

26 July 2023

ASX Release

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## UPDATED: KEMPFIELD DRILL RESULTS

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Argent Minerals Limited (ASX: ARD) is pleased to provide an update to its announcement released on 25 July 2023 "Extensive High-Grade Mineralisation Zones Intersected Over Kempfield Polymetallic Deposit". Material changes include:

- Figure 3 (Cross Section looking GDA 6257994N, highlighting AKRC226 & AKDD205 new drill intercept);
- Cautionary statements in pages 2 and 5 of the updated announcement; and
- An updated JORC Table 1 Report.

This ASX Announcement has been authorised for release by the Managing Director 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)

26<sup>th</sup> July 2023

ASX Release

## EXTENSIVE HIGH-GRADE MINERALISATION ZONES INTERSECTED OVER KEMPFIELD POLYMETALLIC DEPOSIT

Diamond drilling confirms new previously unidentified silver-lead-zinc rich mineralised zones at depth.

### HIGHLIGHTS

- Results have been received for the diamond holes completed over the Kempfield Deposit with broad, high-grade zones of silver-zinc-lead mineralisation up to **21.2m thick**, representing significant depth extensions to the silver-lead-zinc mineralisation.
- Significant results from the diamond drilling include:
  - Drillhole AKDD201: **8.4m @ 23.05 g/t Ag, 1.55% Pb & 1.93% Zn** from 223.9m  
**2m @ 44.25 g/t Ag** from 253m
  - Drillhole AKDD202: **20.6m @ 19 g/t Ag, 1.20% Pb & 1.36% Zn** from 172.4m  
including **4.4m @ 47.86 g/t Ag & 1.33% Zn** from 172.4m  
including **8.8m @ 18.1 g/t Ag, 2.19% Pb & 2.02% Zn** from 181.2m
  - Drillhole AKDD203: **2.2m @ 16.50 g/t Ag, 1.22% Pb & 3.16% Zn** from 171.3m  
**2.8m @ 35.50 g/t Ag** from 296m
  - Drillhole AKDD204: **3m @ 35.21 g/t Ag, 1.16% Pb & 2.91% Zn** from 19m  
**21.2 @ 20.30 g/t Ag & 2.43% Zn** from 58.8m  
including **6.6m @ 15.44 g/t Ag & 3.62% Zn** from 58.8m
  - Drillhole AKDD205: **2.1m @ 24.25g/t Ag** from 202m  
**3m @ 20.98 g/t Ag** from 209m  
**4.5m @ 22.23 g/t Ag** from 226m  
**11.4m @ 33.85 g/t Ag** from 246m  
including **3.5m @ 61.90 g/t Ag** from 246m
- In total AKRC227 and AKDD201 have intersected 4 mineralised zones within the same drillhole for a total of **74.4m of mineralisation**. Drillhole AKRC228/AKDD202 intersected 3 zones of mineralisation for a total of **166.6m of mineralisation** within the drillhole. AKRC226 and AKDD205 have intersected **52m of mineralisation** over 5 mineralised zones within the same drillhole.
- These diamond holes have delineated new continuous thick high-grade silver-zinc-lead zones on the western lodes at depth within the Kempfield Deposit. The zinc lodes are increasing with grade and consistency at depth with significant silver-lead-zinc mineralisation.
- Future exploration will focus on delineating extensions to the higher-grade zones and the calculation of revised newly constrained 2012 JORC Resource.

#### 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

*Note: The mineralised intercepts reported are downhole drilled lengths only and not true widths of the mineralised lodes as the relationship between the orientation of mineralisation and the drillholes remains unverified.*

Argent Minerals Limited (ASX: ARD) (“**Argent**” or “**the Company**”) is pleased to announce that we have received the final drill assay results from the seven (7) diamond drillholes completed over our Kempfield Polymetallic Deposit in NSW. Following highly successful RC drilling January 2023, Argent has completed a follow-up diamond drilling program over the Main Zone of the Kempfield Deposit along with 2 diamond holes over the Colossal Reef Zone and the eastern section of the Henry Zone area. The goal of the seven (7) Diamond Drillholes (1,101.5m total) was to extend the new Ag-Pb-Zn zones at depth from the 2023 RC drilling campaign.

**Argent Managing Director Mr Kastellorizos commented:**

*“The newly defined high-grade silver-zinc-lead-gold mineralised zones clearly demonstrate a strong continuation of mineralised extensions at depth within the Kempfield Deposit. These zones of mineralisation have clearly demonstrated that the vertical depth of the overall resource has greater depth extensions than previously delineated in the historical drilling spanning from 2008 until 2020. Currently, the company is working on the new constrained 2012 JORC Resource estimation which will be released to the market once completed”.*

**Diamond Drilling Program**

A total of 7 diamond drillholes with three diamond tails were completed at Kempfield between February and April 2023. These holes were designed to test the mineralised extensions from AKRC226 & AKRC228 with one hole completed over the Colossal Reef Zone and eastern section of the Henry Zone located NNE of the Kempfield Deposit. The primary sulphide zone within the Kempfield Deposit is composed of mineral assemblages including pyrite, sphalerite and galena hosted within chlorite altered volcanic metasediments and barite lithologies. All completed diamond drillholes locations are illustrated in Figure 4, cross sections are shown in Figures 1 to 3, along with the significant diamond intersections shown in Table 1.

