

25 August 2025

ASX Release

First deep diamond hole completed at Kempfield Project

Testing true depth of Australia's second largest undeveloped silver deposit.

Highlights

- The first diamond drillhole AKDD208, targeting the Kempfield deposit's Lode 200, was completed to a depth of 339.2m.
- Drilling of the second drillhole AKDD209, collared in Lode 100, is currently underway and has reached 85m with approximately 230m remaining to be drilled.
- An additional 1,000m of diamond drilling is planned across Lode 200 upon the finalisation of assay results which have been submitted to ALS Orange under priority status.
- Following assay results, core samples will undergo metallurgical testwork, supporting both Heap Leach and Carbon-In-Leach (CIL)/Flotation processing routes.
- This phase of work represents a critical step in advancing our high-quality polymetallic asset towards potential production.

Argent Minerals Limited (**ASX: ARD**) ("**Argent**" or "**the Company**"), the Australian-focused silver and precious metals developer, is pleased to announce an exploration update over the 100%-owned Kempfield Polymetallic Project in NSW. The company has completed the first of two diamond drill holes at its flagship Kempfield Project in New South Wales as it seeks to confirm the depth and grades of its polymetallic deposit ahead of a planned Scoping Study.

Amid historic silver price highs, Argent is seeking to fast track the development of its large polymetallic deposit at Kempfield towards production. The deposit hosts the second largest undeveloped silver resource in Australia with 63.7Mt @ 69.75 g/t silver equivalent for 142.8 Moz Ag Eq, containing of 65.8 Moz silver, 125,192 oz gold, 207,402t lead and 420,373t zinc¹.

Argent Managing Director Mr Pedro Kastellorizos said:

"The current Resource at Kempfield extends down to around 150m but the diamond drilling program is testing the two primary lodes down to around 350m which correlates with the depth of mineralisation estimated by our ore block model. The material returned by drilling will undergo metallurgical testwork to serve a Scoping Study as Argent seeks to fast track a pathway to early production."

The first diamond drillhole AKDD208 was completed to a depth of 339.2m and targeted Lode 200 while drillhole AKDD209 has reached 85m of 315m and is targeting Lode 100 (see Figure 1).

An additional 1,000m of diamond drilling is planned across Lode 200 subject to assay results and regulatory approvals expected within the next three weeks. Core samples will undergo

¹ Refer ASX Announcement 25 July 2024 *Significant Silver Resource Upgrade over Kempfield Deposit*

metallurgical testwork, supporting both Heap Leach and Carbon-In-Leach (CIL)/Flotation processing routes.

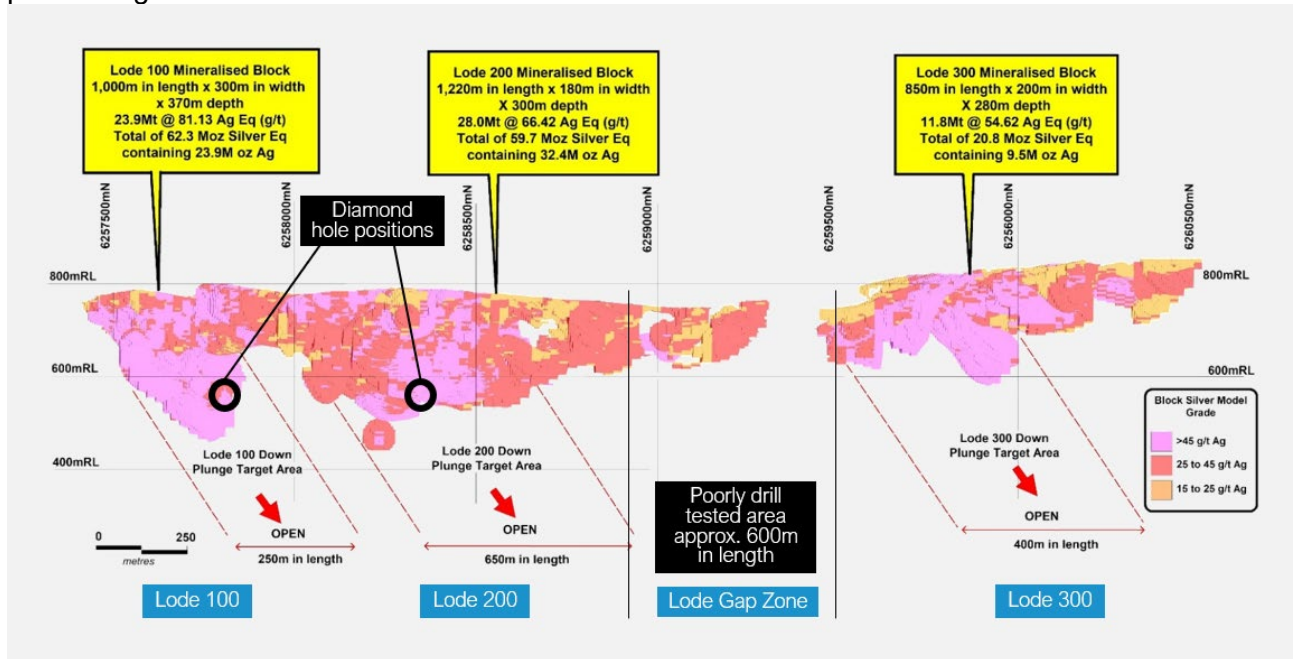


Figure 1 – Kempfield Project Long Section showing the position of the two diamond drill holes.

