

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0130
CALIBRATION DATE: 05-Jan-10p

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 2.4615e-004 (DI)
Foffset = -796.41
Tau20 = 1.71

A = -2.5097e-003
B = 1.6089e-004
C = -1.8080e-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)
1.28	2.00	0.00	1336.70	1.28	-0.00
1.29	6.00	0.00	1403.33	1.29	0.00
1.29	12.00	0.01	1501.43	1.30	0.00
1.30	20.00	0.01	1626.84	1.30	0.00
1.30	26.00	0.01	1719.85	1.31	0.00
1.31	30.00	0.01	1787.43	1.32	0.01
4.29	2.00	0.00	2600.04	4.28	-0.01
4.29	20.00	0.01	3533.06	4.28	-0.00
4.29	26.00	0.01	3834.46	4.30	0.00
4.30	6.00	0.00	2820.82	4.30	-0.00
4.30	30.00	0.01	4034.37	4.30	0.00
4.30	12.00	0.01	3134.92	4.30	-0.00
6.72	30.00	0.01	5852.70	6.72	-0.00
6.75	26.00	0.01	5570.47	6.75	0.00
6.79	20.00	0.01	5133.01	6.79	-0.00
6.82	12.00	0.01	4508.74	6.82	0.00
6.85	6.00	0.00	4026.56	6.86	0.01
6.85	2.00	0.00	3687.96	6.86	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

