24 October 2016

SEPTEMBER 2016 QUARTER ACTIVITIES AND CASH FLOW REPORT

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 Codes:	ARD, ARDO
Share price (21 October 2016):	$0.025
Shares on issue:	360.1 M
Market capitalisation:	$9.00 M

Directors and Officers

Stephen Gemell
Non-Executive Chairman

David Busch
Managing Director

Peter Nightingale
Non-Executive Director

Peter Michael
Non-Executive Director

Vinod Manikandan
Company Secretary

Contact details

PRINCIPAL OFFICE
Suite 6, Level 6, 50 Clarence Street
Sydney NSW 2000
T: +61 2 9262 2211
F: +61 2 9475 5346

REGISTERED OFFICE
Level 2, 66 Hunter Street
Sydney NSW 2000
T: +61 2 9300 3390
F: +61 2 9221 6333
E: admin@argentminerals.com.au

Highlights:

- **Kempfield drilling results:**
  - **Major breakthrough** – Kempfield VHMS host horizons and lithology defined;
  - **Significant potential mineralised extensions** identified;
  - **High grade gold trend** geometry identified - related to the Trunkey-Kings Plain gold system;
  - **High grade VHMS precious and base metal discovery enhanced** by the findings of the drill program;
  - **Massive sulphide intersections** in proximity to known intrusive confirm Kempfield North as a high-ranking target area;
  - **Proven continuity of mineralisation along strike and at depth;**
  - **Significant potential for hosted mineralised lenses** identified in the untested southern area; and
  - Potential **high temperature zone** and primary/secondary feeder sources identified.
- **Pine Ridge gold mine and Trunkey-Kings Plain goldfields**
  - Review and assessment of historic exploration results commenced.
- **Heavily oversubscribed private placement raised $1.75 million to expedite drilling.**
- **Drill programs advancing**
  - Update for Kempfield and West Wyalong.

Argent Minerals Limited (ASX: ARD, Argent or the Company) is pleased to report on its performance for the quarter ended 30 September 2016.

The main focus of the quarter was the completion of data gathering from the diamond drill core produced by the Kempfield drilling program, and the subsequent analysis.

A private placement was also conducted in preparation for the next round of drilling programs and advancing exploration. The strong support of existing and new investors resulted in a heavily oversubscribed outcome, raising **$1.75 million** before costs, which is being applied by the Company to advance exploration at the historic Pine Ridge gold mine and Trunkey-Kings Plain goldfields, and the Kempfield and West Wyalong drilling programs.

The 30 September 2016 quarter activities are summarised as follows.

KEMPFIELD DRILLING RESULTS

Summary

The strategically designed 11 hole diamond drilling program produced 3,167 metres of drill core containing vast amounts of information about Kempfield that is significant to understanding the deposit for further exploration success.

Detailed physical analyses were first performed on the drill core to record host rock types, thicknesses and angles, and where visible, mineralisation. The physical drill core information was then assessed together with assays as they became available following standard QA/QC. Whole rock assays were performed on more than 50% of the drill core[1] to yield a further significant level of detail – a 36 element suite for each metre of core sampled.

In addition to the obvious pursuit of silver, gold, zinc, lead and copper mineral grades, authentic volcanic-hosted massive sulphide (VHMS) exploration that employs the latest techniques requires the remaining 31 elements to be assessed in detail to discover and quantify their associations with the target minerals and the inter-relationships that are unique for the deposit being explored.

To assess and interpret the complexities of this detailed information in the context of hundreds of millions of years of multiple geological processes, and ultimately be able to reconstruct the intricacies of the current form of the deposit for highly efficient drill targeting, requires specialised VHMS knowledge and experience.

These processes were performed on the recent drill core, and will continue, with the results to date representing a significant milestone in the exploration of the Kempfield VHMS system.

The significant advances have taken the understanding of the Kempfield deposit to a new, far more detailed, higher level than that afforded by the minimal information made available by historical RC drilling.

