

**ASX & Media Release**

8 October 2018

**ASX Symbol**

ARL

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**Issued Capital**

*Fully Paid Ordinary Shares*  
104,990,413

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

*Directors/Employee  
Performance Rights*  
3,240,000

**ABN 30 614 289 342**

## High-grade nickel-cobalt mineralization extended at Goongarrie

Recent drilling results from the Pamela Jean Deeps confirm and extend the deeper high-grade mineralization. This zone is scheduled as the mining target during the payback period, to enhance project economics.

- Ongoing Definitive Feasibility Study (DFS) drilling program confirms high-grade intercepts at the Pamela Jean Deeps orebody.
  - **AGSR419** 112m at 1.30% Ni, 0.26% Co, 31g/t Sc from 30m<sup>1</sup>
  - **AGSD0001** 100.8m at 1.00% Ni, 0.08% Co from 32m<sup>2</sup>
  - **AGSR0413** 76m at 1.11% Ni, 0.09% Co and 38g/t Sc from 24m
  - **AGSR0418** 56m at 1.29% Ni, 0.14% Co and 18g/t Sc 104m
  - **AGSR0190** 57m at 1.04% Ni, 0.10% Co and 21g/t Sc from 70m
- The top of Pamela Jean is a typical flat laterite surface at 15-30m below surface. Rather than a flat base some 40-50m below surface, the base of Pamela Jean is “funnel-shaped”, penetrating up to 165m below surface. With continuous mineralisation to depth, this geometry fortuitously mimics pit design batters, minimizing Pamela Jean strip ratios. The result is high tonnes and grade proximal to future plant site.
- The “deep funnel” ore is associated with a narrow dyke and intense shearing that has facilitated exceptionally deep weathering (to 165m).
- An additional “funnel-shaped” Deeps ore zone discovered in 20m infill drilling (AGSR0190), suggests potential for further deeper high-grade ore, associated with bedrock structures, still requiring drill appraisal.
- Uniform goethite mineralization confirmed at Pamela Jean, validates Pamela Jean as a premium autoclave feed for project payback.
- Ore geometry very consistent, with >0.5% Ni pervasive between the base of lateritized alluvium overburden and top of carbonated saprock basement, facilitates predictable mine planning, free-dig ore until mining encounters sub-grade hard saprock at the pit base and within batters, excellent visual grade control.
- Ardea inclined drill-holes have precisely confirmed historic drill results, serves as a QAQC program for historic work.
- Scandium mineralization evident from surface, typically 30-62g/t Sc when occurring in the nickel-cobalt ore feed.
- Magnesite neutralizer pervasive within ore footwall, ~0.5% Ni credit.

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

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

## Recent drilling results from the Goongarrie orebody

### Pamela Jean Deeps

#### Significant intercepts from the Pamela Jean Deeps drilling<sup>3</sup>

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##### 6669440mN section

AGSR0412	38m at 0.89% nickel, 0.06% cobalt and 36g/t scandium from 22m <sup>4</sup> <i>including</i> <b>8m at 1.16% nickel, 0.13% cobalt and 34g/t scandium from 30m</b>
AGSR0412	14m at 0.78% nickel, 0.04% cobalt and 8g/t scandium from 136m <sup>4</sup> <i>including</i> <b>2m at 1.13% nickel, 0.11% cobalt and 6g/t scandium from 140m</b>
AGSR0411	32m at 0.84% nickel, 0.05% cobalt and 15g/t scandium from 22m <sup>4</sup> <i>including</i> <b>2m at 1.28% nickel, 0.09% cobalt and 22g/t scandium from 38m</b>
AGSR0411	20m at 0.71% nickel, 0.03% cobalt and 9g/t scandium from 76m <sup>4</sup>

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##### 6669520mN section

AGSR0414	<b>4m at 0.44% nickel, 0.54% cobalt</b> and 52g/t scandium from 14m <sup>4</sup>
AGSR0414	<b>38m at 1.01% nickel, 0.10% cobalt</b> and 43g/t scandium from 16m <sup>4</sup> <i>including</i> <b>8m at 1.40% nickel, 0.08% cobalt and 30g/t scandium from 40m</b>
AGSR0413	<b>76m at 1.11% nickel, 0.09% cobalt</b> and 38g/t scandium from 24m <sup>4</sup> <i>including</i> <b>12m at 1.11% nickel, 0.12% cobalt and 36g/t scandium from 44m</b> <i>including</i> <b>16m at 1.36% nickel, 0.22% cobalt and 35g/t scandium from 66m</b> <i>including</i> <b>4m at 1.36% nickel, 0.13% cobalt and 33g/t scandium from 88m</b>

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##### 6669600mN section

AGSR0418	42m at 0.67% nickel, 0.04% cobalt and 14g/t scandium from 30m <sup>4</sup> <i>including</i> <b>2m at 1.12% nickel, 0.09% cobalt and 13g/t scandium from 48m</b>
AGSR0418	<b>56m at 1.29% nickel, 0.14% cobalt</b> and 18g/t scandium from 104m <sup>4</sup> <i>including</i> <b>36m at 1.40% nickel, 0.20% cobalt and 19g/t scandium from 110m</b>
AGSD0001	<b>100.8m at 1.00% nickel, 0.08% cobalt</b> from 34m <sup>4</sup> <i>including</i> <b>2m at 1.02% nickel, 0.11% cobalt from 87m</b> <i>including</i> <b>7.2m at 1.30% nickel, 0.45% cobalt from 95.6m</b> <i>including</i> <b>6m at 1.40% nickel, 0.22% cobalt from 118m</b>

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<sup>3</sup> Drill-holes for the Pamela Jean deposit are listed first by section (south to north, then by hole west to east)

<sup>4</sup> Calculated using a 0.50 % nickel cut-off, 2 m minimum intercept, and 4 m maximum internal waste, for "including" intercept 0.08% Co cut-off

AGSD0001                    **24.8m at 1.10% nickel**, 0.08% cobalt from 140.2m<sup>4</sup>  
*including 8m at 1.40% nickel, 0.11% cobalt from 152m*

6669680mN section

AGSR0419                    **112m at 1.30% nickel, 0.26% cobalt** and 31g/t scandium from 30m<sup>4</sup>  
*including 6m at 1.14% nickel, 0.08% cobalt and 19g/t scandium from 42m*  
*including 68m at 1.58% nickel, 0.39% cobalt and 35g/t scandium from 72m*

6669760mN section

AGSR0422                    48m at 0.94% nickel, 0.07% cobalt and 19g/t scandium from 104m<sup>4</sup>  
*including 8m at 0.88% nickel, 0.16% cobalt and 18g/t scandium from 114m*  
*including 4m at 1.48% nickel, 0.09% cobalt and 135g/t scandium from 134m*

AGSR0421                    26m at 0.66% nickel, 0.04% cobalt and 35g/t scandium from 20m<sup>4</sup>

AGSR0421                    76m at 0.82% nickel, 0.07% cobalt and 28g/t scandium from 54m<sup>4</sup>  
*including 28m at 0.91% nickel, 0.14% cobalt and 27g/t scandium from 84m*

AGSR0190                    24m at 0.86% nickel, 0.02% cobalt and 99g/t scandium from 36m<sup>4</sup>

AGSR0190                    **57m at 1.04% nickel, 0.10% cobalt** and 21g/t scandium from 70m<sup>4</sup>  
*including 14m at 0.82% nickel, 0.20% cobalt and 24g/t scandium from 70m*  
*including 16m at 1.28% nickel, 0.10% cobalt and 29g/t scandium from 90m*

6669840mN section

AGSR0186                    **62m at 0.92% nickel**, 0.04% cobalt and 32g/t scandium from 22m<sup>4</sup>  
*including 2m at 1.40% nickel, 0.08% cobalt and 50g/t scandium from 66m*

AGSR0417                    26m at 0.90% nickel, 0.04% cobalt and 29g/t scandium from 22m<sup>4</sup>

AGSR0187                    **60m at 1.14% nickel**, 0.08% cobalt and 47g/t scandium from 24m<sup>4</sup>  
*including 24m at 1.27% nickel, 0.14% cobalt and 33g/t scandium from 60m*

6669880mN section

AGSR0416                    28m at 0.87% nickel, 0.08% cobalt and 34g/t scandium from 62m<sup>4</sup>  
*including 4m at 0.83% nickel, 0.11% cobalt and 34g/t scandium from 62m*  
*including 8m at 0.91% nickel, 0.09% cobalt and 34g/t scandium from 82m*

6669920mN section

AGSR0294                    **18m at 0.98% nickel**, 0.08% cobalt and 34g/t scandium from 18m<sup>4</sup>  
*including 8m at 0.98% nickel, 0.12% cobalt and 43g/t scandium from 18m*

AGSR0415                    **46m at 1.03% nickel**, 0.06% cobalt and 35g/t scandium from 28m<sup>4</sup>  
*including 10m at 1.33% nickel, 0.14% cobalt and 34g/t scandium from 46m*

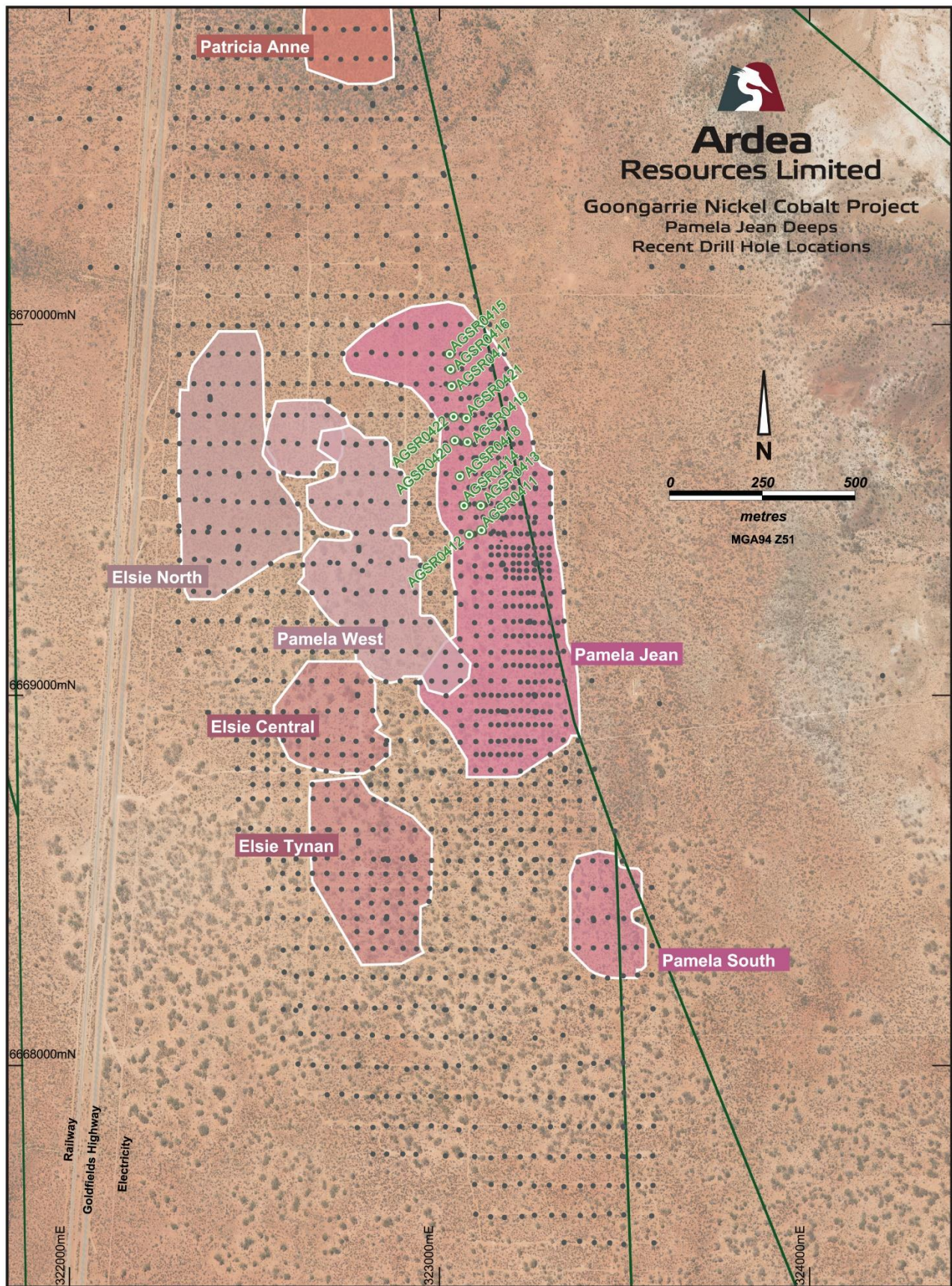


Figure 1 – Location of Ardea RC drilling (green & white dots and hole number). Dark dots show historic drill collars. Deposits are marked by significant nickel and cobalt mineralization and are encased within the overall nickel envelope (scheduled pits coloured pink, nominally Ni>0.5%, containing zones with Co>0.1%).

