

**FORM 51-102F3
MATERIAL CHANGE REPORT**

Item 1 Name and Address of Company

Greenland Resources Inc.
181 University Avenue, Suite 1410
Toronto, Ontario M5H 3M7

Item 2 Date of Material Change

October 12, 2021

Item 3 News Release

The press release attached as Schedule A was disseminated via Globe Newswire on October 12, 2021.

Item 4 Summary of Material Change

The material change is described in the press release attached as Schedule A.

Item 5 Full Description of Material Change

The material change is described in the press release attached as Schedule A.

Item 6 Reliance of subsection 7.1(2) or (3) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Ruben Shiffman
President & Executive Chairman
Greenland Resources Inc.
(647) 273-9913

Item 9 Date of Report

October 12, 2021

PRESS RELEASE 21-09

OCTOBER 12, 2021

GREENLAND RESOURCES ANNOUNCES UPDATED MINERAL RESOURCE ESTIMATE ON ITS MALMBJERG MOLYBDENUM PROJECT

TORONTO, ONTARIO -- (October 12, 2021) -- Greenland Resources Inc. (NEO:MOLY) (“**Greenland Resources**” or the “**Company**”) is pleased to announce that TetraTech Canada Inc. (“Tetra Tech”), has prepared an independent Mineral Resource estimate of 281 million tonnes grading 0.18% MoS₂ resulting in 661 million pounds of Mo in the Measured and Indicated Resource categories at the Company’s 100% owned, Malmbjerg Molybdenum Project (the “Project”).

Greenland Chairman Dr. Shiffman noted, "It is the revenue side in our financial model that really moves the needle on our project economics. To that extent, we have 14% more molybdenum contained within the new confining open pit due to glacier ablation and molybdenum prices are significantly higher. This will reflect favourably in our upcoming Feasibility Study. Our Project is among the largest undeveloped primary molybdenum deposits in the world. It has very few deleterious elements and will be able to supply very clean molybdenum to the European Union (EU) Green Deal from a responsible EU associate member country. The EU is the second largest user of molybdenum in the world but has no production of its own”.

Resource Estimate Highlights

- Measured and Indicated Resources of 281 million tonnes at 0.18% MoS₂, for 661 million pounds of contained molybdenum metal.
- Inferred Resources of 33 million tonnes at 0.10% MoS₂, for 42 million pounds of contained molybdenum metal.
- Mineral Resources were constrained within a Lerchs-Grossman pit shell generated using a price of US\$18.00/lb molybdenum.
- Appropriate metallurgical recovery, mining parameters, costs and revenue assumptions have been used to define reasonable prospects for eventual economic extraction.

Table 1 shows the Mineral Resource Estimate for the Project at the base case cutoff grade of 0.08% MoS₂ and Table 2 shows the Measured and Indicated Resources at different cut-off grades.

Table 1. MINERAL RESOURCE ESTIMATE – Effective Date: OCTOBER 12, 2021

Classification	Tonnes (Million)	Grade (% MoS ₂)
Measured	128	0.20
Indicated	153	0.16
Total Measured & Indicated	281	0.18
Inferred	33	0.10

Notes for Tables 1 and 2:

1. Resources are reported using the 2014 CIM Definition Standards and were estimated using the 2019 CIM Best Practices Guidelines.
2. The Mineral Resource has been confined by a “reasonable prospects of eventual economic extraction” pit using the following assumptions to calculate the NSR: US \$18/lb Mo; 99% payable Mo, 0.15% losses and US \$824/wmt offsites roasting costs (roasting, transport and insurance); a 2.5% NSR royalty; and uses an 86.4% metallurgical recovery

3. Costs for the “reasonable prospects of eventual economic extraction” pit are: mining costs of US\$3.05/t for mineralized material and \$2.50/t for waste; G&A cost of US\$3.00/t; and process costs of US\$8.00/t. These parameters were derived from engineering studies carried out in the concept study in 2018.
4. Average bulk densities used were 2.62 t/m³ for intrusive host rocks and 2.67 t/m³ for sedimentary rocks.
5. Pit slope angles are assumed at 45°.
6. A site inspection and core review was undertaken during August 15-25, 2021 by Ms. Sue Bird, P.Eng. an “independent qualified person” as such term is defined in NI 43-101
7. Conversion from MoS₂ to Mo is 0.599 based on the respective atomic weights
8. Numbers may not add due to rounding.

Table 2. MEASURED AND INDICATED RESOURCES AT DIFFERENT CUT-OFF GRADES – OCTOBER 12, 2021

Cut-off Grade (% MoS₂)	Tonnes (Million)	Grade (% MoS₂)	Mo Metal (Million pounds)
0.06	332	0.16	708
0.07	309	0.17	688
0.08	281	0.18	661
0.09	258	0.19	635
0.1	237	0.19	609
0.12	209	0.21	569
0.14	185	0.22	528
0.16	159	0.23	477

An updated Technical Report and Resource Estimate prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”) will be filed under the Company’s profile on SEDAR within 45 days from today.

Resource Estimate Overview

The Malmbjerg Molybdenum Deposit Mineral Resource Estimate has been estimated in accordance with the 2014 CIM Definition Standards and using the 2019 CIM Best Practices Guidelines.

