



## Drilling Underway Targeting Palladium-Platinum at Fontenoy Project

### Geochemistry and geophysics outline undrilled PGE-Ni-Cu targets

#### Diamond drilling commenced

- Diamond drilling has commenced at the Fontenoy Project in NSW with two initial holes planned for 1,300m funded under the under the Earth AI Exploration Alliance<sup>i</sup>.
- The drilling is targeting magmatic-related PGEs (platinum group elements)-Ni-Cu (nickel-copper) mineralisation at new, undrilled prospects.
- These new prospects are 800m away from the first pass drilling completed in January 2024 which returned strong PGE mineralisation including<sup>ii</sup>:
  - **32m at 0.5g/t 3E PGE (Pt+Pd+Au)** from 386m including:
  - **10m at 1.2g/t 3E PGE, 0.2% Ni and 891ppm Cu** from 388m down-hole (EFO7D).

#### Drilling will be focused within a 5km<sup>2</sup> PGE soil anomaly

- **2km x 2.5km PGE soil anomaly of >20ppb palladium (Pd) + platinum (Pt)**<sup>iii</sup>
- Reconnaissance rock chip results returned grades up to **1.1g/t 3E PGE**.
- The new targets include the highest PGE soil assay to date of 330ppb 3E PGE.

#### Portfolio Summary

- **Fontenoy Project - Drilling is expected to take approximately two months to complete**
- Bauloora Project – Drilling completed at three new prospects with assays pending<sup>iv</sup>.
- Drake Project – Set up of regional field office commenced, with site secured, data compilation, review nearing completion to focus epithermal Au-Ag targeting strategy.
- Glenlogan Project – Drilling of priority porphyry Cu-Au target has commenced with earn-in partner S2 Resources. Drilling anticipated to take six weeks to complete<sup>v</sup>.
- Thomson Project - Land access commenced over intrusion related Au-Cu targets.



Figure 1: Diamond drill rig in onsite at the Fontenoy Project, NSW

Legacy Minerals Holdings Limited (ASX: LGM, “LGM”, “the Company” or “Legacy Minerals”) is pleased to provide an update on exploration work completed by its Exploration Alliance Partner, Earth AI, at the Company’s 100%-owned Fontenoy Project (EL8995), NSW.

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

“We are very pleased to have a rig now spinning at the Fontenoy Project with our Alliance Partner Earth AI. The discovery of magmatic PGE-Ni-Cu mineralisation using artificial intelligence earlier this year was a breakthrough for the Fontenoy Project, with follow-up work in the form of a detailed gravity survey and soil and rock chip sampling delivering strong targets for drill testing.

“The drilling will target newly identified zones of anomalous PGEs-in-soils, which have never been drilled. These targets are also supported by coincident density highs that are thought to reflect potential PGE-bearing lithology.

“Legacy Minerals looks forward to seeing the outcomes of this drilling, which has the potential to deliver significant value for shareholders. In parallel with this work, the Leacy Minerals’ field team continues to complete generative targeting work across our portfolio and is also preparing the Drake field office and site sheds for field work programs anticipated to commence later this year.”

