

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0603
CALIBRATION DATE: 01-Jan-13

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 1.4376e-04 (adj)
Foffset = -3333.84
Tau20 = 4.59

A = 1.1243e-003
B = -1.2673e-004
C = 2.1136e-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

Note: Soc adjustment from single-point measurement 01-Jan-13

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.22	2.00	0.00	4233.99	1.22	0.00
1.24	6.00	0.00	4349.96	1.24	0.01
1.25	12.00	0.00	4526.19	1.26	0.00
1.26	20.00	0.00	4766.47	1.26	0.00
1.27	25.63	0.00	4953.85	1.27	0.00
1.27	29.89	0.00	5096.48	1.28	0.01
4.14	6.00	0.00	6707.21	4.12	-0.02
4.16	2.00	0.00	6380.53	4.13	-0.02
4.17	20.00	0.00	8062.00	4.16	-0.01
4.18	29.88	0.00	9104.85	4.18	0.00
4.20	12.00	0.00	7305.25	4.19	-0.01
4.20	25.68	0.00	8688.31	4.20	0.00
6.34	29.86	0.00	12076.20	6.34	-0.01
6.50	25.72	0.00	11637.77	6.51	0.01
6.67	20.00	0.00	10906.38	6.67	-0.00
6.84	12.00	0.00	9827.86	6.85	0.01
6.93	6.00	0.00	9009.77	6.94	0.01
6.99	2.00	0.00	8491.19	7.00	0.01

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 SBE43I, 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

