

## June 2018 Quarterly Report

Tuesday 31<sup>st</sup> July 2018

### Highlights:

- **New pro-mining coalition government established in Greenland in May**
  - Coalition agreement clearly sets out a positive position on resource development
  - Coalition specifically contemplates rare earth production, and by-product uranium production and export
  - Positive meetings held with new Mines Minister Mr Vittus Qujaukitsoq in June
- **Updated Social Impact Assessment (SIA) report completed**
  - Lodged with Greenland Government, expedited review period commenced
- **Updated Environmental Impact Assessment (EIA) report received, undergoing internal reviews prior to final signoff**
  - EIA to be lodged with Greenland's EAMRA in early August
- **Translations of SIA, EIA, Maritime Safety Study being readied for public consultation**
- **Shenghe coordinates two leading Chinese laboratories to visit Perth in preparation for final pilot plant operations**
  - Each group has developed a flotation method to significantly increase REO mineral concentrate grades to >23% REO
  - Results on track to deliver simpler, more efficient flotation circuit to reduce capital and operating costs
- **Outlook for rare earth and uranium sectors strengthening**
  - Uranium price rising follow continued supply side reform

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## June 2018 Quarterly Activities

The June Quarter has seen important progress for Greenland Minerals in key areas of permitting and technical optimisation.

A national election took place in Greenland in April. The Siumut Party that had led the incumbent government in a coalition won the most votes and formed a new coalition government. The coalition agreement outlines a clear position of support for mine development, increasing Greenland's competitiveness for attracting foreign investment, and importantly, clear support for rare earth and associated uranium production.

The Company's major shareholder Shenghe Resources holding Co Ltd (Shenghe) has been driving technical optimisation of the Kvanefjeld Project. Following the major improvements in flotation performance by two leading Chinese laboratories, representatives from each laboratory visited Perth to conduct further test work as a basis for confirming the best possible methodology. This strategy sees the integration of world-leading Chinese rare earth processing technology with one of the world's most significant rare earth projects, with the aim of developing a simpler, lower cost rare earth value chain.

Environmental and Social Impact Assessments, both key permitting documents have been completed by expert consultants. The SIA has been lodged with the Greenland Government. The EIA is undergoing internal review and will be lodged with the Greenland Government in early August. The completion of updated impact assessments following an in-depth review process is an important milestone in project development.

July is the main holiday month in Greenland, with many members of the administration taking leave. Through August and September activity will increase with numerous groups set to visit the project. Scheduled visits include a delegation from the Bank of Greenland, a representative from the IAEA, a group from Aalborg University (Denmark) to learn more about the SIA program, and a joint geoscience delegation from IMUMR (Shenghe's major shareholder) and Denmark University.

Sector outlook for both rare earths and uranium continues to strengthen. The uranium price has recently improved after significant production shutdowns in Canada, Namibia, and Kazakhstan, and the possibility of trade restrictions in the USA focus attention on the longer-term supply-demand balance.

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 producers globally 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.

### **New Pro-Mining Government in Greenland**

Following a national election on April 24<sup>th</sup>, a new coalition government has been established. The Siumut Party, which led the incumbent government, won the most votes and has formed a coalition with three minority parties; Partii Naleraq, Atassut, and Nunatta Qitornai. Kim Kielsen, head of the Siumut Party, will continue as Greenland Premier.

The coalition agreement articulates a clear position of support for the mining industry, and a desire for Greenland to be an attractive destination for foreign investment, and to competitively develop and operate mining operations.

Importantly, the coalition agreement outlines a clear position of support for rare earth production and associated uranium by-product.

A supportive pro-mining government sets the scene to effectively move through the next steps in the permitting process and gain project approvals.

### **Permitting Update – Impact Assessments Set for Completion**

Following a thorough and constructive review process overseen by the Greenland Government, the updated Social and Environmental Impact Assessments (SIA, EIA) have been finalised by lead consultants. The revised reports will be reviewed by the Greenland Government, and will be translated in preparation for a public consultation period.

The updated SIA has been completed by Shared Resources and has been lodged with Greenland's Ministry of Industry Labour and Trade (MILT) for review. Translation of the document to Greenlandic and Danish for the purpose of public consultation has also commenced.

