



# ESSENTIAL METALS

for a sustainable future

## ASX Code: ESS

### Corporate Profile

Shares on issue: 240,839,974  
Cash: \$9m (30 Sep 2021)  
Debt: Nil

## KEY PROJECTS

**LITHIUM** Pioneer Dome  
**GOLD** Golden Ridge  
**GOLD** Juglah Dome

## Joint Ventures (ESS %)

1 x lithium project (51%)  
2 x nickel projects (20-25%)\*  
4 x gold projects (25-30%)\*  
\* Free carried to a decision to mine

### Corporate Directory

**Non-Executive Chairman**  
Craig McGown

**Non-Executive Directors**  
Paul Payne  
Warren Hallam

**Managing Director**  
Timothy Spencer

**CFO & Company Secretary**  
Carl Travaglini

**Exploration Manager**  
Andrew Dunn

### Investor Relations

Nicholas Read  
Read Corporate  
t: +61 8 9388 1474  
e: nicholas@readcorporate.com.au

ABN: 44 103 423 981  
t: +61 8 9322 6974  
e: info@essmetals.com.au  
w: essmetals.com.au

Level 3, 46 Ord St  
West Perth, WA 6005  
Australia  
PO Box 1787,  
West Perth, WA 6872  
Australia

22 October 2021

## SEPTEMBER 2021 QUARTERLY REPORT

**Exploration, resource growth and development activities ramp up on several fronts at the Pioneer Dome Lithium Project, WA**

## HIGHLIGHTS

- **Pioneer Dome Lithium Project:** The main operational activities during the Quarter were:
  - 5,934m Reverse Circulation (RC) drill programme completed at Dome North;
  - Implementation of the 'development-ready' transition plan for Dome North; and
  - Geochemical soil sampling surveys completed in the Gneiss zone on the eastern flank of the Pioneer Dome granite.
- **Post-Quarter** – Assays received to date from the August drill programme were released<sup>1</sup>. Highlights from the four RC drill holes into the upper portion of the Cade Deposit included:
  - **21m @ 1.08% Li<sub>2</sub>O from surface** (PDRC589)
  - **24m @ 1.29% Li<sub>2</sub>O from surface** (PDRC590)
  - **15m @ 1.06% Li<sub>2</sub>O from 47m** (PDRC591)
  - **26m @ 1.46% Li<sub>2</sub>O from 51m** (PDRC592)
- **Golden Ridge Gold Project:** Assays received in July from the June Quarter air-core drill programme confirmed numerous new zones of gold mineralisation at the Skandia, Maximus and AC75 prospects.
- **Corporate:** \$5 million placement (gross) announced in August with 40 million shares issued at 12.5c per share. The funds are earmarked for advancing the Pioneer Dome Lithium Project and for working capital purposes.

**Closing cash** on hand as at 30 September was \$9 million.

<sup>1</sup> Refer ASX announcement 15 October 2021 – High grade assay results from Cade Deposit

## PIONEER DOME LITHIUM PROJECT

The Pioneer Dome Project (ESS: 100%) is located 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 Resource of 11.2Mt @ 1.21%  $\text{Li}_2\text{O}^2$  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 the Bald Hill Mine, the Mt Marion Mine and the Buldania Project. 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.

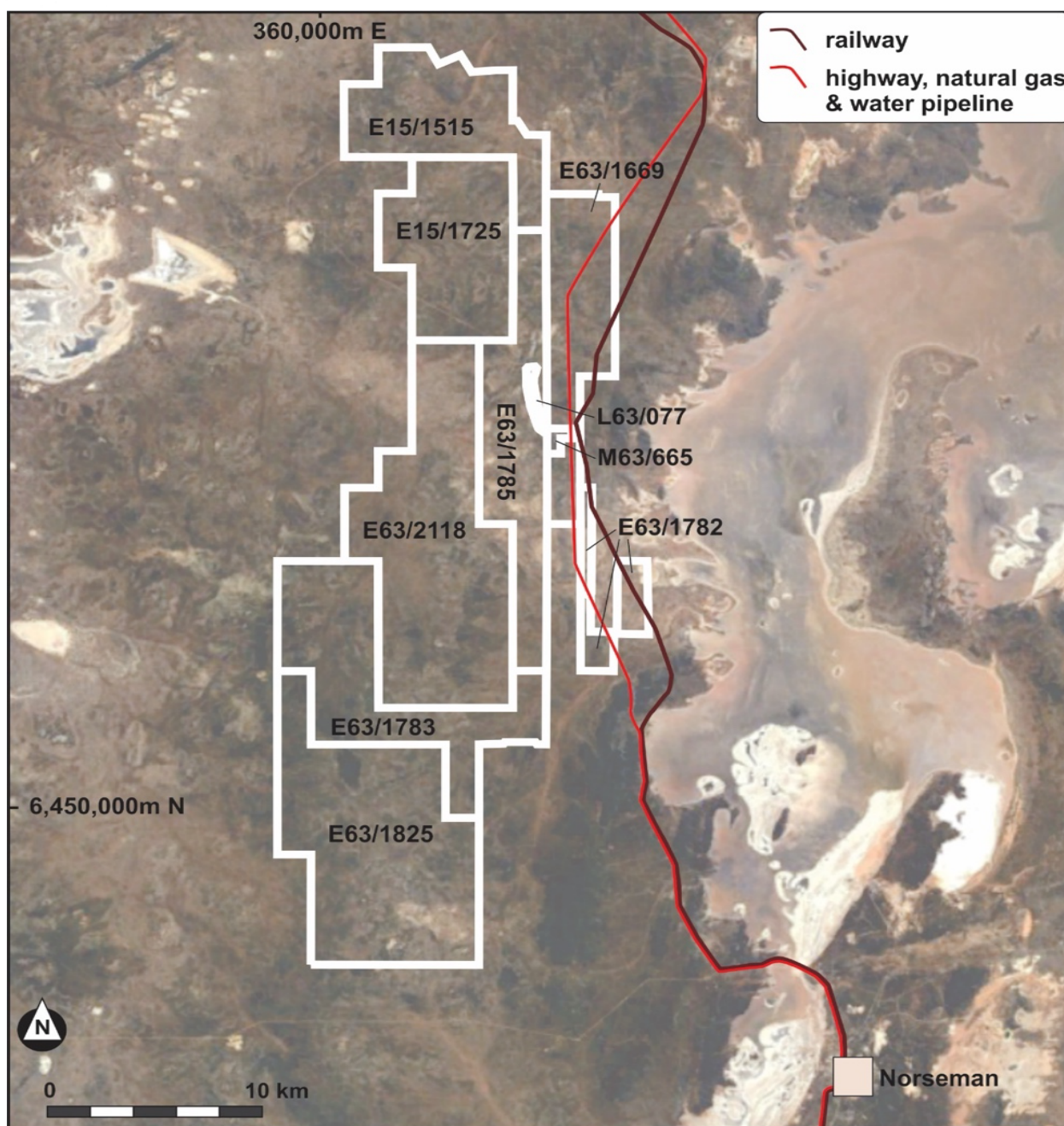


Figure 1 – The location of the tenements of the Pioneer Dome Lithium Project relative to major infrastructure

