

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3233

SBE 43F OXYGEN CALIBRATION DATA

CALIBRATION DATE: 25-Sep-15

COEFFICIENTS:

Soc = 3.1556e-004 (adj)

Foffset = -817.40

Tau20 = 1.41

A = -3.8249e-003

B = 1.5244e-004

C = -2.1156e-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)
1.25	5.85	0.00	1287.645	1.25	-0.00
1.25	2.00	0.00	1238.348	1.25	-0.00
1.25	12.00	0.00	1370.673	1.25	-0.00
1.28	20.00	0.00	1489.009	1.28	-0.00
1.30	25.99	0.00	1588.012	1.31	0.00
1.32	30.00	0.00	1656.151	1.32	0.01
4.03	2.00	0.00	2174.780	4.03	-0.00
4.04	5.95	0.00	2347.588	4.05	0.00
4.05	12.00	0.00	2607.072	4.05	-0.00
4.09	20.00	0.00	2970.445	4.09	-0.00
4.11	26.00	0.00	3247.588	4.12	0.00
4.15	30.00	0.00	3448.344	4.15	-0.00
6.84	2.00	0.00	3122.618	6.84	-0.00
6.86	5.99	0.00	3416.283	6.87	0.00
6.88	12.00	0.00	3857.177	6.88	0.00
6.98	26.00	0.00	4942.097	6.99	0.01
6.99	30.00	0.00	5247.614	6.98	-0.00
7.02	20.00	0.00	4508.127	7.01	-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 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

