

## December 2018 Quarterly Report

Thursday 31<sup>st</sup> January 2019

### Highlights:

- **China BTMR laboratories complete flotation circuit optimisation test work**
  - Optimised grade-recovery produces >22% REO concentrate grades with recovery in excess of 80%
- **Engineering optimisation studies advance:**
  - Tetra Tech devise engineering design refinements to reduce civil earth works substantially
  - Updated port design completed by PND Engineers and C-CCC
- **Updated SIA reviewed by Greenland Government with only minor recommendations**
  - SIA amendments completed, and returned to Government early January
- **Updated EIA review progressing, with meetings held during the quarter**
  - Additional waste-rock studies, fjord modelling and air quality studies completed with no changes to existing conclusions of minimal impact
- **Translation of EIA document and Maritime Safety Study completed**
- **Democrat party enters agreement with Siumut-led government to strengthen support on key areas**
  - Agreement includes committed support for rare earth and associated uranium production

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## December 2018 Quarterly Activities

The December Quarter saw a busy end to the year for Greenland Minerals Limited ('GML' or 'the Company'), with significant progress on Kvanefjeld Project optimisation and project permitting. Optimisation has focussed on both areas of metallurgical process development, and civil engineering design. Following the lodgement of updated project impact assessments in Q3, productive meetings were held in both Greenland and Denmark to follow up on reviews while document translations were being completed.

In November, the company participated in an IAEA workshop in Swakopmund, Namibia, as an external consultant at the invitation of the IAEA. These workshops consist of country presentations, workshops and expert lectures. Typically, an external uranium industry expert is invited to present at the meeting on a variety of uranium production cycle topics. GML's Damien Krebs attended as an industry expert providing a series of lectures.

Government support for the mining industry was strengthened in October, with the Democrat party entering an agreement with the coalition government to provide support across key areas including the rare earth production.

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. It is projected to be one of the largest global producers of key magnet metals including neodymium, praseodymium, dysprosium and terbium, along with by-production of uranium and zinc.

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

## Civil Engineering Optimisation Program

To address engineering design and costs GML brought together on-site a collective of specialist engineering groups including **Nuna Logistics, Tetra Tech, PND Engineers** and **China Communications Construction Co (C-CCC)**. Work on-site was conducted in September (see Company announcement September 18<sup>th</sup>, 2018), and follow-up studies have since been underway by each respective group.

Further development of the engineering design is set to reduce the capital costs, along with the project footprint and impacts. In 2015 GML released a Feasibility Study for the Kvanefjeld Project, and an updated Feasibility Study in 2016 following pilot plant operations and further engineering studies. Civil

earth works to prepare sites for plant and equipment represented a major contributor to project capital costs, and have therefore been a key point of focus as part of project optimisation.

Tetra Tech completed their work in October to produce a heavily revised pad for the process plant, that is shaped to match the natural land contours thereby leading to a substantial reduction in the amount of civil construction effort. These changes have led to a dramatic reduction in civil earth works associated with project development, with cut and fill quantities reduced to ~20% of the original design.

The North American arctic specialist port design company PND Engineers has completed a design optimisation for the port facilities. The location of the port facilities at the Tuna Peninsula has been enhanced to allow for increased use of local construction materials. This will reduce the overall capital cost of the project by utilising advantages of having an abundant source of good quality aggregate material available for port construction. The port location is on the Tuna Peninsula at the base of the Narsaq valley in an area that is currently used for a municipal rubbish dump. PND Engineers have recommended the use of Open Cell Technology for the project as it offers the lowest cost and least construction risk.

C-CCC are China's largest construction company with extensive experience in infrastructure construction including Ports. C-CCC worked collaboratively with PND Engineers to provide the on-shore port design and cost estimate for associated facilities. C-CCC has provided an extensive design of the on-shore facilities for an efficient port operation. C-CCC have included flexibility within the design to allow for a staged development strategy and delivered a high level of design detail for the updated design and cost estimate.

Nuna Logistics is currently compiling a new civil construction cost estimate for the project based on the new civil design and which will detail the cost reductions accurately. This estimate is based on new information gained from the site visit, and the subsequent studies by the other participating engineering firms.

