Ardea Resources Limited

QUARTERLY OPERATIONS REPORT

For the Quarter ended 30 June 2019

ASX & Media Release
22 July 2019

ASX Symbol
ARL

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Issued Capital
Fully Paid Ordinary Shares
106,145,424

Unlisted options exercisable at $0.25
11,155,011

Directors/Employee Performance Rights
5,161,000

ABN 30 614 289 342

CORPORATE

Cash position at end of Quarter of **$11.2M**.

Research and development funding of $2.5M received.

Financial year 2020 budget adopted which strikes a balance between maintaining Ardea's strong financial position, whilst advancing the Company's strategic mix of nickel development and quality gold and base metal exploration projects.

DEVELOPMENT

Goongarrie Nickel Cobalt Project (GNCP)

- **Strategic Partner** process ongoing with recent nickel price movements stimulating new interest from international groups, including battery producers and end-users that need to secure long-term supplies of nickel and cobalt.
- **High grade open pit optimisations and neutralisation test-work** nearing completion, with encouraging results.
- **Approvals Studies** continue with independent expert reports for flora, fauna, surface water and tailings being finalised.

EXPLORATION

WA Gold and Nickel Sulphide

Technical reviews completed, targets defined and initial air core drilling completed. Further exploration planned to follow up:

- **Bardoc Tectonic Zone** – Big Four drill program has confirmed gold mineralisation in the area of Ardea's Big Four gold mine and historic gold prospects at Zeus and Dionysus, and also identified numerous new anomalies.
- **Mulga Plum, Taurus and Windanya Projects** – First phase field work confirms gold mineralisation associated with old workings with extensional potential. Follow up assessment programs under way.
- **Perrinvale** – Nickel Sulphide exploration tenement granted and planning underway to complete initial ground EM geophysical survey.

NSW Gold and Base Metals

Godolphin Resources Limited incorporated as the IPO vehicle to advance Ardea's NSW gold and base metal assets. Field programs completed confirming high prospectivity targets across all tenure.

- **Prospectus** – on track to lodge in Q3 2019.

June Quarter, 2019

Andrew Penkethman, Ardea's Chief Executive Officer commented:

> *"The **Goongarrie Nickel Cobalt Project** (GNCP) is the most advanced and our flagship asset. The Strategic Partner process continues to receive strong interest and Ardea's strategy remains to deliver an optimum outcome for our Shareholders. On this basis Ardea continues to engage with battery producers and end-users wanting to secure long-term supplies of nickel and cobalt.*
>
> *There are few nickel-cobalt resources of Goongarrie's scale and it is pleasing to note that multiple international vehicle manufactures continue to announce their commitment to expanding their electric vehicle production.*
>
> *In parallel with the GNCP, Ardea is proceeding with its stated strategy to advance its West Australian gold and nickel sulphide targets. At Big Four on the Bardoc Tectonic Zone, initial gold and infrastructure site drilling results have been interpreted, with a number of high-quality targets defined for follow up. Now the **Perrinvale** exploration licence has been granted, planning work is being finalised to complete an Electro Magnetic survey designed to define nickel sulphide targets.*
>
> *The planned IPO of the New South Wales assets has accelerated considerably during the Quarter with incorporation of **Godolphin Resources Limited**. The IPO prospectus is on-track for lodging in Q3 2019.*
>
> *Ardea continues to define optimum strategies to enhance the value of its quality development and exploration portfolio."*

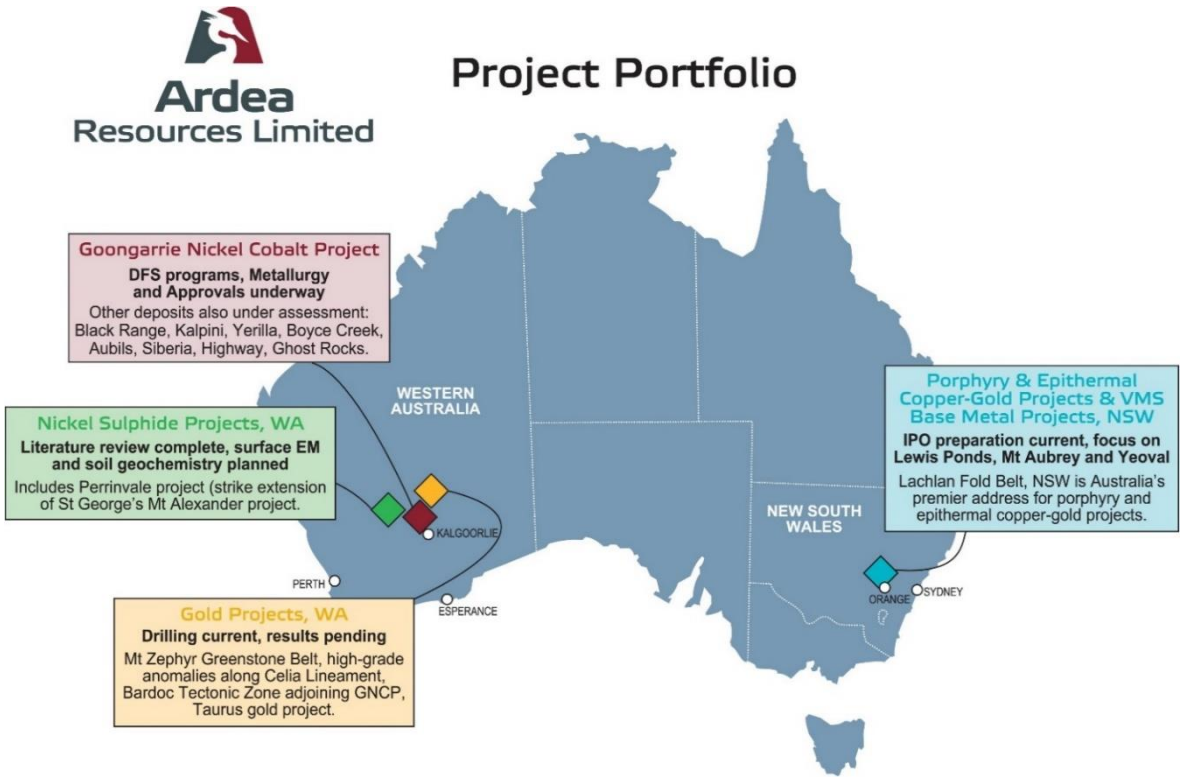

Figure 1: Ardea Projects Map

1. Goongarrie Nickel Cobalt Project

Overview

Ardea continues to advance the Goongarrie Nickel Cobalt Project (GNCP) with a focus on delivering the best outcome for Shareholders. Recent progress and ongoing work streams include:

- **Strategic Partner Update** – The Ardea executive team continue, alongside our advisors KPMG, in engaging with potential international project partners interested in securing nickel and cobalt off-take. Interest in off-take from the GNCP remains high, with a key Ardea criteria being that offtake rights are linked to project funding commitment.
- **Resource Update** – Wireframe modelling in the June Quarter has focussed on the 10km of strike that comprise the Big Four and Scotia Dam deposits, forming the southern end of the GNCP. A resource and reserve update are expected to be completed in H2 2019.
- **High Grade Mine Schedule** – Open pit optimisations and detailed mine scheduling, including pit back-fill schedule, waste landform locations and Material Characterisation are in progress utilising the updated GNCP wireframes and block models. The objective is to focus upon higher grade mining areas during the GNCP capital payback period, combined with sourcing carbonate during open pit mining that can be used as a local source of in-plant neutraliser.
- **Metallurgical Variability Work** – Final laboratory reports are being reviewed for input into the current mine schedule study.
- **Mineralised Neutraliser** – First and second phase neutraliser bench-scale research test-work has demonstrated viable on-site neutraliser results from material containing recoverable nickel-cobalt and scandium mineralisation. These results are being incorporated into the mine scheduling work which is expected to allow their value to be captured in updated financial models.
- **Approvals** – Draft reports for all flora, fauna and water surveys commissioned in Q4 2018 continue to be reviewed and consolidated, as inputs to the mine site layout design and mine schedule. Ardea will not lodge any development applications with the various State authorities until the scale and footprint of the GNCP is finalised, which is linked to the ongoing Strategic Partner process.
- **Tenement Consolidation** – GNCP tenure is being consolidated and adjoining infrastructure sites secured. Some of the new acquisitions include opportunistic gold and nickel sulphide targets, which are being evaluated and ranked for future exploration.
- **Stakeholder Engagement** – Continues with strong Local Government and Community support received during the ongoing Stakeholder engagement process.

Results from the above work streams will continue to refine key inputs and underpin a future Definitive Feasibility Study where production scale and type of nickel-cobalt product to be produced is tailored to future Strategic Partner requirements.

Feasibility Programs

Work during the Quarter was focussed on resource modelling, pit optimisations, mine planning, metallurgy and availability of infrastructure sites. These programs shape and define the planned site layout, which is the critical parameter for the approvals process.

Resource Modelling

Updated resource modelling incorporating the results from the Ardea RC drilling completed in late 2018 focused on the Big Four and Scotia Dam deposits after completion of an updated resource model of Goongarrie South in the previous Quarter. These models need to be consolidated and optimised, prior to reporting, which is a work in progress.

Similar to the Goongarrie South deposit, the mineralisation at Big Four and Scotia Dam is remarkably consistent, occurring as a uniform goethite sheet beneath a barren lateritised alluvial cover and above a carbonated saprock basement. In the resource modelling, the "Base of Alluvium" and "Top of Saprock" are the key contacts. The goethite material between these two contacts uniformly exceeds 0.5% Ni, which fortuitously is also the mineral resource cut-off grade for the GNCP.

The alluvium is comprised of clay, quartz sand, re-worked haematite clast gravel, and most importantly, a gravel cemented with nodular dolomite or magnesite which carbonate can be used for neutralising the autoclave acidic discharge. All alluvium variants have distinct geochemical signatures, which are the basis for interpreting the Base of Alluvium in resource modelling.

The nickel-cobalt laterite mineralisation is invariably associated with the hydrated iron oxide mineral, goethite, which is the preferred plant feed for this style of deposit, as it has rapid leach kinetics and does not require drying or screening prior to processing.

The base of laterite mineralisation is defined by the Top of Saprock. Saprock is an indurated weathered bedrock consisting variously of dolomite-magnesite-silica-serpentine. The hard competent saprock contrasts sharply with the overlying soft goethite mineralisation, so will allow excellent visual grade control in mining. The saprock dolomite and magnesite will be the main GNCP neutraliser source. In contrast to the barren alluvium cover, nickel grade persists down into saprock at 0.3-0.8% nickel, being the source of the GNCP "Mineralised Neutraliser".

Updated wireframe model extents of the nickel and cobalt mineralisation at Big Four and Scotia Dam have been modelled based on notional 0.25% nickel and 0.05% cobalt cutoff grades and are displayed in plan and 3D isometric views in **Figures 2 and 3**. Additional features interpreted and modelled to constrain the updated resource estimates include the base of near surface calcrete and dolomite, envelopes capturing paleochannel carbonate mineralisation, the Base of Alluvium and the Top of Saprock.

Resource grade estimation is being undertaken using local uniform conditioning for nickel (Ni) and cobalt (Co), and ordinary kriging for MgO, FeO, Al2O3, SiO2, CaO, Mn, Cr and LOI. The block model geochemistry allows specific Material Characterisation attributes to be assigned to each block within the 3D model. The blocks in the current model are 10x10x2m, compared to 40x40x4m in historic GNCP block models. The smaller block size will facilitate more accurate mine scheduling.

Representative cross sections of the drilling and updated resource model through the Big Four and Scotia Dam areas are displayed in **Figures 4 to 9**. **Figures 4 and 7** show the drilling and resource model colour coded by the newly defined material type classification scheme for the GNCP while **Figures 5, 6, 8 and 9** display the same cross sections colour coded by the updated nickel and cobalt grade estimates. A description of the GNCP material types (as used at Goongarrie) is presented in **Table 1**.

