

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1232
CALIBRATION DATE: 05-Oct-07p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3887

Boc = 0.0000

Voffset = -0.4951

TCor = 0.0006

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)
1.23	2.00	0.00	0.821	1.23	-0.00
1.23	12.00	0.01	0.914	1.23	0.00
1.23	6.00	0.01	0.859	1.23	0.00
1.24	20.00	0.01	0.990	1.24	-0.00
1.25	26.00	0.01	1.056	1.25	-0.00
1.27	30.00	0.02	1.106	1.27	0.01
4.09	20.00	0.01	2.128	4.08	-0.01
4.10	26.00	0.01	2.324	4.08	-0.02
4.11	12.00	0.01	1.890	4.11	-0.00
4.13	6.00	0.01	1.712	4.13	0.00
4.13	2.00	0.00	1.592	4.13	-0.00
4.14	30.00	0.02	2.489	4.16	0.02
6.62	20.00	0.01	3.139	6.60	-0.02
6.64	26.00	0.01	3.464	6.63	-0.01
6.66	30.00	0.02	3.699	6.68	0.02
6.69	12.00	0.01	2.768	6.70	0.01
6.71	6.00	0.01	2.477	6.73	0.01
6.73	2.00	0.00	2.283	6.73	-0.00

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

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

