ARGENT MINERALS LIMITED

ASX Code: ARD

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SIGNIFICANT UPGRADE TO MINERAL RESOURCE ESTIMATE FOR KEMPFIELD SILVER DEPOSIT

Kempfield Project currently has 127.5 million ounces Ag Eq Resource

New JORC Resource Estimation over Kempfield Deposit has increased by 28% from previous 2018 Resource Estimation.

HIGHLIGHTS

- The Kempfield Silver Deposit Mineral Resource Estimate for all categories has been upgraded to:

38.9Mt @ 102 g/t silver equivalent ('Ag Eq')[1] for 127.5 million ounces Ag Eq

(34.26 g/t Ag, 1.10% Zn, 0.47% Pb, 0.12 g/t Au at a 60 g/t Ag Eq cut-off)

- The new Resource Estimation has a silver equivalent estimation of 127.5 million ounces Ag Eq at 102 g/t Ag Eq, approximately 28% increase when compared with/to the previous 2018 Mineral Resource Estimation.
- Kempfield Deposit contains **42.8 Moz Silver**, **149.2 thousand oz Gold**, **181,016t Lead** and **426,900t Zinc**, confirming the Kempfield Deposit is one of the largest Silver Deposits in NSW.
- Metallurgical test work shows excellent recoveries (86% and 90%) for silver and gold within the Primary Zone via Cyanide Leach Process.
- The revised silver contained metal equivalents signal a significant advance towards potential economic viability.
- Strong foundation for further resource growth through exploration and infilling and extensional resource drilling.
- The company has used a conservative silver price of $US21.80/oz versus current price of $US24.24/oz.
- Significant potential to grow the resource within the Central Gap, Kempfield East and Sugar Loaf Zones.
- High grade extensions in the central and northern areas running at 250 Ag Eq (g/t) within Lodes 100 and 300.

[1]Kempfield silver equivalent varies across weathering horizons due to differences in metallurgical recoveries for base metals. Metal Prices used: US$21.80/oz silver, US$1,830/oz gold, US$2,990/t zinc and US$2,084/t lead. Oxide Ag Eq (g/t) = g/t Ag + g/t Au x 87.8494 calculated using metallurgical recoveries of 86% silver, 90% gold. Transitional Zone Ag Eq (g/t) = g/t Ag + g/t Au x 87.8494 + % Zn x 45.6366 + % Pb x 18.3243 calculated using metallurgical recoveries of 86% silver, 67% zinc, 90% gold and 21% lead. Primary Zone Ag Eq (g/t) = g/t Ag + g/t Au x 87.8494 + % Zn x 45.6366 + % Pb x 18.3243 calculated using metallurgical recoveries of 86% silver, 92% zinc, 90% gold and 53% lead.

Argent Minerals Limited (ASX: ARD) ("Argent" or "the Company") is pleased to announce an upgraded Mineral Resource Estimate ("MRE") for the Kempfield Silver Deposit located within its 100%-owned Kempfield Ag-Au-Pb-Zn Project in New South Wales. The Kempfield Silver Deposit Mineral Resource now stands at 38.9Mt @ 102g/t silver equivalent ('Ag Eq') for 127.5 million ounces of silver, a 28% increase of from the previous Mineral Resource Estimation.

The Kempfield Project is located 45km SSW of Blayney and 8km west of Trunkey Creek in NSW. Access to the project is by 9km of unsealed all-weather road from Trunkey Creek. The Kempfield Project is the Company's flagship project and is registered in NSW as a Significant Development.

Strategically Positioned in World-Class Area

The Lachlan Orogen is host to one of the largest underground gold-copper mines in the Southern Hemisphere, Newcrest Mining's (ASX: NCM; TSE: NCM; PNGX: NCM) Cadia Valley Operations. The current Cadia Valley Operations Mineral Resource comprises 37 million ounces of gold, and 8.3Mt of copper. The region also hosts world-class copper-gold and gold deposits (>100 Mt) such as the North Parkes and Cowal mines.

The Kempfield deposit belongs to a peer group of volcanic-hosted massive sulphide (VHMS) deposits located at the margins of geological basins. This peer group is known as the Eastern Australian Palaeozoic VHMS Deposits and includes well-known significant deposits such as Rosebery, Que River, Hellyer, Mt. Lyell, Sunny Corner, McPhillamys, Woodlawn, Captains Flat and Thalanga.

The growing number of newly identified zones of the Kempfield deposit, along with the major deposit size and increasing lead, zinc, silver and gold grade trends, provides Kempfield with significant potential to become a major producer of base and precious metals.

Argent Managing Director Mr Kastellorizos commented:

"We are pleased to have completed the upgraded 2012 JORC compliant Resource over the Kempfield Silver Polymetallic Deposit with a 28% increase from the previous resource. This exceptional resource estimate is another major milestone for Argent Minerals as it confirms the Kempfield Project as one of the largest silver deposits in NSW. Achieving a Mineral Resource Estimate of this size and the value of the metal content within the resource area is significant as we believe the discovery of further mineralisation within the Project area will increase the overall value of the future operations.

Furthermore, our technical team believe the Kempfield deposit has substantial potential for additional resource growth along strike and at depth. Argent will be planning the next phase of extensional drilling within the Central Gap Zone Area with a view of increasing the tonnage and grade of the current resource estimation.

Our focus on resource growth has already identified multiple prospect areas of significant mineralisation within the Argent Project portfolio which can be accelerated into the Company's resource inventory. Argent is now well positioned and aims to deliver increasing value for shareholders by targeting systematic exploration programmes and bringing further projects to a Resource status."

Mineral Resource

The Kempfield Silver Deposit Mineral Resource estimate for all categories has been upgraded to 38.9Mt @ 102.4 g/t silver equivalent ('Ag Eq') for 127.5 million ounces Ag Eq, an increase of approximately 28% from the previous 2018 Resources Estimate.

The Kempfield Deposit contains **42.8Moz silver**, **149,200oz gold**, **181,016t lead** and **426,900t zinc**, confirming the Kempfield Deposit is one of the largest Silver Deposits in NSW.

Metallurgical test work shows excellent recoveries for silver and gold (86% and 90% respectively) within the Primary Zone via Cyanide Leach Process

The Kempfield Mineral Resource has been independently estimated by Odessa Resources Pty Ltd (Perth). The estimate has been produced by using Leapfrog Edge software to produce wireframes of the various mineralised lode systems and block grade estimation using an ordinary kriging interpolation. Top cuts were applied to individual lodes as necessary to limit the effect of high-grade outliers. The reporting is compliant with the 2012 JORC Code and Guidelines. Please refer to Tables 1, 2 and 3, and JORC Tables 1 to 3 for further details.

Table 1 is a summary of the updated Kempfield mineral resource as of September 2023 based on the weathering zones, Table 2 shows the Resource tonnes and grades by Indicated and Inferred categories and Table 3 summaries the Mineral Resource by lodes. The cut-off grades used where 25 g/t Ag for Oxide with Transitional and Primary for 60 g/t Ag equivalent silver cut-off [1].

Table 1 – Kempfield Silver Deposit Mineral Resource Estimate by Weathering Zone as at September 2023 (at a 25 g/t Ag cut-off for oxide and 60 g/t Ag Eq cut-off for Transitional/Primary)											
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 Lead	Thousand tonnes Zinc	Million Ounces Silver Eq.
[3] Oxide	3.4	69	56.93	0.13			6.3	14.6			7.6
[2] Transitional	3.4	98	54.99	0.16	0.60	0.74	6.0	17.3	20.4	25.1	10.6
[1] Primary	32.1	106	29.65	0.11	0.50	1.25	30.6	117.3	160.6	401.8	109.3
Total	38.9	102	34.26	0.12	0.47	1.10	42.8	149.2	181.0	426.3	127.5

Notes:

1. Primary Zone: Kempfield silver equivalent: Ag Eq (g/t) = g/t Ag + g/t Au x 87.8494 + % Zn x 45.6366 + % Pb x 18.3243 calculated from prices of US$21.80/oz silver, US$1,830/oz gold, US$2,2990/t zinc, US$2,084/t lead with metallurgical recoveries of 86% silver, 92% zinc and 53% lead, 90% gold estimated from test work commissioned by Argent Minerals Limited.
2. Transitional Zone: Kempfield silver equivalent: Ag Eq (g/t) = g/t Ag + g/t Au x 87.8494 + % Zn x 33.2353 + % Pb x 7.2606 calculated from prices of US$21.80/oz silver, US$1,830/oz gold, US$2,2990/t zinc, US$2,084/t lead with metallurgical recoveries of 86% silver, 67% zinc and 21% lead, 90% gold estimated from test work commissioned by Argent Minerals Limited.
3. Oxide Zone: used cut-off of 25 g/t silver and calculated from prices of US$21.80/oz silver, US$1,830/oz gold with metallurgical recoveries of 86% silver and 90% gold estimated from test work commissioned by Argent Minerals Limited.
4. 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.
5. Variability of summation may occur due to rounding and refer to Appendices for full details.

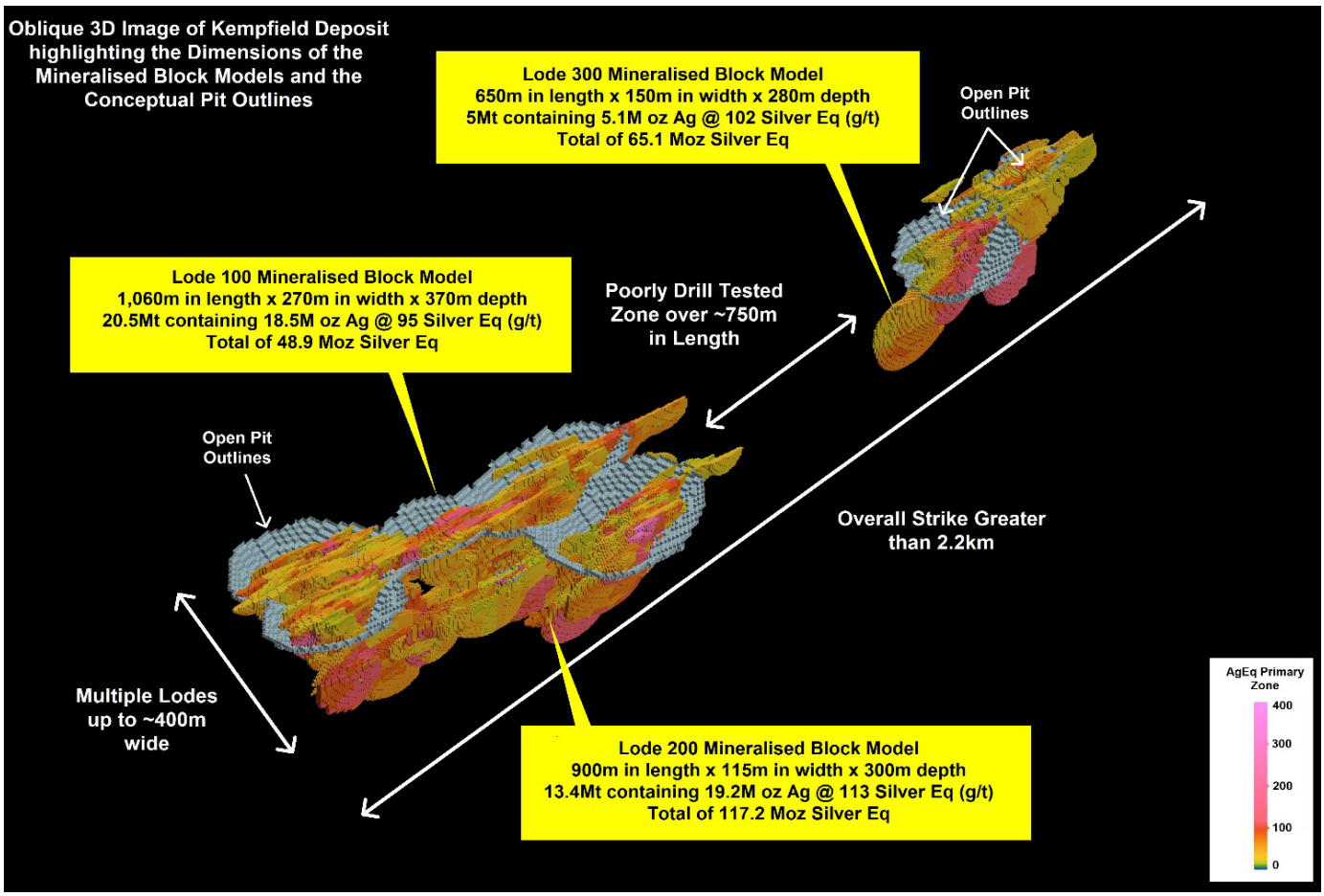

Figure 1 – Oblique 3D Image of Kempfield outlining the Dimensions & Grade of Mineralised Block Models

