

## March 2020 Quarterly Report

Thursday 30<sup>th</sup> April 2020

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### Highlights:

- **Near completion of updated Kvanefjeld Environmental Impact Assessment**
  - Additional EIA studies by independent consultants complete
  - Review of updated EIA by impact assessment specialist near complete
  - Indicative timeline provided by Greenland Government for EIA review
  
- **Positive meetings held with Greenland's Minister for Mineral Resources and Labour**
  - Productive meetings held with Minister Mr Vittus Qujaukitsoq to discuss project outlook, schedule and timelines
  
- **Important development in licensing with approval of Kvanefjeld Project documentation**
  - Greenland government confirms resource and feasibility reporting meets legislative requirements, following specialist reviews
  
- **Technical steering committee meeting conducted with Shenghe Resources**
  - Productive review meeting on impurity removal strategy in consideration of rare earth separation

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## March 2020 Quarterly Activities

Greenland Minerals Ltd ('GML' or 'the Company'), continued to make progress on the permitting of the Company's Kvanefjeld Rare Earth Project through the March 2020 Quarter. The main focus has been on the completion of additional technical studies that were undertaken following EIA reviews in 2019. These studies were conducted to address recommendations from Greenland's Environmental Agency for Mineral Resource Activities and provide additional detail to support and add rigour to the Kvanefjeld EIA. As part of finalising the updated EIA, the Company has also undertaken an overall review of the EIA to ensure consistency and cross checking that new studies address recommendations. Overall, GML has been able to continue to advance key areas of Company focus during the COVID-19 crisis with minimal disruption and is grateful to the diligent efforts by employees and contributing consultants.

At the start of March, GML's Managing Director was able to participate in Greenland events at the annual PDAC mining conference in Toronto, Canada. This provided an excellent opportunity meet with Greenland's Minister for Mineral Resources and Labour and run through the current status and outlook for the Kvanefjeld Rare Earth Project. Timing was fortunate in that this event and associated meetings were took place prior to the introduction of global travel restrictions that have emerged in response to COVID-19. Discussion points included the need to bring greater clarity and definition to forward timelines in order to better manage both stakeholder and shareholder expectations.

In ongoing communications, Greenland's Environmental Agency for Mineral Resource Activities (EAMRA) has provided an indicative period of eight weeks to review the final Environmental Impact Assessment Report (EIA). Once the EIA is approved by EAMRA, the Ministry for Mineral Resources will manage the remainder of the licensing process, that includes formalising the public consultation process. The Greenland Government has been proactive in taking a supportive and cooperative position to assist companies operating in their mineral resources sector through the COVID-19 crisis.

Technical work programs saw continued development of the refinery circuit for the Kvanefjeld Project with a focus on impurity removal. A technical steering committee meeting was then held in late-April, 2020 to review all recent test work outcomes, and to further discuss pilot plant operations. The technical steering committee includes representatives from both GML and Shenghe Resources Holding Co Ltd (Shenghe), a leading international rare earth company and GML's major shareholder. Impurity removal is linked to downstream processing in both a technical and geographic sense, and, therefore, has and continues to be a point of focus as plans for rare earth separation are further developed.

The Kvanefjeld Project, 100% owned by GML, 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.

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

Shenghe Resources Holding Co Ltd, GML's largest shareholder, is a leader in RE processing technology, and one of the largest RE producers globally. Both companies are working to develop the project as a low-cost, long-life cornerstone to future rare earth supply.

### **Progress Toward a Mining License – Kvanefjeld Rare Earth Project**

GML has been working through the permitting phase for the Kvanefjeld rare earth project. Permitting in Greenland requires three main impact assessments and supporting studies to be prepared and accepted for public consultation. These include the EIA, Social impact assessment (SIA), and Maritime Safety study. Studies undergo a detailed review process prior to being accepted for the government to present for formal public consultation. The SIA and Maritime Safety Study have been accepted for public consultation. Following EIA reviews in 2019, Greenland's EAMRA produced a short list of 'Type 1' issues for further clarification and study. Meetings were then held with Greenland's EAMRA to discuss Type 1 issues and determine what additional work should be done to address these. Once Type 1 issues have been resolved, the EIA will be ready for public consultation.

