

29<sup>th</sup> January 2025

ASX Release

# HIGH-GRADE GOLD-SILVER-COPPER-INDIUM-LEAD & ZINC INERALISATION DELINEATED AT WOOD GULLY GOSSAN PROSPECT WITHIN KEMPFIELD

High-grade gold rock chips have confirmed VMS signature proximal to Pine Ridge Gold Deposit

# HIGHLIGHTS

- Strong gold, silver, copper, indium, lead and zinc mineralisation was confirmed by Argent's first rock chip reconnaissance program over the Wood Gully Gossan Prospect area within the Kempfield Project in NSW, situated approximately 19km SSE of the Kempfield Polymetallic Project.
- Rock chip sampling program has delineated gold assays up to 3.82 g/t gold, 112 g/t silver, 1.76% copper, 1.68% lead, 0.72% zinc and 31.1 ppm Indium, including highlights of:
  - 0.74 g/t Au, 60.4 g/t Ag, 0.49% Cu, 10.3 ppm In, 1.09% Pb & 0.33% Zn in sample 3001287
  - 1.67 g/t Au, 63.4 g/t Ag, 0.45% Cu, 1.44% Pb & 0.69% Zn in sample 3001288
  - 0.57 g/t Au, 112 g/t Ag, 0.12% Cu, 0.4% Pb in sample 3001289
  - 3.82 g/t Au, 90.4 g/t Ag, 1.36% Cu, 14.05 ppm In, 0.63% Pb & 0.72% Zn in sample 3001290
  - 2.8 g/t Au, 94.1 g/t Ag, 0.67% Cu, 11.2 ppm In, 1.68% Pb & 0.15% Zn in sample 3001293
  - 1.1 g/t Au, 31.6 g/t Ag, 1.76% Cu, 0.14% Pb & 0.16% Zn in sample 3001296
  - 0.77 g/t Au, 32.7 g/t Ag, 1.37% Cu, 0.43% Pb & 0.31% Zn in sample 3001299
- The Wood Gully Gossan Prospect is situated 700m south of the Pine Ridge Gold Deposit which hosts an Inferred Mineral Resource of 419,887t @ 1.65 g/t Au containing 22,122 oz Gold.
- Pine Ridge Gold Deposit current mineralised model has a strike length over 200m by 85m in width and extending down 145 vertical metres with mineralisation remaining open to the north and at depth. All mineralisation is hosted within the Box Ridge Volcanic Member, particularly within the basalt lithology.
- Strong extensive faulted structural zone striking over 1.5km is associated with the high-grade gold mineralisation over Pine Ridge and Wood Gully Gossan Prospect area. This zone has been identified along strike and at depth of the main gold mineralisation and will be systematically tested through further drilling.

Argent Minerals Limited (**ASX: ARD**) ("**Argent**" or "**the Company**") is pleased to announce high-grade assay results from the rock chip sampling program at its 100%-owned Wood Gully Gossan Prospect within the Kempfield Project in NSW, which provide further confirmation of surface polymetallic mineralisation.

### Argent Managing Director Mr Pedro Kastellorizos commented:

"We are extremely pleased to have received the first high-grade geochemical results highlighting significant polymetallic mineralisation potential over the Wood Gully Gossan Prospect. At this stage, we believe this geochemical signature is a volcanic massive sulphide style mineralisation. These high-grade gold rock chip assays in conjunction with its proximal location to the Pine Ridge Gold Deposit (orogenic style mineralisation) has highlighted the exploration potential of these highly prospective geological areas. The strong indium and precious metals along with the high-grade copper results have been defined as "stand up" and will immediately be systematically explored through further ground geochemical exploration programs, followed by Aircore or RC Drilling".

