



## ASX ANNOUNCEMENT

28 January 2010

## QUARTERLY ACTIVITIES REPORT FOR QUARTER ENDED 31<sup>ST</sup> DECEMBER 2009

### HIGHLIGHTS

#### Kempfield Scoping Study

The Scoping Study into the Kempfield silver project is expected to be finalised in February 2010. It will incorporate;

- Revised resource estimates now underway taking into account drilling results from the last two drill programmes;
- Revised metallurgical recovery estimates including recoveries to zinc and silver-rich lead concentrates;
- Updated operating and capital cost data.

A positive outcome to the Scoping Study will lead to a Conceptual Project Presentation to the NSW Department of Primary Industries as the first step in the process of obtaining Development Approval and a Mining Lease.

#### Further High Grade Silver and Combined Base Metals (CBM) intersections at Kempfield

Zone Hole No	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %
<b>McCarron</b>							
AKRC74	50	6	356.0	1.07	4.66	6.94	11.60
<b>Quarries</b>							
AKRC73	50	10	39.2	0.14	2.32	5.21	7.53
AKRC76	54	10	131.8	0.02	1.48	1.17	2.65

#### Corporate

- \$621,900 raised in placement during quarter;
- Cash on hand at 31 December 2009 of \$2.121 million.



## **KEMPFIELD**

Activities during the quarter were concentrated on progressing the Scoping Study for the Kempfield silver project, including further drilling aimed at delineating additional resources.

### **Scoping Study**

In addition to the drilling described below, Scoping Study activities have included further metallurgical reviews and test work, a flora study and discussions with Native Title claimants.

The metallurgical test work included agitation and bottle roll tests on BJ zone samples collected for the earlier heap leach work. The bottle roll tests showed recoveries of 80% for oxide material, 89% for transitional material and 64% for sulphide material. Some of the sample head grade assays were considerably greater than the average resource grade and further bottle roll tests are being undertaken to confirm these results using lower grade samples.

A review has also been undertaken of previous flotation test work and new test work is being done on BJ and McCarron zone samples. The aim of this work is to determine whether flotation of the tails from the agitated leach process would yield saleable zinc and silver rich lead concentrates. Preliminary economic analysis indicates significantly enhanced financial returns if this can be achieved.

A flora study over the Kempfield project area has been undertaken by Anne Clements and Associates. The final report is expected in February 2010. A fauna study is to be undertaken in February 2010.

Constructive discussions with the Gundungurra Council, representatives of the Native Title Claimants to the area, concerning a Mining Agreement were begun in December 2009.

In anticipation of a positive outcome to the Scoping Study a conceptual mining project presentation is being prepared as the first step in the process of obtaining Development Approval and a Mining Lease. The Presentation is expected to be made to the NSW Department of Primary Industries in February 2010.

### **Extension Drilling**

A programme of RC drilling was undertaken comprising 19 holes. Selected results for McCarron, Quarries and South Conglomerate Zones are shown below.



## McCarron Zone

Results for holes 58 - 62 were released to the market on 23 December 2009. The best intersection was in hole AKRC62, which has been included in the table below. It was located just north of the planned northern-most McCarron pit. Follow-up holes AKRC66, 74, 77 and 79 were drilled to the west, north and northwest of hole AKRC62.

