

10 June 2015

## KEMPFIELD SPURRED ON BY MALLEE BULL ZINC/LEAD INTERSECTIONS

### HIGHLIGHTS:

- **Spectacular lead/zinc intersections announced by Peel Mining's Mallee Bull project in the Lachlan Orogen**
- **Kempfield intersections to date include 5m @ 17.9% Pb/Zn, 259 g/t Ag & 0.34 g/t Au from 88m**
- **7 hole 3,200 metre diamond drilling program to test potentially significant 'size of the prize' at Kempfield, featuring high grade base and precious metals targets**

### KEMPFIELD POLYMETALLIC PROJECT, NSW

Argent Minerals Limited (ASX: ARD, Argent, Argent Minerals or the Company) is pleased to provide the following strategic information to the market in relation to the Kempfield Polymetallic Project.

Managing Director David Busch said, "Argent Minerals is strongly encouraged by Peel Mining Limited's (Peel Mining, ASX:PEX) 9 June 2015 announcement of 'spectacular' zinc/lead/silver/gold intersections at the Mallee Bull project in the Lachlan Orogen geological terrain in New South Wales, as the Company prepares to conduct a major deep diamond drilling program at its Kempfield Polymetallic Project, targeting high grade base and precious metals.

"Also located in the Lachlan Orogen terrain, Argent's Kempfield project is strategically situated in a historically fertile neighbourhood which has produced world class mines such as the Cadia Valley Operations just 40 kilometres to the Northwest featuring the largest hard rock underground mine in Australia, and one of the largest in the world with Ore Reserves of 1.8 billion tonnes containing 28 million ounces of gold and 4.9 million tonnes of copper<sup>i</sup>.

"Kempfield has been identified as a volcanogenic massive sulphide (VMS) deposit in the Eastern Australian Palaeozoic VMS peer group which extends from Red River Resources' Thalanga polymetallic project in Queensland, and southward through the Hill End Trough basin margin deposits in New South Wales which also includes the Company's polymetallic project at Sunny Corner (where grades were so high at one point to that the mined material was direct shipped to London), through to Tasmania where high grade VMS deposits such as Rosebery, Hellyer and Que River are hosted<sup>ii</sup>.

"On inspection of drill core and rock outcrops during a site visit at Kempfield, Professor Ross Large of the Centre of Excellence in Ore Deposits (CODES) identified similarities in the style of mineralisation at Kempfield to that of the historically high grade Que River deposit in Tasmania<sup>iii</sup>.

"Subsequent diamond drilling by Argent confirmed the existence of high grade base and precious metals on the western edge of the known Kempfield deposit, with significant intersections including 5 metres @ 17.9% lead/zinc, 259 g/t silver & 0.34 g/t gold from 88 metres for hole AKDD159, and 5 metres @ 4 g/t gold from 353 metres for hole AKDD178.

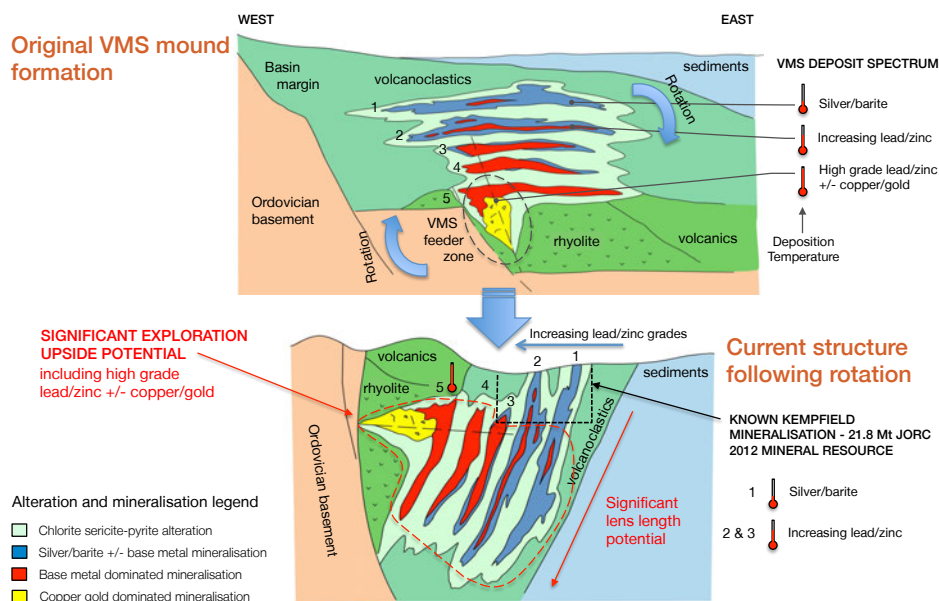
"We are looking forward to what this major deep diamond drilling program will reveal adjacent and underneath the