Table 2 – Kempfield Silver Deposit Mineral Resource Estimate by Classification as at September 2023 (at a 25 g/t Ag cut-off for oxide and 60 g/t Ag Eq cut-off for Transitional/Primary)									
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	22.5	7,707,281	109	42.58	0.14	0.51	1.05	**30.3**	**78.8**
Inferred	16.4	5,562,125	92	23.74	0.09	0.40	1.17	**12.5**	**48.7**
Total	**38.9**	**13,269,406**	**102**	**34.26**	**0.12**	**0.47**	**1.10**	**42.8**	**127.5**

Note 1 - 60 g/t Silver Equivalent Cut-off Grade for Primary

This Mineral Resource is only reported in Resource tonnes and contained metal (ounces of silver and gold, and tonnes for lead and zinc). The Resource estimation for the Primary material is based on a silver equivalent (Ag Eq) cut-off grade of 60 g/t. The contained metal equivalence formula is based on the following assumptions:

Silver price:	$US 21.80/oz
Gold price:	$US 1,830/oz
Zinc price:	$US 2,990/tonne
Lead price:	$US 2,084/tonne
Silver recoverable:	86% of head grade
Gold recoverable:	90% of head grade
Zinc recoverable:	92% of head grade
Lead recoverable:	53% of head grade

The equivalent silver formula for primary is: AgEq formula = g/t Ag + g/t Au x 87.8494 + % Zn x 45.6366 + % Pb x 18.3243. The metals pricing is based on the one-year historical average daily market close as of 25 August 2023. The metallurgical recovery assumptions are based on metallurgical testing to date, including the results announced on 12 April 2018. It is the Company's opinion that all the elements in the metal's equivalents calculation have a reasonable potential to be recovered and sold.

Note 2 - 60 g/t Silver Equivalent Cut-off Grade for Transitional

This Mineral Resource is only reported in Resource tonnes and contained metal (ounces of silver and gold, and tonnes for lead and zinc). The Resource estimation for the transitional material is based on a silver equivalent (Ag Eq) cut-off grade of 60 g/t. The contained metal equivalence formula is based on the following assumptions:

Silver price:	$US 21.80/oz
Gold price:	$US 1,830/oz
Zinc price:	$US 2,990/tonne
Lead price:	$US 2,084/tonne
Silver recoverable:	86% of head grade
Gold recoverable:	90% of head grade
Zinc recoverable:	67% of head grade
Lead recoverable:	21% of head grade

The equivalent silver formula for transitional is: AgEq formula = g/t Ag + g/t Au x 87.8494 + % Zn x 33.2353 + % Pb x 7.2606.

Note 3 - 25 g/t Silver Cut-off Grade for Oxide

This Mineral Resource is only reported in Resource tonnes and contained metal (ounces of silver and gold). The Resource estimation for the oxide material is based on a 25 g/t silver only cut-off grade. The contained metal equivalence formula is based on the following assumptions:

Silver price:	$US 21.80/oz
Gold price:	$US 1,830/oz
Silver recoverable:	86% of head grade
Gold recoverable:	90% of head grade

Table 3 – Kempfield Silver Deposit Mineral Resource Estimate by Lode as at September 2023 (at a 25 g/t Ag cut-off for oxide and 60 g/t Ag Eq cut-off for Transitional/Primary)								
Lode	**Million Tonnes (Mt)**	**Silver Eq. (g/t)**	**Silver (g/t)**	**Gold (g/t)**	**Lead (%)**	**Zinc (%)**	**Million Ounces Silver**	**Million Ounces Silver Eq.**
100	**20.5**	**95**	**28.07**	**0.16**	**0.49**	**1.00**	**18.5**	**48.9**
200	**13.4**	**113**	**44.48**	**0.08**	**0.39**	**1.21**	**19.2**	**117.2**
300	**5.0**	**102**	**32.21**	**0.06**	**0.57**	**1.20**	**5.1**	**65.1**
Total	**38.9**	**102**	**34.26**	**0.12**	**0.47**	**1.10**	**42.8**	**127.5**

Forward Plan and Next Steps

The Project has exceptional growth potential with an abundant drill target already defined (refer to Figure 2 and 3). The extensive data review based on surface and drilling geochemistry along with the interpreted geophysics has highlighted multiple targets proximal to the Kempfield Deposit, but also potential feeder structures/faults associated with magnetic highs that are interpreted to potentially control the higher-grade mineralisation within the VMS silver-base metal system.

Resource definition drilling – Infill RC and diamond drilling is planned to target the Central Gap Zone Area (area lies between the 100 and 300 ore zones), as there is over 750m strike length between both ore bodies with strong soil and RAB drilling results along with historical drillhole AKRC169 intersecting 34m @ 36.7 g/t Ag, 0.6% Pb and 1.3% Zn from 48m – remains completely untested and warrants immediate follow-up work. Deeper extensional drilling will also target the Central Gap Zone over 750m in length as per the below image.

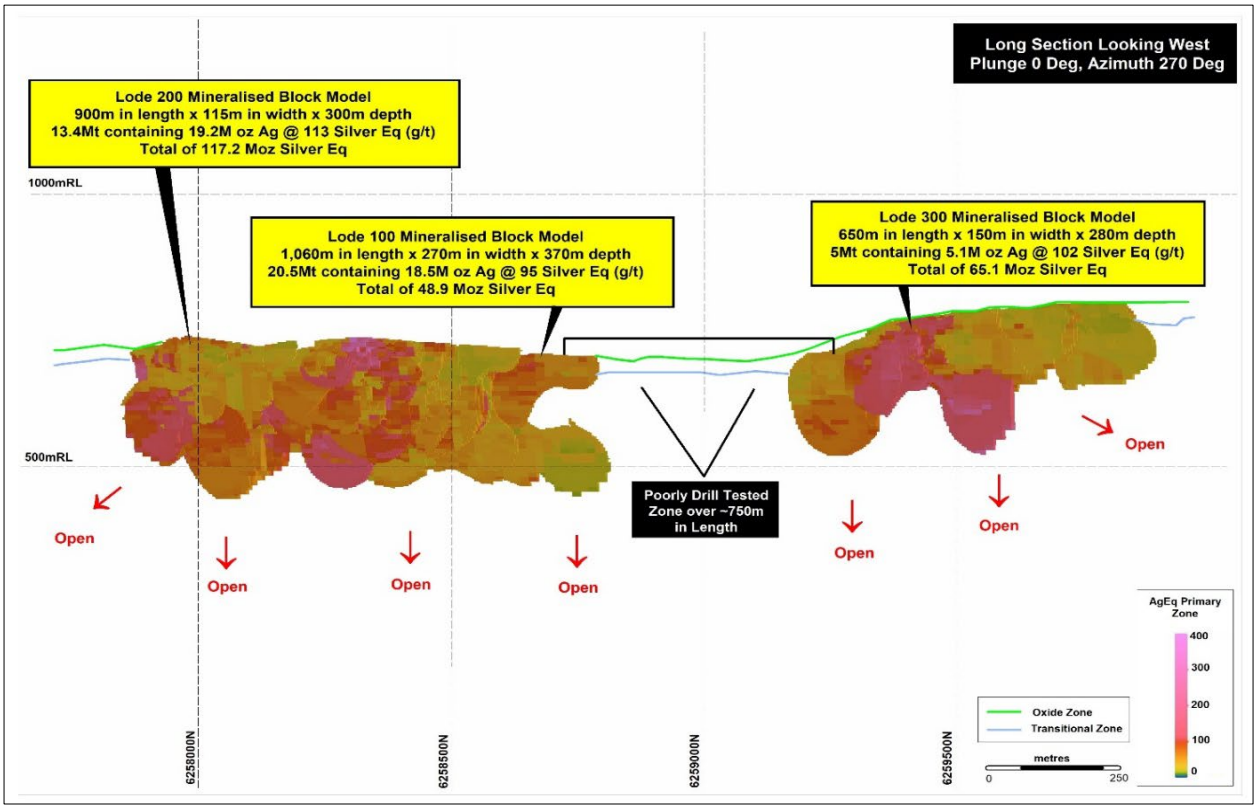

Figure 2 – Long Section highlighting the Resource is open at depth with untested zones between Lodes 100 and 300

Discovery drilling – The existing 2012 JORC compliant resource is not closed off and requires further drilling. Based on an extensive review of all the existing historical drillholes, it has been identified that 81 RC drillholes were terminated in mineralisation. Some additional targets that may yield further mineralisation are included below:

- Quarries West Zone (target strike length is over 900m) with strong base-metal soil and extensive zinc mineralisation in the order of 57m @ 0.4% Zn from 2m in AKRC216.
- Sugar Loaf Zone (target strike length is over 400m) with strong soil and rock chip Ag-Pb-Zn geochemistry with shallow silver mineralisation intersecting 14m @ 28 g/t Ag from 4m in 3PD-30.
- South Conglomerate Zone (target strike length is over 1,000m) with strong soil and rock chip Ag-Pb-Zn geochemistry with shallow RAB Au-Pb-Zn mineralisation.
- Kempfield East Zone (target strike length is over 1,700m) with strong soil and rock chip Au-Ag-Pb-Zn geochemistry with shallow RAB Cu-Au-Zn mineralisation.
- Henry Gold Working Zone (target strike length is over 1,200m) with strong rock chip Au-Ag-Pb-Zn geochemistry with no drilling.

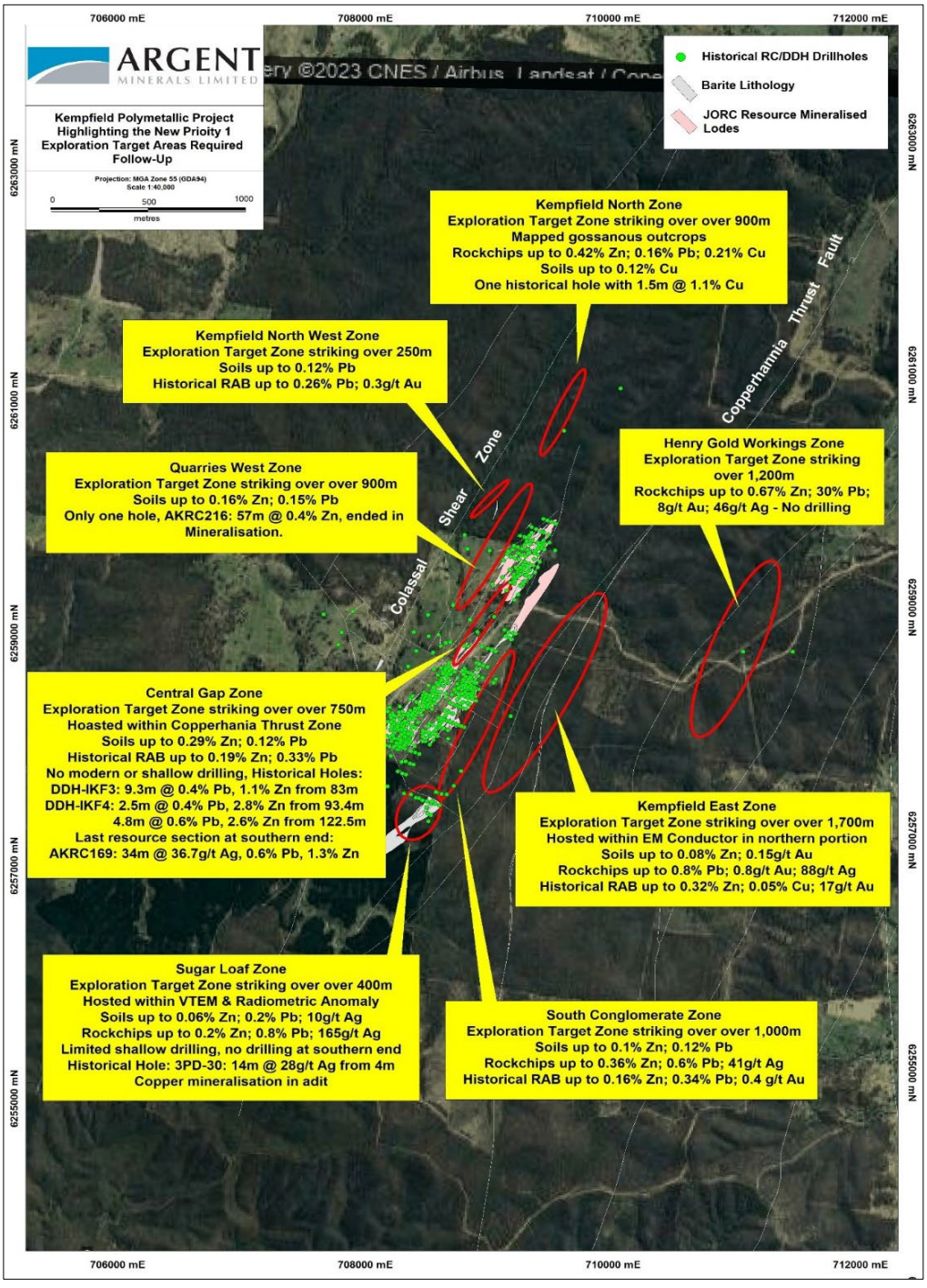

Figure 3 – Exploration Target Map highlighting potential Resource Upgrade Areas

Metallurgical studies – Lead-Zinc composite samples from RC/Diamond drillholes will be collected to confirm the simple and conventional flowsheet for the oxide/transitional zone, and further improve the heap leach performance.

