



# ARGENT MINERALS LIMITED ASX:ARD

## RIU SYDNEY RESOURCES

### ROUND-UP MAY 2015





# DISCLAIMER



This investor presentation (**Presentation**) has been prepared by Argent Minerals Limited (ABN: 89 124 780 276) (**Argent Minerals, Argent** or the **Company**). It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this Presentation.

This Presentation contains summary information about Argent Minerals, its subsidiaries and their activities which is current as at the date of this Presentation. The information in this Presentation is of a general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Argent Minerals.

By its very nature exploration for minerals is a high risk business and is not suitable for certain investors. Argent Minerals securities are speculative. Potential investors should consult their stockbroker or financial advisor. There are a number of risks, both specific to Argent Minerals and of a general nature which may affect the future operating and financial performance of Argent Minerals and the value of an investment in Argent Minerals including but not limited to economic conditions, stock market fluctuations, silver, lead, zinc, copper and gold price movements, regional infrastructure constraints, securing drilling rigs, timing of approvals from relevant authorities, regulatory risks, operational risks and reliance on key personnel and foreign currency fluctuations.

Certain statements contained in this Presentation, including information as to the future financial or operating performance of Argent Minerals and its projects, are forward-looking statements that:

- may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral resources and mineral reserves and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;
- are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Argent Minerals, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and,
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Argent Minerals disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward-looking statements.

All forward-looking statements made in this Presentation are qualified by the foregoing cautionary statements. In particular, the corporate mission and strategy of the Company set forth in this Presentation represents aspirational long-term goals based on current expectations. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

No verification: Although all reasonable care has been undertaken to ensure that the facts and opinions given in this presentation are accurate, the information provided in this Presentation has not been independently verified.

All production related images in this presentation are not Argent Minerals Limited assets, including the images on the cover and in the header.



## Capital Structure

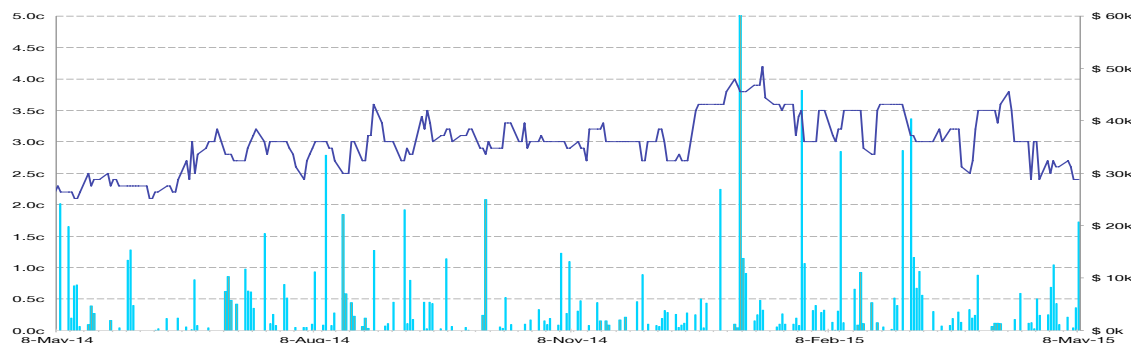
Ordinary shares (ASX:ARD)	177.6M
Share price <sup>1</sup>	\$0.024
Market capitalisation <sup>1</sup>	\$4.26M
Cash <sup>2</sup>	\$381,000
Listed Options (ASX:ARDO) <sup>3</sup>	108M
ASX Listing	3 April 2008
Top 20 shareholders <sup>4</sup>	40%

1. As at cob 8/5/15 2. As at 31/3/15 3. \$0.175 strike, 31 March 2016 expiry 4. As at 29/9/14 (2014 Annual Report)

## Board & Management

Stephen Gemell	<b>Chairman (Non-exec)</b> B.Eng (Hons), FAusIMM (CP)
David Busch	<b>Managing Director</b> B.Eng, BSc, MAusIMM
Marcus Michael	<b>Director (Non-exec)</b> B.Bus, CA
Sarah Shipway	<b>Company Secretary</b> B.Com, CA
Dr. Vladimir David	<b>Chief Geologist</b> BSc (Hons, Geology), PhD (Economic Geology), Registered Professional Geoscientist (RPG), MAIM

ARD Share price & daily \$ volume traded – 1 year



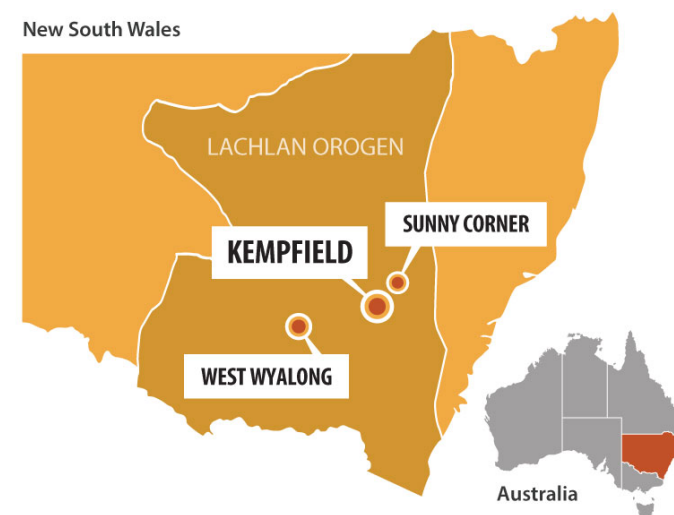


## ■ BOARD AND MANAGEMENT EXPERIENCE

- Depth of experience: mining, financial & commodities markets, corporate governance
- Exploration track record in Volcanogenic Massive Sulphide (VMS) discovery
  - Dr. Vladimir David (eg. Hera), aided by Professor Ross Large

