



### GREENLAND MINERAL EXPLORATION NEWSLETTER

MINEX 29 · DECEMBER 2006

### RENEWED FOCUS ON GREENLAND GEMSTONES

Canadian Brad Wilson demonstrates the faceting equipment in Fiskenæsset (TrueNorth)



Two gemstone companies have demonstrated solid and continued interest in Greenland gemstone potential during 2006. Rubies and diamonds are definitely now in focus, with large high quality rubies at hand, and the size of diamonds growing almost with every new press release. The largest diamond to date has just been reported: 0.1216 carats. Apparently persistent exploration pays! The gemstones are in competition with two sulphide prospects (lead/zinc and/or molybdenum) as the next mining operation in Greenland to commence.



A selection of facetted rubies and pink sapphires from Fiskenæsset (TrueNorth)

On 25 July 2006, True North Gems released their plans to commence bulk sampling of the Aappaluttoq ruby discovery as well as news of their commissioning of a gravity concentrator as part of the 2006 exploration program at the Company's 110 km² property located near the village of Fiskenæsset, on the west coast of Greenland. The occurrence is an important discovery for the company and was a primary target for detailed geological mapping and bulk sampling in 2006.

On 19 September the company then announced the engagement of MVI Marketing Ltd. of California to conceive, complete, and deliver a comprehensive plan for the marketing and sale of Greenland rubies and pink sapphires produced from the company's property near the village of Fiskenæsset.

"This is a major step forward toward fulfilling the potential promised by our Greenland ruby and pink sapphire resource. MVI has the expertise to meet the needs of True North Gems. Having served major mining and gemstone clients, including BHP Billiton, Swarovski, and Tiffany, MVI can provide the experience we will require," reports Greg Fekete of True North gems.

### Drill cores deliver largest diamond to date from Greenland

On 24 October Hudson Resources Inc. announced the diamond results of the 2006 exploration drill core program. The highlight is the recovery of 35 diamonds, including the largest diamond ever found in Greenland. Sample 06DS02-DI, which was a 14.60kg core sample taken from a 4.5 m kimberlite intercept in the dyke, yielded the largest stone weighing 0.122 carats.

"We are very excited by these initial results from the 2006 exploration programme on the Garnet Lake dyke," stated James Tuer, President of Hudson. "The fact that such large stones have been recovered from such small sample sizes is very encouraging for the prospective grade and value of the dyke. We believe this demonstrates the potential for larger diamonds to be found as we move forward with the analysis of our 50 tonne bulk sample extracted from the Garnet Lake dyke this September. The sample has now arrived in Canada and we expect to have the results before the end of the year."

The results illustrate the highly diamondiferous nature and coarse diamond distribution of the kimberlite dyke at Garnet Lake. To date, a total of 357kg of kimberlite from the Garnet Lake dyke has yielded nine commercial-sized stones (+0.85mm) totalling 0.31 carats or a nominal 0.87 carats/tonne.

The core results confirm the Garnet Lake dyke as being a significantly diamondiferous body, which can be followed



Drill rig at site in the 2006 campaign in Maarmorilik (GEUS)

over a strike length of 900m and 450m down-dip. Additional results are pending from 06DS13, located 900m down-dip, as well as 06DS14 and 06DS15, located 500m and 700m down-dip to the northeast, respectively.

The 2006 drill program was primarily designed to define the structure of the Garnet Lake kimberlite body and it has done so successfully. Core samples were selected from various kimberlite intersections, both above and below the main Garnet Lake kimberlite. They have been submitted for mineralogy testing by thin section, kimberlite indicator minerals, and diamond recovery.

# Exploration 2006 completed at the Black Angel zinc/lead property – a mine in prospect?

Angus & Ross PLC announced on 1 September 2006 the first results from this summer's drilling programme at its 'Black Angel' zinc/lead property in West Greenland. The Company is encouraged by these first results, which included some particularly high-grade massive sulphide intersections with combined lead+zinc grades exceeding 30%; most particularly in the South Lakes Glacier zone where a 700 metre outcrop of massive sulphide zinc-lead mineralisation was discovered last year. 8,675 metres of drilling in 67 separate holes has resulted in a total of 632 samples being sent for assay by ALS Chemex in Vancouver. A revised resource estimation incorporating the results of the new discoveries will be prepared by the company's consultants Wardell Armstrong International as soon as the final results are received.

