

# SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1875  
CALIBRATION DATE: 11-Dec-10p

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.4670

Voffset = -0.4820

Tau20 = 1.20

A = -2.3863e-003

B = 1.7036e-004

C = -3.3475e-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)
1.27	2.00	0.02	0.765	1.27	-0.00
1.28	6.00	0.02	0.800	1.28	-0.00
1.29	12.00	0.02	0.852	1.29	-0.00
1.31	20.00	0.03	0.925	1.31	-0.00
1.31	26.00	0.03	0.980	1.31	-0.00
1.32	30.00	0.03	1.022	1.32	0.00
4.22	2.00	0.02	1.420	4.22	-0.00
4.24	6.00	0.02	1.535	4.24	0.00
4.27	12.00	0.03	1.706	4.27	-0.00
4.28	20.00	0.03	1.930	4.27	-0.00
4.29	26.00	0.03	2.110	4.29	0.00
4.30	30.00	0.03	2.237	4.30	0.00
6.85	12.00	0.03	2.447	6.85	0.00
6.85	30.00	0.03	3.281	6.85	-0.00
6.86	6.00	0.02	2.185	6.86	-0.00
6.91	20.00	0.03	2.822	6.91	0.00
6.91	2.00	0.02	2.018	6.91	0.00
6.92	26.00	0.03	3.107	6.92	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 [deg K]

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

Date, Delta Ox (ml/l)

