

## Iron ore drillers face challenges; Harsh conditions lead to a change in northern Quebec

**THE DOWNING** Drilling drillers, face extremely tough conditions while drilling for iron ore deposits in the remote area of Schefferville in northern Quebec.

Typical ground formations are 70 percent iron ore with bands of chert that are very hard and abrasive. These drilling conditions require a free-cutting bit to stay sharp and achieve good production, as well as an abrasion-resistant matrix to attain acceptable bit life. The diamond bits the drillers had been using were not providing the life they needed to be competitive, and they were not staying sharp in the hard formations.

“With our previous bits, our drillers were never able to achieve the proper torque due to the bit continually polishing. The only method we had to sharpen the bits was to shut off the water, which resulted in many bits burning into the formation,” said Matt Mactavish, Downing Drilling Drill foreman.

The team found a solution to the problem with the bits by turning to Boart Longyear 09UMX bits.

These bits achieved an average 200 percent increase in life over the other bits in the same ground conditions. In addition, the bits did not require extreme measures to stay sharp, and the drillers were able to maintain the proper torque on the rigs while sustaining a continuously sharp bit.

The 09UMX Stage 2 bit, from the Ultramatrix line of diamond bits, is one of Boart Longyear’s most versatile impregnated bits. The large diamonds and revolutionary free cutting matrix allows it to out-perform traditional impregnated bits in very hard, abrasive and nonabrasive ground conditions.

While the drillers had been reaching an average 15 m (50 ft) of life with their previous bits, the 09UMX Stage 2 bits consistently achieved a bit life of 33 m to 45 m (108 to 148 ft) per bit. As a result of



the performance of the UMX bits – including the need to trip less often, as well as the reduction of wear and tear on their drill rigs, Downing Drilling’s exploration operations have become more efficient and profitable. The 09UMX Stage 2 diamond bit is now their bit of choice for all iron ore exploration projects. ■

Many iron ore deposits are found in the areas of Schefferville, Quebec, as well as Eastern Labrador/ Newfoundland in Canada.

## Cradle to cradle

Consulting assistance for mining clients from grass roots exploration through to mine closure.



 **srk.com**

>1,000 professionals • >40 offices • 20 countries • 6 continents