

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0387
CALIBRATION DATE: 13-Feb-08p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3894

Boc = 0.0000

Voffset = -0.4870

TCor = 0.0009

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)
1.24	2.00	0.00	0.818	1.25	0.00
1.25	6.00	0.00	0.856	1.26	0.01
1.25	12.00	0.01	0.912	1.26	0.01
1.27	20.00	0.01	0.990	1.27	-0.00
1.27	26.00	0.01	1.049	1.27	0.00
1.28	30.00	0.01	1.096	1.28	0.01
4.21	20.00	0.01	2.153	4.19	-0.01
4.21	2.00	0.00	1.599	4.19	-0.02
4.22	12.00	0.01	1.910	4.22	0.00
4.23	6.00	0.00	1.729	4.23	0.00
4.23	26.00	0.01	2.357	4.22	-0.01
4.27	30.00	0.01	2.513	4.27	0.01
6.75	30.00	0.01	3.694	6.76	0.01
6.86	26.00	0.01	3.524	6.85	-0.01
6.93	12.00	0.01	2.830	6.95	0.02
6.94	20.00	0.01	3.236	6.92	-0.02
6.94	6.00	0.00	2.531	6.96	0.02
7.01	2.00	0.00	2.342	6.99	-0.01

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

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

Date, Delta Ox (ml/l)