<sup>2</sup> Refer ASX announcement 29 September 2020 – Dome North Resource upgrade

## DOMES NORTH DRILL PROGRAMME

During the Quarter, a slim-line Reverse Circulation (RC) drill programme was undertaken to test areas with the potential for the discovery of additional spodumene-bearing pegmatites which could add to the currently defined Mineral Resource at Dome North and to test the upper zone of the Cade Deposit.

The 5,934m drilling programme commenced in mid-July and was completed in late August. The six zones targeted in the RC drill programme are shown in Figure 2. The holes that intersected pegmatites are shown as orange circles and holes with no pegmatite intersections are shown as yellow circles.

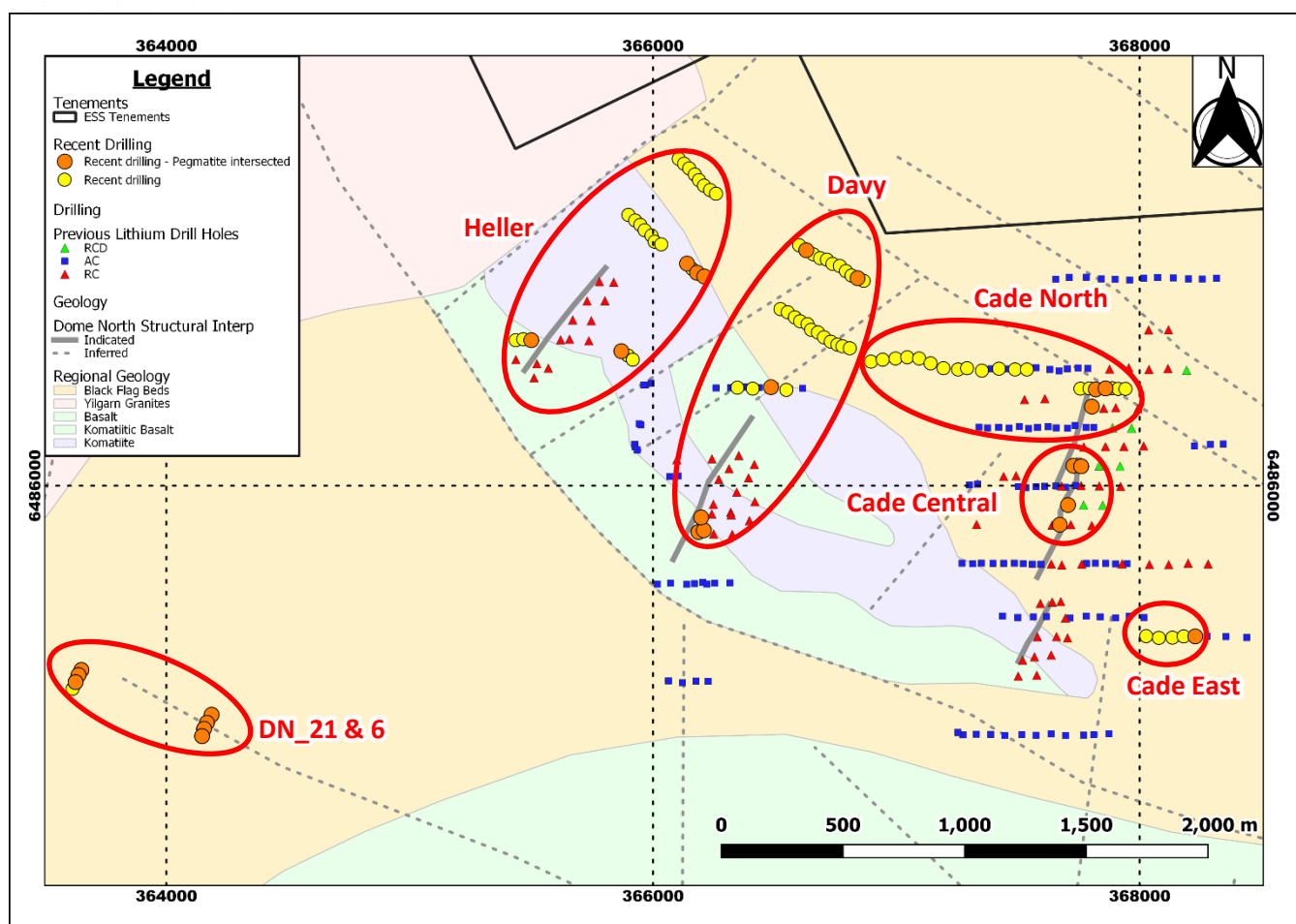


Figure 2 – Plan view of the Dome North area. The recent holes that intersected pegmatites are shown as orange circles and holes with no pegmatite intersections shown as yellow circles.

The first assay results<sup>3</sup>, received in October, included four holes that were drilled into the upper zone of the Cade Deposit, which is part of the Dome North Lithium Resource. These included:

- **21m @ 1.08% Li<sub>2</sub>O from surface** (PDRC589)
- **24m @ 1.29% Li<sub>2</sub>O from surface** (PDRC590)
- **15m @ 1.06% Li<sub>2</sub>O from 47m** (PDRC591)
- **26m @ 1.46% Li<sub>2</sub>O from 51m** (PDRC592)

These four drill holes were completed to better understand the distribution of lithium in the weathering profile. The assays were of a high lithium tenor, demonstrating that there is likely to have been minimal

<sup>3</sup> Refer ASX announcement 15 October 2021 – High grade assay results from Cade Deposit



depletion of lithium near-surface. Mineralogy tests will be conducted to confirm that the host mineral is spodumene, which is expected given that visual spodumene was observed when the holes were drilled.

