

## **Eyes wide open with virtual reality**

Think of the marvel of an ultrasound, which can provide a real-time image of babies growing in a woman's womb. Without the use of this technology, an obstetrician is working in the dark.

Transfer this image to a complex, old, deep underground mine like Red Lake. There is a lot of information but, without the application of virtual reality (VR) visual technology, those data sets cannot be visually appreciated. Different, sometimes competing departments, such as production, engineering, geology and head office (think multiple births), are making decisions that impact on each other. Those impacts can be more easily understood if the groups can meet in a studio (think small, warm and dark) where they can see all the relevant information from different angles and truly understand all the issues.

Although VR has become a widely-used technology in many fields, the first such facility was opened at a mine site in early 2004. Laurentian University's MIRARCO teamed up with Goldcorp Inc. and Placer Dome Inc. to build the VR studio at the Red Lake mine in Balmertown, Ont., to be shared by the two companies. The high-end projection, advanced edge-blending and Gocad software immerse viewers in a seamless 3-D stereographic image, as they look at the flat screen.

Having the studio onsite has made a great difference to the way the companies work. The mine engineers and managers use it on a regular, weekly basis. Staff can visualize information and make appropriate decisions without resorting to elaborate mathematics or expensive trial and error. In this way, the technology very quickly saves money and time.

Mirarco's startup director, Andrew Dasys, says his organization is trying to create a network to link the existing VR studios in Sudbury, Red Lake and Thunder Bay, plus build new ones in Timmins and Kirkland Lake, and possibly a mobile one. Through such a network, people in different locations could videoconference and discuss the same imagery, without having to travel.