The main area of additional work to address a number of Type 1 issues is associated with the tailings management methods. All additional studies relating to tailings management have now been completed.

### **Tailings Closure Method**

The method of tailings closure based on current technology is to close the tailings facility as a lake (wet closure). This closure design and method were developed to Feasibility Study level by AMEC Foster Wheeler in 2015 and updated in 2017. As part of further investigations EAMRA requested that a dry closure method be developed to the same level of detail to allow a direct comparison to the wet closure method.

Klohn Crippen Berger (KCB) were selected as an independent specialist consultancy to conduct this work. KCB developed a detailed dry closure design considering best available technology (BAT) to the same standard as the wet design, and subsequently conducted a trade-off study. The trade-off study concluded that the wet closure design has a lower environmental impact based on the criteria assessed by KCB. Significantly, due to the long projected life of the Kvanefjeld Project, EAMRA has deemed that a final decision on closure will be deferred to later in the operational phase, at which point any new technologies or considerations can be effectively applied. The report on dry closure by KCB has been reviewed by the Danish Centre for Environment, key advisors to the Greenland Government, and has since been updated by KCB to address recommendations.

### **Seismic Analysis and Modelling**

KCB has also performed a two-part analysis to determine the stability of the tailings dam walls. The first part of the assessment determined the maximum number and magnitude of earthquakes which will be

encountered during the life of the project and beyond. The latest information from GEUS (Greenland and Denmark Geology Survey) was applied to ensure modelling was accurate. The second part included determining the stability of the planned tailings dam walls. The results of the modelling and analysis showed the tailings dam wall will be stable under maximum earthquake scenarios.

KCB were also engaged to develop a three-dimensional model to investigate the impacts of a theoretical tailings dam wall failure. The Kvanefjeld tailings facility is designed to be a permanent installation which returns the land close to its original form after operations and is designed to the highest standards. The design can withstand a maximum expected earthquake over a 10,000-year period for southern Greenland. It is common practice for EIAs to evaluate the consequences of a catastrophic tailings dam failure regardless of site-specific likelihood and failure mode. As such, a worst-case hypothetical tailings facility failure was evaluated to determine the consequences for the environment.

The 3D modelling by KCB builds on a study based on two-dimensional modelling of a hypothetical failure scenario by independent consultant Arcadis. The KCB modelling indicates that under a failure scenario, the released solids and water would be naturally channelled via the Taseq Valley to Illua Bay below. The 3D modelling indicates that a theoretical failure will not flow into the town of Narsaq, nor is it expected to result in any fatalities, and the impact of such an event on the environment is assessed by KCB to be medium.

### **Site Hydrology**

GML conducted a series of meetings with the advisors to the Government of Greenland to discuss possible impacts to the local water environment. After further exchange of documents and plans to mitigate any excursions the EIA will be updated with additional explanatory material. The modifications have been incorporated into the updated EIA document.

### **Radon Studies**

Additional laboratory test work has been performed to determine the surface area of samples used for radon release test work in 2018. This information has been provided to the independent consultant Arcadis to verify their radiation impact assessments. Arcadis has confirmed that the latest information is consistent with previous calculations and have updated specific radon reports to include this and other information.

### **Independent EIA Review and Cross Check**

In late March, the Company appointed Shared Resources, a renowned consultant to conduct a thorough review of the updated Kvanefjeld Project EIA. With numerous independent consultancies contributing to different aspects of the EIA, this comprehensive review has been undertaken to ensure consistency and cross referencing, and to ensure that feedback from the Greenland Government and their advisors is appropriately addressed.

Shared Resources lead consultant Ms Liz Wall who has extensive experience in the preparation of impact assessments has led this review. Ms Wall has had the opportunity to speak with key personnel of Greenland's EAMRA to discuss aspects of the EIA as part of this process.

