GREENLAND
MINERALS AND ENERGY LTD

ASX: GGG

Greenland Minerals Extends 'Zone 2' Rare Earth-Uranium Deposit with Broad Drill Intercepts

Company Announcement: *Tuesday January 24th, 2012*

Results of the 2011 drilling at *Zone 2* on the northern Ilimaussaq complex continue to deliver broad, high-grade intercepts of REE-uranium mineralisation. Zone 2, located 6km from the world-class Kvanefjeld resource (contained metal 350 Mlbs U_3O_8, 6.6 Mt TREO*, 3 Blbs zinc), is clearly shaping up as a significant deposit in its own right, and is anticipated to lead to a substantial increase in the projects overall resource base.

Significant 2011 Zone 2 Intercepts Include:

- ***S018*** **66m @ 474ppm U_3O_8, 1.55% TREO, 0.34% Zn**
- ***S019*** **60m @ 486ppm U_3O_8, 1.15% TREO, 0.34% Zn**
- ***S016*** **65m @ 417ppm U_3O_8, 1.36% TREO, 0.33% Zn**
- ***S020*** **52m @ 452ppm U_3O_8, 1.49% TREO, 0.33% Zn**
- ***S013*** **45m @ 443ppm U_3O_8, 1.70% TREO, 0.35% Zn**
- ***S015*** **39m @ 449ppm U_3O_8, 1.29% TREO, 0.37% Zn**

- *Intercepts continue to delineate a thick, high-grade upper lens that remains open to the north*
- *Drill hole array now covers an area of 500 x 800m, with all holes intersecting mineralisation*
- *Drill results follow the recent introduction of a uranium licensing framework for the Kvanefjeld project (inclusive of new deposits)*
- *Results of the 2011 drilling at 'Zone 3' are anticipated in the coming weeks*
- *Initial JORC-code compliant resources estimates for Zones 2 and 3 scheduled for Q1 2012*

*TREO = rare earth oxides in the lanthanide series, plus yttrium oxide

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Introduction

Greenland Minerals and Energy Ltd ('GMEL' or 'the Company') is a mineral exploration and development company operating in southern Greenland. The Company is primarily focused on advancing the Kvanefjeld multi-element project *(both light and heavy rare earth elements, uranium, and zinc)* through the feasibility phase and into mine development.

Kvanefjeld is located within the Company's license over the northern Ilimaussaq Intrusive Complex; a unique geological entity that is highly prospective for specialty metals. Mineral resources at Kvanefjeld now stand at **619 Mt** (JORC Compliant), with three recently discovered satellite deposits now being the focus of resource definition. Kvanefjeld is a highly-accessible resource that outcrops on a broad plateau, with the higher grade portions located close to surface. Adjacent deep-water fjords provide shipping access directly to the project area. An international airport is located 35km away, and a nearby lake system has been positively evaluated for hydroelectric power.

An *Interim Report* on the Kvanefjeld pre-feasibility study was released in February 2010 that indicates the potential for the multi-element resources to sustain a large-scale mining operation for decades (*for more information visit the Company's website at* http://www.ggg.gl).

Importantly, the Greenland government recently introduced a uranium licensing framework for the Kvanefjeld project. This provides a clear path to see the project move through the feasibility phase and ultimately into mine development.

The Company's aim is to be a cost-effective producer of metals of fundamental strategic importance and value to tomorrow's world. Rare earth elements (REEs) are now recognised as being critical to the global manufacturing base of many emerging consumer items and green technologies. However, China controls more than 95% of global REE supply, and has maintained a policy of significantly reducing export quotas. This continues to raise serious concerns to non-Chinese consumers over the long-term stability of REE supply and pricing, at a time when REE-demand continues to grow. 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.

