



Sea-Bird Scientific  
 13431 NE 20<sup>th</sup> Street  
 Bellevue, WA 98005  
 USA

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

SENSOR SERIAL NUMBER: 3327  
 CALIBRATION DATE: 18-Feb-22

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:  
 Soc = 3.3406e-004  
 Foffset = -837.81  
 Tau20 = 0.96  
 A = -4.7077e-003  
 B = 2.2040e-004  
 C = -3.6392e-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) |
|----------------|-----------------|----------------|------------------------|--------------------------|-----------------|
| 1.13           | 2.00            | 0.00           | 1192.133               | 1.14                     | 0.01            |
| 1.13           | 6.00            | 0.00           | 1237.345               | 1.14                     | 0.00            |
| 1.14           | 12.00           | 0.00           | 1307.107               | 1.15                     | 0.00            |
| 1.15           | 20.00           | 0.00           | 1398.148               | 1.15                     | -0.00           |
| 1.16           | 26.00           | 0.00           | 1473.503               | 1.16                     | -0.00           |
| 1.17           | 30.00           | 0.00           | 1526.089               | 1.17                     | -0.01           |
| 3.91           | 2.00            | 0.00           | 2056.608               | 3.91                     | 0.00            |
| 3.92           | 6.00            | 0.00           | 2212.498               | 3.92                     | -0.00           |
| 3.92           | 12.00           | 0.00           | 2444.750               | 3.92                     | 0.00            |
| 3.93           | 20.00           | 0.00           | 2754.233               | 3.93                     | -0.00           |
| 3.95           | 26.00           | 0.00           | 3000.244               | 3.95                     | -0.00           |
| 3.96           | 30.00           | 0.00           | 3172.898               | 3.96                     | -0.01           |
| 6.71           | 2.00            | 0.00           | 2929.954               | 6.71                     | -0.00           |
| 6.74           | 6.00            | 0.00           | 3202.122               | 6.73                     | -0.00           |
| 6.76           | 12.00           | 0.00           | 3609.451               | 6.77                     | 0.00            |
| 6.82           | 20.00           | 0.00           | 4162.643               | 6.82                     | -0.00           |
| 6.85           | 30.00           | 0.00           | 4883.418               | 6.85                     | 0.00            |
| 6.86           | 26.00           | 0.00           | 4600.751               | 6.87                     | 0.01            |

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 \* T<sup>2</sup> + C \* T<sup>3</sup>) \* Oxsol(T,S) \* exp(E \* P / K)

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

