

EXCELLENT KEMPFIELD METALLURGICAL TEST RESULTS

Argent at a glance

ASX-listed Company focused on the expansion and development of its significant existing base and precious metal projects and to leverage its expertise to pursue value accretive acquisitions of other significant projects identified by the Company.

Facts

■ ASX Codes:	ARD, ARDO ¹
■ Share price (8 November 2017):	\$0.031
■ Option price (8 November 2017):	\$0.006
■ Shares on issue:	421.4 M
■ Market capitalisation	\$13.1 M

¹ \$0.10 exercise price, 27 June 2019 expiry.

Directors and Officers

Stephen Gemell
Non-Executive Chairman

David Busch
Chief Executive Officer

Peter Nightingale
Non-Executive Director

Peter Michael
Non-Executive Director

Vinod Manikandan
Company Secretary

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Highlights:

- Preliminary metallurgical recovery test results of 83.4% to 97.5% significantly exceed historical assumptions for lead, zinc, silver and gold recoveries.
- Argent is aggressively pursuing Kempfield economic viability through several programmes currently directed at the following goals:
 - ★ Increasing the Mineral Resource through infill drilling of the JORC compliant Exploration Target estimated by resource specialists H&S Consultants Pty Ltd;
 - ★ Optimising processing plant feed grades in financial modelling scenarios; and
 - ★ Optimising metal recoveries through further identified metallurgical testwork.
- Project economic potential further boosted by LME zinc prices at 10 year highs.

PRELIMINARY METALLURGICAL TEST RESULTS EXCEED HISTORICAL ASSUMPTIONS

Argent Minerals Limited (ASX: ARD, Argent, or the Company) is pleased to report preliminary results for the Kempfield metallurgical testwork programme.

About the metallurgical test results

Argent's metallurgical testwork has yielded excellent recoveries for Kempfield silver, gold, zinc and lead in a standalone flotation processing environment. The recoveries to an initial bulk metal concentrate are substantially higher than historical feasibility study assumptions for Kempfield deposit material, as summarised in the following table:

Table A – Preliminary metallurgical recovery test results versus historical assumptions

	Historical assumption	Recovery test results AF3 Rougher 1 - 6
Zinc	55%	97.5%
Lead	55%	83.4%
Silver	80%	89.5%
Gold	80%	88.6%

Notes

1. These are preliminary results from one test of a series of metallurgical tests yet to be completed, and therefore may not be representative of the ultimate outcome for the completed series.
2. The samples utilised for the tests may not necessarily be representative of the Kempfield deposit due to limited availability of suitable drillcore, and the samples were partially weathered.

About the purpose of the metallurgical tests

Argent's goal for the testwork is to establish the potential for higher metallurgical recoveries to separate lead and zinc concentrates in a standalone flotation processing environment than the existing assumptions based on historical testing. The historical testing had primarily focused on carbon-in-leach (CIL) recoveries for silver and gold from oxide and transitional material.

Whereas the historical flotation tests were performed on residue from the preceding CIL tests (which can introduce complexities for subsequent flotation recoveries), the recent tests were performed directly on drill core samples from primary material.

The metallurgical testwork will be used to devise the most effective processing flowsheet for optimal recovery of metals from Kempfield-specific material into two separate concentrates of saleable grades as the Company continues to advance the Kempfield project toward the ultimate goal of production.

About the metallurgical testwork

Under the supervision of metallurgical engineer Mr. Roland Nice, Kempfield material was selected from two diamond holes drilled in 2016 (AKDD183 and 187) and shipped to Australian Minmet Metallurgical Laboratories Pty Ltd (AMML) in Gosford NSW, who is conducting the testwork.

The drill core samples were crushed to 3.25 mm and divided into two equal halves. One half was retained, while the other was combined to form an 18 kg composite. The composite was further divided into 18 portions, each 1 kg for individual testwork. All samples were frozen in order to enhance the life of the samples.

The metallurgical engineer devised a series of tests, commencing with three bench-scale flotation procedures.

About the preliminary results

The first three tests (AF1, 2 and 3) showed that the sulphides float quite readily. One test incorporated a bulk flotation test AF3 with the preliminary recovery results summarised in Table A. The zinc and lead recoveries, in particular, significantly exceed the historical feasibility study assumptions of 55% (Table A).



Test AF3 comprised a primary grind of $P_{80} = 53 \mu\text{m}$, followed by a bulk sulphide flotation for 6 minutes.