2011 Field Program: Northern Ilimaussaq Complex

In 2010, Greenland Minerals and Energy Ltd ("GMEL") unearthed two significant new multi-element (REE, U, Zn) deposits within the northern Ilimaussaq complex; Zones 2 and 3. Significantly, these deposits demonstrated that mineralisation is far more widespread than previously recognised (Figure 1). Geological evidence suggests that Zones 2 and 3 represent outcropping, or near-surface expressions of a mineralised system that extends over several kilometres from Kvanefjeld, and is interconnected at depth. Following the highly encouraging initial drill results that were generated between 2008 and 2010, GMEL set about drilling sufficient drill holes in 2011 to generate initial resource estimates for both Zones 2 and 3. The aim is to increase resources at the upper end of the grade range established for resources already defined at Kvanefjeld.

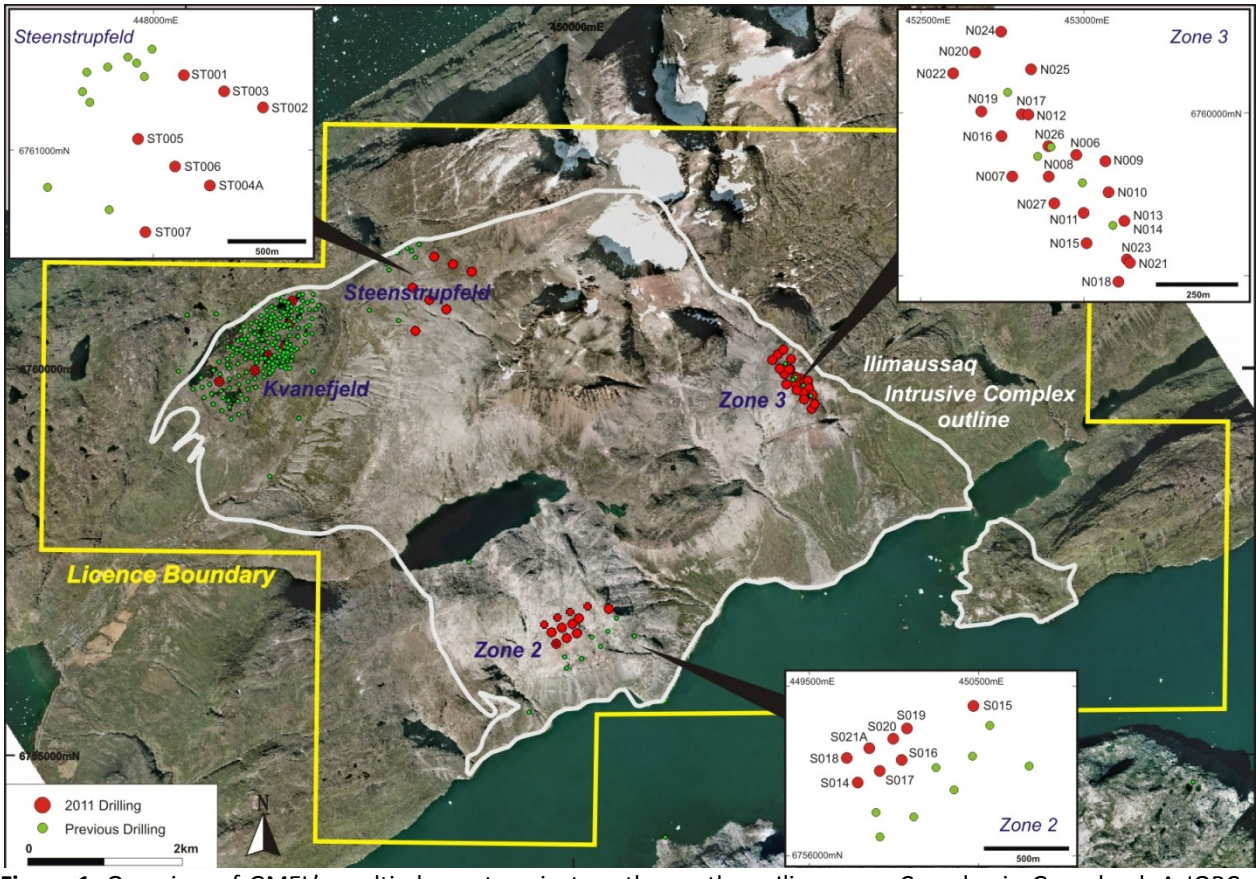


Figure 1. Overview of GMEL's multi-element project on the northern Ilimaussaq Complex in Greenland. A JORC-code compliant 619Mt resource has been defined at Kvanefjeld. The 2011 drill program concentrated on Zones 2 and 3.

