

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: 2712
CALIBRATION DATE: 23-Oct-13

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4360

Voffset = -0.5267

Tau20 = 1.48

A = -1.4276e-003

B = 5.6096e-005

C = -1.0922e-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)
1.25	2.00	0.00	0.825	1.25	0.00
1.27	6.00	0.00	0.863	1.27	0.00
1.27	12.00	0.00	0.919	1.28	0.00
1.29	20.00	0.00	0.997	1.28	-0.00
1.29	26.00	0.00	1.059	1.29	0.00
1.30	30.00	0.00	1.104	1.30	0.00
4.01	2.00	0.00	1.477	4.00	-0.01
4.05	6.00	0.00	1.599	4.05	-0.00
4.06	12.00	0.00	1.774	4.06	-0.00
4.07	20.00	0.00	2.015	4.07	-0.01
4.09	26.00	0.00	2.210	4.09	-0.00
4.09	30.00	0.00	2.342	4.09	0.00
6.84	2.00	0.00	2.152	6.84	0.00
6.86	6.00	0.00	2.346	6.86	0.00
6.87	30.00	0.00	3.570	6.86	-0.01
6.87	20.00	0.00	3.042	6.87	-0.00
6.88	26.00	0.00	3.360	6.88	0.01
6.88	12.00	0.00	2.642	6.88	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 [Kelvin]

OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

