GREENLAND MINEX News

GREENLAND MINERAL EXPLORATION NEWSLETTER

Greenland MINEX News No. 13 November 1997

Transfer of the Mineral Resources Administration to the Greenland Home Rule Government

In August 1997 the Danish Government and the Greenland Home Rule Government initiated negotiations on a transfer to the Greenland Home Rule Government of the Mineral Resources Administration for Greenland (MRA), which is today an agency under the Danish Ministry for Environment and Energy.

It is expected that such transfer of the administration will be effected as of July 1, 1998. The transfer will cover both minerals and hydrocarbons. The transfer will imply that MRA will be abolished and a new mineral resources administration will be established under the Greenland Home Rule Government to handle the present tasks of MRA.

The transfer implies that the political responsibility for the administration, including the granting of licences under the Mineral Resources Act for Greenland, which presently lies with the Danish Minister of Environment and Energy, after the transfer will rest with a member of the Greenland Home Rule Government.

The basic principle of the transfer is that the roles will be reversed for the two parties in the Greenland Mineral Resources System, i.e. the Danish Government and the Greenland Home Rule Government. Apart from this the Greenland Mineral Resources System will remain unchanged. This includes the joint decision-making competence of the two parties implying that all fundamental decisions, including the granting of licences under the Mineral Resources Act, are made jointly by the parties, the Joint Committee on Mineral Resources in Greenland and the division between the parties of public revenues from mineral resources activities in Greenland.

The contents of licences granted under the

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ISSN 0909-0649

Mineral Resources Act will likewise remain unchanged.

The Danish Ministry for Environment and Energy and the Greenland Home Rule Administration are presently working on the administrative, economic, legal and other matters to be clarified before the parties can sign a new mineral resources agreement and the Danish Government can introduce the necessary Bills in the Danish Parliament.

Until the transfer has been effected all tasks in relation to applicants and licensees will continue to be handled by MRA, and all inquiries regarding licences under the Mineral Resources Act are to be made to MRA as usual.

Geological & exploration briefs

Greenland: part of the global diamond chase

kimberlites, diamonds, indicator minerals
but as yet, no pipes

The October 24th issue of *Mining Journal* reports that with prices for good quality diamonds still gaining strength, the worldwide exploration activity for the primary source rock, kimberlite, is *being carried out with a vigour which is unabated*. The ancient blocks of Earth's crust are being scoured for signs of these mantle rocks with their unique carbon inclusions. Greenland, like its closest neighbour Canada, is part of this global diamond exploration chase so much so that the entire Archaean craton of western Greenland is now staked in the search for diamonds (see map). The resurgence of international interest in the West Greenland kimberlite province - an area 1300 km long between latitudes 60° and 72°N - is at an all-time high and ground is being claimed in the Proterozoic terranes to the north and south of the Archaean block.

The presence in Greenland of the world's leading diamond company, De Beers (through it's wholly owned Canadian subsidiary, Monopros Ltd), along with Dia Met Minerals Ltd and Aber Resources Ltd - two of the successful companies exploring commercial kimberlite pipes in the now classical Lac de Gras region in the Northwest Territories of Canada - underlines the high-ranking diamond potential. However, one critical ingredient remains elusive in Greenland: pipes.

Exploration progress

Since the **1970's** it has been known that dykes and sheets of kimberlite and related rocks occur in swarms in western Greenland. There are also reports of surficial microdiamonds.

In **1995** came the important discovery by the Australian company Quadrant Resources Pty Ltd of diamond indicator minerals in sediments from streams emanating from lakes. This breakthrough, as reported in an earlier issue of *Greenland MINEX News*, was in an area of Proterozoic rocks immediately south of the Archaean block, and was a spin-off bonus during prospecting for Voisey's Bay-type nickel-copper-cobalt mineralisation. This discovery greatly boosted interest in western Greenland and created an early rush to stake ground.

The year **1996** saw Platinova's discovery in the Maniitsoq area of a microdiamond-bearing kimberlite boulder at a geophysically pre-defined lake target. This made the comparison to the Lac de Gras and other Canadian locations even more tantalising.

The **1997** field exploration led to two more firsts for Greenland: the discovery by Platinova of the first macrodiamond, followed by the Lexam Explorations Inc. autumn announcement of diamonds from *in situ* rock. The Platinova macrodiamond, from a kimberlite boulder, is a 1.62 x 1.53 x 0.22 mm stone recovered from a 27.6 kg sample; the Lexam find is of two white translucent microdiamonds from a 42.6 kg sample from a kimberlite dyke that can be traced about 2.5 km. The dyke contains abundant indicator minerals such as G-10 garnets, picro-ilmenites and chrome diopsides, with the largest chrome diopside measuring about 12 cm across. Both discoveries are from the Maniitsoq region, to the north of the capital Nuuk. Also of note are the finds of indicator minerals in samples from other parts of the Archaean block, for example high mineral counts have been announced in Monopros - Dia Met samples.

