



Greenland is ready to join the new diamond rush in the Arctic

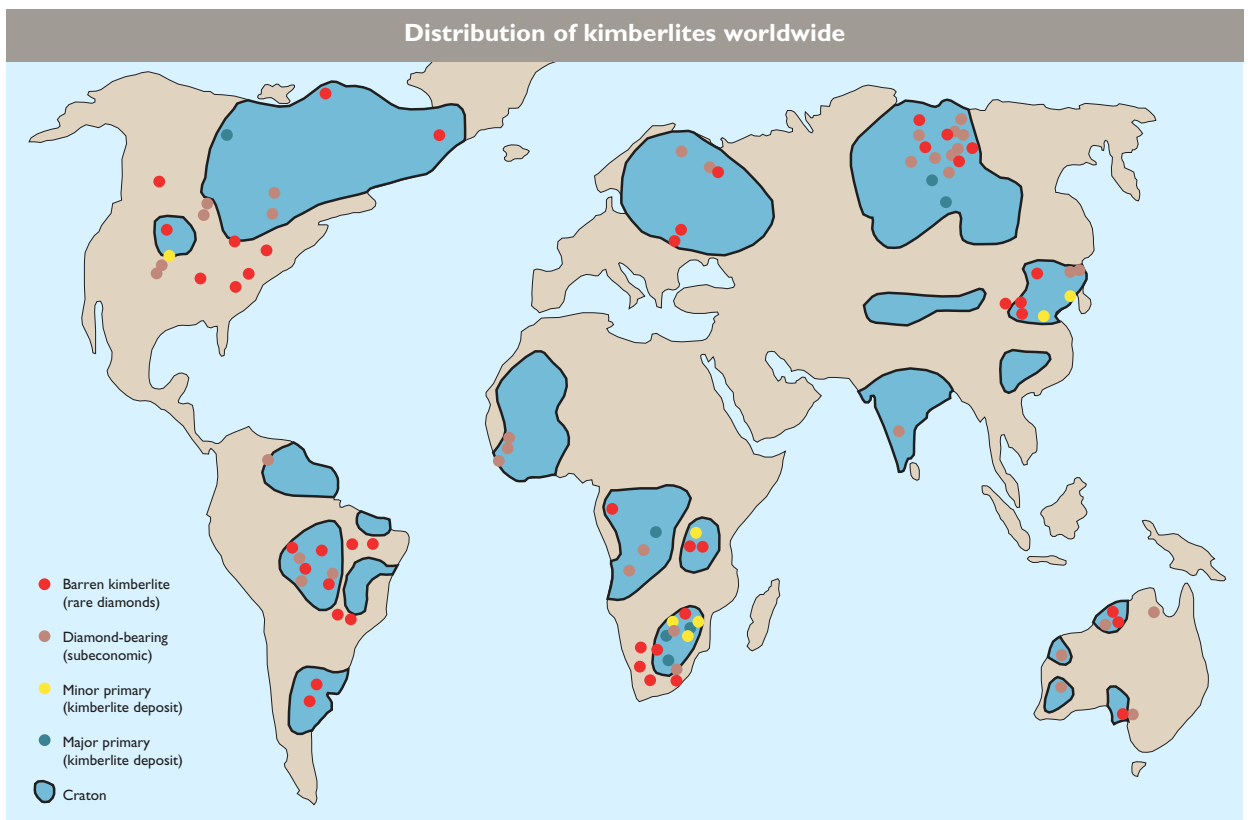
- renewed licensing in the 'classical' Greenland kimberlite areas

It is evident from journals, news magazines and other sources related to the mining business that much of the speculative market action during the early part of 2002 will be directed towards Canadian diamond plays in the Archaean of Nunavut (North Slave craton) and Quebec. This was also the report from our colleagues representing Greenland at the Cordilleran Roundup in Vancouver in January. Maybe because of that, the posters at the Greenland booth displaying the status of regional kimberlite exploration in West Greenland also attracted many visitors and questions.

