



RESIDENTIAL PROPERTY SOIL SAMPLING

April 2007

If your residential property has not been previously sampled and analyzed for lead contamination, you may sample it by following the instructions below. This is *only* for properties that have not already been remediated or sampled.

To find out if your property has already been sampled, you may call your city or town government. If you live outside of a city, go by your mailing address.

Cardin 673-1234
Commerce 675-4373
North Miami 542-6230

Picher 673-1765
Quapaw 674-2525

PLEASE READ ALL INSTRUCTIONS BEFORE YOU BEGIN SAMPLING!

How to Prepare for Sampling

Before you start sampling, gather the following equipment and materials:

trowel or small shovel	2-gallon plastic bucket
Ziploc [®] bags, 1 gallon size	permanent marker (Sharpie [®] or Marks-a-Lot [®])
latex gloves (available at hardware store or drug store)	dishwashing liquid and water

Make sure the trowel (or shovel) and bucket are clean. If they aren't clean, wash them with the dishwashing liquid and water and then rinse them with clean water. Get new bags and gloves, or else wash and rinse them, too.

How to Collect the Samples

1. Divide the property into approximately 6 parts. A typical house lot is about 50 feet wide by 100 feet long. Here's an example of dividing the yard into six parts: the front yard, left side of the house, right side of the house, a gravel driveway, one half of the back yard, and the other half of the back yard. A large vegetable garden could be a separate part. Your parts may be different, depending on the location of your house and the size and shape of your yard. Each part should usually be no larger than about 50 feet by 50 feet. Driveways, sidewalks, or fences may help decide the shape of a part. Figure 1 shows an example of a lot divided into 6 parts.
2. Draw a map of how you divided up your property, and write the names of the parts on it, like "front yard" or "back yard" or "driveway." This map is for you to keep. Later, after the results come back, you can look at the map and remember how you decided to divide your yard. That way, you will know what lab results are for what soil in your yard.
3. Decide which part to start on, and put on a pair of clean latex gloves.
4. Decide on places to dig 5 separate holes in the part (but don't dig yet—that comes in step 5). One place should be in the middle of the part, and the other four should be a few feet from each corner of the part. Figure 2 shows an example of where to dig the holes in a part. The "X" marks show where to dig the 5 holes.
5. Begin to dig a hole by clearing away any grass or weeds. Then clear away the first inch or so of soil if there are roots in it. Prepare a circle about 8 inches across so it is clear of grass, weeds, and roots. Then use a trowel or small shovel to dig out the soil until you have a hole that is about 6 inches deep at the deepest. The top of the hole should be about as wide as the hole is deep. As you dig the hole, place the soil into a clean bucket.
6. Dig the other four holes like you did the first one. Put the dirt from the other four holes in the same bucket with the dirt from the first hole.
7. Mix the soil from all 5 holes together. Mix it thoroughly for a couple of minutes, using a trowel or your hands (with gloves on).
8. Take a handful of soil from the middle of the bucket, and put it into an empty Ziploc bag. Then take a handful from somewhere around the edge of the bucket and put it in the bag. Take more handfuls from around the edges of the bucket, until you have 5 handfuls in the bag. Then seal the bag.
9. On the outside of the bag, print your name, your address, the part of your yard the soil is from (like "driveway" or "front yard"), the date, and the time. Write very clearly and use a permanent marker so it doesn't smear. Sharpie pens work well for this.
10. Put the Ziploc bag into another Ziploc bag and seal it.

11. Use the soil that is left in the bucket to fill in the holes.
12. Wash the inside of the bucket and the trowel or shovel with dishwashing liquid and water. Wash the latex gloves if you intend to re-use them, or else put them in your trash can. Everything that is washed should be rinsed with clean water.
13. Repeat Steps 3 through 12 for each part of your yard. When you are done you should have one bag of dirt for each part of your property.

Remember, before working on a new part, you **MUST** wash and rinse the bucket and shovel. Wash your gloves or get new ones before starting on the new part.

After you are done, thoroughly wash your hands with soap and water. Be sure to wash your hands if you stop for a break to eat or do other activities (like smoking).

Save your map. Later, if you forget how you divided your yard into parts or if you forget how you named the parts, the map will help you remember. That way, you can be sure which lab results go with which part of your yard.

