Earth AI Commences Field Work at Fontenoy

Artificial Intelligence focused exploration underway at the Fontenoy Project in search of critical and battery metals including Copper-Nickel-Cobalt-Platinum-Gold

Legacy Minerals Holdings Limited (**ASX: LGM**, "**LGM**", "**the Company**" or "**Legacy Minerals**") is pleased to announce the commencement of field work by its alliance partner, Earth AI.

Highlights

- **The Project has a known mineralised strike of at least 8kms** with historical drilling having intercepted widespread disseminated and veined copper-gold mineralisation from surface.
- Renewed investigation of historical anomalous nickel (Ni) cobalt (Co) results[1] and potential for associated platinum group elements (PGE) mineralisation in association with known chromium (Cr), copper (Cu) and Ni occurrences is also underway.
- **Preliminary work includes the identification of oxide copper mineralisation interpreted as malachite and chalcocite from undrilled historical workings** (spot pXRF readings up to 27.54% Cu - Sample 5996)[i].

Planned Alliance Work

- Upon completion of the reconnaissance field work, a revised targeting assessment will be conducted prior to final field checking and drilling.
- **This work is expected to be completed in Q1 2023 with drilling planned for Q1 2023.**

Earth AI – Artificial Intelligence Exploration Alliance[2]

- The Earth AI Alliance aims to fast-track discovery across Fontenoy and Mulholland with up to $4.5M AUD to be spent by Earth AI over 2 years.
- Unlike a 'classic JV' the alliance is success based with up to a 3% royalty earnt over the discovery area by Earth AI if a significant drilling discovery is made.
- LGM retains 100% ownership of all exploration licences.
- Subject to work conducted by Legacy Minerals, Earth AI has the option to purchase the relevant tenements from Legacy Minerals for $1M USD and a 2% royalty to LGM.

Legacy Minerals maintaining focus at Bauloora

This Alliance allows Legacy Minerals to maintain its focus at Bauloora which is considered by the Company to be the largest under-explored low-sulphidation epithermal gold-silver system in NSW with the potential for a major gold discovery.

[i] Visual observations and handheld pXRF results are only used for preliminary assessment of element compositions, prior to the receipt of assay results from a certified laboratory.

