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

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 26-Nov-15

 COEFFICIENTS:
 A = -4.6334e-003
 NOMINAL DYNAMIC COEFFICIENTS

 Soc = 0.5481
 B = 2.1011e-004
 D1 = 1.92634e-4
 H1 = -3.300000e-2

 Voffset = -0.4860
 C = -3.1387e-006
 D2 = -4.64803e-2
 H2 = 5.00000e+3

 Tau20 = 1.13
 E nominal = 0.036
 H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.15	6.00	0.00	0.731	1.15	-0.00
1.16	30.00	0.00	0.900	1.16	0.00
1.16	12.00	0.00	0.774	1.16	-0.00
1.16	20.00	0.00	0.829	1.16	-0.00
1.16	26.00	0.00	0.872	1.16	0.00
1.17	2.00	0.00	0.709	1.17	0.00
3.93	6.00	0.00	1.327	3.93	0.00
3.93	30.00	0.00	1.892	3.93	0.00
3.94	2.00	0.00	1.234	3.94	0.00
3.94	20.00	0.00	1.653	3.93	-0.00
3.94	12.00	0.00	1.468	3.94	-0.00
3.95	26.00	0.00	1.799	3.95	0.00
6.64	12.00	0.00	2.143	6.64	-0.00
6.65	26.00	0.00	2.698	6.65	0.00
6.68	30.00	0.00	2.873	6.68	-0.00
6.70	20.00	0.00	2.474	6.70	0.00
6.70	2.00	0.00	1.760	6.70	-0.00
6.70	6.00	0.00	1.921	6.71	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 * T^2 + C * T^3) * Oxsol(T,S) * exp(E * P / K)

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