**Table 1: Significant Diamond Drilling Intersections**  
 (Intercepts using 18g/t Ag and/or 1% Pb or Zn% cut-off)

Hole ID	Coring Depth	From	To	Interval (m)	Ag (g/t)	Pb%	Zn%	Pb% + Zn%
AKDD201	258.8	223.9	232.3	8.4	23.05	1.55	1.93	3.48
		253	256.3	2	44.25	0.36	0.46	0.82
AKDD202	208.9	172.4	193	20.6	19	1.20	1.36	2.56
	inc	172.4	176.8	4.4	47.86	0.27	1.33	1.60
	& inc	181.2	190	8.8	18.1	2.19	2.02	4.21
AKDD203		171.3	173.5	2.2	16.50	1.22	3.16	4.38
		296	298.8	2.8	35.50	0.04	0.22	0.26
AKDD204		19	22	3	35.21	1.16	2.19	3.35
		58.8	80	21.2	20.30	0.61	2.43	3.04
	inc	58.8	65.4	6.6	15.44	0.33	3.62	3.95
	& inc	65.4	70.6	5.2	29.79	0.97	1.75	2.71
	& inc	77	80	3	34.07	0.97	3.32	4.29
		241.1	245.7	4.6	5.47	0.04	1.49	1.53
AKDD205	196	202	204.1	2.1	24.25	0.65	0.24	0.89
		209	212	3	20.98	0.26	0.03	0.29
		226	230.5	4.5	22.23	0.29	0.38	0.67
		246	257.4	11.4	33.85	0.08	0.30	0.38
	inc	246	249.5	3.5	61.90	0.03	0.14	0.17

**Drillhole AKDD201**

Hole AKDD201 (Section 6258088N) intersected a zone of silver-zinc-lead-mineralisation within a chloritic volcanoclastic mudstone/siltstone. AKDD201 diamond tail was designed to drill test the continuous mineralisation encountered in AKRC227 within

**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)

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a southwest down plunge of the high-grade discovery of 9m @ 38.21 g/t Ag & 2.42% Zn from 27m, 28m @ 30.58 g/t Ag & 0.72% Zn from 109m, 29m @ 63.48 g/t Ag & 0.53% Zn from 173m including 16m @ 97.81 g/t Ag from 174m, including 8m @ 18.93 g/t Ag & 1.22% Zn from 194m (ASX Announcement 1 March 2023: *Further Extensive New High-Grade Mineralisation over Kempfield*). AKRC227 was the pre collar for AKDD201 which started from 203.5m down to 258.8m totalling 56.8m of diamond core. AKDD201 intersected 8.4m of silver-lead-zinc- mineralisation from 223.9m down hole including a 2m downhole zone of silver mineralisation starting from 253m, confirming that the strong mineralisation does extend down plunge. This mineralisation is interpreted to be the down dip position of the wide interval of mineralisation intersected in RC drillhole AKRC142 located 170m to the northwest (refer Figure 1). This new system is open at depth and along strike.

In total AKRC227 and AKDD201 has intersected **74.4m of mineralisation** over 4 discrete west dipping mineralised zones within the same drillhole as per below Figure 1.

