



TRUE NORTH GEMS

In a world hypnotized by risks – real and sometimes imagined – unique long-term investments are poised to be ignored, benefitting those few managing to look beyond tomorrow. Toronto-listed junior miner True North Gems (TSX: TGX) might just be one of those opportunities.

True North Gems is engaged in something as unique as the exploration and development of deposits of rubies, sapphires (primarily pink sapphires), and other colored gem stones. The company has several exploration targets in its portfolio, as well as one development project: its flagship project, Aappaluttoq.

Aappaluttoq project

The Aappaluttoq project is a ruby and pink sapphire deposit located on the island of Greenland. True North Gems has been exploring the area since 2004 when it acquired an exploration license from *Brereton Engineering and Developments Ltd.* True North conducted exploration until it was forced to suspend activities due to the financial meltdown in 2008.

With the economy stabilizing, exploration recommenced, and in 2011 the company, led by a highly experienced team with extensive experience from gemology as well as the gemstone market, published the Aappaluttoq pre-feasibility study. The study, which to date has been followed by a favorable Environmental Impact Assessment as well as a positive Social Impact Assessment, indicates a low cost, high stripping ratio mine with relatively small initial investments. The low

cost structure derives primarily from short haul distances and the small scale of the mine. Life of mine is estimated to approximately 9 years, with operations between April-November and 8 years of full production. At full production, the mine, employing 63 people, will handle 455,000 tonnes per year of extracted rock, containing 25,000 tonnes of corundum ore.

Access to the site will be by boat or helicopter, with helicopters being as large as the Sikorsky



S-61. Four hours by boat north of Aappaluttoq, in the city of Nuuk, True North will maintain sorting facilities and locate administrative headquarters, employing 14 persons.

The gemstone market

Contrary to the fairly well defined 4Cs – Cut, Color, Clarity, Carat – by which diamonds are valued, there is no general agreement on how to classify colored gemstones. The classification of a stone as either ruby or pink sapphire may vary according to the evaluator, and thus also their value.

The lion's share of the world's rubies still comes from Burma. Even though several countries, including the United States, have officially banned imports of Burmese stones due to political and humanitarian issues, the country still dominates the supply. According to experts, this should not be possible given the sanctions in place, thus suggesting a large illegal market. However, output from Burmese

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mines appears to be in a declining trend. Complicating things further is the fact that due to the current ruby mines being located in closed and unstable nations, the geology of gem corundum deposits is still poorly understood.



Recently, documentation supporting the origin of rubies has gained significant importance in ruby trading, and then not only in order to demonstrate the socially responsible production of the gems, but also their authenticity. At present, it is not only possible to enhance stones through various chemical processes, but also to manufacture synthetic rubies virtually impossible to discern from real ones by visual inspection.

According to True North Gems' own research the ruby market, although considerably smaller in volume than the market for sapphires, in 2009 was the largest in terms of value: \$ 2.1 billion, versus \$ 800 million for sapphires.

The plan is to sell all rubies and 60 % of pink sapphires from Aappaluttoq as polished, with the remainder sold as rough. Although the company has conducted several independent valuations of selected bulk samples, management underscores that the ruby market, especially for the very small sized gems that will constitute the majority of output, is still an unknown which will not be clarified until production commences.

The company has chosen to base project estimates on a price for faceted rubies and pink sapphires at \$ 56 per carat. Less valuable cabochons are valued at \$ 20 per carat, and rough stones at \$ 517 per kilogram, with the highest rough valuation obtained being \$ 2,875 and \$ 175 the lowest. One carat equals 0.2 grams.

Valuation

The pre-feasibility study puts the after-tax value – using an 8 % discount rate – at \$ 17.5 million. This corresponds to 9.13 Canadian cents per share and a 40.5 % discount at the current stock price of 6.5 Canadian cents. At a 10 % discount rate, the NPV falls by almost 50 % to approximately \$ 8 million.



The PFS assumes full equity financing. Given a capital expenditure estimate of \$ 40.7 million – which includes a 10.7 million contingency and a ± 25 % CAPEX margin – this would at the current share price result in no less than a 318 % dilution. The project-NPV per share consequently drops to 2.2 Canadian cents: less than half the current market value.

According to the PFS, the majority of the production and project value will be in later years. The payback time is thus relatively long at 5.5 years. After-tax IRR is estimated to 17.5 % at an 8 % discount rate.

Given the conservative price estimates and low risk characteristics, the study concludes that True North Gems should proceed to mine development, the greatest risk being the

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proportion of pink sapphire possible to sell as polished. As pink sapphires will constitute the largest share of production, a decrease of 5 % of the proportion of polished relative to the 60 % planned, results in the project's pre-tax NPV dropping by 27.3 %.

The issue of financing

Obviously, great *opportunities* do not necessarily make great investments. For proof, one only has to look at recent developments for the Toronto- and Oslo-listed Northland Resources (TSX: NAU, OB: NAUR). Located in northernmost Sweden in one of the most favorable mining jurisdictions, and with a portfolio of both great current as well as future resources, the share was virtually crushed as the company's bond offering failed, forcing an expanded stock offering and significant dilution. Although the company's projects are still, albeit difficult market conditions, touted as very promising, the case nevertheless demonstrates the importance of adequate financing.

The bottom line

Have no illusions: True North Gems' Greenland mine will not be a billion dollar Ekati project. However, due to its small scale, environmental impacts will be almost non-existent. The company also possesses exploration licenses adjacent to the current

project, leaving the door open for future expansions.

As management emphasizes, the markets for ruby and pink sapphire are still unexplored and largely unknown territory. To date during exploration activities, the company has not found any ruby larger than 0.69 carat: this stone sold for \$ 2,100, or \$ 3,043 per carat. This price is to be compared to the \$ 56 per carat applied to polished and cut stones in the Aappaluttoq project's NPV-calculations.

At five Canadian cents, junior miner True North Gems may in fact be fairly valued. However, given the conservative pricing, as well as the marketing potential for socially-conscious Greenlandic gems, the upside appears more attractive than the downside frightens.

Also, the find of merely *one* large sized ruby would most likely make the stock spike, and the company would gain widespread recognition in this often controversial niche market. Finally, one must not forget that Aappaluttoq is but *one* project in True North Gems' portfolio.

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