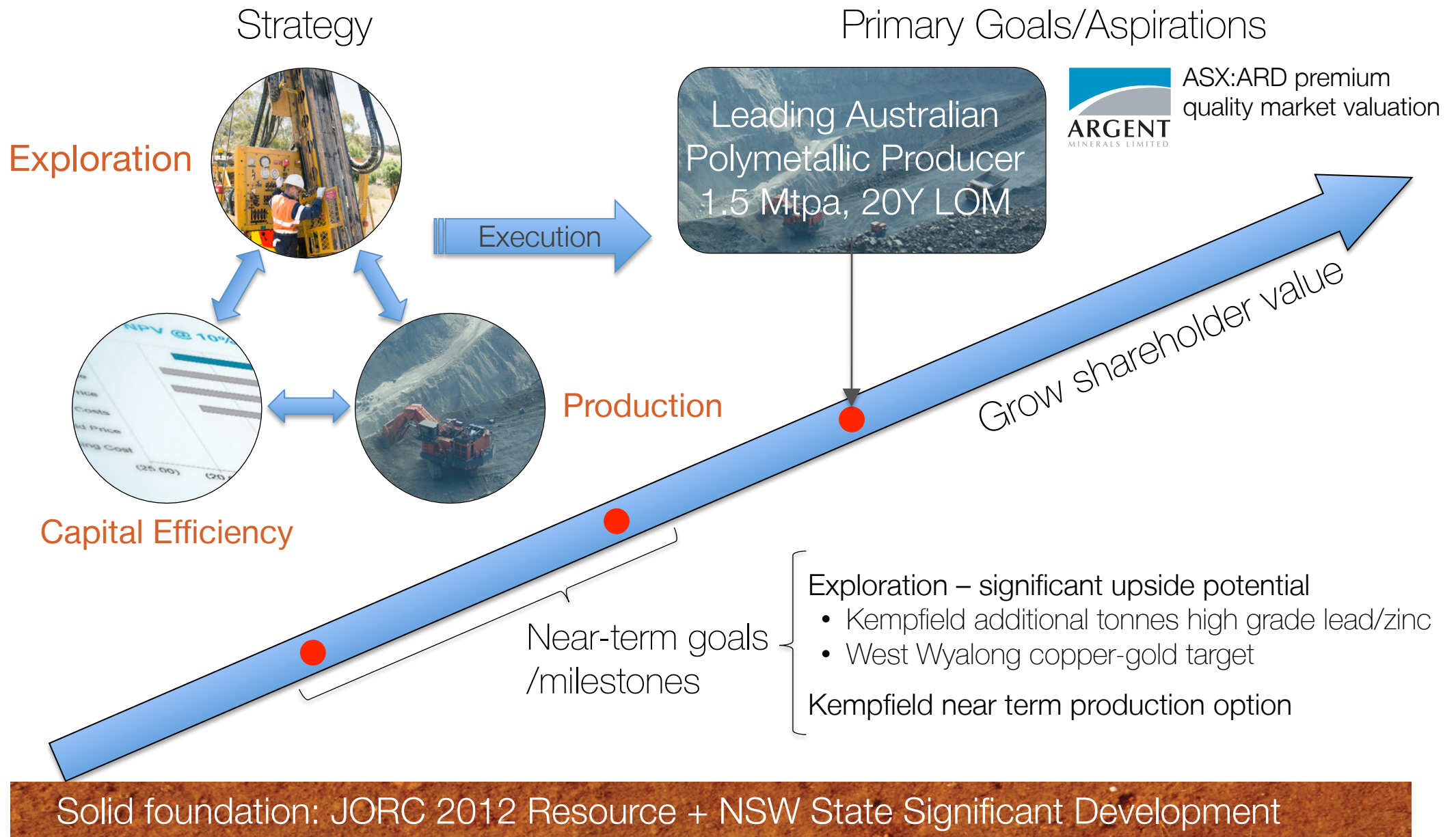
## ■ THREE PROJECTS IN HIGHLY PRODUCTIVE TERRANE

- Kempfield Polymetallic Project (Argent 100%)
  - High grade base and precious metals potential
  - Near term production potential (JORC 2012 Resource)
- West Wyalong (Argent 51%)
  - Large porphyry copper-gold target identified
  - 37 km from Lake Cowal mine infrastructure
- Sunny Corner (Argent 70%)
  - Historic rich polymetallic mine – potential feedstock for Kempfield