The key results of the program reported in the 10 October 2016 announcement are summarised as follows:

- **Major breakthrough – detailed litho-stratigraphy defined, and four key host VHMS horizons identified**, which will lead to highly efficient drill targeting of precious and base metals at Kempfield;
- **Significant potential mineralised extensions identified**, following the analyses that revealed the strike-slip movements caused by transverse faulting;
- **High grade gold trend geometry identified** and confirmed as a later stage orogenic overprint related to the Trunkey-Kings Plain gold system – and the potential for structural upgrades and Trunkey–Kings Plain type high grade gold in the main Kempfield deposit area;
- **Massive sulphide intersections** in proximity to known intrusive confirm Kempfield North as a high-ranking target area
- **Proven continuity of mineralisation along strike and at depth** in Kempfield North;
- **Significant potential for hosted mineralised lenses identified in the untested southern area** historically assumed to be closed; and
- **Potential high temperature zone and primary/secondary feeder sources identified**.

1. Split core sampling (see 'Sampling Techniques and Data' in Appendix C – JORC 2012 Table 1 of the 10 October 2016 announcement)

Selected highlights of the 10 October 2016 announcement follow.

Major breakthrough - lithology and host horizons identified

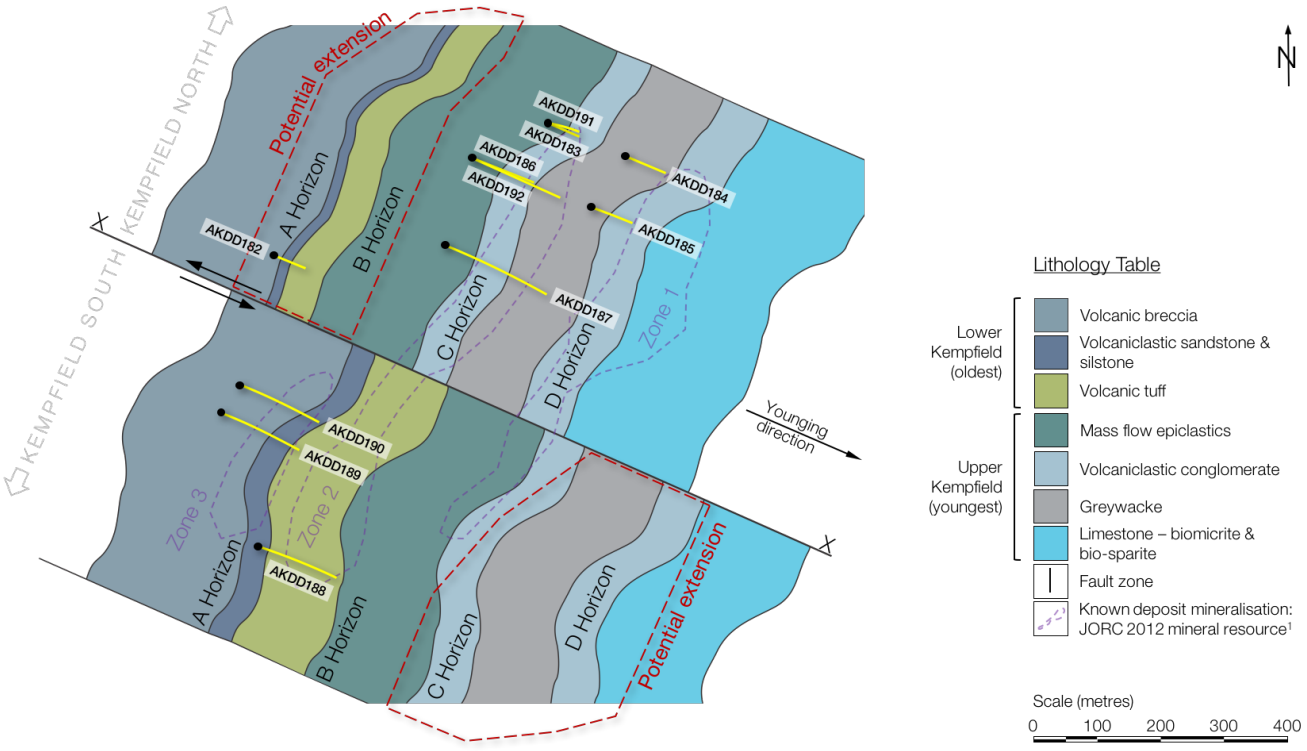
Vital to the exploration of VHMS systems is the identification of the specific host rock horizons or geological features that control mineralisation, and their arrangement.

