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QUARTERLY OPERATIONS REPORT

28 April 2017

Ardea admitted to ASX on 9 February 2017

- To date best performed IPO of 2017, issue price \$0.20, trading range \$0.17-0.92, current market capitalization \$45.5 million
- Free 1 for 3 Loyalty Options to be issued to all shareholders on the Record Date of 9 May 2017 – a Prospectus containing the offer of the Loyalty Options will be dispatched shortly after the Record Date

KNP Cobalt Zone Feasibility Study

- Resource estimation is currently underway for Goongarrie South and Big 4 using a 0.1% cobalt cut-off grade, very good continuity of high grade cobalt mineralisation, resource uplift expected
- Initial 56 hole 3,467 m RC drilling completed at Kalpini and Black Range, results pending

Lewis Ponds Feasibility Study

- Broad mineralised "Polymetallic Stringer" zones in drilling:
 - ALD0001 51.37 m at 2.45 % Zn equiv¹ or 1.48 g/t Au equiv² (1.28 % Zn, 0.18 g/t Au, 22.0 g/t Ag, 0.51 % Pb, and 0.11 % Cu) from 41.60 m
 - ALD0001 20.91 m at 2.74 % Zn equiv or 1.63 g/t Au equiv (1.39 % Zn, 0.17 g/t Au, 32.7 g/t Ag, 0.56 % Pb, and 0.10 % Cu) from 110.76 m
 - ALD0002 16.40 m at 8.53 % Zn equiv or 5.07 g/t Au equiv (4.73 % Zn, 0.86 g/t Au, 75.9 g/t Ag, 1.44 % Pb, and 0.19 % Cu) from 43.60 m
- Such intercepts are typical of the major deposits of the region, indicating the potential for a bulk-tonnage mining operation.

¹ Zn equivalents defined using the following values (11/4/2017 US\$ price, expected recovery proportion): Zn (2658/t, 100%), Au (1258/oz, 90%), Ag (17.92, 80%), Pb (2259/t, 80%), Cu (5730.5/t, 80%). Zn equiv. = Zn(%) + 1.369Au(g/t) + 0.017Ag(g/t) + 0.680Pb(%) + 1.725Cu(%). These values used for zinc equivalent calculations throughout this announcement (except for the previously announced Exploration Target). Zinc equivalents are used because zinc contributes most to the metal equivalent calculations.

² Au equivalents defined using the following values (11/4/2017 US\$ price, recovery): Zn (\$2658/t, 80%), Au (\$1258/oz, 100%), Ag (\$17.92, 80%), Pb (\$2259/t, 80%), Cu (\$5730.5/t, 80%). Au equiv. = 0.526Zn(%) + Au(g/t) + 0.011Ag(g/t) + 0.447Pb(%) + 1.133Cu(%). These values used for gold equivalent calculations throughout this announcement (except for the previously announced Exploration Target). Gold equivalents are used because gold is a significant proportion of the deposit by value, and they allow for direct comparison to major deposits of the region.



Ardea Resources' listing on the ASX

Ardea Resources Limited (ASX:ARL, "Ardea" or "the Company") commenced trading on the Australian Securities Exchange at 10am WST on 9 February 2017.

To date, ARL has been widely reported as the best performed IPO of 2017. With an issue price 0.20, the stock has traded in a range of 0.17 - 0.92 (Figure 1). Between listing and 31 March 2017, Ardea returned 160% on its list price. At the time of writing, ARL's share price was 0.68, for a market capitalisation of 45.5 million.

As part of the IPO, free Loyalty Options will be issued to Ardea shareholders. Those holding Ardea shares on the Record Date of 9 May 2017 will receive one Loyalty Option for every three shares held. The strike price for the options will be calculated on the basis of ARL's 5 day VWAP plus 25%. Further information will be published closer to the date.



Figure 1 – Ardea's share price performance, 9 February (listing) to 24 April 2017 (daily SP values plotted).

Company rationale

Ardea's aim is to advance its key development projects, the KNP Cobalt Zone in WA and the Lewis Ponds zinc-gold-silver deposit in NSW, towards production for the benefit of shareholders. In addition, it will leverage its broad, high-quality exploration portfolio to further benefit shareholders. This may mean exploration, development, or spinning out of projects as appropriate to the project's prospectivity and the Company's strategic requirements.

We seek to become a significant producer of cobalt and nickel sulphate from the KNP Cobalt Project, and zinc, gold and silver in concentrates from Lewis Ponds, for global commodity markets.

The KNP Cobalt Zone

There is a renewed global interest in cobalt owing to its prominent use in lithium ion batteries, particularly in their role in the electrification of the automobile industry, and associated technologies supporting renewable energy storage. Cobalt prices have risen substantially over the last year to \$US55,500 per tonne (London Metal Exchange, 24 April 2017). Cobalt hosted within nickel laterites around Kalgoorlie in Western Australia constitutes Australia's largest cobalt resource, and one of Australia's largest nickel resources.