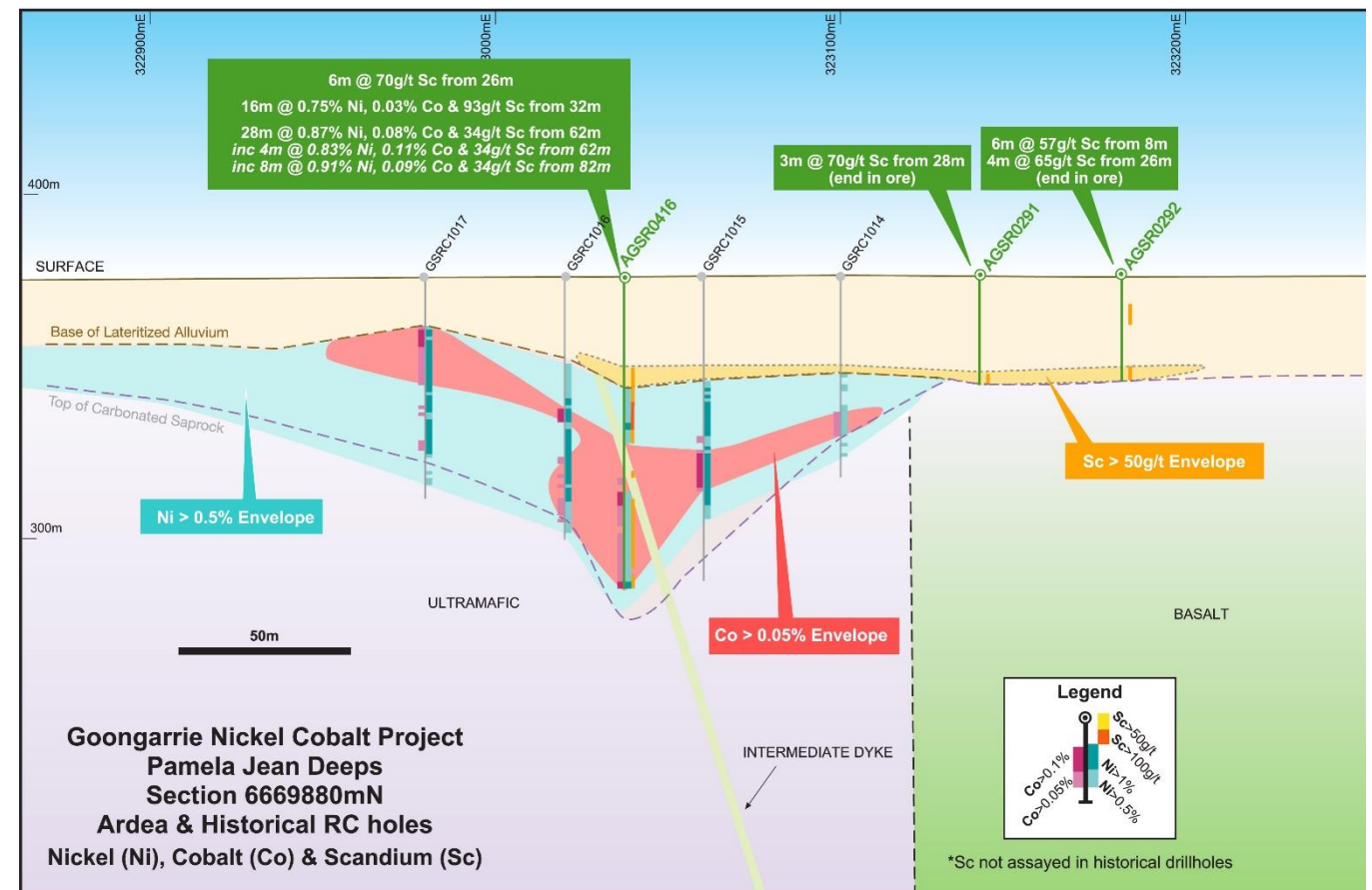
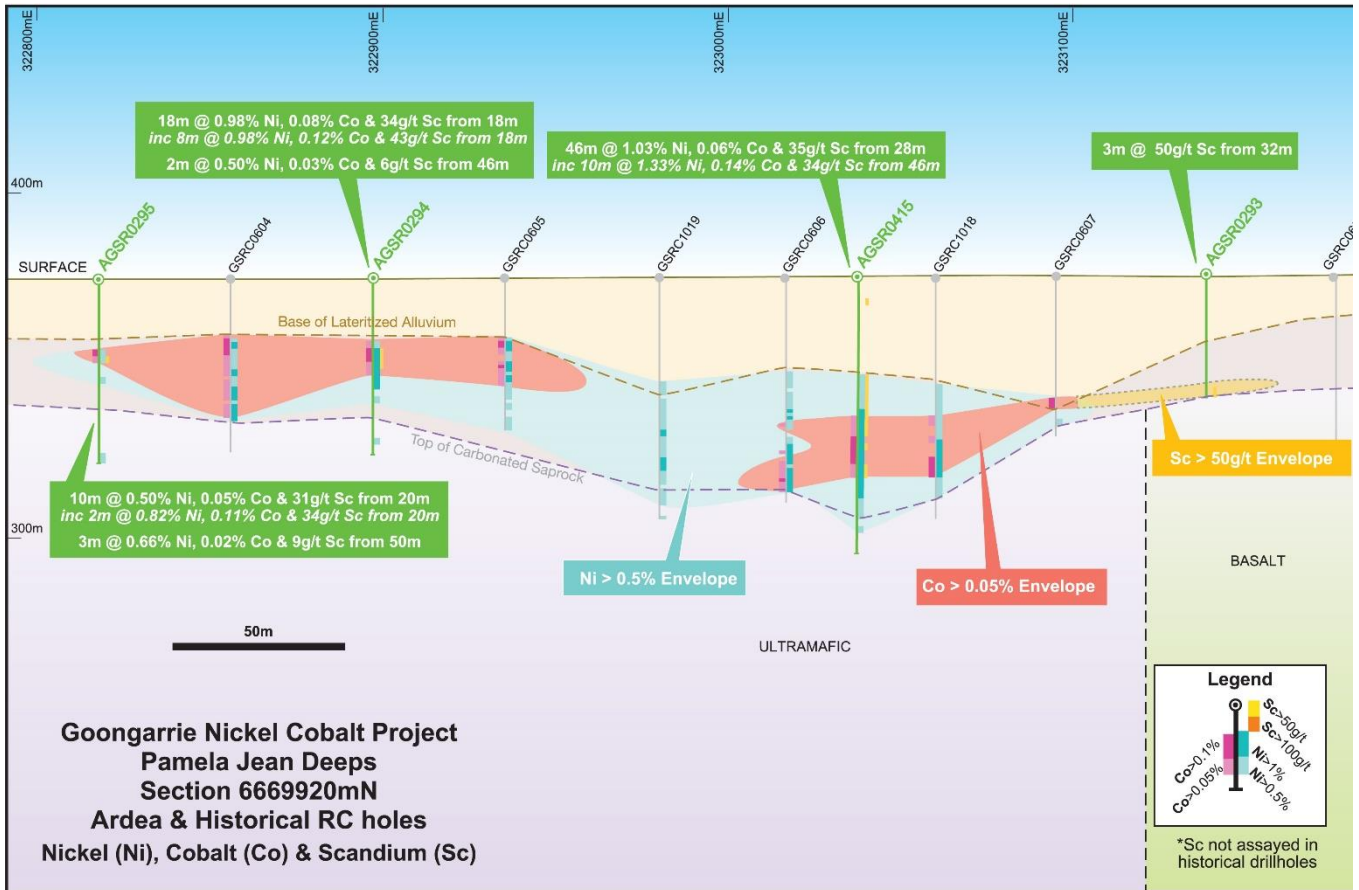


Figure 2 Section 6669920mN

Figure 3 Section 6669880mN

## Pamela Jean Geological Model

The current Pamela Jean Deeps drilling was initially executed as a precursor to a geotechnical program, but has generated new insights into Goongarrie geological models, geo-metallurgy and geotechnics.

The 2018 Ardea drilling at Goongarrie, and Pamela Jean in particular, is restricted to 80x40m infill of proposed pit locations where existing 80x80m drill patterns define the current Indicated Mineral Resource (refer ASX announcement 14 March 2018 for current resource statement). Being infill drilling during 2018, changes to the overall Mineral Resources are expected to be non-material. Of note, historical geological interpretations for the run-of-mine “shallow flat” lateritic mineralization have been precisely confirmed by 2018 drilling, suggesting robust QAQC for historic Goongarrie drilling.

The recent Pamela Jean Deeps drilling has been different to earlier 2018 drilling, in that the inclined holes (first time executed anywhere at Goongarrie) have quantified deep “funnel-shaped” ore zones, especially in respect to structural controls on deep ore. Importantly, “deep funnel” mineralization has been defined (notably by drill-hole AGSR0190 section 6669760mN) where previous drilling only had “shallow flat” ore.

Historic hole GSRC0184 (323096mE) returned 22m at 0.58% Ni and 0.03% Co from 17m and GSRC1005 (323140mE) returned 35m at 0.82% Ni and 0.11% Co from 28m. Ardea RC drill-hole **AGSR0190** (323116mE) between the two returned **91m at 0.92% Ni and 0.07% Co** from 36m (stops in ore), and in addition intersected a previously unrecognized dyke dipping 65° east that fingerprints the “deep funnel”.

Following this result, a systematic drill data review was completed, identifying a significant number of holes stopping in ore where potential deep “funnels” could be present (as for AGSR0190). This will necessitate amendments to wireframes and ultimately pit designs. With the deepening and widening of potential pits, various geotechnical parameters in terms of batter designs and PAL plant neutralizer also come into play.

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

The same bedrock structures also control the location of palaeo-channel quartz sand units (component of “Lateritized Alluvials”, Figure 2-9). The sand channels influence DFS hydrology planning and pit designs.

### Protolith

The Goongarrie nickel-cobalt mineralization is hosted by the Walter Williams Formation (WWF), a 2.7 billion year old olivine cumulate komatiite volcanic flow. The flow at its western contact variously overlies a granitoid basement or Missouri Basalt (conformable volcanic contact). The upper eastern contact is conformable Siberia Komatiite, with potential for a low-grade nickel laterite regolith.

Western-most Goongarrie drill holes intersect a major quartz sand palaeo-channel aquifer (including carbonate bands), either overlying mineralization or dissecting mineralization. The palaeo-channel is a NW palaeo-valley separating Pamela Jean in the east from Elsie Tynan in the west.

Eastern-most Goongarrie drill holes end in olivine orthocumulate and Siberia Komatiite and have a nontronite regolith with low-grade nickel laterite developed on shallow dolomitic saprock (potential neutralizer).

