GREENLAND
MINERALS AND ENERGY LTD

ASX: GGG

June 2013 Quarterly Report

Wednesday 31st July, 2013

Highlights

- Positive meetings held with the new Greenland Government to commence discussions on the path forward for the Kvanefjeld project, with an emphasis on the permitting process and timeline

- Advances in the leaching stage of the Kvanefjeld circuit continue to build confidence and demonstrate effective impurity management and the generation of high-purity rare earth concentrates

- The EURARE Project – An EU-backed rare earth supply chain initiative - moves forward with a second round of meetings held to review progress and plan the pilot plants that are scheduled to be constructed in 2014

- Rare earth market update – Critical rare earth element prices stabilise and start to increase in general alignment with analyst views which highlight that a major supply issue for these elements remain, amidst sustained demand growth

- The uranium market is also starting to garner more interest with numerous analysts highlighting a significant market imbalance looming, with uranium set to move into short supply in the near- to mid-term

- A progressive restart of the Japanese nuclear reactor fleet will aid in stabilising the market, and is viewed as in important driver of positive sector sentiment

PERTH: Unit 6 100 Railway Road, Subiaco Western Australia 6008 Postal: PO Box 2006 Subiaco WA 6904
Telephone: +61 8 9382 2322 Facsimile: +61 8 9382 2788
LONDON: First Floor 47 Charles Street, Mayfair, London W1J 5EL
GREENLAND: PO Box 156, Narsaq, Greenland 3921
WEB: www.ggg.gl EMAIL: info@ggg.gl ABN 85 118 463 004

Contents

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 100% owned Kvanefjeld multi-element project *(both light and heavy rare earth elements, uranium, and zinc)* through the feasibility and permitting phase and into mine development.

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 **956 Mt** (JORC-code 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.

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.

GMEL finalised a comprehensive, multi-year pre-feasibility program in March 2012 that focussed on identifying and evaluating the best possible process flow sheet for the Kvanefjeld project, taking into account economic metrics, environmental considerations, technical and market risk. A feasibility level Mine and Concentrator Study has since been finalised further reducing capital costs. The study outcomes are extremely positive and reiterate the potential for Kvanefjeld to become a long-life, cost competitive operation. A large heavy REE output and significant uranium output differentiate Kvanefjeld from other potential emerging RE producers.

Rare earth elements (REEs) are now recognised as being critical to the global manufacturing base of many emerging consumer items and green technologies. 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.

June Quarter Activities

During the June Quarter, GMEL's focus shifted to feasibility studies on the refining stage of the Kvanefjeld project. This shift followed on from the completion of pilot plant operations of the beneficiation stage, and the release of the Mine and Concentrator Study in March 2013. All technical aspects of the Kvanefjeld project continue to track positively with the process development now at an advanced stage.

In late-May, Company representatives attended as series of meetings in Greenland with the new government that was elected in March of this year. The meetings were very positive, with a key aim being to develop clear lines of communication and to start mapping out the permitting process and timeline. The Company is planning a follow-up series of meetings in late-August to focus the mining license application process.

Towards the later part of the June Quarter, the prices of the 'critical rare earth elements' started to stabilise and then rise, after several quarters of price retreat. The term critical rare earths was coined by the US Department of Energy and refers to the rare earths that are important to energy efficient technologies and are forecast to be in severely short supply in the near to mid-term (neodymium, europium, dysprosium, terbium and yttrium). These price increases are in general alignment with market expectations that highlight ongoing supply issues for the high-demand heavy rare earths, along with the light rare earths neodymium and praseodymium which are important to the magnet sector.

The uranium sector is also starting garner more coverage with an increasingly positive outlook. A number of analysts are pointing to an improvement in the uranium price and sector interest, which has languished since the Japanese earthquake of 2011 and the resulting incident at the Fukushima nuclear power plant.

During the June Quarter GMEL presented at a series of industry conferences and technical meetings including the ALTA Metallurgy Conference, the Australian Institute of Mining and Metallurgy (AusIMM) Critical Minerals Meeting, and the International Atomic Energy Agency (IAEA) meeting on naturally occurring radioactive materials (Beijing, April). The Company also participated in the World Nuclear Association (WNA) Nuclear Fuel Cycle Conference (Singapore, April), and the World Nuclear Transport Institute (WNTI) Workshop (Shanghai, May). In addition, the Company participated in the second round of meetings for the EURARE program, in which it serves a key role.

Technical Update – Refining Stage

Since finalising the test-work program for the beneficiation stage, and the release of the Mine and Concentrator Study, the focus has increasingly shifted to feasibility studies on the refining stage. Process development for the refining stage is well-advanced. The flow sheet for this stage involves an atmospheric sulphuric acid leach of mineral concentrates, which achieves particularly high extraction levels of uranium and heavy rare earth elements.

