



ASX Announcement

26 April 2012

RESOURCE UPGRADE – KEMPFIELD SILVER PROJECT

- **33 million ounces of silver hosted in 22 million tonnes**
- **82% of Resource now classified as Measured or Indicated (up from 71%)**
- **Significant increases in Measured and Indicated contained metals:**
 - **silver +17%, gold +52%, lead +32% and zinc +36%**

Australia-based Argent Minerals Limited (ASX: ARD) ("**Argent**") is pleased to announce a significant upgrade to its Kempfield Silver Project as a result of its 2011 drilling campaign.

The project is strategically located just 30 km south of the town of Blayney in NSW Australia.

Blayney provides key transportation infrastructure to mines in the area including Newcrest's Cadia Ridgeway operations, the largest underground mine in Australia and links the area by rail to the major shipping terminal of Port Kembla on the east coast of Australia, south of Sydney.

The Kempfield Silver Project is 100% owned by Argent and was awarded "State Significant Development" status by the NSW Government Planning & Infrastructure Department on 14 December 2011.

As at 26 April 2012, Argent has upgraded its Kempfield Mineral Resource to 33 million ounces¹ of silver, 86,000 ounces of gold, 97,000 tonnes of lead and 200,000 tonnes of zinc.

The Resource extends from surface to a depth of approximately 150 to 200 metres depth (varying by deposit) and is the subject of a feasibility study currently underway.

This resource upgrade represents a significant improvement on the previous resource statement issued by Argent on 23 November 2010 (see Table 4).

Commenting on the upgrade, Argent's Managing Director David Busch said, "We are delighted with the results of Argent's drilling investment which confirms our confidence in the quality of the Kempfield Resource. Analysis of the additional 12,500 metres of drilling, including quality assurance and quality control, has resulted in an increase in the Measured and Indicated categories to 82% of the total Resource, a significant improvement on the previously reported 71%.

"In contained metal terms this represents an increase of 17% silver, 52% gold, 32% lead and 36% zinc in the Measured and Indicated categories. This is a vital input to the feasibility study and increases our confidence level in the Resource on which the study is based", said Mr. Busch.

Under the JORC Code 2004 reporting guidelines Measured and Indicated categories of a Resource provide the potential for Proven and Probable Reserves respectively, whilst those in the Inferred category do not.



Table 1: Upgraded Kempfield Resources as at 26 April 2012

(Cutoff grades 50 g/t Ag equivalent² and 25 g/t Ag for the Primary and Oxide/Transitional respectively)

Table 1		Silver (Ag)		Gold (Au)		Lead (Pb)		Zinc (Zn)	
	Resource Tonnes (Mt)	Grade (g/t)	Contained Metal (Moz)	Grade (g/t)	Contained Metal ('000oz)	Grade %	Contained Metal ('000t)	Grade %	Contained Metal ('000t)
Oxide/ Transitional*	6.0	55	10.7	0.11	21	N/A	N/A	N/A	N/A
Primary **	15.8	44	22.3	0.13	66	0.62%	97	1.3%	200
TOTAL***	21.8	47	33.0	0.12	86	N/A	97	N/A	200

* Approximately 90% of the Oxide and Transitional material is Measured or Indicated (Resource tonnes basis)

** Approximately 79% of the Primary material is Measured or Indicated (Resource tonnes basis)

*** Approximately 82% of the Total Resource is Measured or Indicated (Resource tonnes basis)

“The portion of Measured and Indicated categories of the oxide and transitional material has increased to an impressive 90% from 83%, and we are particularly pleased with the portion of Measured and Indicated Resource categories in the deeper primary - now 79%, up from 67%³”, Mr. Busch said.

Table 2 below summarises the Resource by category and Table 3 sets out the contained metals in the Measured and Indicated categories.

Table 2: Resource by Category

(Cutoff grades as noted for Table 1 above)

Table 2		Grade (g/t)		Grade (%)	
	Resource Tonnes (Mt)	Silver (Ag)	Gold (Au)	Lead (Pb)	Zinc (Zn)
Oxide / Transitional					
Measured	2.7	68	0.11		
Indicated	2.7	47	0.11		
Inferred	0.6	39	0.08		
Total Oxide / Transitional	6.0	55	0.11		
Primary					
Measured	4.1	57	0.12	0.66%	1.2%
Indicated	8.4	41	0.13	0.58%	1.2%
Inferred	3.2	35	0.13	0.66%	1.4%
Total Primary	15.8	44	0.13	0.62%	1.3%
Total Resource	22	47	0.12	N/A	N/A



Table 3: Measured and Indicated: Resource Tonnes and Contained Metal

(Cutoff grades as noted for Table 1 above)

