

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0221
CALIBRATION DATE: 21-Nov-15

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 2.5867e-004
Foffset = -832.29
Tau20 = 1.16

A = -3.9302e-003
B = 2.2342e-004
C = -3.0737e-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)
1.23	12.00	0.00	1477.976	1.23	0.00
1.24	30.00	0.00	1740.061	1.24	0.00
1.25	6.00	0.00	1395.978	1.25	-0.00
1.26	26.00	0.00	1691.632	1.26	-0.00
1.26	2.00	0.00	1338.981	1.26	-0.00
1.27	20.00	0.00	1612.506	1.27	0.00
3.95	12.00	0.00	2897.163	3.95	-0.00
3.97	20.00	0.00	3280.477	3.97	-0.00
3.98	6.00	0.00	2625.835	3.98	0.00
3.98	2.00	0.00	2432.254	3.98	-0.00
3.98	30.00	0.00	3746.290	3.99	0.01
4.00	26.00	0.00	3568.769	4.00	0.00
6.69	12.00	0.00	4329.771	6.68	-0.00
6.70	6.00	0.00	3856.681	6.70	0.00
6.72	20.00	0.00	4971.651	6.72	0.00
6.76	2.00	0.00	3553.699	6.76	0.00
6.78	30.00	0.00	5782.708	6.77	-0.00
6.82	26.00	0.00	5499.879	6.82	-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

