00	0.04	2.047	4.46	-0.00
4.48	26.00	0.04	2.244	4.48	-0.00
4.50	30.00	0.04	2.384	4.50	0.00
6.62	2.00	0.04	1.995	6.62	-0.00
6.99	6.00	0.04	2.275	6.99	0.00
7.02	12.00	0.04	2.573	7.02	-0.00
7.10	30.00	0.04	3.496	7.10	-0.00
7.12	26.00	0.04	3.297	7.12	0.01
7.13	20.00	0.04	2.998	7.13	-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)



21-Dec-11 0.9730  
12-Oct-12 1.0000