Winter exploration

Based on the promising finds from summer field work, diamond prospecting in Greenland continues through the winter months. For example Platinova, along with partners Aber Resources, Lexam Explorations and Fjordland Minerals, are carrying out a 10 000 line km geophysical survey in the Maniitsoq region.

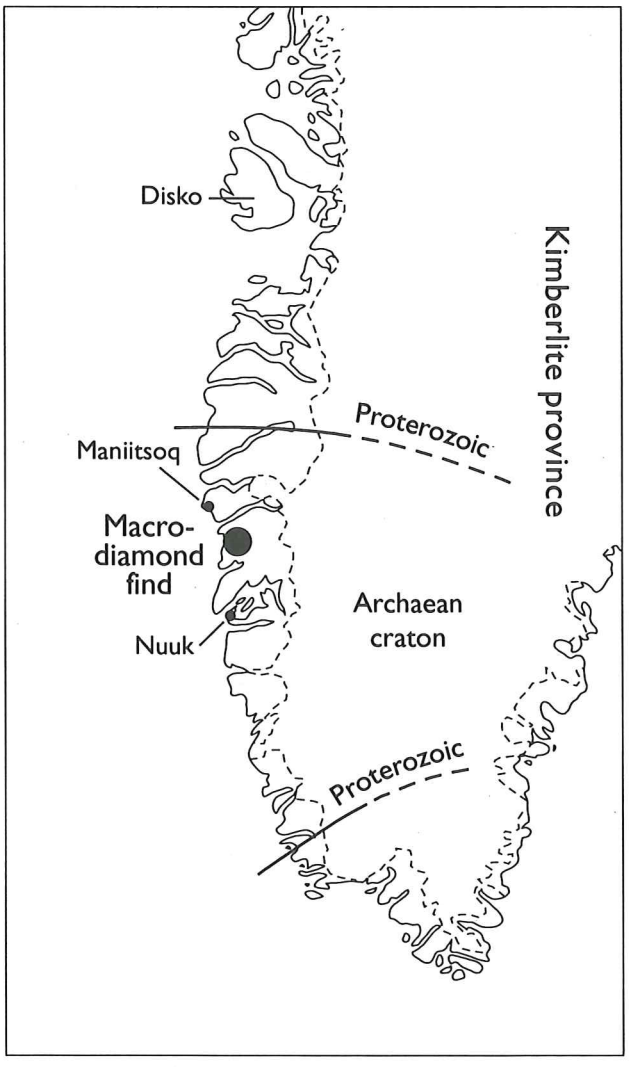
Regional stream sediment survey

While commercial companies continue field exploration, a joint project with a number of licence holders and GEUS has been set up to utilize the Survey's sample archives. Some 3000 stream sediment samples from western Greenland collected during systematic geochemical surveys between 61°30′ and 67°N form the basis of the project. The samples represent a density of 1 sample per 20-30 km^2. The less than 0.1 mm grain-size fraction has been analysed for major and trace elements and the results have been presented in open file reports and thematic maps.

The 0.1 to 1 mm grain-size fraction of the samples is being treated in Canadian laboratories with a combination of heavy mineral separation, mineral picking and microprobing of suspected diamond indicator minerals. The laboratory work will be completed this winter and the results released in the Spring of 1998 in the form of a Survey report.

Expectations remain high

As outlined above, exploration progress for diamonds in Greenland has taken a leap forward in the last three years and, as each field season has brought to light something new, morale and expectations are high. With the diamond search now at the stage of target testing by drilling, all wait for the next Greenland first: a pipe, a gem quality diamond, or, more simply, both.



Information on Greenland geoscientific publications and data

In the past two years changes have been made in the range of Greenland publications issued by the geological survey. This is a direct result of the establishment in 1995 of the Geological Survey of Denmark and Greenland (Danmarks og Grønlands Geologiske Undersøgelse - GEUS) as the new governmental research and consultative body responsible for the three countries of the Kingdom of Denmark: Denmark, Greenland and the Faeroe Islands. Some information about GEUS publications has been given in the last issues of *Greenland MINEX News*, including the renaming of the popular annual Report of Activities (of the former Geological Survey of Greenland - GGU) to *Review of Greenland Activities*.

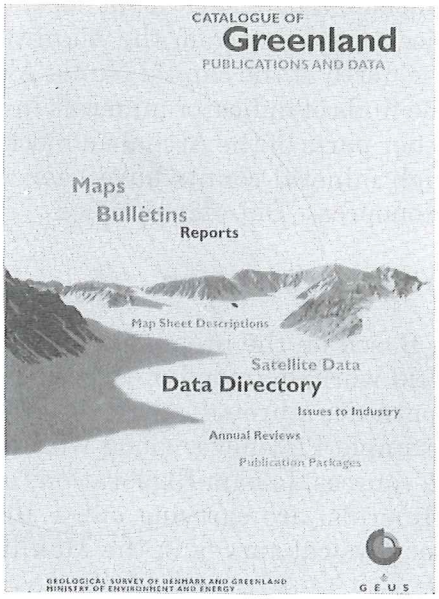
Two publications dealing with the range and availability of Greenland geological publications in print form can be requested free of charge from GEUS.

