

6 November 2024

ASX Release

## KEMPFIELD DRILLING EXPLORATION UPDATE

*Drilling has been extended to include further untested high-grade surface silver targets proximal to Lode 300*

### HIGHLIGHTS

- A total of 2,943m of RC drilling has been completed to date across 50 holes with 2,223 drill samples submitted to the ALS Laboratory in Brisbane. Assay results are expected within 4-6 weeks.
- A further 12 RC holes, totalling 1,300m of RC drilling are forecast to be completed over the Kempfield NW/NE Zone.
- The newly additional RC drilling program over Kempfield NW/NE Zone will concentrate on drill testing the mineralised silver-base-metal lithology extension proximal to the Lode 300 Mineralised Zone. These previously unknown gossan outcrops and mineralised baritic lithologies were discovered during the August 2024 rock chip reconnaissance program.
- **The Kempfield NW/NE Mineralised Zone is a major mineralisation extension of the Kempfield Deposit which was discovered in March 2024 through surface sampling along strike from the Lode 300 Mineralised Block, which contains 11.8Mt @ 54.62 Ag Eq (g/t), totalling 20.8 Moz Silver equivalent resource.**

Argent Minerals Limited (ASX: ARD) ("Argent" or "the Company") is pleased to provide an update over the current drilling program over its 100%-owned Kempfield Polymetallic Au-Ag-Pb-Zn Project in NSW.

### Reverse Circulation (RC) Drilling Program

During September to October 2024, 50 RC drillholes totalling 2,943m were completed at the Kempfield NW, Sugarloaf Hill, Henry's and Golden Wattle Prospects. Argent is anticipating drilling results to be received 4 to 6 weeks.

The company has a further 12 RC holes, totalling 1,300m of drilling still to be completed over the Kempfield NW Zone proximal to the Mineralised Lode 300 Zone (Figure 1).

This area was delineated during the July-August 2024 fieldwork programme in baritic volcanic units approximately 200m northwest from the Lode 300 mineralised block. These rock types are the key mineralised target lithologies which host the Kempfield Deposit.

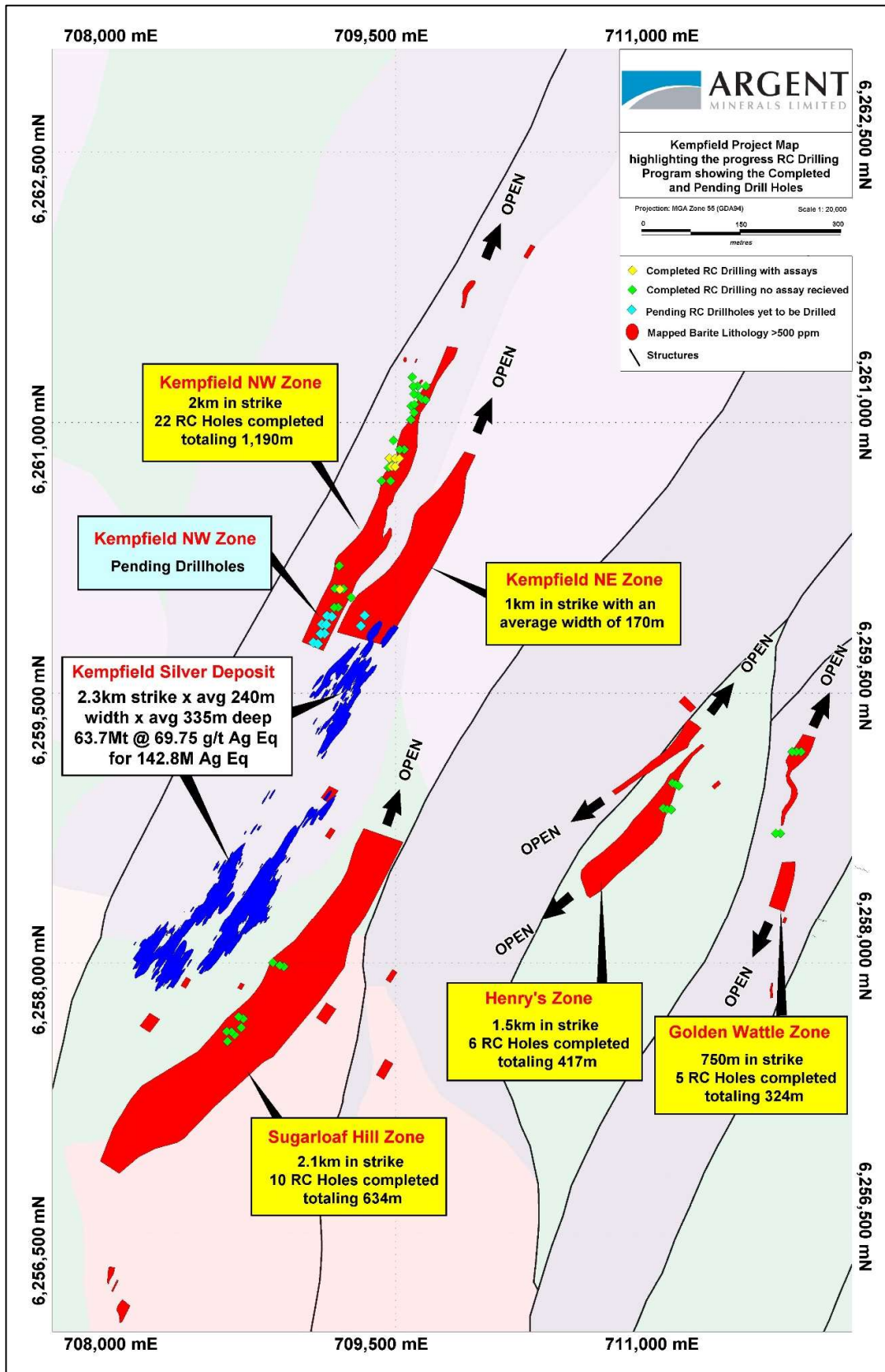
This mineralised zone striking over 200m by 40m in width has been defined and now extends the Kempfield NW zone over **2km by an average width of 100m**. This new extension zone yielded **117 g/t Ag** within sample 3001009, **73.4 g/t Ag** in sample 3000996, **66.9 g/t Ag** with **0.19% Cu-Pb-Zn** within sample 3001003 and **53.5 g/t Ag** with **0.19% Cu-Pb-Zn** within sample 3001008 – refer to Figure 2 (ASX Announcement 18 September 2024: *Kempfield NW/NE Zones Delivers More High-grade Assay Results*).

