Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1875 CALIBRATION DATE: 04-Feb-14

SBE 43 OXYGEN CALIBRATION DATA

| COEFFICIENTS | A = -2.7610e - 003 | NOMINAL DYNAMIC COEFFICIENTS | | |
|---------------------|---------------------|------------------------------------|--|--|
| Soc = 0.4733 | B = 1.7133e-004 | D1 = 1.92634e-4 $H1 = -3.30000e-2$ | | |
| Voffset = -0.4900 | C = -3.0756e - 006 | D2 = -4.64803e-2 $H2 = 5.00000e+3$ | | |
| Tau20 = 1.43 | E nominal = 0.036 | H3 = 1.45000e + 3 | | |

| BATH OX (ml/l) | BATH TEMP ITS-90 | BATH SAL PSU | INSTRUMENT OUTPUT(VOLTS) | INSTRUMENT OXYGEN(ml/l) | RESIDUAL (ml/l) |
|-------------------|---------------------|-----------------|-----------------------------|----------------------------|-----------------|
| 1.25 | 5.80 | 0.00 | 0.796 | 1.25 | 0.00 |
| 1.25 | 2.00 | 0.00 | 0.766 | 1.26 | 0.00 |
| 1.26 | 12.00 | 0.00 | 0.848 | 1.26 | 0.00 |
| 1.28 | 20.00 | 0.00 | 0.921 | 1.28 | -0.00 |
| 1.30 | 25.99 | 0.00 | 0.977 | 1.30 | 0.00 |
| 1.30 | 30.00 | 0.00 | 1.017 | 1.30 | 0.00 |
| 4.00 | 12.00 | 0.00 | 1.627 | 4.00 | -0.00 |
| 4.03 | 2.00 | 0.00 | 1.373 | 4.03 | -0.00 |
| 4.03 | 20.00 | 0.00 | 1.844 | 4.03 | -0.00 |
| 4.04 | 5.85 | 0.00 | 1.477 | 4.04 | -0.00 |
| 4.05 | 26.00 | 0.00 | 2.015 | 4.06 | 0.00 |
| 4.08 | 30.00 | 0.00 | 2.141 | 4.09 | 0.00 |
| 6.80 | 12.00 | 0.00 | 2.423 | 6.80 | 0.01 |
| 6.81 | 5.88 | 0.00 | 2.153 | 6.80 | -0.00 |
| 6.82 | 30.00 | 0.00 | 3.246 | 6.82 | -0.00 |
| 6.83 | 2.00 | 0.00 | 1.989 | 6.83 | 0.00 |
| 6.83 | 26.00 | 0.00 | 3.059 | 6.83 | 0.00 |
| 6.87 | 20.00 | 0.00 | 2.796 | 6.86 | -0.00 |

Oxygen (ml/l) = Soc * (V + Voffset) * $(1.0 + A * T + B * T^2 + C * T^3) * OxSol(T,S) * exp(E * P / K)$ V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU], K = temperature [Kelvin] OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