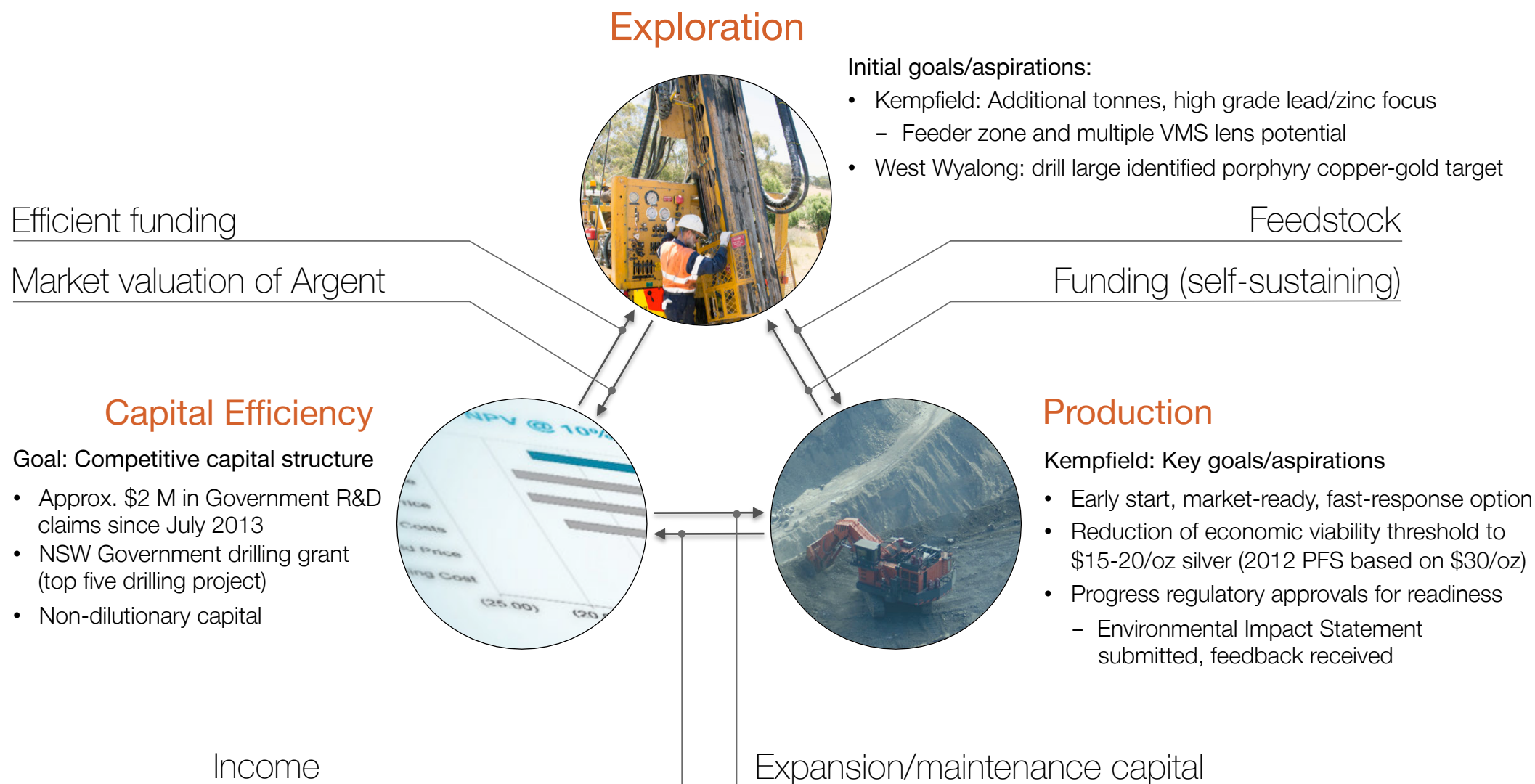




# BUSINESS MODEL

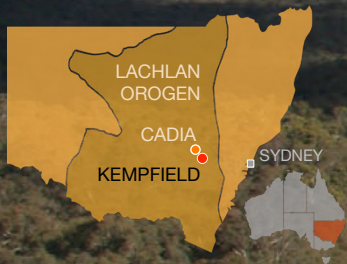


# ARGENT STRATEGY: THREE KEY ELEMENTS

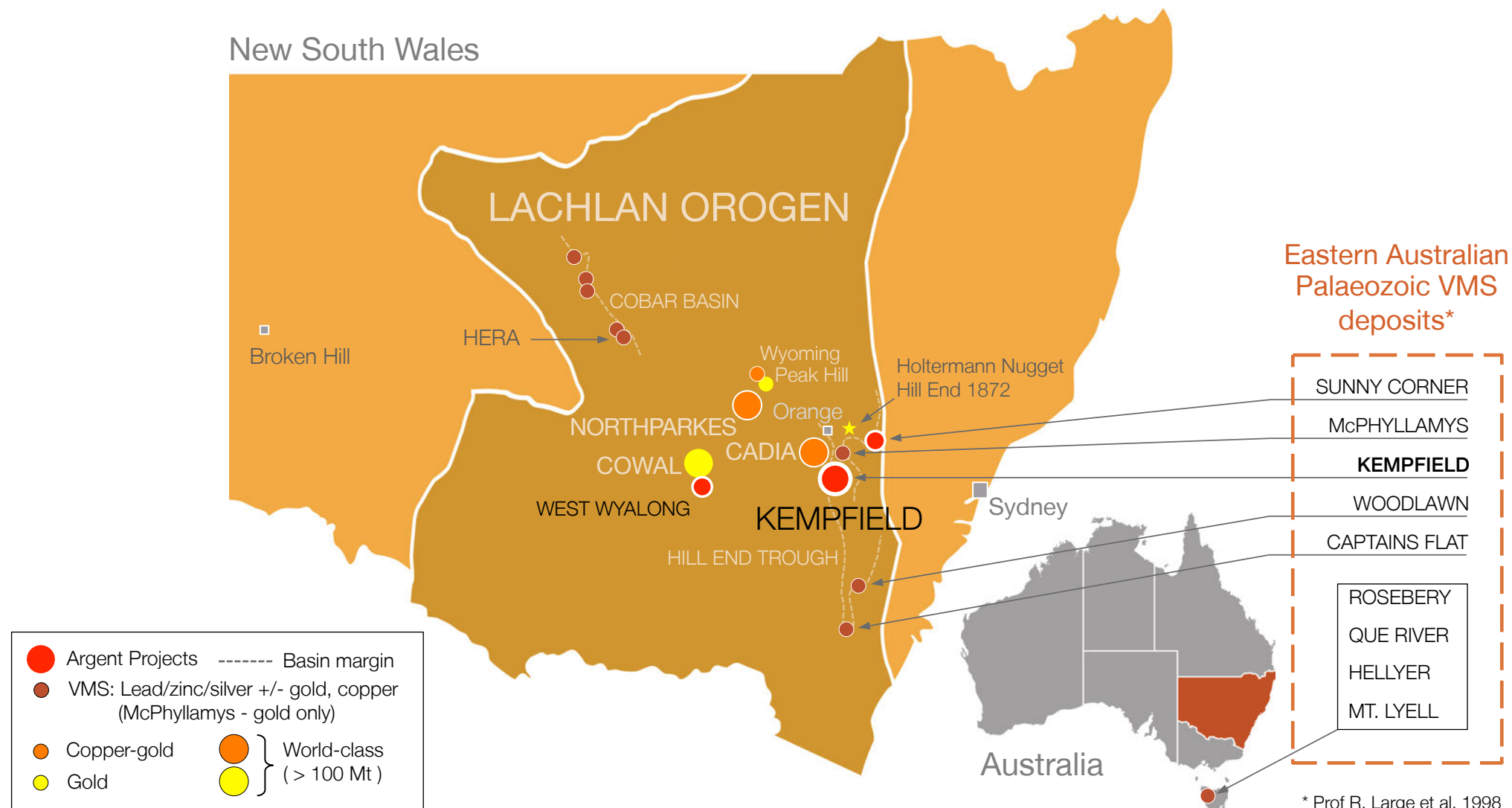




# KEMPFIELD POLYMETALLIC PROJECT



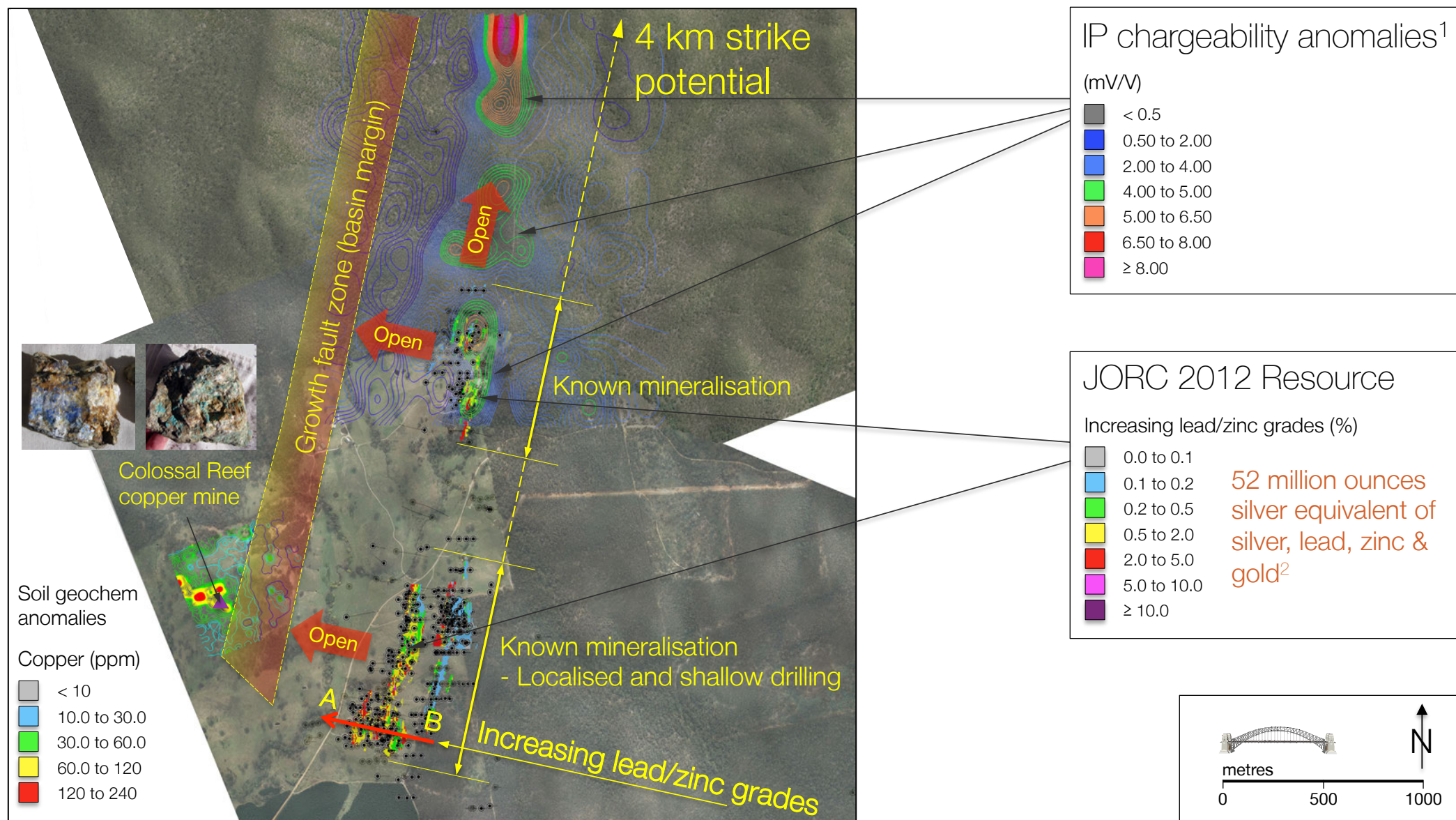
- HIGHLY PRODUCTIVE GEOLOGICAL TERRANE
- COMPELLING PEER GROUP: RICH VMS DEPOSITS AT BASIN MARGINS



Drill testing the high-grade VMS potential of the Kempfield polymetallic deposit



# SUBSTANTIAL OPEN, HIGHLY PROSPECTIVE, UNTESTED AREAS



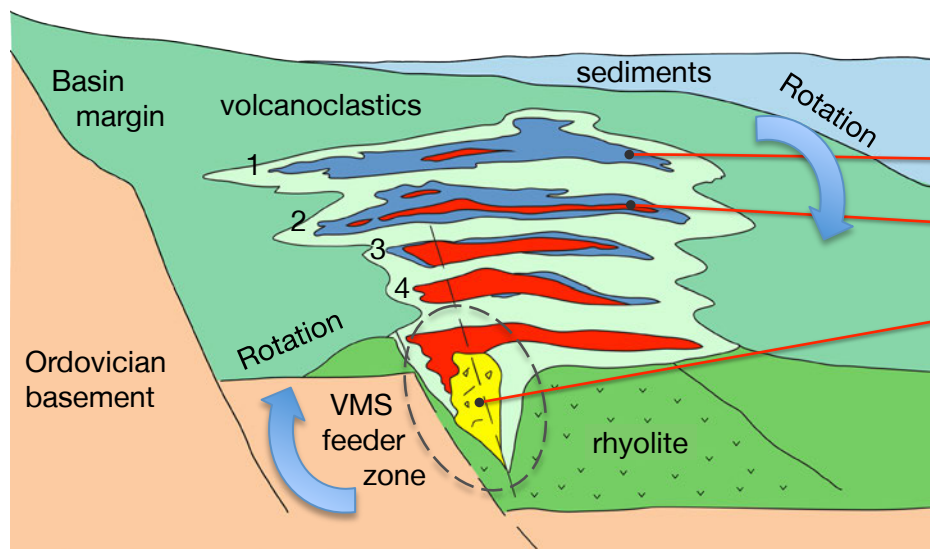
1. See ASX Announcement 2 Sep 2009
2. See Appendix A for details

