Ardea Resources Limited

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ASX Symbol

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4,000,000

ABN 30 614 289 342

Confirmation of High-Grade Nickel-Cobalt from Goongarrie Hill Metallurgical Drilling

Ardea Resources Limited (**Ardea** or the **Company**) advises that diamond drill core drilling at the Goongarrie Hill nickel-cobalt deposit confirms high-grade near surface nickel-cobalt mineralisation. Results very closely validate mineralisation models used in generating the Goongarrie Hill Mineral Resource Estimate (**MRE**).

Pits at Goongarrie Hill will be the key Atmospheric Leach base load feed source for the proposed nickel-cobalt processing plant at the Kalgoorlie Nickel Project – Goongarrie Hub (**KNP – GH**).

Intercepts at 0.5% nickel and 1% nickel cut-off grades include:

- AGHD0003 — 38m at 0.85% nickel and 0.057% cobalt from 2m
  including — **18m at 1.12% nickel and 0.095% cobalt from 4m**
- AGHD0005 — 18m at 1.16% nickel and 0.059% cobalt from 2m
  including — **14m at 1.22% nickel and 0.067% cobalt from 6m**

The drilling program was designed to generate run-of-mine Atmospheric Leach mineralisation for the bench-scale metallurgical programs currently in train at the ALS Balcatta metallurgical laboratories. The metallurgy is an initial program for the KNP Definitive Feasibility Study (**DFS**).

The drilling was particularly useful in upgrading the KNP mineralisation and geo-metallurgical models. There is notable change in regolith style between the Goongarrie Hill duricrust residual profile with dominant Atmospheric Leach (**AL**) feed, and intensely weathered Goongarrie South setting of lacustrine deposition with dominant High Pressure Acid Leach (**HPAL**) feed.

In terms of project metallurgy, this contrast of mineralisation styles is an ideal outcome to maximise project flexibility through the scheduling of plant feeds.

Ardea's Managing Director, Andrew Penkethman said:

"The Goongarrie Hill core drilling was a further field test of the KNP low-carbon flowsheet model.

In contrast to Goongarrie South, Goongarrie Hill lacks the intense weathering associated with the Bardoc Tectonic Zone and ancestral Lake Goongarrie hydrology. None-the-less, premium High Pressure Acid Leach feed still occurred at Goongarrie Hill above an extensive and more uniform sheet of high-magnesium mineralisation well suited as an Atmospheric Leach feed.

In terms of Mineralised Neutraliser, the neutraliser at Goongarrie Hill appears to be a sheet below the Atmospheric Leach feed. In a production situation, this material will be mined from grade control drilling and "goodbye cuts".

With the unique Goongarrie geological model yet again confirmed, we continue to await the results of the ALS benchscale metallurgy from Highway, as a control for the waiting Goongarrie South and Goongarrie Hill programs. These results will feed into ongoing DFS work flows and continue to enhance the KNP Goongarrie Hub as a globally significant source of sustainable and ethical ESG-compliant nickel-cobalt for the lithium ion battery sector."

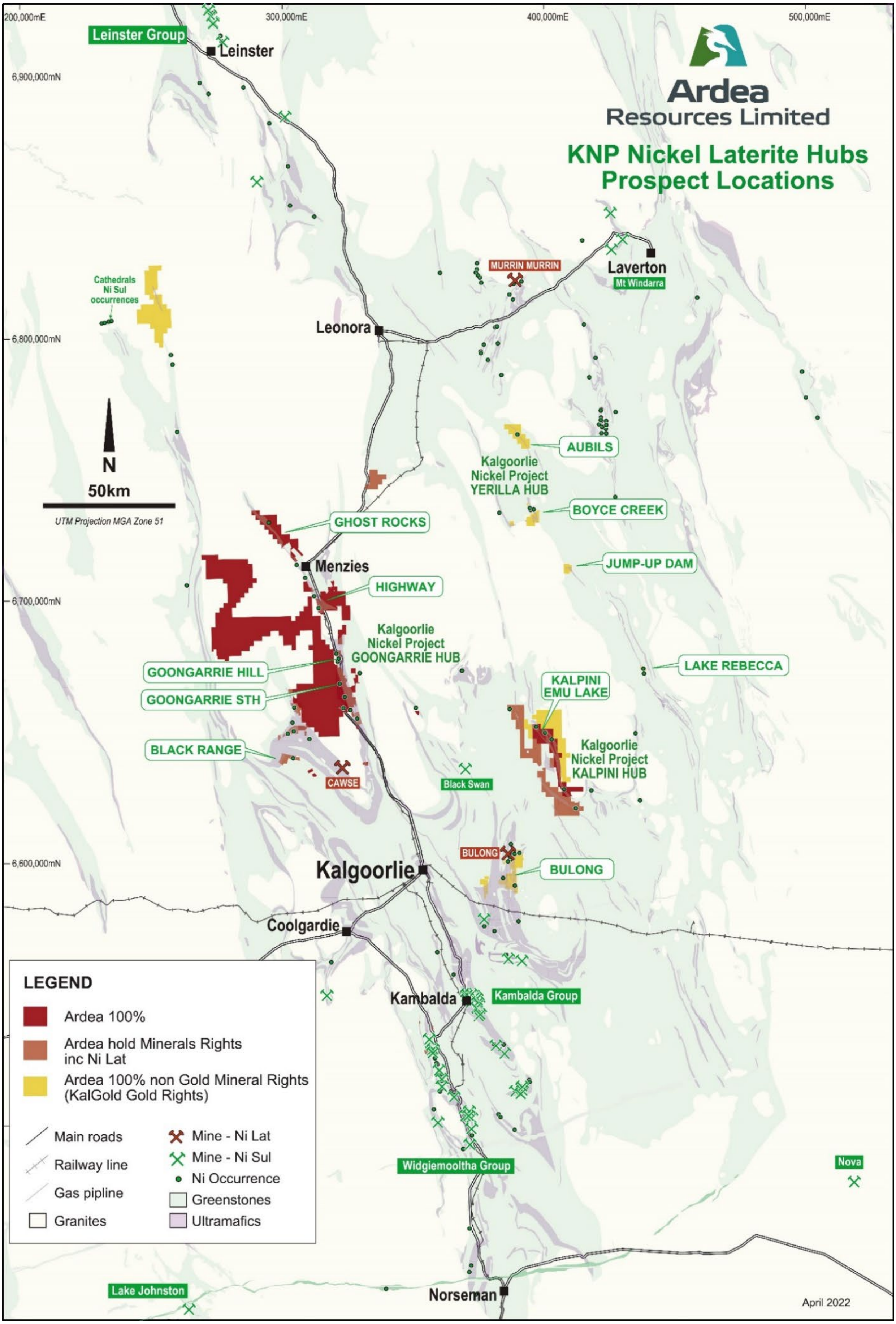

Figure 1:Ardea tenement plan highlighting the location of Goongarrie Hill within the Goongarrie Hub, including nickel laterite and nickel sulphide mines and occurrences within the region. Projection MGA 94 Zone 51.

1. METALLURGICAL DRILLING INTERCEPT SUMMARY

The drilling program was predicated on acquiring representative "Run-of-Mine" (**ROM**) Material Types for the current ALS Balcatta bench-scale metallurgical program.

In particular, high-magnesium Atmospheric Leach (**AL**) and Neutraliser Material Types were targeted. These specific geo-metallurgical Material Types are integral to the KNP flowsheet, specifically the low-carbon objective.

These Material Types are largely lacking in historic Goongarrie Hill bench-scale metallurgy, which focussed on screen beneficiation of silica-goethite mineralisation for the High Pressure Acid Leach (**HPAL**) circuit.

The diamond core drilling program has confirmed a consistent sheet geometry for the ROM mineralisation and is eminently suited to open pit bulk excavation.

With the deeper testing of the core drilling program, zones of a distinctive cave-fill style of clay mineralisation within saprock was identified, sometimes with very high nickel (**Ni**) and cobalt (**Co**) grade within the clay component. As cave-fill, such zones can be variable and not always correlate between adjoining holes. However, the recent program demonstrated good correlation between drill holes.

In selective open pit mining, the zones of high-grade haematite-goethite clay will be easily recovered through visual grade control and excavator supervision.

Intercepts in the Goongarrie Hill metallurgical drilling at 0.5% Ni and 1% Ni cut-off grades include:

Table 1: Goongarrie Hill Metallurgical Drilling Significant Intercepts

Hole	Nickel Intercept 0.5%	From	To		Nickel Intercept 1%	From	To
AGHD0001	12m @ 0.870% Ni and 0.037% Co	4	16	*including*	6m @ 1.087% Ni and 0.058% Co	10	16
	2m @ 0.514% Ni and 0.02% Co	28	30				
	2m @ 0.575% Ni and 0.023% Co	40	42				
AGHD0002	20m @ 0.779% Ni and 0.046% Co	0	20	*including*	6m @ 1.303% Ni and 0.088% Co	14	20
AGHD0003	38m @ 0.849% Ni and 0.057% Co	2	40	*including*	18m @ 1.117% Ni and 0.095% Co	4	22
AGHD0004	16m @ 0.686% Ni and 0.04% Co	4	20				
AGHD0005	18m @ 1.155% Ni and 0.059% Co	2	20		14m @ 1.223% Ni and 0.067% Co	6	20
AGHD0006	14m @ 0.874% Ni and 0.038% Co	2	16	*including*	6m @ 1.190% Ni and 0.049% Co	8	14
	4m @ 0.540% Ni and 0.013% Co	24	28				
AGHD0007	20m @ 0.695% Ni and 0.098% Co	4	24	*including*	2m @ 1.120% Ni and 0.082% Co	10	12
AGHD0008	24m @ 0.857% and 0.066% Co	28	52	including	6m @ 1.403% Ni and 0.147% Co	28	34

Minimum intercept thickness: 2m.

Maximum internal waste thickness: 4m

2. INTRODUCTION

Goongarrie Hill is located 80km northwest of the mining services capital of Australia, the City of Kalgoorlie-Boulder (Figure 1). Goongarrie Hill was included in Ardea's previous Pre-feasibility Study (**PFS**) and Expansion Study (**ES**) (ASX releases 15 February 2018 and 24 July 2018).

The Goongarrie Hill Metallurgical Core Drilling (Figure 4) was designed following the resource estimation Feasibility Study programs completed in mid-2021 (Ardea ASX release 16 June 2021).

The drill program aimed to generate drill-core test material specifically suited to the three key KNP processing circuits, being HPAL, AL and Mineralised Neutraliser (**Neut)**, as required for the low carbon KNP flowsheet.

Additionally, visual logging of the core with photography has allowed geo-metallurgical characterisation of comminution options, being SAG/ball mill grind (**Grind**) or screen beneficiation (**Bene**).

With a proposed KNP feed rate of 3.5Mtpa, the Goongarrie Hill AL and Neut feed are significant resources located some 5-7km north of the proposed plant site. Historic PFS programs had minimal metallurgical data for the AL and Neut Material Types, hence the importance of the current metallurgical programs.

The Goongarrie Hub MRE at a 0.5% Ni cut-off grade is **556Mt at 0.68% Ni and 0.045% Co** for contained metal of 3.8Mt of nickel and 248kt of cobalt (Ardea ASX release 16 June 2021, Table 5.1).

The Goongarrie Hill contribution to the Hub at a 0.5% Ni cut-off grade is **69.2Mt at 0.63% Ni and 0.032% Co** for 0.4Mt of nickel and 22kt of cobalt (Ardea ASX release 16 June 2021, Table 5.1). Of this MRE, the approximate distribution of mineralisation Material Types is estimated at:

- Goethite HPAL feed — 34.6Mt at 0.65% Ni and 0.038% Co — Figure 2a
- Nontronite-serpentine AL feed — 29.0Mt at 0.62% Ni and 0.027% Co — Figure 2b
- Mineralised Neutraliser — 5.6Mt at 0.60% Ni and 0.018% Co — Figure 2c, d

The deficiency of AL feed at Goongarrie South will be readily addressed by the abundant near-surface AL feed at nearby Goongarrie Hill.