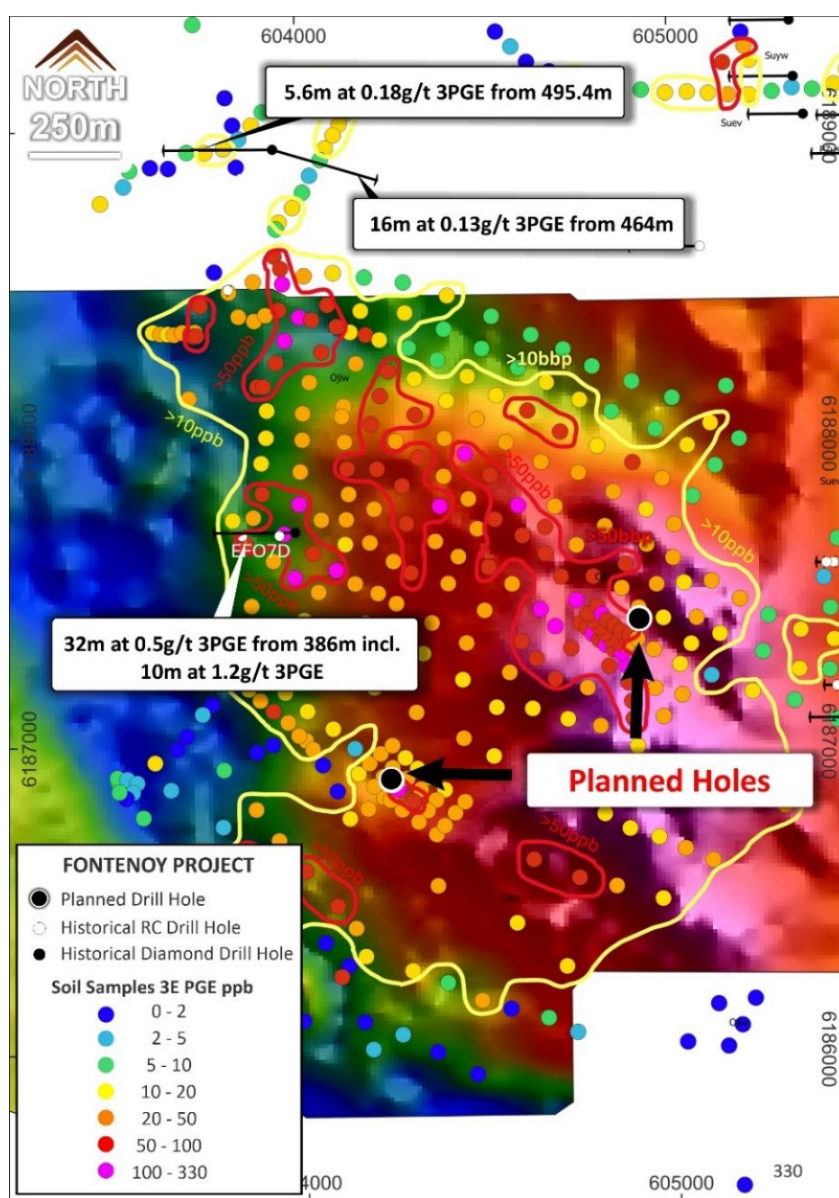


Figure 2: Soil sampling results over residual bouguer gravity image<sup>iii</sup>.