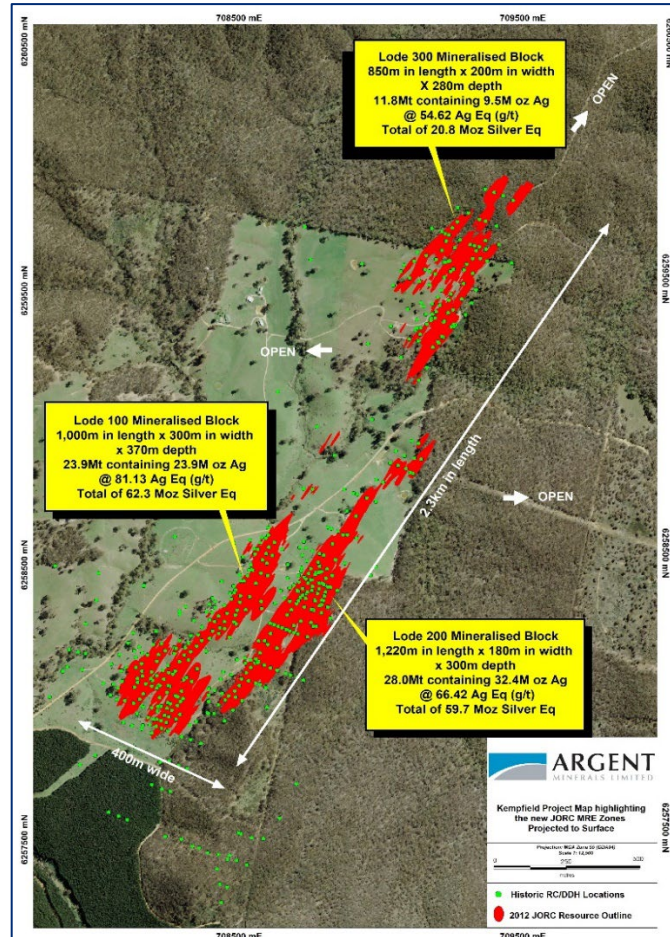


Figure 2 – Aerial view of lode positions at Kempfield deposit.

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

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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. Mr Gillman has completed all the Mineral Resource Estimations for Kempfield, Mt Dudley and Pine Ridge.

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.

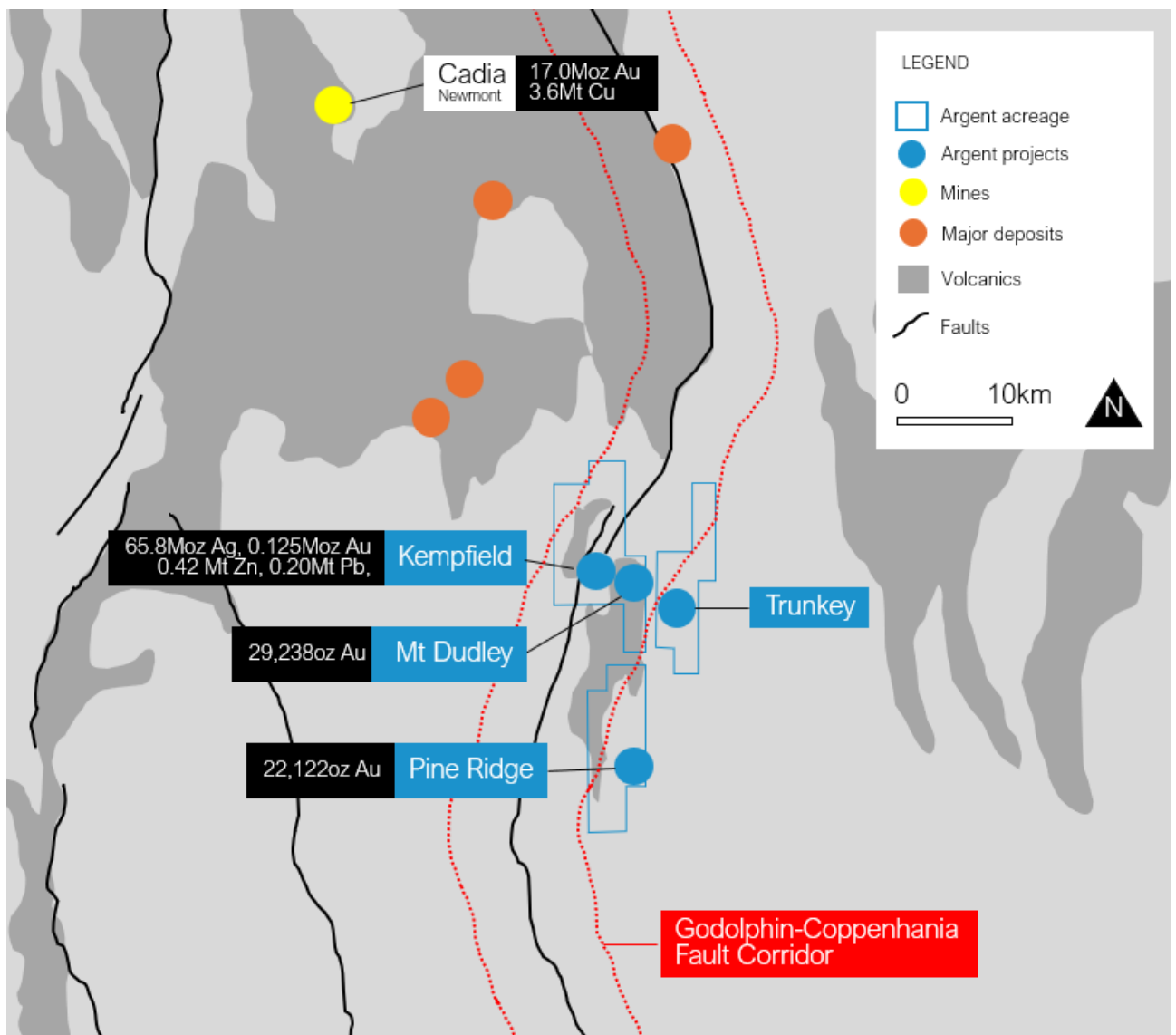
Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated 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.