Mineral Resource Estimation and Supporting Technical Information Summary

A summary of other material information pursuant to ASX Listing Rules 5.8 is provided below for the updated Kempfield Silver Mineral Resource estimate. The Assessment and Reporting Criteria is in accordance with the 2012 JORC Code and Guidelines are presented in Appendix 1 to this announcement.

Geology and Geological Interpretation

The Kempfield Deposit has been classified as a Volcanogenic Massive Sulphide (VMS) with the geological setting is Silurian felsic to intermediate volcaniclastics within the intra-arc Hill End Trough in the Lachlan Orogen, Eastern Australia. The style of mineralisation comprises stratiform barite-rich horizons hosting silver, lead, zinc, +/- gold. The geology and mineral assemblage are consistent with a distal facies of a volcanic-hosted base metals sulphide deposit (VHMS).

The key result of the drilling programmes has identified the litho-stratigraphy over the Kempfield deposit has four key host horizons. Four mineralisation horizons A, B, C and D have been identified within stratigraphy that dips approximately 70° to 80° to the west, with the younger material located to the east.

Mineralisation is hosted in stratiform normally 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 felsic volcanic activity. Primary mineralogy comprises pyrite, chalcopyrite (copper), galena (lead), sphalerite (zinc), tetrahedrite (silver), native silver and pyrargyrite. Silver is present in tetrahedrite, native silver, pyrargyrite, argentite and galena. Seven (7) zones of barite/sulphide mineralisation have been identified over a 3 km strike length within the volcano-sedimentary sequence.

Sampling and Sub-Sampling Techniques

Overview

The Kempfield deposit has been explored over a period of approximately forty years by Argent Minerals Limited (Argent Minerals), Golden Cross Operations Pty Ltd (Golden Cross), Jones Mining Limited (Jones Mining), The Shell Company of Australia/Metals Division (Shell), and International Nickel Australia Limited (Inco). Variation in techniques or procedures applied by each exploration company are outlined in this report as appropriate. The data on which the Resource Estimate has been determined is considered to be of high quality in nature.

The Kempfield deposit was sampled with drill chips from reverse circulation (RC) and conventional rotary percussion (PERC) drilling, and with diamond drill hole (DDH) core of PQ, HQ and NQ size. A total of 31,141 drill samples have been collected, including 23,828 percussion chip samples and 10,633 diamond drill hole core samples. A summary of Kempfield sample types is provided in Table 4.

Samples of between 2 and 3 kg each in weight were selected for assay according to the procedures detailed under the criteria heading 'Sub-sampling techniques and sample preparation'. These were crushed to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire assayed for gold. The lower detection limit for gold is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using acid digest and either an Inductively Coupled Laser - Mass Spectrometry (ICP-MS) or Inductively Coupled Laser - Atomic Emission Spectroscopy (ICP-AES) finish, or an Atomic Absorption Spectrometer (AAS).

Percussion drilling chip sampling

Approximately 69.2% of the total number of samples were collected by either RC or conventional percussion drilling. A total of 23,828 percussion drill chip samples were collected during three major drilling programs conducted by Shell, Golden Cross and Argent Minerals. The sampling sizes (between 2 and 3 kg) and techniques are considered to have been appropriate for percussion drilled chip sampling for the style and grain size of mineralisation at Kempfield, and further details are set out according to exploration company as follows:

Argent Minerals conducted RC drilling under industry best practice procedures. The total recovered RC drill chips were collected at 1 metre intervals in plastic bags, left to dry out if required, split to 1:12 with a riffle splitter in calico bags each up to 2.5 kg in weight and then composited on 2 metre intervals.

Golden Cross conducted RC drilling and collected 4,090 samples. Samples were collected by the spear method – the total sample for a 1 metre of drill hole length was collected in a bag which was speared and the spear samples then composited at two metre intervals. Golden Cross samples were collected as both wet and dry, and sample sizes were between 2 and 3 kilograms each.

Shell drilled 150 percussion holes in three programs of 30, 30 and 90 holes respectively - 147 of which are recorded in the Argent Minerals database and employed in the Kempfield Resource estimation. During programs one and two, cuttings were collected using either simple cyclones or sludge buckets and much of the fines was either blown or washed away. Sample collection methods were improved in the third program through the use of an Ingersoll Rand Jumbo Airtrac drilling rig, and from hole 3PD-27 onward the Aqua-Dust sampling system was used to minimise the loss of fines. Documentation is not available for the specifics of Shell's sample preparation techniques at Kempfield. Argent Minerals believes that it is a reasonable assumption that Shell, as a leading minerals exploration company, would have operated according to documented procedures, and that these procedures were likely to have reflected international best practice at the time. Given that the majority of the Shell holes were shallow (less than 50 metres depth), they are generally higher than the known water table in the area and therefore likely to be collected mostly as dry samples.

Diamond drill core sampling

The diamond drill core sampling at Kempfield has provided high quality samples that were logged for multiple attributes including lithology, structure, geotechnical data, and density. The selected drill core was cut in either half or quarters (or in the case of one large diameter core, eighths), and the respective core section 'split' analysed at a certified assay laboratory. The sample sizes were appropriate to correctly represent the sulphide mineralisation at the Kempfield project based on the style of mineralisation, consistency of the intersections, and the sampling methodology. Further details are set out according to each exploration company as follows:

Argent Minerals drilled diamond core with PQ, HQ and NQ size and split as half core (HQ and NQ size) and quarter (PQ) core with a diamond saw to produce samples for assaying. Intervals vary from 0.5 to 1.5 metres maximum. Sampling intervals were selected with an emphasis on mineralisation and geological control.

Golden Cross drilled diamond drill core of NQ size was split in half with a diamond saw. The majority of the samples comprised 1 metre intervals. Where zones were of variable geology and mineralisation, intervals of between 1 and 2 metres were selected on the basis of observed geology.

Most of the Jones Mining core was split along the length by diamond saw, with half taken as either 1 or 2 metre samples. One PQ sized hole, JKF-18, was split and 1/8 core analysed.

Shell diamond drill core sampling comprised predominantly split core in 2 metre lengths. The upper and lower sections of SKF-1 and all of the SKF-5 sampling was performed by bevelling.

Inco collected samples comprising:

a) 51 mm (2 inch) core chips collected over 1.52 metre intervals and

b) 1.52 metre splits of core at varying intervals.

Where significant mineralisation was noted, the total respective core length was split for analysis. Inco conducted selective sampling (1,516 samples in the Argent Minerals database) of drill core with limited assays (mostly for base metals). Selected core intervals were subsequently re-assayed for gold and silver by Shell and Golden Cross. Shell bevelled selected sections of Inco core over 6.1 metre intervals. Whilst some discrepancies in lead values exist, Shell's analysis verified Inco's results overall.
Inco drill holes within the Kempfield resource outline were also resampled by Argent Minerals during 2011 - a total of 709 samples and arranged for them to be analysed by a laboratory for gold, silver, base metals, pathfinder, and rock-forming elements. A total of 10,896 drill core samples of different sizes were collected (see Table 4 summary).

Drilling Techniques

A total of 549 holes for 53,660 metres of drilling has been conducted. Several industry standard drilling techniques have been applied in the extraction of the samples, including full length diamond drilling, percussion drilling (PERC and RC) and combination RC collar/DDH tails, as summarised in Table 4.

Table 4 – Summary of collected samples by drill hole type and exploration company.

Company	Period	Full Length DDH Holes	Metres	Percussion Drill Holes	Metres	RC Pre-Collar/DDH Tail Holes	RC Metres	Total Drill Holes	Total Metres	Total %
Argent	2007-current	55	10,896	203	20,609	**5**	929	263	33,020	62%
Golden	1996-2007			99	7,586	**3**	456	102	8,201	15%
Jones	1984-1985	14	771					14	771	1%
Shell	1979-1984	6	917	146	7,675			152	8,592	16%
Inco	1972-1974	18	3,076					18	3,076	6%
Total		**93**	**15,660**	**448**	**35,870**	**8**	**1,385**	**549**	**53,660**	**100**

Diamond drilling techniques (including RC Pre-Collar and DDH tail)

Diamond drilling was conducted with either double tube wireline core barrel or triple tube procedures. The historical drill core was orientated relative to regional, steep (80° to W) north-south trending cleavage. This is the most reliable orientation method for the historical holes at the Kempfield deposit. Core was measured and marked at 1 metre intervals after each drill run using benchmark block lengths to calibrate depth, except for Inco which marked at 1.52 metre intervals (5 feet). Rig procedures were adjusted as required including drilling rate, run length and fluid pressure, in order to maintain sample integrity.

Percussion drilling techniques

Percussion drilling was conducted with conventional methods using a standard hammer size from 115 to 140 mm (4.5 - 5.5 inches).

Sample Analysis Method

Argent Minerals samples were submitted to ALS Laboratories in Orange for gold assays by fire assay, and silver and base metals by ICP-MS. Samples were crushed by ALS to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire-assayed for gold. The lower detection limit for gold is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using aqua regia acid digest and an ICP-MS finish. Aqua regia digest/ICP-MS finish was compared with four-acid/ICP-MS finish with a very high correlation achieved, confirming a near-total result for the aqua regia/ICP-MS technique. ALS Laboratory QAQC comprised the use of certified reference materials, blanks, splits and duplicates as part of in-house procedures and internal standards. Argent Minerals submitted an independent suite of standard reference materials (SRM) 1:25 and coarse blanks 1:50 Field duplicates were collected every 25th sample during RC drill chip sampling. For percussion drilling samples, Argent Minerals performed laboratory cross checking by submitting samples to ALS and Genalysis Laboratory Services Pty Ltd for cross checking; a very high correlation was achieved.

For core samples, metallurgical assays for 1/2 core were compared with the original 1/4 core assays; a very good correlation was achieved. Periodic internal QAQC reports for Argent Minerals sampling procedures show good precision and accuracy of analytical methods and sampling procedures. No obvious contamination was observed during sample preparation. Full sets of assay certificates are retained by Argent Minerals.
Golden Cross samples were submitted to ALS Laboratories in Orange for gold assays by fire assay, silver and base metals by aqua regia digest with an ICP-AES finish, and barium by X-ray diffraction (XRF). Samples were crushed by ALS to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire-assayed for gold. The lower detection limit for gold

is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using aqua regia acid digest and an ICP-AES finish. Duplicate samples were submitted to the Australian Nuclear Science and Technology Organisation (ANSTO) for Neutron Activation Analysis (NAA), a very sensitive method of quantitative multi-elemental analysis with the potential to determine concentrations in a sample from parts per billion (ppb) to tens of percent. Comparison of neutron activation, four acid/ICP-MS and aqua regia digest/ICP-AES assay results verified that the primary technique (aqua regia digest/ICP-AES) was reliable for silver and base metal assaying, yielding near-total results. Full sets of assay certificates are retained by Argent Minerals.

Jones Mining samples were assayed by Australian Laboratory Services in Brisbane for silver and barium using method XRF-1A, and one hole (JKF-20) by AMDEL in South Australia. The XRF-1A method comprised sample preparation by milling to -75 microns and pressing into briquettes each of minimum 25 g weight. A limited number of samples were analysed for gold (7) and other elements (2), for which analysis procedure documentation has not been located. Jones Mining re-assayed many of the 2 metre lengths at 1 metre intervals using the same methodologies as for the original 1 metre interval assays. The PQ size hole, JKF-18, was split and 1/8 core analysed for Ag and Ba by ALS as per the above XRF-1A method together with the core from the other holes. Half of the silver anomalous zones were despatched to AMDEL in South Australia for metallurgical tests as well as silver and barium assays (analytical method documentation not available). Partial documentation has been located in relation to the Jones Mining internal QAQC procedures. The original assay certificates have not been located.

