

14th August 2024

ASX Release

RC DRILLING TO BE COMMENCING AT KEMPFIELD POLYMETALLIC PROJECT

HIGHLIGHTS Reverse circulation ('RC') drilling program comprising 3,300m across 51 RC drill holes at the Kempfield Project to commence in September 2024 The drilling program has the following objectives: Confirm newly discovered Kempfield NW and Sugarloaf Hill prospects as potential VMS polymetallic . style mineralisation proximal to the Kempfield Deposit. Confirm Golden Wattle and Henry Zone prospects as potential orogenic gold style mineralisation. . Delineate new mineralised extensions/zones outside the current resource area within the • Kempfield Project. Drill test numerous high-grade geochemical gold-silver-base metals zones over Kempfield NW, Sugarloaf Hill Zone, Henry's and Golden Wattle zones delineated in the 2024 surface sampling programs. Delineation of mineralisation may result in an overall increase in tonnage and grade of the current Kempfield Deposit. Drilling approvals have been granted from the NSW Regulator.

• The drill programme is estimated to be completed within 6 weeks.

Argent Minerals Limited (ASX: ARD) ("Argent" or "the Company") is pleased to advise the commencement of RC drilling over its **100%** Kempfield Cu-Pb-Zn-Au-Ag Project in NSW.

The Kempfield Silver Deposit Mineral Resource estimate for all categories has been upgraded to **63.7Mt** @ **69.75** g/t silver equivalent for **142.8 million ounces Ag Eq**, containing of **65.8Moz silver**, **125,192 oz gold**, **207,402t lead & 420,373t zinc** (ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit).

Chief Drilling from Orange NSW has been awarded the contract to drill approximately 3,300m using a Bormor 150 drill rig and a 900/350 Sullair auxiliary compressor booster unit. Drilling will firstly commence over the Kempfield NW Zone and thereafter over the Sugarloaf Hill Prospect area (see Figure 1).

Argent Minerals Limited Managing Director Mr Kastellorizos commented:

"Argent is pleased to announce that we have received NSW Regulator & Crown Lands approval for an RC drilling campaign over Argent's flagship project, Kempfield Deposit in NSW. Recent work in the project area has delineated significant walkup drill targets yet to be systematically drill tested. Based on structural, geological and the more recently completed geochemical programs, Argent has identified 13 untested zones which have excellent potential to host gold, silver and base metal mineralisation. We have advanced the Company's strategy by identifying priority target areas which have the potential for delineating undiscovered mineralisation. The Kempfield Project remains on track for further resource expansion based on numerous drillholes which finished in mineralisation along with broad high-grade down plunging silver mineralisation previously outlined".

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ASX Code: ARD

RC drilling will focus on 13 high priority regional targets outside the current resource over the Kempfield Deposit (Figure 1). All RC drill holes are planned to test the shallow gold-silver-gold-base metal barite hosted mineralisation along these highly prospective regional trends. The planned drill depths vary from 50m to 100m at this stage – deeper extensional drilling will depend on the incoming XRF preliminary results on site.

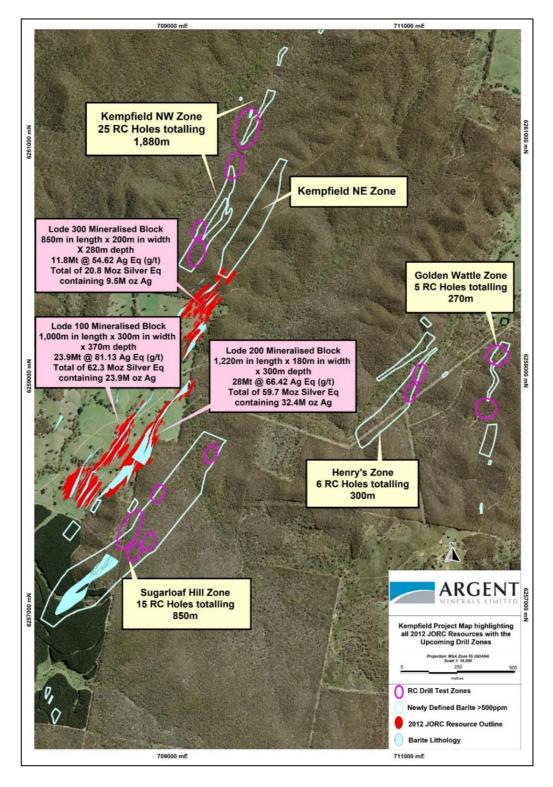


Figure 1 – Location of Proposed RC Drillholes with Barite outcrops vs the known JORC Mineralised Zones

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Strategically Positioned in World-Class Area

The Lachlan Orogen is host to one of the largest underground gold-copper mines in the Southern Hemisphere, Newmont Mining's (**NYSE: NEM**) Cadia Valley Operations. The current Cadia Valley Operations Mineral Resource comprises >50 million ounces of gold, and 8.7Mt of contained copper metal. The region also hosts world-class copper-gold and gold deposits (>100 Mt) such as the North Parkes and Cowal mines.

The Kempfield Project is the Company's flagship project and is registered in NSW as a Significant Development. The growing number of newly identified zones of the Kempfield deposit, along with the major deposit size and increasing, silver, gold, lead and zinc grade trends, provides Kempfield with significant potential to become a major producer of base and precious metals.