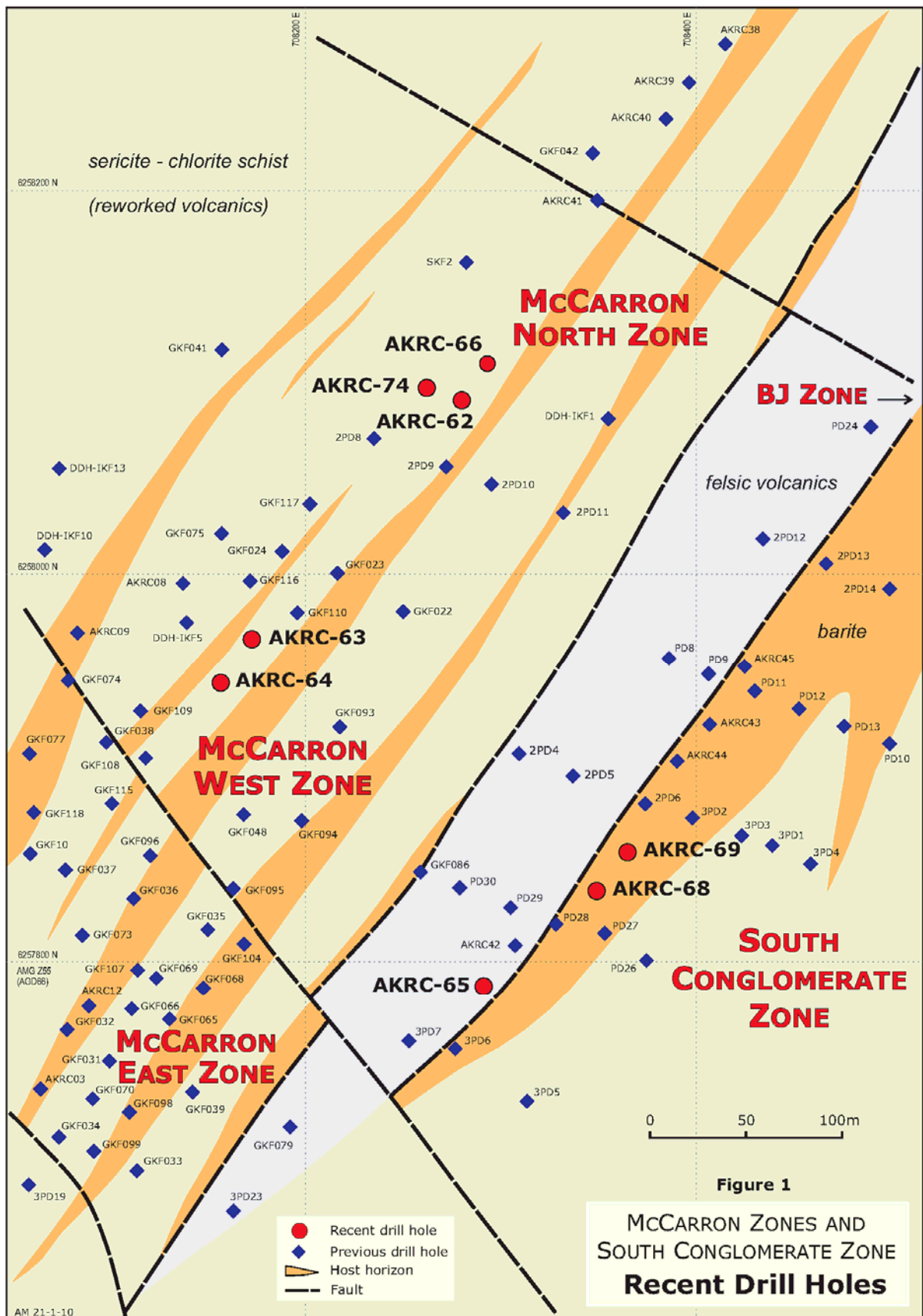
Highly encouraging assay results are available for holes AKRC66 and 74 and are set out below. Results for holes AKRC77 and 79 are expected soon.

It is likely that the results of holes AKRC62, 66 and 74 will lead to an increase in resources in the McCarron zone.

In addition to some high grade silver intersections these holes include some broad intervals of low grade gold and some high grade base metals e.g., 6 metres of 11.6% CBM within a broader interval of 16 metres at 8% CBM.

