

Dear Client

Mycometer® is a rapid analysis technique that measures the amount of fungal enzymes present on a surface. The test does not identify the type of mold that may be present, but instead tests for a specific enzyme present in all fungi. Mycometer® testing can be used in a number of different ways:

- The most common way that RestCon Environmental uses it is as a part of post remediation testing to help insure that the tested surface has been adequately cleaned to reduce fungal enzyme levels to normal or background levels. Low or normal levels indicate that reconstruction of that area can commence. Elevated levels indicate that additional remediation or cleaning is needed.
- The technique can be used to determine if elevated levels of fungal enzymes are present on surfaces before or during remediation as an interim indicator of how the work is progressing.
- In some cases, Mycometer® surface testing can help determine if a hidden source of mold growth may be present. In this situation the room in question is generally cleaned to reduce the level of fungal enzymes present on the surfaces. A few days are usually allowed for the contaminants to begin working their way back out of the wall cavity or area of hidden growth. The closer a swab is collected to an area of growth the higher the level of fungal enzymes will be. Swabbing the crack at the junction where the floor meets the baseboard will frequently be able to show if a hidden source of mold growth is likely to be present in the vicinity of the swab collection area. When this method is used, control swabs are used in areas away from suspected areas of contamination as a reference. For example, a laundry room with a problem in one wall will have a much higher level of fungal enzymes present than would be found on the wall on the opposite side of the room where no issue is present. In order for this method to be effective there must be a pathway and air flow to allow the mold contamination to travel from the hidden location to the area where the test is collected.

The absence of enzymes or a low normal level of fungal enzymes shows that the surface that was tested has been adequately cleaned to remove mold spores and fragments. When higher levels of mold related enzymes are present on a surface, it indicates that the cleaning was not sufficient to remove the fungal residues. At the highest levels, it is an indicator that mold growth is present on the surface.

The test results only represent the condition of the actual surface that was tested and do not indicate if adjacent surfaces were also well cleaned; However, the more surfaces that are tested with low results, the greater the probability that the remediation efforts taken have address mold issues in the areas where the swabs were collected.

It is generally recommended that remaining surfaces that were in direct contact with mold be tested. These surfaces are usually located at the joint where the sill plate meets the floor. Since water flows and collects at the lowest point, this location is usually the area with the greatest amount of growth and the most difficult to clean. This makes it a good place to test. Other locations are areas where staining remains on wood surfaces. As a pre-test, a moistened q-tip is run over the surface to see if it picks up

dirt or stain. A clean surface will usually result in a clean q-tip. This pre-test increases the likelihood that the Mycometer® swab test will show that the mold has been adequately cleaned from the area tested.

Mycometer® Fungal Enzyme Surface Samples Methodology:

Surface samples are collected by swabbing a measured area (9 square centimeter template or 16 linear inches) of surface with a Mycometer® swab moistened with the activator solution that comes with the kit. The analysis is a rapid fungi detection technology based on fluorogenic detection of enzyme activities found predominantly in mold related organisms. The sample is processed with a test solution containing a synthetic enzyme substrate. The enzyme present in the fungal cells hydrolyzes the synthetic enzyme substrate resulting in a molecule that fluoresces upon excitation with ultraviolet (UV) light (365 nanometers). The amount of fluorescence is measured using a fluorometer. This fluorescence semi-quantitatively correlates to a measure of the fungal biomass. The methodology has been published by Mycometer®-test and detects both viable and non-viable spores, hyphae and fungal particles such as hyphal fragments to give a representation of the contamination on the tested surface. Although the Mycometer®-test cannot distinguish between fungal genera or viable/non-viable fungi, it provides a semi-quantitative measure of the total fungal biomass present.

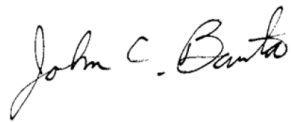
For Mycometer®-test analysis, results are graded semi-quantitatively into three categories:

- Category A – Normal fungal ecology, FVU ≤ 25
- Category B – Settled spores from a growth area, 25 < FVU ≤ 450
- Category C – Fungal growth structures/ hyphae or high spore level, FVU > 450

I look forward to working with you as the Certified Industrial Hygienist on this remediation project.

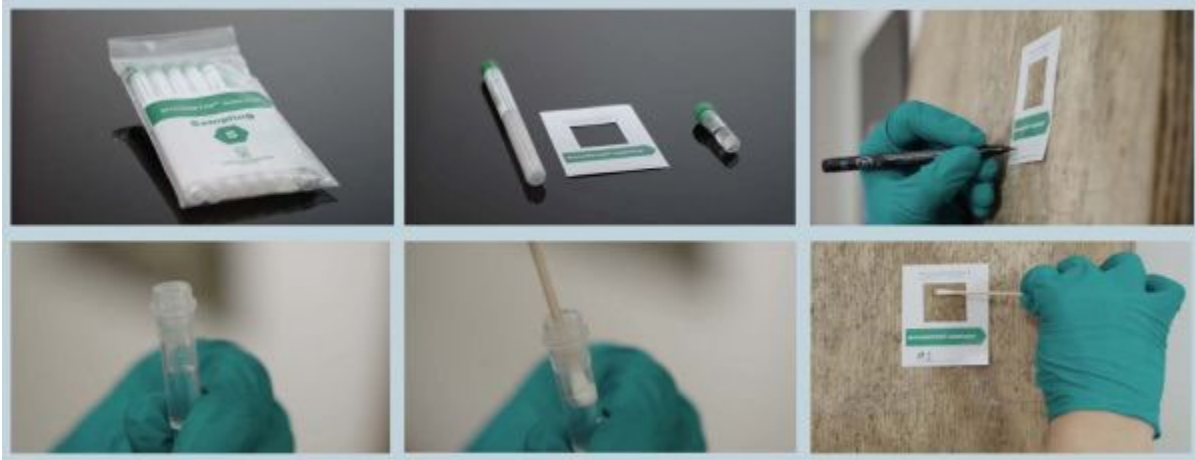
If you have any questions, please feel free to contact me.

Sincerely,



John C. Banta, CIH
Environmental Consultant
ResCon Environmental

MYCOMETER SURFACE SAMPLING



For best results, keep any un-used Mycometers in the refrigerator for later sampling.

1. Break the sterile seal on the swab container by twisting the cap.
2. The cotton swab is then wetted in the sterile saline contained in the small clear tube.
3. Surface samples are collected by swabbing a measured area – either using a 9 square centimeter template or by measuring 16 linear inches of surface. If sampling a 9 square centimeter area, then apply the self-adhesive template to the surface to be sampled. Otherwise, use a ruler to measure 16 linear inches.
4. Firmly grip the wooden swab handle, keeping your fingers at least one inch from the cotton swab. Thoroughly wash the surface by rubbing the area inside the template. The swab should be rotated in order to use as much of the cotton as possible. Keep a low angle between the swab and surface.
5. Replace the swab into the container until analysis. **The samples can be stored up to one week before analysis.** The sterile saline contains a biostatic agent that prevents any growth in the sample during storage. However, it is recommended that samples be analyzed as soon as possible after sampling.
6. Send the samples, along with a completed Chain of Custody form to:

RestCon Environmental
3035 Prospect Park Drive, Suite 180
Rancho Cordova, CA 95670