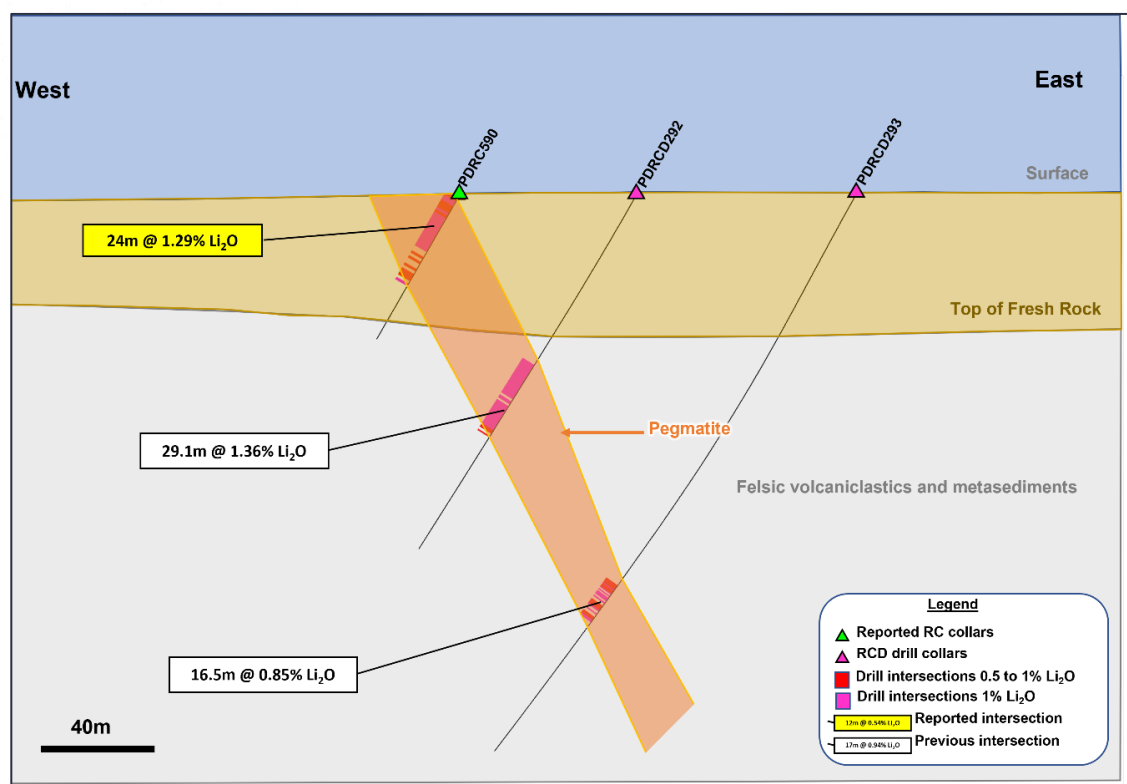


Figure 3 – Cross-section showing drill hole PDR590 and previously drilled holes on the same section.

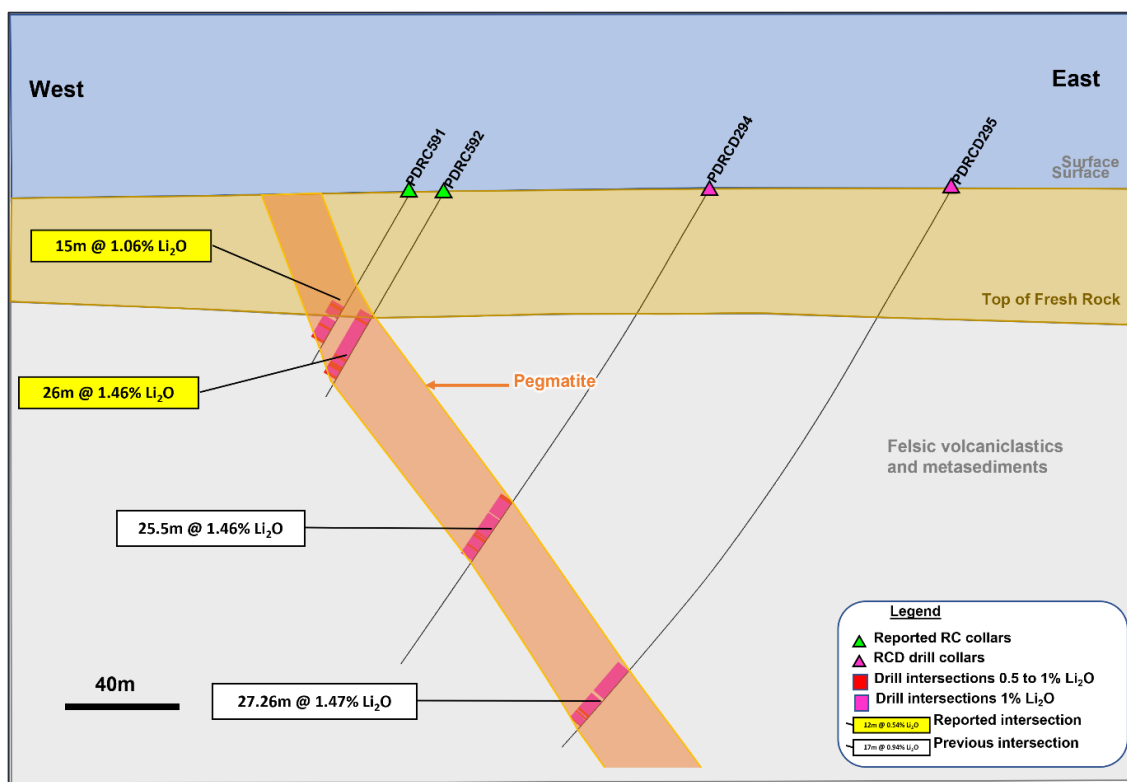


Figure 4 – Cross-section showing drill holes PDR591 and PDR592 and previously drilled holes on the same section.



Hole PDRC519, located at the southern end of the Davy deposit, also returned encouraging assays, as follows:

- **7m @ 1.02% Li<sub>2</sub>O from 21m**, including 3m @ 1.44% Li<sub>2</sub>O; and
- **9m @ 0.62% Li<sub>2</sub>O from 42m**

The eight holes drilled into the DN6 and DN21 targets intersected pegmatites up to 18m in thickness (down-hole). Detailed geological logging of the drill chips did not indicate the presence of visual spodumene and this has been confirmed by assays, which contained no lithium.

While drilling in areas outside the Dome North Resource domain did not appear to have identified a new, large lithium-mineralised pegmatite, the results are important in enhancing the geological model for further targeting of pegmatites in and around the Dome North Resource, which is still very much under-explored.

The assay results received to date were included in the ASX announcement dated 15 October 2021 and titled "High grade assay results from Cade Deposit". The remaining assays are anticipated to be reported before the end of October.