## McCarron Zone

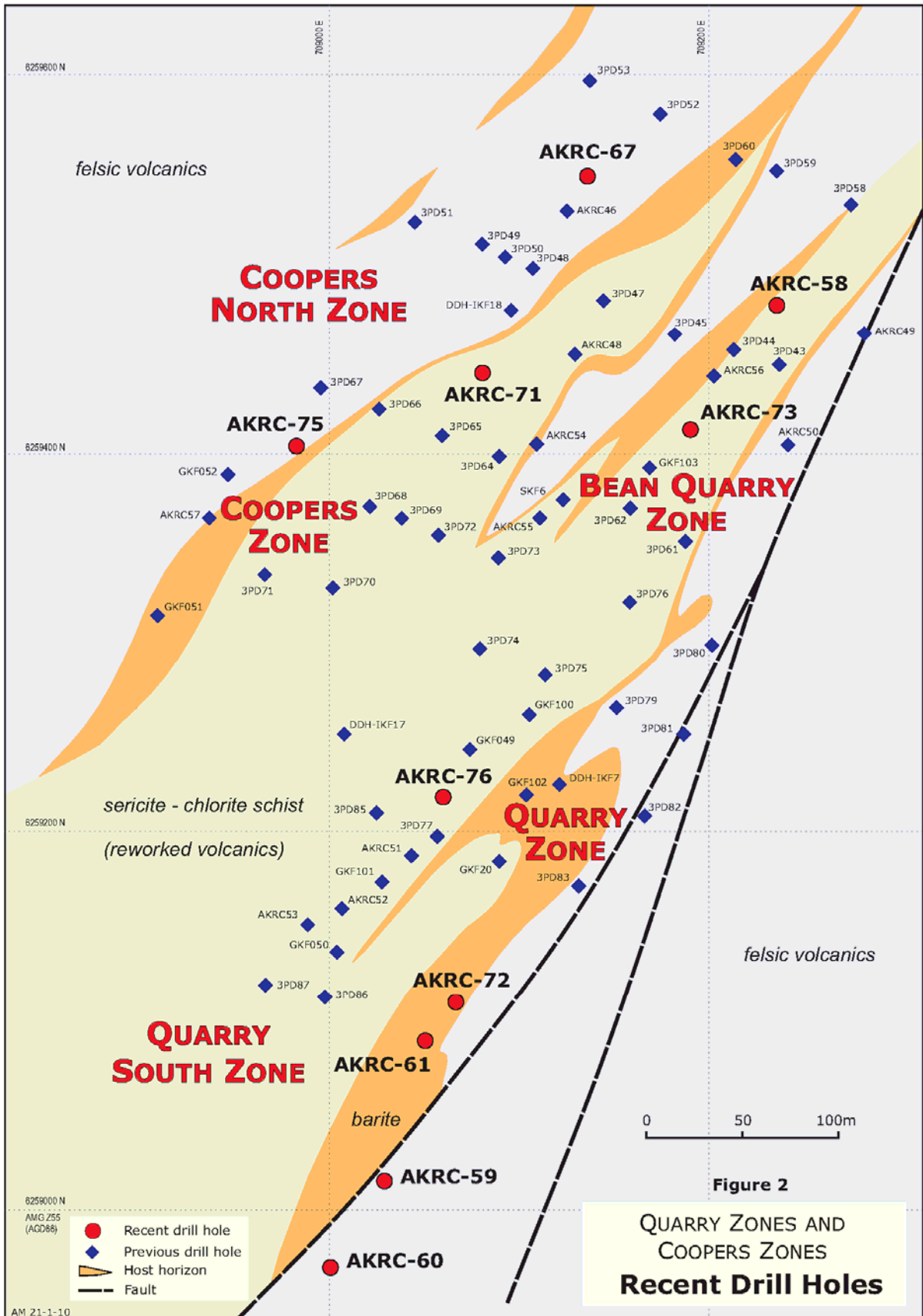
Hole No	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %
<b>AKRC62</b>	<b>Surface</b>	<b>44</b>	<b>71.6</b>	0.20	0.03	0.46	0.49
Including	<b>4</b>	6	<b>212.7</b>	0.37	0.02	0.74	0.76
Including	<b>4</b>	2	<b>320.0</b>	0.36	0.01	0.73	0.74
Including	36	6	<b>133.3</b>	0.59	0.03	0.46	0.49
Including	40	2	<b>134.0</b>	<b>1.53</b>	0.02	0.74	0.76
And	68	4	4.4	<b>1.21</b>	0.06	0.17	0.23
<b>AKRC66</b>	<b>Surface</b>	<b>28</b>	37.6	0.41	<b>1.99</b>	<b>0.41</b>	<b>2.40</b>
Including	<b>0</b>	2	27.2	<b>2.15</b>	0.52	0.23	0.75
Including	<b>4</b>	4	<b>146.0</b>	0.29	0.65	0.09	0.74
<b>AKRC74</b>	12	<b>44</b>	<b>159.7</b>	0.41	<b>1.68</b>	<b>1.98</b>	<b>3.66</b>
Including	20	6	<b>365.0</b>	0.20	0.66	0.27	0.97
Including	40	<b>16</b>	<b>190.7</b>	0.53	<b>3.14</b>	<b>4.89</b>	<b>8.03</b>
Including	50	6	<b>356.0</b>	<b>1.07</b>	<b>4.66</b>	<b>6.94</b>	<b>11.60</b>





## Quarries Zone

A total of 10 holes were drilled to test the numerous barite horizons that lie adjacent to the central part of the Quarries zone.





