

11th June 2024

ASX Release

KEMPFIELD DRILL PLANNING UNDERWAY*Exploration Program is being designed to expand the mineralised footprint over Kempfield***HIGHLIGHTS**

- Over 2,000m of RC drilling has been planned to test the gold-silver and base metal mineralisation along strike and depth over multiple project areas at the Kempfield Project.
- Drilling will commence once the Company has received all NSW regulatory approvals, expected to be received within 4-6 weeks.
- Kempfield's proposed drill program is currently being designed over the Kempfield NW, Sugarloaf Hill, Henry's and Golden Wattle Mineralised Zones.
 - Kempfield NW Mineralised Zone is approximately **1.72km along strike** with an average **width of 100m**.
 - Sugarloaf Hill Mineralised Zone is approximately **2.1km along strike** with an average **width of 300m**.
 - Henry's Mineralised Zone is approximately **1km along strike** with an average **width of 200m**.
 - Golden Wattle Mineralised Zone is approximately **500m along strike** with an average **width of 100m**.
- A further 100 rock-chip samples have been collected at Kempfield NW, Sugarloaf and Pine Ridge and are awaiting analysis from ALS Laboratory in NSW.

Argent Minerals Limited (**ASX: ARD**) ("**Argent**" or "**the Company**") is pleased to provide an update over its 100%-owned Kempfield Polymetallic gold (Au), silver (Ag), lead (Pb), zinc (Zn) Project in NSW following the highly successful geochemical and drilling campaigns. Surface geochemical sampling has also commenced over Argent's 100%-owned Pine Ridge Gold Project approximately 18km south of the Kempfield Deposit.

Argent Managing Director Mr Pedro Kastellorizos commented:

"During the last 6 months, Argent has delivered numerous important milestones over the Kempfield Project. The highly successful exploration results from surface geochemical sampling and shallow drilling have laid the foundations for potential new discoveries over Kempfield NE, Sugarloaf, Henry's and Golden Wattle zones".

"Furthermore, the Pine Ridge Project has substantial potential for resource growth along the northern portion, proximal to the old historical mine area as this highly prospective zone remains completely untested by modern day exploration".

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Kempfield Project

Kempfield NW Mineralised Zone is approximately **1.72km along strike** with an average **width of 100m**. High-grade assay results received from the Kempfield NW Zone with silver assays up to **177 g/t Ag, 1.89% Pb and 1.21% Zn** (refer ASX Announcement 28 March 2024, Massive Silver-Base Metal Discovery NE of Kempfield Deposit).

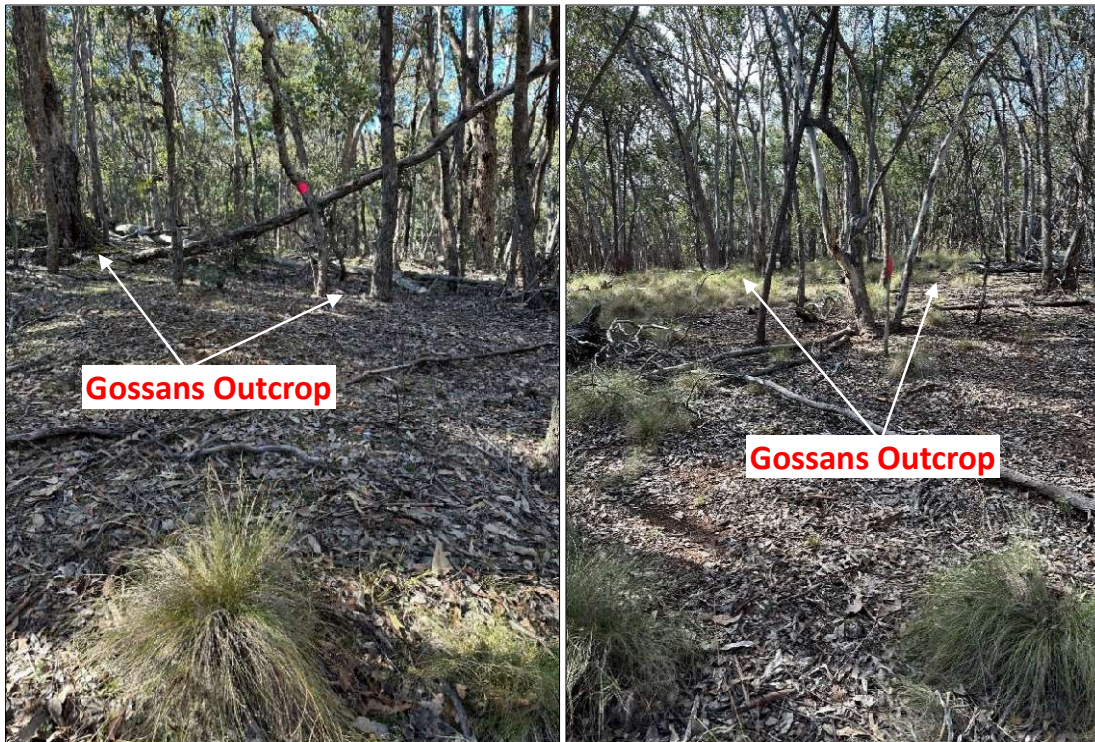


Figure 1 – Kempfield North Proposed RC Drill Site

Figure 2 – Kempfield North Proposed RC Drill Site

The Sugarloaf Hill zone has been divided into 2 separate mineralised areas within an extensive barite zone assaying greater than >500 ppm Ba. Numerous high-grade silver assay results include grades from **318 g/t Ag, 181 g/t Ag, 180 g/t Ag, 96.7 g/t Ag, 92 g/t Ag, 80.9 g/t Ag, 80 g/t Ag, 79.9 g/t Ag, 65.7 g/t Ag, 57.5 g/t Ag and 40.5 g/t Ag (1.30 oz Ag to 10.22 oz Ag/t)** from surface (refer ASX Announcement 8 April 2024, Massive Silver Mineralisation Delineated at Sugarloaf Hill).

