

8 June 2023

New phase of exploration drilling commences at Pioneer Dome Lithium Project

Essential Metals Limited (ASX: ESS) is pleased to advise that a ~3,000m Reverse Circulation (RC) drilling programme to test three main target areas at the Pioneer Dome Lithium Project in WA is now underway with drilling expected to be completed by mid-July and assays to be available by end-August.

The drilling will test and advance targets at Dome North as well as on the eastern flank of Pioneer Dome, as shown in Figure 1. The Company will test all of these targets with shallow RC drilling to fully penetrate any pegmatites that are intersected.

Two targets are proposed to be drill tested at Dome North. The first is the south-western extension (DN_32) of the Heller spodumene-bearing pegmatite and the second is a north-east trending pegmatite that is poorly exposed (DN28/DN30) between Davy and Heller, as shown in Figure 2. The second area selected for drilling the third target (PEG004) is on the eastern side of the Pioneer monzogranite, as shown in Figure 1.

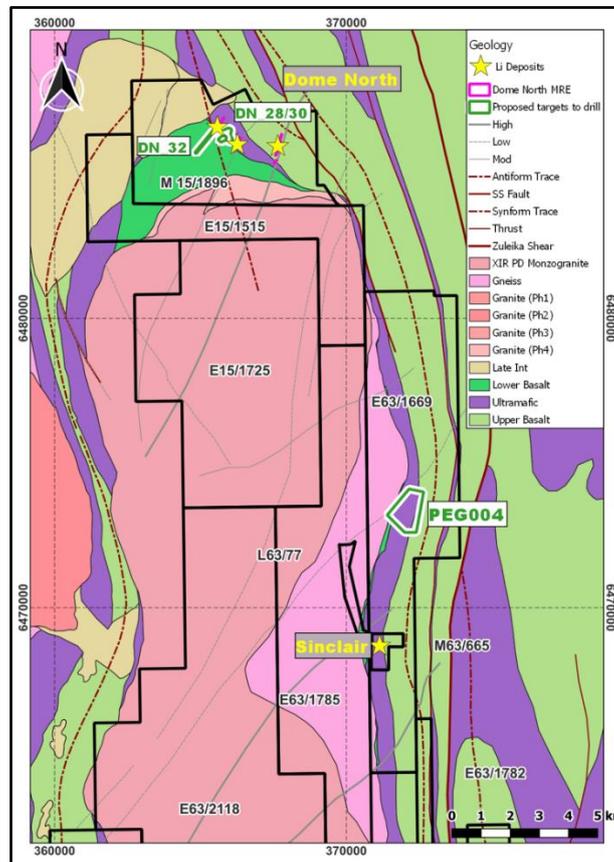


Figure 1: Proposed targets to drill test and interpreted regional geology.

Dome North – Target DN_32

The southern extensions of two (Cade and Davy) of the three spodumene-bearing pegmatites that host the 11.2Mt @ 1.16% Li₂O Dome North Mineral Resource have been previously drill tested. The Heller pegmatite remains open to the south-west with the possibility of another spodumene-bearing pegmatite being present, similar to both Cade and Davy.

The presence of up to 5m of transported cover to the south-west of the current drilling at Heller limits the effectiveness of soil sampling to identify potential pegmatites, so shallow RC holes will be drilled along the projected strike of Heller to test for the presence of pegmatites.

Dome North – Target DN_30/DN_28

Mapping and reconnaissance sampling carried out in late-2022 identified a poorly exposed north-east trending pegmatite that doesn't appear to have been fully drill tested. Rock sampling results received earlier this year indicate that this pegmatite is moderately to strongly fractionated and is lithium enriched (up to 1,085ppm Li₂O).

Drilling conducted in July 2021 tested just beyond the north-eastern extent of the sub-cropping pegmatite was not definitive and the proposed drilling will be designed to test the various interpretations. As the DN_28 area has a thin veneer of cover, drilling is required to test whether the poorly exposed pegmatite(s) continue to the south-west, as shown in Figure 3.