Drill testing the high-grade VMS potential of the Kempfield polymetallic deposit



# DEPOSIT MODEL VALIDATED BY DIAMOND DRILLING

Original VMS mound formation

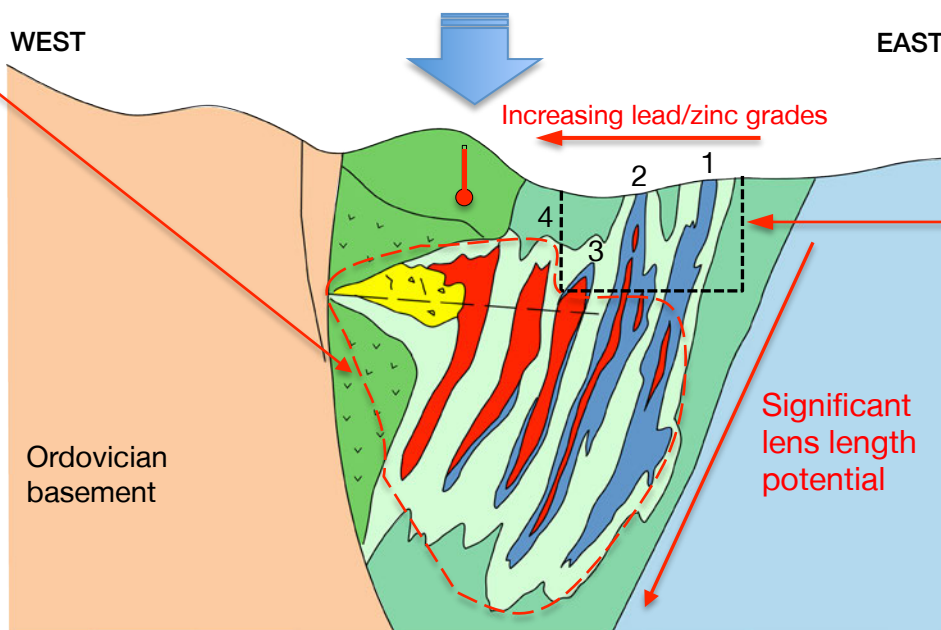


VMS DEPOSIT ZONATION

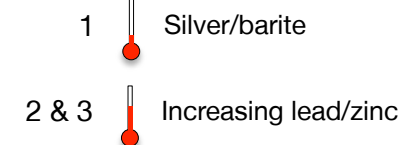


**SIGNIFICANT EXPLORATION UPSIDE POTENTIAL**

including high grade lead/zinc +/- copper/gold



KNOWN KEMPFIELD MINERALISATION  
21.8 Mt JORC 2012 RESOURCE



Current structure following rotation



# HIGH GRADE POTENTIAL TO THE WEST AND AT DEPTH

## INTERPRETED VMS LENS AND FEEDER ZONE AREAS

(Conceptual targets shown, to be adjusted  
following diamond drilling program results)

