Antifreeze Samples

The MCS (Microgeneration Certification Scheme) certificates microgeneration technologies used to produce electricity and heat from renewable sources. It is designed to provide a level of protection and assurance to consumers as well as a sign of quality.
As such MCS is also linked to financial incentives which include the Renewable Heat Incentive and these schemes require that the installations conform to the requirements within the MCS standard.

Part of the MCS standard for heat pumps (MIS3005) requires that the amount of antifreeze within the ground arrays is at least 20% by volume and is tested by two random samples. Antifreeze within the ground arrays is vitally important as temperatures of the return flow back from the heat pump into the ground arrays can drop below freezing.

Kensa will supply enough antifreeze to generally provide this 20% protection, however if the antifreeze is not added following Kensa's instructions or larger headers or pipework is used the protection level might drop below the 20% level. It is therefore important that two random samples are taken and tested to ensure the 20% is met and the installation is MCS compliant.

It is advisable that the samples are taken at least 24 hours, after the antifreeze has been added and with the ground circulation pump operational, to ensure mixing of the antifreeze and water. The second sample should be taken at least 10 minutes after the first sample. The samples should be tested via a refractometer and the results recorded as they will be added to the commissioning completion certificate. If a refractometer is not available the samples can be sent back to Kensa in the sample pots provided and using the pre-addressed 'Freepost' envelope. Kensa will then test the samples and advise the client on the levels of antifreeze.