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SENSOR SERIAL NUMBER: 0345
CALIBRATION DATE: 05-Dec-23

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.3637
Voffset = -0.6988
Tau20 = 1.22
A = -4.2556e-003
B = 1.6651e-004
C = -2.1930e-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 OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.20	20.00	0.00	1.238	1.20	-0.00
1.21	12.00	0.00	1.152	1.21	-0.00
1.21	26.00	0.00	1.309	1.21	0.00
1.22	6.00	0.00	1.091	1.22	-0.00
1.22	30.00	0.00	1.358	1.22	0.00
1.22	2.00	0.00	1.049	1.22	-0.00
3.98	20.00	0.00	2.483	3.98	-0.00
3.98	12.00	0.00	2.197	3.98	0.00
3.99	6.00	0.00	1.984	3.99	0.00
3.99	26.00	0.00	2.707	4.00	0.00
3.99	2.00	0.00	1.842	3.99	-0.00
4.00	30.00	0.00	2.859	4.00	0.00
6.78	2.00	0.00	2.639	6.78	-0.00
6.82	30.01	0.00	4.378	6.81	-0.00
6.82	6.00	0.00	2.897	6.82	0.00
6.85	12.00	0.00	3.277	6.85	-0.00
6.89	20.00	0.00	3.787	6.89	-0.00
6.94	26.00	0.00	4.186	6.94	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)

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

Residual (ml/l) = instrument oxygen - bath oxygen