Four target areas have been drill tested so far, with particular focus on the South Lakes Glacier prospect and the Ark Prospect. Each of four holes within the Glacier Zone includes mineralised intercepts with combined lead-zinc grades in excess of 20%. In the ARK Zone, drilling has confirmed the presence of sulphide mineralisation at rela-



Newly discovered solid spahlerite ore in brecciated host rock near Maarmorilik (GEUS)



Aerial view of the olivine quarry at Seqi (Jóannes Niclassen, MTHS)

tively shallow depths, with a best Angus & Ross intersection to date of 7.45 metres, grading 4.4% Pb and 5.8% Zn. This area was previously drilled by Cominco in the 1980s and the data from its 25 holes will be used, together with the new data from the 15 holes Angus and Ross completed this year, to calculate a resource.

In addition, bulk samples from the original Black Angel mine and the Glacier prospect were taken recently. The samples total over 600 kilos and will be used for metallurgical testing which will form part of a feasibility study to be completed in early 2007. The company is heading to become the next active mine operator in Greenland as expressed in the October 6, 2006 issue of Mining Journal.

### First year of operation for the Seqi Olivine Mine in West Greenland

The development of mine operations at the Seqi Olivine Mine has progressed successfully. The Seqi olivine body, situated 90 km from Nuuk, is a large homogenous deposit of high quality olivine, with at least 100 million tonnes of olivine ore, and is operated by Minelco AB (LKAB). Production facilities for olivine in Greenland have been completed during the third quarter of 2006. Fine tuning of production began during the same quarter. As planned, the Minerals Division is now supplying LKAB's total requirement of olivine for the company's pellet production.

Introduction of olivine products for external customers is under way, as quoted from the LKAB interim report in January-September 2006.

### Grade improvements of gold in Nalunaq

Crew Gold Corp. has recently reported on the results for the year ending June 30, 2006 for the mine operated by Nalunaq Gold Mine A/S near Nanortalik reports Erik Andersen, General Manager of the mine, to MINEX News. The average gold ore shipped during the fiscal year was 19.0 g/t compared to 15.9 g/t for the previous year. A total of 123,800 tons were shipped for processing during the year. The mine is now developed from the 260 m level to the 560 m level with sublevels every 10 m in elevation. Nalunaq mine has begun receiving a new fleet of LHD loaders, underground trucks, service vehicles and an additional longhole drill to replace and expand the original fleet. Production rate is planned to be expanded to 500 ton per day.

In October 2006, Crew announced the purchase of the Nugget Pond processing facility in Newfoundland. It is planned that Nalunaq will begin shipping ore to Newfoundland in December 2006 and that processing at Nugget Pond will start in January 2007. The Nugget Pond plant has been on maintenance standby since 2004 and requires renovation and the addition of a gravity circuit.



GEUS geologists demonstrating the largest kimberlite boulder found in a side moraine along the nunatak, south-east of Nuuk (GEUS)

### New player at the Skaergaard -Platina Resources Ltd. is granted license after Galahad Gold

Galahad Gold Plc/Skaergaard Minerals relinquished their license during the autumn of 2006. On 29 September 2006 is was announced on the Galahad website that following the relinquishment of the Skaergaard licence to the Government of Greenland, the camp site had been cleared, and all items of value had been removed and relocated to Iceland.

A new player is now entering the stage. Platina Resources Ltd. was granted a new license covering the same area in mid November 2006. The company is still evaluating the database, which was purchased from Skaergaard Minerals. "So far highly encouraging", says John Ferguson, Director (26 November 2006).

### InterMoly underway with Pre-Feasibility Study at Malmbjerg in East Greenland

Following an operational assessment of the project in February this year, it was decided by International Molybdenum Plc (InterMoly) to defer the original feasibility study and large-scale underground mine development (see MINEX 28) and replace it with a new Pre Feasibility

Study (PFS) to be completed by the end of this year. The PFS is based on an open pit development and revised project configuration. InterMoly has retained several experienced, international consultants and engineering firms to assist with the PFS. These include AMEC, Knight Piesold, SRK, GR Technical and Roscoe Postle Associates. A preliminary report received from independent mining consultants confirms the technical viability of developing an open pit mine at Malmbjerg. Graham Mascall, Chief Executive Officer of InterMoly, said "We are very pleased to report the positive indications for open pit development at Malmbjerg and will now work to complete the PFS on this option by the end of this year" (31 May 2006).

