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SENSOR SERIAL NUMBER: 1756
CALIBRATION DATE: 27-Mar-25

SBE 63 OXYGEN CALIBRATION DATA

COEFFICIENTS:

A0 = 1.0513e+00 B0 = -2.1946e-01 C0 = 8.7923e-02 E = 1.1000e-02
A1 = -1.5000e-03 B1 = 1.6610e+00 C1 = 3.7125e-03
A2 = 4.4980e-01 C2 = 5.2170e-05

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.777	30.00	0.00	30.63	0.787	0.010
0.809	26.00	0.00	31.33	0.813	0.004
0.866	20.00	0.00	32.35	0.868	0.001
0.948	12.00	0.00	33.80	0.949	0.001
1.058	6.00	0.00	34.77	1.057	-0.001
1.162	2.00	0.00	35.34	1.162	-0.000
2.429	30.00	0.00	22.29	2.435	0.006
2.566	26.00	0.00	22.89	2.567	0.001
2.712	20.00	0.00	24.09	2.709	-0.002
3.223	12.00	0.00	25.12	3.220	-0.003
3.625	6.00	0.00	26.17	3.622	-0.002
3.976	2.00	0.00	26.85	3.970	-0.006
4.039	30.00	0.00	18.35	4.043	0.004
4.292	26.00	0.00	18.84	4.292	-0.000
4.722	20.00	0.00	19.65	4.719	-0.003
5.461	12.00	0.00	20.81	5.460	-0.001
5.689	30.00	0.00	15.89	5.689	-0.000
6.099	26.00	0.00	16.27	6.096	-0.003
6.193	6.00	0.00	21.74	6.193	0.000
6.731	20.00	0.00	16.97	6.724	-0.007
6.799	2.00	0.00	22.39	6.800	0.001
7.774	12.00	0.00	18.03	7.779	0.004
8.824	6.00	0.00	18.89	8.831	0.007
9.306	2.00	0.00	19.82	9.304	-0.001

T = temperature (°C) , P = pressure (dbar), U = Instrument output (µsec)

S_{corr} (salinity correction function) = 1.0 for calibration in DI water

See the user manual for more information on S_{corr} calculation

$V = U / 39.457071$

Oxygen (ml/l) = $\{((A0 + A1 \cdot T + A2 \cdot V^2)/(B0 + B1 \cdot V) - 1.0)/(C0 + C1 \cdot T + C2 \cdot T^2)\} \cdot S_{\text{corr}} \cdot \exp(E \cdot P / (T + 273.15))$

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

