



## Extension Bulletin

### Canadian Diamonds

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Many people don't realize that Canada is the world's third largest diamond supplier, next to Russia and Botswana. Diamonds are currently mined from four active mines in Canada: Diavik Diamond Mines Inc (N.W.T); Ekati Diamond Mine (N.W.T); Snap Lake (N.W.T) and Victor (ON). Canadian diamonds are mined in accordance with the principles of sustainable development, and the mines follow very strict environmental regulations.

Canadian diamonds are sold with certificates showing:

1. The serial number or a "Canadian Product" notation,
2. The rough weight of the diamond and,
3. The cut weight of the diamond. This allows many of the diamonds to be traced back to the mine of origin.

In addition to the certificate, many of the diamonds are laser inscribed on the stone's girdle. The girdle is the rim between the flatter top and the pointed bottom of the diamond. This laser inscription cannot be seen with the naked eye, and can only be viewed through either a 20X magnification hand lens or a microscope.

Laser inscription technology is a "cold laser" process that utilizes the

shortwave length of light and therefore has no thermal effect on the diamond. In other words, laser inscribing a diamond does not chip, fracture, weaken, or damage the diamond. Many companies have a signature logo that is inscribed on their diamonds, such as a polar bear or a maple leaf.

Some companies have taken laser etching a step further and now offer personal message inscription on a diamond. The benefits of the laser inscriptions is that the serial number can be traced back to the mine, which ensures to the customer that the diamond is truly Canadian.

LUCAS now offers a diamond imaging service, where an image is taken of a diamond ring. Under high power you can see characteristics that make your diamond unique (i.e. inclusions, fractures or the laser inscription). The images are delivered to the client as a computer image file (.jpg or .bmp).

**For more information** about technical expertise and services available through LUCAS, contact:

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Many diamonds mined in Canada are laser inscribed.