Resource Drilling – Zone 2

In 2008, GMEL's second year of exploration on the northern Ilimaussaq intrusion, regional exploration drilling was undertaken with the intention of evaluating the broader resource potential within the license area. The program also aimed to identify higher grade ore that may displace presently scheduled mill feed. Available geological evidence suggested that the mineralized layer (lujavrite) that outcrops at Kvanefjeld extended through much of the northern Ilimaussaq Complex at depth.

The initial discovery drill hole at Zone 2 (S001) was completed close to the end of the 2008 field season. The target was a large body of lujavrite visible from Tunugdliarfik fjord (Figure 2). Radiometric surveys suggested that grade profile was promising, and potentially higher grade than resources defined at Kvanefjeld. This drill hole intersected considerable lujavrite mineralisation over its 398 metres and was the catalyst for future exploration on this prospect. The intercepts reported from drill hole S001 were :

- *S001* 116m @ 440 ppm U_3O_8, 1.2% TREO, 0.34% Zn
- *S001* 34m @ 346 ppm U_3O_8, 1.1% TREO, 0.36% Zn

Figure 2. View of the Zone 2 lujavrite mineralisation from Tunugdliarfik Fjord looking to the north west, Zone 2 in BLUE, and Zone 3 (several kilometres away refer Figure 1) in GREEN.

This discovery hole, and another hole drilled halfway to Kvanefjeld (adjacent to Lake Taseq), confirmed that the mineralized layer underlies the majority of the intrusive complex extending up to 7 km from Kvanefjeld. This geological theory had been suggested previously by state sponsored geologists but until recently, remained untested by drilling. At Zone 2, the full mineralized section is present, and not partially unroofed by glaciation like that at Kvanefjeld.

A further 13 holes were drilled in 2010 for 4,713m, this drilling was designed to further refine the geological understanding of the deposit. The most significant intercepts previously reported included:

- *S006* 185m @ 442 ppm U_3O_8, 1.2% TREO, 0.34% Zn
- *S002* 131m @ 447 ppm U_3O_8, 1.3% TREO, 0.34% Zn
- *S008* 64m @ 462 ppm U_3O_8, 1.3% TREO, 0.33% Zn
- *S003* 42m @ 463 ppm U_3O_8, 1.4% TREO, 0.39% Zn
- *S003* 46m @ 415 ppm U_3O_8, 1.5% TREO, 0.37% Zn

The drilling in 2010 reinforced that Zone 2 could not only be a deposit of comparable size to Kvanefjeld but also that a distinct, higher-grade upper horizon was both continuous and of an attractive mining width.

In 2011 GMEL planned to complete as much resource drilling as possible extending the mineralisation to the north and the west. This drilling was designed to enable resource estimation to be completed to JORC standard.

A total of 10 holes were completed during the 2011 field season, with the deepest hole being drilled to approximately 550m depth. The mineralized body is characterized by thick, sub-horizontal lenses that outcrop along the slopes to Tunugdliafik Fjord (Figure 2), and remains open to the north. Significant intercepts from the 2011 drill program include:

