

## December 2021 Quarterly Report

Tuesday 25<sup>th</sup> January 2022

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### Key Developments

- **Appointment of Daniel Mamadou as Managing Director**
- **Strategic review of the Company's current business model**
- **Submission of White Paper response to the Greenland government**
- **Every specific issue raised in the public consultation process, addressed in the White Paper**
- **Greenland government to complete their input to the White Paper in a timely manner**
- **Greenland parliament passes new anti-uranium legislation**
- **The Company appoints Clifford Chance as legal advisors**

### December 2021 Quarterly Activities

Greenland Minerals Ltd ('GGG' or 'the Company') is focussed on the development of the Kvanefjeld Rare Earth Project in southern Greenland that has been systematically advanced since 2008. The Kvanefjeld Project, 100% owned by GGG, is underpinned by a JORC-code compliant resource of >1 billion tonnes, and an ore reserve estimate of 108 million tonnes to sustain an initial 37-year mine life. Kvanefjeld offers a new, simpler path to rare earth production than traditional refractory sources.

Kvanefjeld has the potential to be developed as a large-scale, low-cost producer of critical magnet rare earths including **neodymium, praseodymium, terbium and dysprosium**.

The Kvanefjeld Project is located near the southern tip of Greenland near existing infrastructure, including an airport, and has year-round direct shipping access to the project area.

In 2021, the Company's focus has been working through the public consultation period; and key step in Greenland's permitting process for mining projects. On 13 September 2021, the 38-week consultation period for the Kvanefjeld Project concluded; the longest hearing period for a mining project in Greenland.

The consultation period commenced in late December 2020 after the Greenland Government and their independent advisors formally accepted the Project's environmental and social impact assessments as meeting the Greenland Guidelines for public consultation that draw on international best-practice, a major milestone in the permitting process. The impact assessments had been through an in-depth 5-year review revision process, prior to acceptance.

The scope of the impact assessments was framed by the ‘Terms of Reference’, which were approved by the Government of Greenland in 2015, following a 6-week public pre-hearing in 2014.

A second round of public meetings were held in the towns and settlements of southern Greenland in late August 2021. The format of these meetings changed from the first round, held in February 2021, with greater political emphasis. The meetings were led by politicians with key presentations given at the meetings by an anti-uranium NGO, with a strong emphasis on uranium, which is a minor part of the Kvanefjeld Project, but a point of significant stakeholder focus. In reviewing the meeting transcripts, the Company was pleased that responses to technical questions raised during the meetings were competently handled with clear responses from a representative of the Danish Centre for Environment (DCE). The DCE have been the main independent advisor to the Greenland Government and have been deeply involved in the review-revision of the EIA and Technical reports.

#### **Appointment of Daniel Mamadou**

On 6 December 2021, the Company appointed Daniel Mamadou as its Managing Director to drive the next phase of its growth and development of the Company. This followed the resignation of Dr John Mair from the role. Dr Mair will work in an advisory capacity with Mr Mamadou, who is currently based in Singapore, to transition the Company effectively.

Mr Mamadou holds an MSc in International Securities and Investment Banking from the University of Reading, UK. He is the founder of Welsbach Holdings Pte Ltd, a Singapore-based technology metals supply chain advisory company and CEO of Welsbach Technology Metals Acquisition Corp., a Nasdaq listed blank cheque company with USD 77 million of cash in trust. Prior to that, he was the Executive Director of Talaxis Ltd, a Noble Group wholly owned subsidiary focused on technology metals, from 2015 until 2020. During this period, he drove the development of critical metals supply chains, focusing on the movement of molecules of rare earths, lithium, cobalt, and graphite from producers to consumers among others. He is also a Non-Executive Director of TSX-listed Medallion Minerals Limited.

Before Talaxis, Mr Mamadou held senior positions as capital markets officer with Deutsche Bank, Goldman Sachs and Nomura, with more than two decades across EMEA and Asia-Pacific.

Dr Mair joined GGG in 2008 as General Manager, joined the Board in 2011 and was appointed Managing Director in 2014. During this period GGG has established an internationally diverse shareholder base, and Kvanefjeld has emerged to be one of the most significant rare earth projects globally, with an established JORC code compliant ore reserve of 108 million tonnes to underpin an initial 37-year mine life. Greenland Minerals Ltd invested more than AUD 89 million in the project, in direct investment, community engagement and technical support, strictly complying with the legislation implemented by the Government in Greenland and under the guidance of the local regulator. Mr Mair step down leaving the Company in a strong cash position.