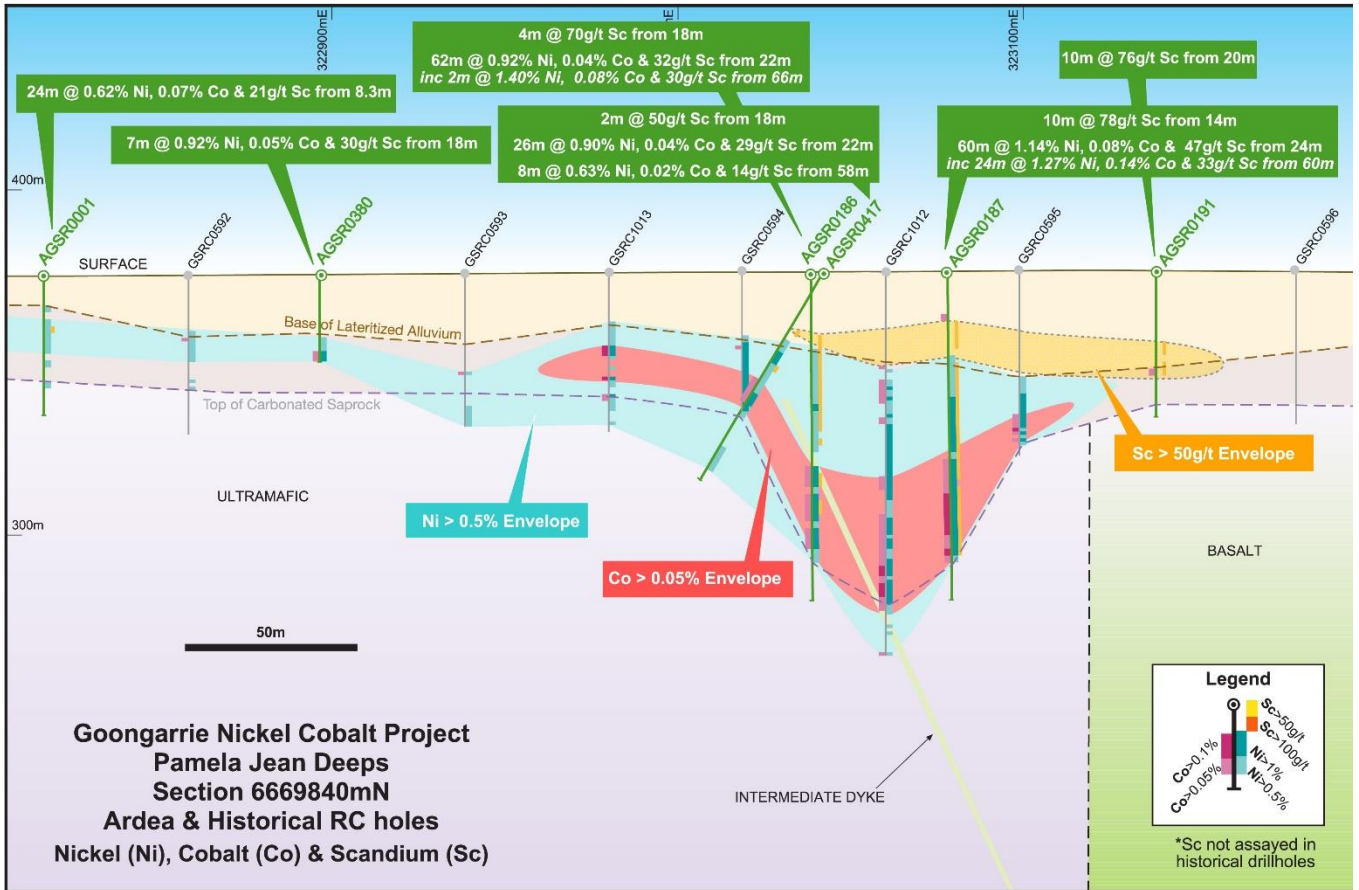


Figure 4 Section 6669840mN

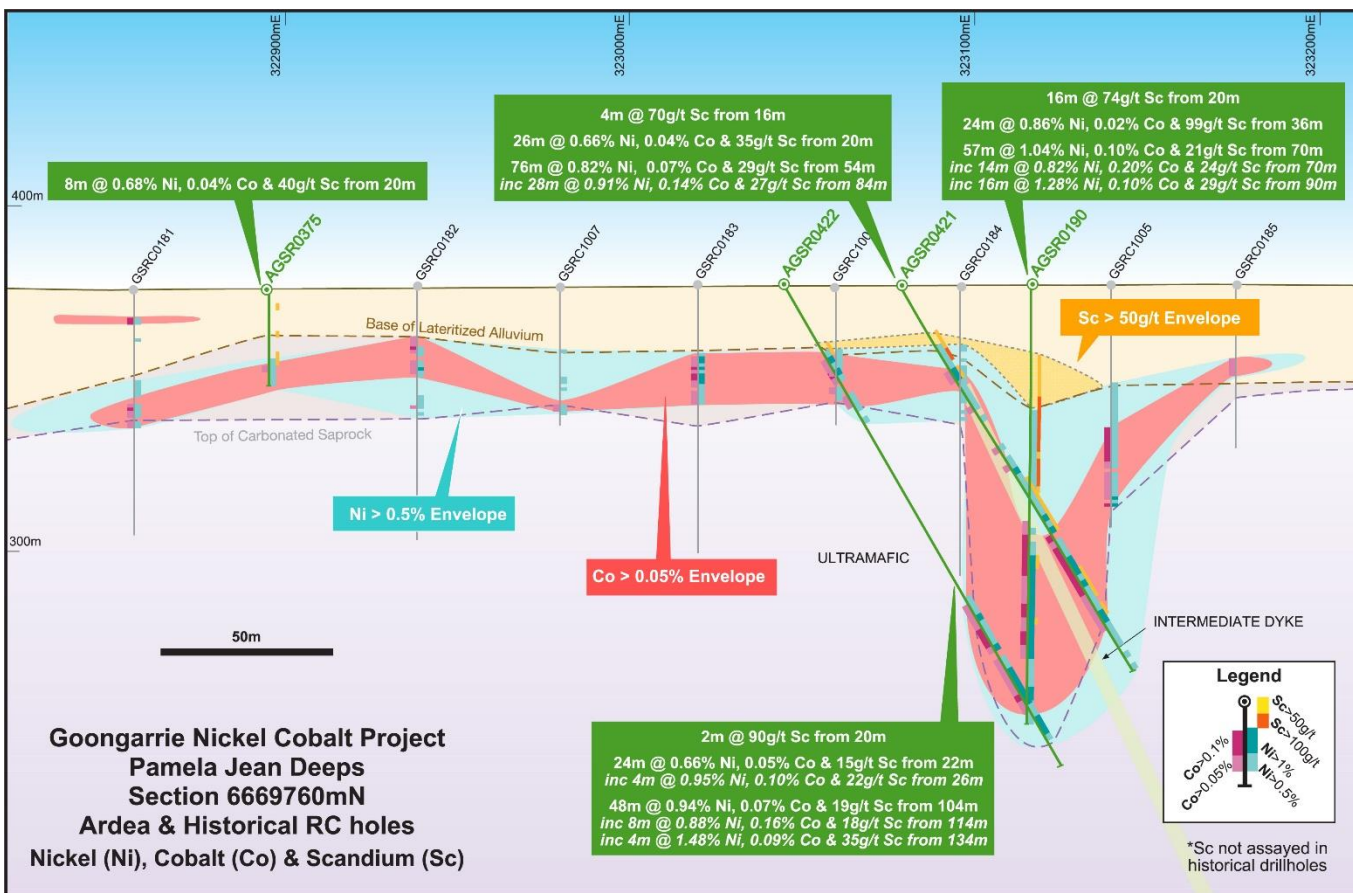


Figure 5 Section 6669760mN

## Regolith

As well as being the ore body, the Regolith is critical to project design, providing civil construction material, and importantly neutralizer for the PAL discharge and environmental management.

The drill-hole logging and interpretation defines the regolith, which then governs mine scheduling for ore, neutralizer and construction materials.

Goongarrie has a predicable Regolith, easily recognized in drill logging and is summarized as follows.

### *Pedogenic – Regolith Cycle 3 - Residual (youngest)*

Modern soil profile, typical detrital quartz sand with colluvial hematitic clasts cemented by calcite at 0-2m and dolomite at 2-6m, commonly colluvial gravel horizons.

The carbonate component is suited as an environmental neutralizer.

### *Laterite – Regolith Cycle 2 - Residual*

Laterite Duricrust is dominantly ferruginous (>25% Fe) and usually develops on Alluvial cover, but on palaeo-Tertiary highs such as Patricia Anne, laterite develops on a mineralized goethite cumulate substrate.

The Laterite Mottled is a distinctive dark red massive mottled kaolinitic clay with Sc-V-Ti-Zr “resistate” enrichment. XRD confirms a haematite-kaolinite mineralogy. There can be a diagnostic alunite overprint superimposed upon upper Cycle 2 Laterite.

Laterite is earmarked for use in civil earthworks, including plant site, ROM pad and roadways.

### *Alluvial Cover – Regolith Cycle 1, 2 - Depositional*

The Alluvial Cover includes Tertiary-aged gravel, sand and clay overburden. For consistency, if ferricrete bands are present (yellow/brown mottling or dark red hematite nodules), then the material characterization is Laterite, and it is suitable for earthworks.

Tertiary palaeo-channel gravels with carbonate cement typically show no lateritization. The magnesite is suitable for neutralization of the PAL discharge, but lacks the nickel credit of saprock neutralizer.

A distinctive clay variant is “candy-stripe clay”, being a thin bedded 0.2-2mm banded white and brown-pink kaolinitic lacustrine deposit which has been irregularly “bleached” to pure white (to blue-green-white) coating-grade kaolinite. This is a high priority precursor target for High Purity Alumina (HPA).

### *Clay Upper – Regolith Cycle 1 - Residual (oldest)*

The main mineralized zone at Goongarrie is termed Clay Upper/Lower and occurs dominantly between base of Cycle 2 Lateritized Alluvials and top of Cycle 1 Carbonated Saprock (Figures 2-9).

Clay Upper mineralogy is dominantly goethite clay, with accessory asbolite, haematite, magnetite, chromite, kaolinite, gibbsite and silica. The ore zone in modelling is clearly defined by the >0.5% Ni grade shell, with associated Co, Mn, Cr, Zn and Cl enrichment.

The continuity of Clay Upper/Lower mineralization ensures predictability and accuracy for mine scheduling, significantly diminishing production risk at Goongarrie.



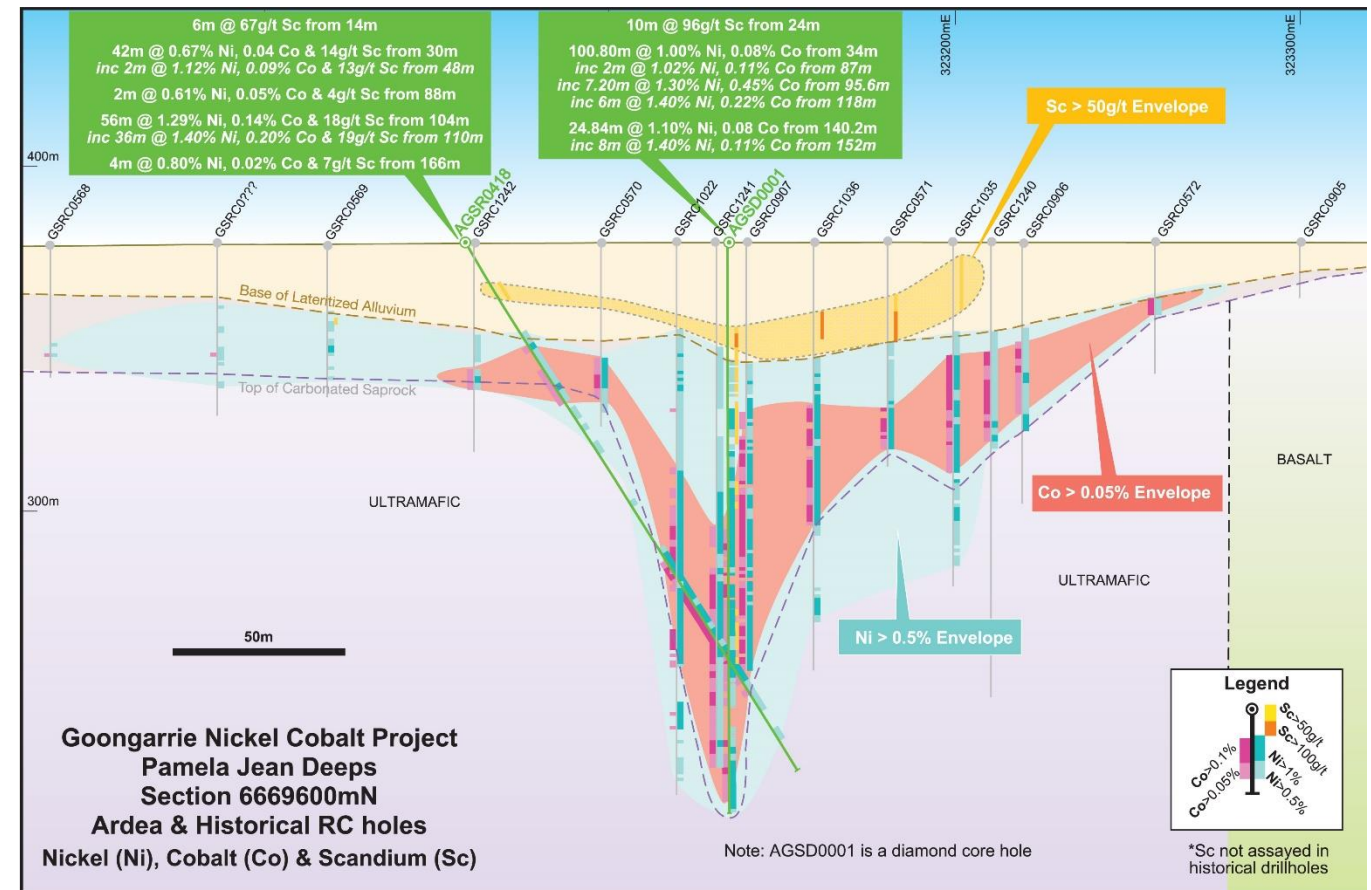
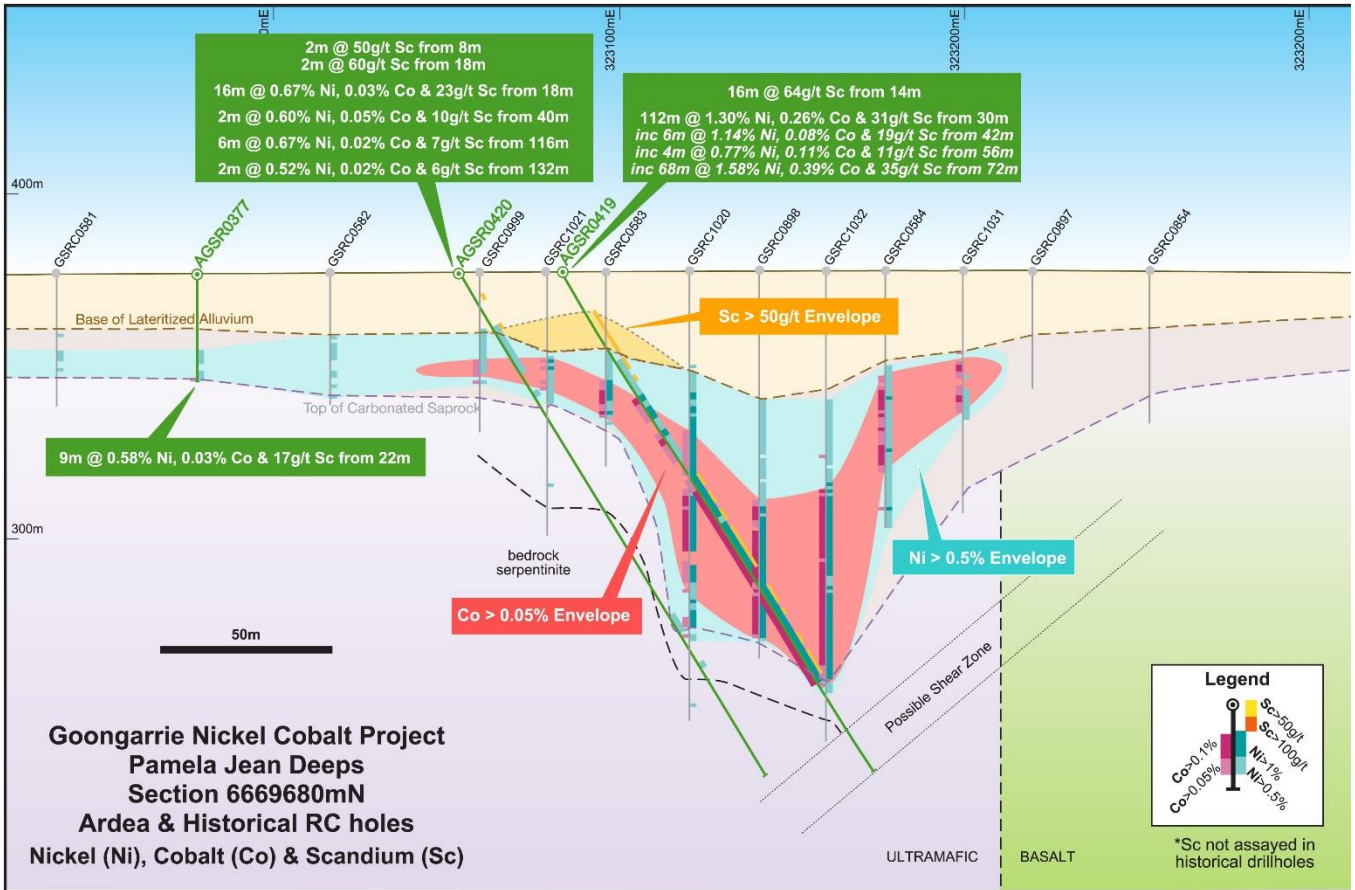


