

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: 18-Feb-10p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.5594

Voffset = -0.5085

Tau20 = 1.39

A = 1.1237e-002

B = -1.1845e-003

C = 3.4015e-005

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)
1.18	6.00	0.00	0.753	1.23	0.05
1.18	2.00	0.00	0.728	1.21	0.03
1.19	12.00	0.00	0.784	1.19	0.00
1.21	20.00	0.00	0.836	1.19	-0.02
1.22	26.00	0.00	0.860	1.22	-0.00
1.23	30.00	0.00	0.826	1.12	-0.11
4.09	6.00	0.00	1.334	4.15	0.06
4.09	2.00	0.00	1.248	4.08	-0.01
4.10	12.00	0.00	1.452	4.07	-0.03
4.12	20.00	0.00	1.621	4.05	-0.07
4.12	26.00	0.00	1.722	4.20	0.08
4.14	30.00	0.00	1.684	4.14	-0.00
6.54	30.00	0.00	2.342	6.45	-0.09
6.71	26.00	0.00	2.494	6.87	0.16
6.75	20.00	0.00	2.336	6.65	-0.09
6.78	12.00	0.00	2.074	6.76	-0.03
6.89	6.00	0.00	1.896	6.98	0.08
6.96	2.00	0.00	1.761	6.90	-0.06

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)