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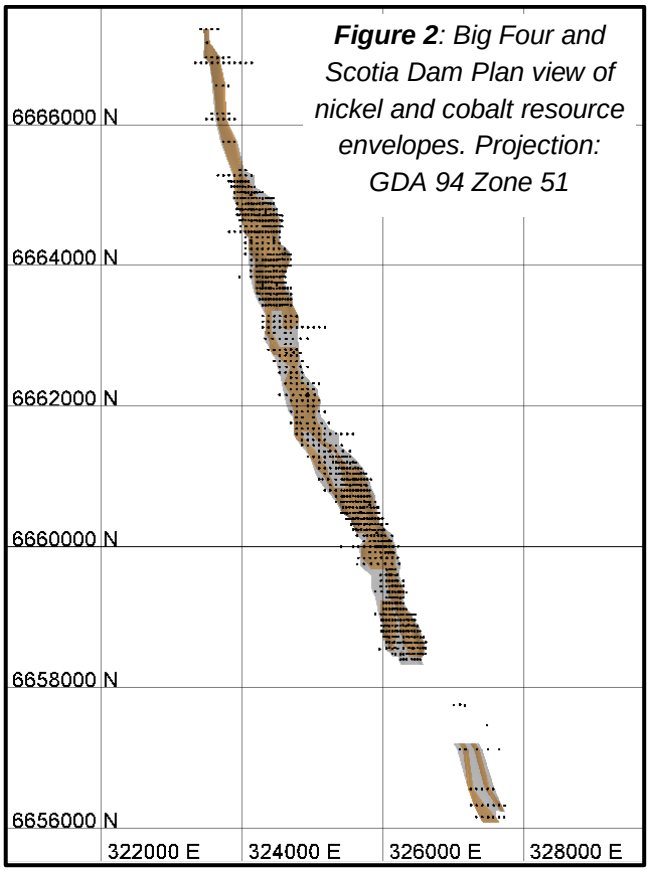

***Figure 2**: Big Four and Scotia Dam Plan view of nickel and cobalt resource envelopes. Projection: GDA 94 Zone 51*

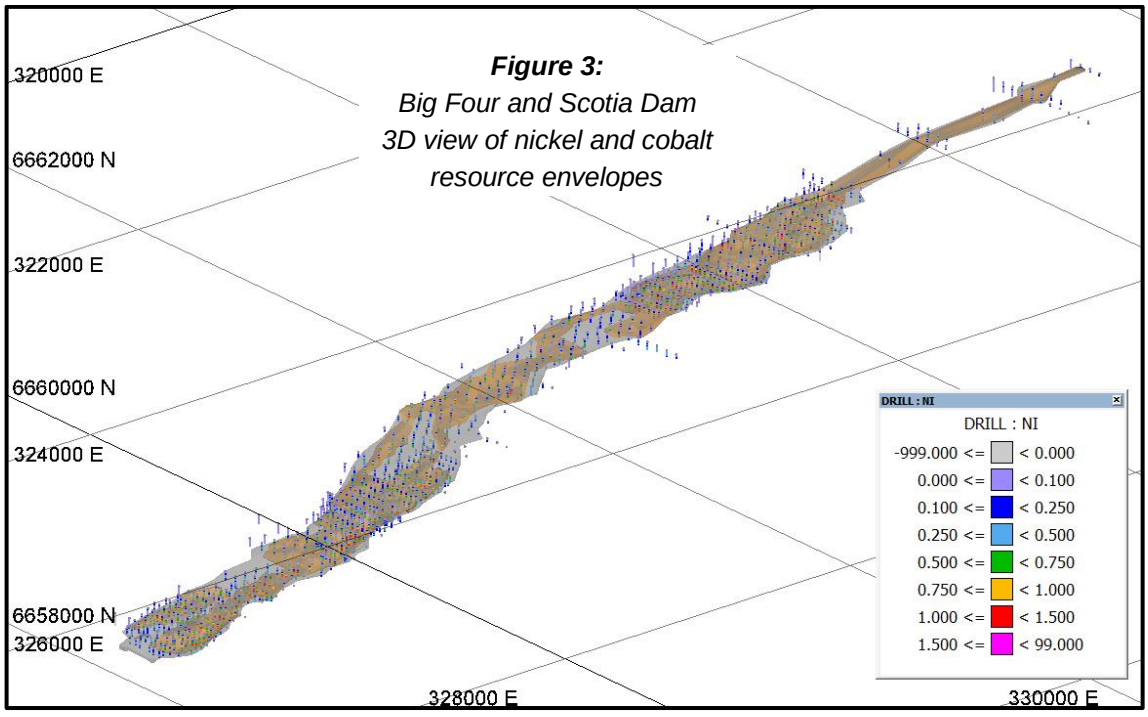

Figure 3:
Big Four and Scotia Dam 3D view of nickel and cobalt resource envelopes