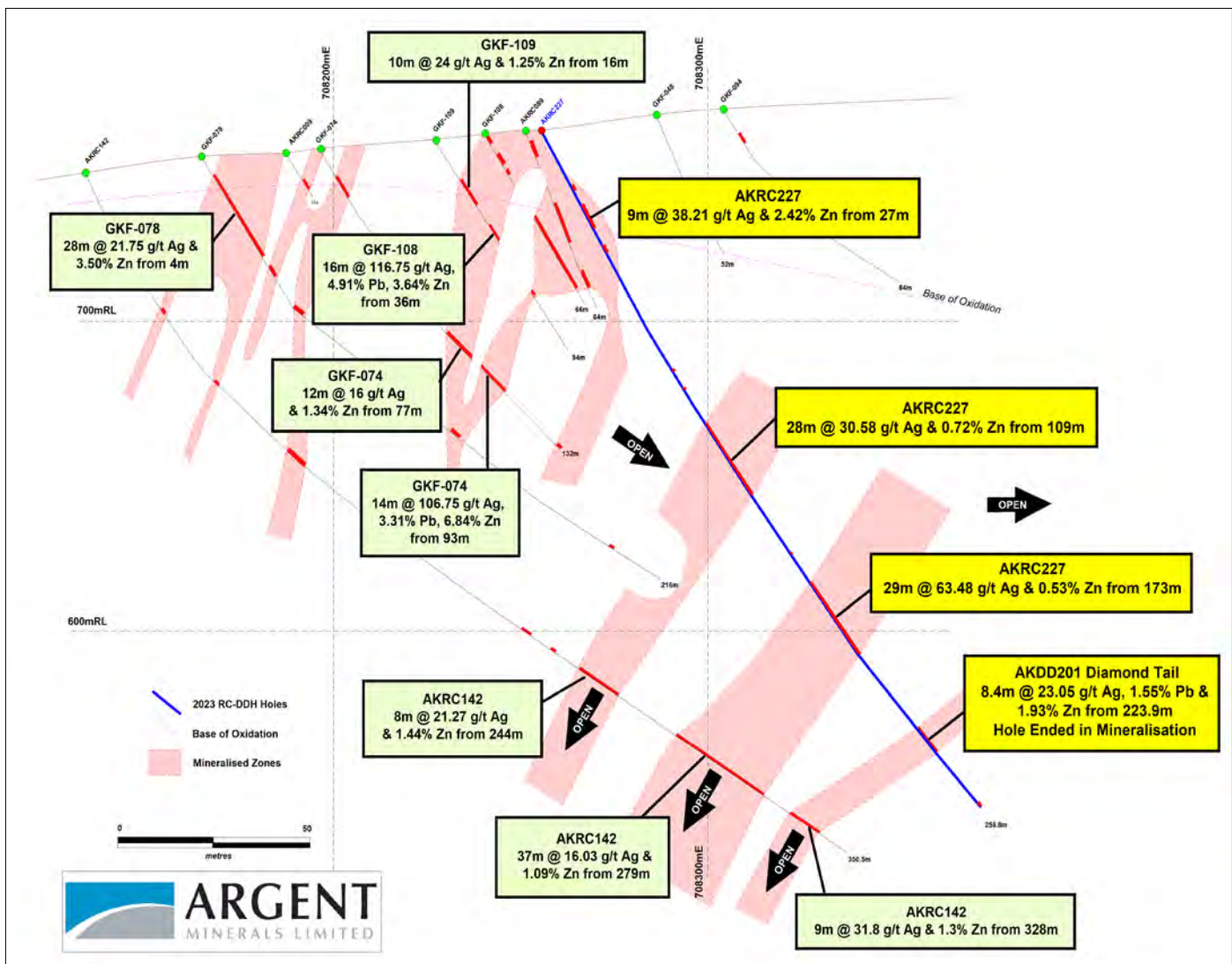


Figure 1 – Cross Section looking GDA 6258279N, highlighting AKRC227 & AKDD201 new drill intercept.

### Drillhole AKDD202

AKDD202 diamond drillhole was designed to drill test the continuous mineralisation encountered in AKRC228 i.e. the south-west vertical down plunge of the high-grade discovery of 129m @ 55.44 g/t Ag from 7m, which included 15m @ 120.77 g/t Ag from 33m, 12m @ 94.34 g/t Ag from 71m, 10m @ 37.24 g/t Ag, 1.01% Pb & 1.12% Zn from 98m, and 17m @ 40 g/t Ag & 1.61% Zn from 155m, including 8m @ 44.4 g/t Ag & 2.73% Zn from 164m – Hole Ended in Mineralisation (ASX Announcement 1 March 2023: *Further Extensive New High-Grade Mineralisation over Kempfield*).

