

AHID0004

AHID0008

AHID0010

AHID0019

AHID0020

including

#### **ASX & Media Release**

11 February 2022

**ASX Symbol** ARL

#### Ardea Resources Limited

Suite 2 / 45 Ord St West Perth WA 6005

PO Box 1433 West Perth WA 6872

Telephone

+61 8 6244 5136

#### Email

ardea@ardearesources.com.au

#### Website

www.ardearesources.com.au

#### **Directors**

Mat Longworth Non-Executive Chair

Andrew Penkethman Managing Director & CEO

Ian Buchhorn Technical Executive Director

**Executive Management** 

Sam Middlemas Company Secretary & CFO

Alex Mukherii Manager Land Access & Compliance

Mike Miller General Manager Technical Services

#### **Issued Capital**

Fully Paid Ordinary Shares 138.830.219

Performance Rights 4,771,000

Options 4,000,000

ABN 30 614 289 342

# **Confirmation of High-Grade Nickel-Cobalt** from Highway Metallurgical Drilling

Ardea Resources Limited (Ardea or the Company) advises that diamond drill core drilling at the Highway nickel-cobalt deposit confirms high-grade near surface nickel-cobalt mineralisation. The results validate mineralisation models used in generating the Highway resource estimate.

Highway is a key satellite plant feed source for the Kalgoorlie Nickel Project - Goongarrie Hub (KNP).

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

- AHID0002 42m at 0.77% nickel and 0.11% cobalt from 2m 12m at 1.01% nickel and 0.22% cobalt from 16m including 6m at 1.00% nickel and 0.04% cobalt from 38m and
  - AHID0003 36m at 0.95% nickel and 0.08% cobalt from 2m 24m at 1.11% nickel and 0.10% cobalt from 4m including
    - 40m at 0.86% nickel and 0.10% cobalt from 10m 28m at 0.96% nickel and 0.12% cobalt from 14m including
    - 18m at 1.08% nickel and 0.06% cobalt from 4m 14m at 1.21% nickel and 0.06% cobalt from 6m includina
    - 28m at 0.87% nickel and 0.04% cobalt from 14m 8m at 1.23% nickel and 0.05% cobalt from 22m including
      - 10m at 1.18% nickel and 0.12% cobalt from 18m 8m at 1.32% nickel and 0.15% cobalt from 18m
    - 28m at 0.78% nickel and 0.04% cobalt from 26m including 6m at 1.08% nickel and 0.08% cobalt from 30m 2m at 1.02% nickel and 0.04% cobalt from 46m and
  - AHID0022 34m at 0.88% nickel and 0.04% cobalt from 8m 14m at 1.14% nickel and 0.04% cobalt from 16m including 2m at 1.01% nickel and 0.03% cobalt from 38m and

There is consistently high cobalt grades, with significant intercepts:

- AHID0001 22m at 0.56% nickel and **0.47% cobalt** from 38m 2m at 1.17% nickel and 1.42% cobalt from 40m including
- 12m at 1.01% nickel and **0.22% cobalt** from 16m AHID0002
- 12m at 0.80% nickel and **0.19%** cobalt from 34m AHID0004

The Highway metallurgical hole selection was primarily based on obtaining representative in situ material for testing an Atmospheric Leach hydrometallurgical flowsheet. In particular, high-magnesium nontroniteserpentine clay mineralisation was sought on the basis of its role in sulphuric acid demand and hence the KNP low-carbon flowsheet.



Importantly, the program generated drill-core test material specifically suited to High Pressure Acid Leach **(HPAL)**, Atmospheric Leach **(AL)** and Mineralised Neutraliser for a low carbon flowsheet.

Key highlights include:

- Successful completion of 23 HQ core holes for 1,351 metres at Highway (KNP Goongarrie Hub). Drilling was completed in July August 2021 as part of current Feasibility programs.
- Good assay correlation between new Ardea twin diamond drill (**DD**) holes and historic Reverse Circulation (**RC**) holes, providing confidence in the Highway Mineral Resource Estimate (**MRE**).
- The premium high grade goethite mineralisation conforms well with bulk tonnage domaining, and will significantly contribute as a satellite pit operation for the KNP Goongarrie HPAL feed, at the proposed rate of 3.0Mtpa.
- The nontronite-serpentine mineralisation that underlies the goethite at Highway was not targeted in historic drilling. This high-magnesium mineralisation occurs as a siliceous feed and is likely to be amenable to screen beneficiation. Such material is a key component of the proposed KNP AL feed at the proposed rate of 0.5Mtpa. Based on Highway, it is likely this feed rate could well be expanded.
- The Atmospheric Leach material provides strategic benefits in terms of resource utilisation, onsite energy sourcing and carbon footprint reduction. The Highway drill results provide good support for the KNP low-carbon model.
- Test work is well-advanced 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).

The Company also advises that the Geological Survey of Western Australia have independently classified Ardea's **KNP** as the **largest nickel deposit in Western Australia** (refer pages 13 - 14 following). This acknowledgement reaffirms the significant role that the KNP can play in providing sustainable and ethical mineral supply from the best operating jurisdiction in the World, as the planet transitions to a low-carbon future which requires greatly increased nickel-cobalt production for the lithium-ion batteries so critical for Electric Vehicles and energy storage.

#### Ardea's Managing Director, Andrew Penkethman, said:

"The core drilling at Highway was the first field test of the KNP low-carbon flowsheet model. It was important for confirming the expectation that high-magnesium mineralisation is suitable as an Atmospheric Leach (AL) feed and uniformly underlies the premium goethite High Pressure Acid Leach (HPAL) feed. The 2021 Diamond Drilling (DD) program supports Ardea's modeling that Highway is particularly endowed with AL material.

AL material is especially important to the low-carbon flowsheet as this helps enable the on-site acid plant to be expanded to generate excess steam which is used for off-grid power generation.

The Highway DD program tested well below the depth of historic RC drilling. In terms of Mineralised Neutraliser, from our detailed core logging, the neutraliser will be an extensive sheet below the AL feed at the base of conventional open pits. It appears to be of a cave-fill mineralisation style within saprock. In a production situation, this material would best be defined by grade control drilling from the base of pit floor, and mined as "goodbye cuts".

With the Highway geological model now confirmed, we eagerly await the results of the ALS benchscale metallurgy, testing the Highway flowsheet model. 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 minerals to fuel the battery revolution".



# Metallurgical core drilling results, Highway

The drill program targeted specific geo-metallurgical Material Types which are integral to the KNP flowsheet, but for which historic bench-scale metallurgy is largely lacking.

The DD program has confirmed a consistent sheet geometry for the Run-of Mine (**ROM**) mineralisation and is eminently suited to open pit bulk excavation.

With the deeper drilling of the DD program, zones of a distinctive cave-fill style of mineralisation within saprock was identified, sometimes with very high nickel (**Ni**) and cobalt (**Co**) grade. As cave-fill, such zones can be variable and not always correlate between holes. However, in mining they will be easily recovered through visual grade control.

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

AHID0001		26m @ 0.73% Ni and 0.38% Co from 24m
	including	2m @ 1.17% Ni and 1.42% Co from 40m
AHID0002		42m @ 0.77% Ni and 0.11% Co from 2m
	including	12m @ 1.01% Ni and 0.22% Co from 16m
	and	6m @ 1.00% Ni and 0.04% Co from 38m
AHID0003		36m @ 0.95% Ni and 0.08% Co from 2m
	including	24m @ 1.11% Ni and 0.10% Co from 4m
AHID0004		40m @ 0.86% Ni and 0.10% Co from 10m
	including	28m @ 0.96% Ni and 0.12% Co from 14m
AHID0005		22m @ 0.67% Ni and 0.03% Co from 4m
		14m @ 0.54% Ni and 0.01% Co from 38m
	including	2m @ 1.55% Ni and 0.02% Co from 50m
AHID0006		18m @ 0.77% Ni and 0.03% Co from 2m
	including	4m @ 1.27% Ni and 0.04% Co from 10m
AHID0008		18m @ 1.08% Ni and 0.06% Co from 4m
	including	14m @ 1.21% Ni and 0.06% Co from 6m
AHID0010		28m @ 0.87% Ni and 0.04% Co from 14m
	including	8m @ 1.23% Ni and 0.05% Co from 22m
AHID0012		6m @ 1.76% Ni and 0.09% Co from 4m
	including	4m @ 2.31% Ni and 0.13% Co from 4m
		8m @ 1.30% Ni and 0.02% Co from 16m
AHID0013		4m @ 1.17% Ni and 0.06% Co from 4m
	including	2m @ 1.74% Ni and 0.09% Co from 6m
AHID0017		12m @ 0.50% Ni and 0.02% Co from 8m
		22m @ 0.57% Ni and 0.02% Co from 26m
AHID0018		32m @ 0.71% NI and 0.04% Co from 14m
AHID0019		10m @ 1.18% Ni and 0.12% Co from 18m
	including	8m @ 1.32% Ni and 0.15% Co from 18m
AHID0020		28m @ 0.78% Ni and 0.04% Co from 26m
	including	6m @ 1.08% Ni and 0.08% Co from 30m
	and	2m @ 1.02 Ni and 0.04% Co from 46m
AHID0022		34m @ 0.88% Ni and 0.04% Co from 8m
	including	14m @ 1.14% Ni and 0.04% Co from 16m
	and	2m @ 1.01% Ni and 0.03% Co from 38m

New results not previously reported, refer JORC Table and appendices, pages 15 – 30.



# Introduction

The Highway Metallurgical Core Drilling (Figure 2) was designed following the resource estimation Feasibility Study programs completed in mid-2021.

The Highway MRE is **91.7Mt at 0.69% Ni and 0.038% Co** (Ardea ASX release 16 June 2021, Table 6.2), located some 30km north of the proposed Goongarrie plant site (Figure 1). Of this MRE, the approximate distribution of mineralisation Material Types is:

- Goethite HPAL feed 56.3Mt at 0.70% Ni and 0.046% Co
- Nontronite-serpentine AL feed 16.8Mt at 0.68% Ni and 0.028% Co
- Mineralised Neutraliser 18.5Mt at 0.68% Ni and 0.022% Co

With a KNP feed rate of 3.5Mtpa, the Highway AL and Mineralised Neutraliser feed are significant resources, but historic PFS programs had no metallurgical data for these Material Types.