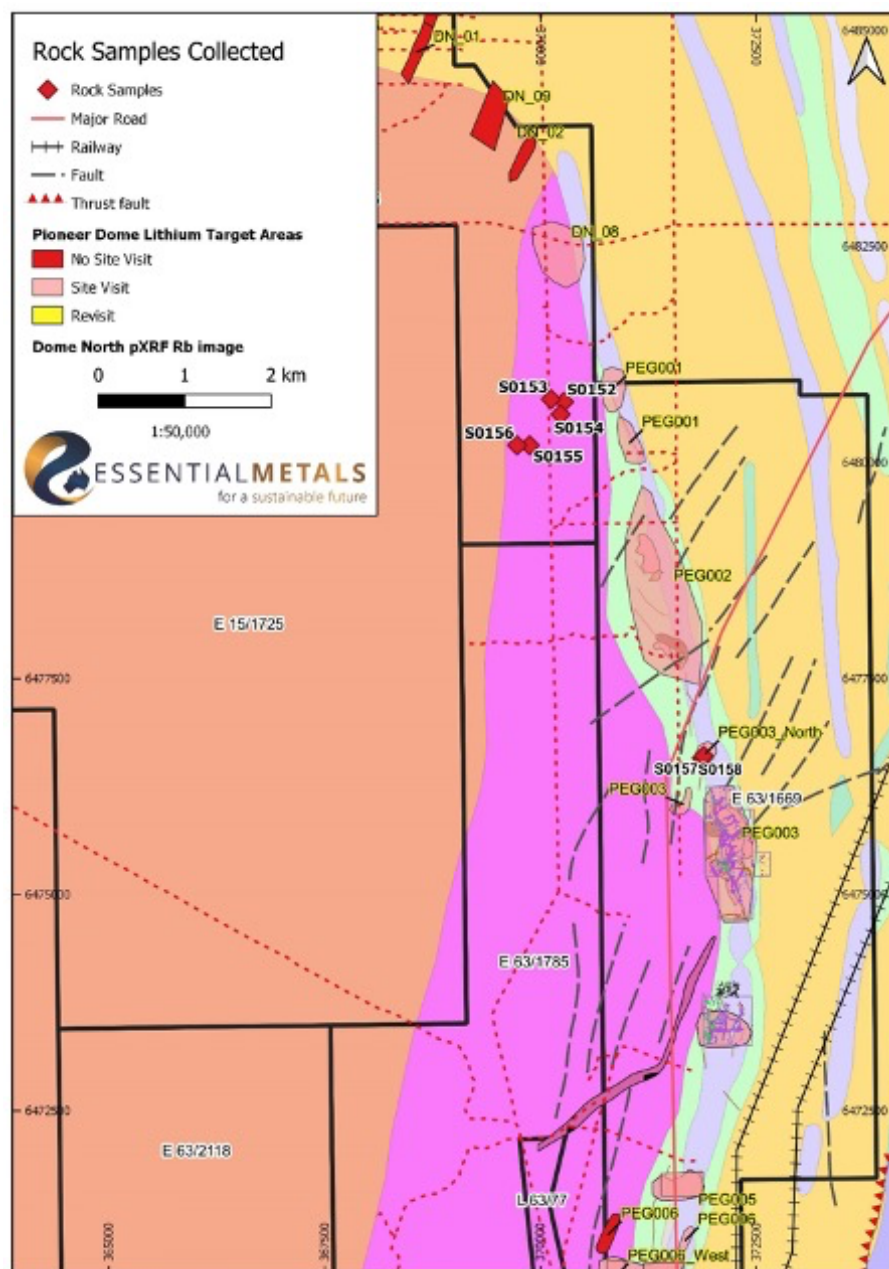
## STEPS TOWARDS BEING DEVELOPMENT-READY

As part of its strategy to become a new force in the lithium supply chain, the Company began taking key steps during the Quarter to advance the Pioneer Dome Lithium Project to be 'development-ready' by commencing studies that are required to obtain the various regulatory approvals to operate a mine and to further advance technical and financial studies for a future operating lithium project based on the Dome North Mineral Resource. These steps include:

- Primero Group has been engaged to undertake Scoping Study level engineering for two plant flowsheet options – 'dense medium separation + flotation' and 'whole-of-ore flotation' and provide indicative **capital (+/-40%) and operating costing estimates**. This information will allow internal financial modelling to be undertaken to provide a better understanding of the economic parameters and sensitivities of a mining operation based on the current Dome North Mineral Resource. This will also enable formal development studies to be fast-tracked. Primero Group was recently selected by the SQM-Wesfarmers joint venture to undertake the EPC contract for the Mt Holland Concentrator project.
- Botanica Consulting, a Kalgoorlie-based environmental consultancy, has been engaged to conduct springtime **flora and fauna surveys** to assist with the coordination of the baseline studies required to secure regulatory approvals and licences.
- Rockwater, a specialist hydrogeological and environmental consulting firm, has been engaged to complete a desktop study of **groundwater supply sources** in and surrounding the Pioneer Dome Lithium Project.
- Preparations have commenced for a **Mining Lease Application** over the Dome North area (within tenement E15/1515), based on a mineralisation report.
- Discussions are continuing with the Ngadju Native Title Aboriginal Corporation (NNTAC), the body representing the Ngadju People, who are the custodians of the land on which the Pioneer Dome Project is located. A Mining and Heritage Agreement is already in place with the NNTAC covering the Pioneer Dome Project.

## OTHER EXPLORATION ACTIVITIES

Rock samples were collected (Figure 5) and submitted to the laboratory for analysis with results pending.



**Figure 5 – Location of rock samples collected during September at Dome Central with the LCT target areas.**



## GOLDEN RIDGE GOLD PROJECT

The Golden Ridge Gold Project (ESS: 100% Au) is located 20km south-east of Kalgoorlie and is highly prospective for gold and nickel mineralisation. The Project lies within the well-endowed Menzies-Boorara Shear Zone that hosts the New Boddington, Paddington, Boorara and Golden Ridge Deposits (the latter two are owned by Horizon Minerals Limited – ASX: HRZ). Exploration at the Project has identified multiple highly prospective gold and nickel targets.