The current and earlier holes have outlined mineralization below and along strike from the Bean Quarry which was mined for barite last century. Hole AKRC73 is notable for high grade lead / zinc including 2 metres at 12% CBM. Modelling will be undertaken to determine whether the mineralization is likely to support a pit.

Hole AKRC76 was drilled to confirm an area within the Quarries zone resource model. The results, which include 24 metres at 105.8 g/t Ag and 10 metres at 131.8 g/t Ag, are expected to confirm if not improve the resource model.

## Quarries Zone

Hole No	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %
<b>AKRC73</b>	48	<b>32</b>	16.2	0.06	<b>1.14</b>	<b>2.74</b>	<b>3.88</b>
Including	50	<b>10</b>	39.2	0.14	<b>2.32</b>	<b>5.21</b>	<b>7.53</b>
Including	52	2	62.2	0.28	<b>2.71</b>	<b>9.29</b>	<b>12.00</b>
<b>AKRC76</b>	<b>8</b>	<b>56</b>	<b>72.9</b>	0.03	<b>1.41</b>	<b>1.29</b>	<b>2.70</b>
Including	<b>8</b>	<b>16</b>	<b>105.8</b>	0.04	0.84	0.29	1.13
Including	46	8	49.6	0.06	<b>2.81</b>	<b>3.25</b>	<b>6.06</b>
Including	54	<b>10</b>	<b>131.8</b>	0.02	<b>1.48</b>	<b>1.17</b>	<b>2.65</b>

## South Conglomerate Zone

A programme of 4 RC holes has tested approximately 200 metres of a mineralized north - south trending barite horizon to the south of the BJ Zone.

The southern most hole, AKRC65, intersected 12 metres of 4.9% CBM, 24.1g/t Ag and 0.56g/t Au from 44 metres down hole. Hole AKRC78 has recently been drilled and assay results are expected in two weeks will determine if the mineralization extends closer to surface.

## South Conglomerate Zone

Hole No	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %
AKRC65	44	<b>12</b>	24.1	0.56	<b>1.48</b>	<b>3.39</b>	<b>4.87</b>
Including	50	4	42.0	0.69	<b>2.75</b>	<b>5.52</b>	<b>8.27</b>

The detailed results for this drilling campaign are set at Table 1 on page 8 and 9.

Argent may earn a 70% interest in the Kempfield Tenements from Golden Cross Resources Limited by the expenditure of \$2.745 million by July 2013.

## WEST WYALONG

As advised to the market on 23 December 2009, the 300 metre diamond tail on hole WGC001 drilled to explore the combined gravity / magnetic anomalies was not successful in intersecting any metal values of significance.



Drilling to follow up the 2 metres of 22.7 g/t Au at 60m in the initial 200m section of hole WGC001 will be undertaken in the first quarter of this year.

Argent may earn a 70% interest in the West Wyalong Tenements from Golden Cross Resources Limited by the expenditure of \$1.03 million by July 2013.

## **SUNNY CORNER**

A base metals marketing consultant has been retained to investigate potential markets for the bulk concentrate that previous test work has shown could be produced from the Sunny Corner deposit.

That work indicated a 97% metal recovery to a 30% by weight bulk concentrate grading 2.3% Cu, 8.8% Pb, 20.5% Zn and 180 g/t Ag.

A report of a review of previous drilling at Sunny Corner undertaken by VMS expert Rod Sainty was released to the market on 30 October 2009. Follow up drilling is expected to be undertaken later in the March quarter.

Argent may earn a 70% interest in the Sunny Corner Tenements from Golden Cross Resources Limited by the expenditure of \$0.686 million by July 2013.

