

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0086
CALIBRATION DATE: 20-Apr-17

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 2.6649e-004
Foffset = -806.68
Tau20 = 1.27

A = -3.8473e-003
B = 2.4214e-004
C = -3.2103e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4 H1 = -3.300000e-2
D2 = -4.64803e-2 H2 = 5.00000e+3
H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP (° C)	BATH SAL (PSU)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.07	2.00	0.00	1221.714	1.06	-0.01
1.08	6.00	0.00	1275.923	1.07	-0.01
1.10	12.00	0.00	1363.523	1.10	-0.00
1.12	20.00	0.00	1474.908	1.13	0.00
1.14	26.00	0.00	1558.415	1.15	0.01
1.15	30.00	0.00	1614.634	1.16	0.01
3.85	2.00	0.00	2309.803	3.85	0.00
3.86	6.00	0.00	2494.174	3.86	-0.00
3.91	12.00	0.00	2789.218	3.92	0.00
3.92	20.00	0.00	3134.615	3.92	0.00
3.94	26.00	0.00	3392.456	3.94	0.00
3.96	30.00	0.00	3577.720	3.97	0.01
6.68	6.00	0.00	3728.000	6.68	-0.00
6.74	2.00	0.00	3438.782	6.74	0.00
6.84	26.00	0.00	5284.113	6.82	-0.01
6.85	30.00	0.00	5591.257	6.85	-0.00
6.86	12.00	0.00	4278.932	6.86	-0.00
6.91	20.00	0.00	4906.201	6.91	0.00

F = instrument output (Hz); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (F + Foffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

Residual (ml/l) = instrument oxygen - bath oxygen