Colossal Reef  
copper mine

Soil geochemical  
anomalies

FEEDER  
ZONE

LENS 2 – Quarries (1.7 Mt)  
2.1% Pb/Zn & 0.05 g/t Au

LENS 2 – McCarron (5.8 Mt)  
2.2% Pb/Zn & 0.18 g/t Au

LENS 1 (6.8 Mt)  
1.4% Pb/Zn & 0.06 g/t Au

LENS 3

LENS 4

2

1

Increasing lead/zinc  
grade trend to the West  
and at depth



Copper (ppm)

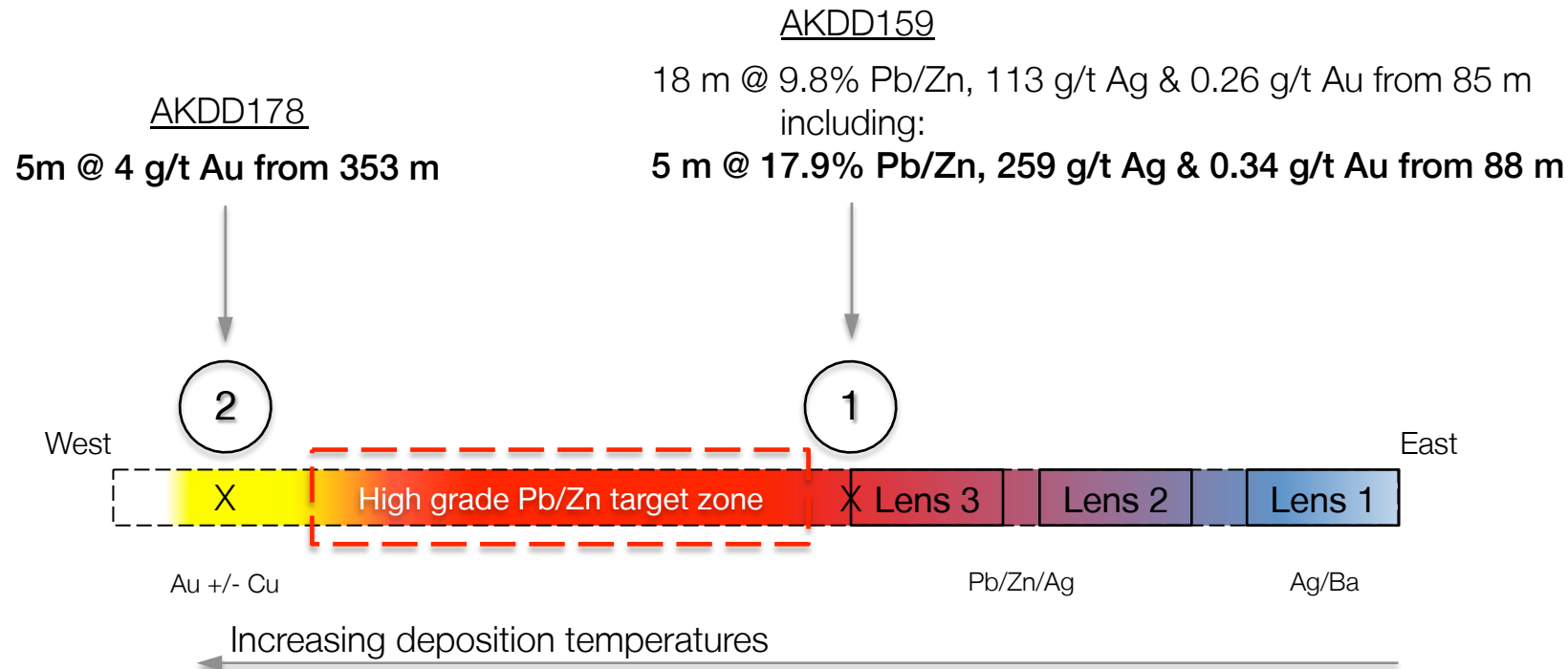


West McCarron (1.5 Mt)  
2.6% Pb/Zn & 0.34 Au g/t, incl.  
3.1% Pb/Zn & 0.46 g/t Inferred

View toward the North East



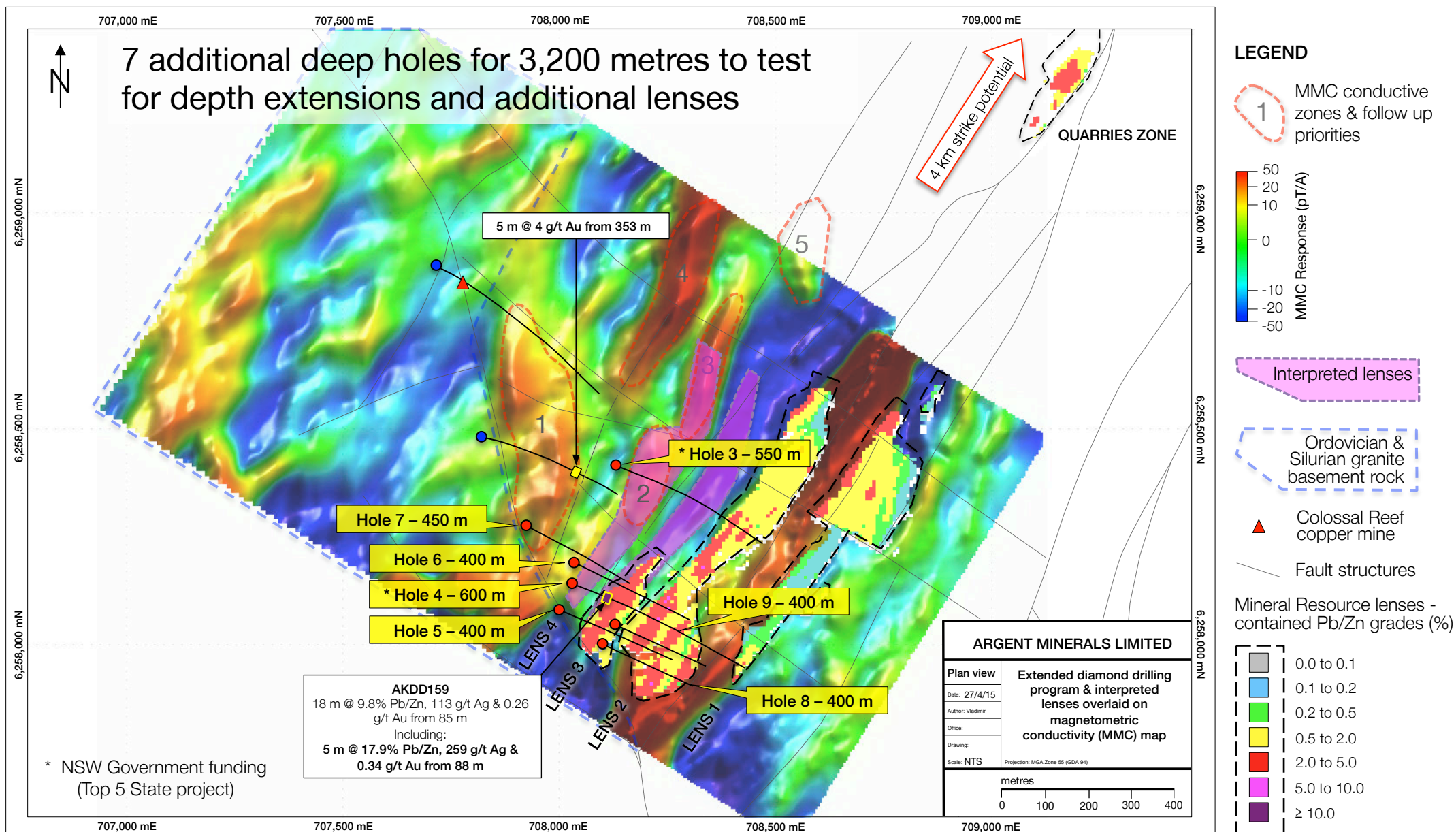
# HIGH GRADE LEAD/ZINC TARGET ZONE



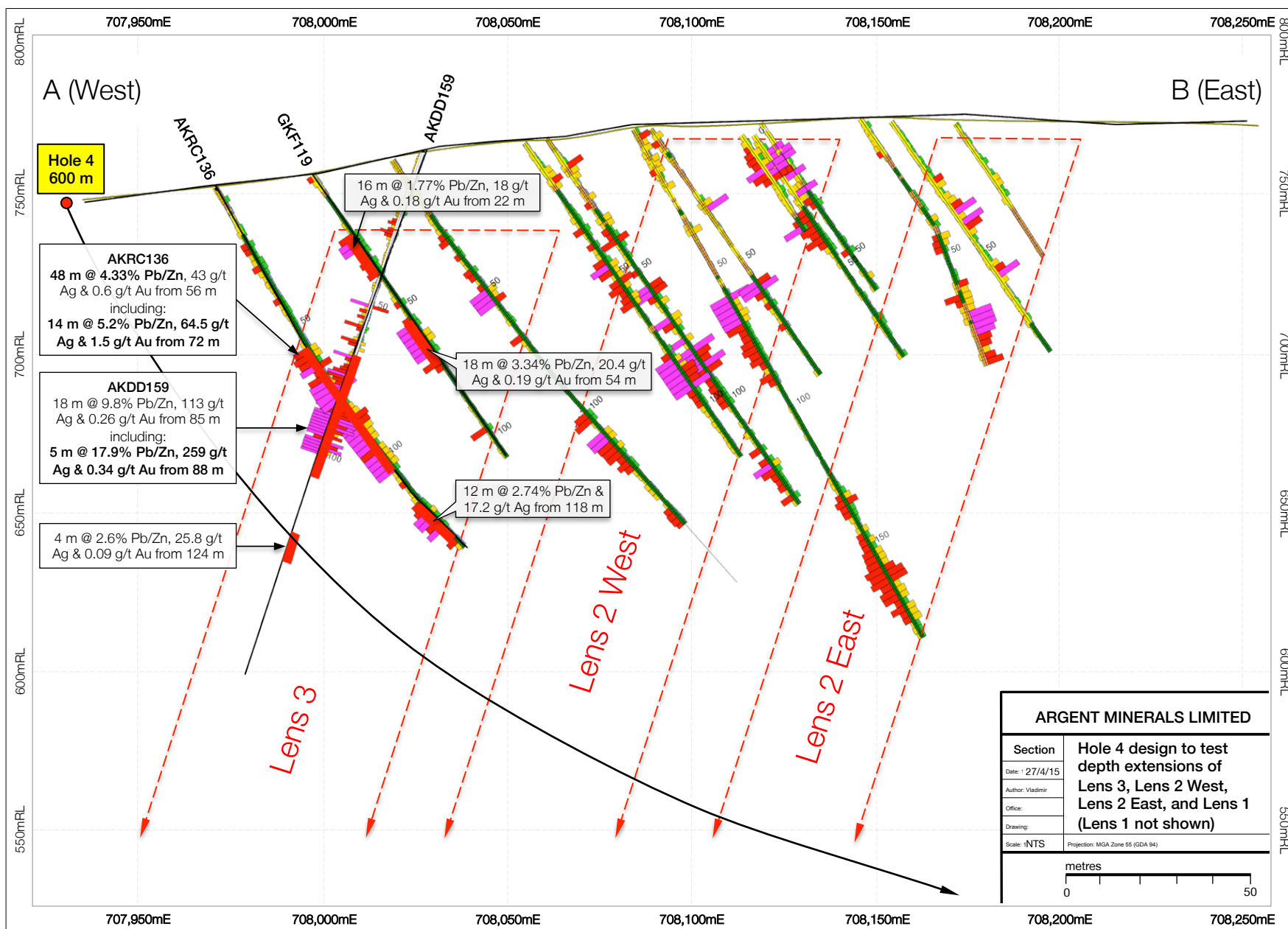
- **Targeting high grade lead/zinc:**
  - Multiple exploration vectors indicate significant grade/tonnes potential
  - Sufficient tonnes & grade could also unlock significant silver production
  - Zinc price resurgence fuelled by compelling supply/demand outlook