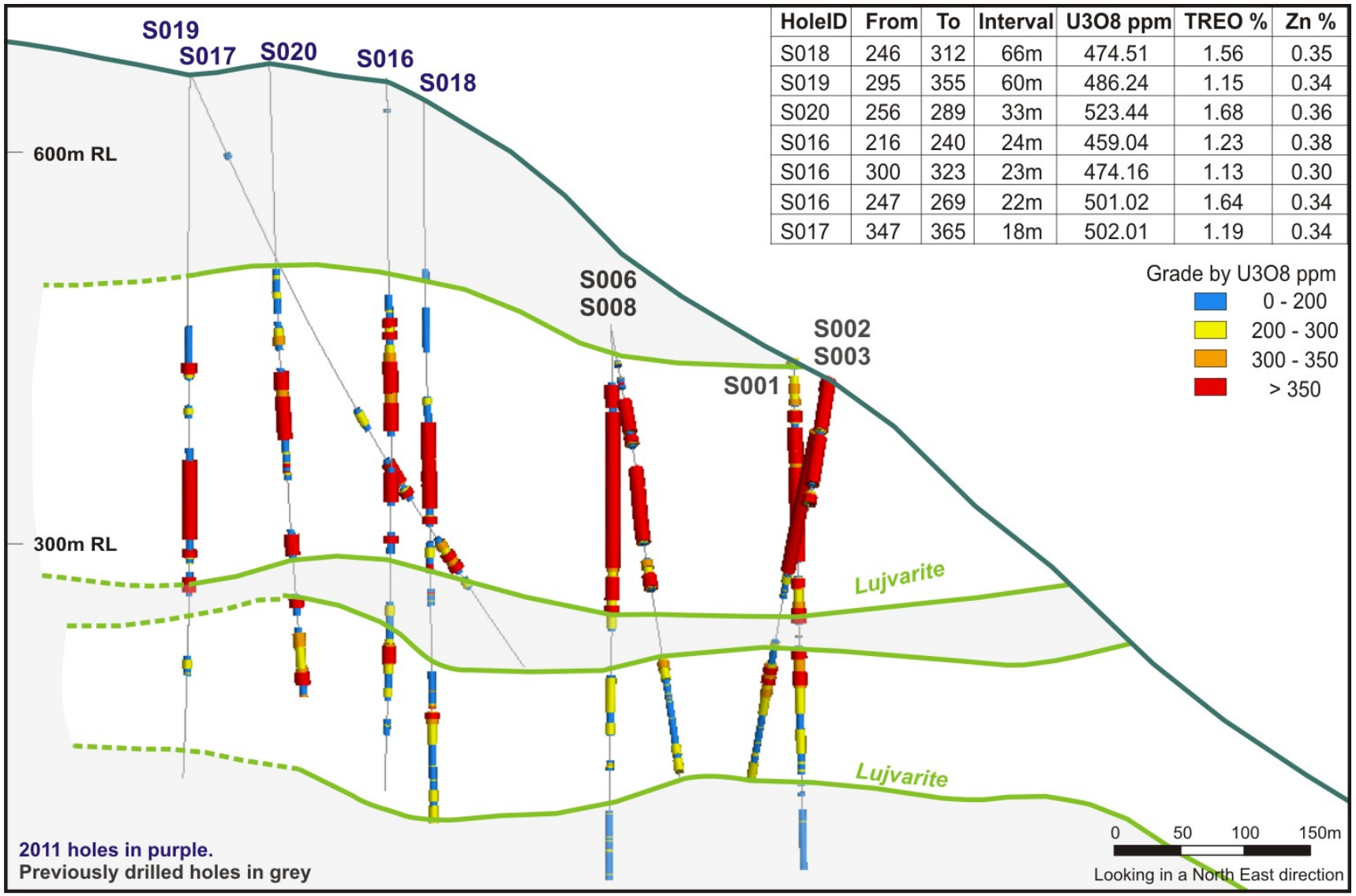
- ***S018*** **66m @ 474ppm U_3O_8, 1.55% TREO, 0.34% Zn**
- ***S019*** **60m @ 486ppm U_3O_8, 1.15% TREO, 0.34% Zn**
- ***S016*** **65m @ 417ppm U_3O_8, 1.36% TREO, 0.33% Zn**
- ***S020*** **52m @ 452ppm U_3O_8, 1.49% TREO, 0.33% Zn**
- ***S013*** **45m @ 443ppm U_3O_8, 1.70% TREO, 0.35% Zn**
- ***S015*** **39m @ 1.29% TREO, 449ppm U_3O_8, 0.37% Zn**

Intercepts calculated at 250 ppm U_3O_8 cut-off, maximum internal waste 4m, minimum intercept 5m.*TREO=LREO+HREO+Y_2O_3

Upon completion of the 2011 field season the drill hole array at Zone 2 covers an area of 800m by 500m, and extends to depths of up to 550m. All drill holes intersected the mineralised lujavrite, which remains open to the east, north and west. Figure 3 presents a schematic section through Zone 2, highlighting the high-grade upper layer.