The KNP

Ardea's Kalgoorlie Nickel Project (KNP – Figure 2) is a globally significant lateritic nickel resource that contains significant concentrations of cobalt. The global resource for the KNP is **805.3 Mt at 0.048 % cobalt and 0.70 % nickel** (Table 1) which equates to over **386,000 tonnes of contained cobalt metal**.

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
KNP Total Resources	805.3	0.048	0.70

Table 1 – KNP Resources breakdown



Figure 2 – The KNP and KNP Cobalt Zone, near Kalgoorlie WA



During the 2000s, the KNP attracted investment from majors such as Vale Inco and BHP. Over A\$50 million was spent on its evaluation, with over 9,000 holes drilled to densities of up to 20 x 20 metres in order to define resources and reserves. Development of the project faltered with the collapse of the nickel price and hence appetite for investment during the Global Financial Crisis of 2008. Since then, refinement of metallurgical processing procedures by Heron has significantly reduced forecast costs. With Ardea acquiring the project during the quarter and firmly focusing on the higher-grade cobalt-rich portions of the deposit, a new pre-feasibility study is underway to optimise both cobalt and nickel recoveries in a new mining and processing operation.

Recent recalculation of these resources with a focus on cobalt rather than nickel concentrations confirms that the KNP is **one of the world's largest cobalt resources**, and certainly the largest in the developed world including Australia.

The KNP Cobalt Zone

A cobalt-rich subset of the KNP, known as the KNP Cobalt Zone, contains a significant cobalt and nickel resource in its own right. The KNP Cobalt Zone contains **49.7 Mt at 0.12 % cobalt and 0.86 % nickel** (Table 2) for a total **contained cobalt metal of just under 60,000 tonnes**. Our aim is to substantially increase upon this initial resource through drill-out of historic cobalt drill intercepts, and through reinterpretation of the resource based on Ardea's regolith and geo-metallurgical models using a 0.1% cobalt cut-off grade rather than the current 0.5 % nickel cut-off. It is clear from initial wireframing that there will be a significant uplift of the Table 2 resource through re-interpretation using the new cobalt-specific models.

Once the bulk grade of the deposit is defined from the current resource estimation, Ardea will focus on the application of advanced metallurgical processes to optimise cobalt extraction and meet increasing cobalt demand from the vehicle electrification and energy storage sectors.

Area	Prospect	Resource category	Cutoff (% Co)	Size (Mt)	Cobalt (%)	Nickel (%)
Goongarrie	Goongarrie	Measured	0.08	3.4	0.14	1.19
	South	Indicated	0.08	11.2	0.11	0.92
		Inferred	0.08	1.4	0.11	0.76
	Big Four	Indicated	0.08	4.5	0.11	0.89
		Inferred	0.08	0.2	0.11	0.95
	Scotia	Inferred	0.08	2.9	0.14	0.88
	Goongarrie su	btotal		23.6	0.12	0.94
Siberia	Black Range	Inferred	0.50(Ni)	20.1	0.10	0.75
Yerilla	Aubils	Inferred	0.08	6.0	0.15	0.90
KNP Cobalt Zo	one total resour	49.7	0.12	0.86		

Table 2 – KNP Cobalt Zone, Resource Statement from RMRC consulting group
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KNP Cobalt Zone Pre-Feasibility Study (PFS)

The focus of Ardea's evaluation during 2017 is to optimise a metallurgical flow-sheet for the KNP Cobalt Zone, leveraging Vale Inco's nickel PFS from 2009 and Heron's KNP scoping study from July 2014 (see Ardea's website for reference announcements from the Heron Resources archives).

The Vale Inco PFS was focused on High Pressure Acid Leach (HPAL) nickel production based on their flow-sheet from the Goro operation in New Caledonia.

Heron utilised a lower capital cost atmospheric leach, with focus on reagent re-use (Carbon Friendly Nickel Production). This "lower capex" concept is the starting basis of current Ardea studies.

The current scoping model is to target up to 2 Mtpa or ore production aiming for an initial cobalt production grade 0.15% cobalt and around 1% nickel.

The budget for the current work program is \$1 million as per the 9 November 2016 prospectus, to be completed by January 2018.

During the quarter, Mr Kevin Reynolds was appointed the study manager for the PFS. Mr Reynolds is a metallurgist with 32 years' experience that includes operations, engineering and project management. In the past, he has worked extensively on the KNP and many other related projects.

Simulus Engineering, an engineering firm with extensive experience in nickel-cobalt laterites and a number of patented processes applicable to the KNP Cobalt Zone, was selected to undertake the metallurgical test work and piloting.