Test AF1 revealed that a pre-float stage does not improve flotation performance, and that there is an activation mechanism occurring within the pulp chemistry, considered at this preliminary stage to likely be related to the partial weathering of the core samples and will need to be further investigated.

AF4 is the next test underway, investigating the ability to separate into two different concentrates. The first photograph (Fig. 1a) represents the initial Lead Rougher flotation stage and indicates good lead mineralisation in the froth. The second photograph (Fig. 1b) represents the Zinc Rougher stage and shows reasonable zinc mineralisation.



Figure 1a – Test AF4: Lead rougher test R1



Figure 1b – Test AF4: Zinc rougher test R1

For further details of the tests see Appendix A – JORC Table 1 Section 4.

KEMPFIELD ECONOMIC FEASIBILITY

Argent is aggressively pursuing Kempfield economic feasibility through several programmes currently directed at the following goals:

- **Increasing the Kempfield mineral resource** – through the infill drilling programme that Argent is designing and executing for validation of the significant Exploration Target estimate announced 8 November 2017;
- **Optimising plant feed grades** – through a combination of (i) improving grades where possible through the above exploration, aided by the new 3D geological model for wireframing identified mineralisation, and (ii) ‘high grading’ the selection of material for milling and processing; and
- **Optimising metal recoveries** - through the continuing metallurgical testing programme, with the preliminary results reported in this announcement exceeding historical assumptions.

Significantly improved zinc prices have further boosted the project economic potential, as reported by the Company in the 24 August 2017 announcement – ‘**Argent to Increase Zinc Assets as LME Price Hits 10Y High**’.

With the assistance of specialists Australian Mining Design and Development Pty Ltd (AMDAD), Argent has developed a detailed [conceptual] financial model to guide ongoing decision making on the key elements of the project over which it has control, as the Company continues to advance Kempfield toward the goal of economic viability, and ultimately - production.

The comprehensive financial model incorporates the substantial data obtained through the Company’s feasibility study work conducted during approximately 2011 to early 2013. The available data includes mine design options based on open cut mining, as well as infrastructure and environmental planning information. The Company continues to update the model as new data becomes available, for ongoing analysis.

NEXT STEPS

About the iterative metallurgical testwork process

Argent is conducting the metallurgical testwork as an iterative process in order to develop the most efficient process flowsheet for extracting saleable metals concentrates from Kempfield-specific deposit material.

This is standard practice for polymetallic projects such as Kempfield.

As the results are received for each group of tests in the series, these are analysed and used for the design of the subsequent group of metallurgical tests, and so on, until a conclusive result is obtained.

About the next steps in the current testwork series

Argent is conducting the following further work to resolve the key identified key challenge of lead and zinc separation, based on the metallurgical engineer's recommendations:

1. Pursuing a series of tests with varying reagent regimes;
2. Conducting tests with regrinding lead and zinc rougher concentrates followed by cleaning flotation steps; and
3. Reviewing the mineralogy of the process products to determine distribution of the mineral components.

All of these tests are utilising the existing drill core prepared and stored in the AMML freezers as described on page 2 of this announcement.

The Company may conduct further testing on samples obtained through the resource infill drilling programme.

For further information please contact:

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APPENDIX A - JORC 2012 EDITION TABLE 1

KEMPFIELD METALLURGICAL TEST RESULTS

The following information follows the requirements of JORC 2012 Table 1 Sections 1, 2 and as applicable for this ASX announcement.

