



ASX Announcement
25 October 2024

Leading-edge geophysics to accelerate targeting at Thomson Announcement dated 21 October 2024 - Amended

On 21 October 2024, Legacy Minerals Holdings Limited (**ASX: LGM**, "**LGM**", "**the Company**" or "**Legacy Minerals**") made a market announcement titled "Leading-edge geophysics to accelerate targeting at Thomson".

The Announcement disclosed:

- Figure 2: Project overview showing EL9190, EL9194, ELA6777 and examples of "bullseye" magnetic targets (inset);
- Examples of Thomson Project Targets including CUT-B Anomaly – "Historical drilling appears to have missed the magnetic anomaly however mineralised veins were noted with assays up to 113g/t Ag, 0.5% Cu and 4.2% Zn."; and
- Figure 3: Aeromagnetic RTP images showing examples of discrete magnetic targets on the project.
- Endnote viii provided cross-reference to the source of information being "Eastern Meals Limited Prospectus, Dated 18th August 2021, Thomson Resources Limited Prospectus, dated 22 October 2010" to the above disclosures.

Endnote viii was incorrectly referenced and has been amended:

- Endnote vi now states:
 - "Scale reduction for exploration using ambient noise tomography Learnings from Pakistani and Australian porphyry deposits, Fleet Space Technologies, Latin Rocks 2024"
- Endnote ix now states:
 - "2010; ASX Release TMZ 22 September 2022 Drilling intersects three large polymetallic mineralised systems"
- Endnote x now states:
 - "ASX Release LGM 24 June 2024 Bullseye Targets Secured in 5,500km² Belt-Scale Project."

To comply with ASX Listing Rule 5.23.1, following is the Company's amended announcement dated 21 October 2024.

Approved by the CEO & Managing Director of Legacy Minerals Holdings Limited.

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Fleet Space engaged to accelerate drill targeting at Thomson

Leading-edge geophysics targeting 5,500km² Belt-Scale Gold and Copper Project

Large-Scale Geophysical Survey Using ExoSphere Real-Time 3D ANT Imaging

- The survey seeks to gather large-scale, 3D subsurface data to identify belt-scale architecture including cross-arc structures that may direct fluid flow and influence the formation of large-scale intrusive bodies and mineral systems.
- Lightweight seismic sensors (Geodes) are placed on the ground in a grid, capturing high-quality 3D Ambient Noise Tomography (ANT) data at scale while minimising environmental impact.
- Real-time 3D ANT data from the sensors is transmitted to Fleet Space’s proprietary satellite network in low Earth orbit and converted into detailed 3D visualisations of the subsurface, enhancing mineral systems knowledge and drill targeting decisions on site

ANT imaging being implemented by major mining companies

- 2024 Barrick Goldⁱ, Reko Diq porphyry Cu-Auⁱⁱ for near-mine targeting.
- 2024 Gold Fieldsⁱⁱⁱ, Salares Norte: porphyry/epithermal for near-mine targeting.
- 2023-2024 Anglo Gold Ashanti (NSW Macquarie Arc, Inflection Resources and Kincora Copper) searching for undercover porphyry Cu-Au deposits with recent Fleet driving results delivering some of the best drilling to date by Inflection Resources^{iv}

ANT results to guide drill testing of discrete, “bullseye” targets

- **Across the Thomson Project there are numerous, undercover targets defined by discrete, “bullseye” magnetic and gravity anomalies with similar character to other Tier-1 deposits.**
- The limited historical drilling has been either too shallow, or mis-targeted, to have tested the magnetic and gravity anomalies but has intersected widespread alteration and mineralisation^v.
- The survey is expected to start in November with interpretation and potential drill targets expected within a few weeks of completion.

