

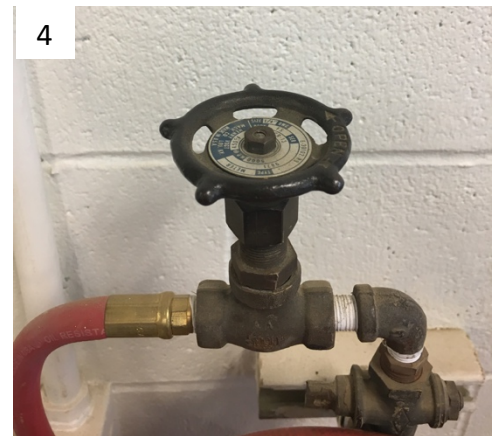
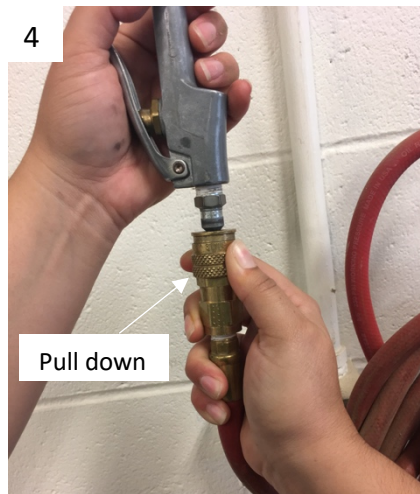
Procedure for Grinding Soil Samples

Procedure

This protocol describes the procedure for grinding soil samples to <2 mm using a Dynacrush DC-5 hammer flail grinder.

Steps

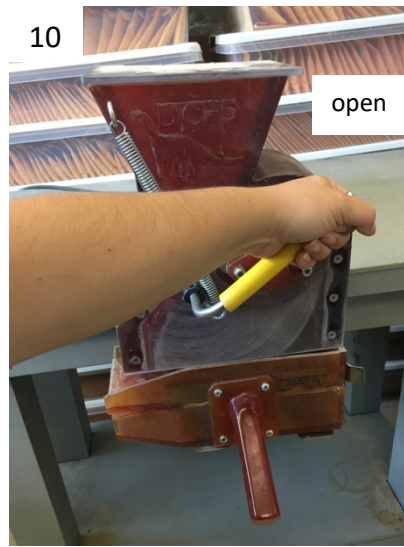
1. Move the soil grinder from the SENR lab in the headhouse to the grinding area in the West side of the Williams Headhouse.
2. Make sure you have appropriate PPE, including a mask, eye protection and ear plugs for safety.
3. Turn on the exhaust fan with switch.
4. Connect the nozzle to the air line (hose) and turn on the pressurized air.



5. Clean the grinder and the container using the pressurized air.
6. Put the collection container under the grinder chamber, placing into position. Ensure handle is in closed position.



7. Plug in grinder and turn grinder on via switch.
8. To start grinding a sample, open the cover of the grinder, dump the soil and close the cover quickly. Ensure the container is under grinding chamber, so the ground sample is collected.



9. Wait for 15-60 seconds for soil to pulverize, until you hear noise of aggregates getting crushed to become minimal. Turn off grinder.
10. Open the bottom cover to let ground sample fall to collection container.
11. Sieve (or slightly shake) the sample in the container.
12. Put the ground soil in its correspondent bag, toss the residues that did not pass through the sieve * (If too much soil was left un-sieved, you can grind again)
13. Use air and nozzle to clean grinder and container.
14. Repeat steps for all samples.
15. When finished with grinding all samples, clean the equipment with pressurized air, make sure there are no residues left.
16. Turn off the pressurized air and disconnect the nozzle.
17. Disconnect the equipment, clean and return to the storage room.

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