

9<sup>th</sup> October 2023 ASX Release

# EXPLORATION OF COPPER & RARE EARTH TARGETS COMMENCES AT COPPERHEAD PROJECT

Follow-up Ground Reconnaissance over new copper & REE and styles of mineralisation

#### **HIGHLIGHTS**

- Helicopter supported reconnaissance has recommenced over new targets defined by the recent airborne magnetic-radiometric survey over the Copperhead Project.
- The geochemical reconnaissance program will include the following:
  - Twenty-six (26) extensive copper anomalies will be examined on the ground based on anomalous uranium responses used to define more prospective targets for copper mineralisation. Thes uranium responses are closely associated with known copper prospects within E08/3001.
  - Eight (8) prospective rare earth (REE) anomalies will be investigated as these are all uranium anomalies associated with magnetic responses representing potential ironstone dykes or ironstones.
  - Thirteen (13) Electromagnetic (EM) target areas considered prospective for copper mineralisation selected. Electromagnetic surveys can detect conductive material such as copper sulphides and are an excellent tool for detecting certain styles of copper mineralisation.
  - Some of the EM anomalies delineated are proximal to the high-grade copper rock chips that were collected by Argent in 2022, potentially confirming copper mineralisation at depth.
  - Argent will complete detailed rock chip sampling over E08/3463 to further investigate the high tenor lithium anomalies defined by July 2023 sampling within the classified LCT-enriched pegmatites.

Argent Minerals Limited (ASX: ARD) ("Argent" or "the Company") is pleased to announce the commencement of further ground exploration over its 100%-owned Copperhead Ag-Cu-Zn and Rare Earth Project in Western Australia.

#### **Argent Managing Director Mr Pedro Kastellorizos commented:**

"We are pleased to have started ground exploration activities at our Copperhead Project in Western Australia. The results of the close spaced airborne geophysics survey have identified that copper mineralisation is associated with elevated uranium anomalies. The results have further expanded and upgraded the prospectivity which further supports ongoing ground exploration to systemically explore these areas. We anticipate the program will be completed in two weeks with all samples to be dispatched to ALS in Perth for geochemical analysis".



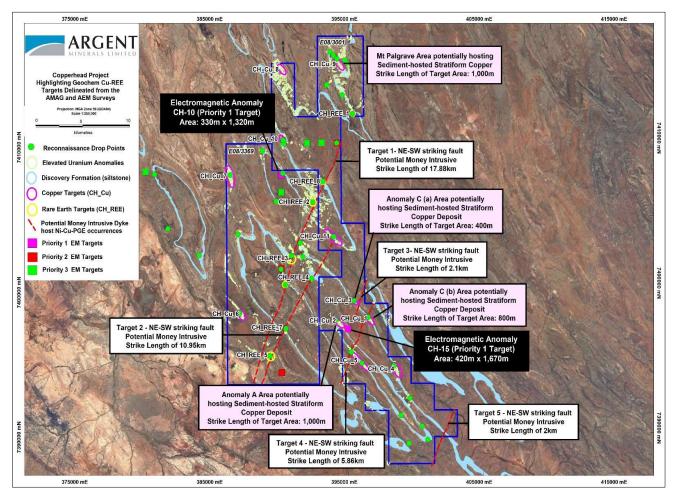


Figure 1 - Highlighting all sampling areas (green circles) within E08/3369 and E08/3001

#### **Targets**

Examination of the magnetic, radiometric and wide-spaced airborne electromagnetic (AEM) targets in comparison to the historical copper occurrence and recent rock chip sampling has defined 26 anomalies of interest (Figure 1).

In addition to the base metal targets, 8 anomalies considered prospective for REE have been defined. These are all radiometric anomalies (uranium) associated with magnetic responses representing potential ironstone. The new aeromagnetic survey has greatly improved the magnetic and radiometric resolution within the project area. The results indicate the known copper occurrences are not generally associated with magnetic anomalies; however, they always appear to be preferentially located within or bounded by the Discovery and Kiangi Creek Formations which provides a distinct radiometric response.

The Company is seeking to expand the copper and rare earth footprint by surface rock chip testing over all defined anomalies and verifying the uranium anomalism associated with copper mineralisation. In addition, rock chip sampling over E08/3463 will investigate the high tenor lithium anomalies defined by the July 2023 sampling within the classified LCT-enriched pegmatites.

This ASX announcement has been authorised for release by the Managing Director of Argent Minerals Limited.

-ENDS-



For further information, please contact:

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#### **Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Pedro Kastellorizos. Mr. Kastellorizos is the Managing Director/CEO of Argent Minerals Limited and is a Member of the AusIMM of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Kastellorizos has verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

**ASX Code: ARD** 

#### **Forward Statement**

This news release contains "forward-looking information" within the meaning of applicable securities laws. Generally, any statements that are not historical facts may contain forward-looking information, and forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget" "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or indicates that certain actions, events or results "may", "could", "would", "might" or "will be" taken, "occur" or "be achieved." Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, commodity prices, the estimation of initial and sustaining capital requirements, the estimation of labour costs, the estimation of mineral reserves and resources, assumptions with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the project, permitting and such other assumptions and factors as set out herein.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: risks related to changes in commodity prices; sources and cost of power and water for the Project; the estimation of initial capital requirements; the lack of historical operations; the estimation of labour costs; general global markets and economic conditions; risks associated with exploration of mineral deposits; the estimation of initial targeted mineral resource tonnage and grade for the project; risks associated with uninsurable risks arising during the course of exploration; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support exploration activities; risks associated with changes in the mining regulatory regime governing the Company and the Project; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalisation and liquidity risks including the risk that the financing necessary to fund continued exploration and development activities at the project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issuance of additional common shares of the Company; the risk of litigation.

Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward looking information is made as of the date of this announcement and the Company does not undertake to update or revise any forward-looking information this is included herein, except in accordance with applicable securities laws.

#### References

For further information please refer to previous ASX announcement from Argent Minerals Ltd

ARD ASX Announcement 1 February 2023: High-grade copper confirmed at Gascoyne Copper Project
ARD ASX Announcement 8 February 2023: More High-Grade Copper Delineated at Copperhead Project
ARD ASX Announcement 20 April 2023: New EM Targets Enhances Exploration at Copperhead
ARD ASX Announcement 14 September 2023: Exploration Potential Confirmed at Copperhead

1967 Annual Report for TR3705H, Mt Palgrave. Westfield Minerals WA NL. Submitted 1968. DMIRS Open File Report A572.

1975 Report on the Lucie Area. Mineral Claims 08/2377-84, 2430-35. AFMECO. DMIRS Open File Report A8090.

Core Geophysics: Copperhead Project, WA – Geophysics Review. October Memorandum to Argent Minerals October

Duncan, D. 1993. Annual Report Licence E08/286, June 1993. Stockdale Prospecting Ltd. DMIRS Open File Report A38748.





Muggeridge, M. 2009. Ullawarra Project E09/1020, 1448 and E08/1405. Combined Annual Report Year Ending 31 December 2008. Paramount Mining Corporation. DMIRS Open File Report A81105.

Martin, D. McB., Sheppard, S., and Thorne, A. M., Geology of the Maroonah, Ullawarra, Capricorn, Mangaroon, Edmund, and Elliott Creek 1:100 000 sheets: Western Australia Geological Survey, 1:100 000 Geological Series Explanatory Notes, 65p

Muhling, P. C., and Brakel, A. T., 1985, Geology of the Bangemall Group — the evolution of an intracratonic Proterozoic basin: Western Australia Geological Survey, Bulletin 128, 266p.



#### About Argent Minerals Ltd (ASX: ARD)

Argent Minerals Limited is an ASX listed public company focused on creating shareholder wealth through the discovery, extraction, and marketing of precious and base metals. Currently, Argent has over 1,734km² of exploration ground in NSW, 1,038km² in Western Australia and 104km² in Tasmania, totalling 2,876 km² within 3 Australian States.



## Kempfield Project EL5645, EL5748 (100% ARD) NSW

The Kempfield Project is located 60km SSW of Cadia Newcrest Gold and Copper Mining Operations in Central West New South Wales, 250 kilometres west of Sydney. This is the Company's flagship project and is registered as a New South Wales State Significant Development Project. Kempfield Silver Deposit Mineral Resource estimate for all categories has been upgraded 38.9Mt @ 102 g/t silver equivalent for 127.5 million ounces Ag Eq, containing of 42.8Moz silver, 149,200 oz gold, 181,016t lead & 426,900t zinc (ASX Announcement 6 September 2023: Updated Mineral Resource Estimate for Kempfield).

## Trunkey Creek Project EL5748 (100% ARD) NSW

The Trunkey Creek Gold Project is located 5 kms east of the Kempfield in Central West region New South Wales. The Project lies within the Trunkey Creek Mineral Field which extends for 5.5 km by 500 m wide with over 2,900 oz of gold extracted from small scale mining. New IP model has delineated three distinct resistive/chargeable zones. Sub-parallel main quartz reefs are spaced 30m to 50m apart over a strike length of 2 km.

## Pine Ridge Project EL8213 (100% ARD), NSW

The Project is located in the Central Tablelands in New South Wales approximately 65 kilometres south of the township of Bathurst and 10 km south-west of Trunkey. Gold mining commenced in 1877 and continued sporadically until 1948, producing a total of 6,864t ore with variable gold grades. Current 2012 JORC Resource is **416,887t @ 1.65 g/t Au containing 22,122 oz Gold** (ASX Announcement 20 April 2022: Pine Ridge Inferred Resource)

## Mt Dudley Project EL5748 (100% ARD), NSW

The Project is located 5 km northwest of the township of Trunkey, near Blayney NSW. The Mt Dudley mine was worked between 1913-1922 and 1928-1931, with the mine's records indicating an average mined grade of approximately 25 g/t of gold. Current 2012 JORC Resource is 882,636t @ 1.03 g/t Au containing 29,238 oz Gold (ASX Announcement 13 September 2022: Maiden JORC Resource Over Mt Dudley Prospect)

#### Copperhead Project (100% ARD), WA

The Copperhead Project is located NE of Carnarvon and SW of Karratha in Western Australia Gascoyne Region. The project is proximal to major REE deposits and is considered Elephant country based on its untapped potential.

Helicopter rock-chip sample program has confirmed the extensive copper mineralisation over the Mount Palgrave Prospect. High-grade stratiform copper assays include 2.42%, 4.14%, 5.92%, 8.8%, 14.96% and 21.1% Cu.

The Project is also considered highly prospective for potential ironstone/carbonatite Rare Earth mineralisation. Over Fifty (50) high priority potential ironstone/carbonatite rare earth targets have been delineated and are currently being assessed (ASX Announcement 1 February 2023: High-grade copper confirmed at Gascoyne Copper Project)



## Ringville Project (100% ARD), TAS

The Project Ringville Project is strategically positioned between world class mines Rosebery (high grade polymetallic deposit) and Renison Bell Tin Mine (one of the world's largest and highest-grade tin mines) in Tasmania. The Project contains 52 recorded mineral occurrences, including three deposits featuring silver, copper, lead, zinc and tin. Broad, high-grade zones of silver-copper-lead-zinc mineralisation varying from 3m to 23.6m from shallow to moderate depths from diamond drilling.