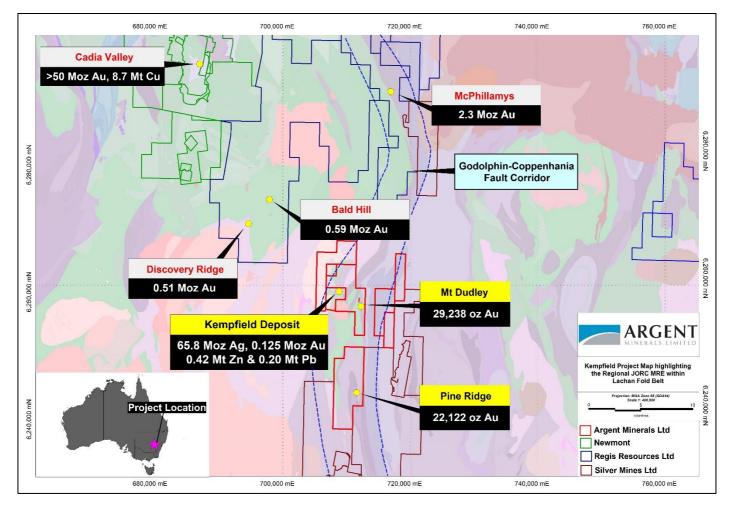


Figure 2 – Regional Kempfield Project Location Map highlighting surrounding nearby Resources

ASX announcement has been authorised for release by the Board 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.

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

ASX Announcement 2008: Further significant intersections at Kempfield ASX Announcement 2009: Kempfield BJ Zone drilling continues with promising results. ASX Announcement 2009: Argent to Drill Gold Targets at Kempfield ASX Announcement 2009: Significant Results from Kempfield Extension Drilling ASX Announcement 2009: Drilling Results from Kempfield and West Wyalong ASX Announcement 2010: Highest recorded silver grades at Kempfield ASX Announcement 2011: Significant Deep Intersections at Kempfield ASX Announcement 2012: Resource upgrade - Kempfield Silver Project ASX Announcement 2013: Exploration Advances for Kempfield Massive Sulphide Targets ASX Announcement 2013: Resource upgrade - Kempfield Silver Project ASX Announcement 2013: Conductor Targets Identified at Kempfield Silver Project ASX Announcement 2013: Sulphides Intercepted at Kempfield Causeway Target ASX Announcement 2013: Argent Minerals Advances Exploration for Kempfield Massive Sulphide Targets ASX Announcement 2013: Argent Set to Drill Massive Sulphide Targets - Dec Start 2013 ASX Announcement 2014: Geophysics Breakthrough in Kempfield Lead/Zinc Detection ASX Announcement 2014. Kempfield Resource Statement Upgraded to JORC 2012 Standard ASX Announcement 2014. Assays confirm third VMS Len group at Kempfield. ASX Announcement 2015: IP Survey confirms Large Copper Gold Target at Kempfield ASX Announcement 2015: Significant Intersections at Kempfield – Including Copper and High-Grade Gold ASX Announcement 2016: Kempfield Drilling Update ASX Announcement 2016: High grade Zinc Lead Silver and Gold Added to Kempfield ASX Announcement 2016: Diamond Drilling Results in Major Breakthrough at Kempfield ASX Announcement 2017: Significant Ag Pb Zn Intersections

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ASX Announcement 18 March 2018: Significant Kempfield Milestone Achieved Separate Commercial Grade Zinc and Lead Concentrates Produced Substantial Boost to Project Economics ASX Announcement 30 March 2018: Significant Kempfield Resource Update Contained Metal Eq Signal Boost to Economic Potential ASX Announcement 20 April 2022: Pine Ridge Inferred Resource ASX Announcement 13 September 2022: Maiden JORC Resource Over Mt Dudley Prospect ASX Announcement 1 February 2023: High-grade copper confirmed at Gascoyne Copper Project ASX Announcement 1 March 2023: Extensive New High-Grade Silver-Lead-Zinc at Kempfield ASX Announcement 13 April 2023: Further Extensive New High-Grade Mineralisation over Kempfield ASX Announcement 6 September 2023: Updated Mineral Resource Estimate for Kempfield ASX Announcement 29 January 2024: Kempfield Exploration Update ASX Announcement 12 February 2024: Extensive Mineralisation Confirmed over Sugarloaf Prospect ASX Announcement 1 February 2023: High-grade copper confirmed at Gascoyne Copper Project ASX Announcement 1 March 2023: Extensive New High-Grade Silver-Lead-Zinc at Kempfield ASX Announcement 13 April 2023: Further Extensive New High-Grade Mineralisation over Kempfield ASX Announcement 6 September 2023: Updated Mineral Resource Estimate for Kempfield ASX Announcement 29 January 2024: Kempfield Exploration Update ASX Announcement 12 February 2024: Extensive Mineralisation Confirmed over Sugarloaf Prospect ASX Announcement 21 February 2024: Outstanding Gold-Silver Grades Uncovered at Henry Prospect ASX Announcement 28 February 2024: Golden Wattle delivers Gold-Silver-Lead Mineralisation ASX Announcement 18 March 2024: Second Rock Chip Program completed over Kempfield ASX Announcement 27 March 2024: Massive Silver-Base Metal Discovery NE of Kempfield Deposit ASX Announcement 8 April 2024: Massive Silver Mineralisation Delineated at Sugarloaf Hill ASX Announcement 10 April 2024: Completed RC drilling Program over Kempfield ASX Announcement 17 April 2024: High-Grade Gold & Silver Mineralisation at East of Kempfield ASX Announcement 30 April 2024: New Exceptional High-Grade Drill Results over Kempfield ASX Announcement 13 June 2024: Further Silver-Base Metal Mineralisation Hits at Kempfield ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit

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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 and 1,038km² in Western Australia, totalling 2,772 km² within 2 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 **63.7Mt** @ **69.75** g/t silver equivalent for 142.8 million ounces Ag Eq, containing of **65.8 Moz silver**, **125,192 oz gold**, **207,402t lead & 420,373t zinc** (ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit)

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 (ASX Announcement 31 May 2022: New Gold Drill Targets Identified at Trunkey Creek).

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)



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