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SENSOR SERIAL NUMBER: 1753 SBE 63 OXYGEN CALIBRATION DATA
CALIBRATION DATE: 25-Mar-25

COEFFICIENTS:

A0 = 1.0513e+00	B0 = -2.1899e-01	C0 = 8.7980e-02	E = 1.1000e-02
A1 = -1.5000e-03	B1 = 1.6573e+00	C1 = 3.7399e-03	
A2 = 4.4681e-01		C2 = 5.1750e-05	

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.794	30.00	0.00	30.52	0.804	0.010
0.818	26.00	0.00	31.26	0.825	0.007
0.871	20.00	0.00	32.32	0.875	0.004
0.955	12.00	0.00	33.78	0.956	0.001
1.059	6.00	0.00	34.78	1.058	-0.001
1.158	2.00	0.00	35.39	1.157	-0.001
2.421	30.00	0.00	22.33	2.426	0.005
2.544	26.00	0.00	22.96	2.548	0.004
2.691	20.00	0.00	24.16	2.690	-0.000
3.200	12.00	0.00	25.19	3.198	-0.002
3.606	6.00	0.00	26.23	3.600	-0.006
3.954	2.00	0.00	26.93	3.945	-0.009
4.009	30.00	0.00	18.42	4.013	0.004
4.259	26.00	0.00	18.91	4.258	-0.002
4.692	20.00	0.00	19.72	4.686	-0.006
5.418	12.00	0.00	20.88	5.423	0.004
5.617	30.00	0.00	15.99	5.616	-0.001
6.035	26.00	0.00	16.35	6.030	-0.004
6.150	6.00	0.00	21.82	6.150	0.001
6.684	20.00	0.00	17.03	6.681	-0.003
6.763	2.00	0.00	22.46	6.762	-0.002
7.725	12.00	0.00	18.09	7.728	0.003
8.758	6.00	0.00	18.96	8.760	0.002
9.254	2.00	0.00	19.88	9.258	0.004

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