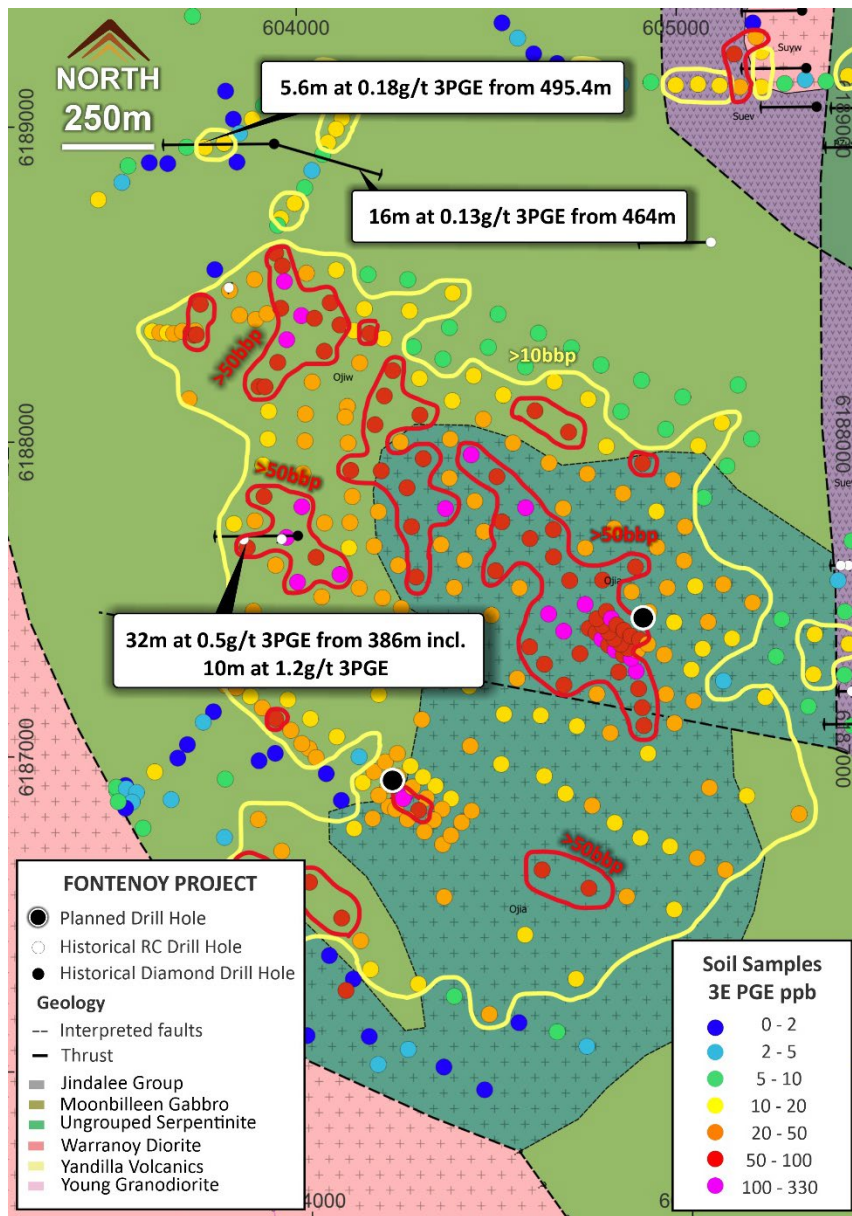


Figure 3: Soil sampling results at Fontenoy over solid geology interpretation<sup>iii</sup>.

### Summary of ground gravity results

Mitre Geophysics and Atlas Geophysics were engaged to undertake ground gravity activities at the Fontenoy Project. A gravity survey was designed and implemented with 50 m station spacing along 100m spaced lines. The total survey comprised 1944 stations over an 8.7 km<sup>2</sup> area. Preliminary results from the survey show a high gravity anomaly across a 1.5 km x 1.5 km area. Gravity geophysical surveys are an exploration tool that has been successfully used globally to help delineate more dense and potentially PGE bearing mafic and ultramafic lithologies<sup>vi</sup>.

### Next Steps

Drilling is anticipated to take two months. The Company intends to provide updates on the drilling and expected timeframe for return of assay results once drilling is completed.

## About Fontenoy

The Fontenoy Project contains a number of prospective units within the Project area which include the Yandilla Volcanics, Warrenoy Diorite and ultramafic rocks of the Wambidgee Serpentinite for copper-nickel and cobalt. Stratabound manganese mineralisation occurs in the Cambro-Ordovician Jindalee Group, while the Wambidgee Serpentinite contains a number of chromite deposits, and this differentiated ultramafic sequence is prospective for both chromite and PGE mineralisation. Disseminated and veined copper-gold mineralisation hosted within the Yandilla Volcanics has a strike length of approximately 8km.

Recent diamond drilling has returned magmatic-related PGEs:

EFO7D: **32m at 0.5g/t 3E PGE from 386m incl.: 10m at 1.2g/t 3E PGE, 0.2% Ni and 891ppm Cu.**

Historical drilling has confirmed that soil anomalism is associated with broad gold-copper mineralisation intersected along the entire 8km strike and provides encouragement for a number of drill ready target zones.

Historical drill intercepts at the Project include<sup>vii</sup>:

1-2-10D:	<b>79m at 0.27% Cu</b>	from 1.5m
WRC9:	<b>22m at 0.67g/t Au and 0.34% Cu</b>	from 20m
WRC21:	<b>24m at 0.17g/t Au and 0.24% Cu</b>	from surface
WRC3:	<b>26m at 0.44g/t Au and 0.11% Cu</b>	from surface
1-2-15D:	<b>14m at 0.72g/t Au and 0.37% Cu</b>	from 108m

## Nickel and PGE's in New South Wales

There are numerous nickel occurrences located in three main NSW ultramafic belts<sup>viii</sup>. These occurrences are predominantly in the form of residual nickel-cobalt laterites, less commonly hydrothermally-enriched nickel sulphide deposits, and rare magmatic nickel sulphide deposits in layered mafic and ultramafic bodies.