The mineralisation at Zone 2 has strong lithological and geochemical similarities to the mineralisation at Kvanefjeld. The host rock, lujavrite, occurs as a thick, flat lying horizon surrounded mostly by naujaite. The higher grade mineralisation is located closer to surface and grade slowly diminishes with growing depth. The mineralisation at Zone 2 has a more pronounced, higher-grade upper layer than Kvanefjeld, which can be largely attributed to the preservation of the entire mineralized section.

Importantly, it confirms the presence of *multiple* significant deposits within the broader northern Ilimaussaq project area. Results of the 2011 drilling at Zone 2 are presented in Table 1.



HoleID	From	To	Interval	U3O8 ppm	TREO %	Zn %
S018	246	312	66m	474.51	1.56	0.35
S019	295	355	60m	486.24	1.15	0.34
S020	256	289	33m	523.44	1.68	0.36
S016	216	240	24m	459.04	1.23	0.38
S016	300	323	23m	474.16	1.13	0.30
S016	247	269	22m	501.02	1.64	0.34
S017	347	365	18m	502.01	1.19	0.34

Figure 3. Sectional view through Zone 2; newer 2011 drill holes are labelled in purple, previous drillings in black. The outcropping lujavrite in Figure 2 aids in firming up the geological interpretation. Note: Hole S017 is angled off section.

Table 1. Results of 2011 drilling at Zone 2.

Area	Hole_ID	From (m)	To (m)	Interval (m)	U3O8 ppm	TREO ppm	Zn ppm
Zone2	S018	246	312	66	474.51	15591.26	3498.32
Zone2	S019	295	355	60	486.24	11535.93	3433.07
Zone2	S016	204	269	65	417.45	13668.28	3348.18
Zone2	S020	237	289	52	452	14901.35	3289.9
Zone2	S013	170	215	45	443.81	17014.89	3578.27
Zone2	S015	120	159	39	449.55	12927.25	3767.1
Zone2	S013	222	254	32	419.7	13344.55	3679.44
Zone2	S016	300	323	23	474.16	11280.62	2996.26
Zone2	S013	120	141	21	456.38	16060	3589.19
Zone2	S017	347	366	19	492.52	11678.85	3333.21
Zone2	S017	421	447	26	354.97	10181.2	2637.42
Zone2	S016	428	452	24	357.29	12932.5	3256.08
Zone2	S020	361	377	16	488.25	11211.32	3142.56
Zone2	S015	307	327	20	344.22	10622.16	2473.95
Zone2	S020	459	476	17	360.44	13241.73	3657.18
Zone2	S016	183	199	16	369.89	15355.42	3079.44
Zone2	S013	270	286	16	360.76	12648.78	3309.25
Zone2	S019	384	396	12	388.19	13005.51	4888.5
Zone2	S015	262	273	11	403.23	9897.41	3053.18
Zone2	S015	247	256	9	450.71	13739.78	3135.67
Zone2	S019	221	231	10	370.4	13846.26	2873.7
Zone2	S020	204	217	13	282.2	15758.2	4501.23
Zone2	S013	76	85	9	395.98	18215.36	3291.11
Zone2	S018	466	477	11	321.6	13322.51	4317.55
Zone2	S020	436	447	11	320.62	12238.48	2535.73
Zone2	S013	300	312	12	291.38	10306.79	2616.42
Zone2	S018	318	324	6	548.81	11045.6	2906.17
Zone2	S013	148	155	7	438.03	12936.77	4006.29
Zone2	S017	371	377	6	469.36	11985.59	2170.67
Zone2	S018	341	349	8	349.9	11669.74	1946.38
Zone2	S019	363	369	6	464.25	13069.02	2340.83
Zone2	S016	348	354	6	456.53	15891.85	3169.33
Zone2	S020	410	417	7	391.15	8722.16	2771.86
Zone2	S013	493	501	8	336.25	15364.32	546.5
Zone2	S015	235	241	6	434.56	13423.88	3302.33
Zone2	S015	224	231	7	365.6	13420.21	3330.29

