

**Q.** *How do geologists and exploration teams accurately pierce the target and see drilling results against the geologic model while a hole is in progress?*

**A.** G Mining Ventures Corp. adopted Major Drilling's Drillside Imaging Unit and KORE Geosystems' online platform to view core images alongside their geologic models in near real-time, guiding drilling decisions.

## THE GEOLOGIC CHALLENGE

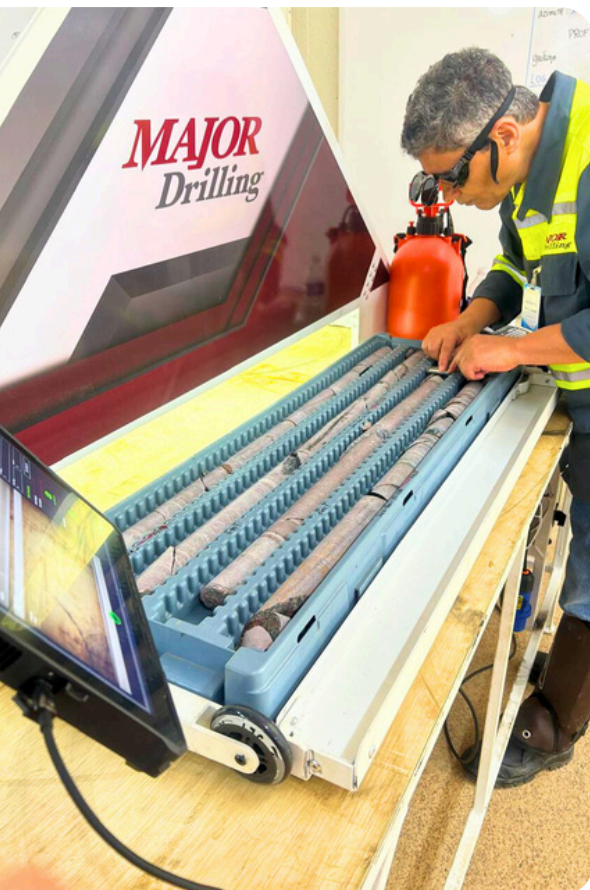
The Tocantinzinho (TZ) mine is a high-grade open pit gold deposit in the Tapajos district in Para State Brazil. The mine and surrounding areas are being drilled for reserve replacement, in-pit deep orebody delineation drilling, and near-mine expansion campaigns. The project commenced in 2022, advancing remarkably to commercial production in 2024.

The ore body at TZ is open in several directions with high prospectivity in the district. In 2024-2025, G Mining Ventures Corp.'s exploration team began drilling to vector mineralization and test mineralization at depth.

The team craved innovative solutions to run an agile drill program. Through Major Drilling, G Mining turned to KORE Geosystems' AI and machine learning to support lithologic logging and optimize the drill campaign.

Capturing images at the drill and delivering near real-time core markup, lithologic quick logs, and basic geotechnical logging significantly improves productivity and standardization. Geologists now have a built-in link to modeling software and can validate the geologic model from anywhere in the world. They can make agile decisions on whether to extend or cut drilling while holes were still in progress.

**With Major Drilling's drillside geologic imaging capabilities, the G Mining team has access to real-time core photos, quick geological logs, and standardized geotechnical data.**



Drillside logging pushes core photography to the cloud for remote insights.



A Major Drilling team member loads core into the Drillside Imaging Unit tray at G Mining Ventures Corp.'s Tocantinzinho Mine.

## GEOLOGIC SOLUTION TO AGILE DRILLING AND AI ASSISTED LOGGING ▼

Major Drilling’s partnership with KORE Geosystems introduced a drillside, cloud-based, AI assisted, geology platform to TZ. This technology capitalizes on high resolution image storage, provides open APIs to import hole IDs and export logging and photos, and integrates with geological modeling software, Leapfrog Geo. Through a Starlink satellite internet connection at the drill site, images are loaded from the remote jungle to the cloud immediately.

Major Drilling’s Innovation Team overcame field-level design challenges through a reliable, weatherproof field-portable camera system that can withstand humidity and high temperatures. Early power stability issues were resolved by the driller-client partnership built on a vision of successful job completion made possible through coordinated support. The result? Resolution of potential power issues not just for this application, **but on all rigs.**

**Major Drilling brings orebody knowledge drillside. The solution to capture images at the drill site marks the client-focused, value-added service that is the vision for this collaboration.**

### RESULTS ▼

#### Acceleration and Accuracy

- Real-time geology
- Improved consistency in logging codes
- Reduced errors especially in RQD
- Improved speed of workflow
- Reduced visits to the drill to verify progress
- Online SAAS platform visible from anywhere

#### Integrating APIs

- API connections allow for visualization and validation of geologic models



## TRANSFORMING GEOLOGIC LOGGING ▼

*Outcomes for G Mining Ventures Corp.*

*Julie-Anais Debreil, P.Geo., Ph.D., Vice President, Geology*

### WORKFORCE EFFICIENCY

#### Maximizing productivity through time savings

*“Technicians assigned to RQD already have more time to dedicate to other activities, for example field exploration. This improves task distribution and helps prevent backlogs or delays.”*

### TIME SAVINGS

#### Reduced hours between drilling to core photography

*“In the past, it could take more than a day before the photos were available for viewing to validate core descriptions or to see where the gold zones were. Now, we have geologic results uploaded and accessible in the cloud within minutes of drilling.”*

### IMPROVED WORKFLOW

#### Quick logging via machine learning

*“Manually opening each individual image was time-consuming and inefficient. Now, we can efficiently validate logged intervals directly during the modeling process, greatly streamlining the workflow.”*

**Images once stored as files in folders on a server are now searchable, indexed, depth referenced and able to be viewed online anywhere in the world within seconds.**

## LEARN MORE ▼



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