PFS work completed during the quarter includes:

- Completion of drilling at Kalpini.
- Commencement of drilling at Black Range.
- Review of extensive historic databases and previous work programs.
- Finalisation of the PFS work program.
- Commencement of detailed remodelling of the cobalt resource at Goongarrie South and Big Four as the initial program of a complete KNP resource upgrade.
- Conceptual mine planning, including provisional process plant location at Goongarrie South.

The KNP Cobalt Zone timetable is as follows:

- Core drilling of "run-of-mine" high cobalt zones for fresh metallurgical testing samples during April-May 2017.
- New KNP resource estimate based on cobalt cut-off grades by July 2017.
- May to September 2017, bench-scale metallurgical test-work and process technology evaluations for the flowsheet, piloting as appropriate.
- September 2017 to January 2018, PFS engineering, cost estimation and reporting, using previous Vale Inco and Heron data where appropriate. Ardea's focus will be on the process flow-sheet and project financials.



Kalpini

Lateritic cobalt-nickel mineralisation at Kalpini is not presently part of the KNP Cobalt Zone. The existing resource at Kalpini is **75.0 Mt at 0.044 % cobalt and 0.73 % nickel** (see *Ardea Resources prospectus* p.86). However, recent geo-metallurgical review by Ardea with field confirmation has defined significant cobalt-bearing intercepts in historic drilling at Kalpini. As with all cobalt-nickel mineralisation throughout the KNP Cobalt Zone, mineralisation at Kalpini occurs in sub-horizontal bodies usually within 20-40 m of surface. This style of mineralisation is very soft and, given its predictable regolith geometry, is very easy to selectively mine for high grade feed to a "central" Goongarrie South processing facility.

The Kalpini program is to test whether selected high grade resources within the KNP can be upgraded to become part of the KNP Cobalt Zone. This will be a pilot study for a series of other similarly identified cobalt-rich occurrences that are not yet part of the KNP Cobalt Zone.

A drill program at Kalpini comprising reverse circulation (RC) holes commenced on 21 March but was delayed for several days by unseasonal heavy rains. The program was completed on 5 April with a total of 29 RC holes drilled for 1,471 m. Assay results are pending.

Black Range

Extensive lateritic cobalt-nickel mineralisation at Black Range is part of the initial resource published 6 January 2017 for the KNP Cobalt Zone. For Black Range itself, the defined JORC 2012 Inferred Mineral Resource is **20.1 Mt at 0.10 % cobalt and 0.75 % nickel** (see *Ardea Resources Second Supplementary Prospectus*, 6 January 2017). Historic drilling in the area also highlights lateritic platinum, palladium, and chromite occurrences that require assessment.

The aim of the drill program was to provide a sample of the style and continuity of mineralisation at Black Range that will facilitate upgrading of the resource.

Drilling commenced at Black Range on 6 April and was completed by 14 April. Three lines were completed for a total of 1,996 m in 27 RC drill holes. Assay results are pending.

Goongarrie South Metallurgical core sampling

Drill core will be sourced from high-grade areas of cobalt and nickel mineralisation at Goongarrie South for metallurgical testing during the PFS. It is likely that core samples will also be sourced from the Highway and Black Range deposits.

The Black Range ore in particular requires evaluation, in view of its PGM and chromite credits.

Drilling for metallurgical core samples commenced on 27 April 2017 at Goongarrie South.

KNP chrysoprase opportunities are being assessed

Ardea has recognised increasing demand for one of Australia's signature gemstones, chrysoprase. Commonly referred to as 'Australian jade', chrysoprase is a rich green coloured semi-precious gemstone that, like opal, is located within cracks and crevices in weathered near-surface rocks. The chrysoprase has developed as part of the nickel laterite regolith associated in particular with siliceous magnesitic laterite, so is genetically and spatially related to the nickel and cobalt mineralisation. Chrysoprase is highly sought after and valued in east Asia, notably China.



Profitable chrysoprase mining has been undertaken by small-scale tribute miners on the KNP mining licences for many years. Ardea is presently assessing the viability of an industrial-scale mining operation to meet the surging east-Asian demand, and is seeking a suitable partner with knowledge of the downstream jewellery industry with which to further pursue these opportunities. Figure 3 – As-mined chrysoprase from the KNP.



Lewis Ponds zinc-gold-silver

The historic mining centre of Lewis Ponds, near Orange in NSW, has been the focus of high-grade gold, silver, and zinc-lead-silver mining at various times over its long history. Ardea is the first operator, however, to examine the deposit as a bulk tonnage open-pittable system. Such reconsideration is expected to define broad mineralised intercepts and allow appraisal of the deposit in a manner akin to that used for the development of the successful mines of the region (e.g. Cadia and Northparkes, with McPhillamys currently undergoing feasibility).



