Overview:
Boart Longyear 09UMX™ Stage™ 2 Bit Outperforms Abrasive Ground Conditions
Iron Ore is the key raw material used to make steel. As demand for steel continues to increase, the demand for diamond drilling has also increased. Many of these deposits are found in the areas of Shefferville, Quebec, as well as Eastern Labrador/Newfoundland in Canada. Drilling in these Iron Ore formations provides many challenges from working in harsh weather to very hard ground conditions.

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 non-abrasive ground conditions.

Increased Bit Life

"We are proud to say that Boart Longyear makes an amazing bit for our hard ground conditions. The 09UMX Stage 2 bits cut steady, offer long life, and hold consistent penetration without any abuse on our rigs.”
Matt Mactavish, Drill Foreman, Schefferville Quebec
The Challenge:
Drilling in Tough Ground Conditions
The Downing Drilling drillers, currently drilling for Iron Ore deposits in the very remote area of Schefferville in Northern Quebec, face very tough ground conditions. Typical ground formations are 70% Iron Ore with bands of chert that are very hard and abrasive. These drilling conditions require a very 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 Solution:
Boart Longyear™ 09UMX™ Achieves 200% Greater Bit Life
The 09UMX™ bits achieved an average 200% 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.

While the drillers had been reaching an average 15 m of life with their previous bits, the 09UMX Stage 2 bits consistently achieved a bit life of 33 m – 45 m per bit.

As a result of the outstanding 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.

George Downing Estate Drilling Ltd.
Downing Drilling, headquartered in Quebec, Canada, was founded in 1947 and has been incorporated under Federal Charter as George Downing Estate Drilling Limited since 1958. They specialize in diamond, geotechnical, environmental and soil drilling. We are honored with the long term relationship Boart Longyear has established with Downing Drilling. As our oldest customer in Canada, their extensive drilling fleet covers the Ontario and Québec regions and includes diamond drills, air rotary down-hole hammers and reverse circulation drilling rigs.

Boart Longyear
Boart Longyear is a 120-year-old global mineral exploration company that is the leader in providing mineral exploration services and drilling products for the global mining industry and also has a substantial drilling presence for water exploration, environmental sampling, energy and oil sands exploration.

Headquartered in Salt Lake City, Utah, the company conducts contract drilling services in over 40 countries and provides mining products to customers in over 100 countries. Regional offices and operations are located in: Adelaide - Australia, Geneva - Switzerland, Santiago - Chile, and Mississauga - Canada.

Ultramatrix™ Diamond Bit Series: SSUMX™, 07UMX™, 09UMX™, 10UMX™
- Highly versatile, capable of long life and extreme cutting in varied ground conditions
- Very durable and able to resist wear within extreme conditions
- Offer several options in crown height (up to 25mm), waterways and diameter
- Boart Longyear’s most productive bit with increased output, efficiency and spectacular performance at sites around the world