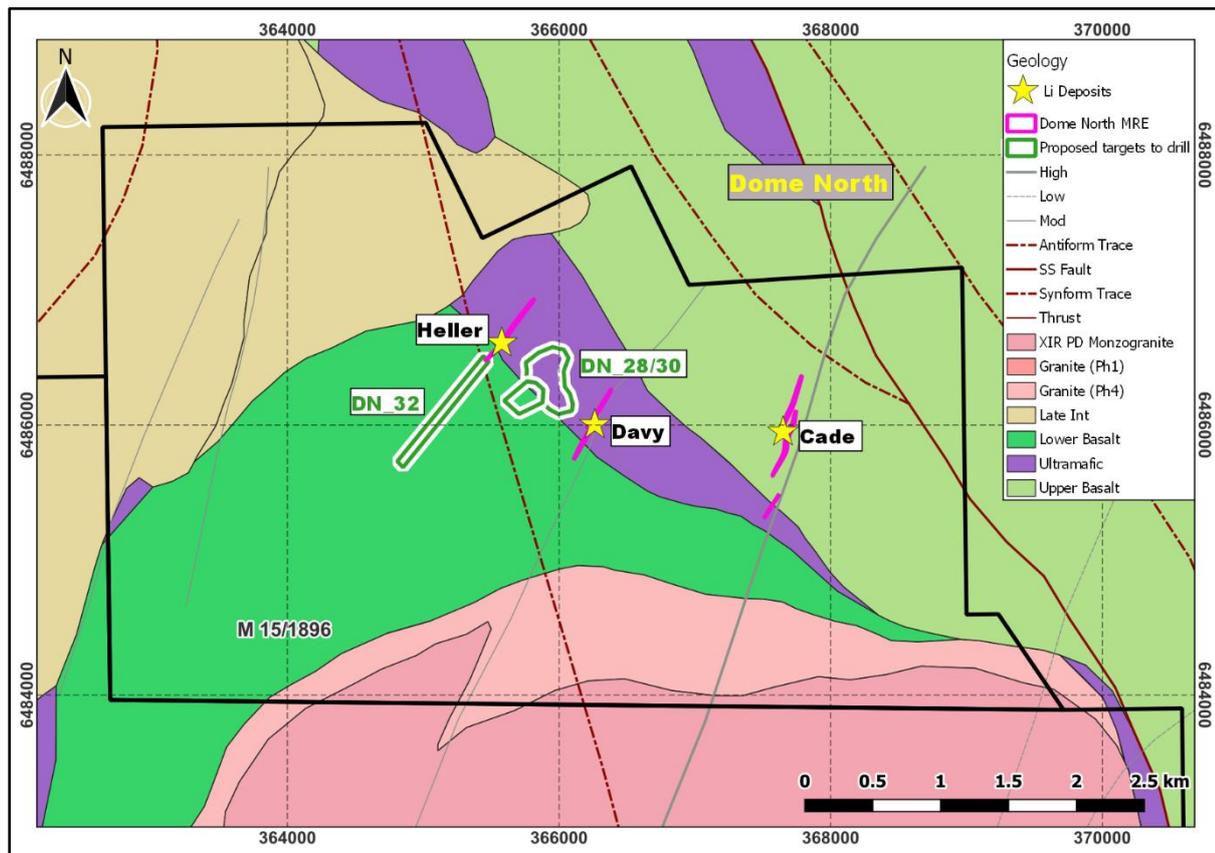


Figure 2: Proposed targets to drill test at Dome North.

