

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: 0514
CALIBRATION DATE: 31-Dec-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4700
Boc = 0.0000
Voffset = -0.5075

Tcor = -0.0003
Pcor = 1.350e-04

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)
1.15	20.00	0.00	0.896	1.15	0.00
1.15	30.00	0.00	0.977	1.15	-0.00
1.15	26.00	0.00	0.944	1.15	-0.00
1.17	2.00	0.00	0.763	1.16	-0.01
1.17	6.00	0.00	0.794	1.17	0.00
1.17	12.00	0.00	0.842	1.18	0.01
3.86	30.00	0.00	2.075	3.85	-0.01
3.89	26.00	0.00	1.979	3.88	-0.01
3.91	20.00	0.00	1.829	3.92	0.01
3.92	12.00	0.00	1.626	3.95	0.02
3.93	6.00	0.00	1.472	3.94	0.01
3.94	2.00	0.00	1.370	3.92	-0.02
6.56	30.00	0.00	3.174	6.55	-0.01
6.63	26.00	0.00	3.012	6.61	-0.02
6.65	20.00	0.00	2.755	6.67	0.02
6.66	12.00	0.00	2.406	6.70	0.04
6.66	2.00	0.00	1.966	6.62	-0.04
6.67	6.00	0.00	2.144	6.68	0.01

V = instrument output (volts); T = temperature (°C); S = salinity (PSU)

Oxsat(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = (Soc * (V + Voffset)) * exp(Tcor * T) * Oxsat(T, S) * exp(Pcor * P)

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