The litho-stratigraphy has now been defined at the Kempfield deposit and four key host horizons have been identified. Horizons A, B, C and D have been identified within stratigraphy that dips approximately 70^0-80^0 to the west and youngs to the east.

The identification of the lithology and host horizons represents a major breakthrough for the project, leading to highly efficient drill targeting of high grade precious and base metals at Kempfield.

Figure 1 provides a simplified geological plan view illustrating the dominant lithology and identified VHMS host horizons projected to surface, together with outlines of the three mineralisation zones of the known deposit and the drill program holes.

Figure 1 – Simplified plan view of Kempfield lithology, the identified VHMS host horizons, and diamond drill hole locations



1. See Appendix B of the 10 October 2016 announcement

Potential mineralised extensions identified for drill targeting

An immediate result of this new level of detail was the identification of two potentially significant areas of additional mineralisation (each labelled as 'Potential Extension' in Figure 1):

- Northwest Kempfield – comprising A and B Horizons north of the transverse fault X-X; and
- Southeast Kempfield – comprising C and D Horizons to the south of the fault.

The discovery and delineation of the host horizons and the identification of the potential mineralised extensions represent significant advances at Kempfield. The mineralisation extension potential is especially significant when considered together with the recent depth extensions to northern portions of the deposit, which were confirmed to be at least twice that afforded by historical shallow drilling.

