

ASX & Media Release

30 October 2018

ASX Symbol

ARL

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Issued Capital

Fully Paid Ordinary Shares 104,990,413

Unlisted options exercisable at \$0.25 12,310,022

Directors/Employee Performance Rights 3,240,000

ABN 30 614 289 342

QUARTERLY OPERATIONS REPORT

For the Quarter ended 30 September 2018

DEVELOPMENT

Goongarrie Nickel Cobalt Project (GNCP)

- First pilot plant run successful Goongarrie goethite ore delivers excellent performance with on-specification nickel and cobalt sulphate produced.
- Finalisation of EPA referral underway with programs for Goongarrie flora, fauna, hydrology, geotechnical design and material characterisation all underway or awaiting requisite climatic event.
- Goongarrie infill 80x40m RC drilling completed on all 1.5Mtpa pit areas, extended to 2.25Mtpa pit areas and completed.
- New resource estimation including nickel-cobalt-scandium and neutraliser with target completion Q4 2018.
- Ongoing Definitive Feasibility Study (DFS) drilling program confirms high-grade intercepts at the Pamela Jean Deeps orebody.
 - o AGSR419 112m at 1.30% Ni, 0.26% Co, 31g/t Sc from 30m¹
 - AGSD0001 100.8m at 1.00% Ni, 0.08% Co from 32m²
 - O AGSR0413 76m at 1.11% Ni, 0.09% Co and 38g/t Sc from 24m
 - AGSR0418 56m at 1.29% Ni, 0.14% Co and 18g/t Sc 104m
 - o AGSR0190 57m at 1.04% Ni, 0.10% Co and 21g/t Sc from 70m
- Strategic Partner search advancing with KPMG.

EXPLORATION

WA Gold-Nickel Assets

 Mt Zephyr - structural interpretation completed defining Yamarnastyle structural system with altered granitoid gold host. Drill sites selected and first drilling campaign scheduled.

Lachlan Fold Belt NSW

 Orange-based management team in place in NSW - completing full re-interpretation of Lewis Ponds ore as a bulk-tonnage system.

CORPORATE

Cash position at end of Quarter of **\$15.8M**, all corporate and development activity well-funded.

¹ Calculated using a 0.5 % nickel cut-off, 2 m minimum intercept, and 4 m maximum internal waste

² 0.5 % nickel cut-off, 2m minimum intercept, and 4m maximum intern waste, previous report 2017 core hole



September 2018 Quarter

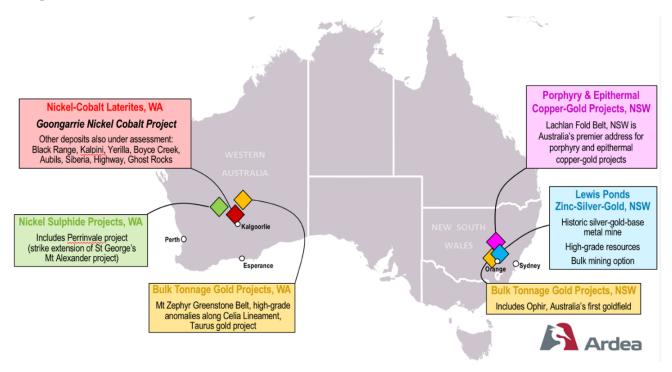


Figure 1 - Ardea Asset Map

1. Development

During the Quarter metallurgical test work, approvals and resource programs for the Company's flagship Goongarrie Nickel Cobalt Project (GNCP) in Western Australia continued to advance:

- Expansion Study for a 2.25Mtpa throughput completed, focussed on Train 1 at Goongarrie with the KNP resource well able to service an additional Train 2 and 3 with generations of mine life available.
- Metallurgically uncomplicated flowsheet developed, focussed on premium goethite ore, short residence time in pressure vessels in comparison to other laterite ore types.
- Low risk fifth generation High Pressure Acid Leach/Mixed Sulphide (HPAL/MS) process which is
 operating successfully in other jurisdictions. Flowsheet and ore type replicate the successful Coral
 Bay/Taganito (Sumitomo Philippines) and Moa Bay (Sherritt Cuba) nickel laterite operations.
- Significant infrastructure advantages with a major highway, railway line and power transmission lines adjacent to Goongarrie mining tenements, approvals in progress.
- Highest laterite cobalt grades from a non-conflict jurisdiction, largest bulk resource cobalt project outside of Democratic Republic of Congo.
- Significant by-product metals being evaluated, notably scandium, alumina, vanadium and manganese, with R&D during the Quarter identifying a potential Rare Earth Element (REE) setting.
- On-site feedstocks being evaluated notably neutraliser for HPAL discharge, targets located within scheduled Goongarrie pits, negating the need to import high-cost neutraliser.
- Strong Community support expressed during current Stakeholder engagement.
- Internationally intense competition amongst EV manufacturers and battery makers to secure long term, reliable, "ethical" supply of battery metals.



Goongarrie Nickel Cobalt Project

Pilot Plant

Development of the Goongarrie metallurgical flow-sheet during the Quarter culminated with Ardea conducting pilot plant trials producing marketing samples of nickel sulphate and cobalt sulphate crystals. These marketing products are available as part of the third-party due diligence currently being completed by potential Strategic Partners for Goongarrie.

To test the optimised pit schedule feed material, sonic core was drilled at 200m intervals along the strike length of the Pamela Jean and Elsie Tynan orebodies and supplemented with bulk RC chips from the Patricia Anne orebody. Fifteen wet tonnes at approximately 1.1% nickel, 0.12% cobalt and 35g/t scandium were used for the pilot plant program. The dominant ore style at Goongarrie is goethite-rich, with an accessory cobaltian wad termed "asbolite". The ore has exceptional rheological characteristics leading to consistent metallurgical performance.

Leaching extractions for nickel and cobalt in Goongarrie goethite ore exceeded 95% in continuous piloting, using the proposed Goongarrie flowsheet. Results were as predicted in preceding batch tests.





Photographs – upper red-orange cobalt sulphate, lower bluegreen nickel sulphate produced from Goongarrie ore.

The resultant Mixed Sulphide Product (MSP) was then re-oxidised and metals re-dissolved at laboratory-scale (SGS Laboratory) as sulphates. Impurities were removed using the proposed Solvent Extraction and Ion Exchange flowsheet. The solutions were on-specification for both nickel and cobalt sulphate.

Assay results for the nickel and cobalt sulphate crystals confirmed on-specification product.

Variability Test-work

Representative "run-of-mine" mineralization from Ardea diamond core holes AGSD0007, 0010 and 0012 was used in the study. A further 60 core samples have been selected for final variability work as part of the current DFS programs.

Rheology

Rheology test work was completed using Sonic drill core from the Pamela Jean and Elsie Tynan pit areas, and RC drill chips from the Patricia Anne and Pamela Jean ore zones, theses being the early scheduled pits.

Initial rheology results are very good, with the final report awaited.



Feasibility Programs

The location of the GNCP is a key advantage for the Company as it is less than an hour's drive on bitumen roads from Kalgoorlie in Western Australia, an established regional hub with 125 years of mining history.

The proximity of world-class infrastructure is a major advantage, with Kalgoorlie providing key support for mining operations, including infrastructure, logistical and personnel support, and is considered to be Australia's key mining capital.

