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SENSOR SERIAL NUMBER: 3840
CALIBRATION DATE: 29-Nov-23

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.5267
Voffset = -0.5155
Tau20 = 1.19

A = -4.3414e-003
B = 1.6401e-004
C = -2.4060e-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	26.00	0.00	0.938	1.21	0.00
1.21	20.00	0.00	0.891	1.21	0.00
1.21	30.00	0.00	0.973	1.21	0.00
1.21	12.00	0.00	0.831	1.21	-0.00
1.22	6.00	0.00	0.786	1.22	-0.00
1.22	2.00	0.00	0.757	1.22	-0.00
3.96	20.00	0.00	1.748	3.96	0.00
3.97	26.00	0.00	1.905	3.97	0.00
3.97	12.00	0.00	1.550	3.97	0.00
3.98	6.00	0.00	1.400	3.98	0.00
3.98	2.00	0.00	1.302	3.98	-0.00
3.98	30.00	0.00	2.016	3.98	-0.00
6.75	30.00	0.00	3.060	6.75	-0.00
6.77	2.00	0.00	1.855	6.77	0.00
6.79	6.00	0.00	2.027	6.79	0.00
6.81	12.00	0.00	2.289	6.82	0.00
6.85	20.00	0.00	2.645	6.85	-0.00
6.86	26.00	0.00	2.916	6.86	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