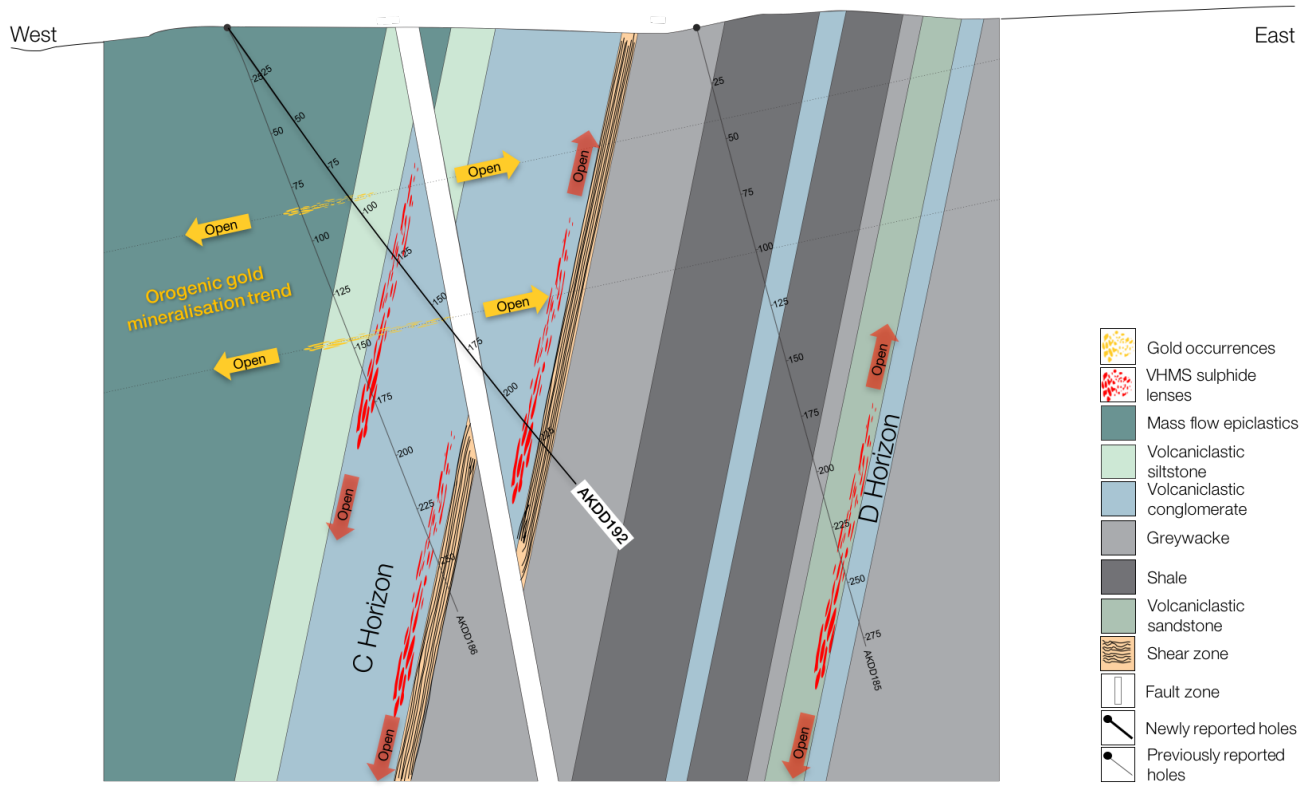
High grade gold trend

The diamond drill core assessment confirmed two main types of gold occurrences at Kempfield:

- VHMS related gold – generally in the range of 0.5-1.5 g/t Au, widespread, and associated with the original VHMS silver and base metal mineralisation event; and
- Orogenic gold overprint related to the Trunkey-Kings Plain gold system – that occurred as a later stage event. Gold occurrences of highly variable grades to as high as **1.0 m @ 1,065 g/t Au from 97 m** (AKDD181) have been identified as being related to the Trunkey-Kings Plain orogenic gold system. Diamond drill core analyses and modeling has identified that these occur within a variable trend that generally dips 25° to the west. The interference of the existing VHMS system and the overprinted gold system holds potential for further occurrences of structural upgrading to achieve high gold grades.

Figure 2 provides an example illustration of the orogenic overprint gold trend and the significant new level of detail for VHMS lenses and the lithology identified by the diamond drill core analysis.

Figure 2 – Gold trend and VHMS lens continuity confirmed by analyses of diamond holes AKDD186, 192 and 185 (section view)



Massive sulphides intersected

Small intervals of massive sulphide mineralisation intersected by hole AKDD191 are a very positive discovery for the northern area of Kempfield. It shows that sulphide mineralisation is increasing in quality, and grade, with depth and there is a high potential for further depth extensions. The coincidence of a rhyolite intrusive and increasing grades with depth strongly indicates there was a growth fault at this location controlling the distribution of sulphide mineralisation.

The next round of Kempfield drilling will include further testing in the region of the rhyolite intrusive in Kempfield North.