The drilling needed to address comminution, beneficiation and geotechnical (pit wall) parameters, so intact core rather than pulverised RC chips was required for the current studies. Due to cave setting and broken ground, the core could generally not be orientated for geotechnical work.

Specifically sited geotechnical holes around proposed pit margins will in all likelihood be required, for later in the DFS program.

3. DRILL STATISTICS

Drilling at Goongarrie Hill (Figure 1, 3) was completed on 10 October 2021. A total of 8 HQ diameter diamond drill holes for a total of 385.7 metres were drilled (AGHD0001 to 8). All holes were drilled to collect HQ drill core with a core diameter of 63.5mm to secure sufficient sample volume for bench-scale metallurgical test-work at ALS Balcatta.

Half core was used in assay and metallurgy studies, with the remaining half core to be used for specialised beneficiation programs later in the DFS.

No major drilling issues occurred. Minor issues included voids within the nickel laterite that made drilling difficult with occasional poor core recovery.

Fig 2a
LDF_GZ
Laterite Duricrust on Clay Upper Goeth suited to Grind/HPAL circuit

AGHD0003
4.1-7.5m
1.219% Ni
0.159% Co
20.7% Fe
2.4% Mg
24.2% Si
8.0% LOI

Fig 2b
CUG_S
Clay Upper Goethite-Silica suited to Bene/HPAL circuit

AGHD0003
21.6-24.6m
0.98% Ni
0.040% Co
19.1% Fe
0.7% Mg
28.4% Si
5.0% LOI

Fig 2c
CVEG_S
Clay Void-fill Goeth suited to Screen/AL circuit

AGHD0003
29.6-33.2m
0.66% Ni
0.019% Co
8.2% Fe
5.3% Mg
33.2% Si
5.8% LOI

Fig 2d
SRMG
Saprock Mag-Goeth suited to Neutraliser circuit

AGHD0003
52.7-55.9m
0.30% Ni
0.011% Co
4.8% Fe
21.0% Mg
13.0% Si
25.7% LOI

Figure 2: Goongarrie Hill Material Types, being a depth "pseudo-section" from Clay Upper, then Clay Void-fill, then Saprock being a typical laterite residual regolith sequence. The regolith code is first alphas for matrix, after "_" for clasts.

Note that the magnesite saprock in figure 2d is a potential feedstock for magnesia (key input for MHP production).

4. GOONGARRIE HILL GEOLOGICAL MODEL

Sections are presented from south (Figure 5) to north (Figure 8) as a representation of the Goongarrie Hill ROM nickel laterite mineralisation, as required for the current systematic metallurgical evaluation.

Regolith - Mineralisation

There is a standard KNP residual regolith profile at Goongarrie Hill, with only a veneer of alluvials, and the lacustrine deposition cover as seen at Goongarrie South totally absent. The Saprock component of the Goongarrie Hill regolith profile is commonly seen at surface, being the host to historic chrysoprase gemstone workings (at Goongarrie South, Saprock typically occurs at depths of 20-120m).

The Goongarrie Hill surface is commonly a red cemented ferruginous haematitic Laterite Duricrust (Regolith Cycle 2) formed on the older yellow goethitic Clay Upper and Clay Lower mineralisation (Regolith Cycle 1).

Pedogenic – Regolith Cycle 3 - Residual (youngest Cycle)

The modern soil profile is a veneer of 0-2m haematite gravel with dolomite cement on an ultramafic magnesian regolith (often Saprock).

Laterite – Regolith Cycle 2 - Residual

Laterite Duricrust is dominantly a ferruginous (>25% Fe) hard-cap and usually develops on a mineralised goethite cumulate substrate. The laterite is often mineralised and suited to Grind/HPAL, and so unsuited to site civil engineering.

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

The main mineralised zone at Goongarrie Hill is termed Clay Upper/Lower and occurs dominantly from Cycle 2 Laterite Duricrust to the top of Cycle 1 Carbonated Saprock (Figures 5 - 8).

Clay Upper mineralogy is dominantly clay-textured goethite "mud", 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 and Zn enrichment.

Clay Upper is a very obvious HPAL feed, due to its high iron content (15 to 45% Fe).

The continuity of Clay Upper/Lower mineralisation at Goongarrie Hill ensures predictability and accuracy for mine scheduling, significantly diminishing future production risks.

Clay Lower – Regolith Cycle 1 - Residual

Clay Lower is the mineralisation host immediately above Saprock. Clay Lower is goethite, with accessory silica, nontronite-chlorite-serpentine (green flecks) and magnesite (white-brown coloration).

At Goongarrie Hill, the Clay Lower is gradational into Clay-Void-fill (which in turn is gradational into Saprock).

Clay Lower is clearly an AL feed (<15% Fe, typically >5% Mg).

Clay Void-fill – Regolith Cycle 1 - Residual

Clay Void-fill is a distinctive karst-style breccia deposit variously found throughout carbonate Saprock, consisting of irregular angular fragments of silicified "olivine cumulate textured" Saprock "floating" in a dark yellow or red goethitic and haematitic mud matrix (Figure 2c). The matrix may contain high nickel grades. Where carbonate "scats" rather than silica, these are to be assessed as a potential neutraliser in the current ALS metallurgical program.

The silicified fragments may be suited as a SAG mill grinding media, which is attractive in view of the nickel credit of Clay Void-fill (typically 0.5-1.3% Ni) and scats (typically 0.3-0.4% Ni).

Saprock – Regolith Cycle 1 - Residual

Saprock is a hard carbonated weathered rock with strong remnant olivine cumulate textures of the ultramafic bedrock. The hard Saprock is easily distinguished from the overlying soft ore, so the base of ore will be readily distinguished in grade control and selective mining.

Saprock is suited as an HPAL discharge neutraliser, with the focus on nickel-bearing serpentine silicate (target 0.4-0.8% Ni) and less so on carbonate.

Protolith - Bedrock

The Goongarrie Hill nickel-cobalt mineralisation is hosted by the Walter Williams Formation (**WWF**), a 2.7 billon year old olivine cumulate komatiite volcanic flow sequence. The flow at its western contact overlies Missouri Basalt (conformable volcanic contact). The upper eastern contact is conformable Siberia Komatiite.

At Goongarrie Hill, the protolith is dominantly olivine adcumulate which weathers to characteristic siliceous mineralisation suited to screen beneficiation.

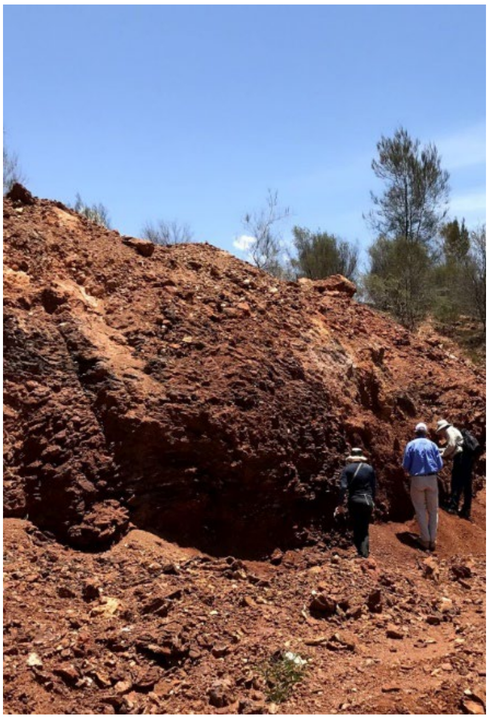

Figure 3a: Southern Goongarrie Hill, historic chrysoprase gemstone workings near Ardea diamond drill hole AGHD0001, photograph facing northwest.

The pit face is approximately 6 metres high and consists of flat lying "plates" of silica "floating" in a fine matrix of dark red haematitic "mud". The morphology of the deposit suggests a "cave-fill" deposit, or speleothem.

Based on historic face samples from Heron Resources Limited the previous owner of the KNP, this style of mineralisation is expected to upgrade very well, through screening out the barren "plates" of silica (Heron Resources, Annual Report 1999).

This particular exposure is the locality in which Heron first developed its screen beneficiation model for the Goongarrie Hill nickel laterite mineralisation. The barren silica plates are removed by simple screening to convert a low-grade 0.7% nickel in situ plant feed into a high-grade leach feed into the HPAL autoclave.

Figure 3b: The drilled equivalent of the above "cave-fill", AGHD0001 45.0-48.3m, characteristic "plates" of silica "floating" in a fine matrix of dark red haematitic "mud."

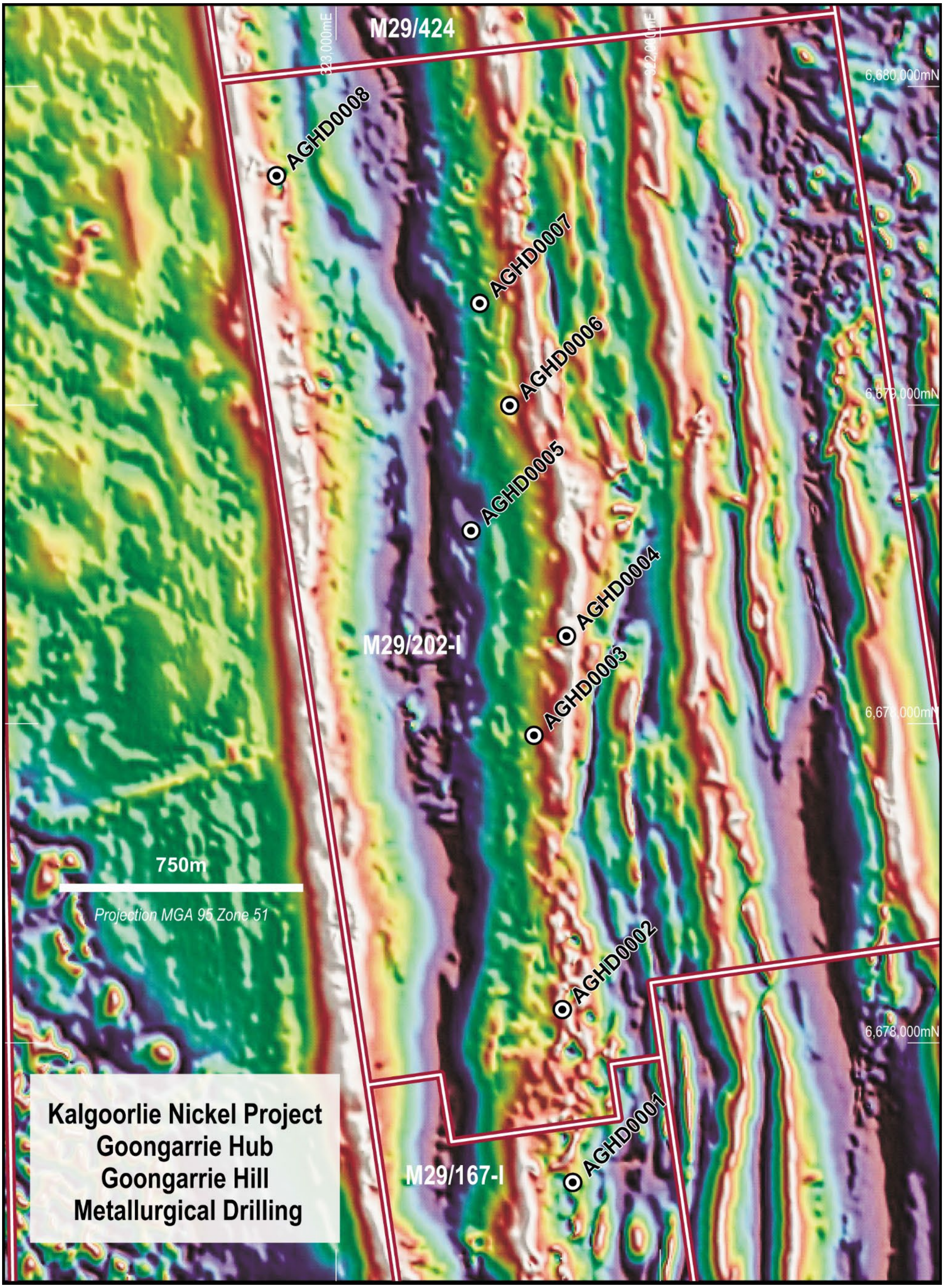

Figure 4: Goongarrie Hill (KNP Feasibility Study) – Diamond drill hole collars and magnetics plan (Total Magnetic Intensity -TMI) 5m Tilt Angle of Reduced to Pole TMI with North. Projection MGA 94 Zone 51.

