



GREENLAND MINERAL EXPLORATION NEWSLETTER

MINEX 36 · FEBRUAR 2010

Greenland Day 'Down Under'

Greenland meets Australia under the slogan: 'Greenland – the land of mineral opportunities'. At a one-day session in Perth, the Bureau of Minerals and Petroleum (BMP) will be presenting Greenland as a future mineral resource playground, direct to the Australian audience. Greenland

has experienced a very positive development of mineral licence interest in

recent years, and the number of mineral licences has tripled. A large number of the companies involved in Greenland exploration and exploitation activities are domiciled in Canada and Europe. More recently this picture has been supplemented by a growing interest from Australian exploration companies.

nies. The Australian companies are involved in advanced projects covering lead and zinc, zirconium, niobium, platinum group metals, gold and other commodities.

The BMP has the pleasure of inviting your company to attend a one-day presentation concerning the opportunities for mineral deposits in areas not yet covered by licences. The Greenland Day aims to tell the Australian mining industry about the mineral exploration opportunities in Greenland, the new Mineral Resources Act, as well as licensing terms and how to operate in Greenland. The second day is open for meetings between the individual companies and the BMP.

The Greenland Day meeting will take place on Thursday, 25 February, 2010 at the Perth Sheraton Hotel. Individual meetings will take place the following day. The event will give the Australian companies a nice opportunity to get acquainted with the Greenlandic geology, the mineral potential, the operating conditions in Greenland and not least how to apply for licences.

The Greenland Day programme will illustrate favourable geological environments with potential for mineral deposits. The technical session is addressed to the mining industry highlighting favourable areas for new mineral discoveries. Some Australian companies will share their experience on operating in Greenland. The mining service industry will also be present in Perth.

New finds of diamonds in West Greenland outcrop

- Tikiusaaq carbonatite complex (Nuuk area) established as new a diamondiferous environment NunaMinerals reported on 11 January 2010 that the company has conducted reconnaissance prospecting for diamonds in two areas in West Greenland. Within the Tikiusaaq license and with the recovery of a single micro diamond from a 32 kg sample, NunaMinerals has demonstrated that the dykes associated with the Tikiusaag carbonatite complex are diamondiferous. The host rock to the diamond is a lamprophyre dyke similar in composition to a kimberlite. This dyke and similar intrusive bodies in the area have bulk chemistry and contain mantle-derived garnets that are favorable for diamonds. At Tikiusaaq, caustic fusion testing has demonstrated that the lamprophyric dykes, which extend out from the Tikiusaaq carbonatite complex, are diamondiferous. A single microdiamond was recovered from the 106 micron screen from processing 32 kg of in-situ rock. This sample was taken from a dyke so far established to have a lateral extent of 500 m and an average thickness of approximately 1 m. The positive result establishes the area for the first time as a source for diamonds.

-At the Qaamasoq license, the company has confirmed the presence of considerable quantities of kimber-litic float samples. Previous exploration in the area has recorded a macro diamond from a single kimberlite float sample. In 2010

NunaMinerals plans to follow up these encouraging reconnaissance results.

NunaMinerals president and CEO, Ole Christiansen said, "These first samples from a reconnaissance programme show that both areas have a potential to host financially viable deposits of diamonds".



New data from South-East Greenland -

Mineral Resource Assessment Project South-East Greenland (MRAPSEG)

South-East Greenland, 62°N to 67°N, is the one of the lesser known and lesser explored regions in Greenland. Only very limited geological surveys have been carried out in the region and there is only a scarce amount of systematically collected basal geoscientific data and observations, e.g., mapping data, geochemical data, geophysical data, structural data, etc. Such data are essential for the exploration for new ore deposits, as well as for the general evaluation of a region's mineral potential and the establishment of modern geological models.

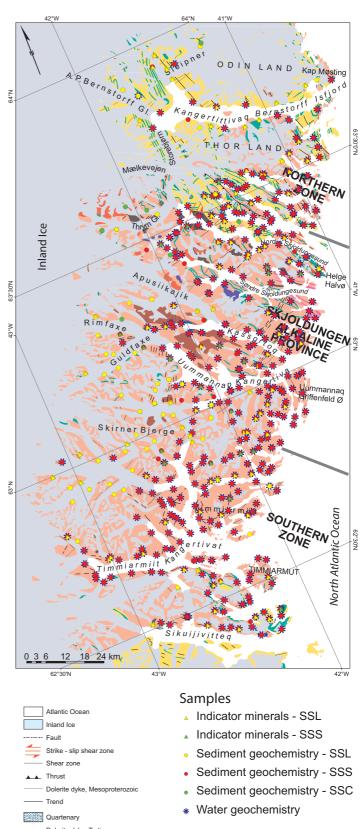
In order to improve this, the Bureau of Minerals and Petroleum (BMP) has financed a two-year programme in which regional datasets will be collected systematically during general geological reconnaissance. Sediment and water samples will be taken for geochemistry together with sediment samples of glacial overburden for indicator mineral analysis. In subsequent years this programme will be followed by a larger genuine geological and resource assessment, carried out in cooperation between the BMP and GEUS.

