

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0730
CALIBRATION DATE: 26-Feb-11p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4905

Voffset = -0.5063

Tau20 = 1.42

A = -2.9755e-003

B = 8.8041e-005

C = -1.7907e-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	2.00	0.01	0.777	1.28	0.00
1.28	6.00	0.01	0.810	1.28	0.00
1.28	26.00	0.02	0.992	1.28	0.00
1.28	20.00	0.02	0.934	1.28	0.00
1.29	12.00	0.01	0.863	1.29	-0.00
1.29	30.00	0.02	1.037	1.30	0.00
4.19	6.00	0.01	1.502	4.19	-0.00
4.19	26.00	0.02	2.090	4.19	-0.00
4.20	12.00	0.01	1.671	4.20	0.00
4.20	20.00	0.02	1.905	4.20	-0.00
4.20	30.00	0.02	2.226	4.20	-0.00
4.20	2.00	0.01	1.396	4.20	-0.00
6.64	30.00	0.02	3.221	6.63	-0.00
6.65	12.00	0.01	2.352	6.65	0.00
6.66	6.00	0.01	2.090	6.66	0.01
6.67	2.00	0.01	1.919	6.67	-0.00
6.68	20.00	0.02	2.732	6.68	-0.01
6.70	26.00	0.02	3.041	6.71	0.01

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)