Tetra Tech has reviewed the resource estimate done by Moose Mountain Technical Services (MMTS). The Resource has been estimated by interpolation of the molybdenum sulphide grades into a block model using Ordinary Kriging to provide block grade estimates constrained by 3D wireframes. Wireframe models used for constraining the estimate included volumes enclosing the drilled area, the lower grade halo and higher grade core, and the barren trachyte dikes. The block size is 15m x 15m x 12m. Samples were composited to 10m downhole intervals with each composite assigned a code according to the dominant rock type. Domains have been created to follow the orientation of the cupola style mineralization. Outlier values are restricted at values of between 0.2% and 0.25% MoS₂ for low grades domains and between 0.55% and 0.6% for high grade domains. Estimation parameters were derived from geostatistical analysis with search ellipsoids based on variogram ranges and mineralized shapes. Classification of the mineral resource is also based on variography with measured resources required to have 2 drillholes within 50m (the range at approximately 50% of the sill) and Indicated having 2 drillholes within 90-120m (the range at 80% of the sill)

Site Visit

From August 16-25, 2021 Ms. Sue Bird, P.Eng. of MMTS, and Mr. Hassan Gaffari, P.Eng. of Tetra Tech., both “independent qualified persons” as defined by NI 43-101 conducted a site visit and verified previous drilling, the geologic interpretation and the limits to the open pit resource boundaries, which at Malmbjerg is the lateral proximity to the glaciers. To verify the drill hole database, a total of nine samples were collected on the site visit

from two core storage areas for a total of 96 meters of core. These were shipped to a Canadian lab for re-assay which confirmed the historic drilling grades. In addition, verification of the historic drillhole collars in the Arcturus and South adits was completed and documented. The underground channel samples used for the resource estimate were confirmed to be consistent with sampling appropriate for resource estimation along the entire length of the adits. Field observations of the mineralized zone were made and verified the geologic interpretation used in the resource modelling. In addition, survey points were taken to adjust the effect the lateral extents of the glaciers had on the limiting resource shell used for the Resource Statement.

Qualified Person Statement

Mineral Resources for the Malmbjerg Molybdenum Project have been estimated by Sue Bird, P.Eng of MMTS, an "independent qualified person" as such term is defined in NI 43-101. Mr. Hassan Gaffari, P.Eng. of Tetra Tech, an "independent qualified person" as such term is defined in NI 43-101 has reviewed and approved the technical content of this press release.

About Greenland Resources Inc.

Greenland Resources is a Canadian reporting issuer with the Ontario Securities Commission as its principal regulator and is focused on the development of its 100% owned world-class Climax type pure molybdenum deposit located in central east Greenland. The Malmbjerg molybdenum deposit has pit-constrained Measured and Indicated Resources of 281 million tonnes at 0.18% MoS₂, for 661 million pounds of contained molybdenum metal (Tetra Tech, 2021). The Malmbjerg project benefits from a 2008 Feasibility Study completed by Wardrop (now Tetra Tech), an Environmental and Social Impact Assessment (SRK, 2007), an engineering optimization Concept Study (DRA, 2019) and had a previous exploitation license granted in 2009. With offices in Toronto, the Company is led by a management team with an extensive track record in the mining industry and capital markets. For further details, please refer to our web site (www.greenlandresources.ca) as well as our Canadian regulatory filings on Greenland Resources' profile at www.sedar.com

For further information please contact:

Ruben Shiffman, PhD	Executive Chairman, President
Keith Minty, P.Eng, MBA	Engineering and Project Management
Jim Steel, P.Geo, MBA	Exploration and Mining Geology
Nauja Bianco, M.Pol.Sci.	Public and Community Relations
Gary Anstey	Investor Relations
Corporate office	Suite 1410, 181 University Av. Toronto, Ontario, Canada M5H 3M7
Telephone	+1 647 273 9913
Email	info@greenlandresourcesinc.com
Web	www.greenlandresources.ca

CAUTIONARY STATEMENT: This News Release includes certain "forward-looking statements" which are not comprised of historical facts. Forward-looking statements include estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Forward-looking statements may be identified by such terms as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "will", or "plan" and include, but are not limited to, statements with respect to: the results of the 2021 field program, including future opportunities, future operating and capital costs, timelines, permit timelines, and the ability to obtain the requisite permits, economics and associated returns of the Malmbjerg molybdenum deposit, the technical viability of the Malmbjerg molybdenum deposit, the market and future price of and demand for molybdenum, the environmental impact of the Malmbjerg molybdenum deposit, and the ongoing ability to work cooperatively with stakeholders, including the local levels of government. Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although these statements are based on information currently available to the Company, the Company provides no assurance that actual results will meet management's expectations. Risks, uncertainties and other factors involved with forward-looking information could cause actual events, results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward looking information in this news release includes, but is

not limited to, the Company's objectives, goals or future plans, statements, exploration results, potential mineralization, the estimation of mineral resources, exploration and mine development plans, timing of the commencement of operations and estimates of market conditions. Factors that could cause actual results to differ materially from such forward-looking information include, but are not limited to failure to identify mineral resources, failure to convert estimated mineral resources to reserves, the inability to complete a Feasibility Study which recommends a production decision, the preliminary nature of metallurgical test results, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, political risks, uncertainties relating to the availability and costs of financing needed in the future, changes in equity markets, inflation, changes in exchange rates, fluctuations in commodity prices, delays in the development of projects, capital and operating costs varying significantly from estimates and the other risks involved in the mineral exploration and development industry, the ability to anticipate and counteract the effects of COVID-19 pandemic on the business of the Company, including without limitation the effects of COVID-19 on the capital markets, commodity prices, supply chain disruptions, restrictions on labour and workplace attendance and local and international travel, and those risks set out in the Company's public documents filed on SEDAR. Although the Company believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.