ABN 63 111 306 533

QUARTERLY REPORT TO SHAREHOLDERS

for the three months ended 30 September 2022

ASX Code - EME

For further information, contact:

Shuqing Xiao
Energy Metals Limited

Telephone: 61 8 9322 6904
Facsimile: 61 8 9321 5240
Email: enquiry@energymetals.net
Level 2, 5 Ord Street,
West Perth WA 6005

PO Box 1323
West Perth WA 6872

This report and further information are available on Energy Metals' website at:

www.energymetals.net

HIGHLIGHTS

Bigrlyi JV Project (NT)

Encouraging results obtained from beneficiation and carbonate-rejection metallurgical test-work.

Ore-sorting tests show significant U_3O_8 and V_2O_5 upgrades are achievable for both high and low-carbonate ores.

Reverse flotation tests show substantial carbonate rejection achievable for both high and low-carbonate ores, with significant improvement in process acid consumption (from >100 kg/t to <30 kg/t).

Ngalia Regional Project (NT)

Soil-sampling program at the Crystal Creek REE-in-regolith prospect yields encouraging initial results with 30% of samples reporting La + Ce grades >250 ppm and TREO grades >0.05%.

Aerial hyperspectral survey commissioned over the Crystal Creek prospect for surface mineral mapping and identification of REE-prospective clay-rich zones.

FINANCIAL

Energy Metals had approximately $14.37M in cash and 209.7M shares on issue at 30 September 2022.

Shuqing Xiao
Managing Director
31 October 2022

INTRODUCTION

Energy Metals (EME) is a dedicated uranium company with eight exploration projects located in the Northern Territory (NT) and Western Australia covering over 2,400 km² (Figure 1). Most of the projects contain uranium and associated vanadium mineralisation discovered by major companies in the 1970s, including the advanced Bigrlyi Project (NT).

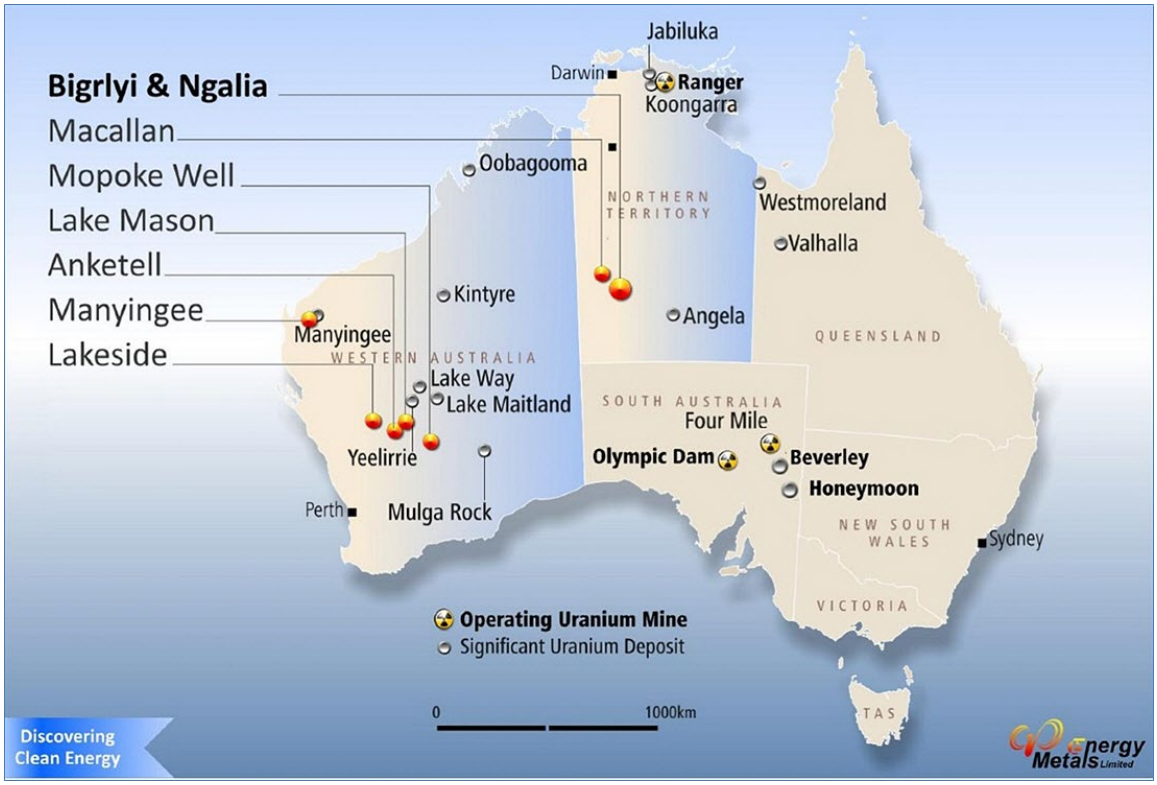

Figure 1 – Location of Energy Metals Projects

Energy Metals is well placed to take advantage of the favourable outlook for uranium as nuclear power continues to play an increasing role in reducing global carbon emissions.

China Uranium Development Company Limited, Energy Metals' largest shareholder (with 66.45% of issued capital), is a wholly owned subsidiary of CGN, a leading company in clean energy and nuclear power technologies in China and world-wide. As of 30 September 2022, the installed capacity of CGN's operating nuclear generating plants was 29,380MWe from 26 nuclear power units with seven other power units of 8,380MWe capacity under construction in various locations across China. This unique relationship with CGN gives Energy Metals direct market exposure as well as access to significant capital and places the Company in a very strong position going forward.

