

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

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

SENSOR SERIAL NUMBER: 0140
CALIBRATION DATE: 23-Mar-05p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3390

Boc = 0.0000

Voffset = -0.5990

TCor = -0.0001

PCor = 1.350e-04

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.25	12.00	0.01	1.089	1.25	0.00
1.27	6.00	0.00	1.032	1.28	0.00
1.29	2.00	0.00	0.994	1.29	0.00
1.31	20.00	0.01	1.204	1.30	-0.01
1.33	26.00	0.01	1.288	1.32	-0.01
1.33	30.00	0.01	1.350	1.34	0.01
4.08	12.00	0.01	2.197	4.08	0.00
4.09	6.00	0.00	1.990	4.10	0.01
4.12	2.00	0.00	1.852	4.11	-0.01
4.15	20.00	0.01	2.518	4.13	-0.02
4.17	26.00	0.01	2.770	4.16	-0.01
4.21	30.00	0.01	2.968	4.23	0.02
6.73	30.00	0.01	4.383	6.76	0.03
6.87	2.00	0.00	2.692	6.86	-0.01
7.01	26.00	0.01	4.242	6.99	-0.02
7.02	12.00	0.01	3.357	7.04	0.02
7.03	20.00	0.01	3.854	7.00	-0.03
7.04	6.00	0.00	2.996	7.07	0.03

oxygen (ml/l) = (Soc * (V + Voffset)) * exp(Tcor * T) * Oxsat(T,S) * exp(PCor * P)

V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU]

Oxsat(T,S) = oxygen saturation [ml/l], P = pressure [dbar]

Residual = instrument oxygen - bath oxygen

