

# Laframboise Drilling Searches for Minerals with the Prism Directional Wedge

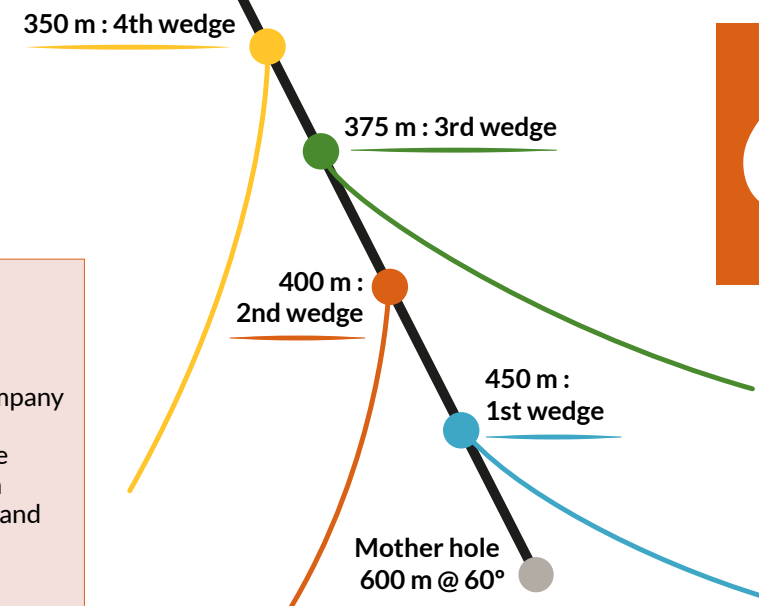


## The Challenge

In this project from Laframboise Drilling, wedges were used to help find additional orebodies on a drilling contract in Gowanda, Ontario. The drilling team had found silver in one ore body and now was searching for similar adjacent deposits. They had drilled a 60-degree mother hole straight down to 600 meters.

Knowing that the use of wedges would provide a minimum of 1.5 degrees of deviation, they planned to deflect from the mother hole starting at 450 meters and moving upwards using four wedges. The strategy was to deviate in a different direction at each point, that is, at the 450m mark, the 400m mark, the 375m mark and the 350m mark.

Each of the four individual cuts would go to a depth of between 600 and 650 meters. This plan would allow them to explore the surrounding ground at that depth without beginning a new hole from the surface each time, thus avoiding several hundred meters of unnecessary drilling.



**60%**  
savings in time

**Client**  
Laframboise Drilling

A private drilling company located in northern Ontario, Canada. The company has been in business since 2007 and has 3 drill rigs.

**Location**  
Gowanda, ON, Canada

## The Solution

Following advice from the Fordia technical representative, they decided to use a Prism Directional wedge. This wedge allows the driller to lock the wedge securely at any point in the borehole, orient the wedge, and anchor the facet in the desired direction – all in one trip.

This is accomplished by a unique 2-stage locking device. The first stage positively locks the wedge at the desired depth, without the use of cement or resins, and the second locks in the direction or azimuth of the wedge facet. It is not retrievable and remains a permanent fixture in the hole. These wedges are split in the middle, with a threaded connection just above the wedge face. This makes it much easier to transport and install in shorter sections.

Installation of the wedge is safe due to its keyway system built directly into the wedge facet, and the wedge can be set at any depth in suitable ground without prior hole preparation. More importantly, the Prism Directional wedge helps drilling teams save a tremendous amount of time by reducing the number of down-the-hole trips while wedging.

## The Results

The team at Laframboise Drilling was most interested in reducing the number of in-hole trips. In their experience with wedging, it took at least three trips, and reducing this number would not only mean a substantial amount of time saved, but it would also be safer. They were not disappointed. **The number of trips down went from three to one, resulting in 60% savings in time.** Wedging was done during the night shift so the next shift could be ready for drilling in the morning. By comparison, at 750 meters and using a standard by-pass wedge, it would take at least two consecutive shifts.

“I really like this wedge. It allowed us to wedge much more quickly,” said Claude Laframboise, President at Laframboise Drilling. “We were also really pleased with how easy it was to use,” he added. Fordia’s technical rep had explained and demonstrated the proper installation of the first wedge. He supervised as the Laframboise drillers performed the second installation and after that, the drillers were able to install the next two wedges by themselves without supervision.

“The installation demonstration was excellent. I really appreciate the engineering and the ideas behind the development of this wedge. **There really is no other wedge that we would consider for our needs.** The Prism Directional wedge saves us a lot of time so our operations are more efficient and productive,” added Mr. Laframboise.

*“It allowed us to wedge much more quickly. We were also really pleased with how easy it was to use.”*

Claude Laframboise, President at Laframboise Drilling



Fordia's Prism Directional wedge is available in sizes N and H. For more information, visit:

