

SEA-BIRD ELECTRONICS, INC.

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

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

SENSOR SERIAL NUMBER: 1266
CALIBRATION DATE: 12-Feb-11p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5085

Voffset = -0.5360

Tau20 = 1.20

A = -1.1295e-003

B = 7.5990e-005

C = -1.8677e-006

E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4 H1 = -3.30000e-2

D2 = -4.64803e-2 H2 = 5.00000e+3

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	2.00	0.01	0.790	1.25	0.00
1.25	6.00	0.02	0.820	1.25	-0.00
1.25	12.00	0.02	0.865	1.25	-0.00
1.26	30.00	0.03	1.012	1.26	-0.00
1.26	20.00	0.02	0.928	1.26	-0.00
1.27	26.00	0.02	0.979	1.26	-0.00
4.14	30.00	0.03	2.100	4.14	0.00
4.19	26.00	0.02	2.004	4.19	0.00
4.19	20.00	0.02	1.841	4.19	-0.00
4.19	6.00	0.02	1.487	4.19	-0.00
4.19	12.00	0.02	1.636	4.19	-0.00
4.19	2.00	0.01	1.391	4.20	0.00
6.58	20.00	0.02	2.585	6.58	-0.00
6.59	12.00	0.02	2.265	6.59	0.00
6.61	30.00	0.03	3.031	6.60	-0.00
6.62	6.00	0.02	2.039	6.62	0.00
6.63	2.00	0.01	1.886	6.63	-0.00
6.64	26.00	0.02	2.861	6.64	0.00

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * OxSol(T,S) * exp(E * P / K)

V = voltage output from SBE43, T = temperature [deg C], S = salinity [PSU] K = temperature [deg K]

OxSol(T,S) = oxygen saturation [ml/l], P = pressure [dbar], Residual = instrument oxygen - bath oxygen

Date, Delta Ox (ml/l)

