13 APRIL 2016

KEMPFIELD DRILLING UPDATE – POSITIVE DRILL CORE VISUALS

Argent at a glance

ASX-listed mineral resource company focused on the expansion, development, extraction and marketing of its existing base and precious metals discoveries in NSW.

Facts

ASX Code:	ARD
Share price (Tuesday 12 April 2016):	$0.041
Shares on issue:	299.6M
Market capitalisation:	$12.28M

Directors and Officers

Stephen Gemell
Non-Executive Chairman

David Busch
Managing Director

Peter Nightingale
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Highlights:

- Zone of strong hydrothermal alteration intersected by hole AKDD182 on trend consistent with the recent spectacular **1m @ 1,065 g/t gold intersection** – assays pending for gold and copper
- Sulphide mineralisation intersected by AKDD183 consistent with depth extension of Zone 2 north
- Observed sulphide mineralisation in drillhole AKDD183 consists of sphalerite (zinc), galena (silver, lead) and pyrite, assays pending
- Drilling of 5 holes completed with encouraging mineralisation observations
- Mineral resource estimate review planned to follow completion of drilling campaign, assays and analysis

Argent Minerals Limited (ASX: ARD, Argent, or the Company) is pleased to provide this update on observed mineralisation in holes AKDD182 and AKDD183, the first two holes for which logging has been completed of the 12 hole, 3,330 metre Kempfield diamond drilling campaign. Core sampling is underway and assays are expected in the coming weeks.

With historical drilling at Kempfield generally limited to a relatively shallow depth of only 120 metres, this drilling campaign has been designed to test the potential for an increase in tonnes and grade at depth and along strike in order to progress the Kempfield project toward economic viability and mining operations.

AKDD182 – follow up to AKDD181 spectacular gold intersection

AKDD182 was designed to test for a down-dip

extension of the spectacular gold mineralisation zone intersected by hole AKDD181 – **1 m @ 1,065 g/t Au from 97 m**.

AKDD182 intersected areas of strong chlorite alteration and silicification associated with a series of concordant quartz veins in a position considered to be continuous from AKDD181.

AKDD182 also intersected a zone of stringer chalcopyrite (copper) at 71 m with cross-cutting pyrrhotite veins.

Pyrrhotite and chalcopyrite stringers and blebs (small, localised 'blister' like features) were observed at various intervals throughout the lower portion of the drillhole. These observations are consistent with the type of mineralisation that can be expected in the higher temperature and pressure formation conditions associated with the footwall position of a volcanic-hosted massive sulphide (VHMS) deposit.

AKDD183 – Sphalerite (zinc) and galena (silver, lead) observed

The second hole in the program, AKDD183, was designed to test for depth and strike extensions of known Zone 2 mineralisation, and importantly, continuity of mineralisation.

AKDD183 intersected a series of variably mineralised zones throughout the extent of the drillhole. Cleavage and fracture controlled red-brown sphalerite (zinc) and galena (silver, lead) occurs between 46 to 50 metres, which indicates a degree of remobilisation and structural enrichment during a later orogenic phase at Kempfield.

Figure 1 – Red-brown sphalerite (zinc), galena (lead, silver) and pyrite intersected by hole AKDD183 from 46 to 50 m

The prevalence of honey-brown, low-iron sphalerite in mineralised intersections at depth, along with a strong association with barite and silver sulphosalts, indicates that the bulk of the sulphide mineralisation remains unaffected by later orogenic events seen in the area (see Figure 2).

Drilling has now shown that sulphide mineralisation is continuous and predictable, which will provide further efficiencies in coming resource delineation work.

Figure 2 – Honey-brown sphalerite (zinc) and silver sulphosalts intersected by AKDD183 at 95.5 m (left) and 98.6 m (right)

Whilst these are visual observations only and subject to assays pending, the preliminary results are encouraging, indicating that mineralisation extends along strike and at depth from that intersected by historical drilling in Zone 2.

