

# **The Mineral Exploration Cycle**

## **Desktop Exploration** & Regional Analysis

Prospectors and geoscientists look through historical data for clues before starting physical work.



1 week - 1 year

**Access To Land** & Staking

2

Large areas of land are staked online and refined by completing low impact work like sampling & mapping, and through conversations with the local community.



## 6. **Resource Definition**

Drill results are used to geologically model the subsurface and determine the potential volume of metal present. Further drilling is needed to increase the accuracy of the model.





### Sampling & Surveys

Using geochemisty and geophysics, we sample and test the soil, rock and water to help determine what lies underneath.





7.

Reclamation

If there isn't enough mineralized

rock to build a mine and move on

to the Design and Permit stage, the site

is reclaimed, filling holes, seeding of local

plants and removing project materials.

1 week - 1 year



Permitting

needed to complete mechanical work the surrounding communities, wildlife, archeology, and landscape.

3 - 6 Months

2 - 3 Years





CMG

The mineral exploration lifecycle is part of a larger cycle known as the mineral resources development cycle. Mineral explorers look for hidden minerals in rocks and dirt that indicate that metals (like gold, copper and silver) might be nearby. These minerals are called indicator minerals. We use these indicator minerals to trace our way to an area known as the source, which has a larger abundance of the metal or mineral we are looking for.

Once we've found the source, we try to figure out how much of the mineral or metal is present, and its shape in the rocks below. If there is enough mineralized rock, studies will be done to determine if a mine can be built. Typically 1 in every 10,000 exploration projects becomes a mine! The odds of success are low, but the minerals and metals found in BC are essential for the products we use every day in our homes, appliances, cell phones, cars, and the list goes on.

Throughout the mineral exploration lifecycle, explorers engage with local communities and stakeholders and partnerships are often formed. Mineral explorers typically love being outside, are passionate about their natural surroundings and they do their best to be good stewards of the land, leaving behind no trace.

#### References can be found at www.amebc.ca/publications