KIMBERLEY RARE EARTHS

ASX ANNOUNCEMENT

ASX:KRE

Kimberley Rare Earths Limited
ABN 20 147 678 779

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Capital Structure
126.6m shares
6.0m 25c, 2014 unlisted options
3.5m 30c, 2014 unlisted options
0.75m 30c, 2015 unlisted options

Cash at 31 July 2012
$11.6 million

Market Cap at 20 August 2012
$9.24 million

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Cummins Range rare earths project:
Positive assessment from concept study

KEY POINTS

- **Concept study supports technical viability**
- **Resource fully exploitable via simple open pit design**
- **Conventional process flow sheet achievable**
- **Commercial scale production rate supports 16 year mine life**
- **Economics enhanced with scale-up to include third party feeds**

Kimberley Rare Earths Limited (ASX:**KRE**), is pleased to advise the findings of a concept study ('Study') carried out for the Cummins Range Project. This early-stage assessment confirms the project's technical viability.

The Cummins Range rare earths deposit has significant intrinsic advantages of favorable mineralogy, ease of mining, and relatively low technical and country risk. A low-risk metallurgical flow sheet has been defined based on successful concentration test work and conventional downstream unit processes.

The base case project concept is for straightforward open pit mining and concentration at the site, then downstream processing into five separate rare earth products at a coastal port location. The principal market is Asia.

A 16 year mine life results from a production rate of 3,000 tonnes per annum (tpa) TREO, which accommodates both the scale of the project and market factors. Improved project economics are possible through capacity scale-up of the downstream processing facility to treat potential third party or additional KRE feed concentrates.

Next steps are to identify and investigate strategies and opportunities for the optimisation of downstream processing before proceeding with further engineering or exploration.

Development concept targets low risk and right scale

The Cummins Range rare earths project is located in the East Kimberley region of Western Australia and has an Inferred Resource of 4.9 Mt at 1.74% TREO. The deposit is flat-lying and expresses at surface; total mining recovery of the Resource is practicable. The project concept involves conventional open cut mining then beneficiating the ore into a mineral concentrate at the mine site. Concentrate would be trucked to a hydrometallurgical facility located at a regional sea port such as Broome, Derby, Wyndham or Darwin for extraction, purification and separation of the rare earths into saleable products for shipping to the market, predominantly Asia.

The selected project scale of 3,000 tpa TREO production is based on considerations of: the Resource size and grade; the size of the market and market penetration factors; capital expenditure versus mine life. This scale of production represents five per cent of forecast[1] annual non-Chinese demand of 56,000 tpa rare earths for 2016 and is not expected to impact materially on supply-demand dynamics.

Key operating parameters for the concept are summarised in Table 1.

Parameter	Unit	Value
Mine		
Mine life	years	16
Ore mined	Mt	3.7
Waste mined	Mt	13.6
Waste:Ore (strip) ratio	-	3.68
Concentrator		
Mill feed rate	ktpa	250
Mill feed grade	% TREO	1.95
TREO recovery	%	65
Concentrate tonnes	ktpa	20
Concentrate grade	% TREO	15
Hydrometallurgical plant		
TREO recovery	%	95
Overall TREO recovery	%	62
TREO production	tpa	3,000

Table 1: Indicative operating parameters

[1] Dudley J Kingsnorth, Centre for Research in Energy and Minerals Economics, July 2012.

Potential for all of the Resource to be mined[2]

Pit optimisation and mine scheduling were undertaken by Intermine Engineering Consultants. The work was based on an Inferred Resource block model developed by Hellman & Schofield (see KRE ASX announcement, 13 February 2012). The mining concept involves conventional shovel and truck open cut mining with a high-grade starter pit and a final pit. Pit optimisations for both were based on Whittle 4X software using in-house input assumptions. Resulting pit shell data are shown in Table 2.