The assay results from a first pass Air-Core (AC) drill programme completed in May to test three gold targets, Skandia, Maximus and AC75, were received in July (refer ASX announcement date 8 July 2021). The best intersections were as follows:

- **Skandia** (25 AC holes) results include:
  - **8m @ 1.01 g/t Au from 96m** including **3m @ 2.45g/t Au** (hole GRA0454); and
  - **12m @ 0.50 g/t Au** from 60m (hole GRA0388)
- **Maximus** (26 AC holes) results include:
  - **3m @ 3.0 g/t Au** from 30m including 1m @ 6.07g/t Au (hole GRA0375); and
  - **5m @ 0.75 g/t Au** from 57m (hole GRA0369); and
  - **3m @ 0.89g/t Au** from 24m and **6m @ 0.17g/t Au** from 33m (hole GRA0368)
- **AC75** (41 AC holes) results include:
  - **12m @ 0.49 g/t Au** from 51m including 3m @ 1.01 g/t Au (hole GRA0415); and
  - **9m @ 0.26 g/t Au** from 54m (hole GRA0451)

The three gold targets were identified to have coincident magnetic breaks, dislocations of lithological units and medium-to-large scale soil anomalies with the potential to host >100koz gold deposits. These targets were either previously not tested or were poorly tested.

Drilling was designed to determine the source of the soil anomalism to gain a greater understanding of the geology and to identify favourable features to support the presence of significant gold mineralisation.

A breakdown of the number of holes and metres drilled by prospect is shown in Table 1.

**Table 1 – Number of holes and total metres drilled by prospect**

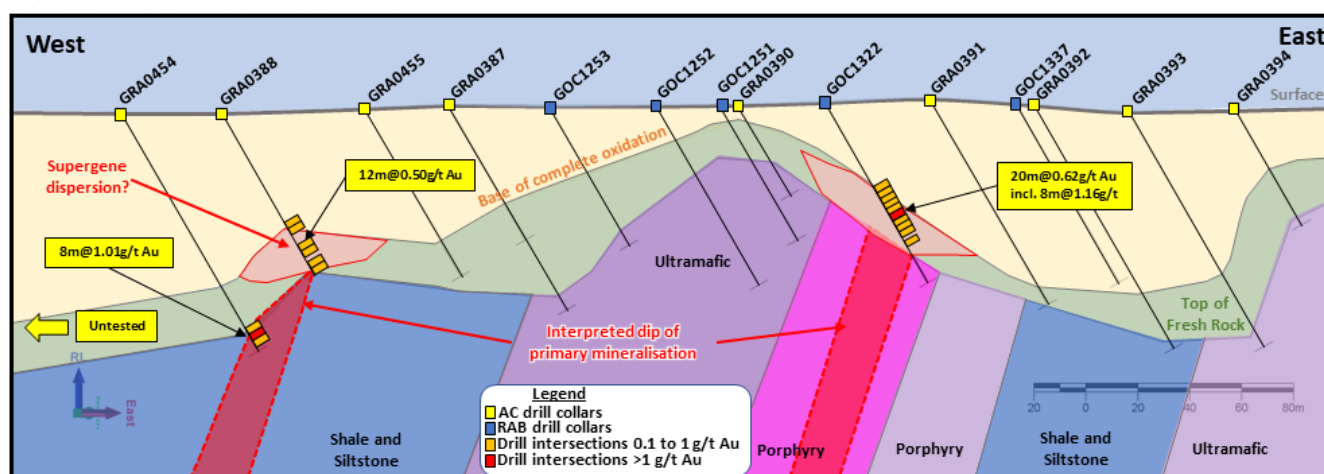
Prospect	No. holes drilled	Drill metres
Skandia	25	1,712
Maximus	26	1,853
AC75	41	2,515
<b>Total</b>	<b>92</b>	<b>6,080</b>

### SKANDIA PROSPECT

AC drilling at the Skandia Prospect tested a 600m strike length of gold, arsenic and molybdenum in-soil anomalism that is coincident with favourable aeromagnetic features and minor outcropping feldspar-phyrlic porphyry lithologies.

Gold mineralisation was intersected and significant results from this drilling are listed below and shown in Figure 6:

- **8m @ 1.01 g/t Au** from 96m including 3m @ 2.45g/t Au (hole GRA0454); and
- **12m @ 0.50 g/t Au** from 60m (hole GRA0388)



**Figure 6 – Cross-section through the middle line of Skandia AC drilling with the interpreted mineralised primary structures, supergene dispersion and bedrock lithologies. Note: west of section are prospective untested sediments.**

While the drilling did not intersect significant porphyry lithologies, it did highlight a thick shale/siltstone sediment unit in between two ultramafic units with moderate quartz brecciation and sulphidation observed in EOH chips.

## MAXIMUS PROSPECT

AC drilling at the Maximus prospect tested a 600m strike length of interpreted north-west south-east trending structures in an area of coincident >20ppb Au-in-soils anomalism. Samples taken from mullock heaps of the old Maximus workings that are in the vicinity of GRA0369 returned gold values of up to 14.89g/t Au (13 mullock samples returned an average of 1.68g/t Au). This mineralised zone is interpreted to be parallel to the Flying Ant trend.

The best AC drill results returned are as follows:

- **3m @ 3.0 g/t Au** from 30m including 1m @ 6.07g/t Au (hole GRA0375); and
- **5m @ 0.75 g/t Au** from 57m (hole GRA0369); and
- **3m @ 0.89 g/t Au** from 24m and 6m @ 0.17g/t Au (hole GRA0368).

## AC75 PROSPECT

AC drilling at the AC75 prospect tested a 650m long zone of north-south oriented, medium-to-large scale >20ppb Au gold-in-soil anomalism, in an area of minimal previous exploration activities.

Drilling intersected basalt and ultramafic lithologies with minor bands of chert and shale and the mineralisation intersected correlates with a roughly north-south oriented band of weakly brecciated shale and chert.

The best results from the program are as follows:

- **12m @ 0.49 g/t Au from 51m** including **3m @ 1.01 g/t Au** (hole GRA0415); and
- **9m @ 0.26 g/t Au** from 54m (hole GRA0451); and
- **6m @ 0.32 g/t Au** from 33m (hole GRA0449); and
- **6m @ 0.24 g/t Au** from 39m (hole GRA0413)

