

Lead-210 Subsampling

You will need:

Many sheets of 8.5x11" printer paper
A few sheets of weighing paper
50 ml centrifuge tubes (one per sample)
Aluminum centrifuge tube holder
The precise balance
Freeze-dried sediment
Metal spatula/scoop
Spreadsheet to record sample name, sample weight and capsule location in sample tray
A bunch of small Kimwipes
DI H₂O in a squirt bottle
Permanent marker

Wear gloves!

1. Place a sheet of 8.5x11" printer paper next to the balance. Change paper in between each sample. This will help prevent cross-contamination in these tiny samples.
2. Place a sheet of weighing paper on the balance. Again, this is to keep things clean between each sample. You don't have to replace this each time, just be sure you shake it off well between samples and replace it if it refuses to be clean.
3. Label each centrifuge tube with the sample name and depth.
4. Place an empty centrifuge tube (without top) in the tube holder on the weighing paper in the balance.
5. Tare the balance.
6. Remove the centrifuge tube and holder from the balance and place them on the printer paper.
7. Using the metal spatula, place ~400-700 mg sediment in the centrifuge tube.
8. Place the centrifuge tube and holder back on the balance. If there is less than 400 mg of sediment, remove the centrifuge tube and holder from the balance and put more sediment in the tube.
9. When there is at least 400 mg of sediment in the centrifuge tube, record the weight on your spreadsheet.
10. Cap the centrifuge tube.
11. Put the sediment baggie or bottle away.
12. Clean the metal spatula with DI H₂O and a kimwipe.
13. Place a clean sheet of 8.5x11" printer paper next to the balance.
14. Repeat steps 3-15 for all of your samples.