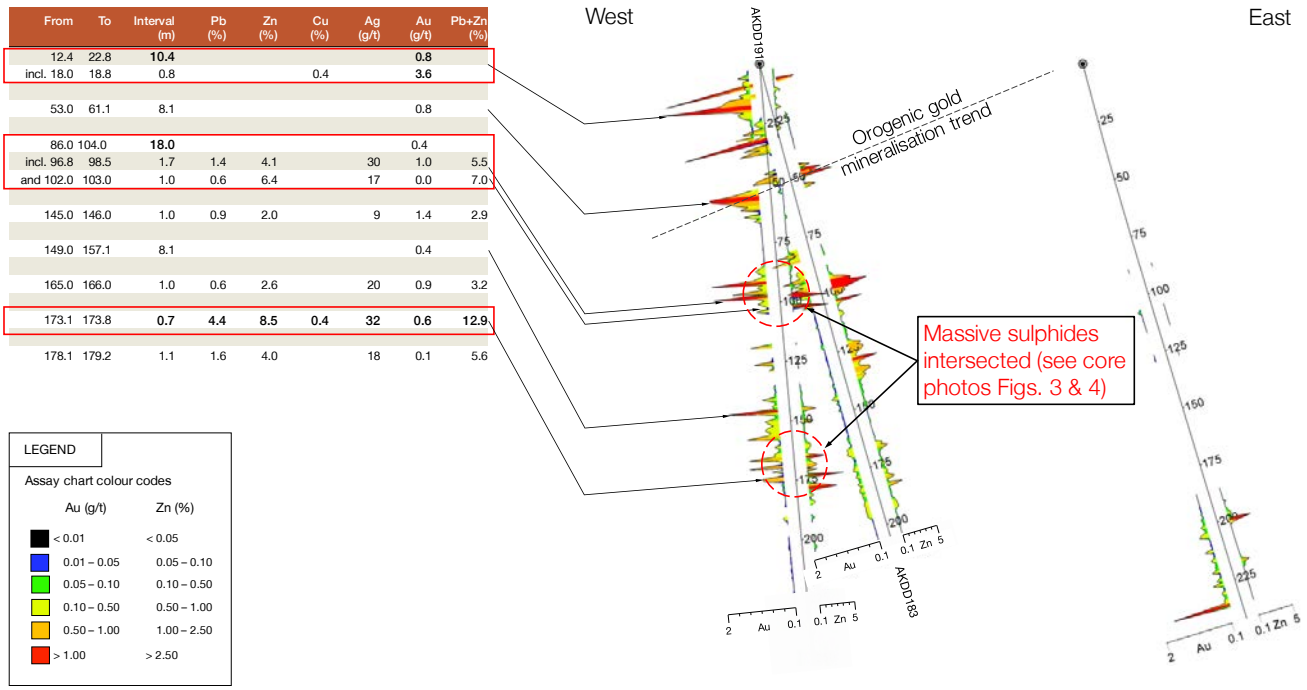
Figure 3 – AKDD191 core samples including intersection of massive sphalerite and minor galena from 97.8 m to 98.5 m

Figure 4 - AKDD191 core samples including massive galena and sphalerite within the intersection 0.7 m @ 8.5% Zn, 4.4% Pb, 32g/t Ag and 0.6% Au from 173.1 m

Figure 5 illustrates a section view of including diamond hole AKDD191 that intersected the massive sulphides, together with a table of significant intervals intersected by the hole.

Figure 5 – Section view showing where massive sulphides were intersected by AKDD191

From	To	Interval (m)	Pb (%)	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)	Pb+Zn (%)
12.4	22.8	**10.4**					**0.8**	
incl. 18.0	18.8	0.8			0.4		**3.6**	
53.0	61.1	8.1					0.8	
86.0	104.0	**18.0**					0.4	
incl. 96.8	98.5	1.7	1.4	4.1		30	1.0	5.5
and 102.0	103.0	1.0	0.6	6.4		17	0.0	7.0
145.0	146.0	1.0	0.9	2.0		9	1.4	2.9
149.0	157.1	8.1					0.4	
165.0	166.0	1.0	0.6	2.6		20	0.9	3.2
173.1	173.8	**0.7**	**4.4**	**8.5**	**0.4**	**32**	**0.6**	**12.9**
178.1	179.2	1.1	1.6	4.0		18	0.1	5.6



Proven continuity of mineralisation along strike and at depth in Kempfield North

The diamond drilling confirmed continuity of mineralisation at depth and along strike in Kempfield North.

Figure 2 illustrates how drill hole AKDD192 confirmed continuity of the VHMS mineralisation lenses intersected by the steeper-angled hole AKDD186.