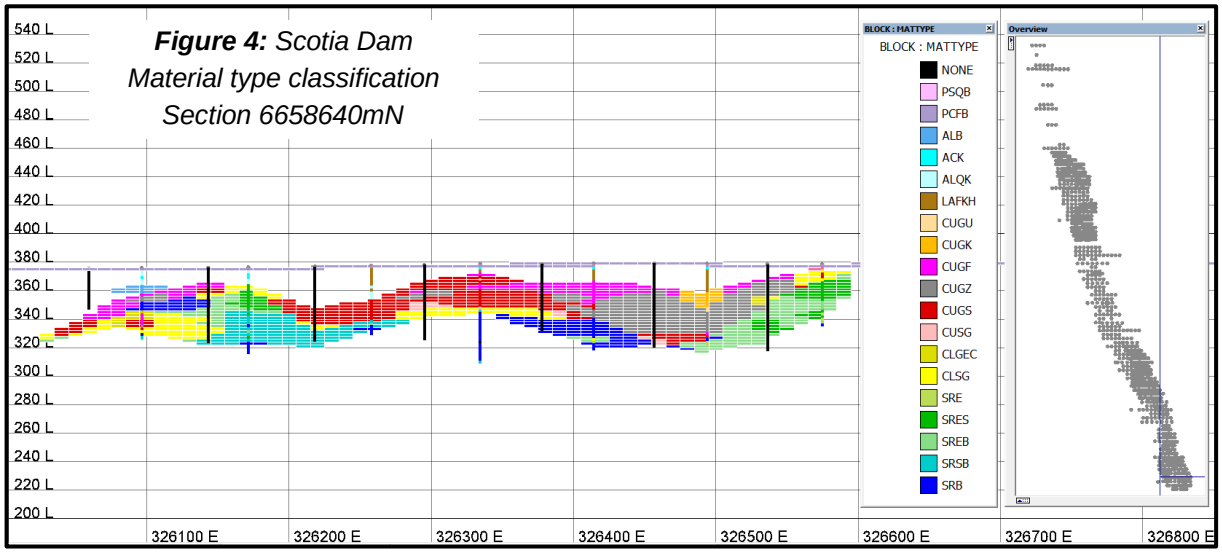

Figure 4: *Scotia Dam Material type classification Section 6658640mN*

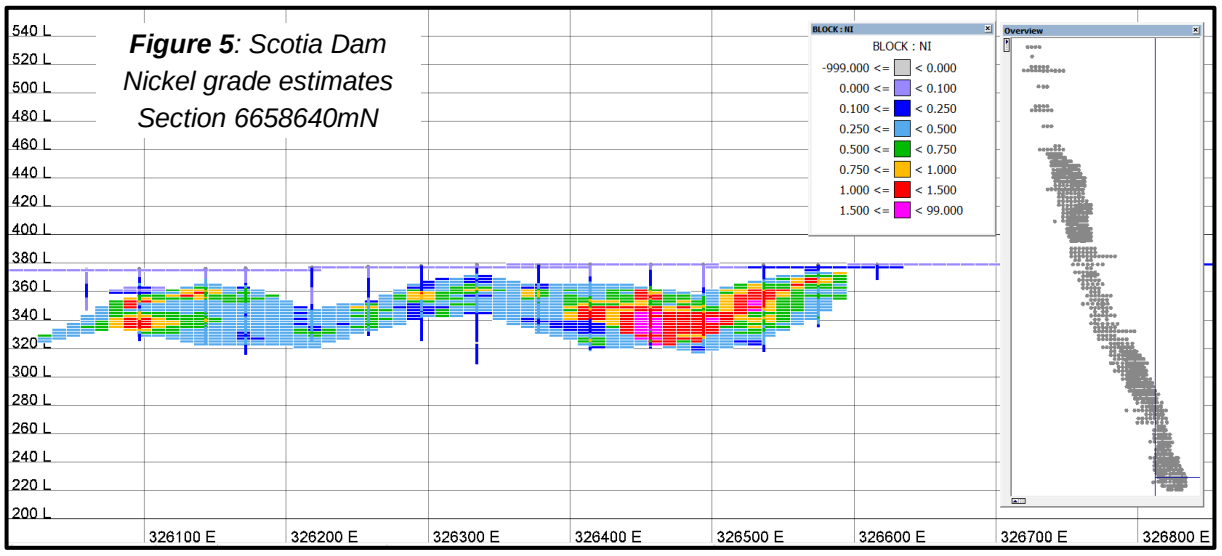

Figure 5*: Scotia Dam Nickel grade estimates Section 6658640mN*

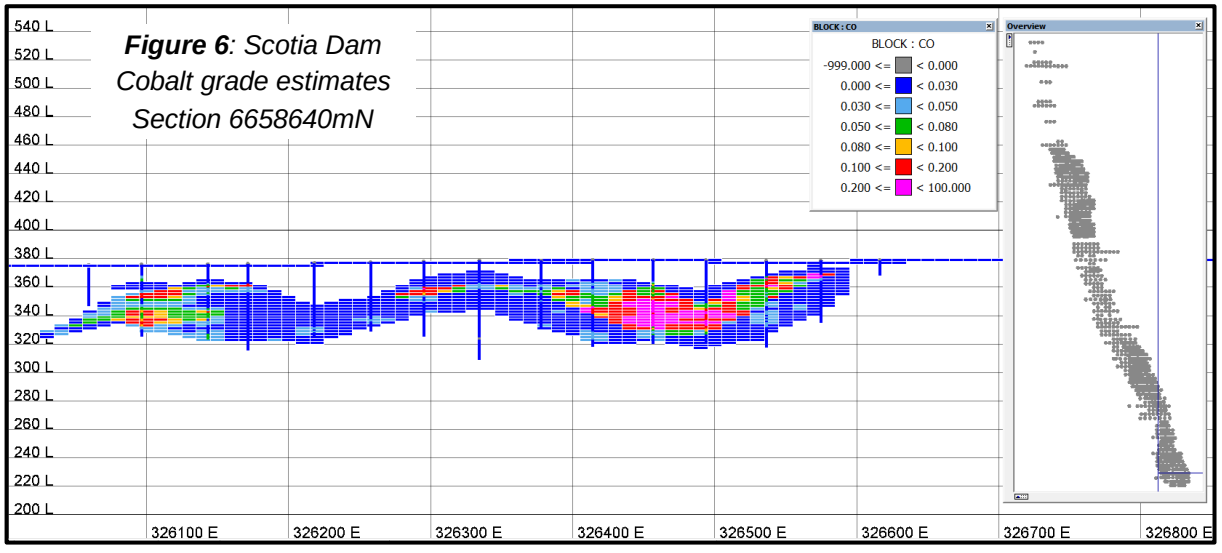

Figure 6*: Scotia Dam Cobalt grade estimates Section 6658640mN*

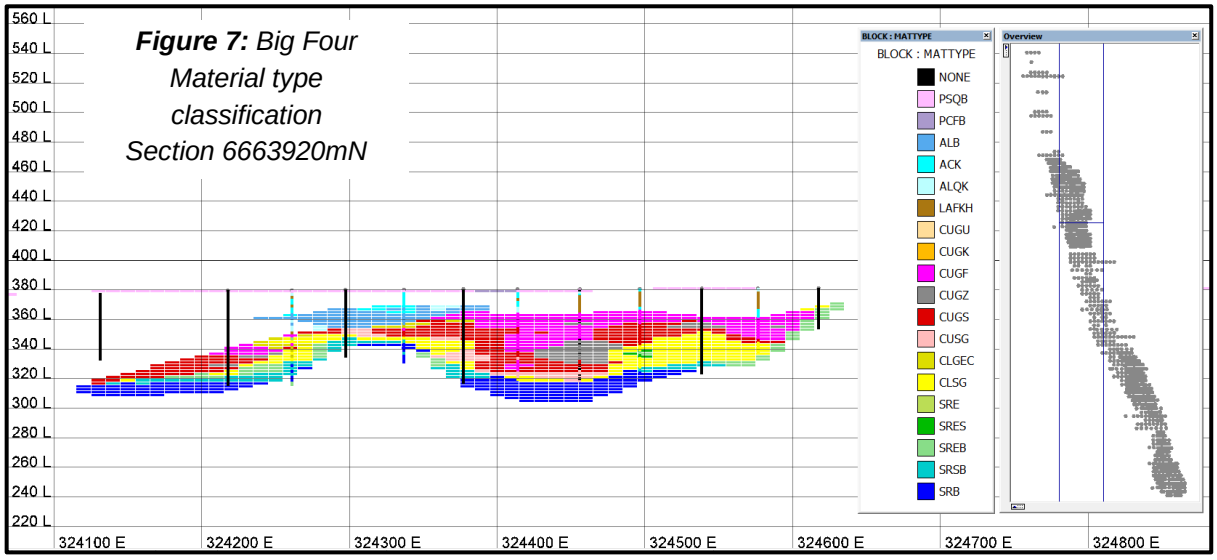

Figure 7: *Big Four Material type classification Section 6663920mN*

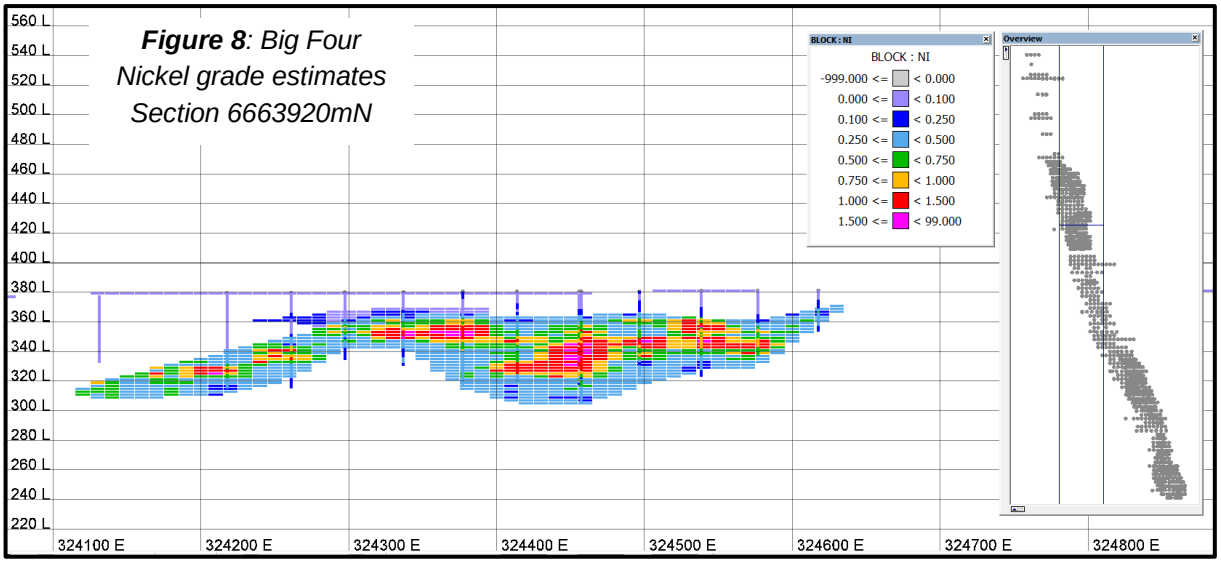

Figure 8*: Big Four Nickel grade estimates Section 6663920mN*

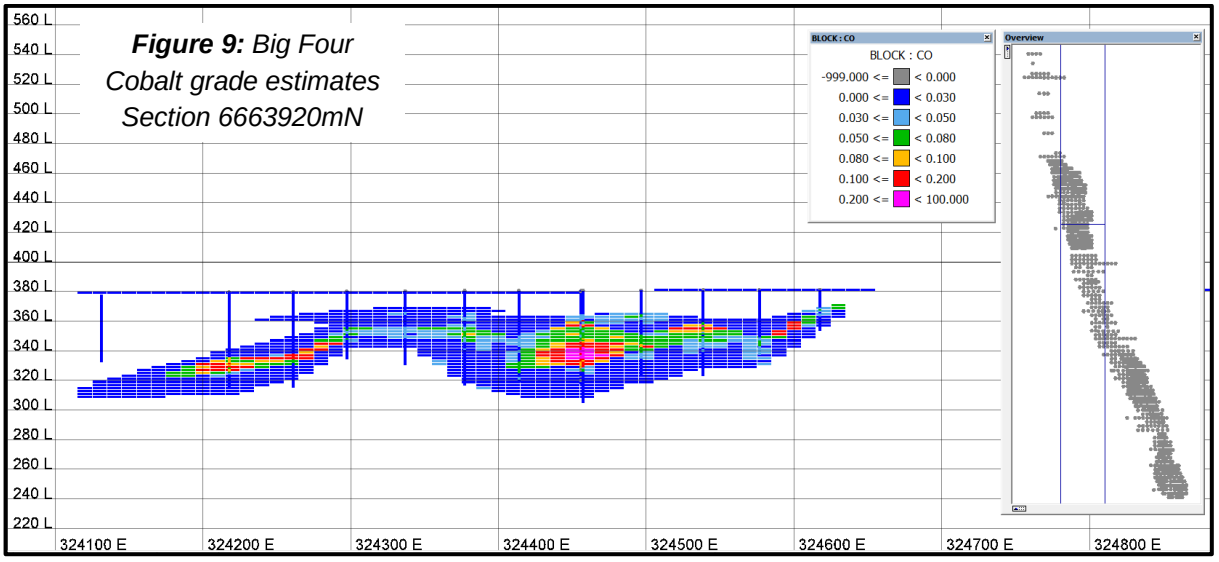

Figure 9: *Big Four Cobalt grade estimates Section 6663920mN*

Code	Profile	Description
PSQB	Pedolith	Pedogenic sand, quartz & carbonate - calcite and or dolomite
PCFB		Pedogenic clay, Fe oxide & carbonate rich – calcite and or dolomite
ALB	Alluvial (Transported)	Alluvial channel with carbonate cemented sediments
ACK		Alluvial clay, kaolinite rich
ALQK		Alluvial sand, quartz and kaolinite rich
LAFKH		Laterite ferruginous, goethite + kaolinite + haematite
CUGU	Clay Upper	goethite + gibbsite
CUGK		goethite + kaolinte
CUGF		goethite + undifferentiated Fe oxide
CUGZ		goethite + asbolite
CUGS		goethite + silica
CUSG		silica + goethite
CLGEC	Clay Lower	goethite + serpentine + chlorite
CLSG		silica + goethite
SRE	Saprock	serpentine dominant
SRES		serpentine + silica
SREB		serpentine + dolomite &/or magnesite
SRSB		serpentine + silica + dolomite &/or magnesite
SRB		dolomite &/or magnesite dominant

Table 1: Description of GNCP material types for reference with Figure 4 and 7.

A strong correlation exists between high nickel-cobalt grades and the CUGZ goethite-asbolite variant of mineralisation (grey colour unit in **Figure 4 and 7**).

An important feature of the GNCP is that the “Saprock Neutralisers” SREB, SRSB, SRB, tend to occur at the base of the nickel-cobalt mineralisation. As such, these neutraliser source zones are expected to be captured within optimised open pit shells, once mine design work has been completed. This feature, along with the ancillary nickel and cobalt credits generated in the neutraliser, is an important and valuable attribute of the GNCP that enhances project economics.

High Grade Mine Schedule

Pit Optimisations were completed for Goongarrie South during the Quarter. This included strategic mine scheduling of both High Grade (HG) and Life of Mine (LOM) phases of the identified pit shells to confirm the areas suitable for detailed pit design. Some detailed pit designs for Goongarrie South were completed during the June Quarter which extend over 7km of the total +16km of strike of the extensive GNCP mineral system (see **Figure 10**).

The Pit Optimisation results also contributed to identification of neutraliser material sources at Goongarrie South that would support mill feed requirements for the entire LOM plan. Sourcing of all neutraliser onsite is expected to result in improved outcomes for the project by eliminating the need to import either externally sourced neutraliser material and/or commercial grade carbonate product. Sequencing and prioritising of the neutraliser sources identified will be confirmed during the final mine scheduling work that incorporates additional mining areas at Big Four and Scotia Dam which are known to be well endowed with neutraliser.

Work on mining options at Big Four and Scotia Dam continues to be undertaken with incorporation into the full LOM plan and finalisation of the updated mining study planned to be completed in the September Quarter.

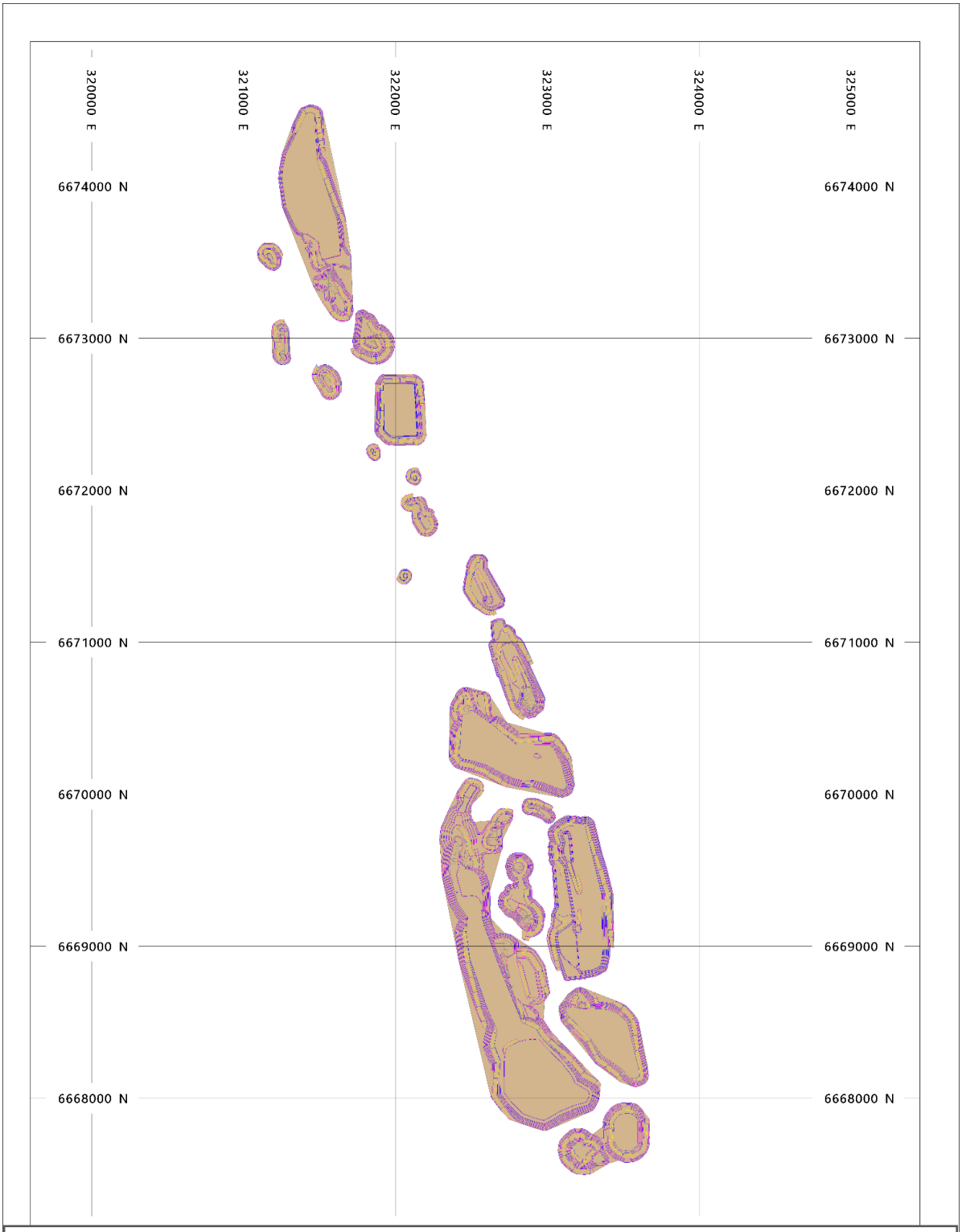

Figure 10: *Goongarrie South Life-of-Mine optimised pit designs completed thus far. The pit designs incorporate higher grade starter pits based on Pit Optimisation Revenue Factor of 0.40 (i.e. optimal pit shell at 0.4 of the base case metal prices). The potential Life-of-Mine pit shown is based on a Revenue Factor of 0.55. Projection GDA 94 Zone 51.*

Metallurgical Variability Work

On-site neutraliser testwork

Following the encouraging results from the preliminary neutralisation test-work performed on Goongarrie South drill core samples, which indicated that palaeo-channel and saprock carbonates are effective neutralisers, size-by-size chemical analysis of nine prospective neutralisers was conducted at SGS laboratories. Preliminary assay results have been presented ahead of a full report. An initial review of the results indicates that moderate upgrading of the nickel, calcium and magnesium occurs in the finer fractions (-106 micron). However, the mass recovery to the fines was low. Final results and a summary report are awaited to close out this important, potentially value adding work stream.

It is important to note that on-site neutraliser material is recovered in the course of normal mining operations and provides a cost-effective alternative to importing limestone neutraliser with no recoverable nickel and cobalt grades, that would otherwise have to be sourced off-site.

Final reporting is in progress for all H2 2018 metallurgical programs, to inform current mining schedule studies and optimise process work streams to be carried forward into Definitive Feasibility Study work streams.

Work has been advancing on defining optimum process water sources including using membrane separation as a cost-effective alternative to chemical-based water softening. Testwork is being planned and will be completed in H2 2019 to better understand the benefits of such initiatives.