In 1998 Golden Cross re-sampled and re-assayed material from Jones Mining's drill holes JKF-7 to JKF-18 and JKF-19 in 1999. Intervals were selected for re-assay were warranted by grade and distribution. A comprehensive inter-laboratory check assay program was performed, with samples sent to ALS Orange, ALS Stafford, Becquerel and Genalysis. Silver was assayed for by method A101 and lead and zinc by method G102. Method A101 was recommended by the lab for lead and silver ores containing barite and comprised aqua regia digestion, hydrochloric acid dissolution with addition of ammonium acetate and thiosulphate for complexation of lead and silver, followed by flame AAS. Method G102 was recommended by the lab for sulphidic samples and comprised aqua regia digestion followed by flame AAS. Satisfactory QAQC procedures were applied, and data pertaining to ALS's internal lab standards are documented. Evaluation of the data found that there were good correlations between the Stafford laboratory by method A101, Stafford fire assay (correlation coefficient = 0.9976), and Becquerel (correlation coefficient = 0.9982). Data that fell outside the acceptable range of tolerance was discarded from the database, leaving those summarised in Table 9.0. From this work Golden Cross concluded that the best available sample and assay data have been employed in the database (favouring the Golden Cross re-assays). A subsequent review by Argent Minerals determined that there are no material issues with the remaining Jones Mining data.

Shell core and percussion samples were originally assayed by ALS method XRF-1A for barium (see description above) and 101-B for copper, lead, zinc, and silver. ALS has advised Argent Minerals that method 101-B is likely to have been a modified version of A101 (see description above) specifically designed for Pb and Zn analysis, and the Shell documentation notes that it involved 'specially developed digestion'. Shell subsequently selected specific core samples from the six diamond holes and submitted them for re- assay by ALS (method 101-B) as well as COMLABS Pty Ltd. SKF-4 was re-assayed from 99 to 120 metres by ALS method 101-B and COMLABS method AAS-3 for silver, base metals and barium. Limited documentation has been located for method AAS-3 which is described as 'AAS using specially developed acid digestion technique'. ALS re-assayed all of the SKF-2, 3, 5 and 6 core sampled originally, with several methods. These included AAS-5B for gold (30 g charge), and for silver, AAS-3, XRF and 'AAS special acid attack' (no details). XRF was also employed for pathfinder elements gallium and antimony. Approximately 11% of the original percussion hole metres were also re-assayed by COMLABS in 6 metre segments for gold using method AAS-5B, and pathfinder elements gallium and antimony using XRF. From this work Shell concluded from that the analytical techniques routinely used by ALS for all Kempfield samples was satisfactory.

Inco submitted samples for assay by 'INAL' (Inco's own laboratory), Robertson Research', 'Geomin', Boulder Lab' and 'Rockhampton'. In some cases, the laboratory has not been identified in the available documentation. The assay method has been recorded in the drill logs as 'AAS'. Where the method field has not been ticked the almost identical sheet format and context suggest that AAS has been employed.

In 1980 Shell resampled Inco's drillholes IKF-DDH1, 5, 7, 10, 17 and 18, and submitted them for re-assay by ALS using the AAS method; it had been suggested that the laboratory techniques employed by Inco may have underestimated the lead and silver content of the holes drilled by Inco. It was thought that lead and silver results would be notably depressed in

the presence of large amounts of barite when perchloric acid digestion rather than aqua regia digestion was used before AAS determination. In order to test this hypothesis, sections of Inco's drill core were bevel sampled and the samples analysed for lead and silver and in some cases for gold, barium, copper and zinc. The results showed that generally the lead values from Inco's assays were depressed, but silver values were comparable with the re-sampling results. In 1984 Jones Mining assayed some of the core for gold by fire assay.

Estimation Methodology

In contrast to historic unconstrained block model estimations, the current grade estimation for silver (Ag) and zinc (Zn), the two key economic minerals, together with gold (Au) and lead (Pb) were carried out using a constraint created a silver-equivalent value that incorporated the added value of Zn, Pb and Au to the silver value at an assumed set of metal recoveries and prices. The silver equivalent value, AgEq, itself was not estimated but is used as a reporting cut off for transitional and fresh material.

The Kempfield resource comprises three main mineralised zones developed over 2.3km north-easterly trending zone. Each of these zones are defined by three separate radial bias function (RBF) models of the AgEq value (100, 200 and 300). Smaller zones, that are generally defined by a single holes are excluded. The mineralized zone or lodes (100, 200 and 300) appear to be fault-bounded. However no cross-faulting within the respective lodes is apparent.

Composites were derived from within each individual boundary (ie., 100, 200 and 300) for each element (Ag, Au, Zn, Pb). Statistical analysis of each dataset determined both top cut selection and search ellipse parameters. Grades were estimated using ordinary Kriging as it is considered to be the preferred industry-accepted technique. Metallurgical recovery assumptions updated to incorporate the results into the contained metals equivalence formula;

- Silver equivalent cut-off grade updated for the reporting of the transitional and primary material;
- Silver contained metal equivalent.

Contained metal pricing assumptions

The underlying market pricing assumptions for the contained metals in the resource have been updated to the values stated in Note 1 of the Mineral Resource Statement. The metals pricing is based on the one year average of the daily market closes for each of the metals, utilising LBMA for Ag, LME London Fix for Au, and LME Cash Settlement for Zn and Pb, and calculated as at market close on 24 August 2023.

Classification Criteria

The resource classification is based on a two pass ordinary Kriging methodology in which Pass 1 was classified as Indicated and Pass 2 (which is generally double the search ellipse of that used for Indicated classification) is classified as Inferred.

Cut-off Grades

The silver equivalent cut-off grade 60 g/t Ag Eq for the transitional and primary material. The cut-off grade provides a numerical filter to determine which resource blocks of the unchanged mineral resource estimate are reported. Applying the contained metal equivalence formula resulting from the updated pricing and metal recovery assumptions, the 60 g/t Ag Eq primary cut-off was determined on the basis of a comparable estimated net recovered value. A silver equivalent was not employed for the oxide material, the reporting of which remains based on the original 25 g/t silver only cut-off grade. The cut-off grade is a silver equivalent (Ag Eq) value, based on grades and recoveries for silver, zinc, lead and gold as shown below.

Table 5 – Summary of Metallurgical Recoveries from the Different Weathering Zones.

Weathering Zone	Ag Recovery	Au Recovery	Pb Recovery	Zn Recovery
Oxide	86%	90%		
Transitional	86%	90%	21%	67%
Primary	86%	90%	53%	92%

Table 6 – Summary of Metallurgical Recoveries from Primary Zone with one-year average Metal Prices.

Metal	Unit	Price (USD)	Recovery
Silver (Ag)	Ounce (oz)	$21.80	**86%**
Gold (Au)	Ounce (oz)	$1,830	**90%**
Zinc (Zn)	Tons (t)	$2,990	**92%**
Lead (Pb)	Tons (t)	$2,084	**53%**

The equivalent silver formula for transitional is: AgEq formula = g/t Ag + g/t Au x 87.8494 + % Zn x 33.2353 + % Pb x 7.2606

The equivalent silver formula for primary is: AgEq formula = g/t Ag + g/t Au x 87.8494 + % Zn x 45.6366 + % Pb x 18.3243

The adopted cut-off grade of 60 g/t Ag Eq is considered likely to be economic at this stage for the mining method and scale of operation envisioned for Kempfield Silver Deposit.

Mining and Metallurgical Methods, Parameters and other modifying factors considered to date.

Surface open cut mining is the most likely method to be used in the extraction of this orebody based on the based on the mine design over Kempfield. Mining assumptions were based on bench marking from industry standard mining operations.

In 2012, ALS Metallurgy conducted rougher stage flotation resulting in 21% recovery for lead and 67% recovery for zinc within the transitional zone. This illustrated reasonable lead and zinc recoveries in the transitional zone over the Kempfield Deposit. The QPWF5 test results quoted are for the first cleaner concentrate and these demonstrate lead and zinc recoveries are still at saleable grades. The samples used for metallurgical testing came from diamond holes drilled into lode 300. Previous metallurgical testwork in 2008 on 4 holes drilled into lode 200 indicated recoveries of 83% Zinc and 30% Pb.

R W Nice & Associates Pty Ltd conducted a series of metallurgical testwork to determine the effectiveness of extracting metals from Kempfield primary material by flotation, targeting separate concentrates. The successful separation of primary material into potentially marketable commercial grade zinc and lead concentrates also containing silver and gold was achieved. The metallurgical results were achieved by a flotation test followed by the regrinding of lead rougher concentrates and conducting a series cleaning tests for separate lead and zinc flotation circuits as per announced on the 12 April 2018 and 30 May 2018 releases.

The same silver and gold recovery assumptions have been adopted for the Oxide/Transitional material on the basis that they are approximately identical to historical metallurgical results for that material. The samples used for metallurgical testing came from two diamond holes drilled into lode 100. This lode contains the majority of tonnes with over 50% of tonnes.

The metallurgical recovery assumptions are subject to any changes that may result from future metallurgical testing including variability testing across the various mineralogical domains across the Kempfield deposit. The metallurgical testwork stated are the most recent for the relevant weathering domains and while from specific lodes, numerous historical metallurgical testwork has confirmed similar results in base metal recoveries across the various lodes for both primary and transitional. Argent believes the metallurgical test work that was completed between 2012 and 2018 was conducted to industry-standards which also would be applicable to 2023. Thus, the metallurgical test work results are considered to be relevant, representative, and sufficient to the Mineral Resource Estimate at its current project development stage.

Argent Minerals intends to conduct further metallurgical testwork to clarify metallurgical results across different lode domains and different weathering zones over the next 12 months.

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

-ENDS-

ARGENT MINERALS LIMITED

ASX Code: ARD

For further information, please contact:

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Competent Persons Statement

The information in this report / ASX release that relates to Exploration Results, Exploration Targets and Mineral Resources 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 Gillam 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.

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

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*

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ASX Code: ARD

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^2 of exploration ground in NSW, 1,038km^2 in Western Australia and 104km^2 in Tasmania, totalling 2,876 km^2 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 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**.

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** *(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)*

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.

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JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Sampling techniques</td>
<td>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.
Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.
Aspects of the determination of mineralisation that are Material to the Public Report.
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.</td>
<td>

The Kempfield deposit has been explored over a period of approximately forty years by Argent Minerals Limited (Argent Minerals Pty Ltd), Golden Cross Operations Pty Ltd (Golden Cross), Jones Mining Limited (Jones), The Shell Company of Australia/Metals Division (Shell), and International Nickel Australia Limited (Inco). Variation in techniques or procedures applied by each exploration company are outlined in this report as appropriate.
The data on which the Resource Estimate has been determined is considered to be of high quality in nature.
The Kempfield deposit was sampled with drill chips from reverse circulation (RC) and conventional rotary percussion (PERC) drilling, and with diamond drill hole (DDH) core of PQ, HQ and NQ size.
A total of 34,461 drill samples have been collected, including 23,828 RC/percussion chip samples and 10,633 diamond drill hole core samples. A summary of Kempfield sample types is provided in Table 1.1.1.

Table 1.1.1 – Summary of collected by Drilling & Exploration Company
<table>
<tr><th>Company</th><th>Period</th><th>Total Holes</th><th>Total Metres</th><th>Total %</th></tr>
<tr><td>Argent</td><td>2007-current</td><td>266</td><td>33,020</td><td>61.54%</td></tr>
<tr><td>Golden</td><td>1996-2007</td><td>102</td><td>8,201</td><td>15.28%</td></tr>
<tr><td>Jones</td><td>1984-1985</td><td>14</td><td>771</td><td>1.44%</td></tr>
<tr><td>Shell</td><td>1979-1984</td><td>152</td><td>8,592</td><td>16.01%</td></tr>
<tr><td>Inco</td><td>1972-1974</td><td>18</td><td>3,076</td><td>5.73%</td></tr>
<tr><td>Total</td><td></td><td>552</td><td>53,660</td><td>100.00</td></tr>
</table>

Samples of between 2 and 3 kg each in weight were selected for assay according to the procedures detailed under the criteria heading 'Sub-sampling techniques and sample preparation'. These were crushed to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire assayed for gold. The lower detection limit for gold is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using acid digest and either an Inductively Coupled Laser - Mass Spectrometry (ICP-MS) or Inductively Coupled Laser - Atomic Emission Spectroscopy (ICP-AES) finish, or an Atomic Absorption Spectrometer (AAS).
Measures taken to ensure sample representivity and measurement calibration are noted under the Criteria headings 'Drill sample recovery', 'Sub-sampling techniques and sample preparation' and 'Quality of assay data and laboratory tests'.

