The Use of Sulfide Trace Element Chemistries for Orogenic Gold Deposit Exploration

"Project Breadcrumbs"

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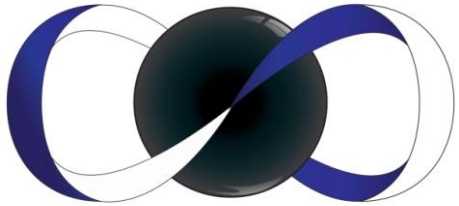


Introduction

- **This project uses multivariate trace element data from multiple sulfide samples, within a greenfields or brownfields exploration license, to better identify and explore for new gold orebodies in orogenic terrains.**

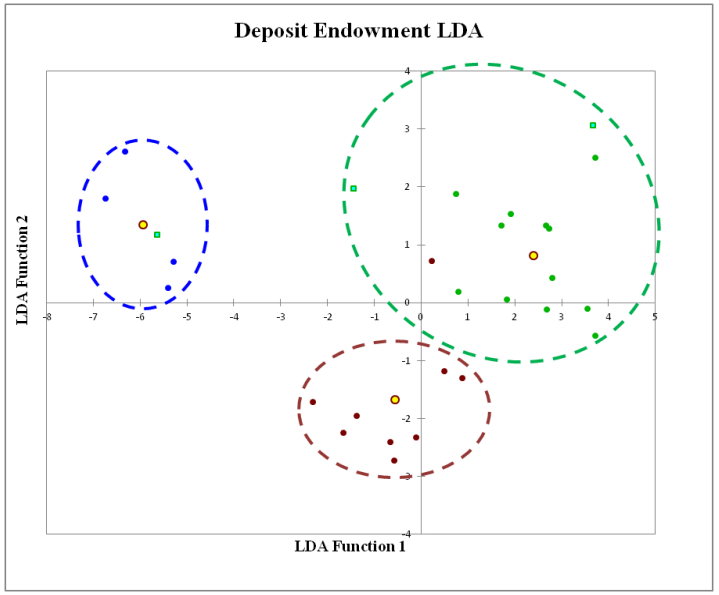
- **Often sulfides are present at great distances from orebodies and the interpretation of their trace element data may extend the distance that these orebodies may be explored for with geochemical techniques.**
  - **We interpret the "breadcrumbs" left behind from the mineralization event**

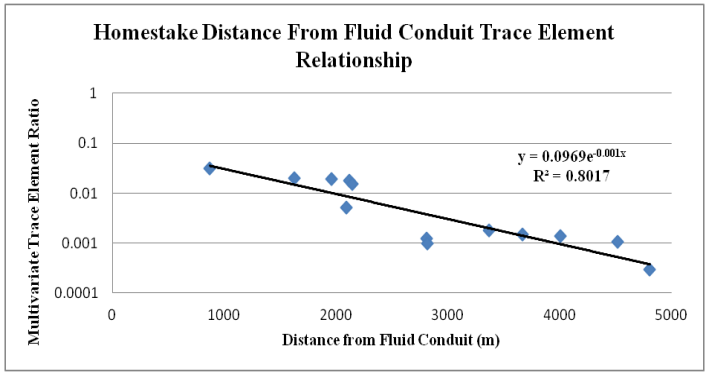
Current State of the Technique

- Investigated 626 individual sulfide samples from 44 orogenic gold deposits

- Possible to differentiate and identify samples based upon the:
  - Deposit Type
  - Deposit Location
  - Potential Gold Endowment of the System (Top, Right)

- By specifically identifying the position of the sulfide in the deposit it was possible to identify a relationship between the sample position and:
  - Hostrock lithology
  - Distance to fluid focussing structure (Bottom, Right)
  - Gold concentration





Further Development

- **BlueStem seeks to further develop the results gained from the investigations of the gold deposits already conducted in-house.**

- **With additional sampling data, a more comprehensive exploration technique and software package will be developed for use in industry which will expedite the discovery of hidden ore bodies.**

- **This requires a detailed investigation of a few orogenic gold deposits.**
  - **Ideally 1,000 sulfide samples will be collected and investigated using LA-ICP-MS.**

Collaboration

- **BlueStem wishes to enter into a Joint Venture with a mining company which is either mining a few of orogenic deposits or has access to core material from a few orogenic deposits.**

- **Project Breadcrumbs will take approximately 1.5-2 years to fully complete. Operational costs for the development of the technique and companion software need to be substantiated by the JV partner.**

- **The partner is granted free access to the software package for a negotiated period of time and a percentage of royalties generated from the licensing/commercializing of the software.**

About BlueStem Pty. Ltd.

- **Inter-disciplinary blue skies R&D company based in Western Australia**

- **A Few of the Current Major Projects:**
  - **-Energy Production**
  - **-Water Treatment/Desalination**
  - **-Metal Refinement**
  - **-Micro Electro Mechanical Systems**

Thank You