Environment and Approvals

The Goongarrie Nickel Cobalt Project (GNCP) is part of the Kalgoorlie Nickel Project (KNP) (**see Figure 11**) and is being designed to minimise its environmental foot-print. Key attributes include:

- The strip ratio is low at approximately 2:1, minimising project waste generation.
- Waste is either used for construction of integrated waste landforms, progressive back-fill of exhausted pits or rehabilitating completed mine areas.
- Tailings are deposited in exhausted pits or in integrated waste landforms.
- Early-mined nodular surface laterite waste is particularly well suited as road base for site access roads or rehabilitation materials.
- The ultramafic mine waste from anecdotal observation favours local flora assemblages for revegetation.
- There are no indications of Acid Mine Drainage risk.

Updated baseline studies have been reviewed and are in the process of being finalised for future statutory approval lodgement.

A spring flora and fauna survey is planned for the Papertalk West borefield and a Salt Lake water and ecology survey is planned for September – December 2019.

Water supply options continue to be investigated with sources identified including aquifers associated with paleo-channels (within granted Ardea mining tenure) and where possible linked to pit de-watering and outlying areas also covered by Ardea tenure.

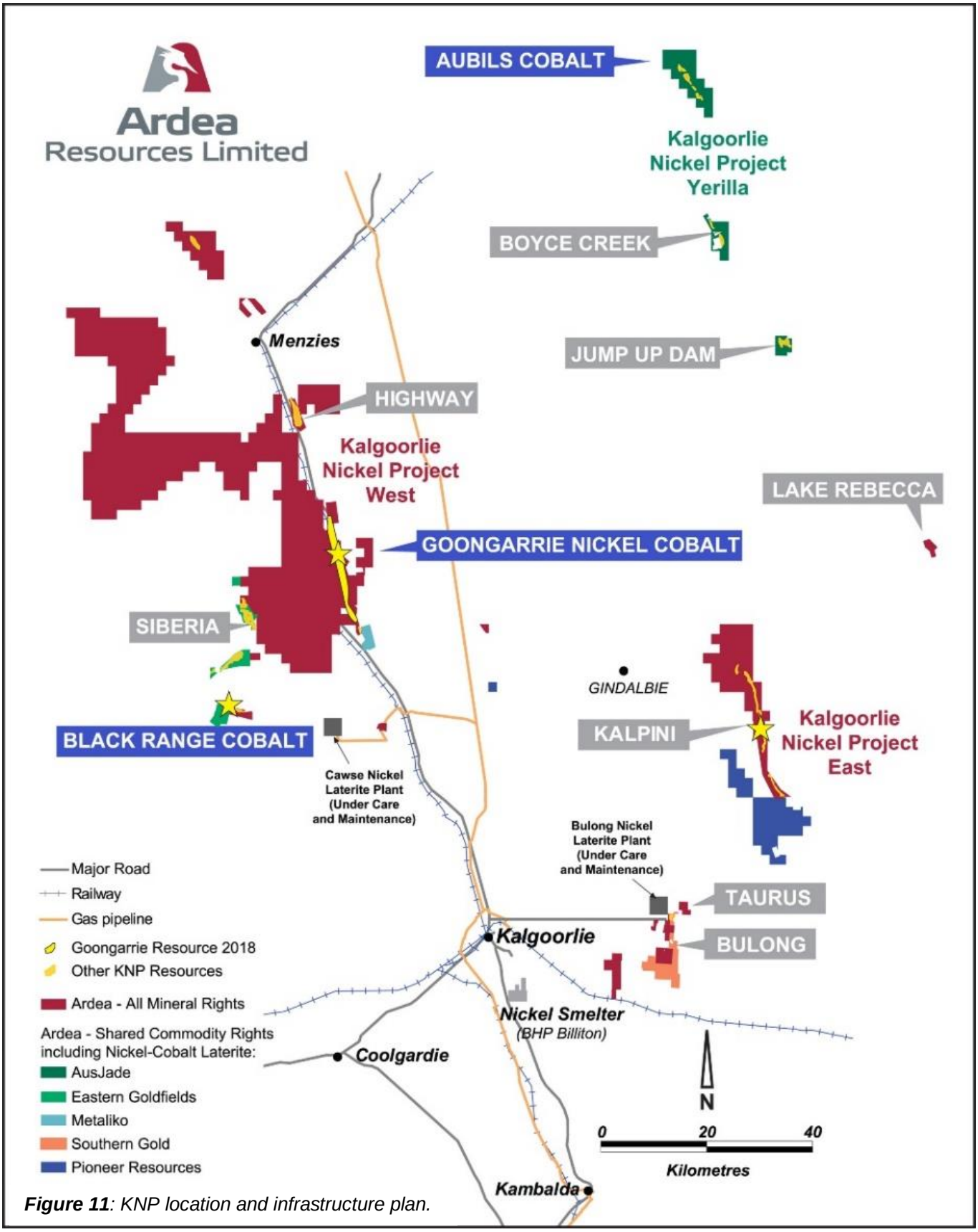

***Figure 11**: KNP location and infrastructure plan.*

An update to the mine schedule and amended materials balance is in preparation to determine optimal sequencing and project footprint requirements for stockpiling of low-grade ore and construction of integrated waste landforms.

Studies on Materials Characterisation of the overburden excavated during the normal course of mining continue. Opportunities identified to date include that specific waste material is better suited to varying civil uses, such as mottled nodular laterite for haul roads, nontronite clay for settling dam liner and indurated laterite for pit ramp sheeting. Each of these uses helps contribute to minimising the surface footprint of waste landforms.

GNCP is favoured by a benign arid environmental setting, which is much easier managed than wet tropical settings requiring submarine tailings disposal or valley-fill tailings dams. These environmental attributes favour GNCP as a future source of the nickel and cobalt that the Electric Vehicle and Static Storage Battery industries increasingly favour.

Processing Research and Development

The GNCP has had several unique attributes identified in Ardea Research and Development (R&D) programs, with research ongoing during the June 2019 Quarter:

- **Carbonate is necessary for neutralising autoclave discharge** – First phase bench-scale test-work was completed during the March Quarter and followed up by screen size analysis during the June Quarter. Final assay results are awaited to enable interpretation to quantify neutralisation rate and recovery at different screen sizes of the accessory nickel and cobalt naturally present in the site saprock carbonates. Recent focus has been upon neutraliser material at the base of ore zones (termed “Clay Lower Magnesite”) which has potential for screen beneficiation, with the undersize being a high-grade goethite autoclave feed, and oversize being nickel-enriched carbonate.
- **Comminution media available from mine sub-grade** – A very specific geo-metallurgical ore type that is a biscuity goethite ore that has been re-cemented by massive haematite or “jasper” at the top of the orebody to generate a highly indurated rock which is potentially available as SAG mill grinding media.
- **Comminution media as mine floor sheeting** – Trafficability on wet ore for mine vehicles was identified as a potential mining issue, solved by the use of Articulated Dump Trucks. Additionally, research identified that the “Comminution Jasper” would be ideal as a road sheeting in wet ore, since the material when mined from the road on the following bench down would then act as comminution media for the SAG mill.
- **Tailings research has demonstrated exceptional filtration ability** – Facilitating dry-stack tailings disposal rather than traditional slurry tailings. A cost/benefit analysis is continuing, currently favouring a dense slurry as opposed to dry-stack.
- **Detailed core logging combined with multi-element geochemistry and XRD mineralogy has identified potential co-products** – Including scandium oxide (scandia) and manganese sulphate from the HPAL/MS circuit, and in the laterite overlying the Ni-Co-Sc ore zones recoverable High Purity Alumina (HPA, kaolin as precursor), scandium, vanadium and Rare Earth Elements (REE). This data assessment work continues to compare the geochemical data with the logged geology to maximise the understanding and future use of the mineralised and non-mineralised domains.
- **Detailed core logging combined with multi-element geochemistry and XRD mineralogy** - Has also generated Material Characterisation algorithms that allow mine waste to be variously characterised for environmental use around waste landforms and tailings management.

Geo-metallurgical/Geological Research and Development

A geological model has been developed for the KNP (including GNCP) which consolidates the current 1,093 holes for 50,561m of Ardea drilling since listing in February 2017. The Ardea model focuses on the mineralised regolith (the weathered mantle), and its relationship to the underlying protolith (the unweathered ultramafic bedrock).

High Purity Alumina

The research focus is the early-mined pits at Patricia Anne and Pamela Jean. Research in respect of the north Pamela Jean area has identified a kaolin playa lake. The kaolin is pure white with "camembert cheese texture" and a distinctive "blue" tinge in drill core. The material is clearly a coating grade kaolin and thus a potential feedstock for HPA.

For HPA production, research indicates two acid solvent possibilities:

- Mottled Laterite with Sc-V-Nd-Pd credits (1g/t PGM at Black Range), use hydrochloric acid as the solvent, to recover $AlCl_3$ which is then calcined to HPA.
- Goethite-kaolinite-gibbsite laterite with Ni-Co-Sc in the upper nickel ore zone, HPAL H_2SO_4 as solvent, treating the tailings to remove Al.

Rare Earth Elements

Research was completed on the full Ardea drill data base, defining multiple REE laterite settings. Historic drill intercepts were identified throughout the GNCP, notably:

- 0.15% Ce ABFR0164, 12-14m, east pit crest at Mavis Irene (Big Four).
- 0.08% Nd-0.02% Pr AGSR0392, 28-30m, east pit crest at Patricia Anne.

The REE enrichment mirrors Ni-Co enrichment being at the Magnesia Discontinuity within the regolith profile.

The R&D program has identified that the east pit crests are the most favourable REE enrichment site, reflecting the contact of Walter Williams Formation olivine-rich rock (source of Ni-Co) and Siberia Komatiite alkaline volcanic (source of REEs).

Initial R&D programs have focussed on REE recovery in parallel circuit with Sc (using Ion Exchange).

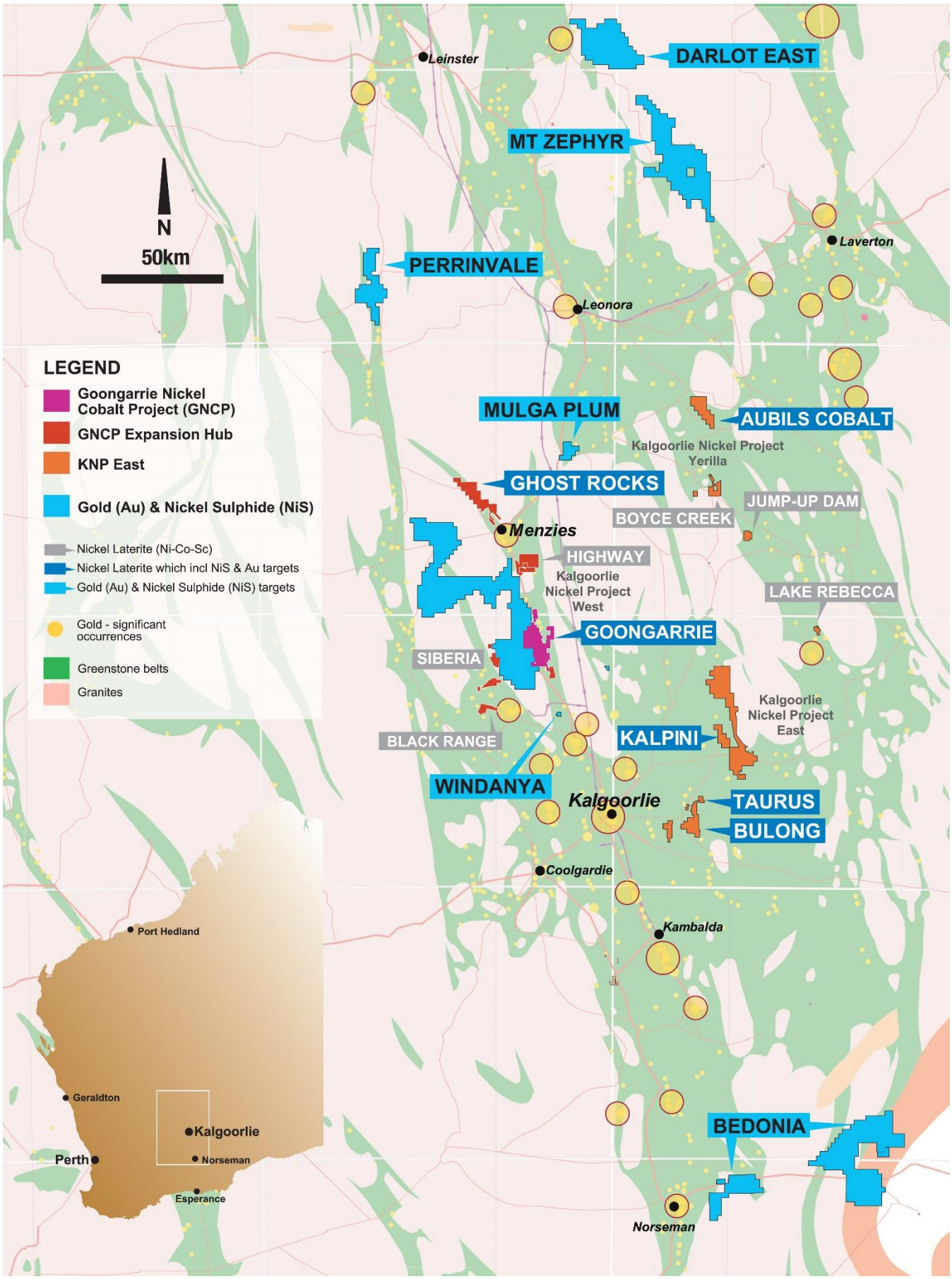

***Figure 12**: Ardea's Western Australian projects.*

2. WA Gold and Nickel Sulphide projects

Ardea has a significant number of additional projects outside of the GNCP. Most of these projects host nickel-cobalt laterite resources (that could supplement future GNCP production) but also host significant "greenfields" gold and/or nickel sulphide mineralisation (see **Figure 12**).