Figure 6 Section 6669680mN

Figure 7 Section 6669600mN

The base of Clay Upper is a geochemical contact termed the Magnesia Discontinuity (MD), characterized by a sharp increase in magnesium and silica with a corresponding decrease in iron and aluminium which reflects palaeo-water table events. There is a marked increase in Ni, Co and Mn straddling the MD.

#### *Clay Lower – Regolith Cycle 1 - Residual*

Clay Lower is the mineralization host below the Magnesia Discontinuity. There is invariably 2-10m of mineralized Clay Lower below the MD and above Saprock. Clay Lower is dominantly goethite, with accessory silica, chlorite-serpentine (green flecks) and magnesite (white-brown).

#### *Clay Void-fill – Regolith Cycle 1 - Residual*

Clay Void-fill is a distinctive karst-style breccia deposit occasionally found at the top of Saprock, consisting of irregular angular fragments of silicified Saprock “floating” in a dark red goethitic mud matrix.

The silicified fragments are suited as a grinding media, which is attractive in view of the nickel credit of Clay Void-fill (0.5-1.3% Ni).

#### *Saprock – Regolith Cycle 1 - Residual*

Saprock is a hard carbonated weathered rock with strong remnant olivine cumulate textures. It is easily distinguished from the overlying soft ore, so the base of ore will be readily distinguished in grade control. Geochemically, Saprock has >7% Ca and >20% LOI. There is a strong vertical zonation with depth in Saprock, being dolomite to magnesite to silica and finally serpentinite with irregular veining of porcellanous magnesite and chalcedony. At Pamela Jean, the dolomite zone is generally absent.

Saprock is suited as a PAL discharge neutralizer, with the focus on nickel-bearing carbonate (target 0.4-0.8% Ni).

#### *Bedrock - Protolith*

Bedrock has only been intersected by Ardea in the Pamela Jean Deeps “batter” geotechnical holes. Previous interpretations at Goongarrie are that olivine adcumulate weathers to deep goethite-gibbsite-silica clays, mesocumulate to shallower nontronite clays and orthocumulate has a very thin carbonated saprock weathering profile.

## **Mineralization**

Pamela Jean is the key constituent lateritic orebody that contributes to the ore reserves defined at the Goongarrie Nickel Cobalt Project. It is located at the central Goongarrie South area (Figure 1). It is one of the 31 currently defined deposits modelled for future mining at Goongarrie (see Appendix 1).

The Pamela Jean deposit measures approximately 1,700 metres by 300 metres and is characterised by high-grade, “deep funnel”-shaped mineralization. Overburden is 20-30m, with base of Pamela Jean Deeps mineralization between 100 and 165m.

The top of Pamela Jean is a typical flat laterite surface at 15-30m below surface. Rather than a flat base some 40-50m below surface, the base of Pamela Jean is concave at 80-165m below surface forming a “funnel-shaped” ore geometry that fortuitously mimics pit design batters, so minimizing Pamela Jean strip ratios. The result is high tonnes and grade proximal to the future plant site.

Continuity of mineralization is strong between drill holes (Figure 2-9). This is a hallmark of Goongarrie, being a “goethite style” (yellow) laterite nickel-cobalt deposit. It contrasts with the more siliceous and nontronitic style (green) laterite deposits which can exhibit marked variation between drill-holes. All defined intercepts from the 2018 Pamela Jean program are listed in Appendix 3.

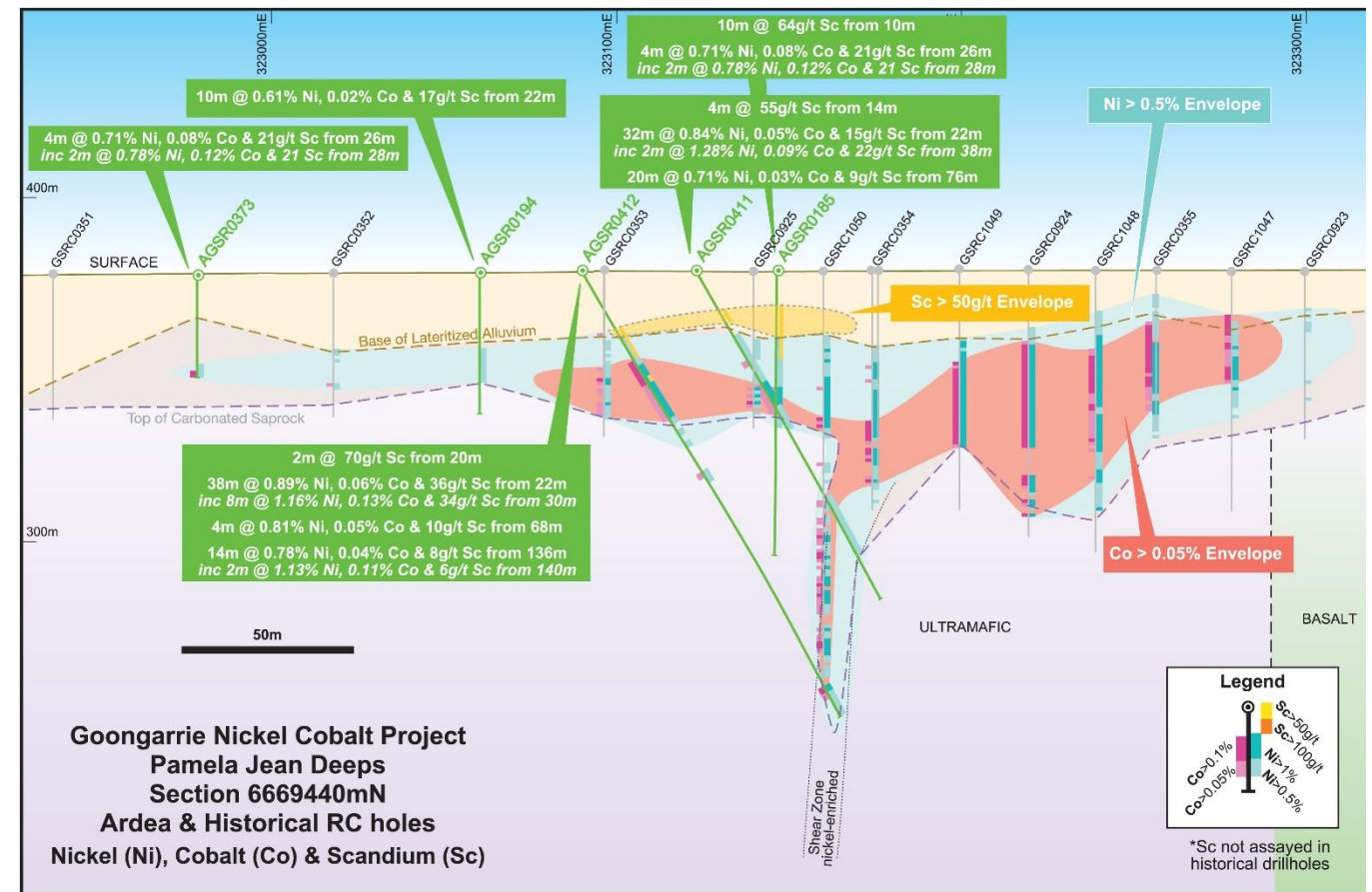
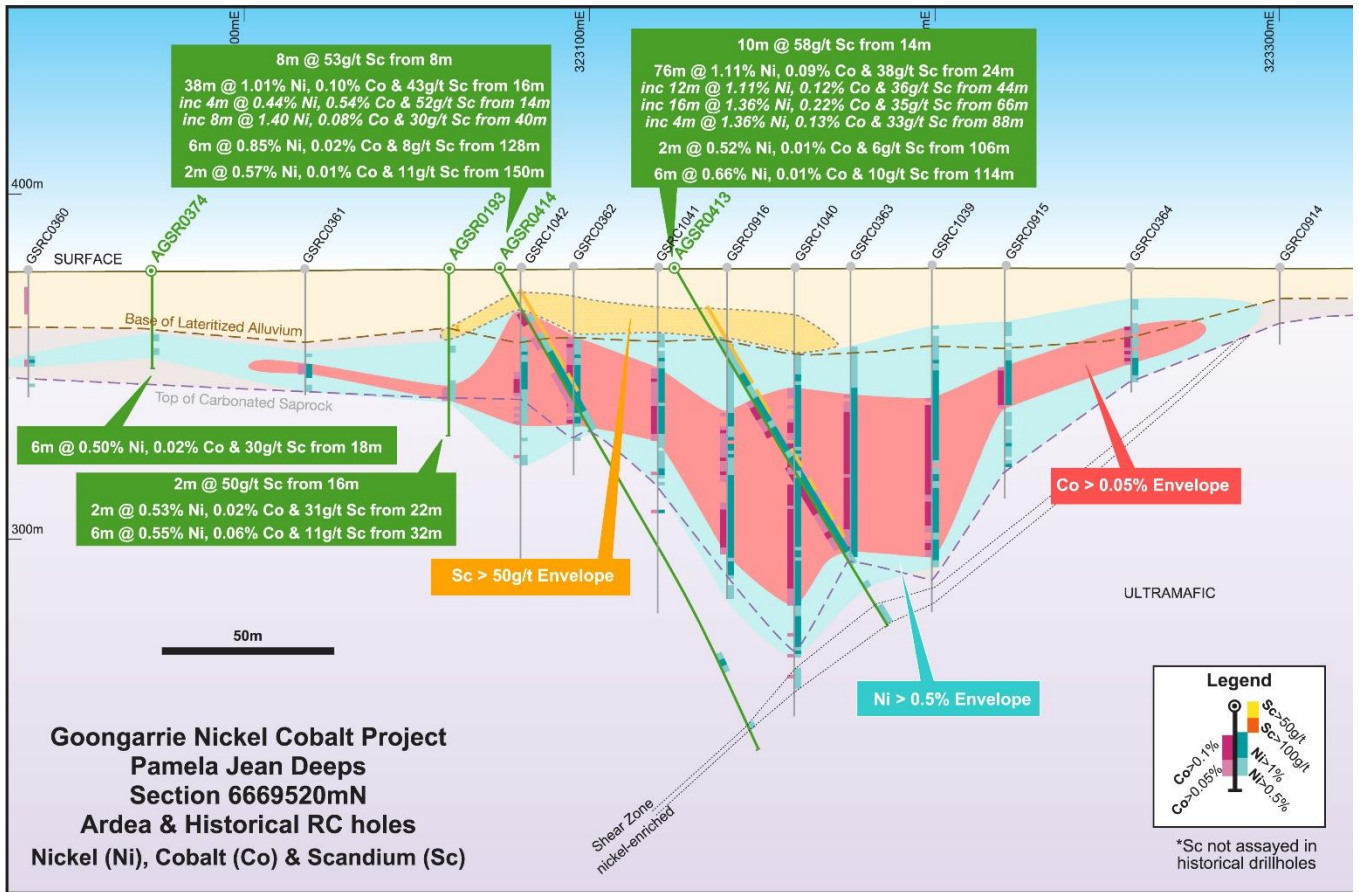


Figure 8 Section 6669520mN

Figure 9 Section 6669440mN

## Metallurgical Programs

The 2018 Pamela Jean drilling has been a key source of metallurgical test material for current DFS programs.

