## 5 STEPS IN THE MINING PROCESS





**EXPLORE:** Finding high-quality ore

## **Solutions from Crust to Core**

Sample prep for all steps include acid digestion using Sample Preparation Blocks (SPB), Microwave Digestions (Titan MPS) or Fusion.



**DRILL AND BLAST:**Pulling the ore out of the earth



**CRUSH AND MILL:** Extracting minerals from the ore



**SEPARATE:** Isolating minerals from the waste rock



**REFINE:** Cleaning the minerals and metals

Analysis	Technique	Explore	Drill and Blast	Crush and Mill	Separate	Refine
Metal Analysis	AAS, ICP-OES, ICP-MS	•	•	•	•	•
Ionic Leach	ICP-OES, ICP-MS	•	•			
Selected Elements	FIMS, FIAS, AAS, ICP-OES, ICP-MS	•				
Halogens	LC-ICP-MS	•				
Loss on Ignition	TGA	•				
Clay Characterization	UV-Vis, ICP-MS	•	•			
Mineral Characterization	NIR	•	•			



## **Heavy Equipment and Operation**

In addition to your mining needs, our lubricant-testing and wear-metal analysis solutions ensure your mining operation is constantly running smoothly – from drilling to final distribution.