



ASX & Media Release

30 July 2024

ASX Symbol

ARL

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Company Secretary

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Chief Financial Officer

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General Manager Land Access

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General Manager Geology & Exploration

Issued Capital

Fully Paid Ordinary Shares
199,682,915

Performance Rights
3,316,400

Options
3,000,000

ABN 30 614 289 342

QUARTERLY OPERATIONS REPORT

For the Quarter ended 30 June 2024

Ardea Resources Limited (ASX:ARL) (**Ardea** or the **Company**) is pleased to provide the following report on its activities during the June 2024 Quarter.

JUNE 2024 QUARTER HIGHLIGHTS

The Company is well capitalised with \$14.8M cash-at-bank as at 30 June 2024, and has no debt. Additionally, wholly owned subsidiary Kalgoorlie Nickel Pty Ltd (**KNPL**) has a funding support arrangement of \$11.1M through Sumitomo Metal Mining Co., Ltd (**SMM**) to facilitate the early start to DFS programs. With available funds of \$25.9M, the Company is soundly positioned.

Kalgoorlie Nickel Project

Ardea's sole priority continues to be progressing the development of the world-significant Kalgoorlie Nickel Project (**KNP**) commencing with the Goongarrie Hub (**GH**). Current focus is fine tuning the 2023 PFS outcomes to optimise the DFS.

During the Quarter, Ardea completed its Strategic Partner process by executing a binding Cooperation Agreement with SMM and Mitsubishi Corporation (**MC**) (**Consortium**) to form an incorporated joint venture (**JV**) to develop the KNP – Goongarrie Hub (**Transaction**) (Figures 1, 2). The incorporated JV vehicle is currently a wholly owned Ardea subsidiary company, KNPL (ASX release 26 April 2024). The Consortium may earn a 50% interest in KNPL through taking the GH through to Final Investment Decision (**FID**).

This milestone represents a significant Critical Minerals Collaboration between Australia and Japan.

Key Goongarrie Hub June 2024 Quarter activities included:

- Strategic Partners, SMM and MC selected for the KNP – Goongarrie Hub.
- The Consortium will fund 100% of the DFS costs up to the agreed budget of approximately A\$98.5 million and assist KNPL in optimising debt financing to earn an ultimate 50% interest in the JV, with Ardea retaining the other 50% as a contributing interest.
- Ardea, SMM and KNPL have agreed on funding support arrangements allowing DFS activities to have commenced 1 May 2024.
- Key KNPL Owners Team personnel are being recruited.
- DFS work packages are being awarded, with multinational engineering services firm Ausenco awarded the Process Plant contract (ASX release 8 July 2024).
- Infill Drill program comprising 888 RC holes for 51,745m, designed to upgrade the nickel-cobalt laterite resources to Measured category for the first five years of mining within the scheduled open pits.
- Goongarrie Hub DFS Infill Drill program commenced at the Big Four nickel-cobalt deposit (ASX release 4 July 2024).

\$1.1 million Research and Development (**R&D**) Tax Incentive Rebate for the 2023 financial year has been received from the Federal Government through the Australian Tax Office (ASX release 13 June 2024). R&D focused on the GH processing flowsheet, notably on Mineralised Neutraliser for which an international patent has been applied (ASX release 16 November 2022).



Strategic Partner Process

During the Quarter, Ardea executed a binding Cooperation Agreement to form an incorporated JV with SMM and MC which represents a significant Critical Minerals Collaboration.

Under the Transaction, KNPL will manage the DFS process, with the Consortium providing 100% of the funding for the DFS up to a budget of approximately A\$98.5 million via staged equity contributions over approximately 18 months. Ardea and the Consortium will provide technical and commercial input into the DFS. At the conclusion of the DFS spend, the Consortium will have subscribed to a 35% ownership in KNPL and retain the right to increase its ownership in KNPL to 50% upon a positive Final Investment Decision by the Consortium.

To reach a FID requires all relevant approvals to be granted and project development funding to be secured, with a positive FID initiating project development.

Ardea's collaboration with the Consortium is focused on the KNP – Goongarrie Hub being developed to realise its full potential as a long life (>40 years), low cost source of nickel-cobalt that meets the high ESG standards expected by society, from the premier resources operating jurisdiction, the Eastern Goldfields of Western Australia (**WA**) (ASX releases 26 April 2024 and 5 July 2023).

The Transaction is subject to standard conditions precedent including Foreign Investment Review Board (**FIRB**) approval and the execution of a binding Shareholders' Agreement. Ardea expects to provide an update prior to the end of September 2024, as has previously been guided (ASX release 26 April 2024).

During the Quarter, Ardea Managing Director and CEO, Andrew Penkethman and KNPL Project Director, Matthew Read, travelled to Japan to meet with the Consortium and visit the SMM Niihama Nickel Refinery and downstream nickel processing facilities (Figure 1).



Figure 1: Ardea (Andrew Penkethman, far right), KNPL (Matt Read, second from right), MC and SMM personnel, at the SMM Niihama Nickel Refinery located 800km WSW of Tokyo, Japan.

Health and Safety

There was one incident recorded during the Quarter when a field assistant strained muscles on two fingers starting a water pump which jammed. First aid was applied and swollen hand was assessed by a doctor. The field assistant went on light duties, avoided heavy lifting and repetitive use for two weeks. The investigation concluded that the pump should only be started with the battery start procedure and the battery be checked prior to deployment in the field. The Safe Work Method Statements (**SWMS**) were amended to reflect the action.



Safety topics for the Quarter included working in remote conditions, completion of training risk assessments, personnel protective equipment, lightning standard operating procedure and a corrective action register. The focus of this period has been on ensuring the documented processes (plans, procedures, work instructions, safe work procedures) are compliant with the WA Work Health and Safety Act and associated regulations. Site personnel training sessions were conducted to increase the awareness of the risk assessment processes and introduced an updated Job Hazard Analysis and Take 5 process to the system.

During the Quarter a new Health Safety and Environment (**HSE**) Manager commenced and has focused on review of all Occupational Health and Safety (**OHS**) policies, procedures and contractor safety documents, for use in both Ardea and KNPL. These include key management plans such as the Mine Safety Management Plan, Emergency Management Plan, Health Management Plan and Principal Mining Hazard Management Plan. He also planned training and verification of competencies, and completed an audit of the Mine Safety Management System based on the Association of Mining and Exploration Companies (**AMEC**) Audit Tool. A presentation was made to the Consortium and Ardea Board on the progress of the Work Health Safety (**WHS**) management process and document development late in June 2024.

With additional contractors mobilising to the KNP – Goongarrie Hub, the focus has continued to be on assisting them with the documentation and safety expectation of Ardea and KNPL for the works.

During the Quarter a Radiation Safety Officer was appointed for Ardea.

Environmental, Social and (Corporate) Governance

Environmental, Social and (Corporate) Governance (**ESG**) considerations are at the forefront for Ardea and KNPL. Project designs and work practices are based on the Company minimising the project development footprint and CO₂ green-house gas emissions when in production. The proposed flowsheet has been enhanced for CO₂ mitigation in the neutralisation circuit through introducing an Atmospheric Leach (**AL**) circuit to assist in neutralising the High Pressure Acid Leach (**HPAL**) discharge. The AL circuit facilitates upgrade of the site acid plant utilisation and allows Ardea to generate its own site power requirements off-grid through burning elemental sulphur, without relying on fossil fuel for power generation.

Responsible sourcing of materials, through mechanisms such as mandatory reporting of CO₂ footprints for all batteries sold is essential. Traceability is also being implemented with raw materials used in batteries that must be procured according to OECD guidelines for sustainable sourcing (part of Ardea's FBICRC R&D, see following).

Ardea enjoys strong support from the communities in which it operates, primarily the City of Kalgoorlie-Boulder and the Shire of Menzies. The environmental setting, being the Great Western Woodlands, allows excellent post-mining rehabilitation and reforestation.

Ardea's planned in-pit tailings disposal strategy, incorporating waste rock back fill, stockpiled topsoil, and finally progressive revegetation, minimises land disturbance and accelerates rehabilitation, concurrently with operations (Figure 5).

Critically, at the Goongarrie Hub, mining and processing has no land-use conflict with agricultural activity which occurs in multiple peer nickel laterite centres.

Vehicle wrecks abandoned on Ardea tenure located near the Goldfields Highway by members of the public and other third-party rubbish was removed in conjunction with the Shire of Menzies and support from our long-term drilling contractor Kennedy Drilling. All historic and legacy Goongarrie South drill sites within the scheduled key production area have been rehabilitated. A similar campaign is current for the full Goongarrie Hub tenements.



During the Quarter, Ardea continued to engage with stakeholders, who are supportive of the Goongarrie Hub development and are looking forward to the contributions the operation can make to the local community through increased skilled job opportunities, training and enhancing community contributions. Stakeholder engagement also continued with the Western Australian Government, the Shire of Menzies and City of Kalgoorlie-Boulder in addition to on-going discussions with the Marlinyu Ghoorlie Native Title Claimants.

The Commonwealth, via agencies, such as Austrade, the Critical Minerals Office (**CMO**) and Major Projects Facilitation Agency (**MPFA**) continues to be updated with Ardea's progress on its DFS. The MPFA will also work with Ardea in re-applying for Major Project Status which is due to expire after three years in March 2025. With Ardea already having Major Project Status, it will support future Commonwealth assistance and liaison with Federal and State approvals agencies.

In having a West Kalgoorlie Operations Office, Ardea and KNPL maintains a permanent presence and regular engagement with the communities within which the Company operates.

ESG Compliance

In March, the Company completed its 2024 updated ESG assessment and reporting submission by internationally accredited Digbee ESGTM. Final scoring was received in the June Quarter and the Company has significantly improved from its score in 2022 (BBB) towards the A grade of the score spectrum for both Corporate and the Kalgoorlie Nickel Project. As Ardea grows from exploration through to development and mining, it will continue to strive to achieve the highest possible, AAA rating (ASX release 9 May 2024).

1. KALGOORLIE NICKEL PROJECT - GOONGARRIE HUB

The Goongarrie Hub is located 70km northwest of the mining centre the City of Kalgoorlie-Boulder and is the premium ore feed within the broader KNP (Figure 2). Resources from the Goongarrie, Highway and Siberia North nickel-cobalt laterite deposits are planned to be the base load feed for a processing operation located at Goongarrie South.

The mineral resources at Goongarrie are dominantly the premium goethite style and extend continuously over 25km of strike and at Highway, 30km north, over a strike length of 10km (Figure 2). All key Goongarrie Hub mineral resources are located on granted mining leases and tenure 100%-controlled by Ardea.

The project also has ready access to high-quality infrastructure with the Goldfields Highway, rail line, fibre optic cable and power infrastructure passing through the project area (Figure 2 and 3). The Goldfields gas pipeline is located some 30km to the east and there are two port options, these being Esperance and Kwinana, that are well serviced by the KNP road and rail network.

Significantly, the KNP is located on the rail connection to the developing battery hub at the Port of Kwinana industrial area immediately south of Perth, as well as east to Port Augusta and developing low-carbon energy hubs on the eastern Australia seaboard.

Ardea is actively engaged with Federal and State agencies and statutory authorities who are coordinating the push for a downstream battery industry within Australia through "*Team Australia*" and the State of Western Australia through "*Team WA*".

All the Lithium-Ion-Battery (**LIB**) feedstocks, including nickel and cobalt, are available in Australia, and Western Australia in particular, at the scales required for World-significant green energy centres of excellence.

