

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1232
CALIBRATION DATE: 24-Oct-08p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4098
Voffset = -0.4985
Tau20 = 1.44

A = -6.4730e-004
B = 1.1827e-004
C = -3.1247e-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)
1.28	30.00	0.01	1.088	1.28	0.00
1.28	26.00	0.01	1.045	1.28	0.00
1.29	20.00	0.01	0.988	1.29	-0.00
1.30	12.00	0.01	0.919	1.30	0.00
1.32	6.00	0.00	0.868	1.32	-0.00
1.33	2.00	0.00	0.833	1.33	-0.00
4.17	30.00	0.01	2.417	4.17	0.00
4.18	26.00	0.01	2.282	4.18	0.00
4.20	20.00	0.01	2.093	4.20	-0.00
4.23	12.00	0.01	1.864	4.23	0.00
4.25	6.00	0.00	1.692	4.26	0.00
4.27	2.00	0.00	1.575	4.27	-0.00
6.62	30.00	0.01	3.543	6.62	-0.00
6.81	26.00	0.01	3.402	6.81	0.00
6.82	20.00	0.01	3.089	6.82	-0.00
6.86	12.00	0.01	2.710	6.86	-0.00
6.90	6.00	0.00	2.432	6.90	0.00
6.93	2.00	0.00	2.247	6.93	-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)