</td>
</tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Drilling techniques</td><td>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).</td><td>
A total of 549 holes for 53,660 metres of drilling has been conducted. Several industry standard drilling techniques have been applied in the extraction of the samples, including full length diamond drilling, percussion drilling (PERC and RC) and combination RC collar/DDH tails, as summarised in Table 1.1.2.
Table 1.1.2 – Summary of Drill Holes by Hole Type and Total Length Drilled
<table>
<tr><th>Item</th><th>PQ</th><th>HQ</th><th>NQ</th><th>Perc</th><th>RC</th></tr>
<tr><td>Number of Holes</td><td>12</td><td>42</td><td>42</td><td>148</td><td>300</td></tr>
<tr><td>Metres</td><td>824</td><td>8,387.6</td><td>6,448.7</td><td>7,978</td><td>2,7891</td></tr>
</table>
<table>
<tr><th>Item</th><th>Pre-collar</th><th>DDH tail</th><th>Total</th></tr>
<tr><td>Number of Holes</td><td>8</td><td></td><td>552</td></tr>
<tr><td>Metres</td><td>1,385</td><td>745.6</td><td>53,659.90</td></tr>
</table>
Table 1.1.3 – Summary of drilling metres by drilling technique and exploration company
<table>
<tr><th>Company</th><th>Period</th><th>Full Length DDH Holes</th><th>Metres</th></tr>
<tr><td>Argent</td><td>2007-current</td><td>55</td><td>10,896</td></tr>
<tr><td>Golden</td><td>1996-2007</td><td></td><td></td></tr>
<tr><td>Jones</td><td>1984-1985</td><td>14</td><td>771</td></tr>
<tr><td>Shell</td><td>1979-1984</td><td>6</td><td>917</td></tr>
<tr><td>Inco</td><td>1972-1974</td><td>18</td><td>3,076</td></tr>
<tr><td>Total</td><td></td><td>93</td><td>15,660</td></tr>
</table>
<table>
<tr><th>Company</th><th>Period</th><th>Percussion Drill Holes</th><th>Metres</th></tr>
<tr><td>Argent</td><td>2007-current</td><td>203</td><td>20,609</td></tr>
<tr><td>Golden</td><td>1996-</td><td>99</td><td>7,586</td></tr>
<tr><td>Jones</td><td>1984-1985</td><td></td><td></td></tr>
<tr><td>Shell</td><td>1979-1984</td><td>146</td><td>7,675</td></tr>
<tr><td>Inco</td><td>1972-1974</td><td></td><td></td></tr>
<tr><td>Total</td><td></td><td>448</td><td>35,870</td></tr>
</table>
<table>
<tr><th>Company</th><th>Period</th><th>RC Pre-Collar/DDH Tail Holes</th><th>RC Metres</th></tr>
<tr><td>Argent</td><td>2007-current</td><td>5</td><td>929</td></tr>
<tr><td>Golden</td><td>1996-2007</td><td>3</td><td>456</td></tr>
<tr><td>Jones</td><td>1984-1985</td><td></td><td></td></tr>
<tr><td>Shell</td><td>1979-1984</td><td></td><td></td></tr>
<tr><td>Inco</td><td>1972-1974</td><td></td><td></td></tr>
<tr><td>Total</td><td></td><td>8</td><td>1,385</td></tr>
</table>
<u>Diamond drilling techniques (including RC Pre-Collar and DDH tail)</u>
Diamond drilling was conducted with either double tube wireline core barrel or triple tube procedures.
The historical drill core was orientated relative to
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		regional, steep (80° to W) north-south trending cleavage. This is considered to be the most reliable orientation method for the historical holes at the Kempfield deposit. • Core was measured and marked at 1 metre intervals after each drill run using benchmark block lengths to calibrate depth, except for Inco which marked at 1.52 metre intervals (5 feet). Rig procedures were adjusted as required including drilling rate, run length and fluid pressure, in order to maintain sample integrity. <u>Percussion drilling techniques</u> • Percussion drilling was conducted with conventional methods using a standard hammer size from 115 to 140 mm (4.5 - 5.5 inches). Please refer to Table 1.1.3 above for a summary of the relative portions of percussion holes drilled as RC and conventional percussion.
Drill sample recovery	*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.* *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.*	• The Argent Minerals database contains a detailed record of Argent Minerals drill core and drill chip recoveries. Relevant aspects of recoveries for diamond and percussion drilling are summarised as follows. <u>Diamond drilling sample recovery</u> • Diamond drill core recoveries were derived through reconciliation of the actual core and the drillers' records (for every diamond drilling program). Diamond core recoveries were recorded during drilling and reconciled during the core processing and geological logging. The method employed was to measure the length of the recovered core and divide by the drill interval for each section recovered. This was entered into a separate table which was then uploaded into the database. • No significant core loss occurred during drilling. However, localised lower recoveries were recorded in intensively weathered (BJ Zone) and clay-altered (McCarron Zone) rocks. • Measures undertaken to maximize core recovery include: a) larger core diameter size (HQ) drilled through the weathered intervals and b) the use of short drill runs (0.5 -1.5 metres). • A statistical analysis of diamond core recoveries was performed in 2014 on a representative dataset of 27 holes out of the 28 full length diamond holes drilled by Argent Minerals. The result of the analysis is that there was no obvious bias in silver grades due to low sample recoveries. <u>Percussion drilling sample recovery</u> • During Argent Minerals RC drilling, special care was taken to adjust penetration rate and air pressure, especially if samples were wet. Drill chips were collected at one metre intervals in plastic bags, weighed, split (to 1:12 with a riffle splitter) and then composited on two metre intervals in calico bags. The weight of recovered drill chips per metre enabled recovery rates to be estimated. Wet samples were dried before weighing and splitting.

Criteria	JORC Code explanation	Commentary
		• Percussion drill chip recoveries were calculated by weighing recovered chips per metre drilled and reconciling with the volume and expected relative density of the material sampled. This was entered into a separate table which was then uploaded into the database. There was no obvious bias in silver grades due to low sample recoveries.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	• Geological logging and re-logging of diamond drill core was employed to record lithology, alteration, mineralisation, veining and structures (faults and foliation). • The geological logging of core and chip samples and geotechnical logging of core has been performed to the level of detail required to support appropriate Mineral Resource estimation. • Drill core and drill chips were logged as both qualitative (descriptive) and quantitative (percentage volume visual estimates). Core was photographed in both wet and dry condition. Argent Minerals has also re- logged and re-photographed historical drill core stored at the NSW Core Library in Londonderry. • 100% of the total 53,660 metres of the diamond and percussion drill holes have been geologically, geochemically and geotechnically (diamond holes) logged. • All DDH holes were geological logged from the start to the end of hole. All fields' descriptions are qualitative in nature.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	<u>Percussion drilling chip sampling</u> • 69.2% of the total number of samples were collected by either RC or conventional percussion drilling. A total of 23,828 RC/percussion drill chip samples were collected during three major drilling programs conducted by Shell, Golden Cross, and Argent Minerals. The sampling sizes (between 2 and 3 kg) and techniques are considered to have been appropriate for percussion drilled chip sampling for the style and grain size of mineralisation at Kempfield, and further details are set out according to exploration company as follows. • Argent Minerals conducted RC drilling under industry best practice procedures. The total recovered RC drill chips were collected at 1 metre intervals in plastic bags, left to dry out if required, split to 1:12 with a riffle splitter in calico bags each up to 2.5 kg in weight and then composited on 2 metre intervals. • Golden Cross conducted RC drilling and collected 4,090 samples. Samples were collected by the spear method – the total sample for a 1 metre of drill hole length was collected in a bag which was speared and the spear samples then composited at two metre intervals. Golden Cross samples were collected as both wet and dry, and sample sizes were between 2 and 3 kilograms each. • Shell drilled 150 percussion holes in three programs of 30,

Criteria	JORC Code explanation	Commentary
		30 and 90 holes respectively (147 of which are recorded in the Argent Minerals database and employed in the Kempfield Resource estimation detailed in this report). During programs one and two, cuttings were collected using either simple cyclones or sludge buckets and much of the fines was either blown or washed away. Sample collection methods were improved in the third program through the use of an Ingersoll Rand Jumbo Airtrac drilling rig, and from hole 3PD-27 onward the Aqua-Dust sampling system was used to minimise the loss of fines. Documentation is not available for the specifics of Shell's sample Shell, as a leading minerals exploration company, would have operated according to documented procedures, and that these procedures were likely to have reflected international best practice at the time. Given that the majority of the Shell holes were shallow (less than 50 metres depth), they are generally higher than the known water table in the area and therefore likely to be collected mostly as dry samples. <u>Diamond drill core sampling</u> • The diamond drill core sampling at Kempfield has provided high quality samples that were logged for multiple attributes including lithology, structure, geotechnical data, and density. • The selected drill core was cut in either half or quarters (or in the case of one large diameter core, eighths), and the respective core section 'split' analysed at a certified assay laboratory. • The sample sizes were appropriate to correctly represent the sulphide mineralisation at the Kempfield project based on the style of mineralisation, consistency of the intersections, and the sampling methodology. • Further details are set out according to exploration company as follows: • Argent Minerals drilled diamond core with PQ, HQ and NQ size and split as half core (HQ and NQ size) and quarter (PQ) core with a diamond saw to produce samples for assaying. Intervals vary from 0.5 to 1.5 metres maximum. Sampling intervals were selected with an emphasis on mineralisation and geological control. • Golden Cross drilled diamond drill core of NQ size was split in half with a diamond saw. The majority of the samples comprised 1 metre intervals. Where zones were of variable geology and mineralisation, intervals of between 1 and 2 metres were selected on the basis of observed geology. • Most of the Jones Mining core was split along the length by diamond saw, with half taken as either 1 or 2 metre samples. One PQ sized hole, JKF-18, was split and 1/8 core analysed. • Shell diamond drill core sampling comprised predominantly split core in 2 metre lengths. The upper and lower sections of SKF-1 and all of the SKF-5 sampling was performed by

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>bevelling.

• Inco collected samples comprising a) 51 mm (2 inch) core chips collected over 1.52 metre intervals and b) 1.52 metre splits of core at varying intervals. Where significant mineralisation was noted, the total respective core length was split for analysis. Inco conducted selective sampling (1,516 samples in the Argent Minerals database) of drill core with limited assays (mostly for base metals).

• Selected core intervals were subsequently re-assayed for gold and silver by Shell and Golden Cross. Shell bevelled selected sections of Inco core over 6.1 metre (20 feet) intervals. Whilst some discrepancies in lead values exist, Shell's analysis verified Inco's results overall.

• Inco drill holes within the Kempfield resource outline were also resampled by Argent Minerals during 2011 - a total of 709 samples and arranged for them to be analysed by a laboratory for gold, silver, base metals, pathfinder, and rock-forming elements.

• A total of 6,487 drill core samples of different sizes were collected as per Table 1.1.4 below.

