

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0730
CALIBRATION DATE: 21-May-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3877

Voffset = -0.5821

Tau20 = 1.19

A = -2.7737e-003

B = 2.4543e-004

C = -5.5671e-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	0.01	0.906	1.21	-0.01
1.22	6.00	0.01	0.941	1.20	-0.02
1.23	12.00	0.01	1.001	1.22	-0.01
1.24	20.00	0.01	1.087	1.24	0.01
1.25	26.00	0.02	1.159	1.27	0.02
1.26	30.00	0.02	1.232	1.32	0.06
4.08	12.00	0.01	1.988	4.08	-0.00
4.09	6.00	0.01	1.801	4.08	-0.01
4.10	2.00	0.01	1.679	4.10	-0.00
4.10	20.00	0.01	2.251	4.11	0.01
4.11	26.00	0.02	2.455	4.11	-0.00
4.15	30.00	0.02	2.631	4.15	0.00
6.74	26.00	0.02	3.643	6.71	-0.03
6.76	20.00	0.01	3.332	6.77	0.01
6.81	12.00	0.01	2.931	6.82	0.01
6.89	6.00	0.01	2.640	6.89	-0.00
6.94	2.00	0.01	2.442	6.95	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)