### ARGENT MINERALS LIMITED

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

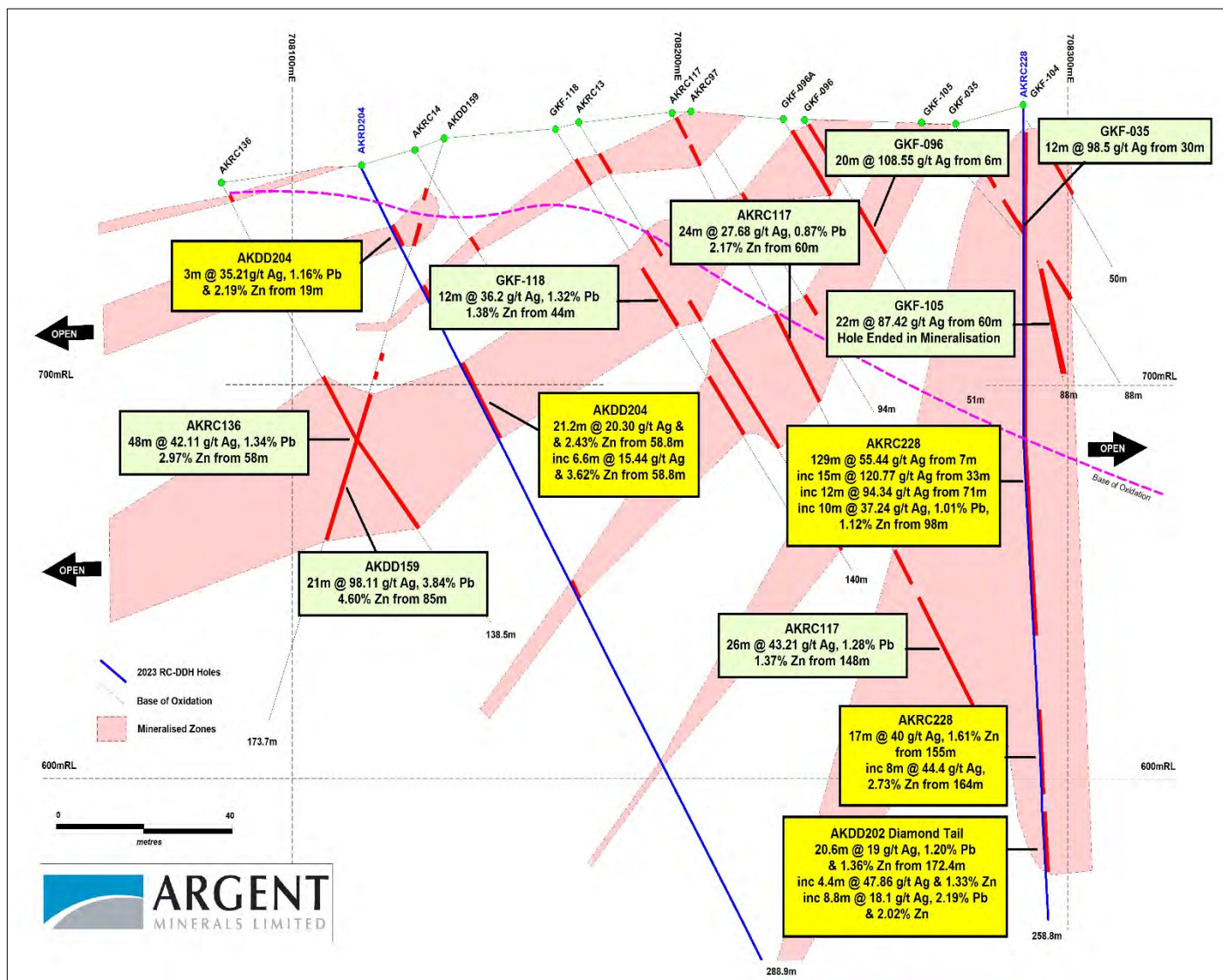
T: +61 8 6311 2818 | E: [info@argentminerals.com.au](mailto:info@argentminerals.com.au)

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AKRC228 was the pre collar for AKDD202, which started from 172.4 down to 258.8, totalling 86.4m of diamond core. AKDD202 intersected a rich barite zone hosting strong pyrite-sphalerite zones from 172.4 to 176.8m, and from 181.2 to 190m. This confirms that the mineralisation extends down plunge.

In total the AKRC228 and AKDD202 drillhole has intersected 2 vertical to west dipping mineralised zones totalling **166.6m of mineralisation** within the same drillhole as per Figure 2. The mineralisation included mostly filled pyrite-galena-sphalerite within barite and altered metasediments.



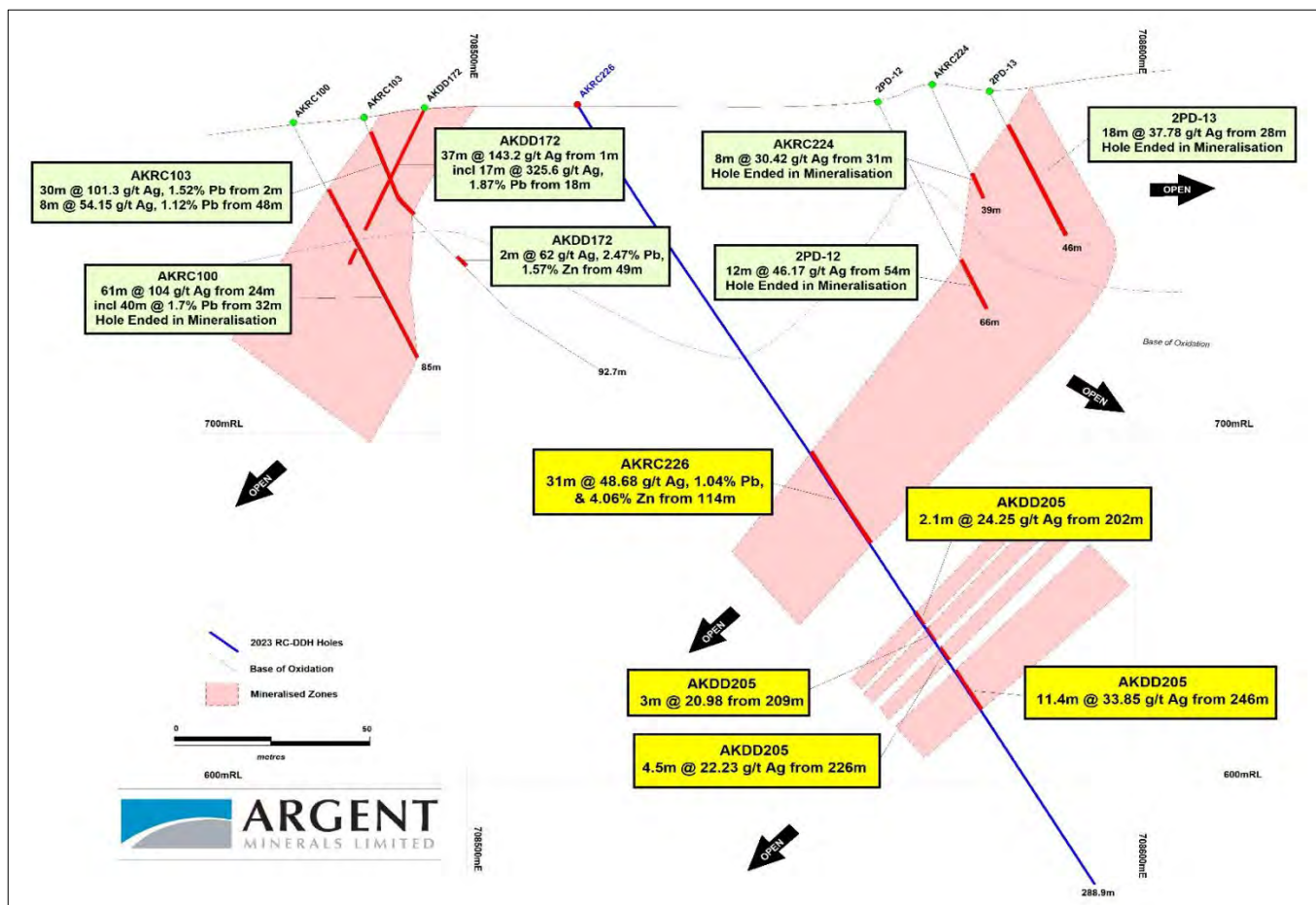
**Figure 2 – Cross Section looking GDA 6257994N, highlighting AKRC228, AKDD202 & AKDD204 new drill intercept.**

