

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0171  
CALIBRATION DATE: 31-Mar-09p

SBE 43F OXYGEN CALIBRATION DATA

**COEFFICIENTS**

Soc = 2.7117e-004 (DI)  
Foffset = -811.07  
Tau20 = 1.17

A = -2.0024e-003  
B = 1.9249e-004  
C = -3.4377e-006  
E nominal = 0.036

**NOMINAL DYNAMIC COEFFICIENTS**

D1 = 1.92634e-4 H1 = -3.30000e-2  
D2 = -4.64803e-2 H2 = 5.00000e+3  
H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.24	2.00	0.00	1283.89	1.24	-0.00
1.25	6.00	0.00	1341.62	1.25	0.00
1.26	12.00	0.00	1426.32	1.26	0.00
1.27	20.00	0.00	1540.16	1.27	0.00
1.27	26.00	0.00	1623.14	1.27	-0.00
1.27	30.00	0.00	1680.12	1.27	-0.00
4.25	6.00	0.00	2623.34	4.26	0.00
4.25	30.00	0.00	3719.15	4.26	0.00
4.25	2.00	0.00	2435.88	4.25	-0.00
4.26	26.00	0.00	3533.65	4.27	0.00
4.26	12.00	0.00	2900.49	4.26	-0.00
4.27	20.00	0.00	3263.86	4.27	0.00
6.65	30.00	0.00	5351.96	6.65	-0.00
6.73	26.00	0.00	5112.47	6.74	0.00
6.76	12.00	0.00	4123.50	6.76	-0.00
6.78	20.00	0.00	4700.31	6.77	-0.00
6.79	6.00	0.00	3703.93	6.79	0.01
6.81	2.00	0.00	3412.65	6.80	-0.00

Oxygen (ml/l) = Soc \* (F + Foffset) \* (1.0 + A \* T + B \* T<sup>2</sup> + C \* T<sup>3</sup>) \* OxSol(T,S) \* exp(E \* P / K)  
 F = frequency output from SBE43F, 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)

