

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1232
CALIBRATION DATE: 14-Sep-07p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3964

Boc = 0.0000

Voffset = -0.5010

TCor = 0.0008

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)
1.22	2.00	0.00	0.818	1.22	-0.00
1.23	6.00	0.00	0.855	1.23	0.00
1.24	12.00	0.01	0.911	1.24	0.00
1.24	20.00	0.01	0.984	1.24	-0.00
1.26	26.00	0.01	1.049	1.25	-0.00
1.27	30.00	0.02	1.095	1.27	0.00
4.10	20.00	0.01	2.101	4.09	-0.01
4.11	26.00	0.01	2.293	4.10	-0.00
4.11	12.00	0.01	1.867	4.12	0.00
4.12	2.00	0.00	1.573	4.11	-0.00
4.13	6.00	0.00	1.695	4.14	0.01
4.14	30.00	0.02	2.438	4.14	0.01
6.51	30.00	0.02	3.549	6.52	0.02
6.54	26.00	0.01	3.355	6.54	-0.01
6.55	20.00	0.01	3.057	6.53	-0.02
6.60	12.00	0.01	2.690	6.60	-0.00
6.62	6.00	0.00	2.414	6.63	0.01
6.62	2.00	0.00	2.227	6.62	-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

