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SENSOR SERIAL NUMBER: 4016 SBE 63 OXYGEN CALIBRATION DATA
CALIBRATION DATE: 15-Feb-25

COEFFICIENTS:

A0 = 1.0513e+000	B0 = -2.3924e-001	C0 = 9.8139e-002	E = 1.1000e-002
A1 = -1.5000e-003	B1 = 1.6728e+000	C1 = 4.1378e-003	
A2 = 4.4466e-001		C2 = 5.7979e-005	

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.718	30.00	0.00	30.64	0.738	0.021
0.751	26.00	0.00	31.30	0.767	0.016
0.818	20.00	0.00	32.24	0.828	0.010
0.908	12.00	0.00	33.66	0.911	0.004
1.032	6.00	0.00	34.54	1.030	-0.002
1.130	2.00	0.00	35.16	1.124	-0.006
2.226	30.00	0.00	22.48	2.231	0.005
2.362	26.00	0.00	23.03	2.364	0.002
2.526	20.00	0.00	24.13	2.526	0.000
3.035	12.00	0.00	25.05	3.033	-0.002
3.446	6.00	0.00	26.02	3.441	-0.006
3.700	30.00	0.00	18.59	3.694	-0.006
3.806	2.00	0.00	26.65	3.797	-0.009
3.947	26.00	0.00	19.04	3.941	-0.006
4.380	20.00	0.00	19.77	4.371	-0.009
5.139	12.00	0.00	20.79	5.133	-0.007
5.191	30.00	0.00	16.16	5.190	-0.000
5.562	26.00	0.00	16.53	5.563	0.002
5.882	6.00	0.00	21.63	5.877	-0.005
6.228	20.00	0.00	17.11	6.232	0.004
6.503	2.00	0.00	22.21	6.496	-0.006
7.320	12.00	0.00	18.04	7.324	0.004
8.360	6.00	0.00	18.82	8.369	0.008
8.868	2.00	0.00	19.69	8.876	0.008

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

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