Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3200
CALIBRATION DATE: 01-Aug-15

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.5462
Voffset = -0.5086
Tau20 = 2.47

A = -3.5499e-003
B = 1.4816e-004
C = -2.1733e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4
D2 = -4.64803e-2

H1 = -3.300000e-2
H2 = 5.00000e+3
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)
1.13	2.00	0.00	0.723	1.13	-0.00
1.14	5.74	0.00	0.749	1.13	-0.00
1.14	12.00	0.00	0.793	1.14	-0.00
1.15	26.00	0.00	0.890	1.15	0.00
1.15	20.00	0.00	0.850	1.15	-0.00
1.16	30.00	0.00	0.924	1.16	0.00
3.92	2.00	0.00	1.255	3.92	0.00
3.93	5.87	0.00	1.345	3.93	0.00
3.94	12.00	0.00	1.489	3.94	0.00
3.95	20.00	0.00	1.680	3.95	0.00
3.96	26.00	0.00	1.827	3.96	0.00
3.98	30.00	0.00	1.933	3.98	0.00
6.69	20.00	0.00	2.490	6.69	-0.00
6.69	2.00	0.00	1.783	6.69	-0.00
6.71	5.99	0.00	1.942	6.71	0.00
6.72	12.00	0.00	2.182	6.72	-0.00
6.79	29.93	0.00	2.932	6.79	-0.00
6.80	26.00	0.00	2.770	6.80	-0.00

$$\text{Oxygen (ml/l)} = Soc * (V + Voffset) * (1.0 + A * T + B * T^2 + C * T^3) * OxSol(T,S) * \exp(E * P / K)$$

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