

London Leak Specialist

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Client Withheld
Property Withheld (North London, N11)
Inspection date 2026-10-08

Sample report. Client, address and contact details have been removed. Photos are watermarked and shown at reduced size.

Leak Detection Report – Findings, Investigation and Recommendations

Reason for Attendance

We were called to the property following reports of significant water ingress, damp staining and water damage affecting various areas of the property, including the living room and adjoining kitchen areas.

There was also evidence of dampness and water damage around the washing machine and surrounding internal walls. Prior to our attendance, the washing machine and its associated plumbing had been considered as a possible source of the problem, and previous efforts had been made to identify and address what was believed to potentially be a leak or condensation issue associated with the washing machine cupboard.

The purpose of our attendance was to carry out a comprehensive **Trace and Access leak detection investigation** to identify the source of the water ingress and establish the extent and distribution of the associated moisture.

The investigation was undertaken using all relevant detection methods considered appropriate, including:

- Visual inspection.
- Moisture mapping.
- Hot and cold water pressure testing.
- Tracer gas leak detection.
- Thermal imaging.
- Endoscopic camera inspection where access permitted.
- Tracer dye testing.
- Inspection and tracing of accessible plumbing and drainage.
- Investigation of accessible areas around kitchen electrical installations.
- Isolation testing of individual sections of the water system.
- Post-repair pressure testing.

Initial Visual Inspection

A thorough visual inspection was carried out throughout the affected areas.

Particular attention was given to the kitchen, washing machine area, kitchen sink, adjoining walls, flooring, skirting and areas showing visible signs of dampness or water damage.

The washing machine was inspected, including the visible inlet connection, isolation valve and waste pipework.

There was no obvious indication that the washing machine itself was leaking. The visible waste pipework showed no obvious signs of damage, splitting, disconnection or failure.

The pipework associated with the washing machine was traced as far as reasonably accessible.

The adjoining bathroom plumbing and drainage areas were also inspected for any indication of leakage or previous water escape.

No obvious active leak was identified from the washing machine itself or its visible waste connection.

This was significant as the washing machine area had previously been considered a possible source of the dampness and water damage.

Moisture Mapping

Moisture mapping was carried out throughout the affected areas to establish the distribution and extent of moisture within the property.

Elevated moisture readings were identified predominantly in areas where visible water damage and damp staining were already present.

Affected areas included:

- Living room wall.
- Kitchen area beneath the sink.
- Rear kitchen wall.
- Skirting along the rear kitchen wall.
- Areas behind and around the food cupboard.
- Areas beneath the floor.
- Areas extending towards the opposite side of the affected section.
- Areas around and behind the washing machine.
- Internal wall areas immediately behind the washing machine.
- Minor moisture readings to sections of the ceiling.

The moisture distribution indicated that water had migrated beyond the immediate location of the eventual source and had travelled through concealed building materials, floor construction, wall cavities and other available pathways.

The extent of the moisture damage was considerably greater than would have been apparent from the visible signs alone.

Hot and Cold Water Pressure Testing

Pressure testing was carried out on both the hot and cold water supplies as part of the investigation.

During the **initial pressure test, a pressure drop was recorded on the cold-water circuit.**

This established that there was a loss of water from the cold-water system and indicated the presence of a leak or loss point requiring further investigation.

The hot-water circuit was also tested and did not demonstrate a significant pressure loss.

Further isolation testing was therefore undertaken on the cold-water system in order to establish which component or section of the system was responsible for the pressure loss.

Isolation Testing and Confirmation of Leak Source

The washing machine isolation valve, located beneath the kitchen sink, was isolated from the cold-water circuit.

The cold-water pressure test was then repeated with the valve isolated.

Following isolation of the washing machine valve, **the previously recorded pressure drop was no longer present.**

The cold-water circuit subsequently held pressure during the repeat test.

This provided a direct diagnostic indication that the washing machine isolation valve was responsible for the pressure loss identified during the initial test.

The valve was then inspected and was found to be slowly dripping.

