

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0140  
CALIBRATION DATE: 19-Jun-08p

## SBE 43 OXYGEN CALIBRATION DATA

### COEFFICIENTS

Soc = 0.3040

Voffset = -0.6093

Tau20 = 1.09

A = -1.3616e-003

B = 2.1553e-004

C = -4.6740e-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)
1.26	12.00	0.01	1.156	1.26	0.00
1.26	2.00	0.00	1.039	1.26	-0.00
1.27	6.00	0.00	1.088	1.27	0.00
1.27	20.00	0.01	1.253	1.27	-0.00
1.27	26.00	0.01	1.327	1.27	-0.00
1.29	30.00	0.01	1.389	1.29	-0.00
4.16	20.00	0.01	2.716	4.16	0.00
4.16	12.00	0.01	2.412	4.16	-0.00
4.17	26.00	0.01	2.958	4.17	-0.00
4.17	6.00	0.00	2.187	4.17	0.00
4.17	2.00	0.00	2.030	4.17	-0.00
4.18	30.00	0.01	3.144	4.19	0.00
6.52	30.00	0.01	4.562	6.53	0.00
6.61	20.00	0.01	3.958	6.61	0.00
6.62	26.00	0.01	4.340	6.62	-0.00
6.65	12.00	0.01	3.491	6.65	-0.00
6.67	2.00	0.00	2.882	6.67	0.00
6.68	6.00	0.00	3.136	6.68	-0.00

Oxygen (ml/l) = Soc \* (V + Voffset) \* (1.0 + A \* T + B \* T<sup>2</sup> + C \* T<sup>3</sup>) \* OxSol(T,S) \* exp(E \* P / 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)