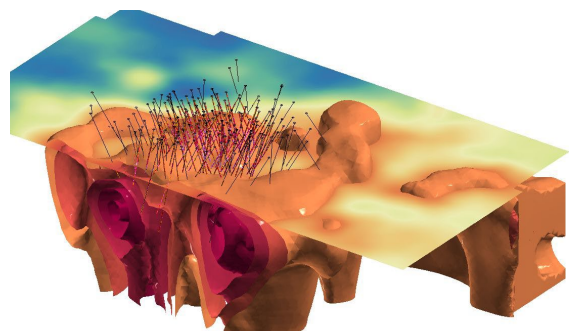
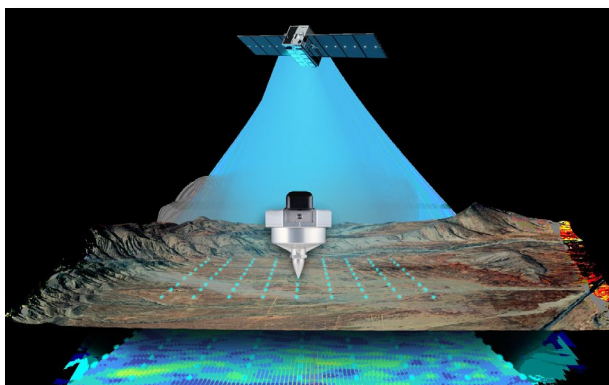


Figure 1: Fleet ANT sampling example and 3D Model example^{vi} (Reko Diq, Barrick 5.35 Bt at 0.41% Cu and 0.22g/t Au^{vii}).

Legacy Minerals Holdings Limited (ASX: LGM, “LGM”, “the Company” or “Legacy Minerals”) is pleased to report the engagement of Fleet Space to conduct a large-scale geophysical survey at the Thomson Project (ELA6777, EL9194, EL9190).

Management comment Legacy Minerals CEO & Managing Director, Christopher Byrne said:

“The Thomson Project presents a rare, unexplored belt-scale gold and copper search space across 5,500km² with a multitude of high-quality and untested ‘bullseye’ magnetic and gravity targets. As part of our plans to fast track a potential discovery we are excited to implement Fleet Space’s end-to-end mineral exploration solution driven by space and 3D artificial intelligence ExoSphere modelling.

“Fleet Space’s real-time 3D ANT surveys have rapidly become an important new exploration tool that is being utilised by major miners, including Barrick and Anglo Gold Ashanti, to target undercover discoveries. It provides a systematic dataset that when combined with regional gravity and magnetic surveys helps prioritise areas for drill testing.”

“Based on our consideration that the Southern Thomson region is one of the most under-explored orogens in Australia, we staked a significant position in line with the belief that the next major new mineral province will be undercover and is yet to be found.

“Using this latest cutting-edge technology, Legacy Minerals is attempting to make a major discovery in the district and we are moving quickly with the survey planned to commence in November with results expected within this quarter.”