The combination of:

- An initial pressure loss on the cold-water circuit;
- Isolation of the washing machine valve;
- The pressure loss stopping when the valve was isolated;
- Physical confirmation of a slow drip from the valve; and
- Successful pressure testing following replacement,

provides confirmation that the washing machine isolation valve was the source of the identified cold-water leak.

Tracer Gas Investigation

Tracer gas testing was subsequently carried out to investigate the possibility of any additional concealed leak within pressurised pipework that could not be identified visually.

The relevant pipework was tested and monitored for any reduction in pressure or indication of tracer gas escaping from concealed pipework.

No significant pressure loss or tracer gas escape was identified from other concealed sections of pressurised pipework.

Accordingly, no separate concealed pinhole or failed section of pressurised hot or cold-water pipework was identified through the tracer gas investigation.

The tracer gas investigation therefore did not identify an additional concealed pressurised-water leak separate from the washing machine isolation valve.

Thermal Imaging and Endoscopic Inspection

Thermal imaging was used where appropriate to assist with identifying abnormal temperature patterns associated with water migration and areas of concealed moisture.

An endoscopic camera was also used to inspect concealed and otherwise inaccessible areas without unnecessary opening-up of the building fabric.

The images obtained during the endoscopic inspection provided further evidence of the source and pathway of the water escape.

The endoscopic camera images consistently identified the area surrounding the washing machine isolation valve beneath the kitchen sink as the source of the slow water escape. The images showed evidence consistent with moisture/water escaping from the valve and the surrounding area, supporting the findings obtained through the pressure and isolation testing.

The endoscopic findings therefore provide additional visual confirmation that the washing machine isolation valve was the source of the identified leak and were consistent with the pressure testing sequence, whereby the initial cold-water pressure loss ceased when the valve was isolated.

The combined evidence from the endoscopic inspection, visual inspection, pressure testing, isolation testing and subsequent successful post-repair pressure test provides a clear basis for identifying the washing machine isolation valve as the source of the water escape.

Investigation Behind Kitchen Electrical Areas

Further inspection was undertaken around the kitchen, including accessible areas behind electrical sockets and surrounding areas.

This was undertaken to establish whether there was evidence of water migration through or behind the kitchen wall and to investigate the extent of the water migration in areas where electrical installations had been affected.

The investigation established that water had migrated through concealed areas of the building and had travelled beyond the immediate location of the leaking valve.

The water had followed available pathways within the building construction, including areas around the floor, skirting, walls and kitchen units.

The fact that water had reached areas associated with the electrical installation was also significant and demonstrates the extent to which the water had migrated through otherwise concealed areas.

Leak Identified – Washing Machine Isolation Valve

The active source of water escape was identified as the **washing machine isolation valve located beneath the kitchen sink.**

The valve was found to be slowly dripping.

Although the rate of leakage was relatively minor at the time of inspection, a small continuous leak operating over an extended period can result in a substantial volume of water escaping.

Due to the location of the valve beneath the kitchen sink and within a concealed area, the leak was not readily visible during normal occupation of the property.

A slow leak of this nature can remain undetected for a considerable period because it does not necessarily produce obvious flooding, visible running water or an immediate indication of failure.

The evidence obtained during the pressure and isolation testing confirms that this valve was responsible for the loss of water from the cold-water circuit.

Extent and Pattern of Water Damage

The resulting water damage was found to extend considerably beyond the immediate location of the leaking valve.

Water migration and elevated moisture were identified across and around areas including:

- The skirting along the rear kitchen wall.
- Behind the food cupboard.
- Beneath the floor.
- Towards the opposite side of the affected area.
- Around and beneath the washing machine.
- Internal walls immediately behind the washing machine.
- Other concealed areas within the floor and wall construction.

The pattern of damage is consistent with water escaping slowly from the valve and subsequently migrating through concealed building materials and voids.

The water did not remain confined to the area immediately beneath the sink.

Instead, it travelled through the building construction, following available pathways and resulting in damage to areas that would not necessarily have been visible during a normal visual inspection.

This includes concealed moisture damage behind finishes, beneath flooring and within wall/floor interfaces.

Previous Washing Machine/Damp Issue

Prior to the present investigation, the occupants had identified damage and dampness around the washing machine area several months before our attendance, shortly before the summer period.