## Drillhole AKDD205

AKDD205 diamond drill hole was designed to drill test the continuous mineralisation encountered in AKRC226 within a southwest down plunge of the high-grade discovery of 31m @ 48.68 g/t Ag, 1.04% Pb & 4.06% Zn from 114m and 3m @ 1.02% Pb & 4.47% Zn from 154m (ASX Announcement 1 March 2023: *Further Extensive New High-Grade Mineralisation over Kempfield*). Hole AKDD201 (Section 6258088N) intersected a zone of silver-zinc-lead-mineralisation within a chloritic volcanoclastic mudstone/siltstone.

AKRC226 was the pre collar for AKDD205 which started from 196m down to 288.9m totalling 92.9m of diamond core. AKDD205 intersected five mineralised zones with the thickest intersection of 11.4m of silver mineralisation from 246m down hole confirming that the strong mineralisation does extend down plunge. The nearest hole to the north, which is also open at depth, is 90 metres away with historical hole AKRC139. This new system is open at depth and along strike.

In total AKRC226 and AKDD205 intersected **52m of mineralisation** over 5 different west dipping mineralised zones within the same drillhole within the same drillhole as per Figure 3.



**Figure 3 – Cross Section looking GDA 6257994N, highlighting AKRC226 & AKDD205 new drill intercept.**

Diamond Drillholes AKDD206 and AKDD207 did not intersect any significant mineralisation.

*Note: The mineralised intercepts reported are downhole drilled lengths only and not true widths of the mineralised lodes as the relationship between the orientation of mineralisation and the drillholes remains unverified.*

### About the Kempfield Project Area

The Kempfield Project is located 45km SSW of Blayney in New South Wales. The Kempfield area first became known for barite mining which commenced in 1918 and continued periodically until the Geological Survey of NSW undertook mapping from 1971. Mineralisation is hosted in stratiform and probably barite-rich horizons occurring in what appear to be a series of tight isoclinal folds. silver, lead, zinc, gold and barite mineralisation are derived from submarine volcanic exhalations associated with the felsic volcanic activity. The geology and mineral assemblage are consistent with a distal facies of a volcanic-hosted base metals sulphide deposit (VHMS).

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)