Studies by independent consultants to address the Type 1 issues have been completed (Company Announcement 23 March 2020), and these studies have been reviewed by Shared Resources. In addition, the Danish Centre for Environment (DCE), primary advisors to Greenland's EAMRA, have reviewed the additional tailings storage and closure studies.

Respective consultancies have updated reports to address Shared Resources' and DCE's recommendations. These additional EIA technical studies and the updated EIA report will then be submitted to EAMRA.

### **EIA Review by Greenland EAMRA and Next Steps**

In ongoing communications, Greenland's Environmental Agency for Mineral Resource Activities (EAMRA) has provided an indicative period of eight weeks to review the final Environmental Impact Assessment Report (EIA). Once the EIA is approved by EAMRA, the Ministry for Mineral Resources will manage the remainder of the licensing process, that includes formalising the public consultation process.

GML will provide further updates on the submission of EIA documents, and the review status as it progresses. The Company has been maintaining regular communications with EAMRA and the Ministry for Mineral Resources through recent weeks.

### **Approval of Kvanefjeld Project Documentation**

In late April, GML achieved another important milestone in the path to the Kvanefjeld Mining License. Under Greenland's Mineral Resources Act, one of the main requirements for the granting of an exploitation (mining) license is the effective documentation of a deposit of exploitable minerals in the license area, and that this has been approved by the Greenland Government. Greenland's Ministry of Mineral Resources and Labour has provided written confirmation that GML's documentation (mineral resource and feasibility reports) for the Kvanefjeld Project (exclusive exploration license EL 2010/02) has been approved.

In the case of resource reporting, mineral resources are required to be of the 'indicated' (or higher) category as reported in accordance with the Australian JORC Code. The mineral resources for the Kvanefjeld mine plan (initial 37-year operation) are largely of the 'measured' category (highest confidence category).

Greenland's Ministry of Mineral Resources and Labour engaged Auralia Mining Consultants to conduct the evaluation. This involved the review of a series of reports on the Kvanefjeld Project, most of which had been conducted by SRK Consulting.

Auralia confirmed that the resource estimation of the following 16 oxides and 1 metal have been completed to JORC (2012) standards:

Light Rare Earth Oxides		Heavy Rare Earth Oxides		Other	
Lanthanum	La <sub>2</sub> O <sub>3</sub>	Europium	Eu <sub>2</sub> O <sub>3</sub>	Yttrium	Y <sub>2</sub> O <sub>3</sub>
Cerium	CeO <sub>2</sub>	Gadolinium	Gd <sub>2</sub> O <sub>3</sub>	Uranium	U <sub>3</sub> O <sub>8</sub>
Praseodymium	Pr <sub>6</sub> O <sub>11</sub>	Terbium	Tb <sub>4</sub> O <sub>7</sub>	Zinc	Zn
Neodymium	Nd <sub>2</sub> O <sub>3</sub>	Dysprosium	Dy <sub>2</sub> O <sub>3</sub>		
Samarium	Sm <sub>2</sub> O <sub>3</sub>	Holmium	Ho <sub>2</sub> O <sub>3</sub>		
		Erbium	Er <sub>2</sub> O <sub>3</sub>		
		Thulium	Tm <sub>2</sub> O <sub>3</sub>		
		Ytterbium	Yb <sub>2</sub> O <sub>3</sub>		
		Lutetium	Lu <sub>2</sub> O <sub>3</sub>		

Evaluations were conducted following the JORC (2012) Table 1 requirements.

### Greenland's Role in New RE Supply Chains

GML is at the forefront of a strategic evolution in rare earth supply. Major changes are coming to global RE supply, with China looking to cap primary production in 2020, at a point when demand is set to surge. Prior to establishing a strategic relationship with leading rare earth company Shenghe in 2016, the Company had been actively engaging the Chinese rare earth industry for a number of years; a process which provided strong insight into how the industry was reshaping.