Accordingly, Ardea completed core drilling at Highway in July to August 2021 to obtain suitable test material.

Some 57.7Mt of the Highway MRE is beneficiable siliceous mineralisation, so intact core rather than pulverised RC chips is required for the metallurgical studies.

Highway was not included in Ardea's previous Pre-feasibility Study (**PFS**) and Expansion Study (ASX releases 15 February 2018 and 24 July 2018), which only considered nickel laterite open cuts on the Goongarrie Line. Highway became a strategic open pit addition with the recognition of the benefit of an Atmospheric Leach component.

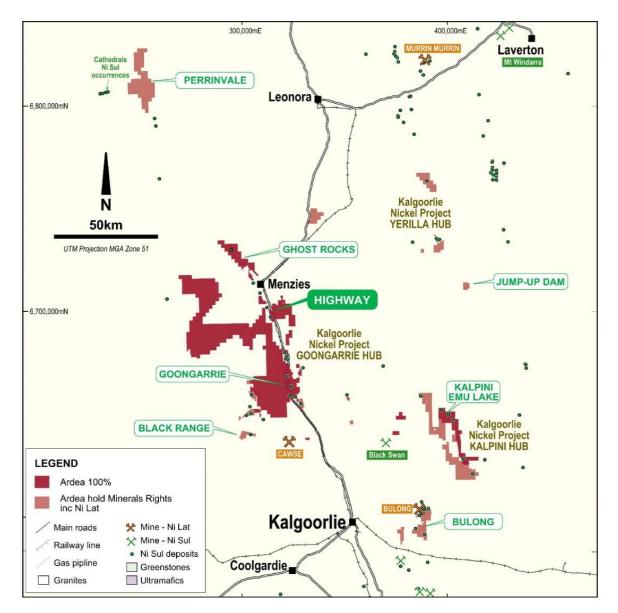


Figure 1: Ardea tenement plan highlighting the location of the Highway Nickel Prospect within the Kalgoorlie Nickel Project – Goongarrie Hub, and nickel mines and deposits in the region. Projection MGA 94 Zone 51.



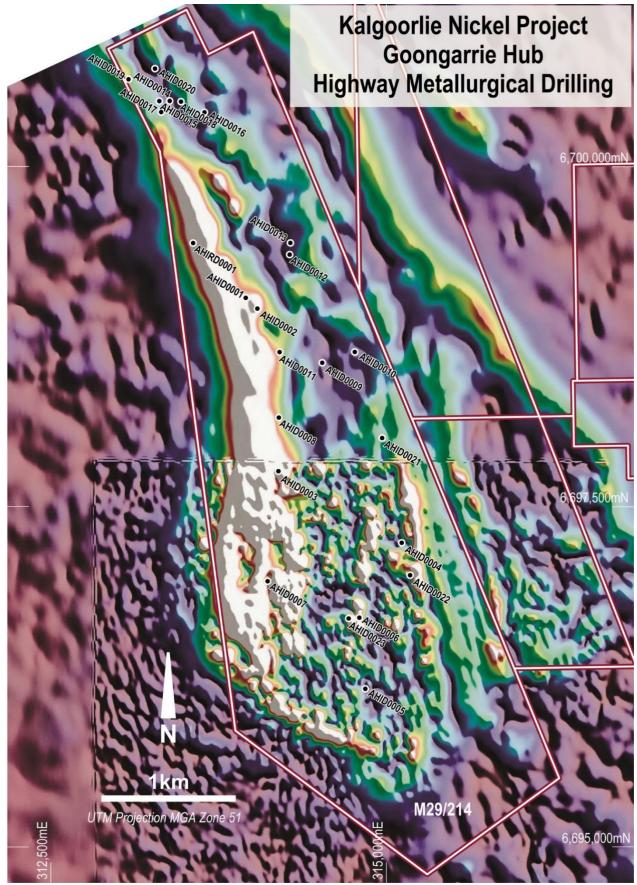


Figure 2: Highway DFS – Metallurgical Drilling Collars and Magnetics Plan, Projection MGA 94 Zone 51. DD hole locations were designed specifically for Atmospheric Leach and Mineralised Neutraliser feed, so were not focussed on high grade HPAL ore zones (for which extensive Highway legacy data is already available from the Vale Inco 2005-2009 PFS).



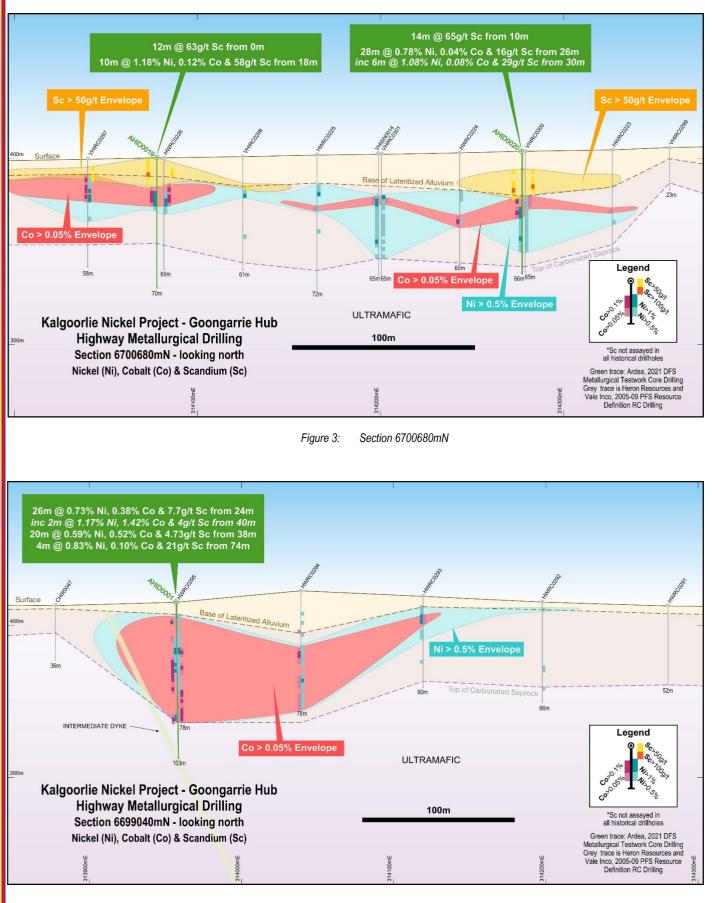


Figure 4: Section 6699040mN



# Highway Geological Model

#### Protolith

The Highway 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 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, high magnesium laterite regolith.

The sections are presented from north (Figure 3) to south (Figure 7) as a representation of the ROM mineralisation as required for systematic metallurgical evaluation. There are two distinct ultramafic komatiite flows at Highway, being the Western Komatiite and Eastern Komatiite.

The Western Komatiite ultramafic is a is a uniform 200-650m wide olivine adcumulate komatiite sheet flow facies. This protolith within the KNP commonly generates silica-goethite mineralisation, being the prime beneficiable HPAL feed. The northern part of Highway is outside the main Highway adcumulate aeromagnetic anomaly and is inferred to be a more orthocumulate and mesocumulate dominant ultramafic so more likely to generate the target high-magnesium AL feed.

The Eastern Komatiite ultramafic is comprised of more discrete, limited strike length magnetic features and has the likely Bardoc Tectonic Zone (**BTZ**) at its eastern contact (BTZ being the control on the Yunndaga-Lady Shenton gold mines east of Ardea tenure). The Eastern Ultramafic is more mesocumulate dominant and is also considered a high-magnesium mineralisation target as an AL feed. As at Goongarrie, the eastern-most Highway drill holes tend to be in olivine orthocumulate and Siberia Komatiite and have a nontronite-dominant regolith with low-grade nickel laterite developed on more shallow dolomitic saprock (potential barren neutraliser).

As well as metallurgical requirements, the standard KNP multi-element suite was run at Highway so as to identify potential nickel sulphide or gold targets within bedrock.

There is a single gold-enriched laterite which is AHID0011/12-20m, 8m at 0.53g/t Au with 0.45% Ni hosted by a silicagoethite-serpentine laterite, located at the hangingwall contact of the Western Komatiite. The interval has been selected as an ALS metallurgical composite to ascertain whether a gravity gold concentrate can be recovered as part of the beneficiation of the AL feed. This is a second priority target and won't be tested until all the main hydrometallurgical studies are completed. The sparsity of gold within the Highway laterite is in strong contrast to the gold seen at Goongarrie South.

For nickel sulphide, key indicators in the Ardea Nickel Sulphide Prospectively Index are palladium (**Pd**), platinum (**Pt**) and sulphur (**S**). Surprisingly in view of the historically reported nickel sulphide mineral pentlandite being identified at Highway (Ardea ASX release 30 September 2020), maximum values were 55ppb Pd, 41ppb Pt and 2.05% S. No nickel sulphide programs are thus proposed at Highway.

#### Regolith

There is a standard KNP regolith profile at Highway, but significantly, the alluvial and lacustrine cover as seen at Goongarrie South is absent. Accordingly, siliceous and nontronitic regolith mineralisation is far better preserved.

#### 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.

#### Laterite - Regolith Cycle 2 - Residual

Laterite Duricrust is dominantly ferruginous (>25% Fe) and usually develops on a mineralised goethite cumulate substrate. The Laterite Mottled at Highway is a distinctive dark red massive mottled kaolinitic clay which may be well mineralised (in contrast to Goongarrie). XRD confirms a haematite-kaolinite mineralogy.