#### ARGENT MINERALS LIMITED



Sample ID	MGA55_E	MGA55_N	Au (g/t)	Ag (g/t)	Cu (ppm)	Cu%	In (ppm)	Pb (ppm)	Pb%	Zn (ppm)
3001284	715431	6255647	0.02	0.17	15.9		0.019	56		55
3001285	712098	6241949	0.02	11.55	141		0.118	417		107
3001286	712098	6241949	0.95	57.8	7780		12.95	8740		3780
3001287	712098	6241949	0.74	60.4	4930		10.30	>10,000	1.09%	3330
3001288	712098	6241949	1.67	63.4	4580		3.39	>10,000	1.44%	6980
3001289	712098	6241949	0.57	112	1285		1.17	4010		959
3001290	712099	6241951	3.82	90.4	>10,000	<b>1.36%</b>	14.05	6320		7200
3001291	712099	6241951	0.64	51.8	>10,000	1.23%	31.1	4000		2760
3001292	712099	6241951	0.02	1.51	1000		0.782	1510		624
3001293	712103	6241959	2.80	94.1	6760		11.2	>10,000	1.68%	1540
3001294	712106	6241964	0.91	49.8	3860		9.33	3690		3080
3001295	712106	6241966	0.51	34.2	2710		4.12	3270		1495
3001296	712106	6241969	1.10	31.6	>10,000	1.76%	3.05	1495		<b>1650</b>
3001297	712104	6241965	0.14	9.28	1360		2.26	1425		563
3001298	712103	6241958	2.43	60.1	5960		3.67	7470		1305
3001299	712122	6242022	0.77	32.7	>10,000	1.37%	3.19	4330		3140
3001300	712126	6242040	0.01	0.12	22.7		0.019	13.2		64

### Table 1: Wood Gully Gossan rock chip locations and results

### Wood Gully Gossan Prospect

The Woody Gully gossanous ironstone outcrop is located on the eastern flank within EL8213 and was originally discovered by Jododex Australia Pty Ltd in 1977. Work carried out included detailed soil geochemical surveys, initially analysing for copper, lead and zinc, and later for mercury. Anomalous metal values were only obtained over the ironstone outcrop.

Historical analysis of this ironstone returned values of anomalous copper, lead, tin, zinc and silver. The surface expression of this ironstone is a few scattered, but essentially in-situ boulders in soil. The boulders occur over an area which is 100 metres north-south along strike and several metres in width wide. The ironstone has a banded texture and boxworks are developed within it. The ironstone is hosted by slaty rock, but nearby basic pillow lava and basic sills crop out.

Immediately to the west of this thin ironstone band, the slate locally contains large, disseminated blebs of limonite. Some of these are pseudomorphs of pyrite. Some of these blebs are concentrated into distinct beds. A few metres from the ironstone, large veins of quartz outcrop and some of the slaty rocks are strongly sheared. Detailed mapping revealed that this area is within the axial, zone of the Pine Ridge anticline which hosts the Pine Ridge Gold Deposit.

During the reconnaissance program, work mainly concentrated on the actual location of the gossanous ironstone outcrops. During the fieldwork program, 17 rock chip samples were collected within various lithological units.

High-grade mineralisation delineated includes **3.82 g/t Au**, **90.4 g/t Ag**, **1.36% Cu**, **14.05 ppm In**, **0.63% Pb & 0.72% Zn** in sample 3001290; **2.8 g/t Au**, **94.1 g/t Ag**, **0.67% Cu**, **11.2 ppm In**, **1.68% Pb & 0.15% Zn** in sample 3001293; **1.1 g/t Au**, **31.6 g/t Ag**, **1.76% Cu**, **0.14% Pb & 0.16% Zn** in sample 3001296 and **1.67 g/t Au**, **63.4 g/t Ag**, **0.45% Cu**, **1.44% Pb & 0.69% Zn** in sample 3001288. All the high-grade sample were hosted within the ironstone gossanous rock.

The sample location and summary of high-grade results are illustrated in Figure 1. Table 1 contains location and assay data for all 17 samples collected.





