Mira Geoscience

CLIENT SUCCESS STORY

Geophysical Inversion Modelling and Interpretation

Chieftain Metals seeks to model legacy IP and magnetic data in 3D – and finds promising targets with Mira Geoscience

Owing to the success of the 3D inversion initiative carried out over the immediate Tulsequah Chief deposit area, the Company is again retaining Mira Geoscience Ltd. ("Mira") to perform 3D inversions of IP data over the very prospective Big Bull, Banker/Sparling and southeast areas of the Tulsequah VMS property.

Chieftain Metals Inc. Toronto, Canada - May 29

Summary



Chieftain Metals Corp. is exploring and developing two advanced stage polymetallic massive sulphide deposits in northwestern British Columbia: the Tulsequah Chief and Big Bull projects. Mineral exploration in this area is challenging due to significant faulting and deformation of multiple, complex geological units. They wanted to dig deeper into their existing geophysical data to search for more answers about mineralization in the project area. The aim: identify additional drill targets to expand the known resource.

At Mira Geoscience, we have one of the mineral industry's largest and most experienced teams of geophysicists. With almost 15 years of experience and thousands of complex projects completed, we know the best practices, and the mistakes to avoid when modelling and interpreting challenging geophysical datasets. For this geophysical modelling effort, we were provided with magnetic and induced polarization (IP) data collected in 1994. Legacy data does not always comply with today's continuously evolving technology, but integration of these data into a comprehensive 3D model is crucial to effective interpretation. We are specialists in finding innovative ways to provide our clients with a clear understanding of their data. In this manner, we can provide focused advice and solutions for successful targeting.

Project objectives:

- Extract as much value as possible out of the legacy data
- Generate 3D models of magnetic susceptibility and chargeability
- » Use the "compactness" geophysical modelling algorithm to generate geologically reasonable model outputs
- Provide project deliverables on time and on budget
- » Deliver top quality customer service with clear communication.

COMPANY PROFILE



chieftainmetals.com Vancouver, Canada Chieftain Metals' principal business is the acquisition, exploration and, if warranted, development of mineral properties. Customer since 2013

Results

This 3D geophysical modelling project proved successful. Key outcomes of the project include the following:

- » The magnetic modelling confirmed broad-scale geologic hypotheses about the rocks that host the mineral deposit
- The IP modelling identified at least two new and exciting targets lying within close proximity to the known Tulsequah Chief deposit.
- » Chieftain Metals retained Mira Geoscience for additional modelling of IP data.



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3D chargeability model identifying the known massive sulphide deposit and other features of interest