Market Update. During the September quarter the uranium spot price averaged around $US 50/lb U_3O_8 and recently peaked above $US53/lb. Confidence in the uranium sector improved with Japan ordering the development of new reactors and approving the re-start of 17 shut-down reactors, and China announced extra capacity to accelerate its power plant building objectives with a planned build rate of 10 new reactors per year. Analysts have forecast a long-term uranium price near or above $60/lb but increasing volatility in the short term.

The vanadium market remained steady with prices ~ $US 7.5/lb V_2O_5, near long-term averages.

NORTHERN TERRITORY

Bigrlyi Joint Venture (EME 72.39%)

The Bigrlyi Joint Venture comprises two granted exploration licences in retention (ELRs), one granted EL, and several applications within the Ngalia Basin, located approximately 350km northwest of Alice Springs. Energy Metals operates the Joint Venture in partnership with Northern Territory Uranium Pty Ltd (NTU; a wholly-owned subsidiary of Elevate Uranium Ltd, EL8), and with Noble Investments Pty Ltd (NIL), a private investment company that holds a 6.79% interest.

The Bigrlyi Joint Venture has been the subject of significant exploration activity since 1973, including over 1,040 drill-holes, metallurgical test-work and mining studies focussed on the flagship Bigrlyi deposit, which comprises a number of sub-deposits over a 11km strike length on ELR32552 (Figure 2). The Bigrlyi project is characterised by relatively high uranium grades, vanadium credits and excellent metallurgical recoveries. Further information is available in ASX announcements or from Energy Metals' website: www.energymetals.net.

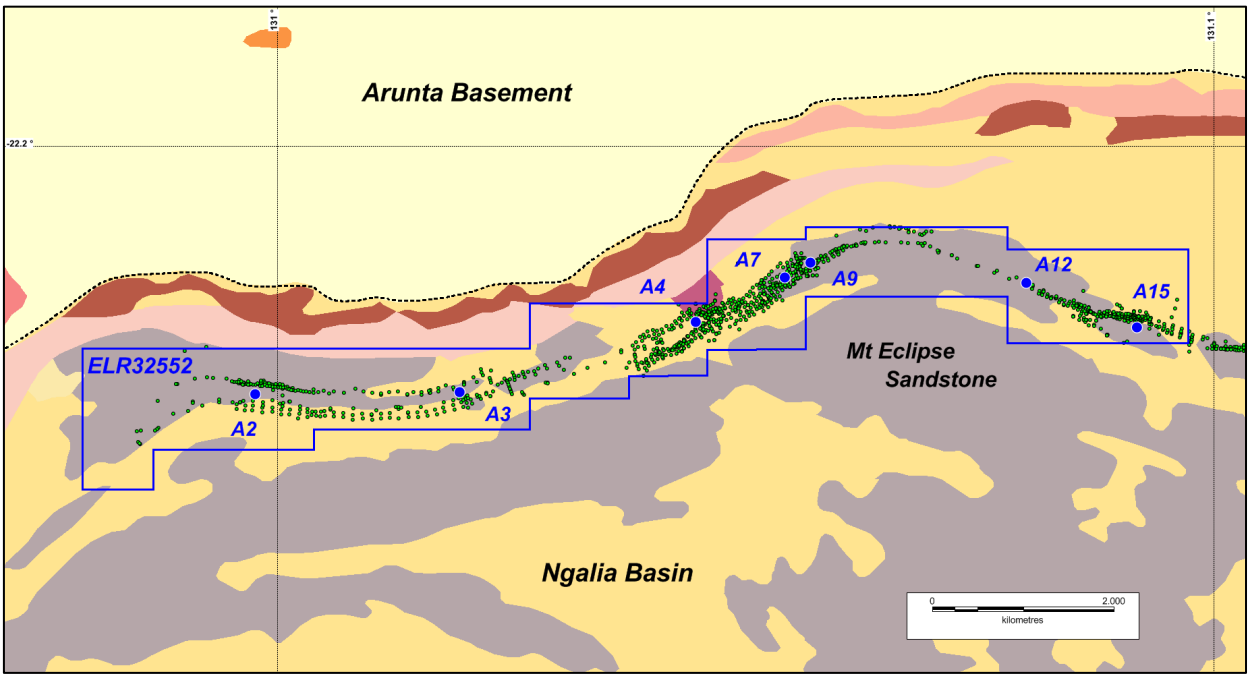

Figure 2 – Bigrlyi Joint Venture project area showing simplified geology (grey = Mt Eclipse Sandstone) with the outline of amalgamated ELR 32552 shown in blue; Anomaly-2 to Anomaly-15 (A2 to A15) sub-deposit locations (blue dots) and exploration drill-hole collars (green dots) are shown.

The historical Karins uranium deposit (Figure 3) is part of the Bigrlyi Joint Venture and a JORC-compliant resource estimate was released to the ASX in 2015. In 2015 a maiden JORC (2012) resource estimate was announced for the historic Sundberg deposit, which is part of the Bigrlyi Joint Venture, and a satellite of the larger Walbiri deposit (Figure 3).