Figure 1 – Pine Ridge/Wood Gully Gossan area highlighting high-grade polymetallic rock chip results – the Wood Gully Gossan is located 700m south of Pine Ridge Gold Deposit





Figure 2 – Polymetallic mineralisation within ferruginous ironstone gossan yielding 3.82 g/t Au, 90.4 g/t Ag, 1.36% Cu, 14.05 ppm In, 0.63% Pb & 0.72% Zn from sample 3001290

Figure 3 – Polymetallic mineralisation within ferruginous ironstone gossan yielding 2.43 g/t Au, 60.1 g/t Ag, 0.59% Cu, 0.43% Pb & 0.13% Zn from sample 3001298



Figure 4 – Photo of the Wood Gully Gossan Prospect flanked by outcropping quartz veining to left of image



Indium is relatively rare with its abundance in the Earth's crust estimated to be around 0.1 parts per million. Worldwide production of indium is about 475 tonnes annually mainly because of the demand in the production of LCD computer and television screens. Due to the low natural reserves and high demand, indium is one of the scarcest raw materials on earth.

Argent will undertake further surface geochemical exploration programs followed by a shallow hole drilling program to determine if the ironstone is the surface expression of a body of sulphide mineralisation.

### **Pine Ridge Gold Area**

The Pine Ridge Exploration Licence (EL) 8213, located in an undulating region of the Central Tablelands in New South Wales (NSW), approximately 65 km south of the township of Bathurst and 10 km south-west of Trunkey. The Exploration Licence forms apart of the overall Kempfield Project area. The Exploration Licence 8213 is 100% owned and operated by Argent Pty Ltd, a wholly owned subsidiary of Argent Minerals Limited.

Alluvial gold was discovered within the area of EL 8213 in 1851 on the Abercrombie River and its tributaries. After the initial gold rush of the early 1850s, small scale alluvial and deep-lead prospecting and mining continued until World War 2.

The actual Pine Ridge Gold Mine commenced mining in 1877 and continued sporadically until 1948, producing a total of 6,864t ore with variable gold grades. Mining was originally conducted by open cut workings and then subsequently by underground workings which consisted of 2 shafts up to 20m deep, small open cut pits, an adit and underground drives in a zone that extended over 300m.

The mineralisation has been described as a series of mineralised zones (sub-parallel) of highly weathered porphyrite separated by phyllite up to 75m wide that contained gold bearing quartz veins. Gold mineralisation is associated with strongly sheared volcaniclastics and strong quartz-carbonate-sericite-pyrite alteration. The gold mineralisation trends roughly N-S over a strike distance of 200m by 85m in width and dips steeply at 80° to the west. To date, all holes encountered quartz veining hosted within a volcanic unit (basalt).



Figure 5 – Looking South Historical Shallow Gold Workings at Pine Ridge Deposit





Figure 6 – Kempfield Project Location Map highlighting surrounding nearby Resources in relation to Trunkey Creek



### About Pine Ridge Resource Estimation

The Pine Ridge Gold Deposit Mineral Resource estimate is only an Inferred Category for **419,887** @ **1.65** g/t gold containing **22,122** oz Gold (*ASX Announcement 20 April 2022: Pine Ridge Inferred Resources).* Table 2 shows the **July 2022** Resource Estimation tonnes/grade by only Inferred category.

Table 2 – Pine Ridge Gold Deposit Mineral Resource Estimate by Classification as at April 2022 (at a 0.3 g/t Au cut-off)						
Category	Million Tonnes (t)	Volume (m³)	Gold (g/t)	Ounces Gold		
Inferred	419,887	158,448	1.65	22,122		

### **About Kempfield Resource Estimation**

The Kempfield Silver Deposit Mineral Resource estimate for all categories was upgraded to **63.7Mt @ 69.75** g/t silver equivalent for 142.8 million ounces Ag Eq, containing of **65.8Moz silver**, 125,192 oz gold, 207,402t lead & 420,373t zinc (ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit). Table 3 shows the July 2024 Resource Estimation tonnes/grade by Indicated and Inferred categories.