## Other executive changes

Jørn Skov Nielsen resigned from his position as executive general manager of Greenland Minerals A/S on 31 October 2021. Jørn joined the Company in July 2020 to assist with the permitting process of the Kvanefjeld project and the engagement of European industry. Significant progress was achieved in relation to the permitting, during this time.

## 'White Paper' responses submitted

The Company on 29 October 2021 submitted its responses for the public consultation 'White Paper' on the Kvanefjeld project to the Government of Greenland (GoG). The White Paper addresses feedback and concerns lodged via the Government's online portal, and those raised during public meetings. The GoG is also required to add its comments prior to publication of the White Paper.

GoG initiated Kvanefjeld public consultation on 18 December 2020 after the Environmental and Social Impact Assessments (EIA, SIA) had both been accepted as meeting Greenland's Guidelines for public consultation after a rigorous review and revision process. The consultation period closed on 13 September 2021 after 38 weeks, the longest public consultation period for a mining project in Greenland.

GGG acknowledges community concerns and debate around Kvanefjeld among stakeholders in Greenland through the consultation period. However, after working through all feedback carefully, the Company is satisfied that every specific issue raised in the public consultation process has already been identified and addressed in the EIA and SIA. The EIA and associated Technical Reports contain an extensive amount of information, and the consultation feedback highlights that conveying the level of detail effectively has been challenging, particularly with limited stakeholder understanding of Greenland's rigorous permitting and assessment process.

In its White Paper, GGG provided responses to concerns and identify where further detail can be found in the EIA and SIA. It will make the draft consultation responses available on its website, as the responses provide important guidance to where information can be found in the EIA and Technical Reports.

Following a multi-year review-revision process the Danish Centre for environment 'DCE' and Greenland's Institute of Natural Resources 'GINR' concluded 'that the Kvanefjeld Project is very likely to be carried out without more extensive environmental effects than described in the EIA report, provided that Best Available Technologies (BAT) and Best Environmental Practice (BEP) are used in all processes.'

The GoG are required to also provide responses in the White Paper to submissions made during the consultation period that are relevant to the government.

The completion of the White Paper and the Impact Benefit Agreement are the final statutory requirements to be completed by the Company, under the Minerals Resource Act to be entitled to receive an exploitation licence.

At a meeting on the 15 December 2021, the Company reiterated to the Greenland government of the expectation for the White Paper to be completed with the Government's contribution, in a timely manner.

### **Greenland's new anti-uranium legislation**

Greenland's parliament on 9 November 2021, passed new legislation concerning uranium prospecting, exploration and exploitation. This followed the release of draft legislation in July 2021 and the new legislation was enacted on 1<sup>st</sup> December 2021. The new legislation will apply to mineral licences issued after the enactment date.

The new legislation prohibits preliminary investigation, exploration, and exploitation of uranium, which it defines as uranium content which occurs at 100 parts per million or greater in the total resource. The legislation also permits the Government to extend that prohibition to other unspecified radioactive elements by imposing permitted limit values on those elements. It also seeks to reverse initiatives, policies and legislation adopted by successive governments over the past decade.

There are no active primary uranium projects in Greenland. This legislation affects disproportionately rare earths projects (as well as projects focused on other critical minerals) where it is common for those ores to contain radioactive elements including uranium and thorium. The Company is seeking clarity as to how the new legislation will effectively modify existing approvals or authorizations.

GGG's 100%-owned Kvanefjeld rare earth project is underpinned by a JORC code compliant ore reserve estimate that contains 108 million tonnes at 1.43% rare earth oxide, 0.26% zinc, and 0.036% uranium oxide. Under the currently proposed development strategy for Kvanefjeld, uranium oxide, if recovered as a by-product of rare earth production, would contribute approximately only 5% of project revenues.

The Company is not aware of any technical, radiological, or health and safety reasons as to how the Greenland Government has selected a threshold level of 100ppm uranium for the legislation.

A comprehensive radiological assessment of the Kvanefjeld Project by independent specialist consultancy Arcadis concluded that the Kvanefjeld Project is not expected to result in an adverse effect, or significant harm, to wildlife or people that live or visit the area.