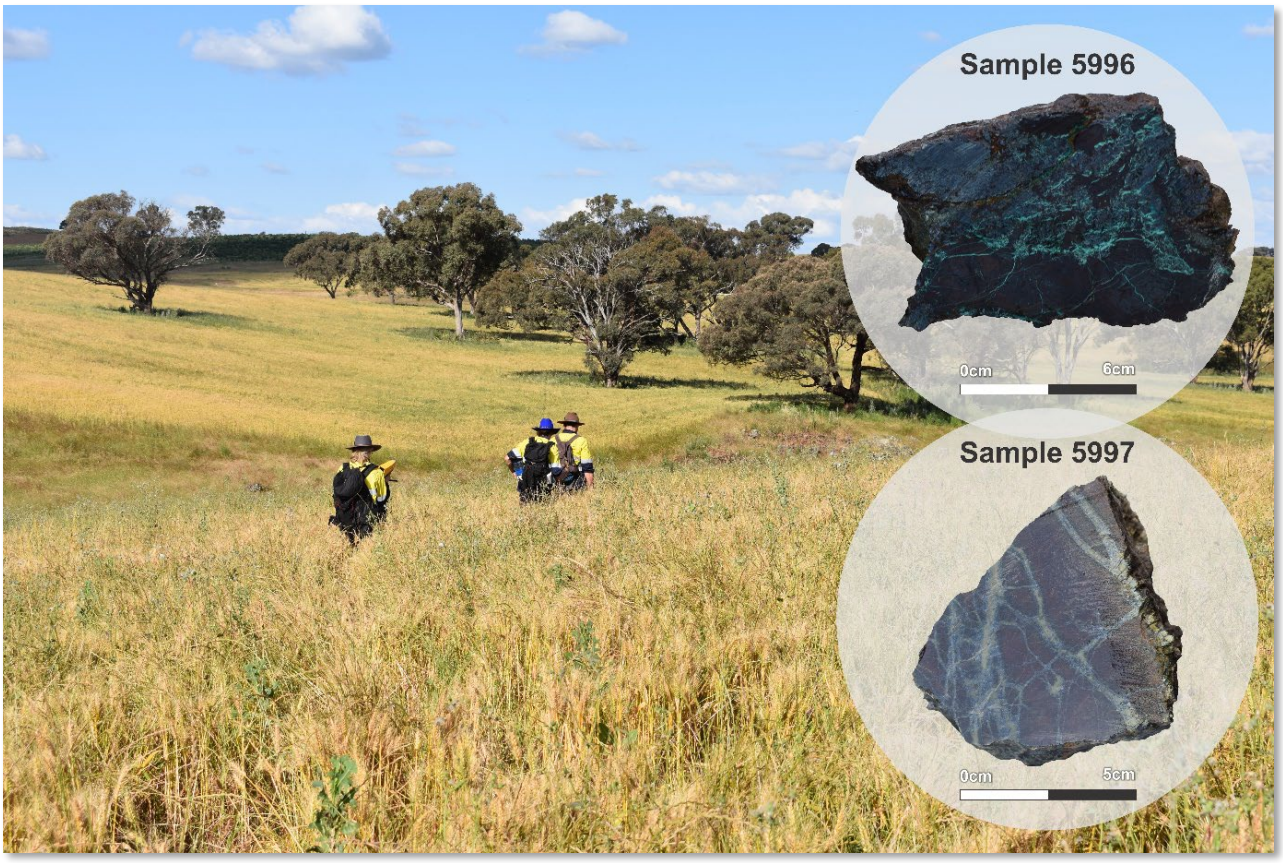

Figure 1: Earth AI field team conducting field reconnaissance, geological mapping, soil and rock sampling. Rock sample 5996 collected from surface sub-crop contains malachite (visual estimate 10%) and chalcocite (visual estimate 8%) supported by spot pXRF readings of 27.54% Cu and 18.46% Cu. Rock sample 5997 exhibiting stockwork quartz-carbonate veins with chalcocite (visual estimate of 5% chalcocite)[ii].

Management Comment **Legacy Minerals Managing Director, Christopher Byrne said:**

"It's very exciting for Legacy Minerals to be part of a small group of companies utilising the power of artificial intelligence to assess and target prospective areas for drilling.

Our Exploration Alliance with Earth AI puts Legacy Minerals at the forefront of the exploration industry in utilising artificial intelligence and machine learning to increase discovery opportunities. Earth AI's vertically integrated approach and ownership of diamond drill rigs sets Earth AI apart from other AI explorers and gives them the capacity to drill test newly defined targets in quick succession.

The Fontenoy Project presents significant critical and battery metal opportunities with prospectivity for copper-nickel-cobalt-PGE's and gold and the company is extremely pleased with the impact Earth AI are already having on the ground. The critical and battery metals industry is a strongly growing market and there is increasing recognition of the need for exploration discovery rates to increase in order to meet the demand for these metals.

[ii] Visual observations and handheld pXRF results are only used for preliminary assessment of element compositions, prior to the receipt of assay results from a certified laboratory.