Walbiri Joint Venture (EME 77.12%)

ELR45 covers part of the historical Walbiri deposit and part of the Hill One satellite deposit (Figure 3). The project is a joint venture with NTU, with EME as the operator. Energy Metals holds a 77.12% beneficial interest in the JV. A JORC (2012) mineral resource estimate was announced

for the Walbiri deposit in 2015 confirming Walbiri as the second largest sandstone-hosted deposit in the Ngalia Basin after Bigrlyi.

Malawiri Joint Venture (EME 76.03%)

ELR41 covers the historical Malawiri deposit. The project is a joint venture with NTU, with Energy Metals as the operator. Energy Metals holds a 76.03% beneficial interest in the JV and NTU holds a 23.97% interest. The Company advanced the Malawiri project to JORC-compliant resource status with release of a mineral resource estimate on 14 December 2017.

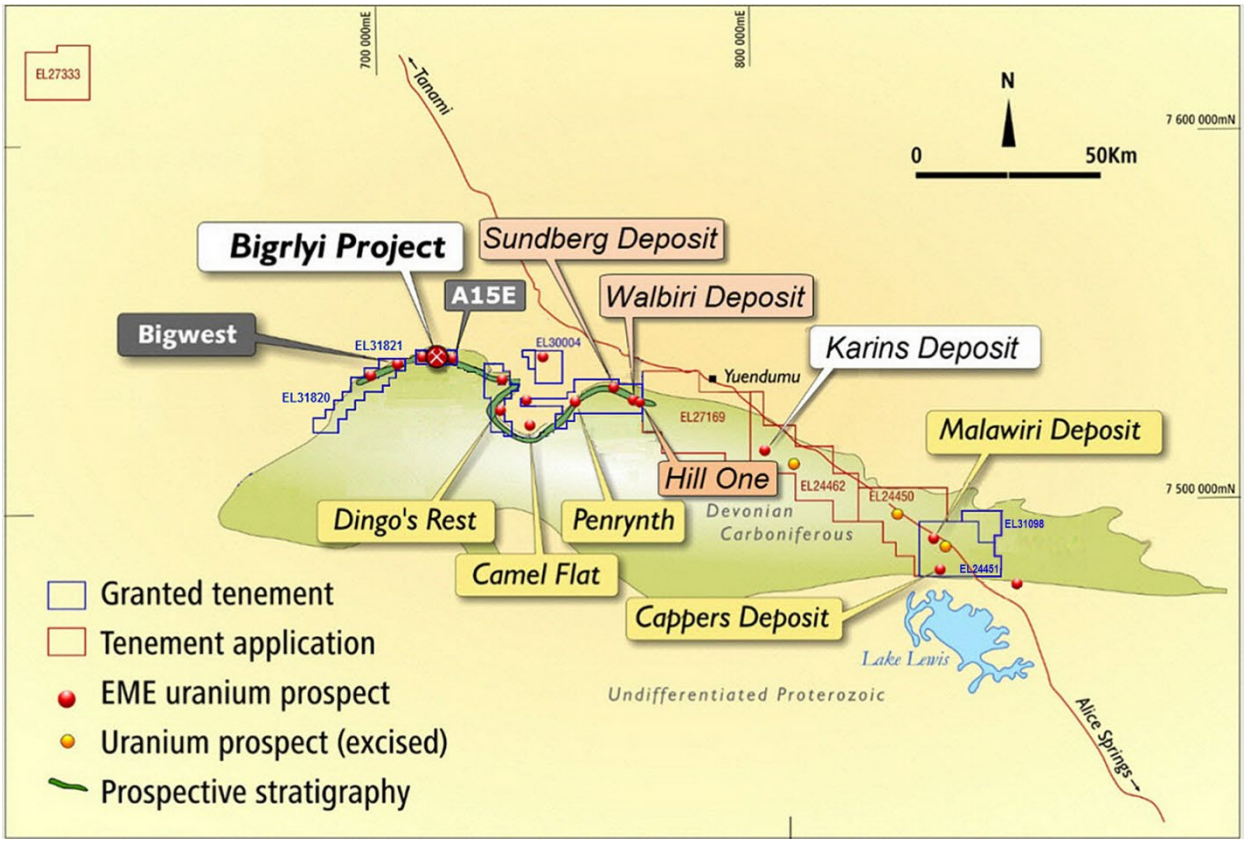

Figure 3 – Uranium deposits, occurrences and exploration target areas in the Ngalia Basin

JV Activities (September 2022 Quarter)

Recent exploration work has focussed on the re-optimisation of various aspects of the Bigrlyi Project 2011 Prefeasibility Study (PFS). This work is aimed at enabling key components of the project to be re-started in a timely manner once the uranium market shows sustained recovery. The work is also designed to increase the level of confidence in geological, mining, processing and economic aspects of the project. In addition to uranium, the Bigrlyi deposit contains a vanadium exploration target of approximately 44,000 tonnes V_2O_5 within a mineralised envelope that is more than three times the size of the present uranium resource volume (refer to the ASX release of 4 December 2019 and the caveats therein). Energy Metals is committed to improving the economics of its flagship Bigrlyi project and a program to enhance the value of vanadium as a by-product commodity is on-going.

Field Program. Field activities continued during the quarter.