### **Greenland government meeting**

The Company met with Greenland's Department of Minerals Resources and Justice ('the Department') via video conference on 15 December 2021 to discuss the effect of Greenland's recently passed legislation banning uranium mining on development of its Kvanefjeld rare earths project.

The Department delivered a presentation relating to the recently passed Act to ban uranium prospecting, exploration and exploitation, etc. ('the Act'), and the impact of the Act on the Company's exploitation licence application for the Kvanefjeld project.

According to the terms of the Act, it is to apply to licences issued after its effective date (2 December 2021). GGG's current exploration licence EI 2010/02 was issued well before this date and is the basis of the Company's application for an exploitation licence for the Kvanefjeld project.

However, the Department stated that granting of an exploitation licence would be considered a separate, new licence, and therefore subject to the Act. Based on this interpretation, the Company's exploitation licence application would not be granted, based on its current development proposal for Kvanefjeld.

The Company was advised of two options for Kvanefjeld, which are:

- To maintain the present exploitation licence application, to which it should expect a refusal, or
- To recall the application and potentially hand in a revised application, in which the Company would need to demonstrate that it can comply with the Act's 100 ppm uranium threshold limit.

Whilst the Company acknowledges the Greenland Parliament has the sovereign prerogative to enact legislation, the Act, as explained by the Ministry, appears to deprive the Company of its acquired rights and effect an expropriation without compensation. The company's primary position is to seek dialogue with the authorities to find an avenue that is satisfactory for all parties

Covid-19 conditions allowing, the Company and Greenland's Minister for Minerals Ms Naaja H Nathanielsen, are due to meet in person in early February to discuss the situation. The Company will take appropriate actions to protect its assets. The Company has appointed Clifford Chance, as the Company's international legal adviser, and Bruun & Hjelje Advokatpartnerselskab, as Danish legal adviser.

### **Capitalised exploration and evaluation expenditure**

The Company's capitalised exploration and evaluation expenditure asset value at 31 December 2020 was AUD 89 million. Due to the Government of Greenland's current position on the permitting of the Kvanefjeld project, as outlined at the meeting on 15 December 2021, there is significant uncertainty on the timing and nature of the recovery of the asset value. As a result of this uncertainty, a provision will be made to the asset value as at 31 December 2021.

### **Strategic Review of Greenland Minerals Ltd**

Whilst the company is currently facing headwinds from the anti-uranium legislation that threatens to nullify its efforts to date in Greenland, it still has a solid foundation to become a significant player in the energy transition and to play a key role in the technology metals sector.

Under the leadership of CEO, Mr Daniel Mamadou, the Company is finalising its strategic review. Besides the imperative to protect its current position in Greenland, the Company is expanding its functional focus on geographic diversification, an expansion of its range of activities to include revenue generating initiatives, all related to the supply chain of critical metals. Changes at operational and board levels are expected.

Further details on the strategy will be announced on completion of the review.

### **Rare earth metal prices**

Rare earth prices, particularly for magnet metals neodymium 'Nd', praseodymium 'Pr', terbium 'Tb' and dysprosium 'Dy' performed very strongly in the 4<sup>th</sup> quarter of 2021. The price for NdO rose by ~ 50%, PrO

~ 40% and TbO ~ 30% in the 3 months to December 31. As was the case consistently over 2021, DyO lagged, increasing by ~10%.

The largest gain was for Yttrium, the price for YO increased by ~ 85% in the quarter and by ~270% in 2021

The impressive price performance of the magnet metals over 2021, PrO up ~ 150%, NdO up ~ 90%, TbO up ~ 60% and DyO up ~50% has been driven by acceleration in the rate of growth rate of demand, in particular Nd and Pr. These metals are used extensively in electric vehicles the global demand for which continues to grow strongly.

Reinforcing the impact of higher demand was the temporary ban mid-year on Chinese imports of heavy rare earth oxides from Myanmar. China dominates world production of super magnets.

#### **Greenland's Role in New Rare Earth Supply Chains**

Subject to the future direction of the Government of Greenland, GGG has been operating in Greenland, with a focus on the Kvanefjeld rare earth project since 2007. The project has been systematically investigated, and today, Kvanefjeld is one of the world's most important emerging rare earth projects and is well positioned to see Greenland become a globally significant supplier of materials that are key to an energy efficient, and environmentally sustainable future.