The Project has strong support within the Shire of Menzies and City of Kalgoorlie Boulder where operations are focussed.

Definitive Feasibility Study (DFS) programs commenced immediately following release of the PFS results (announcement 28 March 2018), and ramped up with the release of the Expansion Study (announcement 24 July 2018).

Programs involving hydrology, geotechnical design and material characterisation are underway, in preparation for initial Environmental Protection Authority (EPA) referral.

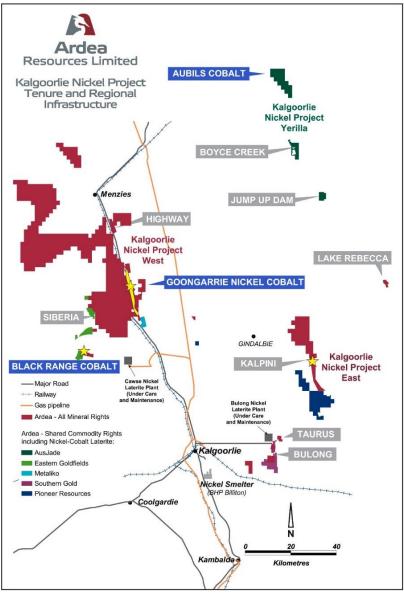


Figure 2 – The Kalgoorlie Nickel Project (KNP) Regional Infrastructure

Strategically, Ardea holds nickel-cobalt laterite projects covering 1,738km² near Kalgoorlie. Goongarrie makes up only 142km² of this total area.

Goongarrie Nickel Cobalt Project Expansion Study

Following the successful 1.0Mtpa and 1.5Mtpa PFS evaluations (announcement 28 March 2018), a 2.25Mtpa Goongarrie Expansion Study was completed in July 2018 (announcement 24 July 2018) to investigate at a scoping level the optimal throughput that could be achieved using a single autoclave processing train. The Expansion Study used the operating and financial parameters generated through up-scaling the previous PFS results.

The outstanding metallurgical characteristics and rheology of the Goongarrie orebody have resulted in an extremely robust, unleveraged, estimated pre-tax NPV of approximately A\$3.1 billion, with a pre-tax IRR of approximately 31% and a rapid payback period of 5.1 years for a 2.25Mtpa operation.



Table 1: Summary of A	Approximate Outcomes	for the 2.25Mtpa	Throughput	Scopina Study

Parameter	Assumption/Outcome \$US****	Assumption/Outcome \$A
Autoclave Throughput*	2.25	5Mtpa
Initial Life of Mine	25 <u>y</u>	years
Average Annual EBITDA	US\$ 354 million	\$ 450 million
Pre-production Capital Estimate**	US\$ 918 million	\$1.165 billion
Net Present Value (NPV) (post tax)***	US\$ 1.805 billion	\$2.29 billion
Internal Rate of Return (IRR) (post tax)	27%	
Average C1 operating cash costs – inclusive of by-product credits	(US\$0.34)/lb Nickel	(\$0.43)/lb Nickel
Average C1 operating cash costs- exclusive of by-product credits	US\$4.63/lb Nickel	\$5.88/lb Nickel
Project payback (simple)	5.1	years

^{*}Autoclave throughput rate following 24-month commissioning and ramp up period

Nickel sulphate and cobalt sulphate prices are average recorded transaction prices for February 2018 in the People's Republic of China, the world's largest consumer of these products (Source: SMM, see 28 March 2018 PFS announcement Section 13). Note: production tonnages are rounded to reflect degree of certainty.

Average C1 operating costs modelled for nickel only are US\$4.63/lb nickel, but when including cobalt revenues, the costs are negative at -US\$0.34/lb nickel, making Goongarrie a highly attractive project.

The positive financial results reflect the favourable goethite metallurgical characteristics which enables extremely short residence time in the autoclave, with no significant loss in metal recovery.

The 2.25Mtpa start-up option can easily be expanded by adding modular processing trains to take advantage of the full scale of Goongarrie's world-class resource base (to 4.5Mtpa and subsequently 6.75Mtpa).

The Expansion Study highlights the upside potential of Goongarrie and its competitive economies of scale. The primary goal of the Company was to determine a cost-effective start-up scenario, whilst also providing an upside case more suited to a Financier or Strategic Partner seeking a long life, low cost, sustainable production base in a stable jurisdiction. The results show the benefits of scale, demonstrating Goongarrie as a unique battery metals project that can become a significant global producer over a long life.

Mine and processing life is artificially limited to 25 years for the purposes of financial modelling. With conversion of resources (which is current including new 2018 drilling results), mine life could be extended for many decades beyond these 25 years.

Benchmarking

Nickel can be produced from either nickel sulphide (40% of world supply, fast diminishing resource base) or nickel laterite (60% of world supply, but largely located in areas of higher sovereign risk in the wet tropics thus presenting major environmental hurdles). Goongarrie is a nickel laterite, but is unique in being located within the stable, well developed mining jurisdiction of Western Australia with no environmental hurdles.

^{**}Includes \$192 million contingency on capital costs

^{***8%} discount, 100% equity, real terms

^{****} Exchange rate used AUD:US 0.788 as for March 2018 PFS



For battery precursor metal production, the nickel sulphide flowsheet requires first to refine the ore to pure nickel metal to eliminate the penalty elements that characterise all sulphide mineralization (arsenic and the like). The pure nickel is then dissolved in sulphuric acid to make the nickel sulphate for batteries.

In contrast, nickel laterite has already been leached by intense weathering to remove penalty elements. The laterite consists of the siderophile elements nickel, cobalt, manganese and iron, to which sulphuric acid is added directly in an autoclave reaction vessel to make metal sulphates, then a Mixed Sulphide Product which can then be further refined into very high purity nickel and cobalt sulphate.

Distinction of Laterite Ore Types Globally

The two main laterite variants are termed:

- Saprolite dominantly clay minerals being serpentine, chlorite, smectite with silica and magnesite.
- Limonite dominantly iron-oxide minerals being goethite, haematite, with kaolinite, smectite, silica.

Goongarrie is a "limonite" ore, but consists only of goethite, kaolinite and importantly cobaltian "wad". The simple mineralogy of Goongarrie Goethite is the basis of its excellent metallurgical performance. The high mined grades obviate the need for beneficiation to achieve viable leach feed grades (through screening to remove barren silica).

Operational Performance of High-Pressure Acid Leach (HPAL)

The goethite ("limonite") nickel laterite operations at Coral Bay, Taganito and Moa Bay have all achieved fast ramp up to name-plate capacity.

The clay nickel laterite operations at Murrin Murrin and Bulong (both early generations of HPAL) struggled, with only Murrin achieving ramp up through using very sophisticated management of their clay ore types.

The nickel laterite operations of Cawse, Bulong and Ravensthorpe (all utilising screening to beneficiate ore) all struggled with their comminution and beneficiation circuits.

Goongarrie goethite with its high grade, absence of clay and no beneficiation requirement benchmarks as a premium ore feed. Combining favourable ore with later generation, de-risked Coral Bay-style HPAL/MS flowsheet underpins the robust feasibility outcomes delivered for Goongarrie.