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

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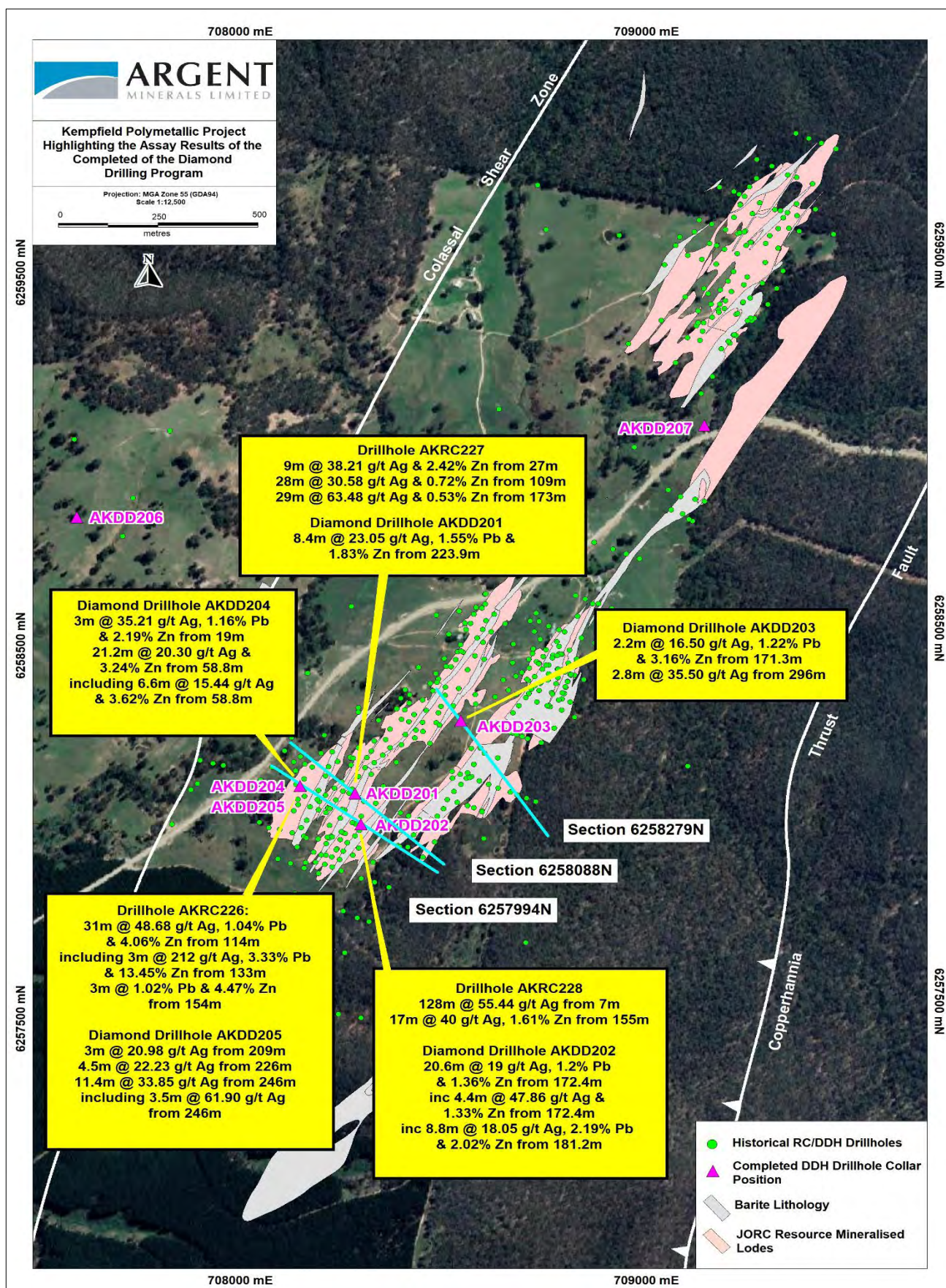


Figure 4 – Kempfield Project Highlighting the Assay Results of the Completed RC/Diamond Holes

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

ABN: 89 124 780 276



## **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 have 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.

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## **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



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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

## **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, 1,038km<sup>2</sup> in Western Australia and 104km<sup>2</sup> in Tasmania, totalling 2,876 km<sup>2</sup> 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 Polymetallic Deposit is situated within the Lachlan Orogen with current operation focus on the definition of the first maiden constrained JORC 2012 Resource over the Kempfield Polymetallic 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 inversion model has delineated three distinct resistive/chargeable zones (Northern, Central, Southern). Sub-parallel main quartz reefs are spaced 30m to 50m apart over a strike length of 2 km. The distribution of shafts along the reef indicates two main centres of mineralisation.

### **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**.

### **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**.

### **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.



### **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. The vein system defined by historical surface mapping and drilling has a strike length of approximately 1.2 km and has been intersected down to 305 metres below surface. The mineralisation is open both along strike and a depth.

## **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

**JORC Code, 2012 Edition – Table 1 report**
**Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g., ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>Diamond Drilling (DDH) was completed over 7 holes, totalling 1,101.5m. Sample type was drill core from DDH drilling with sampling varied depending on the geology and the visible mineralisation between 0.4 and 1 metres. Every sample weighted between 1.5 and 3.65 kgs. The heavier samples are due to the high SG from the barite lithologies.</p> <p>Industry standard practices will used to ensure sample representation. ALS Laboratories in Brisbane applied QA-QC for sample preparation and appropriate instrument calibration.</p> <p>Drill core was measured, oriented and marked up in the field. Oriented. The core was placed in an orientation rack with a line drawn along the core</p> <p>Duplicates, blanks, and standards will be submitted to ensure results are repeatable and accurate. Laboratory comparison checks will also be completed. With no statistically significant lab errors or biasing shown at this stage.</p> <p>Intervals were geologically logged by geologist currently on the drilling programme.</p>
<b>Drilling techniques</b>	<p><i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Diamond drilling was completed by standard Diamond Drilling techniques. Ophir Drilling Pty Ltd is using a track mounted Sandvik DE712 drill rig with diamond core in HQ (5-inch diameter core (HQ) was utilised through the regolith and oriented until the end of hole.</p> <p>All HQ diamond drill core orientated using Reflex ACT III Orientation Tool.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>All metre intervals were logged, and sample recoveries were estimated by geologist on site based on bag volume estimation and recorded as a percentage. Sample recoveries were classified as satisfactory, and the volume of sample was considered to represent a good composite sample overall.</p> <p>Intervals of core loss were logged and entered into the database. There is no observed sample bias, nor a relationship observed between grade and recovery.</p> <p>Diamond Core measured using standard measuring tape. Length of core is then compared to the recorded interval drilled from core blocks placed in trays at end of runs. All measures were taken to obtain 100% core recovery; core trays were photographed wet and dry. Core recoveries were excellent and usually between 90-100%. Some minor cavities were encountered at depth.</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been</i></p>	<p>All DDH drilling is qualitatively and quantitatively logged for</p>