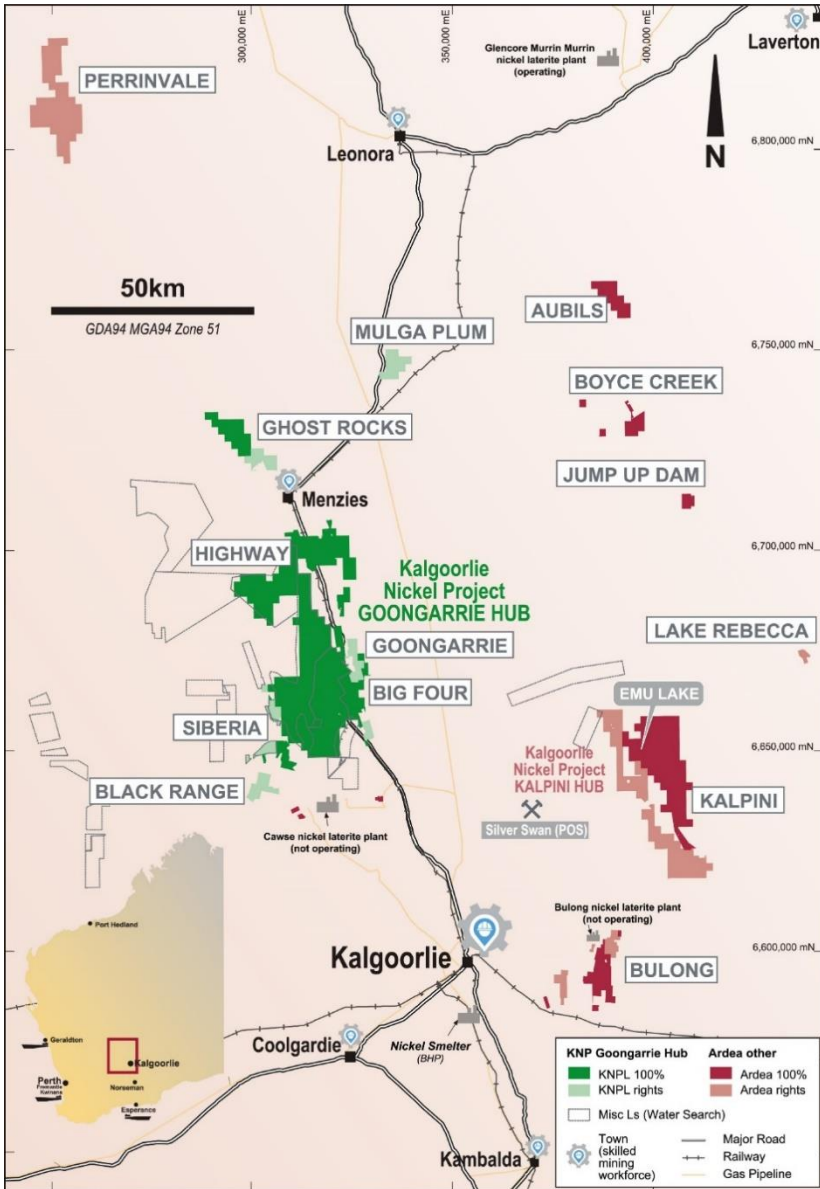


Figure 2: KNP location plan. Projection GDA94 Zone 51



Figure 3: Aerial image at Ardea's Goongarrie Hub at Goongarrie South looking south towards Kalgoorlie-Boulder showing road and rail infrastructure within the granted mining leases upon which the resources are located.



Highlights

Ardea's focus remains development of the KNP – Goongarrie Hub, which is managed by KNPL who will complete the Goongarrie Hub DFS.

During the June 2024 Quarter the focus has been the key start-up activities to enable KNPL to deliver the DFS, including:

- The commencement of hiring the second tranche of new KNPL team members.
- Ongoing recruitment of remaining key roles for KNPL.
- Relocated the KNPL team to a new and independent West Perth office.
- The IT hardware rollout and fit-out of the new office.
- Significant progress on the commercial terms and conditions negotiations with key consultants.
- Process plant and utilities DFS engineering contract was awarded to Ausenco (Ardea ASX release 8 July 2024).
- Ausenco commenced work on trade off studies and design criteria.
- Hydrological and geotechnical consultant (PSM) commenced the passive seismic surveys as part of the hydrogeological study.
- Aconex document management system rolled-out.
- Further reviews on the pre-DFS mining schedule with mining consultant Orelogy.
- Water exploration drilling report complete. The water supply options trade-off study is to commence next period by consultant WGA.
- Drill preparation works commenced for the infill drill program to upgrade nickel-cobalt laterite resources to Measured category for the first five-year open pits (888 RC holes for 51,745m), including a contract award to Kennedy Drilling.

Processing Research and Development

The Ardea FY2024 Research & Development (R&D) is based upon metallurgical experiments aimed at optimising the plant performance, product range and hence revenue streams from the KNP and its Goongarrie Hub. This is fundamental to delivering the KNP as a world-competitive Critical Minerals project.

Global Patent Application – Mineralised Neutraliser.

Ardea lodged patent applications in Australia (AU2022903389) on 11 November 2022, and with the World Intellectual Property Office (WIPO) on 13 June 2023: PCT/AU2023/050520 relating to the use of Mineralised Neutraliser in the Ardea process.

Scandium and Rare Earth Elements

CSIRO-Ardea continued conceptual nickel sulphide and hydrothermal alteration target concepts at the Highway Nickel Prospect pursuant to an Exploration Incentive Scheme (EIS) jointly State government/Ardea funded diamond core hole ("Nickel Sulphide Prospectivity Confirmed and the Lithium-Caesium-Rubidium bearing intrusives in the Highway EIS drillhole." ASX release 15 December 2023). Based on the EIS research, it is planned that DFS drilling at Highway will include a multi-element assay suite to quantify the potential Sc-REE-Lithium-Caesium-Tantalum (LCT) potential, as well as better define the Mineralised Neutraliser role in the plant.



Future Battery Industries – Cooperative Research Centre (FBICRC)

Ardea continues to support the FBICRC developments and have monitored progress over the Quarter. No specific requests for material or intellectual support were received during the period.

Australian Research Council

In September 2022 Ardea became one of the sponsors of the Australian Research Council's (**ARC**) Industrial Transformation Training Centre in Critical Minerals. During April a proposed PhD project was sent to Ardea for review.

Bench-scale Metallurgy

Bench scale metallurgical testing has been planned for the initial stages of the DFS study. Initial testing will be focused on leaching tests for the goethite (limonite) and magnesian (sapolite) ores.

Testwork for the ore preparation has been scoped and is to be conducted by an accredited Perth-based laboratory. The testwork is mainly intended to generate the leach feed samples for the downstream testing. However, information about milling characteristics of the ore and potential for selective upgrading of the coarse fractions by differences in the grind response for different minerals (e.g. goethite versus silica).

The testwork commenced in July 2024.

The downstream leaching testwork is being scoped and prepared for quotations.

Flowsheet Research and Development

Beneficiation bench scale testwork from the Vale Inco Pre-Feasibility Study (**PFS**) study in 2008 was revisited to identify additional opportunities. The data was compiled into a single Excel file and analysed using "Bene Rules" adopted during the mine scheduling work completed both as part of the PFS and early DFS work.

This knowledge is being used to ratify the Bene Rules (especially cut-off grades and criteria for selecting processing options for a given ore block). Once the Bene Rules have been finalised, regression equations to predict processing outcomes for each ore block (based on head grade and the Bene Rules criteria) will be tested. If successful, this may improve the accuracy of the mine model and improve the overall resource utility.

An Ore Preparation circuit configuration has been proposed. The overall circuit is to consist of 3 x ore preparation trains; two of these (goethite trains 1 & 2) will have the same design and be capable of processing either grind or beneficiable HPAL ore feeds. The other train will process magnesian AL ore feed and Mineralised Neutraliser on a campaign basis.

SysCAD

The SysCAD engineering design model forms the basis of the process mass and energy balance and is an important input to engineering design activities such as mechanical equipment identification and sizing. The adoption of the Coral Bay-style flowsheet means that the existing PFS SysCAD model must be updated. It has been decided that the details of this updated model will be provided from SMM operational data.

In the interim, provisional data from an updated version of the PFS SysCAD model is to be used for engineering design. This will cover the front end of the circuit, including the proposed changes to the HPAL residence time from 70 to 60 minutes.

Engineering

The major engineering work for the Process Plant has been awarded to Ausenco Engineers. Various workshops and presentations have been conducted to bring all parties up to speed.

The Work Breakdown Structure (**WBS**) is now agreed and being used. The Block Flow Diagram (**BFD**) has been released. Some aspects of the BFD will need to be confirmed during the ongoing metallurgical testwork. KNPL will be reviewing the Ausenco PFD markups, which will be used for the SysCAD design.



Geology

The Infill RC drill program to upgrade nickel-cobalt laterite resources to Measured category for the first 5-year open pits (888 holes for 51,745 m on a 40x40 m spacing) commenced at Big Four (16,215m planned) in early July (ASX release 4 July 2024). The program is being completed by Kennedy Drilling, initially with one RC rig to end of August (Figure 4). Site contractors (2x Geologists and 2x Field Assistants) are supporting the program on alternate rosters, assisted by a Principal Contract Geologist on a campaign roster.

Kennedy Drilling and KNPL geologists and field assistants will camp on site at Goongarrie South during the initial period. Once multiple drill rigs are operating, then KNPL and its contractors will be based in Kalgoorlie, and travel to/from site daily via a coach bus.

Geotechnical drilling for pit design slope parameters by consultants PSM is scheduled to commence September 2024.



Figure 4: Infill resource definition drilling underway at the Big Four nickel-cobalt deposit, Kennedy Drilling rig.

Resource Workflows

Resource workstreams during the June Quarter 2024 consisted of pre-DFS work, preparing for the Infill RC drill program and updated Mineral Resource Estimates.

Interpretation of the DFS mineral resource wireframes continued at Goongarrie South and Big Four using a combination of geochemistry and logged geology. The QAQC procedure for the Infill drill program was reviewed, with new assay standards selected appropriate for lithologies to be intersected.

A high-level review of the current RC/diamond core twin hole datasets and existing density data was undertaken to aid in planning of the DFS Diamond Drilling program. Diamond core and RC chips were selected from representative areas at Goongarrie South and Highway and reviewed in Kalgoorlie with the site geologists.

The KNP global Mineral Resource Estimate (**MRE**) (using a 0.5% Ni cut-off grade) stands at **854Mt at 0.71% Ni and 0.045% Co for 6.1Mt of contained nickel and 386kt of contained cobalt** (Table 1 – ASX release 30 June 2023). All the resources are constrained within optimised pit shells using appropriate nickel and cobalt prices, mining and processing costs and pit slope parameters to determine the material that could potentially be economically mined in the future. The Mineral Resource has been estimated and reported in accordance with the guidelines of the 2012 edition of the Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code (2012).



Table 1 - KNP nickel and cobalt MRE based on a greater than 0.5% Ni cut-off grade. Minor discrepancies may occur due to rounding of appropriate significant figures. Legend: LUC – Local Uniform Conditioning; UC – Uniform Conditioning; OK – Ordinary Kriging.