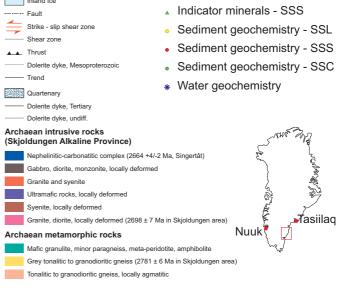
The rocks of the North Atlantic craton in South-East Greenland are bounded to the south by the Ketilidian mobile belt and to the north by the Nagssugtoqidian mobile belt. The craton is dominated by gneisses with small belts and slivers of supracrustal rocks of up 1 km width and extending up to several tens of kilometres and with several late-tectonic alkaline intrusions in the Skjoldungen area. The craton is subdivided into the Northern Zone (NZ), the Skjoldungen Alkaline province (SAP) and the Southern Zone (SZ).

Based on the geological reconnaissance carried out as part of the field work in 2009 potentials for the following mineralising systems have been identified:

Orthomagmatic Ni, Cu, PGE and Au

Small, metre-scale lenses of metamorphosed ultramafic rocks, often hosted within mafic rock sequences. In the NZ these are sulphide-mineralised and are generally elevated in Ni, Cu and Cr. Several rusty horizons, up to tens of meters wide and continuous along strike for tens of kilometres, have been seen within the mafic rock sequences. A potential for PGE and Au also exists within these rock sequences. Massive sulphide (pyrite-chalcopyrite), 2–5 m wide and continuous along strike for several kilometres, have been encountered within mafic to ultramafic rocks in the SAP.





Public release of sediment and surface water geochemistry data from unexplored South-East Greenland

- As part of the Mineral Resource Assessment Project in South-East Greenland (MRAPSEG 2009) sediment samples and surface water samples were collected for geochemical analysis.
- This is the first regional geochemical dataset from South-East Greenland and it will enable the exploration and mining industry to begin their assessment of this largely unexplored part of the Archaean craton. MRAPSEG 2009 is financed by the Bureau of Minerals and Petroleum.
- The sample media for the sediment samples were fine-fraction stream sediments, preferably taken at first or second order streams. In areas without
 drainage systems, sediments from glacial overburden (consolidated or fresh) and cliff-scree sediments were collected. The sediments have been sieved and split in the laboratories at GEUS and the fine-fraction material (<0.1 mm) is being analysed for 62 different elements at Activation Laboratories Ltd., Canada. A total of 506 sediment samples (including duplicates) were collected for analysis.
- In places with suitable drainage systems, the sediment samples were supplemented by surface water samples (two at each sample locality), which were analysed for pH, conductivity and water geochemistry. Measurements of the pH and conductivity were carried out on one of the water samples in the base camp during the fieldwork, the other sample was acidified before storing and later analysed for 65 geochemical elements at Activation Laboratories Ltd., Canada. A total of 384 water samples (including duplicates) were collected for geochemistry analysis.
- The sediment and water geochemistry, together with coordinates of sample locations and information on sample type and processing, will first be released to the public as raw data and access to the data will be free of charge for a limited period so that the industry has rapid access to the data. After that, as usual the data will be available at nominal cost on CD-ROM as a part of a GEUS report.
- The data will first be released on 1 April 2010 at 1200 (GMT+1); distribution to interested parties will be by email and at no cost to the receiver during the period until 15 April 2010. After this period, the data will have to be obtained by normal request to GEUS. This method for the distribution of data is specific for the sediment and surface water geochemistry data collected during the MRAPSEG 2009 field programme.

Hydrothermal quartz vein, potential for Au Quartz veins within hydrothermal alteration zones (pyrrhotite-chalcopyrite-quartz-biotite-garnet), 10–20 m wide and traceable from about 100 m to several kilometres along strike have been found in the SAP and in the SZ.

