Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 0910
CALIBRATION DATE: 16-Dec-17

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:		NOMINAL DYNAMIC COEFFICIENTS	
Soc = 0.4872	A = -4.6234e-003	D1 = 1.92634e-4	H1 = -3.300000e-2
Voffset = -0.5010	B = 2.0983e-004	D2 = -4.64803e-2	H2 = 5.00000e+3
Tau20 = 1.51	C = -3.4433e-006		H3 = 1.45000e+3
	E nominal = 0.036		

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.21	20.00	0.00	0.904	1.20	-0.00
1.21	6.00	0.00	0.791	1.21	-0.00
1.21	30.00	0.00	0.989	1.20	-0.01
1.21	26.00	0.00	0.954	1.21	-0.01
1.21	12.00	0.00	0.841	1.21	-0.00
1.22	2.00	0.00	0.761	1.21	-0.00
3.95	30.00	0.00	2.102	3.95	-0.00
3.95	2.00	0.00	1.350	3.97	0.01
3.96	6.00	0.00	1.456	3.97	0.01
3.96	26.00	0.00	1.993	3.97	0.01
3.96	12.00	0.00	1.616	3.97	0.01
3.97	20.00	0.00	1.830	3.97	0.00
6.74	2.00	0.00	1.940	6.73	-0.01
6.75	6.00	0.00	2.125	6.75	-0.00
6.80	12.00	0.00	2.410	6.79	-0.01
6.82	30.00	0.00	3.268	6.82	0.00
6.92	20.00	0.00	2.817	6.92	-0.00
6.97	26.00	0.00	3.121	6.96	-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

Date, Slope (ml/l)
● 04-Dec-15 0.9877
▲ 16-Dec-17 1.0000

POST CRUISE CALIBRATION

1