

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0092
CALIBRATION DATE: 06-Jan-09p

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 2.3000e-004 (DI)
Foffset = -836.00
Tau20 = 3.61

A = -2.5144e-004
B = 3.5548e-005
C = -8.9129e-007
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(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.27	30.00	0.02	1881.99	1.27	0.00
1.28	20.00	0.01	1708.67	1.28	-0.00
1.29	12.00	0.01	1575.84	1.28	-0.00
1.29	26.00	0.01	1818.85	1.29	-0.00
1.29	2.00	0.00	1416.77	1.29	-0.00
1.30	6.00	0.01	1483.22	1.30	-0.00
4.22	20.00	0.01	3715.54	4.22	-0.00
4.23	26.00	0.01	4072.22	4.23	0.00
4.24	30.00	0.02	4323.46	4.24	0.01
4.26	12.00	0.01	3288.56	4.26	0.00
4.28	6.00	0.01	2974.48	4.28	0.00
4.29	2.00	0.00	2763.34	4.29	0.00
6.64	30.00	0.02	6287.07	6.63	-0.01
6.73	26.00	0.01	5983.71	6.73	-0.00
6.78	20.00	0.01	5463.06	6.78	0.00
6.80	12.00	0.01	4754.23	6.80	-0.00
6.81	6.00	0.01	4237.81	6.81	0.00
6.83	2.00	0.00	3904.94	6.83	-0.00

Oxygen (ml/l) = Soc * (F + Foffset) * (1.0 + A * T + B * T² + C * T³) * OxSol(T,S) * exp(E * P / K)
 F = frequency output from SBE43F, 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

