



Integrated Borehole Imaging for Structural Characterization

Project Overview

DGI completed integrated borehole imaging surveys to characterize structural features and lithology across two mineral exploration projects in Newfoundland. High-resolution Acoustic Televiwer (ATV) and Optical Televiwer (OTV) data supported geological and geomechanical modelling through detailed interpretation of fractures, veins, foliation, and lithological contacts.

Challenges

- Required detailed structural characterization across multiple exploration drill holes.
- Needed accurate orientation data to improve interpretation of fractures, veins, foliation, and lithological contacts.
- Required consistent structural datasets to support geological and geomechanical models.

DGI Approach

- Conducted Acoustic Televiwer (ATV) and Optical Televiwer (OTV) surveys across 21 drill holes, complemented by gyroscopic (gyro) deviation surveys where orientation data were unavailable.
- Interpreted structural features including fractures, veins, foliation, and lithological contacts using high-resolution borehole imagery.
- Delivered integrated structural datasets to support exploration and geological modelling.

Project Outcomes

- Successfully completed borehole imaging surveys across two exploration projects.
- Produced high-resolution structural interpretations that improved understanding of geological controls and rock mass conditions.
- Delivered reliable orientation and structural data to support ongoing exploration, resource modelling, and future drilling programs.

PROJECT SNAPSHOT

- Region: Newfoundland, Canada
- Commodity: Gold & Polymetallic VMS
- Rock Type: Volcanic and sedimentary rocks
- Operation Type: Exploration
- DGI Solution: Acoustic Televiwer, Optical Televiwer, Gyroscopic Borehole Surveys