Criteria	JORC Code explanation	Commentary
	<p><i>geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>a combination of geological and geotechnical attributes in their entirety including as appropriate major &amp; minor lithologies, alteration, vein minerals, vein percentage, sulphide type and percentage, fractures, shears, colour, weathering, hardness, grain size.</p> <p>All DDH holes were geological logged from the start to the end of hole. All fields' descriptions are qualitative in nature.</p> <p>Diamond drilling – All HQ drill core is photographed, core recovery calculated; core marked up along the orientation line and logged by experienced geologists familiar with the style of deposit and stratigraphy. The percentage of visible sulphide (pyrite, galena, and sphalerite etc) is estimated for each significant geological unit.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>All Diamond holes were sampled and cut between 0.4 to every 1 metre using a core saw to produce a sample between 1.5 and 3.65 kgs sub-sample for submission to ALS Labs in Brisbane. The heavier samples are due to the high SG from the barite lithologies.</p> <p>All samples submitted to ALS Labs were weighted, dried, crushed and pulverised until sample was classified as homogeneous.</p> <p>Approx. 7% of submitted samples are in the form of standards, blanks, and duplicates and will be submitted once the drilling programme has been completed.</p> <p>There has been no statistical work carried out at this stage. The sample sizes are appropriate to the grain size of the material been sampled.</p>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</i></p>	<p>Geochemical Analysis of the RC samples conducted by ALS in Brisbane included drying and pulverising to 85% passing 75um. Four acid ICP-AES (ME-ICP61) was used to assay for Ag (ppm), As (ppm), Cu (ppm), Pb (ppm) and Zn (ppm).</p> <p>When high grade assays results were encountered, ICP-AES Ore Grade Element was used</p> <p>If Ag &gt;= 100 ppm then Method Ag-OG62 was used          If Cu &gt;= 10,000 ppm then Method Cu-OG62 was used          If Pb &gt;= 10,000 ppm then Method Pb-OG62 was used          If Zn &gt;= 10,000 ppm then Method Zn-OG62 was used</p> <p>Acceptable levels of accuracy for all data referenced in this ASX announcement have been achieved given the purpose of the analysis.</p>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p>	<p>Argent and SGS employ independent QAQC assay checks. Argent uses coarse crush, fine crush and pulp duplicates, blanks and 3 types of CRM's inserted at a ratio of 1:20. Alternative company staff have verified the significant results that are listed in this report.</p> <p>No Twinned Holes were used</p>

Criteria	JORC Code explanation	Commentary
	<i>Discuss any adjustment to assay data.</i>	<p>All drillhole information is stored graphically and digitally in MS excel and MS access formats.</p> <p>No adjustments have been made to assay data.</p>
<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Sample positions were recorded by differential GPS (0.1m expected accuracy) which is suitable for this stage of exploration.</p> <p>All data used in this report are in:</p> <p>Datum: Geodetic Datum of Australia 94 (GDA94)          Projection: Map Grid of Australia (MGA)          Zone: Zone 55</p> <p>Topographic control was gained using government DTM data with handheld GPS check.</p>
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.</i>	<p>Data spacing is listed in Section 2 Reporting of Exploration Results under Drillhole information.</p> <p>The historic RC and Diamond drill holes spacing, and distribution completed at the Kempfield deposit is considered sufficient to establish geological and grade continuity appropriate to be added to the creation of a JORC 2012 Mineral Resource for a future resource estimation upgrade.</p> <p>Sampling will be undertaken on diamond core through all potential mineralisation zones and structural zones with contacts determined by geological contacts or sulphide density. Sampling usually at 1m intervals.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>Samples were taken with consideration of stratigraphy and alteration; samples do not straddle geological or stratigraphic boundaries. The immediate local geological sequence and foliation is steeply westerly dipping.</p> <p>Drillholes were targeted to intersect geology on mildly oblique sections to increase intercept potential and also to test the true vertical depth of the various mineralised lens.</p> <p>The relationship between drilling orientation and mineralisation orientation is not considered to have introduced any material sampling bias during the Kempfield drilling program.</p> <p>At present it is not believed that the drilling orientation has introduced any sampling bias. The relationship between drill holes and the mineralisation is shown in cross sections. The holes are approximately perpendicular to mineralisation apart from hole AKRC228/AKDD202 which was drilled vertically giving a true width roughly 60% of downhole metres.</p>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Diamond core sub-samples were stored on site prior to being transported to the laboratory for analyses. Chain of custody involved graphic and digital sign off sheets onsite, sample transfer protocols onsite, delivery to laboratories by Argent Minerals staff with receipts received from the laboratory. Sample pulps are currently stored at the

