

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0275
CALIBRATION DATE: 23-Nov-04p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4035

Boc = 0.0000

Voffset = -0.4404

TCor = 0.0010

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)
1.52	12.00	0.01	0.937	1.53	0.01
1.55	20.00	0.01	1.033	1.55	0.00
1.57	6.00	0.00	0.885	1.57	0.00
1.58	30.00	0.01	1.163	1.59	0.01
1.59	26.00	0.01	1.118	1.59	-0.00
1.61	2.00	0.00	0.849	1.60	-0.01
4.17	20.00	0.01	2.033	4.16	-0.01
4.19	12.00	0.01	1.806	4.20	0.01
4.22	26.00	0.01	2.237	4.21	-0.00
4.22	30.00	0.01	2.366	4.22	0.00
4.28	6.00	0.00	1.655	4.29	0.01
4.34	2.00	0.00	1.547	4.32	-0.02
6.88	30.00	0.01	3.580	6.89	0.01
7.24	2.01	0.00	2.287	7.21	-0.03
7.25	6.00	0.00	2.498	7.27	0.02
7.32	12.02	0.01	2.832	7.35	0.03
7.49	20.00	0.01	3.304	7.49	-0.00
7.69	26.00	0.01	3.708	7.66	-0.02

$\text{oxygen (ml/l)} = (\text{Soc} * (\text{V} + \text{Voffset})) * \exp(\text{Tcor} * \text{T}) * \text{Oxsat}(\text{T}, \text{S}) * \exp(\text{Pcor} * \text{P})$

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

