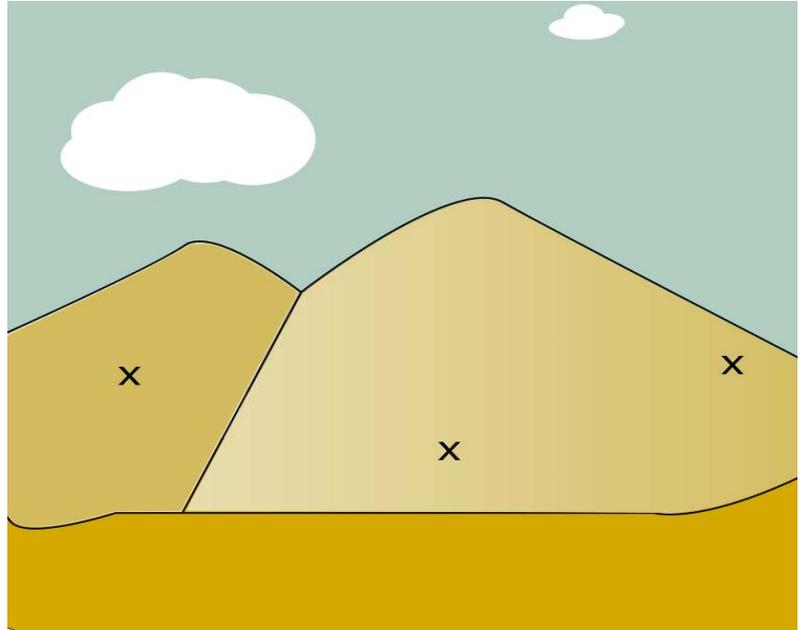


DAKOTA

TAKING STOCKPILE SAMPLES

Proper sampling is critical to ensuring that the test results you get are actually representative of your stockpile. The best practice for sampling a stockpile is to sample multiple areas and then mixing them together. When you get the test results back you can feel comfortable that the results represent the entire stockpile and not just a small portion of it. Follow these sampling instructions to ensure you get the best data possible:

1. Map out several areas of the stockpile to sample from. The number of sample areas depends on the size of the pile, but you want to make sure to at least sample from three different areas on a pile.
2. Once you have your sample areas determined take a shovel and scoop away a section of the outside layer. The outside layer will likely be higher in fine sands and your results could show artificially high results in the fines.
3. Take a soil probe or 2" PVC pipe with one end beveled and stick it into the area which have removed the outer layer.
4. Place the collected sand into a bucket.
5. Repeat steps 2—4 for each sample area while ensuring that you are mixing each sample together when you are placing it in the bucket.
6. Take a sample out of the bucket and place it in a bag. Make sure to label your sample. Double-bagging your sample is always a good idea.



TAKING UNDISTURBED SOIL CORE SAMPLES

Proper sampling is critical to ensuring that the test results you get are actually representative of your green. It is important to make a sampling plan based on what type of information you are looking for from the testing.

Making a Sampling Plan

1. Determine what you are trying to find out about the green. Is there a problem area or are you just wanting to get a general idea of how the rootzone is doing?
2. Determine the depth you will want to sample. If the green was thoroughly tested when being built it is likely that if you have a problem area it will be within the first few inches of the rootzone. If you are looking to get a general idea of the rootzone then try to sample all the way down to the gravel layer in a USGA green.
3. Map out where your samples will be pulled from.

Pulling Samples

1. Choose your soil probe. The type of soil probe you use will be very important in determining what analyses we can perform on your sample. The ideal soil probe will create a cylindrical soil core that can be kept intact for analysis in the lab. If you don't have a soil probe you can make one by using a PVC pipe that is 2" in diameter. Cut it to your desired depth and bevel one side so the pipe can be easily driven into the ground. Drill a hole near the top of the pipe so that a rod or rope can be used to pull the pipe out of the ground.
2. Take the samples. It is very important to keep track of where the samples are being pulled from. Pack each pipe as needed to ensure the sample doesn't get jostled in shipping and label them. Tape both ends of the pipe to ensure the sample remains in the pipe during shipping.

Dakota Analytical can provide soil cores to you for a \$30 deposit which is returned in full when the cores are shipped back.