Onsite investigations of the project area (including sites for the proposed mine, processing plant, tailings storage, port and roads) by the multi-disciplinary engineering groups confirmed that the construction of the Kvanefjeld Project has no major impediments and is relatively straight forward owing to a number of site-specific advantages which include:

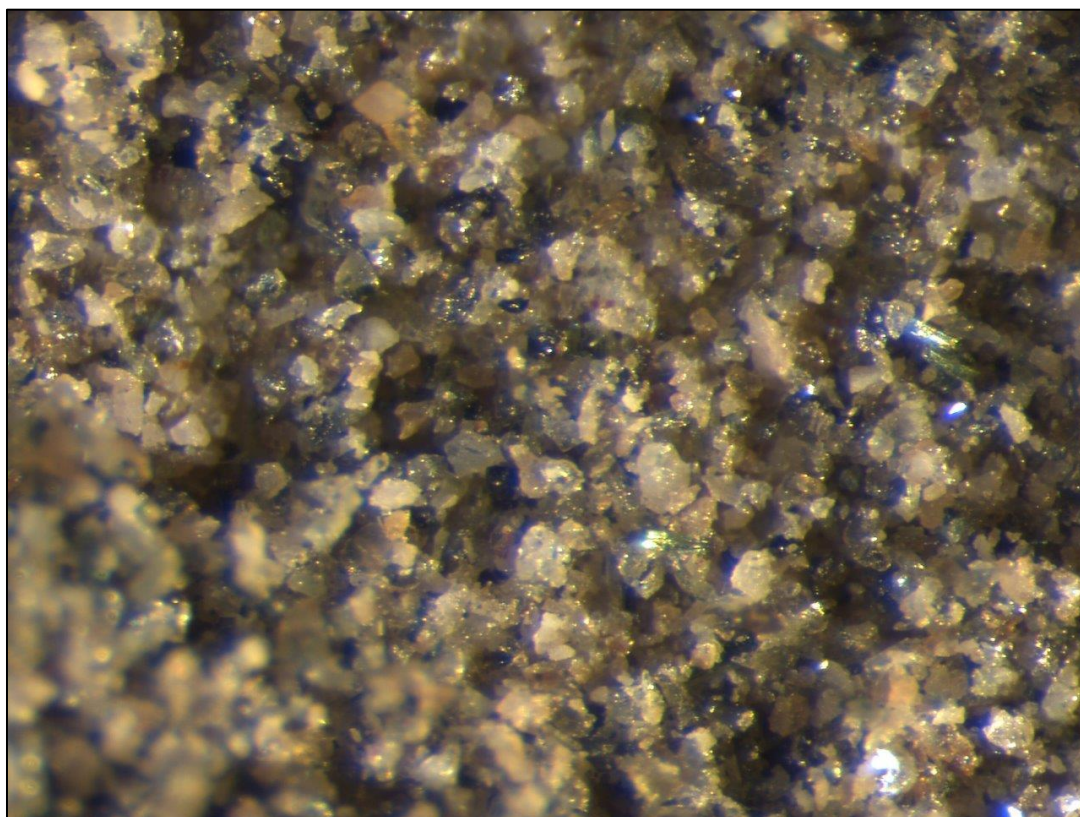
1. Located near an existing town (Narsaq), with infrastructure benefits including port and fuel storage that greatly assists the pioneering (early) phase of project development.
2. Local labour is available that can be trained and utilised effectively from the early construction phase and onward into mine development.
3. Abundance of high-quality construction suitable rock material on-site, which can be used for roads, culverts, plant site preparation and port construction.
4. Year-round shipping access for fuels, construction material and labour.

Being located near the southern tip of Greenland and on the coastal fringe, winters are not exceptionally cold, with the weather relatively mild allowing for year-round construction.

### **Kvanefjeld Metallurgical Optimisation**

Technical optimisation of Kvanefjeld is part of an on-going program of co-operation with leading rare earth company and major shareholder Shenghe. This strategy sees the integration of world-leading Chinese rare earth processing technology with one the world's most significant rare earth projects, to develop a simpler, lower cost rare earth value chain.

Through mid-2018, representatives from the Institute of Multipurpose use of Mineral Resources (IMUMR) and Baotou Meng Rong Fine Materials Co Ltd (BTMR) laboratories visited Perth to evaluate the flotation process flow sheets developed by each group.



**Figure 1.** Steenstrupine mineral concentrate produced from BTMR test work conducted in Perth laboratories.

Following the test work in Perth, BTMR was selected to continue the development and validation of their flotation circuit. BTMR has played a key role in the technical overhaul of the Mountain Pass rare earth operation in the USA, where Shenghe is also a shareholder.

Further testwork by BTMR in China has resulted in outstanding simplifications with key highlights including:

- **Circuit operates consistently over a broad temperature range,**
- **No regrinding or de-sliming circuits are required,**
- **Reduced reagent consumption through improvements to the water chemistry without increased capital expenditure,**
- **Reduced reagent consumption assisted by the removal of 80% of fluorine in process water with positive impacts on environmental management.**

These benefits will reduce both operating and capital expenditures, with increased concentrate REO grades at high recoveries. This provides greater flexibility to project implementation and major efficiency of refining mineral concentrates.