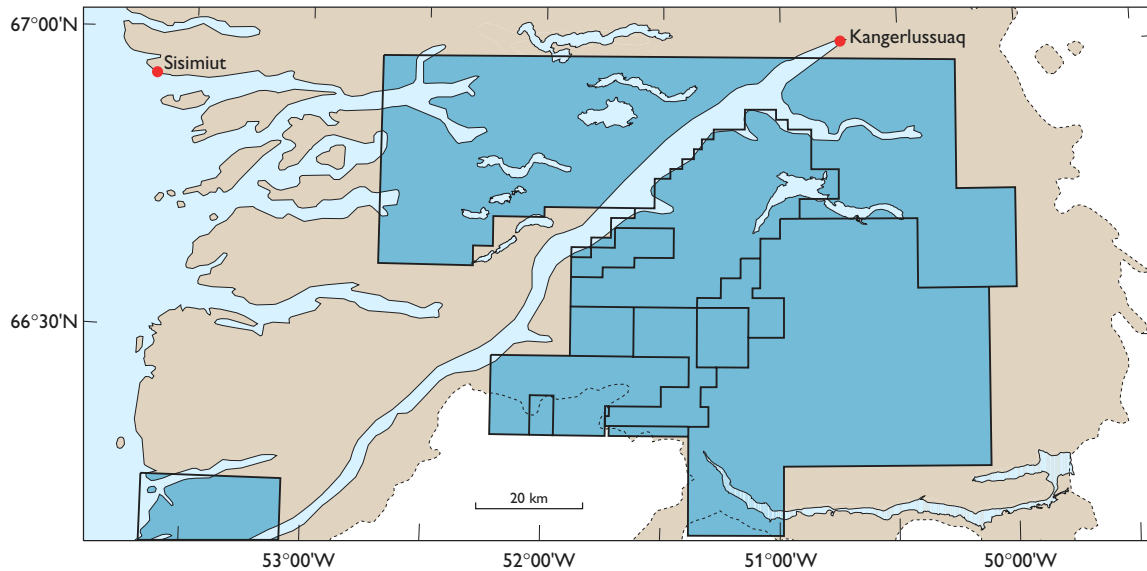
Quebec is not that far from the west coast of Archaean Greenland, and central Quebec, the region between James Bay and the Otish Mountains, is now the focus of a

staking rush following recent diamond discoveries. There are good reasons for junior companies to be optimistic looking for success, and there will probably be many future press releases incorporating the words 'diamonds' and 'Quebec'.

There is no obvious reason why the new Canadian rush should not reach Greenland as it did during the glory period in the early to mid -1990s (MINEX 3). In fact a slight increase in exploration licence coverage has already been noted in areas of known kimberlite occurrences in West Greenland. Within the last year, new staking has resulted in application for or approval of licences covering nearly 8000 square kilometres. There are of course good reasons for this. Many believe that kimberlite magmatism in eastern and northern Canada – and maybe also in western Greenland – is broadly coeval with major tectonic events in Archaean cratonic areas of the North and coincident with World kimberlite events (see also the article in MINEX 19). So, Greenland is ready to welcome your licence application soon!



Distribution of kimberlites worldwide in relationship to Archaean cratons. After O.R. Eckstrand et al, 1995, *Geology of Canada* No. 8, GSC.



Map of new licence areas applied for or granted within the last year in the well-known kimberlite area in West Greenland.

BMP and GEUS to publish released company data from earlier diamond exploration

– information on West Greenland till sample analyses and indicator mineral distribution

Exploration companies have produced a large volume of data relevant to diamond exploration since 1995. The data include mineral analyses of heavy minerals recovered from till samples, dyke and boulder distribution maps, helicopter-borne geophysical surveys, results of diamond testing of mini-bulk sampled dykes, drill logs, etc. Compilation and publication of all non-confidential company data submitted in assessment reports to the BMP in Nuuk is planned for 2002 as a joint BMP and GEUS effort. The data in question are mainly from the area between the coastal town Sisimiut and the inland international airport in Kangerlussuaq, West Greenland.

JV partners Citation Resources, BHP-Billiton and Cantex have preliminary results after drilling ‘the largest known kimberlitic dyke in the world’

– magnetic signature of the target is now demonstrated

The latest news from the JV partners, communicated through a Citation Resources Inc. press release were dated 13 December 2001. However, MINEX has now been in personal communication with Dr. John Ferguson, President of Citation Resources, who tells us that no micro-diamonds were found in the drill core intercepts.