Continuous laboratory-scale test work has focussed on impurity management within the leach liquor. A two stage leach process has been now been rigorously tested. Importantly, recent test work conducted at the Australian Nuclear Science and Technology Organisation (ANSTO) has confirmed that silica and associated gels can be effectively managed through the leach process, along with all major impurities. In addition, flocculent and coagulants have been firmed up to assist in efficient liquid-solid separation following the sulphuric acid leach. A reagent has also been successfully identified to manage colloidal silica and enhance the performance of solvent extraction uranium recovery.

Rare earths are re-leached in hydrochloric acid and then recovered from a purified rare earth chloride stream. A mixed rare earth carbonate can now be readily produced from continuous laboratory scale set-ups than can process tens of kg's of mineral concentrate. This high-purity carbonate product contains a favourable REO distribution with approximately 15% of the contained rare earths being the more valuable heavy REO's.

With high extractions of the key target elements (uranium, heavy REO's) and impurity management effectively controlled through the leach process, the Company is continuing to evaluate the benefit of separating out a high-value lower-volume rare earth concentrate that is

mostly devoid of lanthanum and cerium. Under this scenario lanthanum and cerium would be stockpiled with a market strategy to be formulated at a later point; a luxury afforded through the advantage of a polymetallic project and the multiple revenue streams. Importantly, this option would serve to de-couple the production of uranium and critical rare earth elements from the production of the bulk light rare earths in lanthanum and cerium that could potentially be in oversupply.

Developments in Greenland

In late May, Company representatives attended a series of meetings in Greenland with the new government. The meetings were very positive, with the government looking to understand the issues and challenges that the mining industry faces and increase the lines of communication. The government has made clear its aim of removing the zero-tolerance policy on uranium, with the aim to then focus on regulation and permitting. The upcoming sitting of parliament that commences in September has been cited as the forum in which regulatory issues associated with uranium will be addressed. The government have clearly indicated that Kvanefjeld is a high priority project.

Further meetings between GMEL and the government are set to take place in late August to work on mapping out the path the finalising a mining license application in close consultation with Greenland regulators and stakeholders.

The new Greenland government has continued on from the last in hosting high-level political and business delegations from a number of countries. Delegations from both South Korea and China have made official visits in the last couple of months.

Update on the EURARE Project

The EURARE Project is an initiative backed by the European Union that aims to establish a rare earth element value creation chain in Europe. The second round of EURARE meetings since the Projects commencement took place on June 17th and 18th in Copenhagen. As recently announced on July 25th, GMEL has an important role in the Project through the provision of bulk sample material from Kvanefjeld, as well as managing a key work stream. The EURARE

Project stands to be of great benefit and provides both direct and indirect funding, an excellent collective of technical expertise to collaborate with, and pilot plant facilities that will utilise Kvanfjeld sample material.

Rare Earth Market Update

Rare earth prices have been retreating since the extremely high prices of 2011, but the market is showing signs of stabilising, with a number of analysts pointing to strong demand and ongoing supply concerns for the critical rare earths (Nd, Eu, Dy, Tb, Y). Importantly, the prices for these elements have started to increase over the last month in both Chinese and China FOB prices.

While globally economic activity is slowing, the demand drivers for the critical rare earths remain strong growth areas. Green technologies associated with energy efficiency continue to be a major driver. The demand outlook for neodymium, praseodymium and dysprosium that are all utilised in rare earth magnets is strong, with the wind turbine and the automotive industries being important consumers. Television and computer screens drive the demand of elements utilised in RE-phosphors including terbium, yttrium and europium, and yttrium is also important for LED lighting. Demand for the light REEs cerium and lanthanum remain steady, however significant new supply of these elements is now coming online with Lynas Corp and Molycorp both moving into production.

In China the second round of rare earth export quotas for 2013 was announced during the June Quarter by the Ministry of Commerce. The total amount is 15,500 tonnes. Heavy rare earths account for 11% of the quota amount; a reduction from 13% in the first quota round of 2013.

Efforts are continuing by authorities in China to curb ‘illegal miners’ that operate and export rare earths outside the quota system. This illegal flow has assisted in driving down prices but efforts to restructure and regulate rare earth production in China should see this impact reduced in the coming years.

Uranium Market Update

Since the Japanese earthquake of 2011, and the resulting incidents at the Fukushima power plant, the future role of nuclear power has been through a period of uncertainty leaving the uranium market languishing. However, over two years after the event the energy policies of many nations is becoming clearer, with many looking to a diverse energy portfolio in which nuclear power is set to play a significant role.