### New titanium and vanadium estimates create hope for an ore in the South Greenland Isotoq gabbro

The Isotoq prospect in South Greenland, conducted by Dr. John Ferguson of the MDA Investment Pty Ltd., released a status of progress on 26 November 2006. Following a heliborne geophysical survey utilising E-M & magnetic techniques a dyke-like body of Gardar aged rocks gave positive responses to both of these techniques. Follow-up drilling identified a rhythmically layered magnetite-rich olivine gabbro. The layering is defined by variable magnetite concentrations. Geophysical and geological interpretation has defined a largely outcropping body about 750 m long

x 120 m thick and 120 m wide. Although of dyke-like form, the layered body appears to be a down-faulted lopolith having a feeder-dyke system about 30 to 40 m wide.

Of the iron-oxides, magnetite appears to make up about 50% of the rock and ilmenite about 5%. The magnetite is highly unusual in that it is titanium-rich as well as moderately enriched in vanadium.  $TiO_2$  content of magnetite is around 20% and  $V_2O_5$  about 0.35%. Together with the 51%  $TiO_2$  in ilmenite, a concentrate of magnetite + ilmenite would therefore have approximately  $25\%\,TiO_2$  and  $0.33\%\,V_2O_5$ .

# Progress in regional kimberlite research in southern West Greenland

Following the BMP and GEUS workshop held in Copenhagen a year ago, regional kimberlite research programmes relating to studies of the lithospheric mantle under southern West Greenland, petrogenesis of kimberlite, geotectonic and structural setting, and exploration techniques were continued during the 2006 field campaign. The eclogiterich and microdiamond-bearing Majuagaa archetypical kimberlite dyke near Maniitsoq (MINEX 28) has been further investigated and the eastwards continuation of a related dyke train has been followed successfully. Zones rich in garnet xenocrysts and in nodules of peridotite and eclogite were located.

A new and exciting discovery of kimberlite was made during the Survey investigation of supracrustal rocks on a 10 km² large nunatak in the Inland Ice, c. 140 km southeast of Nuuk. Here a large number of kimberlite boulders were discovered in a side moraine along the northern side of the nunatak. The kimberlite erratics occur over a distance of 300 m and are from one cubic centimetre up to 0.5 cubic metres in size. Additionally, they appear with abundant fragments and many nodules of crustal, mantle and eclogitic origin. The source of the boulders is unknown, as no in situ kimberlite has yet been seen on the nunatak. Kimberlites have not previously been recorded in this part of Greenland, thus the discovery opens a completely new area for diamond exploration.

# NunaMinerals creates an analytical lab facility in Nuuk: GreenLAB Greenland A/S

NunaMinerals A/S announced on 20 June 2006 that the first analytical lab facility for the mineral exploration industry has been established in Nuuk. The lab co-operates with Canadian Activation Laboratories Ltd., which through their sister company Actlabs Greenland will carry out the analytical work.

NunaMinerals A/S has underlined its position in Greenland by building new headquarters in Nuuk. The new office,



First pour of analyses from the Actlabs Greenland (NunaMinerals)



Eclogitic xenolith in a kimberlite dyke from the eastern part of the Maniitsoq kimberlite swarm (GEUS).



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named Minerals Centre Nuuk, includes optimized storage facilities as well as apartment renting facilities for exploration companies and partners with activities in Nuuk.

# New issues of the series 'Geology & Ore' and Fact Sheets with themes from 'Greenland exploration and mining'

New issues have been published in the series 'Geology & Ore' and 'Fact Sheets' (on Greenland mineral resources), with subjects relating to the mineral potential in East Greenland. The publications can be obtained free of charge from GEUS. E-mail minex@geus.dk for a copy.



2006 Geology & Ore No.6:The mineral potential of the East Greenland Palaeogene intrusions, 12 pp 2006 Fact Sheet No.13: A world class deposit in the Skaergaard intrusion, 2 pp

### New management of the Bureau of Minerals and Petroleum in Nuuk

Mr. Jørn Skov Nielsen, economist, was appointed Managing Director of the BMP during 2006. Jørn Skov Nielsen has several years' experience from BMP, where he acted as deputy head from 2002–2006.



### Greenland welcomes Mineral Exploration Roundup 2007 in Vancouver

The BMP tradition to participate in the yearly Roundup conference and trade show in Vancouver, Canada, will continue in 2007. You are invited to visit the Greenland booth (C11–C12), on 29–31 January 2007. The exhibition and material will focus on mining and exploration, especially, gold, gemstones and industrial minerals. Look in for a chat with the experts, who will be ready to tell you about geology, licensing and logistics in Greenland.

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