Thomson – Belt scale Intrusion-Related Gold and Copper Project

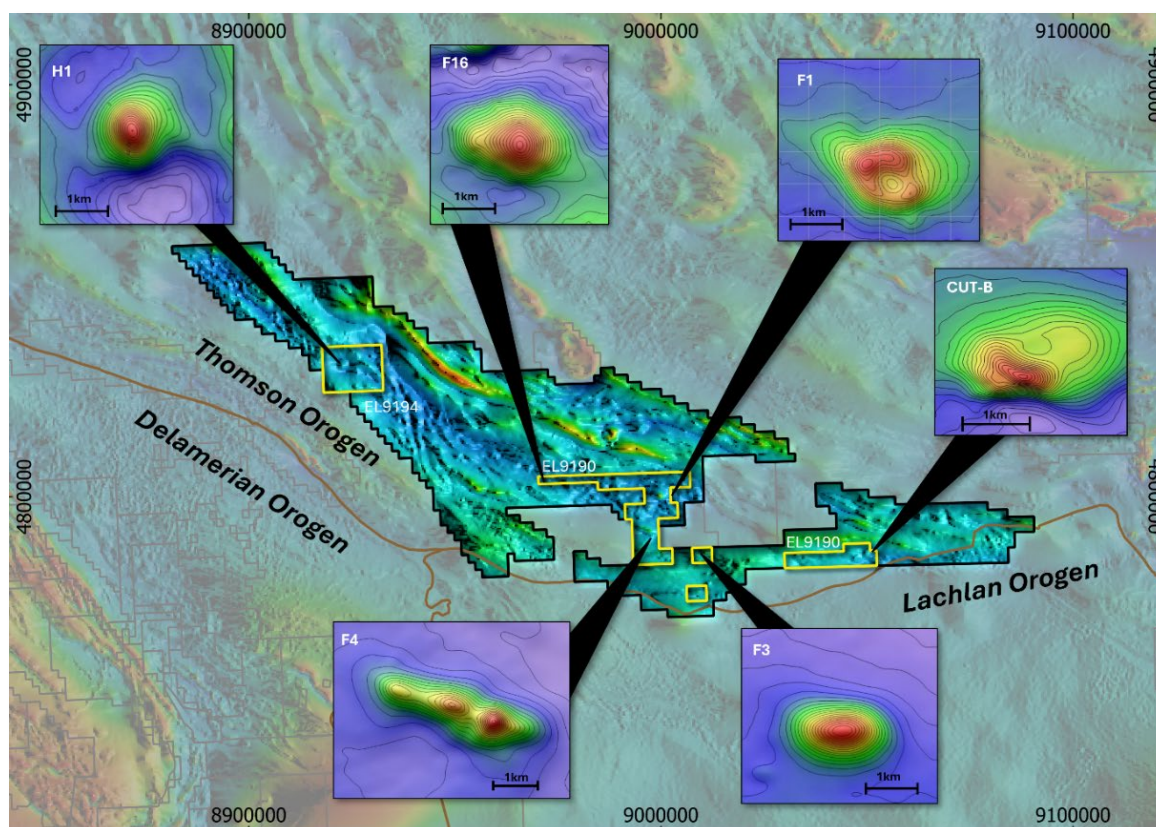


Figure 2: Project overview showing EL9190, EL9194, ELA6777 and examples of “bullseye” magnetic targets (inset).

Located west of Bourke, the Thomson Project covers 5,500km² of tenure under granted and pending exploration licenses, securing a belt-scale exploration opportunity for Legacy Minerals shareholders. Legacy Mineral's is now exploring across nine projects in NSW, with four under farm-in and joint venture agreements covering more 8,000km² of tenure.

The Thomson Project is located near the southern margin of the Thomson Orogen nearby the interpreted contact with the Lachlan Fold Belt and the Delamerian Orogen. The Thomson Orogen covers a large area of Queensland and north-western New South Wales, mostly under cover of the Mesozoic Eromanga Basin. The dominant basement rocks are interpreted to consist of Cambrian to Ordovician volcanics, metamorphosed turbidite, siltstone, and slate that are intruded by Silurian to Devonian felsic and mafic igneous rocks.

- Several deep stratigraphic drillholes, such as Tongo1, Laurelvale 1, completed by the NSW Geological Survey (GSNSW).
- Historic drillholes completed by previous exploration companies.
- The incorporation and interpretation of regional geophysical data (aeromagnetic, gravity and seismic) conducted by the GSNSW with geology logged in drill holes.

The Thomson Project is covered by younger sediments that ranges up 280m thick. These sediments are part of the Eromanga and the Surat Basin cover sequences. This cover has historically, in part, deterred exploration and has limited the realisation of the Thomson Orogen's mineral potential. Importantly, historical work indicates that this cover sequence is geophysically transparent with a number of the key geophysical targeting methods such as magnetics and gravity providing highly useful and important data sets.

The GSNSW has suggested that the basement rocks within the Thomson Orogen have the possibility to hold similar mineral potential to the adjoining belts, including the base metal and gold endowment of the Lachlan Orogen to the south which is over 80Moz gold and 13Mt copper^{viii}. A series of major, belt-scale faults are observable that may act as major fluid flow conduits during both early extensions and later deformation of the belt.

The survey is expected to start quarter four this year with interpretation expected within a few weeks of completion. This interpretation and 3D model will be used in conjunction with existing geophysical, drilling, and geochemical datasets to define drill targets for testing.

About Fleet

Fleet Space Technologies, Australia's leading space exploration company based in Adelaide, is revolutionizing critical mineral discovery with its end-to-end mineral exploration solution, ExoSphere, which combines the company's proprietary satellite network, 3D multiphysics, and AI to image mineral systems in real-time. Over 40 leading exploration companies like Rio Tinto, Barrick Gold, and Core Lithium have used ExoSphere's real-time 3D subsurface imaging on projects across five continents.

ExoSphere's vertically integrated technology stack has unlocked hyper-scalable, predictive, and low-impact exploration capabilities worldwide. Recently, Fleet Space conducted the world's largest real-time 3D ANT survey with Inflection Resources across 1800km² in the Macquarie Arc, announced plans to deliver the world's highest real-time 3D ANT survey between 3900-4700 meters above sea level at Salares Norte in Chile with Gold Fields, and delivered real-time 3D imaging on copper porphyry complexes across 1,150km² of Barrick Gold's Reko Diq project.

