

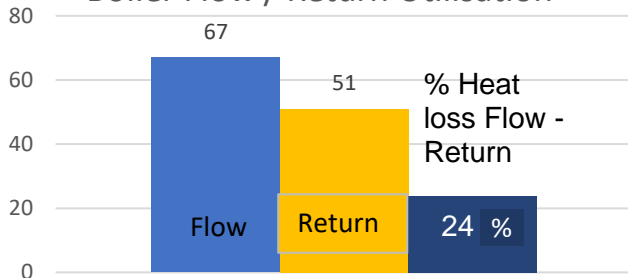
A Complete System Cleaning Solution



Home Heating Survey Report.

Thank you for taking the time to have your Home Heating System survey completed by Dr Radiator. We appreciate the opportunity to work with you in improving and maintaining your home. Please see below a breakdown of findings and recommendations.

Boiler Flow / Return Utilisation



Overall System Performance.

Your Home Heating System has a Flow / Return loss of 16% or more. This would indicate that the lack of maintenance over a period of time has begun to take its toll on your Home Heating System.

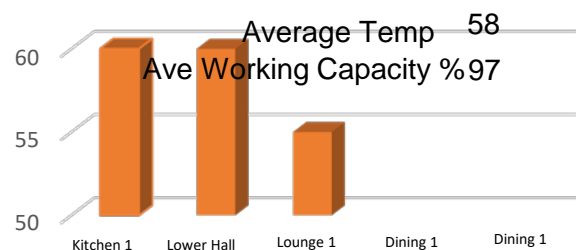
With such a large loss of performance at your boiler it is highly likely that other issues will be reported below. Urgent action is required in order to prevent expensive breakdowns.

Ground Floor Radiators

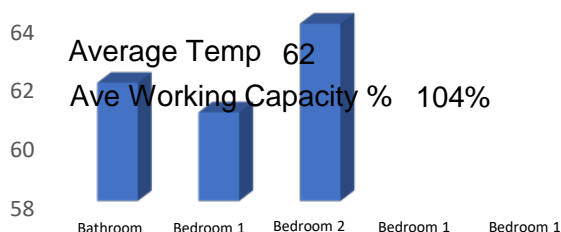
The average temperature of your ground floor radiators is 50 degrees or more. This is well within the expected normal working temperatures.

However please check other information in this report for any other issues which may have been identified.

Ground Floor Radiator Performance



Upper Floor Radiator Performance



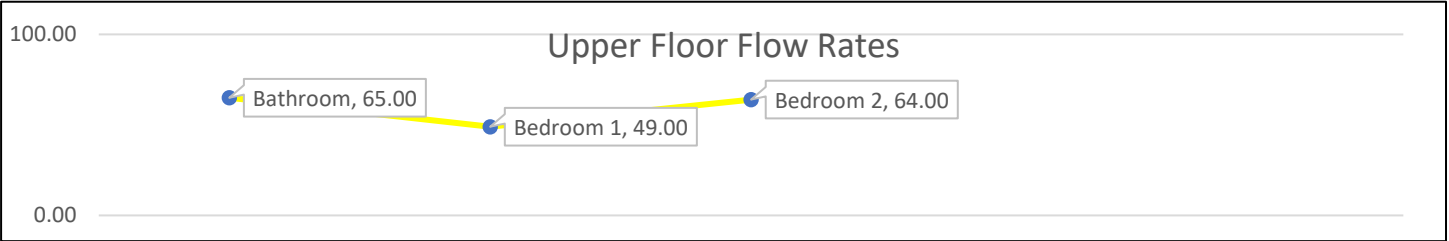
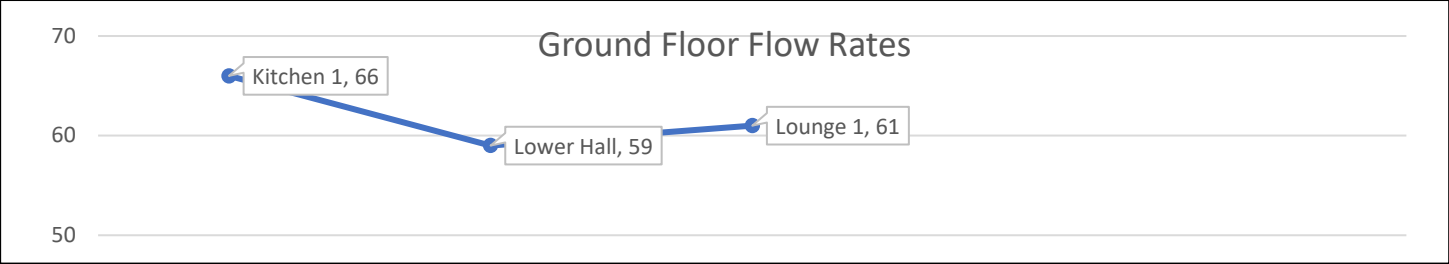
Upper Floor Radiators

