



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

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

SENSOR SERIAL NUMBER: 3803
CALIBRATION DATE: 06-Mar-19

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:

Soc = 2.8974e-004 (adj)

Foffset = -817.39

Tau20 = 2.00

A = -3.4502e-003

B = 1.5233e-004

C = -2.3434e-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 OX (ml/l)	BATH TEMP (° C)	BATH SAL (PSU)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.05	2.00	0.00	1200.594	1.05	-0.00
1.06	6.00	0.00	1249.656	1.05	-0.00
1.08	12.00	0.00	1332.595	1.08	-0.00
1.10	20.00	0.00	1444.163	1.10	-0.00
1.12	30.00	0.00	1583.733	1.12	0.00
1.12	26.00	0.00	1528.863	1.12	0.00
3.82	2.00	0.00	2212.979	3.82	-0.00
3.83	6.00	0.00	2385.856	3.83	0.00
3.86	12.00	0.00	2658.233	3.86	-0.00
3.88	20.00	0.00	3020.489	3.88	0.00
3.88	30.00	0.00	3477.671	3.89	0.00
3.89	26.00	0.00	3296.730	3.89	0.00
6.62	2.00	0.00	3236.678	6.62	-0.00
6.64	6.00	0.00	3538.160	6.64	0.00
6.67	30.00	0.00	5380.819	6.67	-0.00
6.68	12.00	0.00	4003.865	6.68	-0.00
6.72	20.00	0.00	4630.746	6.72	-0.00
6.75	26.00	0.00	5117.314	6.75	0.00

F = instrument output (Hz); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

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

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

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

