ASX ANNOUNCEMENT

26 May 2009

KEMPFIELD'S SILVER RESOURCES INCREASED FROM 11 to 13 MILLION OUNCES
SCOPING STUDY UNDERWAY

Highlights

- **13 million ounces of contained silver, 9 million ounces of which lies within 70 metres from surface**
- **81% is Measured or Indicated**
- **Scoping Study underway for Heap Leach project.**

Argent Minerals Limited (ASX:ARD) today announced that a revised estimate of the silver / lead / zinc / barite resource at its Kempfield property has been undertaken by consulting geologists Hellman and Schofield Pty Ltd.

The revised estimates at 60g/t Ag only from surface to 70 metres depth and at 100g/t Ag Eq for depths greater than 70 metres are set out in Table 1. Also reported is the previous resource estimate which was included in the Company's prospectus issued in conjunction with its listing on the ASX on 4th April, 2008.

Table 1

	Million Tonnes	Silver		Lead %	Zinc %	Barite %
		Gms/tonne	Million oz			
Prospectus March 2008 (at 60g/t Ag only cut-off)	3.7	95	11	0.5	0.7	26
April 2009 Surface to 70 meters depth (at 60g/t Ag only cut-off)	2.7	100	8.7	0.4	0.7	27
April 2009 Greater than 70 meters depth (at 100g/t Ag Equivalent cut-off*)	1.9	72	4.4	0.9	2.1	23

*100g/t Ag Equivalent equals 100g/t Ag or 5% Pb or 5% Zn or any proportional combination thereof (see below for details and description of the revised resource estimate).

The resources comprise a potentially heap leachable resource containing, at a 60 g/t silver only cut off, 8.7 million ounces within 70 metres of the surface and a sulphide resource containing ,at a 100g/t silver equivalent cut off, 4.4 million ounces between 70 and up to 190 metres from the surface.

Potential Heap Leach Resource
The resources contained within 70 metres from surface are relatively high grade (100g/t Ag at a 60g/t Silver only cut-off), have low strip ratios and have a substantial proportion of oxide and transitional mineralization with favourable leaching characteristics. These resources would therefore provide a suitable feedstock for a heap leach operation to produce silver.

The resources estimates, reported above at a 60 g/t Ag only cut-off, are set out in Table 2.

Approximately 81% of the resource, at a 60g/t Ag only cut-off, is categorized as Measured or Indicated.

Scoping Study Commenced.
In the light of the revised resource estimate and the favourable Kappes Cassiday and Associates (Australia) report on the metallurgical testwork (see Argent's ASX release of 28 April 2009) Argent has commissioned a Scoping Study to ascertain the potential viability of a heap leaching project to produce silver.

The Study is being undertaken by Gemell Mining Engineers with assistance on processing from Kappes Cassiday.

The Study is based on the resources within 70 metres from the surface in each of the three deposits, ie, BJ, McCarron and Quarries that make up the Kempfield resource. Proposed throughput would be at the rate of 400,000 tonnes per annum for 5-6 years.

The process route would involve heap leaching the crushed ore followed by silver recovery via the well proven Merrill Crowe process. The Study is expected to be finalized in a month.

Table 2 Resources within 70m of surface

60g/t Ag only cut off	Million Tonnes	Silver	
		Gms/tonne	Million oz
Ore Type			
Oxide	0.6	102	2.0
Transitional	0.9	103	2.8
Sulphide	1.2	97	3.9
Total	2.7	100	8.7
Resource			
Measured	1.2	108	4.1
Indicated	1.0	95	3.0
Inferred	0.5	91	1.6
Total	2.7	100	8.7

The company anticipates that some mineralization between 40 and 60 g/t Ag that falls within the pits will be processed in a proposed heap leach operation.

The updated resource estimates are for three deposits that occur over a three kilometre north - south strike length-see Diagram 1.