Building on its exponential growth and sustained innovation in space technologies, Fleet Space was named "Australia's Fastest Growing Company" by the Australian Financial Review in 2023, winner of the Innovation category at the 2024 Mining Technology Excellence Awards, and received the Climate Impact Technology Award at the Banksia Foundation's 35th National Sustainability Awards.

Example of Thomson Project Targets

F1 Anomaly^{ix}

A fence line of three Reverse Circulation and Diamond core holes was completed at the F1 anomaly. Drilling intercepted an I-type intrusive granodiorite with hydrothermal alteration was noted as occurring with pyrrhotite, minor chalcopyrite and molybdenite intergrown with coarse muscovite, interstitial to igneous quartz, feldspar and biotite, within granodioritic host rocks. The easternmost drillhole (F1DD01), passed through anomalous molybdenum (up to 0.2% Mo) as well as other IRG pathfinders including Bi, As (up to 1%) and Au (up to 0.24g/t). The overall pattern between the three drillholes suggests a pathfinder zonation in the F1 anomaly, pointing to potential for high gold zones in association with magnetic high responses, outside the centre of the intrusion. Modelling indicates the historical drill holes did not test the discrete magnetic high anomaly.

H1 Anomaly^{ix}

A discrete magnetic high where regional aeromagnetics suggests the anomaly is underlain by a large intrusive. Drilling intersected significant fluorite in veins indicating the influence of igneous fluids and hydrothermal mineralisation. Disseminated magnetic pyrrhotite becomes more abundant towards the bottom of the hole corresponding to increasing Zn anomalism. Modelling indicates the magnetic target was not tested.

CUT-B Anomaly^{ix}

The coincident gravity high and magnetic high anomaly shows the close spatial relationship between magnetic material and dense material located in a favourable structural position. Historical drilling appears to have missed the magnetic anomaly however mineralised veins were noted with assays up to 113g/t Ag, 0.5% Cu and 4.2% Zn. These veins are within a 300 m zone of strong carbonate and silica alteration indicative of a large, metalliferous, hydrothermal system which the Company interprets to have not been tested.

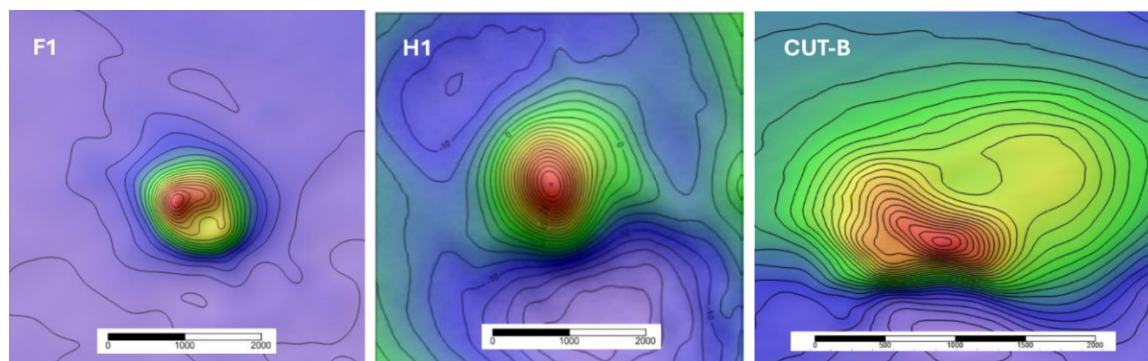


Figure 3: Aeromagnetic RTP images showing examples of discrete magnetic targets on the project.

Details of the Thomson Acquisition

Legacy Minerals wholly owned subsidiary, Starlight Exploration Pty Ltd (Starlight), is in the process of acquiring Exploration Licences EL9190 and EL9194 for A\$200k in cash from Eastern Metals Limited. A\$50k has been paid, with the remaining \$150k upon transfer of the tenements. Starlight will grant a 1.5% royalty to EMS and have the option to buy back 0.75% of the royalty for A\$2M and the remaining \$0.75% for A\$4M at any stage^x.

Approved by the Board of Legacy Minerals Holdings Limited.