Approvals Process

The Goongarrie Nickel Cobalt Project has been designed such that multiple characteristics of the mineralisation favour a minimised site footprint:

- The strip ratio is low at approximately 2:1, thereby minimising project waste generation.
- Waste is in any event used for progressive back-fill and rehabilitating adjoining earlier stage pits.
- Early-mined nodular surface laterite waste is particularly well suited to the road network construction required for servicing multiple pits.
- The ultramafic rock mine waste from anecdotal observation favours flora assemblages amenable to waste stabilisation.

The key objective for Q4 2018 is to refer the GNCP to the Environmental Protection Authority (EPA) and Department of the Environment and Energy (DoEE).



Scopes of work have been awarded for the subterranean fauna study, hydrogeological studies (water source and dewatering), surface water study, lake ecology study, spring terrestrial flora and vegetation study, terrestrial fauna study, and post rainfall short range endemic study. Scopes of work for material characterisation and soil and landform analysis were awarded.

A mass materials balance calculation was completed to determine the footprint required for stockpiling of low-grade ore, neutralising materials, waste and tailings. A water balance program to determine the life of mine dewatering volume is current as a part of the hydrogeological study and will inform the area required for evaporation ponds, one of the options for dewater disposal.

The water supply study has focussed on aquifers associated with paleo channels on granted Ardea tenure and preferably linked to pit de-watering. Where groundwater is hypersaline, this requires desalination for process water use.

Processing Research and Development

The Goongarrie Project has had several key attributes identified in R&D programs:

- Carbonate is necessary for neutralising autoclave discharge. A suitable carbonate will be recovered
 from mine waste at nil effective cost and includes dolomite and magnesite neutraliser resources
 within pit floor saprock underlying the nickel-cobalt ore zones. This is a breakthrough concept
 entirely unique to Goongarrie.
- Nickel and cobalt naturally present in carbonates below the defined ore zones may also be part
 recovered during neutralisation. The metals would be released through consumption of the
 carbonates, with new techniques unique to Goongarrie being tested to maximise metal recovery.
- Tailings research has demonstrated exceptional filtration ability facilitating dry-stack tailings disposal. The current back-fill plan involves clay-rich mine waste below standing water tables, followed by a layer of carbonate, then dry-stack tailings above. This again is a unique Goongarrie development.
- Detailed core logging combined with multi-element geochemistry and XRD mineralogy has identified potential co-products including scandium oxide and manganese sulphate from the HPAL/MS circuit, and High Purity Alumina (kaolin as precursor), scandium, vanadium and rare earth elements (REE) in an independent circuit.
- Palygorskite-type clays have been identified in transported overburden (ancestral Lake Goongarrie), and have potential use as environmental filters.
- Alternate energy options are under investigation to reduce site energy operating costs and minimise greenhouse gas emissions.
- Research into potential scandium markets and product development from the GNCP is ongoing.
 Further development of a scandium flowsheet by bench scale research will be followed by a continuous flowsheet.

Geo-metallurgical/Geological Research and Development

As the 2018 RC drill program winds down, data is being consolidated for current DFS programs. In particular, a geological model has been developed for Goongarrie which consolidates the current 575 holes for 26,528m of Ardea RC drilling with existing 2,372 holes for 115,384m of historical RC drilling. The Ardea model focuses on the mineralised regolith (the weathered mantle), and its relationship to the underlying protolith (the unweathered ultramafic bedrock). In particular, a marked bedrock structural control on overlying laterite mineralization has been recognised in research studies (Figure 3, 4).



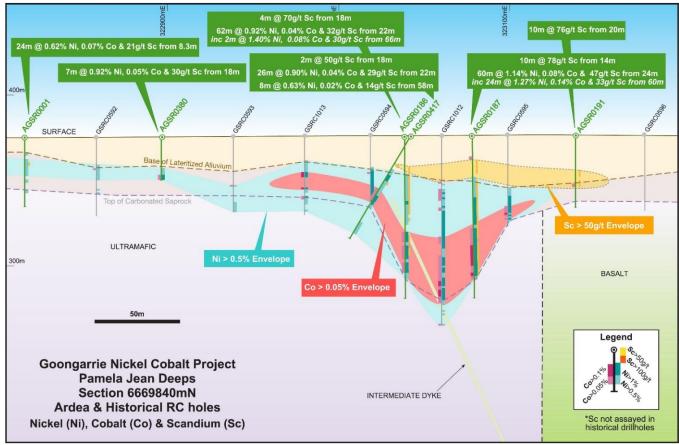


Figure 3 – Section 6669840mN at Goongarrie

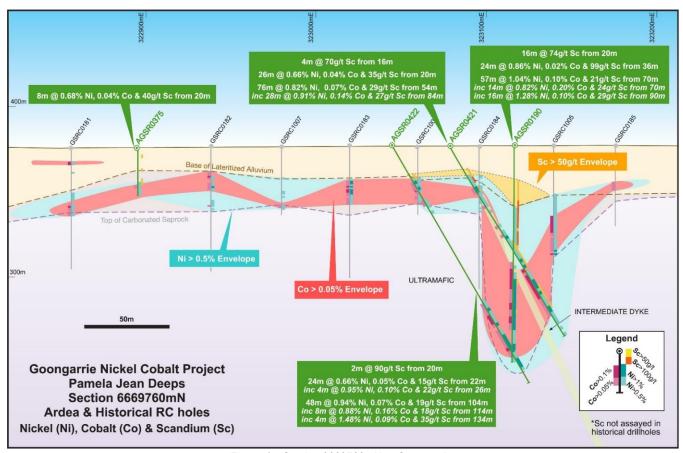


Figure 4 – Section 6669760mN at Goongarrie



The top of the Pamela Jean ore body at Goongarrie is a typical flat laterite surface at 15-30m below surface. Rather than a flat base some 40-50m below surface, the base of Pamela Jean is "funnel-shaped", penetrating up to 165m below surface. With continuous mineralisation to depth, this geometry fortuitously mimics pit wall batter designs, minimizing Pamela Jean strip ratios. The result is high tonnes and grade proximal to the future plant site. The "deep funnel" ore is associated with a narrow dyke and intense shearing that has facilitated exceptionally deep weathering (to 165m).

Other smaller funnel-shaped mineralised structures have been identified at Goongarrie. Like Pamela Jean, these appear to be controlled by underlying bedrock structures. Such mineralised structures penetrate below and beyond modelled PFS pit shells so are expected to provide grade and tonnage upside.

Resource Drilling

Drilling for the September 2018 Quarter consisted of:

- Goongarrie South, Pamela Jean 12 RC holes for geotechnical siting for 1,588m.
- Goongarrie South Patricia Anne 25 RC holes of 80x40m infill for 1,208m.
- Goongarrie South Elsie Central 23 RC holes of 80x40m infill for 1,192m.
- Big Four 89 RC holes of 80x40m infill for 3,785m.
- Scotia Dam 75 RC holes of 80x40m infill for 3,665m.

The RC infill drilling continues to provide excellent agreement with historic RC holes, providing confidence that areas of current Inferred Mineral Resource will upgrade to Indicated (target completion Q4 2018).

A deep RC drilling program was completed at the Pamela Jean Deeps to allow accurate siting of core holes for geotechnical evaluation of pit batter positions (announcement 8 October 2018).

Results continue to be received for the completed RC drilling with updates on these results planned for the upcoming reporting period.