At that time, the occupants reasonably believed that the issue may have been associated with the washing machine itself, a washing machine leak or condensation.

Efforts had therefore previously been made to identify and address what was believed to be a possible washing machine-related leak or condensation issue.

Our investigation established that the **washing machine itself was not the source of the identified water escape**.

The actual source was the isolation valve located beneath the kitchen sink.

The distinction is important because the leaking valve was concealed and was not located within the immediately visible washing machine area.

There were no obvious signs at the earlier stage that would reasonably have indicated that water was escaping from the concealed valve beneath the kitchen sink.

Concealed and Slow Nature of the Leak

The characteristics and location of the leak are consistent with a **slow, innocuous and concealed water escape**.

The valve was positioned beneath the sink and was not readily visible during normal use of the property.

The leak did not present as a sudden or substantial escape of water. Instead, it was a slow drip capable of continuing for an extended period.

Water from such a leak can migrate through concealed building materials, voids, floor construction, wall cavities and other pathways without producing immediate or obvious visible signs.

In this case, the damage extended along the skirting of the rear kitchen wall, behind the food cupboard, beneath the floor and towards the opposite side of the affected area, including internal walls immediately behind the washing machine.

This explains why the ultimate extent of the damage was significantly greater than the visible signs initially suggested.

Consideration of the Delay in Identifying the Leak

The occupants had previously observed damage around the washing machine area several months before our attendance.

However, based on the findings of our investigation, the actual source of the water escape was concealed beneath the kitchen sink and was not the washing machine itself.

There were no obvious signs at the time that would have reasonably indicated that a separate concealed leak was occurring from the isolation valve.

The slow rate of leakage and its concealed location meant that the source was not readily identifiable through normal observation.

The subsequent extent of the damage is therefore consistent with a slow leak remaining concealed over an extended period, allowing moisture to migrate through the building construction and accumulate in areas that were not readily visible.

The findings do not indicate that the occupants were presented with an obvious major water escape that would necessarily have allowed the underlying source to be identified at an earlier stage.

Repair Carried Out

The defective washing machine isolation valve was replaced.

Following replacement, the cold-water supply was reinstated and the system was subjected to a further pressure test.

The system held pressure following the repair, with **no further pressure loss identified**.

This provides further confirmation that the identified isolation valve was the source of the cold-water pressure loss.

Drainage Consideration

As part of the investigation, the drainage system was also considered and tracer dye testing was undertaken/considered where relevant.

It should be noted that if coloured dye subsequently becomes visible on the flooring, around the affected areas, or appears following the use of sinks, appliances or other sanitary appliances, this may indicate a separate drainage-related leak or failure.

Drainage leaks can occur intermittently, particularly when appliances, sinks, baths or other sanitary appliances are discharged.

Therefore, the absence of visible leakage during a static inspection cannot completely exclude an intermittent drainage leak.

The occupants should monitor the affected areas following our attendance for any appearance of coloured dye, fresh water staining or renewed moisture.

If any such signs are identified, further investigation may be required.

Recommendation – Professional Drying and Moisture Remediation

Given the extent of the moisture migration identified during the investigation, we recommend that the property's insurer **appoint or authorise a professional water-damage restoration and drying contractor before significant building or reinstatement works commence**.

The affected areas should be professionally assessed using appropriate moisture measurement equipment and, where necessary, drying equipment should be installed to remove residual moisture from:

- Flooring and subfloor areas.
- Walls and wall cavities where accessible.
- Skirting.
- Kitchen units and concealed areas.
- Areas behind the washing machine.
- Other affected building materials.

This is particularly important because visible surfaces may appear substantially dry while moisture remains trapped within concealed construction.

We therefore recommend that the insurer considers arranging and/or covering professional drying and moisture remediation as part of the water-damage claim and that the affected areas are appropriately dried before replacement flooring, skirting, wall finishes, cupboards or other reinstatement works are undertaken.

Conclusion

A comprehensive **Trace and Access leak detection investigation** was undertaken using the relevant detection methods available and appropriate to the circumstances.

