



# KULSEN & HENNIG

Nature's Brilliant Colours

Newsletter No. 13

12/2012

## Gemmology Corner

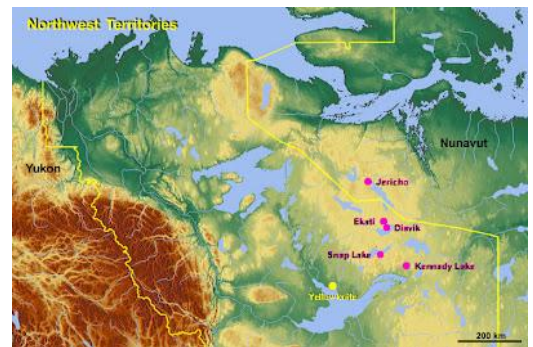
### The *Diavik* Diamond Mine and the Ice Road

#### **Diavik Diamond Mine – Key Figures and Information**

The *Diavik* diamond mine is a joint venture between *Diavik Diamond Mines Inc.*, a subsidiary of the Rio Tinto Group, and *Harry Winston Diamond Limited Partnership*, a subsidiary of *Harry Winston Corporation of Toronto*. Both companies are headquartered in Yellowknife, the capital of Canada's Northwest Territories. *Diavik Diamond Mines Inc.* operates the mine.

The *Diavik* diamond mine is about 300 kilometers "as the crow flies" northeast of Yellowknife and 220 kilometers south of the Arctic Circle. The mine is located on a roughly 20-square-mile island in the Lac de Gras.

Research in this area began in 1992, construction of the mine began in 2001 and diamond mining started in January 2003. With 700 employees, the mine is a major regional economic factor and produces 8 000 000 carats of diamonds (1,6 tons) annually. Its operating time is estimated at 16 to 22 years.



Location of the *Diavik* Mine. © Realgems



© *Diavik* Diamond Mine

#### **Ice-Roads**

In countries with corresponding climates (i.e. Sweden, Finland, Russia, Canada), ice roads crossing frozen lakes, rivers and marine waters are used for transportation.

For safety reasons, the maximum allowed weight of vehicles is limited on these public roads.

There is also a speed limit, as excessive speed could trigger vibrations underneath the ice surface leading to dangerous cracks and breaks in the ice.



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## **The Tibbitt to Contwoyto Winter Ice Road**

Although the *Diavik* diamond mine has an airport, the *Diavik Airport*, designed with a 1 596 meter long gravel runway for the Boeing 737, during the winter months, the mine depends on the *Tibbitt to Contwoyto winter ice road* to maintain its activity and receive goods all year round. The immense importance of this road became clear in 2006, when, due to a mild winter, the ice road opened late and closed rather early; as a result, the *Diavik* mine was forced to fly in the remaining cargo.

During the two-year construction of the *Diavik* mine, 7 000 truckloads of fuel, building materials, cement and explosives were transported to the mine. In 2012, there were at least 3 160 loads in total, including 60 loads for the construction of a wind farm - and all in just eight to nine weeks!



© Government of the Northwest Territories

*The Tibbitt to Contwoyto winter ice road* - incidentally the longest ice road in the world - is operated and rebuilt every year by the mining companies from the region - *Diavik Diamond Mines Inc.*, *BHP Billiton Diamonds Inc.* and *De Beers Canada Inc.*

It connects Tibbitt Lake, near Yellowknife, with the *Jericho* Diamond Mine, located 400 kilometers to the north, and passes by several gold and diamond mines. The road measures 568 kilometers in total length, although only 73 kilometers are land passages. Open from February to early April, it is primarily used to transport heavy loads and dangerous goods to the mines. The *Diavik* diamond mine is located at kilometer 360 along the route.

## **Ice Road Truckers**

The exciting and informative documentary series *Ice Road Truckers* accompanied several truckers for a season on the *Tibbitt to Contwoyto winter ice road*. As a viewer, one is glad not to have to drive up to 30 hours in minus 40 degree Celsius temperatures on cracking ice, often only 90 centimeters thick.

More information about the *Ice Road Truckers* can be found in the gift recommendations in this newsletter. And if you are looking for adventure, you can reserve a trekking tour along the *Tibbitt to Contwoyto ice road*!

