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SENSOR SERIAL NUMBER: 0703  
CALIBRATION DATE: 14-Oct-22

#### SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:  
Soc = 0.5174  
Voffset = -0.5168  
Tau20 = 1.07  
A = -4.0943e-003  
B = 1.5594e-004  
C = -2.4404e-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<br>OXYGEN (ml/l) | BATH<br>TEMPERATURE (° C) | BATH<br>SALINITY (PSU) | INSTRUMENT<br>OUTPUT (volts) | INSTRUMENT<br>OXYGEN (ml/l) | RESIDUAL<br>(ml/l) |
|-----------------------|---------------------------|------------------------|------------------------------|-----------------------------|--------------------|
| 1.16                  | 12.00                     | 0.00                   | 0.823                        | 1.16                        | -0.00              |
| 1.16                  | 2.00                      | 0.00                   | 0.749                        | 1.15                        | -0.01              |
| 1.16                  | 6.00                      | 0.00                   | 0.779                        | 1.16                        | -0.00              |
| 1.17                  | 30.00                     | 0.00                   | 0.966                        | 1.17                        | 0.00               |
| 1.17                  | 20.00                     | 0.00                   | 0.886                        | 1.17                        | 0.00               |
| 1.17                  | 26.00                     | 0.00                   | 0.934                        | 1.17                        | 0.00               |
| 3.91                  | 2.00                      | 0.00                   | 1.304                        | 3.91                        | -0.00              |
| 3.91                  | 6.00                      | 0.00                   | 1.403                        | 3.92                        | 0.00               |
| 3.92                  | 12.00                     | 0.00                   | 1.554                        | 3.92                        | 0.00               |
| 3.92                  | 30.00                     | 0.00                   | 2.024                        | 3.93                        | 0.00               |
| 3.93                  | 26.00                     | 0.00                   | 1.915                        | 3.93                        | 0.00               |
| 3.93                  | 19.99                     | 0.00                   | 1.759                        | 3.93                        | 0.00               |
| 6.68                  | 2.00                      | 0.00                   | 1.863                        | 6.69                        | 0.00               |
| 6.71                  | 6.00                      | 0.00                   | 2.035                        | 6.71                        | -0.00              |
| 6.75                  | 12.00                     | 0.00                   | 2.301                        | 6.75                        | 0.00               |
| 6.77                  | 30.00                     | 0.00                   | 3.115                        | 6.77                        | -0.00              |
| 6.80                  | 19.90                     | 0.00                   | 2.661                        | 6.80                        | -0.00              |
| 6.82                  | 26.00                     | 0.00                   | 2.945                        | 6.82                        | 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 \* T<sup>2</sup> + C \* T<sup>3</sup>) \* Oxsol(T,S) \* exp(E \* P / K)

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

