



SEA-BIRD  
SCIENTIFIC

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## Pressure Test Certificate

Test Date: 2019-08-21

Description: SBE-37 Microcat

### Sensor Information:

Model Number: SBE-37

Serial Number: 21146

### Pressure Test Protocol:

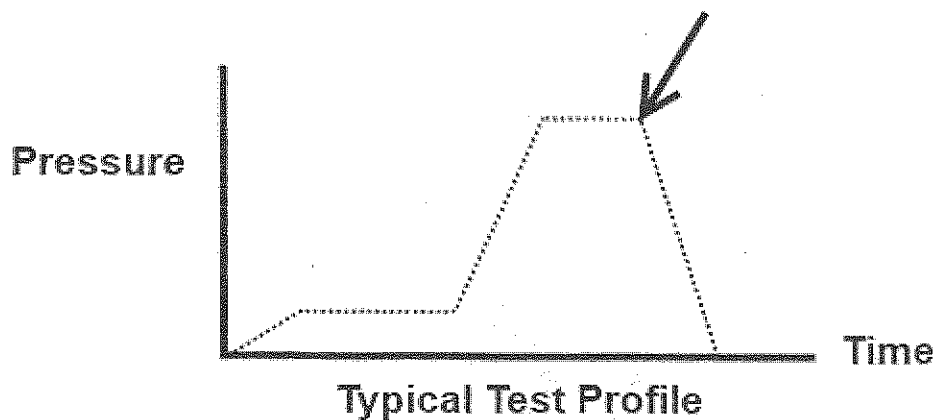
Low Pressure Test: 40 PSI Held For: 15 Minutes

High Pressure Test: 2900 PSI Held For: 15 Minutes

Passed Test: True

Tested By: db

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





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SENSOR SERIAL NUMBER: 21146  
CALIBRATION DATE: 22-Aug-19

SBE 37 V2 PRESSURE CALIBRATION DATA  
2901 psia S/N 5059699

#### COEFFICIENTS:

PA0 =	3.773409e-001	PTCA0 =	5.233178e+005
PA1 =	9.127258e-003	PTCA1 =	-6.749704e+000
PA2 =	3.816526e-011	PTCA2 =	3.700895e-001
PTEMPA0 =	-9.410318e+001	PTCB0 =	1.024660e+002
PTEMPA1 =	3.944904e-002	PTCB1 =	-5.666133e-003
PTEMPA2 =	1.221360e-006	PTCB2 =	0.000000e+000

#### PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (counts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (counts)	INSTRUMENT OUTPUT (counts)
14.65	524921.8	2732.0	14.69	0.00	32.50	2941	525127.37
591.08	587961.1	2732.7	590.94	-0.00	29.00	2866	525073.56
1168.20	651034.8	2733.5	1167.82	-0.01	24.00	2759	525008.83
1738.88	711947.2	2734.2	1725.23	-0.47	18.50	2639	524958.85
2322.75	777217.3	2735.1	2322.83	0.00	15.00	2562	524938.17
2899.87	840193.1	2735.9	2899.73	-0.00	4.50	2331	524933.28
2322.75	777225.2	2735.7	2322.90	0.01	1.00	2254	524951.35
1745.54	714179.1	2735.7	1745.66	0.00	TEMPERATURE (°C) SPAN		
1168.36	651105.0	2736.0	1168.46	0.00			
591.15	587999.3	2736.2	591.28	0.00			
14.65	524923.1	2736.5	14.68	0.00	-5.50		102.50
					34.49		102.27

y = thermistor output (counts)

t = PTEMPA0 + PTEMPA1 \* y + PTEMPA2 \* y<sup>2</sup>

x = instrument output - PTCA0 - PTCA1 \* t - PTCA2 \* t<sup>2</sup>

n = x \* PTCB0 / (PTCB0 + PTCB1 \* t + PTCB2 \* t<sup>2</sup>)

pressure (PSIA) = PA0 + PA1 \* n + PA2 \* n<sup>2</sup>

Residual (%FSR) = (computed pressure - true pressure) \* 100 / Full Scale Range

Date, Offset (%FSR)

● 22-Aug-19 -0.00