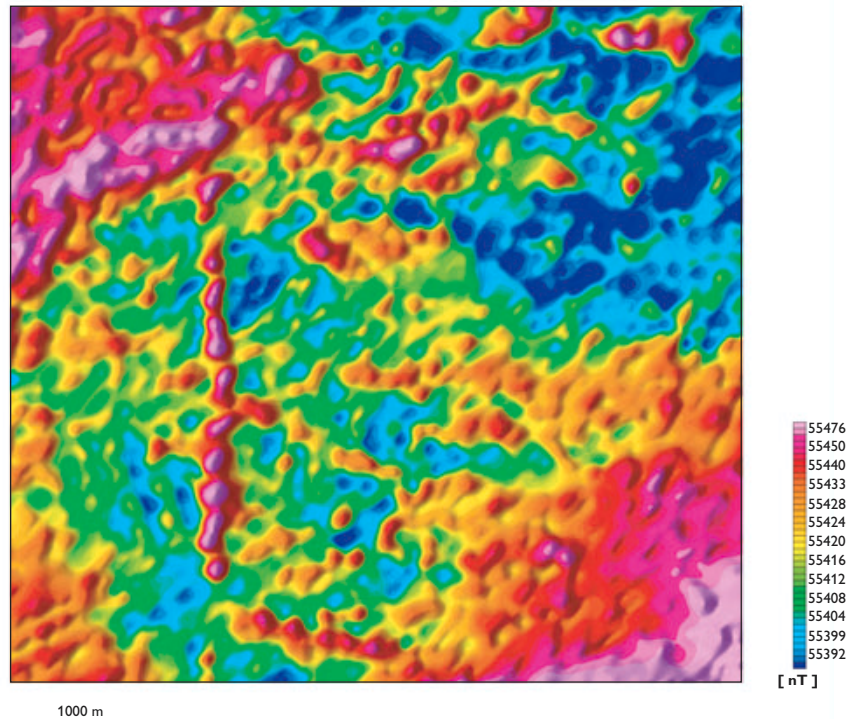


Detailed information will be released in a News Release from the company.

Preliminary information on the drilling activity was presented in the previous issue of MINEX (21). By courtesy of the licensee we are now able to show part of the aeromagnetic map, that was used in delineating the drill targets on this unusually wide and long kimberlitic dyke (see map page 3, top).

The JV also reported that a new sulphide mineralisation

Magnetic total field anomaly of a 5 km long and 20 m wide kimberlitic dyke. Data from helicopter-borne DIGHEM survey carried out for the JV; reproduced with permission.



was encountered in one of the drill holes over a 4-m core interval with anomalous accumulation of nickel, copper, cobalt and PGE.

GEUS to publish a new report on kimberlites and other ultramafic alkaline rocks

- focus on mantle xenoliths and mapping of new kimberlite dykes in West Greenland

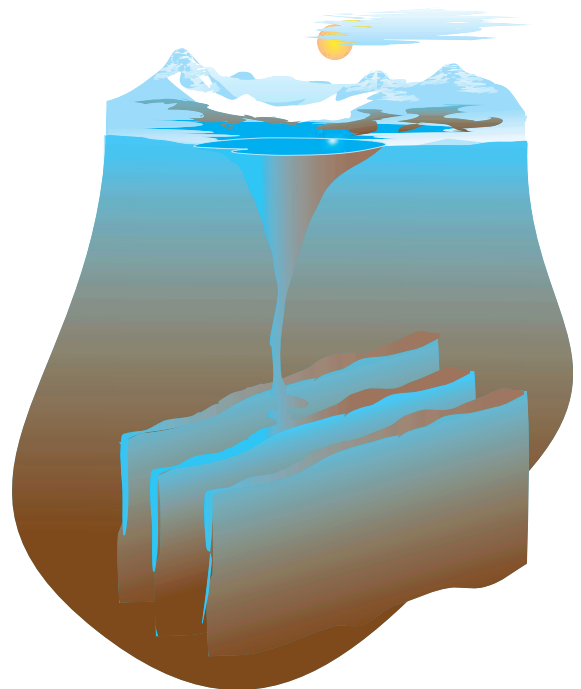
GEUS' Review of Greenland Activities for 2001 to be published in mid-2002 will include a report on fieldwork in areas within the Sisimiut–Kangerlussuaq region. Previously only limited information has been available, and fieldwork in 2000 and 2001 has added much new information to the existing kimberlite data bank. The GEUS field project continues in 2002.