Geological Model

The systematic assaying of scandium, vanadium, chromium and REE by the Company shows that substantial by-product mineralisation continues to be discovered above and within the known cobalt-nickel mineralisation.

Several geological elements of the Project have been quantified during the Quarter:

- Ore geometry is very consistent, with >0.5% Ni pervasive between the base of lateritised alluvium overburden and top of carbonated saprock basement, facilitating predictable mine planning, with free-digging ore until mining encounters sub-grade hard saprock at the pit base and within batters, excellent visual grade control.
- The saprock neutraliser for the eastern pits (Pamela Jean, Patricia Anne) is invariably magnesite, while the western pits (Elsie Tynan, Pamela West) and Big Four are dominantly dolomite. This has necessitated modification of pit scheduling to now include Ca:Mg ratios (dolomite:magnesite) to ensure a constant feed to the neutraliser circuit. The ROM pad area has been suitably expanded to reflect neutraliser blending finger requirements.
- Tertiary-aged palaeochannel sand channels and lake kaolinite deposits have been identified.



Strategic Partner Process

The GNCP is attracting strategic investor interest because of its scalability, superior nickel-cobalt metal endowment, large upside resource potential and potential of valuable co-production of payable metals.

Ardea engaged corporate advisory firm KPMG in June 2018, with its well-established global commercial network, to assist in securing partnership investors for the consortium that will ultimately develop Goongarrie. The process is advanced, with the level of corporate, end user and offtaker interest high.

The Board and senior management have travelled to meet with well-credentialled investors throughout east Asia and North America in order to establish strategic relationships. Prospective Investors have had access to key project documents in Ardea's Virtual Data Room allowing comprehensive project evaluation.

The partner process is complex, with a requirement to merge together multiple technical objectives including saleable battery materials, funding and completion of current Ardea DFS programs, future offtake allocations, and critically, future project funding mechanisms.

2. Exploration

Ardea now controls some 5,500km² of tenements in WA and NSW in premium metal producing mineral provinces. This is a robust but sustainable portfolio.

Ardea has a significant number of additional projects outside of the GNCP. Most host nickel-cobalt laterite resources (that could supplement GNCP production) but also host significant gold or nickel sulphide mineralisation (Figure 5):

- The primary and current focus is the GNCP, with multiple DFS programs already underway. Key current work programs are piloting, approvals and updated resource estimation.
- Supporting the DFS programs are the GNCP Expansion Case tenure and "additional train" tenure at Siberia, Highway and Ghost Rocks. All current evaluation programs include these tenements, notably piloting has specifically included geo-metallurgical types characteristic of individual Expansion Case ore bodies.
- The Kalpini Hub is a nontronitic and goethitic nickel-cobalt laterite, being evaluated either as a satellite feed to the GNCP or potential future standalone hub. Resource estimation programs during the Quarter have identified significant nickel sulphide targets in the historic drilling database.
- The Yerilla Hub is a smectitic (nontronite) and saprolitic nickel-cobalt laterite, being evaluated either as a satellite feed to the GNCP or potential future standalone hub.
- Gold and Nickel tenure has a surprisingly important role in development and production at the GNCP:
 - Initial metallurgical modelling indicates nickel sulphide is a beneficial GNCP autoclave addition for high grade nickel units, sulphuric acid generation and oxidation/reduction control.
 - The currently defined GNCP bore-field and infrastructure sites have presented in initial studies with potentially good gold endowment, and ore grade gold intercepts associated with porphyry intrusives are often recorded in Ardea laterite drill-outs.

In these circumstances, all WA tenure is likely to remain 100% Ardea-owned in the immediate term.

For NSW based projects, the Ardea tenure is under review for possible divestment. A potential strategy to crystallise value for Ardea Shareholders is a spin-out of the gold-copper-zinc portfolio.



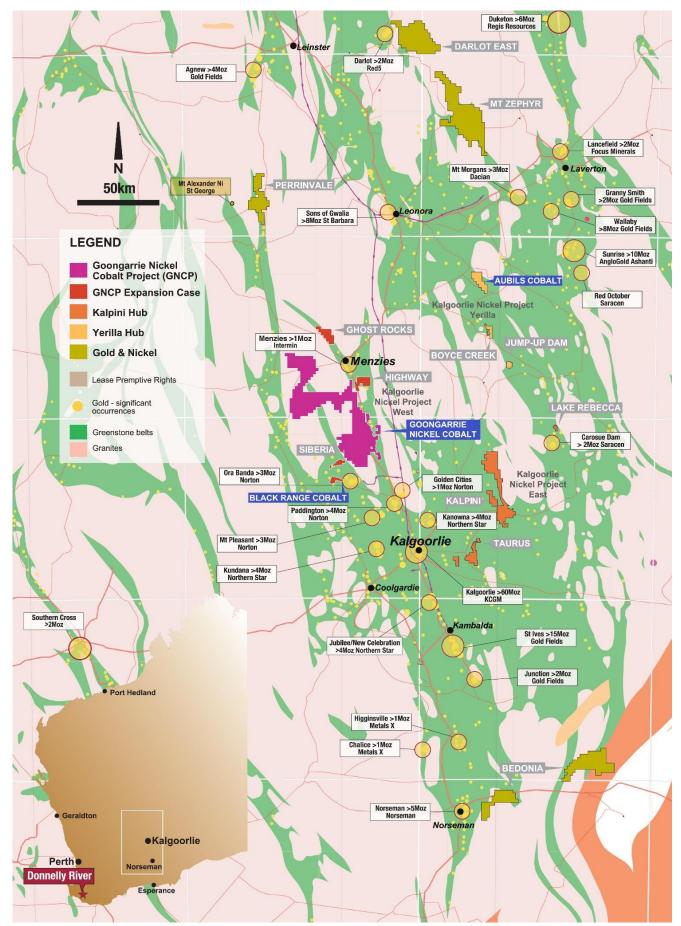


Figure 5 – Ardea's Western Australian projects



3. WA projects

Mount Zephyr gold project, Eastern Goldfields, WA (100% Ardea)

Upon acquisition of Ardea's new, high-resolution aeromagnetic and ground gravity data at Mount Zephyr, a complete reinterpretation of the geology was undertaken.

In areas of poor outcrop such as the Mount Zephyr greenstone belt, such data is used to redefine the geology and assist in the identification of potential targets for gold mineralisation.

The broader architecture of the Mt Zephyr greenstone belt is felt to be comparable to that of the Yamarna greenstone belt. The Celia Lineament in the Dunn's Line area can be compared to the Yamarna Shear Zone. Parallel to this but further eastward, the Gale structures can be compared to the Dorothy Hills Shear Zone (which hosts the 5.9Moz Gruyere discovery). As such, these projects are considered high priority exploration targets.

Additionally, Mount Zephyr has excellent nickel sulphide targets, generated from Geographic Information System (GIS) data compilations during the Quarter (notably Jones Area A, for which drilling approval was received). The strongly nickel sulphide-endowed Mount Windarra ultramafic unit is present in the eastern Mount Zephyr BIF units. More recently-discovered gold prospects at Paul's Find in the eastern stratigraphy are also under investigation.

