

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0904  
CALIBRATION DATE: 14-Jan-12

SBE 43 OXYGEN CALIBRATION DATA

## COEFFICIENTS

Soc = 0.4460

Voffset = -0.4927

Tau20 = 1.63

A = -2.2160e-003

B = 1.1208e-004

C = -2.0974e-006

E nominal = 0.036

## NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4 H1 = -3.30000e-2

D2 = -4.64803e-2 H2 = 5.00000e+3

H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.24	6.00	0.04	0.816	1.24	-0.00
1.25	12.00	0.04	0.871	1.25	0.01
1.25	20.00	0.04	0.942	1.25	0.01
1.25	2.00	0.04	0.783	1.25	-0.01
1.26	30.00	0.04	1.046	1.28	0.02
1.26	26.00	0.04	1.006	1.27	0.01
4.13	12.00	0.04	1.737	4.13	-0.01
4.13	6.00	0.04	1.564	4.12	-0.01
4.14	30.00	0.04	2.290	4.15	0.00
4.14	20.00	0.04	1.975	4.14	-0.01
4.16	26.00	0.04	2.167	4.16	0.00
4.18	2.00	0.04	1.462	4.17	-0.02
6.64	30.00	0.04	3.368	6.63	-0.01
6.68	26.00	0.04	3.182	6.68	-0.00
6.71	20.00	0.04	2.897	6.71	0.00
6.75	12.00	0.04	2.529	6.75	0.00
6.82	6.00	0.04	2.268	6.83	0.01
6.91	2.00	0.04	2.103	6.92	0.01

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)

V = voltage output from SBE43, 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

Date, Delta Ox (ml/l)