Figure 4 – Map of Ardea's projects in the Lachlan Fold Belt of NSW. Lewis Ponds is, like many of the region's major deposits, located in the highly prospective Lachlan Transverse Zone.



Lewis Ponds is a zinc-gold-silver-lead(-copper) deposit in the Lachlan Fold Belt of NSW (Figure 4). The belt is host to numerous major bulk tonnage gold and base metal mines. Of particular note is that the major deposits at Northparkes and Cadia are hosted within or adjacent to the Lachlan Transverse Zone (LTZ), a west-northwest trending structure that is thought to represent a fundamental crustal weakness that corresponds to major mineralisation. Several of Ardea's projects, notably Lewis Ponds, are located within the LTZ at its intersection with the Godolphin Fault.

Lewis Ponds Pre-Feasibility Study

Study manager Kevin Reynolds was appointed for Ardea's Lewis Ponds Pre-feasibility Study and a metallurgical laboratory retained. The scope of the study has been defined in detail, with several development opportunities, all contingent upon metallurgical results.

Once assay results for all four core holes drilled to date are available, the core will be composited into "run-of-mine" grade bulk samples for metallurgical test-work.

Bulk tonnage open pit mining model

Exploration at Lewis Ponds has historically been based on a narrow high grade underground mining model, and has generated a mineral resource totalling **6.6 Mt at 1.5 g/t gold and 2.4 % zinc**³ estimated at a 3% ZnEq cut-off grade (refer Prospectus Table 3.2 for full description of resource status).

Our recent reassessment shows that Lewis Ponds mineralisation is dominantly a 20-50 metre wide stringer (shear vein) system enclosing 2-10 metre thick bands of massive Zn-Au-Ag-Pb mineralisation. The implications for Lewis Ponds are:

- Drill intercepts are required to be bulked into broad lower grade intervals using a 1.5% zinc equivalent cut-off (approximately 1.0g/t gold equivalent, similar mining grade to nearby McPhillamys and other deposits).
- Open-pit bulk mining is more likely to be feasible, given the favourable Lewis Ponds strip ratios and consistent shallow high-grade mineralised occurrences.

From reviewing available drill core at site and archived core photographs, it is clear that extensive zones of chloritic stringer mineralisation and sericite-pyrite alteration (potential gold mineralised host) have not been sampled. There is thus a requirement to cut and sample this core (assuming the individual core is still available), with the potential to establish both "McPhillamys-style" gold mineralised systems and polymetallic stringer systems.

Resource Category	Quantity(Mt)	Zn(%)	Cu(%)	Pb(%)	Au(g/t)	Ag(g/t)
Indicated	-					
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
Inferred						
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
Total Mineral Resource	6.62	2.4	0.2	1.4	1.5	69

³ The breakdown for the full Lewis Ponds resource categories is as follows:



Exploration target

In consideration of the broad mineralised intercepts over a strike length of 1.15 km, the initial Lewis Ponds Exploration Target is estimated at **15–25 Mt at 2.2–3.7 % ZnEq (1.2–2.0 g/t AuEq)**⁴.

The system is open north and south along strike within areas of historic workings and soil geochemical anomalism. Significantly, there are extensive runs of historic drill core with no assays at all or only base metal assays (i.e. no gold assays).

Ardea Drilling at Lewis Ponds

Drilling of the first four core holes at Lewis Ponds for 779.8 m was completed during the quarter. Broad zones of "polymetallic stringer" sulphide mineralisation was encountered in each drill hole, confirming the presence of a potentially large mineralised system at Lewis Ponds.

Drill holes ALD0001 and ALD0002 (Table 1) are the northern two holes of the recent drill program, aimed at generating material for Lewis Ponds metallurgical test-work. These holes filled gaps in the distribution of the extensive historic drilling and were designed to provide material for metallurgical testwork and generate data in gaps in the database.

The successful identification of zinc, gold, silver and lead mineralisation in our first two drill holes confirms the Company's hypothesis that the Lewis Ponds deposit is more like the major deposits of the Lachlan Fold Belt region (in terms of its bulk tonnage potential) than has been previously recognised.

