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SENSOR SERIAL NUMBER: 0765 SBE 63 OXYGEN CALIBRATION DATA
CALIBRATION DATE: 12-Oct-19

COEFFICIENTS:

A0 = 1.0513e+000	B0 = -2.4152e-001	C0 = 1.0569e-001	E = 1.1000e-002
A1 = -1.5000e-003	B1 = 1.6018e+000	C1 = 4.5460e-003	
A2 = 3.7287e-001		C2 = 6.3118e-005	

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.710	30.00	0.00	31.14	0.706	-0.004
0.750	26.00	0.00	31.69	0.746	-0.004
0.804	20.00	0.00	32.66	0.800	-0.004
0.882	12.00	0.00	34.06	0.879	-0.003
0.972	6.00	0.00	35.05	0.971	-0.001
1.059	2.00	0.00	35.65	1.059	-0.000
2.163	30.00	0.00	22.89	2.160	-0.002
2.310	26.00	0.00	23.38	2.308	-0.002
2.461	20.00	0.00	24.53	2.457	-0.003
2.962	12.00	0.00	25.44	2.963	0.001
3.347	6.00	0.00	26.46	3.351	0.004
3.595	30.00	0.00	18.92	3.593	-0.002
3.676	2.00	0.00	27.14	3.685	0.008
3.856	26.00	0.00	19.33	3.856	0.000
4.283	20.00	0.00	20.07	4.280	-0.002
5.013	12.00	0.00	21.13	5.019	0.006
5.082	30.00	0.00	16.42	5.083	0.002
5.527	26.00	0.00	16.69	5.533	0.006
5.731	6.00	0.00	22.02	5.733	0.003
6.194	20.00	0.00	17.29	6.190	-0.004
6.317	2.00	0.00	22.65	6.323	0.006
7.231	12.00	0.00	18.28	7.230	-0.001
8.191	6.00	0.00	19.16	8.187	-0.004
8.690	2.00	0.00	20.06	8.681	-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