

How Hernon Municipal Engineering achieved WIS compliance with our pipeline pressure testing equipment.

Hernon Municipal Engineering faced ongoing challenges when conducting pipeline pressure testing at their Blackburn Meadows facility. After weeks of failed attempts and with no clear insight as to the underlying problem, they turned to us. Leveraging the expertise of our in-house specialists, we equipped them with the right tools and dedicated support, enabling them to resolve their issues and achieve a successful outcome.

- Over 5,000 litres of water saved each time a repeat test is avoided
- Stopping failed tests prevents repeated 5-hour relaxation delays.
- 0% — Safe and successful test delivery at 0% air content.
- Another 560m of compliant, leak-free pipeline installed
- Time and cost savings due to reduced hire period.

With AMP8's requirements to cut leakage by a further 17%*, the need to pressure test new and rehabilitated pipelines to ensure they are leak free before commissioning has never been so important.

Having recently laid a new 560m stretch of pipeline, Hernon Municipal Engineering set about sourcing the equipment to conduct their Type II Hydrostatic PE pressure tests from their incumbent supplier.

Challenges

Over the course of three weeks and having conducted in the region of thirty tests, Hernon Municipal Engineering faced nothing but repeated test failures. And with every failed test adding avoidable cost and delay, there seemed no end in sight. With every unsuccessful attempt, frustration grew as the team struggled to understand why the system wouldn't pressurise correctly or deliver a positive result.

Despite repeated efforts, the customer lacked access to accurate test data or supporting information, making it impossible to diagnose the issue or determine the right course of action. The incumbent supplier was unable to offer meaningful guidance, leaving the customer uncertain, out of options, and facing increasing delays.

To make matters worse, each failed test consumed significant volumes of water (over 5,000 litres per test), compounding the environmental impact and operational cost of the ongoing problem.



Our equipment and services supplied at a glance

- Bluetooth data logger
- SmartSite.live app - providing safety and compliance
- Pressure testing pump - ensuring correct flow and pressure
- Ancillary products - providing easy to use set up

> "After weeks of failed tests and mounting frustration, Sunbelt helped us understand exactly what was going wrong. Their advice, equipment and on-site support made the difference — we achieved a compliant pressure test first time, with clear data and total confidence in the result. Further to this we were able to complete additional pressure tests without on-site guidance."

Jamie Chappell
Site Supervisor, Hernon Municipal Engineering

Solution

After exhausting all options with their existing provider, Hernon Municipal Engineering turned to our expert team for support. Following a brief discussion, it became immediately evident that several critical improvements were needed and that our pressure testing equipment and SmartSite.live app could provide the complete solution.

One of the first issues identified was the lack of pipeline swabbing. The incumbent supplier had not provided any instruction about the importance of swabbing the pipeline prior to testing, nor did they suggest this could be a contributing factor in the repeated test failures. Our pipeline specialists explained that swabbing is a vital step in the pressure testing process as it removes trapped air, which, if left in the pipeline, can almost certainly cause the test to fail. Importantly, the SmartSite.live app not only incorporates this requirement into its workflow but actively reminds users to complete the swabbing process before testing begins and provides evidence the process has been completed.

The SmartSite.live app also displays a live air content reading, a feature not commonly available in other pressure testing apps. This real-time insight ensures the pipeline is pressurised and tested safely and compliantly, significantly reducing the risk of a failed test and saving time and money in the process.

Outside of the air content issue, our team also identified that the pressure testing pump provided by the incumbent supplier was not fit for purpose. A pump that cannot deliver the correct flow rate (litres per minute) will struggle to pressurise the pipeline efficiently, and in some cases, not at all, leading to inaccurate results and test failures. The correct pump flow rate depends on the pipe's diameter and length, and this can be easily calculated within the SmartSite.live app.

Result

Our expert industry knowledge enabled us to swiftly identify the root cause of the customer's challenge and recommend the most appropriate solution for their specific application.

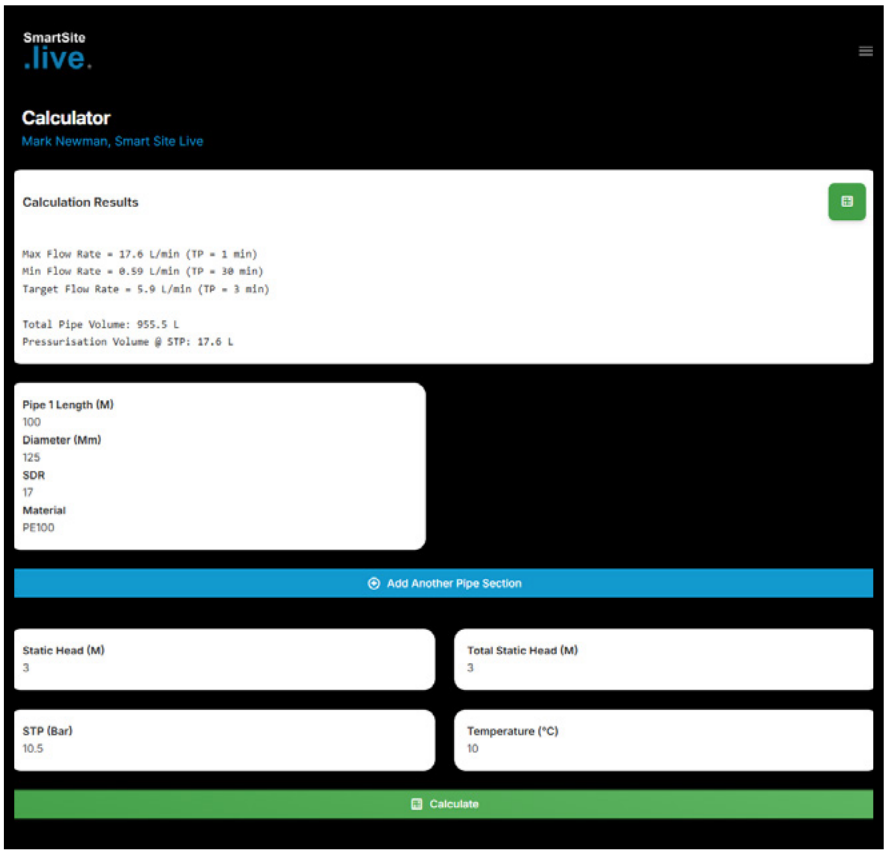
The equipment was promptly delivered to site by one of our engineers, who supported the customer through the initial testing phase. This resulted in a WIS 4-01-03 compliant pressure test on the first attempt with instant on-site confirmation of success via the app. The detailed test data and certification are also accessible in the app or via the SmartSite.live dashboard.

As a result of the successful test, the customer off-hired their incumbent supplier's equipment and has since made us their preferred supplier for pressure testing solutions.

* Source: Ofwat

> "This project was about stepping in, asking the right questions and applying proven best practice. By combining the correct equipment with expert guidance and real-time data through SmartSite.live, we removed uncertainty, reduced waste and helped the customer achieve WIS compliance quickly and safely."

Lee Gallagher
National Business Development Manager - Utilities - Sunbelt Rentals



Expert advice

Correct kit

First-time compliance

Leave the how to us.