Mineralisation in ALD0001

In ALD0001, two broad mineralised "Polymetallic Stringer" sphalerite-pyrite zones which are separated and surrounded by disseminated low grade mineralisation were intersected:

- 51.37 m at 2.45 % Zn equivalent or 1.48 g/t Au equivalent (1.28 % Zn, 0.18 g/t Au, 22.0 g/t Ag, 0.51 % Pb, and 0.11 % Cu) from 41.60 m
- 20.91 m at 2.74 % Zn equivalent or 1.63 g/t Au equivalent (1.39 % Zn, 0.17 g/t Au, 32.7 g/t Ag, 0.56 % Pb, and 0.10 % Cu) from 110.76 m

These two intercepts combined with the lesser mineralised zone between them cover a downhole thickness of 104.25 m. Over this thickness, the interstitial and mineralised zones show a distinct geochemical signature that comprises elevated zinc (>0.3 %), gold (>0.2 g/t), silver (>15 g/t), antimony (>30 ppm), and manganese (>800 ppm), and depleted barium (<200 ppm) compared to non-mineralised zones.

⁴ Details of the Exploration Target were described in full in the announcement by Heron Resources dated 6 January 2017. An Exploration Target is a term used within the JORC2012 Code for an estimate of the exploration potential of a mineral deposit. As used in this release the stated Exploration Target is based upon the parameters described in the text, however the potential quantity and grade is conceptual in nature and there is insufficient information to estimate a Mineral Resource and it remains uncertain if further exploration will result in the estimation of a Mineral Resource in this area of drilling. For this previously published Exploration Target, Zn equivalents were defined using the following values (21/12/2016 US\$ price, recovery): Zn (\$2617/t, 100%), Au (\$1133/oz, 90%), Ag (\$16.00, 80%), Pb (\$2259/t, 80%), Cu (\$5488.5/t, 80%). Zn equiv. = Zn(%) + 1.253Au(g/t) + 0.016Ag(g/t) + 0.665Pb(%) + 1.678Cu(%). Values used for zinc equivalent calculations throughout this announcement (except for the previously announced Exploration Target). Zinc equivalents used as zinc contributes most to the metal equivalent calculations. Au equivalents were defined using the following values (21/12/2016 US\$ price, recovery): Zn (\$2617/t, 80%), Au (\$1133/oz, 100%), Ag (\$16.00, 80%), Pb (\$2177/t, 80%), Cu (\$5488.5/t, 80%). Au equiv. = 0.575Zn(%) + Au(g/t) + 0.016Ag(g/t) +



Using these criteria, a strong Polymetallic Stringer mineralised sequence is evident that encases the above intercepts within a broad zone measuring:

104.25 m at 1.94 % Zn equivalent or 1.15 g/t Au equivalent (1.01 % Zn, 0.13 g/t Au, 19.5 g/t Ag, 0.40 % Pb, and 0.08 % Cu) from 41.60 m.

This zone is geologically and geochemically coherent, and corresponds to strong chlorite-pyrite alteration, whereas sericite-dominant alteration occurs outside the Stringer zone. Common chloritic shear zones, white quartz veining and solution brecciation of carbonate horizons are consistent with a high strain environment conducive to fluid movement.



Figure 5 – Cross section along the 11000mN line on the Lewis Ponds grid, showing interpreted mineralisation distributions.

Mineralisation in ALD0002

In ALD0002, a single higher-grade zone comprised of Polymetallic Stringer sphalerite-pyrite mineralisation shows an abrupt contact with the surrounding rock types.

• **16.40 m at 8.53 % Zn equivalent** or **5.07 g/t Au equivalent** (4.73 % Zn, 0.86 g/t Au, 75.9 g/t Ag, 1.44 % Pb, and 0.19 % Cu) from 43.60 m

In addition, this intercept is underlain by the footwall dolomite unit, and the hangingwall volcaniclastics are oxidised due to proximity to surface.

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It is likely that the intercept in ALD0002 is the basal portion of the mineralised zone that is more completely preserved in ALD0001. The ALD0002 mineralisation likely has a supergene sulphide component.

Table 3 – Examples of Lewis Ponds mineralisation compared to some of the major mining operations
(current and proposed) of the Lachlan Fold Belt.

Operation	Mining	Processing	Mtpa	Example intercept	Zn (%)	Au (g/t)	Ag (g/t)	Pb (%)	Cu (%)	Zn Eq (g/t)	Au Eq (g/t)
Lewis Ponds	Open pit	Zinc con	?	ALD00011	1.28	0.18	22.0	0.51	0.11	2.45	1.48
				ALD0001 ²	1.01	0.13	19.5	0.40	0.08	1.94	1.15
				ALD00023	4.73	0.86	75.9	1.44	0.19	8.53	5.07
Northparkes	Block cave	Copper con	6.0	-	-	0.24	-	-	0.85	1.80	1.21
Cadia	Block cave	Copper con	22.0	-	-	0.94	0.5	-	0.29	1.80	1.27
Cowal	Open pit	CIL	7.3	_	-	1.11	-	_	_	1.52	1.11
McPhillamys	Open pit	CIL	_	-	-	0.94	_	_	_	1.29	0.94

¹ ALD001, 41.60 – 92.97 m. ² ALD001, 41.60 – 145.85 m. ³ ALD0002, 43.60 – 50.00 m

Similarities with the major deposits of the region

Previously, Lewis Ponds has been explored as a high-grade underground VMS deposit, with a historic resource of 6.6 Mt at 1.5g/t Au, 69g/t Ag and 2.4% Zn⁵ estimated at a 3% ZnEq cut-off grade.

The published Lewis Ponds resource of 6.6 Mt was calculated at a 3% zinc equivalent cut-off (as opposed to Ardea's 1.5% zinc equivalent cut-off) and envisaged an underground selective mining operation. This contrasts with bulk tonnage operations characterising the central Lachlan Fold Belt (LFB) which are all low grade, bulk excavation-based (Table 3). Both Cadia and Northparkes produce sulphide concentrates with precious metal credits, whereas Cowal and the undeveloped McPhillamys deposit utilise (or propose to utilise) a carbon-in-leach (CIL) flowsheet. In terms of metal value (i.e. zinc and gold equivalent values), the mineralised zones intercepted in ALD0001 and ALD0002 match or exceed those of the major Lachlan Fold Belt operations (Table 3).

The recent drill results validate Ardea's Exploration Target for the Lewis Ponds of **15–25 Mt at 2.2–3.7 % ZnEq** or **1.2–2.0 g/t AuEq**⁶.

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

⁶ Details of the Exploration Target were described in full in the announcement by Heron Resources dated 6 January 2017. An Exploration Target is a term used within the JORC2012 Code for an estimate of the exploration potential of a mineral deposit. As used in this release the stated Exploration Target is based upon the parameters described in the text, however the potential quantity and grade is conceptual in nature and there is insufficient information to estimate a Mineral Resource and it remains uncertain if further exploration will result in the estimation of a Mineral Resource in this area of drilling. For this previously published Exploration Target, Zn equivalents were defined using the following values (21/12/2016 US\$ price, recovery): Zn (\$2617/t, 100%), Au (\$1133/oz, 90%), Ag (\$16.00, 80%), Pb (\$2259/t, 80%), Cu (\$5488.5/t, 80%). Zn equiv. = Zn(%) + 1.253Au(g/t) + 0.016Ag(g/t) + 0.665Pb(%) + 1.678Cu(%). Values used for zinc equivalent calculations throughout this announcement (except for the previously announced Exploration Target). Zinc equivalents used as zinc contributes most to the metal equivalent calculations. Au equivalents were defined using the following values (21/12/2016 US\$ price, recovery): Zn (\$2617/t, 80%), Au (\$1133/oz, 100%), Ag (\$16.00, 80%), Pb (\$2177/t, 80%), Cu (\$5488.5/t, 80%). Au equiv. = 0.575Zn(%) + Au(g/t) + 0.016Ag(g/t) + 0.478Pb(%) + 1.205Cu(%). Gold equivalents used for direct comparison to major deposits of the region. Scoping study level financial model for a 2.5Mtpa open-pit with base metal float circuit indicates 1.5% ZnEq is a suitable break-even cut-off grade.



Results for the remaining two drillholes at Lewis Ponds are expected shortly. Ardea looks forward to updating shareholders once results are received. Additionally, results for the oxidised portions of ALD0001 and ALD0004 are awaited.

Rock chip sampling

During preparation for drilling, outcropping and surface float samples of interest were sampled. Most of the rock samples contain quartz veins and are strongly altered, similar to rocks observed in the drill-hole ALD0001 stringer zones.

Table 4 – Selected surface samples from Lewis Ponds, arranged north to south. See Appendix 1 for full listing.									
Sample	Easting (mE)*	Northing (mN)*	Zinc (%)	Gold (g/t)	Silver (g/t)	Lead (%)	Copper (%)	Sulphur (%)	
S124050	709794	6316604	0.04	5.69	195.0	1.63	0.03	0.87	
S124049	709790	6316603	0.05	3.81	76.6	0.69	0.02	0.27	
S124051	709799	6316600	0.06	1.58	1040.0	0.32	0.03	0.27	
S124034	709705	6316514	0.24	1.53	41.5	0.95	0.18	0.33	
S124039	709788	6316510	0.09	0.23	30.9	1.88	0.75	0.59	
S124054	710072	6316455	2.91	0.06	29.1	2.53	0.20	0.02	
S124063	709946	6316435	0.31	0.05	57.3	2.80	0.03	0.51	
S124061	709959	6316424	0.17	0.28	44.3	1.88	0.09	0.13	
S124060	709999	6316395	0.04	0.91	95.0	1.94	0.08	0.51	
S124069	710027	6316256	0.01	1.35	75.9	1.89	0.03	2.61	
S124071	710064	6316247	0.16	1.65	92.8	1.65	0.08	1.30	
S124083	709989	6316129	0.18	0.97	82.6	1.75	0.23	0.75	
S124081	709990	6316128	2.35	0.22	43.2	1.79	0.24	3.09	
S124074	710158	6316127	0.12	0.08	21.2	1.56	0.37	0.37	
S124082	709989	6316127	0.84	0.81	93.8	1.85	0.35	0.90	
							2	GDA Zone 55	

Results

Geochemical analysis of these samples show local strong mineralisation at surface. A summary of well mineralised samples is shown in Table 4. Results show:

- gold values up to 5.69 g/t
- silver values up to 1040 g/t (over 33 oz/t)
- zinc values up to 2.91 %
- lead values up to 2.80 %.