Metallurgical Test-work Program. Results of metallurgical investigations were received this quarter. The program consisted of two test-work studies: one involving initial evaluation of 'state-of-the-art' ore sorting methods with the aim of enhancing run-of-mine uranium and vanadium grades; and a second study involving evaluation of a reverse flotation method for rejection of carbonate gangue from the ore feed; the aim being to reduce the high acid consumption required in processing Bigrlyi ore. Representative samples of high-carbonate and low-carbonate uranium-vanadium ores were prepared by compositing crushed drill-core samples. On average, Bigrlyi ore comprises about one third high-carbonate material and two-thirds low-carbonate material. Processing the high-carbonate ore by conventional acid leaching is not cost-effective as previous test-work has shown that an acid consumption in excess of 130 kg/t is required. Following coarse crushing, each ore type was screened into coarse -25+10mm (~30% of total) and fine -10mm (~70% of total) fractions. The coarse fractions were used for ore-sorting test-work at Steinert's test facility in Perth (Figure 4); and the fine fractions were further milled for use as the feed in reverse flotation test-work at ANSTO, Sydney.

Figure 4 – Low-carbonate (left) and high-carbonate (right), +10mm feed samples for ore sorting.

Ore Sorting Beneficiation Study Results. Initial ore sorting test-work results were finalised this quarter following chemical analysis of the various sorted fractions. Using a Steinert KSS FLI XT Sensor Sorter (Figure 5), it was found that a combination of X-Ray transmission and 3D-laser sorting yielded optimal sorting results for Bigrlyi ore materials.

In X-ray transmission (XRT) sorting the XRT sensor measures the absorption of X-rays through each rock particle as it passes the sensor and particles are discriminated on the basis of their mean atomic density. Because uranium- and vanadium-bearing particles are denser than gangue materials such as quartz and feldspar, it is expected that mineralised particles will be separable from gangue materials permitting upgrade of the ore. In this method surface conditions are not critical to particle discrimination, and therefore feed can be processed dry.

The 3D-laser sensor is used to evaluate particles in terms of their shape and size, and can discriminate particles on the basis of their surface properties such as degree of laser light scatter and particle reflectivity. Bright materials such as quartz scatter laser light significantly more than darker materials such as uranium-vanadium ore.

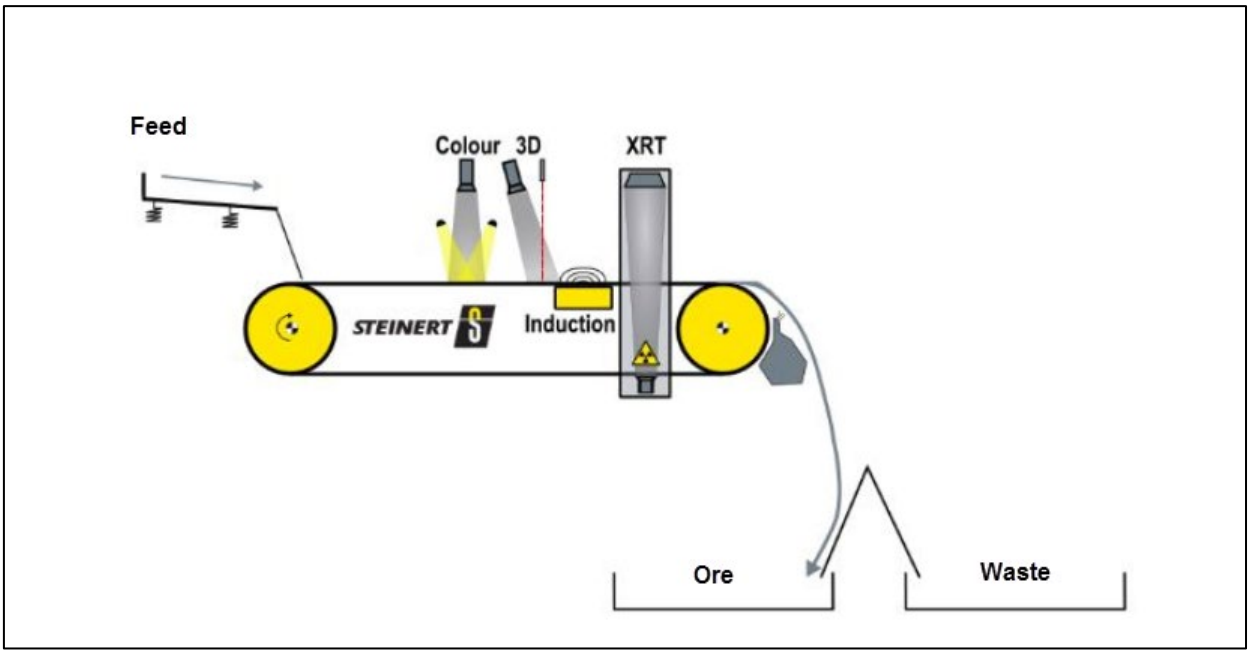

Figure 5 – Schematic of the Steinert KSS FLI XT Sensor Sorter.

Tables 1 and 2 show the results of the sorting test-work in terms of mass yields and cumulative grade for a four-stage batch sorting process. In each pass the higher density fraction is returned to the sorter, and as shown in Tables 1 & 2, uranium-vanadium-mineralised particles are successively enriched in each sort fraction.