Figure 3 – Section showing visual AKDD183 observations in relation to known mineralisation

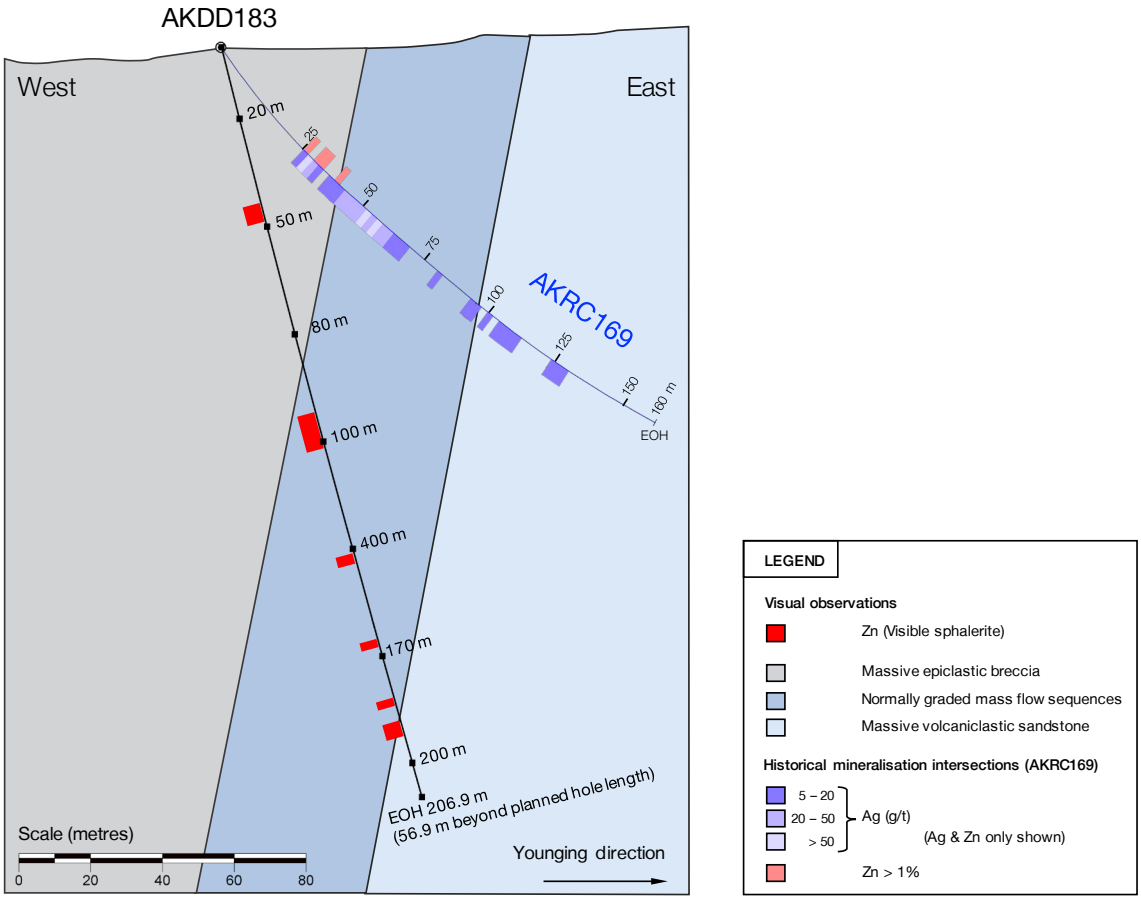
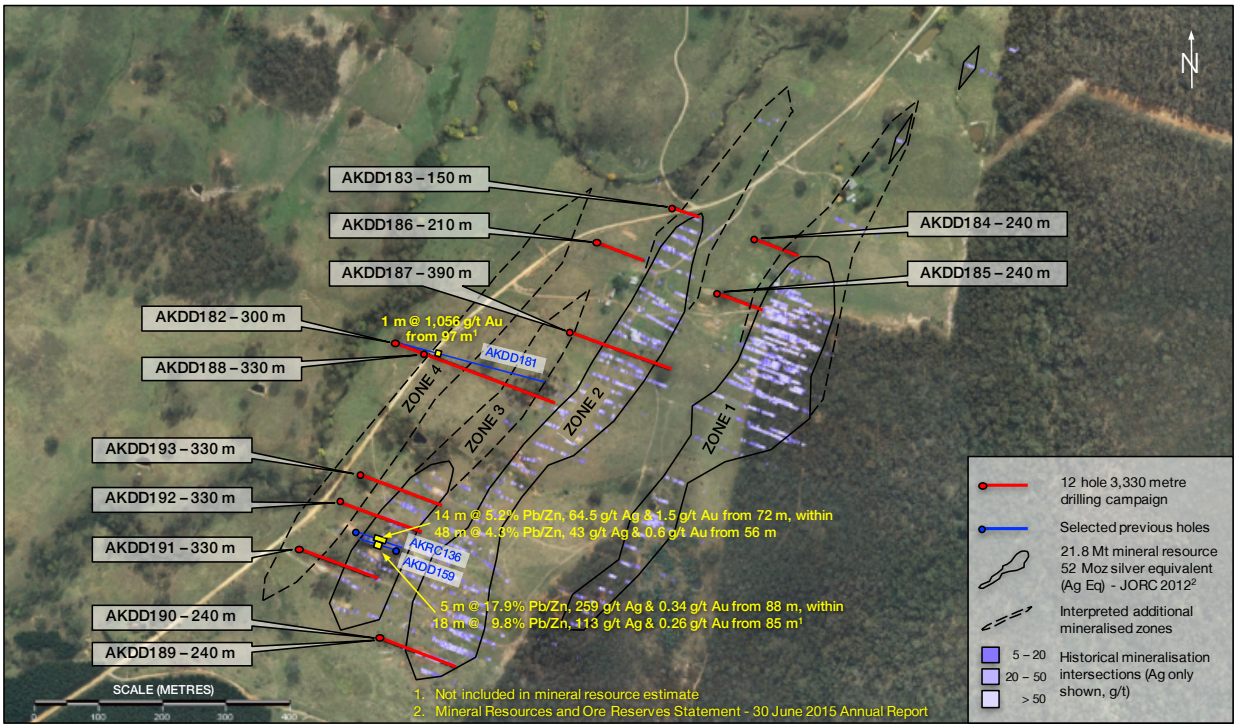