The Kvanefjeld Project is founded on a unique geological environment in southern Greenland, that contains vast mineral resources enriched in critical rare metals. At a planned processing rate of 3 million tonnes/year, Kvanefjeld will be a globally significant producer of light RE magnet metals neodymium and praseodymium (combined Nd-Pr oxide of 5,690t/a) as well as being a significant producer of the strategically significant heavy RE's terbium and dysprosium (44t/a and 270t/a respectively). Rare earth production costs will be low owing to favourable metallurgy.

Kvanefjeld has an initial mine life of 37 years, based on a 108 million tonne ore reserve (JORC 2012), however, this represents only 10% of the broader resource based. There is clear scope to expand production and extend the project mine life.

The Kvanefjeld Project has been systematically put together drawing on a collective of specialist expertise from around the world. Extensive stakeholder engagement has shaped the development strategy. Studies into environmental and social impacts have been undertaken by independent special consultancies in close communication with Greenland regulatory bodies.

**Authorised for release by the Board of Greenland Minerals Ltd.**

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## About the Kvanefjeld Project

The Kvanefjeld Project is centred on the northern Ilmaussaq Intrusive Complex in southern Greenland. The project includes several large-scale multi-element resources including Kvanefjeld, Sørensen and Zone 3. Global mineral resources now stand at **1.01** billion tonnes (JORC-code 2012 compliant).

The deposits are characterised by thick, persistent mineralisation hosted within sub-horizontal lenses that can exceed 200m in true thickness. Highest grades generally occur in the uppermost portions of deposits, with overall low waste-ore ratios.

Less than 20% of the prospective area has been evaluated, with billions of tonnes of iluvavrite (host-rock to defined resources) awaiting resource definition. Extensive resources of other rare minerals enriched in critical elements also occur within the license area.

While the resources are extensive, a key advantage to the Kvanefjeld project is the unique rare earth and uranium-bearing minerals. These minerals can be effectively beneficiated into a low-mass, high value concentrate, then leached with conventional acidic solutions under atmospheric conditions to achieve particularly high extraction levels of rare earths. This contrasts to the highly refractory minerals that are common in many rare earth deposits that require technically challenging and costly processing. The rigorously developed process route for Kvanefjeld has been the subject of several successful pilot plant campaigns. Uranium and zinc will be recovered as by-products at low incremental costs.

The Kvanefjeld project area is located adjacent to deep-water fjords that allow for shipping access directly to the project area, year-round. An international airport is located 35km away, and a nearby lake system has been positively evaluated for hydroelectric power.

Rare earth elements (REEs) are used in a wide variety of applications. Most notably, rare earth elements make the world's strongest permanent magnets. The magnet industry continues to be a major growth area, owing to the essential requirement of high-powered magnets in electric cars, renewable energy sources such as wind turbine, along with many common place electrical applications.

Magnetism is the force that converts electricity to motion, and vice-versa in the case of renewable energy such as wind power. In recent years growth in rare earth demand has been limited by end-user concerns over pricing instability and surety of supply; however, demand has returned and the outlook continues to strengthen.

Kvanefjeld provides an excellent opportunity to introduce a large, stable supplier at prices that are readily sustainable to end-users. In addition, rare earths from Kvanefjeld will be produced in an environmentally sustainable manner further differentiating it as a preferred supplier of rare earth products to end-users globally. These factors serve to enhance demand growth.

## **Tenure, Permitting and Project Location**

### ***Tenure***

Greenland Minerals Ltd (ABN 85 118 463 004) is a company listed on the Australian Securities Exchange. The Company has conducted extensive exploration and evaluation of license EL2010/02. The Company controls 100% of EL2010/02 through its Greenlandic subsidiary.

The tenement is classified as being for the exploration of minerals. The project hosts significant uranium, rare earth element, and zinc mineral resources (JORC-code compliant) within the northern Ilmaussaq Intrusive Complex.

Historically the Kvanefjeld deposit, which comprises just a small portion of the Ilmaussaq Complex, was investigated by the Danish Authorities. GGG has since identified a resource base of greater than 1 billion tonnes, including the identification and delineation of two additional deposits. The Company has conducted extensive metallurgical and process development studies, including large scale pilot plant operations.