The Ardea WA tenure covers approximately 3,500km^2 and represents a strategic land holding in one of Australia's premier gold and nickel sulphide provinces. The KNP, Mt Zephyr, Perrinvale and Bedonia projects are all highly prospective for both gold and nickel sulphides.

The following summary provides an update on Ardea's main WA projects and work undertaken during the June 2019 Quarter.

Mt Zephyr

The Mt Zephyr-Darlot East metallogenic model for Ardea's 910km^2 tenement holding is:

- The gold structural target is the shallow east-dipping Celia Lineament and 10km to the east (from north to south localises the Jupiter, Wallaby, Sunrise Dam gold mining centres).
- Syenite-host, Ardea assaying confirms an alkaline igneous association with distinctive Ba-Sr-Ce-La-Nd association, alteration is dominantly pyrite with subordinate sericite, and alteration chemistry dominantly anomalous As-Mo-W.

The Mt Zephyr project continues to be assessed to plan optimum follow-up work. With multiple targets defined at the Gale Gold, Jones A Nickel Sulphide and Dunn's Line Prospects. Ardea needs to consider the best strategy for this quality tenement portfolio. Current options being considered include introducing a larger project joint venture partner with a strong balance sheet and track record of exploration success, which will help protect Ardea's tight capital structure and cash balance.

Bardoc Tectonic Zone

Gold Anomalism and Recent Results from Big Four

The Big Four Gold Prospect is located within the Bardoc Tectonic Zone (BTZ) at Goongarrie and offers an exceptional gold exploration opportunity for Ardea. A detailed ASX update, Extensive gold anomalism at the Goongarrie Nickel Cobalt Project, was released on 4 June 2019.

Ardea's GNCP is unique among the world's lateritic nickel-cobalt deposits in that it has developed on ultramafic rocks that are within and a part of a major, crustal-scale gold-mineralised structure being the BTZ. The BTZ hosts, from south to north, the Paddington, Goongarrie, Comet Vale and Menzies gold mining centres.

The latest Ardea drill results from the Big Four area, as well as having reassessed historic data, shows that **strong, laterally extensive gold anomalism is present beneath the full 15 km strike length of the nickel-cobalt orebodies of the GNCP**. The exceptional thickness and grade of the GNCP laterite is interpreted to be directly attributable to deep and intense weathering along BTZ bedrock shear structures, particularly at the eastern contact of the Walter Williams Formation (WWF) laterite host rock with the stratigraphically overlying Siberia Komatiite.

These same structures in the current studies have had extensive gold anomalism confirmed (see **Figure 13**).

The areas east of the WWF are the preferred sites for GNCP infrastructure and this round of drilling has highlighted multiple zones for systematic follow-up gold RC drilling. Just as importantly, selected areas that appear to be unmineralised have been identified as suitable future infrastructure sites.

Gold structures within the GNCP

During the course of the 2018 Pre-Feasibility Study (PFS) and Expansion Study programs, several parallel work streams all indicated a strong structural control on nickel laterite mineralisation (refer Pamela Jean Deeps, ASX announcement 8 October 2018).

These structures also control the distribution of gold mineralisation within the GNCP:

- 3D ore body modelling confirmed a dominant 345˚ trend to laterite mineralisation, but with a strong overprinting 300^0 "gold trend" leading to particularly thick, deep nickel-cobalt-scandium laterite mineralisation.
- An ultra-detailed airborne magnetic survey flown by Ardea to quantify potential bedrock ground-water hosting structures highlighted the association of the 300˚ trending bedrock structures with ore-grade nickel laterite and also known gold anomalism.
- Pump testing process water targets from pit-dewatering defined high water volumes in association with the deep structures at Pamela Jean, which is also a zone of anomalous gold intercepts.
- Multi-element geochemistry identified discrete alkaline intermediate dykes associated with bedrock shear structures with anomalous gold. These structures are closely related to overlying high grade laterite mineralisation.

On the basis of identifying the gold anomalism associated with bedrock structures, Ardea initiated an aircore drilling gold exploration program at Big Four within the GNCP.

Results of the recent Big Four gold drilling program

As a first-pass gold exploration program, 265 aircore holes for 4,861 m (average 18.3 m) were drilled to blade refusal at the Big Four Prospect (see **Figure 14**).

The Big Four drill program has confirmed gold mineralisation at Ardea's Big Four gold mine and historic gold prospects at Zeus and Dionysus, and furthermore has identified numerous new anomalies within the stratigraphically overlying Siberia Komatiite mafic sequence and Black Flag Formation felsic volcaniclastics to the east of the WWF ultramafic sequence.

Sampling was undertaken as 6m composites to reduce assay costs, but thereby lowering the sensitivity of the program. As such, anomalism is defined by lower grades as dilution by non-mineralised rock is expected over such broad sample intervals.

Despite this lowered sensitivity, the drilling has identified a number of highly anomalous gold intercepts that require further investigation. For reference, gold anomalies of 20–40 parts per billion (or 0.002–0.004 g/t) within a laterite profile are commonly the basis for further gold exploration in the Eastern Goldfields of Western Australia.

The intensity of the gold anomalism mapped throughout the GNCP and surrounds is at least 10 times the values typical of the region's gold-anomalous laterites (see **Figure 13**).

Results of the recent GNCP Big Four drilling include:

- ABFA0245, **6m at 2.0g/t Au** from surface to end of hole (EOH).
- ABFA0188, **24m at 0.8g/t Au** from 12m.

- ABFA0197, 12m at 0.3g/t Au from 78m to EOH.
- ABFA0209, 42-48m, 6m at 0.4g/t Au from 42m, and 18m at 0.1g/t from 66m to EOH.
- ABFA0152, 4m at 0.3g/t Au from 6m to EOH.

Work is ongoing to define the likely controls on mineralisation at each occurrence, which is utilising geochemical data in conjunction with interpretation of Ardea's proprietary high-resolution magnetic datasets and digitisation of historic data where available. Collation and integration of these datasets will enable the design of follow up drill programs to test these anomalies at depth.

As well as the main focus gold targets, the aircore drilling has identified geological settings prospective for nickel sulphide (Scotia nickel sulphide mine immediately east of Ardea GNCP tenure), Volcanogenic Massive Sulphide (VMS) of the Jaguar-Bentley style, nickel laterite in olivine cumulate facies of the Siberia Komatiite, magnesite in WWF and Siberia Komatiite, scandium-vanadium laterite and Rare Earth Elements (REE) in alkaline volcanics.

Extensive gold anomalism

The GNCP is unique amongst the world's lateritic nickel-cobalt-scandium deposits in that it has developed on ultramafic rocks that are within and a part of a major, crustal-scale gold-mineralised structure being the BTZ. Ardea recent results, as well as newly-treated historic data, show that strong, laterally extensive gold anomalism is present beneath the full 15 km strike length of the nickel-cobalt-scandium orebodies of the GNCP.

With real potential for significant gold mineralisation beneath the lateritic Ni-Co-Sc deposits, the possibility is open for evolving mining operations, whereby development of nickel-cobalt-scandium open pits at Goongarrie effectively pre-strips material for the subsequent mining of gold beneath. However, much work is required to define gold resources at depth beneath the laterite deposits that would facilitate such sequential mining operations. In particular, historic laterite drill exploration was not planned to drill deep enough into the saprock and bedrock, and generally no gold assays were completed on drill samples. The identification of significant gold alteration systems and anomalism has only come about as a result of the detailed multi-element assay suite that Ardea uses in its GNCP research and development (R&D) programs.

Extensive strong gold anomalism is present in the laterite profile throughout the nickel-cobalt orebodies of the GNCP. Also, strong anomalism is present throughout the remainder of the BTZ, both to the east and possibly to the west of the laterite deposits.

The recent gold program has highlighted multiple zones for systematic follow-up RC drilling, and just as importantly, selected areas are being suitably sterilised as future infrastructure sites.

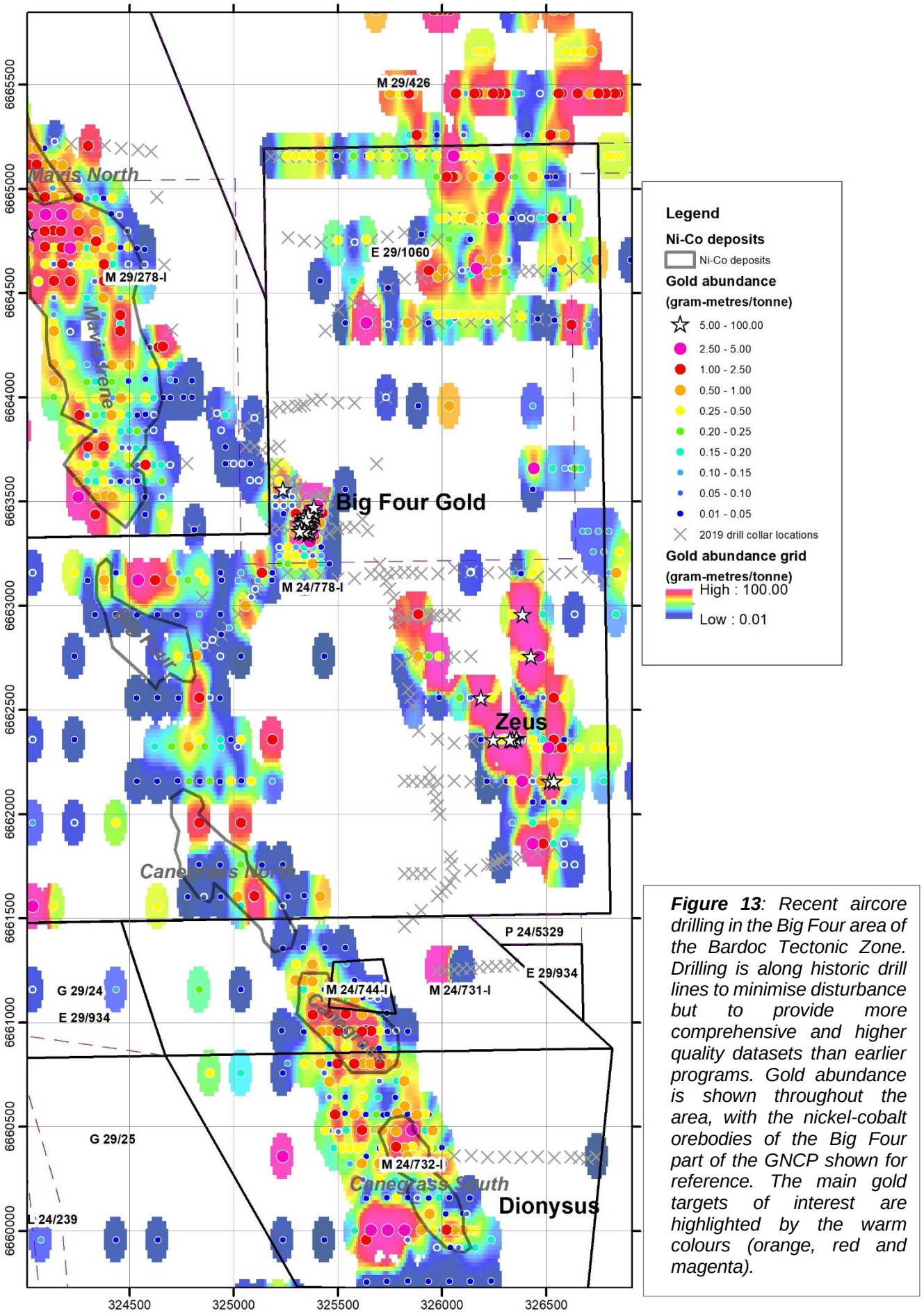

***Figure 13**: Recent aircore drilling in the Big Four area of the Bardoc Tectonic Zone. Drilling is along historic drill lines to minimise disturbance but to provide more comprehensive and higher quality datasets than earlier programs. Gold abundance is shown throughout the area, with the nickel-cobalt orebodies of the Big Four part of the GNCP shown for reference. The main gold targets of interest are highlighted by the warm colours (orange, red and magenta).*

Interrogation of historical datasets

Since their discovery, the lateritic deposits of the Goongarrie area have been extensively drilled and assayed for a range of elements, but only sporadically including gold. The desultory gold results were generally overlooked by previous explorers.

