Acid Digest:

1. Each sample was mixed and sifted through a sieve
2. A 1-2g sample of each soil was weighed and transferred to a 100mL beaker
3. A 1:1 HNO_3 mixture was made with 25mL of concentrated HNO_3 and 25mL of nanopure DI water
4. 10mL of the HNO_3 mixture was added to each beaker containing a soil sample and heated until reflux for 10-15 minutes (at 95℃ +/- 5℃) with a watch glass over each beaker
5. The sample was taken of heating and cooling. Once cooled, 5mL of concentrated HNO_3 was added to each beaker and refluxed for 30 minutes
6. If brown fumes were observed after 30 minutes of reflux, more concentrated HNO_3 was added to the reaction until no brown fumes are observed
7. The solution was refluxed for 2 hours with a watch glass at 95℃ +/- 5℃
8. After 2 hours of reflux, the solution was removed from heat and cooled, and 2mL of DI water and 3mL of 30% H_2O_2 were added to each reaction
9. The beakers were then returned to heat and 30% H_2O_2 was added in 1mL aliquots until effervescence was minimal (no more than 10mL of 30% H_2O_2 was added)
10. The reaction was then cooled and diluted with water in a 100mL volumetric flask after being filtered through filter paper.