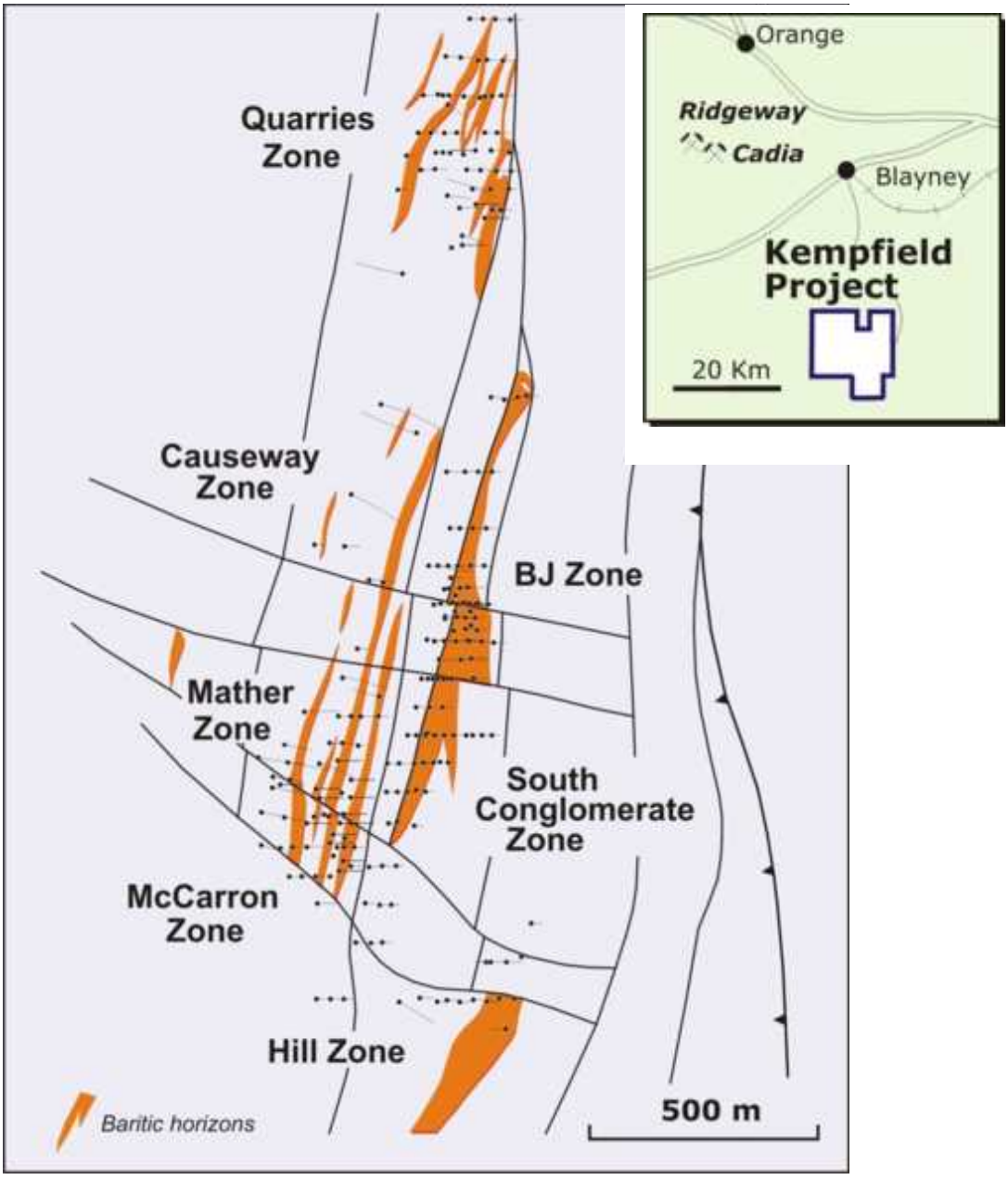

Diagram 1

BJ Zone.

The BJ zone is the largest zone, containing 60% of tonnes and 66% of contained silver at Kempfield. Drilling was particularly successful and resulted in an increase of over 35% in both tonnes and contained silver.

The bulk of the mineralisation occurs in a number of lenses, which in aggregate have a north - south strike length of approx 260 metres and extend to 190 metres below the surface. The zone is open at depth and to the south and contains, as do the other two zones, plunging shoots of higher grade lead / zinc, e.g; hole AKRC 19 which intersected 14 metres at 6.6% zinc, 1.4% lead and 41 g/t silver from 142 metres down hole.

These higher grade shoots will be the target of future exploration drilling to identify additional resources.

McCarron Zone.
This zone comprises three lenses that have a combined north / south strike length of some 450 metres and are open at depth and to the north. Difficult drilling conditions resulted in 12 out of the 16 holes drilled failing to reach their targets. Follow up drilling is warranted which, if successful could be expected to result in an increase in resources including within the top 70 metres.