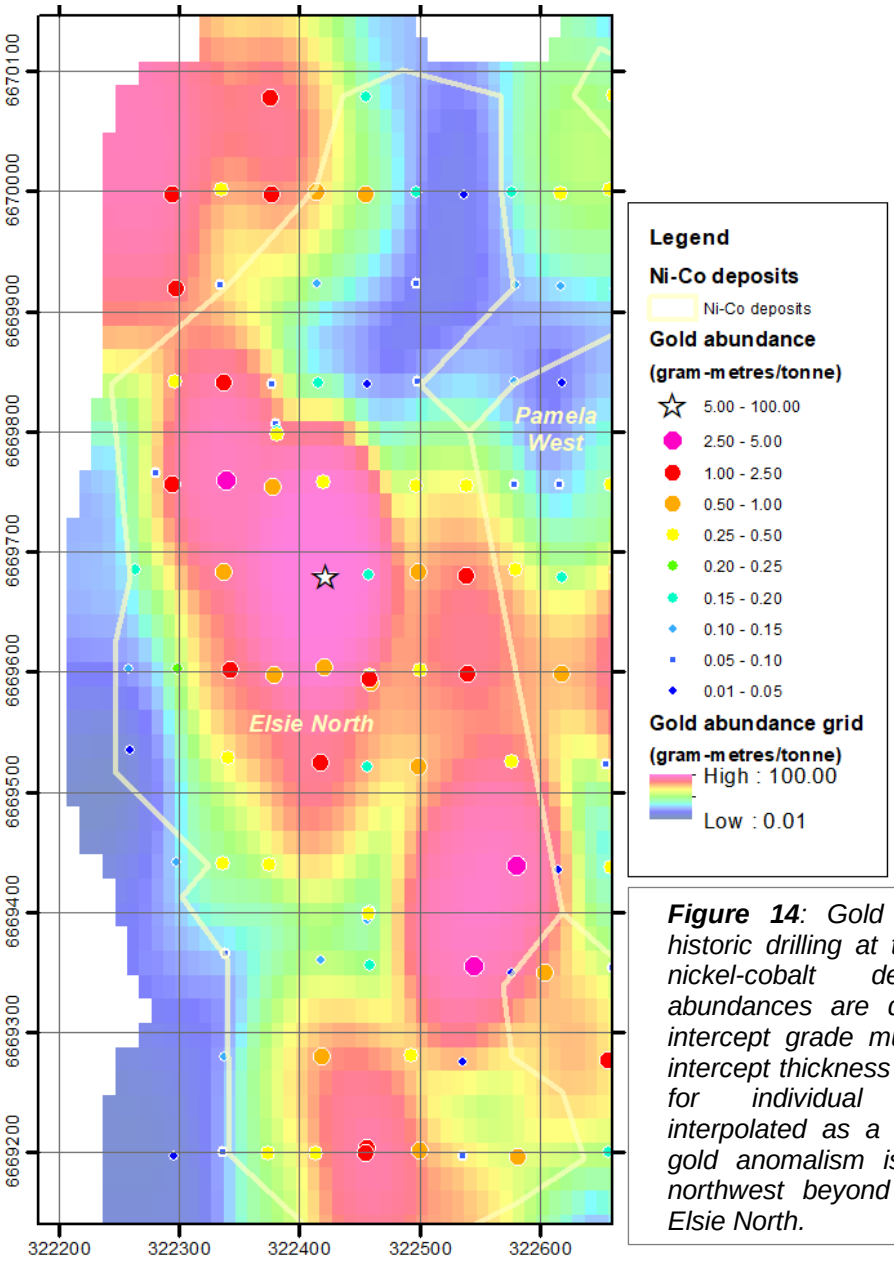

***Figure 14**: Gold abundance in historic drilling at the Elsie North nickel-cobalt deposit. Gold abundances are defined by the intercept grade multiplied by the intercept thickness and are shown for individual holes and interpolated as a grid. Note that gold anomalism is open to the northwest beyond the extent of Elsie North.*

Recent interrogation and re-treating of the historic datasets by Ardea has identified numerous gold anomalies (see **Figure 13 and 14**). Gold mineralisation is present, for example, within and beneath the Elsie North nickel-cobalt deposit, to the west of the Pamela Jean nickel-cobalt deposit.

Ghost Rocks gold

Lady Isobel Gold Prospect

Lady Isobel is associated with the BTZ at the northeast contact of the Ghost Rocks WWF nickel laterite. The Lady Isobel line of lode includes a major, historic underlay shaft, with Ardea mullock assays of up to 5.3g/t Au (Ardea Prospectus).

Twelve Mile Base Metal Prospect

Up to 0.6% Ni with 14.3% Cu occurs in historic 1969 and 1974 rock-chip samples. A soil auger drilling program was completed, with low-order gold targets defined.

Ghost Rocks Southeast Gold and Nickel Prospect

A soil auger program, consisting of 341 holes, targeting historical gold and base metal anomalies identified in the 1960s and 70s was completed at Ghost Rocks during the Quarter with results still being reviewed and interpreted at Quarter end.

Perrinvale nickel sulphide

Grant of tenure was confirmed during the June Quarter.

The Ardea exploration target is based on recent nickel sulphide discoveries immediately west of Perrinvale made by St George Mining. Regional magnetic data highlights that the feature which hosts the St George Mining nickel sulphide discoveries, has an ENE strike and extends into Perrinvale. The nickel sulphide prospects are overlain by transported cover, so geophysical methods such as moving loop Electro Magnetic (EM) surveys will be employed to facilitate drill hole targeting. A proposal has been received from a specialist consultant, with the EM survey planned to be completed during H2 2019.

Any nickel sulphide occurrence located at Perrinvale could be potential GNCP autoclave feed, to provide additional sulphur and nickel units to the reaction vessel.

Bedonia gold and nickel sulphide

The metallogenic model at Bedonia is nickel sulphide and Platinum Group Metals (PGM) associated with the Proterozoic-aged Jimberlana Dyke, with mineralisation at a historic prospect, Mordicus, as the proof of concept. Field programs by Ardea have identified targets at the Cleanthes and Lila gold prospects (historic drilling up to 2.7g/t Au) located on the Cunderlee Fault at Albany Fraser Province western boundary.

Soil auger drilling programs have been designed and heritage clearance programs have been sought.

Mulga Plum gold and VMS base metal-sulphur

The Mulga Plum Prospect is a gold-base metal VMS target located 40km NE of Menzies between Ardea's Menzies and Aubils projects (see **Figure 12**).

Assay results from series of rock chip samples taken from Mulga Plum during April returned some significant results. Highlights from the 13 samples taken include:

- Alteration hosts the highest grade gold.
    - Sample S301426 – **2.00 g/t Au**: spoil around a minor shaft containing common hematite-pyrite alteration.

  - Sample S301440 – **1.34 g/t Au**: potassic-altered rock containing common pyrite spotting adjacent to a small shaft.
  - Sample S301434 – **0.49 g/t Au**: biotite-quartz-pyrite alteration (potassic) with minor K-spar alteration.
- Gold was also found within larger veins:
  - Sample S301429 – **0.92 g/t Au**: quartz vein

A gridded shallow drill RC program is planned to confirm near-surface gold mineralisation and the potential for a resource. This is with an intention to undertake small scale mining in the medium term.

Prior to any drilling, a surface mapping program is required to assist with delineating controls on gold mineralisation and to delimit drill hole orientation for the proposed program.

Windanya gold

Windanya is a historical gold mining centre that was operational in the 1900s. Today relic shafts, dumps, battery sands and a large dam remain. A first phase assessment field trip to Windanya was undertaken during the Quarter. On the visit the old workings were mapped and sampled. The gold mineralisation appears to be hosted on the contacts between a large quartz blow on a mafic/ultramafic contact. Several high-grade rock chip results were returned highlighting project prospectivity:

- Zones of quartz veining and pyrite alteration tend to host the highest grade gold with significant results received during the Quarter, including.
  - Sample S301416 – **20.50 g/t Au**: Bucky vein quartz, pyritic alteration.
  - Sample S301409 – **5.31 g/t Au**: Vein quartz, alteration.

Additional work is being planned to follow-up on the gold potential of this project area.

Taurus gold

A series of historical gold workings is being assessed. Initial sampling around old gold workings and tailings from battery sands returned the following encouraging results:

- Alteration tends to host the highest-grade gold with significant results received during the Quarter, including.
  - Sample S301290 – **4.27 g/t Au**: Weathered pyritic altered rock.
  - Sample S301291 – **0.74 g/t Au**: Iron-stained altered rock.
- Zones of quartz veining also host gold mineralisation, with significant results received during the Quarter, including.
  - Sample S301288 – **1.99 g/t Au**: Quartz veining in bleached host rock.
  - Sample S301289 – **1.07 g/t Au**: Minor quartz vein on shear.
- Gold mineralisation was also detected in old battery sands and tails material, including.
  - Sample S301293 – 1.33 g/t Au: Tailings from historic battery sands.

Additional work is required to follow up on the encouraging first phase reconnaissance gold results from Mulga Plum, Taurus and Windanya. There may be potential to define areas of old battery sands and tails that are amenable to low volume, shallow-level mining opportunities.

3. NSW Gold and Base metals projects (100% Ardea)

Ardea has incorporated a wholly owned subsidiary, **Godolphin Resources Limited** (Godolphin) for the spin out of its NSW projects, through an Initial Public Offering, as summarised in ASX release, Godolphin Resources Limited a spin-out of Ardea's NSW tenements, 25 June 2019.

Godolphin's development focus will be the Mount Aubrey epithermal gold and Lewis Ponds gold-zinc projects associated with the Lachlan Transverse Zone (LTZ) of the Lachlan Fold Belt (LFB) in central NSW.

The Proposed Transaction is subject to various conditions, including approval by Ardea shareholders at an Extraordinary General Meeting (EGM) proposed for Q3 2019, in anticipation of a listing in Q4 2019.

The Ardea Board is committed to unlocking the significant value held in the LFB assets and believes that this is best achieved through the ASX listing of a focused, standalone gold and base metal exploration and development company, with dedicated funding, board and management team.

Godolphin has been registered as a wholly-owned subsidiary of Ardea, with title to the NSW assets in the process of being transferred to Godolphin.

The derivation of the Godolphin name is from the Godolphin Fault, a crustal-scale structure that hosts significant mineral deposits along its entire strike length, including the 60km of strike held by Godolphin.

Since its listing in 2017, Ardea has become the second largest mineral tenement holder in NSW with Godolphin now holding some 3,306km^2, with tenure being associated with the key LFB metallogenic provinces being the LTZ and Gilmore Suture. This dominant land position has been acquired through detailed project scale and regional data compilation and analysis. This work has been carried out by the dedicated exploration team based in Orange. The work has highlighted the prospectivity of the Godolphin tenements and remarkably, the fact that this area is largely under explored by modern standards.

Work completed thus far by Ardea has advanced its NSW projects towards defining four separate JORC-compliant mineral resources. Work programs completed include land-holder access agreements, digitally capturing historic exploration data, geological mapping and soil auger geochemistry, leading to the definition of drill-ready targets across granted Godolphin tenure.

Godolphin will go to the market with this same Ardea "can-do" attitude, having totally transformed the tenement holding of February 2017 into cohesive holdings on universally acknowledged prime gold and base metal mineralised structures.