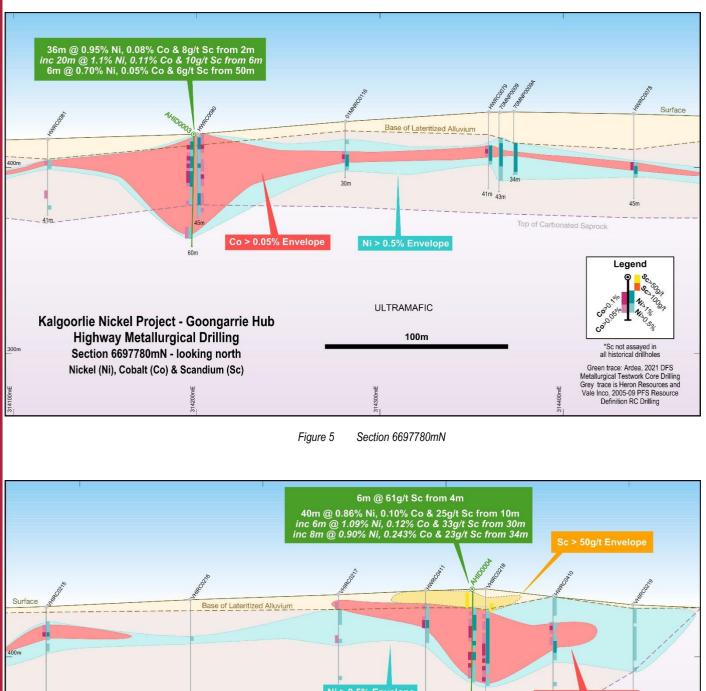




Figure 6 Section 6697260mN



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

The main mineralised zone at Highway is termed Clay Upper/Lower and occurs dominantly between the base of Cycle 2 Lateralised Alluvials and top of Cycle 1 Carbonated Saprock (Figures 3 - 7).

Clay Upper mineralogy is dominantly clay-textured goethite, 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.

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 ensures predictability and accuracy for mine scheduling, significantly diminishing production risk.

The base of Clay Upper is a geochemical contact termed the Magnesia Discontinuity (**MD**), characterised 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. This Material Type typically exceeds 1% Ni and 0.1% Co and is an HPAL rather than AL feed due to the >20% higher HPAL recoveries.

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

Clay Lower is the mineralisation host below the Magnesia Discontinuity. There is invariably 2-10m of mineralised Clay Lower below the MD and above Saprock. Clay Lower is goethite, with accessory silica, nontronite-chlorite-serpentine (green flecks) and magnesite (white-brown coloration, very apparent at Highway).

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 at the top of Saprock, consisting of irregular angular fragments of silicified "olivine cumulate textured" Saprock "floating" in a dark red goethitic mud matrix. The matrix may contain bonanza nickel-cobalt grades. The carbonate "scats" are to assessed as a 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).

#### 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.

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

#### Bedrock - Protolith

As at Goongarrie, the olivine adcumulate weathers to deep goethite-gibbsite- silica clays (HPAL feed), mesocumulate weathers to shallower nontronite clays (AL feed) and orthocumulate has a very thin carbonated saprock weathering profile (potential low-Ni Neutraliser, but pit strip ratios are better optimised by recovering Mineralised Neutraliser as "goodbye cuts' beneath the main mineralisation).

There are occasional intermediate dykes at Highway (refer Figure 4) that may be enriched in Ni-Co in the regolith, reflecting ground water remobilisation from adjoining ultramatic. These "composite" laterites commonly have Rare Earth Element (REE) enrichment within the Magnesia Discontinuity. The ALS composites include a single sample to evaluate the REE deportment (just as for gravity gold, this is a second priority target and won't be tested until all the main hydrometallurgical studies are completed).



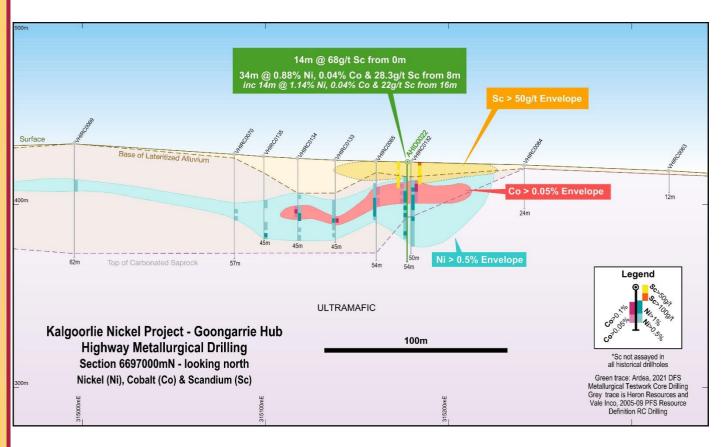


Figure 7 Section 6697000mN

#### Mineralisation

Highway is one of the key constituent lateritic deposits that will contribute to the ore reserves being defined at the KNP Goongarrie Hub, as part of ongoing DFS work.

Continuity of mineralisation is strong between drill holes (Figure 3-7). The KNP Goongarrie Hub is dominantly a "goethite style" (yellow) laterite nickel-cobalt deposit. Highway is a significantly more siliceous and nontronitic style (green) laterite deposits. All defined intercepts from the 2021 Highway program are listed in Appendix 3.

In terms of KNP resource endowment, as noted on page 2, the Geological Survey of Western Australia on 4 February 2022 updated their brochure on nickel-cobalt investment opportunities in Western Australia. The KNP with 830Mt at 0.71% Ni and 0.046% Co was listed as the largest nickel resource in Western Australia (refer attachment, pages 13 and 14 of this release).

The publication may also be viewed at: https://geodocs.dmirs.wa.gov.au/Web/document/794158

# **Ongoing work at Highway**

The 2021 Highway drilling has been the 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 23 Ardea Highway core holes.

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



Authorised for lodgement by the Board of Ardea Resources Limited.

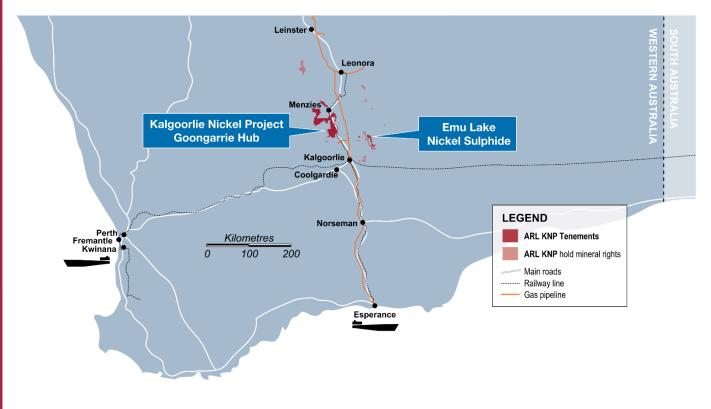
#### For further information regarding Ardea, please visit <u>https://ardearesources.com.au/</u> or contact: Andrew Penkethman

Managing Director and Chief Executive Officer Tel +61 8 6244 5136

#### About Ardea Resources

Ardea Resources (ASX:ARL) is an ASX-listed 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 (ARL ASX announcements 15 February, 16 June 2021), located in a jurisdiction with exemplary ESG credentials.
- Advanced-stage exploration at compelling nickel sulphide targets, such as Emu Lake and Critical Minerals targets within the KNP Eastern Goldfields world-class nickel-gold province, with all exploration targets complementing the KNP nickel development strategy.







#### 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 2012)

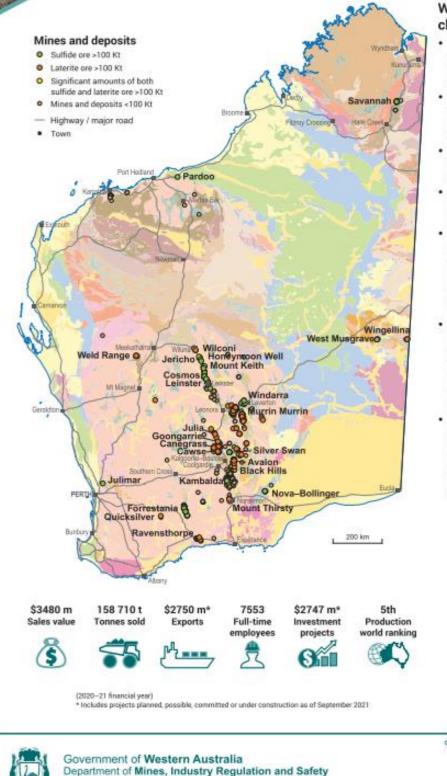
The exploration and industry benchmarking summaries are based on information reviewed or compiled by Mr. Ian Buchhorn, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Buchhorn is a full-time employee of Ardea Resources Limited and has sufficient experience, which is relevant 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.



