



Report 12th January 2015

Client: Wiltshire SP2

Water meter details

| | | | | | | | | | |
|-----------------------------------|-----------|---|-------|--|--------|-------------------|---------|--|-------------|
| Size (mm) | 15-28 | ✓ | 32-50 | | 75-100 | | 125-200 | | Above 200mm |
| Serial number | 12M112345 | | | | | | | | |
| Meter Reading (after leak repair) | 12950.180 | | | | Day: | 12th January 2015 | | | |

Repair Activities

To locate the leak on the supply pipework to the client's property, a trial hole was excavated at the back of the meter to locate and access the 32mm MDPE pipe. This was cut into and the full length of the 120m trace wire inserted. The route of the trace wire was verified using a CAT & Genny, and marked in blue spray paint. The route differs to that of the construction plans obtained. With the full route of the pipework marked, the trace wire was withdrawn and the pipework reconnected. The pipework was flushed through using a drain valve in the plant room.

A second trial hole was then excavated at a suitable point mid-way along the length of the pipework, which found water approximately 300mm under the surface of the ground. Further digging showed clear water flowing from one side of the excavation, so the hole was extended another metre. The water was found to be draining away down a cut off piece of 50mm MDPE yellow gas pipe located just above the leaking connector (Philmac compression fitting).

Once the excavation was cleared out, the water supply was isolated for the leaking connector to be inspected. The connector was very loose and pulled out easily. Upon closer inspection, the connector was found to have one gripper (white plastic ring with small 'teeth') inserted backwards. The pipe ends were also cut too short to provide sufficient length for the connector to grip onto.

A small piece of 32mm MDPE and two new connectors installed to provide a repair. With the water back on, the pipework was again flushed through in the plant room and the meter checked, which was found stationary indicating no further leaks.

The excavation was then backfilled and reinstated back to its original condition, and the meter read following the resolution of the water leak – reading 12950m³.

Photographs



Traced pipework near Costa



Traced pipework between Costa & McDonalds (adj. BT box)



Water found under surface of ground



Incorrectly inserted gripper ring



Correctly inserted gripper ring



Completed repair



Pipe ends cut too short



Location of repair



Area reinstated



Water meter after repair

Recommendations: - The contractor who installed the water supply pipe is clearly at fault, the pipe end is cut too short, the gripper ring is incorrectly inserted and this has been leaking since day one.

The meter reading 12,950m³ @ £52,965, the restaurant over the period should have used no more than 2,000m³ therefore water charge excess 10,950m³ at £44,785 loss plus the leak detection and repairs costs brings the total negligence / poor workmanship costs to £47,769.