Table 1. Four-stage sorting results for High-Carbonate Ore

Sort-Fraction	**Stage**	**Mass**	**Cumulative Mass Yield**	**Cumu-lative Mass Rejection**	**U3O8 Cum. Grade**	**U3O8 Up-grade Factor**	**U3O8 Cum. Re-covery**	**V2O5 Up-grade Factor**
		kg	%	%	%		%	
High-Grade	4	3.83	8.5%	91.5%	2.12	6.2	52.6%	10.0
Medium-to-High-Grade	3	4.7	18.9%	81.1%	1.28	3.8	70.5%	5.5
Medium-Grade	2	16.27	54.9%	45.1%	0.56	1.6	89.5%	2.7
Medium-to-Low-Grade	1	16.95	92.4%	7.6%	0.36	1.1	97.4%	1.3
Initial	0	3.45	100.0%	0.0%	0.34	1.0	100.0%	1.0
Total		**45.2**	-	-	-	-	-	-

Table 2. Four-stage sorting results for Low-Carbonate Ore

Sort-Fraction	**Stage**	**Mass**	**Cumulative Mass Yield**	**Cumu-lative Mass Rejection**	**U3O8 Cum. Grade**	**U3O8 Up-grade Factor**	**U3O8 Cum. Re-covery**	**V2O5 Up-grade Factor**
		kg	%	%	%		%	
High-Grade	4	0.99	2.2%	97.8%	1.94	12.1	26.7%	2.8
Medium-to-High-Grade	3	2.4	7.5%	92.5%	0.81	5.1	38.1%	2.7
Medium-Grade	2	14.15	38.7%	61.3%	0.28	1.8	68.1%	2.0
Medium-to-Low-Grade	1	21.29	85.7%	14.3%	0.18	1.1	94.4%	1.3
Waste	0	6.5	100.0%	0.0%	0.16	1.0	100.0%	1.0
Total		**45.3**	-	-	-	-	-	-

The results prove that both Bigrlyi ores types are amenable to U_3O_8 and V_2O_5 upgrade. For uranium recoveries set to approximately 70% of the starting U_3O_8 content, the upgrade factors for high-carbonate and low-carbonate ores are 3.8x (0.34% U_3O_8 upgraded to 1.28%) and 1.8x (0.16% U_3O_8 upgraded to 0.28%), respectively. The corresponding vanadium upgrade factors are 5.5x (0.15% V_2O_5 upgraded to 0.82%) and 2.0x (0.30% V_2O_5 upgraded to 0.60%) for high-carbonate and low-carbonate ores, respectively. For this scenario, mass rejections (i.e., lower grade material that would report to waste or low-grade stockpiles) are 81% for high-carbonate ore and 61% for low-carbonate ore. In the sort fractions, essentially no change was observed in carbonate grade indicating that carbonate is closely bound with ore minerals in the coarser grain-sized material; hence this method is not amenable to carbonate rejection. Nevertheless, the results suggest a pre-processing ore sorting circuit would have a positive impact on processing costs in a future mining operation through generation of higher-grade uranium-vanadium feed and reduced plant throughput.

Carbonate Rejection Study. A program of carbonate rejection test-work was initiated at ANSTO, Sydney late last year. After researching the available literature, the industry-standard reverse flotation method, in which sodium oleate is used as the collector, was selected for initial carbonate rejection trials. In the froth flotation method, particles of interest are physically separated from a liquid phase as a result of differences in the ability of air bubbles to selectively adhere to the surface of the target minerals. In reverse flotation, valuable ore minerals (uranium-vanadium minerals) are suppressed and report to the 'tails', while deleterious minerals (carbonate) are floated and removed. A number of tests were undertaken and several produced very satisfactory results (Table 3).

Table 3. Flotation Test Results

Sample	Sodium Oleate Addition (kg/t)	Sample	U_3O_8 (%)	Carbonate (wt%)	Calculated Acid Consumption (kg/t)	% Mass Rejected	% Carbonate Rejected	% U Rejected
Low Carbonate	5.6	Feed	0.148	2.2	35	3.9	53.9	3.5
		Tail	0.156	0.9	15			
High Carbonate	7.3	Feed	0.274	8.4	137	15.8	78.8	7.9
		Tail	0.320	1.9	30			

In a successful test of the high-carbonate ore sample, it was found that 79% of carbonate was rejected for a mass rejection of only 16%, and U_3O_8 grade increased by a factor of 1.17x. Estimated acid consumption was reduced from 137 kg/t to 30kg/t. For the low-carbonate sample 54% of the carbonate was rejected for a mass rejection of only 3.9% and acid consumption was reduced from 35 to 15 kg/t. These results are considered highly encouraging with a positive impact on project operating costs in a future development.

Ngalia Regional Project (EME 100%)

The Ngalia Regional project comprises thirteen 100% owned exploration licences, applications and exploration licences in retention located in the Ngalia Basin, between 180km and 350km northwest of Alice Springs (Figure 3). The tenements are contiguous and enclose the Bigrlyi project as well as containing a number of uranium occurrences, including part of the historic Walbiri deposit and the Cappers calcrete-hosted deposit. A number of high priority targets have

been identified on the 100% owned tenements and Energy Metals is undertaking a program of systematic evaluation of these prospects.

Activities (September 2022 Quarter)

Clay-rich regolith materials and granitic saprolite are being targeted for ionic adsorption on clay (IAC) style rare-earth element (REE) mineralisation at Energy Metals' Crystal Creek prospect. Total REE oxide (TREO) grades in IAC-style deposits typically range from 0.05 to 0.20% with higher grades generally found in the sub-surface at the interface between clay-rich regolith and underlying saprolite. Where soils are dominantly residual rather than transported (as at Crystal Creek), soil sampling assists in locating anomalous zones for follow-up drill testing.