The updated EIA report has been produced by GHD and is undergoing internal review while remaining supporting studies are finalised. The EIA will be submitted to Greenland's Environmental Agency for Mineral Resource Activities (EAMRA) in early August, and translations will commence.

The Maritime Safety Study was accepted as suitable for public consultation 2017.

Since the new government was established in May, the Company has held positive meetings with the Minister for Mineral Resources Mr Vittus Qujaukitsoq, with a focus on establishing project timelines.

The Company will be communicating closely with the Greenland Government through the coming weeks to constrain the timelines on the remaining steps in the permitting process and looks forward to providing further market updates.

### **Kvanefjeld Optimisation Program**

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 of the world's most significant rare earth projects, with the aim of developing a simpler, lower cost rare earth value chain

In early 2017 a technical committee was established with representatives from both GML and Shenghe to oversee test work programs that improve the metallurgical performance, simplify the processing route and related infrastructure, and improve the cost structure of the Kvanefjeld Project. Flotation beneficiation test work is being directed by Shenghe and draws on the expertise of a number of Chinese technical institutes. Work on the refinery circuit is being conducted in Australia and China.

Important technical progress has been made on both the flotation and refinery circuits as announced in December 2017, and January 2018. Test work continued through Q1 and Q2, 2018, with excellent results that continue to build confidence in project enhancements. The technical developments complement the unique non-refractory nature of the Kvanefjeld ore and have the project on track to be one of the simplest and lowest-cost rare earth producers globally.

Metallurgical test work has now been completed with two Chinese Institutes who have separately developed flotation methods to concentrate the unique, advantageous rare earth minerals from Kvanefjeld.

The Institute of Multipurpose Utilisation of Mineral Resources – Chinese Academy of Geological Sciences (IMUMR) based in Chengdu in Sichuan Province was the first institute engaged. They have developed flotation reagents and methods which have been successfully commercialised at Shenghe's operating mining. Test work with IMUMR commenced in May 2017 with initial results announced in December 2017.

Baotou Meng Rong Fine Materials Co Ltd (BTMR) was the second institute engaged. They are a privately-owned technology and technical service provision company based in Baotou, Inner Mongolia. Test work with the BTMR commenced in February 2018 and is ongoing, with excellent initial results.

Initial test work by both technical groups produced substantially enhanced mineral concentrate grade approaching 25% REO. Notably, the Kvanefjeld Feasibility Study uses a mineral concentrate grade of 14% REO; well below the grades achieved by the revised flotation processes now under development.

The next phase has involved transferring the development work to Australia, overseen by technical teams from each of Chinese laboratories. Based on results, the preferred of the two new methodologies will then be selected for pilot plant operation.

This significant increase in mineral concentrate grade with a reduced mass of solids will result in substantial reductions in the size of equipment leading to lower capital and operating costs of the processing plant (atmospheric leach) circuit.

### **IMUMR – Perth Visit**

A technical delegation from the IMUMR visited Perth in April to oversee and co-ordinate flotation test work on Kvanefjeld ore. The work was performed at the independent laboratory ALS located in Perth, Australia.

The delegation consisted of flotation metallurgists and reagent development chemists. A program of intensive flotation test work was performed to optimise and validate the results which were achieved at the IMUMR's laboratories in Chengdu, China.

A range of different types of tests were performed using the IMUMR supplied flotation reagents. Initial tests were simple batch tests to confirm the reagent scheme was working. Then a number of locked cycle flotation tests were performed to show more complete metallurgical performance.

The locked cycle tests include recycle streams from within a proposed flotation circuit. This gives slower floating particles the chance to report to the final product stream boosting recovery. These tests are very typical for flotation of both sulphide and oxide ores in order to produce a laboratory test which more closely resembles the performance of a commercial circuit.

Two separate locked cycle flotation tests were performed as part of this program to develop the conditions for pilot plant operations.