| Camp | Prospect | Resource Category | Size (Mt) | Ni (%) | Co (%) | Contained Metal | | Estimation Details | | | |
|-----------------------------------|------------------------------|-------------------|------------|-------------|--------------|-----------------|------------|--------------------|---------|------|--|
| | | | | | | Ni (kt) | Co (kt) | Method | Source | Year | |
| Goongarrie | Goongarrie South | Measured | 18 | 0.94 | 0.085 | 171 | 15 | LUC | Ardea | 2021 | |
| | | Indicated | 82 | 0.71 | 0.049 | 584 | 40 | LUC | Ardea | 2021 | |
| | | Inferred | 10 | 0.64 | 0.033 | 61 | 3 | LUC | Ardea | 2021 | |
| | Highway | Indicated | 71 | 0.69 | 0.038 | 487 | 27 | LUC | Ardea | 2023 | |
| | | Inferred | 21 | 0.67 | 0.040 | 141 | 8 | LUC | Ardea | 2023 | |
| | Ghost Rocks | Inferred | 47 | 0.66 | 0.042 | 312 | 20 | OK | Snowden | 2004 | |
| | Goongarrie Hill | Indicated | 40 | 0.65 | 0.037 | 259 | 15 | LUC | Ardea | 2021 | |
| | | Inferred | 29 | 0.60 | 0.025 | 176 | 7 | LUC | Ardea | 2021 | |
| | Big Four | Indicated | 49 | 0.71 | 0.047 | 346 | 23 | LUC | Ardea | 2021 | |
| | | Inferred | 14 | 0.68 | 0.043 | 96 | 6 | LUC | Ardea | 2021 | |
| | Scotia Dam | Indicated | 12 | 0.71 | 0.065 | 82 | 7 | LUC | Ardea | 2021 | |
| | | Inferred | 5 | 0.72 | 0.043 | 37 | 2 | LUC | Ardea | 2021 | |
| | Goongarrie Subtotal | | Measured | 18 | 0.94 | 0.085 | 171 | 15 | | | |
| | | | Indicated | 253 | 0.69 | 0.044 | 1,758 | 112 | | | |
| | | Inferred | 127 | 0.65 | 0.037 | 823 | 47 | | | | |
| | | Combined | 398 | 0.69 | 0.044 | 2,753 | 175 | | | | |
| Siberia | Siberia South | Inferred | 81 | 0.65 | 0.033 | 525 | 27 | OK | Snowden | 2004 | |
| | Siberia North | Indicated | 14 | 0.72 | 0.042 | 102 | 6 | Ni(UC) Co(OK) | Snowden | 2009 | |
| | | Inferred | 72 | 0.74 | 0.034 | 534 | 25 | Ni(UC) Co(OK) | Snowden | 2009 | |
| | Black Range | Indicated | 9 | 0.67 | 0.090 | 62 | 8 | OK | HGMC | 2017 | |
| | | Inferred | 10 | 0.69 | 0.100 | 68 | 10 | OK | HGMC | 2017 | |
| | Siberia Subtotal | | Indicated | 24 | 0.70 | 0.061 | 165 | 14 | | | |
| | | | Inferred | 163 | 0.69 | 0.038 | 1,127 | 61 | | | |
| | | Combined | 186 | 0.69 | 0.040 | 1,292 | 75 | | | | |
| KNP - Goongarrie TOTAL Hub | | Measured | 18 | 0.94 | 0.085 | 171 | 15 | | | | |
| | | Indicated | 277 | 0.70 | 0.046 | 1,923 | 127 | | | | |
| | | Inferred | 289 | 0.67 | 0.037 | 1,951 | 108 | | | | |
| | | Combined | 584 | 0.69 | 0.043 | 4,044 | 250 | | | | |
| Bulong | Taurus | Inferred | 14 | 0.84 | 0.051 | 119 | 7 | OK | Snowden | 2007 | |
| | Bulong East | Indicated | 16 | 1.06 | 0.055 | 169 | 9 | OK | Snowden | 2004 | |
| | | Inferred | 24 | 0.79 | 0.053 | 190 | 13 | OK | Snowden | 2004 | |
| | Bulong Subtotal | | Indicated | 16 | 1.06 | 0.055 | 169 | 9 | | | |
| | | | Inferred | 38 | 0.81 | 0.052 | 309 | 20 | | | |
| | | Combined | 54 | 0.88 | 0.053 | 477 | 29 | | | | |
| Hampton | Kalpini | Inferred | 75 | 0.73 | 0.044 | 550 | 33 | OK | Snowden | 2004 | |
| | Hampton Subtotal | Inferred | 75 | 0.73 | 0.044 | 550 | 33 | | | | |
| KNP Kalpini Hub TOTAL | | Indicated | 16 | 1.06 | 0.055 | 169 | 9 | | | | |
| | | Inferred | 114 | 0.76 | 0.047 | 859 | 53 | | | | |
| | | Combined | 130 | 0.79 | 0.048 | 1,028 | 62 | | | | |
| Yerilla | Jump Up Dam | Measured | 4 | 0.94 | 0.048 | 36 | 2 | OK | Snowden | 2008 | |
| | | Indicated | 42 | 0.78 | 0.043 | 324 | 18 | OK | Snowden | 2008 | |
| | | Inferred | 18 | 0.63 | 0.034 | 116 | 6 | OK | Snowden | 2008 | |
| | Boyce Creek | Indicated | 27 | 0.77 | 0.058 | 206 | 16 | OK | Snowden | 2009 | |
| | Aubils | Inferred | 49 | 0.70 | 0.066 | 346 | 33 | OK | Heron | 2008 | |
| | KNP Yerilla Hub TOTAL | | Measured | 4 | 0.94 | 0.048 | 36 | 2 | | | |
| | | Indicated | 68 | 0.78 | 0.049 | 531 | 33 | | | | |
| | | Inferred | 68 | 0.68 | 0.057 | 462 | 39 | | | | |
| | | Combined | 140 | 0.73 | 0.053 | 1,028 | 74 | | | | |
| KNP TOTAL | | Measured | 22 | 0.94 | 0.079 | 207 | 17 | | | | |
| | | Indicated | 361 | 0.73 | 0.047 | 2,622 | 169 | | | | |
| | | Inferred | 471 | 0.70 | 0.043 | 3,272 | 200 | | | | |
| GRAND TOTAL | | Combined | 854 | 0.71 | 0.045 | 6,101 | 386 | | | | |



Ore Reserve

The 2023 PFS (ASX release 5 July 2023) defined an Ore Reserve of **194.1Mt at 0.70% Ni and 0.05% Co** for 1.36Mt contained nickel and 99kt contained cobalt (Table 2). Other Goongarrie Hub deposits (Ghost Rocks, Siberia South and Black Range) have not been included in the current Ore Reserve and provide potential to significantly extend the mine life.

Table 2 - KNP - Goongarrie Hub Ore Reserve Summary consisting of ore above 0.5% Ni as the feed stock for the processing facility, and ore as Mineralised Neutraliser above 0.5% Ni equivalent (NiEq) and Loss on Ignition (LOI) above 25%.

| Deposit | Ore >= 0.5% Ni | | | | | Ore > 0.5% NiEq and LOI > 25% | | | | | Total Ore | | | | |
|----------------------------------|----------------|-------------|-------------|--------------|-----------|-------------------------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|-----------|
| | Mt | Ni % | Co % | Ni kt | Co kt | Mt | Ni % | Co % | Ni kt | Co kt | Mt | Ni % | Co % | Ni kt | Co kt |
| Proven | | | | | | | | | | | | | | | |
| Goongarrie South | 16.7 | 0.96 | 0.09 | 160 | 15 | 0.05 | 0.43 | 0.03 | 0.20 | 0.01 | 16.7 | 0.96 | 0.09 | 160 | 15 |
| Sub-total | 16.7 | 0.96 | 0.09 | 160 | 15 | 0.05 | 0.43 | 0.03 | 0.20 | 0.01 | 16.7 | 0.96 | 0.09 | 160 | 15 |
| Probable | | | | | | | | | | | | | | | |
| Big Four/Scotia Dam | 34.9 | 0.76 | 0.07 | 265 | 23 | 0.8 | 0.38 | 0.04 | 3 | 0 | 35.7 | 0.75 | 0.06 | 268 | 23 |
| Goongarrie South | 33.6 | 0.79 | 0.07 | 265 | 23 | 1.8 | 0.40 | 0.03 | 7 | 1 | 35.4 | 0.77 | 0.07 | 272 | 24 |
| Goongarrie Hill | 15.8 | 0.70 | 0.04 | 110 | 7 | 0.1 | 0.44 | 0.02 | 0 | 0 | 15.9 | 0.70 | 0.04 | 111 | 7 |
| Highway | 54.0 | 0.70 | 0.04 | 380 | 22 | 27.2 | 0.39 | 0.01 | 106 | 4 | 81.2 | 0.60 | 0.03 | 486 | 26 |
| Siberia North | 9.2 | 0.74 | 0.05 | 68 | 4 | - | - | - | - | - | 9.2 | 0.74 | 0.05 | 68 | 4 |
| Sub-total | 147.4 | 0.74 | 0.05 | 1,087 | 79 | 29.9 | 0.39 | 0.02 | 117 | 5 | 177.4 | 0.68 | 0.05 | 1,204 | 84 |
| PROVEN AND PROBABLE TOTAL | | | | | | | | | | | | | | | |
| Big Four/Scotia Dam | 34.9 | 0.76 | 0.07 | 265 | 23 | 0.8 | 0.38 | 0.04 | 3 | 0 | 35.7 | 0.75 | 0.06 | 268 | 23 |
| Goongarrie South | 50.2 | 0.85 | 0.08 | 425 | 38 | 1.9 | 0.40 | 0.03 | 7 | 1 | 52.1 | 0.83 | 0.07 | 432 | 39 |
| Goongarrie Hill | 15.8 | 0.70 | 0.04 | 110 | 7 | 0.1 | 0.44 | 0.02 | 0 | 0 | 15.9 | 0.70 | 0.04 | 111 | 7 |
| Highway | 54.0 | 0.70 | 0.04 | 380 | 22 | 27.2 | 0.39 | 0.01 | 106 | 4 | 81.2 | 0.60 | 0.03 | 486 | 26 |
| Siberia North | 9.2 | 0.74 | 0.05 | 68 | 4 | - | - | - | - | - | 9.2 | 0.74 | 0.05 | 68 | 4 |
| TOTAL | 164.1 | 0.76 | 0.06 | 1,247 | 94 | 30.0 | 0.39 | 0.02 | 117 | 5 | 194.1 | 0.70 | 0.05 | 1,365 | 99 |

Notes:

- The Ore Reserve is reported in accordance with JORC Code (2012). The Ore Reserve information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 5 July 2023, in accordance with Listing Rule 5.9.
- The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement noted above and that all material assumptions and technical parameters underpinning the Ore Reserve in the previous market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcement.
- Ore reserves are reported at a cut-off of 0.5% Ni for primary feed stock to the processing facility, plus Mineralised Neutraliser as ore at a cut-off of 0.5% NiEq and LOI above 25%.
- NiEq defined using Ni + 2.32 x Co.
- The Ore Reserve was evaluated using a base price of US\$22,000/t for Ni and US\$51,000/t for Co at 85% payable for a Mixed Hydroxide Precipitate (MHP) product, and an exchange rate 0.69 USD/AUD. In view of forward metal price projections averaging US\$25,000/t Ni.
- Ore Reserves account for mining dilution and mining ore loss.
- Ore Reserves are reported on a Dry Tonnage Basis.
- Proven Ore Reserves are based on Measured Mineral Resources only and Probable Ore Reserves are based on Indicated Mineral Resources only.
- The sum of individual amounts may not equal due to rounding.
- This Ore Reserve estimate is for a subset of the KNP - Goongarrie Hub deposits being Goongarrie South, Big Four / Scotia Dam, Goongarrie Hill, Highway and Siberia North.



Hydrogeology

At Goongarrie all nickel-cobalt-scandium mineral resources are located on granted mining leases. As such, Ardea/KNPL has first rights to any ground water underlying these areas. Past work by Ardea has defined multiple water sources outside the mine area, with water for project development to be sourced from multiple dedicated borefields.

The regional water exploration aircore drill program was completed on 15 May 2024. Total for the program was 98 holes drilled for 5,226m over eight prospects within an 80km radius of Goongarrie (Figure 2).

To finalise the early DFS phase of water sourcing, a specialist hydrogeological consultancy completed a detailed data compilation and presentation, which included:

- Results from the recent aircore drill program and all historical hydrogeological work, to identify several future water source alternatives for the Goongarrie Hub.
- Review of the water quality analyses.
- Prepared water supply options and opportunities within 100km of Goongarrie.
- Planning additional exploration on less advanced opportunities including aircore drilling and passive seismic surveys.

A workshop was held in early July to discuss results and review all options/opportunities to meet the Goongarrie Hub water demand sourced from several borefields. Consultant engineers will review the results to provide high-level engineering design/cost estimates of the borefield configurations and assist plan locations for DFS production bore drilling, testing and detailed modelling.

Part of the hydrogeology study will include drilling of fractured rock and paleochannel water targets and test pumping bores, with a program of 70 holes for 8,925m planned largely using aircore rather than RC drilling due to interpreted ground conditions.

Passive seismic surveys commenced at Goongarrie on 21 June 2024 and are continuing largely on the paleochannel systems, 60-80km west of Goongarrie.

Process Plant

Progress during the Quarter:

- Contract awarded to Process Plant Engineer, Ausenco.
- Ausenco commenced work on trade off studies and design criteria, and PFD drafting.
- SysCAD modelling awarded and commenced.
- Logistics consultant engaged and kick-off meeting has been held to provide subject matter expert advice to Ausenco's supply chain logistics updates.
- Technical kick-off meetings held.
- Interviewed candidates for Area Manager roles.
- Interim Area Managers for Hydrometallurgical studies engaged.
- Work commenced on Ausenco PFS study updates.
- Work commenced on engineering standards.

Non-Process Infrastructure

Progress during the Quarter:

- Site Hydrology investigations were completed.
- Water Delivery Contract awarded, and kick-off meeting held.



Environment and Rehabilitation

All project development within the KNP is aimed at including systematic and rapid rehabilitation concurrent with operations.

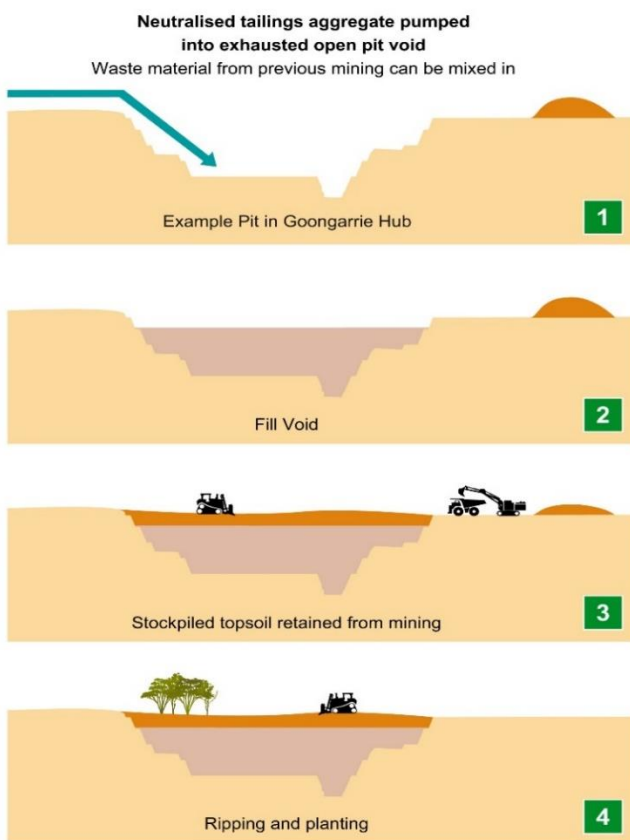
Due to the expanded development footprint of the Goongarrie Hub, as defined in the 2023 PFS (ASX release 5 July 2023), baseline surveys completed in 2018 have been extended and include further surveys to incorporate the latest environmental standards and guidelines.

During the September 2024 Quarter, Ardea is expecting finalisation of consultant reports and data from the following expanded baseline surveys: Flora and Vegetation; Terrestrial Fauna; Short Range Endemic Fauna; Targeted Conservation Significant Butterfly and Subterranean Fauna. Review and assessment of the completed surveys will continue to be managed by Ardea's environmental consultant from the 2023 PFS. The tender for the DFS environmental studies is in the final stages of evaluation and will be awarded in the next quarter.

Completion of remaining non-seasonal dependent baseline studies will allow further assessment of the need for the Project to be formally assessed under the State Environmental Protection Act (**EP Act**) and the Commonwealth Environment Protection and Biodiversity Conservation Act (**EPBC Act**). If it can be shown that environmental impacts are low and/or can be adequately managed by other regulatory agencies using other mechanisms, the Environmental Protection Authority (**EPA**) may make an assessment on the referral that the Project is not to be formally assessed.

Similarly, if the EPA believes impacts on some factors are not significant and can be adequately managed by other regulatory agencies using other mechanisms, the number of Key Factors to be assessed by the EPA under the Part IV process would be reduced.

Figure 5: Planned Goongarrie Hub in-pit tails disposal and rehabilitation strategy.



Mine rehabilitation methodology is facilitated through four decades of WA open pit gold mine operations, and the KNP footprint is minimised using mining voids for tailings and mullock disposal. Mining voids will be progressively rehabilitated during operations and returned to their pre mining state, by dressing the back filled open pit voids with topsoil (Figure 5) and then revegetating. Such sites, if unaffected by operations mine dust, would be suited as future solar array locations.

In terms of ESG compliance for hydrometallurgical metal processing, the KNP's benign and manageable environmental footprint contrasts strongly with "wet tropical laterite" projects. The tropical laterites require submarine tailings disposal or valley tailings storage with consequent substantial environmental risk. Tailings disposal in these environments tends to be further complicated by high rainfall and the fact that most tropical laterite deposits are in seismically active regions. Additionally, wet tropical laterite production areas commonly involve non-restorable rain forest habitat destruction.

It is doubtful whether wet tropical laterite hydrometallurgical battery metal sources can comply with the ESG standards required by the Japanese, South Korean, European and north American EV sectors.

Similarly, with more than 3,000mm of annual rainfall in the wet tropical nickel laterites, it is an immense challenge for long-term tailings stabilisation. The KNP semi-arid climate with robust environmental setting is likely just as important as the premium goethite, high nickel grade and excellent ore rheology for its economic attractiveness.



Approvals

Programs of work (**PoW**) for the Infill Drilling program have been granted at Big Four, Siberia North, Highway and Goongarrie Hill. Program of work approvals are still outstanding for Goongarrie South. A detailed approval tracker for PoW applications has been created within KNPL.

2. KALGOORLIE NICKEL PROJECT – KALPINI HUB

With the Goongarrie Hub now sole-funded by the Consortium to DFS completion at a budget of \$98.5 million, Ardea is undertaking initial Nickel Laterite scoping level feasibility reviews and Nickel Sulphide target generation for the Yerilla Hub (Aubils, Boyce Creek and Jump Up Dam Nickel Projects) and Kalpini Hub (Kalpini and Bulong Nickel Projects, Emu Lake nickel sulphide) shown in Figure 7. These “non-Goongarrie Hub” projects are collectively termed the “Kalpini Hub”.

Kalpini Nickel Project

Ardea’s Kalpini Nickel Project is located 70km northeast of the City of Kalgoorlie-Boulder and covers 121km² of contiguous granted tenure 100%-owned by Ardea (Figure 6, 7). Regionally there are two distinct Kalpini ultramafic units each with 20-25km strike within Ardea tenure (Figure 8):

- The Kalpini Eastern Komatiite Belt hosts the Wellington East and Acra North nickel laterite deposits containing 75Mt at 0.73% nickel and 0.04% cobalt, for 549.7kt nickel and 32.6kt cobalt (Ardea ASX release 30 June 2023). The ultramafics are typical of the Walter Williams Formation style consisting of a thick 200-600m sheet with olivine orthocumulate upper and lower contacts and core olivine meso-accumulate (Dunitic Sheet Flows-Layered Lava Lakes) which weathers to nickel laterite.
- The Kalpini Western Komatiite Belt hosts the Emu Lake Binti Binti nickel sulphide mineralisation. There are at least two fertile nickel sulphide ultramafic flows at Emu Lake. The volcanics are characterised by a bi-modal co-magmatic suite, with each cycle having a footwall dacite volcanic overlain by ultramafic volcanic flows. The ultramafics are orthocumulate flows typically 10-40m thick, with massive, matrix, blebby and disseminated nickel sulphides identified in the Western Ultramafic (**WU**) and Central Ultramafic (**CU**).

Nickel Laterite Studies

The Kalpini Nickel Project includes Nickel Laterite mineralisation associated with significant Rare Earth Element (**REE**) and Scandium credits (Figure 6).

At the Wellington East Prospect, re-sampling historic drill pulps by Ardea during 2020 to 2022 identified significant Rare Earth Element and Rare Metal (**RM**) grades within the historic nickel-cobalt laterite mineralisation (ASX Release 14 March 2022), including:

- WERC0371: 12m at 1.70% nickel, 0.151% cobalt, 28g/t scandium from 20m with;
 - **0.244%** Total Rare Earth Oxide (**TREO**) includes neodymium (Nd), praseodymium (Pr), lanthanum (La), cerium (Ce)
 - **1.320%** Total Rare Metal Oxide (**TRMO**) includes titanium (Ti), yttrium (Y), zircon (Zr), niobium (Nb), hafnium (Hf), tantalum (Ta) and tungsten (W)
- VKPRC0112: 4m at 1.66% nickel, 0.102% cobalt, 40g/t scandium from 29m with;
 - **0.1297% TREO**
 - **0.7193% TRMO**

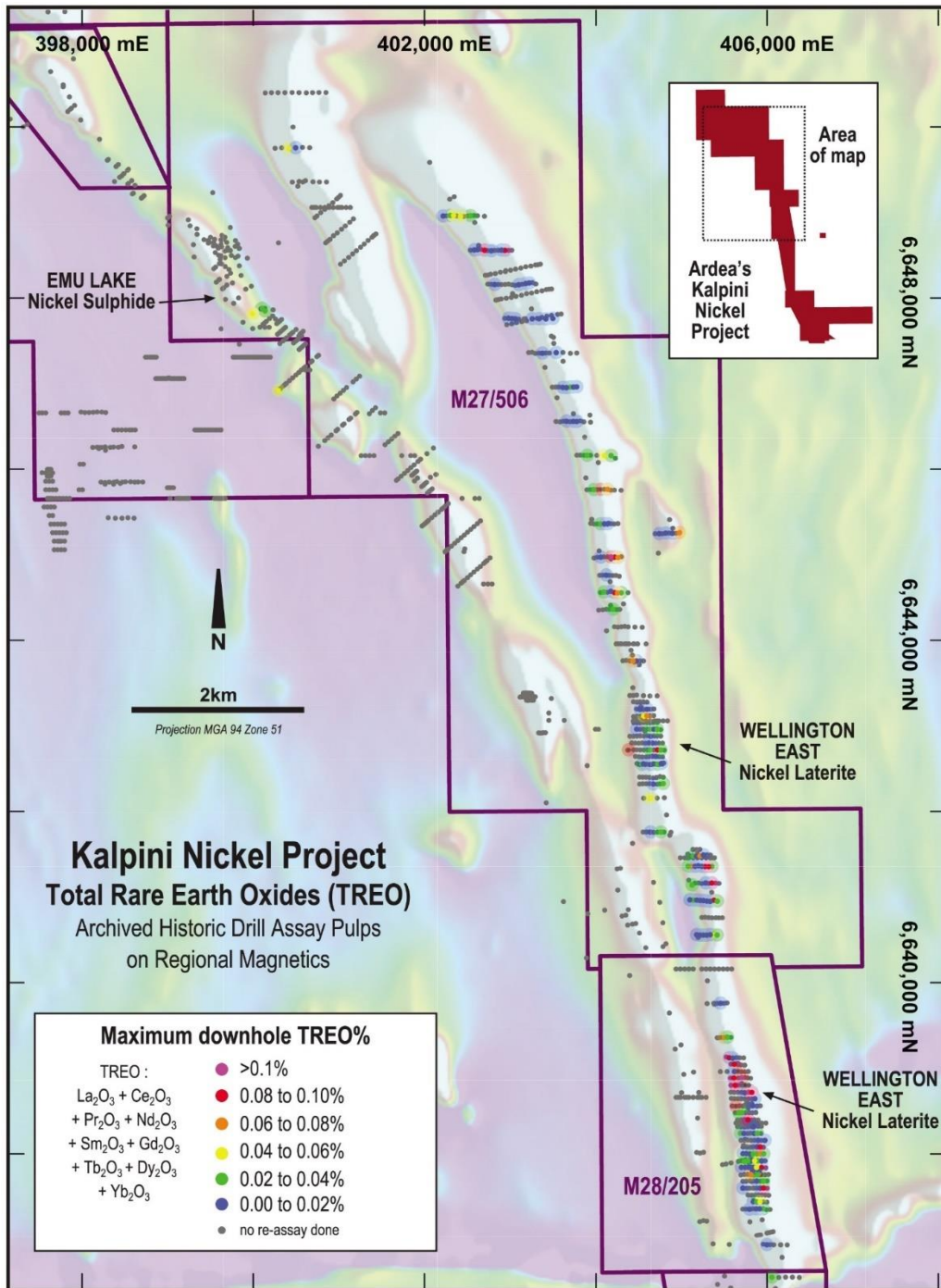


Figure 6: Northern Kalpini Nickel Project, aeromagnetic image showing historic drillholes as black dots, and if available % Total Rare Earth Oxide (TREO) assays, color-coded as per the map legend.

Studies completed during the current Quarter suggest the Kalpini REE occurs within the Enrichment Zone of the main Nickel Laterite. In contrast, scandium is more enriched within younger duricrust overlying the Nickel Laterite.

Ardea scandium intercepts (ASX Release 22 June 2017) include:

- AKR0015, **20m at 102g/t scandium** from 38m
- AKR0017, **6m at 463g/t scandium** from 28m



Nickel Sulphide Exploration

Ardea and KNPL’s extensive and strategic land holding in the Eastern Goldfields of WA comprises >3,480km² of tenements and in addition to the globally significant nickel-cobalt-scandium KNP resources, is highly prospective for nickel sulphides and other Critical Minerals notably REE (Figure 7).