Results from a program of soil sampling in July were received this quarter with 30% of samples reporting La + Ce grades >250 ppm (maximum 558 ppm), which generally correspond to total REE oxide (TREO) grades ≥0.05% (maximum 0.11%); see Table 4. Most higher-grade samples are located on two southern lines where kaolinite is dominant in the regolith (Figure 6). Further details of the sampling program and project information are provided in Appendix 1.

This quarter an aerial hyperspectral survey was commissioned over the Crystal Creek prospect for the purpose of surface mineral mapping and identification of REE-prospective clay-rich zones. A preliminary HyMap image from the survey is shown in Figure 6, which highlights large (~9 km^2), untested areas (in white) rich in kaolinitic clays. Final HyMap products, expected next quarter, will assist Energy Metals in planning further soil sampling programs.

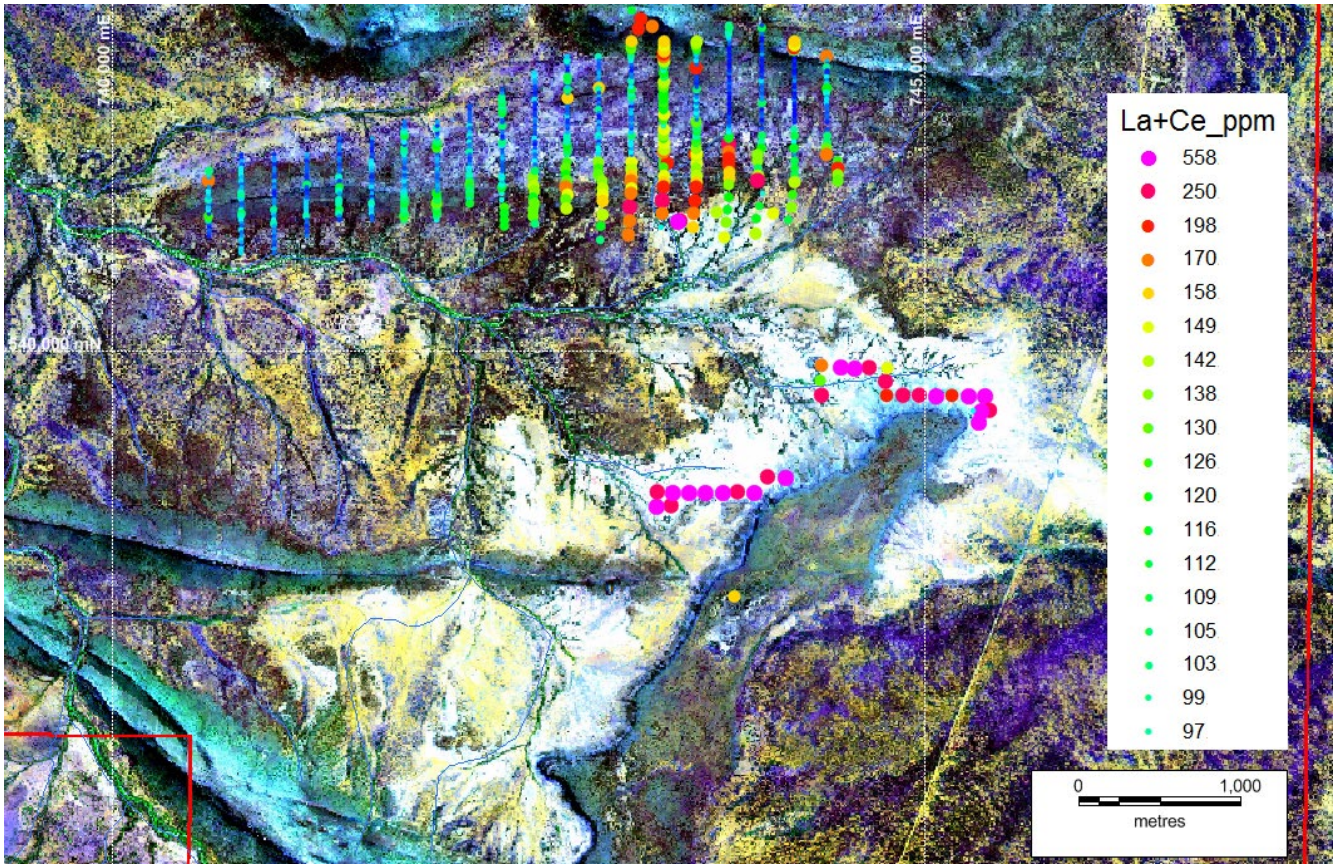

Figure 6 – Soil sampling results at the Crystal Creek prospect showing higher-grade REE-in-soil along southern lines. The backdrop is a preliminary hyperspectral (HyMap) image highlighting, in white, areas rich in kaolinitic clays overlying granite saprolite.