Section 1 - Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<p>The Kempfield deposit was sampled with drill chips from reverse circulation (RC), conventional rotary percussion (PERC) drilling, and with diamond drill hole (DDH).</p> <p>PERC/RC drill chips are sampled 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.</p> <p>Drill holes are sampled based on observed mineralisation or intensity of alteration. Holes were drilled PQ2, HQ3 and NQ3. PQ ¼ core, HQ ½ and NQ ½ core were used for sample submittal. Samples are generally constrained to >0.6 m or <1.4 m interval lengths with an average sample length of 1 m. A minimal number of samples are taken with interval lengths <0.6 m due to rock condition or stratigraphic constraints.</p> <p>Soil samples taken from approximately 0.5 m below the surface (aimed at C Horizon). The samples were sieved to -75 microns and then bagged ready for analysis.</p> <p>Metallurgical samples were extracted from drillholes AKDD183 (a 23.0 m section from Horizon C primary material) and AKDD187 (two sections from Horizon D primary material, each 11.0 m). The drillcore was shipped to AMML in Gosford, who prepared the samples and conducted the testwork. The samples were prepared by crushing to 3.25 mm, and then divided into two equal halves. One half was retained, while the other was combined to form an 18 kg composite. The composite was further divided into 18 portions, each 1 kg for individual testwork. All samples were stored in freezers at the AMML facility in order to enhance the life of the samples.</p>
Drilling techniques	<p>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.</p> <p>Diamond drilling utilised PQ collars with HQ and NQ drilling to depth. The drill string was configured with a triple tube 3 m barrel and wireline/overshot setup.</p> <p>PERC/RC was conducted using conventional methods using standard 4-1/2 inch or 5-1/2-inch face sampling down the hole hammer.</p>
Drill sample recovery	<p>Recovery was recorded by the geologist or field geotechnician.</p> <p>Diamond: Triple tube was permanently employed to maintain core integrity.</p> <p>RC: Every effort was made to ensure samples remained dry. Wet samples were dried at the earliest opportunity. Hammer drilling was pulled back from the hammer face per sample to ensure sample separation.</p> <p>PERC: 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.</p> <p>No significant core loss occurred during drilling. However, localised lower recoveries were recorded in intensively weathered (BJ Zone) and clay-altered (McCarron Zone) rocks.</p>
Logging	<p>Geological logging is conducted to a high standard via graphic and digital logging noting lithology, mineralisation, alteration and structure with associated degrees of intensity. Logging is undertaken using both qualitative and quantitative methods accompanied with wet and dry core photography, and sampling for type section lithogeochemistry. Core was oriented when recovered and logged in full. A short field description was taken for each soil sample.</p>
Sub-sampling techniques and sample separation	<p>During PERC/RC, 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. Any wet samples were dried before weighing and splitting.</p> <p>Diamond drill holes are sampled on observed mineralisation or intensity of alteration. PQ ¼ core, HQ and NQ</p>



	<p>½ core was used for sample submittal. Samples were constrained to >0.6 m or <1.4 m interval lengths with an average sample length of 1 m. A minimal number of samples are taken with interval lengths <0.6 m due to rock condition or stratigraphic constraints. Assay and preparation are carried out by ALS Global Orange and ALS Global Brisbane. 2-3 kg samples were crushed using a jaw crusher, riffle split, and pulverized to produce a 250g sample for various analytical methods. Petrology samples selected based on dominant lithology type compositions and alteration types, completed by A & A Crawford Pty. Ltd. (Tony Crawford)</p>																											
Quality of assay data and laboratory tests	<p>Quality assurance and quality control (QAQC) procedures for historical sampling, assay data and laboratory tests are summarised in Table 1.1.1</p> <ul style="list-style-type: none">Argent Minerals samples were digested with a 4-acid total digest (hydrochloric, perchloric, nitric and hydrofluoric acids) to counteract the ubiquitous presence of barite. Samples were assayed using ICP-AES for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Zr. Samples over detection limit were re-assayed using 4-acid digest with ICP-AES finish. Au was quantified using a 30g charge with fire assay and AAS finish. Any over-limit samples were assayed via dilution. Argent and ALS Global employ independent QAQC assay checks. Argent uses coarse crush, fine crush and pulp duplicates, blanks and 2 types of CRM's inserted at a ratio of 1:10. Soil samples were assayed by ME-MS41 with a total of 4312 samples collected.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).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.Shell core and percussion samples were originally assayed by ALS method XRF-1A for barium and 101-B for copper, lead, zinc, and silver.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. <p>Table 1.1.1 – QAQC Summary for each Exploration Company</p> <table><tr><th>Company</th><th>No. of assays</th><th>Comments</th></tr><tr><td>Argent Minerals</td><td>15,019</td><td>Full QAQC applied:</td></tr><tr><td>Argent Minerals Re-assays of Inco samples</td><td>708</td><td><ul style="list-style-type: none">- field coarse blanks (every 50th);- standard reference material from standards supplied by Geostats Pty Ltd (every 50th);- duplicate every 25th or 50th ;- 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</td></tr><tr><td>Golden Cross</td><td>4,135</td><td>Satisfactory QAQC:</td></tr><tr><td>Golden Cross Re-assays of Jones Mining</td><td>263</td><td><ul style="list-style-type: none">- duplicates; and- cross-laboratory checks (ALS Orange, ALS Stafford, Becquerel and Genalysis), and cross-analytical- technique checks (ICP-AES versus Neutron Activation Analysis)</td></tr><tr><td>Jones Mining</td><td>146</td><td>QAQC documentation partially available - Jones Mining re-assayed 82 samples</td></tr><tr><td>Shell</td><td>4,253</td><td>Satisfactory QAQC:<ul style="list-style-type: none">- four check holes against percussion drilling program; and- cross-laboratory checks.</td></tr><tr><td>Inco</td><td>1,516</td><td>QAQC documentation not available</td></tr><tr><td>TOTAL</td><td>26,040</td><td>24,378 assays (94%) with satisfactory QAQC procedures and documentation</td></tr></table>	Company	No. of assays	Comments	Argent Minerals	15,019	Full QAQC applied:	Argent Minerals Re-assays of Inco samples	708	<ul style="list-style-type: none">- field coarse blanks (every 50th);- standard reference material from standards supplied by Geostats Pty Ltd (every 50th);- duplicate every 25th or 50th ;- 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 QAQC:	Golden Cross Re-assays of Jones Mining	263	<ul style="list-style-type: none">- duplicates; and- cross-laboratory checks (ALS Orange, ALS Stafford, Becquerel and Genalysis), and cross-analytical- technique checks (ICP-AES versus Neutron Activation Analysis)	Jones Mining	146	QAQC documentation partially available - Jones Mining re-assayed 82 samples	Shell	4,253	Satisfactory QAQC: <ul style="list-style-type: none">- four check holes against percussion drilling program; and- cross-laboratory checks.	Inco	1,516	QAQC documentation not available	TOTAL	26,040	24,378 assays (94%) with satisfactory QAQC procedures and documentation
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TOTAL	26,040	24,378 assays (94%) with satisfactory QAQC procedures and documentation																										
Verification of sampling and assaying	<p>All drill hole information is stored graphically and digitally in excel format. Assay results span low-level, high-level and ore-grade amounts which have been reported in a homogenised format.</p> <p>Reported results are compiled by the Company's Exploration Manager and the Chief Executive Officer. Collected digital data is verified and validated by the Database Administrator (H&SC consultants)</p>																											