Table 3 – Kempfield Silver Deposit Mineral Resource Estimate by Classification as at July 2024 (at a >15 g/t Ag cut-off & >0.9% Zn)									
Category	Million Tonnes (Mt)	Volume (m³)	Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Million Ounces Silver Eq.
Indicated	23.7	8,051,549	79.61	40.04	0.08	0.36	0.67	30.5	60.6
Inferred	40.0	13,589,739	63.92	27.49	0.05	0.31	0.64	35.4	82.3
Total	63.7	21,641,287	69.75	32.15	0.06	0.33	0.66	65.8	142.8

Table 4 is a summary of the updated Kempfield mineral resource as of July 2024 based on the weathering zones, and Table 5 summarises the Mineral Resource by Lodes.

Table 4 – Kempfield Silver Deposit Mineral Resource Estimate by Weathering Zone as at July 2024											
				(>15 g/t	Ag cut-off	r, Zn 0.9%	2n cut-off	)			
				Grade	irade Contained Metal			etal			
Weathering Zone	Million Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Thousand Ounces Gold	Thousand tonnes Zinc	Thousand tonnes Lead	Million Ounces Silver Eq.
Oxide	8.3	45.14	38.48	0.08			10.3	20.9			12.1
Transitional	8.8	60.27	38.87	0.09	0.38	0.37	11.0	24.6	32.5	33.6	17.1
Fresh	46.6	75.93	29.75	0.05	0.37	0.83	44.5	79.7	387.9	173.8	113.7
Total	63.7	69.75	32.15	0.06	0.33	0.66	65.8	125.2	420.4	207.4	142.8



Table 5 – Kempfield Silver Deposit Mineral Resource Estimate by Lode as at July 2024 (>15 g/t Ag cut-off, >Zn 0.9% cut-off)								
Lode	Million Tonnes (Mt)	Silver Eq. (g/t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Million Ounces Silver	Million Ounces Silver Eq
100	23.9	81.13	31.19	0.12	0.49	0.79	23.9	62.3
200	28.0	66.42	36.03	0.03	0.21	0.57	32.4	59.7
300	11.8	54.62	24.93	0.01	0.26	0.61	9.50	20.8
Total	63.7	69.75	32.15	0.06	0.33	0.66	65.8	142.8

#### Notes:

- 1. The silver equivalent formulas were determined using the following metal prices based on a five-year monthly average: US\$22.02/oz silver, US\$1,776.93/oz gold, US\$2,774.16/t zinc, US\$2,066.73/t lead.
- 2. The silver equivalent formulas were determined using different metallurgical recoveries for each weathering zone from test work commissioned by Argent Minerals Limited. For oxide zone metallurgical recoveries of 86% silver and 90% gold. For transitional zone metallurgical recoveries of 86% silver, 67% zinc and 21% lead, 90% gold. For primary zone metallurgical recoveries of 86% silver, 92% zinc and 53% lead, 90% gold.
- The silver equivalent formulas were determined using the metal prices and recoveries listed in Notes 1 & 2 for each weathering zone: Oxide Zone silver equivalent: Ag Eq (g/t) = g/t Ag + g/t Au x 85.4 Transitional Zone silver equivalent: Ag Eq (g/t) = g/t Ag + g/t Au x 85.4 + % Zn x 30.53 + % Pb x 7.13 Primary Zone silver equivalent: Ag Eq (g/t) = g/t Ag + g/t Au x 85.4 + % Zn x 41.92 + % Pb x 17.99
- 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.

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

-ENDS-

### For further information, please contact:

Pedro Kastellorizos **Managing Director/Chief Executive Officer** Argent Minerals Limited info@argentminerals.com.au

#### **Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Pedro Kastellorizos. Mr. Kastellorizos is the Managing Director/CEO of Argent Minerals Limited and is a Member of the AusIMM of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Kastellorizos has verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

