



# Geology and Mineral Resources

Providing advice and technical support relating to geology and mineral resources for all stages of projects to mining companies, lenders, investors, law firms, and governments.

## OUR SERVICES

- Mineral Resource Estimates and Audits
- Training and Workshops
- Geological and mineralization modelling
- Reporting for public disclosure, including NI 43-101 and S-K 1300 Technical Reports, Competent Persons Reports, and Mineral Expert Reports
- Exploration program advice and targeting
- Drill hole spacing studies
- Geo-metallurgical modelling
- Geostatistical studies
- Valuation of mineral properties
- M&A due diligence reviews of mining and exploration projects

## CLIENTS AND SERVICE AREAS:

Our Mining Advisory Group offer services to the mining industry at all stages, from exploration to closure and rehabilitation. Our geology group provides assistance mostly pertaining to geological modelling and the preparation, review, support, and disclosure of Mineral Resource estimates, but also in the valuation of mineral properties and exploration program advice. Our work contributes to exploration and development projects as well as operating mines. We advise banks (both debt and equity), institutional investors, governments, major mining companies, exploration and development firms, law firms, individual investors, and private equity ventures.

**LUKE EVANS, P.Eng.**  
Global Technical Director  
Geology Group Leader

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## OUR EXPERTS



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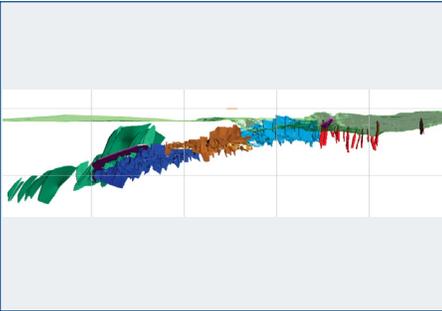
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## OUR PROJECTS

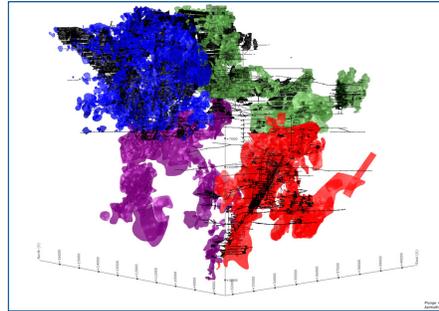


### **Björkdal Gold Mine**

[Mandalay Resources | Sweden](#)

- **Provided initial acquisition due diligence, followed by detailed operational status reviews and recommendations for improvements**
- **Streamlined long term geological modelling procedures**

Björkdal is an open pit and underground operating gold mine that has been in production since 1988. Mandalay acquired Björkdal in 2014 and following recommendations stemming from operational status reviews by SLR, completed plant modifications and streamlined geological modelling procedures. These process improvements resulted in increased gold recovery and time savings. SLR's technical team continued to work with the operation for several years providing technical support, annual audits of the mines' Mineral Resources and Mineral Reserves, by acting as Qualified Persons in their public disclosure, and by preparing NI 43-101 Technical Reports.



### **Red Lake Operations**

[Evolution Mining | Canada](#)

- **Highly complex mineralization modelling**
- **Mineral Resource estimation included innovative approaches to preserve local grades and promote continuity of mineralization**

The Red Lake operation is an underground gold mine in northwestern Ontario and is situated in one of the highest-grade Archean gold camps in Canada. Evolution Mining acquired the operation in April 2020, and trusted SLR's geology group to play an integral role in their in-progress operational transformation plan to restore Red Lake to a premier Canadian gold mine.

As part of that plan, SLR led a re-modelling exercise involving a large team of geologists under the mandate of preparing a Mineral Resource estimate at a lower cut-off grade than previously considered, and under a very tight timeline.

The team developed and implemented unique approaches to the modelling process using Leapfrog, python and Datamine.

SLR's technical team continues to support the operation through technical support and due diligence reviews.



### **Polymetallic Operations & Development Projects**

[Nexa Resources | Brazil & Peru](#)

- **IPO support for dual Canadian and US listings**
- **Preparation of annual SK 1300 and NI 43 101 Technical Reports**
- **Mineral Resource and Mineral Reserve Audits**

Nexa is one of the largest producers of zinc in the world. It has a diversified portfolio of five long life polymetallic mines, three located in the Central Andes of Peru and two located in the state of Minas Gerais in Brazil. It is building its sixth mine, the Aripuanã underground project in Mato Grosso, Brazil which is scheduled to go into production in 2022.

SLR Mining Advisory assembled a multidisciplinary team of professionals with extensive practical experience in polymetallic projects at high altitudes in South America to independently audit Mineral Resources and Mineral Reserves at Nexa's mining operations and deposits. The combination of SLR's technical aptitude, language skills, and strong knowledge of Canadian and US mining disclosure rules supported Nexa to achieve the goal of dual North American public listings. SLR's team continues to provide technical support across Nexa's portfolio of projects.

## OUR KEY CLIENTS

- [Alcoa](#)
- [Baffinland Iron Mines Corporation](#)
- [Barrick Gold](#)
- [BHP Billiton](#)
- [Bonterra Resources](#)
- [Calibre Mining Corporation](#)
- [Cleveland Cliffs](#)
- [Evolution Mining Ltd.](#)

- [Endeavour Financial Ltd.](#)
- [Endeavour Mining](#)
- [Export Development Canada \(EDC\)](#)
- [Fission Uranium Corp.](#)
- [Freshfields Bruckhaus Deringer LLP](#)
- [Glencore](#)
- [IAMGOLD Corp.](#)
- [Jaguar Mining Inc.](#)
- [King & Spalding LLP](#)
- [Kinross Gold Corporation](#)

- [Macquarie Bank Ltd.](#)
- [Mineros SA](#)
- [Nevada Gold Mines](#)
- [Nexa Resources S.A.](#)
- [Orion Resources Partners](#)
- [Quebec Precious Metals](#)
- [Royal Gold AG](#)
- [Société Générale](#)
- [Torex Gold Resources Inc.](#)
- [Vale](#)