Upgrading of the Kvanefjeld ore from 1.4% REO to 20-25% REO in the mineral concentrate was observed in the optimised locked cycle test work. This process also results in the rejection of gangue elements such as aluminium from 7% in the ore to less than 2% in the mineral concentrate. This results in less acid consumption in the leach process and less mass for transport purposes.

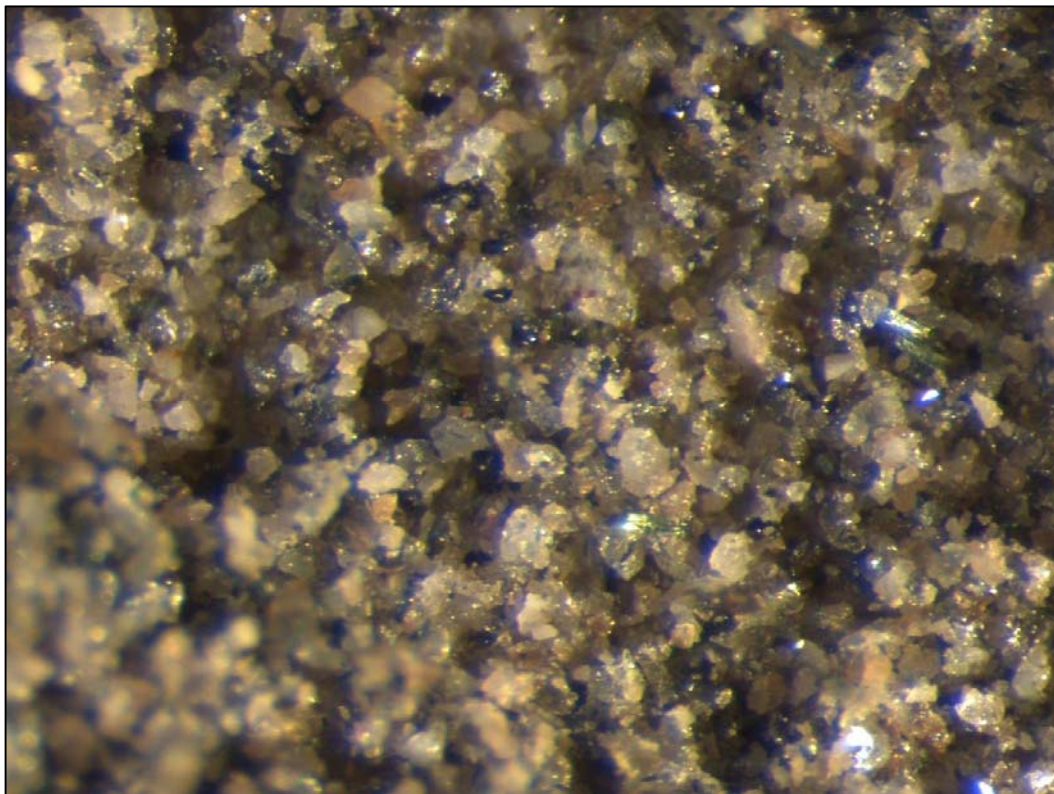


#### **BTMR – Perth Visit**

A technical delegation from the BTMR visited Perth earlier in July to oversee and co-ordinate flotation test work to further develop their optimised flotation method for Kvanefjeld. The delegation similarly consists of flotation metallurgists and reagent development chemists.

**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 selectivity reduces the amount of gangue minerals which float and increases the grade of resulting concentrates. Improved selectivity of these customised collectors has been one of the keys to the high grades of concentrates achieved.



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

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.

### **Pilot Plant Operations**

Planning and design for pilot plant operations in Perth is underway. The results from the Perth based test work using the methods devised by the Chinese Technical Institutes of IMUMR and BTMR will be assessed with the most suitable method and reagent scheme to be selected for use in the pilot plant work.

The Company is in discussions with a number of Perth laboratories to perform the flotation pilot plant. A flowsheet for the pilot plant is being developed and is designed to be applied in Greenlandic conditions. The use of high temperature high intensity conditioning is not required for the flotation reagents that are currently under evaluation. The highly selective nature of the Chinese reagent schemes has allowed for improved flotation performance without intense conditioning that had been required for the previous reagent scheme assumed for the 2016 Feasibility Study.