Kvanefjeld has a number of key attributes that, when integrated with Shenghe's downstream processing technology and capacity, can play an important role in new supply networks. These include:

- ✓ **Scale – largest code-compliant rare earth resource, ore reserve for initial 37-year mine life**
- ✓ **Simple mining with 1:1 strip ratio over initial 37-year mine life**
- ✓ **Multiple by-product revenue streams to strengthen project economics (U<sub>3</sub>O<sub>8</sub>, zinc, fluorspar)**
- ✓ **Composition – ideal production profile across key rare earths – Nd, Pr, Tb, Dy**
- ✓ **RE minerals that allow for simple processing, which will be maximised by technical optimisation underway with Shenghe**
- ✓ **Strong economic metrics, - low capital intensity and operating costs in a positive global macro environment**
- ✓ **Favourable country and project location with ice-free direct shipping access, international airport nearby**
- ✓ **Regulatory framework implemented to manage project operation and export controls**

-ENDS-

## **About Shenghe Resources Holding Co. Ltd**

**Shenghe Resources Holding Co. Ltd** (SSE 600392), (Shenghe) is a public company exclusively focused on mining and processing rare earth ores, and producing high purity rare earth oxides, metals and alloys along with a range of rare earth products. Shenghe is listed on Shanghai Stock Exchange (since 2012) and, as at 28 July 2017 had 1.76 billion shares on issue and a market capitalization of approximately RMB 16 billion or AUD 3.2 billion.

Shenghe has a diversified background of its major shareholders. As at 20 June, 2017, the Institute of Multipurpose Utilization of Mineral Resources (IMUMR), a state owned scientific research institute specializing in mineral resources, holds 14.04%, Mr Wang Quangen, former engineer of IMUMR holds 6.85% and the Sichuan Giastar Enterprise Group, a private company involved in the agricultural industry holds 5.52%.

Shenghe is headquartered in Chengdu, Sichuan Province and is a single industry company with mining and processing activities in a number of Chinese centres and has commenced the strategy of extending business outside China to increase the focus on overseas resources and international markets. Shenghe is involved at all levels of the rare earth industry, from mining through processing to the production of end products. Significantly, Shenghe also holds Chinese production quotas for the mining and separation/refining of rare earths.

For Shenghe, investment in GML is aimed to secure access to rare earth resources outside of China which are capable of supporting a range of rare earth businesses, facilitating long term internationally focussed growth opportunities.

## **About the Kvanefjeld Project**

The Kvanefjeld Project is centred on the northern Ilimaussaq 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 lujavrite (host-rock to defined resources) awaiting resource definition.

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 Ilimaussaq Intrusive Complex.

Historically the Kvanefjeld deposit, which comprises just a small portion of the Ilimaussaq Complex, was investigated by the Danish Authorities. GML 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.

### ***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.

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.