### Variability studies

Representative “run-of-mine” mineralization from Ardea Goongarrie South diamond core holes AGSD0007, 0010 and 0012 was used in the study. The consistency of mineralization has been confirmed and final results are pending.

### Piloting studies

Based on the optimized pit schedule material, pilot feed was specifically-drilled with sonic core at 200m intervals along the strike of Pamela Jean and Elsie Tynan pit areas and supplemented with bulk RC chips from the Patricia Anne pit area, to achieve an approximate 1.1% Ni, 0.12% Co and 35g/t Sc feed (7.5 tonne dry).

The dominant ore style at Goongarrie is goethite-rich, with an accessory cobaltian wad termed asbolite. The ore has exceptional rheology in terms of pulp density and settling, with very consistent metallurgical performance.

Leaching has been completed to produce Mixed Sulphide Product (MSP). Metal leach extractions were 93-95%. The MSP is currently being refined into sulphate crystals. This process should be complete by the end of October 2018.

## Ongoing work at Goongarrie

### Resource Estimation

A comprehensive resource re-estimation for Goongarrie commenced in July 2018 in the northern Goongarrie project area (Patricia Anne) whilst drilling was still current in the southern project area (Big Four, Scotia Dam). The resource re-estimation due this quarter and will incorporate the recent infill drilling at Elsie Tynan.

During the course of wireframing the Patricia Anne and Pamela Jean deposits and siting geotechnical holes, it became apparent that though the 80x40m drill pattern was more than adequate for the run-of-mine “shallow flat” ore that typically occurs between 20m and 40m vertical depth, there were limitations for deeper ore. With the recognition of the strong structural controls on “deep funnel” ore, it became apparent that the 80x40m pattern did not adequately quantify the “deep funnel” ore with a large number of previous holes being stopped in ore (due to failing to identify the deep structural control on mineralization).

These observations indicate a resource predicated on existing drilling could underestimate the contribution of these “funnels”.

An indicator of this issue was the pilot plant deep sonic drilling in most holes returned ore that significantly exceeded predicted the “run-of-mine” grades of 1% Ni and 0.1% Co, necessitating low grade hanging wall ore to be included in piloting to return grade closer to the scheduled life-of-mine grades.

## Geo-metallurgy

Detailed geo-metallurgical analysis is currently underway for Goongarrie using multi-element geochemistry and X-ray Diffraction (XRD) mineralogical analysis.

The study will allow 2018 Ardea drilling to be used as a control to populate the historic data base in respect of predicted metallurgical performance and material characterization.

There are currently 10 variants of Clay Upper ore and 8 variants of Clay Lower ore, all requiring variability test work.

The geo-metallurgical work on 28 Ardea core holes suggests the bulk density of “run-of-mine” ore historically may have been over-estimated, implying a potential reduction in tonnage but the historic bulk density determination estimates far exceed the smaller Ardea bulk density data set.

## Drilling programs

A limited program of 80x20m infill RC drilling is under consideration for late 2018 to better quantify the “deep funnel” targets. This would enable an upgrade of resources and reserves, so facilitating greater confidence in defining mining schedules for the planned Goongarrie mine.

Additional drilling also includes:

- Ongoing samples for metallurgical variability testing of mineralized zones.
- Hydrology, palaeo-channel quartz sands separate the various ore bodies, so require pump-testing.
- Geotechnical, recent drill-hole AGSR0420 was a “sighter hole” for geotechnical core drilling. AGSR0420 intersected saprock and bedrock as predicted by Ardea’s pre-drill wireframe, with RC chip logging suggesting a hard, competent rock suited to pit batter positioning.

## DFS optimization options

The March 2018 Pre-Feasibility Study and July 2018 Expansion Study for the Goongarrie Nickel Cobalt Project highlighted an exceptional business case. With an enormous KNP resource inventory, access to discrete high-grade cobalt zones (“deep funnels”) and the 2018 scandium and neutraliser discoveries, further project upside is expected at Goongarrie with studies underway for:

- Potential to high-grade the mining of cobalt zones during payback period, due to more constrained sub-blocking the resource model (smaller selective blocks in the updated resource model).
- Increased throughput and production through multiple (2.25Mtpa) PAL trains.
- Scandium production.
- Mineralized neutraliser optimization.

Other possibilities to further enhance the project that are under consideration involve monetising accessory metals including vanadium, battery-grade manganese, high-purity alumina and chromium.

**For further information regarding Ardea, please visit [www.ardearesources.com.au](http://www.ardearesources.com.au) or contact:**

### **Ardea Resources:**

Ms Katina Law

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

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

The information in this report that relates to KNP Exploration Results is based on information originally compiled by previous and current full time employees of Heron Resources Limited and after February 2017 employees of Ardea Resource Limited. The Exploration Results 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 mineralization and type of deposit under consideration and to the exploration activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

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

### **CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION**

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

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

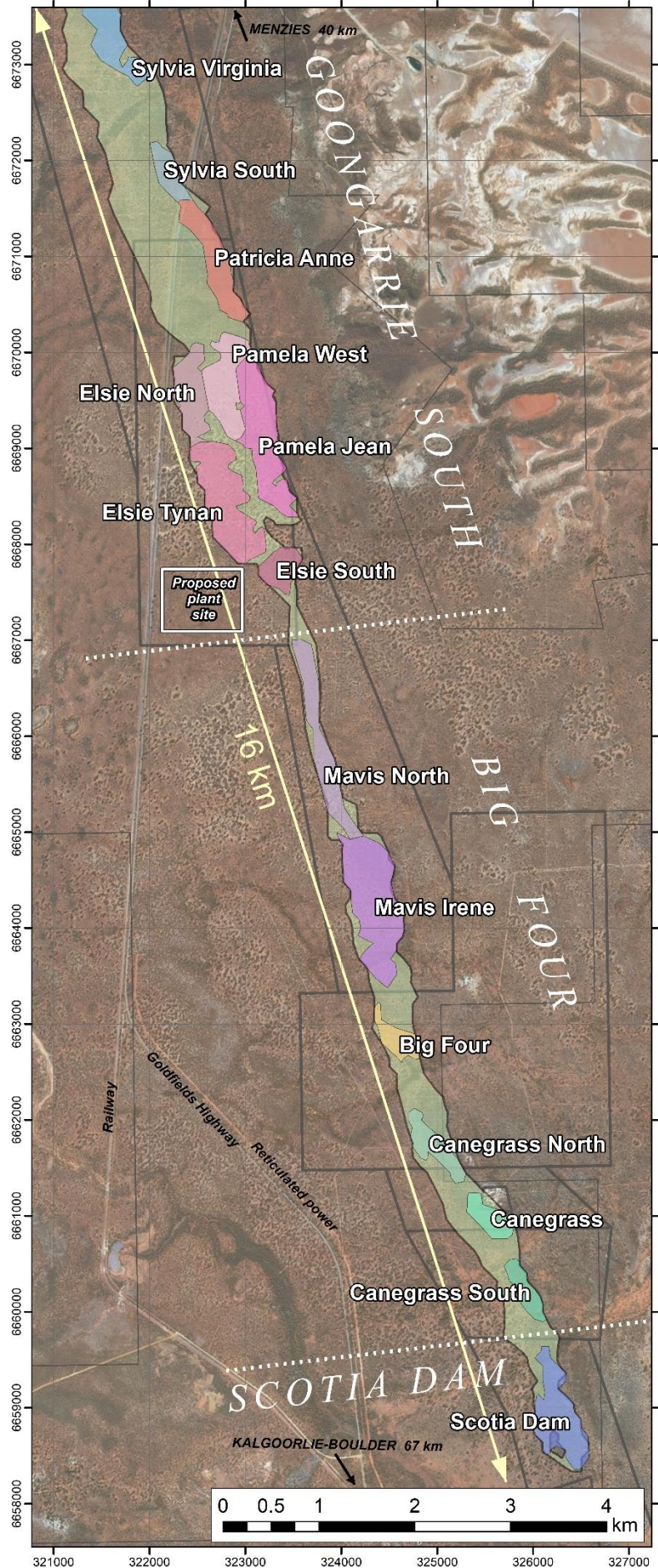
Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there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

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

## Appendix 1 – Constituent deposits and orebodies of the Goongarrie Nickel Cobalt Project

Deposits of the Goongarrie Nickel Cobalt Project, from Sylvia Virginia in the north to Scotia Dam in the south, a distance of 16km. Active mining tenements are outlined in black.

Deposits are marked by significant nickel and cobalt mineralization and are encased within the overall nickel envelope (green, Ni>0.5%).



## Appendix 2 – Pit schedule diagram for Goongarrie South

Pit scheduling identifies Patricia Anne for the first two pits of the Goongarrie Nickel Cobalt Project.

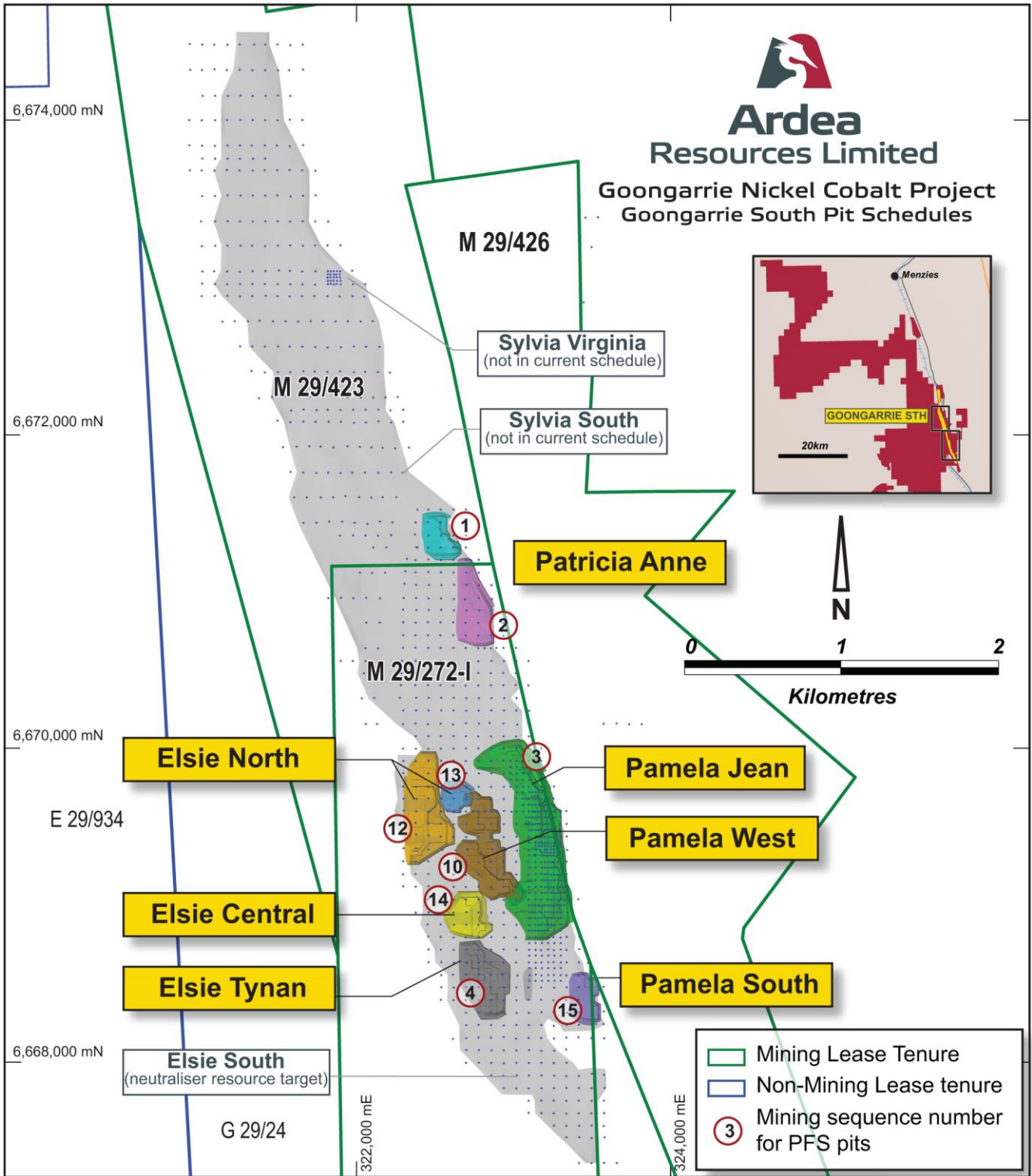


Figure 2 – Pit schedules for the Goongarrie South part of the Goongarrie Nickel Cobalt Project



