Our Services

- Hydrometallurgical Process Development
- Geological and mineralogical sample characterization
- Ore grade determination and distribution
- Minerals processing tests and engineering
- Chemical engineering
- Advanced computer simulations to optimize leaching kinetics (3D reactive transport model for percolate/saturated conditions by in-house software KiLea and TRN)
- Optimization of recovery grades
- Testing and development of hydrometallurgical processes within integrated flow sheets according to your requirements
- Analysis and separation of NORM, as well as integration of NORM removal within the flow sheet
- Integral solutions by considering the whole process chain from ore sampling, processing, disposal and final remediation of the mine site by simulating and engineering the entire process from mining to a marketable metal concentrate
- Testing and evaluation of the most efficient and economic extraction method (tank/heap/in-situ leaching) for a specific ore body under the local conditions (geomorphology, infrastructure, climate, legal issues, etc.)

Technical changes in the sense of technical improvements are reserved.
Processing of Technology Metals

Specialized in-house flow sheet for the processing of minerals containing technology metals associated with NORM (Naturally Occurring Radioactive Material).

Tank/Heap/In-situ Leaching Studies

Industrial (hydro-)metallurgical processing options are investigated at lab-scale and are simulated by chemical processing models for up-scaling. Tank, heap and in-situ leaching is tested by batch experiments (beaker, bottle-roll, autoclave) and column leach test facilities (percolate/saturated).

Comminution and Analytics

Reproducible sample preparation is ensured by crushing, grinding, sieving, homogenization and mechanical beneficiation (gravimetric, magnetic) with most modern lab instruments in order to facilitate a reliable sample analysis. The geochemistry is determined by XRF (most elements) and a basic ore characterization is realized by ore microscopy of polished sections or grain samples. If necessary, additional analyses such as ICP-MS/AES, SEM or MLA are carried out by our affiliate laboratories. Generally, the facilities of the technical center provide contamination-free and reliable sample preparation optimized and certified for NORM samples.

Contact us, we will listen to your needs and work out a solution to fit your technical requirements, your budget and your timeline.

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