How to Ship the Samples

When you have all of your samples in their bags, prepare them for shipment to the laboratory. Follow steps A, B, C, and D:

- A. Put the bags in a sturdy cardboard box or other shipping container. If there is extra space in the box, fill it with packing material. Balled-up newspapers or plastic peanuts work well. Packing material will help keep the bags from tearing or opening on the way to the laboratory.
- B. Fill out the attached form and put it in the box with the samples. The form tells the laboratory staff what tests to do. They will test for the concentration of lead in the soil.
- C. Include a check made out to the Oklahoma Department of Environmental Quality. The cost for soil analysis is \$11 for each sample. For an entire yard of six parts, the cost for analysis will be \$66.
- D. Ship the samples to:

Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101

Be sure to include your return address or you will not receive results back from the lab! Many shipping companies will not deliver to a post office box. Check with them to see if they will. The US Postal Service will do it.

Getting the Results

In about 6 weeks, the results from the laboratory analysis will be mailed to you.

The amount of lead in each sample will be stated in milligrams per kilogram. One milligram per kilogram is the same as 1 part per million. An example of this is:

Front Yard = 435 milligrams per kilogram = 435 parts per million

If the amount of lead is less than 500 parts per million, your soil is considered safe and no additional work is necessary.

Soil with more than 500 parts per million may be hazardous to a person's health if they swallow it. It is especially harmful for young children. The parts of your yard where the soil is above 500 parts per million may need to be removed. For more information, contact the Oklahoma Department of Environmental Quality at (405)-702-5100 or the Environmental Protection Agency at (800) 533-3508. Tell them you are calling about the Tar Creek Superfund Site.

If you have any questions about sampling, you may also call the Oklahoma Department of Environmental Quality or EPA at those same numbers. Again, be sure to say you are calling about the Tar Creek Superfund Site.



United States
Environmental Protection
Agency

Region 6
1445 Ross Avenue (6SF-RL)
Dallas, TX 75202

**SUPERFUND
DEPARTMENT OF ENVIRONMENTAL QUALITY**

Chain of Custody Record

Site Name	Site Location:	Code:			*GCMS Extractables		GCMS Purgeables		Metals - LEAD		General Chemistry		S.E.L Numbers (for DEQ use only)	
Sample Location	Date Sample Collected	Time Sample Collected												
John Smith's house	123 Mineral Street Anytown, OK 74123													
Back yard	March 26, 2007	4:35 p.m.			1									
Front yard, north of sidewalk	March 26, 2007	6:15 a.m.			1									
Front yard, south of sidewalk	March 27, 2007	9:50 a.m.			1									
Driveway	March 27, 2007	10:20 a.m.			1									
Side yard	March 27, 2007	10:45 a.m.			1									
Example														
Form														
Sampler's Signature			Received by:											
(Relinquished by:)			Received by:											
Relinquished by:			Received by:											
Relinquished by:			Received by:											
Remarks:														

*Indicate the number of bags for each analysis in the proper column.

Figure 1 - Example of Property Divided into 6 Parts

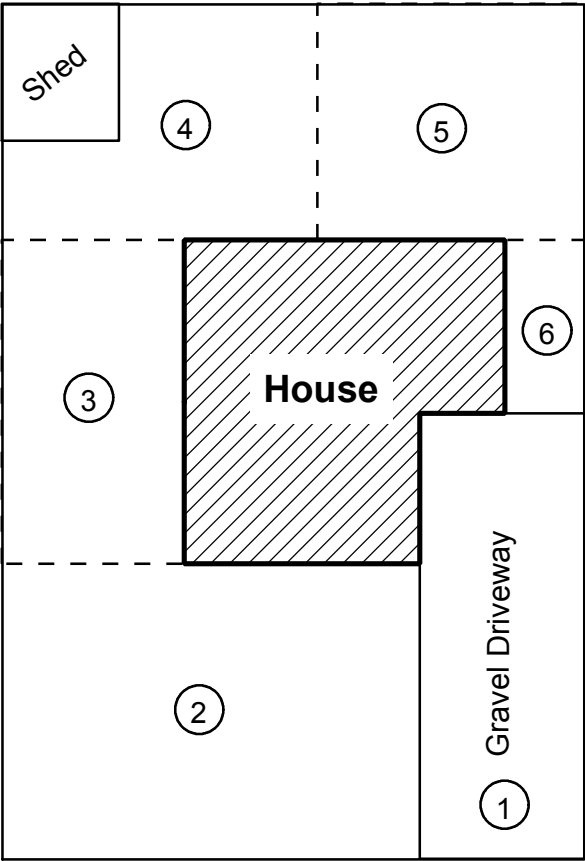


Figure 2 - Example of Where to Dig Holes in Part 4