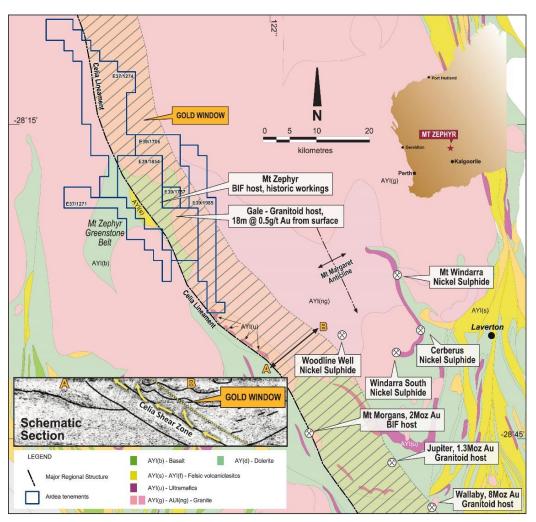


Figure 6 – Regional scale geology, Mount Zephyr, Celia Shear Zone defines the western bounding structure of the greenstone belt, with the Gale gold target some 10km east of the Celia Shear Zone.

To the southeast, there are major granite-hosted (syenite) gold systems at Jupiter and Wallaby, also located some 10km east of the Celia Shear Zone bounding fault.

Additionally, the western limb of the nickel sulphide-endowed Mt Windarra ultramafic occurs within Mt Zephyr tenure.



Gale prospect

The Gale prospect is located on the eastern margin of the Mount Zephyr greenstone belt, and is hosted within an "internal" granitoid within the greenstones, as opposed to the regional granites further to the east.

Gold mineralisation is documented from historic exploration, with RAB drill intercepts including 18m at 0.5g/t Au from surface corresponding with alteration and oxidised pyrite mineralisation in granite.

This alteration is so intense that it has destroyed the original granitic texture and is typical of mineralised zones in other Celia Shear Zone deposits.

Ethnographic surveys are current, ahead of planned drill appraisal.

Dunn's Line prospect

Dunn's Line is a line of historic working along banded-iron formation (BIF) outcrops to the east of the Celia Shear Zone. The localised workings are distributed along 5km of exposed BIF.

Historic mining commenced in 1899, with mining grades between 5 and 90g/t common from the Mount Zephyr mine. On-ground examination of Dunn's Line in conjunction with geophysical data shows that all historic workings correspond to faulted offsets of the BIF. It seems that they correspond to NNE-trending faults (comparable to the famed Mt Magnet "Boogardie Breaks"). Ardea will, in contrast to previous exploration efforts, target these breaks in the BIF units rather than targeting the boldly outcropping BIFs themselves.

Bardoc Tectonic Zone gold project, Eastern Goldfields, WA (100% Ardea)

The Company's Bardoc Tectonic Zone (BTZ) gold project comprises a series of gold deposits and prospects stretching more than 40km parallel to and immediately east of the Goongarrie nickel-cobalt ultramafic. The BTZ is a major regional structure, hosting numerous gold mines such as Paddington and the historic Goongarrie gold mining centre, and connecting through to the Boulder-Lefroy Fault which controls mineralisation at Kalgoorlie amongst others.

The BTZ is immediately adjacent to the Goongarrie nickel-cobalt mineralisation in a corridor of minimal outcrop exposure. Historic workings are present at the Big Four gold mine within GNCP tenure and several other localities. Sterilisation drilling for the Goongarrie project will cover some of this area, and gold anomalies are present locally throughout historic and current Ardea RC drilling (generally at the margins of intermediate dykes emplaced within the Walter Williams Formation nickel laterite host).

Interestingly, previous detailed geophysical interpretation aimed at defining gold exploration targets has highlighted structures which correspond closely to the main GNCP borefield targets.

Acquisition of low-level, high resolution aeromagnetic data has just been completed over the entire GNCP footprint. Data is awaited.

Bedonia nickel and gold, WA (100% Ardea)

Work is progressing at the Bedonia group of four tenements to the east of Norseman in the southern Eastern Goldfields.

The poorly exposed Bedonia project covers forested country near the southeastern margin of the Eastern Goldfields. Archaean-aged granite and greenstones are cross-cut by Proterozoic mafic dykes, some of which are known to host magmatic Ni-Cu-PGM mineralization. The largest of these, the Jimberlana Dyke, contains several documented mineralised occurrences that will be the focus of Ardea's exploration.



Other mineralization known in the area includes orogenic gold mineralization, and potentially secondary lacustrine vanadate deposits (Heartbreak Lignite deposits). Recent field work confirmed known targets as well as identifying previously undocumented gold workings. Greenstone sequences are evident beneath cover on all tenure at Bedonia.

In order to assess these covered rocks, Ardea has recently acquired high-quality aeromagnetic and radiometric data over the tenement areas. This data is being used to generated new target areas for current exploration programs.

Initial soil sampling at Bedonia has identified promising nickel-copper and gold anomalies which will now have detailed follow-up sampling and Aircore drilling completed. These are most encouraging outcomes for reconnaissance programs.

4. NSW projects

Lewis Ponds zinc-gold-silver-copper deposit, NSW (100% Ardea)

Ardea now has an Orange-based NSW management team to manage the Lewis Ponds Project. Relogging and resampling of the historic drill core was completed during the Quarter. A new resource is being generated.

Metallurgical testwork for the scoping study into bulk mining and recovery of metals from the Lewis Ponds deposit is being reviewed due to new insights highlighted in surface mapping.

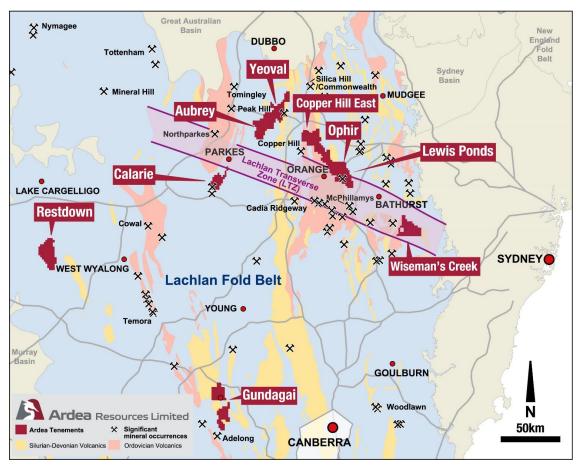


Figure 7 - Ardea's projects in the highly prospective Lachlan Fold Belt of NSW



Lachlan Fold Belt copper-gold, NSW

Copper Hill East copper-gold project – EL8556 (100% Ardea)

Recognition of an epithermal gold-silver setting in the Lewis Ponds structure is based on Ardea sampling of old workings associated with the Godolphin Fault, a shallow east-dipping domain boundary structure separating the Ordovician Macquarie Arc in the west from the Silurian Hill End Trough in the east. From southeast to northwest, the structure hosts gold mining centres and targets including McPhillamy's, Springfield, Mt Shorter, Calula and Copper Hill East. This Godolphin Fault trend is held within Ardea's tenement package, a 50km strike of continuous tenure in proximity to the McPhillamy's gold deposit in the south and the Commonwealth (Silica Hill) base metal-gold deposit in the north. Detailed GIS compilations were completed for target generation, a part of the broader Lachlan Fold Belt program.

Yeoval Porphyry copper-gold-molybdenum-rhenium project – EL8538 (100% Ardea)

Yeoval is located within the Macquarie Arc, 60km northeast of the Northparkes copper-gold mine. The tenement covers an area of 138km² and is intensely mineralised with more than 60 historic copper workings trending in a north-easterly direction along a 20km strike. The Ardea exploration target is a large tonnage porphyry copper-gold-molybdenum-rhenium system.