# NICKEL-COBALT

INVESTMENT OPPORTUNITIES

#### WORLD-CLASS RESOURCE PROVINCE | SECURE INVESTMENT LOCATION WORLD-LEADING GEOSCIENTIFIC DATA | GLOBAL MINING SERVICES INDUSTRY



#### Western Australia hosts worldclassnickel deposits

- The Yilgarn Craton is Australia's premier nickel-producing region containing some of the world's largest nickel resources which are equivalent to 33 Mt of contained nickel
- Western Australia also ranked among the top global producers for cobalt in 2020, with all cobalt produced as a byproduct from operating nickel mines
- Production in 2020–21 reached 158 710 t of nickel (metal and concentrate) from eight operating projects
- The Murrin Murrin, Nova–Bollinger and Ravensthorpe mines also produced cobalt as a byproduct from their nickel operations
- Anticipated demand for battery minerals has encouraged the reopening and development of new nickel mines, such as Cosmos (Western Areas), Ravensthorpe (First Quantum), Mt Keith Satellite project (Nickel West), Cassini and the reopening of the Savannah underground mine
- Exploration continues across the State, with new discoveries made in the Pilbara region at the Andover prospect (Azure Minerals), Bryah Basin at the Mount Labouchere prospect (Bryah Resources) and within the Goldfields at the Mt Alexander prospect (St George Mining)
- A Tier-1 scale maiden Mineral Resource estimate has been announced for the Julimar PGE-Ni-Cu-Co-Au project, located ~70 km north of Perth with 330 Mt at 0.94 g/t palladium+platinum+gold, 0.22% nickel, 0.21% copper and 0.021% cobalt reported

Geological Survey of Western Australia



#### Nickel projects with resources >100 Kt contained nickel

Project	Status	Owner	Resources (Mt)	Av. grade (% Ni)	Contained Ni (kt)	Av. grade (% Co)	Contained Co (t)	Resource date
Kalgoorlie Nickel Project"	Pre-feasibility	Ardea Resources	830.0	0.71	5879	0.05	384 000	16/06/202
Mt Keith1	Operating	BHP Group (Nickel West)	643.7	0.58	3730			30/06/202
Weld Range*	Exploration	EV Metals	385.3	0.64	2466	0.04	154 120	29/10/201
Murrin Murrin	Operating	Glencore	235.7	0.99	2340	0.08	181 198	31/12/202
Leinster <sup>2</sup>	Operating	BHP Group (Nickel West)	194.8	1.04	2024			30/06/202
Wingellina	Feasibility	Metals X	215.8	0.91	1952	0.07	151 087	30/06/201
Ravensthorpe	Operating	First Quantum / Pohang Iron and Steel Co.	331.8	0.57	1904	0.03	87 270	31/12/202
Avalon*	Exploration	Wingstar Investments	169.8	0.83	1403			31/12/201
West Musgrave	Pre-feasibility	Oz Minerals	393.3	0.31	1227	0.01	48 236	09/12/202
Cawse*	Exploration	Wingstar Investments	176.5	0.69	1220			31/12/201
Honeymoon Well*	Exploration	BHP Group (Nickel West)	176.8	0.69	1218			30/06/202
NiWest	Pre-feasibility	GME Resources	85.1	1.03	878	0.07	55 320	30/06/201
Cosmos	Under development	Western Areas	64.4	0.97	625			30/09/202
Wilconi	Exploration	A-Cap Resources / Blackham Resources	78.8	0.74	583	0.07	55 160	17/09/201
Julimar	Exploration	Chalice Mining	330.0	0.16	523	0.02	53 000	09/11/202
Jericho <sup>3</sup>	Exploration	BHP Group (Nickel West)	74.0	0.55	407			30/06/202
Forrestania	Operating	Western Areas / Great Western Exploration	17.9	1.61	287			30/06/202
Savannah	Operating	Panoramic Resources	13.5	1.56	210	0.10	13 328	07/05/202
Canegrass*	Exploration	Huntsman Exploration	29.6	0.71	209	0.06	17 760	27/11/200
Nova-Bollinger	Operating	IGO	11.8	1.76	208	0.06	6 6 9 4	31/12/202
Kambalda	Operating	Mincor Resources	5.3	3.80	199			30/06/202
Silver Swan – Black Swan	Feasibility	Poseidon	30.9	0.63	195			30/06/201
Julia*	Exploration	Wingstar Investments	25.9	0.74	193			31/10/201
Black Hills*	Exploration	Zetek Resources / Western Resources	30.0	0.64	192	0.03	9 000	18/09/200
Quicksilver	Exploration	Golden Mile Resources	26.3	0.65	170	0.04	11 354	19/11/201
Mt Edwards	Exploration	Neometals	10.2	1.60	164	0.05	1 387	30/06/202
Pardoo	Exploration	Caeneus Minerals	50.0	0.30	152	0.03	15 000	31/03/201
Windarra	Exploration	Poseidon	9.7	1.53	148			16/07/201
Mt Thirsty	Pre-feasibility	Conico / Barra Resources	26.8	0.52	140	0.12	31 543	09/09/201
Norseman	Exploration	Galileo	25.1	0.49	122	0.11	27 386	11/12/201
Grey Dam	Exploration	Carnavale Resources	14.6	0.75	110	0.05	7 174	26/02/201
Pyke Hill	Exploration	Cougar Metals	10.5	0.99	104	0.09	9 0 3 0	30/06/201
Sherlock Bay	Exploration	Sabre Resources / International Exploration	24.7	0.40	100	0.02	5 420	31/05/201

Resources estimated according to JORC 2012

Resource estimates have been rounded "Includes the JORC 2004 resource for Lake Rebecca \* Resource estimates are not JORC 2012 compliant Includes Yakabindie resources

<sup>1</sup> Includes Cliffs and Venus resources <sup>1</sup> Includes West Jordan resources

For more information

Contact us

Geological Survey of www.dmirs.wa.gov.au/gswa

MINEDEX www.dmirs.wa.gov.au/minedex

GeoVIEW.WA www.dmirs.wa.gov.au/geoview

Sulfide

Sarah Sargent

Geological Survey and Resource Strategy Division Email: minerals.investors@dmirs.wa.gov.au Tel: +61 8 9222 3890

Laterite



14

Government of Western Australia Department of Mines, Industry Regulation and Safety December 307 Geological Survey of Western Australia

Laterite + sulfide



# Appendix 1 – Collar location data

# Drill holes by Ardea Resources at Highway (DFS)

Hole_ID	Туре	Depth (m)	Tenement	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azi (°)
AHID0001	DD	102.6	M29/00214	MGA94_51	313957	6699036	415	-90	0
AHID0002	DD	72.5	M29/00214	MGA94_51	314040	6698966	418	-90	0
AHID0003	DD	60.3	M29/00214	MGA94_51	314198	6697760	418	-90	0
AHID0004	DD	70.2	M29/00214	MGA94_51	315115	6697236	437	-90	0
AHID0005	DD	60	M29/00214	MGA94_51	314841	6696165	413	-90	0
AHID0006	DD	57.6	M29/00214	MGA94_51	314799	6696686	422	-90	0
AHID0007	DD	50.1	M29/00214	MGA94_51	314114	6696955	416	-90	0
AHID0008	DD	40	M29/00214	MGA94_51	314199	6698155	421	-90	0
AHID0009	DD	50	M29/00214	MGA94_51	314522	6698558	420	-90	0
AHID0010	DD	70	M29/00214	MGA94_51	314764	6698637	422	-90	0
AHID0011	DD	60	M29/00214	MGA94_51	314204	6698638	409	-90	0
AHID0012	DD	50	M29/00214	MGA94_51	314277	6699353	424	-90	0
AHID0013	DD	40	M29/00214	MGA94_51	314282	6699436	426	-90	0
AHID0014	DD	57.5	M29/00214	MGA94_51	313386	6700482	407	-90	0
AHID0015	DD	54.2	M29/00214	MGA94_51	313310	6700484	405	-90	0
AHID0016	DD	50	M29/00214	MGA94_51	313642	6700401	417	-90	0
AHID0017	DD	70.9	M29/00214	MGA94_51	313323	6700401	407	-90	0
AHID0018	DD	60	M29/00214	MGA94_51	313470	6700476	410	-90	0
AHID0019	DD	70.1	M29/00214	MGA94_51	313078	6700640	400	-90	0
AHID0020	DD	66	M29/00214	MGA94_51	313277	6700719	404	-90	0
AHID0021	DD	24	M29/00214	MGA94_51	314967	6698005	418	-90	0
AHID0022	DD	54.5	M29/00214	MGA94_51	315177	6696998	423	-90	0
AHID0023	DD	60.3	M29/00214	MGA94_51	314720	6696681	420	-90	0



# Appendix 2 – Assay results from Highway

All assays from recent drilling at Highway from the KNP Goongarrie Hub.

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), g/t – grams per tonne, bd – below detection, ns – no sample.