The average temperature of your ground floor radiators is 50 degrees or more. This is well within the expected normal working temperatures.

However please check other information in this report for any other issues which may have been identified.

The Combined Ave Working capacity Ground and Upper floors = 101 %

Radiator Flow Rates



Flow Rate % Loss From Boiler 9

Lowest Flow Rate Degees Overall 49 Highest Flow Rate Degees Overall 66

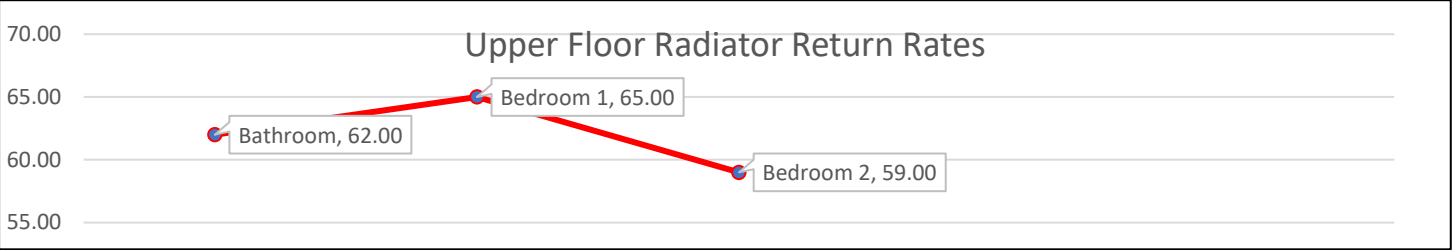
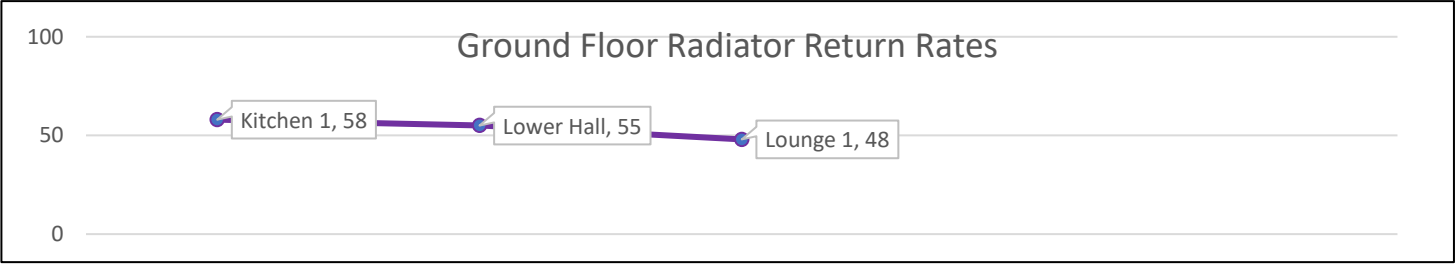
Flow Rate % Diffirence Small to Large 26%

A flow rate difference of between 25% & 50% would indicate that your system has become unbalanced. This difference will likely be causing issues with your radiators average temperature output and is a sign that a build up of contaminants is occurring.