About Argent Minerals Ltd (ASX: ARD)

Argent Minerals Limited is an ASX listed public company focused on the development of its flagship 100%-owned Kempfield Project in New South Wales which hosts Australia's second largest undeveloped silver deposit - **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** ².

The project is located near Orange in one of Australia's premier mining districts and lies within the prolific Lachlan Fold Belt, host to some of Australia's largest gold and copper mines including Northparkes and Cadia.

The scale and quality of the Kempfield deposit supports a clear pathway to early production via a heap leach starter (oxide) to fund a carbon-in-leach (CIL)/flotation hub (sulphide). The company's nearby Trunkey Creek, Mt Dudley and Pine Ridge projects offer major gold and copper upside and the opportunity to establish a scalable, multi-deposit mine at Kempfield.



² Refer ASX Announcement 25 July 2024 *Significant Silver Resource Upgrade over Kempfield Deposit*

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)

About 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 zinc³** (ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit). Table 2 shows the **July 2024** Resource Estimation tonnes/grade by Indicated and Inferred categories.

Table 2 – 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 (m ³)	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
Total	63.7	21,641,287	69.75	32.15	0.06	0.33	0.66	65.8	142.8

Table 3 is a summary of the updated Kempfield mineral resource as of July 2024 based on the weathering zones.

³ Refer ASX Announcement 25 July 2024 Significant Silver Resource Upgrade over Kempfield Deposit

Table 3 – 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
Total	63.7	69.75	32.15	0.06	0.33	0.66	65.8	125.2	420.4	207.4	142.8

Table 4 summarises the Mineral Resource by Lodes.

Table 4 – 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
Total	63.7	69.75	32.15	0.06	0.33	0.66	65.8	142.8

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.

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 31 May 2022: *New Gold Drill Targets Identified at Trunkey Creek*
 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*
 ASX Announcement 14 January 2025: *Further Gold Mineralisation Located at Trunkey Creek Project*
 ASX Announcement 5 February 2025: *Volcanogenic Massive Sulphide (VMS) Mineralisation Extended at Kempfield NW Zone*
 ASX Announcement 6 March 2025: *Expansion of Mineralisation at Kempfield NW Zone*
 ASX Announcement 31 March 2025: *Bonanza Gold Grades up to 1,930 g/t Gold at Trunkey*
 ASX Announcement 3 April 2025: *Update – Trunkey Creek Rock Chip Results*
 ASX Announcement 10 June 2025: *Update – Extensive Untested EM trends Located at Kempfield*
 ASX Announcement 19 June 2025: *Investor Presentation*
 ASX Announcement 9 July 2025: *Gold Mineralisation Confirmed over 4.7km at Trunkey Creek*
 ASX Announcement 15 July 2025: *Commencement of Deeper Drilling at Kempfield Deposit*

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Stevens, B.P. Mine data Sheets to accompany Metallogenic map – Bathurst 1:250,000 Sheet. NSW Geological Survey, Sydney.