Pit	Tonnage (Mt)	REO (%)	P_2O_5 (%)	U_3O_8 (ppm)	Th (ppm)	Total REO (kt)	Waste (Mt)	Strip Ratio	Recovery TREO* (kt)
Starter	0.56	3.34	11.0	290	70	19	1.68	3.00	11
Final**	5.26	1.70	11.0	140	50	89	12.9	2.46	51

** metallurgical recovery 65%* ***includes starter pit*

Table 2: Pit optimisation data

The final pit shell exploits the entire Inferred Resource due to the deposit being at surface, flat-lying, and not exceeding 100 m in depth. The conceptual mining schedule is included as Appendix 1 and supports a 16-year mine life. The high-grade starter pit supports rare earth oxide (TREO) delivery to the concentrator plant of 5,500 tpa for the first four years, with subsequent production averaging 4,100 tpa for the remaining mine life.

Well-understood mineralogy supports conventional process flow sheet

Specialist mineralogical assessment indicates that the Resource has a relatively simple mineralogy with a high proportion of coarse, easy to recover, primary mineralisation present.

Test work has defined a flow sheet that delivers a mineral concentrate with an upgrade ratio of 4.8 and 50 per cent TREO (see KRE ASX announcement, 23 April 2012). A monazite-rich concentrate can be produced that is suitable for further processing using conventional, well-understood rare earth extraction, purification and separation methods.

The resultant process flow sheet, shown in Appendix 2, and mass balance were defined in-house and reflect the KRE team's deep knowledge and experience in developing efficient and cost effective metallurgical processes. The flow sheet was developed and refined with the support of a respected Chinese non-ferrous metals research institute with which KRE management has a long standing relationship.

Scaled-up downstream processing improves economics

The Study contemplates the development of Cummins Range as a standalone project. However, downstream rare earth processing facilities are part of a larger supply chain network and benefit from scale-up due to variable product market dynamics and commitment to large scale chemical supply infrastructure. These factors favour the development of a facility designed and scaled to treat more

[2] The Cummins Range JORC resource is classified as Inferred and as a result, is not sufficiently defined to allow conversion to an ore reserve. It is uncertain if additional exploration will allow conversion of the Inferred resource to a higher confidence resource (Indicated or Measured) and hence if a reserve could be determined for the project in the future. There is no certainty that the results of the concept study will be realised.

than one mineral concentrate feed stock. For Cummins Range, this may be possible in several potential scenarios:

1. KRE builds and operates a downstream facility for Cummins Range that can be used for toll-treating rare earth concentrates supplied by others;
2. KRE develops several rare earth deposits that can utilise a single downstream facility; or
3. Cummins Range concentrate is toll treated through a third party facility.

Next steps

The Study has demonstrated that Cummins Range has inherent value and that a robust operating scenario may be possible in line with developments in the rare earths sector. KRE will continue to pursue the most appropriate development strategy for Cummins Range; a number of scenarios are possible, each will be evaluated on its merits. Plans for further drilling and engineering studies have been curtailed while this exercise is being completed.

About Kimberley Rare Earths

Kimberley Rare Earths Limited listed on the Australian Securities Exchange (ASX:KRE) on 18 May 2011, having raised $18.2m under an oversubscribed Initial Public Offering.

KRE is a specialist rare earths company and holds a 25% interest in the Cummins Range Project in Western Australia. KRE has the right to earn up to 80% of the project by funding exploration and development through to delivery of a bankable feasibility study. KRE's first target is to spend $10m within four years to increase its interest to 55%. The Cummins Range project comprises 1 granted exploration license (80/2232) in the East Kimberley within which is contained a JORC compliant Inferred Resource of 4.90 Mt at 1.74% TREO (total rare earth oxide), 11.2% P2O5 and 145 ppm U3O8 (using a 1% TREO cut off). The Cummins Range project is one of only a few Australian rare earths projects with a Resource reported under the JORC Code.

KRE has also entered an agreement to earn up to a 90% interest in a pegmatite-hosted rare earth project in Mozambique with significant exploration potential, including for xenotime-hosted yttrium, dysprosium and erbium.