Table 4. Significant REE Soil Sampling Results – Crystal Creek Prospect (EL30004)

SAMPLE_No	Zone	MGA_E	MGA_N	Type	La+Ce (ppm)	Y (ppm)	TREO (%)
C03-04	52K	743653	7539127	Soil -2mm	558	85	0.11
C03-03	52K	743760	7539122	Soil -2mm	410	48	0.08
NRC02552A	52K	745337	7539560	Soil -2mm	477	29	0.08
L05A-02	52K	743483	7540793	Soil -2mm	330	79	0.07
C03-01	52K	743953	7539128	Soil -2mm	377	39	0.07
C03-06	52K	743454	7539127	Soil -2mm	357	41	0.07
L05A-01	52K	743501	7540795	Soil -2mm	228	121	0.07
C03-05	52K	743554	7539128	Soil -2mm	320	47	0.07
C04-02	52K	744148	7539218	Soil -2mm	354	24	0.06
C03-07	52K	743356	7539125	Soil -2mm	250	66	0.06
C09-02	52K	745271	7539717	Soil -2mm	335	16	0.05
C09A-02	52K	745352	7539626	Soil -2mm	334	13	0.05
C02-06	52K	743349	7539038	Soil -2mm	289	23	0.05
C11-09	52K	744486	7539897	Soil -2mm	263	25	0.05
C11-08	52K	744572	7539887	Soil -2mm	287	18	0.05
C09-04	52K	745070	7539717	Soil -2mm	285	18	0.05
C09-01	52K	745370	7539717	Soil -2mm	275	20	0.05

Macallan (EME 100%)

The Macallan project comprises a single exploration licence application (ELA27333), located 460 km NW of Alice Springs and 140 km from Bigrlyi. The tenement covers a strong 3km-wide bullseye radiometric anomaly. The Macallan anomaly lies within the Wildcat Palaeovalley, an ancient valley system that drains into Lake Mackay to the southwest. The Macallan anomaly most likely represents a surficial accumulation of uranium minerals associated with the Wildcat palaeodrainage system, although other explanations are possible.

ELA27333 lies on land under Aboriginal Freehold title and access is subject to negotiation with the Traditional Owners and the CLC. The negotiation period has been extended until October 2022 and the CLC are currently reviewing the Company's comments on a draft exploration agreement.

WESTERN AUSTRALIA

Manyingee (EME 100%)

The Manyingee project comprises retention licence application R08/3, underlying tenement E08/1480 and exploration licence application E08/2856, which are located 85 km south of Onslow. The project is located adjacent to mining leases containing Paladin Energy's Manyingee resource, a stacked series of buried, palaeochannel-hosted, roll-front uranium deposits. In November 2016 Energy Metals announced an initial JORC (2012) Mineral Resource Estimate for the Manyingee East uranium deposit, which is located up-channel of Paladin's Manyingee deposit.

Law firm Gilbert+Tobin was appointed in 2019 to assist Energy Metals with landholder objections to grant of the Manyingee title applications. No significant progress was made this quarter while the outcome of various, related legal matters is awaited.

Other Deposits - Mopoke Well, Lakeside, Anketell, Lake Mason (all EME 100%)

These four projects are surficial uranium deposits associated with calcrete or calcretised sediments related to ancient drainage and/or lacustrine systems. All projects are located on granted retention licences and mineral resource estimates under the JORC 2004 or 2012 codes have previously been announced for each deposit. All deposits are affected by the WA Government's current ban on uranium mining, and under present uranium market conditions the deposits are not economic. Energy Metals will continue to monitor the market and political situation with a view to re-starting exploration and development activities should positive conditions return.

CORPORATE

Energy Metals remains in a strong financial position with approximately $14.37 million in cash and bank deposits at the end of the quarter, forming a solid resource for ongoing exploration and project development.

As disclosed under item 6.1 in the Appendix 5B, Energy Metals paid $67,000 in total during the quarter to related parties and their associates. The payments represented amounts paid to the directors, including salaries, non-executive director's fee and consulting fees.

Table 5: Tenement Information as required by listing rule 5.3.3

TENEMENT*	PROJECT	LOCATION	INTEREST	CHANGE IN QUARTER
Northern Territory				
EL24451	Ngalia Regional	Napperby	100%	-
EL31098	Ngalia Regional	Napperby	100%	-
EL31820	Ngalia Regional	Mt Doreen	100%	-
EL31821	Ngalia Regional	Mt Doreen	100%	-
EL32113	Ngalia Regional	Mt Doreen	100%	-
ELR31754	Ngalia Regional	Mt Doreen	100%	-
ELR31755	Ngalia Regional	Mt Doreen	100%	-
ELR31756	Ngalia Regional	Mt Doreen	100%	-
ELR32552	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR41	Malawiri Joint Venture	Napperby	76.03%	-
ELR45	Walbiri Joint Venture	Mt Doreen	77.12%	-
EL30004	Ngalia Regional	Mt Doreen	100%	-
ELA27169	Ngalia Regional	Yuendumu	100%	-
ELA33116	Ngalia Regional	Yuendumu	100%	-
EL30144	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR31319	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELA24462	Ngalia Regional	Yuendumu	100%	-
ELA24450	Ngalia Regional	Yuendumu	100%	-
ELA27333	Macallan	Tanami	100%	-
MLNA1952	Bigrlyi Joint Venture	Yuendumu	72.39%	-
Western Australia				
E08/1480	Manyingee	Yanrey	100%	-
E08/2856	Manyingee	Yanrey	100%	-
R08/3	Manyingee	Yanrey	100%	-
R21/1	Lakeside	Cue	100%	-
R29/1	Mopoke Well	Leonora	100%	-
R57/2	Lake Mason	Sandstone	100%	-
R58/2	Anketell	Sandstone	100%	-

* EL = Exploration Licence (NT); ELA = Exploration Licence Application (NT); ELR = Exploration Licence in Retention (NT); MLNA = Mineral Lease (Northern) Application (NT); E = Exploration Licence (WA); R = Retention Licence (WA).

