

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1348
CALIBRATION DATE: 03-Mar-10p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5382

Voffset = -0.5202

Tau20 = 1.68

A = -2.5074e-003

B = 1.3829e-004

C = -2.5395e-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(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.22	2.00	0.00	0.755	1.22	-0.00
1.25	6.00	0.01	0.789	1.25	-0.00
1.25	12.00	0.01	0.834	1.25	0.00
1.28	20.00	0.01	0.900	1.28	0.00
1.28	26.00	0.01	0.949	1.29	0.01
1.29	30.00	0.02	0.986	1.30	0.01
4.17	2.00	0.00	1.324	4.17	-0.01
4.22	6.00	0.01	1.431	4.22	-0.00
4.26	12.00	0.01	1.585	4.26	-0.00
4.26	26.00	0.01	1.940	4.27	0.00
4.29	30.00	0.02	2.058	4.29	0.00
4.29	20.00	0.01	1.793	4.29	-0.00
6.83	30.00	0.02	2.964	6.82	-0.01
6.94	26.00	0.01	2.833	6.95	0.01
6.97	20.00	0.01	2.585	6.96	-0.01
6.98	6.00	0.01	2.027	6.99	0.01
6.99	12.00	0.01	2.268	6.99	-0.00
7.06	2.00	0.00	1.883	7.06	0.00

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * 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)

