

35 ml and 80 ml Coffee Verification

Sample Preparation

1. Obtain ground coffee beans
2. Weigh 0.29-0.31 for the 35 ml and 0.49 – 0.51 grams for the 80 ml of ground coffee beans into the vessel.

Vessel used: _____

Sample weight: _____

3. Add a stir bar to the vessel.
Using a 35 or 80 mL vessel, add 10.0 mL nitric acid to a 10 mL graduated cylinder (or use a volumetric pipette). Add acid to the vessel.

Acid used: _____

Volume added: _____

4. Snap cap on vessel.

Running the Sample

1. Install the 35 ml or 80 mL attenuator.
2. Insert vessel into attenuator.
3. Select the Organic Sample Method and Change temperature to 200C
4. Press “play” key.
5. ActiVent will close on sample. Sample will ramp to 200°C in 4 minutes and hold temperature for 2 minutes. During the run, pressure will increase inside the vessel. Vessel will potentially vent 2 times at 225 psi, 2 times at 250 psi, 2 times at 275 psi.
6. Record the number of times the vessel vents during the digestion. A vent occurs when the pressure drops a minimum of 25 psi during the digestion. Acceptable number of vents is 2-8.

Number of vents: _____

7. Record the temperature at the end of the ramp time. Temperature should be 200°C \pm 6°C

Temperature: _____

8. Record the temperature at 30 seconds (90 seconds remaining) during the hold time. Temperature should be 200°C \pm 6°C

Temperature: _____

Checking the Digestion

1. Pour the digested sample into a 10 mL graduated cylinder (do not allow stir bar to fall into the graduated cylinder). Record the acid volume to the nearest tenth of a milliliter by reading the bottom of the meniscus that is formed by the acid. You should get back at least 7 ml.

Acid volume: _____

2. Pour digested sample into a 50 mL beaker or Erlenmeyer flask. Add approximately 40 mL water to the sample in the beaker or flask. Sample should be clear and particle free.

Solution Color: _____

Below is an Example of a good Coffee run:



