

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1427  
 CALIBRATION DATE: 16-Apr-08p

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.3917  
 Voffset = -0.5041  
 Tau20 = 1.19

A = -2.1511e-003  
 B = 2.1845e-004  
 C = -4.1406e-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)
1.24	2.00	0.00	0.833	1.24	0.00
1.24	6.00	0.00	0.871	1.24	0.01
1.25	12.00	0.00	0.931	1.26	0.01
1.26	20.00	0.00	1.007	1.27	0.01
1.26	26.00	0.00	1.066	1.27	0.01
1.26	30.00	0.00	1.106	1.27	0.01
4.20	6.00	0.00	1.736	4.18	-0.02
4.21	2.00	0.00	1.609	4.17	-0.03
4.21	12.00	0.00	1.928	4.20	-0.01
4.21	30.00	0.00	2.496	4.21	-0.00
4.22	20.00	0.00	2.178	4.22	-0.01
4.24	26.00	0.00	2.370	4.23	-0.01
6.88	30.00	0.00	3.758	6.88	0.00
7.01	26.00	0.00	3.597	7.01	0.00
7.01	20.00	0.00	3.287	7.01	0.00
7.04	12.00	0.00	2.892	7.04	0.00
7.06	6.00	0.00	2.590	7.08	0.01
7.13	2.00	0.00	2.396	7.14	0.02

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

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)

● 16-Apr-08p 1.0000