Zinc, copper and sulphur values are generally low in the weathered rocks (as expected) but lead values are more consistent. One particular sample (S124054) contains 2.91 % zinc and 2.53 % lead but with low precious metal contents.

Analysis shows that the results of the rock chip sampling are consistent with multiple generations of epithermal precious metal mineralisation that postdates much of the base metal mineralisation.



It should be noted that the Lewis Ponds metallogenic interpretations are preliminary and will require analysis of fresh samples from drill core. However, they are consistent with other features recently discovered at Lewis Ponds that are indicative of multiple mineralisation events with particularly well defined gold-silver association.

For further information regarding Ardea, please visit www.ardearesources.com.au or www.heronresources.com.au or contact:

Ardea Resources:

Dr Matt Painter Managing Director, Ardea Resources Limited Tel +61 8 6500 9200

Media or Investor Inquiries:

FTI Consulting Jon Snowball Tel +61 2 8298 6100 or +61 477 946 068 jon.snowball@fticonsulting.com

Compliance Statement (JORC 2012)

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 June 2014, October 2016, 2016 Heron Resources Annual Report and 6 January 2017;
- 2. KNP Cobalt Zone Study on 6 January 2017

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 KNP 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, verified and reinterpreted by Mr Ian Buchhorn who is a Member of the Australasian Institute of Mining and Metallurgy and currently a director of Ardea 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 exploration and industry benchmarking summaries are based on information reviewed by Dr Matthew Painter, who is a Member of the Australian Institute of Geoscientists. Dr Painter is a full-time employee and a director of Ardea 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'. Dr Painter 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.



CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of this news release.

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and ability to complete the Ardea spin-out, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to complete the Ardea spin-out on the basis of the proposed terms and timing or at all, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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

Ardea Resources Ltd Tenement Schedule as at 31st March 2017.

	Ardea NSW Tenements												
Tenement	Location	Ardea Interest (%)	Status	N o t e	Tenement	Location	Ardea Interest (%)	Status	N o t e				
ELA5323	5km N of Gundagai	100	Pending		ELA5439	20km SE of Gundagai	100	Live					
ELA5335	62km W of West Wyalong	100	Pending		EL5583	15km E of Orange	100	Live					
ELA5337	19km NE of Orange	100	Pending		EL8061	Gundagai	100	Live					
ELA5338	5km N of Forbes	100	Pending		EL8323	10km NE of Orange	100	Live					
ELA5365	22km SW of Wellington	100	Pending		EL8532	30km NE of Parkes	100	Live					
ELA5369	30km NE of Parkes	100	Pending		EL8538	50km NE of Parkes	100	Live					
ELA5374	27km SE of Bathurst	100	Pending		ML0739	10km N of Forbes	100	Live					
ELA5435	10km N of Forbes	100	Pending										

