

Sea-Bird Electronics, Inc.

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

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SENSOR SERIAL NUMBER: 0221
CALIBRATION DATE: 11-Nov-11

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS

Soc = 3.0691e-004 (DI)
Foffset = -827.66
Tau20 = 1.69

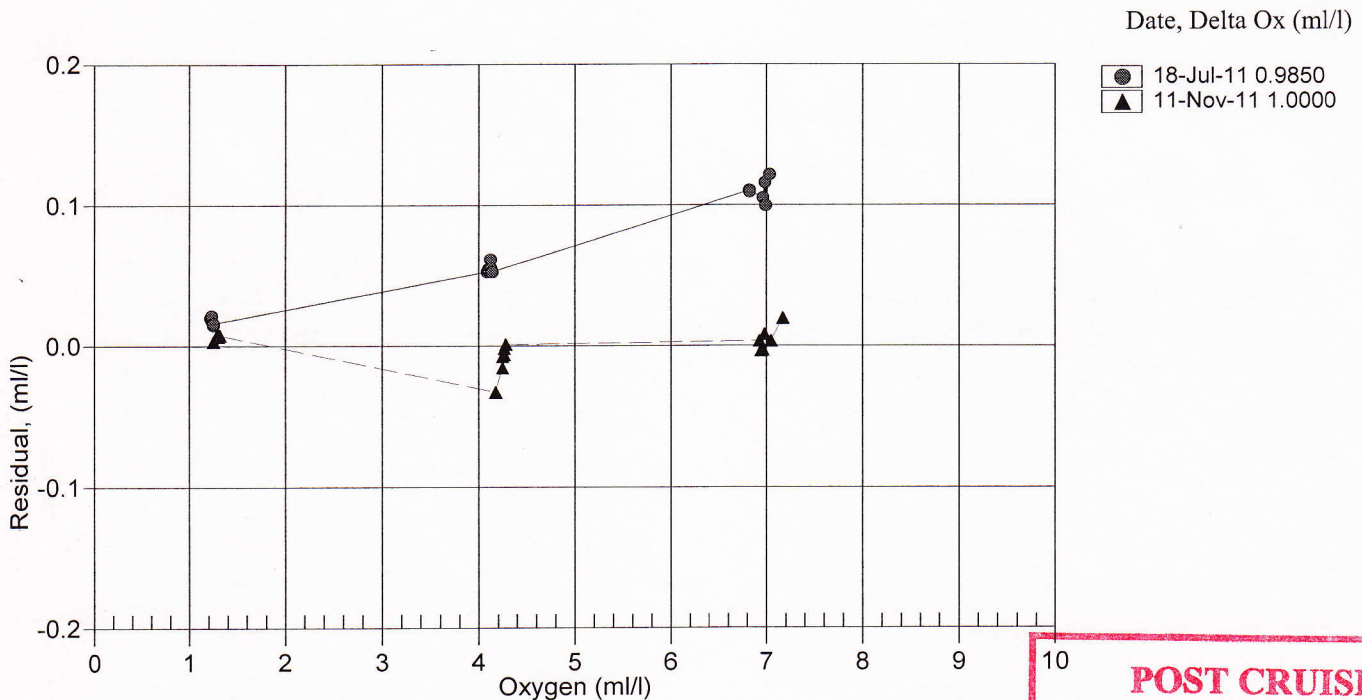
A = -2.8417e-003
B = 1.2600e-004
C = -1.5069e-006
E nominal = 0.036

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)
1.25	2.00	0.10	1250.59	1.25	0.00
1.29	6.00	0.09	1318.29	1.29	0.01
1.29	12.00	0.08	1399.22	1.30	0.01
1.30	20.00	0.08	1509.91	1.31	0.01
1.31	26.00	0.08	1592.47	1.31	0.01
1.31	30.00	0.08	1650.70	1.32	0.01
4.17	2.00	0.10	2227.68	4.13	-0.03
4.24	6.00	0.09	2430.87	4.23	-0.02
4.25	12.00	0.09	2695.05	4.24	-0.01
4.26	20.00	0.08	3048.91	4.26	-0.01
4.26	26.00	0.08	3312.64	4.26	-0.00
4.28	30.00	0.08	3499.55	4.28	0.00
6.92	26.00	0.08	4866.75	6.93	0.00
6.94	30.00	0.08	5155.75	6.93	-0.00
6.96	20.00	0.08	4457.46	6.95	-0.00
6.97	12.00	0.09	3903.49	6.98	0.01
7.04	6.00	0.09	3498.20	7.04	0.00
7.16	2.00	0.10	3260.39	7.18	0.02

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



**POST CRUISE
CALIBRATION**

SBE SEA-BIRD ELECTRONICS, INC.

13431 NE 20th St. Bellevue, Washington 98005 USA



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

Service

Report

RMA Number

66754

Customer Information:

Company U HAWAII/OCEAN

Date 12/13/2011

Contact Jennie Mowatt

PO Number Credit Card

Serial Number 43F0221

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: