



**INVESTOR PRESENTATION**

**January 2017**

# Important Notice and CP statement



## Important notice

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No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this news release.

Application for securities under the Company's public offer can only be made under the prospectus, a copy of which is available from the Company. Investors should consider the prospectus in deciding whether to acquire Ardea shares and will need to complete the application form that accompanies the prospectus.

## Competent Person Statement

A competent person's statement for the purposes of Listing Rule 5.22 has previously been announced by the Company for:

- Lewis Ponds on 27 August 2015, 2016 Heron Annual Report, Heron's announcement on 6 January 2017;
- Kalgoorlie Nickel Project on 21 October 2013 and 31 July 2014, 27 August 2015, 2016 Heron Annual Report;
- Big Four-Goongarrie on 13 March 2012, 26 June 2012 and 24 July 2012.
- KNP Cobalt Heron's announcement on 6 January 2017

The Company is not aware of any new information or data that materially affects information included in previous announcements, and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. All projects will be subject to new work programs following the listing of Ardea, notably drilling, metallurgy and JORC Code 2012 resource estimation as applicable.



# *Ardea*

*the heron (Latin)  
derived from “ardua” – great and noble*

**Ardea Resources Limited is a focused developer and explorer spinning off from Heron Resources**



# Development projects, 100% owned



**Focusing on the high-grade zones within  
Australia's largest cobalt resource**

Kalgoorlie Nickel Project (KNP)  
Cobalt Zone, WA

**Redefining a historic high-grade zinc-gold mine  
as a bulk-tonnage open pit operation**

Lewis Ponds Zinc-Gold Project, NSW





# Ardea – A New ASX-Listed Company



## IPO and capital raising

Maximum raising	\$6,000,000
Share price	\$0.20
Loyalty options (all shares) (issued 3 months post listing)	1 for 3

## Capital structure post-IPO (maximum subscription)

In specie distribution shares	41,500,938 (58%)
Offer shares	30,000,000 (42%)
Shares on issue	71,500,938
Market capitalisation (at \$0.20)	\$14,300,187
Enterprise value (at \$0.20)	\$8,300,187
Options (3yrs at \$0.25)	12.44 million

## Major holders

Board and associates	10.6 million shares (14.8%) 5.9 million (subscribed) 4.7 million (in specie)
Greenstone Heron Holdings	5.4 million shares

Closing Date of the Public Offer: **20 January 2017**

Quotation of Shares on ASX: **9 February 2017**

# Experienced Board & Management Team



**Katina Law**

Non-Executive Chairman

- 25 years' experience in the mining industry
- Financial management positions previously at Newmont Mining and LionOre
- Appointed 7 Nov 2016



**Ian Buchhorn**

Non-Executive Director

- Mineral economist and geologist with 35 years' experience
- Currently an executive director of Heron Resources Ltd and non-executive director of RBR Group Ltd
- Appointed 17 Aug 2016



**Matt Painter**

Managing Director

- Economic geologist (PhD) and structural geologist with over 20 years' experience
- Technical and managerial positions at SRK Consulting, Sabre Resources, AngloGold, and Geological Survey WA
- Appointed 7 Nov 2016



**Sam Middlemas**

CFO & Company Secretary

- Chartered accountant
- 20 years' experience in various financial and company secretarial roles
- Appointed 20 Oct 2016

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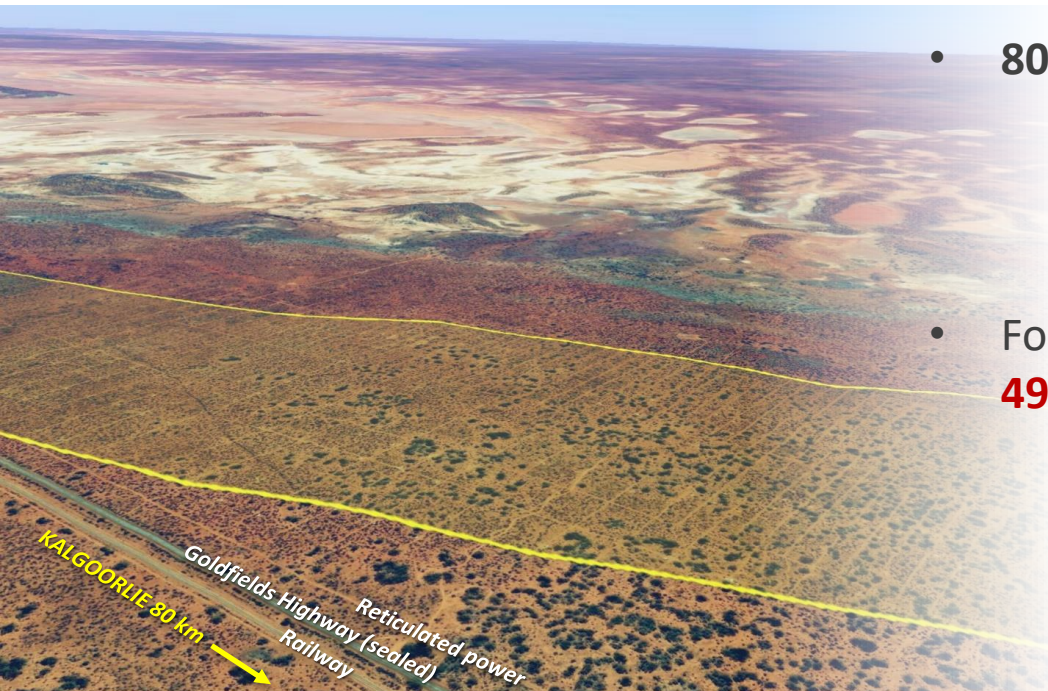
## Development projects

- **KNP Cobalt Zone, WA**
- Lewis Ponds, NSW

# KNP cobalt-nickel project



## Australia's and the developed world's\* largest cobalt resource



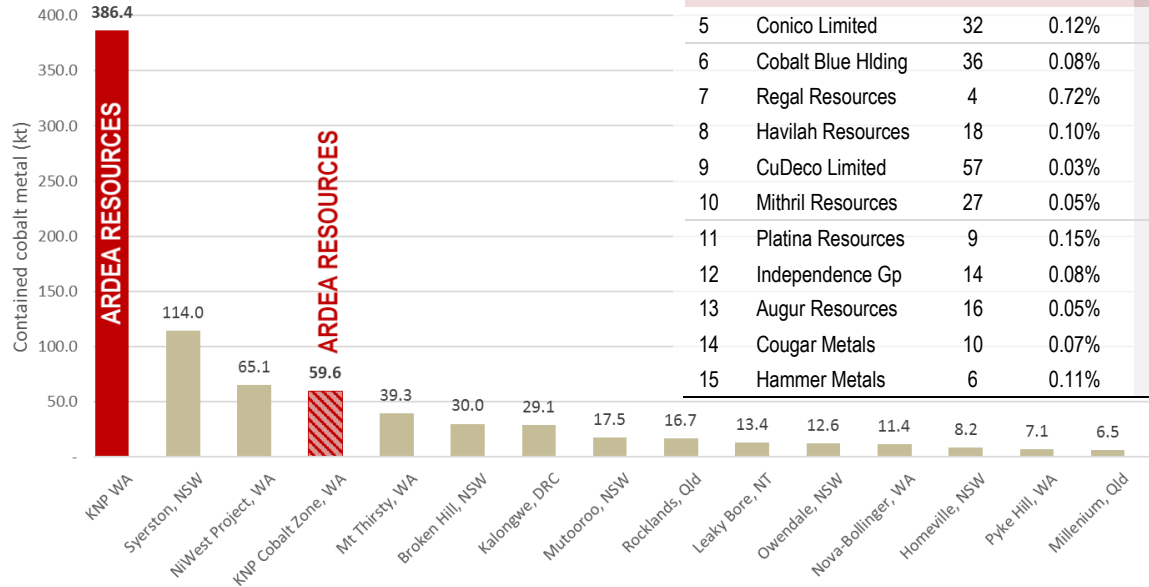
- 805 Mt at 0.05 % cobalt and 0.7 % nickel\*\*  
380,000 t contained cobalt metal,  
5,600,000 t contained nickel metal.
- Focus on the high-grade **Cobalt Zone**, with  
**49.7 Mt at 0.12 % cobalt & 0.86 % nickel\*\***  
59,640 t contained cobalt metal,  
potential lithium ion battery feedstock.

*View over Goongarrie South, looking northeast, showing the partial extent of the deposit (yellow), the extensive historic drill grid, and proximity to infrastructure*

# Australia's largest cobalt deposit...



... by some way.



