

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0130
CALIBRATION DATE: 15-Apr-09P

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 2.3280e-004 (DI) A = -1.6379e-003
Foffset = -802.84 B = 2.1241e-004
Tau20 = 1.07 C = -3.5029e-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(Hz)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.22	2.00	0.00	1343.75	1.22	-0.00
1.22	6.00	0.00	1405.81	1.22	0.00
1.23	12.00	0.01	1498.50	1.23	0.00
1.23	20.00	0.01	1614.63	1.23	0.00
1.23	26.00	0.01	1701.05	1.23	0.00
1.23	30.00	0.01	1760.81	1.24	0.00
4.09	26.00	0.01	3779.76	4.09	-0.00
4.09	30.00	0.01	3974.18	4.09	0.00
4.10	20.00	0.01	3507.46	4.10	0.00
4.11	2.00	0.00	2626.99	4.10	-0.01
4.11	6.00	0.00	2832.98	4.10	-0.00
4.11	12.00	0.01	3131.35	4.11	-0.00
6.47	30.00	0.01	5816.34	6.47	-0.00
6.61	26.00	0.01	5613.10	6.61	0.00
6.61	20.00	0.01	5158.79	6.61	-0.00
6.66	12.00	0.01	4579.55	6.66	0.00
6.71	6.00	0.00	4123.14	6.71	0.00
6.78	2.00	0.00	3821.14	6.78	0.01

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 SBE43F, 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