In Japan, where only two of the country's 50 reactors have been operating since Fukushima, new safety requirements for power stations have been launched. According to the World Nuclear Association (WNA) four Japanese power utilities have applied for permission to restart twelve of the country's non-operating reactors. Japan's Nuclear Regulatory Authority (NRA) has announced that it will commence safety inspections at four of these units. The recent election win by Japanese Prime Minister Shinzo Abe's pro-nuclear ruling coalition is likely to maintain the current agenda of safety inspections and subsequent reactor restarts.

Currently U_3O_8 spot prices remain below US$40/lb; the lowest in over 5 years. With reactor fleets turned off in Japan and some in Europe since the Fukishima incident, destocking of fuel material has been inevitable, and combined with the sudden pause in demand has led to prices drifting downward from over US$70/lb in early 2011 to their current range.

However, many analysts are now pointing to looming uranium supply issue, as the future of nuclear power is gradually reinstated. The restart of the Japanese reactor fleet will represent an important shift of sentiment, and should aid in stabilising the uranium price and balancing the market. Whilst prices have remained low, no new supply has been brought online. In addition the current contract governing the secondary supply of uranium through the disarmament of nuclear weapons is set to end this year. Currently this program contributes approximately 15% of global reactor requirements. These supply factors in combination with a clearer outlook for steady demand growth will likely lead to uranium being in short supply, even with a number of significant projects such as Cigar Lake (Canada) and Imouraren (Niger) quickly coming on line.

Tenure, Permitting and Project Location

Tenure

Greenland Minerals and Energy Ltd (ABN 85 118 463 004) is a company listed on the Australian Securities Exchange. The Company is conducting exploration of license EL2010/2. The Company controls 100% of EL2010/2 through its Greenlandic subsidiary.

The tenement is classified as being for the exploration of minerals. The project hosts significant multi-element mineralisation within the Ilimaussaq Intrusive Complex.

Historically the Kvanefjeld deposit, which comprises just a small portion of the Ilimaussaq Complex, was investigated by the Danish Authorities. The project has received significant past exploration and feasibility evaluation in the form of drilling, geophysics, geochemistry, an exploratory adit and numerous and varying metallurgical test work and technical papers.

Permitting

Greenland Minerals and Energy Limited is permitted to conduct all exploration activities and feasibility studies for the Kvanefjeld REE-uranium project. The company's exploration license is inclusive of all economic components including uranium and REEs. The Company holds the right to apply to exploit the Kvanefjeld project. The approval of an exploitation license is largely dependent on establishing an economically robust, and environmentally and socially acceptable development scenario.

Location

The exploration lease covers an area of 80km^2 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 activities are managed. This office supports the operational camp located on the Kvanefjeld Plateau above the town where the operational staff are housed.

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.

Other Exploration License Holdings

As announced on 18 May 2011 GMEL had applied for, and was granted license holdings to consolidate its ground position in the Kvanefjeld area. The new license areas occur immediately adjacent to the Ilimaussaq Complex and may be prospective for specialty metal mineralization hosted near the margins of the complex (see Figure 1). GMEL aims to conduct evaluations to assess the potential for mineralization, in conjunction with sterilising key areas that are under assessment for plant and infrastructure locations. The Company is considering a number of possible locations for key infrastructure items, which include areas adjacent to the Kvanefjeld resource, as well as the broad area on the northeastern side of the Ilimaussaq Complex. Stakeholder input and environmental considerations are critically important to the site selection process.

