

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1628
CALIBRATION DATE: 07-Apr-09p

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 0.3605

Voffset = -0.4701

Tau20 = 1.08

A = -1.9161e-003

B = 1.8527e-004

C = -3.5774e-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

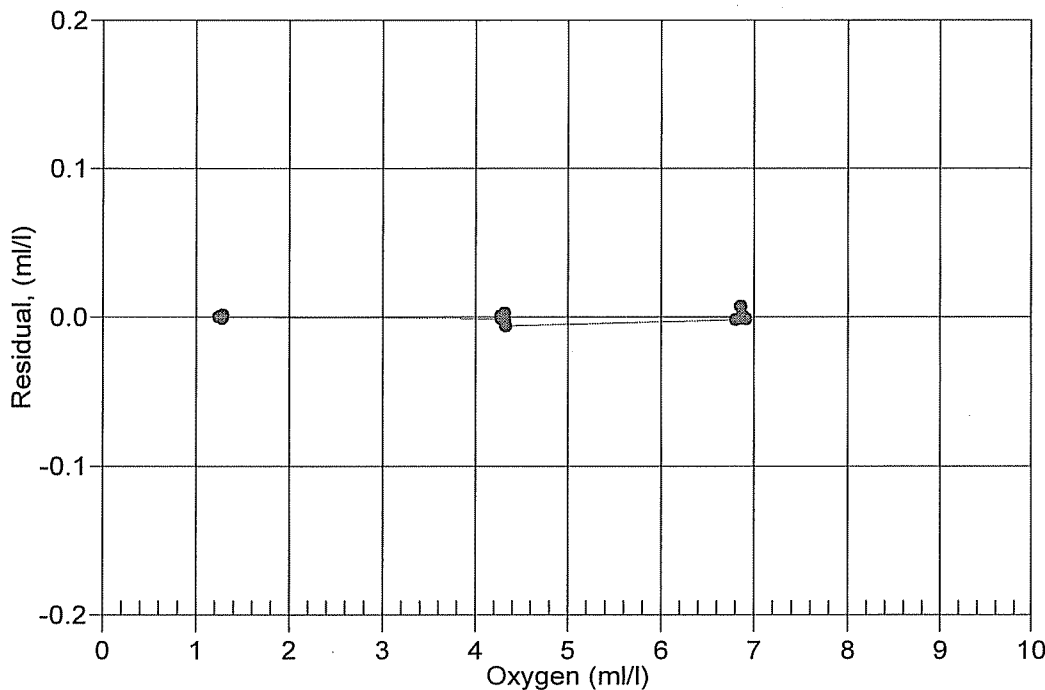
BATH OX (ml/l)	BATH TEMP ITS-90	BATH SAL PSU	INSTRUMENT OUTPUT(VOLTS)	INSTRUMENT OXYGEN(ml/l)	RESIDUAL (ml/l)
1.24	2.00	0.00	0.828	1.24	0.00
1.26	6.00	0.00	0.874	1.26	0.00
1.26	12.00	0.01	0.937	1.27	0.00
1.28	20.00	0.01	1.022	1.28	-0.00
1.29	30.00	0.01	1.138	1.29	0.00
1.29	26.00	0.01	1.092	1.29	0.00
4.27	30.00	0.01	2.683	4.27	-0.00
4.28	2.00	0.00	1.701	4.28	0.00
4.29	6.00	0.00	1.845	4.29	-0.00
4.31	12.00	0.01	2.060	4.31	0.00
4.31	26.00	0.01	2.550	4.31	-0.00
4.32	20.00	0.01	2.338	4.31	-0.01
6.81	30.00	0.01	3.995	6.81	-0.00
6.86	26.00	0.01	3.782	6.86	0.01
6.86	12.00	0.01	3.001	6.86	-0.00
6.87	6.00	0.00	2.671	6.87	0.00
6.90	20.00	0.01	3.455	6.90	-0.00
6.92	2.00	0.00	2.458	6.91	-0.00

$$\text{Oxygen (ml/l)} = \text{Soc} * (\text{V} + \text{Voffset}) * (1.0 + \text{A} * \text{T} + \text{B} * \text{T}^2 + \text{C} * \text{T}^3) * \text{OxSol}(\text{T}, \text{S}) * \exp(\text{E} * \text{P} / \text{K})$$

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)





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SBE Pressure Test Certificate

Test Date: 3/20/2009 Description SBE-43 DO Sensor

Job Number: 53669

Customer Name Nat Park Service - Alaska

SBE Sensor Information:

Model Number: 43
Serial Number: 1628

Pressure Sensor Information:

Sensor Type: None
Sensor Serial Number: None
Sensor Rating: 0

Pressure Test Protocol:

Low Pressure Test: 50 PSI Held For 15 Minutes

High Pressure Test: 800 PSI Held For 30 Minutes

Passed Test:

Tested By: jt