Ardea’s nickel sulphide exploration strategy complements the development of the KNP nickel laterite. The KNP nickel sulphide targets are an asset in a region of multiple nickel sulphide concentrators, with most constrained by insufficient sulphide feed availability particularly with recent mine closures and suspensions in the Eastern Goldfields of WA region.

Nickel sulphide also has potential value for a nickel laterite operation, in that it is a potential addition to any goethite autoclave feed for exothermic heating (optimise steam use), Eh reduction to control hexavalent chromium and adding nickel and sulphur units to the autoclave reaction vessel, and typically improving overall nickel recoveries.

An additional benefit is that metal concentrations considered deleterious to conventional nickel sulphide flotation concentrator processing do not affect the HPAL process, opening the possibility of mineral extraction from nickel sulphide deposits that may otherwise be overlooked.

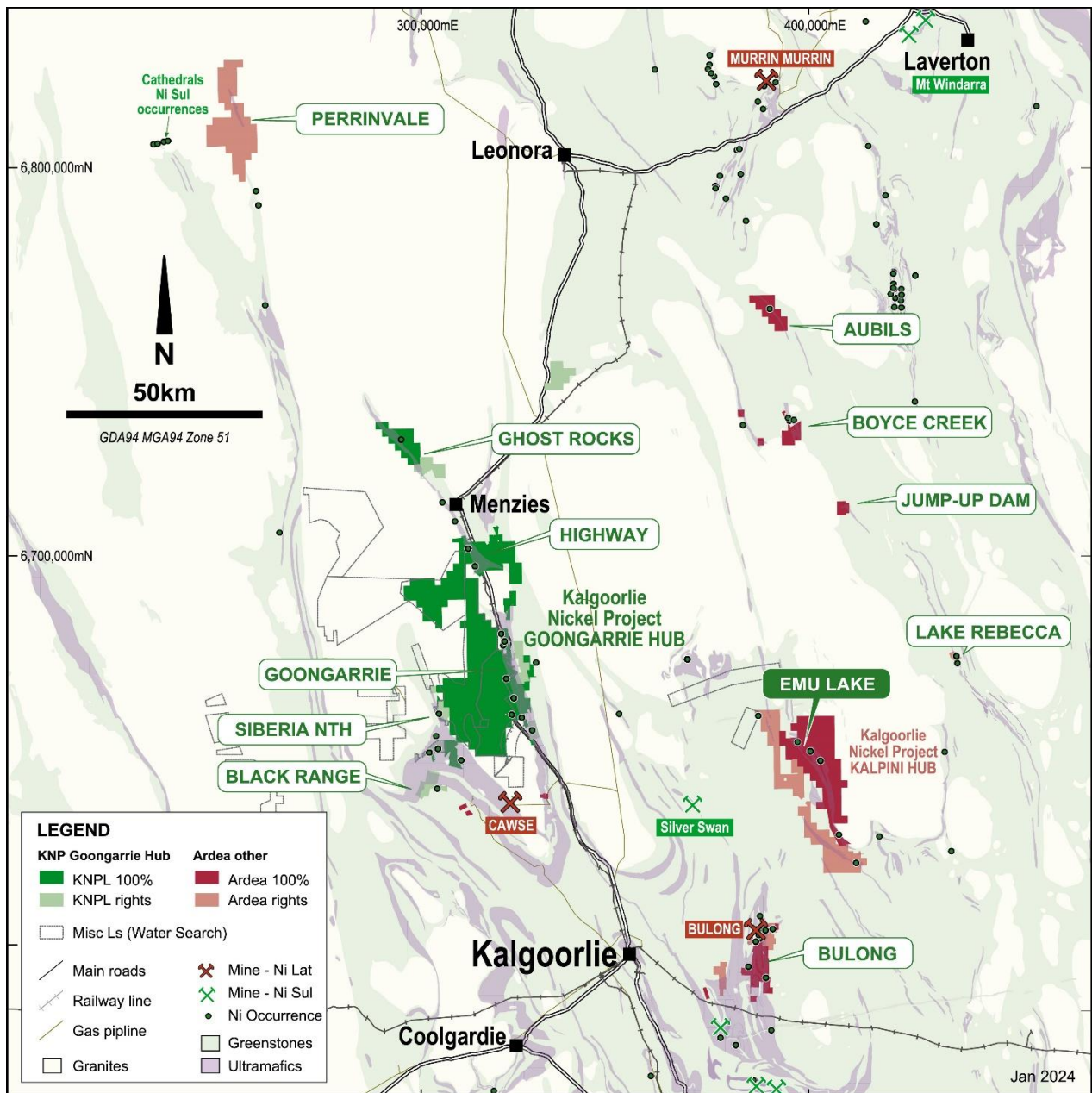


Figure 7: Ardea tenement plan highlighting the location of the Kalpini Hub, Emu Lake Nickel Sulphide Camp and nickel mines and deposits in the region. Projection MGA 94 Zone 51.



The Type 1 massive nickel-copper-PGE sulphides discovered at the Binti Prospect in the Kalpini Project (i.e. AELD0003: 2.72m at 5.42% Ni and 0.85% Cu from 391.04m – ASX release 14 January 2022) occur in the Kurnalpi Terrane which is significant given there are only a few other Type 1 nickel sulphide occurrences in this Terrane. Ardea holds over 20km strike of the prospective Western Ultramafic sequence that is largely unexplored and highly prospective for primary magmatic nickel sulphide mineralisation.

The plan for the Kalpini Hub is to postpone proposed nickel sulphide exploration activities until after KNPL priority DFS workstreams. Low cost/low impact work such as field mapping and rock chip sampling of the fertile Western Ultramafic will continue later in 2024.

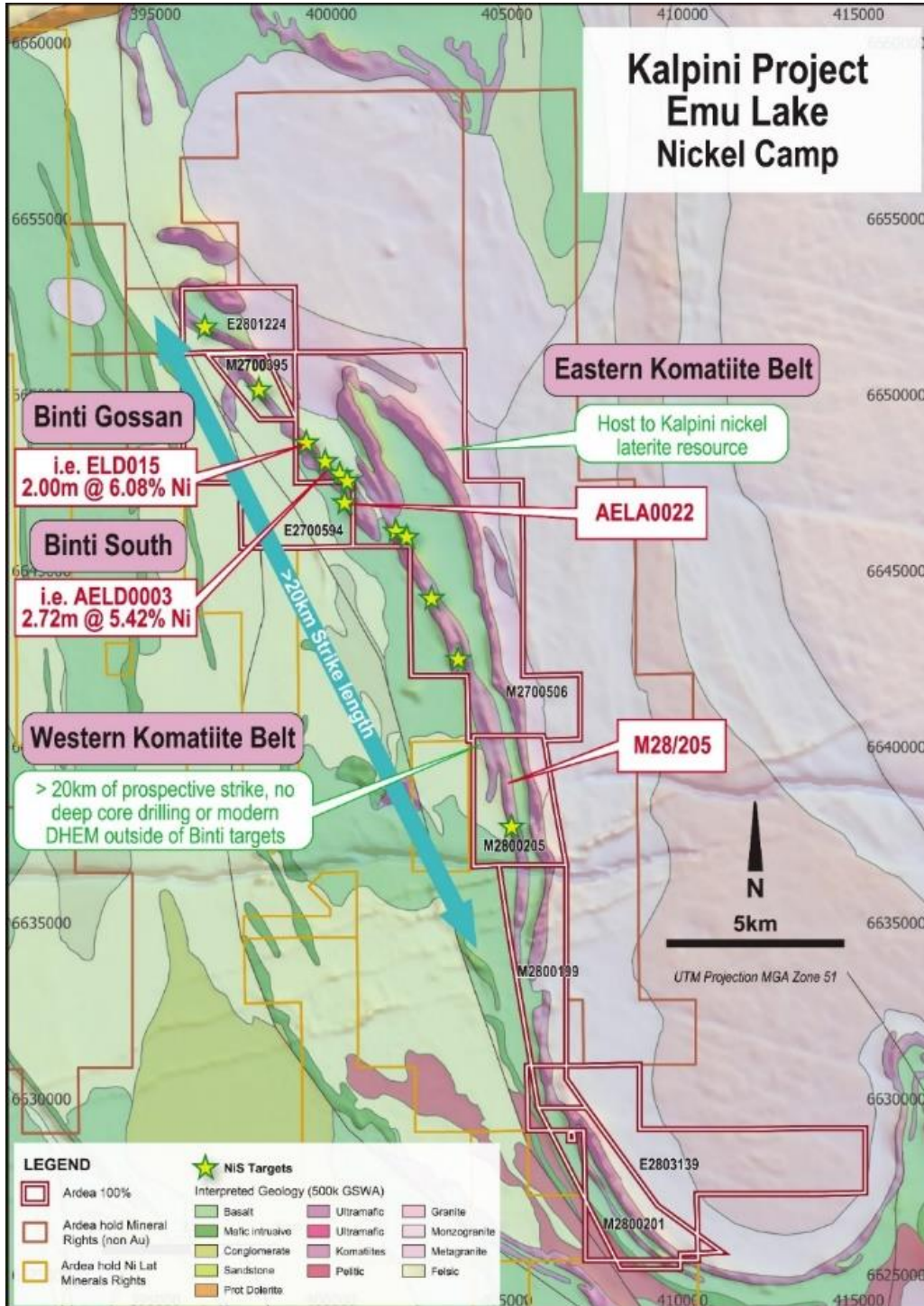


Figure 8: The Kalpini Project showing interpreted geology and Komatiite Belts. The historic nickel laterite resources are located on the Eastern Komatiite Belt, with the Western Belt highly prospective for nickel sulphide (NiS) mineralisation (Ardea ASX release 14 January 2022). Tenements are shown, with NiS targets (stars) (Ardea ASX release 2 May 2023). Projection MGA 94 Zone 51.



Critical Mineral Exploration

Highway Nickel Project

An application for EIS Round 29 was submitted for three diamond holes on Highway tenement M29/214, following up from the Round 26 EIS drillhole which defined fertile horizons of an LCT intrusive system (ASX release 15 December 2023). The Round 29 Submission was successful with an offer up to a maximum of \$180,000 for the three drillholes testing the Highway LCT system and Walter Williams Formation komatiite basal contact nickel sulphide potential. Full agreement was lodged prior to the 1 June 2024 deadline.

3. CORPORATE

Strategy

Ardea's sole priority is KNP nickel-cobalt laterite project development, commencing with the Goongarrie Hub, to produce Critical Minerals for the LIB supply chain to further advance the transition to a low carbon future.

The starter KNP development project is the Goongarrie Hub to capitalise on the premium goethite ore type, infrastructure-rich location and collaboration with the Consortium. Opportunistic but complementary exploration plays for Critical Minerals (including nickel sulphide) will also be pursued, such as the Ardea nickel sulphide discoveries at Emu Lake, and LCT hydrothermal alteration and pegmatite discoveries at Highway and Ghost Rocks.

Finance

The Company's cash position was \$14.8M at Quarter end. Additionally, wholly owned KNPL has a funding support arrangement of \$11.1M through SMM to facilitate the early start to DFS programs. With available funds of \$25.9M, the Company is well positioned.

Issued capital at 30 June 2024 was 199,682,915 Shares, with 3,316,400 Performance Rights and 3,000,000 Options.

Summary of Expenditures for the Quarter

During the Quarter, the Company incurred a total net expenditure from operating activities of \$2.2M. This expenditure included \$2M expended on exploration and evaluation activities, including feasibility studies, \$703k on staff costs and \$1.3M on administrative and corporate costs related primarily to Ardea's Strategic Partner process, with the balance on minor items.

Included in these costs were payments made to Directors of the entity and their associates. These payments were Directors Salaries, Bonuses, Superannuation payments, and Consulting fees of \$841k and rental for the Company's West Kalgoorlie operations office of \$25k for the Quarter. All payments were made on an arm's length basis.

Funds received during the Quarter were interest of \$144k, and Research and Development grant funds of \$1.1M.

Further details on Quarterly expenditures are included in the Appendix 5B – Quarterly Cashflow Report attached to this Quarterly Report.

