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Sans frais: 1877 977 1220 labEnvironeX.com

Sampling for Ferrous Ocher analysis

Now reported in most regions of Quebec, the biochemical phenomenon of ferrous ocher can be defines as follows: in the presence of oxygen, water and ferruginous bacteria, the iron contained in the soil is transformed into an orange gelatinous mass. Gradually, this "gelatine" attaches to the walls of the French drain and causes the obstruction of the duct. In some cases, this orange mud develops in the foundation drain as well as in the catch basin, causing damage to the pump.

Appropriate tests on water or soil can indicate if they are ocher deposits and inform you about the potential for clogging your drain

In Water

The accessibility and the quantity of water available for capture vary from site to site. The most valuable and conclusive samples for assessing the clogging potential come from the foundation drain. However, if it is not accessible, sampling can be done in the catchment / retention basin of the pump (also called sump) which is usually located in the basement of the house. The main thing, during the sampling, is to obtain a sample that is as representative as possible of the site surveyed.

Before recovering the sample, the liquid must be homogenized by stirring the water from the drain or basin with a tool (eg a spoon). To do this, gently mix the water <u>without scraping the bottom of the drain or basin</u>. If the clumps of sludge and bacteria deposited at the bottom (paste / gelatin) are resuspended, the bacterial count made in the laboratory will be overestimated! Then remove the water, gently, using the juice pear included in the shipment. <u>All samples taken from the same sampling point should be of similar consistency and color.</u>

There are two containers for water sampling: One sterile (short and rounded) bottle for microbiological analysis and one (longer) for physico-chemical analyzes. The 2 bottles should ideally be filled to the shoulder. However, if the quantity of water available does not make it possible to fill both bottles adequately, the filling of the container intended for physicochemical analyzes must be priviledged.

NOTE: If there is insufficient water in the drain and sump, contact the laboratory staff to help you find other sampling options.

Do not forget!

It is important to
Properly complete the
Request for Analysis form:

- Date and place of sampling
- Desired analysis delay (regular delay: 5 working days)
- Name of sampler

As well as your contact information to receve the results of your analysis

Thank You!

Date de mise en vigueur : 2017-03-29 ENVIRONNEMENT SANTÉ ET PHARMACEUTIQUE AGROALIMENTAIRE



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In the ground

The containers provided by the laboratory for sampling soil samples are 250 ml glass jars. However, any other clean and hermetic container may be acceptable ("Masson" jar, freezer type "Ziploc" bag, etc.).

The soil sample should be collected at a distance of 1.5 meters (5 feet) from the foundation of the dwelling and at a depth of approximately 1.5 meters. The amount of soil required for the analysis is about one cup (250 ml); thus the provided jar filled to the rim! If several types of soil (strata or veins) are visually present, it is important to produce a sample representative of the soil found where the French drain is present. To do this, it is imperative to collect a little of all the different elements present.

Conservation and shipping of the samples

<u>Water samples must be analysed within 48 hours following</u>. Soil samples, however, are stable and can be taken several days before without problem. <u>All the samples must be kept cool (at a temperature of about 4°C) at all times</u>. It is essential to ship the samples with icepacks (previously frozen), in the provided cooler.



Do not forget!

It is important to Properly complete the Request for Analysis form:

- Date and place of sampling
- Desired analysis delay (regular delay: 5 working days)
- Name of sampler

As well as your contact information to receve the results of your analysis

Thank You!

Please make sure that you close the sampling bottles carefully to prevent any leaking during transport. Also, avoid putting your request for analysis directly with the water bottles, place it on the top of the cooler instead.

The microbiology department thanks you for your trust and remains at your entire disposal to provide you with further information on the subject.