

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: 1875
CALIBRATION DATE: 12-Nov-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 0.5546
Voffset = -0.4866
Tau20 = 1.26

A = -4.4117e-003
B = 2.0913e-004
C = -3.3764e-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)
1.17	6.00	0.00	0.733	1.17	-0.00
1.17	20.00	0.00	0.830	1.17	0.00
1.18	26.00	0.00	0.873	1.18	-0.00
1.18	12.00	0.00	0.778	1.18	-0.00
1.19	30.00	0.00	0.906	1.19	0.00
1.19	2.00	0.00	0.709	1.19	-0.00
3.92	20.00	0.00	1.633	3.92	-0.00
3.93	2.00	0.00	1.225	3.93	0.00
3.93	12.00	0.00	1.454	3.93	0.00
3.93	30.00	0.00	1.877	3.93	0.00
3.94	6.00	0.00	1.317	3.93	-0.00
3.95	26.00	0.00	1.783	3.95	0.00
6.65	2.00	0.00	1.736	6.65	-0.00
6.70	12.00	0.00	2.135	6.70	0.00
6.70	20.00	0.00	2.447	6.70	-0.00
6.70	6.00	0.00	1.903	6.71	0.00
6.74	30.00	0.00	2.867	6.74	-0.00
6.74	26.00	0.00	2.701	6.75	0.00

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * 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

