

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0703
CALIBRATION DATE: 25-Aug-10p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4079

Voffset = -0.7013

Tau20 = 1.34

A = -2.8274e-003

B = 1.1809e-004

C = -2.4096e-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	2.00	0.01	1.022	1.26	-0.00
1.26	6.00	0.02	1.062	1.26	0.00
1.26	12.00	0.02	1.121	1.26	-0.00
1.27	20.00	0.02	1.207	1.27	0.00
1.28	26.00	0.02	1.275	1.28	0.00
1.28	30.00	0.02	1.323	1.28	0.00
4.17	2.00	0.01	1.762	4.16	-0.00
4.17	6.00	0.02	1.891	4.17	-0.00
4.17	12.00	0.02	2.086	4.17	-0.00
4.17	30.00	0.02	2.723	4.17	-0.00
4.17	26.00	0.02	2.572	4.18	0.00
4.18	20.00	0.02	2.357	4.17	-0.00
6.73	30.00	0.02	3.961	6.73	0.00
6.74	26.00	0.02	3.718	6.73	-0.00
6.75	20.00	0.02	3.379	6.75	0.00
6.76	12.00	0.02	2.945	6.76	-0.00
6.83	6.00	0.02	2.650	6.83	0.00
6.87	2.00	0.01	2.451	6.87	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)