A 5-tonne sample of ore has been prepared and is currently being shipped to Perth. This ore material is from a bulk sample that was crushed and blended by GTK of Finland in 2014 as part of pilot plant operations for the EURARE program. The metallurgical performance of this sample is well known as it has been extensively tested. This include mineralogical liberation studies. The sample is on schedule to arrive in Perth in late July 2018.

### **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 provide the potential to 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 work conducted through 2017 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-**

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## **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 1.35 billion shares on issue and a market capitalization of approximately RMB 24.8 billion or AUD 4.6 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.

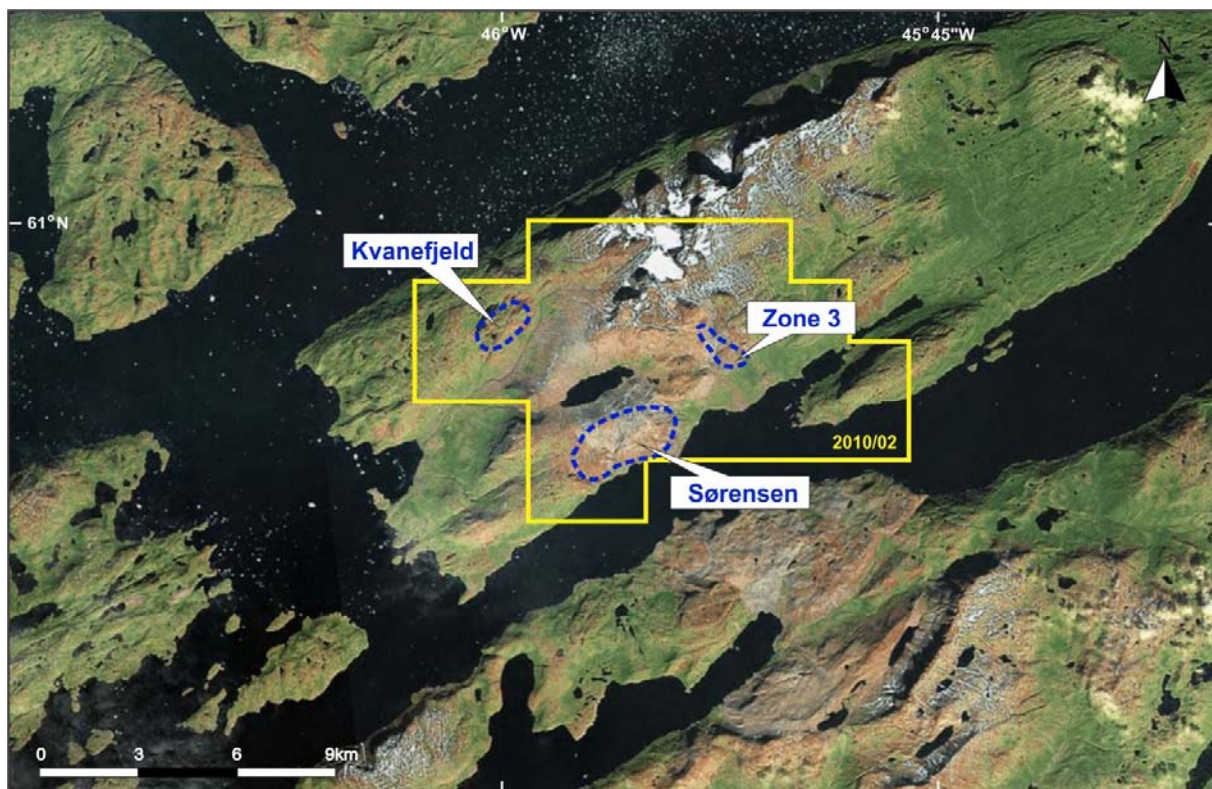
### **Location**

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 and Energy (Trading) A/S, a fully owned subsidiary of GML.
<b>Capital Structure – As at 30 June 2018</b>		
Total Ordinary shares		1,105,466,435
Quoted options exercisable at \$0.08 on or before 30 September 2018		187,081,350
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.

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



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.

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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