Mineralisation remains open at depth and along strike.

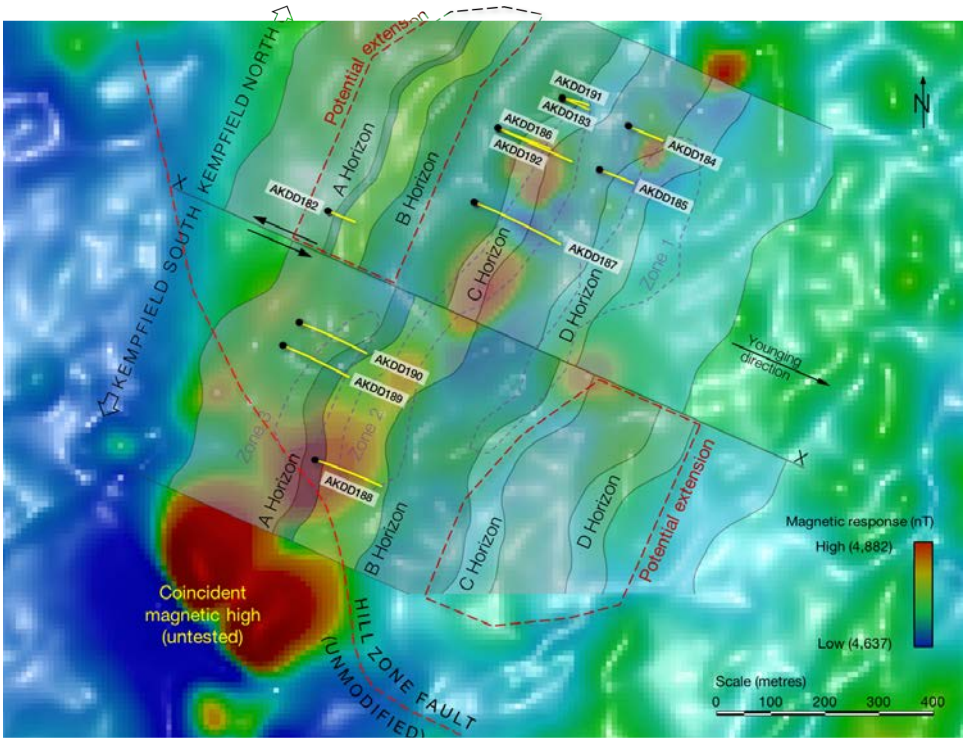
Significant potential for hosted mineralised lenses identified in the untested southern area

Two key findings were discovered in the analysis of diamond hole AKDD188 in Kempfield South:

- The transition from felsic to mafic volcanics is conformable and has resulted in a re-interpretation of the nature of the host rocks. Previous interpretations defined the mafic volcanic package as a basal or older sequence that was faulted against the Kempfield host package that was unlikely to host mineralisation. AKDD188 shows the conformable transition from felsic volcanics to mafic volcanics downhole. **The mafic volcanic package was present during mineralisation of the Kempfield deposit and now holds potential for hosting mineralised lenses**; and
- A notable gold occurrence in the upper portion of the mafic volcanic tuff in AKDD188 is a positive indicator of B Horizon extending further south (1.0 m @ 0.8 g/t Au from 238.0 m).

The first key finding above is a potentially significant outcome for Kempfield exploration. Historically assumed to be closed to mineralisation, the untested area to the south of the Hill Zone Fault (Figure 6) is to be scheduled for drill testing as a priority.

Figure 6 – Simplified Kempfield lithology and drill holes with magnetic survey background (plan view)



Potential high temperature zone and primary/secondary feeder sources identified

Diamond drill core analyses that a potential high temperature zone exists immediately to the south of the known Kempfield deposit. This is important for defining the deposit and assists with predicting potential locations of the

higher grade portions for drill testing. The pyrite-pyrrhotite-chalcopyrite mineralisation intersected by hole AKDD182 indicates a higher temperature metal assemblage which occurs in the felsic volcanic breccia sequence.