The deposit contains high grade lead / zinc shoots open at depth , eg; hole AKRC 13 which intersected 10 meters at 128 g/t silver, 5.0 zinc and 5.7 lead which also deserve follow up drilling.

Quarries Zone
No drilling was undertaken at this Zone which remains open to the south, north and at depth. The zone is notable for very high barite grades, averaging over 33%.The Quarries Zone is covered by a granted mining lease.

Sulphide Resource.
A sulphide resource (at a 100g/t Ag Equivalent cut off grade) of 1.9mt at 72 g/t silver, 1.0% lead, 2% zinc and 23% barite lies below the heap leachable resource ie; between 70 and 190 metres from surface.

Approximately 63% is Measured or Indicated, see Table 3 below. About half lies within 40 metres of the base of the potential heap leach resource.

Table 3 Sulphide resource below 70 meters at 100 g/t Ag Equivalent cut-off

Resource	Million Tonnes	Silver Gms/tonne	Lead %	Zinc %	Barite %
Measured	0.2	86	1.1	1.8	17
Indicated	1.0	67	0.9	2.1	22
Inferred	0.7	76	0.8	2.1	27
Total	1.9	72	0.9	2.1	23

The resource contains areas of high grade lead/zinc/silver mineralization as evidenced by intersections such as those set out below;

Table 4

Zone	From (m)	Interval (m)	Silver Gms/Tonne	Lead %	Zinc %
McCarron					
Hole AKRC13	80	10	128	5.7	5.0
Hole AKRC01	98	2	114	4.2	4.9
BJ					
Hole AKRC19	142	14	41	1.4	6.6
Including	142	6	59	1.9	9.3
Hole AKRC22	128	4	23	2.0	5.2

Importantly, the three mineralized zones BJ, McCarron and Quarries are all open at depth and provide good drill targets aimed at delineating high grade mineralization that might be amenable to underground mining eg; intersections of 10% lead / zinc equivalent over 5 metres.

The objective would be to identify sufficient high grade mineralization that could be treated in a floatation plant. The base metal resource amenable to open pit mining already delineated at Sunny Corner, approx 83 kilometres away, is also a potential source of feedstock for such a plant.

Methodology
All resources were generated by Hellman & Schofield using the ordinary kriging method. Holes are generally drilled on 25m cross-sections, with holes typically 30m apart on section lines. Grades were estimated using 1m drill hole sample composites into 5m x 12.5m (or 10m) x 10m blocks in easting, northing and elevation respectively.

Metal Equivalents
The reporting of a resource at a 100g/t silver equivalent cut off grade has been done in order to better recognize the valuable lead and zinc mineralization contained within the deposits. That mineralization had not been adequately taken into account in earlier resource estimates based on silver only cut off grades. Lead and zinc would not be recovered in a heap leach operation so these resources are reported on a silver only cut off grade basis. However, lead, zinc and associated silver would be recoverable in a flotation process. Therefore, a silver equivalent cut off grade has been used to report these sulphide resources. A metal equivalent of 20 g/t Ag being equivalent to 1% Pb or 1% Zn is based on the following assumptions made by Argent which considers there is reasonable potential for the elements to be recovered:

Metal Prices
Silver A$ 18 per ounce (A$0.58 per gramme)
Lead A$ 2000 per tonne ($20 per 1%)
Zinc A$ 2000 per tonne ($20 per 1%)

Assumed Metallurgical Recoveries based on preliminary metallurgical testwork
Silver 63%
Lead 60%
Zinc 80%

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.

For more information:

www.argentminerals.com.au

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

Competent Person Statements

The information in this report that relates to mineral resources on the Kempfield Tenements is based on information compiled by Mr van der Heyden who is a Member of the Australian Institute of Mining and Metallurgy and a full time employee of Hellman & Schofield Pty Ltd. The data used to derive the mineral resource estimate was supplied by Argent Minerals Limited and compiled, in the case of data produced prior to January 2007 by Mr Chris Torrey who is a Member of the Australian Institute of Geoscientists and a full time employee of CTEX Pty Ltd an independent geological consultancy and, in the case of data produced since January 2007, by Dr Vladimir David. Mr van der Heyden, Mr Torrey and Dr David have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as "Competent Persons" as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr van der Heyden, Mr Torrey and Dr David consent to the inclusion in this Report of the information compiled by them in the form and context in which they appear.

Exploration

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, is a Technical Consultant to Argent, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking 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 his information in the form and context in which it appears.