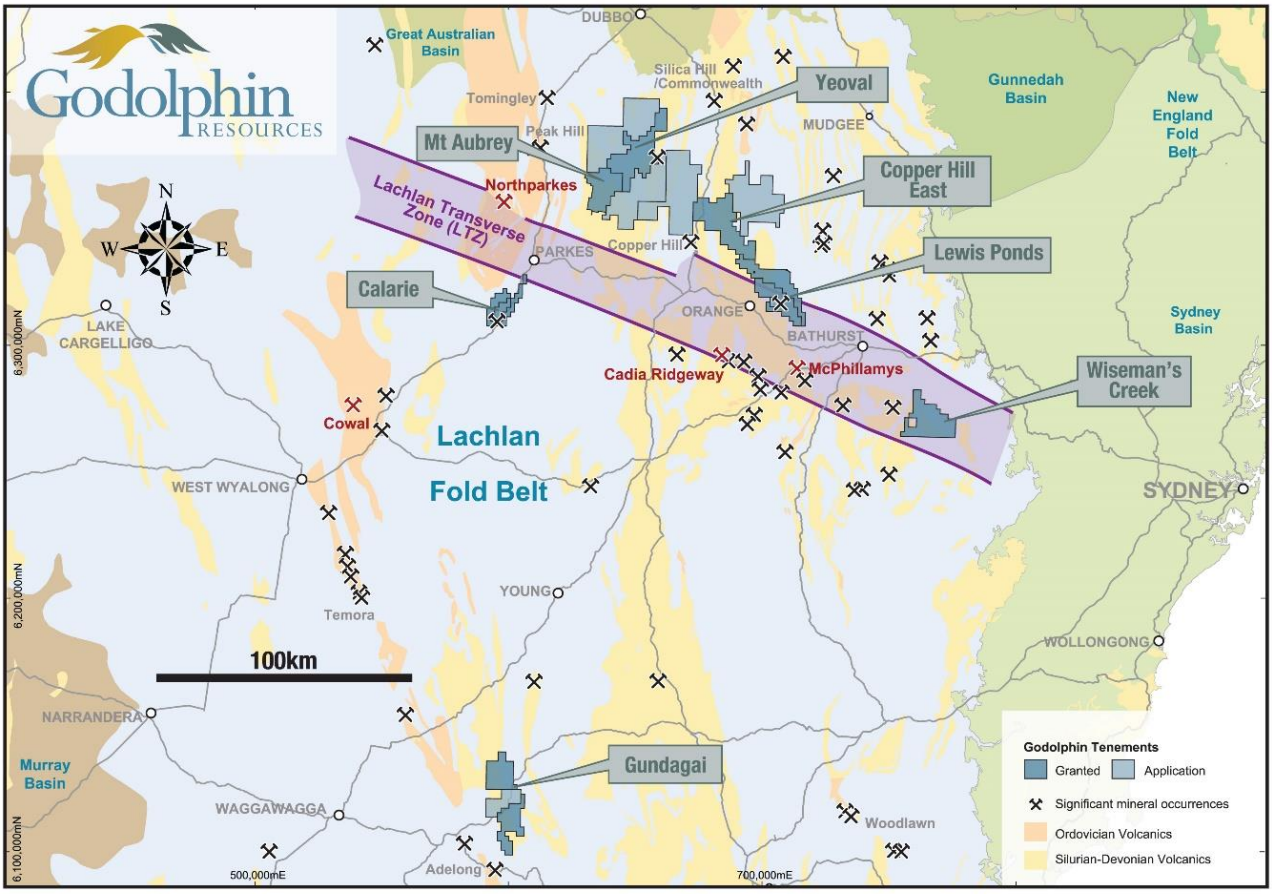

***Figure 17**: Ardea's projects in the highly prospective Lachlan Fold Belt of NSW. Projection: GDA94 Zone 55.*

Lewis Ponds gold-base metal project – Lewis Ponds, Ophir, Copper Hill East, Mt Bulga and Caledonian gold-base metal project – EL5583, 8323 and 8556 and ELA 5794 & 5812)

These projects cover a 50km strike length of the highly prospective Godolphin-Copperhania Thrust, which hosts Volcanogenic Massive Sulphide (VMS) base metal deposits notably at Lewis Ponds and significant orogenic shear-hosted gold deposits including the McPhillamys deposit some 20km south of Lewis Ponds.

The Lewis Ponds data base compilation has been completed and integrated with historic and recent mapping data to update the geological model. The Lewis Ponds independent resource estimation has now commenced.

At Copper Hill East, the geological setting is favourable, being Macquarie Arc andesite (Fairbridge Volcanics). The aim is to locate porphyry copper style intrusives of the Copper Hill style which is located 15km west, and evaluate "McPhillamy's style" orogenic gold targets at Calula. Geophysical modelling is planned post IPO in order to generate drilling targets.

Mt Aubrey epithermal gold-silver project – EL8532

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. Gold mineralisation is typically hosted by 0.5–3m thick chalcedonic epithermal quartz veins and stockworks.

A historical data review was completed for the Mount Aubrey epithermal gold vein system. Three small pits mined the deposit in the late 1980s and were then back-filled in 1991 when the gold price was ~US$350 per ounce. End of mine open pit surveys have not been located, to account for the mined material, so a resource following JORC 2012 guide lines cannot yet be defined.

To help confirm the location of the backfilled open pits, a ground penetrating radar (GPR) survey was completed during the Quarter. This survey has also helped define key gold mineralisation controlling features such as faults and veins (see **Figure 18**). These targets will be tested as a priority, following the listing of Godolphin.

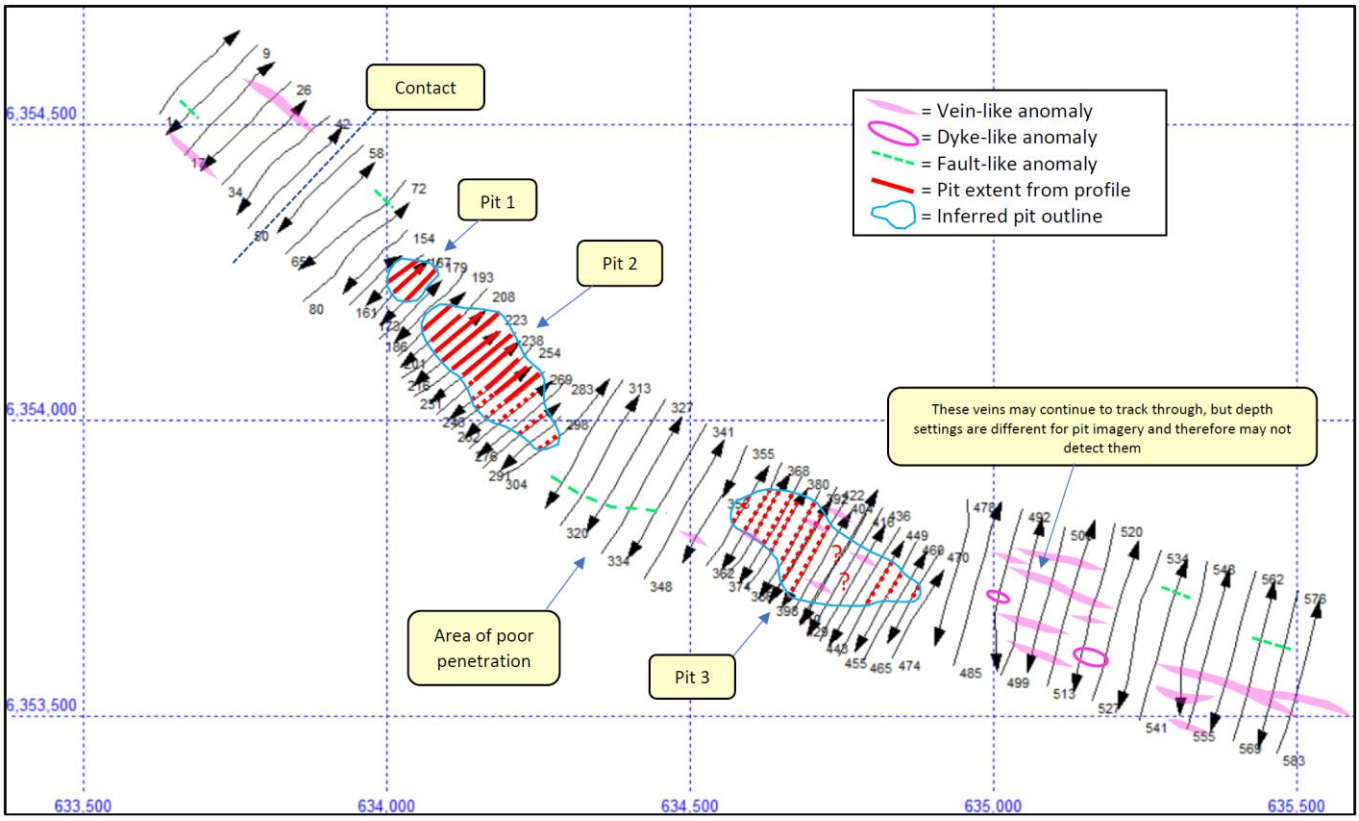

***Figure 18**: Plan view of Mt Aubrey GPR survey area and preliminary interpretation. Projection: GDA94 Zone 55.*

Yeoval Porphyry copper-gold-molybdenum-rhenium project – EL8538 & ELA 5780 & 5806

Yeoval is located within the Macquarie Arc, 60km northeast of the Northparkes copper-gold mine. With four new tenement applications making Yeoval contiguous with Mt Aubrey and Copper Hill East, the Yeoval project now covers an area of 1,314km^2. Yeoval is intensely mineralised with more than 60 historic copper workings trending in a north-easterly direction along a 20km strike, which area is the focus of current soil auger geochemistry. The Godolphin exploration target is a large tonnage porphyry copper-gold-molybdenum-rhenium system.

Wiseman's Creek gold-copper project – EL8554

Wiseman's Creek is located 35 km southeast of Bathurst, NSW, around the logging town of Oberon. Epithermal gold mineralisation within the tenure is hosted largely within Late Silurian to Early Devonian-aged 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).

Further land access negotiations are current for target areas defined by the current GIS compilations.

Gundagai gold-copper project – EL8061, 8586 & ELA5809

The Gundagai tenements are located 315km southwest of Sydney. Several old gold workings hosted by mineralised porphyry units exist in the Ardea tenure, with historic RC drilling returning up to 20 metres at 1.58g/t gold within a quartz-limonite-pyrolusite stockwork system. The Big Ben mineralised system is open to the south, under alluvial cover. Previous historic soil sampling located a >100ppb Au anomaly associated with and to the east of the Big Ben mineralisation.

Field assessment of the Gundagai North area to finalise plans for an auger sampling and rock chip survey around the old working was undertaken. Promising visual indications of gold mineralisation were noted around some of the historic Emu workings (see **Figure 19**). Samples have been taken and results are awaited.

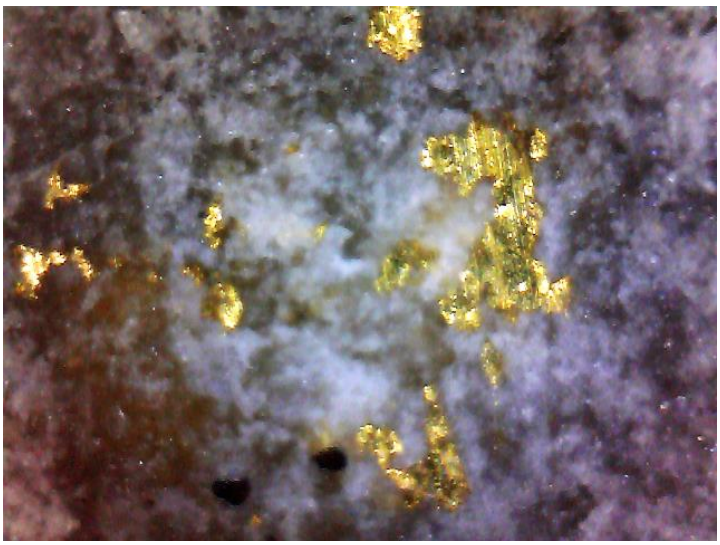

***Figure 19**: Sample taken around old workings at Gundagai North – Emu workings, showing visible gold. Field of view is 2mm. Whilst this is a promising indication, it cannot be considered representative of the entire project, with detailed exploration and resource definition drilling and geological modelling required, to help determine project potential.*

4. Corporate

Strategy

The priority is identifying and securing a Strategic Partner and concomitant funding commitment to develop the GNCP, followed by drill appraisal of quality exploration targets developing across the gold and nickel sulphide targets in WA, and the IPO of the NSW assets through the listing of Godolphin Resources Limited.

Finance

The Company's cash position is **$11.2M** at Quarter end.

Issued capital at 30 June 2019 was 106,145,424 shares.

A Financial year 2020 budget has been defined which strikes a balance between protecting Ardea's strong financial position, whilst advancing the company's strategic mix of quality base and precious metal projects.

5. Looking Forward

During the September 2019 Quarter, Ardea will focus upon the following programs.

Goongarrie Nickel Cobalt Project

Continue work on pre-Definitive Feasibility Study associated programs focussed on studies related to mine scheduling, on-site neutraliser testwork and approvals.

Strategic Partner Process

KPMG and Ardea executives will continue to advance discussions with interested parties and Ardea will keep the market informed of progress.

Resource Upgrades

Resource modelling for the areas covering the Goongarrie South, Big Four and Scotia Dam optimised pits is nearing completion. The updated block models will be used for detailed mine scheduling including ore, neutraliser and waste/tailings back-fill. Updated resource and reserve figures will be defined and reported once pit optimisations and mine scheduling are completed.

GNCP Flowsheet Research and Development

Complete testwork and reporting for metallurgical programs such as the neutraliser bench-scale testing and research.

