



Bundesanstalt für Geowissenschaften und Rohstoffe
Postfach 51 01 53, 30631 Hannover, Germany

Richard Dwyer
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0
Canada

Prepared by
Lutz Reinhardt

T. +49 511 / 64 3- 2786
lutz.reinhardt@bgr.de

Hannover, 14.03.2025

Your reference, your correspondence of
My reference (please use in all replies)

Re: Federal Institute for Geosciences and Natural Resources (BGR),
Germany – Proposed Geological Fieldwork

Dear Mr. Dwyer,

The Federal Institute for Geosciences and Natural Resources (BGR), based in Hannover, Germany, in collaboration with the Geological Survey of Canada, is proposing a geoscience research project on southern Ellesmere Island for the summer of 2025. With this letter, we would like to provide information on the suggested activities, and kindly ask for your input and advice.

Geological fieldwork on southern Ellesmere Island

The proposed geoscientific study is a continuation of a longstanding investigation of the geologic development of the Canadian Arctic Islands.

Sampling of sedimentary rocks allows researchers to learn more about climate variability in deep time, which is crucial to better understand processes of present-day climate change. Researchers of the team will also collect samples of evidence of ancient life, because these may give direct information on age of the rocks and the ancient environment. Collection of very small fossils in the sedimentary rock would take place by hand. In addition, measuring the orientation of geological structures helps scientists to reconstruct how the collision of ancient continents took place to form the modern Arctic Archipelago. This project would also contribute information to update bedrock maps of southern Ellesmere Island.

Offices:

Stilleweg 2
30655 Hannover, Germany

Wilhelmstr. 26
13593 Berlin, Germany

Gaglower Straße 17/18
03048 Cottbus, Germany

poststelle@bgr.de

Tax number

Tax payer number at the local tax
office, Hannover North:
25/202/27510
V.A.T.-ID: DE 811289832
Route-ID: 991-01484-64

Banking details

Bundeskasse Halle
Deutsche Bundesbank –
Filiale Leipzig
IBAN: DE38 8600 0000 0086 0010 40
SWIFT-BIC: MARKDEF1860

The research team consisting of about 10 researchers of BGR and GSC as well as a helicopter pilot would work out of a small base camp at the northern end of Vendom Fiord (favored location, alternative site would be possible). We hope to employ a wildlife monitor from Grise Fiord again, as we already did during our 2017 campaign.

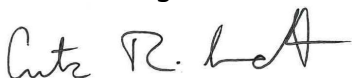
The work would take place over approximately four weeks from mid of July until mid of August 2025. The researchers walk up to 5 km per day, taking GPS and compass measurements, photos, and samples of fist-sized surface rocks. Sample spacing varies from every few centimetres along sections to every few hundreds of metres, sometimes using a small rock hammer. No blasting or drilling is necessary for taking any of these samples. The samples are then taken to laboratories to be analysed for their mineral and chemical content.

In order to realize this fieldwork, a cache of up to 30 fuel drums would be placed at the proposed camp location at the northern end of Vendom Fiord and up to 6 drums at Irene Bay in March/April 2025. An important part of these preparations for the proposed study is applying for research licenses and permits from the Nunavut Planning Commission, Nunavut Impact Review Board, Nunavut Research Institute, the Qiqiktani Inuit Association, Crown-Indigenous Affairs, the Nunavut Water Board, and a paleontology permit from the Nunavut Department of Culture Elders, Language and Youth.

All results of BGR's research like publications, maps, and data are made openly available at no charge. A geological study like this takes usually several years to be concluded and the results to be published. We would provide updates as new results become available.

I am available by e-mail, telephone or video conference (please note the time difference Nunavut to Germany of 7 hours) to discuss the activity, and will be reaching out in the coming weeks. Should you have any comments, questions, or other feedback, please do not hesitate to contact me at +49 511 643-2786 or lutz.reinhardt@bgr.de. Please distribute this letter to any other interested parties.

With best regards from Germany,



Lutz Reinhardt

(Researcher, Polar Geology, BGR, Germany)