

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0794
CALIBRATION DATE: 13-Mar-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3937

Voffset = -0.4913

Tau20 = 2.45

A = -1.7074e-003

B = 1.4432e-004

C = -2.6976e-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)
1.26	12.00	0.01	0.918	1.26	-0.00
1.26	2.00	0.00	0.825	1.27	0.00
1.26	6.00	0.01	0.862	1.26	-0.00
1.27	20.00	0.01	0.995	1.26	-0.00
1.27	26.00	0.01	1.054	1.26	-0.01
1.28	30.00	0.01	1.099	1.27	-0.01
4.23	26.00	0.01	2.371	4.23	-0.00
4.24	20.00	0.01	2.182	4.24	0.00
4.25	30.00	0.02	2.516	4.24	-0.00
4.27	12.00	0.01	1.937	4.27	0.01
4.29	6.00	0.01	1.750	4.29	0.01
4.29	2.00	0.00	1.625	4.31	0.01
6.68	30.00	0.02	3.683	6.69	0.00
6.87	20.00	0.01	3.228	6.87	-0.00
6.89	12.00	0.01	2.821	6.89	-0.00
6.90	26.00	0.01	3.565	6.91	0.01
6.94	6.00	0.01	2.527	6.94	-0.00
6.97	2.00	0.00	2.322	6.96	-0.01

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)