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (q/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0001	0	2	AR043389	0.07	0.003	0.02	(9/1)	0.94	16.5	2.1	9.7	10.7	19.9	(ppin) 7	(ppin) 2
AHID0001	2	4	AR043392	0.08	0.002	0.01	10	0.80	18.4	1.1	15.7	8.8	18.5	5	1
AHID0001	4	6	AR043393	0.13	0.002	0.01	12	1.10	19.5	0.3	14.9	11.5	14.8	19	5
AHID0001	6	8	AR043394		0.005	0.02	15	1.32	21.3	1.6	10.8	8.5	18.5	11	3
AHID0001	8	10	AR043395		0.003	0.03	17	1.89	26.6	0.3	10.8	8.4	14.9	15	4
AHID0001	10	10	AR043395		0.033	0.12	22	1.43	20.0	0.5	11.4	10.5	13.8	19	5
AHID0001	10	12	AR043390		0.085	1.40	25	2.48	32.4	2.3	5.5	8.3	12.9	34	9
AHID0001	12	14	AR043397	0.72	0.03	0.17	12	3.89	17.7	5.9	8.4	11.5	12.9	15	4
AHID0001	14	18	AR043399		0.009	0.17	5	2.70	8.1	16.5	5.1	5.7	34.5	9	2
AHID0001 AHID0001	18	20	AR043399	0.14	0.009	0.07	10	2.70	0.1 11.3	10.5	7.1	12.4	21.5	9	2
AHID0001	20	20	AR043402		0.010	0.07	5	1.33	9.4	17.9	2.1	9.6	29.1	6	2
	20	22			0.019		5	1.35	9.4 38.1					22	6
AHID0001			AR043404	0.49		0.20				0.8	6.3	6.9	13.2		
AHID0001	24	26	AR043405	0.63	0.051	0.14	10	2.05	53.1	0.3	1.5	1.8	11.7	18	5
AHID0001	26	28	AR043406		0.035	0.11	7	1.93	54.8	0.3	0.8	1.7	11.4	17	5
AHID0001	28	30	AR043407	0.56	0.041	0.11	12	1.80	43.3	0.9	3.2	6.9	11.0	14	4
AHID0001	30	32	AR043408		0.039	0.09	20	2.70	50.8	0.4	1.5	2.2	12.6	12	3
AHID0001	32	34	AR043409	0.83	0.049	0.12	18	2.28	48.4	0.7	1.8	3.5	12.4	15	4
AHID0001	34	36	AR043412		0.033	0.10	11	2.21	46.4	1.0	2.1	4.6	12.1	9	2
AHID0001	36	38	AR043413		0.063	0.80	4	1.55	51.3	0.9	0.8	2.3	12.6	12	4
AHID0001	38	40	AR043414		0.473	6.22	3	0.85	46.1	1.0	0.5	1.7	13.8	45	13
AHID0001	40	42	AR043415	1.17	1.42	10.90	5	0.65	25.4	1.6	4.9	6.7	14.9	82	24
AHID0001	42	44	AR043416		0.246	1.95	8	1.71	45.6	0.8	2.6	4.7	10.8	30	8
AHID0001	44	46	AR043417	0.92	1.09	7.15	6	1.04	20.5	2.1	8.9	10.0	12.9	130	39
AHID0001	46	48	AR043418		0.528	3.54	5	0.85	18.4	2.5	10.5	13.3	11.9	109	33
AHID0001	48	50	AR043419	0.8	0.908	8.46	4	0.83	40.7	0.8	2.4	2.8	13.4	86	26
AHID0001	50	52	AR043422	0.3	0.153	2.15	3	0.58	49.7	0.6	2.6	3.3	10.9	53	15
AHID0001	52	54	AR043423	0.22	0.07	0.43	3	0.69	46.3	0.8	4.4	5.0	10.7	74	21
AHID0001	54	56	AR043424	0.24	0.059	0.29	5	1.12	30.3	3.0	9.0	9.1	11.8	151	46
AHID0001	56	58	AR043425	0.39	0.217	1.95	6	1.25	20.7	3.7	11.0	11.2	12.6	186	56
AHID0001	58	60	AR043426	0.32	0.081	0.31	6	0.93	17.4	4.7	12.9	12.5	12.2	187	57
AHID0001	60	62	AR043427	0.29	0.028	0.09	5	0.74	24.5	3.7	10.7	10.8	12.4	156	47
AHID0001	62	64	AR043428	0.34	0.048	0.23	6	0.90	30.1	3.5	8.6	9.1	12.3	79	24
AHID0001	64	66	AR043429	0.38	0.047	0.20	7	1.34	19.4	10.0	8.3	11.3	11.9	7	2
AHID0001	66	68	AR043432	0.42	0.029	0.25	7	2.08	14.4	12.3	6.3	15.4	9.5	7	2
AHID0001	68	70	AR043433	0.4	0.028	0.29	7	2.04	11.8	10.4	0.5	23.7	9.5	5	1
AHID0001	70	72	AR043434	0.42	0.021	0.24	6	1.74	9.8	15.9	0.5	13.6	23.8	4	1
AHID0001	72	74	AR043435	0.36	0.019	0.16	5	1.40	8.8	12.8	0.3	21.6	15.4	2	1
AHID0001	74	76	AR043436	0.87	0.086	0.74	22	6.39	33.2	4.6	1.9	8.6	9.0	7	2
AHID0001	76	78	AR043437	0.8	0.116	0.93	21	6.27	35.6	1.6	1.7	10.9	6.3	3	1
AHID0001	78	80	AR043438	0.48	0.053	0.35	11	2.92	16.7	9.4	0.8	21.1	7.4	0	0
AHID0001	80	82	AR043439	0.26	0.018	0.13	5	1.53	7.9	17.3	0.3	18.5	16.1	0	0
AHID0001	82	84	AR043442	0.23	0.018	0.11	5	1.41	8.4	18.1	0.4	19.0	13.6	0	0
AHID0001	84	86	AR043443	0.28	0.018	0.12	5	1.62	9.1	18.3	0.8	19.1	10.4	0	0
AHID0001	86	88	AR043444		0.017	0.10	4	0.87	6.9	16.0	6.8	16.9	10.7	0	0
AHID0001	88	90	AR043445	0.25	0.017	0.12	4	1.28	7.5	16.1	0.3	19.1	17.8	0	bd
AHID0001	90	92	AR043446		0.014	0.12	4	0.93	6.1	19.5	0.2	13.3	27.0	bd	bd
AHID0001	92	94	AR043447	0.24	0.016	0.12	4	1.09	6.8	20.6	0.3	15.6	19.7	0	0
AHID0001	94	96	AR043448		0.017	0.15	4	1.15	7.0	17.7	0.3	19.5	15.6	0	0
AHID0001	96	98	AR043449	0.24	0.019	0.10	4	1.29	6.5	15.9	1.4	22.8	9.2	0	0
		20		0.0	5.515			2.25	0.0	-0.5				2	~



Hole	From	То	Sample	Ni (%)	Co (%)	Mn (%)	Sc	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd	Pr
AHID0001	(m) 98	(m) 100	Number AR043452	0.19	0.01	0.07	(g/t) 4	0.61	5.0	15.3	4.2	21.4	6.8	(ppm) 3	(ppm) 1
AHID0001 AHID0001	100	100	AR043452	0.18	0.01	0.07	5	0.01	7.0	12.6	9.0	17.4	6.7	1	0
AHID0001 AHID0002	0	2	AR043455	0.12	0.007	0.05	39	0.37	37.3	0.1	4.8	11.2	10.4	12	3
AHID0002 AHID0002	2	4	AR043454 AR043455	0.57	0.09	0.25	28	1.59	41.1	0.1	3.2	9.8	9.8	9	2
AHID0002 AHID0002	4	6	AR043455		0.107	0.21	18	2.45	45.0	0.2	2.6	6.9	10.0	8	2
AHID0002 AHID0002	6	8	AR043456 AR043457	0.65	0.107	3.79	23	0.67	45.0 34.0	0.2	2.0	13.1	9.2	。 19	5
AHID0002 AHID0002	8	10	AR043457	0.03	0.23	1.46	11	0.87	38.3	0.4	0.9	14.0	8.5	19	5
AHID0002 AHID0002	° 10	10	AR043458	0.7	0.085	0.33	11	0.87	30.8	0.2	1.3	14.0	8.5 7.0	18	3
AHID0002 AHID0002	10	12	AR043455	0.53	0.001	0.33	14	0.68	26.3	0.3	0.9	24.0	5.8	22	6
AHID0002 AHID0002	12	14	AR043462	0.55	0.108	0.34	12	0.81	42.1	0.3	1.2	11.2	9.3	22	7
AHID0002 AHID0002	14	18	AR043463	1.08	0.108	0.40	26	0.81	42.1	0.2	1.2	7.5	10.3	11	3
	18	20					32					3.9		9	2
AHID0002 AHID0002	20	20	AR043465 AR043466	1.15 1.08	0.122	0.54	34	1.67 2.59	48.5 48.5	0.4 0.5	2.3 2.3	3.5	10.9 9.9	10	2
AHID0002 AHID0002	20	22	AR043460	0.7	0.20	0.92	23	3.35	34.6	0.3	1.5	14.9	6.8	7	2
AHID0002 AHID0002	22	24	AR043467	0.7	0.175	1.76	23	3.34	34.8		1.5	14.9	7.4	13	3
AHID0002 AHID0002	24	28	AR043468	1.21	0.347	1.78	25	5.59	43.4	0.4		5.7	8.6	20	5
AHID0002 AHID0002	26	28 30					26	1.83	43.4	0.5	1.7 0.4	36.4	2.5	6	
	30	32	AR043472 AR043473	0.33	0.033	0.15	18	4.50		0.3	1.1	21.1	5.6	16	1 4
AHID0002		32 34			0.073	0.35	18		25.5	0.7					
AHID0002	32		AR043474		0.025	0.12		2.49	13.1	0.6	0.5	33.3	3.1	3	1
AHID0002	34	36	AR043475	0.45	0.02	0.11	8	2.58	11.5	1.0	0.5	34.2	3.0	1	0
AHID0002	36	38	AR043476		0.022	0.18	10	2.45	12.2	1.7	0.7	32.6	3.4	0	0
AHID0002	38	40	AR043477	1.03	0.042	0.29	26	5.69	25.8	8.2	2.9	11.1	8.8	1	0
AHID0002	40 42	42 44	AR043478	0.96	0.043	0.32	20 12	4.30	22.0	7.4	2.3	16.4	7.7	1	0
AHID0002			AR043479	1.01	0.021	0.15		2.69	13.6	16.6	1.3	7.3	28.7	1	0
AHID0002	44	46	AR043482	0.46	0.016	0.11	8	0.71	9.2	9.1	0.6	25.9	13.0	1	0
AHID0002	46	48	AR043483	0.42	0.014	0.11	6	0.59	8.3	12.4	0.3	20.4	20.7	0	0
AHID0002	48	50	AR043484		0.011	0.08	3	0.40	5.7	16.9	0.1	13.2	32.3	0	0
AHID0002	50 52	52 54	AR043485		0.009	0.07	3 4	0.37	5.2	18.3	0.1	11.1	34.9	0	0
AHID0002			AR043486		0.011	0.08		0.41	5.6	16.8		14.7	29.6		
AHID0002	54	56	AR043487	0.26	0.012	0.10	5	0.20	6.9	23.3	0.1	15.2	17.6	0	0
AHID0002	56	58	AR043488		0.015	0.11	5	0.82	7.9	24.4	0.2	15.9	12.0	0	bd
AHID0002	58	60	AR043489	0.29	0.015	0.11	5	0.21	8.0	25.6	0.1	17.2	8.4	0	bd
AHID0002	60 62	62	AR043492		0.016	0.12	5 5	0.35	8.1	25.5	0.1	17.0	8.4	0	bd
AHID0002		64	AR043493		0.017	0.11	5	0.84	7.6	25.4	0.2	16.4	9.6		bd
AHID0002	64	66 68	AR043494	0.28	0.016	0.11	4	0.72	7.4	26.1	0.2	16.7	8.4	0	bd
AHID0002	66 68	70	AR043495 AR043496	0.25	0.015	0.10	4	0.69	6.9 7.0	24.6	0.2	15.6 15.7	13.9	0	bd
AHID0002 AHID0002	68 70		AR043496 AR043497	0.26	0.015	0.10	4	0.44		24.1	0.2	15.7	14.8 16.1		bd
AHID0002 AHID0003		72			0.014				6.7	24.1				0	bd
	0	2	AR043498	0.28	0.02	0.01	33 7	0.65	23.2 2.3	4.5	7.1 11.7	11.7 24.2	16.5 11.1	4	1
AHID0003			AR043499		0.042		3	0.10		3.8					
AHID0003	4	6	AR043502	1.01	0.048	0.03		0.11	2.9	2.8	12.1	25.2	9.3	4	1
AHID0003	6	8	AR043503	1.47	0.221	0.62	7	1.48	23.8	2.6	4.7	16.9	9.3	12	4
AHID0003	8	10	AR043504		0.049	0.34	20	1.14	26.9	1.6	4.7	16.7	9.3	7	2
AHID0003	10	12	AR043505	0.93	0.061	0.63	10	2.57	36.1	0.9	1.2	14.2	7.0	5 4	2
AHID0003	12	14	AR043506	1.58	0.106	0.47	14	2.74	48.1	0.7	0.9	5.3	8.7		1
AHID0003	14	16	AR043507	1.4	0.097	0.45	13	4.08	47.8	1.2	1.1	4.4	7.9	4	1
AHID0003	16	18	AR043508	1.21	0.108	1.09	6	1.30	31.4	0.7	0.4	19.3	6.0	5	1
AHID0003	18	20	AR043509	0.53	0.059	0.98	5	1.05	15.0	3.4	0.3	29.5	5.1	1	0
AHID0003	20	22	AR043512	1.12	0.122	0.71	8	2.05	32.6	5.5	0.5	12.8	9.3	1	0
AHID0003	22	24	AR043513	1.13	0.139	0.78	9	1.07	33.4	9.3	0.3	9.1	11.5	1	0