Litho-stratigraphic assessments from diamond drill core have identified the possibility that the majority of hydrothermal fluids emanated from the south via large growth and propagation faults, with additional secondary growth centres at Kempfield North and Quarries Zone.

Upon review of results and correlation with available geophysical data it has become apparent that pyrrhotite mineralisation in AKDD182 is broadly consistent with an elevated magnetic signature (Figure 6).

The next drill campaign will include holes to test the magnetic high signature.

PINE RIDGE GOLD MINE AND TRUNKEY-KINGS PLAIN GOLDFIELDS

During the quarter Argent also expedited exploration work at the Trunkey Creek and Pine Ridge gold projects.

The work forms part of the Company's investigation of the potential for local shallow satellite projects to contribute feedstock to a future Kempfield mine that would have the capability of processing gold ore and, in so doing, boost the economics toward overall viability for the Kempfield project.

The successful application for exploration licence EL8213, located approximately 7 kilometres to the south, forms a low acquisition cost addition to the Company's Kempfield gold assets, whilst also positioning the Company favourably to take advantage of the recent increased market interest in gold and silver.

Located in exploration licence EL8213 is the historic Pine Ridge gold mine, for which publicly available records of historic drilling intersections and resource estimations are available in the NSW Government Mineral Resources & Energy online DIGS database.

Argent commenced a review of the DIGS database reports of potentially significant gold intersection values at Pine Ridge, to determine the quality of the data for potential disclosure to the ASX in compliance with JORC 2012, and/or what extra work might be needed in order to release JORC 2012 compliant exploration results.

The DIGS database also provides records of several metallogenic occurrences throughout EL8213, which Argent intends to investigate for potential VHMS base and precious metals mineralisation occurrences along strike from the known Kempfield VHMS deposit.

HEAVILY OVERSUBSCRIBED PRIVATE PLACEMENT RAISES $1.75 MILLION

On 23 August 2016 Argent announced the completion of the heavily oversubscribed private placement to sophisticated investors to raise a total of $1.755 million before costs.

The placement was strongly supported by existing shareholders as well as new investors.

In summary, two tranches of ARD shares were issued under the private placement to sophisticated investors as announced on 28 June 2016. 18,096,283 shares under Tranche 1 and 40,403,717 shares under Tranche 2 (including a total Argent Director participation of 3,666,667 shares) were issued for a total of 58,500,000 new shares (**Private Placement**).

In addition, a total of 117,000,000 listed options were also been issued under the Private Placement, in accordance with the prospectus released to the ASX on 17 August 2016 (**Prospectus**), under the ASX code ARDO. The listed options have an exercise price of 10 cents and an expiry date of 27 June 2019, and have been trading on the ASX platform. Investors wishing to trade the ARDO options should refer to the Prospectus for further details.

DRILL PROGRAMS ADVANCING

West Wyalong

Preparations for the West Wyalong program drilling program continued during the quarter, and progress made with land access negotiations. Significant rainfall during the quarter requires the drilling program to be deferred until the ground dries out sufficiently to support heavy equipment.

The Company's Exploration Manager has recently inspected the West Wyalong and Kempfield sites, and is of the opinion that certain areas of the latter are more likely to be ready for drilling ahead of West Wyalong.

Following the site visits, Argent in the process of rearranging its drilling programs to prioritise Kempfield ahead of West Wyalong.

Kempfield

Preparations have been advanced for the next phase of drill testing at Kempfield. Targets under review include drill testing the large magnetic and IP anomalous feature in Kempfield South, confirmation of the extensions of Horizons C and D in Kempfield South, confirmation of Horizons A and B in Kempfield North, and a single test of the depth extent to the Quarries Zone (which has also been the subject of relatively shallow historical drilling).

