SEA-BIRD SCIENTIFIC
Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 2318
CALIBRATION DATE: 21-Aug-19

SBE 63 OXYGEN CALIBRATION DATA

COEFFICIENTS:

A0 = 1.0513e+000	B0 = -2.4246e-001	C0 = 1.0301e-001	E = 1.1000e-002
A1 = -1.5000e-003	B1 = 1.6391e+000	C1 = 4.3798e-003	
A2 = 4.1207e-001		C2 = 6.0449e-005	

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.696	30.00	0.00	31.19	0.693	-0.004
0.729	26.00	0.00	31.79	0.726	-0.003
0.782	20.00	0.00	32.75	0.779	-0.003
0.867	12.00	0.00	34.10	0.866	-0.001
0.952	6.00	0.00	35.11	0.953	0.001
1.039	2.00	0.00	35.71	1.041	0.002
2.148	30.00	0.00	22.84	2.147	-0.001
2.273	26.00	0.00	23.40	2.273	0.000
2.437	20.00	0.00	24.48	2.437	0.000
2.936	12.00	0.00	25.39	2.936	0.000
3.313	6.00	0.00	26.41	3.314	0.001
3.576	30.00	0.00	18.87	3.574	-0.002
3.646	2.00	0.00	27.07	3.645	-0.001
3.814	26.00	0.00	19.33	3.813	-0.001
4.256	20.00	0.00	20.01	4.256	0.000
4.993	12.00	0.00	21.06	4.991	-0.002
5.025	30.00	0.00	16.42	5.027	0.002
5.448	26.00	0.00	16.71	5.451	0.003
5.685	6.00	0.00	21.95	5.689	0.003
6.132	20.00	0.00	17.27	6.129	-0.003
6.275	2.00	0.00	22.56	6.277	0.003
7.160	12.00	0.00	18.24	7.161	0.001
8.176	6.00	0.00	19.04	8.174	-0.001
8.664	2.00	0.00	19.93	8.661	-0.003

T = temperature (°C) , P = pressure (dbar), U = Instrument output (µsec)

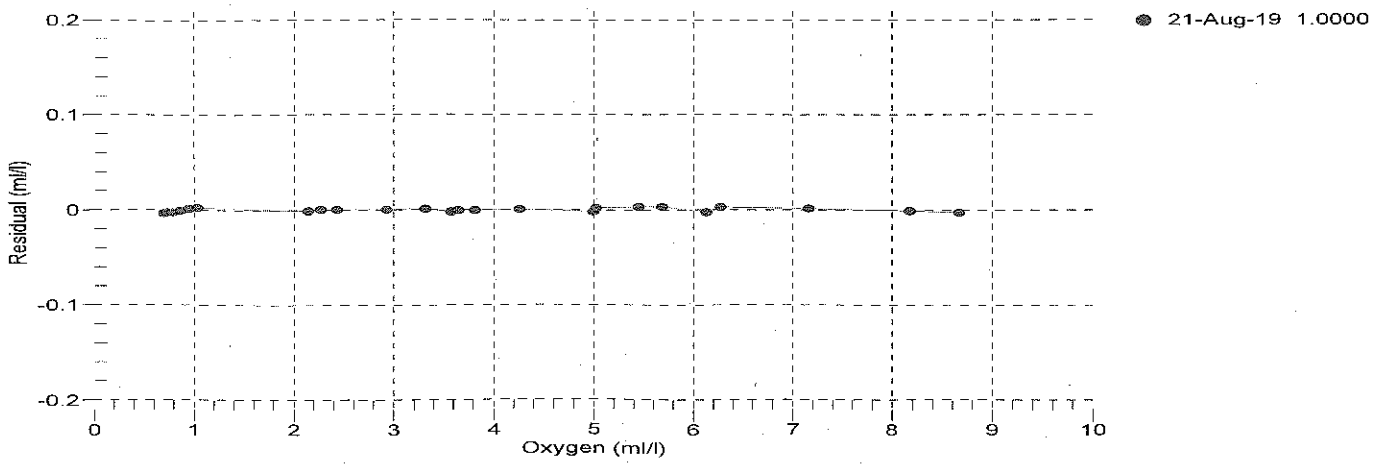
S_{corr} (salinity correction function) = 1.0 for calibration in DI water

See the user manual for more information on S_{corr} calculation

$V = U / 39.457071$

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

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



SEA-BIRD SCIENTIFIC

SBE37-SMP-ODO MicroCAT

Instrument Configuration

Instrument Serial Number:	37-21146
Instrument Firmware Version:	6.1.2
Zero Conductivity Frequency:	2611.77
Communications Format:	RS232
Communications Settings:	9600 baud, 8 Data Bits, No Parity

Installed Devices/Sensors

Data Format	*Measurement*	*Sensor Type*	*Serial Number*	*Rating*
Count	Temperature	Internal	N/A	N/A
Frequency	Conductivity	Internal	N/A	N/A
Count	Pressure Sensor	Kistler	5059699	2000m(2000 dBar)
RS232	Oxygen	SBE 63	63-2320	7000m

Maximum Depth: **2000m**

CAUTION - The maximum deployment depth will be limited by the measurement range of the pressure sensor, if installed, an attached sensor, if installed, or the housing.