



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

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

SENSOR SERIAL NUMBER: 0086
 CALIBRATION DATE: 15-Feb-19

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:
 Soc = 2.5093e-004
 Foffset = -789.76
 Tau20 = 1.15
 A = -5.1908e-003
 B = 2.4942e-004
 C = -3.5075e-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) |
|----------------|-----------------|----------------|------------------------|--------------------------|-----------------|
| 1.15 | 2.00 | 0.00 | 1269.352 | 1.15 | 0.00 |
| 1.15 | 6.00 | 0.00 | 1329.737 | 1.15 | -0.00 |
| 1.16 | 12.00 | 0.00 | 1420.386 | 1.15 | -0.00 |
| 1.17 | 20.00 | 0.00 | 1543.557 | 1.16 | -0.00 |
| 1.18 | 26.00 | 0.00 | 1641.974 | 1.18 | 0.00 |
| 1.19 | 30.00 | 0.00 | 1710.215 | 1.19 | 0.00 |
| 3.93 | 2.00 | 0.00 | 2423.809 | 3.93 | 0.00 |
| 3.95 | 6.00 | 0.00 | 2638.407 | 3.95 | 0.00 |
| 3.95 | 12.00 | 0.00 | 2950.254 | 3.96 | 0.00 |
| 3.97 | 20.00 | 0.00 | 3361.061 | 3.97 | -0.00 |
| 3.99 | 26.00 | 0.00 | 3671.222 | 3.99 | -0.00 |
| 4.04 | 30.00 | 0.00 | 3912.670 | 4.04 | -0.00 |
| 6.72 | 2.00 | 0.00 | 3583.613 | 6.72 | 0.00 |
| 6.75 | 6.00 | 0.00 | 3947.907 | 6.74 | -0.00 |
| 6.82 | 12.01 | 0.00 | 4513.753 | 6.82 | 0.00 |
| 6.87 | 20.00 | 0.00 | 5233.447 | 6.87 | -0.00 |
| 6.90 | 26.00 | 0.00 | 5772.097 | 6.90 | 0.00 |
| 6.93 | 30.00 | 0.00 | 6153.819 | 6.93 | 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