	<p>No adjustment or calibration was made to any primary assay data collected at the Kempfield project for the purposes of reporting.</p> <p>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.</p>
Location of data points	<p>All data used in this report are in:</p> <ul style="list-style-type: none"> Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA) Zone: Zone 55 <p>Topographic control was gained using government DTM data with handheld GPS check (Garmin eTrex H, GPS Accuracy: ± 10 meters).</p> <p>Soil sample locations were collected using handheld GPS (Garmin 76 ± 3 meters) at a spacing of 100m x 50m</p> <p>Downhole surveys were captured approximately every 50 or 30m including at end of hole with an Eastman multishot camera down-hole survey Tool.</p> <p>Surveys of the drill hole collars were conducted by the following methods:</p> <ul style="list-style-type: none"> Historical collars surveyed under the Kempfield local grid and later converted to AMG 66 (Zone 55) grid (by a registered surveyor). Accuracy and quality of drill hole collar survey depends on the age of survey and exploration company which conducted the survey; Holes not originally surveyed by a registered surveyor were located with a GPS and stored in AMG66 (for consistency with the above); and Collars surveyed by a registered surveyor in GDA 94 (Zone 55) grid and then converted to AMG 66 (Zone 55) grid (also for consistency); all Argent Minerals drill hole collars are surveyed by a registered surveyor, an H&SC requirement. <p>The elevations for the Argent holes were surveyed by an independent registered surveyor (195 holes). Elevations for historical holes were either assigned from digital terrain model (DTM) or interpolated from known surveyed collar elevations. The DTM was derived from Light Detecting and Ranging (LIDAR) survey (with an accuracy of ± 5 cm) conducted by Geospectrum for the Kempfield project during 2010.</p>
Data spacing and distribution	<p>No Mineral Resources or Ore Reserves are reported in this announcement.</p>
Orientation of data in relation to geological structure	<p>Samples were taken with consideration of stratigraphy and alteration, samples do not straddle geological boundaries.</p> <p>The immediate local geological sequence and foliation is inclined at 70 degrees to the west.</p> <p>Drill holes were targeted to intersect geology on mildly oblique (55-60 degrees) sections to increase intercept potential.</p> <p>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.</p>
Sample security	<p>Chain of custody involved graphic and digital sign off sheets onsite, sample transfer protocols onsite, delivery to ALS Global Orange by Argent staff, and receipt by ALS Global Orange.</p>
Audits or reviews	<p>A walk-through inspection of ALS Global Orange facilities was conducted by the Exploration Manager of Argent and deemed to be satisfactory.</p> <p>A review of assay method was conducted by the Exploration Manager of Argent and was altered from a partial digest (3-acid), to a total digest (4-acid). Significant amounts of barite cause Ag to precipitate out of solution which is difficult to quantify in a partial digest solution.</p> <p>Sampling techniques and procedures were regularly reviewed internally and by external consultants (H&SC).</p>

Data reviews conclude that QAQC protocols have been adequately employed.

