

## INFORMATION SHEET – EXPLORATION TECHNIQUES

Navarre employs a variety of exploration techniques to search for minerals.

Exploration programs apply a systematic approach to collect samples to define areas of potential economic mineralisation. These can involve:

1. **Office-based desk top studies** to determine the nature of geology and mineralisation within the application area to guide targeted on-ground exploration efforts;
2. **Mapping and rock chip sampling** (collecting loose surface material) over areas of interest identified in office studies, including historic mine dumps and areas of geological outcrop;
3. **Geochemical soil sampling programs** (300g soil sample taken from approx. 25cm depth by hand, analysed for a range of elements) over areas of interest identified in mapping and rock chip sampling;



4. **Geophysical surveys**, typically using gravity, magnetics or electro-conductive methods, often by foot or mounted on a quad bike or aircraft;
5. **Air-core or reverse circulation (“RC”) drilling** utilising a four-wheeled drive, truck or track mounted drill rig and a compressor to supply air for drilling and recovery of samples (1-2 support vehicles). Drill depth usually about 45m but can reach 300m for some RC holes. Up to 3-4 holes may be completed in one day depending on hole depth and drilling conditions;



6. **Diamond Drilling** to extract a continuous cylindrical core of rock. The rig is usually truck mounted and generally requires two support trucks and at least one support light vehicle. Water is used to lubricate and cool the diamond-tipped drill equipment in the hole. Diamond drilling can deliver rock sample from over 1,000m below surface but is one of the most expensive and time consuming drilling techniques available. A single 250m diamond hole may take up to 5 days to drill (24 hour/day);



7. **Bulk Sampling or trenching** to extract a quantity of material from a trench or small pit to be analysed for overall potential mineral content, or to expose a geological feature.

It is important to note that an Exploration Licence does not allow an operator to conduct mining activities. A Mining Lease must be granted for this to occur.

**More information:** Code of Practice for Mineral Exploration, Appendix 2.  
[www.earthresources.vic.gov.au](http://www.earthresources.vic.gov.au)