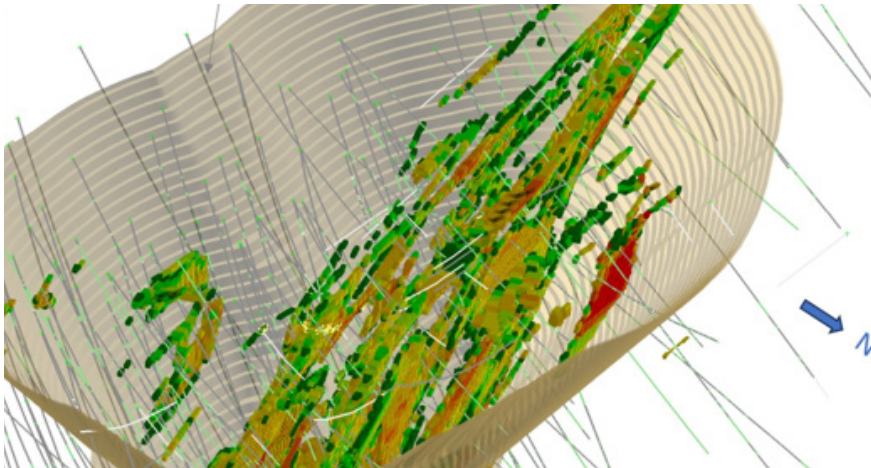




Advancing with DomainMCF

An exploration company in Canada found that Maptek™ domain modelling technology provided a faster way to uncover the resource potential of a gold project.



Emperor Metals is a gold exploration company focused on advancing the Duquesne West Gold project in Quebec, Canada. The project has a historical inferred mineral resource estimate of 727,000 oz of high-grade gold at an average grade of 5.42 g/t Au.

Historical data from more than 100,000 metres of drilling has been augmented by a recent 8,600-metre drill program. The high grade gold coupled with broad low grade bulk tonnage gold offers promise for developing an open pit above a high grade gold deposit.

Emperor Metals developed a 3D geological model using Maptek™ DomainMCF machine learning assisted domain modelling technology.

John Florek, CEO of Emperor Metals, acknowledged that without DomainMCF, the time to develop a 3D geological model would have been prohibitive.

'Within a month, we were able to build the first ever mineralised model of the deposit and within four months the first ever 3D geological model,' said Florek.

Florek was already familiar with the domain modelling technology and its many applications. In 2022, he was awarded third place in the Maptek Geology Challenge—a global competition geared towards rewarding the most innovative uses of DomainMCF—for application of the technology on a series of diamond drillholes for this high grade gold deposit.

Florek and his team continue to use DomainMCF and maintain a close partnership with Maptek.

'Working with Maptek allows us to capitalise on their expertise —we get access to developers, mathematicians and a specialised technical team,' he said.

The geological models of the Duquesne West Gold property have improved visualisation of the deposit and enhanced communication between project management and investors.

'Within a month, I could do a proper evaluation of the deposit and present the model to my board of directors,' Florek said.

Emperor Metals needed the power of machine learning to handle its large dataset in a timely manner.

Florek considers it vital for an exploration company to take advantage of new opportunities as quickly as possible, rather than waiting and potentially dropping a property due to lack of progress.

Not only did DomainMCF give ending the lithological, geological and structural control of the deposit gave them new areas to target for exploration.

We see that the DomainMCF model is legitimate and accurate given the results from our drilling program. The model helped us to target specific areas that might have otherwise been overlooked.

Specifically, their interpretation led them to three distinct scenarios to add gold ounces to the project. In addition to the potential for high grade underground mining, the results of their drilling program have shown potential for open pit and low grade underground bulk tonnage mining.

Emperor Metals will continue using DomainMCF during the next phase of exploration and plans to add new geological information from the recent drilling campaign to the model.

Florek attributes much of the success from the first phase of exploration of the Duquesne West Gold property to DomainMCF and the benefits of this machine learning technology.

*Thanks to
John Florek
President, CEO and Director
Emperor Metals*