The Company is actively pursuing a recommencement of drilling at Kempfield in 2016, with access negotiations for the southern area and the regulatory approval processes underway.

The outcomes for both sites remain subject to weather and access arrangements. Further updates will be provided as they become available.

Appendix 5B is attached to this announcement.

For further information please contact:

David Busch

Managing Director

Argent Minerals Limited

M: 0415 613 800

E: david.busch@argentminerals.com.au

APPENDIX A

The following mining tenement information is provided pursuant to Listing Rule 5.3.3:

Table 1 – Mining Tenement[1] Interest Activities for the Quarter Ended 30 September 2016

Tenement Identifier	Location	Interest Acquired During Quarter	Interest Divested During Quarter	Interest Held at End of Quarter
Kempfield				
EL5645 (1992)	NSW	-	-	100%
EL5748 (1992)	NSW	-	-	100%
EL7134 (1992)	NSW	-	-	100%
EL7785 (1992)	NSW	-	-	100%
EL7968 (1992)	NSW	-	-	100%
EL8213 (1992)	NSW	-	-	100%
PLL517 (1924)	NSW	-	-	100%
PLL519 (1924)	NSW	-	-	100%
PLL727 (1924)	NSW	-	-	100%
PLL728 (1924)	NSW	-	-	100%
West Wyalong				
EL8430 (1992)	NSW	-	-	51%[2]
Sunny Corner				
EL5964 (1992)	NSW	-	-	70%[3]

Notes

1. The definition of "Mining Tenement" in ASX Listing Rule 19.12 is "Any right to explore or extract minerals in a given place".
2. Under the West Wyalong Joint Venture and Farmin Agreement dated 8 June 2007 between Golden Cross Operations Pty Ltd and Argent (JVA), Argent has earned a 51% interest, and may earn 70% by investing a further $372,570 by 30 June 2017. The tenement holder is Golden Cross Operations Pty Ltd (GCO).
3. The tenement holder is Golden Cross Operations Pty Ltd.
4. For all Kempfield tenements the tenement holder is Argent (Kempfield) Pty Ltd, a wholly owned subsidiary of Argent.

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 October 2016 Diamond drilling results in major breakthrough at Kempfield[1]

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. 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.

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

ARGENT MINERALS LIMITED	
ABN	**Quarter ended ("current quarter")**
89 124 780 276	**30 September 2016**

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (3 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(266)	(266)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(18)	(18)
	(e) administration and corporate costs	(190)	(190)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	4
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(470)**	**(470)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**-**	**-**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of shares	1,394	1,394
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(144)	(144)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**1,250**	**1,250**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	649	649
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(470)	(470)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,250	1,250
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**1,429**	**1,429**

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	135	123
5.2	Call deposits	1,294	165
5.3	Bank overdrafts	-	-
5.4	Other – Advance monies received from Placement.	-	361
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**1,429**	**649**

6.	**Payments to directors of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to these parties included in item 1.2	106
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

N/A

7.	**Payments to related entities of the entity and their associates**	**Current quarter $A'000**
7.1	Aggregate amount of payments to these parties included in item 1.2	25
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

N/A

8.	**Financing facilities available** *Add notes as necessary for an understanding of the position*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

N/A

9.	**Estimated cash outflows for next quarter**	**$A'000**
9.1	Exploration and evaluation	200
9.2	Development	-
9.3	Production	-
9.4	Staff costs	18
9.5	Administration and corporate costs	150
9.6	Other (provide details if material)	-
9.7	**Total estimated cash outflows**	**368**

10.	**Changes in tenements (items 2.1(b) and 2.2(b) above)**	**Tenement reference and location**	**Nature of interest**	**Interest at beginning of quarter**	**Interest at end of quarter**
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	Nil			
10.2	Interests in mining tenements and petroleum tenements acquired or increased	Nil			

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Sign here: ..... Date: 24 October 2016.
(Director/Company secretary)

Print name: Vinod Manikandan

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.