## **CORPORATE**

During the quarter a placement of 6,291,000 shares at \$0.10 was made to sophisticated investors raising a total, after costs, of \$ 588,672.

## **CASH RESERVES**

Cash at 31 December 2009 was \$ 2.121 million.

For more information:

[www.argentminerals.com.au](http://www.argentminerals.com.au)

Kerry McHugh  
Executive Chairman  
Argent Minerals Limited  
Ph: 0404 465 154



Table 1 Kempfield extension drilling detailed results

Hole No	Easting	Northing	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %	
<b>McCarron West</b>										
AKRC63	708285	6258150	<b>10</b>	4	38.7	0.09	<b>2.14</b>	0.43	<b>2.57</b>	
			18	4	35.4	0.10	1.69	0.28	<b>1.97</b>	
			30	4	4.4	0.02	0.12	<b>2.01</b>	<b>2.13</b>	
<b>McCarron West</b>										
AKRC64	708269	6258127	<b>Surface</b>	<b>20</b>	32.1	0.11	1.3	0.24	<b>1.54</b>	
			Including	12	<b>70.2</b>	0.18	1.58	0.31	<b>1.89</b>	
			And	30	47.7	0.23	<b>2.19</b>	0.61	<b>2.80</b>	
			Including	30	64.5	0.15	<b>3.12</b>	0.73	<b>3.85</b>	
<b>South Conglomerate</b>										
AKRC65	708405	6257970	40	<b>20</b>	17.8	0.46	0.95	<b>2.20</b>	<b>3.15</b>	
			Including	44	<b>12</b>	24.1	0.56	1.48	<b>3.39</b>	
			Including	50	4	42.0	0.69	<b>2.75</b>	<b>5.52</b>	
<b>McCarron North</b>										
AKRC66	708406	6258293	<b>Surface</b>	<b>28</b>	37.6	0.41	<b>1.99</b>	0.41	<b>2.40</b>	
			Including	<b>0</b>	2	27.2	<b>2.15</b>	0.52	0.75	
			Including	<b>4</b>	4	<b>146.0</b>	0.29	0.65	0.74	
<b>Coopers</b>										
AKRC67	709249	6259730	32	4	66.1	0.12	0.07	0.37	0.44	
<b>South Conglomerate</b>										
AKRC68	708463	6258020	10	12	54.9	0.14	0.16	0.06	0.22	
			including	18	2	<b>78.3</b>	0.07	0.06	0.10	
<b>South Conglomerate</b>										
AKRC69	708479	6258040	12	<b>16</b>	<b>64.2</b>	0.18	0.14	0.04	0.18	
			Including	12	8	<b>73.6</b>	0.17	0.13	0.16	
<b>B J North</b>										
AKRC70	708943	6258441	nothing of significance							
<b>Coopers North</b>										
AKRC71	709194	6259626	44	<b>10</b>	2.5	0.02	0.65	<b>1.85</b>	<b>2.50</b>	
<b>Quarries South</b>										
AKRC72	709180	6259293	<b>10</b>	6	50.8	0.01	0.21	0.05	0.26	
			And	62	2	4.8	<b>1.26</b>	0.46	0.48	
			And	80	2	8.1	<b>2.57</b>	<b>1.83</b>	0.26	
<b>Beans Quarry</b>										
AKRC73	709303	6259596	34	8	16.1	0.05	<b>1.49</b>	1.11	<b>2.60</b>	
			And	48	<b>32</b>	16.2	0.06	1.14	<b>2.74</b>	
			Including	50	<b>10</b>	39.2	0.14	<b>2.32</b>	<b>5.21</b>	
			Including	52	2	<b>62.2</b>	0.28	<b>2.71</b>	<b>9.29</b>	





