SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0463
CALIBRATION DATE: 16-Sep-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3220
Voffset = -0.4660
Tau20 = 1.38

A = -1.0449e-003
B = 2.1076e-004
C = -3.7113e-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)
1.27	2.00	0.00	0.873	1.27	-0.00
1.27	6.00	0.01	0.920	1.28	0.00
1.28	12.00	0.01	0.988	1.28	0.00
1.28	20.00	0.01	1.073	1.29	0.00
1.29	26.00	0.01	1.137	1.29	0.00
1.31	30.00	0.02	1.194	1.31	0.00
4.17	26.00	0.01	2.638	4.17	0.00
4.19	2.00	0.00	1.807	4.18	-0.01
4.19	20.00	0.01	2.440	4.18	-0.01
4.19	30.00	0.02	2.794	4.20	0.01
4.19	12.00	0.01	2.172	4.19	-0.00
4.19	6.00	0.01	1.957	4.19	-0.01
6.53	30.00	0.02	4.088	6.53	-0.00
6.62	26.00	0.01	3.912	6.62	-0.00
6.66	20.00	0.01	3.615	6.67	0.00
6.73	12.00	0.01	3.206	6.73	0.00
6.74	6.00	0.01	2.869	6.74	0.00
6.75	2.00	0.00	2.637	6.76	0.01

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T^2 + C * T^3) * 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