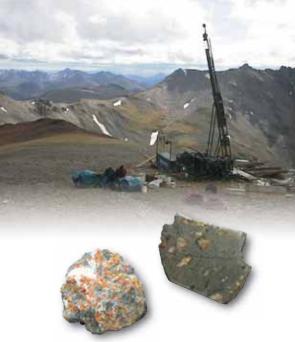
# **Grass Roots Exploration Explained**







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# EAGLE PLAINS RESOURCES A LOOK AT GRASS ROOTS EXPLORATION

## Strategy:

Eagle Plains Resources strategy is to locate grassroots exploration properties that have good potential to host economic mineral deposits and to use our field expertise to develop these projects into resources. Below is a description of the process behind this strategy.

# Perspective:

To put this in context, below are the stages of the exploration and mining process.



## **Research for Potential Areas of Mineralization:**

Research to Acquire Projects with Good Potential to Host Economic Deposits

- Obtain and research public and private geological databases & reports
- Research areas identified by prospectors and other third parties
- Conduct regional chemical surveys or acquire previous survey samples then analyze them using in-house technical staff, such as the Mackenzie Valley Zinc Project

# **Acquisition of Properties:**

Acquisition through Staking / Permitting / Optioning

Acquisition of properties can be done through several different means:

- Staking / Permitting Companies reserve the mineral rights to an area of interest through staking claims or acquiring prospecting permits.
   Depending on the jurisdiction, this is either done by sending crews out to the field or can be conducted electronically using computers. Prospecting permits is generally reserved for large-scale recce programs with follow up staking.
- Optioning Companies may earn an interest in an existing property through optioning. This usually involves a payment to the owner, involving cash and or some of their shares, along with a commitment to explore a specified amount over a certain period of time (eg/ \$5M over three years).

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# NARROW SCOPE •

# A LOOK AT GRASS ROOTS EXPLORATION (cont.)



# **Grass Roots Exploration:**

#### Project Acquired and Identified as Having Potential to Host Mineralization

A properly conducted exploration program begins on the broad scale (referred to as Recce) and then continually focuses in on smaller targets as data is acquired and analyzed.

#### **Recce Program**

A recce program can vary in size from 100 km<sup>2</sup> to 10,000 km<sup>2</sup> and generally involve widely spaced surveys including:

- Geochemical surveys and prospecting silts are collected from streams and measured for anomalous values. At the same time field crews continuously sample rocks to look for elevated mineralization.
- Regional geologic mapping to put the area in a large-scale context (are we in the right geologic environment to host the mineralization we are looking for).
- Airborne Geophysics magnetic, electromagnetic, radiometric and other surveys to also identify anomalous signatures.

#### Geochemical / Geological Anomalies Identified

Once the recce program is complete, the data is compiled, analyzed, and anomalous areas are defined; these anomalies are then the new focus of the grass roots exploration program.

- Geotechicians conduct more concentrated silt, soil and rock sample surveys in the vicinity of the anomaly, typically on the 100m scale.
- Geologists conduct more detailed mapping of the geology in an effort to develop a geological model and identify what controls the grade and distribution of mineralization.
- Based on this second round of exploration work, models are modified and new exploration strategies are developed as work becomes even more focused.
- The end goal of this exploration stage is to locate targets to drill; this is known as exploration drilling.

# **Exploration Drilling:**

Initial drilling involves thousands of meters of drilling and is high risk as it commonly results in little or no mineralization.

**SUCCESS** - a good drill hole identifies significant mineralization Conduct a local drilling program to provide information for a 3D geologic model (again to determine what controls the grade and distribution of mineralization).

#### **Resource Definition:**

Once a deposit is located by exploration drilling, step out drilling is conducted to determine an initial concept of the size and grades – this is often referred to as an inferred resource.

#### Deposit Identified with Drill Program(s)

Continued infill drilling, between successful exploration holes is conducted to test grade and tenure of mineralization; usually involves tens of thousands of meters of drilling

Now that the initial size has been identified, exploration of the surrounding area is conducted to for similar settings that may contain more deposits.

This process is a multi-year endeavor. Each step of the way involves the use of field crews to collect samples; laboratories to analyze; geologists to interpret, map, remodel and target; and finally construction crews to build roads and drill pads; and drill crews to mobilize, then the process starts over again. Exploration in areas with seasonal constraints such as northern locations may take longer. Areas with political constraints may pose similar challenges.

This is the level that Eagle Plains Resources takes grass roots exploration to – developing an inferred or indicated resource. To develop the resource further requires more tightly spaced drilling between the infill holes that originally defined the size of the deposit. This raises the confidence of the resource calculation to measured or indicated. Once this is complete, an economic assessment is conducted to determine viability of a mine. If it proves to be economical, a feasibility study is conducted which considers many factors including environment, labor, politics, etc. Once a feasibility study is conducted for a resource, it then moves to the highest level of resource calculation – a reserve.