The BTMR produce their own range of specialty flotation collectors. This allows them to customise the chemistry of their collectors to target specific minerals selectively. The BTMR approach is ideal for the unique nature of the REE ore minerals at Kvanefjeld, which will be the first large-scale non -refractory source of rare earth materials. A customised approach is therefore required.

GML looks forward to providing further updates as the work program progresses.

## **Permitting Update**

Updated environmental and social impact assessments (EIA, SIA) were lodged with the Greenland Government in Q3, with content reviews then commencing. Meetings have since taken place in both Greenland and Denmark as part of the review process, along with considerable correspondence. SIA reviews were received during Q4, with only minor amendments required. These have been completed, and the SIA is back with the Greenland Government. Translations of the document have been completed and are undergoing final checks.

For the EIA, additional data to supplement waste rock (mostly basalt) studies, along with updated fjord modelling and air-quality modelling studies have been completed and sent through to Greenland's Environmental Agency for Mineral Resource Activities (EAMRA). The outcomes were consistent with prior work demonstrating minimal impact and further supporting the findings of the EIA.

Company personnel have held a number of meetings with the EAMRA and their advisors through Q4 to with the aim of finalising outstanding items that fall within the scope of the EIA. Referencing and document formatting are currently being updated, and translations have been completed and currently being checked.

### **Adjustment to Coalition Government in Greenland**

In October Greenland's Democrat Party, which had previously remained outside the government, entered into an agreement with the coalition to support key areas including mining, thereby strengthening the government's position. The coalition holds 13 seats in Greenland's 31 seat parliament, and the Democrat Party holds 6 seats to provide strong majority support across key areas.

The agreement includes specific support for rare earth and associated uranium extraction and the government has acknowledged that with substantial "research and assessment" completed, the time to move the licensing process to the next stage of public consultations is imminent.

### **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, as 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**
- ✓ **Yttrium enrichment is highly beneficial for latest RE separation technology**
- ✓ **RE minerals that allow for simple processing, which will be maximised by technical optimisation underway with Shenghe**

- ✓ **Favourable country and project location with direct shipping access, international airport nearby**
- ✓ **Regulatory framework implemented to manage project operation and export controls**

Greenland Minerals and Shenghe are considering a staged development to expediate project development. This would see initial downstream processing take place in China, with project-specific downstream processing jointly established outside of China. Kvanefjeld has the scale and longevity to justify the development of new supply chains to meet the growing needs of a number of demand centers.

**-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 growth opportunities.

## **About the Kvanefjeld Project**

GML's primary focus 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 both heavy rare earths and uranium. 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.

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.

Kvanefjeld is slated to produce a significant output of critical rare earths (**Nd, Pr, Eu, Dy, Tb**), with by-production of uranium, zinc, and bulk light rare earths (La, Ce). Low incremental cost of recovering by-products complements the simple metallurgy to deliver a highly competitive cost structure.

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 many 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.

Uranium forms an important part of the global base-load energy supply, with demand set to grow in coming years as developing nations expand their energy capacity.

