

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: 0719
CALIBRATION DATE: 12-Nov-13

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 1.3357e-04 (adj)

Foffset = -3280.18

Tau20 = 3.83

A = -3.3050e-003

B = 1.6220e-004

C = -2.8559e-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

Note: Soc adjustment from single-point measurement 14-Nov-13

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.28	6.00	0.00	4417.98	1.28	-0.00
1.28	12.00	0.00	4608.32	1.28	0.00
1.28	2.00	0.00	4294.68	1.27	-0.00
1.29	20.00	0.00	4881.39	1.30	0.01
1.30	26.00	0.00	5090.01	1.31	0.01
1.30	30.00	0.00	5241.37	1.31	0.01
3.99	2.00	0.00	6444.25	3.98	-0.01
3.99	6.00	0.00	6832.95	3.98	-0.00
4.01	12.00	0.00	7434.60	4.00	-0.00
4.03	20.00	0.00	8248.20	4.03	-0.00
4.05	26.00	0.00	8889.33	4.05	0.00
4.06	30.00	0.00	9343.79	4.06	0.00
6.77	2.00	0.00	8670.11	6.77	0.01
6.77	6.00	0.00	9323.54	6.77	0.01
6.79	12.00	0.00	10326.15	6.79	0.00
6.80	30.00	0.00	13416.55	6.79	-0.01
6.80	26.00	0.00	12710.23	6.81	0.01
6.80	20.00	0.00	11665.53	6.80	-0.00

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

F = frequency output from SBE43I, 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