The current licence period for exploration licence EL2010/02 expires 31 December 2022 and will require renewal on or before this date.

### ***Permitting***

Greenland Minerals Limited is permitted to conduct all exploration activities and feasibility studies for the Kvanefjeld. The Company's exploration license is inclusive of all economic components including both REEs and uranium. The Company is seeking clarity from the GoG on the impacts of its new legislation to ban uranium prospecting and mining.

A pre-feasibility study was completed in 2012, and a comprehensive feasibility study completed in 2016. A mining license application was handed over to the Greenland Government in December 2015, which addresses an initial development strategy. The project offers further development opportunities owing to the extensive mineral resources.

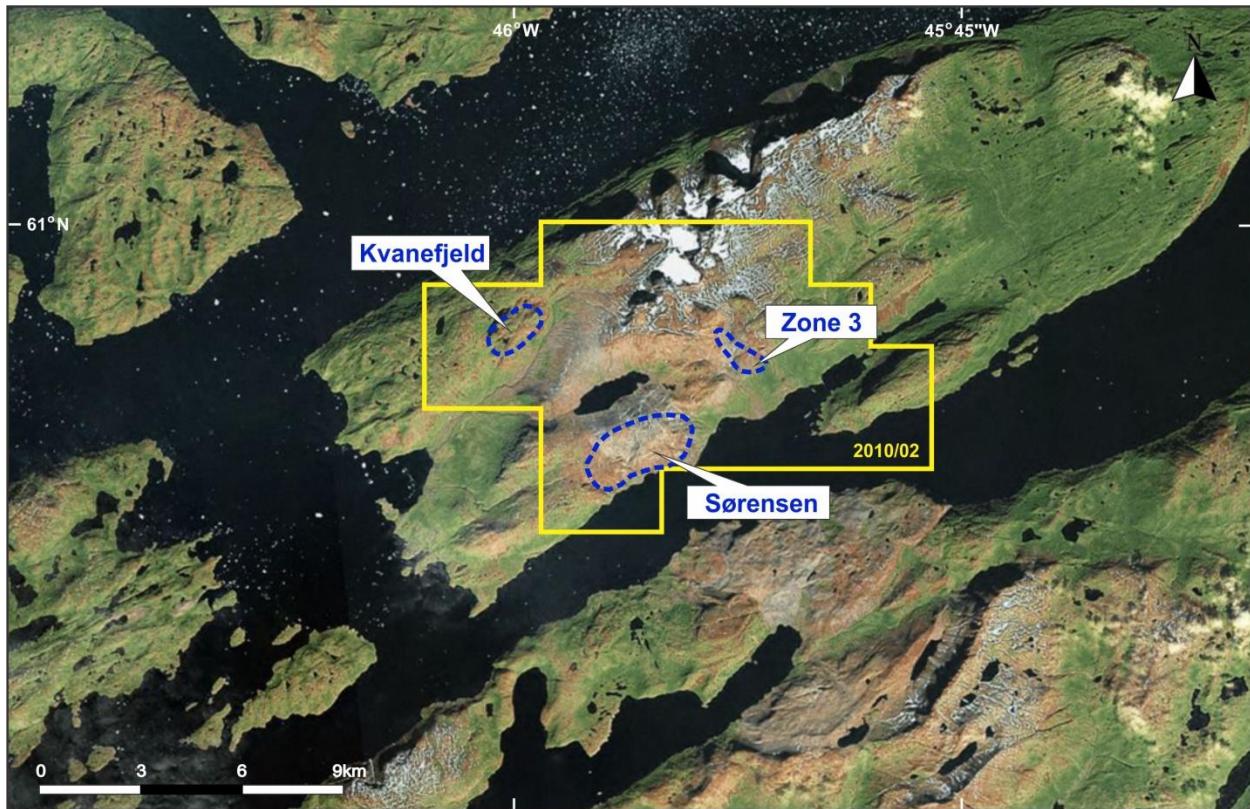
### ***Location***

The exploration lease covers an area of 80km<sup>2</sup> in Nakkaalaaq North on the southwest coast of Greenland. The project is located around 46° 00'W and 60 55'N.

The town of Narsaq is located approximately 8 kilometres to the south west of the license area. Narsaq is connected to Narsarsuaq International Airport by commercial helicopter flights operated by Air Greenland. Local transport between settlements is either by boat or by helicopter.