Highlights from the report include:

Different xenolith types and their distinct mineral compositions – even within a single kimberlite dyke of limited area extent – clearly demonstrate the heterogeneous character of the West Greenland lithospheric mantle. Mineral chemistry suggests that the xenoliths were derived from a depth interval corresponding to approximately 150 to 215 km. The P–T relations of the xenoliths suggest they were all derived from within the diamond stability field.

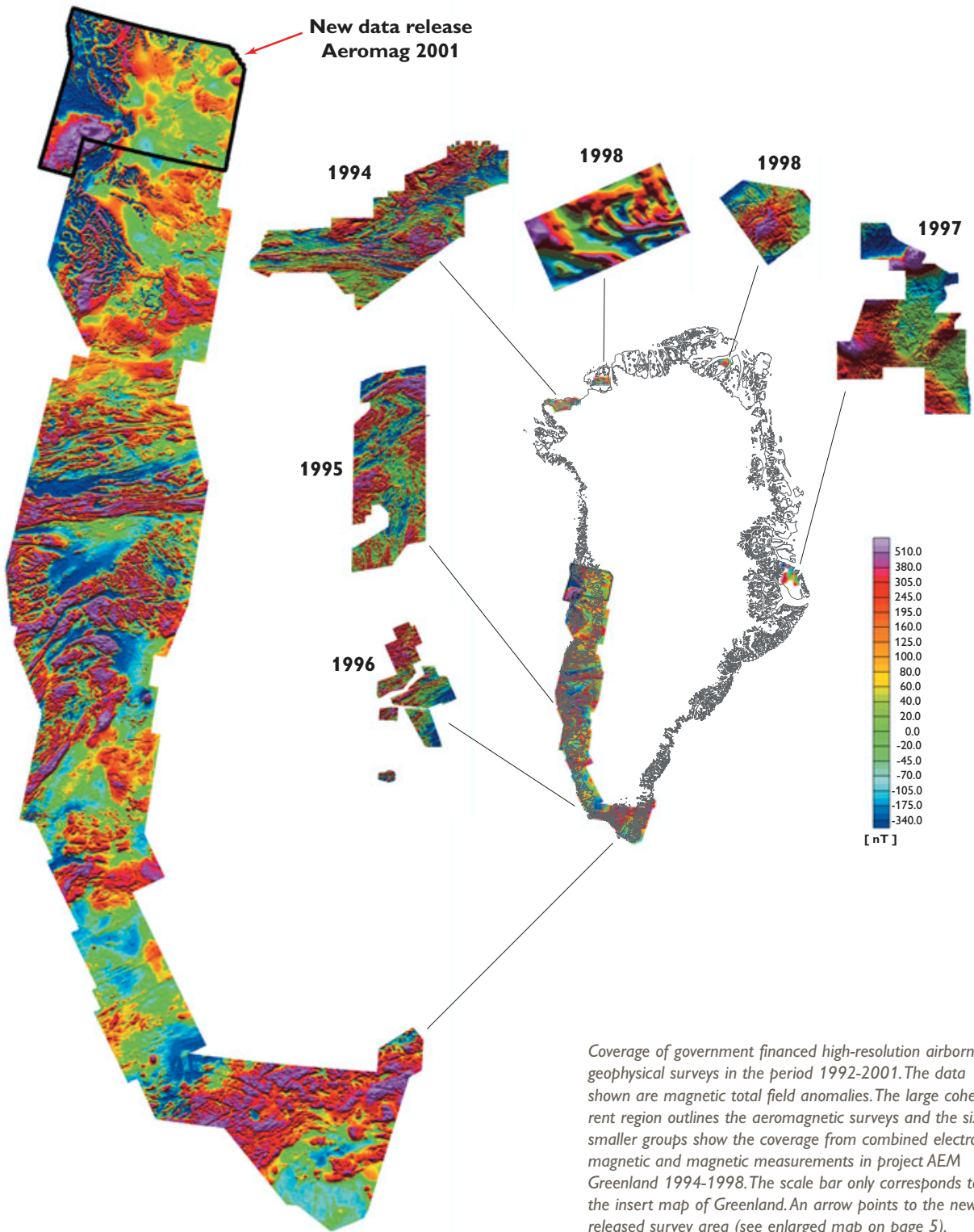
Niobium in the fine fraction (<0.1 mm) of stream sedi-

ments has proved to be a convincing 'pathfinder' element for kimberlites and lamproites. The geochemical information is available in the Geochemical Atlas of West and South Greenland presented in MINEX 21.



