New licensing procedure and data on zinc in North Greenland

The Government of Greenland has in 2014 set up a new Open Door Licensing Procedure for mineral exploration licences for the onshore areas north of 81°, which are believed to have unique potential for discoveries of zinc deposits of world-class scale.

North Greenland has shown great potential for zinc and lead occurrences. The favourable geology of North Greenland is related to the formation of the Franklinian Basin. The east–west-striking basin comprises a carbonate platform in the southern part and trough sediments such as mudstones and shales towards the north. The carbonate platform has the Mississippi Valley Type (MVT) zinc-lead (± barium) deposits, and the trough sediments host sedimentary exhalative deposits (SEDEX). MVT deposits are found in Washington Land and Navarana Fjord, and a representative SEDEX deposit is the well-known Citronen Fjord deposit.

New licensing procedure

To promote the great potential of the Franklinian Basin, North Greenland, the Government of Greenland has set up pre-defined licence areas in 2014 – the so-called *"81° North Open Door Licence area"* that is to be offered on special terms to encourage exploration for zinc and lead in the region.

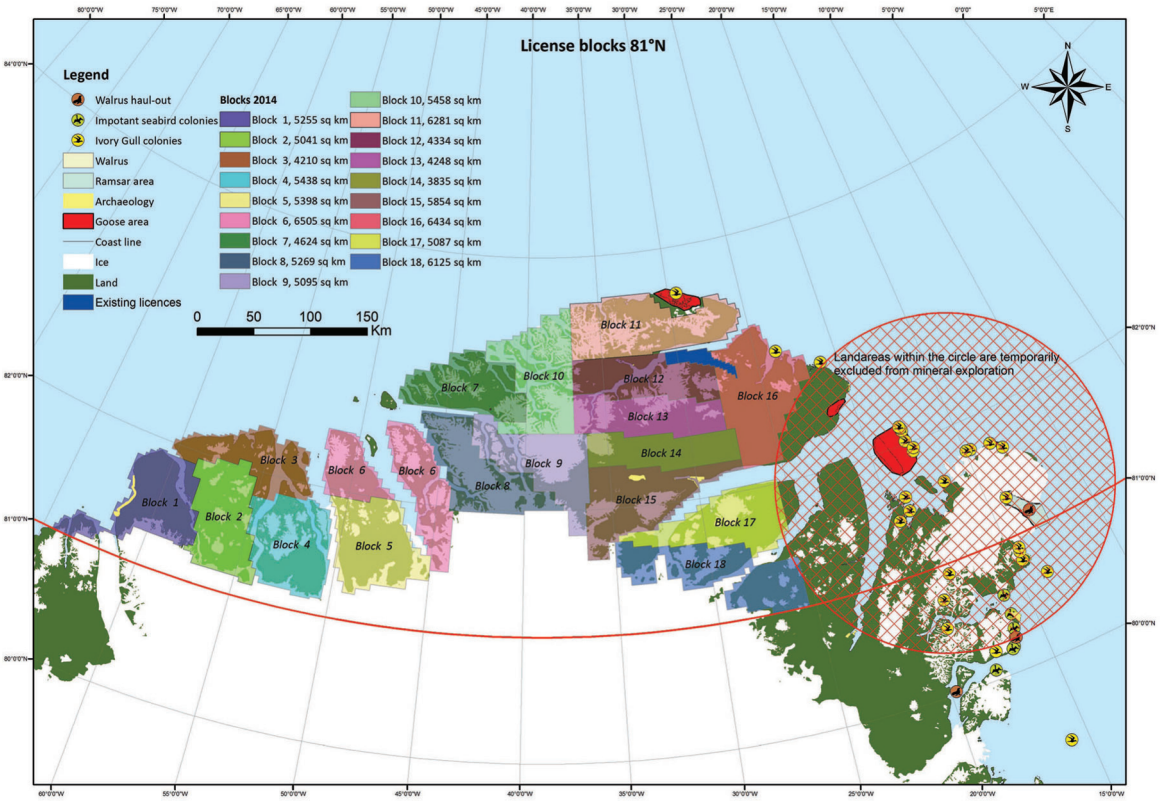
The licence is valid for a period of 13 years from the date it is granted. The calendar year in which the licence is granted shall be year 1 of the licence period. The licence period shall be divided into the following four subperiods:

Subperiod 1: Years 1–4
Subperiod 2: Years 5–6
Subperiod 3: Years 7–8
Subperiod 4: Years 9–13

An application must be submitted in a standard electronic format to the Mineral Licence and Safety Authority (MLSA).

The standard terms for mineral exploration licence (excluding hydrocarbons) shall apply. These standard terms and the special terms applicable for the pre-defined licence blocks can be found at:

www.govmin.gl/minerals/application-and-reporting-forms/81-north



Map of the licence blocks. For details see www.govmin.gl/images/stories/minerals/81_nord_licensoversigt.pdf

Greenland Mineral Resources

The Navarana Fjord Zn deposit. The deposit is associated with the Navarana Fjord escarpment which marks a shelf and trough facies shift in the Franklinian Basin. This facies border is believed to be one of the guiding controls on the formation of zinc mineralisations in North Greenland. Several zinc occurrences and zinc anomalies in stream sediment samples are associated with the structure.

Data on zinc in North Greenland

In connection with the opening of the 81° North Open Door Licence area, the Ministry of Industry and Mineral Resources (MIM) and the Geological Survey of Denmark and Greenland (GEUS) would like to promote the online zinc data package for North Greenland freely available for mineral explorers of Greenland at the following address:

www.geus.dk/DK/data-maps/datacollection-gl/sider/index-dk.aspx

The data package was originally compiled and released in 2011. In 2014, new data and reports were added to include results from 2012 and 2013 from the MIM-GEUS *NordZink* project. The areas of Kronprins Christian Land, Peary Land and Amundsen Land in the Eastern part of the Franklinian Basin of North Greenland were investigated by the *NordZink* project with collection of stream sediment and rock samples.

Further information on the results of the *NordZink* project, including the setting of recently identified mineral occurrences, can be found in Rosa & Kalvig 2013 and Rosa *et al*. 2014.

Key references

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