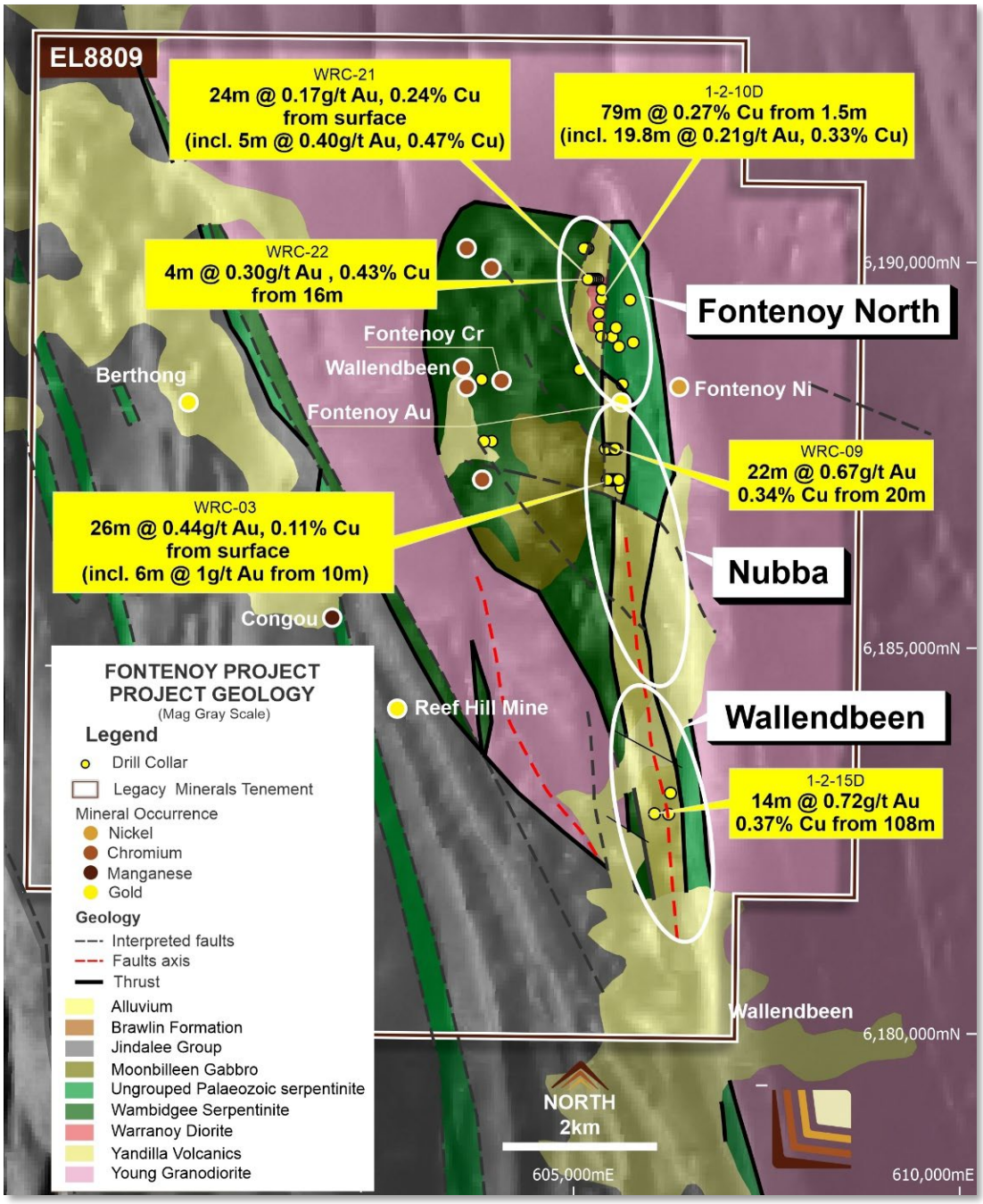

Figure 2: Fontenoy Project exploration areas and highlight drill intersections

Fontenoy Project[1]

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 platinum group element (PGE) mineralisation. Disseminated and veined copper-gold mineralisation hosted within the Yandilla Volcanics has a strike length of approximately 8km. Mineralisation here is interpreted to represent McPhillamys-style volcanogenic hosted massive sulphide (VHMS) mineralisation, however the potential for intrusion related copper-gold mineralisation is being investigated.