Investor Relations and Stakeholder Engagement

During the Quarter, management continued discussions with multiple Federal and State stakeholders and attended several industry events, including:

- Update meetings with the Chamber of Commerce and Industry WA.
- Commenced discussions to have a representative allocated in the Department of Jobs, Tourism Science and Innovation for KNPL.
- An Australia Korea Business Council Critical Minerals Networking event.
- Panel Participation - Realizing a Sustainable Australian Battery Metals Supply Chain, Energy & Mines Conference.



- Multiple investor update meetings following the execution of the Co-operation Agreement with the Consortium.
- A media interview with ABC News National Business Presenter and Reporter, Rachel Pupazzoni.
- A media interview with 7 News Resources Reporter, Adrian Rauso.
- Meetings held with Austrade at the Australian Embassy in Tokyo and a meeting with the WA government office in Tokyo.
- Critical Minerals Production Tax Incentive (**CMPTI**) for Australia announced in the 2024/25 Federal Budget. The commitment is \$7 billion over 10 years, for the 31 critical minerals on the critical minerals list. The CMPTI will provide a 10% tax credit to companies undertaking downstream processing that value-adds to raw minerals. Ardea contributed to an AMEC CMPTI submission and also completed a standalone submission.

4. LOOKING FORWARD

During the September 2024 Quarter, Ardea will focus upon the following programs.

Kalgoorlie Nickel Project – Goongarrie Hub DFS

Ardea will continue to work with all stakeholders, including industry groups and the Federal, State and Local Governments to ensure project development is predicated on the highest industry standards, notably ESG.

KNPL DFS

- Complete the engagement of the initial tranche of personnel for the KNPL DFS Owner's Team.
- Progress the award the key contracts for progressing the DFS.
- Progress DFS process test work and process design updates.
- Interpret the results for the Passive Seismic Survey for the mine area water management.
- Site visit for key project and process personnel to the SMM Philippines operations.
- Commence the operational logistics study for feedstock import and product export.
- Undertake the next iteration of an integrated risk review.
- Progress the Measured Resource infill drilling program.
- Commence mine geotechnical and mine hydrogeological field investigations.
- Progress bore water supply pumping and piping design.

Strategic Partner Process

- Continue working collaboratively with the Consortium to finalise the Co-operation Agreement conditions precedent (ASX release 26 April 2024).

Mineral Resource Updates

- Continue work on geology domain interpretations for DFS resource estimates, to be finalised after the Measured Infill drilling program is completed.
- As predicated by resource update, optimise the mine schedules.
- Plan DFS Diamond Drill program which will be used to add density and moisture data to the DFS resource updates, and provide additional twin-hole datasets for QAQC review.



Stakeholder Engagement

- Community consultation with our First Nations groups, the City of Kalgoorlie Boulder, Shire of Menzies, Southern Ports Esperance and all other stakeholders.
- Continue engagement with groups such as the Australian Commonwealth Government, Austrade, DFAT, CMO, MPFA, WA State Government, and for R&D the FBICRC and CSIRO.

Investor Relations

Regular engagement with Shareholders and investors will continue in person and through Ardea's website, LinkedIn, and Twitter (X) accounts.

Stakeholders are welcome to subscribe for Ardea updates: [click here](#)

The next conference Ardea is scheduled to attend is the **Diggers & Dealers Mining Forum**, City of Kalgoorlie-Boulder WA, 5 to 7 August 2024. Ardea will have a booth at the event with members from Ardea and KNPL available for discussions.

Managing Director and CEO, Andrew Penkethman, will be presenting at 12:15pm AWST on 5 August. The presentation will be live streamed and available for download from the Diggers & Dealers Mining Forum website.

Site visits to the West Kalgoorlie Office to review drill core and then visit the KNP – Goongarrie Hub are planned for 7 and 8 August 2024. Due to high demand to attend the site visits, a larger bus has been organised and extra seats are now available. Interested persons who would like to attend one of the site visits are welcome to contact Ardea by email ardea@ardearesources.com.au or phone the Ardea Corporate office, +61 8 6244 5136.

This announcement is authorised for release by the Board of Ardea Resources Limited.

For further information regarding Ardea, please visit [the Company website](#) or contact:

Andrew Penkethman

Managing Director and Chief Executive Officer

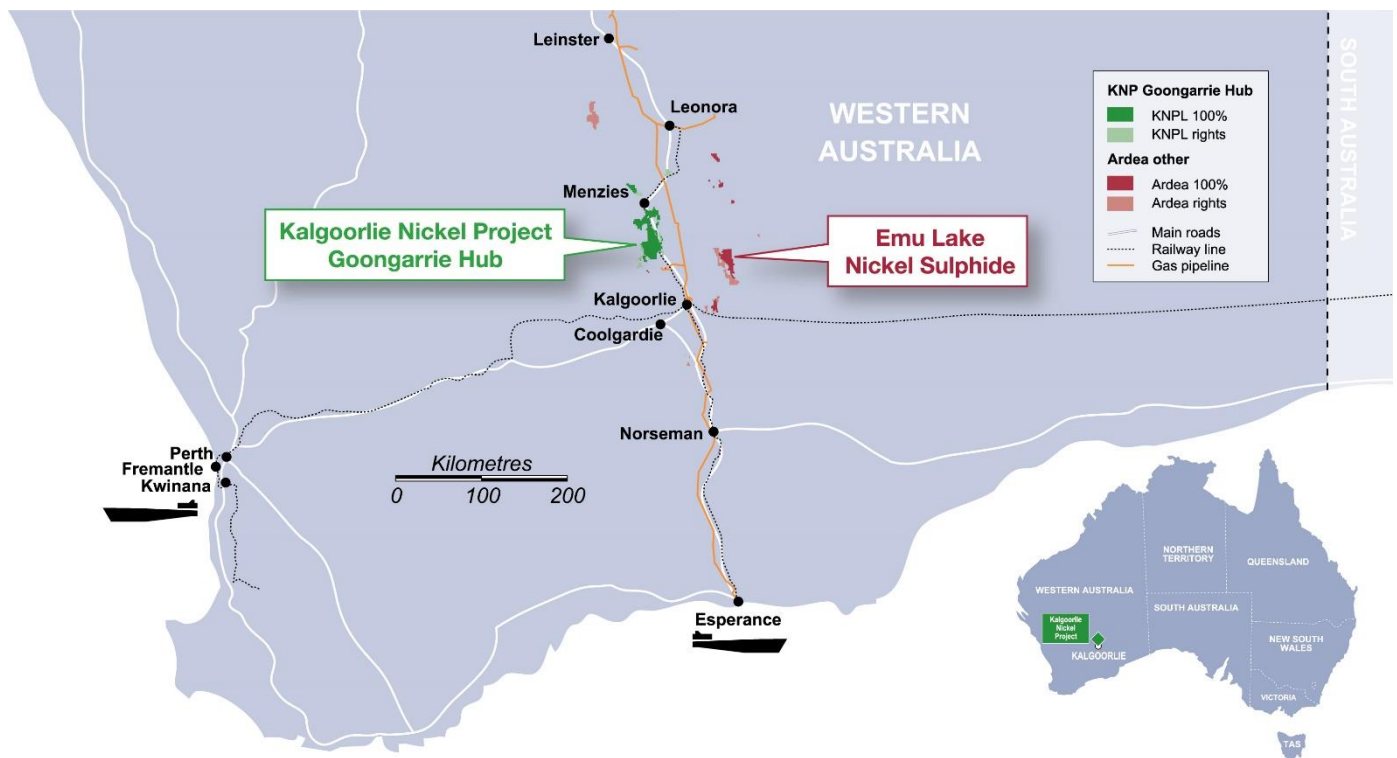
Tel +61 8 6244 5136



About Ardea Resources

Ardea Resources (ASX:ARL) is an ASX-listed nickel resources company, with a large portfolio of 100%-controlled West Australian-based projects, focussed on:

- Development of the Kalgoorlie Nickel Project (KNP) and its sub-set the Goongarrie Hub, a globally significant series of nickel-cobalt and Critical Mineral deposits which host the largest nickel-cobalt resource in the developed World at **854Mt at 0.71% nickel and 0.045% cobalt for 6.1Mt of contained nickel and 386kt of contained cobalt** (Ardea ASX release 30 June 2023), located in a jurisdiction with exemplary Environmental Social and Governance (ESG) credentials.
- Advanced-stage exploration at compelling nickel sulphide targets, such as the Kalpini Hub, and Critical Minerals targets including scandium, Rare Earth Elements and lithium, throughout the KNP Eastern Goldfields world-class nickel-gold province, with all exploration targets complementing the KNP nickel development strategy.



Follow Ardea on social media





COMPLIANCE STATEMENT (JORC CODE (2012))

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

1. Kalpini drill results highlight cobalt-nickel mineralisation, and scandium discovery, 22 June 2017.
2. Emu Lake Nickel Sulphide Discovery confirmed with 2.72m at 5.42% Ni, 14 January 2022.
3. High-grade Nickel-Cobalt Confirmed at Kalpini with Scandium and Rare Earth Elements, 14 March 2022.
4. Kalgoorlie Nickel Project Recognition on All Tiers of Australian Government, 21 March 2022.
5. Nickel sulphide anomalism from aircore drilling at Kalpini Project, 2 May 2023.
6. Mineralised Neutraliser Global Patent Lodged, 15 June 2023.
7. Kalgoorlie Nickel Project Mineral Resource Estimate Exceeds 6 Million Tonne Contained Nickel, 30 June 2023.
8. KNP - Goongarrie Hub Ore Reserve and Feasibility Study Defines +40 Year Operation with Strong Financial Metrics, 5 July 2023.
9. Annual Report 2023, 27 September 2023.
10. Appendix 4G and Corporate Governance Statement 2023, 28 September 2023.
11. Nickel Sulphide Prospectivity Confirmed and Lithium-Caesium-Rubidium bearing intrusives in Highway EIS drillhole, 15 December 2023.
12. Half Year Accounts – December 2023, 12 March 2024.
13. Ardea, Sumitomo Metal Mining (SMM) and Mitsubishi Corporation (MC) to form a Joint Venture to develop the Kalgoorlie Nickel Project (KNP) – Goongarrie Hub, 26 April 2024.
14. Kalgoorlie Nickel Project - Goongarrie Hub DFS Drilling Underway, 4 July 2024.
15. Kalgoorlie Nickel Project – Goongarrie Hub DFS Underway, 8 July 2024.

Competent Persons Statement

Resource Estimation, Exploration Results, and Industry Benchmarking

The Resource Estimation, Exploration Results and Industry Benchmarking summaries are based on information reviewed or compiled by Mr Ian Buchhorn, and Mr Andrew Penkethman. Mr Buchhorn is a Member of the Australasian Institute of Mining and Metallurgy and Mr Penkethman is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Both Mr Buchhorn and Mr Penkethman are full-time employees of Ardea Resources Limited and have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn and Mr Penkethman have reviewed this press release and consent to the inclusion in this report of the information in the form and context in which it appears. Mr Buchhorn and Mr Penkethman own Ardea shares.

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.

Ardea wishes to clarify that its current KNP MRE following JORC Code (2012) guidelines is:

| Camp | Resource | Size | Ni | Co | Contained Metal | |
|--------------------|-----------------|------------|-------------|--------------|-----------------|------------|
| | Category | (Mt) | (%) | (%) | Ni (kt) | Co (kt) |
| KNP TOTAL | Measured | 22 | 0.94 | 0.079 | 207 | 17 |
| | Indicated | 361 | 0.73 | 0.047 | 2,622 | 169 |
| | Inferred | 471 | 0.70 | 0.043 | 3,272 | 200 |
| GRAND TOTAL | Combined | 854 | 0.71 | 0.045 | 6,101 | 386 |

Note: 0.5% nickel cutoff grade used to report resources. Minor discrepancies may occur due to rounding of appropriate significant figures.

The Mineral Resource Estimate information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 30 June 2023, in accordance with Listing Rule 5.8.

The Ore Reserve information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 5 July 2023, in accordance with Listing Rule 5.9.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements noted above and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate and Ore Reserve in the previous market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.



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 KNP - Goongarrie Hub Project is at the PFS phase and although reasonable care has been taken to make sure 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, which are based on forward looking statements, is that the Goongarrie Hub is considered to have positive economic potential.

