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SENSOR SERIAL NUMBER: 0904

SBE 43 OXYGEN CALIBRATION DATA

CALIBRATION DATE: 22-Feb-20

COEFFICIENTS: A = -5.2077e-003 NOMINAL DYNAMIC COEFFICIENTS
Soc = 0.3192 B = 2.2387e-004 D1 = 1.92634e-4 H1 = -3.300000e-2
Voffset = -0.6832 C = -3.0471e-006 D2 = -4.64803e-2 H2 = 5.00000e+3
Tau20 = 1.93 E nominal = 0.036 H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.12	2.00	0.00	1.048	1.12	-0.00
1.12	6.00	0.00	1.095	1.12	-0.00
1.12	12.00	0.00	1.165	1.12	-0.00
1.14	20.00	0.00	1.265	1.14	-0.00
1.14	26.00	0.00	1.337	1.14	-0.00
1.15	30.00	0.00	1.389	1.15	0.00
3.87	6.00	0.00	2.112	3.88	0.01
3.87	12.00	0.00	2.353	3.88	0.00
3.88	26.00	0.00	2.910	3.88	0.00
3.89	20.00	0.00	2.675	3.89	-0.00
3.89	30.00	0.00	3.081	3.90	0.00
4.00	2.00	0.00	1.992	4.01	0.01
6.63	2.00	0.00	2.850	6.63	-0.01
6.66	6.00	0.00	3.135	6.65	-0.00
6.71	12.00	0.00	3.571	6.70	-0.00
6.75	20.00	0.00	4.143	6.75	0.00
6.77	30.00	0.00	4.848	6.77	-0.00
6.79	26.00	0.00	4.578	6.79	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