Figure 4 – Plan view of the 12 hole 3,330 metre drilling campaign design



Drilling campaign progress – additional mineralisation observed

Five holes have been completed for a total of 1,300.8 metres (versus 1,140 metres planned for these holes).

Further encouraging mineralisation has also been observed in holes subsequent to AKDD182 and AKDD183, and will be reported to the ASX following core logging, photographing, and as the results of visual-based analysis become available.

Mineral resource review

Argent is planning to review the Kempfield mineral Resource estimate on completion of the drilling campaign and analysis of the assay results. The drilling campaign has been designed to test the potential for an increase in tonnes and grade in order to progress the Kempfield project toward economic viability and mining operations.

Summary drill hole information is provided in Appendix A, and JORC Table 1 in Appendix B of this announcement.

For further information please contact:

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APPENDIX A – DRILL HOLE SUMMARY INFORMATION

Further to the 30 March 2016 announcement regarding the drill holes completed to date in the 12 hole 3,330 metre drilling program, the following summary table is provided:

Table A – Summary of available drill hole information for AKDD182 to AKDD186

Hole_ID	Easting (mE) [1]	Northing (mN) [1]	Azimuth	Dip	Elevation (mRL)	Hole width
AKDD182	708,141 EOH 299.9 m	6,258,403	110° TN	-80°	748	PQ3/HQ [2]
AKDD183	708,580 EOH 206.9 m	6,258,615	110° TN	-75°	751	PQ3/HQ [2]
AKDD184	708,699 EOH 242.2 m	6,258,569	110° TN	-75°	765	PQ3/HQ [2]
AKDD185	708,649 EOH 278.8 m	6,258,481	110° TN	-75°	767	PQ3/HQ [2]
AKDD186	708,580 EOH 273.0 m	6,258,615	110° TN	-75°	763	PQ3/HQ [2]

Notes:

1. Geodetic Datum of Australia 94 (GDA94), projection Map Grid of Australia (MGA), Zone 55, Australian Height Datum (AHD)
2. Each of the five holes to date were collared with PQ3 hole width, then reduced as appropriate for drilling conditions to HQ3 hole width
3. EOH = end of hole

APPENDIX B - JORC 2012 EDITION TABLE 1

KEMPFIELD 12 HOLE 3,330 METRE DRILL PROGRAM

The following information follows the requirements of JORC 2012 Table 1 Sections 1, 2 and as applicable for this ASX release related to Kempfield 12 hole 3,330 metre drilling program.