	Company	Size (Mt)	Co (%)	Co metal (kt)	Project	Mineralisation style
1	Ardea Resources	805	0.05%	386.4	Kalgoorlie Nickel Project, WA	Laterite Ni-Co
2	CleanTeq Holdings	109	0.10%	114	Syerston, NSW	Laterite Ni-Co-Sc
3	GME Resources	108	0.06%	65.1	NiWest Project, WA	Laterite Ni-Co
4	Ardea Resources	50	0.12%	59.6	KNP Cobalt Zone, WA	Laterite Co-Ni-Mn
5	Conico Limited	32	0.12%	39.3	Mt Thirsty, WA	Laterite Ni-Co
6	Cobalt Blue Hlding	36	0.08%	30.0	Broken Hill, NSW	Co sulphide
7	Regal Resources	4	0.72%	29.1	Kalongwe, DRC	Cu-Co sulphide
8	Havilah Resources	18	0.10%	17.5	Mutooroo, NSW	Cu-Co sulphide
9	CuDeco Limited	57	0.03%	16.7	Rocklands, Qld	Cu-Au-Co sulphide
10	Mithril Resources	27	0.05%	13.4	Leaky Bore, NT	Cu-Co sulphide
11	Platina Resources	9	0.15%	12.6	Owendale, NSW	Laterite Ni-Co-Sc
12	Independence Gp	14	0.08%	11.4	Nova-Bollinger, WA	Ni-Cu-Co sulphide
13	Augur Resources	16	0.05%	8.2	Homeville, NSW	Laterite Ni-Co
14	Cougar Metals	10	0.07%	7.1	Pyke Hill, WA	Laterite Ni-Co
15	Hammer Metals	6	0.11%	6.5	Millenium, Qld	Cu-Au-Co sulphide



# KNP – the importance of Australian cobalt



*High-grade cobalt mineralisation,  
Goongarrie South (KNP Cobalt Zone)*

- **Cobalt** is a major component of **all lithium ion batteries**
  - Phones
  - Computers
  - Electric and hybrid vehicles
  - Solar power storage systems
- Most cobalt is sourced from the DRC
  - Local child labour issues highlighted by Amnesty International 2016\*
  - **Tech companies require ethically-sourced cobalt**



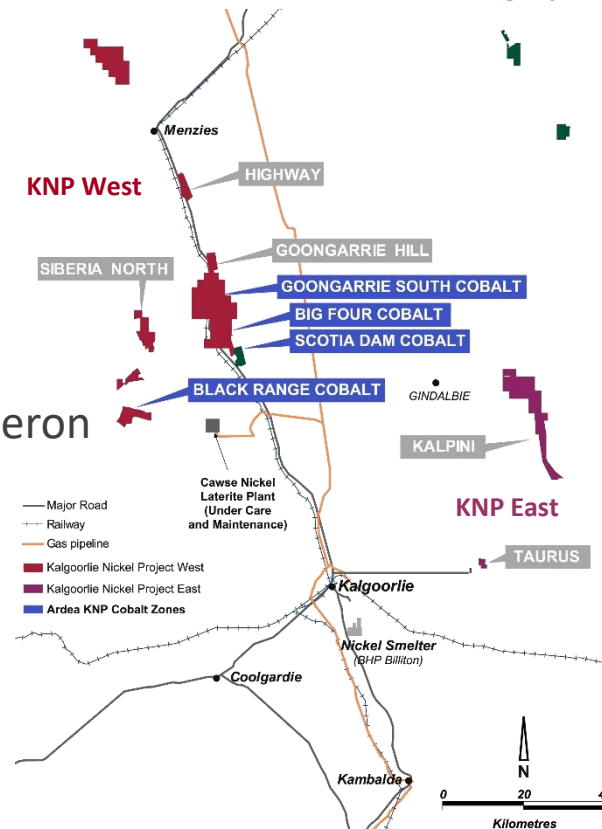
**KNP is an ethical source of cobalt**

# KNP cobalt-nickel project

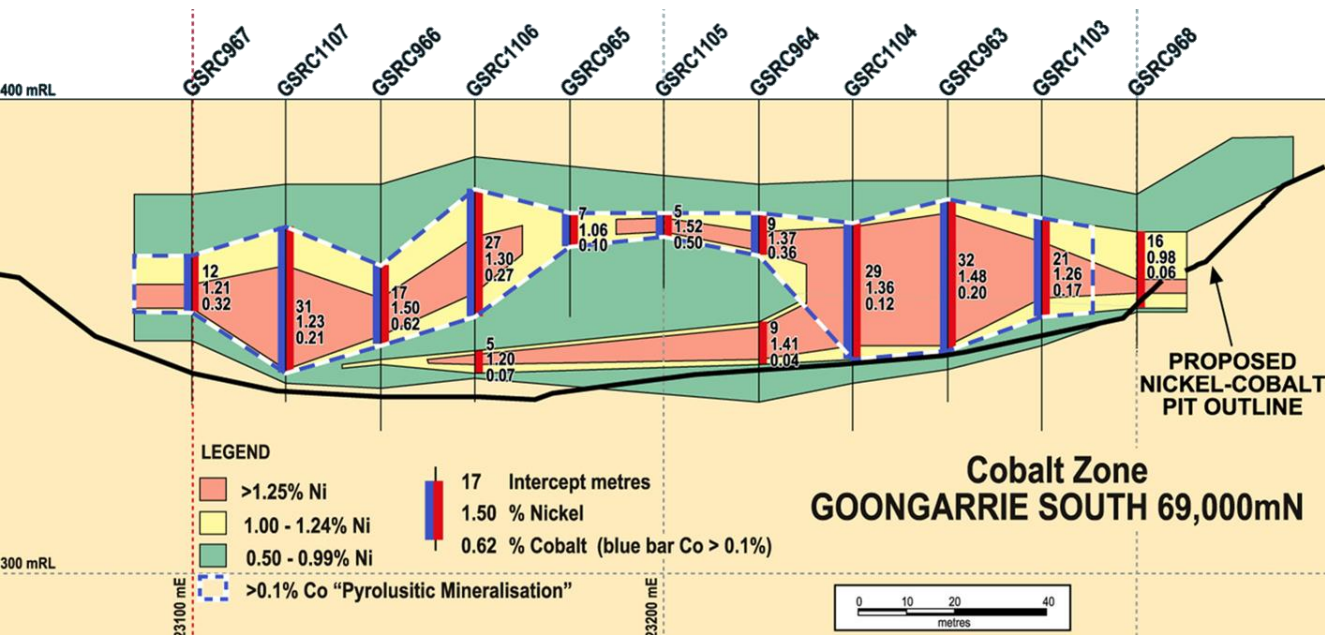


## World-significant resource in a stable jurisdiction

- Located **within 150 km of Kalgoorlie, WA**
  - All required infrastructure
  - Active granted mining leases
- **\$50 million previous expenditure** by Vale Inco and Heron
  - 100,000 m drilling
  - detailed metallurgy
  - nickel and cobalt focus



# KNP Cobalt Zone



- Sub-horizontal bodies of cobalt mineralisation at each location
- Near surface open-pit mining
  - low strip ratio
  - easy digging



# KNP – Chrysoprase (Australian jade)



*Polished chrysoprase cabochons, KNP*

- **Semi-precious gemstone**  
Genetic association with nickel-cobalt laterite
- **Five** advanced chrysoprase pit projects  
Run-of-mine chrysoprase: ~\$8-20/kg  
Gem quality: >>\$20/kg
- **Strong east Asian demand**
- Ardea is assessing opportunities
  - chrysoprase mining operation
  - chrysoprase focused spin-out



*In situ chrysoprase veins, Goongarrie Hill, KNP*



*Gem-quality chrysoprase, Jump-Up Dam, KNP*

# KNP Cobalt Zone – forthcoming work



## Forthcoming work:

- Further drill definition of high-cobalt zones is required
  - Black Range
  - Goongarrie
  - Kalpini
- Development of metallurgical processes and products for the tech industry
- Commencement of a Pre-Feasibility Study (PFS)
- Assessment of chrysoprase opportunities





## Development projects

- KNP Cobalt Zone, WA
- **Lewis Ponds, NSW**

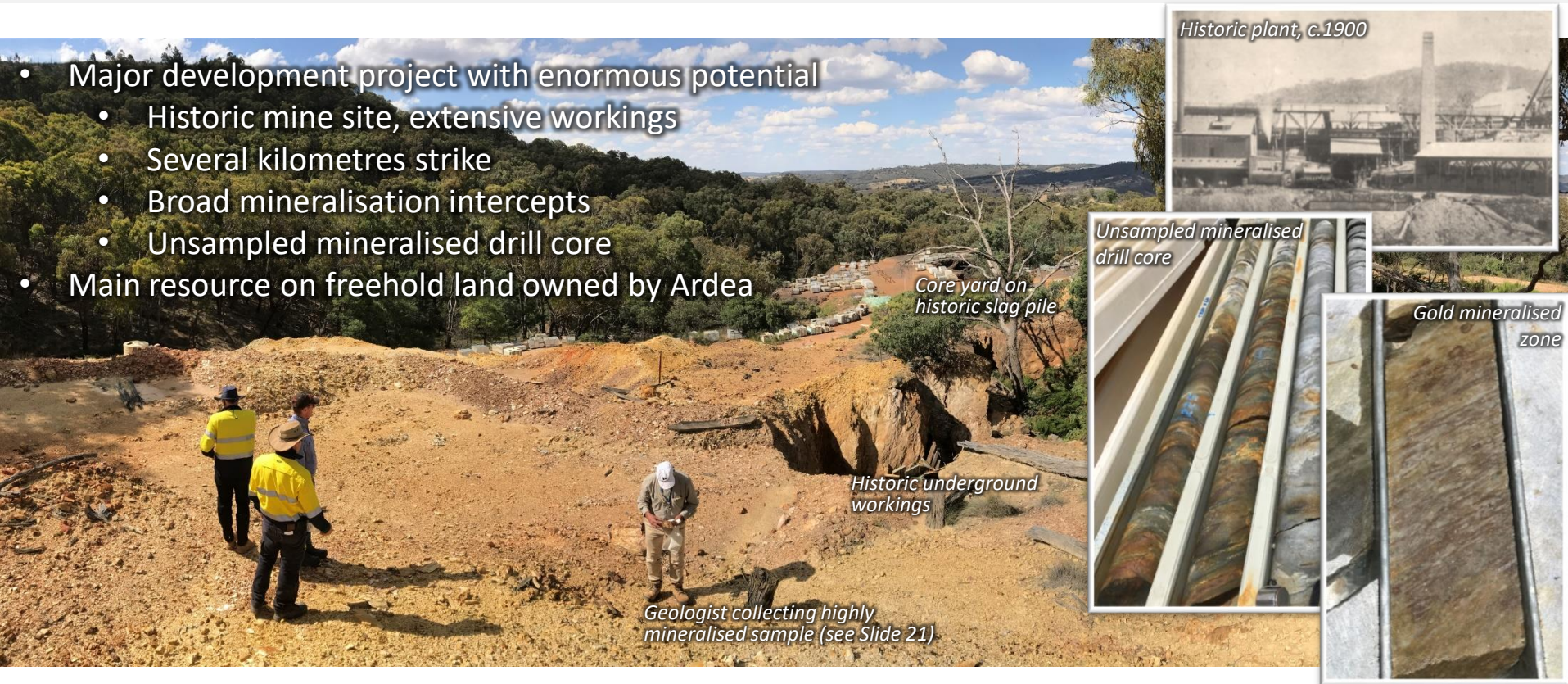




# Lewis Ponds zinc-gold deposit, NSW



- Major development project with enormous potential
  - Historic mine site, extensive workings
  - Several kilometres strike
  - Broad mineralisation intercepts
  - Unsamplered mineralised drill core
- Main resource on freehold land owned by Ardea



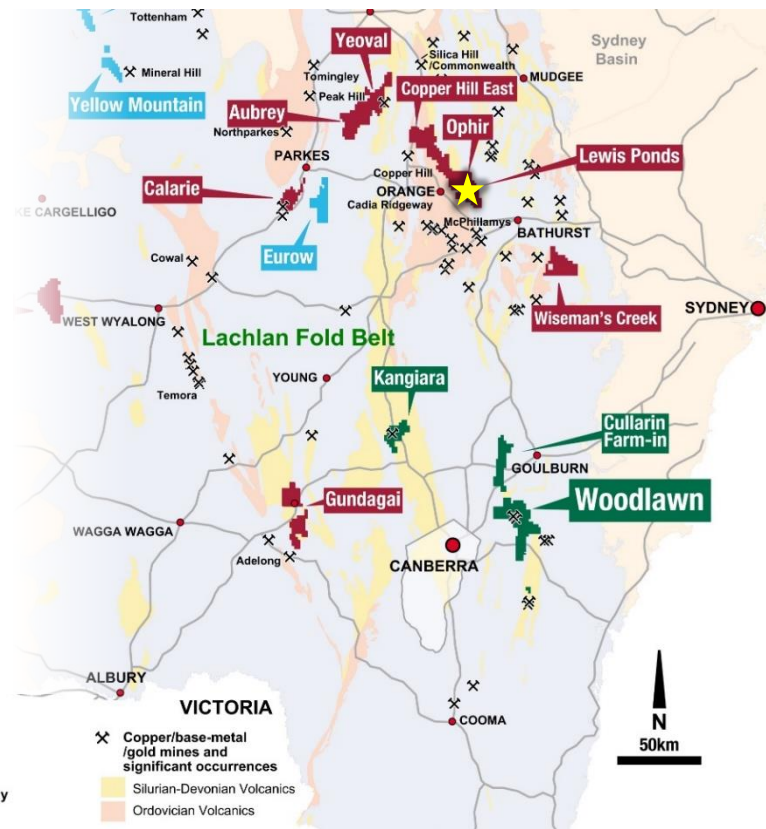
# Lachlan Fold Belt NSW



## One of Australia's great mineral provinces

Project	Resource type	Resource	Au(Eq)	Contained gold
Cadia Valley	global	3,260 Mt @ 0.25 % Cu and <b>0.42 g/t Au</b>	0.78 g/t	43.7 Moz
Cowal	global	164.1 Mt @ <b>0.96 g/t Au</b>	0.96 g/t	5.1 Moz
Northparkes	global	487.5 Mt @ 0.56 % Cu, <b>0.18 g/t Au</b> , and 1.75 g/t Ag	1.01 g/t	2.8 Moz
McPhillamys	indicated and inferred	73.2 Mt @ <b>0.94 g/t Au</b>	1.10 g/t	2.2 Moz
<b>Lewis Ponds</b>	indicated and inferred	<b>6.62 Mt @ 2.4 % Zn, 1.4 % Pb, 0.2 % Cu, 1.5 g/t Au, and 69 g/t Ag*</b>	<b>5.13 g/t</b>	<b>319,000 oz</b>
Commonwealth	inferred	0.72 Mt @ 1.5 % Zn, 0.6 % Pb, 0.1 % Cu, <b>2.8 g/t Au</b> , and 48 g/t Ag	4.95 g/t	65,000 oz
Woodlawn	global**	8.75 Mt @ 5.51 % Zn, 2.23 % Pb, 1.56 % Cu, <b>0.48 g/t Au</b> , and 49.61 g/t Ag	8.32 g/t	130,000 oz

- Resource upgrade at Lewis Ponds required on completion of planned drilling



### LEGEND

- Heron Tenements
- Ardea Tenements
- Heron / Alchemy JV Tenements

- ✕ Copper/base-metal /gold mines and significant occurrences
- Yellow Silurian-Devonian Volcanics
- Orange Ordovician Volcanics



# Lewis Ponds zinc-gold

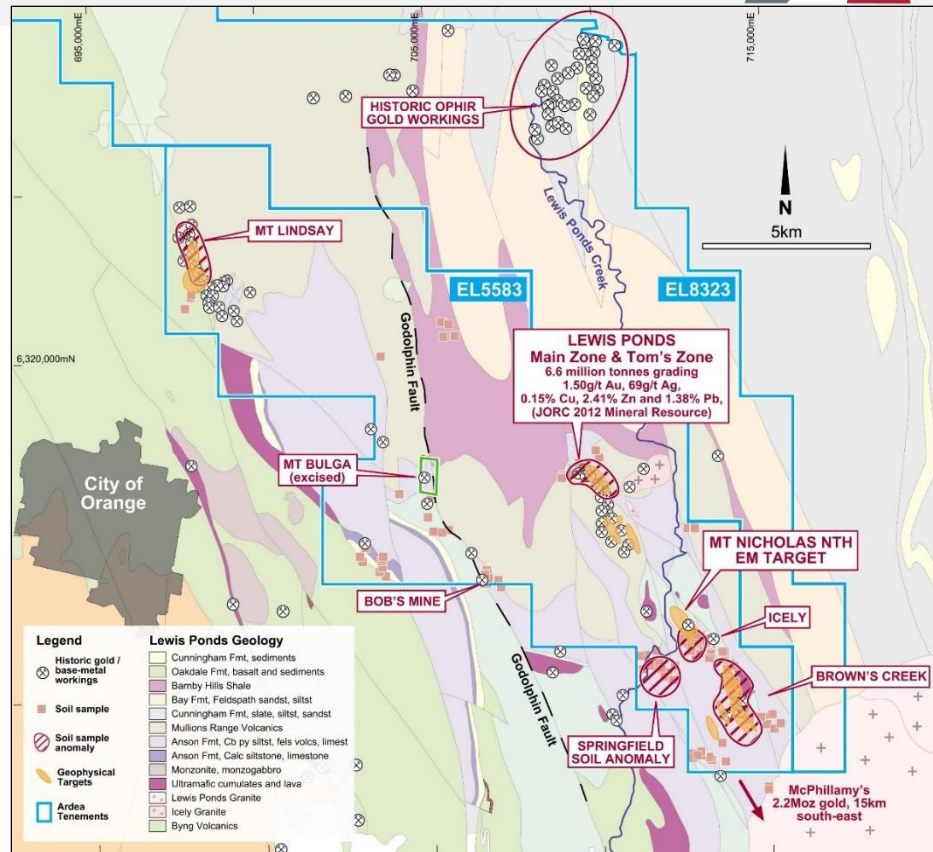


## Lewis Ponds deposit:

- 6.6Mt at 1.5g/t Au, 69g/t Ag, 2.4% Zn\* which focused on a high-grade underground operation. This need reassessment.

## Throughout Lewis Ponds licence areas:

- Premium exploration potential, Godolphin Fault
  - 50 km strike
  - McPhillamy's (south) to Copper Hill East (north)
- Extensive soil gold anomalies, McPhillamy-style gold targets, little or no previous drill testing



# Lewis Ponds bulk intercepts



- Bulk intercepts from selected historic drillholes
- Thick intercepts with lower grades
- Grades higher than at similar deposits mined throughout NSW
- Shallower areas not evaluated by historic drilling

Hole ID	East (local)	North (local)	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	ZnEq <sup>1</sup>	AuEq <sup>2</sup>	m.ZnEq <sup>3</sup>
TLPD-03	-47	1146	163	250	87	0.44	23	0.06	0.47	1.08	2.4	1.9	210.1
TLPD-04	-61	1316	178	203	25	3.12	105	0.26	2.14	3.59	11.0	8.8	275.9
TLPD-06A	21	1235	290	395	105	0.94	50	0.14	0.85	1.89	4.7	3.7	489.9
TLPD-12	103	1312	419	559	140	1.53	52	0.10	1.45	2.20	6.1	4.8	850.4
TLPD-15	74	1361	433	528	95	0.77	27	0.04	0.40	0.69	2.4	2.0	230.6
TLPD-20	72	1362	347	420	73	1.33	38	0.08	0.64	1.15	4.0	3.2	290.7
TLPD-21W	74	1361	409	510	101	1.03	38	0.07	0.60	1.01	3.4	2.7	345.3
TLPD-36	-68	1311	194	220	26	2.35	162	0.17	2.07	3.20	10.4	8.4	270.3
TLPD-51A	152	421	474	510	36	1.24	179	0.28	3.62	4.49	11.8	9.5	423.7
TLPD51AW2	152	421	321	399	78	0.22	22	0.05	0.89	1.44	2.7	2.2	213.2
TLPD-53	106	463	221	321	100	0.25	27	0.06	1.16	1.90	3.5	2.8	351.4
TLPRC04010	-68	999	82	174	92	0.20	25	0.10	0.54	1.38	2.6	2.0	236.1

Metal equivalent values calculated on basis of metal USD prices as at 21 December 2016 (Zn \$2617/t, Cu \$5488/t, Pb \$2177/t, Au \$1133/oz, Ag \$16/oz) and assuming 80% recovery. As such, the following formulae apply:

<sup>1</sup>ZnEq(%) = Zn(%) + 1.678Cu(%) + 0.665Pb(%) + 1.253Au(g/t) + 0.016Ag(g/t)

<sup>2</sup>AuEq(g/t) = 0.718Zn(%) + 1.507Cu(%) + 0.598Pb(%) + Au(g/t) + 0.011Ag(g/t)

<sup>3</sup>m.ZnEq = intercept width x ZnEq value

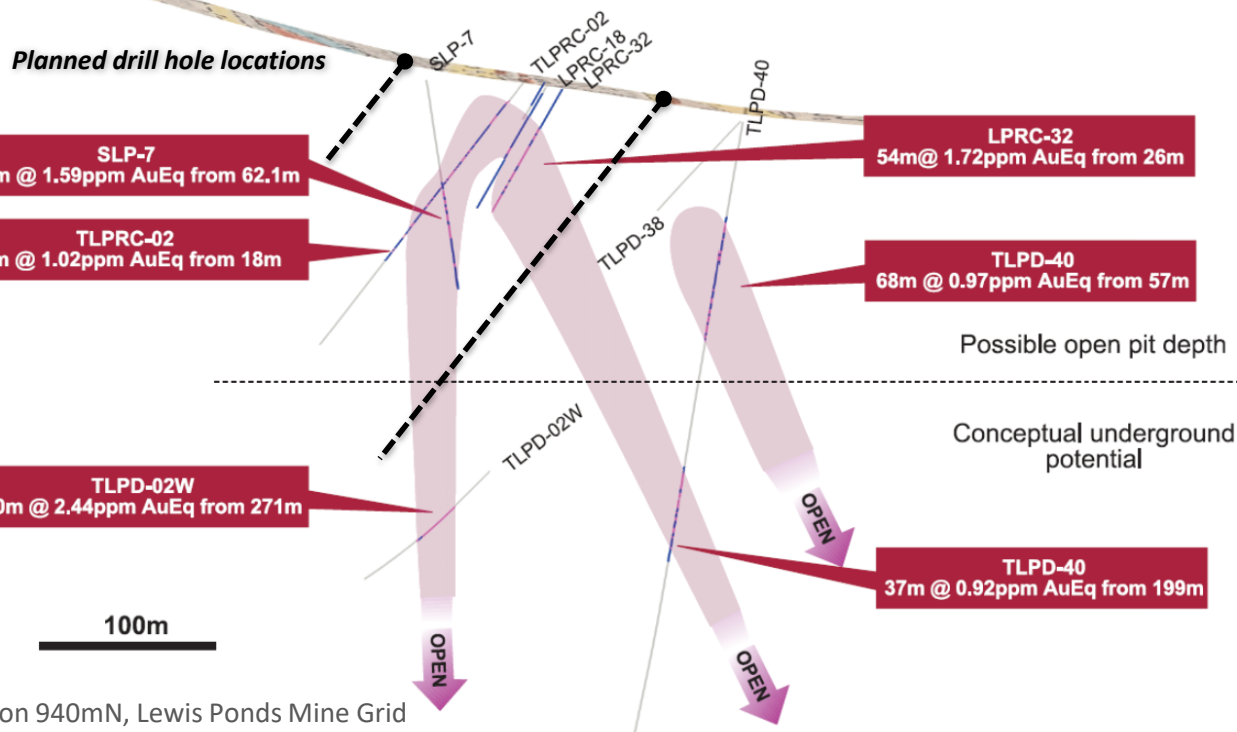




# Lewis Ponds – a bulk tonnage interpretation



To define a **new bulk tonnage open-pit operation**



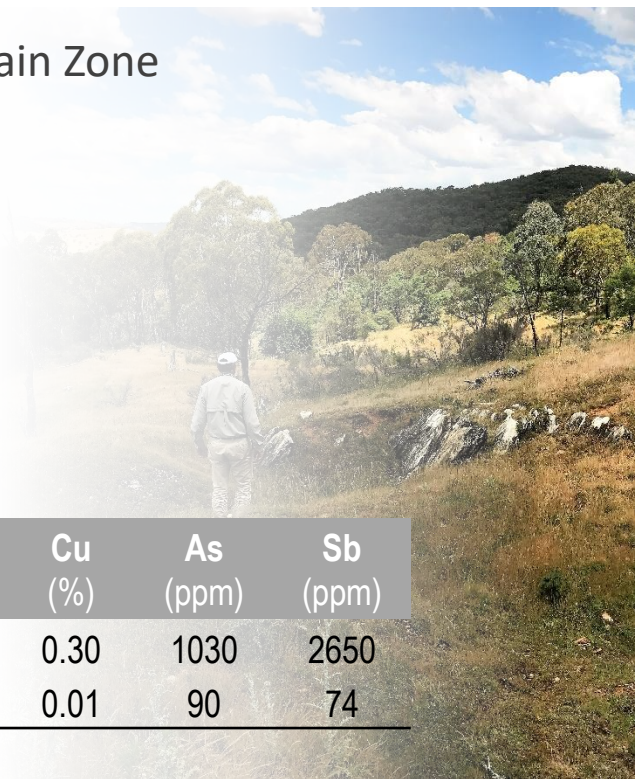
Section 940mN, Lewis Ponds Mine Grid

- Resampling of historic core
- New diamond drilling to optimize mineralisation models, geometallurgy studies, structural & geotech studies
- Test up-dip ore projections (largely untested)
- Metallurgy variability tests
- Updated resource

# Lewis Ponds – gold potential



- Surface mullock sampling around historic Lewis Ponds Main Zone shaft and Tom's Zone main shaft
  - 600m apart along strike
  - distinctive white vuggy quartz-pyrite “sinter”
  - Up to **12.1 g/t gold** and **539 g/t silver**
  - High grade Au-Ag with anomalous As-Sb, epithermal style mineralisation



Location	Sample No	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)	As (ppm)	Sb (ppm)
Lewis Ponds Main Shaft	LP01300	<b>9.9</b>	<b>539</b>	0.05	1.6	0.30	1030	2650
Toms Main Shaft	LP01301	<b>12.1</b>	<b>272</b>	0.09	2.7	0.01	90	74



# Lewis Ponds exploration target



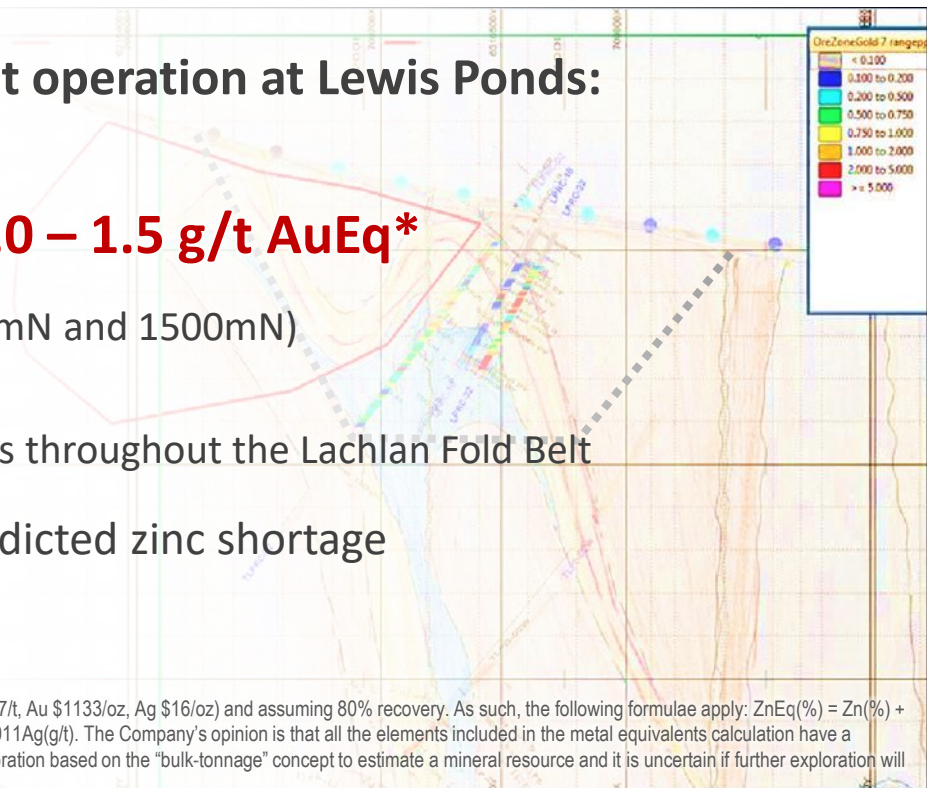
Ardea is evaluating a bulk tonnage open pit operation at Lewis Ponds:

*Exploration target:*

**15 – 25 Mt @ 2.2 – 3.7 % ZnEq\* or 1.0 – 1.5 g/t AuEq\***

- strike length >1.15km (between sections 350mN and 1500mN)
- using geologically-realistic models
- higher grades than similar open pit operations throughout the Lachlan Fold Belt

Ardea is positioned to take advantage of the predicted zinc shortage



\* Metal equivalent values calculated on basis of metal USD prices as at 21 December 2016 (Zn \$2617/t, Cu \$5488/t, Pb \$2177/t, Au \$1133/oz, Ag \$16/oz) and assuming 80% recovery. As such, the following formulae apply: ZnEq(%) = Zn(%) + 1.678Cu(%) + 0.665Pb(%) + 1.253Au(g/t) + 0.016Ag(g/t), AuEq(g/t) = 0.718Zn(%) + 1.507Cu(%) + 0.598Pb(%) + Au(g/t) + 0.011Ag(g/t). The Company's opinion is that all the elements included in the metal equivalents calculation have a reasonable potential to be sold. The potential quantity and grade is conceptual in nature, and there has been insufficient exploration based on the "bulk-tonnage" concept to estimate a mineral resource and it is uncertain if further exploration will result in the estimation of a "bulk tonnage" mineral resource.

# Use of funds



Sources and Uses of Funds	Maximum Subscription (A\$)	Percentage of Funds
Total funds raised from the Offer <sup>1</sup>	6,000,000	100.00%
<b>Allocation of funds (over 2 years)</b>		
Lewis Ponds (feasibility)	1,400,000	23.3%
Mt Zephyr (exploration)	1,400,000	23.3%
KNP nickel-cobalt feasibility (including Bardoc TZ)	1,200,000	20.0%
Other projects (exploration)	800,000	13.3%
Fees of the Offer	400,000	6.7%
Business development, transaction expenses	400,000	6.7%
Overheads	400,000	6.7%
<b>Total</b>	<b>6,000,000</b>	<b>100%</b>



# Indicative IPO Timetable



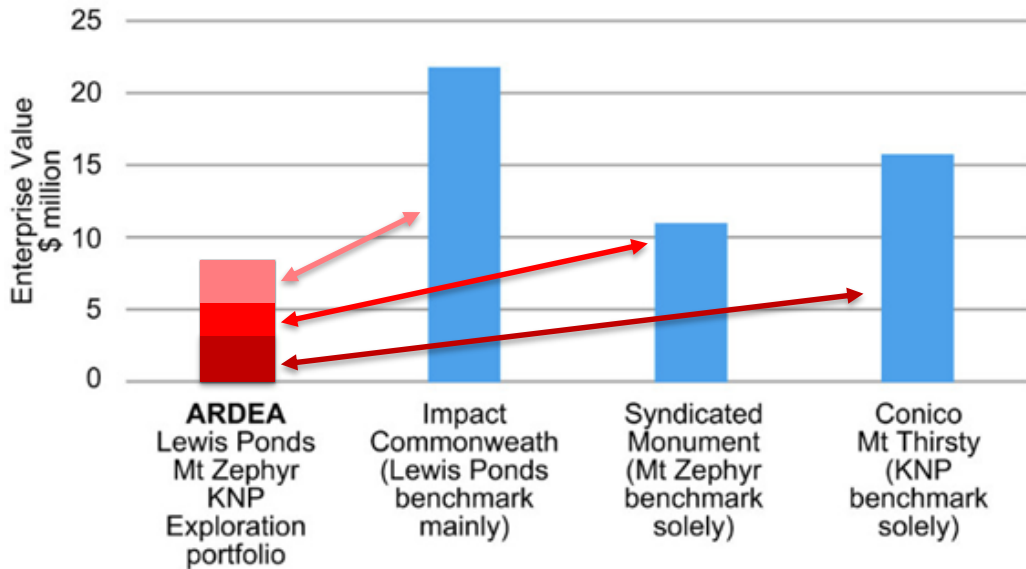
Event	Date
Lodgement of Prospectus with ASIC	9 November 2016
Opening Date of the Offers	16 November 2016
Closing Date of the Public Offers	20 January 2017
Effective Date of Distribution	3 February 2017
Issue of Shares under the Prospectus	4 February 2017
Despatch of holding statements	6 February 2017
Quotation of Shares on ASX	9 February 2017



# Ardea's Enterprise Value benchmarks



- Enterprise Value of Ardea (\$8.3M) is supported by the KNP alone
  - Companies with a fraction of Ardea's resource inventory have EVs of double or more.



# Timetable for development projects



Project	Prospect	Program	Timing (start)*
Lewis Ponds, NSW	Lewis Ponds & Tom's gold-zinc	Phase 1 – 4 diamond holes, ~830m	Mar 2017
		Phase 2 – 7 diamond holes, ~1700m	May 2017
		Metallurgical tests (gravity gold)	May 2017
KNP Cobalt Zone, WA	Black Range, Goongarrie, Kalpini	RC and sonic drilling of cobalt mineralisation	Mar 2017
	Cobalt study (Goongarrie South, Black Range)	Metallurgical variability test work, high-cobalt resource definition	Mar 2017

# Ardea Resources



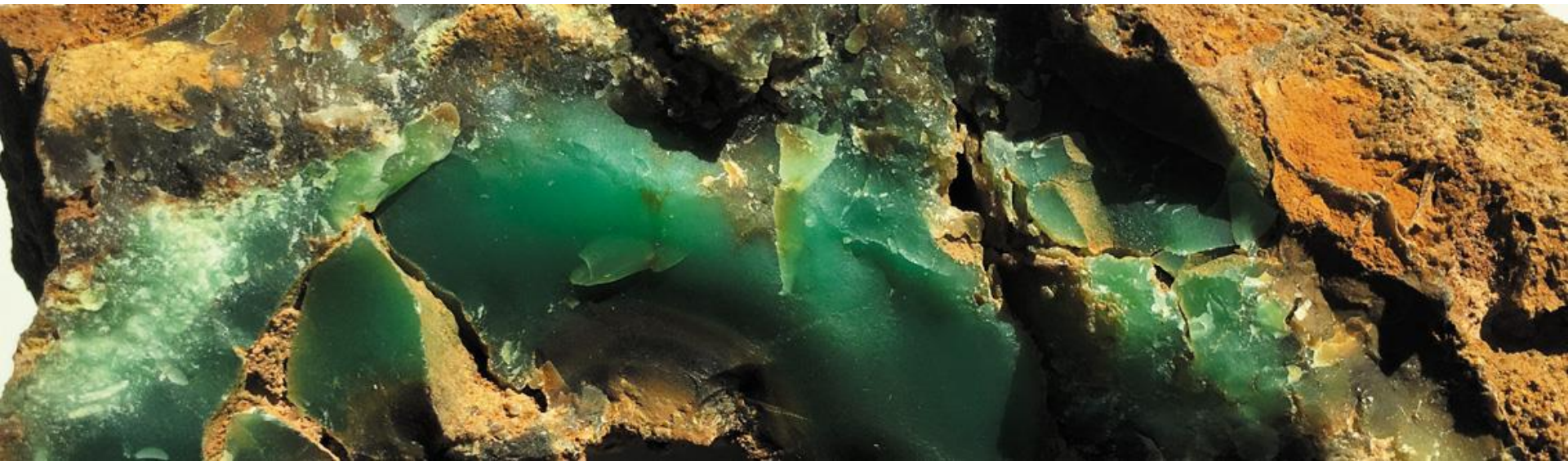
**Ardea will create shareholder value through immediate drilling of key targets**

**Significant near-term news flow post-listing**

- Focus on advanced stage development projects
  - KNP Cobalt Zone (WA)
  - Lewis Ponds zinc and gold (NSW)
- Experienced team assembled for the task to drive value for shareholders







## APPENDICES



## Exploration projects

- **Mount Zephyr, WA**
  - Gale gold
  - Dunn's Line gold
  - Jones nickel sulphide
- Taurus gold, WA





# App 1: Mount Zephyr Project, WA



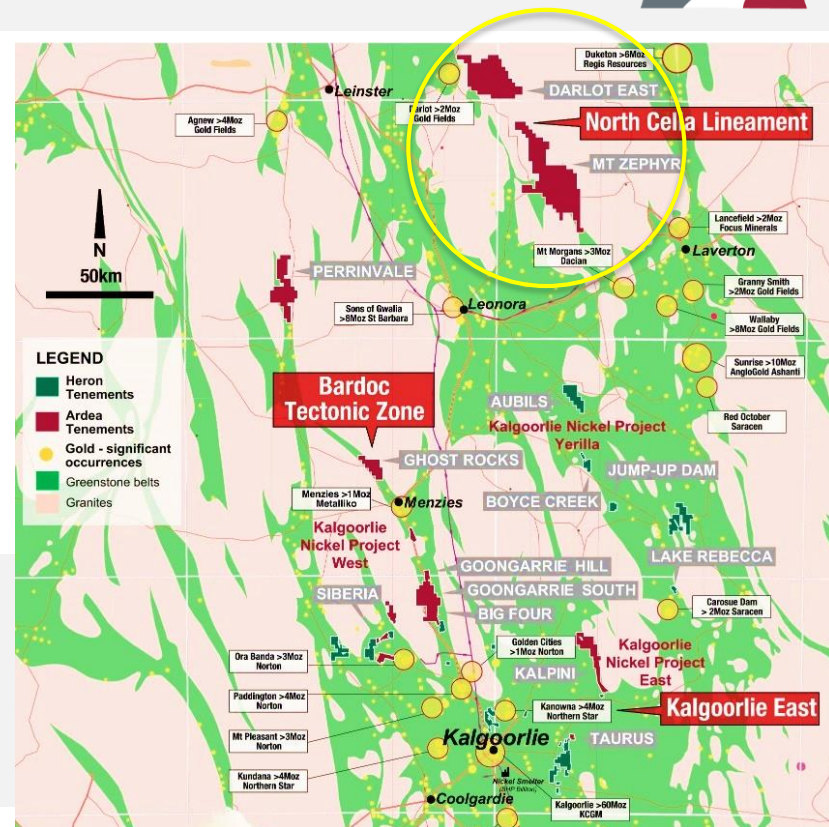
## The Eastern Goldfields of Western Australia: *another of Australia's great mineral provinces*

**Gold** Wallaby, Mt Morgans, Sunrise Dam, Kalgoorlie Super Pit, Sons of Gwalia, Kanowna Belle, Wiluna, Norseman, St Ives, Kundana

**Nickel** Mt Windarra, Mt Keith, Kambalda Murrin Murrin, KNP

### Ardea's Mt Zephyr Project

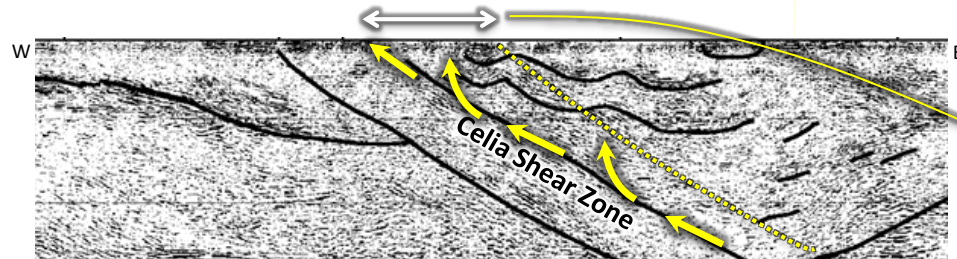
- Contains both **primary gold and nickel** mineralisation
- Encapsulates more than 2/3 of a little explored greenstone belt



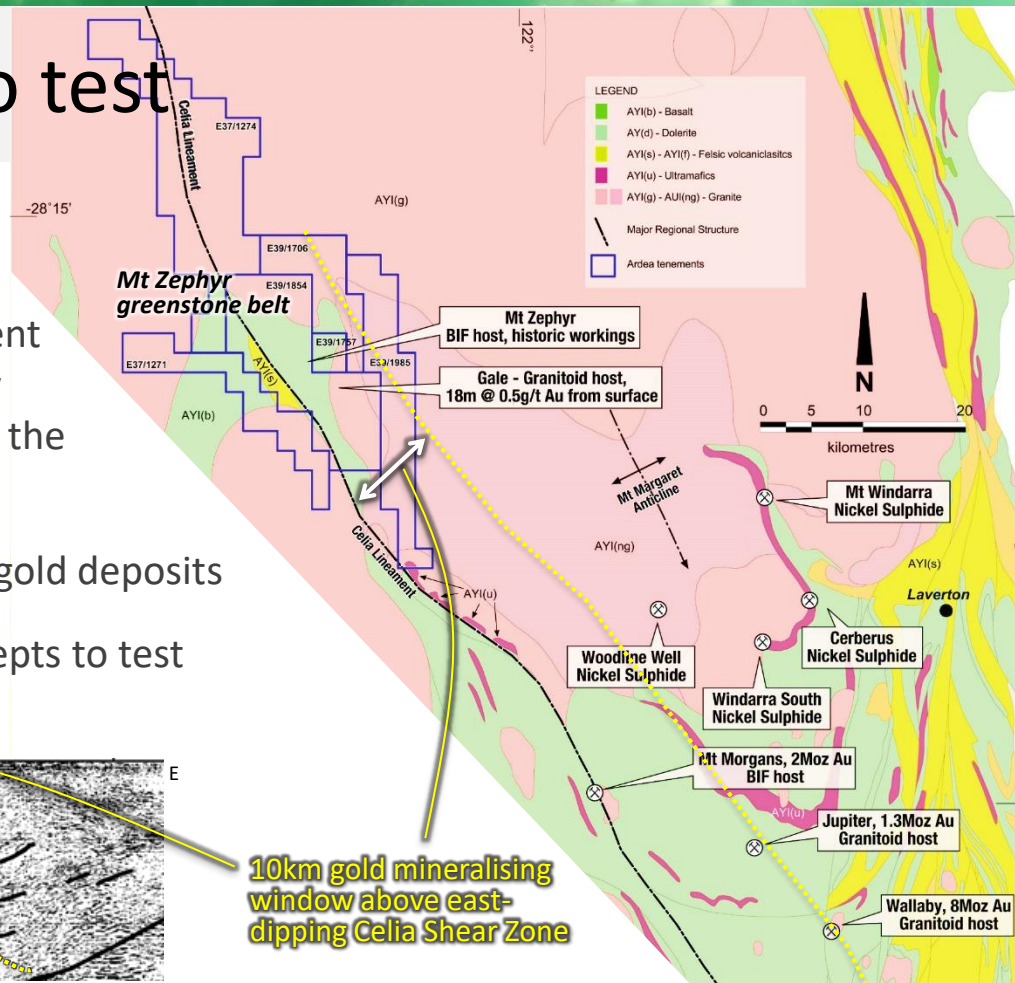


# App 1: New concepts to test

- **Area east of Celia Lineament** is highly prospective at Mt Zephyr:
  - All historic gold workings east of lineament
  - Mt Windarra nickel sulphide stratigraphy
  - Jupiter, Wallaby granitoid-hosted gold to the east of the lineament further south
- Along structure from Mt Morgans, Lake Roe gold deposits
- Ardea will have first application of new concepts to test



**10km gold mineralising window above east-dipping Celia Shear Zone**





# App 1: Dunn's Line, Mt Zephyr



- Historic workings along >4 km strike
  - Gold grading from “a few pennyweights to 3oz per ton”
  - ~5 to 90 g/t gold
- Mt Morgans equivalent BIF-hosted replacement style gold
  - Hill 50-style with mineralised breaks, largely undrilled

Apr. 1900 Report 1. 41

In regard to Dunn's Find the prospector (Mr. John Dunn FRGS) has submitted the following report to Mr. Alex Forrest

Report on the progress carried out on lease known as the Crown of Nations since its discovery in August 1899.

This property consists of three Gulches containing masses of prospecting work has been done on these leases. Up to the end of last year a shaft was carried down to 70 ft. and the hole cut and driven across which proved to be 32 ft. in width. The gold bearing matrix was found to be that of quartzite (metre) Jasper of a very hard and siliceous nature, and carrying gold of high quality, from a few ounces to 15 ozs per ton, as per tests of the ore made in Perth. After these results, the property was proved to be a highly payable ore. It was decided to sink a new shaft to be carried down to a depth of 100 ft. or deeper to prove the value of the lode at depth. The work was started about the commencement of the year and lasted in a manner such as to cut the hole at 120 ft. from the surface.

This is a good shaft 70 ft x 4 ft. and carried down at all possible speed but at 110 ft. heavy water was encountered in sinking, making it impossible to continue deeper, owing to not having the appliances to counter the water. If I could do this I was to drive from the level to discover the lode.



# App 1: Mt Zephyr drill targets



## Mt Zephyr / Dunns Line Gold

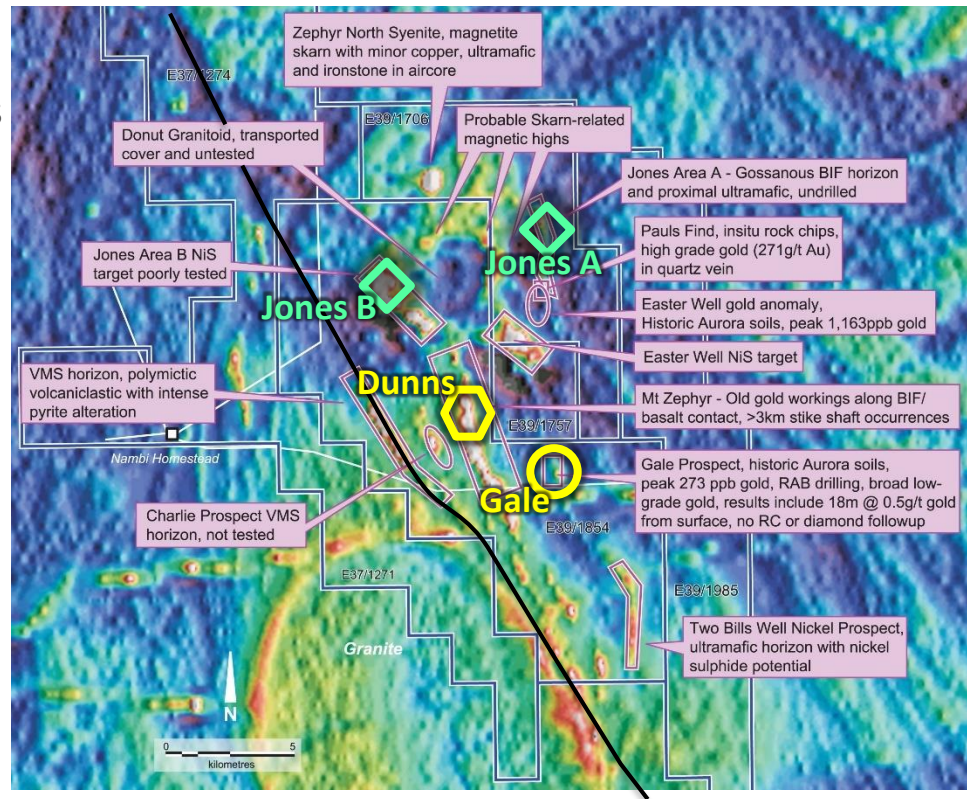
- 4 km strike of mineralised BIF with old workings
- Mt Morgan's analogue, same host rocks
- Mt Magnet Hill 50 "Boogardie Breaks" model

## Gale Gold

- High-grade, extensive, shallow anomaly
- Shallow RAB intercepts
- Jupiter/Wallaby analogue, same host rocks

## Jones Area A & B Nickel Sulphide

- Classic komatiite-hosted nickel features
- Mt Windarra analogue, same host rocks





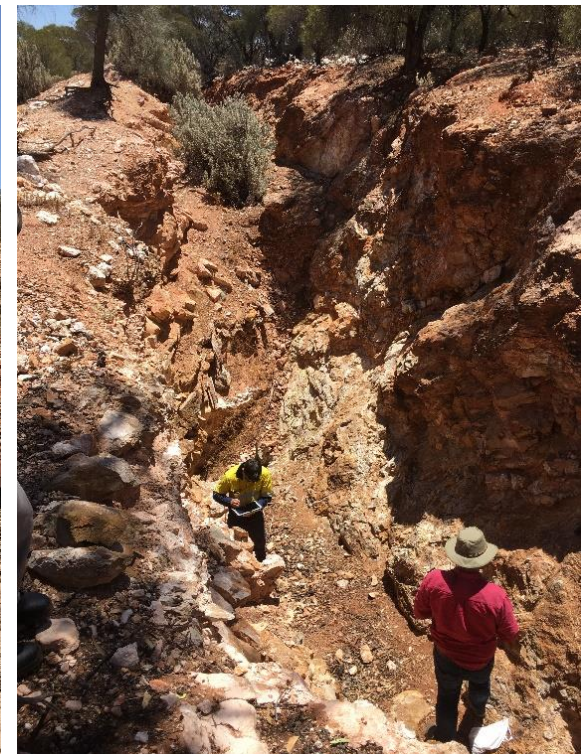
## Exploration projects

- Mount Zephyr, WA
  - Gale gold
  - Dunn's Line gold
  - Jones nickel sulphide
- **Taurus gold, WA**





# App 1: Taurus gold prospect, WA



# App 1: Timetable for exploration



Project	Prospect	Program	Timing (start)*
Mt Zephyr, WA	Gale gold	10-20 shallow RC holes	Upon granting of licences
	Dunns New Find gold	10-20 RC holes, each ~90-150m deep	
	Jones A, B and others Ni sulphide	EM programs	
Kalgoorlie East, WA	Taurus gold	10-15 shallow RC holes	May 2017



# Appendix 2: Resource breakdowns



## KNP nickel-cobalt mineral resource (JORC 2012)

Resource Category	Quantity (Mt)	Co (%)	Ni (%)
Measured	9.6	0.081	1.02
Indicated	244.0	0.052	0.75
KNP Total Measured and Indicated	253.6	0.052	0.76
Inferred	551.7	0.046	0.68
<b>KNP Total Resources</b>	<b>805.3</b>	<b>0.048</b>	<b>0.70</b>

In accordance with the Australian Securities Exchange Limited Listing Rules Appendix 5A:

The information in this report that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled in-house and validated by Steve Jones in 2013. Steve Jones is a member of the Australasian Institute of Mining and Metallurgy. Steve Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steve Jones validated the Snowden Mining Siberia North estimate in 2013. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

# App 2: Resource breakdowns (continued)



## KNP Cobalt Zone nickel-cobalt mineral resource (JORC 2012)

Area	Prospect	Resource category	Cutoff (% Co)	Size (Mt)	Co (%)	Ni %	MgO* %	FeO* %	Al <sub>2</sub> O <sub>3</sub> * %	SiO <sub>2</sub> * %	CaO* %	Mn* %	Cr* %
Goongarrie	Goongarrie South	Measured	0.08	3.4	0.14	1.19	1.6	47	6.3	17	0.16	1.02	1.27
		Indicated	0.08	11.2	0.11	0.92	1.8	43	6.2	23	0.78	0.71	1.20
		Inferred	0.08	1.4	0.11	0.76	1.8	39	5.9	30	0.32	0.74	1.20
	Big Four	Indicated	0.08	4.5	0.11	0.89	1.6	40	5.3	32	0.68	0.76	1.07
		Inferred	0.08	0.2	0.11	0.95	1.6	38	4.2	36	0.25	0.73	1.09
	Scotia Dam	Inferred	0.08	2.9	0.14	0.88	3.2	34	4.4				
	Goongarrie subtotal			23.6	0.12	0.94							
Siberia	Black Range	Inferred	0.50(Ni)	20.1	0.10	0.75	7.9	28	6.7				
Yerilla	Aubils	Inferred	0.08	6.0	0.15	0.90	6.4	33	4.7	31	4.57	0.91	
KNP Cobalt Zone TOTAL				49.7	0.12	0.86							

\*Estimates for MgO, FeO, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, CaO, Mn and Cr are provided for reference only and do not constitute Mineral Resources  
Goongarrie South, Big Four and Scotia Dam are effectively a contiguous mineralized belt

See overleaf (slide 39) for JORC 2012 and NI43-101 compliance statement.



# App 2: Resource breakdowns (continued)



## KNP Cobalt Zone nickel-cobalt mineral resource (JORC 2012) – Compliance Statement

### COMPLIANCE STATEMENT (JORC 2012 and NI43-101)

A competent person's statement for the purposes of Listing Rule 5.22 has previously been announced by the Company for:

1. Kalgoorlie Nickel Project on 21 October 2013 and 31 July 2014, 27 August 2015, 2015 Heron Annual Report;
2. Big Four-Goongarrie on 13 March 2012, 26 June 2012 and 24 July 2012.

The Company confirms that it is not aware of any new information or data that materially affects information included in previous announcements, and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. All projects will be subject to new work programs following the listing of Ardea, notably drilling, metallurgy and JORC Code 2012 resource estimation as applicable.

The information in this report that relates to Exploration Results is based on information originally compiled by previous and current full time employees of Heron Resources Limited. The Exploration Results and data collection processes have been reviewed and verified by Mr Ian Buchhorn who is a Member of the Australasian Institute of Mining and Metallurgy and currently a full-time employee of Heron Resources Limited. Mr Buchhorn has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

The information in this report that relates to Mineral Resources for the Goongarrie South, Big Four and Aubils Prospects is based on information originally compiled by Mr James Ridley in 2008 and 2009 when employed as a Senior Resource Geologist with Heron Resources Limited. The information in this report that relates to Mineral Resources for the Scotia and Black Range Prospects is based on information originally compiled by Snowden Mining Industry Consultants on behalf of Heron in 2004. The Mineral Resource estimates for all five prospect areas have been reviewed and validated by James Ridley who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Ridley is now a full-time employee of Ridley Mineral Resource Consulting Pty Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ridley consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The exploration and industry benchmarking summaries are based on information reviewed by Mr Ian Buchhorn, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Buchhorn is a full-time employee of Heron Resources Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn has reviewed this press release and consents to the inclusion in this report of the information in the form and context in which it appears.



# App 2: Resource breakdowns (continued)



## Lewis Ponds mineral resource (JORC 2012)

Resource Category	Quantity (Mt)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)
<b>Indicated</b>						
Main Zone	5.82	2.1	0.1	1.1	1.5	59
Tom's Zone	0.54	5.5	0.3	3.8	1.7	172
Total Indicated	6.35	2.4	0.2	1.4	1.5	68
<b>Inferred</b>						
Main Zone	0.17	1.7	0.1	0.8	0.9	47
Tom's Zone	0.10	5.0	0.2	3.6	1.4	174
Total Inferred	0.27	3.0	0.1	1.9	1.1	96
<b>Total Mineral Resource</b>	<b>6.62</b>	<b>2.4</b>	<b>0.2</b>	<b>1.4</b>	<b>1.5</b>	<b>69</b>

In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A:

The information in this report that relates to Mineral Resources for the Lewis Ponds Project has been reviewed, and verified by Mr Robert Cotton who is a full time employee of Mineral Appraisals Pty Ltd. Mr Cotton who is a Fellow of the AusIMM, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Cotton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code: Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cotton consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



# Appendix 3: Key Risks



An investment in the Company is not risk free. Before deciding to trade in the Shares, Shareholders and interested investors should read the entire Prospectus, consider at least the following risk factors in light of their personal circumstances and investment objectives (including financial and taxation issues) and seek professional advice from their accountant, stockbroker, lawyer or other professional adviser. The operating and financial performance and position of the Group, the value of Shares and the amount and timing of any dividends that the Company may pay will be influenced by a range of factors. Many of these factors will remain beyond the control of the Group and the Directors. Accordingly, these factors may have a material effect on the Group's performance and profitability which may cause the market price of Shares to rise or fall over any given period. This section identifies the areas the Directors regard as major risks associated with an investment in the Company. This list is not intended to be an exhaustive list of the risk factors to which the Group is exposed.

