

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1348
CALIBRATION DATE: 11-Feb-11p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5410

Voffset = -0.5173

Tau20 = 1.24

A = -2.5295e-003

B = 1.6082e-004

C = -2.8902e-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)
1.23	6.00	0.01	0.781	1.23	0.00
1.23	2.00	0.01	0.754	1.23	0.00
1.23	12.00	0.02	0.823	1.23	-0.00
1.25	20.00	0.02	0.884	1.25	-0.00
1.26	26.00	0.02	0.930	1.26	-0.00
1.26	30.00	0.02	0.962	1.26	-0.00
4.14	6.00	0.01	1.403	4.13	-0.01
4.14	20.00	0.02	1.731	4.14	-0.00
4.14	30.00	0.02	1.977	4.14	-0.00
4.15	2.00	0.01	1.314	4.15	-0.00
4.15	12.00	0.02	1.547	4.15	-0.00
4.16	26.00	0.02	1.881	4.15	-0.00
6.58	30.00	0.02	2.839	6.58	0.01
6.60	26.00	0.02	2.682	6.59	-0.00
6.64	20.00	0.02	2.466	6.64	0.00
6.66	6.00	0.01	1.945	6.66	-0.00
6.66	12.00	0.02	2.173	6.67	0.01
6.67	2.00	0.01	1.798	6.68	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)