The Project has had a significant amount of surface geochemical work completed with extensive soil sampling focused on the Yandilla Volcanics and a bulk cyanide leach stream sediment survey conducted across the tenement. Rock chip sampling has also been conducted across the tenement for Mn and Talc assessment and for Au-Cu mineralisation in the Yandilla Volcanics and Warrego Diorite. This work defined an 8km long Cu and Au soil anomaly centred over the Yandilla Volcanics with rock chips grading up to 0.73g/t Au and 0.47% Cu.

A dipole-dipole induced polarisation (DDIP) survey has been completed at 200m and 800m line spacing along the length of the Yandilla Volcanics. Further to this, ground electromagnetic (EM) survey traverses and airborne EM at 150m line spacing has also been completed by earlier explorers. IP surveying highlighted several known zones of Cu and Au mineralisation with a number of anomalies yet to be drilled.

A total of 16 diamond core holes for 4,014 metres and an additional 28 reverse circulation percussion (RC) drill holes for 1,667m have been historically completed. Drilling has confirmed soil anomalism is associated with broad Au-Cu 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:

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

The large amount of historical data provides Earth AI a significant base of information to utilise in their artificial intelligence and machine learning software for the delivery of compelling drill targets in a data rich environment.

Earth AI Exploration Alliance

Legacy Minerals has signed an Exploration Alliance Agreement (Agreement) with Earth AI covering its Fontenoy (EL8995) and Mulholland tenements (EL9330) (Strategic Alliance)[2]. The Exploration Alliance allows for a co-funding model, whereby Earth AI will contribute up to $4.5M AUD of total exploration costs across the tenements over a two-year period, with an option to extend for a further year. Subject to a qualifying drilling intersection (as defined within the Alliance Agreement) being subsequently identified on any tenement, Earth AI Pty Ltd is entitled to a net smelter return royalty (Royalty) up to 3% in connection with a to be agreed upon area surrounding the discovery (Area of Interest). Legacy Minerals will retain 100% ownership over the tenements covered under the Agreement.

Legacy Minerals is under no obligation to explore, develop or mine any of the tenements 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 all of the Royalty Tenements that overlap 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. The Company's NSW based operations are 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 Company's tenements. Once identified, Earth AI will follow up with on ground geophysical and geochemical work before drill testing.

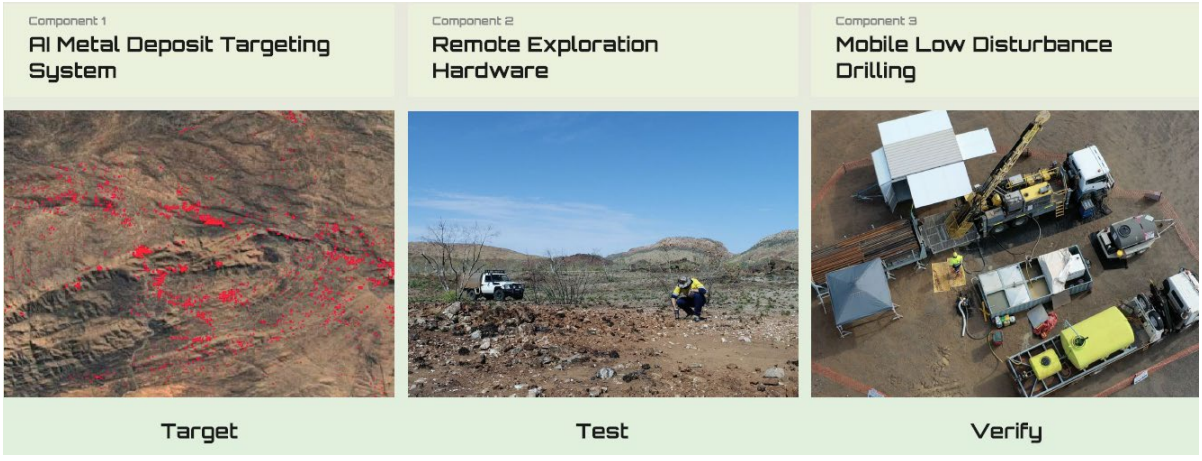

Figure 3: Earth AI's exploration approach and example of their diamond drill set up

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 in the report of the matters based on his information in the form and context in which it appears in this announcement.

