

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0604
CALIBRATION DATE: 22-Oct-15

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 1.5779e-004 (adj)

Foffset = -3443.10

Tau20 = 3.91

A = -3.1111e-003

B = 1.4288e-004

C = -2.1700e-006

E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4

D2 = -4.64803e-2

H1 = -3.300000e-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)
1.19	2.00	0.00	4250.97	1.19	-0.00
1.20	26.00	0.00	4849.86	1.20	0.00
1.20	20.00	0.00	4699.32	1.20	-0.00
1.20	30.00	0.00	4963.23	1.20	0.00
1.22	12.00	0.00	4517.29	1.22	-0.00
1.22	6.00	0.00	4371.09	1.22	-0.00
3.92	2.00	0.00	6098.67	3.92	0.00
3.93	6.00	0.00	6426.14	3.93	0.00
3.94	12.00	0.00	6924.88	3.95	0.00
3.95	20.00	0.00	7580.38	3.95	-0.00
3.95	26.00	0.00	8085.30	3.95	0.00
3.95	30.00	0.00	8434.76	3.96	0.00
6.67	6.00	0.00	8504.97	6.67	0.00
6.67	30.00	0.00	11853.49	6.67	-0.00
6.67	2.00	0.00	7962.50	6.67	-0.00
6.70	12.00	0.00	9356.73	6.70	0.00
6.71	20.00	0.00	10469.33	6.70	-0.00
6.71	26.00	0.00	11324.96	6.71	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 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