The Company has office facilities in Narsaq where storage, maintenance, core processing, and exploration and environmental activities are managed.

Access to the Kvanefjeld plateau (at approximately 500m asl) is generally gained by helicopter assistance from the operations base located on the edge of the town of Narsaq. It is possible to access the base of the plateau by vehicle and then up to the plateau by a track.



Overview of GGG's 100% controlled license EL2010/02. A mining license application has been lodged.

Exploration License	Location	Ownership
EL 2010/02	Southern Greenland	Held by Greenland Minerals A/S, a fully owned subsidiary of GGG.
<b>Capital Structure – As at 31 December 2021</b>		
Total Ordinary shares		1,344,077,346

#### **Listing Rule 5.3.5 disclosure**

The amount disclosed in the Appendix 5B for the quarter ended 31 December 2021, at item 6.1 of \$342,000 represents the total of Director salary, fees and superannuation paid during the quarter this is inclusive of termination payment to Dr. John Mair, consisting of contractual and statutory entitlements.

Please visit the company's website at [www.ggg.gl](http://www.ggg.gl) where recent news articles, commentary, and company reports can be viewed.

Cut-off (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	Classification	Multi-Element Resources Classification, Tonnage and Grade								Contained Metal				
		M tonnes	TREO <sup>2</sup>	U <sub>3</sub> O <sub>8</sub>	LREO	HREO	REO	Y <sub>2</sub> O <sub>3</sub>	Zn	TREO	HREO	Y <sub>2</sub> O <sub>3</sub>	U <sub>3</sub> O <sub>8</sub>	Zn
		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Mt	Mt	Mt	M lbs	Mt
<b>Kvanefjeld - February 2015</b>														
150	<b>Measured</b>	143	12,100	303	10,700	432	11,100	978	2,370	<b>1.72</b>	0.06	0.14	<b>95.21</b>	0.34
150	<b>Indicated</b>	308	11,100	253	9,800	411	10,200	899	2,290	<b>3.42</b>	0.13	0.28	<b>171.97</b>	0.71
150	<b>Inferred</b>	222	10,000	205	8,800	365	9,200	793	2,180	<b>2.22</b>	0.08	0.18	<b>100.45</b>	0.48
150	<b>Total</b>	673	10,900	248	9,600	400	10,000	881	2,270	<b>7.34</b>	0.27	0.59	<b>368.02</b>	1.53
200	<b>Measured</b>	111	12,900	341	11,400	454	11,800	1,048	2,460	<b>1.43</b>	0.05	0.12	<b>83.19</b>	0.27
200	<b>Indicated</b>	172	12,300	318	10,900	416	11,300	970	2,510	<b>2.11</b>	0.07	0.17	<b>120.44</b>	0.43
200	<b>Inferred</b>	86	10,900	256	9,700	339	10,000	804	2,500	<b>0.94</b>	0.03	0.07	<b>48.55</b>	0.22
200	<b>Total</b>	368	12,100	310	10,700	409	11,200	955	2,490	<b>4.46</b>	0.15	0.35	<b>251.83</b>	0.92
250	<b>Measured</b>	93	13,300	363	11,800	474	12,200	1,105	2,480	<b>1.24</b>	0.04	0.10	<b>74.56</b>	0.23
250	<b>Indicated</b>	134	12,800	345	11,300	437	11,700	1,027	2,520	<b>1.72</b>	0.06	0.14	<b>101.92</b>	0.34
250	<b>Inferred</b>	34	12,000	306	10,800	356	11,100	869	2,650	<b>0.41</b>	0.01	0.03	<b>22.91</b>	0.09
250	<b>Total</b>	261	12,900	346	11,400	440	11,800	1,034	2,520	<b>3.37</b>	0.11	0.27	<b>199.18</b>	0.66
300	<b>Measured</b>	78	13,700	379	12,000	493	12,500	1,153	2,500	<b>1.07</b>	0.04	0.09	<b>65.39</b>	0.20
300	<b>Indicated</b>	100	13,300	368	11,700	465	12,200	1,095	2,540	<b>1.34</b>	0.05	0.11	<b>81.52</b>	0.26
300	<b>Inferred</b>	15	13,200	353	11,800	391	12,200	955	2,620	<b>0.20</b>	0.01	0.01	<b>11.96</b>	0.04
300	<b>Total</b>	194	13,400	371	11,900	471	12,300	1,107	2,530	<b>2.60</b>	0.09	0.21	<b>158.77</b>	0.49
350	<b>Measured</b>	54	14,100	403	12,400	518	12,900	1,219	2,550	<b>0.76</b>	0.03	0.07	<b>47.59</b>	0.14
350	<b>Indicated</b>	63	13,900	394	12,200	505	12,700	1,191	2,580	<b>0.87</b>	0.03	0.07	<b>54.30</b>	0.16
350	<b>Inferred</b>	6	13,900	392	12,500	424	12,900	1,037	2,650	<b>0.09</b>	0.00	0.01	<b>5.51</b>	0.02
350	<b>Total</b>	122	14,000	398	12,300	506	12,800	1,195	2,570	<b>1.71</b>	0.06	0.15	<b>107.45</b>	0.31

