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9 June 2015

MAJOR DEEP DIAMOND DRILLING PROGRAM TO COMMENCE AT KEMPFIELD

HIGHLIGHTS:

- Site preparations underway for Kempfield extended reach deep diamond drilling program, with preparations completed for the first two holes
- 7 hole 3,200 metre diamond drilling program to test for volcanogenic massive sulphide (VMS) mineralisation at depth beneath the estimated 21.8 Mt JORC 2012 Mineral Resource, and adjacent identified mineralisation potential
- Deep diamond drilling program targets high grade base and precious metals, including adjacent the area which produced intersections of 18m @ 9.8% Pb/Zn, 113 g/t Ag & 0.26 g/t Au from 85 m, including 5m @ 17.9% Pb/Zn, 259 g/t Ag & 0.34 g/t Au from 88m

KEMPFIELD POLYMETALLIC PROJECT, NSW

Argent Minerals Limited (ASX: ARD, Argent, Argent Minerals or the Company) is pleased to announce details in relation to site preparations for a major deep diamond drilling program at the Kempfield Polymetallic Project.

Managing Director David Busch said, "Preparations are underway for the extended reach deep diamond drilling program announced on 29 April 2015, with the drill sites for the first two holes now ready for drilling.

"This is an exciting phase of the Kempfield drilling program that we have all been looking forward to, as the Company prepares to test the validated deposit model for depth and strike extensions to existing mineralised lenses, and for new lenses.

"Most of the historical drilling at Kempfield has been relatively shallow to only 120 metres, leaving significant potential for mineralisation open both at depth and in substantial untested areas immediately to the west of the known deposit, as well as up to 4 km along strike to the North.

"While the historical drilling resulted in a substantial, high quality JORC 2012 Mineral Resource estimate of 21.8 million tonnes, 82% of which is in either Measured or Indicated category, it remains open at depth.

"Of particular interest is what the drilling program will reveal beneath deposit, where grades of up to 17.9% combined lead/zinc were



intersected by Hole AKDD159, which the Company considers to be among the highest grade base and precious metal intersections of this type in Australia. The extended reach drilling program announced on 29 April 2015 comprises a total of seven holes for 3,200 metres, comprising NSW Government funded Holes 3 and 4 for 550 and 600 metres respectively, and five additional holes totalling 2,050 metres.

"We are looking forward to commencing this next exciting phase of exploration following the completion of the Private Placement and Share Purchase Plan announced earlier today, as Argent continues its highly methodical search for high grade base and precious metals at Kempfield, and as London Metals Exchange prices and dwindling stock levels continue to factor in compelling supply demand expectations in favour of zinc".

About the validated deposit model and the extended Kempfield deep diamond drilling program

The additional holes have been designed to test the recently validated Volcanogenic Massive Sulphide deposit model which predicts the potential for significant depth extensions to mineralised lenses below the known deposit. Most of the historical drilling at Kempfield has been relatively shallow to only 120 metres for most of the deposit, and only 80 metres for the southern section of Lens 1, with the intersected mineralisation leaving the majority of the deposit open at depth.

EAST **Original VMS mound** VMS DEPOSIT SPECTRUM Basin margin sediments formation volcanoclastic Silver/barite Increasing lead/zinc High grade lead/zinc +/- copper/gold Ordoviciar VMS feede rhyolite Dep ition mperature SIGNIFICANT EXPLORATION ng lead/zinc grade **Current structure** UPSIDE POTENTIAL including high grade lead/zinc +/- copper/gold sediments following rotation KNOWN KEMPFIELD Ordovician base MINERALISATION - 21.8 Mt JORC 2012 MINERAL RESOURCE 1 Silver/barite Alteration and mineralisation legend Significant lens length Chlorite sericite-pyrite alteration 2&3 Increasing lead/zinc notentia Silver/barite +/- base metal mineralisation Base metal dominated mineralisation Copper gold dominated mineralisation

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

The recently validated deposit model also predicts the increased likelihood of a high grade lead/zinc zone between the Hole #1 intersection of **5 m at 4 g/t Au from 353 m** in strongly silicified and chlorite-altered host rock with quartz/pyrrhotite and pyrite/pyrrhotite stockwork (indicative of high temperature deposition), and the western portion of the known deposit where hole AKDD159 intersected high grade base metal mineralisation (Figure 2).





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

See Figure 4 for a plan view of the announced drilling plan, including Holes 3 and 7 designed to test for high grade Pb/Zn target zones in the form of either new VMS lenses or extensions to existing known lenses.

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HISTOGRAM LEGEND

Base metals grade (Pb/Zn)

Histograms on left hand side of drillholes

Combined Pb/Zn grade (ppm)



Precious metals grade (Ag)

Histograms on right hand side of drillholes

Ag Grade (ppm)



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NSW Government grant and R&D claims

Argent has received a \$158,400 grant from the NSW State Government Cooperative Drilling initiative in relation to the drilling program. Based on merit assessed by an independent panel of geoscientists, the Kempfield deep diamond drilling program is one of the five largest grants to be issued under the Cooperative Drilling Initiative, and will be paid to Argent by the NSW Government on completion of the drilling and associated technical reports.

Based on its experience with Federal Government's Research and Development Tax Concession claims (R&D Claim) (over \$2 million in R&D Claim funds have been received since July 2013), Argent expects to continue its track record of capital efficiency by successfully applying for and receiving R&D Claim funds in relation to costs associated with the Kempfield extended reach diamond drilling program.

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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; 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

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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 constrains, 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.