Sketch of the Greenland vision for kimberlite occurrences. The alkaline ultramafic rocks found to date in West Greenland are hypabyssal dykes or sheets (after GEUS).

**Airbone geophysical surveys in Greenland
1992 - 2001**



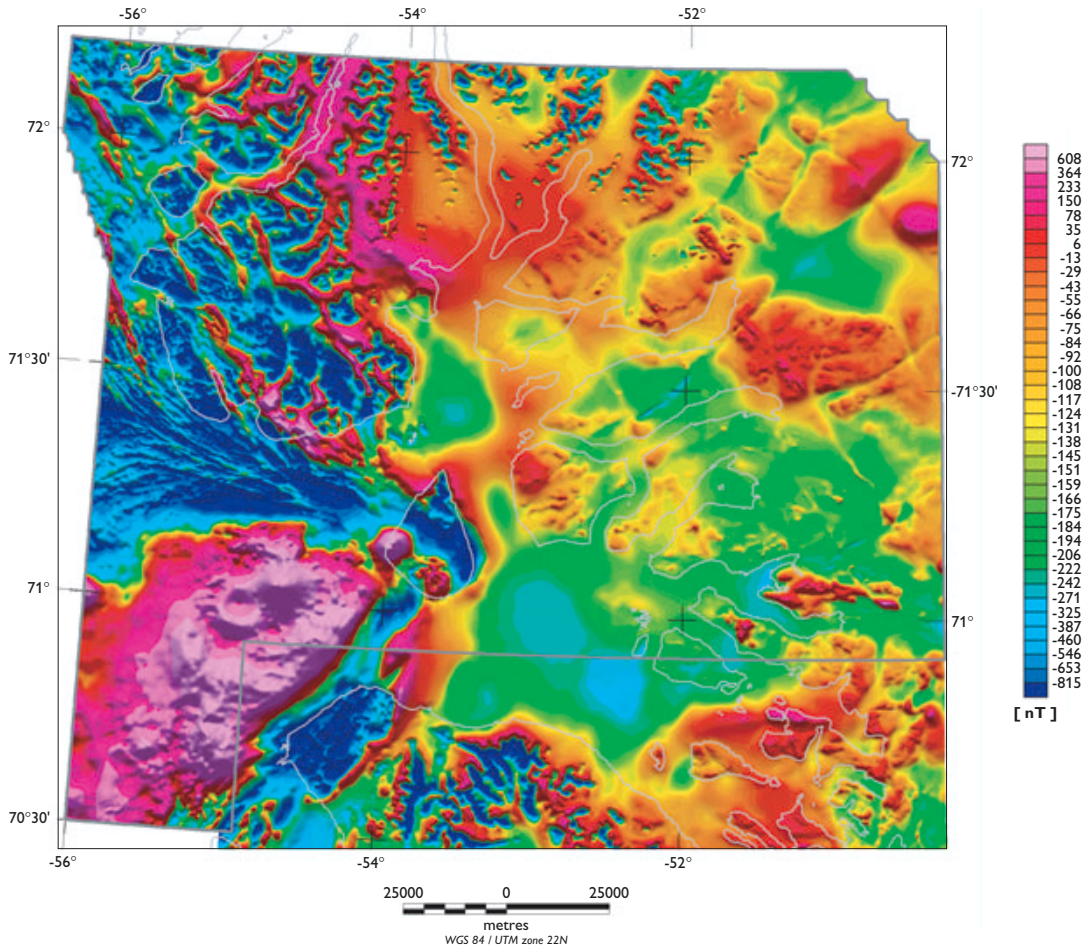
Coverage of government financed high-resolution airborne geophysical surveys in the period 1992-2001. The data shown are magnetic total field anomalies. The large coherent region outlines the aeromagnetic surveys and the six smaller groups show the coverage from combined electromagnetic and magnetic measurements in project AEM Greenland 1994-1998. The scale bar only corresponds to the insert map of Greenland. An arrow points to the newly released survey area (see enlarged map on page 5).