5. INTERPRETATIONS

Pit Designs and Geotechnical Implications

The Goongarrie Hub production schedule is focussed on the high grade goethite-asbolite mineralisation for the HPAL mining and processing operation at Goongarrie South.

The current Goongarrie Hill drilling program has closely confirmed resource interpretations based on historic drilling, providing confidence for a mass excavation nickel laterite mining operation.

The Goongarrie Hill strategy is to have a pit in proximity to Goongarrie South that is readily available as a shallow, low strip ratio source of Atmospheric Leach feed at times when the Goongarrie South operation schedule is deficient in that geo-metallurgical type.

In the longer term, Goongarrie Hill, with Highway, will be developed as the base loads for the Goongarrie Beneficiation HPAL circuit. The current drill core is scheduled for metallurgical test work in late 2022 aimed at validating historic beneficiation studies by Vale Inco in their 2005-2009 PFS.

Goongarrie Hill lacks the intense shearing and alteration seen in the Bardoc Tectonic Zone (**BTZ**) regional structures at Goongarrie South. Accordingly, Goongarrie Hill pit depths will rarely exceed 40m and mining will be very much a typical Eastern Goldfields open pit. No geotechnical issues would be expected, though confirmation drilling will be done later in the DFS program.

Once the in-progress ALS metallurgical test work program and in particular beneficiation studies has been completed, the additional information gained will be utilised in completing the DFS resource optimisation, mine plan and detailed schedule to enable an updated KNP Goongarrie Hub ore reserve to be defined.

Precious Metals and Pathfinders

At Goongarrie Hill, the nickel laterite in the recent drilling sporadically assays at 0.05 to 0.22g/t Au, with up to 18g/t Ag, 0.01% W and 43ppm Sb. The absence of the BTZ reflects in the lower precious metal background.

Heavy Minerals By-product

The current flow-sheet proposes the following comminution circuit:

- Jaw-crush then to SAG mill for a -1mm feed.
- Gravity circuit (cyclones, spirals) for chromite removal (due to the potentially abrasive nature of chromite grains in the HPAL autoclave).
- Either Grind circuit for non-siliceous feed or Bene circuit for low-grade nickel siliceous feed.

The gravity circuit chromite concentrate may potentially contain heavy minerals, inferred from the multi-element suite to include gold.

The Goongarrie South plant site will in any event likely include a gravity circuit, which would recover any Goongarrie Hill gold credit.

Assessment of the mineralogical hosts and heavy mineral recovery options is a low-priority work stream in the current ALS bench-scale metallurgy program.

