

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0703
CALIBRATION DATE: 20-May-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4099

Voffset = -0.6952

Tau20 = 2.20

A = -2.6575e-003

B = 7.7464e-005

C = -1.4570e-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	0.00	1.016	1.27	0.00
1.27	6.00	0.01	1.055	1.27	0.00
1.27	12.00	0.01	1.116	1.27	0.00
1.27	20.00	0.01	1.199	1.27	-0.00
1.27	26.00	0.02	1.267	1.27	0.00
1.28	30.00	0.02	1.317	1.28	0.00
4.13	6.00	0.01	1.868	4.13	-0.00
4.13	12.00	0.01	2.063	4.13	-0.01
4.14	20.00	0.01	2.336	4.14	-0.00
4.14	2.00	0.00	1.742	4.13	-0.01
4.15	26.00	0.02	2.558	4.15	0.00
4.15	30.00	0.02	2.710	4.15	-0.00
6.63	30.00	0.02	3.911	6.63	-0.00
6.74	20.00	0.01	3.371	6.74	-0.00
6.75	26.00	0.02	3.723	6.75	0.00
6.77	12.00	0.01	2.939	6.77	0.00
6.83	6.00	0.01	2.635	6.83	0.00
6.91	2.00	0.00	2.446	6.91	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)

