

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1329
CALIBRATION DATE: 12-Feb-11p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.4484

Voffset = -0.4991

Tau20 = 1.37

A = -2.2168e-003

B = 1.5127e-004

C = -2.4814e-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	0.789	1.25	0.00
1.25	6.00	0.02	0.823	1.25	0.00
1.25	12.00	0.02	0.873	1.25	-0.00
1.26	30.00	0.03	1.029	1.26	-0.00
1.26	20.00	0.02	0.943	1.26	-0.00
1.27	26.00	0.02	0.996	1.27	-0.00
4.14	30.00	0.03	2.240	4.14	0.00
4.19	26.00	0.02	2.143	4.19	-0.00
4.19	20.00	0.02	1.973	4.19	-0.00
4.19	6.00	0.02	1.581	4.19	-0.00
4.19	12.00	0.02	1.750	4.19	-0.00
4.19	2.00	0.01	1.469	4.19	-0.00
6.58	20.00	0.02	2.816	6.59	0.00
6.59	12.00	0.02	2.466	6.59	0.01
6.61	30.00	0.03	3.277	6.61	-0.00
6.62	6.00	0.02	2.209	6.62	-0.00
6.63	2.00	0.01	2.033	6.63	0.00
6.64	26.00	0.02	3.104	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)