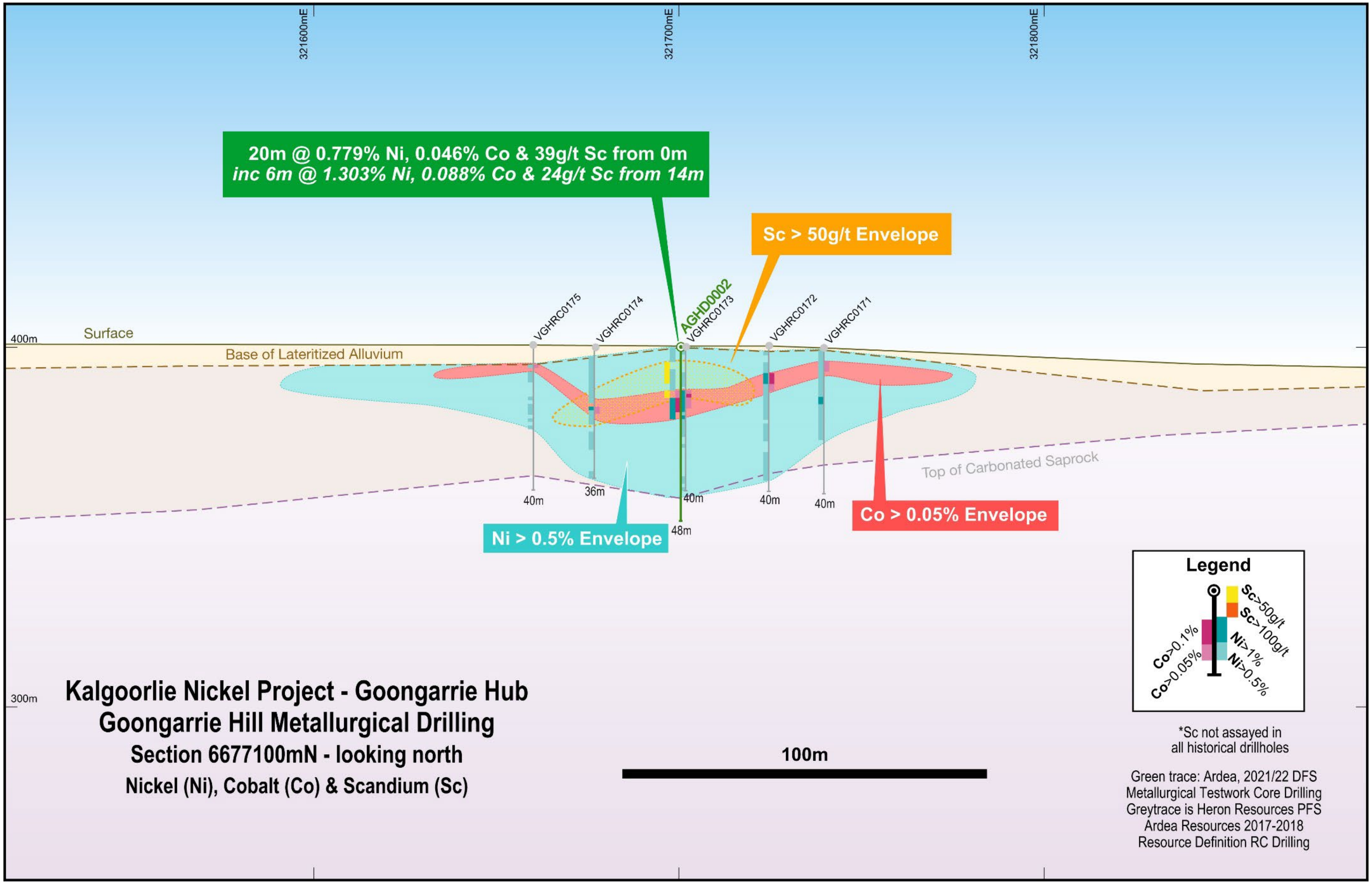

Figure 5: Section 667 7100mN

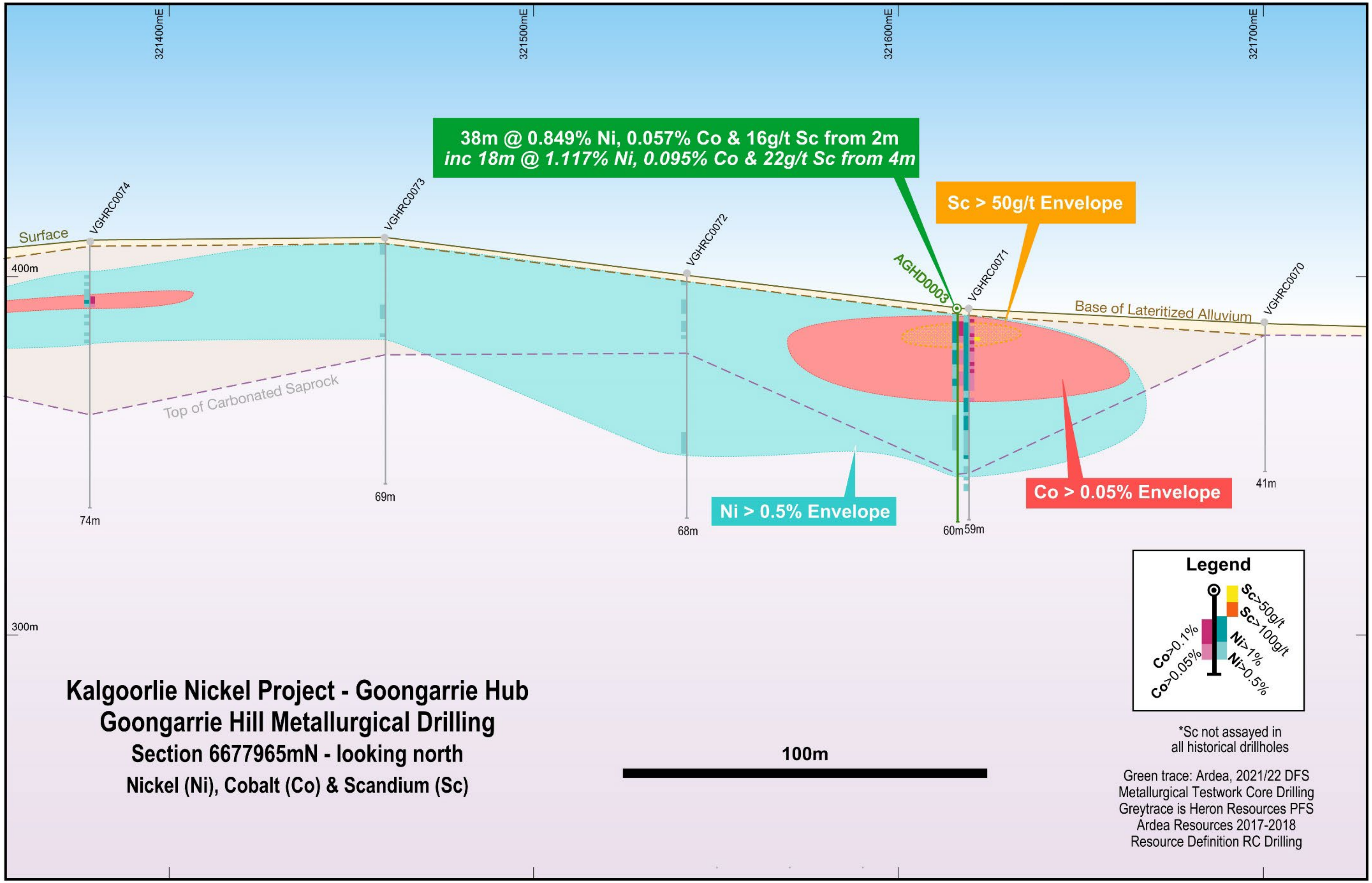

Figure 6: Section 667 7965mN

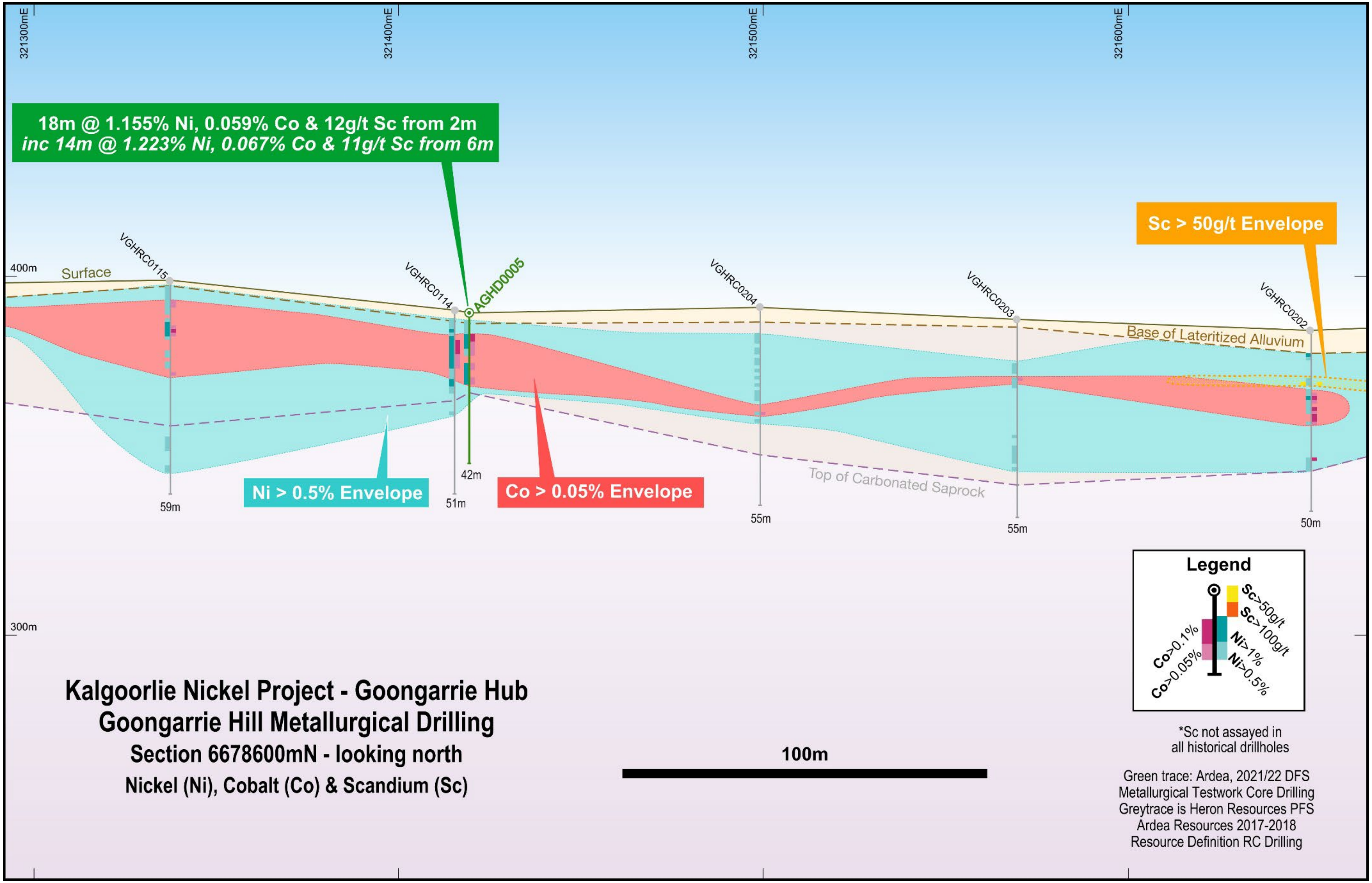

Figure 7: Section 667 8600mN

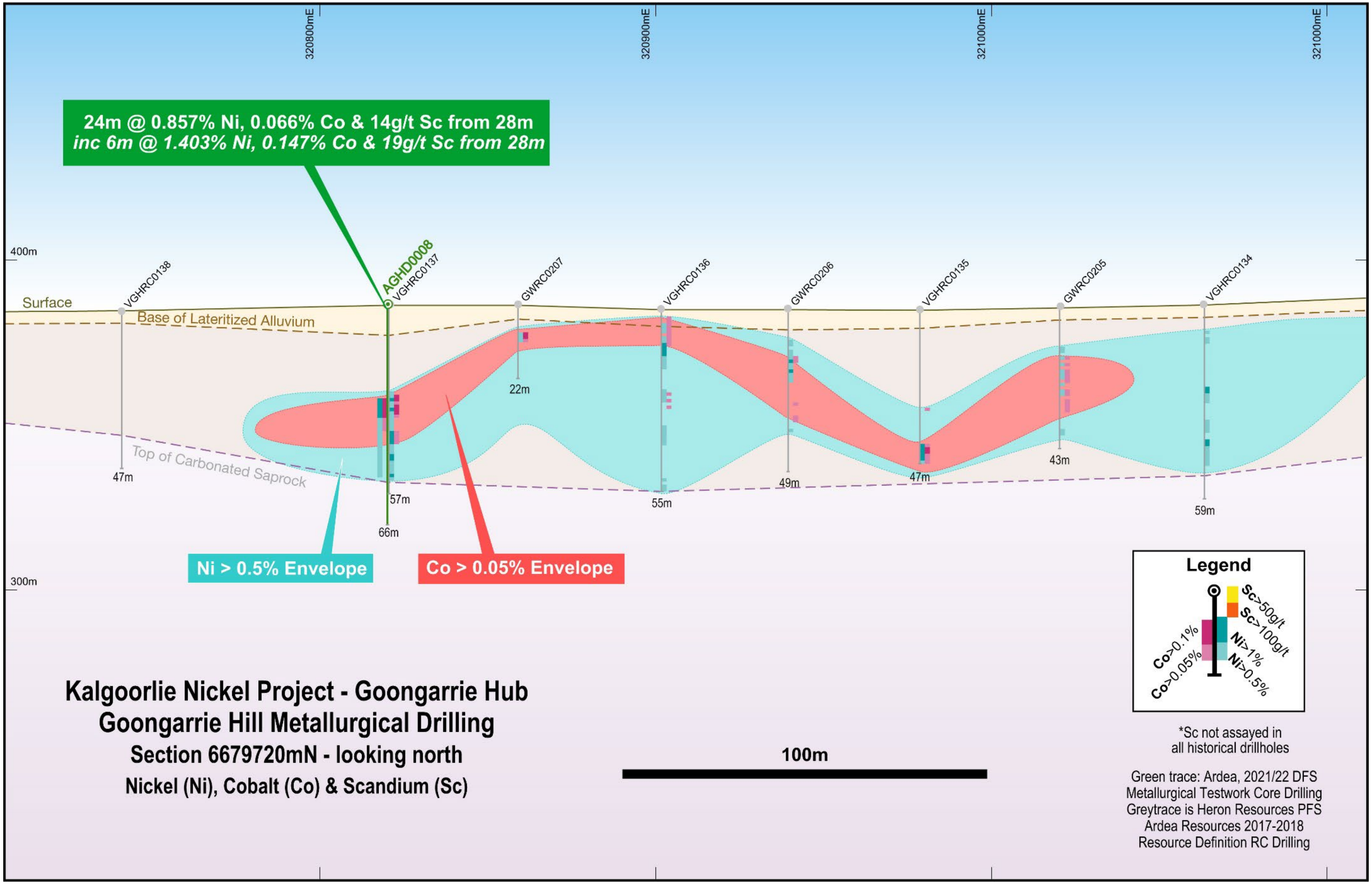

Figure 8: Section 667 9720mN

6. SUMMARY AND CONCLUSIONS

The Goongarrie Hill Metallurgical Drilling has been a valuable addition to the Feasibility Study work programs. The Kalgoorlie Team are again to be commended for their program execution.

Key highlights include:

- Successful completion of 8 HQ core holes for 385.7 metres with no safety incidents.
- Good geological and assay correlation between new Ardea twin diamond drill (DD) holes and historic Reverse Circulation (RC) holes, providing confidence in the Goongarrie Hill MRE.
- In particular, the prominent Cave-fill mineralisation style has replicated well in the twin holes, providing confidence for an effective grade control system when mining commences.
- The Goongarrie Hill nontronite-serpentine mineralisation was not targeted in historic drilling. The extensive sheet of high-magnesium mineralisation confirmed in the current drilling is suited as a key component of the proposed KNP AL feed at the proposed rate of 0.5Mtpa (Goongarrie Hill would easily support an increase in this production rate if so required for site energy balance).
- The Atmospheric Leach material provides strategic benefits in terms of resource utilisation, onsite energy sourcing and carbon footprint reduction. The Goongarrie Hill drill results continue to provide strong support for the KNP low-carbon model.
- Test work continues to advance at the ALS metallurgical laboratory in Balcatta Perth, specifically evaluating the AL and Mineralised Neutraliser components of the flowsheet (Ardea ASX release 25 January 2022).
- Once test work results are available, the knowledge gained will be incorporated into the detailed resource optimisation, mine design and scheduling studies that will be the basis for defining an ore reserve for the DFS.

7. ONGOING WORK AT GOONGARRIE HILL

The 2021 Goongarrie Hill drilling continues to be the specialised source of metallurgical test material for current DFS programs.

The programs are being run at ALS Balcatta and are supervised by Ardea’s full-time metallurgical team.

Geo-metallurgy

The ALS bench-scale programs will test the geo-metallurgical interpretations from the eight Ardea Goongarrie Hill core holes once the higher priority ALS Goongarrie South program is completed.

Specifically, the amenability to screen beneficiation at Goongarrie Hill and generating algorithms to predict leach feed grades is required before Goongarrie Hub DFS pit optimisations can commence.

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

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

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About Ardea Resources

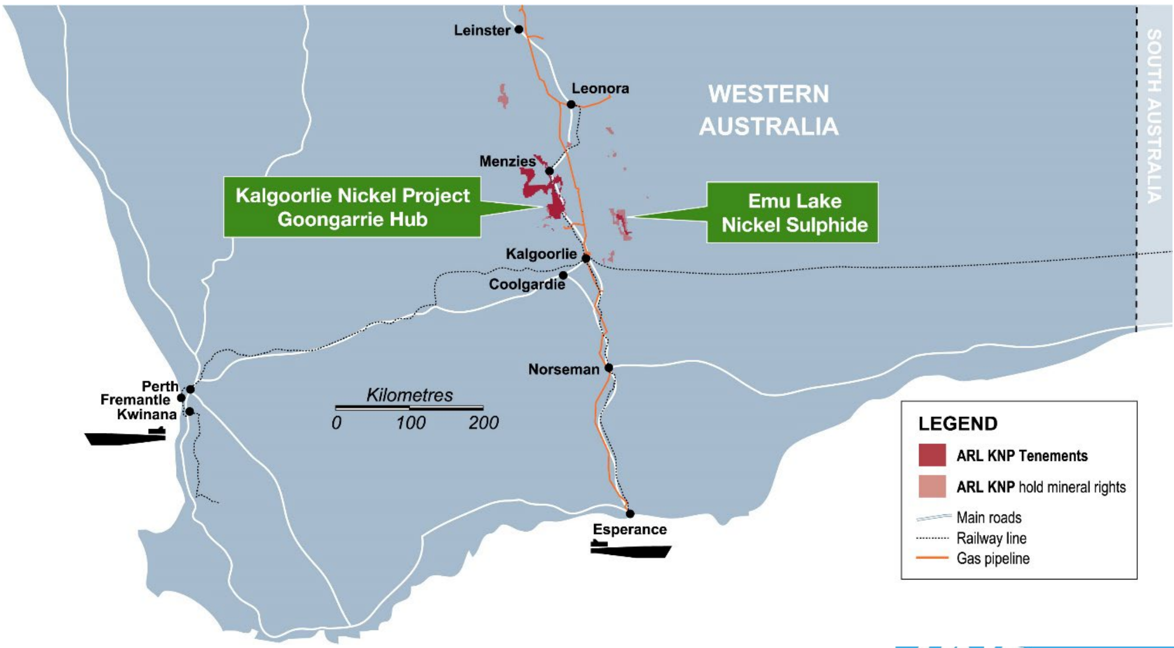
Ardea Resources (ASX:ARL) is an ASX-listed nickel resources company, with a large portfolio of 100%-controlled West Australian-based projects, focussed on:

- 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 **830Mt at 0.71% nickel and 0.046% cobalt for 5.9Mt of contained nickel and 380kt of contained cobalt** (Ardea ASX releases 15 February, 16 June 2021), located in a jurisdiction with exemplary Environmental Social and Governance (**ESG**) credentials, notably environment.
- Advanced-stage exploration at compelling nickel sulphide targets, such as Emu Lake, and Critical Minerals targets including scandium and Rare Earth Elements throughout the KNP Eastern Goldfields world-class nickel-gold province, with all exploration targets complementing the KNP nickel development strategy.