Damage to your Home Heating System is likely occurring. This damage could cause issues with valve and radiator performance, but consideration should also be given to any damage likely to be csauased to your boiler.

Radiator Return Rates

Radiator return rates are very likely to reflect similar difference to the above Flow Rate charts due to the practical links



Return Rate % Loss From Boiler -14

Lowest Return Rate Degrees Overall 48 Highest Return Rate Degrees Overall 65

Flow Rate % Diffirence Small to Large 26%

Your Inhibitor Test Result was a :

Fail

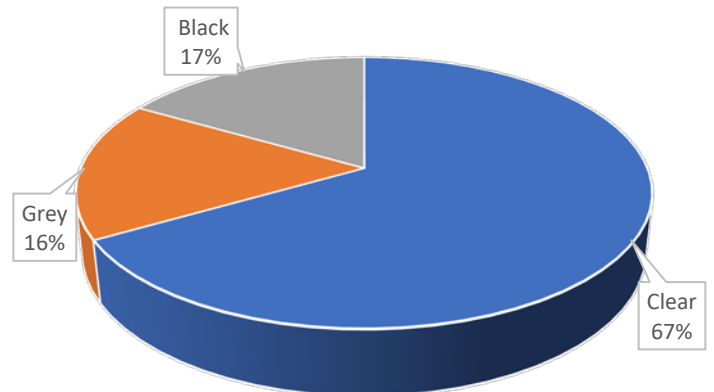
Inhibitor is the chemical that creates the correct balance within your home heating system. If this balance is not maintained your Home Heating System will begin to deteriorate. The metals within your system will activate and begin to create Magnetite.

Water Contamination.

A sizeable amount of contamination is apparent within your radiators based on colour match test of their water content. This level of contamination may be causing blockages in your radiator valves which may cause an unbalanced flow and return temperatures

This may be reflected in other areas of this report as reduced temperature recordings in your flow and return temperatures.

Scale of Radiator Contamination



% of Radiators With Contamination = 33



Magnaclean Jar Sample

The Magnaclean Jar sample shows a significant build up of contaminants in your heating system. This small sample is 200 times smaller than the amount of water in your system.

The Magnetite builds up in your system turning the clear water misty grey before going black and then on to form a sludge which creates blockages in valves and radiators. Reducing performance significantly. Immediate action is required to prevent damage.

When considering the findings of this report customers customer may notice that they have both positive and negative results for the different tests completed. These different positive and negative results are normal. Your surveyor will discuss with you the reasons and effects of these different results. Customer should be aware that this survey is carried out with non invasive actions. No parts have been opened or uncovered. This may mean that un-maintained heating systems have incurred additional damage such as blockages to the heat exchanger within the boiler itself. This damage is only visible by carrying out additional invasive action. The recommendations below may be sufficient to resolve the issues found, but please be aware that additional works within the boiler may be required.

Other Items identified during you Home Heating Survey

Considerations

The mains water road side shut off valve is not visible. This should be raised with your water supplier as a matter of urgency.

Your electricity fuse board is dated or inoperable which may cause a health risk for you or contractors which work at your home. It is recommended that you discuss this with a qualified electrician and consider options to upgrade or repair as required.

Your boiler does not appear to have or has an incorrectly fitted pressure release outlet. This could be a health and safety issue if your boiler release pressure.

There is no magnetic filter fitted to your boiler. This could lead to the build up of magnetite in your boiler which could cause expensive damage. The lack of a magnetic filter also allows any contamination to travel freely around your system.

No descaling device is fitted to the water inlet of your boiler. This could lead to the build up of limescale in your boiler which could cause expensive damage. The lack of a descaling device also allows any contamination to travel around your system.

No Deairating device is fitted to the flow pipe of your boiler. This could lead to the build up of air bubbles / hydrogenation in your boiler which over time could cause damage. The lack of aeration also allows air bubbles to travel around your system.

Your boiler's last service exceeds 1 year. All boilers should be serviced annually in order to ensure good health and safety standards as well as efficiency standards.