REFERENCED DOCUMENTS

1 Company's Prospectus dated 28 July 2021 lodged 9 September 2021 (ASX: LGM)
2 LGM ASX 3 May 2022: Strategic Exploration Alliance with AI Explorer

LEGACY MINERALS INTERACTIVE INVESTOR HUB

Engage with us directly by asking questions, watching video summaries, and seeing what other shareholders have to say about this and past announcements at our Investor Hub

https://investorhub.legacyminerals.com.au/

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 the Lachlan Fold Belt since 2017. The Company has six wholly owned and unencumbered projects that present significant discovery opportunities for shareholders.

Au-Cu (Pb-Zn) Cobar (EL8709, EL9256)

Undrilled targets next door to the Peak Gold Mines with several priority geophysical anomalies Late time AEM conductors, IP anomaly, and magnetic targets Geochemically anomalous - gold in lag up to **1.55g/t Au.**

Au Harden (EL8809, EL9257)

Large historical high-grade quartz-vein gold mineralisation open along strike and down plunge. Significant drill intercepts include **3.6m at 21.7g/t Au** 116m and **2m at 17.17g/t Au** from 111m.

Au-Ag Bauloora (EL8994, EL9464)

A 27km^2 hydrothermal alteration area containing low-sulphidation epithermal-style gold silver targets. Historical bonanza grades at the Mt Felstead Prospect included face sampling up to **3,701g/t Ag, 6.9g/t Au, 29% Pb, 26% Zn,** and **6.4% Cu.**

Au-Cu Fontenoy (EL8995) **EARTH AI-Alliance**

The Project exhibits a greater than 8km long zone of Au and Cu anomalism. Significant drill intercepts include **79m at 0.27% Cu** from 1.5m with numerous untested anomalies along the 8km strike length.

Cu-Au Rockley (EL8296)

Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks the Project contains historic high-grade copper mines that graded up to **23% Cu.**

Sn-Ni-Cu Mulholland (EL9330) **EARTH AI-Alliance**

Associated polymetallic mineralisation. There are several tin and nickel occurrences in the Project area with trends up to 2.6km defined in drilling. Significant drill intercepts include **44m at 0.45% Ni.**