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DISCLAIMER AND PREVIOUSLY REPORTED INFORMATION

Information in this announcement is extracted from reports lodged as market announcements referred to above and available on the Company's website <https://legacyminerals.com.au/>. The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

This announcement contains certain forward-looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Legacy Minerals Holdings Limited (LGM). These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward-looking statements. Any forward-looking statements in this announcement reflect the views of LGM only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, LGM does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward-looking statements is based.

COMPETENT PERSON'S STATEMENT

The information in this Report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Thomas Wall, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Wall is the Technical Director and a full-time employee of Legacy Minerals Pty Limited, the Company's wholly-owned subsidiary, and a shareholder of the Company. Mr Wall has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Wall consents to the inclusion of the matters based on this information in the form and context in which it appears in this announcement.

About Legacy Minerals

Legacy Minerals is an ASX listed public company that has been involved in the acquisition and exploration of gold, copper, and base-metal projects in NSW since 2017. The Company has nine projects that present significant discovery opportunities for shareholders.

<p>Au-Ag Black Range (EL9464, EL9589)</p> <p>Extensive low-sulphidation, epithermal system with limited historical exploration. Epithermal occurrences across 30km of strike.</p>	<p>Cu-Au Drake (EL6273, EL9616, ELA6642)</p> <p>Large caldera (~150km²) with similar geological characteristics to other major pacific rim low-sulphidation deposits.</p>
<p>Cu-Au Rockley (EL8926)</p> <p>Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks with historic high-grade copper mines that graded up to 23% Cu.</p>	<p>Au-Cu (Pb-Zn) Cobar (EL9511) Helix JV</p> <p>Undrilled targets next door to the Peak Gold Mines. Several priority geophysical anomalies and gold in lag up to 1.55g/t Au.</p>
<p>Au-Ag Bauloora (EL8994, EL9464) Newmont JV</p> <p>One of NSW's largest low-sulphidation, epithermal systems with a 27km² epithermal vein field.</p>	<p>Au Harden (EL9657)</p> <p>Large historical high-grade quartz-vein gold mineralisation. Drilling includes 3.6m at 21.7g/t Au 116m and 2m at 17.17g/t Au from 111m.</p>
<p>Cu-Au Glenloghan (EL9614) S2 Resources JV</p> <p>Large, undrilled magnetic anomaly underneath Silurian cover located 55kms from Cadia Valley.</p>	<p>Au-Cu Fontenoy (EL8995) Earth AI JV</p> <p>Significant PGE, Au and Cu anomalism defined in soil sampling and drilling. Significant drill intercepts include 120m @ 0.3g/t PGE from 298, and 79m at 0.27% Cu from 1.5m.</p>

Cu-Au Thomson (EL9190, EL9194, ELA6777)

Prospective for intrusion-related gold and copper systems the project contains numerous 'bullseye' magnetic and gravity anomalies that remain untested.

