

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1266
CALIBRATION DATE: 12-Jun-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5481

Voffset = -0.5337

Tau20 = 2.03

A = -3.1015e-003

B = 1.4744e-004

C = -2.8459e-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	0.00	0.765	1.22	-0.00
1.23	6.00	0.01	0.795	1.23	-0.00
1.25	12.00	0.01	0.841	1.24	-0.00
1.26	20.00	0.01	0.905	1.26	-0.00
1.27	26.00	0.01	0.954	1.27	-0.00
1.28	30.00	0.01	0.990	1.27	-0.00
4.07	2.00	0.00	1.305	4.07	0.00
4.10	6.00	0.01	1.405	4.10	0.00
4.11	26.00	0.01	1.896	4.11	-0.00
4.12	12.00	0.01	1.552	4.12	0.00
4.13	20.00	0.01	1.751	4.13	0.01
4.13	30.00	0.01	2.015	4.13	0.00
6.76	30.00	0.01	2.958	6.77	0.00
6.85	26.00	0.01	2.804	6.85	-0.00
6.88	20.00	0.01	2.559	6.88	0.00
6.94	12.00	0.01	2.247	6.93	-0.00
7.00	6.00	0.01	2.019	6.99	-0.00
7.03	2.00	0.00	1.867	7.03	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)

