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Pressure Test Certificate

Test Date: 2017-03-14

Description: SBE-43 DO Sensor

Sensor Information:

Model Number: SBE-43

Serial Number: 3553

Pressure Test Protocol:

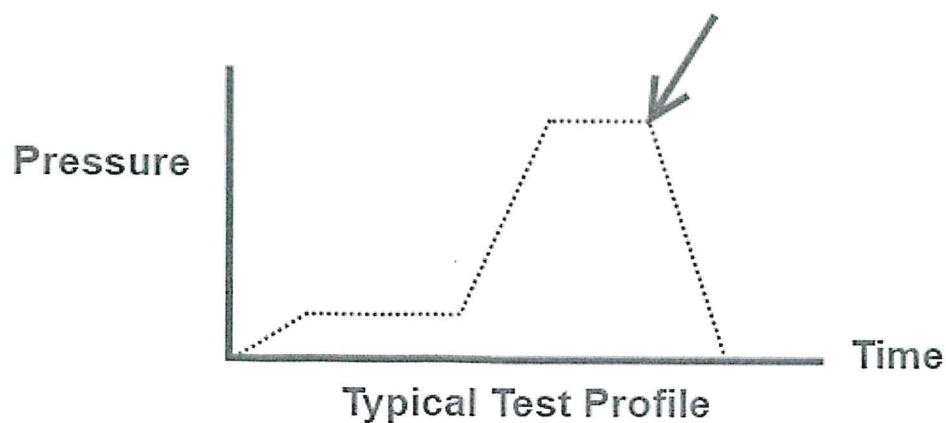
Low Pressure Test: 40 PSI Held For: 15 Minutes

High Pressure Test: 10000 PSI Held For: 15 Minutes

Passed Test: True

Tested By: RH

High pressure is generally equal to the maximum depth rating of the instrument





SEA-BIRD
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SENSOR SERIAL NUMBER: 3553
CALIBRATION DATE: 19-Jul-17

SBE 43 OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 0.4667
Voffset = -0.5100
Tau20 = 1.44
A = -3.9375e-003
B = 1.9024e-004
C = -2.9919e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4 H1 = -3.300000e-2
D2 = -4.64803e-2 H2 = 5.00000e+3
H3 = 1.45000e+3

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (volts)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.11	6.00	0.00	0.787	1.11	-0.00
1.12	2.00	0.00	0.758	1.11	-0.00
1.13	12.00	0.00	0.840	1.13	-0.00
1.15	20.00	0.00	0.908	1.15	0.00
1.15	26.00	0.00	0.956	1.15	0.00
1.16	30.00	0.00	0.995	1.16	0.00
3.85	6.00	0.00	1.474	3.85	-0.00
3.89	2.00	0.00	1.378	3.89	0.00
3.89	12.00	0.00	1.645	3.89	0.00
3.90	20.00	0.00	1.860	3.90	0.00
3.90	26.00	0.00	2.023	3.90	0.00
3.91	30.00	0.00	2.141	3.92	0.00
6.64	6.00	0.00	2.172	6.64	-0.00
6.65	12.00	0.00	2.447	6.65	-0.00
6.66	2.00	0.00	1.996	6.66	0.00
6.69	20.00	0.00	2.825	6.69	-0.00
6.71	30.00	0.00	3.304	6.71	0.00
6.73	26.00	0.00	3.118	6.73	-0.00

V = instrument output (volts); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (V + Voffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

Residual (ml/l) = instrument oxygen - bath oxygen