Release of new geophysical data: the project Aeromag 2001 in West Greenland

- a new piece to the jigsaw puzzle of aeromagnetic mapping

The data processing of the 2001 aeromagnetic survey in central West Greenland has now been successfully completed. The survey was flown by Sander Geophysics Ltd. Ottawa on contract with the BMP and has added about 70.000 line km of high-resolution data to the Greenland geophysics database (see MINEX 18, 20 & 21). GEUS handles the project management and the interpretation of the data and has released the new digital data and maps as of 1 March 2002. The data are now available for inspection and purchase at GEUS in Copenhagen and at BMP in Nuuk.

Following the tradition GEUS and BMP will present the geophysical data release by a presentation at their PDAC booth (410) in Toronto, March 2002.



Motzfeldt Ta-deposit licensee is encouraged by results from new drill holes

- prospect still in front with large tonnage and grade

On the 8 January 2002, results of diamond drill holes No 1, 2, 3, 5 and 7 were released from the Locality 4 of Angus & Ross' Motzfeldt tantalum mineral licence area. The mineralisation has been drilled down to a depth of 200 m. The new cores showed intersections of tantalum oxide of over 300 ppm and 3300 ppm niobium oxide in seven zones. Composite thickness of intersections reached up to 48 m. Geological and geophysical studies indicate that the mineralised zone extends down to 500 m in the cliff face and can be followed over 1.5 km on the plateau surface. To date only some 300 m of the 1.5 km length has been drilled.

Commenting on the results, Dr. Robert Young, Managing Director, said "We are particularly encouraged by the tantalum oxide results from a 9 m section of 550 ppm in hole No. 6, and a 18 m section of 630 ppm in hole No. 9. They show that higher-grade zones occur within the mineralisation. This could enhance the potential economic return for the deposit." In a press release of 14 February 2002, Angus & Ross PLC "is recommending an expansion of exploration drilling and associated studies. This should result in a full feasibility study being completed next year".

Nalunaq gold mine JV is completing a final feasibility study to enable mine start soon

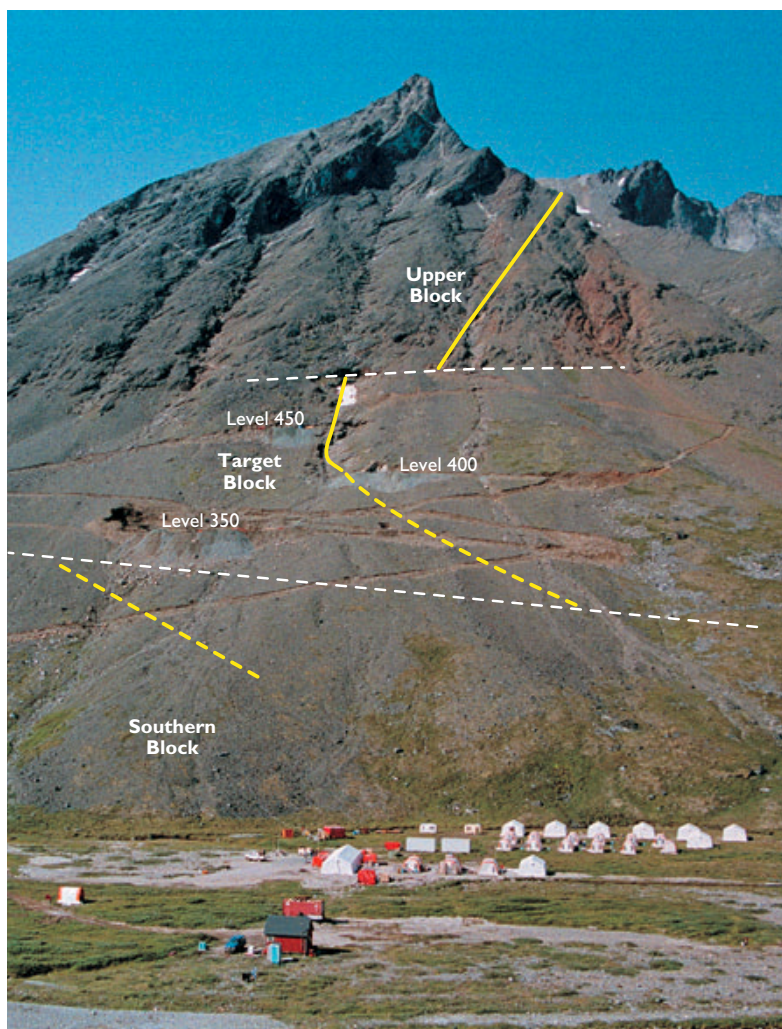
- structural adjustments in the company and partners can strengthen the process