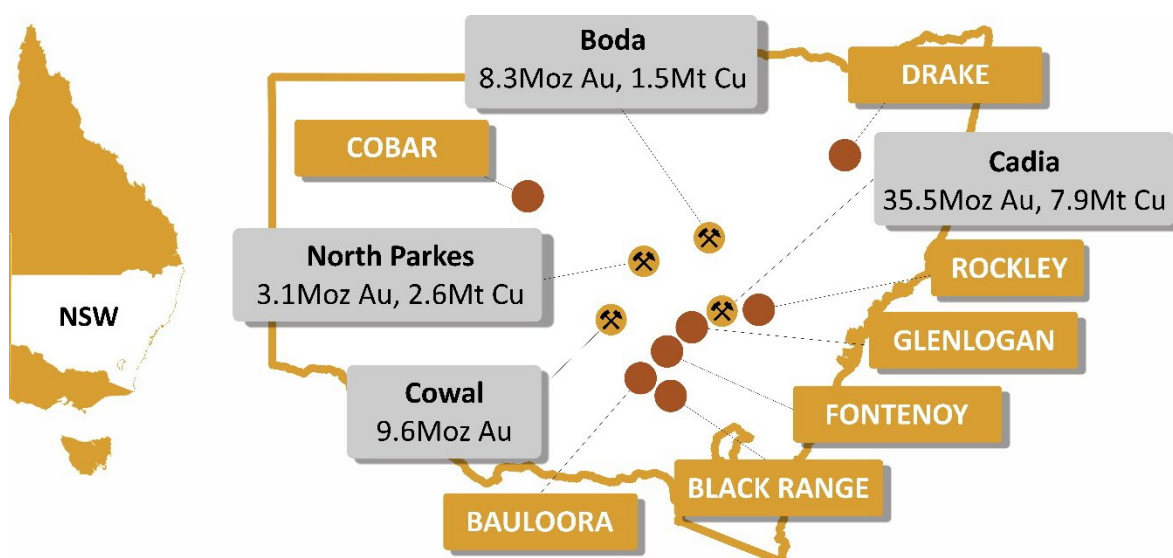


Figure 4: Location of Legacy Minerals' Projects in NSW, Australia^{xi}

Endnotes

ⁱ Gold Fields Taps ExoSphere To Advance Exploration at Salares Norte in Chile, 3 October 2024 https://www.fleetspace.com/newsroom/fleet-spaces-exosphere-enhances-barrick-golds-data-driven-copper-exploration-at-reko-diq?utm_content=301564494&utm_medium=social&utm_source=linkedin&hss_channel=lcp-7952023

ⁱⁱ Fleet Space's ExoSphere Enhances Barrick Gold's Data-Driven Copper Exploration at Reko Diq, 9 July 2024, [Barrick - Reko Diq Copper-Gold Project](#)

ⁱⁱⁱ <https://www.fleetspace.com/newsroom/gold-fields-taps-exosphere-to-advance-exploration-at-salares-norte-in-chile> , ExoSphere Unlocks Geological Potential of America's Largest Copper Producing Region, 15 August 2024, [ExoSphere Unlocks Geological Potential of America's Largest Copper Producing Region | Blog | Aug 15, 2024 \(fleetspace.com\)](#)

^{iv} Inflection Resources Provides Drilling Update from Phase II Duck Creek Exploration Program in New South Wales 3rd October 2024

^v Geophysical Report Thomson Projects EL9190 And EL9194 For Eastern Metals Limited

^{vi} Scale reduction for exploration using ambient noise tomography Learnings from Pakistani and Australian porphyry deposits, Fleet Space Technologies, Latin Rocks 2024

^{vii} Abdul Razique, Richard Tosdal, Farhad Bouzari, 2016. "Anatomical Similarities and Differences Between Spatially Associated Porphyry Copper-Gold Deposits at the Reko Diq H14 and H15 Complex, Balochistan, Pakistan", Tectonics and Metallogeny of the Tethyan Orogenic Belt, Jeremy P. Richards

^{viii} Lachlan Fold Belt Project <https://www.ga.gov.au/about/projects/resources/lachlan>

^{ix} Eastern Meals Limited Prospectus, Dated 18th August 2021; Thomson Resources Limited Prospectus, dated 22 October 2010; ASX Release TMZ 22 September 2022 *Drilling intersects three large polymetallic mineralised systems*

^x ASX Release LGM 24 June 2024 *Bullseye Targets Secured in 5,500km² Belt-Scale Project*

^{xi} Evolution Mining 2022 Annual Report, Newmont 2023 Reserves Statement, Newmont 2023 Reserves Statement, ASX EVN: 8 May 2024 *Macquarie Conference Presentation*, ASX ALK: 29 April 2024 *Revised Kaiser Resource Est Improves Confidence and Grade*

Table 1: Major Mineral Resources of NSW

Project & Company	Mineral Resource	Measured Resource	Indicated Resource	Inferred Resource
Boda-Kaiser, NSW (Alkane Resources Ltd)	7.26Moz Au, 1.38Mt Cu	-	-	8.28Moz Au, 1.46Mt Cu
Cadia-Ridegway, NSW (Newmont Corporation)	35.3Moz Au, 7.8Mt Cu	0.3Moz Au, 0.045Mt Cu	30.9Moz Au, 6.9Mt Cu	4.1Moz, 0.9Mt Cu
Cowal, NSW (Evolution Mining Limited)	9.618Moz Au	0.367Moz Au	7.33Moz Au	1.92Moz Au
Nth Parkes, NSW (CMOC Mining Pty Ltd)	3.09Moz Au, 2.63Mt Cu	1.64Moz Au, 1.2Mt Cu	1.1Moz Au, 1.1Mt Cu	0.35Moz Au, 0.33Mt Cu