Competent Person Statement

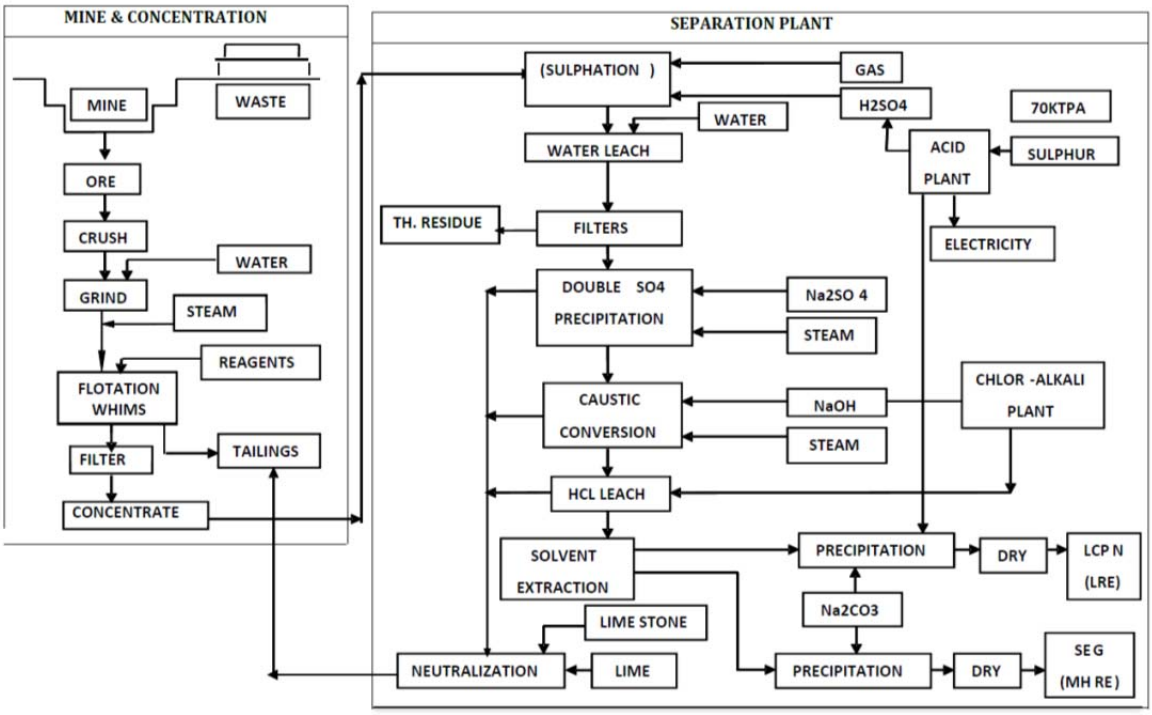
Information in this ASX release that relates to exploration or exploration results is based on information compiled by Mr. Geoff Collis, who is a member of the Australasian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which are being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Mineral Resources and Ore Reserves". Mr Collis consents to the inclusion of these estimates in the form and context in which they appear.

Information in this ASX release that relates to Resource estimates were prepared by Rob Spiers (MAIG) who is a full time employee of Hellman and Schofield Pty Ltd. All resource work was supervised by Dr Phillip Hellman FAIG, who is a Director of Hellman and Schofield Pty Ltd. Both Robert and Phil have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which are being undertaken to qualify as Competent Persons as defined in the 2004 Edition of the "Australian Code for Reporting of Mineral Resources and Ore Reserves". Robert Spiers and Dr Phillip Hellman consent to the inclusion of these estimates in the form and context in which they appear.

Appendix 1 – Conceptual mining schedule

Year	Tonnes (dmt)	Waste Tones (dmt)	Total Tonnes (dmt)	Grade (% TREO)	TREO mined (dmt)	TREO rec. (dmt)
1	168,350	315,445	483,795	3.34	5,623	3,472
2	168,350	315,445	483,795	3.34	5,623	3,472
3	168,350	315,445	483,795	3.34	5,623	3,472
4	252,860	366,711	619,571	2.14	5,411	3,341
5	252,860	271,093	523,953	1.77	4,476	2,764
6	252,860	271,093	523,953	1.77	4,476	2,764
7	252,860	271,093	523,953	1.77	4,476	2,764
8	252,860	271,093	523,953	1.77	4,476	2,764
9	252,860	341,847	594,707	1.79	4,526	2,795
10	252,860	805,930	1,058,790	1.64	4,147	2,561
11	252,860	805,930	1,058,790	1.64	4,147	2,561
12	252,860	805,930	1,058,790	1.64	4,147	2,561
13	252,860	805,930	1,058,790	1.64	4,147	2,561
14	252,860	1,141,892	1,394,752	1.64	4,147	2,561
15	252,860	4,005,002	4,257,862	1.64	4,147	2,561
16	158,576	2,511,655	2,670,231	1.64	2,601	1,606
Total	**3,697,946**	**13,621,534**	**17,319,480**	**1.95**	**72,191**	**44,578**

