

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1232
 CALIBRATION DATE: 09-Apr-08p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3945
 Voffset = -0.4975
 Tau20 = 1.45

A = -7.1098e-004
 B = 1.1901e-004
 C = -2.7605e-006
 E nominal = 0.036

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	0.923	1.27	0.00
1.27	2.00	0.00	0.831	1.27	0.00
1.27	20.00	0.01	0.998	1.27	-0.00
1.27	6.00	0.01	0.868	1.27	0.00
1.28	26.00	0.01	1.061	1.28	0.00
1.29	30.00	0.02	1.109	1.29	0.00
4.18	20.00	0.01	2.143	4.18	-0.01
4.19	26.00	0.01	2.344	4.19	0.00
4.20	30.00	0.02	2.489	4.20	-0.00
4.21	12.00	0.01	1.907	4.21	-0.00
4.22	6.00	0.01	1.725	4.22	-0.00
4.23	2.00	0.00	1.605	4.22	-0.00
6.63	30.00	0.02	3.640	6.63	-0.00
6.69	26.00	0.01	3.445	6.69	0.00
6.69	20.00	0.01	3.135	6.69	0.00
6.78	12.00	0.01	2.767	6.78	0.00
6.82	6.00	0.01	2.484	6.82	0.00
6.83	2.00	0.00	2.289	6.83	0.00

$$\text{Oxygen (ml/l)} = \text{Soc} * (\text{V} + \text{Voffset}) * (1.0 + \text{A} * \text{T} + \text{B} * \text{T}^2 + \text{C} * \text{T}^3) * \text{OxSol}(\text{T}, \text{S}) * \exp(\text{E} * \text{P} / \text{K})$$

V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU] K = temperature [deg K]

OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