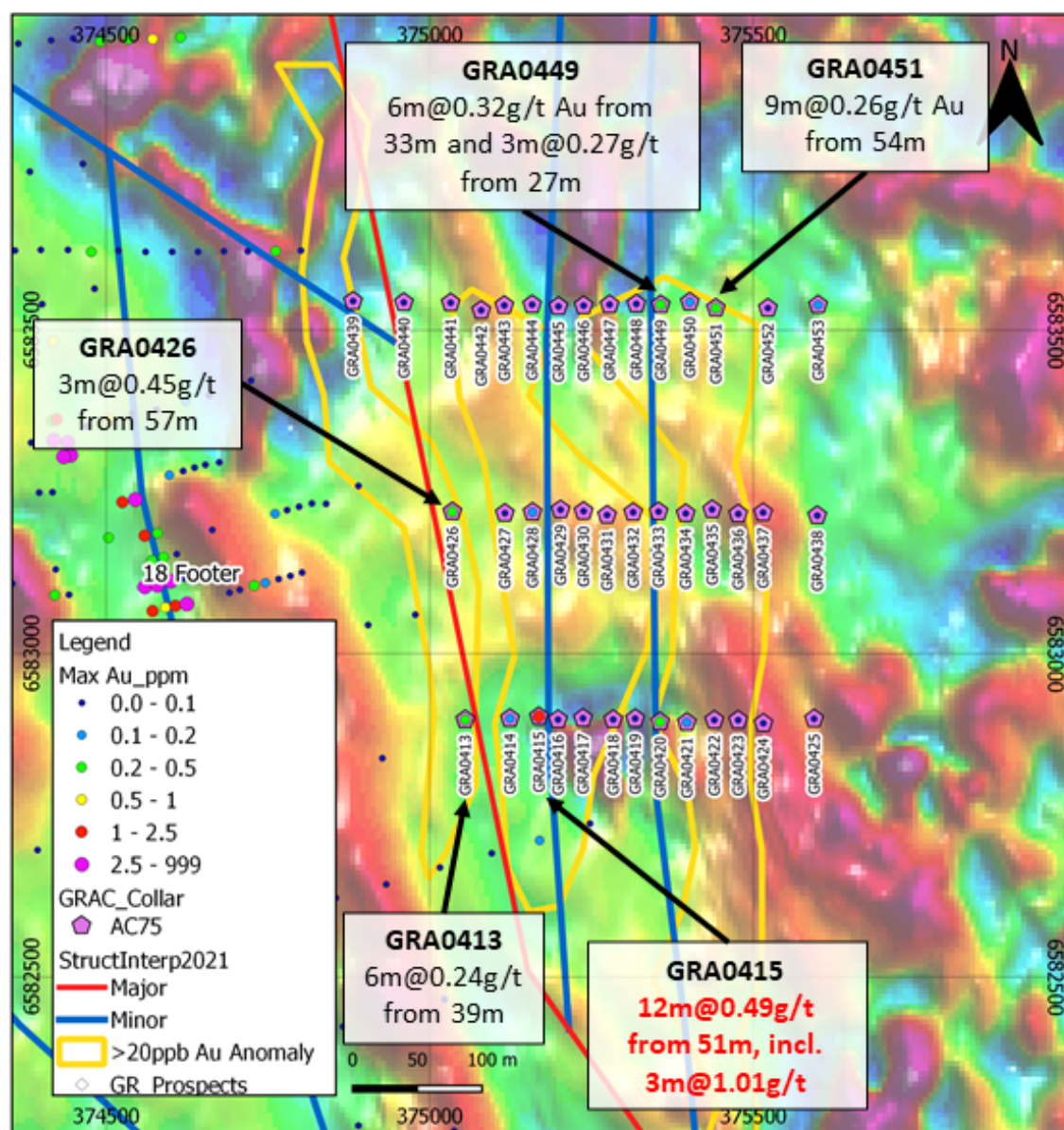


Figure 7 - Location of the AC75 AC drilling (pink pentagons), maximum Au (ppm) in drilling, area of >20ppb Au soil anomalism (yellow polygons) and interpreted structures from aeromagnetic (blue lines).



## JUGLAH DOME GOLD PROJECT

The Juglah Dome Project (ESS: 100%) is located ~60km east-southeast of Kalgoorlie and is highly prospective for gold mineralisation. Exploration by previous owners identified multiple gold targets using soil geochemistry and drilling. The Project lies in a similar geological setting to the Majestic and Imperial Deposits, located 10km to the north-west, and the Daisy Complex to the west, which forms part of Silver Lake Resources Limited's Mt Monger Operations.

No reportable activities for the Quarter.

## JOINT VENTURE INTERESTS

Essential Metals has a portfolio of minority (20%-30%) free-carried interests in four gold and two nickel joint ventures located in Western Australia and holds a 51% interest in a lithium joint venture in Ontario, Canada.

### **Balagundi Gold/Base Metals Joint Venture** Eastern Goldfields WA

***ESS 100% reducing to 25% - Black Cat Syndicate Limited (ASX: BC8) earning 75% (farm-in stage)***

The Balagundi Project is located 25km east of Kalgoorlie and sits immediately adjacent to the north-west portion of the Myhree Mining Centre within the Kurnalpi Terrane, which is separated from the Myhree Mining Centre by the Victory Fault (a second order regional structure). The project is prospective for both gold and base metal VMS-style deposits. Essential Metals and Black Cat entered into the Farm-in and Joint Venture in July 2019.

In July, Black Cat Syndicate Limited ("Black Cat") (ASX: BC8) met the Initial Commitment expenditure of \$150,000 under the Balagundi Gold & Base Metals Project Farm-in & Joint Venture and has elected to continue towards earning a 75% interest by spending a further \$450,000 within the next three years.

During the Quarter, Moving Loop Electromagnetic ground surveys commenced at the Anvil, Brontes and Asterope targets and a large auger sampling program commenced across the Kal East target. Please refer to the ASX announcement released by Black Cat on 26 July 2021 for more detailed information.

### **Acra Gold Joint Venture** Eastern Goldfields WA

***ESS 25% - Northern Star Resources Limited (ASX:NST) 75%***

No reportable activities for the Quarter.

**Wattle Dam Nickel Joint Venture (WDNJV)** Eastern Goldfields WA (nickel rights only)**ESS 20% - Maximus Resources Limited (ASX: MXR) 80%**

JV Operator, Maximus Resources Limited (Maximus), reported the assay results from a maiden drill programme at the West Hilditch target and three mineralised zones have been identified. Best results included:

- 5m @ 1.2% Ni, 0.23% Cu, 0.08% Co from 43m and
- 2m @ 1.5% Ni, 0.03% Co from 87m and
- 19m @ 0.4% Ni, 0.1% Cu, 2.4g/t Ag from 107m (HWRC004)
- 12m @ 0.5% Ni, 0.06% Co from 18m, including 2m @ 0.8% Ni, 0.2% Cu, 0.06% Co from 21m (HWRC003)
- 5m @ 0.3% Ni, 0.7% Cu, 0.09% Co from 3m (HWRC006)

Maximus then conducted a fixed-loop electromagnetic survey at the Hilditch Nickel targets and identified a strong late-time conductor at the Hilditch West target, as well as two shallow conductors along strike from and below the recent Hilditch West nickel-copper-cobalt Reverse Circulation drill intersections.

