



## CASE STUDY

# LANGDALE AIR VALVE SERVICE



Build up of grease, making the air valve inoperable

Locals in Langdale in the Lake District had reported discharge and bubbles coming from pipework in a nearby Lake. This raised concerns about the risk of contamination affecting the water supply. Glenfield Invicta were called to inspect the nearby Water Treatment Works and operability of the site's 5 air valves, which play a vital role in managing pressure within the water system.

### Project Assessment

Upon inspection, Glenfield Invicta's service team discovered each air valve was heavily impacted by a mass build-up of grease, moss, and leaves. This accumulation had rendered the valves inoperable, and the floats within each unit were entirely blocked by moss and other debris.



Contents of the air valve

These blockages prevented the air valves from functioning effectively, compromising their ability to release air pressure safely and potentially polluting the water.



Internal float of the air valve with build up

### Project Assessment

The Glenfield Invicta team began by dismantling each of the air valves, providing a full clean of all components to remove the layers of grease, moss, and other obstructions. This comprehensive cleaning allowed the valves to be restored to their original condition and ensured that all functionality was brought back to a high standard.



Following the cleaning, the team replaced the old, worn seals and fitted each valve with new floats to prevent future issues with blockages. Once the components were reassembled, the valves were recommissioned, ensuring that they would function smoothly and reliably for many years to come.

### Outcome

The servicing resulted in a complete restoration of each air valve, returning the system to optimal functionality and reliability. By addressing potential issues before they could lead to costly repairs or further operational impacts, Glenfield Invicta not only safeguarded the infrastructure but also reassured the customer about the long-term operability of their system.



Seating mechanism packed with grease



Cleaned internal of one air valve

### Conclusion

This project demonstrates Glenfield Invicta's commitment to proactive, highquality maintenance and servicing. The successful overhaul of the air valves at Langdale underscores the importance of regular checks and servicing, particularly in installations where external factors— such as potential pollution—can impair performance.



Air valve float after service

***“GLENFIELD RESPONDED TO A QUERY FOR AIR VALVE SERVICE IN A SENSITIVE AREA OF THE LAKE DISTRICT. THIS WAS COMPLETED WITH A MINIMUM FUSS AND RESULTED IN ASSETS OUT OF SERVICE BEING BROUGHT BACK TO FULL OPERATION.”***

**RICHARD PEACOCK**  
UNITED UTILITIES PRODUCTION  
MANAGER



Air valve Internal after service



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