

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1679  
CALIBRATION DATE: 21-Nov-14

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:  
Soc = 0.4516  
Voffset = -0.4992  
Tau20 = 1.14

A = -4.1722e-003  
B = 1.8952e-004  
C = -2.4749e-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 (ITS-90)	BATH SAL (PSU)	INSTRUMENT OUTPUT (VOLTS)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.24	2.00	0.00	0.784	1.24	-0.00
1.25	6.00	0.00	0.823	1.25	-0.00
1.26	12.00	0.00	0.878	1.26	-0.00
1.27	20.00	0.00	0.953	1.27	-0.00
1.28	26.00	0.00	1.012	1.28	0.00
1.28	30.00	0.00	1.051	1.29	0.00
4.00	6.00	0.00	1.536	4.00	0.00
4.01	2.00	0.00	1.425	4.02	0.00
4.03	20.00	0.00	1.940	4.03	-0.00
4.04	12.00	0.00	1.718	4.04	0.00
4.06	26.00	0.00	2.122	4.06	0.01
4.07	30.00	0.00	2.241	4.07	0.00
6.78	26.00	0.00	3.210	6.78	-0.00
6.80	12.00	0.00	2.552	6.80	-0.00
6.81	2.00	0.00	2.068	6.80	-0.00
6.81	6.00	0.00	2.264	6.81	0.00
6.82	20.00	0.00	2.941	6.82	0.00
6.84	30.00	0.00	3.424	6.84	-0.00

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

