## Sea-Bird Electronics, Inc.

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## SENSOR SERIAL NUMBER: 0910 CALIBRATION DATE: 14-Jan-12

## SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS	A = -1.2458e - 003	NOMINAL DYNAMIC COEFFICIENTS		
Soc = 0.4088	B = 1.2017e-004	D1 = 1.92634e-4 $H1 = -3.30000e-2$		
Voffset = -0.5100	C = -2.4327e - 006	D2 = -4.64803e-2 $H2 = 5.00000e+3$		
Tau20 = 0.98	E nominal = $0.036$	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)
1.24	6.00	0.04	0.861	1.25	0.00
1.25	12.00	0.04	0.916	1.25	0.00
1.25	20.00	0.04	0.988	1.25	0.00
1.25	2.00	0.04	0.827	1.25	-0.00
1.26	30.00	0.04	1.091	1.26	0.00
1.26	26.00	0.04	1.051	1.26	0.00
4.13	12.00	0.04	1.853	4.13	-0.00
4.13	6.00	0.04	1.675	4.13	-0.00
4.14	30.00	0.04	2.418	4.15	0.00
4.14	20.00	0.04	2.096	4.14	-0.00
4.16	26.00	0.04	2.292	4.16	0.00
4.18	2.00	0.04	1.569	4.18	-0.00
6.64	30.00	0.04	3.563	6.64	-0.00
6.68	26.00	0.04	3.371	6.68	-0.00
6.71	20.00	0.04	3.080	6.71	0.00
6.75	12.00	0.04	2.703	6.75	-0.00
6.82	6.00	0.04	2.434	6.82	0.00
6.91	2.00	0.04	2.261	6.91	0.00

Oxygen (ml/l) = Soc \* (V + Voffset) \*  $(1.0 + A * T + B * T^2 + C * T^3) * OxSol(T,S) * exp(E * P / K)$ V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU] K = temperature [deg K] OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

