



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

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

SENSOR SERIAL NUMBER: 1339
 CALIBRATION DATE: 06-Dec-23

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
 Soc = 0.5889
 Voffset = -0.4793
 Tau20 = 1.31
 A = -5.2550e-003
 B = 1.9189e-004
 C = -2.5862e-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)
1.22	26.00	0.00	0.864	1.22	0.00
1.22	30.00	0.00	0.894	1.22	0.00
1.22	20.00	0.00	0.822	1.22	0.00
1.22	12.00	0.00	0.765	1.22	-0.00
1.24	6.00	0.00	0.727	1.24	-0.00
1.24	2.00	0.00	0.699	1.24	-0.00
3.99	20.00	0.00	1.599	3.99	-0.00
3.99	12.00	0.00	1.416	4.00	0.00
4.00	26.00	0.00	1.743	4.00	0.00
4.00	30.00	0.00	1.839	4.00	0.00
4.00	6.00	0.00	1.280	4.00	-0.00
4.01	2.00	0.00	1.189	4.01	-0.00
6.81	2.00	0.00	1.686	6.81	0.00
6.82	6.00	0.00	1.843	6.82	0.00
6.89	30.00	0.00	2.818	6.89	-0.00
6.91	12.00	0.00	2.099	6.91	-0.00
6.92	20.00	0.00	2.423	6.93	0.00
6.97	26.00	0.00	2.678	6.97	-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