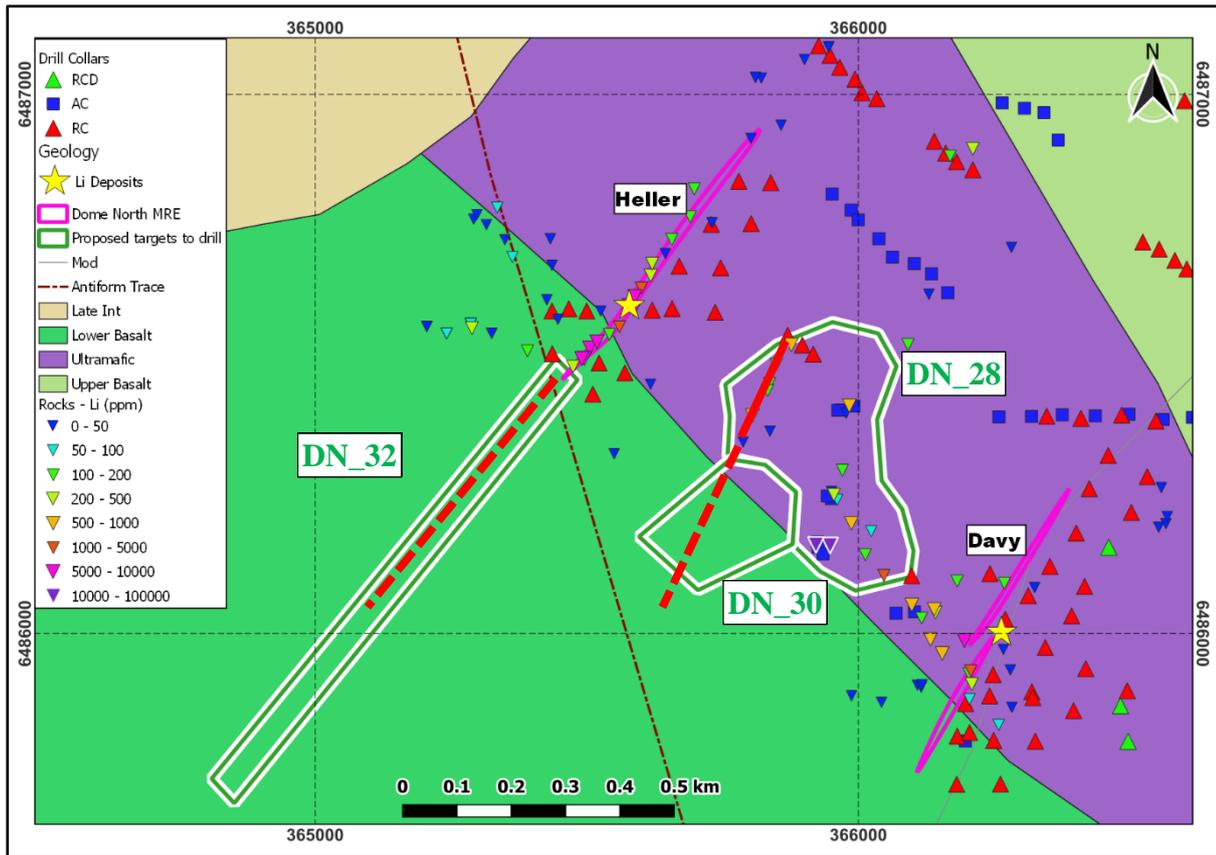


Figure 3: Proposed targets to drill test at Dome North with drilling, rock sampling and interpreted bedrock geology.

Eastern Flank – Target PEG004

Mapping has identified a north-trending lepidolite zone with selective rock samples returning up to 2.77% Li_2O . Field work conducted in late 2022 included sampling pegmatitic drill spoils from nickel exploration holes conducted in the 1990's (refer to Figure 5). Analysis of the assay results received earlier this year infers an increasing fractionation trend in a southerly direction, accompanied by an increase in lithium enrichment, as shown in Figure 4. This could indicate that more fractionated and lithium-enriched pegmatites may be present to the south under a thin veneer of transported cover.

The proposed drilling will assist in determining the thickness and orientation of the lepidolite-bearing pegmatite as well as understanding the thickness and zonation of the pegmatites associated with the drill spoils.

The remainder of this page has been intentionally left blank.

