

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0463
CALIBRATION DATE: 05-Mar-08p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3453
Voffset = -0.4727
Tau20 = 1.12

A = -4.9133e-004
B = 2.0481e-004
C = -4.0945e-006
E nominal = 0.036

BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.29	30.00	0.01	1.143	1.30	0.00
1.29	26.00	0.01	1.100	1.30	0.00
1.30	20.00	0.01	1.041	1.30	0.00
1.30	12.00	0.01	0.965	1.30	0.00
1.31	6.00	0.00	0.908	1.31	0.00
1.32	2.00	0.00	0.868	1.32	0.00
4.19	26.00	0.01	2.503	4.19	-0.00
4.21	20.00	0.01	2.317	4.21	-0.00
4.24	30.00	0.01	2.665	4.24	0.00
4.24	12.00	0.01	2.071	4.23	-0.01
4.24	6.00	0.00	1.875	4.23	-0.01
4.25	2.00	0.00	1.744	4.25	-0.00
6.64	30.00	0.01	3.901	6.63	-0.00
6.66	26.00	0.01	3.700	6.67	0.00
6.70	20.00	0.01	3.405	6.69	-0.00
6.77	12.00	0.01	3.033	6.78	0.00
6.84	6.00	0.00	2.741	6.85	0.00
6.86	2.00	0.00	2.526	6.86	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)

