

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0514
CALIBRATION DATE: 30-Jul-14

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4630
Boc = 0.0000
Voffset = -0.5058

Tcor = 0.0001
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)
1.27	12.00	0.00	0.871	1.28	0.01
1.28	6.00	0.00	0.823	1.28	0.00
1.28	2.00	0.00	0.789	1.27	-0.01
1.28	20.00	0.00	0.943	1.29	0.00
1.29	30.00	0.00	1.033	1.29	-0.00
1.30	26.00	0.00	0.999	1.30	0.00
4.01	2.00	0.00	1.397	3.99	-0.03
4.02	12.00	0.00	1.665	4.05	0.03
4.04	20.00	0.00	1.883	4.06	0.01
4.05	30.00	0.00	2.157	4.04	-0.00
4.05	6.00	0.00	1.513	4.06	0.01
4.06	26.00	0.00	2.052	4.06	-0.00
6.77	12.00	0.00	2.456	6.81	0.04
6.77	26.00	0.00	3.078	6.76	-0.01
6.79	2.00	0.00	2.012	6.74	-0.04
6.80	20.00	0.00	2.821	6.82	0.01
6.83	30.00	0.00	3.286	6.81	-0.03
6.84	6.00	0.00	2.206	6.86	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