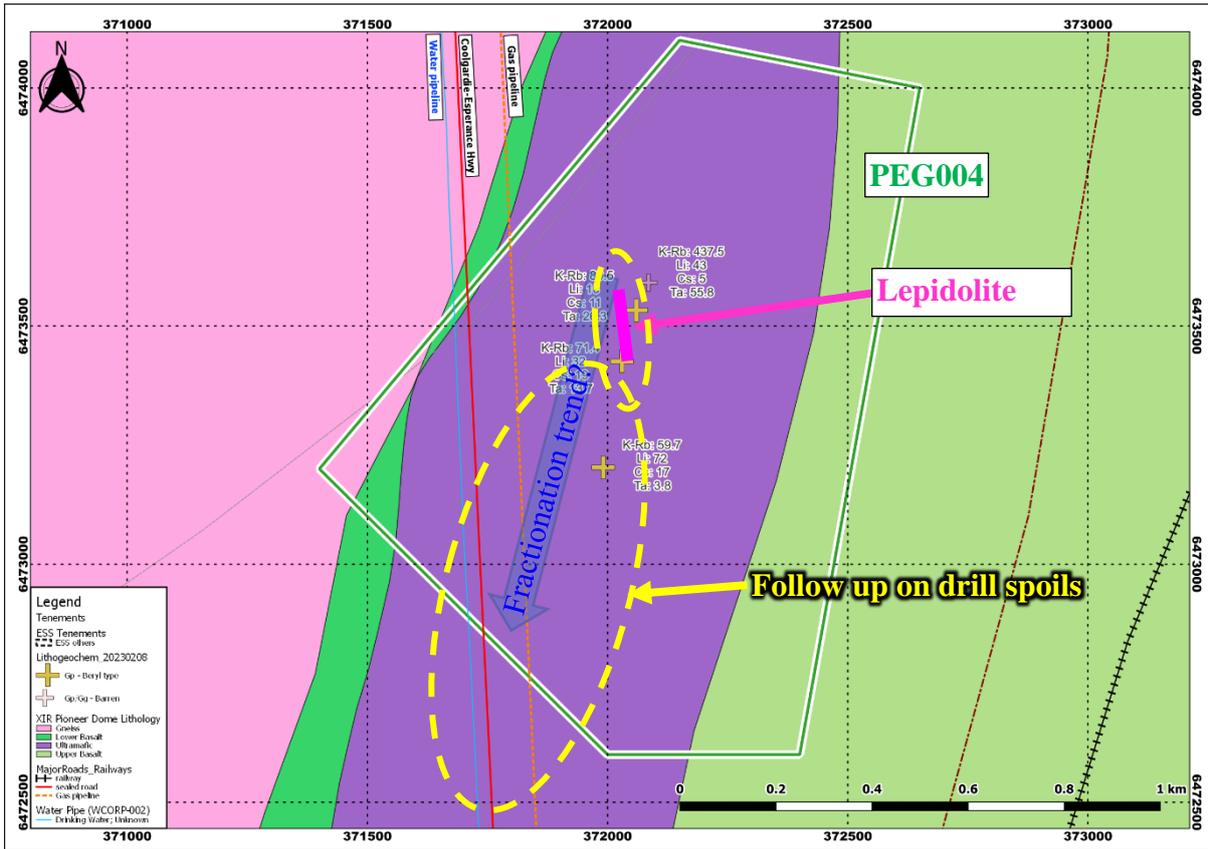


Figure 4: Recent drill spoil samples only with assays annotated (all values in ppm bar K/Rb ratio). Note the potential fractionation trend.