Ardea's KNP development with its 5.9 million tonnes of contained nickel is the foundation of the Company, with the nickel sulphide exploration, such as Emu Lake, as an evolving contribution to Ardea's building of a green, forward-facing integrated nickel company.

Put simply, in the Lithium Ion Battery (**LIB**) sector, the Electric Vehicle and Energy Storage System battery customers demand an ESG-compliant, sustainable, and ethical supply chain for nickel and other inputs. In the wet tropics, with their signature HPAL submarine tailings disposal and rain forest habitat destruction, an acceptable ESG regime is problematic. In contrast, the world-class semi-arid, temperate KNP Great Western Woodlands with its benign environmental setting is likely the single greatest asset of the KNP.

The KNP is located in a well-established mining jurisdiction with absolute geopolitical acceptance and none of the land-use and societal conflicts that commonly characterise nickel laterite proposals elsewhere. All KNP Goongarrie Hub production tenure is on granted Mining Leases with Native Title Agreement in place.



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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 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 create and spin-out a gold focussed Company, 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.

Compliance Statement (JORC Code 2012)

The exploration and industry benchmarking summaries are based on information reviewed or compiled by Mr. Ian Buchhorn, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Buchhorn is a full-time employee of Ardea Resources Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn 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. Mr Buchhorn owns Ardea shares.

Appendix 1 – Collar location data

Drillholes by Ardea Resources at Goongarrie Hill

Drill hole	Historic Twin	Type	Depth (m)	Tenement	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azi (°)
AGHD0001	GWRC0036	DD	48.3	M29/00167	MGA94_51	321735	6676558	401.04	-90	0
AGHD0002	VGHRC0173	DD	48.3	M29/00202	MGA94_51	321701	6677100	400.07	-90	0
AGHD0003	VGHRC0071	DD	60	M29/00202	MGA94_51	321616	6677963	391.6	-90	0
AGHD0004	VGHRC0092	DD	36.4	M29/00202	MGA94_51	321713	6678275	390.47	-90	0
AGHD0005	VGHRC0114	DD	42	M29/00202	MGA94_51	321419	6678601	389.99	-90	0
AGHD0006	GWRC0224	DD	42.1	M29/00202	MGA94_51	321538	6678998	389.57	-90	0
AGHD0007	GWRC0221	DD	42.2	M29/00202	MGA94_51	321446	6679318	389.52	-90	0
AGHD0008	VGHRC0137	DD	66.4	M29/00202	MGA94_51	320820	6679720	386.13	-90	0

Appendix 2 – Assay results from Goongarrie Hill Metallurgical Drilling

All assays from recent drilling at Goongarrie Hill.

Abbreviations used: Ni – nickel, Co – cobalt, Mn – Manganese, Sc – scandium, Cr – chromium, Fe – iron, Mg – magnesium, Al – aluminium, Si – silicon, **LOI** – Loss on Ignition, Nd – neodymium (a REE), Pr – praseodymium (a REE), Au – gold, Ag – Silver, W ¬ Tungsten, Sb – Antimony, Bi – Bismuth ,Pb – Lead, As ¬– arsenic, Li – Lithium g/t – grams per tonne (=ppm parts per million), bd – below detection, ns – no sample.

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0001	0	2	AR045908	0.23	0.026	0.16	32	0.39	24.4	3.2	2.8	16.5	12.2	6	1	0.007	bd	2	2	0.3	bd	220	5
AGHD0001	2	4	AR045909	0.36	0.025	0.06	20	0.28	22.6	5.1	2.7	20.5	8.2	6	1	0.005	bd	8	11.9	0.3	bd	440	5
AGHD0001	4	6	AR045912	0.56	0.023	0.08	26	0.36	24.6	4.4	2.8	19.0	8.8	3	1	0.006	bd	5	6.9	0.2	bd	200	14
AGHD0001	6	8	AR045913	0.69	0.012	0.04	14	0.25	13.6	2.5	1.2	30.6	5.6	0	0	0.008	bd	3	1.3	0.0	bd	30	3
AGHD0001	8	10	AR045914	0.70	0.014	0.08	17	0.27	19.8	3.1	1.3	25.0	7.1	1	0	0.005	bd	4	1.9	0.1	bd	90	4
AGHD0001	10	12	AR045915	1.09	0.053	0.19	26	0.44	22.8	3.6	2.0	21.1	7.6	2	0	0.005	bd	4	3.6	0.0	bd	50	2
AGHD0001	12	14	AR045916	1.05	0.06	0.35	28	0.39	21.9	4.3	2.0	21.3	7.4	9	2	0.009	bd	5	4.6	0.0	bd	60	23
AGHD0001	14	16	AR045917	1.12	0.06	0.31	24	0.40	19.8	4.8	1.8	22.2	7.9	5	1	0.007	bd	5	2.9	0.0	bd	40	4
AGHD0001	16	28	AGHD0001_16_28	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0001	28	30	AR045918	0.51	0.02	0.16	12	0.21	9.1	12.6	1.0	24.9	8.6	0	0	bd	bd	4	0.9	0.0	bd	20	7
AGHD0001	30	32	AR045919	0.37	0.014	0.11	9	0.16	6.7	12.3	0.7	21.1	15.7	1	0	0.002	0.6	3	0.9	0.0	bd	20	6
AGHD0001	32	34	AR045922	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0001	34	36	AR045923	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0001	36	38	AR045924	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0001	38	40	AR045925	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0001	40	42	AR045926	0.58	0.023	0.20	16	0.28	11.7	10.8	1.4	23.8	8.5	1	0	0.001	0.1	4	2.3	0.0	bd	40	4
AGHD0001	42	44	AR045927	0.28	0.011	0.09	9	0.14	5.3	13.3	0.7	13.3	25.6	1	0	bd	bd	3	1.2	0.1	bd	30	3
AGHD0001	44	46	AR045928	0.24	0.013	0.11	8	0.16	5.9	7.2	0.7	29.9	9.7	1	0	0.003	bd	4	1.3	0.1	bd	40	3
AGHD0001	46	48.3	AR045929	0.20	0.01	0.09	8	0.16	5.7	5.3	0.6	35.0	5.7	1	0	0.001	0.1	3	1.6	0.1	bd	40	4
AGHD0002	0	2	AR045932	0.76	0.033	0.05	45	1.08	43.2	0.6	3.7	6.8	11.5	3	1	0.003	bd	5	11.7	0.6	bd	140	3
AGHD0002	2	4	AR045933	0.59	0.023	0.06	34	1.14	41.4	0.3	4.7	7.5	11.3	3	1	0.002	bd	4	6.2	0.2	bd	70	6
AGHD0002	4	6	AR045934	0.38	0.006	0.06	57	0.98	34.5	0.4	6.8	9.5	12.5	3	1	0.003	bd	6	3.1	0.4	bd	40	3
AGHD0002	6	8	AR045935	0.50	0.017	0.09	49	1.54	38.3	0.5	6.0	8.1	11.1	2	0	0.002	bd	5	9.2	0.3	bd	110	4

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0002	8	10	AR045936	0.66	0.014	0.12	45	1.51	46.6	0.5	3.0	4.6	12.0	2	0	0.002	0.1	9	15.3	0.3	bd	250	6
AGHD0002	10	12	AR045937	0.52	0.01	0.16	42	2.59	36.7	0.5	6.6	7.5	11.3	2	0	0.005	bd	6	7.5	0.1	bd	100	6
AGHD0002	12	14	AR045938	0.47	0.091	0.96	49	2.57	39.3	0.6	5.1	8.3	7.9	9	2	0.006	0.2	9	4.6	0.1	bd	50	9
AGHD0002	14	16	AR045939	1.30	0.102	0.33	39	3.24	32.4	2.0	2.5	12.9	8.5	20	4	0.161	bd	4	1.9	0.1	bd	20	3
AGHD0002	16	18	AR045942	1.38	0.115	0.47	20	2.27	22.1	3.2	1.4	21.1	7.1	12	3	0.006	0.2	5	1.9	0.1	bd	10	bd
AGHD0002	18	20	AR045943	1.23	0.048	0.22	12	1.47	13.7	6.6	1.0	25.4	7.5	2	0	0.007	0.3	4	3	0.1	bd	10	bd
AGHD0002	20	26	AGHD0002_20_26	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0002	26	28	AR045944	0.46	0.018	0.11	11	0.70	8.6	14.3	1.3	23.4	9.0	1	0	0.003	bd	1	0.8	0.0	bd	bd	3
AGHD0002	28	30	AR045945	0.37	0.017	0.11	10	0.83	8.3	14.2	1.4	23.5	9.0	1	0	0.003	bd	1	0.8	0.0	bd	bd	4
AGHD0002	30	32	AR045946	0.39	0.021	0.15	9	0.48	9.2	8.6	0.8	28.6	7.2	1	0	bd	0.1	2	0.8	0.0	bd	10	bd
AGHD0002	32	34	AR045947	0.39	0.02	0.14	8	0.59	9.2	9.7	0.7	28.0	7.1	0	0	bd	bd	1	0.8	0.0	bd	bd	2
AGHD0002	34	36	AR045948	0.34	0.017	0.13	10	0.59	8.0	14.1	1.2	24.1	8.9	0	0	0.002	0.7	4	0.9	0.0	bd	bd	4
AGHD0002	36	38	AR045949	0.38	0.02	0.14	8	0.64	9.1	9.5	0.7	28.2	7.0	0	0	0.009	0.3	3	1	0.0	bd	10	3
AGHD0002	38	40	AR045952	0.36	0.018	0.13	7	0.35	7.9	9.3	0.5	17.7	21.5	0	0	0.002	0.1	2	0.6	0.0	bd	10	2
AGHD0002	40	42	AR045953	0.37	0.02	0.13	8	0.30	9.1	8.0	0.5	23.7	14.1	0	0	bd	0.2	2	0.7	0.0	bd	10	4
AGHD0002	42	44	AR045954	0.34	0.01	0.09	6	0.18	5.4	15.9	0.4	13.7	29.5	0	0	bd	bd	1	0.4	0.0	bd	10	2
AGHD0002	44	46	AR045955	0.32	0.01	0.08	6	0.35	6.6	14.6	0.3	14.3	28.5	0	0	0.002	bd	1	0.4	0.0	bd	10	4
AGHD0002	46	48.3	AR045956	0.26	0.009	0.07	3	0.23	4.7	16.2	0.2	13.7	30.4	0	0	0.006	bd	1	0.4	0.0	bd	10	3
AGHD0003	0	2	AR045957	0.36	0.013	0.06	16	0.52	18.0	4.4	1.9	19.8	14.0	7	2	0.023	bd	6	3.1	0.1	100	60	4
AGHD0003	2	4	AR045958	0.69	0.027	0.08	25	0.91	29.7	3.5	2.2	13.9	13.3	8	2	0.018	0.1	20	7.4	0.1	bd	120	4
AGHD0003	4	6	AR045959	1.19	0.264	0.95	15	0.46	18.7	1.4	0.8	27.0	6.4	6	2	0.029	bd	8	2	0.0	100	30	2
AGHD0003	6	8	AR045962	1.30	0.173	0.59	18	0.62	22.7	3.4	0.7	21.4	9.6	7	2	0.037	0.1	14	3.4	0.1	bd	90	3
AGHD0003	8	10	AR045963	1.32	0.081	0.26	34	1.27	37.6	1.9	2.0	10.5	10.6	11	2	0.019	1.1	32	13.5	0.2	bd	410	4
AGHD0003	10	12	AR045964	0.82	0.042	0.12	30	1.00	24.9	0.6	2.4	22.8	6.5	9	2	0.162	1.7	15	13.4	0.2	bd	480	3
AGHD0003	12	14	AR045965	1.16	0.083	0.30	24	1.12	26.5	0.8	1.2	22.1	6.3	5	1	0.154	1.1	14	21.9	0.2	bd	430	4
AGHD0003	14	16	AR045966	1.57	0.085	0.40	23	1.15	32.9	1.1	0.9	17.1	7.0	4	1	0.045	0.4	25	15	0.1	bd	410	4
AGHD0003	16	18	AR045967	0.74	0.025	0.15	14	0.55	16.1	0.6	0.8	31.6	4.0	1	0	0.206	0.3	10	8.9	0.1	100	190	7
AGHD0003	18	20	AR045968	0.79	0.051	0.24	18	0.71	16.6	0.5	1.5	30.4	4.4	1	0	0.191	0.3	7	14.5	0.1	bd	260	7
AGHD0003	20	22	AR045969	1.16	0.055	0.38	20	0.64	20.1	1.0	1.2	26.9	5.7	1	0	0.136	0.3	14	5.9	0.1	bd	240	4
AGHD0003	22	24	AR045972	0.79	0.024	0.12	18	0.77	18.1	0.4	1.1	29.9	4.4	0	0	0.102	0.6	8	9.4	0.1	bd	380	7