Criteria	JORC Code explanation	Commentary
		laboratory and will be returned to the Company and stored in a secure location.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been undertaken

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary																		
<b>Mineral tenement and land tenure status</b>	<p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>Exploration Licence, Kempfield / EL5748, Trunk Creek, NSW, held by Argent (Kempfield) Pty Ltd (100% interest), a wholly owned subsidiary of Argent Minerals Limited. There are no overriding royalties other than the standard government royalties for the relevant minerals.</p> <p>There are no other material issues affecting the tenements.</p> <p>All granted tenements are in good standing and there are no impediments to operating in the area.</p>																		
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Argent Minerals Limited through its wholly owned subsidiary Argent (Kempfield) Pty Ltd is the sole operator of the project. Argent Minerals introduced best industry practice work.</p> <p>Kempfield has been explored for more than forty years by several exploration companies as set out in the below table:</p> <table border="1"> <thead> <tr> <th>Company</th><th>Period</th><th>Exploration activities</th></tr> </thead> <tbody> <tr> <td><b>Argent Minerals</b></td><td>2007-current</td><td>Drilling, surface geochemical sampling, VTEM survey, pole-dipole IP survey, gravity survey, ground EM and down-hole EM survey</td></tr> <tr> <td><b>Golden Cross</b></td><td>1996-2007</td><td>Drilling and high resolution airborne magnetic survey</td></tr> <tr> <td><b>Jones Mining</b></td><td>1982-1995</td><td>Drilling</td></tr> <tr> <td><b>Shell</b></td><td>1979-1982</td><td>Drilling, ground EM survey, dipole-dipole IP survey, and soil sampling</td></tr> <tr> <td><b>Inco</b></td><td>1972-1974</td><td>Drilling</td></tr> </tbody> </table>	Company	Period	Exploration activities	<b>Argent Minerals</b>	2007-current	Drilling, surface geochemical sampling, VTEM survey, pole-dipole IP survey, gravity survey, ground EM and down-hole EM survey	<b>Golden Cross</b>	1996-2007	Drilling and high resolution airborne magnetic survey	<b>Jones Mining</b>	1982-1995	Drilling	<b>Shell</b>	1979-1982	Drilling, ground EM survey, dipole-dipole IP survey, and soil sampling	<b>Inco</b>	1972-1974	Drilling
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<b>Geology</b>	<i>Deposit type, geological setting, and style of mineralisation.</i>	<p>The deposit type is Volcanogenic Massive Sulphide (VMS).</p> <p>The geological setting is Silurian felsic to intermediate volcanics within the intra-arc Hill End Trough in the Lachlan Orogen, Eastern Australia; and</p> <p>Mineralisation is hosted in stratiform and probably barite-rich horizons occurring in what appear to be a series of tight isoclinal folds. Silver, lead, zinc, gold and barite mineralisation is derived from submarine volcanic exhalations associated with the felsic volcanic activity. The geology and mineral assemblage are consistent with a distal facies of a volcanic-hosted base metals sulphide deposit (VHMS).</p>																		
<b>Drill hole</b>	<i>A summary of all information material to the understanding of the exploration</i>	The drill hole information has been inserted and tabulated within the document																		



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<b>Information</b>	<p>results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"><li>○ easting and northing of the drill hole collar</li><li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li><li>○ dip and azimuth of the hole</li><li>○ down hole length and interception depth</li><li>○ hole length.</li></ul> <p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	for the drill holes reported.						
		Hole ID	GDA94 East	GDA94 North	AHDRL	Total Depth	Azimuth	Dip
		AKDD201	708261	6258086	761	258.8	120	-60
		AKDD202	708283	6257991	772	258.8	0	-90
		AKDD203	708520	6258279	775	300.8	132	-60
		AKDD204	708122	6258100	756.5	287.7	120	-60
		AKDD205	708521	6258278	756.5	288.9	132	-60
		AKDD206	707826	6258815	805	106.8	260	-60
		AKDD207	709113	6259058	773	219.6	120	-60
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No weighting average techniques or cut-off grades are employed at this point.						
		Results are estimated on visual observation of alteration intensity and number of sulphides by geologist and supported by photographs.						
		No metal equivalent values employed in this report.						
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., ‘down hole length, true width not known’).</p>	Orientation, true widths and the shape/geometry of the Ag-Pb-Zn mineralisation at Kempfield can be interpreted of historical drilling and existing leapfrog models and cross sections, yet the varied orientation of the mineralised lodes and the true thickness of the high-grade zones remain unclear.						
<b>Diagrams</b>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	Drill collar plan is located as Figures 4 with interpreted cross sections illustrated in Figures 1 to 3.						
<b>Balanced reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</p>	Not Applicable						

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Metallurgical, groundwater, and geotechnical studies have not commenced as part of the assessment of the project.
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Further DDH Drilling will be implemented once the next phase of drilling has been assessed.