The investigation included:

- Full visual inspection.
- Inspection of the washing machine and associated pipework.
- Inspection of the washing machine waste pipe.
- Inspection and tracing of accessible pipework.
- Inspection of adjoining bathroom plumbing and drainage.
- Moisture mapping.
- Hot-water pressure testing.
- Cold-water pressure testing.
- Isolation testing of the cold-water system.
- Tracer gas leak detection.
- Thermal imaging.
- Endoscopic camera inspection where accessible.
- Tracer dye investigation.
- Investigation of accessible areas behind kitchen electrical sockets.
- Inspection of the kitchen sink and washing machine connection.
- Post-repair pressure testing.

The **initial cold-water pressure test identified a pressure drop.**

Further isolation testing established that when the washing machine isolation valve beneath the kitchen sink was isolated, the cold-water circuit was retested and **the pressure drop was no longer present.**

The valve was physically inspected and was found to be slowly dripping.

The defective valve was subsequently replaced and the cold-water system was tested again. Following replacement, the system held pressure with no further pressure loss.

The pressure testing, isolation testing, physical inspection and successful post-repair pressure test therefore provide confirmation that the **washing machine isolation valve was the source of the identified cold-water leak.**

No separate concealed leak was identified from the pressurised hot or cold-water pipework, and the tracer gas investigation did not identify an additional concealed pinhole or significant loss.

The washing machine itself was not identified as the source of the water escape.

The leak was slow and concealed beneath the kitchen sink. Due to its location and relatively low rate of water escape, it was not readily apparent during normal occupation of the property.

The resulting water migrated through concealed areas of the building, including along the skirting of the rear kitchen wall, behind the food cupboard, beneath the floor, towards the opposite side of the affected area and into internal wall areas immediately behind the washing machine.

The extent and distribution of the damage are consistent with a slow leak operating over an extended period and water subsequently migrating through concealed floor and wall construction.

The occupants had previously observed damage around the washing machine area several months before our attendance and had reasonably considered the washing machine or condensation to be a possible cause. The investigation has established that the washing machine itself was not responsible and that the actual source was concealed beneath the kitchen sink.

Given the concealed location, slow rate of leakage and lack of obvious visible indicators at the earlier stage, the underlying source would not necessarily have been apparent to the occupants before the specialist Trace and Access investigation.

The defective valve has now been replaced and the cold-water system has been confirmed to be holding pressure.

Due to the significant extent of concealed moisture identified, we recommend that the insurer arranges or authorises **professional drying and moisture remediation before any substantial building or reinstatement works are undertaken.**

The affected areas should continue to be monitored for any renewed signs of water ingress. If coloured dye, fresh water staining or renewed moisture subsequently appears, particularly around the flooring or affected areas following discharge from appliances or sanitary fittings, further investigation may be required to establish whether an intermittent drainage leak is also present.

Photographs



Photo 1: Corroded back box of the wet socket that first raised the alarm



Photo 2: Tracer dye run through the kitchen sink



Photo 3: Pressure gauge during the cold-water test



Photo 4: Salt and paint damage along the rear kitchen skirting

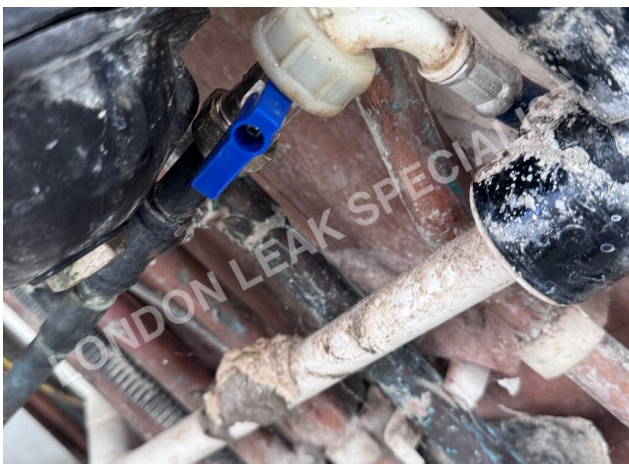


Photo 5: Pipework beneath the kitchen sink where the valve sits



Photo 6: The defective valve after removal