

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0604
CALIBRATION DATE: 15-Jun-12

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 1.3929e-004 (DI)
Foffset = -3418.66
Tau20 = 4.94

A = -1.2199e-003
B = 7.2303e-005
C = -1.5102e-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)
1.20	6.00	0.00	4418.75	1.21	0.00
1.21	2.00	0.00	4314.87	1.21	-0.00
1.22	12.00	0.00	4592.36	1.22	0.01
1.23	20.00	0.00	4828.42	1.24	0.01
1.23	26.00	0.00	5006.51	1.24	0.01
1.25	30.00	0.00	5151.90	1.26	0.01
4.12	6.00	0.00	6822.06	4.11	-0.02
4.13	2.00	0.00	6470.67	4.10	-0.03
4.14	12.00	0.00	7379.55	4.13	-0.01
4.14	26.00	0.00	8709.07	4.14	0.00
4.17	30.00	0.00	9153.94	4.17	0.00
4.18	20.00	0.00	8167.13	4.18	-0.01
6.46	26.00	0.00	11673.35	6.47	0.00
6.65	30.00	0.00	12542.30	6.64	-0.01
6.65	20.00	0.00	10984.73	6.65	-0.00
6.78	12.00	0.00	9926.43	6.79	0.00
6.95	6.00	0.00	9186.66	6.96	0.01
7.07	2.00	0.00	8687.43	7.09	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