Section 1 - Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Drillholes are sampled based on observed mineralisation or intensity of alteration. PQ core utilised ¼ core, HQ utilised ½ core and NQ utilised ½ core for sample submittal. Samples are generally constrained to >0.6m or <1.4m interval lengths with an average sample length of 1m. A minimal amount of samples are taken with interval lengths <0.6m due to rock condition or stratigraphic constraints. Assay and preparation are carried out by ALS Global in Orange. 2-3kg samples are crushed using a jaw crusher, riffle split, and pulverised to produce a 250g sample for various analytical methods.
Drilling techniques	Diamond drilling utilised PQ collars, HQ drilling to oxidation depth, and where determined to be appropriate, NQ drilling thereafter. The drill string was configured with a triple tube 3 m barrel and wireline/overshot setup.
Drill sample recovery	Recovery was recorded by the geologist or field geotechnician. HQ was extended to reasonable depth to maintain recovery in poor ground.
Logging	Geological logging is conducted to a reasonable standard via graphic and digital logging noting lithology, mineralisation, alteration and structures with associated degrees of intensity. Logging is undertaken using both qualitative and quantitative methods accompanied with wet and dry core photography, and lithological sampling for lithogeochemistry and petrographic assessment.
Sub-sampling techniques and sample separation	Drillholes are sampled based on observed mineralisation or intensity of alteration. PQ core utilises ¼ core, HQ utilises ½ core and NQ utilises ½ core for sample submittal. Samples are constrained to >0.6m or <1.4m interval lengths with an average sample length of 1m. A minimal amount of samples are taken with interval lengths <0.6m due to rock condition or stratigraphic constraints. Assay and preparation are carried out by ALS Global in Orange. 2-3kg samples are crushed using a jaw crusher, riffle split, and pulverized to produce a 250g sample for various assay methods. QAQC samples are taken at a 1:10 ratio utilising coarse crush, fine crush and pulp duplicates along with blanks and certified reference material (CRM).
Quality of assay data and laboratory tests	The selected assaying method utilises a 4-acid digest (total) due to the ubiquitous presence of barite. Samples are then assayed using ICP-AES for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr. Samples over detection limit are re-assayed using 4-acid digest with ICP-AES finish. Au is quantified using a 30g charge with fire assay and AAS finish. Any over-limit samples are assayed via dilution.
Verification of sampling and assaying	Argent and ALS Global employ separate independent QAQC assay checks. All drillhole information is stored graphically and digitally in excel format. Assay results span low-level, high-level and ore-grade amounts which are reported in a homogenized format, where highest level assay has been reported regardless of highest value.
Location of data points	All data used in this report are in: Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA) Zone: Zone 55

	Collar positions are recorded by handheld GPS Topographic control is gained using government DTM data with handheld GPS check.
Data spacing and distribution	Drillhole AKDD182 intersected 50m from known mineralisation. Assays are yet to be completed. Drillhole AKDD183 intersected 60m from known mineralisation. Assays are yet to be completed.
Orientation of data in relation to geological structure	Samples are taken with consideration of stratigraphy and alteration, samples do not straddle stratigraphic boundaries. The majority of results are considered as exploration and any predominant orientation is unknown as yet. Existing drilling shows drill intersections are within reasonable estimation as true width. Drillholes are targeted to intersect geology as close to perpendicular as possible.
Sample security	Samples are strictly controlled using graphic and digital sign off sheets onsite, strict sample transfer protocols onsite, delivery to ALS Global Orange by Argent staff, and receipt by ALS Global Orange.
Audits or reviews	A walk through inspection of ALS Global Orange facilities has been conducted by the Exploration Manager of Argent and deemed to be satisfactory. A review of assay method was conducted by the Exploration Manager of Argent and it was changed from a partial digest (3-acid), to a total digest (4-acid). Significant amounts of barite cause Ag to precipitate out of solution which cannot be quantified in a partial digest solution.

