

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0133
CALIBRATION DATE: 27-Nov-08p

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 2.2648e-004 (DI)
Foffset = -793.77
Tau20 = 1.05

A = -1.3287e-003
B = 1.3593e-004
C = -1.4390e-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(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.27	2.00	0.00	1371.85	1.26	-0.00
1.27	6.00	0.01	1439.04	1.27	-0.00
1.27	12.00	0.01	1538.58	1.27	0.00
1.28	20.00	0.01	1664.24	1.27	-0.00
1.29	26.00	0.01	1762.21	1.29	-0.00
1.30	30.00	0.02	1834.49	1.30	0.00
4.21	20.00	0.01	3666.89	4.21	0.00
4.22	26.00	0.01	3974.38	4.22	0.00
4.23	12.00	0.01	3266.25	4.23	0.00
4.24	30.00	0.02	4184.40	4.24	0.00
4.24	6.00	0.01	2951.47	4.24	0.00
4.25	2.00	0.00	2735.14	4.25	-0.00
6.75	30.00	0.02	6194.76	6.75	-0.00
6.81	20.00	0.01	5451.17	6.82	0.01
6.82	26.00	0.01	5928.53	6.81	-0.01
6.84	12.00	0.01	4789.58	6.83	-0.01
6.86	6.00	0.01	4286.52	6.87	0.01
6.88	2.00	0.00	3940.29	6.88	-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