The metallurgical engineer conducts similar regular inspections of the AMML Gosford facility to ensure that QAQC protocols have been adequately employed.

Section 2 - Reporting of Exploration Results

Criteria	Commentary																								
Mineral tenement and land tenure status	<p>Exploration Licence Kempfield EL5748, Trunkey Creek, NSW held by Argent (Kempfield) Pty. Ltd. (100%), a wholly owned subsidiary of Argent Minerals Limited. There is no overriding royalties' other than the standard government royalties for the relevant minerals.</p> <p>Argent has freehold title to the land which has historically been utilised 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 counterparty only, the Gundungurra Tribal Council Aboriginal Corporation, responded to Argent advertisements as part of the standard 'right to negotiate' process, and is the sole registrant.</p> <p>The Company's Exploration Licence renewal application for the full licence area for a five (5) year term was been approved to July 2020.</p>																								
Exploration by other parties	<p>Argent Minerals Limited through its wholly owned subsidiary Argent (Kempfield) Pty Ltd is the sole operator of the project. Argent introduced best industry practice work.</p> <p>Kempfield has been explored for more than forty years by several exploration companies as set out in Table 1.2.1.</p> <p>Table 1.2.1 – Exploration History</p> <table><tr><th>Company</th><th>Period</th><th>Exploration activities</th></tr><tr><td>Argent Minerals</td><td>2007-present</td><td>Drilling, 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> <p>Earlier exploration was performed at the industry standard of the time; available QAQC indicates that the historical data is reasonable and suitable for use in Mineral Resource estimates.</p>	Company	Period	Exploration activities	Argent Minerals	2007-present	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						
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Geology	<p>The deposit type is a volcanic hosted massive sulphide (VHMS) deposit.</p> <p>The geological setting is in the Siluro-Devonian Kangaloolah Volcanics within the intra-arc Hill End Trough within the Lachlan Orogen, Eastern Australia.</p> <p>The style of mineralisation is strata bound barite-rich horizons hosting silver, lead, zinc ± copper ± gold.</p>																								
Drill hole Information	<p>Holes from which the metallurgical test samples were extracted are set out in Table 1.2.2</p> <p>Table 1.2.2 - Collar coordinates for metallurgical test samples</p> <table><tr><th>Drillhole</th><th>Easting^c (m)</th><th>Northing^c (m)</th><th>RL (m)</th><th>Depth¹ (m)</th><th>Azimuth (°)</th><th>Dip (°)</th><th>Status</th></tr><tr><td>AKDD183</td><td>708580</td><td>6258615</td><td>754</td><td>206.9</td><td>110</td><td>-75</td><td>Reported</td></tr><tr><td>AKDD187</td><td>708417</td><td>6258419</td><td>761</td><td>419.9</td><td>110</td><td>-60</td><td>Reported</td></tr></table> <p>1. Depth is hole length to end of hole. 2. AMG 66 (Zone 55)</p>	Drillhole	Easting ^c (m)	Northing ^c (m)	RL (m)	Depth ¹ (m)	Azimuth (°)	Dip (°)	Status	AKDD183	708580	6258615	754	206.9	110	-75	Reported	AKDD187	708417	6258419	761	419.9	110	-60	Reported
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AKDD187	708417	6258419	761	419.9	110	-60	Reported																		
Data aggregation methods	<p>No data aggregation has been applied to the metallurgical test results, as only the results of a single metallurgical test (AF3) out of a series of four tests are reported in this announcement.</p>																								