## Appendix 3 – Collar location data

### Drill holes by Ardea Resources at Pamela Jean Deeps

Drill hole	Type	Depth (m)	Tenement	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
AGSD0001	DD	165.3	M29/00272	MGA94_51	323134	6669598	378	-90	000
AGSR0001	RC	40.3	M29/00272	MGA94_51	322816	6669840	375	-90	000
AGSR0185	RC	83	M29/00272	MGA94_51	323146	6669442	379	-90	000
AGSR0186	RC	95	M29/00272	MGA94_51	323039	6669839	376	-90	000
AGSR0187	RC	95	M29/00272	MGA94_51	323078	6669842	376	-90	000
AGSR0190	RC	127	M29/00272	MGA94_51	323116	6669760	377	-90	000
AGSR0191	RC	42	M29/00272	MGA94_51	323139	6669837	376	-90	000
AGSR0193	RC	48	M29/00272	MGA94_51	323059	6669517	378	-90	000
AGSR0194	RC	41	M29/00272	MGA94_51	323060	6669441	378	-90	000
AGSR0291	RC	31	M29/00272	MGA94_51	323140	6669880	376	-90	000
AGSR0292	RC	30	M29/00272	MGA94_51	323181	6669881	376	-90	000
AGSR0293	RC	35	M29/00272	MGA94_51	323138	6669923	376	-90	000
AGSR0294	RC	51	M29/00272	MGA94_51	322897	6669922	375	-90	000
AGSR0295	RC	53	M29/00272	MGA94_51	322818	6669925	375	-90	000
AGSR0373	RC	30	M29/00272	MGA94_51	322978	6669437	378	-90	000
AGSR0374	RC	28	M29/00272	MGA94_51	322973	6669517	377	-90	000
AGSR0375	RC	28	M29/00272	MGA94_51	322895	6669757	376	-90	000
AGSR0377	RC	31	M29/00272	MGA94_51	322978	6669689	377	-90	000
AGSR0380	RC	25	M29/00272	MGA94_51	322896	6669837	375	-90	000
AGSR0411	RC	110	M29/00272	MGA94_51	323123	6669441	379	-60	100
AGSR0412	RC	150	M29/00272	MGA94_51	323090	6669432	379	-60	100
AGSR0413	RC	120	M29/00272	MGA94_51	323125	6669513	378	-60	100
AGSR0414	RC	158	M29/00272	MGA94_51	323074	6669511	378	-60	090
AGSR0415	RC	80	M29/00272	MGA94_51	323038	6669921	375	-90	000
AGSR0416	RC	90	M29/00272	MGA94_51	323038	6669875	376	-90	000
AGSR0417	RC	70	M29/00272	MGA94_51	323042	6669834	376	-60	270
AGSR0418	RC	180	M29/00272	MGA94_51	323059	6669592	377	-60	090
AGSR0419	RC	170	M29/00272	MGA94_51	323083	6669684	377	-60	090
AGSR0420	RC	170	M29/00272	MGA94_51	323054	6669685	377	-60	090
AGSR0421	RC	130	M29/00272	MGA94_51	323078	6669748	377	-60	090
AGSR0422	RC	160	M29/00272	MGA94_51	323045	6669748	377	-60	090

















Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Sc (g/t)	Mn (ppm)	Cr (ppm)	V (ppm)	Au (ppb)
AGSR0422	28	30	AR020014	1.04	0.124	23	3210	14000	bd	2
AGSR0422	30	32	AR020015	0.537	0.056	14	1560	6900	bd	2
AGSR0422	32	34	AR020016	0.397	0.04	9	1410	4290	bd	7
AGSR0422	34	36	AR020017	0.439	0.043	10	1740	4770	bd	6
AGSR0422	36	38	AR020018	0.542	0.052	11	3220	4900	bd	11
AGSR0422	38	40	AR020020	0.745	0.055	10	3730	5030	bd	10
AGSR0422	40	42	AR020021	0.625	0.036	7	2400	3180	bd	3
AGSR0422	42	44	AR020022	0.484	0.024	5	1750	1830	bd	11
AGSR0422	44	46	AR020023	0.568	0.027	5	2030	2220	bd	2
AGSR0422	46	48	AR020024	0.403	0.018	5	1270	1910	bd	3
AGSR0422	48	50	AR020025	0.299	0.013	4	780	1900	bd	3
AGSR0422	50	52	AR020026	0.272	0.011	3	730	1770	bd	1
AGSR0422	52	54	AR020027	0.27	0.011	3	700	1660	bd	1
AGSR0422	54	56	AR020028	0.228	0.008	3	610	1470	bd	2
AGSR0422	56	58	AR020030	0.184	0.006	3	540	1130	bd	4
AGSR0422	58	60	AR020031	0.197	0.006	3	600	1240	bd	6
AGSR0422	60	62	AR020032	0.197	0.006	2	620	1260	bd	6
AGSR0422	62	64	AR020033	0.19	0.006	3	590	1500	bd	9
AGSR0422	64	66	AR020034	0.188	0.006	3	590	1540	bd	4
AGSR0422	66	68	AR020035	0.195	0.006	3	590	1540	bd	3
AGSR0422	68	70	AR020036	0.191	0.006	4	570	1360	bd	26
AGSR0422	70	72	AR020037	0.188	0.006	4	570	1290	bd	12
AGSR0422	72	74	AR020038	0.217	0.007	4	640	1000	bd	4
AGSR0422	74	76	AR020040	0.183	0.006	3	580	960	bd	4
AGSR0422	76	78	AR020041	0.148	0.004	3	500	760	bd	2
AGSR0422	78	80	AR020042	0.231	0.007	4	650	1210	bd	1
AGSR0422	80	82	AR020043	0.209	0.007	4	590	1140	bd	1
AGSR0422	82	84	AR020044	0.155	0.005	3	570	750	bd	1
AGSR0422	84	86	AR020045	0.132	0.003	3	470	640	bd	2
AGSR0422	86	88	AR020046	0.178	0.006	4	570	1140	bd	2
AGSR0422	88	90	AR020047	0.163	0.005	3	590	940	bd	2
AGSR0422	90	92	AR020048	0.196	0.006	4	750	915	bd	5
AGSR0422	92	94	AR020050	0.143	0.005	3	650	740	bd	2
AGSR0422	94	96	AR020051	0.2	0.009	4	1110	1060	bd	8
AGSR0422	96	98	AR020052	0.343	0.029	4	2550	2580	bd	697
AGSR0422	98	100	AR020053	0.465	0.047	4	3340	4600	bd	1100
AGSR0422	100	102	AR020054	0.377	0.037	5	2920	3900	bd	503
AGSR0422	102	104	AR020055	0.496	0.042	11	1530	10200	bd	126
AGSR0422	104	106	AR020056	0.504	0.036	12	940	11300	bd	130
AGSR0422	106	108	AR020057	0.508	0.054	18	870	17200	100	9
AGSR0422	108	110	AR020058	0.529	0.052	17	880	14200	100	8
AGSR0422	110	112	AR020060	1.01	0.079	20	1830	24600	100	8
AGSR0422	112	114	AR020061	0.647	0.051	18	1430	13200	bd	163
AGSR0422	114	116	AR020062	0.856	0.229	16	7580	12500	bd	142
AGSR0422	116	118	AR020063	0.828	0.196	16	5980	10300	bd	151
AGSR0422	118	120	AR020064	0.694	0.11	15	3300	7530	bd	78
AGSR0422	120	122	AR020065	1.16	0.084	26	2360	12600	100	52
AGSR0422	122	124	AR020066	0.319	0.034	10	1050	4110	bd	29
AGSR0422	124	126	AR020067	0.648	0.065	17	1890	8620	bd	232
AGSR0422	126	128	AR020068	0.955	0.062	31	1300	13000	100	287
AGSR0422	128	130	AR020070	1.24	0.064	29	1290	11200	100	214
AGSR0422	130	132	AR020071	1.41	0.069	30	1290	10600	100	155
AGSR0422	132	134	AR020072	1.28	0.077	31	1570	11700	100	234
AGSR0422	134	136	AR020073	1.5	0.082	36	1300	17100	100	184
AGSR0422	136	138	AR020074	1.45	0.1	34	1210	17400	100	208
AGSR0422	138	140	AR020075	1.02	0.063	14	560	4540	bd	77
AGSR0422	140	142	AR020076	0.959	0.05	15	710	6430	bd	113
AGSR0422	142	144	AR020077	0.911	0.042	13	710	6130	bd	117
AGSR0422	144	146	AR020078	1.19	0.03	12	480	7950	bd	38
AGSR0422	146	148	AR020080	1.01	0.033	11	3870	5740	bd	31
AGSR0422	148	150	AR020081	1.01	0.028	10	2670	6900	bd	17
AGSR0422	150	152	AR020082	0.813	0.032	9	2240	9990	bd	26
AGSR0422	152	154	AR020083	0.483	0.027	10	3320	4860	bd	10
AGSR0422	154	156	AR020084	0.333	0.017	9	1380	5210	bd	7
AGSR0422	156	158	AR020085	0.295	0.017	11	910	5120	bd	10
AGSR0422	158	160	AR020086	0.293	0.015	7	1280	4350	bd	23

## Appendix 5 – Collated intercepts, Pamela Jean Deeps

### Parameters used to define nickel, cobalt, scandium, and gold intercepts at Pamela Jean Deeps

Parameter	Nickel	Cobalt	Scandium	Gold
Minimum cut-off	0.50 % Ni	0.08 % Co	50 g/t Sc	0.5 g/t
Minimum intercept thickness	2 m	2 m	2 m	2 m
Maximum internal waste thickness	4 m	4 m	4 m	4 m

### Nickel, cobalt, and scandium intercepts from new drilling at Goongarrie South

All newly defined cobalt intercepts at Goongarrie South (calculated both from new data and historic data) were calculated using the following parameters:

- Intercepts based on nickel distributions were first calculated using 0.50 % nickel minimum cut-off, 2 m minimum intercept, and 4 m internal waste. Such parameters define broad intercepts that may be cobalt bearing or cobalt poor. Intercepts are considered of interest where cobalt values exceed 0.08%.
- Intercepts based on cobalt distributions are then calculated using a 0.10 % cobalt minimum cut-off, 2 m minimum intercept, and 4 m internal waste. All significant cobalt intercepts are hosted within the broader nickel-based intercepts and tend to define higher-grade, shorter intercepts.
- Where core loss was an issue, and where the thickness of core loss was less than the internal waste thickness, grades in zones of core loss were taken as the weighted average of the intervals immediately above and below the core loss interval in question. This provides grade distributions downhole that are consistent with mineralized zones, where nickel and cobalt grades are observed to change gradually rather than randomly downhole. By defining zones of core loss as being of a value between the interval above and the interval below, a similarly smooth transition in grades downhole is achieved. This method of estimated grade in zones of core loss is therefore considered the most suitable means of defining grade in such zones at Goongarrie South.
- Where an interval of core loss, through calculation, marked the beginning or end of a mineralized interval, this core loss interval was not included in that mineralization interval.

Scandium intercepts were defined by using a 50g/t scandium minimum cut-off, a 2 m minimum intercept, and a 4 m internal waste. Scandium intercept distributions do not show a consistent relationship to nickel and cobalt mineralization and are usually in the shallow subsurface but are only likely to be recovered where nickel and/or cobalt are present. As such, scandium intercepts are only presented where nickel intercepts are defined.

Gold intercepts show no relationship to nickel, cobalt nor scandium mineralization. Their association appears to be ad hoc.

