

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1646
CALIBRATION DATE: 28-Dec-10p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5393

Voffset = -0.5428

Tau20 = 1.30

A = -2.1450e-003

B = 9.8166e-005

C = -1.8084e-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	6.00	0.01	0.814	1.26	0.00
1.26	2.00	0.01	0.786	1.27	0.00
1.27	12.00	0.01	0.859	1.27	0.00
1.27	20.00	0.02	0.919	1.27	-0.00
1.27	26.00	0.02	0.967	1.27	-0.00
1.28	30.00	0.02	1.002	1.28	-0.00
4.19	6.00	0.01	1.443	4.19	-0.00
4.19	26.00	0.02	1.942	4.19	-0.00
4.20	2.00	0.01	1.349	4.19	-0.00
4.20	12.00	0.01	1.590	4.20	-0.00
4.20	30.00	0.02	2.053	4.20	0.00
4.20	20.00	0.02	1.790	4.20	-0.00
6.48	30.00	0.02	2.871	6.48	-0.00
6.53	26.00	0.02	2.720	6.52	-0.00
6.57	6.00	0.01	1.956	6.57	0.01
6.57	2.00	0.01	1.807	6.57	0.00
6.57	12.00	0.01	2.183	6.57	-0.00
6.60	20.00	0.02	2.502	6.60	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)