**Figure 4:** Significant projects and nickel occurrences within the major ultra-mafic and mafic belts of NSW<sup>ix, x, xi</sup>

## Earth AI Exploration Alliance

Legacy Minerals signed an Exploration Alliance Agreement (Agreement) with Earth AI covering its Fontenoy (EL8995) tenement (**Strategic Alliance**)<sup>xii</sup>. The Strategic Alliance allows for a co-funding model, whereby Earth AI will contribute up to \$4.5M AUD of total exploration costs across the tenement over a two-year period. Earth AI have exercised their option to extend the Agreement for a further year. Subject to a qualifying drilling intersection (as defined within the Agreement) being subsequently identified, Earth AI Pty Ltd is entitled to a net smelter return royalty (Royalty) up to 3% in connection with an area surrounding the discovery (Area of Interest). Legacy Minerals will retain 100% ownership over the tenement covered under the Agreement.

Legacy Minerals is under no obligation to explore, develop or mine the tenement during the period of the Strategic Alliance. However, whereafter the second anniversary of the Royalty Trigger Date, if no mineral resource has been defined and the combined annual exploration development and mining expenditure in the Area of Interest falls below \$250,000 USD, Earth AI will have the option to assume operational control and buy the Royalty Tenement that overlaps with the single Area of Interest under the Minerals Royalty Deed, for a cash purchase price equal to \$1,000,000 USD plus a 2% net smelter royalty granted to the Legacy Minerals.

## Earth AI Exploration Strategy

Earth AI is a vertically integrated metals exploration company based in San Francisco, USA. It's NSW based operations are located at Young, 15km from Legacy Minerals' Fontenoy tenement. Earth AI plans to implement its artificial intelligence deposit targeting system to generate drill targets across the tenement. Once identified, Earth AI will follow up with on ground geophysical and geochemical work before drill testing.

Approved by the Board of Legacy Minerals Holdings Limited.

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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 his 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><b>Au-Ag Black Range</b> (EL9464, EL9589) Caldera setting with extensive epithermal occurrences. Limited historical exploration across 30km of known prospective strike.</p>	<p><b>Cu-Au Drake</b> (EL6273, EL9616, ELA6642) Large caldera (~150km<sup>2</sup>) with similar geological characteristics to other major pacific rim low-sulphidation deposits.</p>
<p><b>Cu-Au Rockley</b> (EL8926) Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks with historic high-grade copper mines that graded up to <b>23% Cu</b>.</p>	<p><b>Au-Cu (Pb-Zn) Cobar</b> (EL9511) Undrilled targets next door to the Peak Gold Mines. Several priority geophysical anomalies and gold in lag up to <b>1.55g/t Au</b>.</p>
<p><b>Au-Ag Bauloora</b> (EL8994, EL9464) <a href="#">Newmont JV</a> One of NSW's largest low-sulphidation, epithermal systems with a 27km<sup>2</sup> epithermal vein field.</p>	<p><b>Au Harden</b> (EL9657) Large historical high-grade quartz-vein gold mineralisation. Drilling includes <b>3.6m at 21.7g/t Au</b> 116m and <b>2m at 17.17g/t Au</b> from 111m.</p>
<p><b>Cu-Au Glenlogan</b> (EL9614) <a href="#">S2 Resources JV</a> Large, undrilled magnetic anomaly underneath Silurian cover located 55kms from Cadia Valley.</p>	<p><b>Au-Cu Fontenoy</b> (EL8995) <a href="#">Earth AI Alliance</a> An 8km long zone of Au and Cu anomalism defined in soil sampling and drilling. Significant drill intercepts include <b>79m at 0.27% Cu</b> from 1.5m.</p>