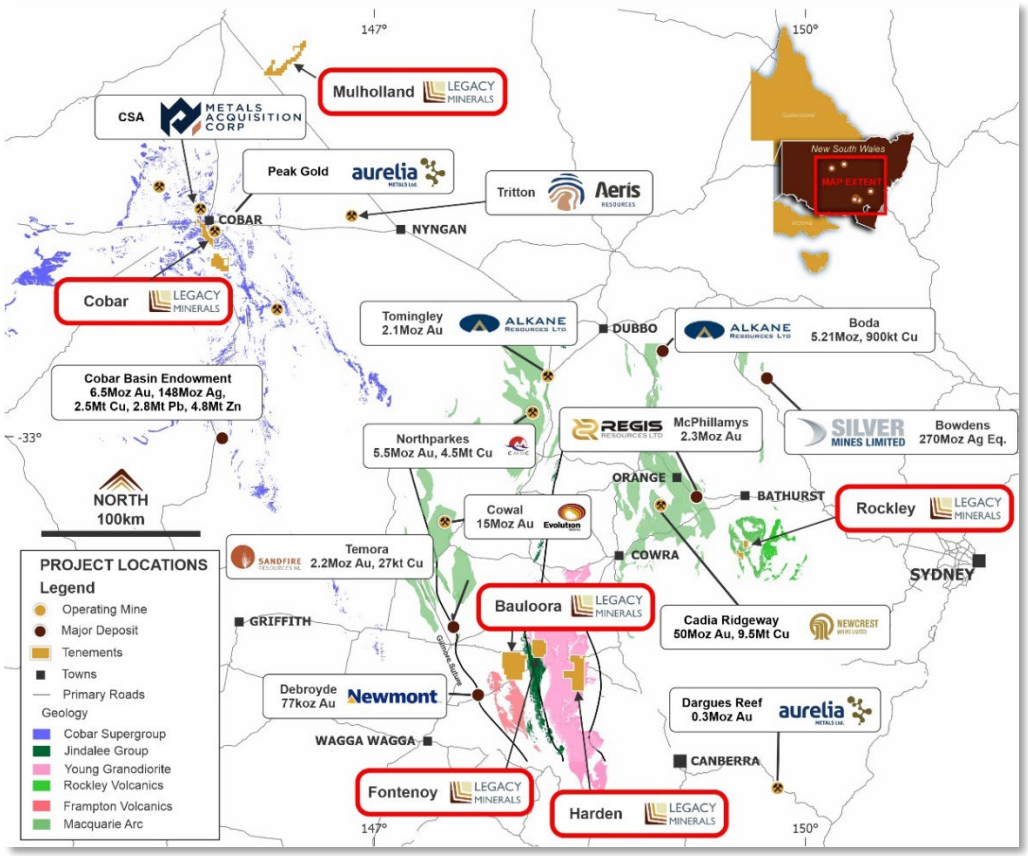

Figure 4: Legacy Minerals Tenements, NSW, Australia

Appendix 1 – JORC Code, 2021 Edition Table 1

Section 1 Sampling Techniques and Data

Criteria	*JORC Code Explanation*	Commentary
Sampling Techniques	*Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Rock chip and grab samples were taken from numerous locations throughout the prospect areas. A handheld XRF analyser was used to obtain spot analyses. The unit is a 2019 Olympus Vanta pXRF.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The purpose of the rock chip samples was to establish the tenor of any mineralisation visible in outcrop and float. Therefore, the samples are biased towards mineralised samples. This is appropriate for this type of work. The handheld pXRF results are only used for preliminary assessment of element compositions, prior to the receipt of assay results from the certified laboratory. Samples subjected to pXRF analysis did not undergo any sample preparation procedures.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g.'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.	Samples weighing up to several kilograms were taken.
Drilling techniques	*Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diametre, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).*	Not Applicable. No drilling conducted.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Not Applicable. No drilling conducted.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not Applicable. No drilling conducted.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not Applicable. No drilling conducted.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Geological logging is carried out on all rock chips with lithology, alteration, mineralisation, structure and veining recorded.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of rock chips records lithology, mineralogy, mineralisation, structures, weathering, colour and other noticeable features. Rock chips are occasionally photographed for reference.
	The total length and percentage of the relevant intersections logged.	Not Applicable. No drilling conducted.
Sub-sampling techniques and	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable. No drilling conducted

sample preparation	*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Not applicable. No drilling conducted
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were delivered by Legacy Minerals Holdings personnel to ALS Minerals Laboratory, Orange NSW. Sample preparation will comprise of an industry standard of drying, jaw crushing and pulverising to -75 microns (85% passing) (ALS code PUL-23). Pulverisers are washed with QAQC tests undertaken (PUL-QC). Samples are dried, crushed and pulverized to produce a homogenous representative sub-sample for analysis.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Laboratory QC procedures for rock sample assays involve the use of internal certified reference material as assay standards, along with blanks and duplicates.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Not appropriate for this stage of exploration.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The size of samples for the rock chips is appropriate for this stage of exploration.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	All samples were analysed by ALS Global. Gold is determined using a 50g charge. The resultant prill is dissolved in aqua regia with gold determined by flame AAS (Au-AA26). A 48 elements by four acid digest (Method ME-MS61) is then completed.
	For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	A 2019 Olympus Vanta pXRF, three beam analyser, with beam times set to 20, 10 and 10 seconds, giving total read time as 40 seconds is used to systematically analyse the sample onsite.
	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	Quality control procedures for assays were followed via internal laboratory protocols. Accuracy and precision are within acceptable limits.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Historical significant assays were verified by independent and company geologists against the applicable historical reports
	The use of twinned holes.	Not Applicable. No drilling conducted.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary assay data is captured using Datashed software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is stored both locally and entered into LGM online database. All historical data has been entered digitally by previous explorers and verified internally by LGM.
	Discuss any adjustment to assay data.	Not applicable. No adjustments have been made.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Samples were located with a handheld GPS.
	Specification of the grid system used.	The grid system used for maps and rock chip table is GDA94, MGA Zone 55.
	Quality and adequacy of topographic control.	Samples were located with a handheld GPS and are accurate to +/- 25m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Soil sample spacing is appropriate for the early stage nature of the exploration work.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade	No mineral resource or reserve calculation has been applied.

