

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0910  
CALIBRATION DATE: 17-Nov-15

SBE 43 OXYGEN CALIBRATION DATA

## COEFFICIENTS:

Soc = 0.4637  
Voffset = -0.5053  
Tau20 = 1.97

A = -3.6822e-003  
B = 1.7684e-004  
C = -2.8603e-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)
1.17	20.00	0.00	0.911	1.17	-0.00
1.17	6.00	0.00	0.799	1.17	-0.00
1.17	12.00	0.00	0.848	1.17	-0.00
1.17	2.00	0.00	0.768	1.17	-0.00
1.19	26.00	0.00	0.967	1.18	-0.00
1.19	30.00	0.00	1.005	1.19	-0.00
3.93	2.00	0.00	1.388	3.94	0.01
3.95	12.00	0.00	1.663	3.95	0.00
3.95	6.00	0.00	1.502	3.96	0.01
3.97	20.00	0.00	1.887	3.97	-0.00
3.97	26.00	0.00	2.058	3.98	0.00
3.98	30.00	0.00	2.177	3.98	0.00
6.66	2.00	0.00	1.997	6.65	-0.01
6.66	6.00	0.00	2.182	6.66	-0.00
6.68	12.00	0.00	2.463	6.68	-0.00
6.72	30.00	0.00	3.325	6.72	-0.00
6.75	20.00	0.00	2.854	6.75	-0.00
6.76	26.00	0.00	3.142	6.76	0.00

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

Oxsat(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>) \* Oxsat(T,S) \* exp(E \* P / K)

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