### ARGENT MINERALS LIMITED

Level 2, 7 Havelock Street, West Perth WA 6005, PO Box 308, West Perth WA 6872

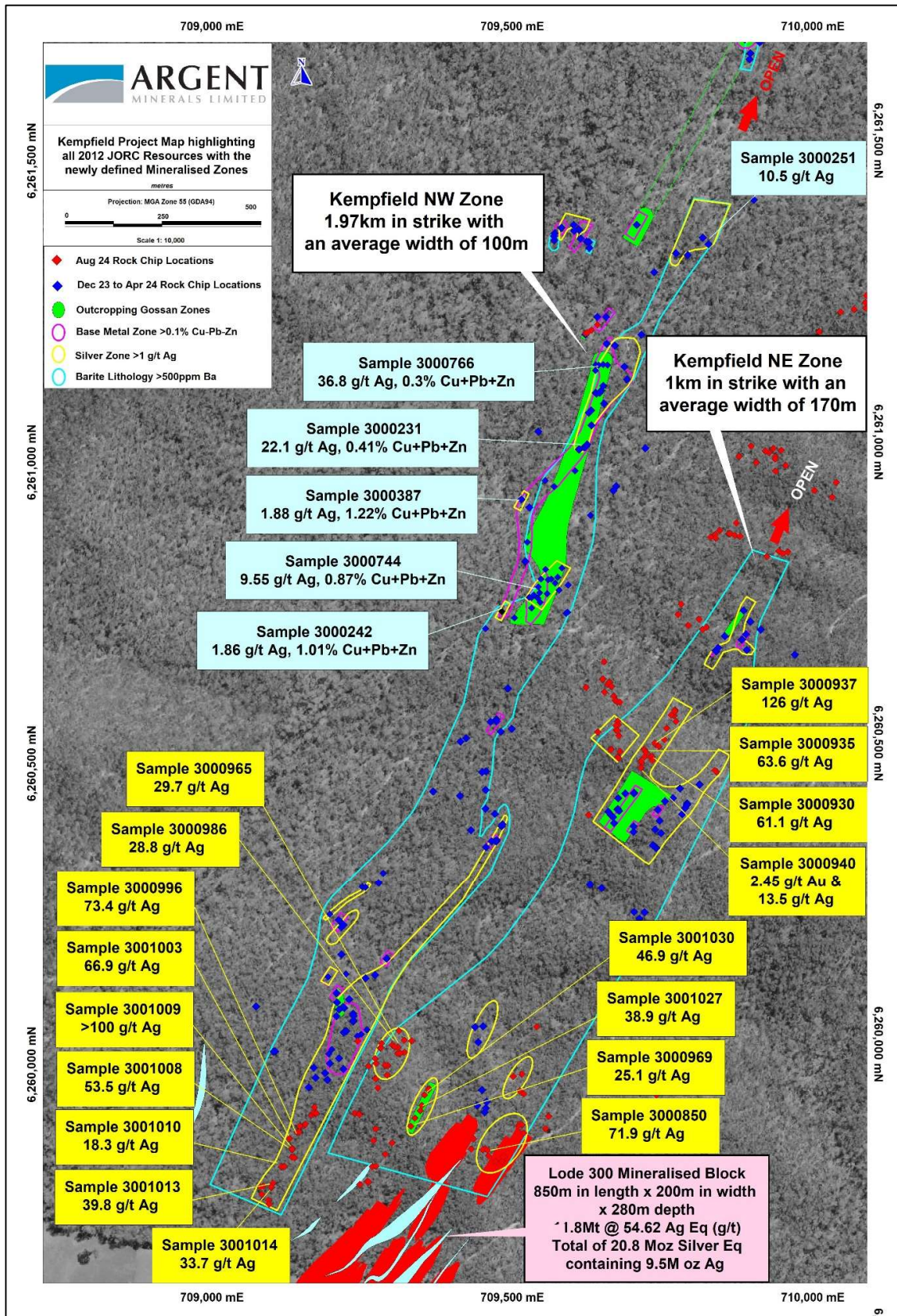
T: +61 8 6311 2818 | E: [info@argentminerals.com.au](mailto:info@argentminerals.com.au)