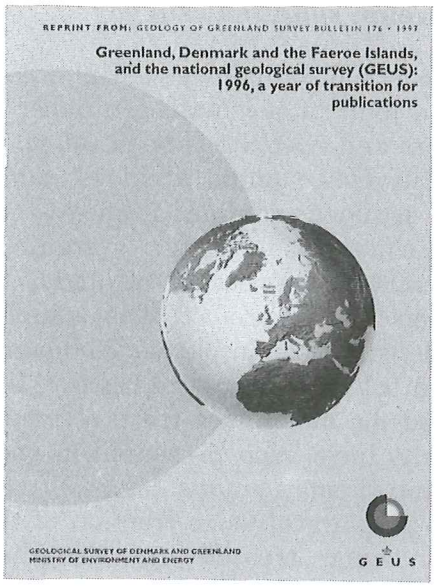
1. Catalogue of Greenland publications and data

This 50-page catalogue lists the titles of publications in English released by GEUS, and gives a full listing of available geoscientific publications of the former GGU. The catalogue also contains a data directory specifying the range of data and services available from the Survey's headquarters in Copenhagen, e.g. industry report library, satellite database, mineralisation data bank, drill-core library, seismic data archive, map and rock archives, publication packages, bibliographies etc.

2. Greenland, Denmark and the Faeroe Islands and the new national geological survey (GEUS): 1996, a year of transition for publications

This 8-page reprint from the *Review of Greenland Activities 1996*, summarises GEUS' English-language geological publications and notes the changes affecting the series of the former GGU. As background information to illustrate the premises behind the reorganisation of publications, it gives a short comparative description of the physiography, human geography and environmental geology of the three countries served by GEUS.



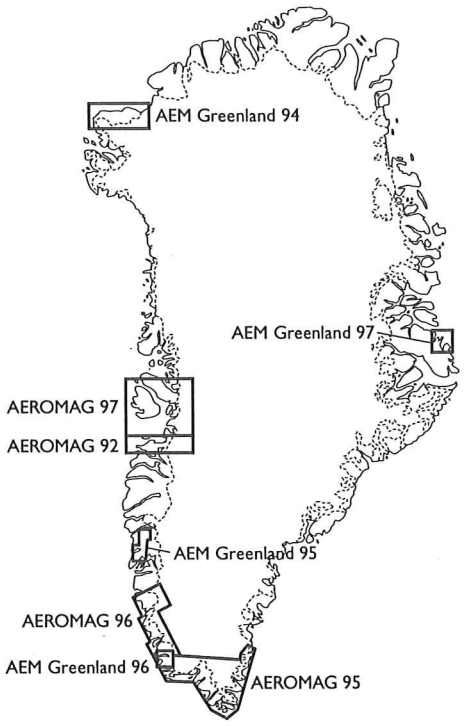


Successful completion of AEM Greenland and AEROMAG 1997

data available March 1998

In the last years, a standard column in this newsletter has been to report on two airborne geophyics programmes: AEM Greenland 1994-1998 and AEROMAG. In 1997, two fixed-wing surveys were successfully carried out (see map): 14 000 line km in East Greenland over Upper Palaeozoic - Mesozoic sediments and Tertiary basic intrusives known for base metal mineralization, and 70 000 line km in West Greenland over Precambrian crystalline rocks, known for gold and copper mineralization, and over the Mesozoic-Tertiary basin that has hydrocarbon potential.

Compilation of data has been completed by the operating Canadian firms (Geoterrex Ltd. and Sander Geophysics Ltd.) and after quality control will be released by GEUS. Inspection of the 1997 data by interested customers can take place in Copenhagen from 1st March. Please contact the Survey. Data from the two programmes will be also presented at the Prospectors and Developers Association annual convention in Toronto.



Regulatory & licensing information

Licence information

Only a few new licences have been granted since the last update of licences in Greenland MINEX News no. 12 (July 1997). These include the following exploration licences:

No. 29/97 to Goldcorp Inc. for an area of 10 km² at Kangerluluk north of Lindenow Fjord in East Greenland.

No. 30/97 to Platinova A/S for an area of 110 km² at Kangerluarsuk north of Wegener Halvø in West Greenland.

No. 31/97 to Quadrant Resources Pty. Ltd. for an area of 105 km² at Tuttutooq Island in South-West Greenland.

Also a few licences have been transferred or otherwise amended. An updated list of the licences in force is available from MRA.