Drillhole	Interval	Nickel intercepts		Cobalt intercepts	Scandium intercepts (within Ni-Co mineralized zones)	Gold intercepts
AGSD0001	34 - 134.8 m	100.8 m at 1.00 % Ni and 0.08 % Co from 34 m	<i>including</i>	2 m at 1.02 % Ni and 0.11 % Co from 87 m	24.4 m at 51 g/t Sc from 34 m	
			<i>and</i>	7.2 m at 1.30 % Ni and 0.45 % Co from 95.6 m	8 m at 48 g/t Sc from 69 m	
	140.2 - 165 m	24.8 m at 1.10 % Ni and 0.08 % Co from 140.2 m	<i>and</i>	6 m at 1.40 % Ni and 0.22 % Co from 118 m	15.8 m at 52 g/t Sc from 106.2 m	
			<i>including</i>	8 m at 1.40 % Ni and 0.11 % Co from 152 m		
AGSR0001	8.3 - 32.3 m	24 m at 0.62 % Ni and 0.07 % Co from 8.3 m	<i>including</i>	4 m at 0.85 % Ni and 0.21 % Co from 14.3 m		
AGSR0185	20 - 46 m	26 m at 0.80 % Ni and 0.05 % Co from 20 m	<i>including</i>	4 m at 1.09 % Ni and 0.14 % Co from 38 m	6 m at 50 g/t Sc from 20 m	
AGSR0186	22 - 84 m	62 m at 0.92 % Ni and 0.04 % Co from 22 m	<i>including</i>	2 m at 1.40 % Ni and 0.08 % Co from 66 m	28 m at 57 g/t Sc from 22 m	
					12 m at 45 g/t Sc from 58 m	2 m at 0.40 g/t Au from 58 m
AGSR0187	24 - 84 m	60 m at 1.14 % Ni and 0.08 % Co from 24 m	<i>including</i>		58 m at 63 g/t Sc from 24 m	

Drillhole	Interval	Nickel Intercepts		Cobalt intercepts	Scandium intercepts (within Ni-Co mineralized zones)	Gold intercepts
			<i>and</i>	24 m at 1.27 % Ni and 0.14 % Co from 60 m		4 m at 0.48 g/t Au from 76 m
AGSR0190	36 - 60 m	24 m at 0.86 % Ni and 0.02 % Co from 36 m	<i>including</i>		24 m at 102 g/t Sc from 36 m	
	70 - 127 m	57 m at 1.04 % Ni and 0.10 % Co from 70 m	<i>including</i> <i>and</i>	14 m at 0.82 % Ni and 0.2 % Co from 70 m 16 m at 1.28 % Ni and 0.10 % Co from 90 m	4 m at 50 g/t Sc from 78 m 2 m at 50 g/t Sc from 96 m	
AGSR0193	22 - 24 m	2 m at 0.53 % Ni and 0.03 % Co from 22 m				
	32 - 38 m	6 m at 0.55 % Ni and 0.06 % Co from 32 m				
AGSR0194	22 - 32 m	10 m at 0.61 % Ni and 0.02 % Co from 22 m				
AGSR0294	18 - 36 m	18 m at 0.98 % Ni and 0.08 % Co from 18 m	<i>including</i>	8 m at 0.98 % Ni and 0.12 % Co from 18 m	6 m at 50 g/t Sc from 20 m	
	46 - 48 m	2 m at 0.50 % Ni and 0.03 % Co from 46 m				
AGSR0295	20 - 30 m	10 m at 0.50 % Ni and 0.05 % Co from 20 m	<i>including</i>	2 m at 0.82 % Ni and 0.11 % Co from 20 m	2 m at 50 g/t Sc from 22 m	
	50 - 53 m	3 m at 0.66 % Ni and 0.02 % Co from 50 m				
AGSR0373	26 - 30 m	4 m at 0.71 % Ni and 0.08 % Co from 26 m	<i>including</i>	2 m at 0.78 % Ni and 0.12 % Co from 28 m		
AGSR0374	18 - 24 m	6 m at 0.50 % Ni and 0.02 % Co from 18 m				
AGSR0375	20 - 28 m	8 m at 0.68 % Ni and 0.04 % Co from 20 m	<i>including</i>		2 m at 60 g/t Sc from 20 m	
AGSR0377	22 - 31 m	9 m at 0.58 % Ni and 0.03 % Co from 22 m				
AGSR0380	18 - 25 m	7 m at 0.92 % Ni and 0.05 % Co from 18 m				
AGSR0411	22 - 54 m	32 m at 0.85 % Ni and 0.05 % Co from 22 m	<i>including</i>	2 m at 1.28 % Ni and 0.09 % Co from 38 m		
	76 - 96 m	20 m at 0.71 % Ni and 0.03 % Co from 76 m				
AGSR0412	22 - 60 m	38 m at 0.89 % Ni and 0.06 % Co from 22 m	<i>including</i> <i>and</i>	8 m at 1.17 % Ni and 0.13 % Co from 30 m	8 m at 85 g/t Sc from 22 m 2 m at 50 g/t Sc from 36 m	
	68 - 72 m	4 m at 0.81 % Ni and 0.05 % Co from 68 m				
	76 - 78 m					2 m at 0.31 g/t Au from 76 m
	136 - 150 m	14 m at 0.78 % Ni and 0.04 % Co from 136 m	<i>including</i>	2 m at 1.13 % Ni and 0.11 % Co from 140 m		
AGSR0413	24 - 100 m	76 m at 1.11 % Ni and 0.09 % Co from 24 m	<i>including</i> <i>and</i> <i>and</i> <i>and</i>	12 m at 1.11 % Ni and 0.12 % Co from 44 m 16 m at 1.37 % Ni and 0.22 % Co from 66 m 4 m at 1.37 % Ni and 0.13 % Co from 88 m	26 m at 58 g/t Sc from 24 m 30 m at 47 g/t Sc from 62 m	
	106 - 108 m	2 m at 0.52 % Ni and 0.01 % Co from 106 m				
	114 - 120 m	6 m at 0.66 % Ni and 0.01 % Co from 114 m				
	16 - 54 m	38 m at 1.01 % Ni and 0.10 % Co from 16 m	<i>including</i> <i>and</i>	8 m at 1.40 % Ni and 0.08 % Co from 40 m	26 m at 60 g/t Sc from 16 m	
AGSR0414	128 - 134 m	6 m at 0.85 % Ni and 0.02 % Co from 128 m				
AGSR0415	150 - 152 m	2 m at 0.57 % Ni and 0.01 % Co from 150 m				
AGSR0415	28 - 74 m	46 m at 1.03 % Ni and 0.06 % Co from 28 m	<i>including</i>	10 m at 1.33 % Ni and 0.14 % Co from 46 m	30 m at 55 g/t Sc from 28 m	
AGSR0416	32 - 48 m	16 m at 0.75 % Ni and 0.03 % Co from 32 m	<i>including</i>		16 m at 94 g/t Sc from 32 m	
	62 - 90 m	28 m at 0.87 % Ni and 0.08 % Co from 62 m	<i>including</i> <i>and</i>	4 m at 0.83 % Ni and 0.11 % Co from 62 m 8 m at 0.91 % Ni and 0.09 % Co from 82 m	26 m at 51 g/t Sc from 64 m	6 m at 0.74 g/t Au from 68 m
AGSR0417	22 - 48 m	26 m at 0.90 % Ni and 0.04 % Co from 22 m	<i>including</i>		2 m at 50 g/t Sc from 30 m	
	58 - 66 m	8 m at 0.63 % Ni and 0.02 % Co from 58 m				
AGSR0418	30 - 72 m	42 m at 0.67 % Ni and 0.04 % Co from 30 m	<i>including</i>	2 m at 1.12 % Ni and 0.09 % Co from 48 m		
	88 - 90 m	2 m at 0.61 % Ni and 0.05 % Co from 88 m				
	104 - 160 m	56 m at 1.29 % Ni and 0.14 % Co from 104 m	<i>including</i>	36 m at 1.40 % Ni and 0.2 % Co from 110 m		
	166 - 170 m	4 m at 0.80 % Ni and 0.02 % Co from 166 m				
AGSR0419	30 - 142 m	112 m at 1.30 % Ni and 0.26 % Co from 30 m	<i>including</i> <i>and</i>	6 m at 1.14 % Ni and 0.08 % Co from 42 m 4 m at 0.77 % Ni and 0.11 % Co from 56 m	8 m at 53 g/t Sc from 30 m	

Drillhole	Interval	Nickel Intercepts		Cobalt intercepts	Scandium intercepts (within Ni-Co mineralized zones)	Gold intercepts
			<i>and</i>	68 m at 1.58 % Ni and 0.39 % Co from 72 m	32 m at 48 g/t Sc from 70 m	
			<i>and</i>		10 m at 48 g/t Sc from 108 m	
			<i>and</i>		14 m at 53 g/t Sc from 124 m	6 m at 0.64 g/t Au from 136 m
<b>AGSR0420</b>	18 - 34 m	16 m at 0.67 % Ni and 0.03 % Co from 18 m	<i>including</i>		2 m at 60 g/t Sc from 18 m	
	40 - 42 m	2 m at 0.60 % Ni and 0.05 % Co from 40 m				
	116 - 122 m	6 m at 0.67 % Ni and 0.02 % Co from 116 m				
	132 - 134 m	2 m at 0.52 % Ni and 0.02 % Co from 132 m				
<b>AGSR0421</b>	20 - 46 m	26 m at 0.66 % Ni and 0.04 % Co from 20 m	<i>including</i>		12 m at 70 g/t Sc from 20 m	
	54 - 130 m	76 m at 0.83 % Ni and 0.07 % Co from 54 m	<i>including</i>		18 m at 70 g/t Sc from 66 m	
			<i>and</i>	28 m at 0.91 % Ni and 0.14 % Co from 84 m	16 m at 54 g/t Sc from 96 m	
<b>AGSR0422</b>	22 - 46 m	24 m at 0.66 % Ni and 0.05 % Co from 22 m	<i>including</i>	4 m at 0.95 % Ni and 0.10 % Co from 26 m	2 m at 60 g/t Sc from 22 m	
	96 - 102 m					6 m at 0.77 g/t Au from 96 m
	104 - 152 m	48 m at 0.94 % Ni and 0.07 % Co from 104 m	<i>including</i>	8 m at 0.88 % Ni and 0.16 % Co from 114 m		2 m at 0.29 g/t Au from 126 m
			<i>and</i>			
			<i>and</i>	4 m at 1.48 % Ni and 0.09 % Co from 134 m		