Table 1.1.4 – Summary of diamond core samples by drill hole size and sampled portion

<table>
<tr><th>Drill core size & sampled portion</th><th>Number of samples</th><th>Comments</th></tr>
<tr><td>1/4 PQ</td><td>674</td><td>Geotechnical drilling</td></tr>
<tr><td>1/2 NQ</td><td>831</td><td>Metallurgical drilling</td></tr>
<tr><td>1/4 HQ</td><td>519</td><td>Metallurgical drilling</td></tr>
<tr><td>1/2 NQ</td><td>4,463</td><td>Exploration drilling</td></tr>
</table>
</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
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.
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.</td><td>• Quality assurance and quality control (QAQC) procedures for historical sampling, assay data and laboratory tests are summarised in Table 1.1.5. No geophysical tools or handheld XRF instruments were used. In summary, the net result of all the laboratory techniques and procedures applied are considered to have been high quality in nature, appropriate for the mineralisation and providing a near-total result sufficient for the Mineral Resource Estimate in this report. Additional relevant specifics for each exploration company are set out following the table.
•

Table 1.1.5 - QAQC Summary for each Exploration Company

<table>
<tr><th>Company</th><th>Number of Assays</th><th>Comments</th></tr>
<tr><td>Argent Minerals</td><td>14,235</td><td>Full QA/QC applied Field coarse blanks (every 50th)</td></tr>
<tr><td>Argent Minerals</td><td>708</td><td>standard reference material from standards supplied by Geostats Pty Ltd (every 50th);</td></tr>
<tr><td>Re-assay of Inco samples</td><td></td><td>duplicate every 25th or 50th ;</td></tr>
</table>
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary		
				cross laboratory check (ALS Orange, Genalysis Laboratory Services Pty Ltd);
				cross analytical technique checks (ICP-MS versus four acid leach); and
				three pairs of twin holes – RC vs DDH
			Golden Cross	4,135 Satisfactory QA/QC
				duplicate and ;
			Golden Cross Re-assays	263 cross-laboratory checks (ALS Orange, ALS Stafford, Becquerel and Genalysis), and cross
			of Jones Mining samples	analytical technique checks (ICP-AES versus Neutron Activation Analysis
				technique checks (ICP-AES versus Neutron Activation Analysis - see discussion
			Jones Mining	146 QAQC documentation partially available - Jones Mining re-assayed 82 samples
			Shell	4,253 Satisfactory QA/QC
			Inco	1,516 QAQC documentation not available
			Total	**25,256** **Over 23,000 assays (94%) with satisfactory QAQC procedures and documentation**

- Argent Minerals samples were submitted to ALS Laboratories in Orange for gold assays by fire assay, and silver and base metals by ICP-MS.
  - Samples were crushed by ALS to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire-assayed for gold. The lower detection limit for gold is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using aqua regia acid digest and an ICP-MS finish correlation achieved, confirming a near-total result for the aqua regia/ICP-MS technique.
  - ALS Laboratory QAQC comprised the use of certified reference materials, blanks, splits and duplicates as part of in-house procedures and internal standards.
  - Argent Minerals submitted an independent suite of standard reference materials (SRM) 1:25 and coarse blanks 1:50 Field duplicates were collected every 25th sample during RC drill chip sampling. For percussion drilling samples, Argent Minerals performed laboratory cross checking by submitting samples to ALS and Genalysis Laboratory Services Pty Ltd for cross checking; a very high correlation was achieved.
  - For core samples, metallurgical assays for 1/2 core were compared with the original 1/4 core assays; a very good correlation was achieved.
  - Periodic internal QAQC reports for Argent Minerals sampling procedures show good precision and accuracy of analytical

Criteria	JORC Code explanation	Commentary
		methods and sampling procedures. No obvious contamination was observed during sample preparation. - Full sets of assay certificates are retained by Argent Minerals. • Golden Cross samples were submitted to ALS Laboratories in Orange for gold assays by fire assay, silver and base metals by aqua regia digest with an ICP-AES finish, and barium by X-ray diffraction (XRF). - Samples were crushed by ALS to 6 mm and then pulverized to 75 microns. A 25 g split of the sample was fire-assayed for gold. The lower detection limit for gold is 0.01 ppm, which has been determined to be an appropriate detection level. All other elements including silver and base metals were analysed using aqua regia acid digest and an ICP-AES finish. - Duplicate samples were submitted to the Australian Nuclear Science and Technology Organisation (ANSTO) for Neutron Activation Analysis (NAA), a very sensitive method of quantitative multi- elemental analysis with the potential to determine concentrations in a sample from parts per billion (ppb) to tens of percent. Comparison of neutron activation, four acid/ICP-MS and aqua regia digest/ICP-AES assay results verified that the primary technique (aqua regia digest/ICP-AES) was reliable for silver and base metal assaying, yielding near-total results. - Full sets of assay certificates are retained by Argent Minerals. • Jones Mining samples were assayed by Australian Laboratory Services in Brisbane for silver and barium using method XRF-1A, and one hole (JKF-20) by AMDEL in South Australia. - The XRF-1A method comprised sample preparation by milling to -75 microns and pressing into briquettes each of minimum 25 g weight. A limited number of samples were analysed for gold (7) and other elements (2), for which analysis procedure documentation has not been located. - Jones Mining reassayed many of the 2 metre lengths at 1 metre intervals using the same methodologies as for the original 1 metre interval assays. The PQ size hole, JKF-18, was split and 1/8 core analysed for Ag and Ba by ALS as per the above XRF-1A method together with the core from the other holes. Half of the silver anomalous zones were despatched to AMDEL in South Australia for metallurgical tests as well as silver and barium assays (analytical method documentation not available). - Partial documentation has been located in relation to the Jones Mining internal QAQC procedures. The original assay certificates have not been located. • In 1998 Golden Cross re-sampled and re-assayed material from Jones Mining's drill holes JKF-7 to JKF-18 and JKF-19 in 1999. Intervals were selected for re-assay where warranted by grade and distribution. A comprehensive inter-laboratory

Criteria	JORC Code explanation	Commentary
		check assay program was performed, with samples sent to ALS Orange, ALS Stafford, Becquerel and Genalysis. Silver was assayed for by method A101 and lead and zinc by method G102. Method A101 was recommended by the lab for lead and silver ores containing barite and comprised aqua regia digestion, hydrochloric acid dissolution with addition of ammonium acetate and thiosulphate for complexation of lead and silver, followed by flame AAS. Method G102 was recommended by the lab for sulphidic samples and comprised aqua regia digestion followed by flame AAS. Satisfactory QAQC procedures were applied, and data pertaining to ALS's internal lab standards are documented. Evaluation of the data found that there were good correlations between the Stafford laboratory by method A101, Stafford fire assay (correlation coefficient = 0.9976), and Becquerel (correlation coefficient = 0.9982). Data that fell outside the acceptable range of tolerance was discarded from the database, leaving those summarised in Table 1.1.5. From this work Golden Cross concluded that the best available sample and assay data have been employed in the database (favouring the Golden Cross re-assays). A subsequent review by Argent Minerals determined that there are no material issues with the remaining Jones Mining data. • Shell core and percussion samples were originally assayed by ALS method XRF-1A for barium (see description above) and 101-B for copper, lead, zinc, and silver. - ALS has advised Argent Minerals that method 101-B is likely to have been a modified version of A101 (see description above) specifically designed for Pb and Zn analysis, and the Shell documentation notes that it involved 'specially developed digestion'. - Shell subsequently selected specific core samples from the six diamond holes and submitted them for re-assay by ALS (method 101-B) as well as COMLABS Pty Ltd. SKF-4 was re-assayed from 99 to 120 metres by ALS method 101-B and COMLABS method AAS-3 for silver, base metals and barium. Limited documentation has been located for method AAS-3 which is described as 'AAS using specially developed acid digestion technique'. ALS re-assayed all of the SKF-2, 3, 5 and 6 core sampled originally, with several methods. These included AAS-5B for gold (30 g charge), and for silver, AAS-3, XRF and 'AAS special acid attack' (no details). XRF was also employed for pathfinder elements gallium and antimony. - Approximately 11% of the original percussion hole metres were also reassayed by COMLABS in 6 metre segments for gold using method AAS-5B, and pathfinder elements gallium and antimony using XRF. - The original assay certificates for the Shell assays have not been located. - From this work Shell concluded from that the analytical techniques routinely used by ALS for all Kempfield samples was satisfactory.

Criteria	JORC Code explanation	Commentary
		• Inco submitted samples for assay by 'INAL' (Inco's own laboratory), Robertson Research', 'Geomin', Boulder Lab' and 'Rockhampton'. In some cases, the laboratory has not been identified in the available documentation. - The assay method has been recorded in the drill logs as 'AAS'. Where the method field has not been ticked the almost identical sheet format and context suggest that AAS has been employed. - No details of blanks, duplicates or internal standards are recorded in the logs, nor is there information about any of the laboratories' internal QAQC, nor have the original assay certificates been located. - In 1980 Shell resampled Inco's drillholes IKF-DDH1, 5, 7, 10, 17 and 18, and submitted them for re- assay by ALS using the AAS method; it had been suggested that the laboratory techniques employed by Inco may have underestimated the lead and silver content of the holes drilled by Inco. It was thought that lead and silver results would be notably depressed in the presence of large amounts of barite when perchloric acid digestion rather than aqua regia digestion was used before AAS determination. In order to test this hypothesis, sections of Inco's drill core were bevel sampled and the samples analysed for lead and silver and in some cases for gold, barium, copper and zinc. The results showed that generally the lead values from Inco's assays were depressed, but silver values were comparable with the re-sampling results. - In 1984 Jones Mining assayed some of the core for gold by fire assay.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• Initial internal verification of significant intersections was conducted by technical consultants David Timms (MAIG), senior geologist Chris Johnson and site geologist Hrvoje Horvat, and progressed to independent verification by H&SC for Mineral Resource estimation and reporting purposes. • Merging of down-hole sampling intervals with assay data was performed by Dr Vladimir David (RPGeo) using H&SC database software. • Use of twinned and check holes: - Argent Minerals has drilled three pairs of twin RC versus DDH holes. The assay results from these pairs show reasonable correlation in the mineralised intervals. This implies that the RC drilling and the applied sampling procedure was a reliable technique. - At the end of Shell's three-part percussion program, three percussion holes were drilled alongside the first and second program holes to compare results from the different sampling methods. An additional, short diamond hole was drilled adjacent to a wet Aqua-Dust hole, for a total of four check holes. Equatable sections were compared. Except for two of the original 150 program holes, all four check holes upgraded the original intersections.

Criteria	JORC Code explanation	Commentary
		• Argent Minerals undertook statistical comparisons of spear sampling versus riffle split sampling in order to confirm the reliability of the spear method; this analysis confirmed a high correlation. • Data entry, verification and storage protocols are to industry standard practice: - Samples are logged on-site with the resulting data digitally entered upon return to the site office, subsequently entered into the project database, and verified at head office. Drill hole data on which the Resource Estimate is based is stored in a reference Microsoft Access database which is maintained by H&SC. Argent Minerals has a copy of the database on its own system, whilst H&SC manages the 'key' for making any changes to the reference database. - Procedures are well understood by site personnel and formally documented. - All available primary physical documentation such as drill logs and historical documentation has been electronically scanned to Adobe PDF format, and the physical originals are stored securely at the Argent Minerals registered corporate address in Perth. - Argent Minerals has invested considerable effort and resources to ensure that all of the company's data is electronically accessible, in order to ensure efficient and reliable access to that data, and the best accuracy and precision in the management of the business. The Argent Minerals central data server is backed up on a nightly incremental basis to an offsite specialist third party service provider, and this is supplemented by regular backups to portable hard disk drives. • No adjustment or calibration was made to any primary assay data collected at the Kempfield project for purposes of Mineral Resources estimation and reporting.
Location of data points	*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.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	• Sample positions were recorded by GPS which is suitable for this stage of exploration. • All data used in this report are in: Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA) Zone: Zone 55 • Topographic control was gained using government DTM and LIDA data.
Data spacing and distribution	*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.*	• The drill holes are drilled on 25 metre sections and approximately 20 metres apart in vertical distance. In diamond drill holes, samples are taken at 1 metre intervals down the hole under geological control. • Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *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.*	• In total, 453 holes were drilled towards local grid east (azimuth 111° in GDA94) at angles of 55° to 60° to intersect the stratigraphy and mineralisation as close as possible to perpendicular in order to provide the most representative samples. • No orientation-based sampling bias has been identified in the data to date. However, holes drilled to the west (along stratigraphy) usually are controlled by cleavage and/or faults and reported assays can be inconsistent.
Sample security	*The measures taken to ensure sample security.*	• Each sample contained within a calico bag, with every ten calicos enclosed within a polyweave sack and in turn locked up within a sturdy sealable waterproof container. • Sulphide mineralisation can be identified macroscopically, and valuable intersections required for analytical or metallurgical tests were stored in refrigerated conditions.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques and procedures were regularly reviewed internally and by external consultants (H&SC). Data reviews conclude that QAQC protocols have been adequately employed. • Periodically Argent Minerals conducted assays QAQC analysis with emphasis on the field sampling procedures (field duplicates) and laboratory performance involving accuracy and contamination (standards and blanks). Reports relating to assay QAQC have been produced by Argent Minerals and H&SC has confirmed satisfactory performance. In addition, Argent Minerals undertook internal QAQC review of the rock density data at Kempfield project; the report produced verifies satisfactory quality of data.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.* *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.*	• Exploration Licence, Kempfield EL5645 & EL5748, Trunkey 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. • The tenement is in good standing and there are no impediments to operating in the area. • All granted tenements are in good standing and there are no impediments to operating in the area. The Company's Exploration Licence is current from 2017 for a period of six years.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• 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. • Kempfield has been explored for more than forty years by several exploration companies as set out in in the below table:

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Company</th><th>Period</th><th>Exploration activities</th></tr>
<tr><td>Argent Minerals</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>Golden Cross</td><td>1996-2007</td><td>Drilling and high resolution airborne magnetic survey</td></tr>
<tr><td>Jones Mining</td><td>1982-1995</td><td>Drilling</td></tr>
<tr><td>Shell</td><td>1979-1982</td><td>Drilling, ground EM survey, dipole-dipole IP survey, and soil sampling</td></tr>
<tr><td>Inco</td><td>1972-1974</td><td>Drilling</td></tr>
</table>
</td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting, and style of mineralisation.</td><td>• The deposit type is Volcanogenic Massive Sulphide (VMS).
• The geological setting is Silurian felsic to intermediate volcaniclastics within the intra-arc Hill End Trough in the Lachlan Orogen, Eastern Australia; and
• 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).</td></tr>
<tr><td>Drill hole Information</td><td>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
○ easting and northing of the drill hole collar
○ elevation or RL (Reduced Level –
○ elevation above sea level in metres) of the drill hole collar
○ dip and azimuth of the hole
○ down hole length and interception depth
○ hole length.
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.</td><td>• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.</td></tr>
<tr><td>Data aggregation methods</td><td>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</td><td>• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.</td></tr>
</table>

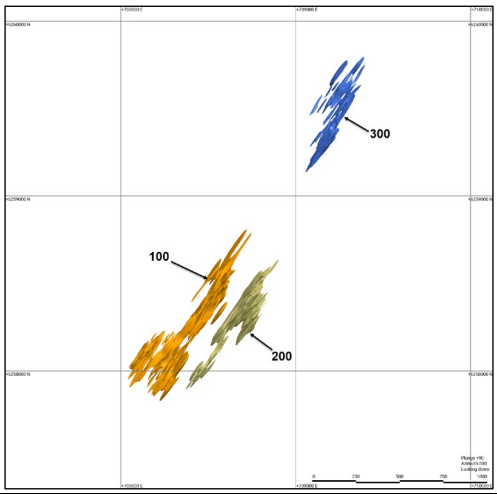
Criteria	JORC Code explanation	Commentary
	reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation 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').*	• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.
Diagrams	*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.*	• Maps, cross-sections and 3D models of the mineralised lodes provided in the body of this announcement.
Balanced reporting	*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.*	• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.
Other substantive exploration data	*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.*	• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.
Further work	*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.*	• No new Exploration Results in this report. This report relates to Mineral Resource estimate only.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	• Database integrity was managed by a three-phase standardised procedure as follows. • Phase 1 - During data entry. Argent Minerals manually input data directly into the 'front end' of a Microsoft Access relational database designed by Argent. The database 'backend' performed 'on the fly' data validation during data entry. Data that did not conform to a predetermined set of validity rules, keys and referential integrity checks was rejected, and the operator alerted accordingly. Argent also performed additional

Criteria	JORC Code explanation	Commentary
		manual checking of sample database records against the original hard copies. • All the assay data was imported from an ALS-provided electronic file directly into the master assay tables of the main backend database using an Assay Import Tool developed by Argent Minerals. This tool imports both the metadata (lab report header) and the assay data itself in a systematic, repeatable and traceable way. • Phase 2 - Post-validation. This phase commenced with Argent Minerals merging the drill log and assay datasets, an automated procedure which forms part of the database export process. Argent Minerals then performed automated checks of the merged Microsoft Access database. Using the inbuilt routines created by H&SC as an integral part of the database tool set, this part of the post-validation process looked for inconsistency issues such as missing logs, overlaps or gaps in drill hole intervals and associated data (including assay data), end of hole length, or specific gravity variations. Downhole drill surveys were also automatically checked for variation of drill hole geometry outside predetermined parameters. • Argent Minerals then performed manual checks on drill hole cross sections, all of which were able to be generated from the merged database. • The post-validated database was then exported by Argent Minerals to H&SC for the next steps in the process. • Phase 3 - Final checks. This phase of the process commenced with the merged exported database being uploaded into leapfrog by Odessa Resources. A combination of automated, scripted, and manual checks were then performed by Odessa, including: - checking drill hole collars against topography; - checking for excessive down-hole deviation; - checking different assay methods for same elements; - visual and statistical checks of assays; and - recalculating density values from raw data and checking densities against values calculated from assays. • Both Argent Minerals and Odessa Resources are satisfied that an appropriately comprehensive multiple phase checking process has been employed, upon which the Mineral Resource Statement is based. The conclusion of the above Phase 3 checks by Odessa Resources on the database provided by Argent for Mineral Resource estimation was that no obvious errors were detected. • Drill hole logs are captured in an Excel database with error checking carried out on import to Leapfrog Geo 2021.2.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	• The Mineral Resource Competent Person has not visited the site. • Mr Gillman (CP) will conduct a site visit during the next quarter as part of the ongoing exploration programs. • The Competent Person has reviewed the 2023 sampling procedures and is satisfied that they have been performed in a professional manner and no material issues were identified.

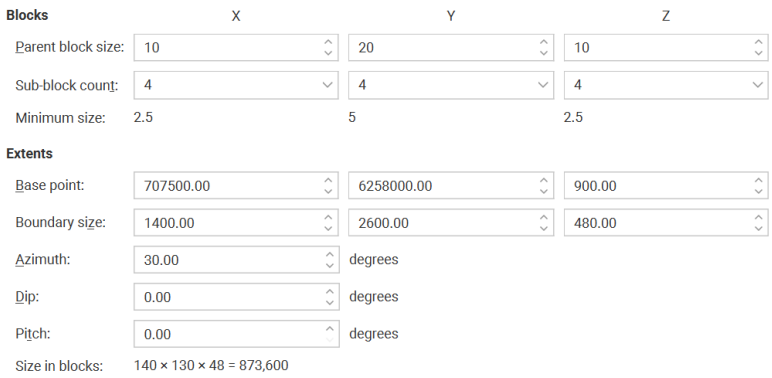
<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Geological interpretation</td><td>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.
Nature of the data used and of any assumptions made.
The effect, if any, of alternative interpretations on Mineral Resource estimation.
The use of geology in guiding and controlling Mineral Resource estimation.
The factors affecting continuity both of grade and geology.</td><td>• There is a reasonable confidence level in the geological interpretation of the mineral deposits.
• The geological interpretation involved dividing the deposits into three main mineralised zones (100, 200 and 300).
• The fresh, transition and oxide zones were modelled from geological logging data.
• The mineralised zones are defined by three separate radial bias function (RBF) models of the AgEq value (100, 200 and 300). Smaller zones, that are generally defined by a single holes are excluded. It is considered unlikely that alternative interpretations would have a substantial impact on the Mineral Resource estimates.
• Both the mineralised zones and the oxidation boundaries were treated having as hard boundaries during grade estimation.
• The mineralized zone or lodes (100, 200 and 300) appear to be fault-bounded. However no cross-faulting within the respective lodes is apparent.</td></tr>
<tr><td>Dimensions</td><td>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>
<table>
<tr><th>Lode</th><th>Strike Length (m)</th><th>Width (m)</th><th>Vertical Extent (m)</th><th>Volume (m3)</th></tr>
<tr><td>100</td><td>1060</td><td>270</td><td>370</td><td>12,856,000</td></tr>
<tr><td>200</td><td>900</td><td>115</td><td>300</td><td>6,369,000</td></tr>
<tr><td>300</td><td>650</td><td>150</td><td>280</td><td>4,230,000</td></tr>
</table>


</td></tr>
<tr><td>Estimation and modelling techniques</td><td>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points.
If a computer assisted estimation method was chosen include a description of computer software and parameters used.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
The assumptions made regarding recovery of by-</td><td>• Modelling and estimation work was carried out using Leapfrog Geo/Edge 2023.1.1
• After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional, plan and 3D view.
• A consistent estimation scheme was applied to all three lodes. Grades were estimated using ordinary Kriging as it is considered to be the preferred industry-accepted technique.
• For estimation purposes samples were composited to 1.5 metre lengths for statistical analysis and grade estimation. Composites were derived from within each individual boundary (ie., 100, 200 and 300) for each element (Ag, Au, Zn, Pb).
• Estimation was performed using Leapfrog Geo/Edge 2023.1.1 software. A two-pass search strategy was according to the following table:</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	products. *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	

Pass	Domain	Element	Ellipsoid Ranges				
			Max	Inter	Min	Dip	Dip Azi.
1	100	Ag	25	15	10	85	305
2	100	Ag	100	60	40	85	305
1	100	Au	15	15	5	85	305
2	100	Au	30	30	10	85	305
1	100	Pb	60	40	15	85	305
2	100	Pb	30	20	6	85	305
1	100	Zn	43	65	2.2	85	305
2	100	Zn	90	120	20	85	305
1	200	Ag	25	15	10	85	305
2	200	Ag	100	60	40	85	305
1	200	Au	45	50	5	85	305
2	200	Au	90	100	20	85	305
1	200	Pb	90	55	10	85	305
2	200	Pb	180	110	20	85	305
1	200	Zn	30	55	5	85	305
2	200	Zn	120	110	20	85	305
1	300	Ag	45	90	5	87	304
2	300	Ag	90	180	10	87	304
1	300	Au	45	50	5	85	305
2	300	Au	90	100	10	85	305
1	300	Pb	45	40	10	87	304
2	300	Pb	90	80	20	87	304
1	300	Zn	35	45	10	87	304
2	300	Zn	70	90	20	87	304

- The deposit remains unmined, so there are no production records for reconciliation.
- Kempfield is currently considered primarily a zinc and silver project with minor gold credits. Metallurgical test work has been performed for all these elements (see section below) and they have been incorporated into the cut-off grades for both the transition and the sulphide (fresh) mineralisation using appropriate revenue and recovery factors.
- There are no estimates for potentially deleterious elements (eg. arsenic, sulphur). Sulphide content at Kempfield is reported to be low, so acid mine drainage is unlikely to be a significant problem. The commercial impact of deleterious elements is estimated to be low with penalties estimated to be zero for the lead concentrate and less than 1.3% of the total potential net smelter revenue (NSR) for the zinc concentrate.
- A rotated block model was set up using the parameters.



- Several runs were made using various block sizes. However, due to the almost imperceptible differences in the resultant estimations a 10mx20mx10m blocks was selected for faster processing and reporting. No SMU consideration was made.
- Correlation between most elements is generally poor. Each element is estimated independently.
- The mineralised zones are defined by three separate radial bias function (RBF) models of the AgEq value (100, 200 and 300). Smaller zones, that are generally defined by a

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>single holes are excluded.

• Grade cutting or capping was applied according to the following schedule:
<table>
<tr><th>Lode</th><th>Ag (ppm)</th><th>Au (ppm)</th><th>Zn (%)</th><th>Pb (%)</th></tr>
<tr><td>100</td><td>300</td><td>4</td><td>15</td><td>10</td></tr>
<tr><td>200</td><td>350</td><td>4</td><td>12</td><td>2.5</td></tr>
<tr><td>300</td><td>100</td><td>2</td><td>12</td><td>8</td></tr>
</table>
• The estimates were validated by several methodologies – visual and statistical comparisons of block and drill hole grades, examination of grade-tonnage data.</td></tr>
<tr><td>Moisture</td><td>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>• Tonnages and grades were estimated on a dry in situ basis.