Competent Persons Statement

Information in this report relating to exploration results, data and cut-off grades is based on information compiled by Dr Wayne Taylor and Mr Lindsay Dudfield. Mr Dudfield is a member of the AusIMM and the AIG. Dr Taylor is a member of the AIG and is a full-time employee of Energy Metals; Mr Dudfield is a consultant to Energy Metals. They both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor and Mr Dudfield both consent to the inclusion of the information in the report in the form and context in which it appears.

The information discussed in this report relating to mineralisation modelling, exploration targets

and metallurgical test-work results is based on information compiled by Dr Wayne Taylor. Dr Taylor is a member of the Australian Institute of Geoscientists (MAIG) and a full-time employee of Energy Metals Ltd. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor consents to the inclusion of the information in the report in the form and context in which it appears.

This report references mineral resource estimates and/or related information that was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Appendix 1: Table 1 – Information provided under JORC (2012)

Section 1: Sampling Techniques and Data.

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Soil samples of approx. 400 g size were collected from 5 to 20cm below surface using hand tools. Samples were sieved to minus 2mm and bagged in Kraft geochemical bags for dispatch to the assay laboratory. • Areas dominated by residual rather than transported regolith were selected for sampling.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• N/A
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• N/A
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Sample sites were photographed and scintillometer readings in counts per second were taken from the bottom of the sample hole using a Radeye PRD. • All samples comprise sandy clays of

	• *The total length and percentage of the relevant intersections logged.*	variable iron oxide content. Most soils originally contained variable amounts of quartz and/or silcrete lag material, which was removed by screening to -2mm.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• N/A
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples were submitted to the Intertek-Genalysis sample preparation facility in Alice Springs for initial sample preparation including sorting, drying and pulverisation; • Pulps were forwarded to Intertek-Genalysis laboratories in Perth for chemical analysis by 4-acid digest multielement methods 4A/OM48 and 4A/OM48R which includes the full REE suite. The method is appropriate for clay-rich regolith materials. • Energy Metals internal standards were inserted every 20-25 samples. • In addition to internal standards, laboratory in-house checks included analysis of appropriate CRMs, blanks and duplicates with each submitted sample batch. Laboratory QC results are reported along with sample values in the analytical certificate and report.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Sampling and assay data are entered into Energy Metals' Geobank database by an independent data management contractor. • All data entered into the database are subject to verification checks. • Data is stored on a secure server subject to regular back-up.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The locations of sample sites were recorded using hand-held GPS units with an accuracy in the x-y plane of approx. 4m. • The coordinates are located on the MGA94 grid, Zone 52, using the GDA94 datum.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The nominal spacing between sample lines was 100m. • Samples were generally spaced 100m apart but spacings may be modified to account for terrain, topography and geomorphological conditions.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The target is ionic adsorption-on-clay REE mineralisation (IAC) developed in the weathering profile of incompatible element-rich granites. • Samples comprise clay-rich regolith dominated by residual soil materials, which drape the land surface.
Sample security	• *The measures taken to ensure sample security.*	• N/A.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques were undertaken due to the early-stage nature of the project.

Section 2: Reporting of Exploration Results.

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The prospect area is located on EL30004, which is 100% owned by Energy Metals Ltd. • There are no impediments to working in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration drilling by Uranium Exploration Australia Ltd has established substantial thicknesses of granitic saprolite in the southern part of the Crystal Creek prospect where the higher-grade REE-in-soil values have been reported in this announcement. The saprolite varies in thickness from 15 to 60m, however, only a few intervals from two holes were ever assayed for REEs with anomalous Nd of 229 ppm reported from hole 08SC14.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Energy Metals is targeting ionic adsorption on clay (IAC) style REE mineralisation. IAC deposits form mainly in the weathering profiles of granites or related rocks where REEs attach loosely to clays. The REEs can be recovered by low-cost leaching methods. Typical grades of IAC deposits are 0.05 to 0.20% TREO (total rare earth oxides).

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the*
		• N/A.

	information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Reported TREO (%) was calculated as the sum of the REE oxides as follows: La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	• N/A.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figure 6 in the body of the text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All significant results (i.e., those equal to or greater than 0.05% TREO) have been reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• As the project is at an early stage, a metallurgical test-work program, including clay desorption extraction and leaching tests, is yet to be implemented. • X-ray diffraction and mineralogical characterisation work is in progress.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Extension and in-fill soil sampling and aircore drill testing is planned for the next field season. • Following finalisation of a HyMap survey over EL30004, mineral mapping products will be used to target prospective clay-rich zones for further soil sampling.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Energy Metals Limited	
ABN	**Quarter ended ("current quarter")**
63 111 306 533	30 September 2022

	Consolidated statement of cash flows	**Current quarter $A'000**	**Year to date (9 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(92)	(295)
	(e) administration and corporate costs	(112)	(307)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	3	43
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (receipt from JV)	5	23
1.9	**Net cash from / (used in) operating activities**	**(196)**	**(536)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(112)	(360)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**(112)**	**(360)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**-**	**-**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	14,681	15,269
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(196)	(536)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(112)	(360)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**14,373**	**14,373**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	256	370
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (term deposits)	14,117	14,311
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**14,373**	**14,681**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	67
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	**Total financing facilities**		

7.5	**Unused financing facilities available at quarter end**	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(196)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(112)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(308)
8.4	Cash and cash equivalents at quarter end (item 4.6)	14,373
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	14,373
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	46.7

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer:	

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: 31 October 2022

Authorised by: .....
Xuekun Li, Company Secretary

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.