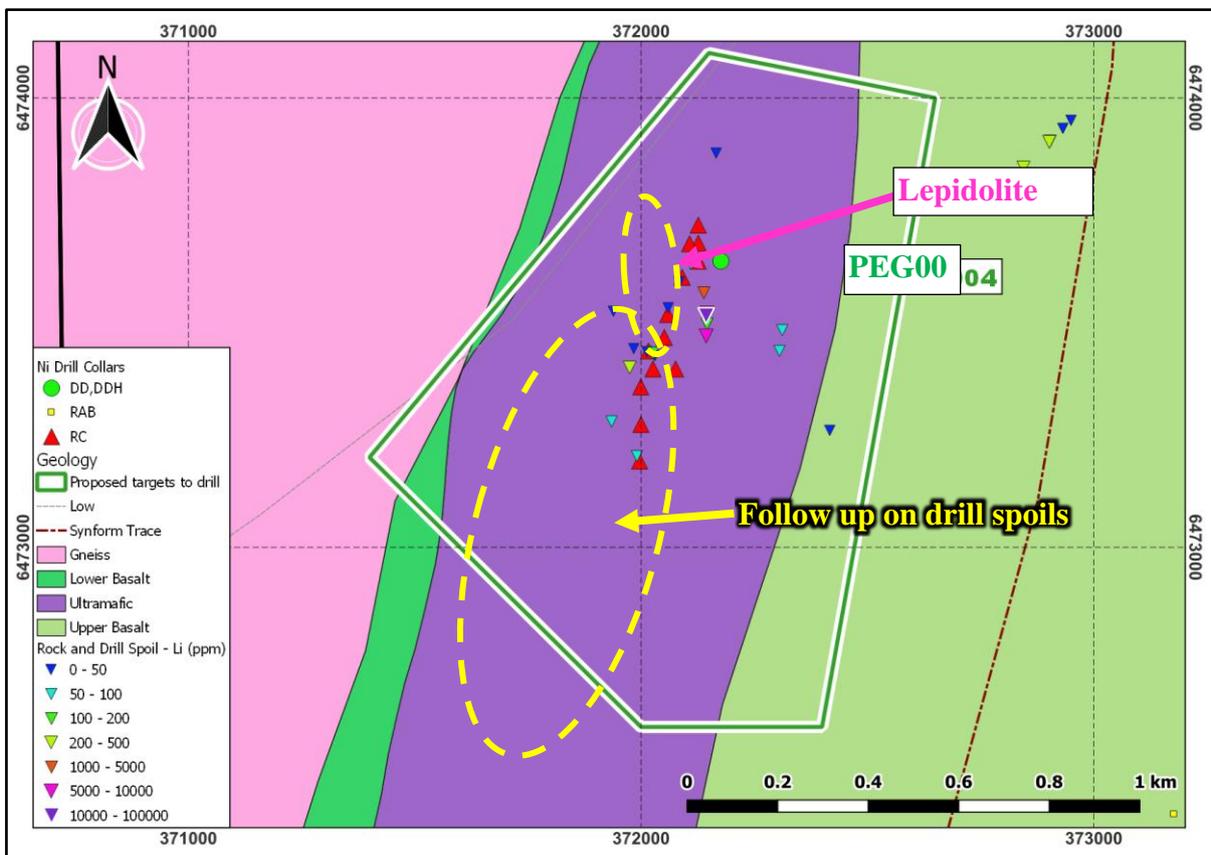


Figure 5: Drill spoil and rock samples with nickel exploration drilling and the interpreted regional geology.

This ASX release has been approved by the Board of Directors.

For further information:

Tim Spencer, Managing Director

Essential Metals Limited

T: +61 8 9322 6974

E: tims@essmetals.com.au

Investor Relations

Nicholas Read

Read Corporate

T: +61 8 9388 1474

E: nicholas@readcorporate.com.au

The remainder of this page has been intentionally left blank.

PIONEER DOME LITHIUM PROJECT

The 450km² Pioneer Dome Project (ESS: 100%) is in the core of Western Australia’s lithium corridor in the Eastern Goldfields, approximately 130km south of Kalgoorlie and 275km north of the Port of Esperance. A Mineral Resource¹ of 11.2Mt @ 1.16% Li₂O has been defined at Dome North in the northern area of the Project. The southern Yilgarn area is recognised as being well-endowed with spodumene deposits, including Pioneer Dome, the Bald Hill Mine, the Mt Marion Mine, the Manna Project and the Buldania Project – all of which are located within a 90km radius. The world-class Greenbushes Deposit, the Mt Holland Mine and the Mt Cattlin Mine are located further west, south-west and south-south-west, respectively.