The Mineral Resource used for the PFS was classified under JORC Code (2012) Guidelines and announced by the Company on 30 June 2023. The cut-off grades adapted for the PFS and reported in Table 2 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 KNP - Goongarrie Hub. 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.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Ardea Resources Limited

ABN

30 614 289 342

Quarter ended ("current quarter")

30 June 2024

| Consolidated statement of cash flows | Current quarter \$A'000 | Year to date (12 months) \$A'000 |
|---|----------------------------|--|
| 1. Cash flows from operating activities | | |
| 1.1 Receipts from customers | - | 10 |
| 1.2 Payments for | | |
| (a) exploration & evaluation | (314) | (2,600) |
| (b) Feasibility Studies | (1,893) | (5,887) |
| (c) production | - | - |
| (d) staff costs | (702) | (1,370) |
| (e) administration and corporate costs | (1,353) | (3,106) |
| 1.3 Dividends received (see note 3) | - | - |
| 1.4 Interest received | 144 | 308 |
| 1.5 Interest and other costs of finance paid | - | - |
| 1.6 Income taxes paid/received | (25) | (90) |
| 1.7 Government grants and tax incentives | 1,079 | 1193 |
| 1.8 Other (provide details if material) – | - | - |
| | - | - |
| 1.9 Net cash from / (used in) operating activities | (3,064) | (11,542) |
| 2. Cash flows from investing activities | | |
| 2.1 Payments to acquire or for: | | |
| (a) entities | - | - |
| (b) tenements | - | - |
| (c) property, plant and equipment | (49) | (81) |
| (d) exploration & evaluation | - | - |
| (e) investments | - | - |
| (f) other non-current assets | - | - |

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

| Consolidated statement of cash flows | | Current quarter \$A'000 | Year to date (12 months) \$A'000 |
|--------------------------------------|---|----------------------------|--|
| 2.2 | Proceeds from the disposal of: | | |
| | (a) entities | - | - |
| | (b) tenements | - | - |
| | (c) property, plant and equipment | - | - |
| | (d) investments | - | - |
| | (e) 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 | (49) | (81) |
| 3. | Cash flows from financing activities | | |
| 3.1 | Proceeds from issues of equity securities (excluding convertible debt securities) | - | 15,911 |
| 3.2 | Proceeds from issue of convertible debt securities | - | - |
| 3.3 | Proceeds from exercise of options | - | - |
| 3.4 | Transaction costs related to issues of equity securities or convertible debt securities | - | (990) |
| 3.5 | Proceeds from borrowings | 904 | 904 |
| 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 | 904 | 15,825 |
| 4. | Net increase / (decrease) in cash and cash equivalents for the period | (2,209) | 4,202 |
| 4.1 | Cash and cash equivalents at beginning of period | 17,059 | 10,648 |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above) | (3,064) | (11,542) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above) | (49) | (81) |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | 904 | 15,825 |

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

| Consolidated statement of cash flows | | Current quarter \$A'000 | Year to date (12 months) \$A'000 |
|--------------------------------------|---|----------------------------|--|
| 4.5 | Effect of movement in exchange rates on cash held | - | - |
| 4.6 | Cash and cash equivalents at end of period | 14,850 | 14,850 |

| 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 | 3,575 | 1,803 |
| 5.2 | Call deposits | 11,275 | 15,256 |
| 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) | 14,850 | 17,059 |

| 6. Payments to related parties of the entity and their associates | | Current quarter \$A'000 |
|---|---|----------------------------|
| 6.1 | Aggregate amount of payments to related parties and their associates included in item 1 | 866 |
| 6.2 | Aggregate amount of payments to related parties and their associates included in item 2 | - |

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Salaries, Directors fees and Consulting fees paid to Directors - \$841k

Payments for Kalgoorlie Office to a Director related entity for the quarter - \$25k

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

| 7. Financing facilities | Total facility amount at quarter end \$A'000 | Amount drawn at quarter end \$A'000 |
|---|--|--|
| <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i> | | |
| 7.1 Loan facilities | - | - |
| 7.2 Credit standby arrangements | - | - |
| 7.3 Other (funding support arrangement) | 12,000 | 904 |
| 7.4 Total financing facilities | 12,000 | 904 |
| 7.5 Unused financing facilities available at quarter end | | 11,096 |
| 7.6 | Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well. | |
| | <p>Ardea has entered into a Cooperation Agreement with a Japanese consortium to form a joint venture to develop the Kalgoorlie Nickel Project - Goongarrie Hub (Ardea ASX announcement 26 April 2024).</p> <p>On 26 April 2024, Ardea, Ardea's subsidiary Kalgoorlie Nickel Pty Ltd (KNPL) and Sumitomo Metal Mining Co. Ltd (SMM) agreed funding support arrangements to facilitate the progression of the early DFS works while the conditions precedent to the Cooperation Agreement are being satisfied. Under the funding support arrangements, the parties have agreed a contribution plan under which SMM will advance up to A\$12,000,000 in funding to KNPL, as and when funds are required to facilitate agreed early DFS works.</p> | |

| 8. Estimated cash available for future operating activities | \$A'000 |
|--|----------------|
| 8.1 Net cash from / (used in) operating activities (item 1.9) | (3,064) |
| 8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d)) | - |
| 8.3 Total relevant outgoings (item 8.1 + item 8.2) | (3,064) |
| 8.4 Cash and cash equivalents at quarter end (item 4.6) | 14,850 |
| 8.5 Unused finance facilities available at quarter end (item 7.5) | 11,096 |
| 8.6 Total available funding (item 8.4 + item 8.5) | 25,946 |

8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)

8.47

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

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.

Date: 30 July 2024

Authorised by: Ardea Board of Directors

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow 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 cash flow 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.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.



Ardea Resources Limited Tenement Schedule (WA) as at 30 June 2024

Goongarrie Hub

| Tenure | Location | Ardea Interest (%) | Status | Note | Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|-------------------------|--------------------|---------|------|----------|-------------------------|--------------------|--------|------|
| E24/196 | Goongarrie | 100 | Live | | M24/731 | Goongarrie | 100 | Live | 3 |
| E24/209 | Goongarrie | 100 | Live | | M24/732 | Goongarrie | 100 | Live | 3 |
| E24/211 | Goongarrie | 100 | Live | | M24/744 | Goongarrie | 100 | Live | |
| E29/934 | Goongarrie | 100 | Live | | M24/778 | Goongarrie | 100 | Live | 3 |
| E29/1028 | Goongarrie | 100 | Live | | M29/167 | Goongarrie | 100 | Live | |
| E29/1038 | Goongarrie | 100 | Live | | M29/202 | Goongarrie | 100 | Live | |
| E29/1039 | Goongarrie | 100 | Live | | M29/272 | Goongarrie | 100 | Live | |
| E29/1045 | Goongarrie | 100 | Live | | M29/278 | Goongarrie | 100 | Live | |
| E29/1048 | Goongarrie | 100 | Live | | M29/423 | Goongarrie | 100 | Live | |
| G29/25 | Goongarrie | 100 | Pending | | M29/424 | Goongarrie | 100 | Live | |
| L24/239 | Goongarrie | 100 | Live | | M29/426 | Goongarrie | 100 | Live | |
| L29/134 | Goongarrie | 100 | Live | | P24/5260 | Goongarrie | 100 | Live | |
| L29/135 | Goongarrie | 100 | Live | | P24/5328 | Goongarrie | 100 | Live | |
| L30/67 | Goongarrie | 100 | Live | | P24/5329 | Goongarrie | 100 | Live | |
| L30/68 | Goongarrie | 100 | Live | | P24/5265 | Goongarrie-Carr Boyd | 100 | Live | |
| L16/141 | Goongarrie | 100 | Live | | P24/5169 | Goongarrie-Windanya | 100 | Live | |
| L30/85 | Goongarrie | 100 | Live | | P24/5480 | Goongarrie-Windanya | 100 | Live | |
| P29/2646 | Highway North | 100 | Live | | M24/919 | Goongarrie-Scotia | 100 Ni rights | Live | 6 |
| P29/2647 | Highway North | 100 | Live | | M24/959 | Goongarrie-Scotia | 100 Ni rights | Live | 6 |
| P29/2648 | Highway North | 100 | Live | | M24/541 | Goongarrie | 100 | Live | |
| P29/2649 | Highway North | 100 | Live | | P29/2650 | Highway North | 100 | Live | |
| P24/5528 | Goongarrie | 100 | Live | | P29/2651 | Highway North | 100 | Live | |
| P29/2559 | Highway North | 100 | Live | | E29/1082 | Goongarrie | 100 | Live | |
| P29/2560 | Highway North | 100 | Live | | E29/1089 | Goongarrie | 100 | Live | |
| P29/2501 | Highway - Moriarty | 100 | Live | | P29/2561 | Highway North | 100 | Live | |
| P29/2511 | Ghost Rocks | 100 | Live | | P29/2562 | Highway North | 100 | Live | |
| P29/2512 | Ghost Rocks | 100 | Live | | E29/941 | Ghost Rocks | 100 | Live | |
| P29/2513 | Ghost Rocks | 100 | Live | | E29/981 | Ghost Rocks | 100 | Live | |
| P29/2514 | Ghost Rocks | 100 | Live | | M29/214 | Highway | 100 | Live | |
| P29/2515 | Ghost Rocks | 100 | Live | | P29/2538 | Ghost Rocks | 100 | Live | |
| L16/143 | Goongarrie – Credo West | 100 | Live | | P29/2539 | Ghost Rocks | 100 | Live | |
| L16/144 | Goongarrie – Credo West | 100 | Live | | E29/1083 | Goongarrie | 100 | Live | |
| L16/145 | Goongarrie – Credo West | 100 | Live | | L16/147 | Goongarrie – Credo West | 100 | Live | |
| L16/146 | Goongarrie – Credo West | 100 | Live | | L16/148 | Goongarrie – Credo West | 100 | Live | |
| L24/252 | Goongarrie | 100 | Live | | L30/95 | Goongarrie – Credo West | 100 | Live | |
| E29/1235 | Goongarrie | 100 | Pending | | E29/984 | Highway North | 100 | Live | 15 |
| P29/2530 | Goongarrie | 100 | Live | 15 | M29/445 | Highway North | 100 | Live | 15 |
| P29/2532 | Goongarrie | 100 | Live | 15 | E29/1062 | Goongarrie | 100 | Live | 15 |
| P29/2467 | Goongarrie | 100 | Live | 15 | L24/253 | Goongarrie | 100 | Live | |
| P29/2468 | Goongarrie | 100 | Live | 15 | L24/254 | Goongarrie | 100 | Live | |
| P29/2380 | Goongarrie | 100 | Live | 15 | L24/255 | Goongarrie | 100 | Live | |

Goongarrie Hub Expansion

Siberia

| Tenure | Location | Ardea Interest (%) | Status | Note | Tenure | Location | Ardea Interest (%) | Status | Note |
|---------|----------|----------------------|--------|------|----------|----------|--------------------|--------|------|
| E24/203 | Siberia | 100 non Au-Ag rights | Live | 4 | P24/5235 | Siberia | 100 | Live | |
| E29/889 | Siberia | 100 | Live | | P24/5236 | Siberia | 100 | Live | |
| M24/634 | Siberia | 100 non Au-Ag rights | Live | 1,4 | P29/2484 | Siberia | 100 | Live | |
| M24/660 | Siberia | 100 non Au-Ag rights | Live | 4 | P29/2485 | Siberia | 100 | Live | |
| M24/663 | Siberia | 100 non Au-Ag rights | Live | 4 | P24/5416 | Siberia | 100 | Live | |
| M24/664 | Siberia | 100 non Au-Ag rights | Live | 4 | P24/5417 | Siberia | 100 | Live | |



