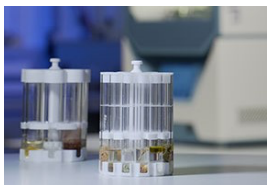
FERBERITE (Iron Wolframite mineral, $FeWO_4$)

MILESTONE ultraWAVE 3 METHOD #GEO-03-05



I SUMMARY

This method provides the acid digestion of the sample in a Single Reactor Chamber (SRC) using temperature control and microwave heating for the metal determination by spectroscopic methods.

I INSTRUMENTATION FOR DIGESTION

Milestone ultraWAVE 3 with internal temperature and pressure control in all vessels, built-in touchsceen with easyCONTROL software installed.

I RACK AND VIALS TYPE

Rack	Vial
20 pos	PTFE

I SAMPLE AMOUNT AND REAGENTS

Rack	Sample amount	Reagents
20 pos	0,1 g	2 mL HCl, 2 mL HNO_3, 2 mL H_3PO_4, 1 mL HF

I BASE LOAD

120 mL of DI H_2O, 5 mL of HNO_3 67%

I TYPE OF GAS AND STARTING PRESSURE

Gas Type	Load pressure
Nitrogen gas	40 bar
Argon Gas	40 bar

Milestone suggests gas purity of 4.7. For trace metal analysis the purity of 5.0 is highly recommended

I MICROWAVE PROGRAM

Step	Time (min)	Power (W)	T1 (°C)	T2 (°C)	P (bar)
1	00:15:00	1500	230	60	100
2	00:15:00	1500	230	60	100

I NOTES

- For details on the operating steps with ultraWAVE 3, see the user manual and video tutorials on Milestone Connect.
- Cleaning /maintenance procedure must be executed following the user manual, video tutorial and installer instructions.
- This procedure is only a guideline and it may need to be modified or changed to obtain the required results on your sample.