• Tonnages are estimated on a dry weight basis. Moisture content has been determined for some of the density samples, by comparing sample weights before and after oven drying. Average moisture content was 1% and ranged from 0.2% – 2.9%.</td></tr>
<tr><td>Cut-off parameters</td><td>The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>• Reporting cutoff grades (table below) were chosen on the basis of providing reasonable prospects for eventual economic extraction given various factors including metallurgical testing, long term market prices, and mining and processing costs.
<table>
<tr><th>Zone</th><th>Minerals Estimated & Reported</th><th>Reporting Cut off</th></tr>
<tr><td>oxide</td><td>Ag, Au</td><td>25g/t Ag</td></tr>
<tr><td>transition</td><td>Ag, Au, Zn, Pb</td><td>60g/t AgTrEq</td></tr>
<tr><td>fresh</td><td>Ag, Au, Zn, Pb</td><td>60g/t AgPrEq</td></tr>
</table>
• Metallurgical recoveries based on earlier reports are adopted as follows:
<table>
<tr><th>Zone</th><th>Ag</th><th>Au</th><th>Pb</th><th>Zn</th></tr>
<tr><td>oxide</td><td>86%²</td><td>90%²</td><td></td><td></td></tr>
<tr><td>transition</td><td>86%²</td><td>90%²</td><td>21%³</td><td>67%³</td></tr>
<tr><td>fresh</td><td>86%¹</td><td>90%¹</td><td>53%¹</td><td>92%¹</td></tr>
<tr><td colspan="3">1. 12/4/18 Metallurgy Announcement</td><td colspan="2"></td></tr>
<tr><td colspan="3">2. 30/5/18 Resource Update Announcement</td><td colspan="2"></td></tr>
<tr><td colspan="3">3. 30/8/12 Metcon Report</td><td></td><td></td></tr>
</table>
• Mineral Resource estimate contained metal equivalence formula is based on the following assumptions made by Argent Minerals:

Metal Prices:
<table>
<tr><th>Element</th><th>$US Price</th></tr>
<tr><td>Silver</td><td>$US21.80/oz</td></tr>
<tr><td>Gold</td><td>$US1,830/oz</td></tr>
<tr><td>Zinc</td><td>$US 2,990/t</td></tr>
<tr><td>Lead</td><td>$US 2,084/t</td></tr>
</table>
Equivalence formulas:
<table>
<tr><th>Equivalence</th><th>Weathering Zone</th><th>Formula</th></tr>
<tr><td>AgEqPr23</td><td>fresh</td><td>g/t Ag+g/tAux87.8494+%Znx45.6366+%Pbx18.3243</td></tr>
<tr><td>ZnEqPr23</td><td>fresh</td><td>%Zn+%Pbx0.4015+g/tAgx0.0219+g/tAux1.9250</td></tr>
<tr><td>AgEqTr23</td><td>transition</td><td>g/tAg+g/tAux87.8494+%Znx33.2353+%Pbx7.2606</td></tr>
<tr><td>ZnEqTr23</td><td>transition</td><td>23%Zn+%Pbx0.2185+g/tAgx0.0301+g/tAux2.6433</td></tr>
</table></td></tr>
<tr><td>Mining factors or assumptions</td><td>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining</td><td>• The mining method is currently assumed to be all open pits.

• The estimate is reported as undiluted. The Z value of 10m allows for sub-blocking to either 5m or 2.5m which corresponds with common mining bench dimensions.</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</td><td></td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</td><td>

The metallurgical recovery assumptions are based on flotation of primary sulphides for lead, zinc, silver and gold, and on carbon in leach (CIL) processing for silver and gold in the oxide and transitional ores. Based on metallurgical testing to date, summarised below, it is the Company's opinion that each of the contained metals reported have a reasonable potential to be recovered and sold.
Metallurgical recoveries from test work are summarised below:

<table>
<tr><th>Zone</th><th>Ag</th><th>Au</th><th>Pb</th><th>Zn</th></tr>
<tr><td>oxide</td><td>86%[2]</td><td>90%[2]</td><td></td><td></td></tr>
<tr><td>transition</td><td>86%[2]</td><td>90%[2]</td><td>21%[3]</td><td>67%[3]</td></tr>
<tr><td>fresh</td><td>86%[1]</td><td>90%[1]</td><td>53%[1]</td><td>92%[1]</td></tr>
<tr><td colspan="3">1. 12/4/18 Metallurgy Announcement</td><td colspan="2"></td></tr>
<tr><td colspan="3">2. 30/5/18 Resource Update Announcement</td><td colspan="2"></td></tr>
<tr><td colspan="3">3. 30/8/12 Metcon Report</td><td></td><td></td></tr>
</table>

12/4/2018: Metallurgy announcement: " Significant Kempfield milestone achieved separate commercial grade zinc and lead concentrates produced substantial boost to project economics."
30/5/2018: Resource update announcement: "Significant Kempfield resource update contained metal equivalents signal boost to economic potential".
30/8/2012: Metcon report: "Metallurgical testing of Kempfield silver ore, April 2012 to June 2012 report M2591"

Argent believes the metallurgical test work that was completed between 2012 and 2018 was conducted to industry-standards which also would be applicable to 2023. Thus, the metallurgical test work results are considered to be relevant, representative, and sufficient to the Mineral Resource Estimate at its current project development stage.
</td></tr>
<tr><td>Environmental factors or assumptions</td><td>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of</td><td>

In April 2013, Argent submitted an Environmental Impact Statement ('EIS') for an initial phase of the Kempfield Project to the NSW Government Department of Planning & Infrastructure. Whilst the initial phase submitted in the EIS focused on Oxide/Transitional, various infrastructure scenarios were investigated in relation to carbon-in-leach ('CIL') and flotation processing options for the Primary, including related electricity, water, tailings dam and waste rock emplacement configurations for with a potential mine life of up to 20 years.
The 2013 EIS study is considered still valid based on the new drill results. Argent will commence on the upgrade of the EIS during the course of 2023-2024 as part of the future feasibility studies.
The environmental impacts associated with the submitted EIS were assessed by twelve specialist consultancies. In all cases, the impacts were determined to be less than the relevant criteria, capable of being offset through licencing, or not significant. Additionally, the submitted EIS included a proposed biodiversity offset strategy that Argent contends would provide medium and long-term biodiversity benefits within and surrounding the site, while balancing the community need to ensure that

</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>the environmental assumptions made.</td><td>agricultural land remains productive.
• The study work undertaken by Argent was progressed beyond pre-feasibility toward feasibility and was based on mining lead and zinc in addition to the silver and gold, designed as an open cut mine with CIL processing for the Oxide/Transitional silver and gold, and flotation processing for Primary zinc, silver, lead and gold. The relevant environmental aspects were investigated under the direction of an appropriately qualified environmental consultant experienced with NSW mining projects. Subject to further feasibility work, Argent Minerals is satisfied that the environmental aspects of a full-scale zinc silver lead gold project at Kempfield can be successfully managed to the satisfaction of the relevant regulations.
• Whilst the EIS was placed on hold, the data resulting from the investment in the detailed assessment work – amounting to approximately $3 million, remains as a significant asset that the Company envisages will assist in a rapid restart for further feasibility work and related regulatory approval processes.</td></tr>
<tr><td>Bulk density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>• Density measurements were determined on site by Argent personnel in 2011 using an unsealed water immersion method – 292 samples were tested. Of these, 10 samples were submitted to ALS Orange for checking by unsealed and waxed immersion methods. There are a further 45 historical density measurements on core from the Jones Mining and Golden Cross core – these are believed to be unsealed water immersion measurements.
• A comparison of the Argent site measurements and 10 ALS waxed values show no significant difference. Since all these samples appear to be fresh rock, little variation would be expected.
• Dry bulk density at Kempfield is primarily controlled by the concentration of heavy minerals, as there is limited variation in the density of the unmineralised rock. The concentration of heavy minerals (galena, sphalerite and barite) can be calculated from assays, although not all samples are assayed for lead, zinc and barium. Unfortunately, samples were not systematically assayed for iron or sulphur, so pyrite content cannot be calculated but sulphide content is generally low. A set of density formulas based on heavy mineral concentration and oxidation were derived from available data and used to estimate density in the resource models.
• A combination of old and new measurements was used to determine SG used, while being conservative.
• We have considered the previous SG work and consider the measures to be relative and representative.
<table>
<tr><th>Weathering</th><th>2023 SG Averages</th><th>Previous SG Averages</th><th>Average SG used in Model</th></tr>
<tr><td>Measurements</td><td>271</td><td>109</td><td></td></tr>
<tr><td>Oxide</td><td>2.98</td><td>2.85</td><td>2.8</td></tr>
<tr><td>Transitional</td><td>2.96</td><td>2.99</td><td>2.9</td></tr>
<tr><td>Fresh</td><td>2.92</td><td>3.2</td><td>2.95</td></tr>
</table></td></tr>
<tr><td>Classification</td><td>The basis for the classification of the Mineral Resources into varying confidence categories.
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data,</td><td>• The resource classification is based on a two-pass ordinary Kriging methodology in which Pass 1 was classified as Indicated and Pass 2 as Inferred categories according to the following search parameters:
<table>
<tr><th rowspan="2">Pass</th><th rowspan="2">Classification</th><th rowspan="2">Domain</th><th rowspan="2">Element</th><th colspan="3">Ellipsoid Ranges</th></tr>
<tr><th>Max</th><th>Inter</th><th>Min</th></tr>
<tr><td>1</td><td>indicated</td><td>100</td><td>Ag</td><td>25</td><td>15</td><td>10</td></tr>
<tr><td>2</td><td>inferred</td><td>100</td><td>Ag</td><td>100</td><td>60</td><td>40</td></tr>
<tr><td>1</td><td>indicated</td><td>100</td><td>Au</td><td>15</td><td>15</td><td>5</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
Whether the result appropriately reflects the Competent Person's view of the deposit.</td><td>
<table>
<tr><td>2</td><td>inferred</td><td>100</td><td>Au</td><td>30</td><td>30</td><td>10</td></tr>
<tr><td>1</td><td>indicated</td><td>100</td><td>Pb</td><td>60</td><td>40</td><td>15</td></tr>
<tr><td>2</td><td>inferred</td><td>100</td><td>Pb</td><td>30</td><td>20</td><td>6</td></tr>
<tr><td>1</td><td>indicated</td><td>100</td><td>Zn</td><td>43</td><td>65</td><td>2.2</td></tr>
<tr><td>2</td><td>inferred</td><td>100</td><td>Zn</td><td>90</td><td>120</td><td>20</td></tr>
<tr><td>1</td><td>indicated</td><td>200</td><td>Ag</td><td>25</td><td>15</td><td>10</td></tr>
<tr><td>2</td><td>inferred</td><td>200</td><td>Ag</td><td>100</td><td>60</td><td>40</td></tr>
<tr><td>1</td><td>indicated</td><td>200</td><td>Au</td><td>45</td><td>50</td><td>5</td></tr>
<tr><td>1</td><td>indicated</td><td>200</td><td>Pb</td><td>Max</td><td>Inter</td><td>Min</td></tr>
<tr><td>2</td><td>inferred</td><td>200</td><td>Pb</td><td>180</td><td>110</td><td>20</td></tr>
<tr><td>1</td><td>indicated</td><td>200</td><td>Zn</td><td>30</td><td>55</td><td>5</td></tr>
<tr><td>2</td><td>inferred</td><td>200</td><td>Zn</td><td>120</td><td>110</td><td>20</td></tr>
<tr><td>1</td><td>indicated</td><td>300</td><td>Ag</td><td>45</td><td>90</td><td>5</td></tr>
<tr><td>2</td><td>inferred</td><td>300</td><td>Ag</td><td>90</td><td>180</td><td>10</td></tr>
<tr><td>1</td><td>indicated</td><td>300</td><td>Au</td><td>45</td><td>50</td><td>5</td></tr>
<tr><td>2</td><td>inferred</td><td>300</td><td>Au</td><td>90</td><td>100</td><td>10</td></tr>
<tr><td>1</td><td>indicated</td><td>300</td><td>Pb</td><td>45</td><td>40</td><td>10</td></tr>
<tr><td>2</td><td>inferred</td><td>300</td><td>Pb</td><td>90</td><td>80</td><td>20</td></tr>
<tr><td>1</td><td>indicated</td><td>300</td><td>Zn</td><td>35</td><td>45</td><td>10</td></tr>
<tr><td>2</td><td>inferred</td><td>300</td><td>Zn</td><td>70</td><td>90</td><td>20</td></tr>
</table>

Appropriate account has been taken of all relevant factors, including the relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.
The geological and grade continuity of the deposit has been demonstrated and the quality of the assay data is adequate as shown by the quality control analysis.
The reported Mineral Resources appropriately reflect the Competent Person's view of the Kempfield deposit.

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<tr><td>Audits or reviews</td><td>The results of any audits or reviews of Mineral Resource estimates.</td><td>

Internal review has been undertaken and no material issues were identified.

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<tr><td></td><td>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</td><td>

The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits around the world. The factors that could affect the relative accuracy and confidence of the estimate include:
The completeness and accuracy of the database; and
Historic assays were carried out using industry-standard methods at the time. There is unlikely to be a material global difference in assay when compared to assay techniques that are currently being used.
The mineral resource as estimated using the same methodology, database and parameters as detailed above is unlikely to vary in the absence of additional drilling and/or metallurgical recovery data.
The Competent Person is of the opinion that the scope for variations is minimal, and if any, the impact on the Mineral Resource estimate is unlikely to be significant.
The estimates are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as either Indicated or Inferred Mineral Resources.
No production data is available as the deposit currently remains unmined.

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