## **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.

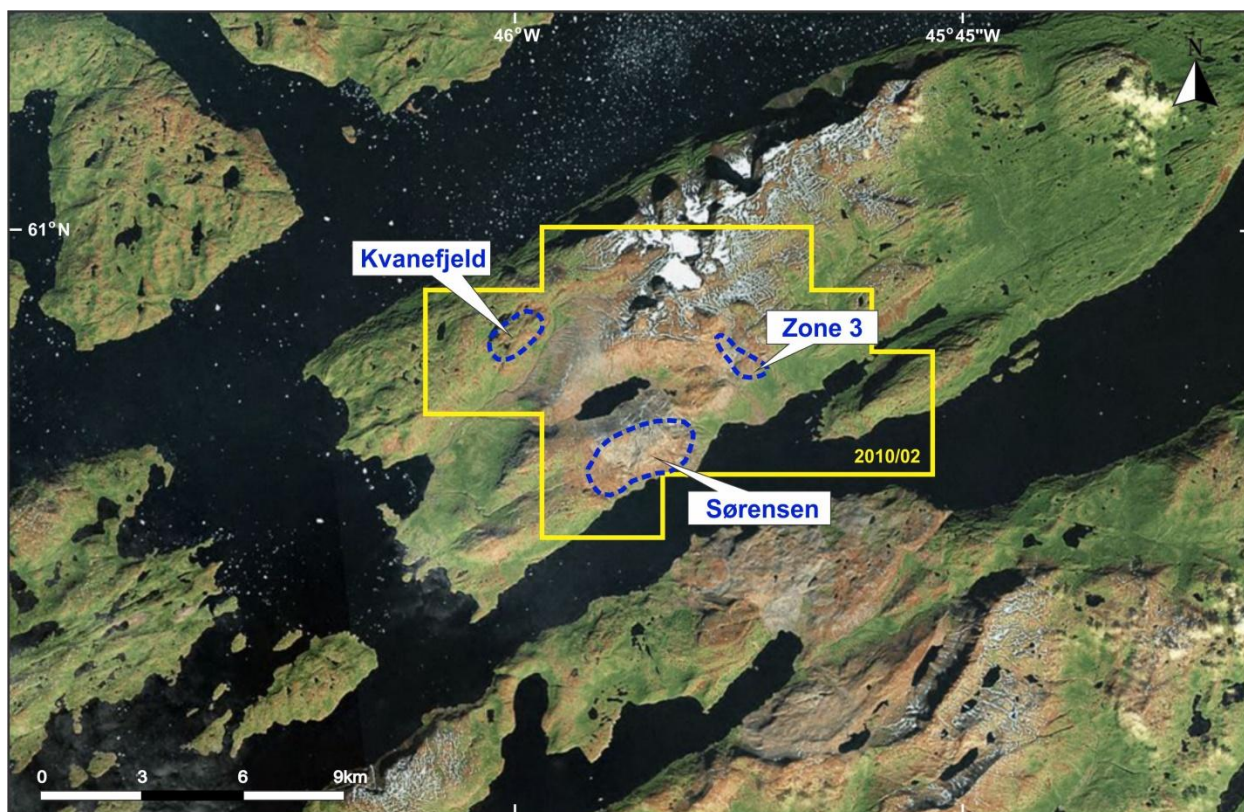
### ***Location***

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 (Trading) A/S, a fully owned subsidiary of GML.
<b>Capital Structure – As at 31 December 2018</b>		
Total Ordinary shares		1,132,649,196
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

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.



Multi-Element Resources Classification, Tonnage and Grade										Contained Metal				
Cut-off (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	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><i>Kvanefjeld - February 2015</i></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	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>	<b>673</b>	<b>10,900</b>	<b>248</b>	<b>9,600</b>	<b>400</b>	<b>10,000</b>	<b>881</b>	<b>2,270</b>	<b>7.34</b>	<b>0.27</b>	<b>0.59</b>	<b>368.02</b>	<b>1.53</b>
200	Measured	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	Indicated	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	Inferred	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>	<b>368</b>	<b>12,100</b>	<b>310</b>	<b>10,700</b>	<b>409</b>	<b>11,200</b>	<b>955</b>	<b>2,490</b>	<b>4.46</b>	<b>0.15</b>	<b>0.35</b>	<b>251.83</b>	<b>0.92</b>
250	Measured	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	Indicated	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	Inferred	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>	<b>261</b>	<b>12,900</b>	<b>346</b>	<b>11,400</b>	<b>440</b>	<b>11,800</b>	<b>1,034</b>	<b>2,520</b>	<b>3.37</b>	<b>0.11</b>	<b>0.27</b>	<b>199.18</b>	<b>0.66</b>
300	Measured	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	Indicated	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	Inferred	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>	<b>194</b>	<b>13,400</b>	<b>371</b>	<b>11,900</b>	<b>471</b>	<b>12,300</b>	<b>1,107</b>	<b>2,530</b>	<b>2.60</b>	<b>0.09</b>	<b>0.21</b>	<b>158.77</b>	<b>0.49</b>
350	Measured	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	Indicated	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	Inferred	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>	<b>122</b>	<b>14,000</b>	<b>398</b>	<b>12,300</b>	<b>506</b>	<b>12,800</b>	<b>1,195</b>	<b>2,570</b>	<b>1.71</b>	<b>0.06</b>	<b>0.15</b>	<b>107.45</b>	<b>0.31</b>



Multi-Element Resources Classification, Tonnage and Grade										Contained Metal				
Cut-off (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	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 (rare earth elements, uranium, zinc). 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 highlight the potential to develop Kvanefjeld 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 has been undergoing review by the Greenland Government through the latter part of 2016 and through 2017.

In 2017-18, GML continues to undertake technical work programs with Shenghe Resources Holding Co Ltd that aim to improve the metallurgical performance, simplify the development strategy and infrastructure footprint in Greenland, enhance the cost-structure, and ensure that Kvanefjeld is aligned 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.

**Dr John Mair**  
**Managing Director**  
**+61 8 9382 2322**

**Christian Olesen**  
**Rostra Communication**  
**+45 3336 0429**

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