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SENSOR SERIAL NUMBER: 1018
CALIBRATION DATE: 24-Feb-21

SBE 63 OXYGEN CALIBRATION DATA

COEFFICIENTS:

A0 = 1.0513e+000 B0 = -2.3138e-001 C0 = 1.0061e-001 E = 1.1000e-002
A1 = -1.5000e-003 B1 = 1.6295e+000 C1 = 4.3319e-003
A2 = 4.1081e-001 C2 = 5.8090e-005

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.701	30.00	0.00	31.10	0.700	-0.001
0.753	26.00	0.00	31.56	0.751	-0.002
0.813	20.00	0.00	32.45	0.816	0.003
0.901	12.00	0.00	33.85	0.901	-0.000
1.007	6.00	0.00	34.78	1.008	0.002
1.107	2.00	0.00	35.36	1.110	0.003
2.149	30.00	0.00	22.83	2.148	-0.000
2.307	26.00	0.00	23.28	2.306	-0.001
2.489	20.00	0.00	24.29	2.496	0.007
2.994	12.00	0.00	25.24	2.991	-0.003
3.403	6.00	0.00	26.22	3.398	-0.004
3.580	30.00	0.00	18.84	3.576	-0.003
3.760	2.00	0.00	26.85	3.758	-0.003
3.863	26.00	0.00	19.21	3.861	-0.002
4.328	20.00	0.00	19.84	4.339	0.011
5.056	30.00	0.00	16.34	5.050	-0.006
5.075	12.00	0.00	20.92	5.069	-0.006
5.473	26.00	0.00	16.64	5.467	-0.006
5.813	6.00	0.00	21.78	5.806	-0.007
6.189	20.00	0.00	17.14	6.207	0.018
6.432	2.00	0.00	22.37	6.434	0.002
7.268	12.00	0.00	18.10	7.264	-0.003
8.306	6.00	0.00	18.91	8.302	-0.004
8.827	2.00	0.00	19.78	8.833	0.006

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

● 24-Feb-21 1.0000