Cut-off (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	Classification	Multi-Element Resources Classification, Tonnage and Grade								Contained Metal				
		M tonnes	TREO <sup>2</sup>	U <sub>3</sub> O <sub>8</sub>	LREO	HREO	REO	Y <sub>2</sub> O <sub>3</sub>	Zn	TREO	HREO	Y <sub>2</sub> O <sub>3</sub>	U <sub>3</sub> O <sub>8</sub>	Zn
Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Mt	Mt	Mt	M lbs	Mt	
<b>Sørensen - March 2012</b>														
150	Inferred	242	11,000	304	9,700	398	10,100	895	2,602	2.67	0.10	0.22	162.18	0.63
200	Inferred	186	11,600	344	10,200	399	10,600	932	2,802	2.15	0.07	0.17	141.28	0.52
250	Inferred	148	11,800	375	10,500	407	10,900	961	2,932	1.75	0.06	0.14	122.55	0.43
300	Inferred	119	12,100	400	10,700	414	11,100	983	3,023	1.44	0.05	0.12	105.23	0.36
350	Inferred	92	12,400	422	11,000	422	11,400	1,004	3,080	1.14	0.04	0.09	85.48	0.28
<b>Zone 3 - May 2012</b>														
150	Inferred	95	11,600	300	10,200	396	10,600	971	2,768	1.11	0.04	0.09	63.00	0.26
200	Inferred	89	11,700	310	10,300	400	10,700	989	2,806	1.03	0.04	0.09	60.00	0.25
250	Inferred	71	11,900	330	10,500	410	10,900	1,026	2,902	0.84	0.03	0.07	51.00	0.20
300	Inferred	47	12,400	358	10,900	433	11,300	1,087	3,008	0.58	0.02	0.05	37.00	0.14
350	Inferred	24	13,000	392	11,400	471	11,900	1,184	3,043	0.31	0.01	0.03	21.00	0.07
<b>All Deposits – Grand Total</b>														
150	Measured	143	12,100	303	10,700	432	11,100	978	2,370	1.72	0.06	0.14	95.21	0.34
150	Indicated	308	11,100	253	9,800	411	10,200	899	2,290	3.42	0.13	0.28	171.97	0.71
150	Inferred	559	10,700	264	9,400	384	9,800	867	2,463	6.00	0.22	0.49	325.66	1.38
<b>150</b>	<b>Grand Total</b>	<b>1010</b>	<b>11,000</b>	<b>266</b>	<b>9,700</b>	<b>399</b>	<b>10,100</b>	<b>893</b>	<b>2,397</b>	<b>11.14</b>	<b>0.40</b>	<b>0.90</b>	<b>592.84</b>	<b>2.42</b>

<sup>1</sup>There is greater coverage of assays for uranium than other elements owing to historic spectral assays. U<sub>3</sub>O<sub>8</sub> has therefore been used to define the cutoff grades to maximise the confidence in the resource calculations.

<sup>2</sup>Total Rare Earth Oxide (TREO) refers to the rare earth elements in the lanthanide series plus yttrium.

Note: Figures quoted may not sum due to rounding.