GIS compilations commenced as part of the broader Lachlan Fold Belt program.

Mt Aubrey epithermal gold-silver project – EL8532 (100% Ardea)

Mt Aubrey is located at the east contact of the highly mineralised Macquarie Arc Ordovician andesites some 30km northeast of Parkes and 30km southeast of the historic Peak Hill epithermal gold mine.

Mt Aubrey was acquired by Ardea as an epithermal gold system hosted in Upper Silurian to Lower Devonian-aged Dulladerry Volcanics, a bimodal subaerial suite of quartz eye porphyry with rhyolitic ashflow lapilli tuff, pyroclastic and breccia and amygdaloidal basalt. Gold mineralisation is typically hosted by 0.5-3m thick chalcedonic epithermal quartz veins and stockworks.

Mt Aubrey along with the adjoining Yeoval tenure is interpreted by Ardea as the manifestation of a major NE-trending zoned porphyry copper-gold-molybdenum-rhenium to epithermal gold-silver intrusive centre.

GIS compilations commenced as part of the broader Lachlan Fold Belt program.

Wiseman's Creek gold-copper project – EL8554 (100% Ardea)

Wiseman's Creek is located 35km southeast of Bathurst, NSW, around the logging town of Oberon. Epithermal gold mineralisation within the tenure is hosted largely within Late-Silurian – Early Devonianaged sediments, with geology through the centre of the tenure comprising the andesitic Ordovician-aged Rockley Volcanics (equivalent units host the Cadia and Northparkes gold-copper operations).

The historic mining area has high-grade epithermal gold-silver-lead mineralised pyritic deposits:

- 4-5 years operation (1899-1902, 1905), mining records show annual production up to 1,960tpa (1902) containing up to 26g/t gold (1905) and up to 540g/t silver (1899), grades suggest epithermal.
- Mined to a maximum depth of 40m only, untested at depth.
- Workings extend over 1000m E-W and over 800m N-S, with only extremities as yet sampled by Ardea.



Ardea's first-pass rock chip sampling at the historic Black Bullock mining area (Wiseman's Creek EL8554) recorded exceptional assay results (announcement 5 September 2018):

- Up to 38g/t gold and 348g/t silver.
- Significant samples have greater than 1g/t gold, confirming bulk tonnage potential.
- Several centres of workings located, largely obscured by soil cover and pine plantations.

Gundagai gold-copper project – EL8061 & 8586 (100% Ardea)

The Gundagai tenements are located 315km southwest of Sydney. Several old gold workings hosted by mineralised porphyry units exist in the Ardea tenure with mining dating back to 1842.

GIS compilations commenced as part of the broader Lachlan Fold Belt program.

5. Corporate

Strategy and Leadership

With the Strategic Partner program advancing for the GNCP, new exploration targets developing across the gold assets and additional focus required on the nickel sulphide targets, the Company has focussed its search for a new Managing Director.

Finance

The Company's cash position is \$15.8M at quarter end.

Issued capital at 30 September 2018 was 104,990,413 shares.

6. Looking Forward

During the December 2018 Quarter, Ardea will focus upon the following programs.

Goongarrie Nickel Cobalt Project (WA)

Ongoing Definitive Feasibility Study Programs

The Company will continue work on DFS programs focussing on studies related to approvals and submission of the GNCP development proposal to the Environmental Protection Authority

Ardea will also continue to report results from previously completed drilling programs as assays are received and interpreted.

Resource Upgrades

The Company is currently working on resource upgrades which will continue for the areas covering the Goongarrie South, Big Four and Scotia Dam optimised pits.

Upon receipt of final assays for the current 80x40m infill RC drilling of proposed pit areas, a full GNCP resource upgrade will be completed.



GNCP Flowsheet Research and Development

With the full 773Mt KNP resource inventory, discrete high-grade cobalt zones and the 2018 scandium and neutraliser discoveries, further project upside is expected at Goongarrie with studies planned to define business cases for:

- Scandium oxide and manganese sulphate production from the HPAL/MS sulphate circuit.
- Saprock neutraliser optimisation, including nickel-cobalt mineralised neutraliser.
- High Purity Alumina opportunities including from kaolin.
- Scandium-aluminium-vanadium-REE in surface laterite overlying and separate from the nickelcobalt mineralised sheet.

All potential co-production is after or independent from nickel-cobalt, meaning such options don't impact on current nickel-cobalt studies. Results will be released in the coming months and may well provide significant upside to the Goongarrie business case.

Strategic Partner Process

KPMG is advancing discussions with interested parties and Ardea will keep the market informed of progress.

Project Acquisitions

With the development strategy for the GNCP now well defined, the Company has been acquiring additional tenure where adjoining where adjoining the KNP. Selective business development evaluations have also commenced, again aimed at crystallizing shareholder value within the areas in which the Company already has comparative advantage.

WA and NSW Exploration

Exploration focus is to

- Complete initial gold drill appraisal of Mt Zephyr and the BTZ.
- Target generation of nickel sulphide prospects, in priority Mt Zephyr, Kalpini, Ghost Rocks, Bedonia and Perrinvale.

Mt Zephyr (WA)

Targets generated form the recent GIS compilations, gravity/magnetic surveys and field sampling will continue to have approval applications lodged to facilitate drill testing.

Lewis Ponds (NSW)

The new team for Lewis Pond will continue to advance the project with a view to a potential divestment of the NSW assets. Once all assay and geological data is available, resource estimation will proceed.

Target definition is required for the Lachlan Fold Belt tenements, with GIS compilation of historic data underway.

For and on behalf of the Board

Katina Law, Executive Chair, Ardea Resources Limited



For further information regarding Ardea, please visit www.ardearesources.com.au

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 July 2014, October 2016, 2016 Heron Resources Annual Report and 6 January 2017;
- KNP Cobalt Zone Study on 7 August 2017;
- Goongarrie Nickel Cobalt Project, Supplementary Prospectuses 10 February 2017, Ardea Annual Report Nov 2017, ASX announcements 28 June 2017, 4 July 2017, 28 August 2017, 14 March 2018, 24 July 2018, 8 October 2018;
- Lewis Ponds 2016 Heron Resources Annual Report, Ardea Resources Prospectus November 2016, Ardea Supplementary Prospectuses 10 February 2017, ASX announcements 9 March 2017, 16 March 2017, 26 April 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 are subject to new work programs, notably drilling, metallurgy and JORC Code 2012 resource estimation as applicable.

The information in this report that relates to Exploration Results and Resource Estimates for the Goongarrie Nickel Cobalt Project is based on information originally compiled by previous and current full-time employees of Heron Resources Limited and current full-time employees of Ardea Resources Limited. The Exploration Results, Resource Estimates and data collection processes have been reviewed, verified and re-interpreted 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.