Ardea Resources Limited Quarterly Report as at 30 June 2024

| | | | | | | | | | |
|----------|---------------|----------------------|---------|-----|----------|---------------|-----|---------|--|
| M24/665 | Siberia | 90 non Au-Ag rights | Live | 2,4 | P24/5418 | Siberia | 100 | Live | |
| M24/683 | Siberia | 100 non Au-Ag rights | Live | 4 | P24/5566 | Siberia | 100 | Live | |
| M24/686 | Siberia | 100 non Au-Ag rights | Live | 4 | P24/5567 | Siberia | 100 | Live | |
| M24/772 | Siberia | 100 non Au-Ag rights | Live | 4 | L24/248 | Siberia | 100 | Pending | |
| M24/797 | Siberia | 100 non Au-Ag rights | Live | 4 | L24/249 | Siberia | 100 | Pending | |
| M24/915 | Siberia | 100 non Au-Ag rights | Live | 4 | L24/250 | Siberia | 100 | Live | |
| M24/916 | Siberia | 100 non Au-Ag rights | Live | 4 | L24/251 | Siberia | 100 | Pending | |
| M24/1002 | Siberia | 100 non Au-Ag rights | Pending | 4 | P24/5599 | Siberia | 100 | Live | |
| P24/5618 | Siberia South | 100 | Live | | P24/5623 | Siberia South | 100 | Live | |
| P24/5619 | Siberia South | 100 | Live | | P24/5624 | Siberia South | 100 | Live | |
| P24/5620 | Siberia South | 100 | Live | | P24/5625 | Siberia South | 100 | Live | |
| P24/5621 | Siberia South | 100 | Live | | L29/181 | Siberia | 100 | Live | |
| P24/5622 | Siberia South | 100 | Live | | L29/183 | Siberia | 100 | Pending | |

Goongarrie Hub Expansion Black Range

| Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|-------------|-------------------------------------|---------|------|
| M24/757 | Black Range | 100 non Au-Ag rights; 100 ownership | Live | 4 |
| M24/973 | Black Range | 100 non Au-Ag rights | Pending | 4 |
| P24/4395 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/4396 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/4400 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/4401 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/4402 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/4403 | Black Range | 100 non Au-Ag rights | Live | 4 |
| P24/5593 | Black Range | 100% non Au rights | Live | 14 |
| P24/5594 | Black Range | 100% non Au rights | Live | 14 |
| P24/5595 | Black Range | 100% non Au rights | Live | 14 |
| P24/5596 | Black Range | 100% non Au rights | Live | 14 |

Kalpini Hub

| Tenure | Location | Ardea Interest (%) | Status | Note | Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|----------------|--------------------|---------|------|----------|----------------------|--------------------|---------|--------|
| E27/524 | Kalpini | 100 non Au rights | Live | 9 | P25/2454 | Kalpini-Bulong | 100 | Live | |
| E27/606 | Kalpini | 100 | Live | | P25/2455 | Kalpini-Bulong | 100 | Live | |
| E27/607 | Kalpini | 100 | Live | | P25/2456 | Kalpini-Bulong | 100 | Live | |
| E28/1224 | Kalpini | 100 | Live | | P25/2457 | Kalpini-Bulong | 100 | Live | |
| E28/2978 | Kalpini | 100 | Live | | P25/2458 | Kalpini-Bulong | 100 | Live | |
| M27/395 | Kalpini | 100 | Live | | P25/2459 | Kalpini-Bulong | 100 | Live | |
| M27/506 | Kalpini | 100 | Live | | P25/2460 | Kalpini-Bulong | 100 | Live | |
| M27/512 | Kalpini | 100 | Pending | | P25/2461 | Kalpini-Bulong | 100 | Live | |
| M28/199 | Kalpini | 100 | Live | | P25/2482 | Kalpini-Bulong | 100 | Live | |
| M28/201 | Kalpini | 100 | Live | | P25/2483 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| M28/205 | Kalpini | 100 | Live | | P25/2484 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| E27/278 | Kalpini-Acra | 100 Ni Lat Ore | Live | 5 | P25/2559 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| E27/438 | Kalpini-Acra | 100 Ni Lat Ore | Live | 5 | P25/2560 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| E27/520 | Kalpini-Acra | 100 Ni Lat Ore | Live | 5 | P25/2561 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| E27/579 | Kalpini-Acra | 100 Ni Lat Ore | Live | 5 | P25/2609 | Kalpini-Bulong | 100 | Live | |
| E28/2483 | Kalpini-Acra | 100 Ni Lat Ore | Live | 5 | P25/2613 | Kalpini-Bulong | 100 | Live | |
| E25/578 | Kalpini-Bulong | 100 non Au rights | Live | 14 | P25/2614 | Kalpini-Bulong | 100 | Live | |
| M25/59 | Kalpini-Bulong | 100 non Au rights | Live | 14 | P25/2615 | Kalpini-Bulong | 100 | Live | |
| M25/134 | Kalpini-Bulong | 100 | Live | | P25/2650 | Kalpini-Bulong | 100 non Au rights | Live | 14 |
| M25/145 | Kalpini-Bulong | 100 | Live | | P25/2305 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| M25/151 | Kalpini-Bulong | 100 non Au rights | Live | 14 | M31/488 | Kalpini-Lake Rebecca | 100 non Au rights | Pending | 14 |
| M25/161 | Kalpini-Bulong | 100 | Live | | P31/2038 | Kalpini-Lake Rebecca | 100 non Au rights | Live | 14 |
| M25/171 | Kalpini-Bulong | 100 non Au rights | Live | 14 | P31/2039 | Kalpini-Lake Rebecca | 100 non Au rights | Live | 14 |
| M25/187 | Kalpini-Bulong | 100 | Live | | P31/2040 | Kalpini-Lake Rebecca | 100 non Au rights | Live | 14 |
| | | | | | E27/647 | Kalpini | 100 | Live | |



Ardea Resources Limited Quarterly Report as at 30 June 2024

| Tenure | Location | Ardea Interest (%) | Status | Note | Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|----------------|--------------------|---------|--------|----------|----------------|--------------------|---------|--------|
| M25/209 | Kalpini-Bulong | 100 | Live | | P25/2306 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| E27/646 | Kalpini | 100 | Live | | M25/19 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| P25/2295 | Kalpini-Bulong | 100 non Au rights | Live | 14 | P25/2307 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| P25/2296 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 | P25/2408 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| P25/2743 | Kalpini-Bulong | 100 | Pending | | P25/2409 | Kalpini-Bulong | 100 non Au rights | Live | 13, 14 |
| E27/714 | Kalpini | 100 | Pending | | L27/102 | Kalpini | 100 | Live | |
| E27/715 | Kalpini | 100 | Pending | | L31/88 | Kalpini | 100 | Live | |
| M25/377 | Kalpini-Bulong | 100 non Au rights | Pending | 14 | E28/3308 | Kalpini | 100 | Pending | |
| P25/2768 | Kalpini-Bulong | 100 | Pending | | E28/3309 | Kalpini | 100 | Live | |
| P25/2769 | Kalpini-Bulong | 100 | Pending | | P25/2770 | Kalpini-Bulong | 100 | Pending | |
| P25/2778 | Kalpini-Bulong | 100 | Pending | | P25/2771 | Kalpini-Bulong | 100 | Pending | |
| P25/2779 | Kalpini-Bulong | 100 | Pending | | P25/2773 | Kalpini-Bulong | 100 | Pending | |

WA Regional

| Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|--------------|--------------------|--------|------|
| M15/1101 | WA Regional | Pre-emp Ni-Co Lat | Live | 7 |
| M15/1263 | WA Regional | Pre-emp Ni-Co Lat | Live | 7 |
| M15/1264 | WA Regional | Pre-emp Ni-Co Lat | Live | 7 |
| M15/1323 | WA Regional | Pre-emp Ni-Co Lat | Live | 7 |
| M15/1338 | WA Regional | Pre-emp Ni-Co Lat | Live | 7 |
| M27/510 | WA Regional | 100 Ni Lat Ore | Live | 8 |
| M27/272 | Kanowna East | Non-Au Rights | Live | 10 |

Yerilla Hub

| Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|---------------------|--------------------|---------|------|
| E39/1954 | Yerilla-Aubils | 100 non Au rights | Live | |
| M39/1147 | Yerilla-Aubils | 100 non Au rights | Pending | |
| E31/1092 | Yerilla-Boyce Creek | 100 non Au rights | Live | |
| E31/1169 | Yerilla-Boyce Creek | 100 non Au rights | Live | |
| E31/1208 | Yerilla-Boyce Creek | 100 non Au rights | Live | |
| E31/1213 | Yerilla-Boyce Creek | 100 non Au rights | Live | |
| M31/483 | Yerilla-Boyce Creek | 100 non Au rights | Live | |
| M31/493 | Yerilla-Boyce Creek | 100 non Au rights | Pending | |
| M31/475 | Yerilla-Jump Up Dam | 100 non Au rights | Live | |
| M31/477 | Yerilla-Jump Up Dam | 100 non Au rights | Live | |
| M31/479 | Yerilla-Jump Up Dam | 100 non Au rights | Live | |

Kookynie

| Tenure | Location | Ardea Interest (%) | Status | Note |
|---------|----------|--------------------|--------|------|
| E40/350 | Kookynie | Non-Au Rights | Live | 11 |
| E40/357 | Kookynie | Non-Au Rights | Live | 11 |

Perrinvale Nickel

| Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|------------|--------------------|--------|------|
| E29/1006 | Perrinvale | 100 non Au rights | Live | 14 |
| E29/1078 | Perrinvale | 100 non Au rights | Live | 14 |

Mt Zephyr Gold-Nickel

| Tenure | Location | Ardea Interest (%) | Status | Note | Tenure | Location | Ardea Interest (%) | Status | Note |
|----------|-------------|--------------------|--------|------|----------|-----------|--------------------|--------|------|
| E37/1271 | Mt Zephyr | 80 | Live | 12 | E39/1706 | Mt Zephyr | 80 | Live | 12 |
| E37/1272 | Darlot East | 80 | Live | 12 | E39/1854 | Mt Zephyr | 80 | Live | 12 |
| E37/1273 | Darlot East | 80 | Live | 12 | E39/1985 | Mt Zephyr | 80 | Live | 12 |
| E37/1274 | Mt Zephyr | 80 | Live | 12 | | | | | |



| Notes: |
|--|
| 1. Britannia Gold Ltd retains precious metal rights. |
| 2. Impress Ventures Ltd has a 10% equity free-carried interest to a decision to mine. |
| 3. Norton Gold Fields Limited retains certain Au claw-back rights and royalty receivable. |
| 4. Ora Banda Mining Ltd holds Au-Ag rights while Ardea retains all non Au-Ag rights. |
| 5. Acra JV – Northern Star Resources Ltd earn-in with Essential Metals Limited. Former holds gold rights while latter retains nickel sulphide rights. Ardea retains rights to Ni laterite ore. |
| 6. Black Mountain Gold Limited all rights with exception of Ardea retaining Ni rights. |
| 7. Ramelius Resources Limited assignee (Maximus Resources Ltd) all rights, Ardea pre-emptive right to Ni-Co laterite. |
| 8. Paddington Gold Pty Ltd all mineral rights (except nickel sulphide) while Ardea retains rights to nickel laterite ore. |
| 9. By Sale Agreement between Northern Star (Carosue Dam) Pty Ltd and Kalnorth Gold Mines Ltd, Northern Star (Carosue Dam) Pty Ltd now owns Au rights while Ardea retains non-Au rights. |
| 10. Northern Star (Kanowna) Limited holds Au rights. Ardea retains non-Au rights. |
| 11. The Option to purchase the tenements was transferred to Metalicity Limited on 21 November 2020. Ardea retains non Au rights. |
| 12. The Mt Zephyr/Darlot East tenements were farmed out to Red 5 Limited on 18 November 2020 whereby Red 5 Limited may earn 80% equity interest. Ardea is free carried to Decision to Mine. |
| 13. Purchase of tenements by Binding Terms Sheet and Alluvial Rights Agreements dated 4 June 2021 between the Seller Steven Lionel Kean and Ardea Resources Limited. |
| 14. By way of the Demerger Implementation Deed executed between Ardea Resources Limited, Kalgoorlie Gold Mining Limited, Yerilla Nickel Pty Ltd, Kalgoorlie Nickel Pty Ltd and Ardea Exploration Pty Ltd dated 9 September 2021, certain tenements are to be transferred to newly listed Kalgoorlie Gold Mining Limited. For certain other tenements, Ardea Resources Limited or its subsidiaries will continue to hold and retain non-gold rights while Kalgoorlie Gold Mining Limited retain gold rights only. |
| 15. Tenement Swap Agreement between Brightstar Resources Limited subsidiaries, Goongarrie Operational and Mining Pty Ltd and Menzies Operational and Mining Pty Ltd, and Ardea Resources Limited subsidiary, Kalgoorlie Nickel Pty Ltd dated 15 July 2023. E29/1062 Infrastructure Rights only. |

Interests in Mining Tenements and Petroleum Tenements Acquired or Increased during the June Quarter 2024 – Nil