During the year, as stated in a press release of 23 November 2001, Crew increased its interest in Nalunaq from 57% at June 30, 2000, to 82% (with remaining interest held by NunaMinerals A/S), and obtained full operational control of the high-grade gold project, in exchange for various commitments. In addition, successful underground development programs at Nalunaq have defined measured and indicated resources of 292.000 ounces of gold, at an average grade of 25 g/t, and inferred resources of 718.000 ounces of gold at an average grade of 19 g/t. The total resources are contained within approximately 300.000 square metres of the geological vein structure, which appears to extend over 1.400.000 square metres within the Mountain Sector of the deposit.

As a result of the encouraging progress to date, Kvaerner has now been asked to initiate a bankable feasibility study. Financing is projected to be finalised concurrently. If all goes well, mine construction is scheduled to begin in the third quarter of 2002. Capital costs are estimated to be in the range of US\$20–24 million, with first gold production by early to mid-2003.



Drilling for tantalum-niobium mineralisation within the Motzfeldt intrusion. Courtesy of Angus & Ross PLC.



View of the mineralised vein (yellow) at the Nalunaq gold prospect. The winding road provides access to the adit portals at exploration levels 350 m, 400 m and 450 m.

with distinct vanadium contents in samples from West Greenland. As a new initiative this year 'Ujarassiorit' is going on-line and now has its own place at the GEUS web site: www.geus.dk/ujarassiorit. The site will also be linked to the BMP web site: www.bmp.gl. Details about the awards are on display on this address (so far only in Danish).

The public 'mineral hunt' Ujarassiorit 2001 concluded with awards to promising samples

- gold, copper, cobalt and titanium are again favourite elements

The domestic mineral hunt programme, 'Ujarassiorit', has run for more than a decade (MINEX 16 & 20). The programme - the name means 'go out and look for rocks' - is a yearly competition involving the whole population. The management of the activity has recently been moved to Greenland Resources A/S in Nuuk. Prizes are given to select samples that show promising mineral potential in relation to their location and apparently add new information to the mineral resources distribution. In other words, samples collected at known mineral deposits are not awarded.

Samples from the year 2001, in total 936, were especially honoured for promising contents of gold, copper and cobalt in massive sulphide accumulations in West Greenland near the towns of Kangaatsiaq in West Greenland and south of Tasiilaq in East Greenland. Top prizes were also awarded to ilmenite-magnetite associations



Greenland map with locations of awarded samples, 'Ujarassiorit' 2001.

MINEX 22 · MARCH 2002

PDAC underway in early March with enlarged Greenland presentation and initiatives

- visit our booth and get more information on the Greenland gold, kimberlite and Ta-Nb potential, and about the release of new geophysical data

The Greenland tradition to participate in the yearly PDAC conference and show in Toronto, Canada, is continued in 2002 with more presentations and activities. You are kindly invited to visit our booth 410. Key subjects will be focused on the mineral resources potential in South Greenland with entries on gold, speciality metals and kimberlites as well as information on the early mining activity in the region. The release of new geophysical data (see above) will also play a major role. Please drop in for a chat with the experts, who also are ready to tell you about geology, licensing and logistics in Greenland.

MINEX Online introduced late 2001

- don't be confused when you are searching the web; the name Minex is used in many businesses

MINEX Online has been available since fall of 2001 with lots of general information, the present issue in pdf-format as well as back numbers. The site on www.geus.dk/minex is now an integrated part of the promotion for Greenland mineral resources and the site has already reached its own popularity. As a hint from the editorial office to those of you, who are approaching via a web search machine as e.g. Google, please notice that more than 3000 entries are suggested in an ordinary search for the popular name 'MINEX'. Many organisations are indeed using the name, so just combine your search for MINEX with 'Greenland' and the result will be among the top ten. Try a visit to MINEX On-line!



The Greenland booth at PDAC 2000.

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