The information in this report that relates to Ore Reserves for the Goongarrie South and Big deposits of the Goongarrie Nickel Cobalt Project is based on information compiled by Mr Steve Lampron who is a Member of the Australasian Institute of Mining and Metallurgy and who has provided expert guidance on mine planning and Ore Reserve estimation. Mr Lampron is a director of Auralia Mining Consulting and has sufficient experience 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 Lampron consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

ASX CHAPTER 5 COMPLIANCE AND PFS CAUTIONARY STATEMENT

The Company has concluded that it has a reasonable basis for providing the forward-looking statements and forecast financial information included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and all material assumptions, including the JORC modifying factors, upon which the forecast financial information is based are disclosed in this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules.

The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information. Certain material factors were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information.



The Goongarrie Nickel Cobalt Project is at the PFS phase and although reasonable care has been taken to ensure that the facts are accurate and/or that the opinions expressed are fair and reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness. Actual results and developments of projects and the scandium market development may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

A key conclusion of the PFS and Expansion Study, which are based on forward looking statements, is that the Goongarrie Nickel Cobalt Project is considered to have positive economic potential.

The Mineral Resource used for the PFS was classified under JORC 2012 Guidelines and announced by the Company on 14 March 2018. The cut-off grades adapted for the PFS and reported in Table 3.1 are the basis of the production target assumed for the PFS.

The Company believes it has a reasonable basis to expect to be able to fund and further develop the Goongarrie Nickel Cobalt Project. However, there is no certainty that the Company can raise funding when required.

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 amount of funding required to execute the Company's programs, 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, 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.

+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	30 September 2018

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(452)	(452)
	(b) feasibility & development	(2,818)	(2,818)
	(c) production	-	-
	(d) staff costs	(224)	(224)
	(e) administration and corporate costs	(262)	(262)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	66	66
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds (net)	409	409
1.8	Other	-	-
1.9	Net cash from / (used in) operating activities	(3,281)	(3,281)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(61)	(61)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

⁺ See chapter 19 for defined terms

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 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	(61)	(61)

3.	Cash flows from financing activities	
3.1	Proceeds from issues of shares	-
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	-
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.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	19,157	19,157
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,281)	(3,281)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(61)	(61)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	15,815	15,815

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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	1,815	2,157
5.2	Call deposits	14,000	17,000
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)	15,815	19,157

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	181
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

Salaries, Directors fees and consulting fees paid to Directors - \$138,656

Payment for Kalgoorlie office to a Director related entity for the quarter - \$18,750

Payment for HR Services to a Director related entity for the quarter - \$24,283

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
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 transaction items 7.1 and 7.2	ns included in

1 September 2016

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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 ab whether it is secured or unsecured. If any add proposed to be entered into after quarter end	ditional facilities have bee	en entered into or are

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	(683)
9.2	Feasibility and Development	(2,930)
9.3	Production	-
9.4	Staff costs	(112)
9.5	Administration and corporate costs	(550)
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	(4,275)

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	See Attached Schedule			
10.2	Interests in mining tenements and petroleum tenements acquired or increased	See Attached Schedule			

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Compliance statement

- 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.

Sam Middlemas Company Secretary

Jan Widdlenas

30 October 2018

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.

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10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced

Ardea WA Tenements										
Tenure	Location	Nature of Interest	Ardea interest beginning Quarter	Ardea interest end Quarter						
0	0	0	0	0						

Ardea NSW Tenements										
Tenure	Location	Nature of Interest	Ardea interest beginning Quarter	Ardea interest end Quarter						
0	0	0	0	0						

10.2 Interests in mining tenements and petroleum tenements acquired or increased

	Ardea WA Tenements										
Tenure	Location	Nature of Interest (current) Ardea interest Ardea inte beginning Quarter Quar									
E28/2807	Kalpini	Pending	0	100							
P28/1337	Kalpini	Pending	0	100							

Ardea NSW Tenements										
Tenure	Location	Nature of Interest (current)	Ardea interest beginning Quarter	Ardea interest end Quarter						
0	0	0	0	0						

Ardea Resources Ltd Tenement Schedule (WA) as at 30 September 2018 Goongarrie Nickel Cobalt Project

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E24/0211	Goongarrie Nickel Cobalt	100%	Pending		M24/0541	Goongarrie Nickel Cobalt	100%	Live	
E29/0934	Goongarrie Nickel Cobalt	100%	Live		M24/0731	Goongarrie Nickel Cobalt	100%	Live	3.7
E29/1028	Goongarrie Nickel Cobalt	100%	Pending		M24/0732	Goongarrie Nickel Cobalt	100%	Live	3.7
E29/1038	Goongarrie Nickel Cobalt	100%	Pending		M24/0744	Goongarrie Nickel Cobalt	100%	Live	7
E29/1039	Goongarrie Nickel Cobalt	100%	Pending		M24/0778	Goongarrie Nickel Cobalt	100%	Live	3
E30/0500	Goongarrie Nickel Cobalt	100%	Pending		M29/0167	Goongarrie Nickel Cobalt	100%	Live	
E30/0501	Goongarrie Nickel Cobalt	100%	Pending		M29/0202	Goongarrie Nickel Cobalt	100%	Live	
E30/0502	Goongarrie Nickel Cobalt	100%	Pending		M29/0272	Goongarrie Nickel Cobalt	100%	Live	
G29/0024	Goongarrie Nickel Cobalt	100%	Pending		M29/0278	Goongarrie Nickel Cobalt	100%	Live	
L24/0239	Goongarrie Nickel Cobalt	100%	Pending		M29/0423	Goongarrie Nickel Cobalt	100%	Live	
L29/0134	Goongarrie Nickel Cobalt	100%	Pending		M29/0424	Goongarrie Nickel Cobalt	100%	Pending	
L29/0135	Goongarrie Nickel Cobalt	100%	Pending		M29/0426	Goongarrie Nickel Cobalt	100%	Pending	
L30/0067	Goongarrie Nickel Cobalt	100%	Pending		P29/2265	Goongarrie Nickel Cobalt	100%	Live	
L30/0068	Goongarrie Nickel Cobalt	100%	Pending		P24/5260	Goongarrie Nickel Cobalt	100%	Pending	
					P24/5265	Goongarrie Nickel Cobalt	100%	Pending	



Goongarrie Nickel Cobalt Project Expansion Case

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
M24/0919	GNCP Expansion Siberia	100% Ni lat	Live	10	M24/0797	GNCP Expansion Siberia	100% Ni lat	Live	5
M24/0959	GNCP Expansion Siberia	100% Ni lat	Live	10	M24/0915	GNCP Expansion Siberia	100% Ni lat	Live	5
E29/1045	GNCP Expansion Siberia	100%	Pending		M24/0916	GNCP Expansion Siberia	100% Ni lat	Live	5
E29/1048	GNCP Expansion Siberia	100%	Pending		P24/5235	GNCP Expansion	100%	Pending	
M29/0214	GNCP Expansion Highway	100%	Live		P24/5236	GNCP Expansion	100%	Pending	
E24/0203	GNCP Expansion Siberia	100% Ni lat	Live	5	P29/2484	GNCP Expansion	100%	Pending	
E29/0889	GNCP Expansion Siberia	100% Ni lat	Live	5	P29/2485	GNCP Expansion	100%	Pending	
M24/0634	GNCP Expansion Siberia	100% Ni lat	Live	1,5	M24/0757	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0660	GNCP Expansion Siberia	100% Ni lat	Live	5	M24/0973	GNCP Expans Black Range	100% Ni lat	Pending	5
M24/0663	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4395	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0664	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4396	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0665	GNCP Expansion Siberia	100% Ni lat	Live	2,5	P24/4400	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0683	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4401	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0686	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4402	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0772	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4403	GNCP Expans Black Range	100% Ni lat	Live	5
E29/0941	GNCP Expans Ghost Rock	100%	Live						