## Specific Risks

### Non-grant or non-renewal of title

- A number of Ardea's Tenements are subject to application or renewal, the details of which are set out in the Solicitors' Report. In particular, the Mt Zephyr project consists of 8 tenements, of which 6 are subject to grant. Of these, 3 are subject to objection, and require an access agreement with the holders of prior infrastructure tenements.
- There is a risk that Ardea may not acquire or retain title to these Tenements.
- Under both New South Wales and Western Australian law, exploration tenements are valid for set periods of time and renewal is subject to the approval of the respective State Minister. There is no guarantee that Ardea will be successful in the renewal of exploration tenements as they reach their expiry date, though statutory mechanisms exist to extend title.
- If in future Tenements are not extended, Ardea may suffer damage through loss of the opportunity to discover and/or develop any mineral resources on these Tenements.

### Management

- Ardea's management presently consists of two non-executive Directors and a Managing Director. Prior to appointing the full-time management team, the Managing Director will manage Ardea's exploration programs.

# App 3: Key Risks (continued)



<b>Limited exploration</b>	<ul style="list-style-type: none"><li>• Aside from Lewis Ponds and the KNP, Ardea's projects have been subjected to only limited drill testing. Whilst gold and/or nickel mineralisation as the case may be has been located in multiple previous drill intersections, there is a risk that the mineralisation in adjacent drill holes is not continuous between drill holes. There is also a risk that the presently completed drill holes may not be representative of the overall mineralisation present. Further drill tests are required to determine if mineralisation extends further beyond the geometry as defined in current drill patterns. There is no guarantee that if exploration extends the current resources that it will be capable of sustaining commercial development.</li></ul>
<b>Resource estimates</b>	<ul style="list-style-type: none"><li>• Resource estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates, which were valid when made, may change significantly when new information becomes available. In addition, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. Should Ardea encounter mineralisation different from those predicted by past sampling and drilling, resource estimates may have to be adjusted and mining plans may have to be altered in a way which could have either a positive or negative effect on Ardea's operations.</li></ul>
<b>Exploration and Operating Risks</b>	<ul style="list-style-type: none"><li>• The current and future operations of Ardea, including exploration, appraisal, development and possible production activities may be affected by a range of exploration and operating factors, including:<ul style="list-style-type: none"><li>(i) geological conditions;</li><li>(ii) limitations on activities due to seasonal or adverse weather patterns;</li><li>(iii) alterations to program and budgets;</li><li>(iv) unanticipated operational and technical difficulties encountered in geophysical surveys, drilling, metallurgical laboratory work and production activities;</li><li>(v) mechanical failure of operating plant and equipment, industrial and environmental accidents, acts of terrorism or political or civil unrest and other force majeure events;</li><li>(vi) industrial action, disputation or disruptions;</li></ul></li></ul>





# App 3: Key Risks (continued)



## Exploration and Operating Risks (cont.)

(vii) unavailability of transport or drilling equipment to allow access and geological and geophysical investigations;  
(viii) unavailability of suitable laboratory facilities to complete metallurgical testwork investigations;  
(ix) failure of metallurgical testing to determine a commercially viable product;  
(x) shortages or unavailability of manpower or appropriately skilled manpower;  
(xi) unexpected shortages or increases in the costs of consumables, spare parts, plant and equipment;  
(xii) prevention or restriction of access by reason of inability to obtain consents or approvals; and  
(xiii) Certain of Ardea's tenements are subject to agreements with third parties which limit the commodities that Ardea may exploit on these tenements; with third parties having certain rights. Whilst Ardea does not consider these limitations to be unduly onerous, there is a risk that these restrictions may not be in Ardea's best interests or that the third parties may, in asserting their rights over Ardea's tenements, not act in Ardea's best interests.

## Commodity Prices

- Ardea may derive some of its future revenue from the sale of commodity products, or from the sale of either intermediate or fully-separated products. Consequently, any earnings will be closely related to the price of these commodities together with the terms of any off-take agreement(s) under which Ardea's products may be sold.
- Commodity prices fluctuate and are affected by numerous factors beyond the control of Ardea. These factors include worldwide and regional supply and demand for the specific commodity, prevailing commodity trading terms, general world economic conditions and the outlook for interest rates, inflation and other economic factors on both a regional and global basis. These factors may have a positive or negative effect on Ardea's exploration, project development and production plans and activities, together with the ability to fund those plans and activities. Furthermore, some products are not traded upon terminal, liquid, commodity exchanges. There is a risk therefore that Ardea may not be able to secure an attractive price for its commodity products.

# App 3: Key Risks (continued)



<b>Environment</b>	<ul style="list-style-type: none"><li>• The projects are subject to Western Australian, New South Wales and Federal laws and regulations regarding environmental matters and the discharge of hazardous wastes and materials. As with all mining projects, the projects would be expected to have a variety of environmental impacts should development proceed. In particular, the Donnelly River project application covers areas of private land and state forests. There is a risk that owners' rights and environmental requirements may restrict or prevent Ardea from carrying out its exploration activities.</li><li>• Ardea intends to conduct its activities in an environmentally responsible manner and in accordance with applicable laws and industry standards. Areas disturbed by Ardea's activities are rehabilitated as required by applicable laws.</li></ul>
<b>Mining Tax and Royalties</b>	<ul style="list-style-type: none"><li>• There is a risk that the Commonwealth, New South Wales or Western Australian Governments may seek to introduce further, or increase existing, taxes and royalties.</li></ul>
<b>Encumbrances on Title</b>	<ul style="list-style-type: none"><li>• Ardea may at a future date be required to encumber part or all of its tenure to expedite future commercial transactions.</li></ul>
<b>Funding</b>	<ul style="list-style-type: none"><li>• Ardea may derive some of its future revenue from the sale of commodity products, or from the sale of either intermediate or fully-separated products. Consequently, any earnings will be closely related to the price of these commodities together with the terms of any off-take agreement(s) under which Ardea's products may be sold.</li><li>• Commodity prices fluctuate and are affected by numerous factors beyond the control of Ardea. These factors include worldwide and regional supply and demand for the specific commodity, prevailing commodity trading terms, general world economic conditions and the outlook for interest rates, inflation and other economic factors on both a regional and global basis. These factors may have a positive or negative effect on Ardea's exploration, project development and production plans and activities, together with the ability to fund those plans and activities. Furthermore, some products are not traded upon terminal, liquid, commodity exchanges. There is a risk therefore that Ardea may not be able to secure an attractive price for its commodity products.</li></ul>
<b>Unforeseen Risks</b>	<ul style="list-style-type: none"><li>• There may be other risks which the Directors are unaware of at the time of issuing this Prospectus which may impact on Ardea and its operations, and on the valuation and performance of Ardea's Shares.</li></ul>

# App 3: Key Risks (continued)



## Other Risks

### General Economic Risks and Business Climate Risks

- Share market conditions may affect the listed securities regardless of operating performance. Share market conditions are affected by many factors such as:
  - (a) general economic outlook;
  - (b) movements in or outlook on interest rates and inflation rates;
  - (c) currency fluctuations;
  - (d) commodity prices;
  - (e) changes in investor sentiment towards particular market sectors; and
  - (f) the demand and supply for capital.
- Commodity prices are influenced by physical and investment demand for those commodities. Fluctuations in commodity prices may influence individual projects in which Ardea may have an interest.

### Native Title Risks

- The Native Title Act 1993 (Cth) recognises and protects the rights and interests in Australia of Aboriginal and Torres Strait Islander people in land and waters, according to their traditional laws and customs. There is significant uncertainty associated with Native Title in Australia and this may impact on Ardea's operations and future plans.
- Native Title can be extinguished by valid grants of land or waters to people other than the Native Title holders or by valid use of land or waters. It can also be extinguished if the indigenous group has lost their connection with the relevant land or waters. Native Title is not extinguished by the grant of mining leases, as they are not considered to be grants of exclusive possession. A valid mining lease prevails over Native Title to the extent of any inconsistency for the duration of the title.
- For tenements to be validly granted (or renewed) after 23 December 1996 the special 'right to negotiate' regime established by the Native Title Act must be followed.
- It is important to note that the existence of a Native Title claim is not an indication that Native Title in fact exists to the land covered by the claim, as this is a matter ultimately determined by the Federal Court.
- Ardea must also comply with Aboriginal heritage legislation requirements which require heritage survey work to be undertaken ahead of the commencement of exploration and mining operations.



# App 3: Key Risks (continued)



## Exploration, Development, Mining and Processing Risks

- The business of mineral exploration, project development and mining by its nature contains elements of significant risk. Ultimate and continuing success of these activities is dependent on many factors such as:
  - (a) the discovery and/or acquisition of economically recoverable ore reserves;
  - (b) successful conclusions to feasibility studies;
  - (c) access to adequate capital for project development;
  - (d) design and construction of efficient mining and processing facilities within capital expenditure budgets;
  - (e) securing and maintaining title to tenements and compliance with the terms of those tenements;
  - (f) obtaining consents and approvals necessary for the conduct of exploration and mining; and
  - (g) access to competent operational management and prudent financial administration, including the availability and reliability of appropriately skilled and experienced employees, contractors and consultants.
- Adverse weather conditions over a prolonged period can adversely affect exploration and mining operations and the timing of revenues.
- Whether or not income will result from projects undergoing exploration and development programs depends on the successful establishment of mining operations. Factors including costs, integrity of mineralisation, consistency and reliability of ore grades and commodity prices affect successful project development and mining operations.
- Mining is an industry which has become subject to increasing legislative regulation including but not limited to environmental responsibility and liability. The potential for liability is an ever present risk. The use and disposal of chemicals in the mining industry is under constant legislative scrutiny and regulation. The introduction of new laws and regulations or changes to underlying policy may adversely impact on the operations of Ardea.





# Ardea Resources Limited

## Thank you

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