#### Forward Statement

This news release contains "forward-looking information" within the meaning of applicable securities laws. Generally, any statements that are not historical facts may contain forward-looking information, and forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget" "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or indicates that certain actions, events or results "may", "could", "would", "might" or "will be" taken, "occur" or "be achieved." Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, commodity prices, the estimation of initial and sustaining capital requirements, the estimation of labour costs, the estimation of mineral reserves and resources, assumptions with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the project, permitting and such other assumptions and factors as set out herein.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including



but not limited to: risks related to changes in commodity prices; sources and cost of power and water for the Project; the estimation of initial capital requirements; the lack of historical operations; the estimation of labour costs; general global markets and economic conditions; risks associated with exploration of mineral deposits; the estimation of initial targeted mineral resource tonnage and grade for the project; risks associated with uninsurable risks arising during the course of exploration; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support exploration activities; risks associated with changes in the mining regulatory regime governing the Company and the Project; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalisation and liquidity risks including the risk that the financing necessary to fund continued exploration and development activities at the project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issuance of additional common shares of the Company; the risk of litigation.

Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward looking information is made as of the date of this announcement and the Company does not undertake to update or revise any forward-looking information this is included herein, except in accordance with applicable securities laws.

#### References

For further information please refer to previous ASX announcement from Argent Minerals Ltd

ASX Announcement 2008: Further significant intersections at Kempfield ASX Announcement 2009: Kempfield BJ Zone drilling continues with promising results. ASX Announcement 2009: Argent to Drill Gold Targets at Kempfield ASX Announcement 2009: Significant Results from Kempfield Extension Drilling ASX Announcement 2009: Drilling Results from Kempfield and West Wyalong ASX Announcement 2010: Highest recorded silver grades at Kempfield ASX Announcement 2011: Significant Deep Intersections at Kempfield ASX Announcement 2012: Resource upgrade - Kempfield Silver Project ASX Announcement 2013: Exploration Advances for Kempfield Massive Sulphide Targets ASX Announcement 2013: Resource upgrade – Kempfield Silver Project ASX Announcement 2013: Conductor Targets Identified at Kempfield Silver Project ASX Announcement 2013: Sulphides Intercepted at Kempfield Causeway Target ASX Announcement 2013: Argent Minerals Advances Exploration for Kempfield Massive Sulphide Targets ASX Announcement 2013: Argent Set to Drill Massive Sulphide Targets - Dec Start 2013 ASX Announcement 2014: Geophysics Breakthrough in Kempfield Lead/Zinc Detection ASX Announcement 2014. Kempfield Resource Statement Upgraded to JORC 2012 Standard ASX Announcement 2014. Assays confirm third VMS Len group at Kempfield. ASX Announcement 2015: IP Survey confirms Large Copper Gold Target at Kempfield ASX Announcement 2019: Pine Ridge Gold Mine Drilling Approval Granted ASX Announcement 2019: Pine Ridge Gold Mine Drilling Programme Results ASX Announcement 2019: Airborne Survey Over Old Pine Ridge Gold Mine ASX Announcement 2019: Drilling Program Approved - Pine Ridge Gold Mine ASX Announcement 2019: Maiden Drilling Program Commenced at Pine Ridge Gold Mine ASX Announcement 2019: Maiden Drilling Underway – Pine Ridge Gold Mine ASX Announcement 2019: Maiden Pine Ridge Drilling Results - Significant Intercepts Recorded ASX Announcement 2019: Airborne Survey Over Old Pine Ridge Gold Mine ASX Announcement 2020: Pine Ridge Gold Mine Exploration update ASX Announcement 2021: Pine Ridge Gold Mine Drilling Results June 2021 ASX Announcement 2021: Pine Ridge Gold Mine drilling commences Stage ASX Announcement 2021: Pine Ridge Gold Mine drilling Results stage 2 ASX Announcement 19 August 2021: More High-Grade Gold Intersections at Pine Ridge ASX Announcement 20 April 2022: Pine Ridge Inferred Resource

David. V., 2014. Exploration Licence 8213, Pine Ridge, Kempfield NSW - First Annual Report.

Kuehn, P., 1997. Annual report EL 3576 "Pine Ridge" Reporting period 13/21996-12/2/1997. Goldrim Mining Australia Limited GS1997 121.

Kuehn, P., 1995. Annual report EL 3576. February 1995. Goldrim Mining Australia Limited GS1995\_227.

