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SENSOR SERIAL NUMBER: 0765
CALIBRATION DATE: 15-Dec-17

SBE 63 OXYGEN CALIBRATION DATA

COEFFICIENTS:

A0 = 1.0513e+000 B0 = -2.4242e-001 C0 = 1.0460e-001 E = 1.1000e-002
A1 = -1.5000e-003 B1 = 1.6089e+000 C1 = 4.5042e-003
A2 = 3.7882e-001 C2 = 6.1968e-005

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.705	30.00	0.00	31.20	0.702	-0.003
0.736	26.00	0.00	31.81	0.734	-0.002
0.784	20.00	0.00	32.79	0.784	-0.000
0.872	12.00	0.00	34.13	0.870	-0.002
0.983	6.00	0.00	34.99	0.983	-0.000
1.081	2.00	0.00	35.54	1.082	0.001
2.173	30.00	0.00	22.89	2.170	-0.003
2.300	26.00	0.00	23.45	2.298	-0.002
2.460	20.00	0.00	24.54	2.461	0.001
2.965	12.00	0.00	25.47	2.962	-0.003
3.380	6.00	0.00	26.41	3.381	0.001
3.618	30.00	0.00	18.91	3.614	-0.004
3.735	2.00	0.00	27.03	3.740	0.005
3.874	26.00	0.00	19.34	3.871	-0.003
4.291	20.00	0.00	20.07	4.300	0.009
5.048	12.00	0.00	21.12	5.045	-0.003
5.195	30.00	0.00	16.31	5.188	-0.006
5.572	26.00	0.00	16.67	5.575	0.003
5.779	6.00	0.00	21.99	5.776	-0.002
6.184	20.00	0.00	17.31	6.199	0.014
6.405	2.00	0.00	22.56	6.411	0.006
7.263	12.00	0.00	18.28	7.258	-0.005
8.300	6.00	0.00	19.09	8.295	-0.006
8.817	2.00	0.00	19.96	8.815	-0.002

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

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

Date, Slope Correction