Appendix 2 – Conceptual process flow sheet



Glossary

Aeromagnetic	Airborne geophysical technique where the intensity of the Earth's magnetic field is measured in a systematic way.
Alluvium	Loose unconsolidated soil or sediment eroded and deposited by water.
Amazonite	A bright green mineral of limited occurrence that can be cut and used as a gemstone.
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer – a remote sensory device on board the Terra satellite, launched by NASA in 1999, that provides high-resolution images of the planet Earth in 15 different electromagnetic spectrum bands ranging from visible to thermal infrared light
Carbonatites	Intrusive igneous rocks with a composition of greater than 50 % carbonate minerals.
Diamond Drilling	(or **Core Drilling**) A drilling technique which uses a diamond-set drill bit to produce a cylindrical core of rock.
Dykes	Igneous rocks that intrude the geological sequence at a high angle to the geological layering
Eluvium	Loose unconsolidated soil or sediment deposited under gravitational weathering and accumulation processes.
Flotation	(or **Froth Flotation**). A mineral processing technique used to separate chemically different particles (ground and suspended in a water-based slurry) by selectively floating particles into a surface froth (concentrate), leaving other particles in the slurry (tailing).
Gemstones	In the Heads of Agreement signed with GWM covering farm-in rights to the Malilongue heavy rare earths project in Mozambique, gemstones is defined as topaz, aqua-marine and amazonite.
HREO	Heavy rare earth oxides. The oxides of the 9 heavy rare earth elements Europium (Eu), Gadolinium (Gd), Terbium (Tb), Dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu) plus Yttrium (Y).
LREO	Light rare earth oxides. The oxides of the 5 light rare earth elements; Lanthanum (La), Cerium (Ce), Praseodymium (Pr), Neodymium (Nd), Samarium (Sm). Note, excludes Promethium (Pm) due to its transient (radioactive) nature.
Pegmatite	A very coarse grained igneous intrusive rock composed predominantly of quartz, feldspar and mica. Certain classes of pegmatite commonly host significant strategic metal ore deposits.
Pipe	Cylindrical intrusion of younger igneous rocks into an older geological terrain.
ppm	Parts per million by weight (10,000 ppm equals 1.0 %).
Pyroxenite	Ultramafic igneous rock comprising predominantly minerals of the pyroxene group.
RAB	Rotary air blast, a cost-effective drilling technique used to sample weathered rock.
RC	Reverse circulation, a drilling technique that is used to return uncontaminated pulverised rock samples through a central annulus inside the drill pipes. RC samples can be used in industry-standard Mineral Resource statements.
REO	The oxides of the 14 rare earth elements; Lanthanum (La), Cerium (Ce), Praseodymium (Pr), Neodymium (Nd), Samarium (Sm), Europium (Eu), Gadolinium (Gd), Terbium (Tb), Dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu) plus Yttrium (Y) but excluding Promethium (Pm).
Sills	Igneous rocks that intrude the geological sequence at a low angle or sub-parallel to the geological layering
Thermal Mapper (TM7)	Remote sensory device on board the LANDSAT-7 satellite, launched by NASA in 1999, that provides imagery of the planet Earth with high image resolution, sharp spectral separation and geometric fidelity, and strong radiometric accuracy and resolution.
TREO	The sum total of the 14 rare earth oxides, Lanthanum to Lutetium plus Yttrium as defined above under REO.
WHIMS	Wet High Intensity Magnetic Separation. A mineral processing technology used to separate weakly magnetic particles from non-magnetic particles.
Xenotime	A rare earth phosphate mineral comprising predominantly yttrium phosphate (YPO_4). Dysprosium, Erbium and Terbium can substitute for Yttrium.