Table 3		Contained Metal			
	Resource Tonnes Mt*	Moz Silver (Ag)	'000oz Gold (Au)	'000t Lead (Pb)	'000t Zinc (Zn)
Oxide / Transitional					
Measured	2.7	5.8	9.3		
Indicated	2.7	4.1	9.9		
Measured + Indicated	5.4	10	19		
As % of Total Oxide /Transitional	90%	93%	93%		
Primary					
Measured	4.1	7.5	16	27	51
Indicated	8.4	11	36	49	103
Measured + Indicated	12.5	19	51	76	154
As % of Total Primary	79%	83%	79%	78%	77%
Oxide / Transitional + Primary					
Measured	6.8	13	25	27	51
Indicated	11	15	46	49	103
Total Measured + Indicated	18	28	71	76	154
As % of Total Resource	82%	86%	82%	78%	77%

* Mt except where noted otherwise ie. as %

The Resource remains open along strike and at depth and some induced polarisation geophysical surveys are yet to be drill-tested.

Details of the basis for this Resource announcement follow under the heading, "Resource Estimation Details".

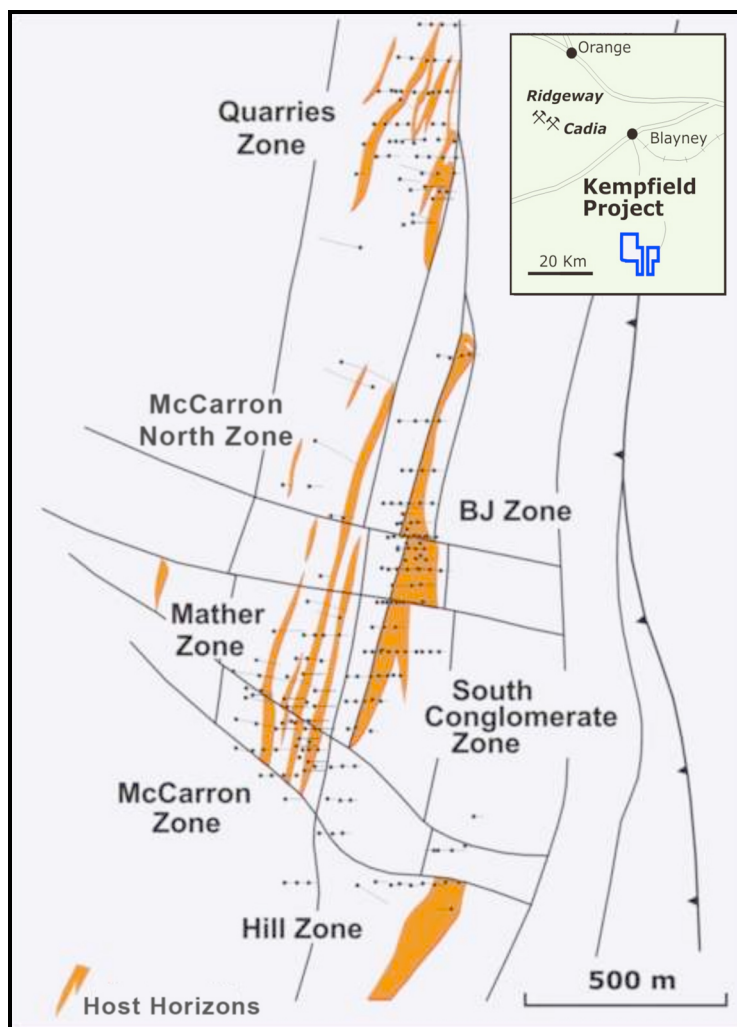
Resource Estimation Details

Mineral Resource estimates for Kempfield were prepared by H&S Consultants Pty Ltd.

The Kempfield project area contains a number of volcanogenic sulphide deposits that have been divided into four separate areas for resource estimation:- BJ, McCarron-Mather, South Conglomerate and Quarries zones. Each of these areas was further divided into a number of separate mineralised lenses.



Figure 1: Kempfield Mineralised Zones



The drill hole database for Kempfield contains around 480 holes totalling 41,000m, including 195 holes totalling 21,450m drilled by Argent over the last 4 years. Holes are commonly drilled on 25m intervals along and across the mineralised zones.

The mineralised lenses are divided into oxide, transition and primary mineralisation. The oxide and transition mineralisation contains silver and gold but little or no recoverable lead or zinc, while in the primary zone silver, gold, lead and zinc are all recoverable as sulphides.