Kuehn, P., 1997. Annual report EL 3576 "Pine Ridge" Reporting period 13/21996-12/2/1997. Goldrim Mining Australia Limited GS1997\_121.

Maher S. 1992. Siluro-Devonian volcanism and sedimentation in the Hill End Trough South Abercrombie River area, New South Wales. Unpublished Honours Thesis, Monash University, Melbourne.

Raymond O.L. and Pogson D.J., et al, 1998, Bathurst 1:250 000 Geological Sheet SI/55-08, 2nd edition, Geological Survey of New South Wales, Sydney. Geoscience Australia, Canberra

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

https://www.statista.com/statistics/1060401/global-refinery-production-of-indium-by-country/

https://www.google.com.au/search?q=indium+production&sca\_esv

#### ARGENT MINERALS LIMITED



### About Argent Minerals Ltd (ASX: ARD)

Argent Minerals Limited is an ASX listed public company focused on creating shareholder wealth through the discovery, extraction, and marketing of precious and base metals. Currently, Argent has over 1,734km<sup>2</sup> of exploration ground in NSW and 1,038km<sup>2</sup> in Western Australia, totalling 2,772 km<sup>2</sup> within 2 Australian States.



### Kempfield Project EL5645, EL5748 (100% ARD) NSW

The Kempfield Project is located 60km SSW of Cadia Newcrest Gold and Copper Mining Operations in Central West New South Wales, 250 kilometres west of Sydney. This is the Company's flagship project and is registered as a New South Wales State Significant Development Project. Kempfield Silver Deposit Mineral Resource estimate for all categories has been upgraded **63.7Mt @ 69.75** g/t silver equivalent for 142.8 million ounces Ag Eq, containing of **65.8 Moz silver**, **125,192 oz gold**, **207,402t lead & 420,373t zinc** (ASX Announcement 25 July 2024: Significant Silver Resource Upgrade over Kempfield Deposit)

#### Trunkey Creek Project EL5748 (100% ARD) NSW

The Trunkey Creek Gold Project is located 5 kms east of the Kempfield in Central West region New South Wales. The Project lies within the Trunkey Creek Mineral Field which extends for 5.5 km by 500 m wide with over 2,900 oz of gold extracted from small scale mining. New IP model has delineated three distinct resistive/chargeable zones. Sub-parallel main quartz reefs are spaced 30m to 50m apart over a strike length of 2 km (ASX Announcement 31 May 2022: New Gold Drill Targets Identified at Trunkey Creek).

### Pine Ridge Project EL8213 (100% ARD), NSW

The Project is located in the Central Tablelands in New South Wales approximately 65 kilometres south of the township of Bathurst and 10 km south-west of Trunkey. Gold mining commenced in 1877 and continued sporadically until 1948, producing a total of 6,864t ore with variable gold grades. Current 2012 JORC Resource (Inferred Category Only) is 416,887t @ 1.65 g/t Au containing 22,122 oz Gold (ASX Announcement 20 April 2022: Pine Ridge Inferred Resource)

### Mt Dudley Project EL5748 (100% ARD), NSW

The Project is located 5 km northwest of the township of Trunkey, near Blayney NSW. The Mt Dudley mine was worked between 1913-1922 and 1928-1931, with the mine's records indicating an average mined grade of approximately 25 g/t of gold. Current 2012 JORC Resource (Inferred Category Only) is 882,636t @ 1.03 g/t Au containing 29,238 oz Gold (ASX Announcement 13 September 2022: Maiden JORC Resource Over Mt Dudley Prospect)

### Copperhead Project (100% ARD), WA

The Copperhead Project is located NE of Carnarvon and SW of Karratha in Western Australia Gascoyne Region. The project is proximal to major REE deposits and is considered Elephant country based on its untapped potential.

Helicopter rock-chip sample program has confirmed the extensive copper mineralisation over the Mount Palgrave Prospect. High-grade stratiform copper assays include 2.42%, 4.14%, 5.92%, 8.8%, 14.96% and 21.1% Cu.