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0003	24	26	AR045973	0.67	0.042	0.20	13	0.56	13.2	0.4	1.0	33.6	3.9	0	0	0.034	0.4	4	5.7	0.1	bd	270	6
AGHD0003	26	28	AR045974	0.41	0.017	0.09	10	0.25	7.4	1.3	0.8	38.0	2.9	0	0	0.033	1	6	1.8	0.1	100	110	4
AGHD0003	28	30	AR045975	0.47	0.019	0.16	8	0.20	7.6	4.3	0.5	35.5	3.5	0	0	0.061	0.4	3	2.1	0.1	bd	140	8
AGHD0003	30	32	AR045976	0.73	0.024	0.15	10	0.31	9.8	5.0	0.4	32.0	6.0	0	0	0.065	0.2	2	1.8	0.1	bd	80	4
AGHD0003	32	34	AR045977	0.59	0.013	0.08	7	0.19	6.6	5.6	0.2	34.3	5.6	0	bd	0.033	bd	2	1.9	0.1	100	60	bd
AGHD0003	34	36	AR045978	0.67	0.018	0.13	6	0.23	7.9	10.6	0.2	28.5	7.7	0	0	0.03	bd	2	2.2	0.1	bd	60	bd
AGHD0003	36	38	AR045979	0.55	0.018	0.13	6	0.24	7.6	9.0	0.2	30.8	6.0	0	bd	0.131	bd	2	4.1	0.2	bd	220	3
AGHD0003	38	40	AR045982	0.52	0.014	0.08	6	0.18	6.0	11.3	0.1	29.8	7.3	0	bd	0.107	bd	2	6.9	0.2	bd	120	bd
AGHD0003	40	42	AR045983	0.49	0.016	0.12	6	0.19	6.5	9.8	0.1	31.2	5.8	0	bd	0.06	bd	2	12.5	0.2	bd	170	2
AGHD0003	42	44	AR045984	0.35	0.013	0.10	5	0.12	5.4	10.4	0.1	32.6	4.2	0	bd	0.019	bd	3	2.8	0.2	bd	150	3
AGHD0003	44	46	AR045985	0.44	0.016	0.12	5	0.17	6.8	13.9	0.1	28.0	5.5	0	bd	0.041	0.1	3	12.6	0.2	bd	200	bd
AGHD0003	46	48	AR045986	0.29	0.009	0.05	4	0.09	3.5	9.9	0.1	29.6	10.7	0	bd	0.028	bd	2	6.2	0.1	bd	120	2
AGHD0003	48	50	AR045987	0.24	0.014	0.09	5	0.11	4.5	8.3	0.1	29.1	12.2	0	bd	0.015	bd	2	3.3	0.1	bd	80	3
AGHD0003	50	52	AR045988	0.20	0.013	0.07	5	0.12	4.8	7.4	0.1	28.2	14.4	0	bd	0.001	0.2	3	1	0.0	bd	50	2
AGHD0003	52	54	AR045989	0.33	0.012	0.07	4	0.17	5.2	20.0	0.1	13.1	25.8	0	bd	0.034	0.6	5	1.9	0.0	bd	70	2
AGHD0003	54	56	AR045992	0.28	0.01	0.07	4	0.11	4.4	22.0	0.1	12.9	25.7	0	bd	0.005	bd	2	1.5	0.0	bd	60	1
AGHD0003	56	58	AR045993	0.27	0.009	0.06	4	0.10	4.3	23.8	0.1	13.4	24.3	0	bd	0.002	bd	2	1.9	0.1	bd	70	bd
AGHD0003	58	60	AR045994	0.26	0.01	0.07	4	0.10	4.5	24.5	0.1	14.8	19.2	0	bd	0.019	bd	2	1.4	0.1	bd	80	2
AGHD0004	0	2	AR045995	0.38	0.015	0.03	8	0.17	6.1	17.7	0.5	22.7	10.5	1	0	0.054	bd	2	3	0.2	bd	20	ns
AGHD0004	2	4	AR045996	0.46	0.03	0.08	10	0.20	7.7	16.5	0.7	22.7	10.0	3	1	0.04	bd	2	3.8	0.2	bd	30	ns
AGHD0004	4	6	AR045997	0.88	0.069	0.19	25	0.46	16.6	4.8	2.1	23.5	8.8	5	1	0.087	bd	5	6.6	0.4	bd	70	ns
AGHD0004	6	8	AR045998	0.52	0.055	0.15	17	0.29	9.9	13.5	1.7	22.4	9.5	2	1	0.036	bd	3	2.4	0.1	bd	30	ns
AGHD0004	8	10	AR045999	0.69	0.044	0.26	16	0.32	11.9	8.8	1.6	25.0	8.2	3	1	0.044	bd	6	3.5	0.2	bd	40	ns
AGHD0004	10	12	AR046002	0.67	0.04	0.21	17	0.38	14.8	1.4	1.3	30.2	5.8	2	0	0.168	bd	8	5.4	0.2	bd	70	ns
AGHD0004	12	14	AR046003	0.66	0.035	0.25	17	0.37	16.4	1.3	1.0	29.6	5.8	2	0	0.023	bd	6	4.1	0.2	bd	50	ns
AGHD0004	14	16	AR046004	0.73	0.025	0.19	19	0.85	18.4	1.6	1.3	27.1	6.0	2	0	0.224	bd	6	4.8	0.2	bd	30	ns
AGHD0004	16	18	AR046005	0.77	0.029	0.27	15	0.39	13.8	3.6	1.0	29.2	5.8	1	0	0.027	bd	3	3	0.2	bd	40	ns
AGHD0004	18	20	AR046006	0.57	0.024	0.19	12	0.27	11.1	8.5	0.7	27.6	7.3	1	0	0.033	0.2	3	2.9	0.2	bd	30	ns
AGHD0004	20	22	AR046007	0.49	0.021	0.17	11	0.34	10.4	16.1	0.7	20.7	10.4	0	0	0.004	0.2	2	2	0.1	bd	20	ns
AGHD0004	22	24	AR046008	0.33	0.015	0.10	8	0.15	7.3	15.3	0.4	24.3	9.7	0	0	0.014	bd	2	1.7	0.1	bd	20	ns

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0004	24	26	AR046009	0.27	0.013	0.08	7	0.14	6.6	15.5	0.4	24.8	9.7	0	0	0.044	0.2	1	1.2	0.1	bd	10	ns
AGHD0004	26	28	AR046012	0.31	0.014	0.10	7	0.15	6.9	17.0	0.4	23.6	9.5	0	0	0.01	bd	2	1.4	0.1	bd	10	ns
AGHD0004	28	30	AR046013	0.43	0.017	0.12	9	0.24	9.2	13.6	0.6	24.5	9.0	0	0	0.014	bd	2	2.1	0.1	bd	10	ns
AGHD0004	30	32	AR046014	0.43	0.017	0.13	9	0.44	9.8	13.3	0.6	24.3	8.8	0	0	0.047	0.2	2	1.9	0.1	bd	30	ns
AGHD0004	32	34	AR046015	0.31	0.014	0.13	6	0.32	6.7	13.2	0.4	21.6	15.1	0	0	0.025	bd	1	1.3	0.1	bd	10	ns
AGHD0004	34	36.4	AR046016	0.23	0.008	0.09	5	0.20	4.8	12.1	0.3	15.4	25.0	1	0	0.022	bd	1	1.2	0.1	bd	20	ns
AGHD0005	0	2	AR046017	0.47	0.015	0.04	8	0.93	12.5	4.0	1.4	20.6	15.2	4	1	0.024	0.2	3	3	0.4	100	300	6
AGHD0005	2	4	AR046018	0.92	0.029	0.06	14	2.09	25.7	3.4	1.6	15.8	11.7	2	1	0.011	bd	6	6.8	0.7	bd	620	5
AGHD0005	4	6	AR046019	0.91	0.03	0.07	14	1.73	25.5	1.1	0.7	23.0	6.2	2	1	0.009	bd	7	10.2	0.5	bd	520	3
AGHD0005	6	8	AR046022	1.97	0.132	0.23	23	3.47	33.6	0.6	1.2	15.4	6.7	4	1	0.042	0.2	15	43.3	0.8	100	690	3
AGHD0005	8	10	AR046023	1.28	0.073	0.14	11	1.56	14.8	11.6	0.4	21.2	8.6	2	1	0.01	bd	6	7.5	0.3	100	190	4
AGHD0005	10	12	AR046024	0.81	0.073	1.09	4	0.49	14.7	5.5	0.1	27.5	6.8	0	bd	0.011	0.1	3	2.6	0.1	bd	30	6
AGHD0005	12	14	AR046025	0.37	0.02	0.05	4	0.59	7.6	11.9	0.1	28.4	6.8	0	bd	0.019	bd	3	3	0.1	bd	40	3
AGHD0005	14	16	AR046026	1.58	0.065	0.10	14	2.13	23.1	4.2	0.5	21.5	6.8	0	0	0.038	0.1	12	8.7	0.2	bd	230	4
AGHD0005	16	18	AR046027	1.14	0.044	0.07	10	1.31	17.3	14.0	0.3	17.4	10.0	0	0	0.01	bd	5	7.1	0.2	bd	160	3
AGHD0005	18	20	AR046028	1.42	0.063	0.16	14	1.78	20.4	6.1	0.5	22.2	6.6	0	0	0.016	bd	7	10.4	0.5	bd	280	4
AGHD0005	20	38.5	AGHD0005_20_38.5	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0005	38.5	40	AR046029	0.27	0.011	0.09	5	0.67	5.3	14.8	0.3	18.6	23.8	0	0	bd	bd	3	1.3	0.0	bd	30	2
AGHD0005	40	42	AR046032	0.25	0.01	0.08	4	0.48	5.2	12.9	0.1	21.1	21.8	0	bd	0.003	bd	3	0.8	0.0	bd	20	2
AGHD0006	0	2	AR046044	0.41	0.025	0.09	5	0.22	4.4	17.9	0.9	11.2	33.5	5	1	0.018	bd	5	1	0.1	bd	20	5
AGHD0006	2	4	AR046045	0.95	0.049	0.20	24	2.31	21.0	2.5	2.6	20.5	9.3	6	1	0.006	bd	9	6.4	0.4	bd	110	3
AGHD0006	4	6	AR046046	0.29	0.009	0.04	3	0.24	3.1	7.0	0.2	31.8	13.9	1	0	0.007	0.1	3	0.8	0.1	bd	bd	5
AGHD0006	6	8	AR046047	0.47	0.041	0.17	7	0.69	7.7	4.7	0.7	30.3	10.2	3	1	0.011	18.3	111	2.7	0.4	bd	20	3
AGHD0006	8	10	AR046048	1.01	0.043	0.19	15	1.92	14.8	4.5	1.5	23.5	10.7	2	0	0.006	12.8	41	4.3	0.7	100	50	4
AGHD0006	10	12	AR046049	1.20	0.059	0.29	22	2.63	18.5	3.4	2.1	22.1	8.0	2	0	0.005	0.7	23	5.5	1.3	bd	60	2
AGHD0006	12	14	AR046052	1.36	0.044	0.29	19	2.40	18.8	3.8	2.3	21.9	7.7	2	0	0.003	4.7	22	4.3	1.3	bd	40	3
AGHD0006	14	16	AR046053	0.84	0.018	0.16	10	1.40	10.2	2.9	1.2	31.7	5.4	1	0	0.004	1.4	15	1.7	0.6	bd	20	4
AGHD0006	16	18	AR046054	0.23	0.01	0.09	6	0.60	5.0	5.7	0.6	35.4	4.6	1	0	0.006	0.2	5	1.1	0.3	bd	10	7
AGHD0006	18	20	AR046055	0.34	0.019	0.13	9	1.13	6.9	17.1	0.9	21.7	10.3	1	0	0.003	bd	8	2.3	0.6	bd	20	3
AGHD0006	20	22	AR046056	0.25	0.012	0.08	7	0.92	5.9	11.8	0.7	28.5	7.2	0	0	0.007	bd	7	1.6	0.4	bd	10	4