Hole No	Easting	Northing	From (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	CBM %	
<b>McCarron North</b>										
AKRC74	708375	6258280	12	<b>44</b>	<b>159.7</b>	0.41	1.68	<b>1.98</b>	<b>3.66</b>	
		Including	20	6	<b>365.0</b>	0.20	0.66	0.27	0.97	
		Including	40	<b>16</b>	<b>190.7</b>	0.53	<b>3.14</b>	<b>4.89</b>	<b>8.03</b>	
		Including	50	6	<b>356.0</b>	<b>1.07</b>	<b>4.66</b>	<b>6.94</b>	<b>11.60</b>	
		And	90	<b>18</b>	23.8	0.28	0.71	<b>2.15</b>	<b>2.86</b>	
		including	90	4	31.0	0.29	0.92	<b>2.45</b>	<b>3.37</b>	
<b>Coopers North</b>										
AKRC75	709096	6259587	Nothing of significance							
<b>Henry's Quarry</b>										
AKRC76	709173	6259402	<b>8</b>	<b>56</b>	<b>72.9</b>	0.03	1.41	1.29	<b>2.70</b>	
		Including	<b>8</b>	<b>16</b>	<b>105.8</b>	0.04	0.84	0.29	1.13	
		Including	46	8	49.6	0.06	<b>2.81</b>	<b>3.25</b>	<b>6.06</b>	
		including	54	<b>10</b>	<b>131.8</b>	0.02	1.48	1.17	<b>2.65</b>	

## Competent Person Statements

The information in this Report that relates to Exploration is based on information compiled by David Timms who is a member of the Australian Institute of Geoscientists, and a Technical Consultant to Argent, and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Timms consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

**ARGENT MINERALS LIMITED**

ABN

**89 124 780 276**

Quarter ended ("current quarter")

**31 December 2009**

### Consolidated statement of cash flows

	Current quarter \$A '000	Year to date \$A '000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for		
(a) exploration and evaluation	(425)	(562)
(b) development	-	-
(c) production	-	-
(d) administration	(92)	(173)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	17	35
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material) – GST	(76)	(103)
<b>Net Operating Cash Flows</b>	<b>(576)</b>	<b>(803)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of:		
(a)prospects		
(b)equity investments		
(c)other fixed assets	(6)	(6)
1.9 Proceeds from sale of:		
(a)prospects		
(b)equity investments		
(c)other fixed assets		
Loans to other entities		
Laur		
1.10		
1.11 Loans repaid by other entities		
1.12 Other (provide details if material)		
<b>Net investing cash flows</b>	<b>-</b>	<b>-</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(582)</b>	<b>(809)</b>

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(582)	(809)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	629	629
1.15	Proceeds from sale of forfeited shares		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings		
1.18	Dividends paid		
1.19	Other (provide details if material)	(40)	(40)
	<b>Net financing cash flows</b>	589	589
	<b>Net increase (decrease) in cash held</b>	7	(220)
1.20	Cash at beginning of quarter/year to date	2,114	2,341
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	2,121	2,121

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

		Current quarter \$'000
1.23	Aggregate amount of payments to the parties included in item 1.2	81
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

	\$'000
Directors fees and remuneration	73
Accounting, bookkeeping and secretarial services	8

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

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2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

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+ See chapter 19 for defined terms.

### Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	NIL	
3.2 Credit standby arrangements	NIL	

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	450
4.2 Development	-
<b>Total</b>	<b>450</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	34	10
5.2 Deposits at call	2,051	2,068
5.3 Bank overdraft	-	-
5.4 Other (Bank Guarantee deposit)	36	36
<b>Total: cash at end of quarter</b> (item 1.22)	<b>2,121</b>	<b>2,144</b>

### Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	Nil		
6.2	Interests in mining tenements acquired or increased	Nil		

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

**Issued and quoted securities at end of current quarter**

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 <b>Preference securities</b> <i>(description)</i>	-			
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	-			
7.3 <b>+Ordinary securities</b>	48,231,251	41,031,251		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	-	-	-	-
7.5 <b>+Convertible debt securities</b> <i>(description)</i>	-			
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 <b>Options</b> <i>(description and conversion factor)</i>	48,230,751	48,230,751	<i>Exercise price</i> \$0.20c	<i>Expiry date</i> 30 June 2011
7.8 Issued during quarter				
7.9 Exercised during quarter				
7.10 Expired during quarter	-			
7.11 <b>Debentures</b> <i>(totals only)</i>	-			
7.12 <b>Unsecured notes</b> <i>(totals only)</i>	-			

+ See chapter 19 for defined terms.