The Project is also considered highly prospective for potential ironstone/carbonatite Rare Earth mineralisation. Over Fifty (50) high priority potential ironstone/carbonatite rare earth targets have been delineated and are currently being assessed (ASX Announcement 1 February 2023: High-grade copper confirmed at Gascoyne Copper Project)



### ARGENT MINERALS LIMITED Level 2, 7 Havelock Street, West Perth WA 6005, PO Box 308, West Perth WA 6872

T: +61 8 6311 2818 | E: info@argentminerals.com.au

ABN: 89 124 780 276



#### JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	<ul> <li>17 rock chip samples were collected in during the reconnaissance field trip over Trunkey Creek areas.</li> <li>Rock chip samples representative of outcrops with samples collected from mineralised and nonmineralised rocks.</li> <li>All rock chip samples weight varies from 1 kg to 2 kg based on various outcrops.</li> <li>ALS used industry standard method using ME-MS61r for a 48 element four acid ICP-MS.</li> <li>ALS used industry standard method using Fire Assay (AA26 Fire Assay method) using a 25g charge was used to analyse gold.</li> <li>All samples were collected by geologists on site with samples dispatched to ALS Labs in Orange.</li> <li>Individual samples were bagged in calcio bags and sent to ALS Labs with all samples photographed and documented.</li> <li>Samples completed is appropriate for early-stage exploration.</li> </ul>
Drilling techniques	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).	N/A – No drilling was undertaken.
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.	N/A – No drilling was undertaken.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</li> <li>Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>N/A – No drilling was undertaken.</li> <li>All rock chip samples were logged for a combination of geological and geotechnical attributes in their entirety including as appropriate major &amp; minor lithologies, alteration, vein minerals, vein percentage, sulphide type and percentage, fractures, shears, colour, weathering, hardness, grain size.</li> <li>The Project areas is currently classified as early stage of exploration and no Mineral Resource estimation is appliable.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	The rock chip samples were collected from outcrop in the field.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No field duplicates for rock chip samples were collected during this sampling exercise and no sub- sampling is needed for compositing.
	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.	
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Geochemical Analysis of the rock chip samples conducted by ALS in Orange included drying and pulverising to 85% passing 75um.
	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.	ALS Perth will be using ME-MS61r (48 element four acid ICP-MS) for Ag, Al, As, Ba, Be, Bi, Ca%, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe%, Ga, Gd, Ge, Hf, Ho, In, K%, La, Li, Lu, Mg%, Mn, Mo, Na%, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S%, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti%, TI, Tm, U, V, W, Y, Yb, Zn, Zr. Detection limits for the various elements between 0.005 to 0.1
	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	Gold Analysis was undertaken by AA26 Fire Assay method which included drying and pulverising to 85% passing 75um with detection limit of 0.01 ppm
		Acceptable levels of accuracy for all data referenced in this ASX announcement have been achieved given the purpose of the analysis (first pass exploration).
		When high grade assays results were encountered, ICP-AES Ore Grade Element was used
		If Ag >= 100 ppm then Method Ag-OG62 was used If Cu >= 10,000 ppm then Method Cu-OG62 was used If Pb >= 10,000 ppm then Method Pb-OG62 was used If Zn >= 10,000 ppm then Method Zn-OG62 was used
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Rock chip samples areas were documented in the field by qualified geologist with photos taken from each site.
	Documentation of primary data, data entry procedures, data verification, data storage (physical	All samples were collected by GPS and validated through aerial photography.
	ana electronic) protocols. Discuss any adjustment to assay data.	All field data was collected then transferred into a computer database.
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	All rock chip locations were recorded with a handheld GPS with +/- 5m accuracy
	Resource estimation.	GDA94, Zone 55 was used