Relationship between mineralisation widths and intercept lengths	The immediate local geological sequence and foliation is inclined at 70 degrees to the west and drilling planned to intersect mineralisation at an oblique angle where true width is 70%-80% of downhole length. Downhole lengths are reported herein.
Diagrams	No diagrams are required at this preliminary stage since only the results of a single metallurgical test (AF3) out of a series of four tests are reported in this announcement.
Balanced reporting	No Exploration Results are provided in this announcement. The results of a single metallurgical test only (AF3) out of a series of four tests are reported in this announcement.
Other substantive exploration data	All exploration data relevant to this report has been provided.
Further work	<p>Further identified metallurgical testwork includes:</p> <ol style="list-style-type: none"> 1. A series of tests with varying reagent regimes; 2. Tests with regrinding lead and zinc rougher concentrates followed by cleaning flotation steps; and 3. Reviewing the mineralogy of the process products to determine distribution of the mineral components. <p>All of these tests are utilising the existing drill core prepared and stored in the AMML freezers as described on page 2 of this announcement.</p>

Section 4 – Estimation and Reporting of Ore Reserves

Since no Ore Reserves are reported, this section is provided in part only, in order to provide further details of the metallurgical testwork in a manner that is consistent with the prevailing JORC Code 2012 reporting format.

Criteria	Commentary
Metallurgical factors or assumptions	<p><u>Metallurgical process and appropriateness</u> – the Company is conducting a series of metallurgical testwork to determine the effectiveness of extracting metals from Kempfield primary material by flotation, targeting separate concentrates. This is considered by the Company to be standard practice for such material in the Kempfield VHMS deposit.</p> <p><u>Well-tested or novel technology</u> - The Company considers the above process to be standard well-tested technology that has been proven over time. At this point there is no 'novel' or unproven technology under consideration.</p> <p><u>Nature, amount, and representativeness of testwork</u> – due to the limited availability of suitable drillcore, the samples have been extracted from only two holes. Whilst due care has been applied in the selection of these holes to maximise representivity under the circumstances, the results cannot not be considered as representative of the broader Kempfield deposit. The samples have been extracted from Horizon C and Horizon D primary material, for a total of 45 metres of drillcore as follows:</p> <ol style="list-style-type: none"> 1. A combined AKDD183 sample representing Primary material from C Horizon with 23 m of intersection and with an expected grade of 1.59% Zn, 0.65% Pb, 11g/t Ag and 0.25% Ba; 2. A single AKDD187 sample from 133 m to 143.8 m representing Primary material from D Horizon with 11 m of intersection and with an expected grade of 1.43% Zn, 1.04%Pb, 25g/t Ag and 0.05%Ba; and 3. A single AKDD187 sample from 154 m to 66.9 m representing Primary material from D Horizon with 11 m of intersection and with an expected grade of 1.29% Zn, 0.37%Pb, 8g/t Ag and 0.22% Ba <p>The genesis of these samples are that AKDD183 represents C Horizon while AKDD187 represents D horizon</p>



(see Appendix A of announcement 8 November 2017 – Kempfield Exploration Target).

The combined AKDD183 intersections are Primary material and equal 23 m which the Company considers to be a reasonable sample size to commence with. It is noted that the Ba concentration is relatively high at 0.25% while silver is relatively low, Pb and Zn are reasonable. This may or may not have relevance regarding metallurgical performance.

Sample AKDD187 is essentially a sample primary material made up of three parts; the first part is 11 m of low Ba, relatively moderate Ag and higher arsenic with reasonable Pb and Zn, the second part is also Primary and has 11 m of intersection but is high in Ba, low in silver, reasonable Zn and low Pb. The third sample is minor with only 4m intersection, high in Ba as well as moderate Pb and high Zn.

AMML determined that these intersections weighed 36.4kg, which was prepared and stored as described under “Sampling techniques” in the first row of JORC Table 1 Section 1 on page 5 of this announcement.

Deleterious elements – no assumptions or allowances have been made other than as noted in the above point, as the results are only preliminary and reported for only a single metallurgical test (AF3) out of the first four tests conducted.

No bulk sample or pilot scale testwork has yet been conducted.

Minerals defined by specification – none under consideration at this point.

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> :

1. 24 August May 2014 Kempfield Mineral Resource upgraded to JORC 2012 standard
2. 8 November 2017 Kempfield Exploration Target¹

Competent Person:

1. Clifton Todd McGilvray

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.

Metallurgical testwork

The information in this Report that relates to the Exploration Target for the Kempfield deposit is based on information compiled by Mr. Roland Nice, who is a Fellow of the Australasian Institute of Mining and Metallurgy and the Principal of R W Nice & Associates Pty Ltd. Mr. Nice has sufficient experience relevant to the mineral processing of complex base metal deposits under consideration and to the activity being undertaken 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' (JORC Code). Mr. Nice consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.