

The Ten Minute Test

Test detailed in IGN 4-01-03: A5, Clause 4—Main Renewal Test (10 minute test)

How Does it Work?

The 10 minute test is devised for situations where a very short test time is required. It is suitable for the testing of polyethylene pipes laid with the pipe-bursting technique, where the water supply needs to be reconnected as quickly as possible to minimise inconvenience to householders and businesses.



Rather than measuring the pressure loss within the pipeline over an hour period, the 10 minute test maintains the pressure for the 10 minute duration. A specialist pump with a pre-set regulating valve adds the necessary amount of water to the pipeline to keep it at system test pressure (STP). The amount of water added is recorded to indicate the pressure changes within the pipeline. The joints must also be visually inspected for leakage during the ten minute test period.

Equipment



Test Pumps

Developed by Ant Hire, this lightweight pump has been designed especially for the 10 minute test. It is powered by a Honda 4 stroke petrol engine and is fitted with a water meter to record the flow of water entering the pipe during pressurisation. A special pressure regulator stabilizes the test pressure to within 0.05 bar, regardless of the volume of water entering the pipe during the test period.

Data Loggers

Unlike standard data loggers, Ant Hire's in-house designed data loggers provide all of the following data for this test type:

- ⇒ *Pressure* — resolution to 0.008 bar
- ⇒ *Water volume* — resolution to 0.1 litre
- ⇒ *Temperature* — resolution to 0.1°C
- ⇒ *Test Location* — GPS co-ordinates to within approximately 5m



The use of GPS technology makes it quick and simple to get a complete picture of the pipework being tested, and allows the section of the pipeline to which the data relates to be easily pinpointed.

Ant Hire Solutions

With 18 years of experience, we have built a solid reputation for the work we do to assist water companies, drainage contractors and civil engineers to overcome challenges, reduce workloads and increase profits.

Our dedication to first class service, research and development has resulted in some truly exceptional products and services, including our Pressure Testing division and Vertform, a unique manhole creation system. We also provide top quality drainage equipment from manufacturers such as Electro Scan, IBAK and IMS Robotics.

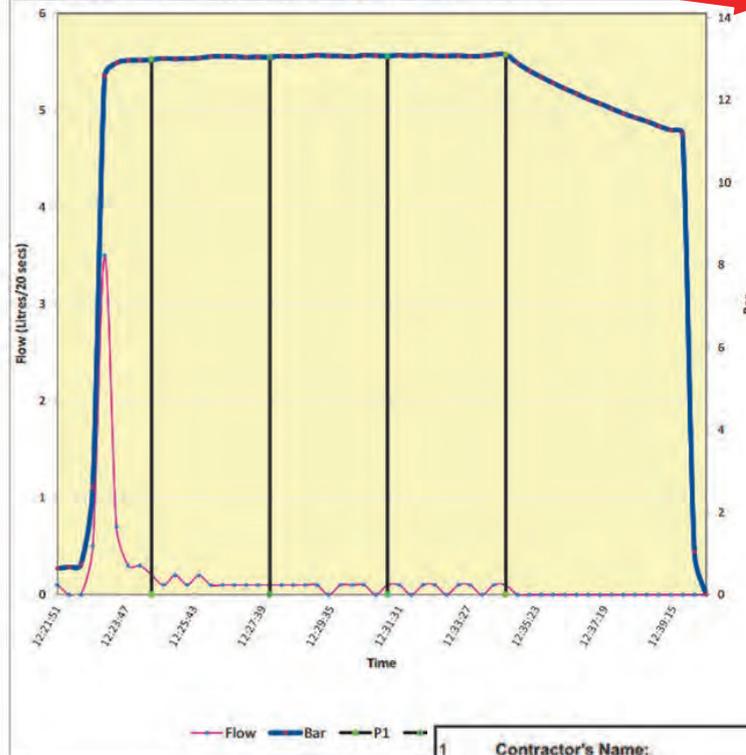
**Ant Hire
Solutions**

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The Results

Ten Minute Test For 20 upper Street Ballyhaise 6-7-12 Test H20

Google Map Link: <http://maps.google.com/maps?q=54.02.8465°N, 7.19.0173°W>



Google Maps link pinpoints test location

Detailed results fulfil industry requirements

Pressure Testing

Ant Hire's Pressure Testing division offer a range of different test for a variety of situations and requirements.

The results factor in the pipe material, temperature, diameter, length and other variables that can affect test results, with experienced analysts to ensure the correct interpretation of the data.

Knowledgeable technicians are available throughout the process to offer advice and guidance.

Accessing Results

Test results are available to download from our secure website as soon as the test is complete.

The data is historically stored for your convenience.

Data Interpretation

Polyethylene pipes expand when under pressure, so pressure loss does not necessarily mean a leaking pipeline. The 10 minute test results take the initial expansion of the polyethylene into account. In a successful test, the water flow from the pump should decrease as the test progresses.

1	Contractor's Name:	Example (CASH)		
2	Location:	20 upper Street Ballyhaise		
3	Coordinates:	54 02.8465° N, 7 19.0173° W		
4	Customer's Job Ref:	H20		
5	Mobile Number:	0123 456789		
6	Test Number:	Example		
7	Test Date:	06/07/2012		
8	Time Started (GMT):	12:21:51		
9	Retest:	No		
10	Pipe Details:			
10.1	Pipe Material:	HPPE		
10.2	Pipe O.D.(mm):	125		
10.3	Pipe Rating (bar):	SDR11		
10.4	Length (metres):	60		
10.5	Test Pressure (bar):	12		
10.6	Services Connected:	No		
11	Pressurised against:			
11.1	Valve:	Yes		
11.2	Hydrant:	Yes		
11.3	End Plate:	No		
11.4	End Cap:	No		
11.5	Squeeze Off:	Yes		
11.6	Pipeline Pr-Pressurised:	Yes		
12	Test results:			
		P1-P2	P2-P3	P3-P4
12.1	Time (minutes)	3.33	3.33	3.33
12.2	Average pressure (bar)	13.04	13.08	13.08
12.3	Flow litres per unit of time	1.20	0.80	0.70
13	Inspection Remarks:	No visual leaks		
TEST SATISFACTORY				

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