

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1329
CALIBRATION DATE: 27-Mar-10p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4708

Voffset = -0.5079

Tau20 = 1.86

A = -3.3342e-003

B = 1.4214e-004

C = -2.1242e-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)
1.24	2.00	0.00	0.781	1.24	-0.00
1.25	6.00	0.01	0.817	1.25	0.00
1.27	12.00	0.01	0.873	1.27	-0.00
1.27	20.00	0.01	0.946	1.28	0.00
1.29	26.00	0.01	1.007	1.30	0.01
1.30	30.00	0.01	1.052	1.31	0.01
4.26	2.00	0.00	1.447	4.25	-0.01
4.27	20.00	0.01	1.971	4.26	-0.01
4.28	6.00	0.01	1.568	4.28	-0.00
4.29	26.00	0.01	2.159	4.29	-0.00
4.30	12.00	0.01	1.748	4.30	-0.00
4.32	30.00	0.01	2.297	4.32	0.00
6.73	30.00	0.01	3.289	6.72	-0.01
6.89	26.00	0.01	3.163	6.90	0.00
6.92	20.00	0.01	2.883	6.92	0.00
7.00	12.00	0.01	2.525	6.99	-0.00
7.03	6.00	0.01	2.249	7.03	0.01
7.05	2.00	0.00	2.065	7.05	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)