Resource grades (for silver, gold, lead, zinc and barium) were estimated using ordinary kriging as the estimation method. Drill hole samples were composited into nominal 2.0m composites for estimation into 5.0 x 12.5 x 10m blocks (in easting, northing and elevation respectively). Blocks were divided into half these dimensions at the various boundaries, such as topography, mineralisation and oxidation.



The estimates used a 3 pass search strategy, with initial search radii of 5 x 25 x 25m (in easting, northing and elevation respectively), using a minimum of 8 and maximum of 24 sample composites, and data from a minimum of 4 octants. Search radii were doubled for the second pass, while retaining the same sample criteria as pass one. The third pass used the same radii as pass 2, with a minimum of 4 sample composites and data from a minimum of 2 octants. The estimation search passes formed the basis of the resource classification scheme.

Rock density (dry bulk density) was estimated using formulas based on heavy mineral content (galena, sphalerite and barite) and oxidation. These formulas were based on over 300 samples that were tested for density and assayed.

H&S Consultants Pty Ltd has reviewed the drill hole database and quality control data relating to the Kempfield project.

Mineral resources for Kempfield are reported according to JORC Code 2004 guidelines.

For more information:

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Competent Person Statements

The information in this report that relates to mineral resources on the Kempfield Tenements is based on information compiled by Mr Arnold van der Heyden who is a Member of the Australian Institute of Geoscientists and a full time employee of H & S Consultants Pty Ltd ("**Information**"). Mr van der Heyden has 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 consents to the inclusion in this Report of the Information in the form and context in which it appears.

Notes:

¹ Definitions.

Ag, Au, Pb, Zn:	Chemical symbols for silver, gold, lead and zinc
Moz:	Millions of ounces
Mt:	Millions of tonnes
Ounces:	Troy ounces (31.1034768 g)
Tonnes :	Metric tonnes



² **50 g/t Silver Equivalent Cutoff Grade.** This Resource is only reported in Resource tonnes and contained metal (ounces of silver and gold, and tonnes for lead and zinc). However, both the 2012 and 2010 Resource estimations for the Primary material were based on a silver equivalent cutoff grade of 50g/t. A silver equivalent was not employed for the oxide/transitional material estimation and was based on a 25 g/t silver only cutoff grade.

Whilst the 2010 estimates of the Primary material were based on a 50g/t silver equivalent cut off grade where 1% lead or zinc = 20 g of silver and 1 g gold = 40 g silver, the 2012 equivalence formula has been changed so that 1% lead or zinc = 15 g/t silver and 1 g gold = 50 g silver, mainly to reflect the change in lead and zinc prices since 2010. The change in the equivalence formula from 2010 to 2012 has resulted in a reduction of the number of Resource tonnes and contained metal in the reported Resource.

The 2012 silver equivalence formula is based on the following assumptions made by Argent:

Silver price:	\$ 30/oz (\$0.9645/g)
Gold price:	\$1,500/oz
Lead price:	\$2,200/tonne
Metallurgical recoveries:	Silver & gold - 80%
	Lead & zinc recoverable & payable - 55% of head grade

Based on metallurgical testing to date, Argent is of the opinion that silver and gold recoveries will be 80%, and recoverable and payable lead and zinc at 55% of the head grade. Argent is also of the opinion that this is consistent with current industry practice. These metallurgical recoveries were included in the calculation of silver equivalent cutoff grades used for reporting of mineral resources.

³ **2012/2010 Comparison.** Details of comparisons with the 23 November 2010 announcement (same as reported in November 2011 Annual Report) referred to in this announcement are set out below in Table 4:

Table 4 – 26 April 2012 and 23 November 2010 Resource Announcement Comparisons

Table 4	Resource Tonnes Mt*	Contained Metal			
		Moz Silver (Ag)	'000oz Gold (Au)	'000t Lead (Pb)	'000t Zinc (Zn)
2010 Resource Announcement					
Measured + Indicated ("M+I")	14	24	46.4	58	113
Total Resource (including Inferred)	20	32	65.0	86	175
(M+I) / Total Resource (%)	71%	77%	71%	67%	65%
2012 Resource Announcement					
M+I	18	28	71	76	154
Total Resource (including Inferred)	22	33	86	97	200
(M+I) / Total Resource (%)	82%	86%	82%	78%	77%
2012 / 2010 Comparison					
M+I (% Increase)	24%	17%	52%	32%	36%
Total Resource (% Increase)	8%	4%	33%	13%	14%

* Mt except where noted otherwise ie. as %

** Portion of M+I for the Oxide/Transitional in 2012 is now 90% (see Table 3 above) versus 2010 = $(2.1+2.7)/5.8 = 83\%$

*** Portion of M+I for the Primary in 2012 is now 83% (see Table 3 above) versus 2010 = $(2.1+7.5)/14.4 = 67\%$