

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0154
CALIBRATION DATE: 28-Jan-05p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5340

Boc = 0.0000

Voffset = -0.5051

TCor = 0.0003

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)
1.27	12.00	0.01	0.827	1.30	0.03
1.28	20.00	0.01	0.888	1.31	0.02
1.28	6.00	0.00	0.784	1.30	0.01
1.30	26.00	0.01	0.936	1.31	0.01
1.31	2.00	0.00	0.756	1.29	-0.01
1.31	30.00	0.01	0.965	1.31	-0.00
4.08	12.00	0.01	1.531	4.14	0.06
4.09	20.00	0.01	1.716	4.13	0.04
4.10	26.00	0.01	1.849	4.10	-0.00
4.10	6.00	0.00	1.386	4.10	0.00
4.12	30.00	0.01	1.936	4.07	-0.05
4.12	2.00	0.00	1.287	4.04	-0.08
6.95	30.00	0.01	2.916	6.86	-0.10
7.09	26.00	0.01	2.827	7.08	-0.01
7.09	20.00	0.01	2.605	7.17	0.07
7.10	12.00	0.01	2.293	7.22	0.12
7.10	6.00	0.00	2.035	7.12	0.02
7.14	2.00	0.00	1.865	7.02	-0.12

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

