



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

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

SENSOR SERIAL NUMBER: 0140
CALIBRATION DATE: 28-Sep-18

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4188
Voffset = -0.7267
Tau20 = 1.31
A = -5.0896e-003
B = 1.7973e-004
C = -2.8461e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4
D2 = -4.64803e-2
H1 = -3.300000e-2
H2 = 5.00000e+3
H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.05	2.00	0.00	0.989	1.05	0.00
1.07	6.00	0.00	1.027	1.07	-0.00
1.08	12.00	0.00	1.082	1.08	-0.00
1.09	20.00	0.00	1.160	1.09	-0.00
1.10	26.00	0.00	1.221	1.10	0.00
1.11	30.00	0.00	1.263	1.11	-0.00
3.80	2.00	0.00	1.673	3.80	0.00
3.81	6.00	0.00	1.797	3.81	0.00
3.83	12.01	0.00	1.988	3.82	-0.00
3.83	20.00	0.00	2.246	3.83	0.00
3.84	26.00	0.00	2.445	3.84	-0.00
3.84	30.00	0.00	2.589	3.85	0.00
6.54	2.00	0.00	2.357	6.54	0.00
6.57	6.00	0.00	2.572	6.56	-0.00
6.58	26.01	0.00	3.670	6.57	-0.00
6.58	30.00	0.00	3.914	6.58	0.00
6.59	12.02	0.00	2.902	6.59	-0.00
6.61	20.00	0.00	3.348	6.62	0.00

V = instrument output (volts); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

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