ABN: 89 124 780 276



**Figure 1 – Kempfield Project Location Map highlighting the Progress of the RC Drilling**





**Figure 2 - Kempfield NW and NE Zones highlighting the recent high-grade rock chip results (red colour dots)**

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## About the Kempfield Resource Estimation

The Kempfield Silver Deposit Mineral Resource estimate for all categories was 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). Table 1 shows the **July 2024** Resource Estimation tonnes/grade by Indicated and Inferred categories. Table 2 is a summary of the updated Kempfield mineral resource as of July 2024 based on the weathering zones, and Table 3 summarises the Mineral Resource by Lodes.

**Table 1 – Kempfield Silver Deposit Mineral Resource Estimate by Classification as at July 2024**  
(at a >15 g/t Ag cut-off & >0.9% Zn)

Category	Million Tonnes (Mt)	Volume (m³)	Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Million Ounces Silver Eq.
Indicated	23.7	8,051,549	79.61	40.04	0.08	0.36	0.67	30.5	60.6
Inferred	40.0	13,589,739	63.92	27.49	0.05	0.31	0.64	35.4	82.3
<b>Total</b>	<b>63.7</b>	<b>21,641,287</b>	<b>69.75</b>	<b>32.15</b>	<b>0.06</b>	<b>0.33</b>	<b>0.66</b>	<b>65.8</b>	<b>142.8</b>

**Table 2 – Kempfield Silver Deposit Mineral Resource Estimate by Weathering Zone as at July 2024**  
(>15 g/t Ag cut-off, Zn 0.9% Zn cut-off)

Weathering Zone	Million Tonnes (Mt)	Grade					Contained Metal				
		Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Thousand Ounces Gold	Thousand tonnes Zinc	Thousand tonnes Lead	Million Ounces Silver Eq.
Oxide	8.3	45.14	38.48	0.08			10.3	20.9			12.1
Transitional	8.8	60.27	38.87	0.09	0.38	0.37	11.0	24.6	32.5	33.6	17.1
Fresh	46.6	75.93	29.75	0.05	0.37	0.83	44.5	79.7	387.9	173.8	113.7
<b>Total</b>	<b>63.7</b>	<b>69.75</b>	<b>32.15</b>	<b>0.06</b>	<b>0.33</b>	<b>0.66</b>	<b>65.8</b>	<b>125.2</b>	<b>420.4</b>	<b>207.4</b>	<b>142.8</b>

**Table 3 – Kempfield Silver Deposit Mineral Resource Estimate by Lode as at July 2024**  
(>15 g/t Ag cut-off, >Zn 0.9% cut-off)

Lode	Million Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Million Ounces Silver Eq
100	23.9	81.13	31.19	0.12	0.49	0.79	23.9	62.3
200	28.0	66.42	36.03	0.03	0.21	0.57	32.4	59.7
300	11.8	54.62	24.93	0.01	0.26	0.61	9.50	20.8
<b>Total</b>	<b>63.7</b>	<b>69.75</b>	<b>32.15</b>	<b>0.06</b>	<b>0.33</b>	<b>0.66</b>	<b>65.8</b>	<b>142.8</b>