Kalpini Hub GNCP Expansion Case

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E27/0524	Kalpini	100%	Live		M25/0161	Kalpini Bulong	100% Ni lat	Live	8
E27/0606	Kalpini	100%	Pending		M25/0171	Kalpini Bulong	100% Ni lat	Live	8
E27/0607	Kalpini	100%	Pending		M25/0187	Kalpini Boulder Block	100%	Live	
E28/1224	Kalpini	100%	Live		M25/0209	Kalpini Bulong	100% Ni lat	Live	8
E28/2807	Kalpini	100%	Pending		P25/2256	Kalpini Bulong	100% Ni lat	Live	8
M27/0395	Kalpini	100%	Live		P25/2257	Kalpini Bulong	100% Ni lat	Live	8
M27/0506	Kalpini	100%	Pending		P25/2258	Kalpini Bulong	100% Ni lat	Live	8
M28/0199	Kalpini	100%	Live		P25/2454	Kalpini Bulong	100%	Pending	
M28/0201	Kalpini	100%	Live		P25/2455	Kalpini Bulong	100%	Pending	
M28/0205	Kalpini	100%	Live		P25/2456	Kalpini Bulong	100%	Pending	
E27/0278	Kalpini Pioneer	100% Ni lat	Live	9	P25/2457	Kalpini Bulong	100%	Pending	
E28/1746	Kalpini Pioneer	100% Ni lat	Live	9	P25/2458	Kalpini Bulong	100%	Pending	
E28/2483	Kalpini Pioneer	100% Ni lat	Live	9	P25/2459	Kalpini Bulong	100%	Pending	
M31/0488	Kalpini Lake Rebecca	100%	Pending		P25/2460	Kalpini Bulong	100%	Pending	
P31/2038	Kalpini Lake Rebecca	100%	Live		P25/2461	Kalpini Bulong	100%	Pending	
P31/2039	Kalpini Lake Rebecca	100%	Live		P25/2482	Kalpini Bulong	100%	Pending	
P31/2040	Kalpini Lake Rebecca	100%	Live		P25/2483	Kalpini Bulong	100%	Pending	
E25/0576	Kalpini Bulong	100%	Pending		P25/2484	Kalpini Bulong	100%	Pending	
E25/0578	Kalpini Bulong	100%	Pending		P25/2559	Kalpini Bulong	100%	Pending	
M25/0059	Kalpini Bulong	100% Ni lat	Live	8	P25/2560	Kalpini Bulong	100%	Pending	
M25/0134	Kalpini Bulong	100% Ni lat	Live	8	P25/2561	Kalpini Bulong	100%	Pending	
M25/0145	Kalpini Bulong	100% Ni lat	Live	8	P28/1337	Kalpini Bulong	100%	Pending	
M25/0151	Kalpini Taurus	100%	Live			_			

Yerilla Hub GNCP Expansion Case

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E39/1954	Yerilla Aubils	100%	Live	7	M31/0475	Yerilla Jump-up Dam	100%	Live	6
E31/1092	Yerilla Boyce Creek	100%	Live	6	M31/0477	Yerilla Jump-up Dam	100%	Live	6
E31/1169	Yerilla Boyce Creek	100%	Pending		M31/0479	Yerilla Jump-up Dam	100%	Live	6
M31/0483	Yerilla Boyce Creek	100%	Live	6					

Mt Zephyr Nickel-Gold

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E37/1271	Mt Zephyr	100%	Live		E39/1706	Mt Zephyr	100%	Live	
E37/1272	Mt Zephyr	100%	Live		E39/1757	Mt Zephyr	100%	Live	
E37/1273	Mt Zephyr	100%	Live		E39/1854	Darlot East	100%	Live	
E37/1274	Mt Zephyr	100%	Live		E39/1985	Darlot East	100%	Live	

Perrinvale Nickel-Gold

Tenure	Location	Ardea Interest (%)	Status	Note	Tonuro	Location	Ardea Interest (%)	Status	Note
renure	Location	mileresi (%)	Status		Tenure	Location	(%)	Status	
E29/1006	Perrinvale	100	Pending						



Bedonia Nickel-Copper-PGM

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E63/1827	Bedonia Ni-Cu-PGM	100%	Live		E63/1856	Jimberlana Ni-Cu-PGM	100%	Live	
E63/1828	Bedonia Ni-Cu-PGM	100%	Live		E63/1857	Jimberlana Ni-Cu-PGM	100%	Live	

Donnelly River Graphite

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E70/4804	Donnelly River	100	Pending						

WA Regional, Mineral Rights

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
M15/1101	WA Regional	Pre-empt Ni lat	Live	11	M15/1323	WA Regional	Pre-empt Ni lat	Live	11
M15/1263	WA Regional	Pre-empt Ni lat	Live	11	M15/1338	WA Regional	Pre-empt Ni lat	Live	11
M15/1264	WA Regional	Pre-empt Ni lat	Live	11	E27/0300	WA Regional	100% Ni lat	Live	12

Ardea Resources Ltd Tenement Schedule (NSW) as at 30 September 2018.

	Ardea NSW Tenements								
Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
EL5583	Lewis Ponds 15km E Orange	100	Live	4	EL8555	Calarie 5km N Forbes	100	Live	
EL8323	Lewis Ponds 10km NE Orange	100	Live		EL8580	Calarie 10km N Forbes	100	Live	
EL8556	Copper Hill East NE Orange	100	Live		ML0739	Calarie 10km N Forbes	100	Live	
EL8554	Wiseman Ck 27km SE Bathurst	100	Live		EL8061	Gundagai 5km S Gundagai	100	Live	
EL8538	Yeoval 22km SW Wellington	100	Live		EL8586	Gundagai 5km N Gundagai	100	Live	
EL8532	Mt Aubery 30km NE Parkes	100	Live		EL8557	Restdown 62km W of Wyalong	100	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 assignee (Norton Goldfields) retains certain gold claw-back rights.
4.	Finder's fee to David Timm's on EL5583 sale transaction or production commencement (\$2M cap).
5.	Eastern Goldfields owns gold-silver rights, Ardea owns all non-Au-Ag, in particular Ni-Co-PGM.
6.	Ausjade right to tenement ownership and semi-precious minerals, Ardea owns all non-semi-precious mineral rights, in particular Ni-Co-PGM-Au.
7.	Ausjade right to semi-precious minerals, Ardea owns all non- semi-precious mineral rights, in particular Ni-Co-PGM-Au, Ardea registered holder.
8.	Southern Gold owns gold rights and responsible for tenement management, Ardea 100% Ni-Co laterite rights.
9.	Pioneer-Northern Star owns gold-nickel sulphide rights and responsible for tenement management, Ardea owns 100% Ni-Co laterite rights.
10.	Intermin subsidiary Metaliko as owns gold rights and responsible for tenement management, Ardea owns 100% Ni-Co laterite rights.
11.	Ramelius assignee owns all mineral rights, Ardea pre-emptive right to Ni-Co laterite.
12.	Pioneer assignee owns all mineral rights. Ardea owns Ni-Co laterite