

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0730  
 CALIBRATION DATE: 31-Aug-07p

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.3801

Boc = 0.0000

Voffset = -0.5030

TCor = 0.0002

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)
1.30	6.00	0.00	0.898	1.31	0.01
1.31	2.00	0.00	0.858	1.31	-0.00
1.31	12.00	0.00	0.961	1.31	0.00
1.32	20.00	0.00	1.043	1.31	-0.01
1.32	30.00	0.00	1.157	1.32	-0.00
1.33	26.00	0.00	1.114	1.32	-0.01
4.33	30.00	0.00	2.659	4.34	0.01
4.36	2.00	0.00	1.686	4.35	-0.01
4.37	12.00	0.00	2.035	4.40	0.02
4.38	6.00	0.00	1.829	4.39	0.01
4.40	26.00	0.00	2.534	4.39	-0.01
4.40	20.00	0.00	2.316	4.39	-0.01
6.99	30.00	0.00	3.983	7.01	0.02
7.15	20.00	0.00	3.448	7.13	-0.02
7.15	26.00	0.00	3.801	7.13	-0.02
7.17	2.00	0.00	2.446	7.14	-0.03
7.18	12.00	0.00	3.014	7.20	0.02
7.19	6.00	0.00	2.678	7.20	0.01

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

