

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1875  
CALIBRATION DATE: 19-Jan-17

SBE 43 OXYGEN CALIBRATION DATA

## COEFFICIENTS:

Soc = 0.5696  
Voffset = -0.4903  
Tau20 = 1.14

A = -4.3213e-003  
B = 1.5263e-004  
C = -1.8077e-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 OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.16	12.00	0.00	0.769	1.16	-0.00
1.16	6.00	0.00	0.729	1.16	-0.00
1.16	2.00	0.00	0.703	1.16	-0.00
1.17	20.00	0.00	0.826	1.17	-0.00
1.20	26.00	0.00	0.877	1.20	-0.00
1.21	30.00	0.00	0.909	1.21	0.00
3.92	12.00	0.00	1.435	3.92	0.00
3.94	20.00	0.00	1.622	3.94	0.00
3.94	2.00	0.00	1.211	3.94	-0.00
3.96	6.00	0.00	1.307	3.97	0.00
3.98	26.00	0.00	1.772	3.97	-0.00
3.98	30.00	0.00	1.867	3.98	0.00
6.71	2.00	0.00	1.717	6.71	0.00
6.74	6.00	0.00	1.877	6.74	-0.00
6.75	12.00	0.00	2.115	6.75	-0.00
6.79	30.00	0.00	2.841	6.79	0.00
6.84	26.00	0.00	2.693	6.83	-0.00
6.85	20.00	0.00	2.458	6.85	0.00

V = instrument output (volts); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

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

Oxygen (ml/l) = Soc \* (V + Voffset) \* (1.0 + A \* T + B \* T<sup>2</sup> + C \* T<sup>3</sup>) \* Oxsol(T,S) \* exp(E \* P / K)

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

