

SEA-BIRD ELECTRONICS, INC.

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QC
121
ACC

SENSOR SERIAL NUMBER: 0194
CALIBRATION DATE: 01-Apr-10p

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 2.8145e-004 (DI)
Foffset = -830.03
Tau20 = 1.55

A = -2.0633e-003
B = 1.4470e-004
C = -2.5439e-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)
1.20	12.00	0.00	1399.99	1.20	0.00
1.21	2.00	0.00	1278.58	1.22	0.00
1.22	6.00	0.00	1332.58	1.22	0.01
1.22	26.00	0.00	1597.53	1.23	0.00
1.23	20.00	0.00	1517.87	1.23	0.00
1.24	30.00	0.00	1663.64	1.24	0.00
4.11	12.00	0.00	2777.03	4.10	-0.01
4.11	6.00	0.00	2513.21	4.09	-0.01
4.12	20.00	0.00	3134.63	4.11	-0.01
4.13	26.00	0.00	3415.02	4.13	-0.00
4.14	30.00	0.00	3609.51	4.14	0.00
4.17	2.00	0.00	2359.56	4.15	-0.01
6.63	30.00	0.00	5284.54	6.63	-0.00
6.74	26.00	0.00	5051.68	6.74	-0.00
6.80	20.00	0.00	4646.31	6.81	0.00
6.87	12.00	0.00	4096.38	6.88	0.00
7.01	6.00	0.00	3716.83	7.02	0.01
7.11	2.00	0.00	3452.85	7.12	0.01

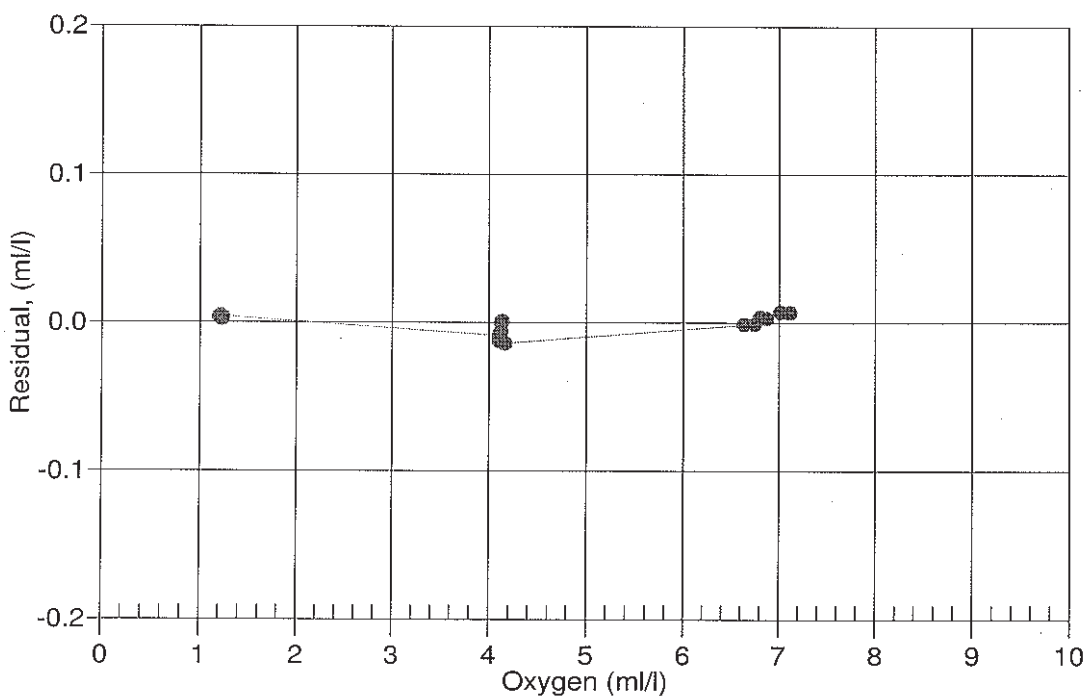
$$\text{Oxygen (ml/l)} = \text{Soc} * (\text{F} + \text{Foffset}) * (1.0 + \text{A} * \text{T} + \text{B} * \text{T}^2 + \text{C} * \text{T}^3) * \text{OxSol}(\text{T},\text{S}) * \exp(\text{E} * \text{P} / \text{K})$$

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

Date, Delta Ox (ml/l)





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SBE Pressure Test Certificate

Test Date: 12/28/2009 Description SBE-43F DO Sensor

Job Number: 59069PA Customer Name Lockheed/Polaris

SBE Sensor Information:

Model Number: 43F

Serial Number: 0194

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: gw