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0006	22	24	AR046057	0.40	0.006	0.06	5	0.59	4.6	8.2	0.4	30.9	11.0	0	0	0.006	bd	3	0.7	0.1	bd	10	3
AGHD0006	24	26	AR046058	0.51	0.02	0.15	9	1.04	8.7	8.0	0.8	28.6	7.8	0	0	0.009	0.1	4	1.3	0.3	bd	20	3
AGHD0006	26	28	AR046059	0.57	0.006	0.05	6	0.72	4.9	20.0	0.5	11.7	30.9	0	0	0.007	bd	4	0.9	0.3	bd	40	3
AGHD0006	28	30	AR046062	0.31	0.013	0.12	5	0.60	5.7	10.0	0.7	31.3	4.7	0	0	0.004	bd	11	1.2	0.3	bd	120	9
AGHD0006	30	32	AR046063	0.33	0.013	0.08	9	0.71	5.8	12.1	1.5	28.3	5.6	1	0	0.016	bd	10	1	0.4	bd	120	9
AGHD0006	32	34	AR046064	0.31	0.011	0.08	7	0.75	6.2	12.6	0.8	28.2	5.7	1	0	0.011	0.2	5	1	0.7	bd	240	10
AGHD0006	34	36	AR046065	0.34	0.013	0.09	8	0.78	6.2	14.2	0.9	26.4	6.5	1	0	0.006	0.1	4	2.9	0.5	100	320	8
AGHD0006	36	38	AR046066	0.35	0.015	0.12	8	1.14	6.9	15.3	0.9	24.5	6.8	0	0	0.002	bd	3	1.4	0.5	100	300	8
AGHD0006	38	40	AR046067	0.34	0.011	0.09	7	0.82	5.7	17.7	0.6	17.4	18.7	0	0	0.179	bd	2	0.3	0.4	bd	90	7
AGHD0006	40	42.1	AR046068	0.25	0.011	0.08	6	0.71	5.4	17.0	0.6	19.0	16.3	0	0	0.009	bd	7	1.1	0.4	bd	60	4
AGHD0007	0	2	AR046069	0.21	0.036	0.18	76	1.04	28.4	0.8	6.5	11.9	13.8	4	1	0.179	0.1	8	9.4	0.6	bd	230	9
AGHD0007	2	4	AR046072	0.21	0.029	0.12	42	0.90	27.2	3.5	4.3	7.8	19.7	3	1	0.078	bd	20	4.8	0.3	bd	40	4
AGHD0007	4	6	AR046073	0.67	0.539	2.50	40	0.93	37.4	1.5	3.7	7.4	11.5	19	5	0.096	0.1	27	14.8	0.6	bd	150	65
AGHD0007	6	8	AR046074	0.55	0.134	0.28	8	0.32	7.0	8.1	0.7	27.5	13.9	7	2	0.053	0.3	6	1.7	0.1	bd	10	6
AGHD0007	8	10	AR046075	0.93	0.058	0.12	11	0.27	7.6	4.2	1.1	32.6	8.1	11	3	0.031	0.4	4	1.1	0.1	bd	bd	9
AGHD0007	10	12	AR046076	1.12	0.082	0.21	11	0.46	10.5	5.6	0.7	30.4	6.2	6	2	0.02	0.2	10	2.4	0.1	bd	20	3
AGHD0007	12	14	AR046077	0.62	0.047	0.19	9	0.81	8.7	8.6	0.7	29.3	6.2	2	1	0.022	0.2	6	2.9	0.5	100	10	1
AGHD0007	14	16	AR046078	0.61	0.035	0.15	9	0.88	8.7	14.3	0.9	23.4	8.8	2	0	0.004	bd	5	3.5	0.4	bd	10	1
AGHD0007	16	18	AR046079	0.36	0.01	0.05	4	0.26	4.7	2.1	0.2	39.7	3.2	1	0	0.006	bd	4	0.6	0.1	100	bd	4
AGHD0007	18	20	AR046082	0.39	0.007	0.03	3	0.19	3.5	2.0	0.1	40.7	3.2	1	0	0.004	0.1	3	0.4	0.0	bd	bd	5
AGHD0007	20	22	AR046083	0.90	0.038	0.18	13	1.45	9.5	17.5	1.4	18.3	10.8	1	0	0.005	0.2	6	2.1	0.2	bd	bd	1
AGHD0007	22	24	AR046084	0.80	0.029	0.16	12	1.26	10.2	14.2	1.1	21.9	8.9	0	0	0.009	bd	4	1.9	0.2	bd	bd	2
AGHD0007	24	32	AGHD0007_24_32	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AGHD0007	32	34	AR046089	0.20	0.01	0.08	5	0.20	4.9	3.3	0.2	39.1	2.7	0	0	0.015	0.6	5	0.8	0.0	100	10	3
AGHD0007	34	36	AR046092	0.20	0.014	0.09	5	0.33	5.2	4.3	0.3	37.5	3.3	0	0	0.005	0.2	4	1	0.0	bd	20	1
AGHD0007	36	38	AR046093	0.38	0.022	0.15	9	0.82	8.9	8.9	0.8	28.6	6.9	1	0	0.004	0.9	12	2	0.1	bd	80	1
AGHD0007	38	40	AR046094	0.35	0.021	0.13	8	0.78	8.3	8.0	0.6	30.3	6.1	0	0	0.007	0.2	8	1.8	0.1	bd	70	1
AGHD0007	40	42.2	AR046095	0.39	0.02	0.12	11	0.98	8.6	16.1	1.1	18.1	13.9	0	0	bd	bd	4	1.6	0.1	bd	20	1
AGHD0008	0	2	AR046096	0.04	0.005	0.03	10	4.73	50.7	0.1	1.5	6.0	2.7	3	1	0.019	0.1	35	20.2	1.1	bd	120	2
AGHD0008	2	4	AR046097	0.05	0.007	0.04	13	4.92	49.2	0.2	2.2	5.8	4.0	3	1	0.016	bd	30	18.6	1.3	bd	160	3

Hole	From (m)	To (m)	Sample number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	Al (%)	Si (%)	LOI (%)	Nd (ppm	Pr (pp	Au (ppm)	Ag (ppm)	W (pp	Sb (ppm)	Bi (ppm)	Pb (ppm)	As (ppm	Li (ppm
AGHD0008	4	6	AR046098	0.04	0.007	0.03	10	4.53	50.0	0.1	2.7	3.3	7.9	2	1	0.01	bd	33	18.2	1.3	bd	240	4
AGHD0008	6	8	AR046099	0.05	0.006	0.02	13	4.32	47.1	0.0	3.5	2.5	12.6	2	1	0.025	0.2	33	16.4	1.0	bd	240	2
AGHD0008	8	10	AR046102	0.13	0.006	0.03	37	5.35	41.6	0.1	5.7	3.2	13.7	2	1	0.028	0.2	16	11.8	0.6	bd	170	5
AGHD0008	10	12	AR046103	0.21	0.013	0.05	38	3.93	48.0	0.1	3.3	2.9	12.4	2	1	0.051	0.1	21	13.9	0.2	bd	130	4
AGHD0008	12	14	AR046104	0.26	0.018	0.07	32	4.81	42.0	0.1	3.9	5.7	12.2	4	1	0.038	bd	21	13.1	0.2	bd	200	5
AGHD0008	14	16	AR046105	0.41	0.03	0.17	25	3.21	39.6	0.3	3.0	9.8	10.1	3	1	0.031	bd	14	7.8	0.1	bd	140	6
AGHD0008	16	18	AR046106	0.41	0.034	0.18	27	3.19	41.7	0.3	3.1	8.4	10.2	3	1	0.025	bd	14	8.3	0.1	bd	210	5
AGHD0008	18	20	AR046107	0.41	0.035	0.13	30	3.71	42.5	0.3	3.3	7.3	9.9	3	1	0.011	bd	10	6.5	0.2	bd	190	5
AGHD0008	20	22	AR046108	0.49	0.042	0.16	24	4.73	43.9	0.2	1.7	7.3	9.1	3	1	0.005	bd	12	5.8	0.3	bd	290	3
AGHD0008	22	24	AR046109	0.40	0.027	0.14	15	6.03	41.6	0.2	1.0	9.3	7.2	1	0	0.014	bd	10	6.6	0.4	bd	100	2
AGHD0008	24	26	AR046112	0.32	0.025	0.12	12	3.87	35.6	0.2	0.7	16.2	5.8	1	0	0.075	bd	9	6.1	0.4	bd	100	3
AGHD0008	26	28	AR046113	0.44	0.041	0.17	15	3.49	31.6	0.4	0.8	19.2	4.8	3	1	0.026	0.2	9	5.2	0.4	bd	110	3
AGHD0008	28	30	AR046114	1.33	0.209	0.85	16	3.53	28.5	2.1	1.2	17.5	6.0	11	3	0.008	0.1	7	4.8	0.2	bd	120	2
AGHD0008	30	32	AR046115	1.42	0.133	0.71	17	3.97	26.7	4.7	1.1	15.7	7.4	8	2	0.019	bd	8	8.3	0.1	bd	220	7
AGHD0008	32	34	AR046116	1.46	0.099	0.58	24	4.71	34.4	1.5	1.8	12.7	6.1	7	2	0.002	bd	14	12.4	0.1	bd	330	5
AGHD0008	34	36	AR046117	0.82	0.063	0.45	14	2.87	22.6	1.2	0.9	24.6	4.0	5	1	0.001	bd	15	5.1	0.0	bd	120	4
AGHD0008	36	38	AR046118	0.71	0.053	0.36	17	3.31	25.1	0.9	1.1	22.9	3.8	3	1	0.012	bd	20	6.6	0.0	100	200	4
AGHD0008	38	40	AR046119	0.59	0.043	0.27	13	2.88	23.0	0.8	0.9	25.1	3.6	2	0	0.011	bd	18	6.5	0.0	100	200	3
AGHD0008	40	42	AR046122	0.61	0.04	0.36	12	2.67	20.7	0.9	0.8	26.4	4.1	1	0	0.001	0.1	16	5.2	0.0	100	130	4
AGHD0008	42	44	AR046123	0.56	0.034	0.26	11	2.39	18.6	3.3	0.8	25.6	5.4	1	0	0.001	bd	14	4.3	0.0	100	90	4
AGHD0008	44	46	AR046124	0.76	0.035	0.33	11	2.57	20.6	7.0	0.8	19.4	8.0	0	0	bd	bd	9	3	0.1	100	160	4
AGHD0008	46	48	AR046125	0.75	0.028	0.23	10	2.37	16.7	12.9	0.7	16.4	10.8	0	0	bd	bd	3	1.9	0.2	bd	150	5
AGHD0008	48	50	AR046126	0.78	0.028	0.18	9	2.60	18.4	11.6	0.7	15.5	11.5	0	0	0.001	bd	4	2.1	0.2	bd	280	5
AGHD0008	50	52	AR046127	0.50	0.023	0.16	8	1.91	13.1	16.4	0.5	17.0	11.1	0	0	0.001	bd	2	1.1	0.1	bd	120	6
AGHD0008	52	66.4	AGHD0008_52_66.4	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns

Appendix 3 – Collated intercepts, Goongarrie Hill

Parameters used to define nickel, cobalt, scandium intercepts at Goongarrie Hill

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

Nickel, cobalt, and scandium intercepts from new drilling at Goongarrie Hill

All newly defined cobalt intercepts at Goongarrie Hill (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 0.05 % 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 an interval of core loss, through calculation, marked the beginning or end of a mineralised interval, this core loss interval was not included in that mineralisation 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 mineralisation 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 mineralisation. Their association appears to be ad hoc.

Hole	Nickel Intercept 0.5%	From	To		Nickel Intercept 1%	From	To
AGHD0001	12m @ 0.870% Ni and 0.037% Co	4	16	*including*	6m @ 1.087% Ni and 0.058% Co	10	16
	2m @ 0.514% Ni and 0.02% Co	28	30				
	2m @ 0.575% Ni and 0.023% Co	40	42				
AGHD0002	20m @ 0.779% Ni and 0.046% Co	0	20	*including*	6m @ 1.303% Ni and 0.088% Co	14	20
AGHD0003	38m @ 0.849% Ni and 0.057% Co	2	40	*including*	18m @ 1.117% Ni and 0.095% Co	4	22
AGHD0004	16m @ 0.686% Ni and 0.04% Co	4	20				
AGHD0005	18m @ 1.155% Ni and 0.059% Co	2	20		14m @ 1.223% Ni and 0.067% Co	6	20
AGHD0006	14m @ 0.874% Ni and 0.038% Co	2	16	*including*	6m @ 1.190% Ni and 0.049% Co	8	14
	4m @ 0.540% Ni and 0.013% Co	24	28				
AGHD0007	20m @ 0.695% Ni and 0.098% Co	4	24	*including*	2m @ 1.120% Ni and 0.082% Co	10	12
AGHD0008	24m @ 0.857% and 0.066% Co	28	52	including	6m @ 1.403% Ni and 0.147% Co	28	34

Table 1: Collated intercepts of nickel (>0.5% Ni) with cobalt including High grade nickel intercepts (1% Ni)

Parameters: Minimum cut off 0.50% Ni and 1% Ni respectfully with minimum intercept thickness 2 m and maximum internal waste thickness 4 m

Appendix 4 - 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
Sampling techniques *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.*	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisationthat are Material to the Public Report.* • *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 mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• 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. • The drill spacing was designed to augment historic drilling. New Ardea core holes were drilled at 4 metres distance to a historic RC hole representing a twin. The drilling will also contribute to provide material for the purpose of metallurgical testwork. • Industry standard practice was used in the processing of samples for assay, with 2m intervals of core collected in calico bags (HQ core was cut into quarters before compositing). 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 mineralisation. • 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.
Drilling techniques	• *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).*	• In this most recent program, Ardea drilled the Goongarrie Hill deposit with 8 diamond drill holes on a varying MGA94 Zone 51 northing grid-spacing of 80m at several localities (see Figure 3). Holes were vertical for laterite(-90 degree dip). HQ core samples were collected and stored in impala core trays. Sample condition, sample recovery and sample size were recorded for all drill samples collected by ARL.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Core sample recovery was recorded by visual estimation of the core sample, expressed as a percentage recovery. Overall estimated recovery was approximately 80%, which is considered to be acceptable for nickel-cobalt laterite deposits. Core measurement calculations were based on driller rod measurements and runs recorded on core blocks. • Measures taken to ensure maximum core sample recoveries included conservative drill penetration rates to limit overgrinding and pressure, using water injection to maintain mud lubrication, as well as regular communication with the drillers when variable to poor ground conditions were encountered.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• 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. ARL employees and geologists supervised all drilling. Quarter core of all drilling has been retained for reference. • Visual geological logging was completed for all core 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. Hand held Niton XRF was also used to cross-check logging and specific rock properties.

Criteria	JORC Code explanation	Commentary
		• The geological legend used by ARL is a qualitative legend designed to capture the key physical and metallurgical features of the nickel-cobalt laterite mineralisation. Logging captured the colour, regolith unit and mineralisation style, often accompaniedby 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. • All material was drilled was logged in detail
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 2 metre (and rarely 1 metre) composite samples were recovered using an Almonte automatic core saw (quarter core) and placed into a calico sample bag. Sample target weight was between 2 and 3kg. Where friable material was encountered, a chisel system was implemented to avoid core loss. Some moist oxide samples occurred in upper portions of core. • 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 mineralisation being drilled (in the case of the Ardea 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 mineralisation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• All Ardea samples were submitted to Kalgoorlie BV laboratories and transported to BV Perth, where they were pulverised. Analysis at BV Perth was by ICP utilising a 50g charge (lab method PGM-ICP24) for PGM suite elements (Au, Pt, Pd). Additional analysis was undertaken where analysis by silicate fusion / XRF analysis (lab method ME-XRF12n) for multiple grade attributes for laterite ores (Al2O3, As, BaO, CaO, Cl, Co, Cr2O3, Cu, Fe2O3, Ga, K2O, MgO, MnO, Na2O, Ni, P2O5, Pb, Sc, SiO2, SO3, SrO, TiO2, V2O5, Zn, ZrO2). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and BV is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits. • BV routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. • 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. • 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All Ardea samples were submitted to Kalgoorlie BV laboratories and transported to BV Perth, where they were pulverised. Analysis at BV 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 BV Perth where analysis by silicate fusion / XRF analysis (lab method ME-XRF12n) for multiple grade attributes for laterite ores (Al2O3, As, BaO, CaO, Cl, Co, Cr2O3, Cu, Fe2O3, Ga, K2O, MgO, MnO, Na2O, Ni, P2O5, Pb, Sc, SiO2, SO3, SrO, TiO2, V2O5, Zn, ZrO2). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and BV is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits. • BV routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. • 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. • 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. • All of the QAQC data has been statistically assessed. Ardea has undertaken its own 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.

Criteria	JORC Code explanation	Commentary
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill holes were 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. • All holes drilled as part of the Goon Hill program were vertical. No holes weredown-hole surveyed except at EOH. The sub-horizontal orientation of the mineralisation, combined with the soft nature of host material resulted in minimal deviation of vertical diamond drill holes. • 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. • 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.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The drill spacing was designed to augment historic drilling, and the entire program consisted of twinned core holes within 4 metres of historic RC holes. The program to date is part of a broader Definitive Feasibility Study (DFS) program. All proposed drilling has been completed at Highway. • Given the homogeneity of this style of orebody, the spacing is, for bulk-scale metallurgical work and probable mining techniques, considered sufficient. • Samples were collected at 2 metre composites.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All drill holes in this program are vertical and give a true width of the regolith layers and mineralisation within the modelled resource and have sufficient adjoining vertical holes which quantify regolith true thickness • On a local scale, there is some geological variability due to possible shear structures and cave fill structures. However, this local variability is not considered to be significant for the project and often increases laterite ore preferentially within and adjacent to the structures. As the detailed shape of the orebody has already been well defined by an abundance of nearby resource drill holes, there is no expected bias to be introduced with reference to mineralised structures. •
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and accounted for by ARL employees during drilling. All samples were stored in core trays, plastic wrapped and placed on pallets. Samples were transported to Kalgoorlie from logging site by ARL employees and submitted directly to BV Kalgoorlie. • The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory.

Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• 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.
		• Internal reviews of the exploration data included the following:
		  • Unsurveyed drill hole collars (less than 1% of collars).
		  • Drill Holes with overlapping intervals (0%).
		  • Drill Holes with no logging data (less than 2% of holes).
		  • Sample logging intervals beyond end of hole depths (0%).
		  • Samples with no assay data (from 0 to <5% for any given project, usually related to issues with sample recovery from difficult ground conditions, mechanical issues with drill rig, damage to sample in transport or sample preparation).
		  • Assay grade ranges.
		  • Collar coordinate ranges
		  • Valid hole orientation data.
		• The BV Laboratory was visited by ARL staff in 2021, and the laboratory processes and procedures were reviewed at this time and determined to be robust.

Section 2 - Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.* • *The security of the tenure held at the time of*	• The tenements on which the Goongarrie Hill drilling was undertaken are M29/167 and M29/202. • The tenement and land tenure status for the KNP prospect areas containing continuous nickel-cobalt laterite mineralization is summarised in the Ardea Prospectus, section 9 “Solicitor’s Report on Tenements”.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Goongarrie Hill deposit was initially discovered by Heron Resources Ltd and subsequently drilled by Vale Inco Limited in a Joint Venture.
Geology	• *Deposit type, geological setting and style of mineralization.*	• 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. • Cobalt-rich mineralization is typically best developed in iron-rich material in regions of deep weathering in 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. • 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 Hill. • Significant gold anomalism and gold indictor minerals was discovered within the nickel laterite profile by Ardea and CSIRO. This was the basis for several of the targets in this program
Drill hole Information	• *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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.*	• All holes drilled in this most recent program are listed in “Appendix 1 – Collar location data”.
Drill hole Information	• *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.*	• All assay data relating to the nickel laterite metals of interest at Goongarrie Hill, namely cobalt, nickel, Sc, and chromium, are listed in “Appendix 2 – Assay results”. Likewise gold and all common gold indicator minerals in the Eastern Goldfields area are included 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.

Data aggregation methods	• *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.*
	• *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.*
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*
		• Most drill hole samples have been collected over 2m down hole intervals.
		• All newly defined nickel and cobalt intercepts at Goongarrie Hill 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 Hill.
		  • 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

Criteria	JORC Code explanation	Commentary
		interval. • 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. • Assay compositing techniques were not used in this assessment. • No metal equivalent calculations have been used in this assessment.
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The nickel-cobalt laterite mineralization at Goongarrie Hill has a strong global sub-horizontal orientation. • As such all laterite drill holes are vertical All drill holes intersect the mineralization at approximately 90°to its orientation
Diagrams	• *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.*	• Maps and sections of the nickel and cobalt mineralization are shown within the report. Every drill hole on every section drilled is shown.
Balanced reporting	• *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.*	• Not applicable to this report. All results are report either in the text or in the associated appendices. Examples of high-grade mineralization are labelled as such.
Other substantive exploration data	• *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.*	• 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.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further drilling is likely to be undertaken at Goongarrie Hill 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. • Metallurgical assessment of all metals of interest at Goongarrie Hill will be undertaken during the Definitive Feasibility Study (DFS) which has commenced on the KNP – Goongarrie Hub (previously termed the KNP Cobalt Zone).