Criteria	JORC Code explanation	Commentary
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
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	No Mineral Resource is being considered in this report. Data spacing and distribution was dependant on the
	Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	identification of mineralisation observed in outcrops. This was not a systematic rock chip sampling program based on a grid.
		The locations of the samples are provided in Table 1 and illustrated in Figure 2.
		There is insufficient data to determine any economic parameters or mineral resources.
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.	Rock chip sampling has been conducted in selective manner targeting precious mineralisation from outcrops.
	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.	Based on the early stage of exploration, the surface grab sampling across the mineralisation over the quartz veins, and slates from the Kangaloolah Volcanics achieves an unbiases sampling of possible structures.
Sample security	The measures taken to ensure sample security.	Sub-samples will be stored on site prior to being transporte to the laboratory for analysis. The sample pulps will be stored at the laboratory and will be returned to the Company and stored in a secure location.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been undertaken

# Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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.	<ul> <li>Exploration Licence EL8213, NSW held by Argent (Kempfield) Pty. Ltd. is located approximately 19 kilometres south-west of the township of Trunkey and 65 kilometres south from Bathurst. The tenement was granted on the 12 December 2013 and is a 100% wholly owned subsidiary of Argent Minerals Limited. There are no overriding royalties other than the standard government royalties for the relevant minerals.</li> <li>The Company's Exploration Licences is in good standing There are no other material issues affecting the tenements.</li> <li>All granted tenements are in good standing and there are no impediments to operating in the area.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Alluvial gold was discovered within the area of EL 8213 in 1851 on the Abercrombie River and its tributaries. After the initial gold rush of the early



Criteria	JORC Code explanation	Commentary
		1850's, small scale alluvial and deep-lead prospecting
		and mining continued until the Second World War.
		The actual Pine Ridge Gold Mine commenced
		mining in 1877 and continued sporadically until 1948, producing a total of 6.864t ore with variable
		gold grades. Mining was originally conducted by
		open cut workings and then subsequently by
		underground workings which consisted of 2 sharts up to 20m deep, small open cut pits, an adit and
		underground drives in a zone that extended over 300m.
Geology	Deposit type, geological setting, and style of	Wood Gully Gossan is situated in the Hill End
		synclinorial zone which is bounded hearby to the west by the Copperhania Thrust. Along with the
		underlying Crudine and Mumbil Groups these rocks
		are folded into the Trunkey Creek Syncline.
		The gold mineralisation is in the form of near vertical
		to steep westerly dipping quartz veining along faults
		carbonaceous shales and phyllites.
Drill hole Information	A summary of all information material to the	No drilling has been undertaken over Trunkey Creek
	tabulation of the following information for all	by Argent Minerals Ltu
	Material drill holes:	The announcement is highlighting areas rock chip
	$\circ$ easting and northing of the drill hole collar	locations and assay results.
	• elevation or RL (Reduced Level –	No Drilling results are reported in this announcement
	o elevation above sea level in metres) of the drill hole collar	
	• dip and azimuth of the hole	
	<ul> <li>down hole length and interception depth</li> <li>hole length</li> </ul>	
	If the exclusion of this information is justified on the	
	exclusion does not detract from the understanding of	
	the report, the Competent Person should clearly	
Data aggregation methods	In reporting Exploration Results, weighting averaging	No averaging or aggregating of rock chip results was
	techniques, maximum and/or minimum grade	undertaken.
	grades are usually Material and should be stated.	All individual results have been reported.
	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	
	The assumptions used for any reporting of metal	
	equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the	All reported rock chip values are not true width as this
mineralisation widths and intercent lengths	reporting of Exploration Results.	is considered grass roots exploration.
	the drill hole angle is known, its nature should be	The nature and dip of the mineralisation are still being
	reported.	evaluated and is currently unknown.
	If It is not known and only the down hole lengths are reported, there should be a clear statement to this	
	effect (e.a., 'down hole length, true width not	



Criteria	JORC Code explanation	Commentary
	known').	
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.	Figure 1 and Tables 1 have been presented within the announcement outlining locations of rock chip samples sites.
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.	All assays result for significant economic elements for samples are included in Table 1 of the announcement. The reporting balances is considered as early exploration results.
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.	Metallurgical, groundwater, and geotechnical studies have not commenced as part of the assessment of the project.
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.	At this stage, RAB or RC drilling programme may be implemented during the next quarter.