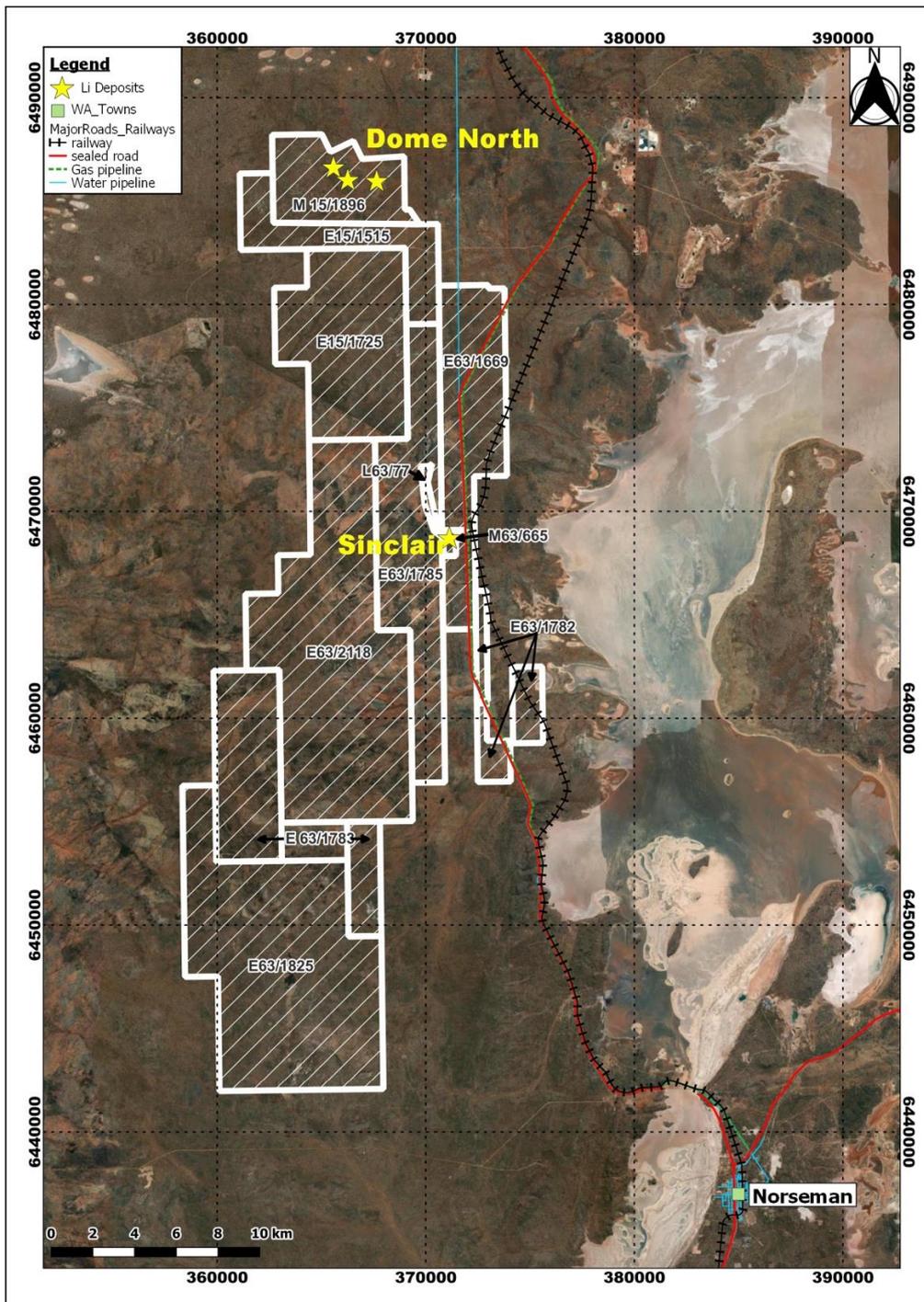


Figure 6 – Pioneer Dome Lithium Project lithium deposits, tenements and major infrastructure.

¹ Refer ASX:ESS announcement 20 December 2022 “Dome North Resource upgrade”

ABOUT ESSENTIAL METALS LIMITED

Essential Metals is a well-funded and active explorer/developer focussed on the discovery of lithium and other key global demand-driven commodities, for the creation of shareholder wealth through exploration and project development. The Company operates three strategically located lithium and gold projects in Western Australia.

