

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0171
CALIBRATION DATE: 26-Jul-12

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 3.4592e-004 (DI)

Foffset = -805.86

Tau20 = 1.29

A = -3.5401e-003

B = 1.5960e-004

C = -2.6433e-006

E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4 H1 = -3.30000e-2

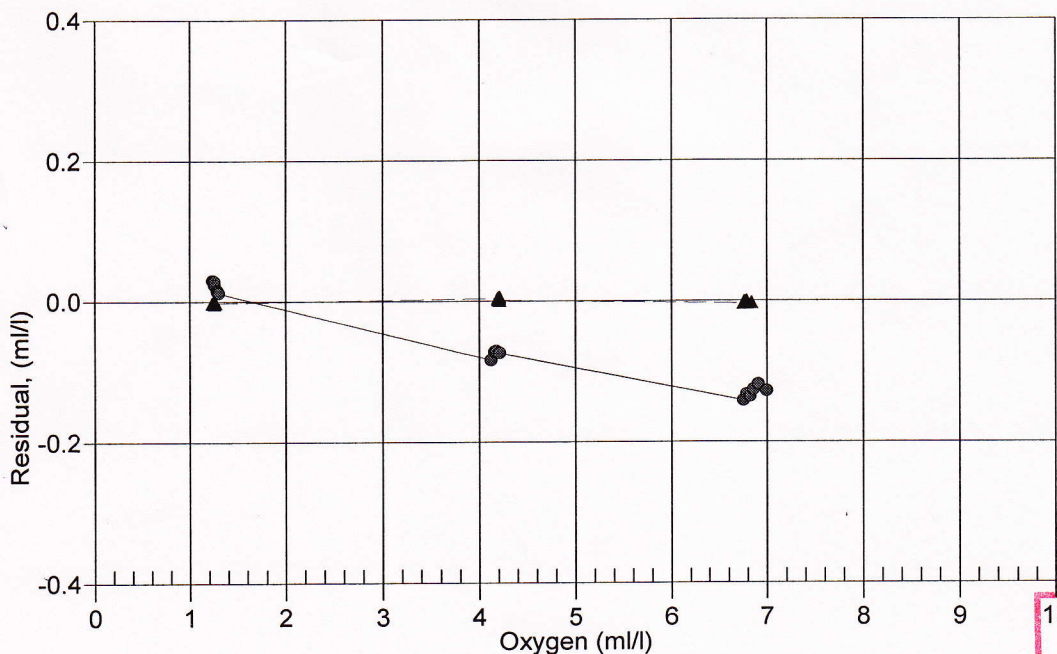
D2 = -4.64803e-2 H2 = 5.00000e+3

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)
1.23	2.00	0.05	1175.26	1.23	-0.00
1.24	6.00	0.05	1221.97	1.23	-0.00
1.24	12.00	0.04	1294.93	1.24	0.00
1.25	20.00	0.04	1390.67	1.25	-0.00
1.26	26.00	0.04	1465.11	1.25	-0.00
1.26	30.00	0.04	1518.90	1.26	-0.00
4.19	6.00	0.05	2220.88	4.19	0.00
4.19	26.00	0.04	3010.87	4.20	0.00
4.20	20.00	0.04	2772.64	4.21	0.00
4.20	2.00	0.05	2072.04	4.21	0.01
4.21	12.00	0.04	2460.80	4.21	0.01
4.21	30.00	0.04	3186.86	4.21	0.00
6.75	20.00	0.04	3961.60	6.75	-0.00
6.76	30.00	0.04	4630.32	6.76	-0.00
6.78	26.00	0.04	4367.99	6.78	0.00
6.78	12.00	0.04	3470.12	6.78	-0.00
6.79	6.00	0.05	3096.33	6.79	-0.00
6.84	2.00	0.05	2861.05	6.83	-0.00

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

Date, Delta Ox (ml/l)



● 07-Sep-11 1.0181
▲ 26-Jul-12 1.0000

**POST CRUISE
CALIBRATION**



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

Service

Report

RMA Number

70210

Customer Information:

Company The University of Hawaii

Date 8/16/2012

Contact Jennie Mowatt

PO Number credit card

Serial Number 43F0171

Model Number SBE 43F

Services Requested:

1. Evaluate/Repair Instrumentation.
2. Perform Routine Calibration Service.

Problems Found:

Services Performed:

1. Performed initial diagnostic evaluation.
2. Performed "Post Cruise" calibration of the oxygen sensor.
3. Performed full diagnostic evaluation.

Special Notes: