



Western Canadian Gemstone Newsletter

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STARR

Iolite (cordierite) developments in the Slocan Valley, BC

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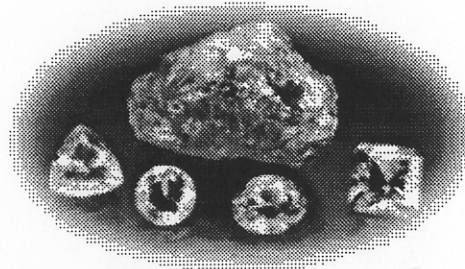
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New iolite deposit

The Canadian Gemmologist reports that Anglo Swiss Resources Inc. has been finding significant amounts of sapphire in the past three years on its properties in the Slocan Valley, B.C. A number of other gemstones have been found in the deposits, including pyrope-almandine garnet, **iolite (cordierite)**, amethyst, clear, rose and star quartz, schorl and dravite tourmaline, beryl, spinel.

In November, 1998, a sampling program tested two gem quality iolite-bearing zones on the Blu Starr property. Two zones outcrop about 1 km apart with excellent access. Iolite (cordierite) is a violet-blue colour similar to tanzanite. It is pleochroic: blue-violet, honey yellow, and pale-blue grey. Correct orientation when faceting is critical to obtain the best colour. Cabochon-cut material from this property displays a noticeable star effect.



The iolite host rock is distinctive, dark green, fibrous metamorphic rock composed of biotite and fuchsite mica, tremolite-actinolite, iolite, quartz, feldspar, megacrystic, almandine-pyrope garnet and amphibole. The iolite occurs as large crystals in quartz vein stocks and pegmatites, and as scattered masses throughout the host rock. It weathers to irregular masses, but the deepest samples show euhedral, dark violet crystals with minimal alteration. A major factor in the value of the gems will be an attractive, saturated colour, and large enough size. The deposit is in an area prone to freeze-thaw cycles that cause fractures.

Approximately one tonne was taken from each outcrop, yielding roughly 25 kilograms of high-grade iolite each. The total yield was more than 100,000 carats of rough. The first iolite gemstones have been cut with very positive results. The chosen pieces have a "superb blue-violet colour, excellent clarity, and intense brilliance"

Market potential

A January 1999 report from the *National Jeweler* reports that iolite, a bluish-violet stone, was recently discovered on Anglo Swiss Resources Inc. Blu Starr Property in British Columbia's Slocan Valley. The 13,000-acre area is a fertile source of star cabochon sapphire, garnet, aquamarine, beryl, tourmaline, titanite, moonstone, smoky rose and star quartz mines.

The company is sorting facet grade material for shipping to its Sri Lanka cutting facility. More than 50,000 carats of iolite crystals have already been

obtained.

If the material is found to be of good quality, this find may make an impact on the market, according to James Alger of James Alger Co., Manchester, N.H., a gemstone supplier. The size of the faceted gems would also be a factor - iolite rarely occurs in larger sizes, and especially in a frost-prone area like British Columbia.

Although there doesn't seem to be a shortage of commercial material, fine-quality iolite is more difficult to obtain. Iolite is most often mined in India, though some gems come from Tanzania. Top quality stones account for only 10-20% of iolite that is cut, Alger estimated.

"A problem with iolite is that the color is often not saturated enough," he said. "Most customers are looking for blue material, and there is a great market for beautiful stones. I found very little quality iolite in Hong Kong last year."

Extent of deposit

Describing the locale of the deposit, Anglo Swiss reported that the two one-tonne samples on the surface were located over half a mile apart, and provided more than 100,000 carats of iolite rough. The company anticipated that the deposit might run continuously between these two surface showings.

Faceted gem grade iolite gemstones in the 1-5 carat range are wholesale priced at US\$60-80 per carat. The deposit's potential is therefore significant. Independent gem specialists at the 1999 Tucson Gem Show rated the stones among the best in the world for color and clarity.

Latest report -- April 1999

Samples of gem-quality iolite and garnet were recently shipped to Chemex Labs of North Vancouver, for whole-rock and multi-element analysis. The whole-rock analysis will assist in defining the exact nature of the almandine-pyrope gem garnet, which is thought to be a new variety.

The unusual colour and brilliance of the gems may be caused by a high chrome content:- 0.09% in the garnet, and 0.05% in the iolite. In addition, the garnet contains a substantial amount of rare-earths, most notably yttrium, at 548 ppm. A micro-probe analysis of the gems is currently being done by a major university, which will further define the chemical characteristics of the gemstones.



The company has staked another 37 claim-units contiguous to the Blu Starr Property. A shallow-dipping horizon hosting the iolite has been intermittently traced for more than two kilometers along the base of the mountain in a north-south direction. This new area displays the same prospective geology that, in addition to gem-quality iolite, also hosts gem-grade garnet, star-sapphire and several other gemstone crystals.

The company's immediate goal is the ongoing extraction of the North Rainbow iolite showing and the establishment of a proven gemstone resource.

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