# EXTENDED REACH DEEP DIAMOND DRILL PROGRAM TO START



# DRILL TESTING FOR LENS EXTENSIONS AT DEPTH (EXAMPLE)



## HISTOGRAM LEGEND

### Base metals grade (Pb/Zn)

Histograms on left hand side of drillholes

### Combined Pb/Zn grade (ppm)

- 0 – 1,000
- 1,000 – 5,000
- 5,000 – 20,000
- 20,000 – 100,000

### Precious metals grade (Ag)

Histograms on right hand side of drillholes

### Ag Grade (ppm)

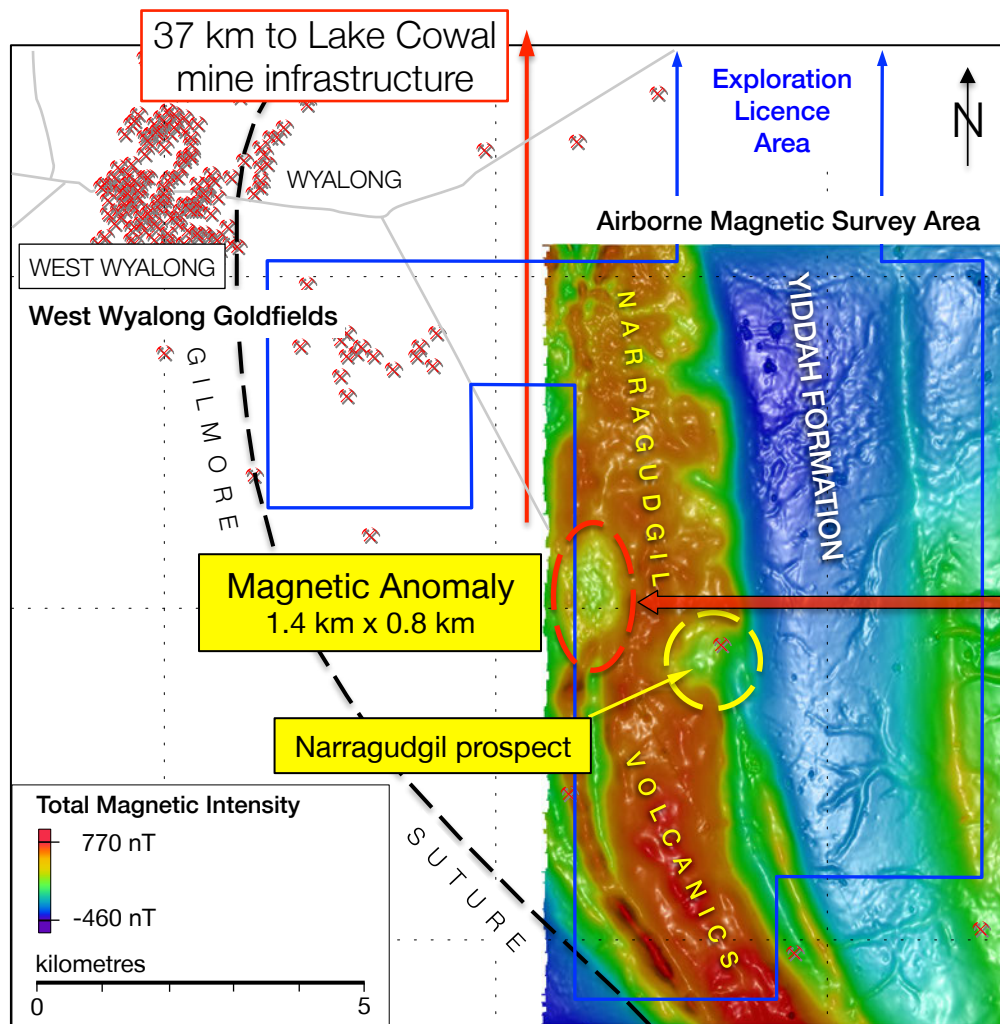
- 0 – 10
- 10 – 25
- 25 – 50
- 50 – 90
- 90 – 10,000





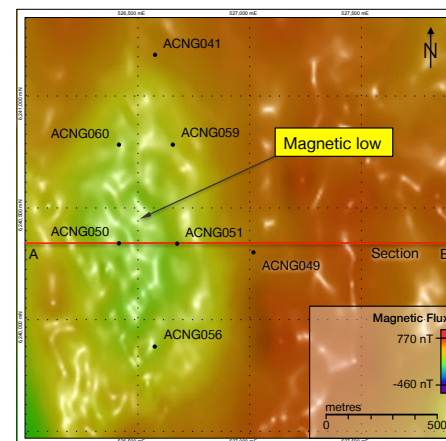
# WEST WYALONG PROJECT

## MAGNETIC SURVEY REVEALS LARGE PORPHYRY COPPER-GOLD TARGET ARGENT PROJECT EQUITY NOW 51% WITH RIGHT TO EARN 70%

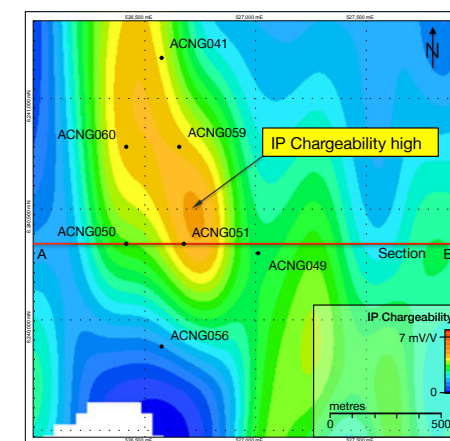


- Porphyry copper-gold signature indicated: coincident magnetic low and IP chargeability high anomalies in Ordovician volcanics
- Strong copper-gold geochemistry intersected by shallow aircore drilling
- Similarities to Northparkes system observed

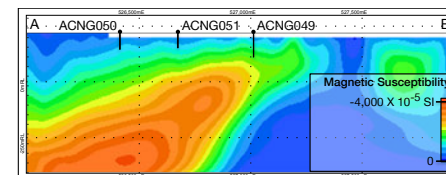
Magnetic low anomaly (plan view)



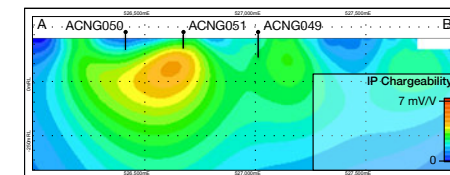
Coincident IP chargeability high



Magnetic anomaly (cross section AB)



IP chargeability (cross section AB)







## ■ KEMPFIELD – DRILL TESTING THE HIGH GRADE VMS POTENTIAL

- Significant (21.8 Mt) Mineral Resource – JORC 2012 compliant (upgrade-ready)
- Extended reach deep diamond drilling program – 7 holes for 3,200 metres
  - Targeting high grade base and precious metals
  - Drilling activity and discovery potential -> liquidity and share price
- Resurgent interest in zinc – compelling supply/demand outlook
- Project quality has attracted:
  - Federal Government R&D funding (expected to continue)
  - NSW State Government drilling-specific grant (Top 5 project based on merit)
- Capital-efficiency optimised by Government co-funding alongside equity capital

## ■ WEST WYALONG

- Large porphyry copper-gold target
- Only 37 km from Lake Cowal Mine infrastructure



- **WEBSITE** [www.argentminerals.com.au](http://www.argentminerals.com.au)
- **MANAGING DIRECTOR**
  - David Busch
  - Mobile 0419 613 800
  - Email [david.busch@argentminerals.com.au](mailto:david.busch@argentminerals.com.au)



## KEMPFIELD JORC 2012 RESOURCE STATEMENT SUMMARY

Table 1.0 is a summary of the Kempfield mineral resource announced on 6 May, 2014. Table 2.0 shows the Resource tonnes and grades by Measured, Indicated and Inferred categories, whilst Table 3.0 provides details of tonnes and contained metal in the Measured and Indicated categories.