WA Gold and Nickel Sulphide projects

Work will continue to target gold along the Bardoc Tectonic Zone at Goongarrie and the GNCP, which is likely to be the main gold focus over the coming months. An Information Memorandum was completed for the Mt Zephyr and Darlot East projects following expressions of interest for joint venture.

Results will be reviewed, interpreted and reported for WA Gold prospects, such as the soil auger drilling program completed at Ghost Rocks. Follow up and new work programs will commence on other gold prospects in the Eastern Goldfields. The EM geophysical survey for the Perrinvale Nickel Project will be finalised and a contractor selected to complete this work.

NSW Gold and Base Metals projects

The priority is completing and lodging the Godolphin prospectus in Q3 2019 and subject to market conditions, moving forward with the IPO in Q4 2019.

As part of this process a Managing Director will be appointed for Godolphin.

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

Ardea Resources:
Andrew Penkethman
Chief Executive Officer, Ardea Resources Limited
Tel +61 8 6244 5136

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;*
2. *KNP Cobalt Zone Study on 7 August 2017, PFS 28 March 2018 and Expansion Study 24 July 2018;*
3. *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;*
4. *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 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.

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 June 2019

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (12months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(1,305)	(3,284)
	(b) feasibility & development	(457)	(6,731)
	(c) production	-	-
	(d) staff costs	(153)	(656)
	(e) administration and corporate costs	(180)	(779)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	68	350
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds (net)	2,502	2,911
1.8	Other	-	-
1.9	**Net cash from / (used in) operating activities**	**475**	**(8,189)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	(70)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (12months) $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**	**-**	**(70)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of shares	-	289
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**	**-**	**289**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	10,712	19,157
4.2	Net cash from / (used in) operating activities (item 1.9 above)	475	(8,189)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(70)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	289
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**11,187**	**11,187**

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	687	1,212
5.2	Call deposits	10,500	9,500
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)**	**11,187**	**10,712**

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	165
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 - $151,762
Payment for Kalgoorlie office to a Director related entity for the quarter - $12,605
Payment for HR Services to a Director related entity for the quarter - $1,080

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 transactions included in items 7.1 and 7.2

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	(762)
9.2	Feasibility and Development	(629)
9.3	Production	-
9.4	Staff costs	(170)
9.5	Administration and corporate costs	(404)
9.6	Other - Godolphin IPO (to be repaid from IPO funds)	(400)
9.7	**Total estimated cash outflows**	**(2,365)**

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			

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.

Sam Middlemas
Company Secretary

22 July 2019

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.

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**
E39/1757	Mt Zephyr	Expired	100%	0%

Ardea NSW Tenements				
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 beginning Quarter**	**Ardea interest end Quarter**
E31/1213	Boyce Creek	Pending	0	100%
P29/2538	Goongarrie	Pending	0	100%
P29/2539	Goongarrie	Pending	0	100%
E63/1974	Bedonia	Pending	0	100%

Ardea NSW Tenements				
EL5794	Mt Aubrey	Pending	0	100%
EL5812	Caledonian	Pending	0	100%

Ardea Resources Ltd Tenement Schedule (WA) as at 30 June 2019

Goongarrie Nickel Cobalt Project

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E29/1060	Goongarrie Nickel Cobalt	100%	Pending		M24/0541	Goongarrie Nickel Cobalt	100%	Live	
E29/1061	Goongarrie Nickel Cobalt	100%	Pending		M24/0731	Goongarrie Nickel Cobalt	100%	Live	3.7
E24/0211	Goongarrie Nickel Cobalt	100%	Pending		M24/0732	Goongarrie Nickel Cobalt	100%	Live	3.7
E24/0196	Goongarrie Nickel Cobalt	100%	Live		M24/0744	Goongarrie Nickel Cobalt	100%	Live	7
E24/0209	Goongarrie Nickel Cobalt	100%	Live		M24/0778	Goongarrie Nickel Cobalt	100%	Live	3
E29/0934	Goongarrie Nickel Cobalt	100%	Live		M29/0167	Goongarrie Nickel Cobalt	100%	Live	
E29/1028	Goongarrie Nickel Cobalt	100%	Live		M29/0202	Goongarrie Nickel Cobalt	100%	Live	
E29/1038	Goongarrie Nickel Cobalt	100%	Live		M29/0272	Goongarrie Nickel Cobalt	100%	Live	
E29/1039	Goongarrie Nickel Cobalt	100%	Pending		M29/0278	Goongarrie Nickel Cobalt	100%	Live	
E30/0500	Goongarrie Nickel Cobalt	100%	Live		M29/0423	Goongarrie Nickel Cobalt	100%	Live	
E30/0501	Goongarrie Nickel Cobalt	100%	Pending		M29/0424	Goongarrie Nickel Cobalt	100%	Pending	
E30/0502	Goongarrie Nickel Cobalt	100%	Pending		M29/0426	Goongarrie Nickel Cobalt	100%	Pending	
G29/0024	Goongarrie Nickel Cobalt	100%	Pending		P29/2265	Goongarrie Nickel Cobalt	100%	Live	
L24/0239	Goongarrie Nickel Cobalt	100%	Pending		P24/5260	Goongarrie Nickel Cobalt	100%	Pending	
L29/0134	Goongarrie Nickel Cobalt	100%	Live		P24/5265	Goongarrie Nickel Cobalt	100%	Live	
L29/0135	Goongarrie Nickel Cobalt	100%	Live		M24/0797	GNCP Expansion Siberia	100% Ni lat	Live	5
L30/0067	Goongarrie Nickel Cobalt	100%	Live		M24/0915	GNCP Expansion Siberia	100% Ni lat	Live	5
L30/0068	Goongarrie Nickel Cobalt	100%	Live		M24/0744	Goongarrie Nickel Cobalt	100%	Live	7
M24/0919	GNCP Expansion Scotia South	100% Ni lat	Live	9	M24/0778	Goongarrie Nickel Cobalt	100%	Live	3

Goongarrie Nickel Cobalt Project Expansion Case

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
M24/0959	GNCP Expansion Goongarrie	100% Ni lat	Live	9	M24/0916	GNCP Expansion Siberia	100% Ni lat	Live	5
E29/1045	GNCP Expansion Highway	100%	Live		P24/5235	GNCP Expansion	100%	Pending	
E29/1048	GNCP Expansion Highway	100%	Pending		P24/5236	GNCP Expansion	100%	Pending	
M29/0214	GNCP Expansion Highway	100%	Live		P29/2484	GNCP Expansion	100%	Pending	
E24/0203	GNCP Expansion Siberia	100% Ni lat	Live	5	P29/2485	GNCP Expansion	100%	Pending	
E29/0889	GNCP Expansion Siberia	100% Ni lat	Live	5	M24/0757	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0634	GNCP Expansion Siberia	100% Ni lat	Live	1,5	M24/0973	GNCP Expans Black Range	100% Ni lat	Pending	5
M24/0660	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4395	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0663	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4396	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0664	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4400	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0665	GNCP Expansion Siberia	100% Ni lat	Live	2,5	P24/4401	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0683	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4402	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0686	GNCP Expansion Siberia	100% Ni lat	Live	5	P24/4403	GNCP Expans Black Range	100% Ni lat	Live	5
M24/0772	GNCP Expansion Siberia	100% Ni lat	Live	5	P29/2512	GNCP Expans Ghost Rock	100%	Pending	
E29/0941	GNCP Expans Ghost Rock	100%	Live		P29/2513	GNCP Expans Ghost Rock	100%	Pending	
P29/2501	GNCP Expansion Highway	100%	Pending		P29/2514	GNCP Expans Ghost Rock	100%	Pending	
P29/2511	GNCP Expans Ghost Rock	100%	Pending		P29/2515	GNCP Expans Ghost Rock	100%	Pending	
E29/0981	GNCP Expans Ghost Rock	100%	Granted		P24/5169	GNCP Expans Windanya	100%	Live	
E40/0350	GNCP Expans Ghost Rock	100%	Granted						
E40/0357	GNCP Expans Ghost Rock	100%	Granted						

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%	Live	
E27/0606	Kalpini	100%	Live		M25/0171	Kalpini Bulong	100%	Live	
E27/0607	Kalpini	100%	Live		M25/0187	Kalpini Boulder Block	100%	Live	
E28/1224	Kalpini	100%	Live		M25/0209	Kalpini Bulong	100%	Live	
E28/2807	Kalpini	100%	Pending		P25/2454	Kalpini Bulong	100%	Live	
M27/0395	Kalpini	100%	Live		P25/2455	Kalpini Bulong	100%	Live	
M27/0506	Kalpini	100%	Pending		P25/2456	Kalpini Bulong	100%	Live	
M28/0199	Kalpini	100%	Live		P25/2457	Kalpini Bulong	100%	Live	
M28/0201	Kalpini	100%	Live		P25/2458	Kalpini Bulong	100%	Live	
M28/0205	Kalpini	100%	Live		P25/2459	Kalpini Bulong	100%	Live	
E27/0278	Kalpini Pioneer	100% Ni lat	Live	8	P25/2460	Kalpini Bulong	100%	Live	
E28/1746	Kalpini Pioneer	100% Ni lat	Live	8	P25/2461	Kalpini Bulong	100%	Live	
E28/2483	Kalpini Pioneer	100% Ni lat	Live	8	P25/2482	Kalpini Bulong	100%	Live	
M31/0488	Kalpini Lake Rebecca	100%	Pending		P25/2483	Kalpini Bulong	100%	Live	
P31/2038	Kalpini Lake Rebecca	100%	Live		P25/2484	Kalpini Bulong	100%	Live	
P31/2039	Kalpini Lake Rebecca	100%	Live		P25/2559	Kalpini Bulong	100%	Pending	
P31/2040	Kalpini Lake Rebecca	100%	Live		P25/2560	Kalpini Bulong	100%	Pending	
E25/0576	Kalpini Bulong	100%	Pending		P25/2561	Kalpini Bulong	100%	Pending	
E25/0578	Kalpini Bulong	100%	Pending		P25/2591	Kalpini Bulong	100%	Pending	
M25/0059	Kalpini Bulong	100%	Live		P25/2609	Kalpini Bulong	100%	Pending	
M25/0134	Kalpini Bulong	100%	Live						
M25/0145	Kalpini Bulong	100%	Live						
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%	Live		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		E39/1854	Darlot East	100%	Live	E39/1854
E37/1273	Mt Zephyr	100%	Live		E39/1985	Darlot East	100%	Live	E39/1985
E37/1274	Mt Zephyr	100%	Live						

Perrinvale Nickel-Gold

Tenure	Location	Ardea Interest (%)	Status	Note	Tenure	Location	Ardea Interest (%)	Status	Note
E29/1006	Perrinvale	100	Live						

Bedonia Nickel-Copper-PGM

Tenure	Location	Ardea Interest	Status	Note	Tenure	Location	Ardea Interest	Status	Note
E63/1928	Bedonia Ni-Cu-PGM	100%	Pending		E63/1930	Bedonia Ni-Cu-PGM	100%	Pending	
E63/1929	Bedonia Ni-Cu-PGM	100%	Pending		E63/1856	Jimberlana Ni-Cu-PGM	100%	Live	
E63/1827	Bedonia Ni-Cu-PGM	100%	Live		E63/1857	Jimberlana Ni-Cu-PGM	100%	Live	
E63/1828	Bedonia Ni-Cu-PGM	100%	Live		E63/1976	Bedonia Ni-Cu-PGM	100%	Pending	
E63/1974	Bedonia Ni-Cu-PGM	100%	Pending		E63/1977	Bedonia Ni-Cu-PGM	100%	Pending	

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	10	M15/1323	WA Regional	Pre-empt Ni lat	Live	10
M15/1263	WA Regional	Pre-empt Ni lat	Live	10	M15/1338	WA Regional	Pre-empt Ni lat	Live	10
M15/1264	WA Regional	Pre-empt Ni lat	Live	10	E27/0300	WA Regional	100% Ni lat	Live	11

Ardea Resources Ltd Tenement Schedule (NSW) as at 30 June 2019

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 Aubrey 30km NE Parkes	100%	Live		EL8557	Restdown 62km W of Wyalong	100%	Live	
EL5780	Obley North, Obley West, Yallundry	100%	Pending		EL5794	Mt Bulga	100%	Pending	
EL5812	Caledonian	100%	Pending						

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 (currently in default), Ardea owns all non- semi-precious mineral rights, in particular Ni-Co-PGM-Au, Ardea registered holder.
8.	Pioneer-Northern Star owns gold-nickel sulphide rights and responsible for tenement management, Ardea owns 100% Ni-Co laterite rights.
9.	Intermin subsidiary Metaliko owns gold rights and responsible for tenement management, Ardea owns 100% Ni-Co laterite rights.
10.	Ramelius assignee owns all mineral rights, Ardea pre-emptive right to Ni-Co laterite.
11.	Pioneer and assignee owns all mineral rights, Ardea owns Ni-Co laterite.