Ardea WA Tenements											
Tenement	Location	Ardea Interest (%)	Status	N o t e	Tenement	Location	Ardea Interest (%)	Status	N o t e		
E24/00203	78km NW of Kalgoorlie	100	Pending		M24/00772	71km NW of Kalgoorlie	100	Live			
E27/00524	67km NE of Kalgoorlie	100	Live		M24/00778	70km NNW of Kalgoorlie	100	Live	3		
E28/01224	63km NE of Kalgoorlie	100	Live		M24/00797	78km NW of Kalgoorlie	100	Live			
E29/00889	78km NW of Kalgoorlie	100	Live		M24/00915	78km NW of Kalgoorlie	100	Live			
E29/00934	67km NNW of Kalgoorlie	100	Pending		M24/00916	78km NW of Kalgoorlie	100	Live			
E29/00941	140km NNW of Kalgoorlie	100	Live		M25/00151	38km E of Kalgoorlie	100	Live			
E29/01006	83 km E of Leonora	100	Pending		M25/00187	40km E of Kalgoorlie	100	Live			
E31/01092	140km NNE of Kalgoorlie	100	Pending		M27/00395	68km NE of Kalgoorlie	100	Live			
E37/01271	60km NW of Laverton	100	Pending		M28/00199	65km NE of Kalgoorlie	100	Live			
E37/01272	100km N of Leonora	100	Pending		M28/00201	65km NE of Kalgoorlie	100	Live			
E37/01273	100km N of Leonora	100	Pending		M28/00205	66km NE of Kalgoorlie	100	Live			
E37/01274	75km NW of Laverton	100	Pending		M29/00167	87km NNW of Kalgoorlie	100	Live			
E39/01706	70km NW of Leonora	100	Live		M29/00202	86km NNW of Kalgoorlie	100	Live			
E39/01757	70km NW of Leonora	100	Live		M29/00214	100km NNW of Kalgoorlie	100	Live			
E39/01854	70km NW of Leonora	100	Pending		M29/00272	77km NNW of Kalgoorlie	100	Live			
E39/01954	170km NE of Kalgoorlie	100	Pending		M29/00278	74km NNW of Kalgoorlie	100	Live			
E39/01985	60km NW of Laverton	100	Pending		M29/00423	76km NNW of Kalgoorlie	100	Live			
E63/01827	10km W of Norseman	100	Pending		M31/00475	129km NE of Kalgoorlie	100	Live	4		
E63/01828	60km ENE of Norseman	100	Pending		M31/00477	129km NE of Kalgoorlie	100	Live	4		
E70/04804	18km W of Manjimup	100	Pending		M31/00479	129km NE of Kalgoorlie	100	Live	4		
M24/00541	67km NNW of Kalgoorlie	100	Live		M31/00483	146km NNE of Kalgoorlie	100	Live	4		
M24/00634	78km NW of Kalgoorlie	100	Live	1	P24/04395	70km NW of Kalgoorlie	100	Live			
M24/00660	75km NW of Kalgoorlie	100	Live		P24/04396	70km NW of Kalgoorlie	100% non gold rights	Live			
M24/00663	75km NW of Kalgoorlie	100	Live		P24/04400	70km NW of Kalgoorlie	100% non gold rights	Live			
M24/00664	75km NW of Kalgoorlie	100	Live		P24/04401	70km NW of Kalgoorlie	100% non gold rights	Live			
M24/00665	75km NW of Kalgoorlie	90	Live	2	P24/04402	70km NW of Kalgoorlie	100% non gold rights	Live			
M24/00683	78km NW of Kalgoorlie	100	Live		P24/04403	70km NW of Kalgoorlie	100% non gold rights	Live			
M24/00686	75km NW of Kalgoorlie	100	Live		P29/02265	90km NNW of Kalgoorlie	100	Pending			
M24/00731	70km NNW of Kalgoorlie	100	Live	3	P31/02038	113km NE of Kalgoorlie	100	Live			
M24/00732	70km NNW of Kalgoorlie	100	Live	3	P31/02039	113km NE of Kalgoorlie	100	Live			
M24/00744	75km NNW of Kalgoorlie	100	Live		P31/02040	113km NE of Kalgoorlie	100	Live			
M24/00757	63km NW of Kalgoorlie	100% non gold rights	Live								

	Notes:						
1.	Britannia Gold Ltd retained precious metal rights.						
2.	Impress Ventures Ltd has a 10% equity free-carried interest to a decision to mine.						
3.	Placer Dome Australia Limited (Norton Goldfields) retains certain gold rights.						
4.	Ardea previously entered a binding framework agreement with Ningbo Shanshan Co Ltd, Shanshan had the right to earn a 70% interest in the Yerilla Nickel-Cobalt Project. The JV ended in May 2011.						

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

Ardea Resources Limited

ABN

Quarter ended ("current quarter")

30 614 289 342

31 March 2017

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(345)	(345)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(62)	(62)
	(e) administration and corporate costs	(48)	(48)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	5	5
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(450)	(450)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(26)	(26)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

+ See chapter 19 for defined terms

1 September 2016

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(26)	(26)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	5,105	5,105
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(356)	(356)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	4,749	4,749

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	-	-
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(450)	(450)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(26)	(26)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	4,749	4,749
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,273	4,273

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	4,273	-
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	4,273	-

6. Payments to directors of the entity and their associates

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

7. Payments to related entities of the entity and their associates

- 7.1 Aggregate amount of payments to these parties included in item 1.1
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

	Current quarter \$A'000	
2		-
d		-
ctic	ons included in	

Current quarter \$A'000

62

-

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	(400)
9.2	Development	(250)
9.3	Production	-
9.4	Staff costs	(120)
9.5	Administration and corporate costs	(100)
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	(870)

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced		N/a		
10.2	Interests in mining tenements and petroleum tenements acquired or increased		Refer detailed table attached – all tenements acquired during the quarter		

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Jam Middlena

Sam Middlemas Company Secretary

28 April 2017

Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.