#### Kvanefjeld Ore Reserves Estimate – April 2015

Class	Inventory (Mt)	TREO (ppm)	LREO (ppm)	HREO (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (ppm)	Zn (ppm)
Proven	43	14,700	13,000	500	1,113	352	2,700
Probable	64	14,000	12,500	490	1,122	368	2,500
<b>Total</b>	<b>108</b>	<b>14,300</b>	<b>12,700</b>	<b>495</b>	<b>1,118</b>	<b>362</b>	<b>2,600</b>

**ABOUT GREENLAND MINERALS LTD.**

Greenland Minerals Ltd (ASX: GGG) is an exploration and development company focused on developing high-quality mineral projects in Greenland. The Company's flagship project is the Kvanefjeld Rare Earth Project. A pre-feasibility study was finalised in 2012, and a comprehensive feasibility study was completed in 2015 and updated following pilot plant operations in 2016. The studies demonstrated the unique and highly advantageous strengths of the Kvanefjeld Project and outlined the potential for Kvanefjeld to be developed as a long-life, low cost, and large-scale producer of rare earth elements; key enablers to the electrification of transport systems.

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Greenland Minerals Ltd will continue to advance the Kvanefjeld project in a manner that is in accord with both Greenlandic Government and local community expectations and looks forward to being part of continued stakeholder discussions on the social and economic benefits associated with the development of the Kvanefjeld Project.

***Competent Person Statement – Mineral Resources Ore Reserves and Metallurgy***

*The information in this report that relates to Mineral Resources is based on information compiled by Mr Robin Simpson, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Simpson is employed by SRK Consulting (UK) Ltd ("SRK") and was engaged by Greenland Minerals Ltd on the basis of SRK's normal professional daily rates. SRK has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence. Mr Simpson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Robin Simpson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in the statement that relates to the Ore Reserves Estimate is based on work completed or accepted by Mr Damien Krebs of Greenland Minerals Ltd and Mr Scott McEwing of SRK Consulting (Australasia) Pty Ltd. The information in this report that relates to metallurgy is based on information compiled by Damien Krebs.*

*Damien Krebs is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the type of metallurgy and scale of project under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.*

*Scott McEwing is a Fellow and Chartered Professional of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.*

The mineral resource estimate for the Kvanefjeld Project was updated and released in a Company Announcement on February 12<sup>th</sup>, 2015. The ore reserve estimate was released in a Company Announcement on June 3<sup>rd</sup>, 2015. There have been no material changes to the resource estimate, or ore reserve since the release of these announcements

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

**Greenland Minerals Limited**

ABN

85 118 463 004

Quarter ended ("current quarter")

31 December 2021

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (12 Months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs		
- Administration staff costs	(417)	(1,047)
(e) administration and corporate costs	(475)	(1,415)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	23	82
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	57	68
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(812)</b>	<b>(2,312)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	(13)
(d) exploration & evaluation		
- Staff costs	(327)	(1,588)
- Other	(210)	(2,850)
(e) investments	-	-

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (12 Months) \$A'000</b>
(f) other non-current assets	-	-
2.2 Proceeds from the disposal of:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (Research & Development rebate)	-	257
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(537)</b>	<b>(4,194)</b>
<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	-	370
3.4 Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
<b>3.10 Net cash from / (used in) financing activities</b>	<b>-</b>	<b>370</b>
<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	31,651	36,438
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(812)	(2,312)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(537)	(4,194)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	-	370

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (12 Months) \$A'000</b>
4.5 Effect of movement in exchange rates on cash held	-	-
<b>4.6 Cash and cash equivalents at end of period</b>	<b>30,302</b>	<b>30,302</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	407	406
5.2 Call deposits	29,895	31,245
5.3 Bank overdrafts		-
5.4 Other (provide details)		-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>30,302</b>	<b>31,651</b>

<b>6. Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to related parties and their associates included in item 1	342
6.2 Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

Payments shown at 6.1 are for Director salary, fees and superannuation.

<b>7. Financing facilities</b>		<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
	<i>Note: the term 'facility' includes all forms of financing arrangements available to the entity.</i>		
	<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

<b>8. Estimated cash available for future operating activities</b>		<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(812)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(537)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,349)
8.4	Cash and cash equivalents at quarter end (item 4.6)	30,302
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	30,302
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	22
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: Not applicable	
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: Not applicable	

- 8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Not Applicable

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 25 January 2022

Authorised by: By the board of Greenland Minerals Limited  
 (Name of body or officer authorising release – see note 4)

### Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.