Alkaline and carbonatite intrusions related Nb, REE, U,Th, Diamonds

SAP hosts the Singertat carbonatite complex. Grab samples from carbonatite yield Σ REE about 2500 ppm. Surrounding rocks are in general elevated in REE and a potential for a hydrothermal halo with probable REE mineralisation in faults is possible. Ultramafic dykes, as conjugate sets, up to 2 m wide and traceable for several 100 metres along strike, have been located in the southern part of the SZ.These may host a potential for diamonds.

Other potential mineralising systems

The syn-tectonic gabbros, granites and syenites in the SAP are magnetite rich and the general geological setting is thought to be permissive for iron oxide copper-gold deposits.

How to sign up for the geochemistry data

If you are interested in getting the sediment and surface water geochemistry data when they are released, you can sign up now by sending an email to GEUS project leader Bo Møller Stensgaard (bmst@geus.dk). Please write 'Geochemistry MRAPSEG 2009' in the subject-field of the email.

Everyone that has signed up for the data before the release date, will be informed by email on 1 April 2010 at 1200 (GMT+1) with attached files containing the data (Excel spreadsheet; Text files and PDFs). Those signing up during the period until 15 April 2010 will receive the data as quickly as possible after their registration. GEUS and the BMP cannot be held responsible for possible errors related to the distribution of the data and the dataset itself. Furthermore, normal GEUS conditions for the use of digital data apply.

Sediment samples for indicator mineral analysis have also been collected as part of MRAPSEG 2009. These samples are currently being processed and at a date to be announced later will also become publicly available in similar manner.





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The Greenland Day continues at the PDAC in Toronto 8–10 March 2010

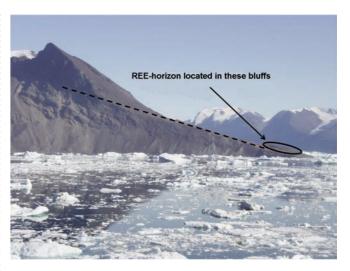
'Greenland Exploration and Opportunities' wil be the theme for the presentation. The Bureau of Minerals and Petroleum has the pleasure to present a half-day presentation concerning the opportunities for mineral deposits in areas not yet covered by licences. The technical session aims to inform the exploration and mining industry about the mineral exploration opportunities in Greenland, licensing terms and conditions for operating in Greenland.

To sign up for the presentation, please send your contact information to the BMP by e-mail (bmp@gh.gl) or fax (+299 32 43 02) to the Bureau of Minerals and Petroleum. A full programme can be viewed at the BMP homepage: www.bmp.gl. You are also welcome to visit our Booth # 417 and ask for Henrik Stendal.

Avannaa Resources launches new REE prospect in West Greenland

The Avannaa management presented a newly discovered REE mineralisation in the West Greenland Karrat Isfjord region in 2007. During the subsequent two years light-weight expeditions have established that this is a significant deposit which, in terms of potential metal content, is amongst the best REE deposits worldwide.

The 2009 fieldwork has confirmed the presence of a REE mineralised horizon on the Niaqornakavsak peninsula. The horizon is between 13 and 35 metres thick, conformable to the regional foliation, and pinches and swells over a strike length of 1.5 km. The horizon is open at both ends, where it is limited by the coastline. An important discovery is that the same horizon reappears on strike on the next peninsular to the East at Umiamako Nuua, resulting in a total strike length of the system of more than 10 km. This implies the existence of REE anomalous rocks of



Picture taken from the center of Karrat Isfjord, looking East over the Umiamako Nuua Peninsula (field of view about 4.5 kilometres) where the same horizon is seen projecting into the cliffs at the left.

regional extent, with potential for more finds over a wide area in the extensive Karrat Group.

The results of a channel sample through 29 meters of the section indicate average TREO+Y = 1.2%, including 12.5 meters thickness with TREO+Y=1.47% with individual values of up to 2.59% over one meter. The data indicate a particularly favourable distribution of REEs with average content of HREO+Y, accounting for 14.2-14.8%. The value of the resulting oxide concentrate based on this assemblage would be higher than any of the world's existing production or near-production deposits.

"Avannaa's aim in 2010 and beyond is to investigate the factors that can determine the commercial viability of the deposit, including detailed petrology, metallurgical scoping studies, and delineation drilling," says Nick Rose, CEO. "An important factor that we have already established is complete absence of uranium and only moderate content of thorium, with thorium segregated from the rare earths at the mineralogical level."

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