Maximus also announced the commencement of a major geophysics programme across the Central Nickel prospect, located on JV tenement M15/1771. The survey aims to define prospective zones for nickel sulphide mineralisation across several under-explored ultramafic corridors across the Central prospect.

Please refer to the following ASX announcements released by Maximus Resources (ASX: MXR) during the Quarter for more detailed information on the activities outlined above:

- 22 July 2021 – Nickel–Copper–Cobalt Sulphides intersected at Hilditch West
- 29 July 2021 – Shallow EM Conductor Identified at Hilditch West
- 7 September 2021 – Major Geophysics Programme Commences – Central Nickel target
- 29 September 2021 – Nickel Sulphides at Hilditch West

**Larkinvile East Gold Joint Venture (ELGJV)** Eastern Goldfields WA**ESS 25% - Maximus Resources Limited (ASX: MXR) 75%**

No reportable activities for the Quarter.

**Kangan Gold Project (ESS: 30% JV interest)** Pilbara, WA

The Kangan Project is located in the West Pilbara region of Western Australia. Under the farm-in & JV agreement with Novo Resources Corp and Sumitomo Corporation signed in June 2019, those parties now hold a 70% interest in the Project with Essential Metals retaining a 30% interest.

Novo and Sumitomo will jointly fully fund gold exploration programmes, with Essential Metals free-carried until a decision to mine is made.

No reportable activities for the Quarter.



## CORPORATE

As at 30 September 2021, the Company held **\$9 million in cash reserves** and had no debt.

During the quarter, the Company completed an oversubscribed \$5 million (gross) share placement at a price of \$0.125 per share. 40,000,000 ordinary shares were issued to sophisticated and institutional investors, including to the Company's directors (1,200,000 shares), as announced on 4 August 2021 and following approval by shareholders at a general meeting held on 16 September 2021.

The Company also issued 22,674 Shares upon the conversion of ESSO listed Share Options during the quarter.

During the quarter, the Company paid a total of A\$135,000 to related parties, comprising all directors of the Company (Managing Director salary, non-executive director fees and superannuation). (Appendix 5B, Item 6).

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*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

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**References to ASX announcements:**

- 15 October 2021 – High grade assay results from Cade Deposit
- 28 September 2021 – Pioneer Dome Lithium Project update
- 25 August 2021 – Dome North lithium drilling completed
- 4 August 2021 – Placement to fund ramp up in activities
- 19 July 2021 - Dome North lithium drilling commences
- 8 July 2021 - New gold zones at Golden Ridge

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.



## ABOUT ESSENTIAL METALS LIMITED

Essential Metals is a well-funded and active explorer focused on key global demand-driven commodities, focussed on 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 LCT Project** is highly prospective for lithium-caesium-tantalum (LCT) mineral systems and includes the **Dome North Lithium Mineral Resource** of 11.2 million tonnes @ 1.21% Li<sub>2</sub>O.
- **GOLD:** The **Juglah Dome Project** is located 60km east-southeast of Kalgoorlie and is considered to be highly prospective for gold and has potential for VHMS style polymetallic deposits.
- **GOLD:** The **Golden Ridge Project** is located ~20km SSE 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:

- **LITHIUM:** The Company holds a 51% Project interest in the **Mavis Lake** Project, Ontario, Canada where drilling has intersected spodumene.
- **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) and Sumitomo Corporation (TYO:8053), who will jointly fund 100% of gold exploration programmes until a decision to mine is made, with Essential Metals holding a 30% interest.
- **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 gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 25% interest.
- **GOLD:** The Company holds a 25% free-carried interest (gold only) in the **Larkinvile** 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 Crest Investment Group, a nickel exploration specialist which is earning up to a 75% interest. The Company will retain a 25% free-carried interest up to a decision to mine.
- **NICKEL:** The Company holds a 20% free-carried interest (nickel only) in the **Wattle Dam** project near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).



## **Forward Looking Statements**

This document 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.

## **Exploration Results (ESS Projects) – Competent Person Statement**

Mr Andrew Dunn (MAIG), Exploration Manager who is employed full-time by Essential Metals Limited, compiled the technical aspects of this Report, other than pertaining to the Joint Ventures. Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization 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.

## **Exploration Results (Wattle Dam and Larkinvile Joint Ventures) – Competent Person Statement**

The information in this report pertaining to the Wattle Dam Nickel JV and the Larkinvile JV is based on information reviewed, collated and compiled by Dr Travis Murphy, a full-time employee of Maximus Resources Limited. Dr Murphy is a professional geoscientist and Member of The Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of Deposit under consideration and to the activity which has been undertaken, to qualify as a Competent Person 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. Dr Murphy consents to the inclusion in the report of the matters based on information in the form and context in which it appears.



## Appendix 1

The following information is provided in accordance with ASX Listing Rule 5.3 for the Quarter.

1. Listing of Tenements (Consolidated Basis)

Tenement	Holder	Notes	Status
<b>Pioneer Dome Project Located 133km SSE of Kalgoorlie, WA</b>			
E15/1515	Essential Metals Limited		Granted
E15/1522	Essential Metals Limited		Granted
E15/1725	Essential Metals Limited		Under application
E63/1669	Essential Metals Limited		Granted
E63/1782	Essential Metals Limited		Granted
E63/1783	Essential Metals Limited		Granted
E63/1785	Essential Metals Limited		Granted
E63/1825	Essential Metals Limited		Granted
E63/2118	Essential Metals Limited		Under application
L63/77	Essential Metals Limited		Granted
M63/665	Essential Metals Limited		Granted
<b>Golden Ridge Nickel Project Located 30km SE of Kalgoorlie, WA</b>			
E26/186	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
E26/211	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
E26/212	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
M26/220	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
M26/222	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
M26/284	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
M26/285	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
L26/272	Golden Ridge North Kambalda Pty Ltd	1, 2	Granted
<b>Juglah Dome Project Located 60km ESE of Kalgoorlie, WA</b>			
E25/585	Western Copper Pty Ltd	3	Granted
<b>Regional Projects, Located in WA</b>			
E15/1710	Essential Metals Limited		Granted
<b>Kangan Lithium Project Located 80km S of Port Hedland, (Wodgina) WA</b>			
E45/4948	Essential Metals Limited	5	Granted
E47/3318-I	Essential Metals Limited	4, 5	Granted
E47/3321-I	Essential Metals Limited	4, 5	Granted
E47/3945	Essential Metals Limited	5	Granted
<b>Balagundi Gold &amp; Base Metals Project Located 25km NE of Kalgoorlie, WA</b>			
E27/558	Essential Metals Limited	6	Granted
<b>Mavis Lake Project, Located 10km East of Dryden, Ontario, Canada</b>			
6 Mining Leases with Surface Rights	Pioneer Canada Lithium Corp 51% International Lithium Corporation 49%	7	Granted
189 Unpatented Mining Claims	Pioneer Canada Lithium Corp 51% International Lithium Corporation 49%	7	Granted