Pine Ridge Project

The Pine Ridge Exploration Licence EL8213, located approximately 18 kilometres NW of Kempfield Deposit 10 km south-west of Trunkey Creek Township. In April 2022, Argent announced the first Independent Maiden JORC 2012 Inferred Mineral Resource for the Pine Ridge Deposit has yielded **419,887t @ 1.65 g/t Au** containing **22,122 oz Gold**.

From mid-May to early June, Argent commenced rock chip programs targeting quartz-veining approximately 1km from the historical Pine Ridge Gold Mine. Strong extensive anticlinal faulted structural zone striking over 1.5km is associated with the high-grade gold mineralisation over Pine Ridge and Wood Gully Gossan Prospect area.

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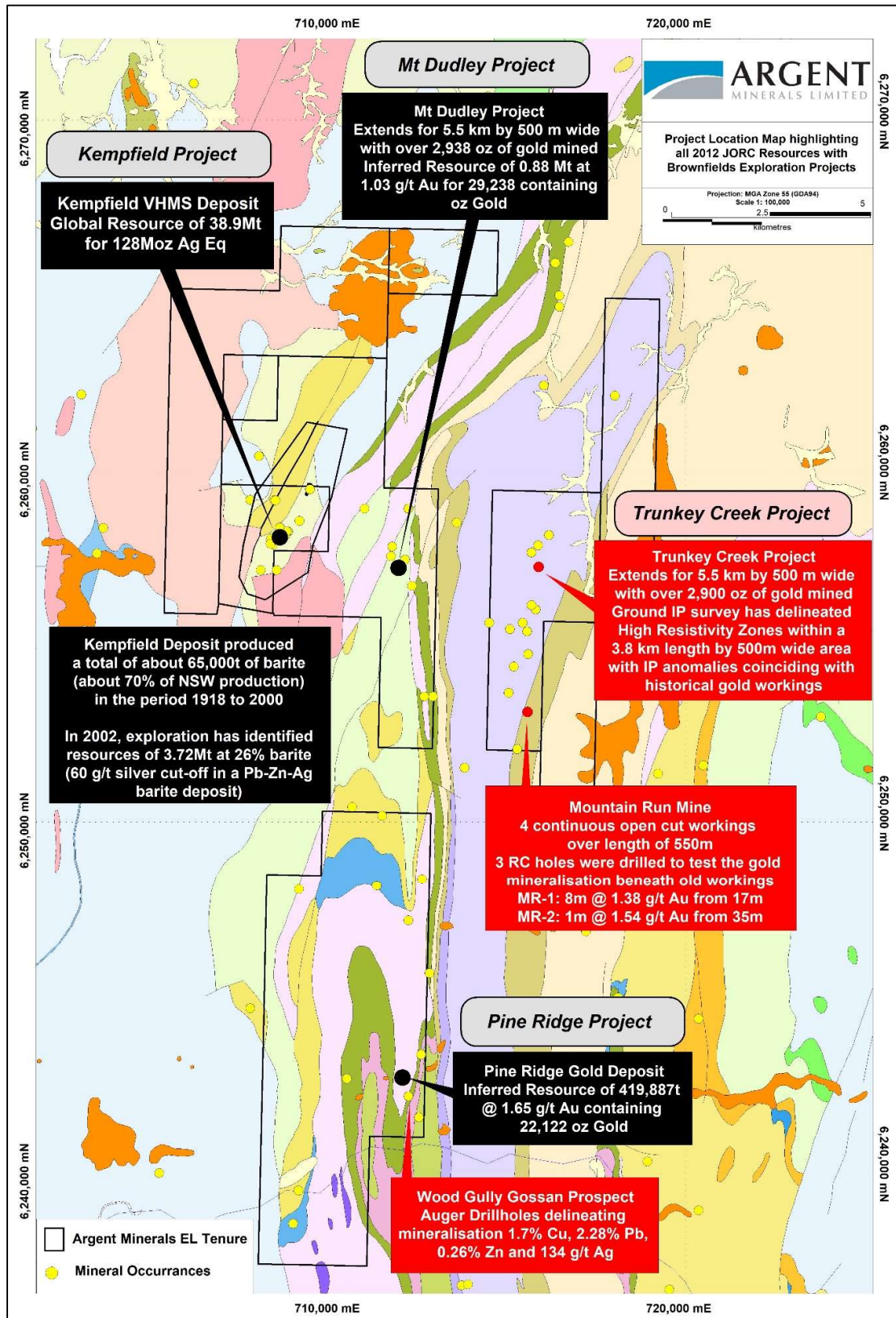


Figure 3 – Kempfield Location Map highlighting the various Mineral Resource Estimations within Argent Portfolio

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Figure 4 – Pine Ridge Project showing the untested 2-3m wide multiple vein set

This 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*
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*

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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 28 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*

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McLean, G, 2003. Exploration Licence 5748 Kempfield & Exploration Licence 5645 Kempfield Group 2, Annual Report 2003. Unpublished Company Report.

McLean, G and Hee, R, 1998. Exploration Licences EL 5448 & 5390 Kempfield & Kempfield North, Annual Report 1998. Unpublished Company Report.

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 **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 (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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