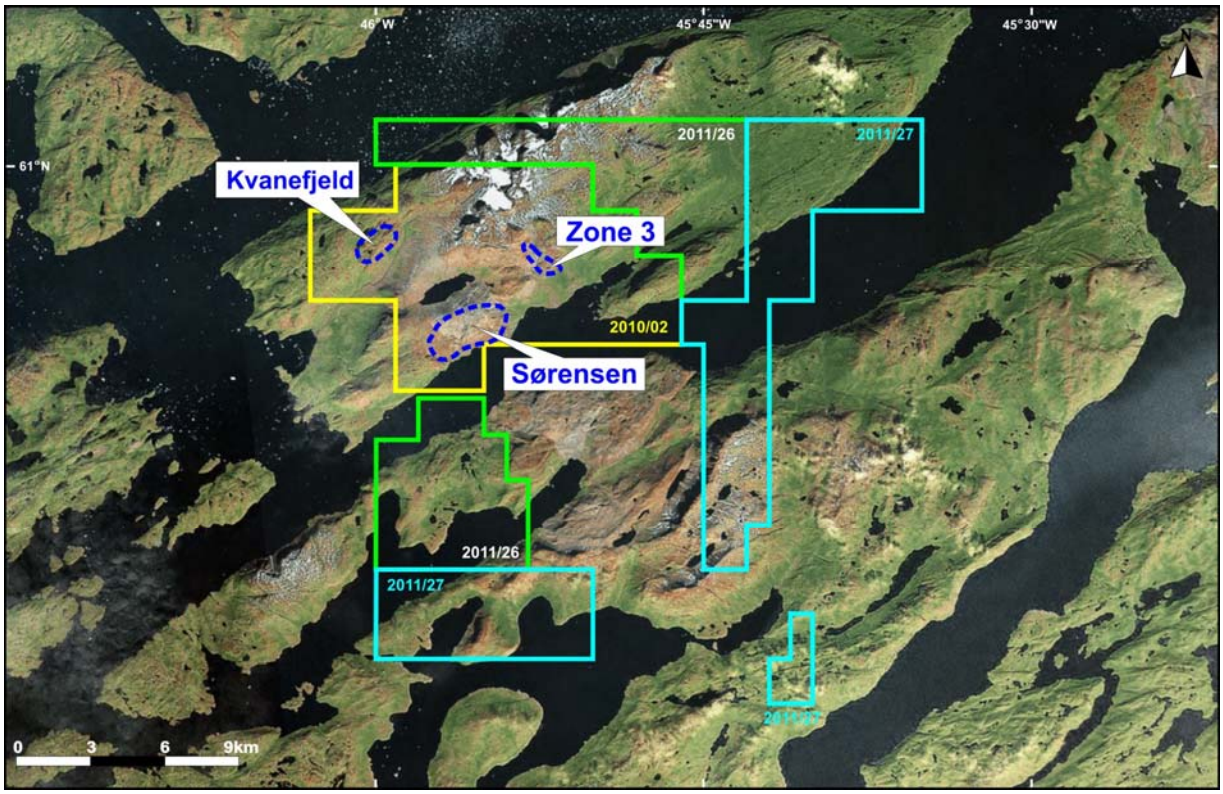

Figure 1. GMEL's license holdings over and adjacent to the Ilimaussaq complex in south Greenland. All licences are held outright by GMEL.

Capital Structure – As at 30th June, 2013

Total Ordinary shares:	**571,975,263**
Quoted options exercisable at $0.60	25,769,191
Unquoted unvested performance options exercisable at $1.75	7,000,000
Unquoted options exercisable at $0.75	4,999,520
Performance rights (refer to announcement 21/10/2011 for terms)	16,860,000

Please visit the company's website at www.ggg.gl where recent news articles, commentary, and company reports can be viewed.

Yours faithfully,

Roderick McIllree

Managing Director

Greenland Minerals and Energy Ltd.

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
Kvanefjeld - March 2011														
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	12429	352	10950	443	11389	1041	2363	**2.84**	0.10	0.24	**178**	0.55
250	**Inferred**	41	12204	324	10929	366	11319	886	2598	**0.46**	0.02	0.03	**29**	0.11
250	**Grand Total**	272	12395	347	10947	431	11378	1017	2398	**3.33**	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
Sørensen - March 2012														
150	**Inferred**	242	11022	304	9729	398	10127	895	2602	**2.67**	0.10	0.22	**162**	0.63
200	**Inferred**	186	11554	344	10223	399	10622	932	2802	**2.15**	0.07	0.17	**141**	0.52
250	**Inferred**	148	11847	375	10480	407	10887	961	2932	**1.75**	0.06	0.14	**123**	0.43
300	**Inferred**	119	12068	400	10671	414	11084	983	3023	**1.44**	0.05	0.12	**105**	0.36
350	**Inferred**	92	12393	422	10967	422	11389	1004	3080	**1.14**	0.04	0.09	**85**	0.28
Zone 3 - May 2012														
150	**Inferred**	95	11609	300	10242	396	10638	971	2768	**1.11**	0.04	0.09	**63**	0.26
200	**Inferred**	89	11665	310	10276	400	10676	989	2806	**1.03**	0.04	0.09	**60**	0.25
250	**Inferred**	71	11907	330	10471	410	10882	1026	2902	**0.84**	0.03	0.07	**51**	0.2
300	**Inferred**	47	12407	358	10887	433	11319	1087	3008	**0.58**	0.02	0.05	**37**	0.14
350	**Inferred**	24	13048	392	11392	471	11864	1184	3043	**0.31**	0.01	0.03	**21**	0.07
Project Total														
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**	520	10687	272	9437	383	9820	867	2468	**5.55**	0.20	0.45	**312**	1.28
150	**Grand Total**	956	10798	273	9524	392	9915	882	2351	**10.33**	0.37	0.84	**575**	2.25

[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 cut-off 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. A comprehensive pre-feasibility study has demonstrated the potential for a large-scale, cost-competitive, multi-element mining operation. For further information on Greenland Minerals and Energy visit http://www.ggg.gl or contact:

Roderick Mcillree
Managing Director
+61 8 9382 2322

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 stakeholder discussions on the social and economic benefits associated with the development of the Kvanefjeld Project.

The information in this report that relates to exploration targets, 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 Mr 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 and Zone 2 deposits 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.