existing Kempfield JORC 2012 estimated 21.8 million tonne Mineral Resource, which the Company's analysis indicates could be the predominantly silver/barite portion of a much larger deposit, where higher base and precious metal grades remain to be discovered.

"Considering this analysis together with the fact that the deposit has generally only been drilled to a relatively shallow 120 metres, and that the deposit remains open also to the West and along strike to the North for up to 4 kilometres, the potential size of the prize at Kempfield is significant".

Figure 1 – The validated Kempfield deposit model showing significant potential at depth (West-East section)



The following diagram provides a representation of the metal zonation identified at the Kempfield deposit and the interpreted location of the high grade lead/zinc target zone also to be tested by the 7 hole 3,200 metre deep diamond drilling program.

Figure 2 – High grade lead/zinc target zonation within the Kempfield VMS deposit

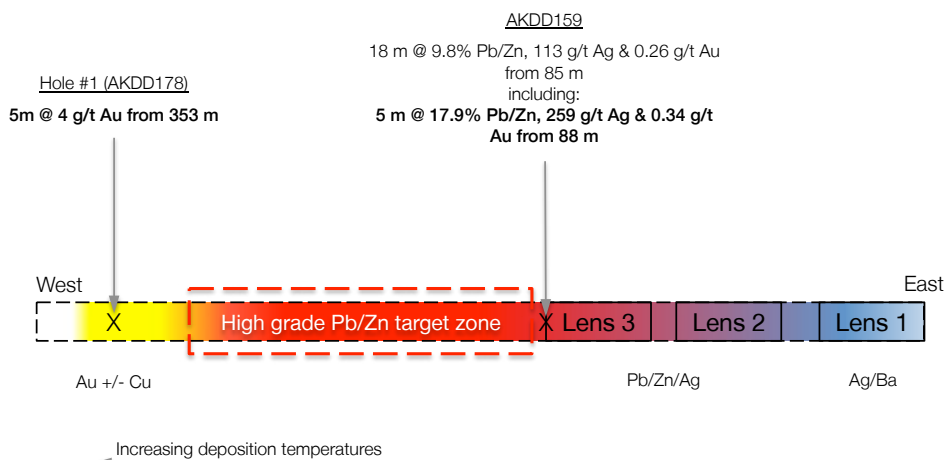
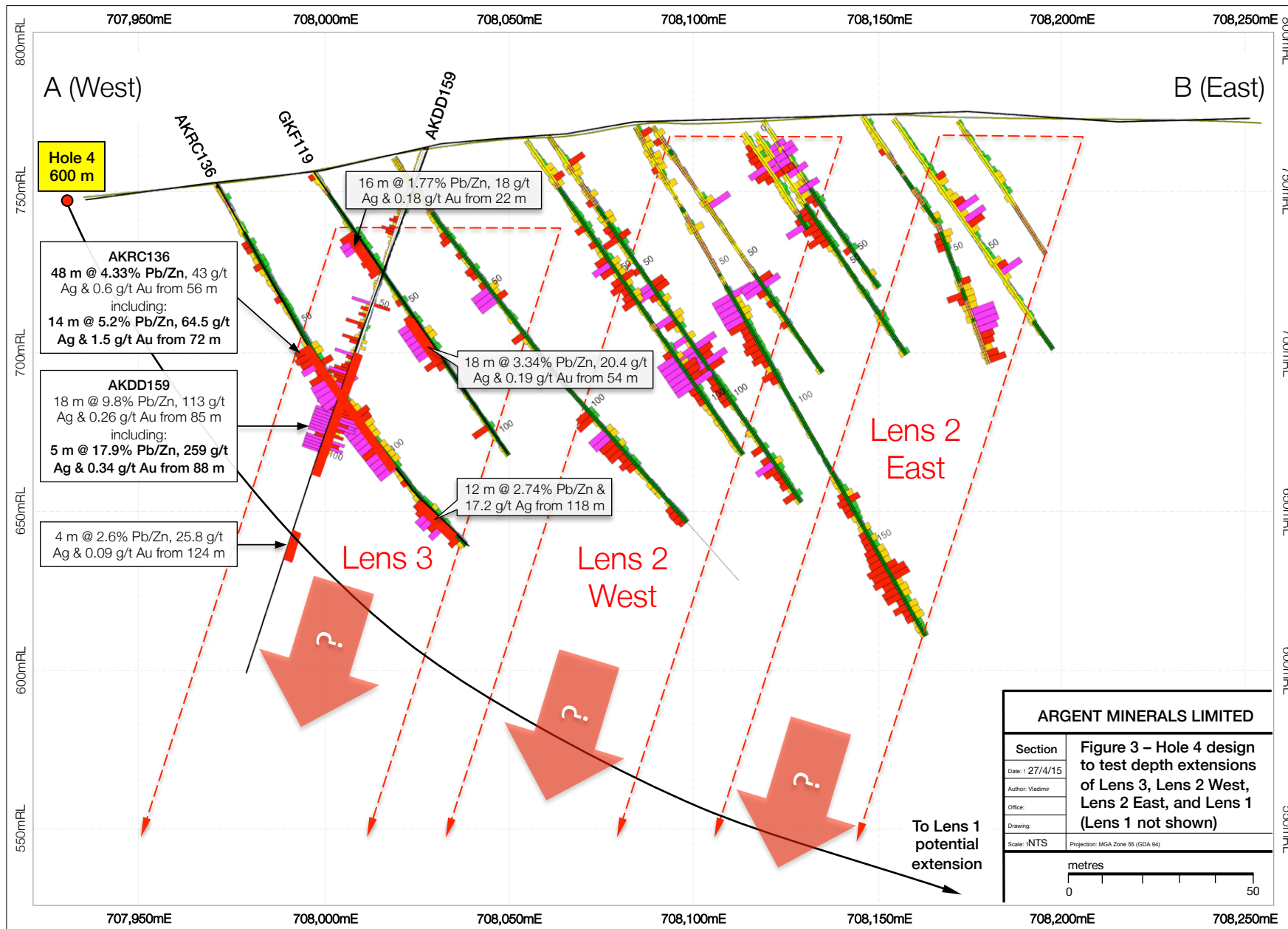


Figure 3 shows an example section view of a hole (Hole 4) designed to test for lens depth extensions.



## HISTOGRAM LEGEND

### Base metals grade (Pb/Zn)

Histograms on left hand side of drillholes

### Combined Pb/Zn grade (ppm)

- 0 – 1,000
- 1,000 – 5,000
- 5,000 – 20,000
- 20,000 – 100,000

### Precious metals grade (Ag)

Histograms on right hand side of drillholes

### Ag Grade (ppm)

- 0 – 10
- 10 – 25
- 25 – 50
- 50 – 90
- 90 – 10,000



## Market capitalisation comparison

Argent Minerals is focused on creating shareholder wealth through the discovery, extraction and marketing of precious and base metals<sup>iv</sup>.

To illustrate the potential for a junior mining company to generate shareholder wealth, the following table provides a comparison of market capitalisations for Peel Mining at market close before and after the Mallee Bull exploration results announcement, and for Argent Minerals.