	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	
	Whether sample compositing has been applied.	No compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Not Applicable. No drilling.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Not Applicable. No drilling.
Sample security	*The measures taken to ensure sample security.*	All samples are bagged in calico sample bags before being grouped into polyweave bags and transported to ALS Minerals Laboratory in Orange by Legacy Minerals personnel. All sample submissions are documented via ALS tracking system with results reported via email. Sample pulps are returned to site and stored for an appropriate length of time. The Company has in place protocols to ensure data security.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	This is not material for these Exploration Results.

Section 2 Reporting of Exploration Results
(Criteria in this section apply to all succeeding section)

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Status	*Type, name/reference number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Fontenoy Project is comprised of EL8995. The license is owned 100% by Legacy Minerals Pty Ltd (a fully owned subsidiary of Legacy Minerals Holdings Limited) and part of the Company's exploration alliance with Earth AI. There are no royalties or encumbrances over the tenement areas. The land is primarily freehold land. There are no native title interests in the license area.
Exploration Done by Other Parties	*Acknowledgment and appraisal of exploration by other parties.*	Pacminex Pty Ltd – conducted soil and rock chip sampling, electro-magnetic (EM) and induced polarization (IP) surveying which were all concentrated on the Fontenoy Prospect. 16 cored drill holes were completed in 1970. Billiton Australia Ltd (Shell Australia Ltd) – conducted reassaying of historical core, a tenement wide bulk cyanide leach stream sediment survey, and rock chip sampling. Michelago Resources NL – detailed airborne magnetic/radiometric survey, rock chip sampling, soil sampling, and 28 RC drill holes. Alloy Resources - mapping, rock chip sampling and gradient array induced polarisation surveys focused on Mn mineralisation. Bushman Resources Pty Ltd – completed rock chip sampling, mapping, and hyperspectral work of selected historical drill core.
Geology	*Deposit type, geological setting and style of mineralisation*	The Fontenoy Project contains a number of prospective units within the Project area 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 platinum group element (PGE) mineralisation. The Yandilla volcanics are prospective for VHMS mineralisation.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:* *• Easting and northing of the drill hole collar* *•Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *• Dip and azimuth of the hole* *• Down hole length and interception depth* *• Hole length*	Not Applicable. No drilling.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Not Applicable. No drilling.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.*	Not applicable. No aggregation.
	Where aggregated intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Not applicable. No drilling.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable. No metal equivalents being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.*	Not applicable. No drilling.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.*	Refer to Figures in body of text. A prospect location map are shown in the Company's Prospectus dated 28 July 2021 and within the body of this report.
Balanced Reporting	*Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All assay results have been reported. Reports on historical exploration can be found in the Company's Prospectus dated 28 July 2021.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock*	All material or meaningful data collected has been reported.

	characteristics; potential deleterious or contaminating substances.	
Further Work	*The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large – scale step – out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	See body of report. See figures in body of report. Further exploration is discussed in the announcement and will be planned based on ongoing geochemical and geophysical results and geological assessment of prospectivity.