### **Cu-Au Thomson** (EL9190, EL9194, ELA6777)

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

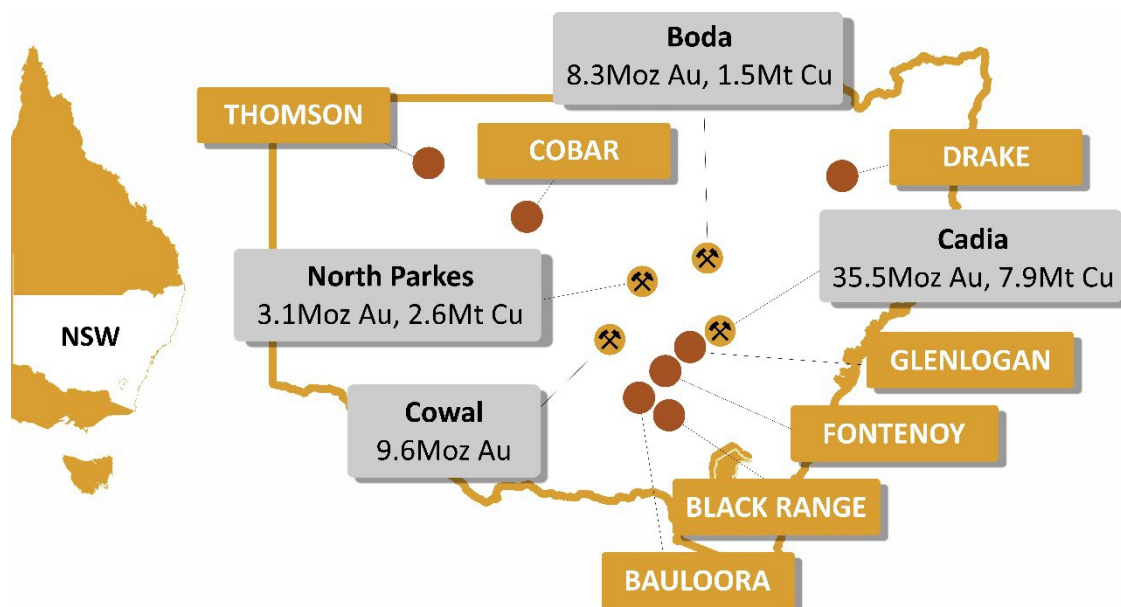


Figure 5: Location of Legacy Minerals Projects in NSW, Australia<sup>xiii</sup>

## ENDNOTES

- <sup>i</sup> ASX LGM 3 May 2022: Strategic Exploration Alliance with AI Explorer
- <sup>ii</sup> ASX LGM 26 February 2024 Artificial Intelligence makes Magmatic PGE-Ni-Cu Discovery
- <sup>iii</sup> ASX LGM 17 July 2024 Extensive Undrilled Palladium-Platinum Footprint at Fontenoy
- <sup>iv</sup> ASX LGM 6 June 2024 Diamond Drilling Underway at Bauloora Au-Ag Project
- <sup>v</sup> ASX S2R 18 July 2024, Drilling Commences Targeting Porphyry Cu-Au at Glenlogan
- <sup>vi</sup> Williams, Nicholas & de Wet, Barry & Kekana, Sello & Nielsen, Shane & Broughton, David. (2016). Applying Advanced Gravity and Magnetic Inversion Methods to Expand the Platreef PGE-Ni-Cu Resource in the Bushveld Complex. ASEG Extended Abstracts. 2016. 1. 10.1071/ASEG2016ab187.
- <sup>vii</sup> Legacy Minerals Holdings Limited Prospectus dated 28 July 2021
- <sup>viii</sup> Nickel exploration opportunities in New South Wales, Australia (Industry and Investment, NSW Government)
- <sup>ix</sup> Platina Resources Annual Report 30 June 2022 ASX: 28 February 2023, Ionick Metals Established, Option Agreement Executed to Accelerate Nickel-Cobalt Venture, Scandium International Mining Corp. FEASIBILITY STUDY - NYNGAN SCANDIUM PROJECT April 15, 2016
- <sup>x</sup> Alchemy Resources, <https://alchemyresources.com.au/investor-centre/resources/#west-lynn>
- <sup>xi</sup> ASX: HLX 28 February 2023 Ionick Metals Established and Option Agreement executed
- <sup>xii</sup> LGM ASX 3 May 2022: Strategic Exploration Alliance with AI Explorer
- <sup>xiii</sup> 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 2:** 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