Company	Project ownership	Total number of shares	Date	Share price at market close	Market capitalisation
Argent Minerals	Kempfield 100% West Wyalong 51% Sunny Corner 70%	177,563,702 <sup>v</sup>	9 June 2015	\$A0.025	\$A4,439,093
Peel Mining	Mallee Bull – JOGMEC farmin to 40% (Stage 1), then 50% (Stage 2) <sup>vi</sup> plus other projects	132,485,969 <sup>vii</sup>	10 March 2015	\$A0.050	\$A6,624,298
			9 June 2015	\$A0.220	\$A29,416,913

For further information please contact:

David Busch

Managing Director

**Argent Minerals Limited**

M: 0415 613 800

E: [david.busch@argentminerals.com.au](mailto:david.busch@argentminerals.com.au)

<sup>i</sup> Newcrest Mining Limited Annual Mineral Resources and Ore Reserves Statement – 31 December 2014

<sup>ii</sup> 13 May 2015 Argent Presentation – Sydney RIU Conference, p. 8

<sup>iii</sup> For further information see AGSO Journal of Australian Geology & Geophysics. 17(4), 129-137, 'Palaeozoic volcanic-hosted massive sulphide deposits', J. Bruce Gemmell, Ross R. Large & Khin Zaw, Commonwealth of Australia 1998

<sup>iv</sup> 2014 Annual Report p. 4

<sup>v</sup> Prior to completion of Private Placement and SPP announced 9 June 2015

<sup>vi</sup> Peel Mining Investor Presentation 27 February 2015

<sup>vii</sup> Half-Year Consolidated Financial Report 31 December 2014, p. 10



## COMPETENT PERSON STATEMENTS

### Previously Released Information

This ASX announcement contains information extracted from the following reports which are available for viewing on the Company's website <http://www.argentminerals.com.au> :

- 10 March 2014 Assays Confirm Third VMS Lens Group at Kempfield – Revised;
- 6 May 2014 Kempfield Resource statement upgraded to JORC 2012 standard;
- 30 September 2014 Annual Report to Shareholders;
- 16 October 2014 Base and precious metal grade zonation in Kempfield Resource;
- 29 October 2014 Kempfield Deep Diamond Drilling Program;
- 25 February 2015 Hole 1 intersects significant gold grades at Kempfield;
- 21 April 2015 Hole 2 increases potential size of the prize at Kempfield;
- 29 April 2015 Extended reach for Kempfield deep diamond drilling program;
- 13 May 2015 Argent presentation – Sydney RIU conference; and
- 9 June 2015 Private Placement and Share Purchase Program.

The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcements, and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### DISCLAIMER

This ASX announcement (**Announcement**) has been prepared by Argent Minerals Limited (ABN: 89 124 780 276) (**Argent Minerals**, **Argent** or the **Company**). It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this Announcement.

This Announcement contains summary information about Argent Minerals, its subsidiaries and their activities which is current as at the date of this Announcement. The information in this Announcement is of a general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Argent Minerals.

By its very nature exploration for minerals is a high risk business and is not suitable for certain investors. Argent Minerals securities are speculative. Potential investors should consult their stockbroker or financial advisor. There are a number of risks, both specific to Argent Minerals and of a general nature which may affect the future operating and financial performance of Argent Minerals and the value of an investment in Argent Minerals including but not limited to economic conditions, stock market fluctuations, silver, lead, zinc, copper and gold price movements, regional infrastructure constraints, securing drilling rigs, timing of approvals from relevant authorities, regulatory risks, operational risks and reliance on key personnel and foreign currency fluctuations.

Certain statements contained in this Announcement, including information as to the future financial or operating



performance of Argent Minerals and its projects, are forward-looking statements that:

- may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral resources and mineral reserves and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;
- are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Argent Minerals, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and,
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Argent Minerals disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward-looking statements.

All forward-looking statements made in this announcement are qualified by the foregoing cautionary statements. In particular, the corporate mission and strategy of the Company set forth in this Announcement represents aspirational long-term goals based on current expectations. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

No verification: Although all reasonable care has been undertaken to ensure that the facts and opinions given in this Announcement are accurate, the information provided in this Announcement has not been independently verified.