## Appendix 6 – JORC Code, 2012 Edition, Table 1 report

### Section 1 Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<p><b>Sampling techniques</b></p> <p><i>Note: Due to the similarity of the deposit styles, procedures and estimations used this table represents the combined methods for all Ardea Resources (ARL) Nickel and cobalt Laterite Resources. Where data not collected by ARL has been used in the resource calculations, variances in techniques are noted.</i></p>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All holes were sampled "in-principle" on a 2 metre down hole interval basis, with exceptions being made due to visual geological/mineralogical breaks, and end of hole final-lengths. All sampling lengths were recorded in ARL's standard core-sampling record spreadsheets. Sample condition, sample recovery and sample size were recorded for all drill-core samples collected by ARL.</li> <li>The drill spacing was designed to augment historic drilling, bringing drill densities down from 80mE x 80mN to 40mE x 80mN. The drilling will also contribute to provide material for the purpose of metallurgical sampling and production of production of pilot marketing samples of cobalt sulphate and nickel sulphate.</li> <li>Industry standard practice was used in the processing of samples for assay, with 2m intervals of RC chips collected in green plastic bags. As the drilling was within a 2012 JORC-compliant Indicated Ni-Co resource, prior knowledge of the resource peculiarities contributes and assists significantly to current interpretation of mineralization.</li> <li>Assay of samples utilised standard laboratory techniques with standard ICP-AES undertaken on 50 gram samples for Au, Pt and Pd, and lithium borate fused-bead XRF analysis used for the remaining multi-element suite. Further details of lab processing techniques are found in Quality of assay data and laboratory tests below.</li> </ul>
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>In this most recent program, Ardea drilled the Goongarrie South deposit with 43 diamond drill holes on a varying MGA94 z51 northing grid-spacing of 80m at several localities (see Figure 2). Holes were vertical (-90 degree dip), designed to optimally intersect the sub-horizontal mineralization. RC drilling was performed with a face sampling hammer (bit diameter between 4½ and 5 ¼ inches) and samples were collected by either a cone (majority) or riffle splitter using 2 metre composites. Sample condition, sample recovery and sample size were recorded for all drill samples collected by ARL.</li> </ul>
<p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC chip sample recovery was recorded by visual estimation of the reject sample, expressed as a percentage recovery. Overall estimated recovery was approximately 80%, which is considered to be acceptable for nickel-cobalt laterite deposits. RC Chip sample condition recorded using a three code system, D=Dry, M=Moist, W=Wet. A small proportion of samples were moist or wet (11.5%), with the majority of these being associated with soft goethite clays, where water injection has been used to improve drill recovery.</li> <li>Measures taken to ensure maximum RC sample recoveries included maintaining a clean cyclone and drilling equipment, using water injection at times of reduced air circulation, as well as regular communication with the drillers and slowing drill advance rates when variable to poor ground conditions are encountered.</li> </ul>
<p><b>Logging</b></p>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was undertaken for metallurgical purposes, and twinning comparison with previous historic RC holes. The level of logging detail utilised supports this type of review and was as follows: Visual geological logging was completed for all drilling both at the time of drilling (using standard Ardea laterite logging codes), and later over relevant met-sample intervals with a metallurgical-logging perspective. Geochemistry from historic data was used together with logging data to validate logged geological horizons. Nickel laterite profiles contain geochemically very distinct horizons and represent a sound validation tool against visual logging. The major part of the logging system was developed by Heron Resources Limited specifically for the KNP and was designed to facilitate future geo-metallurgical studies. It has been customised by Ardea Resources Limited as considered appropriate for recent developments. Planned drill hole target lengths were adjusted by the geologist during drilling. The geologist also oversaw all sampling and drilling practices. A mixture of ARL employees and contract geologists supervised all drilling. Quarter core of all drilling has been retained for reference.</li> <li>Visual geological logging was completed for all RC drilling on 1 metre intervals. The logging system was developed by Heron Resources Limited specifically for the KNP and was designed to facilitate future geo-metallurgical studies. Logging was performed at the time of drilling, and planned drill hole target lengths adjusted by the geologist during drilling. The geologist also oversaw all sampling and drilling practices. A mixture of ARL employees and contract geologists supervised all drilling. A small selection of representative chips were also collected for every 1 metre interval</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>and stored in chip-trays for future reference. Only drilling contractors with previous nickel laterite experience and suitable rigs were used.</p> <ul style="list-style-type: none"> <li>The geological legend used by ARL is a qualitative legend designed to capture the key physical and metallurgical features of the nickel-cobalt laterite mineralization. Logging captured the colour, regolith unit and mineralization style, often accompanied by the logging of protolith, estimated percentage of free silica, texture, grain size and alteration. Logging correlated well with the geochemical algorithm developed by Heron Resources Limited for the Yerilla Nickel Project for material type prediction from multi-element assay data.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>2 metre (and rarely 1 metre) composite samples were recovered using a 15:1 rig mounted cone splitter or trailer mounted riffle splitter during drilling into a calico sample bag. Sample target weight was between 2 and 3kg. In the case of wet clay samples, grab samples taken from sample return pile, initially into a calico sample bag. Wet samples stored separately from other samples in plastic bags and riffle split once dry.</li> <li>QAQC was employed. A standard, blank or duplicate sample was inserted into the sample stream 10 metres on a rotating basis. Standards were either quantified industry standards, or standards made from homogenised bulk samples of the mineralization being drilled (in the case of the Yerilla project). Every 30th sample a duplicate sample was taken using the same sample sub sample technique as the original sub sample. Sample sizes are appropriate for the nature of mineralization.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All Ardea samples were submitted to Kalgoorlie ALS laboratories and transported to ALS Perth, where they were pulverised. Analysis at ALS Perth was by ICP utilising a 50g charge (lab method PGM-ICP24) for PGM suite elements (Au, Pt, Pd). Additional analysis was undertaken by sending subsamples to ALS Brisbane where analysis by silicate fusion / XRF analysis (lab method ME-XRF12n) for multiple grade attributes for laterite ores (Al<sub>2</sub>O<sub>3</sub>, As, BaO, CaO, Cl, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, Ga, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, Ni, P<sub>2</sub>O<sub>5</sub>, Pb, Sc, SiO<sub>2</sub>, SO<sub>3</sub>, SrO, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub>, Zn, ZrO<sub>2</sub>). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and ALS is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits.</li> <li>ALS routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring.</li> <li>Ardea also inserted QAQC samples into the sample stream at a 1 in 10 frequency, alternating between blanks (industrial sands) and standard reference materials. Additionally, a review was conducted for geochemical consistency between historically expected data, recent data, and geochemical values that would be expected in a nickel laterite profile.</li> <li>All of the QAQC data has been statistically assessed. There were rare but explainable inconsistencies in the returning results from standards submitted, and it has been determined that levels of accuracy and precision relating to the samples are acceptable.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All Ardea samples were submitted to Kalgoorlie ALS laboratories and transported to ALS Perth, where they were pulverised. Analysis at ALS Perth was by ICP utilising a 50g charge (lab method PGM-ICP24) for PGM suite elements (Au, Pt, Pd). Additional analysis was undertaken by sending subsamples to ALS Brisbane where analysis by silicate fusion / XRF analysis (lab method ME-XRF12n) for multiple grade attributes for laterite ores (Al<sub>2</sub>O<sub>3</sub>, As, BaO, CaO, Cl, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, Ga, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, Ni, P<sub>2</sub>O<sub>5</sub>, Pb, Sc, SiO<sub>2</sub>, SO<sub>3</sub>, SrO, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub>, Zn, ZrO<sub>2</sub>). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and ALS is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits.</li> <li>ALS routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring.</li> <li>Ardea also inserted QAQC samples into the sample stream at a 1 in 20 frequency, alternating between duplicates splits, blanks (industrial sands) and standard reference materials.</li> <li>Additionally, a review was conducted for geochemical consistency between historically expected data, recent data, and geochemical values that would be expected in a nickel laterite profile.</li> <li>All of the QAQC data has been statistically assessed. There were some inconsistencies in the returning results from standards submitted, relating to the XRF analysis suite. This has been thoroughly investigated with the conclusion that either some standards were not correctly identified and recorded on submission, or time/external influence has had an impact on some of the quality of the values standards, as figures reported for the relevant errant standards were significantly different to the normal recognisable standard values. Ardea has undertaken its own</li> </ul>

Criteria	JORC Code explanation	Commentary
		further in-house review of QAQC results of the ALS routine standards, 100% of which returned within acceptable QAQC limits. This fact combined with the fact that the data is demonstrably consistent and repeated for expected Ni/Co values within the lateritic ore profiles of both reported areas and is also consistent with nearby abundant historic drilling data, has meant that the results are considered to be acceptable and suitable for reporting.
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes are to be surveyed using an RTK DGPS system with either a 3 or 7 digit accuracy. The coordinates are stored in the exploration database referenced to the MGA Zone 51 Datum GDA94.</li> <li>All holes drilled as part of the Goongarrie South program were vertical. No holes were down-hole surveyed except at EOH. The sub-horizontal orientation of the mineralization, combined with the soft nature of host material resulted in minimal deviation of vertical diamond drill holes.</li> <li>The grid system for all models is GDA94. Where historic data or mine grid data has been used it has been transformed into GDA94 from its original source grid via the appropriate transformation. Both original and transformed data is stored in the digital database.</li> <li>A DGPS pickup up of drill collar locations is considered sufficiently accurate for reporting of resources, but is not suitable for mine planning and reserves.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The drill spacing was designed to augment historic drilling, bringing drill densities down from 80mE x 80mN to 40mE x 80mN. The program to date is part of a broader program. All proposed drilling has been completed at Elsie South only. Drilling continues at all other deposits.</li> <li>Given the homogeneity of this style of orebody, the spacing is, for bulk-scale metallurgical work and probable mining techniques, considered sufficient.</li> <li>Sample compositing has not been applied to the newly collected data.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes in this program which are vertical and give a true width of the regolith layers and mineralization within the modelled resource. The inclined holes are designed to test steep structures rather than regolith thickness and in all cases have sufficient adjoining vertical holes which quantify regolith true thickness</li> <li>On a local scale, there is some geological variability in the northern most drill line (6669600mN) due to a probable shear structure. However, this local variability is not considered to be significant for the project overall, but will have local effects on mining and scheduling later in the project life. As the detailed shape of the orebody has already been well defined by an abundance of nearby resource drill holes (including the northern section) it is no bias is expected to be introduced from data pertaining to these drill holes with reference to mineralized structures.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were collected and accounted for by ARL employees/consultants during drilling. All samples were bagged into calico plastic bags and closed with cable ties. Samples were transported to Kalgoorlie from logging site by ARL employees/consultants and submitted directly to ALS Kalgoorlie.</li> <li>The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>ARL has periodically conducted internal reviews of sampling techniques relating to resultant exploration datasets, and larger scale reviews capturing the data from multiple drilling programmes within the KNP.</li> <li>Internal reviews of the exploration data included the following: <ul style="list-style-type: none"> <li>Unsurveyed drill hole collars (less than 1% of collars).</li> <li>Drill Holes with overlapping intervals (0%).</li> <li>Drill Holes with no logging data (less than 2% of holes).</li> <li>Sample logging intervals beyond end of hole depths (0%).</li> <li>Samples with no assay data (from 0 to &lt;5% for any given project, usually related to issues with sample recovery from difficult ground conditions,</li> </ul> </li> <li>mechanical issues with drill rig, damage to sample in transport or sample preparation). <ul style="list-style-type: none"> <li>Assay grade ranges.</li> <li>Collar coordinate ranges</li> <li>Valid hole orientation data.</li> </ul> </li> <li>The ALS Laboratory was visited by ARL staff in 2016, and the laboratory processes and procedures were reviewed at this time and determined to be robust.</li> </ul>

## Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments</li> </ul>	<ul style="list-style-type: none"> <li>The tenement on which the Goongarrie South drilling was undertaken is M29/272.</li> <li>The tenement and land tenure status for the KNP prospect areas containing continuous cobalt rich laterite mineralization is summarised in Table 3 following and in the Ardea Prospectus, section 9 "Solicitor's Report on Tenements".</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Goongarrie South deposit was initially discovered by Heron Resources Ltd and subsequently drilled by Vale Inco Limited in a Joint Venture. Much historic assessment of the Black Range Project was undertaken by Heron Resources Limited.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	<ul style="list-style-type: none"> <li>The KNP nickel-cobalt laterite mineralization developed during the weathering and near surface enrichment of Archaean-aged olivine-cumulate ultramafic units. The mineralization is usually within 60 metres of surface and can be further subdivided on mineralogical and metallurgical characteristics into upper iron-rich material and lower magnesium-rich material based on the ratios of iron to magnesium. The deposits are analogous to many weathered ultramafic-hosted nickel-cobalt deposits both within Australia and world-wide.</li> <li>Cobalt-rich mineralization is typically best developed in iron-rich material in regions of deep weathering in close proximity to major shear zones or transfer shear structures and to a lesser extent as thin zones along the interface of ferruginous and saprolite boundaries at shallower depths proximal to shear structures.</li> <li>The Cobalt Zone is associated with a distinctive geo-metallurgical type defined as "Clay Upper Pyrolusitic". Mineralogy is goethite, gibbsite and pyrolusite (strictly "asbolite" or "cobaltian wad"). The Cobalt Zones typically occur as sub-horizontal bodies at a palaeo-water table within the KNP (late stage supergene enrichment). This material is particularly well developed at Goongarrie South.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>All holes drilled in this most recent program are listed in "Appendix 1 – Collar location data".</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>All assay data relating to the metals of interest at Goongarrie South, namely cobalt, nickel, Sc, and chromium, are listed in "Appendix 2 – Assay results". Other elements were assayed but have not been reported here. They are of use and of interest from a scientific and metallurgical perspective, but are not considered material and their exclusion does not detract from the understanding of this report.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Most drill hole samples have been collected over 2m down hole intervals.</li> <li>All newly defined nickel and cobalt intercepts at Goongarrie South were calculated using the following parameters: <ul style="list-style-type: none"> <li>Intercepts based on nickel distributions were first calculated using 0.50 % nickel minimum cut-off, 2 m minimum intercept, and 4 m internal waste. Such parameters define broad intercepts that may be cobalt bearing or cobalt poor. Intercepts are considered of interest where cobalt values exceed 0.08%.</li> <li>Intercepts based on cobalt distributions are then calculated using a 0.10 % cobalt minimum cut-off, 2 m minimum intercept, and 4 m internal waste. All significant cobalt intercepts are hosted within the broader nickel-based intercepts and tend to define higher-grade, shorter intercepts.</li> <li>Where core loss was an issue, and where the thickness of core loss was less than the internal waste thickness, grades in zones of core loss were taken as the weighted average of the intervals immediately above and below the core loss interval in question. This provides grade distributions downhole that are consistent with mineralized zones, where nickel and cobalt grades are observed to change gradually rather than randomly downhole. By defining zones of core loss as being of a value between the interval above and the interval below, a similarly smooth transition in grades downhole is achieved. This method of estimated grade in zones of core loss is therefore considered the most suitable means of defining grade in such zones at Goongarrie South.</li> <li>Where an interval of core loss, through calculation, marked the beginning or end of</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>a mineralized interval, this core loss interval was not included in that mineralization interval.</p> <ul style="list-style-type: none"> <li>Sc intercepts were defined by using a 50g/t Sc minimum cut-off, a 2 m minimum intercept, and a 4 m internal waste. Sc intercept distributions do not show a consistent relationship to nickel and cobalt mineralization and are usually in the shallow subsurface.</li> <li>Assay compositing techniques were not used in this assessment.</li> <li>No metal equivalent calculations have been used in this assessment.</li> </ul>
<b>Relationship between mineralization widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The nickel-cobalt laterite mineralization at Goongarrie South has a strong global sub-horizontal orientation.</li> <li>All drill holes are vertical.</li> <li>All drill holes intersect the mineralization at approximately 90° to its orientation</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Maps and sections of the nickel and cobalt mineralization are shown within the report. Every drill hole on every section drilled is shown.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable to this report. All results are reported either in the text or in the associated appendices. Examples of high-grade mineralization are labelled as such.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>No other data are, at this stage, known to be either beneficial or deleterious to recovery of the metals reported. Uncertainties surrounding the possibility of recovery of the metals of interest are noted prominently in the report.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further drilling is likely to be undertaken at Goongarrie South but has not yet been defined. Further drilling could include infill drilling as well as extension of lines to the north and south as appropriate.</li> <li>Metallurgical assessment of all metals of interest at Goongarrie South will be undertaken during the Pre-Feasibility Study (PFS) which has commenced on the KNP Cobalt Zone.</li> </ul>