100% OWNED AND MANAGED PROJECTS:

- **LITHIUM:** The **Pioneer Dome Lithium Project** is highly prospective for lithium-caesium-tantalum (LCT) mineral systems and includes the **Dome North Lithium Mineral Resource** of 11.2 million tonnes @ 1.16% lithium (Li₂O) including 8.7 million tonnes @ 1.23% lithium (Li₂O) within the Indicated Category.²
- **GOLD:** The **Juglah Dome Project** is located 60km east-south-east of Kalgoorlie and is highly prospective for gold and has potential for VHMS style polymetallic deposits.
- **GOLD:** The **Golden Ridge Project** is located ~20km south-east of Kalgoorlie, WA. Our activities are focussed on reappraising known prospects as well as identifying new areas within the large land tenure.

JOINT VENTURE INTERESTS:

- **GOLD:** The **Acra Project** is near Kalgoorlie. Northern Star Resources Limited (ASX:NST) has earned a 75% Project Interest and continues to fully fund exploration programmes until approval of a Mining Proposal by DMIRS is received with Essential Metals holding a 25% interest.
- **GOLD:** The **Kangan Project** is in the West Pilbara and part of a joint venture with Novo Resources Corp (TSXV:NVO), who will fund 100% of gold exploration programmes until a decision to mine is made, with Essential Metals holding a 30% interest in precious metals and 100% of all other minerals.
- **GOLD:** The **Balagundi Project** is subject to a farmin & JV agreement where Black Cat Syndicate Limited (ASX:BC8) is earning a 75% interest in the Project located at Bulong, near Kalgoorlie. Black Cat will then fully fund exploration programmes until completion of a bankable feasibility study with Essential Metals retaining a 25% interest in all minerals.
- **GOLD:** The Company holds a 25% interest, free-carried interest up to a decision to mine, in all minerals except 20% for nickel rights in the **Larkinville Project** near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).
- **NICKEL:** The nickel mineral rights on the **Blair-Golden Ridge Project**, which includes the suspended Blair Nickel Sulphide Mine, are subject to a Farmin/Joint Venture with Australian Nickel Company Ltd, a nickel exploration specialist which is earning up to a 75% interest. The Company will retain a 25% interest, free-carried interest up to a decision to mine.
- **NICKEL:** The Company holds a 20% (nickel only) interest, free-carried to a completion of a feasibility study which recommends that commercial mining operations be commenced, in the **Wattle Dam project** near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).
- **NICKEL:** The Company holds a 20% interest, free carried up to completion of a feasibility study which recommends the establishment of a mining area, in the **Maggie Hays project** near Lake Johnson, WA, with Poseidon Nickel Ltd (ASX:POS).

² Refer ASX announcement 20 December 2022 "Dome North Resource upgrade".

Forward Looking Statement

This announcement may contain forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

Reference to previous market announcements

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which Exploration Results or Competent Person's findings are presented have not been materially modified from the original market announcements.

Exploration Results – Competent Person Statement

Mr Andrew Dunn (MAIG) holds the position of Exploration Manager and is employed full-time by Essential Metals Limited. Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn compiled the technical aspects of this Announcement pertaining to Exploration Results, which is based on and fairly represents information compiled by Mr Dunn. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.

Dome North Lithium Mineral Resource – Competent Person Statement

The information in this report that relates to the Dome North Lithium Project Mineral Resource is based on information compiled by Mr Andrew Dunn (Exploration Manager and permanent employee of Essential Metals Limited) and Mr Lauritz Barnes (consultant with Trepanier Pty Ltd). Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn and Mr Barnes are both members of the Australian Institute of Geoscientists. Mr Dunn and Mr Barnes both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Dunn is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus completed the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Dunn and Mr Barnes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Dome North Mineral Resource by deposit and category: (0.3% Li₂O cut-off grade)

Deposit	Classification	Tonnes (Mt)	Li₂O %	Ta₂O₅ ppm	Contained Li₂O (T)	Fe₂O₃ %
Cade	Indicated	6.9	1.26	49	88,000	0.44
	Inferred	1.3	0.88	49	11,000	0.44
Davy	Indicated	1.6	1.08	81	18,000	0.54
	Inferred	0.6	0.89	73	4,000	0.58
Heller	Inferred	0.7	1.02	76	8,000	0.72
Total	Total	11.2	1.16	57	129,000	0.48

Note: Appropriate rounding applied.