

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0113

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 30-Mar-06p

## COEFFICIENTS

Soc = 0.4101

TCor = -0.0005

Boc = 0.0000

PCor = 1.350e-04

Voffset = -0.6342

BATH OX (m/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(m/l)	RESIDUAL (m/l)
1.23	2.12	0.00	0.945	1.22	-0.00
1.24	6.05	0.00	0.983	1.24	0.00
1.24	12.05	0.01	1.041	1.25	0.00
1.27	20.00	0.01	1.127	1.27	-0.00
1.28	26.00	0.01	1.194	1.28	-0.00
1.30	30.00	0.01	1.245	1.30	0.00
4.12	20.00	0.01	2.234	4.12	-0.00
4.12	12.07	0.01	1.986	4.14	0.02
4.13	2.12	0.00	1.675	4.11	-0.02
4.13	6.07	0.00	1.801	4.14	0.01
4.14	26.00	0.01	2.440	4.14	-0.01
4.17	30.00	0.01	2.594	4.17	0.00
6.90	12.08	0.01	2.894	6.93	0.03
6.91	6.08	0.00	2.586	6.93	0.02
6.92	20.00	0.01	3.317	6.91	-0.01
6.93	2.12	0.00	2.383	6.90	-0.02
6.95	26.00	0.01	3.660	6.93	-0.02
7.00	30.00	0.01	3.923	7.00	0.00

oxygen (m/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 [m/l], P = pressure [dbar]

Residual = instrument oxygen - bath oxygen

