



Borehole Imaging for Structural and Geological Characterization

Project Overview

DGI completed Acoustic Televiwer (ATV) and Optical Televiwer (OTV) surveys at a gold exploration project in Ontario, Canada. High-resolution borehole imaging was used to characterize fractures, veins, foliation, and lithological contacts, supporting geological and geomechanical modelling.

Challenges

- Required detailed structural characterization across multiple exploration drill holes.
- Needed accurate orientation data for fractures, veins, foliation, and lithological contacts to support geological interpretation.

DGI Approach

DGI completed Acoustic Televiwer (ATV) and Optical Televiwer (OTV) surveys across six drill holes, producing high-resolution borehole images for structural interpretation. Geological features including fractures, veins, foliation, contacts, faults, and alteration fronts were mapped and oriented to create comprehensive structural datasets for geological and geomechanical modelling.

Project Outcomes

The program delivered high-quality structural datasets despite challenging borehole conditions. More than 2,400 structural features were interpreted across six drill holes, providing valuable insight into structural trends and enhancing geological interpretation, geomechanical modelling, and future exploration planning.

PROJECT SNAPSHOT

- Region: Ontario, Canada
- Commodity: Gold
- Rock Type: Archean volcanic, sedimentary and intrusive rocks
- Operation Type: Exploration
- DGI Solution: Acoustic Televiwer, Optical Televiwer, Structural Interpretation