

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0730
CALIBRATION DATE: 30-Dec-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.5615
Voffset = -0.5094
Tau20 = 1.12

A = -4.2715e-003
B = 1.4677e-004
C = -2.6947e-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)
1.14	2.00	0.00	0.721	1.14	-0.00
1.14	6.00	0.00	0.748	1.14	0.00
1.17	12.00	0.00	0.797	1.17	-0.00
1.18	30.00	0.00	0.936	1.18	0.00
1.20	26.00	0.00	0.910	1.20	0.00
1.20	20.00	0.00	0.864	1.20	0.00
3.86	6.00	0.00	1.315	3.86	-0.00
3.87	2.00	0.00	1.227	3.87	0.00
3.88	12.00	0.00	1.459	3.88	0.00
3.89	30.00	0.00	1.915	3.89	-0.00
3.89	26.00	0.00	1.808	3.90	0.00
3.90	20.00	0.00	1.655	3.89	-0.00
6.60	6.00	0.00	1.889	6.61	0.00
6.61	12.00	0.00	2.127	6.61	0.00
6.62	30.00	0.00	2.902	6.62	-0.00
6.63	26.00	0.00	2.720	6.63	0.00
6.65	2.00	0.00	1.742	6.65	-0.00
6.65	20.00	0.00	2.465	6.65	-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 * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

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