At cutoff grades 25 g/t Ag (Oxide/Transitional) and for 50 g/t Ag equivalent<sup>1</sup> (Primary):

Table 1.0 - Kempfield Resource Summary

	Silver (Ag)			Gold (Au)		Lead (Pb)		Zinc (Zn)		In-situ Contained Ag Equivalent <sup>2</sup>	
	Resource Tonnes (Mt)	Grade (g/t)	Contained Metal (Moz)	Grade (g/t)	Contained Metal (000 oz)	Grade (%)	Contained Metal (000 t)	Grade (%)	Contained Metal (000 t)	Grade (Ag Eq g/t)	Contained Ag Eq (Moz)
Oxide/ Transitional*	6.0	55	10.7	0.11	21	N/A	N/A	N/A	N/A	-	11.7
Primary**	15.8	44	22.3	0.13	66	0.62	97	1.3	200	-	40.5
TOTAL ***	21.8	47	33.0 M	0.12	86	N/A	97	N/A	200	75	52 M

\* 90% \*\* 79% \*\*\* 82%; Percentage of Resource tonnes in Measured or Indicated Category. See Table 3.0 for details.

### Note 1 - 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). The Resource estimation for the Primary material was based on a silver equivalent cutoff grade of 50 g/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.

The contained metal equivalence formula is based on the following assumptions made by Argent Minerals:

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

Based on metallurgical testing to date, Argent Minerals is of the opinion that recoverable and payable silver and gold of 80% is achievable, and recoverable and payable lead and zinc at 55% of the head grade. Argent Minerals 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. Please note that Ag Eq is reported as in-situ contained ounces and grade ie. not recoverable & payable ounces and grade, and in accordance with the JORC Code 2012 Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves.

# APPENDIX A – KEMPFIELD JORC 2012 RESOURCE STATEMENT SUMMARY



Table 2.0 – Resource by Category

		Grade (g/t)		Grade (%)		In-situ Grade (Contained Ag Eq g/t)
Category	Resource Tonnes (Mt)	Silver (Ag)	Gold (Au)	Lead (Pb)	Zinc (Zn)	Silver Equivalent (Ag Eq)
Oxide/Transitional						
Measured	2.7	68	0.11	-	-	73
Indicated	2.7	47	0.11	-	-	52
Inferred	0.6	39	0.08	-	-	43
Total Oxide/Transitional	6.0	55	0.11	-	-	60
Primary						
Measured	4.1	57	0.12	0.66%	1.2%	93
Indicated	8.4	41	0.13	0.58%	1.2%	76
Inferred	3.2	35	0.13	0.66%	1.4%	74
Total Primary	15.8	44	0.13	0.62%	1.3%	80
Total Resource	21.8	47	0.12	N/A	N/A	75

## Note 2 - Contained Silver Equivalent ('Ag Eq') Calculation Details

- (i) A revenue figure was calculated for each metal by category and material class (r) as follows:  
 $r = \text{tonnes} * \text{head grade} * \text{recoverable and payable \%}$   
 Eg. For Measured Oxide/Transitional silver:  $r = 2.7\text{Mt} * 68 \text{ g/t} * 80\% / 31.1 \text{ g/oz} * \$\text{US } 30/\text{oz} = \$\text{US } 142\text{M}$ .  
 Eg. For Measured Primary Zinc:  $r = 4.1\text{Mt} * 1.2\% * 55\% * \$\text{US } 2,200/\text{t} = \$\text{US } 59.5\text{M}$ .
- (ii) Total revenue R was calculated for each resource category and material class as the sum of all the individual (r) revenues for that category and class.
- (iii) Contained silver metal equivalent ounces was then calculated as follows:  
 $\text{Ag Eq (oz)} = R / \text{Ag recoverable and payable \%} / \text{Ag price} = R / 80\% / \$\text{US } 30$ .
- (iv) Contained silver metal grade was calculated as follows:  
 $\text{Grade (Contained Ag Eq g/t)} = \text{Ag Eq (oz)} * 31.1 / \text{tonnes}$ .



# APPENDIX A – KEMPFIELD JORC 2012 RESOURCE STATEMENT SUMMARY

Table 3.0 – Kempfield Resource tonnes and contained metal in Measured and Indicated categories

	Contained Metal					
	Resource Tonnes (Mt)	Moz Silver (Ag)	000 oz Gold (Au)	000 t Lead (Pb)	000 t Zinc (Zn)	In-situ Moz Silver Equivalent (Ag Eq)
<b>Oxide/Transitional</b>						
Measured	2.7	5.8	9.3	-	-	6.3
Indicated	2.7	4.1	9.9	-	-	4.6
<b>Measured + Indicated</b>	<b>5.4</b>	<b>10</b>	<b>19</b>	<b>-</b>	<b>-</b>	<b>11</b>
<b>As % of Total Oxide/Transitional</b>	<b>90%</b>	<b>93%</b>	<b>93%</b>	<b>-</b>	<b>-</b>	<b>93%</b>
<b>Primary</b>						
Measured	4.1	7.5	16	27	51	12
Indicated	8.4	11	36	49	103	21
<b>Measured + Indicated</b>	<b>13</b>	<b>19</b>	<b>51</b>	<b>76</b>	<b>154</b>	<b>33</b>
<b>As % of Total Primary</b>	<b>79%</b>	<b>83%</b>	<b>79%</b>	<b>78%</b>	<b>77%</b>	<b>81%</b>
<b>Oxide/Transitional + Primary</b>						
Measured	6.8	13	25	27	51	19
Indicated	11	15	46	49	103	25
<b>Total Measured + Indicated</b>	<b>18</b>	<b>28</b>	<b>71</b>	<b>76</b>	<b>154</b>	<b>44</b>
<b>As % of Total Resource</b>	<b>82%</b>	<b>86%</b>	<b>82%</b>	<b>78%</b>	<b>77%</b>	<b>84%</b>

## Note 3 – Rounding and Significant Figures

Figures in the tables in this Appendix may not sum precisely due to rounding; the number of significant figures does not imply an added level of precision.



## COMPETENT PERSON STATEMENTS

### Previously Released Information

This Presentation contains information extracted from the following reports which are available for viewing on the Company's website <http://www.argentminerals.com.au> :

- 10 March 2014 Assays Confirm Third VMS Lens Group at Kempfield – Revised;
- 16 Oct 2014 Base and precious metal grade zonation in Kempfield Resource;
- 22 Oct 2014 Conductive zones detected by MMR surveys at Kempfield;
- 29 Oct 2014 Kempfield Deep Diamond Drilling Program;
- 25 February 2015 Hole 1 intersects significant gold grades at Kempfield;
- 21 April 2015 Hole 2 increases potential size of the prize at Kempfield; and
- 29 April 2015 Extended reach for Kempfield Deep Diamond Drilling Program.

The Company confirms that 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 announcements.