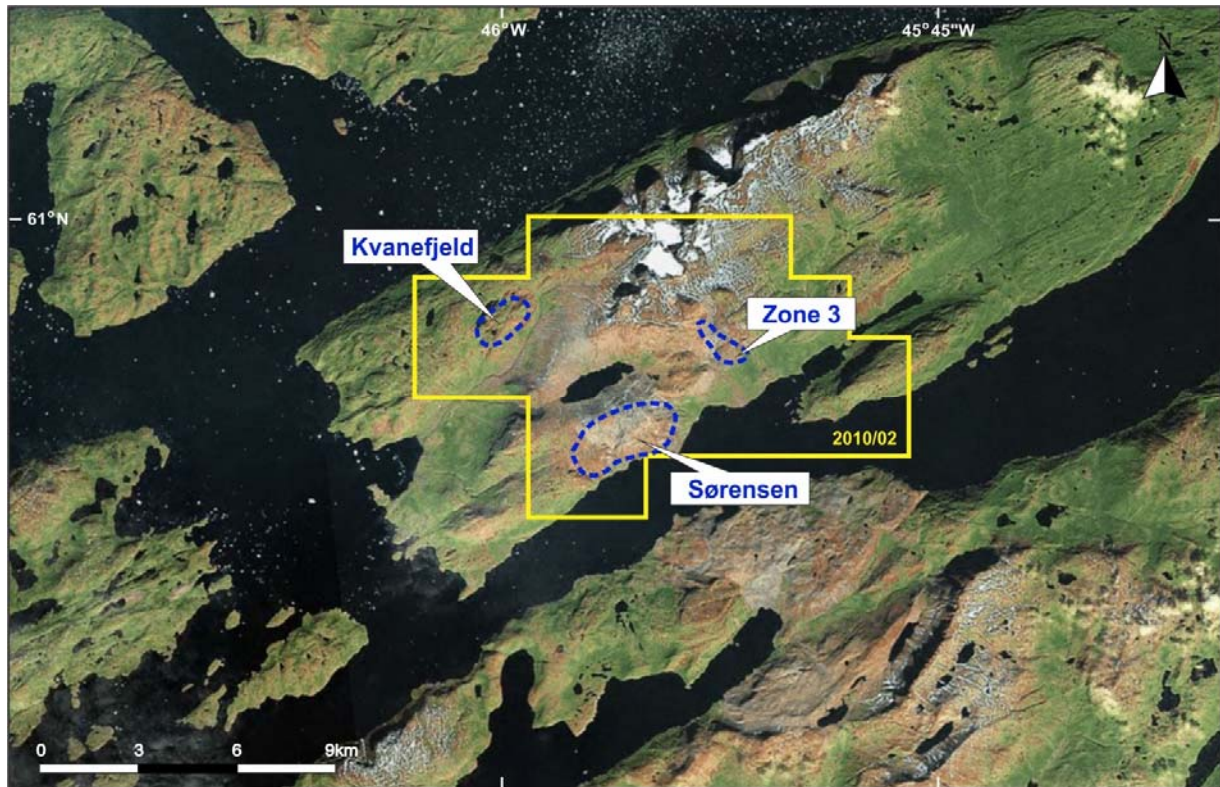
### ***Location***

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 GML'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 GML.
<b>Capital Structure – As at 31 March 2020</b>		
Total Ordinary shares		1,190,982,530
Unquoted options exercisable at \$0.15 on or before 31 March 2021		4,000,000
Employee performance rights (subject to vesting hurdles – refer announcement 22 Dec 2016)		6,000,000
Employee performance rights (subject to vesting hurdles – refer announcement 8 Jun 2019)		8,600,000

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.

## Statement of Identified Mineral Resources, Kvanefjeld Project, Independently Prepared by SRK Consulting (February, 2015)

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 Mt	TREO <sup>2</sup> ppm	U <sub>3</sub> O <sub>8</sub> ppm	LREO ppm	HREO ppm	REO ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Zn ppm	TREO Mt	HREO Mt	Y <sub>2</sub> O <sub>3</sub> Mt	U <sub>3</sub> O <sub>8</sub> M lbs	Zn Mt
<b><i>Kvanefjeld - February 2015</i></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

## Statement of Identified Mineral Resources, Kvanefjeld Project, Independently Prepared by SRK Consulting (February, 2015)

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

GML is working closely with major shareholder and strategic partner Shenghe Resources Holding Co Ltd to develop Kvanefjeld as a cornerstone of future rare earth supply. An exploitation (mining) license application for the initial development strategy was reviewed by the Greenland Government through 2016-19 and was updated in 2019.

In 2017-18, GML undertook technical work programs with Shenghe Resources Holding Co Ltd that improved the metallurgical performance and simplified the development strategy and infrastructure footprint in Greenland, with optimised Feasibility Study outcomes announced in mid-2019. This defined a significantly enhanced project cost-structure and a direct alignment with downstream processing. In addition, the Company continues its focus on working closely with Greenland's regulatory bodies on the processing of the mining license application and maintaining regular stakeholder updates.

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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.

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## **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