

Sieving Procedures

Prepping

1. Mark and weigh beaker
2. Using DI water (if available) and a squirt bottle, empty contents of sample container into beaker.
3. The sample should then be dried and weighed unless pipetting is required.
4. If the sample is more than 100 grams, it should be split before continuing.

Wet Sieving

1. Pour a small amount of water into the beaker to loosen up the sample. If the sample has a good amount of fines or clay nodules, solution of $\text{Na}(\text{PO}_4)_x$ should be added and the sample allowed to sit for a short time.
2. Using a 4 phi sieve, rinse sample under water until the fines are removed.
3. Using a squirt bottle, return sample to beaker.

Dry Sieving Procedures

Sieve Stack A: Larger grain sizes (usually -2.00 phi to 1.00 phi)

Sieve Stack B: Smaller grain sizes (usually 1.25 phi to pan)

If sieves are both empty:

1. Weigh sample 1
2. Put sample 1 in sieve A
3. Allow to run for 30 minutes

Now assume Sample 1 has already been run through Sieve A and is now in sieve stack B. Sample 2 is in sieve stack A. These instructions begin with both stacks ran.

4. Take stack B and empty into boats laying them on the table
5. Take stack A and empty into boats laying them on the table with the previous boats
6. Empty Pan of stack A into stack B
7. Weigh Sample 3 and put in stack A
8. Start running sieves in shaker
9. Weigh all the boats that are currently laid out on the table.
10. Repeat when shakers have stopped.

Digestion

If the sample has sufficient carbonate material, the sample should be digested.

1. During dry sieving, larger shells should be removed to make digestion easier.
2. Place sample under chemical hood.
3. Add a 4M HCl solution to samples a little at a time, allowing for digestion to occur. Stirring will help the digestion process.
4. When there is about 3/4" of acid in the beaker or a layer of digested material forms over the sample, rinse and decant the fluid.
5. Repeat steps 3 and 4 until carbonates are removed (no more bubbles will form)
6. Rinse and decant fluid.
7. Wet sieve to rinse the sample (you may also rinse the beaker).
8. Dry sample.
9. Dry sieve if there is sufficient sample or simply weigh sample after drying to calculate the percentage of carbonate material.