Section 2 - Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• Exploration Licence Kempfield EL5748, Trunkey Creek, NSW held by Argent (Kempfield) Pty. Ltd. (100%), a wholly owned subsidiary of Argent Minerals Limited. There are no overriding royalties other than the standard government royalties for the relevant minerals. • Argent Minerals has freehold title to the land which has historically been utilized for pastoral activities. Heritage items have been identified on the property. A native title claim (Gundungurra Application #6) was lodged on the 29th April 1997 covering a large area inclusive of Kempfield. A single counterpart only, the Gundungurra Tribal Council Aboriginal Corporation, has responded to Argent advertisements as part of the standard 'right to negotiate' process, and is the sole registrant. • The Company's Exploration Licence renewal application for the full licence area for a five (5) year term has been approved to July 2020.
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 Table 1.2.1. • Earlier exploration was performed by to the industry standard of the time; available QAQC indicates that the historical data is reasonable and suitable for use in Mineral Resource estimates.

	Table 1.2.1 – Exploration history | Company	Period	Exploration activities
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Argent Minerals	2007-current	Drilling, VTEM survey, pole-dipole IP survey, gravity survey, ground EM and down-hole EM survey
Golden Cross	1996-2007	Drilling and high resolution airborne magnetic survey
Jones Mining	1982-1995	Drilling
Shell	1979-1982	Drilling, ground EM survey, dipole-dipole IP survey, and soil sampling
Inco	1972-1974	Drilling
Geology	• The deposit type is a volcanic hosted massive sulphide (VHMS) deposit • The geological setting is in the Siluro-Devonian Kangaloolah Volcanics within the intra-arc Hill End Trough within the Lachlan Orogen, Eastern Australia • The style of mineralisation is strata bound barite-rich horizons hosting silver, lead, zinc ± copper ± gold
Drill hole Information	The drillhole information positioning information is summarised as follows: • Drillhole collar AKDD182: - 708,141mE; 6,258,403mN; - Elevation 748 mRL; - Dip -80 °; Azimuth 110° TN; - Final depth 299.9m. • Drillhole collar AKDD183: - 708,580mE; 6,258,615mN; - Elevation 751 mRL; - Dip -75 °; Azimuth 110° TN; - Final depth 206.9 m. • Drillhole collar AKDD184: - 708,699mE; 6,258,569mN; - Elevation 765 mRL; - Dip -75 °; Azimuth 110° TN; - Final depth 242.2 m. • Drillhole collar AKDD185: - 708,649mE; 6,258,481mN; - Elevation 767 mRL; - Dip -75 °; Azimuth 110° TN; - Final depth 278.8 m. • Drillhole collar AKDD186: - 708,580mE; 6,258,615mN;

	- Elevation 763 mRL; - Dip -75 °; Azimuth 110° TN; - Final depth 273.0 m.
Data aggregation methods	• No cutoff grades employed at this point • Significant intersections use the 'sumproduct' function of MSexcel where grouped results exceed a single sample. • Sub-grade results are included in significant intersections if bounded by 1 or more significant results. Only significant results initiate grouping whereby the majority of assay results are deemed significant
Relationship between mineralisation widths and intercept lengths	• AKDD182 & AKDD183 are drilled at -80° and -75° respectively. Intersected widths are visually assessed and reported in downhole length. True width will be reported when reportable assays are announced.
Diagrams	Diagrams are included in the report.
Balanced reporting	All significant results are reported herein.
Other substantive exploration data	All available exploration data relevant to this report has been provided.
Further work	Lithogeochemical assessments will be conducted to adequately define mineralisation and alteration type. Further drilling is planned for 2016.

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 :

- 29 April 2015 Extended reach for Kempfield deep diamond drilling program;
- 4 September 2015 Annual Report to Shareholders – Mineral Resources and Ore Reserves Statement;
- 22 December 2015 Significant intersections at Kempfield including Cu and Au; and
- 30 March 2016 Kempfield drill plan strategy begins to deliver results.

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.

Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr. Clifton Todd McGilvray who is a member of the Australasian Institute of Mining and Metallurgy, an employee of Argent Minerals, and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (**JORC Code**). Mr. McGilvray consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.