Zone2	S013	258	264	6	302.61	11113.15	2488.33
Zone2	S015	17	23	6	293.93	17162.69	3962.83
Zone2	S018	545	551	6	286.53	7914.2	2193
Zone2	S016	401	407	6	279.32	11114.44	1982.67
Zone2	S020	176	181	5	274.35	16129.09	5053.8

Intercepts calculated at 250 ppm U_3O_8 cut-off, maximum internal waste 4m, minimum intercept 5m.*TREO=LREO+HREO+Y_2O_3

Yours faithfully,

Roderick McIllree
Managing Director
Greenland Minerals and Energy Ltd

Table 1. Statement of Identified Mineral Resources, Kvanefjeld Multi-Element Project, March 2011.

Multi-Element Resources, Classification, Tonnage and Grade										*Contained Metal*				
Cut-off	**Classification**	**M tonnes**	**TREO[2]**	**U_3O_8**	**LREO**	**HREO**	**REO**	**Y_2O_3**	**Zn**	**TREO**	**HREO**	**Y_2O_3**	**U_3O_8**	**Zn**
(U_3O_8 ppm)[1]		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Mt	Mt	Mt	M lbs	Mt
150	**Indicated**	437	10929	274	9626	402	10029	900	2212	**4.77**	0.18	0.39	**263**	0.97
150	**Inferred**	182	9763	216	8630	356	8986	776	2134	**1.78**	0.06	0.14	**86**	0.39
150	**Grand Total**	619	10585	257	9333	389	9721	864	2189	**6.55**	0.24	0.53	**350**	1.36
200	**Indicated**	291	11849	325	10452	419	10871	978	2343	**3.45**	0.12	0.28	**208**	0.68
200	**Inferred**	79	11086	275	9932	343	10275	811	2478	**0.88**	0.03	0.06	**48**	0.20
200	**Grand Total**	370	11686	314	10341	403	10743	942	2372	**4.32**	0.15	0.35	**256**	0.88
250	**Indicated**	231	12312	352	10950	443	11281	1032	2363	**2.84**	0.10	0.24	**178**	0.55
250	**Inferred**	41	11251	324	10929	366	10426	825	2598	**0.46**	0.02	0.03	**29**	0.11
250	**Grand Total**	272	12152	347	10947	431	11152	1001	2398	**3.30**	0.12	0.27	**208**	0.65
300	**Indicated**	177	13013	374	11437	469	11906	1107	2414	**2.30**	0.08	0.20	**146**	0.43
300	**Inferred**	24	13120	362	11763	396	12158	962	2671	**0.31**	0.01	0.02	**19**	0.06
300	**Grand Total**	200	13025	373	11475	460	11935	1090	2444	**2.61**	0.09	0.22	**164**	0.49
350	**Indicated**	111	13735	404	12040	503	12543	1192	2487	**1.52**	0.06	0.13	**98**	0.27
350	**Inferred**	12	13729	403	12239	436	12675	1054	2826	**0.16**	0.01	0.01	**10**	0.03
350	**Grand Total**	122	13735	404	12059	497	12556	1179	2519	**1.68**	0.06	0.14	**108**	0.31

[1]There is greater coverage of assays for uranium than other elements owing to historic spectral assays. U_3O_8 has therefore been used to define the cutoff grades to maximise the confidence in the resource calculations.

[2]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.

ABOUT GREENLAND MINERALS AND ENERGY LTD.