<b>Acra Gold Project Located 60km NE of Kalgoorlie, WA</b>			
E27/278	Essential Metals Limited / Northern Star Resources Limited	8, 9	Granted
E27/438	Essential Metals Limited / Northern Star Resources Limited	8, 9	Granted
E27/491	Essential Metals Limited / Northern Star Resources Limited	9	Granted
E27/520	Essential Metals Limited / Northern Star Resources Limited	8, 9	Granted
E27/548	Essential Metals Limited / Northern Star Resources Limited	9	Granted
E27/579	Essential Metals Limited / Northern Star Resources Limited	8, 9	Granted
E28/1746	Essential Metals Limited / Northern Star Resources Limited	8, 9	Granted
E28/2483	Essential Metals Limited / Northern Star Resources Limited	9	Granted

<b>Tenement</b>	<b>Holder</b>	<b>Notes</b>	<b>Status</b>
<b>Wattle Dam Nickel Project Located 65km S of Kalgoorlie, WA</b>			
M15/1101	Maximus Resources Limited	10, 11	Granted
M15/1263	Maximus Resources Limited	10, 11	Granted
M15/1264	Maximus Resources Limited	10, 11	Granted
M15/1323	Maximus Resources Limited	10, 11	Granted
M15/1338	Maximus Resources Limited	10, 11	Granted
M15/1769	Maximus Resources Limited	10, 11	Granted
M15/1770	Maximus Resources Limited	10, 11	Granted
M15/1771	Maximus Resources Limited	10, 11	Granted
M15/1772	Maximus Resources Limited	10, 11	Granted
M15/1773	Maximus Resources Limited	10, 11	Granted
<b>Larkinvile Lithium, Nickel Project Located 75km S of Kalgoorlie, WA</b>			
M15/1449	Essential Metals Limited / Maximus Resources Limited	12, 13	Granted
P15/5912	Essential Metals Limited / Maximus Resources Limited	12, 13	Granted
<b>Maggie Hays Hill JV, Located 140km SE of Southern Cross</b>			
E63/1784	Essential Metals Limited / Poseidon Nickel Limited	14	Granted
<b>Katanning Gold Project Located 275km SE of Perth, WA</b>			
E70/5040	Ausgold Exploration Pty Ltd	15	Granted
E70/5042	Ausgold Exploration Pty Ltd	15	Granted
E70/5043	Ausgold Exploration Pty Ltd	15	Granted
E70/5044	Ausgold Exploration Pty Ltd	15	Granted

<b>Note</b>	
1	Golden Ridge North Kambalda Pty Ltd is a wholly owned subsidiary of Essential Metals Limited.
2	Nickel sulphides rights are subject to the Australian Nickel Company Ltd Farmin/Joint venture.
3	Western Copper Pty Ltd is a 100% owned subsidiary of Essential Metals Limited.
4	FMG Pilbara Pty Ltd 1.5% NSR royalty.
5	Kangan Farmin Agreement: Novo Resources Corp. may earn a 70% Project Interest (excluding lithium and related minerals).
6	Balagundi Farmin Agreement: Black Cat Syndicate Limited may earn a 75% Project interest.



7	Subject to an earn-in Joint Venture with International Lithium Corp. a 100% owned subsidiary of Essential Metals Limited.
8	Heron Resources Limited retains nickel laterite ore rights.
9	Acra JV Agreement Northern Star Resources Limited 75% interest. Essential Metals Limited 25% free carried interest.
10	Heron Resources Limited retains pre-emptive right to purchase nickel laterite ore.
11	Wattle Dam JV Agreement: Title, Mineral Rights held by Maximus Resources Limited, except nickel. Essential Metals Limited 20% free carried interest in nickel sulphide minerals.
12	Larkinville JV Agreement: Maximus Resources Limited 75%, Essential Metals Limited 25% free carried interest.
13	Larkinville JV Agreement: Maximus has an 80% interest in nickel rights, Essential Metals Limited 20% free carried interest in nickel rights.
14	Maggie Hays Lake JV Agreement: Poseidon Nickel Limited 80%, Essential Metals Limited 20% & free carried interest to commencement of mining.
15	Katanning Gold Project: Essential Metals Limited 1.5% NSR.

**2. Tenements acquired during the Quarter (Consolidated Basis)**

None.

**3. Tenements relinquished, reduced or lapsed during the Quarter (Consolidated Basis)**

None.

**4. Tenements applied for during the Quarter (Consolidated Basis)**

None.

## Appendix 5B

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

Name of entity

**ESSENTIAL METALS LIMITED**

ABN

**44 103 423 981**

Quarter ended ("current quarter")

**30 September 2021**

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(3)	(3)
	(b) development	-	-
	(c) production	-	-
	(d) royalties	-	-
	(e) staff costs	(206)	(206)
	(f) administration and corporate costs	(142)	(142)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	3	3
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	13	13
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(335)</b>	<b>(335)</b>
<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(15)	(15)
	(d) exploration & evaluation	(821)	(821)
	(e) investments	-	-
	(f) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(836)</b>	<b>(836)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	5,000	5,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	3	3
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(317)	(317)
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)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>4,686</b>	<b>4,686</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	5,465	5,465
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(335)	(335)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(836)	(836)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	4,686	4,686

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>8,980</b>	<b>8,980</b>

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	3,980	2,465
5.2	Call deposits	5,000	3,000
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>8,980</b>	<b>5,465</b>

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	135
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

7.	Financing facilities <i>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.</i>	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	<b>Total financing facilities</b>	<b>-</b>	<b>-</b>
7.5	<b>Unused financing facilities available at quarter end</b>		-
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)	(335)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(836)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,171)
8.4	Cash and cash equivalents at quarter end (item 4.6)	8,980
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	8,980
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	7.67
<i>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.</i>		
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: N/A	
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: N/A	
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: N/A	
<i>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.</i>		

## 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: 22 October 2021

Authorised by: The Board of Directors  
(Name of body or officer authorising release – see note 4)

## 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.

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

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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.