### Notes:

- The silver equivalent formulas were determined using the following metal prices based on a five-year monthly average: US\$22.02/oz silver, US\$1,776.93/oz gold, US\$2,774.16/t zinc, US\$2,066.73/t lead.
- The silver equivalent formulas were determined using different metallurgical recoveries for each weathering zone from test work commissioned by Argent Minerals Limited. For oxide zone metallurgical recoveries of 86% silver and 90% gold. For transitional zone metallurgical recoveries of 86% silver, 67% zinc and 21% lead, 90% gold. For primary zone metallurgical recoveries of 86% silver, 92% zinc and 53% lead, 90% gold.
- The silver equivalent formulas were determined using the metal prices and recoveries listed in Notes 1 & 2 for each weathering zone:  
Oxide Zone silver equivalent:  $\text{Ag Eq (g/t)} = \text{g/t Ag} + \text{g/t Au} \times 85.4$   
Transitional Zone silver equivalent:  $\text{Ag Eq (g/t)} = \text{g/t Ag} + \text{g/t Au} \times 85.4 + \% \text{ Zn} \times 30.53 + \% \text{ Pb} \times 7.13$   
Primary Zone silver equivalent:  $\text{Ag Eq (g/t)} = \text{g/t Ag} + \text{g/t Au} \times 85.4 + \% \text{ Zn} \times 41.92 + \% \text{ Pb} \times 17.99$
- In the Company's opinion, the silver, gold, lead and zinc included in the metal equivalent calculations have a reasonable potential to be recovered and sold.
- Variability of summation may occur due to rounding and refer to Appendices for full details.

### ARGENT MINERALS LIMITED

Level 2, 7 Havelock Street, West Perth WA 6005, PO Box 308, West Perth WA 6872

T: +61 8 6311 2818 | E: [info@argentminerals.com.au](mailto:info@argentminerals.com.au)

ABN: 89 124 780 276

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

**-ENDS-**

**For further information, please contact:**

Pedro Kastellorizos  
**Managing Director/Chief Executive Officer**  
Argent Minerals Limited  
[info@argentminerals.com.au](mailto:info@argentminerals.com.au)

**Competent Persons Statement**

*The information in this report / ASX release that relates to Mineral Resources Estimation is based on information compiled and reviewed by Mr. Alfred Gillman, Director of independent consulting firm, Odessa Resource Pty Ltd. Mr. Gillman, a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy (the AusIMM) and has 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, Exploration Targets and Mineral Resources. Mr Gillman is a full-time employee of Odessa Resource Pty Ltd, who specialises in mineral resource estimation, evaluation, and exploration. Neither Mr Gillman nor Odessa Resource Pty Ltd holds any interest in Argent Minerals Ltd, its related parties, or in any of the mineral properties that are the subject of this announcement. Mr Gillman consents to the inclusion in this report / ASX release of the matters based on information in the form and context in which it appears. Additionally, Mr Gillman confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.*

*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*  
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*  
ASX Announcement 18 September 2024: *Kempfield NW/NE Zones Delivers More High-grade Assay Results*  
ASX Announcement 14 October 2024: *Exceptional Drilling Results from Kempfield NW Zone*

Crawford, A. J., 2015a. Petrographic Report – 46 Rocks from Drillholes AKDD178 and AKDD179 on the Kempfield Ag-Barite Deposit, NSW, for Argent Minerals Ltd (Sydney) 24/06/2015. *Internal Unpublished Report*.

Crawford, A. J., 2015b. Petrographic Report – 17 Rocks from Drillholes AKDD177, AKDD178 and AKDD159, Kempfield Ag-Barite Deposit, NSW, for Argent Minerals Ltd (Sydney) 26/09/2015. *Internal Unpublished Report*.

David, V. 2013. Geology of the Kempfield silver-barite and base metal (Pb-Zn) Volcanic hosted massive sulphide deposit, Lachlan Orogen, Eastern Australia. *AIG Bulletin* 55. Mines and Wines 2013.

David, V. 2009. Exploration Licence 7134 Kempfield & Exploration Licence 5748 Kempfield & Exploration Licence 5645 Kempfield Group 2 & PLL 519, Joint Annual Report 2009. Unpublished Company Report.

David, V and Mischler, P. 2013. Exploration Licence 5748, 5645, 7134, 5645, 5645 & PLL 517, 519, 727, 728, Combined Annual Report 2013. Unpublished Company Report.

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Level 2, 7 Havelock Street, West Perth WA 6005, PO Box 308, West Perth WA 6872

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ABN: 89 124 780 276

## 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 1,734km<sup>2</sup> of exploration ground in NSW and 1,038km<sup>2</sup> in Western Australia, totalling 2,772 km<sup>2</sup> 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 (**Inferred Category Only**) 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 (**Inferred Category Only**) 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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