Greenland Minerals and Energy 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 multi-element deposit (Rare Earth Elements, Uranium, Zinc), that is rapidly emerging as a premier specialty metals project. An interim report on pre-feasibility studies has demonstrated the potential for a large-scale multi-element mining operation. For further information on Greenland Minerals and Energy visit http://www.ggg.gl or contact:

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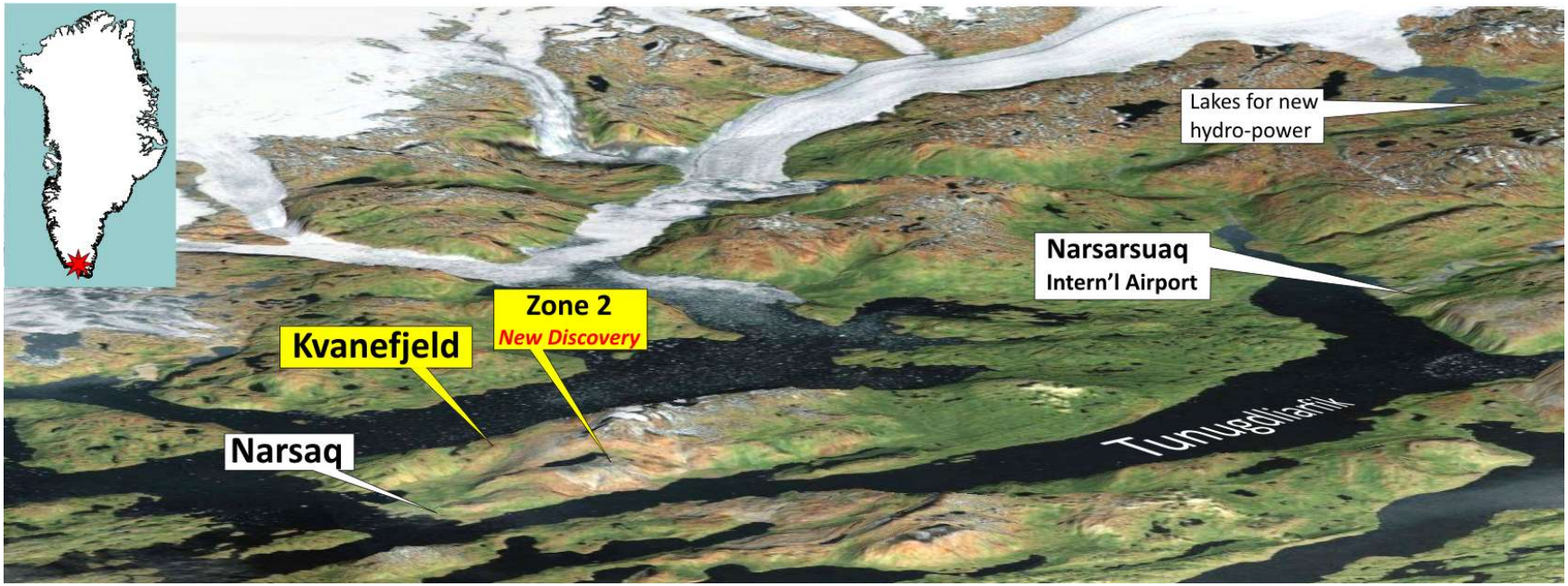
Greenland Minerals and Energy Ltd will continue to advance the Kvanefjeld project in a manner that is in accord with both Greenlandic Government and local community expectations, and looks forward to being part of continued community discussions on the social and economic benefits associated with the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

The information in this report that relates to exploration results, geological interpretations, appropriateness of cut-off grades, and reasonable expectation of potential viability of quoted rare earth element, uranium, and zinc resources is based on information compiled by Jeremy Whybrow. Mr Whybrow is a director of the Company and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whybrow has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Whybrow consents to the reporting of this information in the form and context in which it appears.

The geological model and geostatistical estimation for the Kvanefjeld deposit were prepared by Robin Simpson of SRK Consulting. Mr Simpson is a Member of the Australian Institute of Geoscientists (AIG), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Simpson consents to the reporting of information relating to the geological model and geostatistical estimation in the form and context in which it appears.



View over the broader geography of GMEL's multi-element project on the northern Ilimaussaq Complex located in southern Greenland. The fjords form a large-scale natural harbor system that is open to the north Atlantic shipping lanes all year round, and provide easy access to the project area. The distance from Narsaq to Narsarsuaq is approximately 45 km.