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0003	24	26	AR043514	1.04	0.103	0.63	9	1.00	34.2	9.5	0.3	8.9	11.0	2	0
AHID0003	26	28	AR043515	1.31	0.072	0.98	8	0.84	31.6	2.9	0.3	17.1	7.3	1	0
AHID0003	28	30	AR043516	0.46	0.021	0.38	4	0.86	13.0	3.0	0.2	32.5	4.2	0	0
AHID0003	30	32	AR043517	0.69	0.04	0.60	6	0.72	23.5	2.6	0.2	24.8	5.5	1	0
AHID0003	32	34	AR043518	0.47	0.031	0.38	6	0.89	14.5	4.4	0.3	29.4	5.4	0	0
AHID0003	34	36	AR043519	0.55	0.041	0.37	5	0.82	15.8	4.5	0.3	28.4	5.7	1	0
AHID0003	36	38	AR043522	0.7	0.054	0.49	6	0.89	18.7	6.3	0.3	24.0	7.3	1	0
AHID0003	38	40	AR043523	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0003	40	42	AR043524	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0003	42	44	AR043525	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0003	44	46	AR043526	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0003	46	48	AR043527	0.27	0.016	0.09	7	0.96	8.3	19.3	2.4	17.4	11.7	2	1
AHID0003	48	50	AR043528	0.15	0.011	0.10	4	0.78	7.6	16.6	0.3	23.1	9.4	0	0
AHID0003	50	52	AR043529	0.72	0.052	0.85	6	0.32	20.2	5.6	0.2	21.0	11.2	1	0
AHID0003	52	54	AR043532	0.74	0.052	0.74	7	0.36	18.3	10.1	0.2	15.0	18.9	2	0
AHID0003	54	56	AR043533	0.65	0.05	0.36	6	0.52	14.7	14.7	0.2	14.7	18.0	1	0
AHID0003	56	58	AR043534	0.26	0.03	0.19	5	0.67	10.4	18.9	0.3	18.7	11.1	0	0
AHID0003	58	60.3	AR043535	0.22	0.023	0.22	5	0.73	9.6	20.4	0.3	17.7	11.6	0	0
AHID0004	0	2	AR043536		0.005	0.01	41	0.73	31.7	0.1	7.8	12.0	11.2	2	1
AHID0004	2	4	AR043537	0.26	0.014	0.05	47	0.58	35.6	0.1	7.8	9.3	12.0	4	1
AHID0004	4	6	AR043538		0.019	0.05	62	0.41	38.2	0.2	5.8	8.7	12.0	4	1
AHID0004	6	8	AR043539		0.039	0.07	59	0.27	45.5	0.1	3.8	7.2	10.8	4	1
AHID0004	8	10	AR043542	0.39	0.033	0.05	63	0.31	41.3	0.2	4.8	8.5	11.1	3	1
AHID0004		12	AR043543	0.6	0.036	0.13	30	0.21	39.0	0.2	2.0	13.4	9.3	12	3
AHID0004	12	14	AR043544		0.053	0.21	29	0.23	40.4	0.5	2.0	11.8	10.1	21	5
AHID0004	14	16	AR043545	1.25	0.048	0.27	41	0.25	47.8	0.6	2.6	4.5	12.3	11	2
AHID0004	16	18	AR043546		0.091	0.44	38	0.53	49.0	0.6	2.4	4.1	12.0	6	2
AHID0004	18	20	AR043547	1.1	0.083	0.39	37	0.54	49.3	0.7	2.3	4.1	11.8	4	1
AHID0004		22	AR043548		0.146	0.49	35	0.41	51.4	0.6	1.7	2.9	12.1	4	1
AHID0004	22	24	AR043549		0.140	0.59	34	0.65	52.1	0.4	1.7	2.7	12.0	7	2
AHID0004		26	AR043552		0.101	0.27	30	0.68	51.2	0.4	1.5	3.9	11.6	10	2
AHID0004	26	28	AR043553		0.073	0.22	29	0.50	52.1	0.4	1.8	3.4	11.5	6	1
AHID0004	28	30	AR043554	1.09	0.073	0.22	29	0.56	51.7	0.4	1.6	3.5	11.5	4	1
AHID0004	30	32	AR043555		0.038	0.13	23	0.63	49.0	0.3	1.0	5.9	10.9	7	1
AHID0004 AHID0004	30	34	AR043556	0.37	0.028	0.13	21	0.03	49.0 53.7	0.4	1.7	3.3	10.9	12	3
AHID0004 AHID0004	34	36	AR043557	1.13	0.325	4.04	20	0.72	44.5	0.3	2.3	5.5	11.0	32	8
							34							- 52 - 4	。 1
AHID0004	36	38	AR043558	1.14	0.135	0.44		0.49	38.2	0.4	2.0	13.4	8.7		0
AHID0004	38	40	AR043559		0.04	0.05	8	0.17	9.6	0.3	0.5	38.0	2.3	1	
AHID0004	40 42	42 44	AR043562	1	0.47	3.27	23 21	0.26	27.3	0.4	1.4	19.5	8.0	12 5	3
AHID0004				0.66	0.059	0.18		0.93	19.3	0.4	2.6	27.1	5.7		1
AHID0004	44	46		0.55	0.089	0.33	6	0.08	11.4	0.5	0.4	36.0	3.1	4	1
AHID0004	46	48	AR043565	0.62	0.054	0.14	10	0.19	15.5	0.4	0.8	32.9	3.9	3	1
AHID0004	48	50	AR043566	0.6	0.048	0.28	11	0.34	14.1	0.7	0.8	33.1	3.9	3	1
AHID0004	50	52	AR043567	0.48	0.021	0.16	8	0.21	9.6	1.1	0.4	36.6	3.3	1	0
AHID0004	52	54	AR043568	0.28	0.011	0.08	4	0.15	5.4	2.4	0.3	39.5	2.5	0	0
AHID0004	54	56	AR043569	0.38	0.042	0.21	8	0.19	12.1	1.8	0.5	34.2	4.1	2	0
AHID0004	56	58		0.31	0.033	0.19	6	0.16	9.3	1.2	0.4	37.2	3.1	2	0
AHID0004	58	60	AR043573		0.01	0.08	3	0.12	4.9	2.0	0.3	38.5	4.6	0	0
AHID0004	60	62	AR043574	0.45	0.008	0.06	4	0.09	4.3	18.5	0.2	10.7	36.0	0	0
AHID0004	62	64	AR043575	0.41	0.01	0.08	4	0.09	4.3	16.5	0.2	14.0	31.9	0	0



Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0004		66	AR043576	0.37	0.013	0.10	5	0.14	5.7	8.9	0.2	27.4	12.8	0	0
AHID0004	66	68	AR043577	0.32	0.01	0.10	4	0.10	4.9	9.9	0.2	27.4	13.4	0	0
AHID0004	68	70.2	AR043578	0.34	0.006	0.08	2	0.07	3.2	13.4	0.1	19.3	26.1	0	0
AHID0005	0	2	AR043579	0.34	0.019	0.04	47	0.92	41.5	0.3	3.9	8.3	11.7	5	1
AHID0005	2	4	AR043582	0.37	0.015	0.04	26	0.91	33.7	0.3	1.8	15.0	10.4	4	1
AHID0005	4	6		0.61	0.034	0.07	23	1.00	35.6	0.5	2.0	14.2	9.4	3	1
AHID0005	6	8	AR043584	0.43	0.028	0.07	14	0.53	17.0	0.3	1.1	30.9	4.6	3	1
AHID0005	8	10	AR043585	0.3	0.022	0.09	7	0.20	9.2	0.2	0.4	38.6	2.2	3	1
AHID0005	10	12	AR043586	0.73	0.068	0.18	7	0.28	9.4	0.7	0.5	37.2	2.9	4	1
AHID0005	12	14	AR043587	0.9	0.04	0.18	6	0.29	7.8	1.0	0.6	37.7	3.1	3	1
AHID0005	14	16	AR043588	1.05	0.023	0.09	6	0.24	7.2	4.6	0.9	34.7	4.2	3	1
AHID0005	16	18	AR043589		0.014	0.07	6	0.23	7.3	5.2	0.4	34.9	3.9	2	1
AHID0005	18	20	AR043592	1.11	0.014	0.11	5	0.24	5.4	12.7	2.0	25.8	7.4	1	0
AHID0005	20	22	AR043593	0.32	0.015	0.13	5	0.22	6.8	4.5	0.2	36.3	3.7	1	0
AHID0005	22	24	AR043594		0.015	0.13	6	0.25	7.1	3.6	0.2	36.7	3.4	1	0
AHID0005	24	26	AR043595	1.02	0.013	0.14	9	0.19	6.1	6.0	1.1	31.4	7.2	1	0
AHID0005	26	28	AR043596		0.014	0.14	6	0.20	6.5	5.2	0.2	28.0	13.4	1	0
AHID0005	28	30	AR043597	0.25	0.012	0.10	5	0.17	5.7	5.5	0.2	32.4	8.5	1	0
AHID0005	30	32	AR043598		0.014	0.10	6	0.57	6.6	6.3	0.2	26.3	14.2	1	0
AHID0005	32	34	AR043599	0.3	0.015	0.12	6	0.49	6.5	7.9	0.3	25.4	14.4	1	0
AHID0005	34	36	AR043602	0.26	0.009	0.08	7	0.17	5.7	5.8	0.1	31.3	9.7	1	0
AHID0005	36	38	AR043603	0.35	0.005	0.07	11	0.68	6.2	7.0	0.4	29.5	10.0	1	0
AHID0005	38	40	AR043604		0.013	0.10	5	0.21	6.0	16.6	0.4	14.3	23.0	1	0
AHID0005	40	42	AR043605	0.29	0.012	0.10	4	0.21	5.1	12.1	0.2	10.6	30.8	0	0
AHID0005	42	44	AR043606	0.28	0.013	0.13	5	0.15	5.4	10.7	0.1	18.1	22.5	1	0
AHID0005	44	46	AR043607	0.51	0.016	0.13	6	0.21	8.5	13.4	0.4	24.9	9.4	1	0
AHID0005	46	48	AR043608	0.3	0.009	0.06	4	0.14	5.8	5.6	0.2	35.8	4.4	0	0
AHID0005	48	50		0.29	0.009	0.04	4	0.14	5.8	7.7	0.2	33.9	5.1	0	0
AHID0005	50	52	AR043612	1.55	0.005	0.07	5	0.23	5.6	18.8	2.6	18.7	12.1	1	0
AHID0005	52	54	AR043613	0.28	0.011	0.06	4	0.18	5.1	20.0	0.3	17.9	15.8	1	0
AHID0005	54	56	AR043614		0.007	0.09	2	0.05	2.3	15.2	2.2	8.6	30.3	14	5
AHID0005	56	58	AR043615	0.37	0.009	0.08	3	0.10	3.8	18.1	2.1	13.4	21.6	4	1
AHID0005	58	60	AR043616		0.012	0.13	4	0.20	5.1	17.8	0.3	10.8	26.0	1	0
AHID0006	0	2		0.27	0.006	0.04	10	1.05	8.6	0.3	1.3	35.7	4.1	4	1
AHID0006	2	4	AR043618		0.019	0.04	21	1.32	9.3	1.1	2.4	29.5	8.7	3	1
AHID0006	4	6	AR043619		0.033	0.08	17	1.50	8.9	1.0	1.6	34.0	4.9	3	1
AHID0006	6	8	AR043622	0.81	0.031	0.06	15	1.85	9.6	1.6	1.6	31.8	6.1	4	1
AHID0006	8	10	AR043623	0.66	0.028	0.12	8	1.54	9.2	1.1	0.9	35.6	3.1	3	1
AHID0006	10	12	AR043624	1.28	0.053	0.13	11	2.03	9.5	6.7	2.2	27.0	7.0	3	1
AHID0006	12	14	AR043625	1.25	0.031	0.10	6	0.92	5.6	15.2	2.4	22.7	8.8	2	0
AHID0006	14	16	AR043626		0.021	0.08	5	1.02	5.5	16.6	0.9	24.2	7.9	1	0
AHID0006	16	18	AR043627	0.54	0.006	0.03	3	0.34	3.3	5.7	6.1	29.5	4.3	4	1
AHID0006	18	20	AR043628	0.55	0.002	0.01	3	0.04	1.4	3.4	10.5	27.8	6.6	7	2
AHID0006	20	22	AR043629	0.35	0.013	0.11	5	0.62	5.6	14.0	2.0	25.1	8.0	2	1
AHID0006	22	24	AR043632	0.23	0.016	0.12	5	0.79	7.7	14.8	0.4	25.1	8.3	2	1
AHID0006	24	26	AR043633	0.23	0.012	0.12	6	0.75	7.3	17.3	0.5	22.7	9.7	2	1
AHID0006	26	28	AR043634	0.21	0.012	0.08	5	0.29	5.8	16.3	0.2	22.1	15.9	4	1
AHID0006	28	30	AR043635	0.25	0.0012	0.07	3	0.09	3.9	18.6	0.1	15.9	28.0	4	1
AHID0006	30	32	AR043636		0.006	0.04	2	0.05	2.7	19.2	0.0	13.0	35.5	2	1
AHID0006	32	34	AR043637		0.009	0.08	2	0.06	3.2	19.8	0.0	11.5	36.4	1	0
/11100000	52	J4	,110-13037	0.25	0.009	0.00	2	0.00	J.2	10.0	0.0	11.5	50.4	1	0

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppn
AHID0006	34	36	AR043638	0.14	0.003	0.04	2	0.06	2.3	10.3	4.1	23.9	16.0	5	1
AHID0006	36	38	AR043639	0.14	0.005	0.05	2	0.16	2.6	5.7	5.6	30.6	3.4	8	2
AHID0006	38	40	AR043642		bd	0.01	2	0.01	0.7	0.3	8.2	34.2	0.4	15	4
AHID0006	40	42	AR043643		0.001	0.01	2	0.03	0.9	0.4	8.3	33.9	0.6	12	3
AHID0006	42	44	AR043644	0.02	bd	0.01	2	0.03	0.9	0.4	8.1	34.1	0.6	9	3
AHID0006	44	46	AR043645	0.04	bd	0.01	2	0.04	1.1	0.9	7.8	34.0	1.2	10	3
AHID0006	46	48	AR043646	0.06	0.002	0.01	2	0.11	1.5	2.6	6.2	33.7	1.8	7	2
AHID0006	48	50	AR043647	0.02	0.001	0.01	2	0.04	0.8	0.7	9.1	32.3	0.9	12	3
AHID0006	50	52	AR043648	0.25	0.012	0.08	5	0.70	6.4	6.0	0.9	24.6	15.7	7	2
AHID0006	52	54	AR043649	0.17	0.013	0.09	5	0.50	5.5	7.1	0.1	20.7	21.6	2	1
AHID0006	54	56	AR043652	0.16	0.011	0.08	6	0.54	5.4	13.0	0.1	9.0	31.3	2	1
AHID0006	56	57.6	AR043653	0.15	0.01	0.07	4	0.62	5.9	7.3	0.2	26.3	14.2	1	0
AHID0007	0	2	AR043655	0.44	0.064	0.17	7	0.99	8.1	1.3	1.0	31.3	8.1	17	5
AHID0007	2	4	AR043656	0.73	0.043	0.10	4	0.83	6.1	1.9	0.3	37.4	4.6	3	1
AHID0007	4	6	AR043657	0.55	0.022	0.05	3	0.40	3.0	10.4	0.1	26.3	20.0	0	0
AHID0007	6	8	AR043658		0.01	0.03	2	0.21	1.8	16.2	0.1	18.4	29.8	0	0
AHID0007	8	10	AR043659		0.012	0.10	4	0.90	6.4	18.4	0.3	10.6	34.3	0	0
AHID0007	10	12	AR043662		0.009	0.08	3	0.84	5.1	18.2	0.2	12.1	34.1	0	0
AHID0007	12	14	AR043663		0.008	0.08	4	0.79	5.6	17.3	0.2	12.8	32.9	0	0
AHID0007	14	16	AR043664	0.18	0.007	0.07	3	0.75	5.2	17.9	0.2	12.5	33.6	0	0
AHID0007	16	18	AR043665		0.006	0.07	3	0.72	5.0	18.0	0.2	12.3	34.0	0	0
AHID0007	18	20	AR043666		0.007	0.07	3	0.73	5.2	17.0	0.2	13.8	32.2	0	0
AHID0007	20	22	AR043667		0.009	0.07	3	0.75	5.0	13.5	0.2	19.7	25.8	0	0
AHID0007	22	24	AR043668		0.012	0.09	4	0.76	5.9	8.9	0.3	26.6	17.4	1	0
AHID0007	24	26	AR043669		0.01	0.09	4	0.87	5.9	14.6	0.3	17.3	27.5	0	0
AHID0007	26	28	AR043672		0.009	0.08	4	0.80	5.4	18.4	0.2	11.6	34.5	0	0
AHID0007	28	30	AR043673		0.008	0.07	3	0.77	5.1	18.1	0.2	12.3	33.7	0	0
AHID0007	30	32	AR043674		0.008	0.07	3	0.77	5.3	16.8	0.2	14.4	31.3	0	0
AHID0007	32	34	AR043675		0.009	0.08	4	0.78	5.5	18.7	0.2	13.3	30.2	0	0
AHID0007	34	36	AR043676	0.22	0.012	0.10	4	0.92	6.7	21.6	0.3	13.9	22.4	0	0
AHID0007	36	38	AR043677		0.011	0.09	4	0.90	6.5	22.1	0.3	13.5	22.5	0	0
AHID0007	38	40	AR043678		0.012	0.10	5	0.84	6.6	21.9	0.3	13.5	22.6	0	0
AHID0007	40	42	AR043679		0.011	0.09	4	0.84	6.4	22.9	0.3	13.2	22.0	0	0
AHID0007	42	44	AR043682	0.2	0.011	0.17	4	0.81	6.0	23.0	0.2	12.5	23.3	0	0
AHID0007	44	46	AR043683		0.014	0.07	5	0.94	7.2	23.0	0.2	15.0	16.7	0	0
AHID0007	46	48		0.24	0.013	0.09	4	0.90	7.4	23.1	0.2	14.7	17.0	0	0
AHID0007	48	50.1	AR043685		0.014	0.11	5	1.00	7.4	23.3	0.3	15.2	15.8	0	0
AHID0008	0	2	AR043686		0.022	0.05	19	0.19	8.1	0.4	6.8	29.8	7.9	52	13
AHID0008	2	4	AR043687	0.23	0.016	0.05	17	0.16	6.6	0.5	3.8	33.4	6.9	10	3
AHID0008	4	6	AR043688	0.7	0.068	0.06	30	0.19	7.3	0.6	2.3	36.3	4.2	31	9
AHID0008	6	8	AR043689	1.4	0.147	0.06	6	0.10	3.8	4.1	0.9	34.0	10.1	12	3
AHID0008	8	10	AR043692	2.03	0.114	0.22	6	0.10	5.4	4.7	0.6	31.8	11.3	13	3
AHID0008	10	12	AR043693		0.039	0.09	3	0.10	4.8	2.5	0.2	37.6	6.2	4	1
AHID0008	12	14	AR043694	1.59	0.098	0.34	6	0.10	7.0	7.7	0.4	26.3	16.4	9	3
AHID0008	14	14	AR043695		0.038	0.13	6	0.13	6.8	8.7	0.4	30.7	7.5	2	0
AHID0008	16	18	AR043696	0.87	0.022	0.15	3	0.23	4.2	12.6	0.4	21.5	25.0	0	0
AHID0008	18	20	AR043697		0.011	0.00	2	0.08	2.2	12.0	0.1	14.3	34.4	0	0
AHID0008	20	20		0.61	0.008	0.04	3	0.04	4.4	11.1	0.0	24.1	22.1	0	0
AHID0008	20	22	AR043698	0.61	0.012	0.09	3	0.08	4.4	11.1	0.1	12.5	35.5	0	0
AHID0008	22	24	AR043033		0.003	0.07	1	0.08	1.7	19.6	0.0	12.9	36.8	0	0



Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0008		28	AR043703	0.23	0.006	0.06	(g/t) 3	0.07	3.9	14.8	0.1	18.7	28.5	(ppm) 0	(ppin) 0
AHID0008	28	30	AR043704		0.005	0.05	2	0.06	2.7	20.9	0.0	9.9	39.3	0	0
AHID0008	30	32	AR043705	0.22	0.008	0.06	3	0.09	4.2	18.8	0.1	12.3	35.5	0	bd
AHID0008	32	34	AR043706	0.16	0.005	0.05	2	0.06	2.8	20.6	0.1	10.5	38.7	0	bd
AHID0008	34	36	AR043707		0.007	0.05	3	0.09	3.8	18.0	0.1	12.1	35.6	0	bd
AHID0008	36	38	AR043708		0.007	0.05	3	0.05	3.7	18.8	0.1	11.6	36.0	0	bd
AHID0008	38	40	AR043709	0.21	0.007	0.06	3	0.10	4.0	17.2	0.1	11.9	35.2	0	0
AHID0009	0	2	AR043712	0.21	0.007	0.03	13	0.26	5.7	0.8	3.4	32.8	8.0	8	2
AHID0009	2	4	AR043713	0.45	0.022	0.04	11	0.34	5.7	0.7	2.3	37.9	3.6	6	2
AHID0009	4	6	AR043714	0.45	0.022	0.04	12	0.33	6.4	1.0	3.4	35.1	5.0	12	3
AHID0009	6	8	AR043715	0.42	0.040	0.00	4	0.28	4.8	4.6	0.4	35.0	8.4	6	1
AHID0009	8	10	AR043716		0.013	0.07	4	0.20	4.5	2.4	0.4	38.5	5.2	3	1
AHID0009	10	12	AR043710	0.28	0.013	0.07	3	0.18	3.5	14.2	0.3	20.1	26.9	1	0
AHID0009	10	14	AR043718		0.013	0.06	3	0.23	4.4	1.1	0.1	40.8	3.2	0	0
AHID0009	14	16	AR043718		0.012	0.00	2	0.23	3.6	0.7	0.1	42.3	2.2	0	0
AHID0009	16	18	AR043722		0.005	0.06	3	0.15	3.6	6.6	0.1	32.6	12.9	0	0
AHID0009	18	20	AR043722	0.31	0.001	0.00	2	0.21	3.7	0.0	0.1	42.1	2.2	0	0
AHID0009	20	22	AR043724	0.18	0.005	0.00	3	0.21	5.1	0.5	0.1	41.4	1.8	0	0
AHID0009	20	24	AR043724	0.18	0.012	0.07	3	0.23	5.4	0.5	0.1	40.8	2.1	0	0
AHID0009 AHID0009	22	24		0.22	0.012	0.08	4	0.33	5.4	0.7	0.2	40.8	1.9	0	0
AHID0009	24	28		0.23	0.015	0.10	2	0.31	2.2	0.4	0.2	44.4	0.9	0	0
AHID0009 AHID0009	20	30	AR043727		0.003	0.05	2	0.12	3.7	4.0	0.1	39.0	3.3	0	0
AHID0009	30	32	AR043728	0.13	0.009	0.00	2	0.22	3.7	7.7	0.1	30.9	14.2	0	0
AHID0009	32	34	AR043723	0.27	0.008	0.00	3	0.20	4.5	7.5	0.1	29.7	14.2	0	0
AHID0009	34	36	AR043732	0.28	0.012	0.07	3	0.28	4.3	7.9	0.1	19.3	25.0	0	0
AHID0009 AHID0009	36	38			0.011	0.07	2	0.29	4.2 3.4	10.5	0.1	19.5	33.3	0	0
	38	38 40	AR043734	0.23		0.05	3	0.22			0.1	11.9	33.1	0	bd
AHID0009 AHID0009	30 40	40	AR043735 AR043736		0.008	0.05	3	0.21	3.5 3.8	11.9	0.1	12.0		0	
AHID0009 AHID0009	40	42	AR043736		0.008	0.08	3	0.23	3.6	14.3 16.6	0.1	11.0	34.5 33.4	0	0
AHID0009 AHID0009	42	44	AR043737		0.000	0.05	3	0.23	3.9	17.5	0.1	10.9	36.1	0	bd
AHID0009 AHID0009	44	40	AR043738	0.21	0.008	0.08	2	0.22	3.0	17.5	0.1	10.9	36.9	bd	bd
AHID0009	40	40 50	AR043733	0.19	0.003	0.04	2	0.10	1.9	20.4	0.1	10.9	38.3	0	bd
AHID0009 AHID0010	40	2	AR043742		0.003	0.03	2 34	1.37	1.9	0.4	10.9	15.6	13.4	2	1
AHID0010 AHID0010	2	4	AR043743		0.002	0.02	49	2.24	31.7	0.4	8.7	9.5	12.2	3	1
AHID0010 AHID0010	4	4		0.09	0.004	0.02	49 79	2.24	35.9	0.4	8.7 7.9	9.5 7.4	12.2	6	1
AHID0010 AHID0010	6	8		0.17	0.009	0.03	116	1.46	39.4	0.3	6.3	7.4	12.0	7	1
AHID0010 AHID0010	8	10	AR043740	0.24	0.001	0.04	95	1.40	31.0		8.2	11.5	11.9	5	1
AHID0010 AHID0010	。 10	10	AR043747	0.24	0.008	0.05	101	1.05	27.5	0.6 0.8	8.8	13.1	11.4	12	3
AHID0010 AHID0010	10	12	AR043748	0.2	0.000	0.07	81	2.03	32.4	0.8	8.2	10.6	9.6	7	2
AHID0010 AHID0010	12	14	AR043749	0.10	0.01	0.10	33	1.04	11.6	8.4	6.2 4.1	23.6	7.7	3	1
AHID0010 AHID0010	14	18	AR043752	0.51	0.008	0.02	22	0.81	9.0	10.2	2.6	25.5	7.1	2	0
AHID0010 AHID0010	18	20	AR043755	0.57	0.009	0.02	11	0.81	5.6	10.2	1.6	29.2	5.4	1	0
	20			0.4											
AHID0010	20	22 24	AR043755	1.54	0.067	0.20	21 32	1.20	10.3	8.8 2.2	2.7 4.0	24.9	7.6 9.7	1 2	0
AHID0010			AR043756		0.059	0.18	32 29	2.43	16.8			21.8			1
AHID0010	24	26	AR043757	1.07	0.035	0.17		2.04	14.7	3.1	3.9	24.3	7.9	2	0
AHID0010	26	28	AR043758	1.28	0.05	0.24	31	4.21	17.6	3.7	4.2	19.9	7.9	2	0
AHID0010	28	30	AR043759	1.02	0.056	0.29	28	2.33	15.5	5.2	3.4	22.6	7.5	2	0
AHID0010	30	32	AR043762	0.98	0.042	0.23	34	2.07	19.1	2.9	3.7	21.4	8.1	3	1
AHID0010	32	34	AR043763	0.86	0.039	0.20	17	0.70	14.1	4.3	1.6	27.7	6.6	2	0
AHID0010	34	36	AR043764	0.74	0.028	0.17	21	0.44	16.6	4.6	1.8	25.6	6.8	2	0

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppn
AHID0010	36	38	AR043765	0.92	0.042	0.26	23	0.43	17.9	3.0	2.0	25.4	7.0	1	0
AHID0010	38	40	AR043766	0.76	0.028	0.19	22	0.47	15.2	3.3	2.1	27.0	7.0	1	0
AHID0010	40	42	AR043767	0.58	0.027	0.21	14	0.28	12.1	5.8	1.3	28.4	7.0	1	0
AHID0010	42	44	AR043768	0.45	0.017	0.12	12	0.27	10.0	6.2	1.1	30.1	6.5	1	0
AHID0010	44	46	AR043769	0.47	0.025	0.17	17	0.37	14.6	14.7	1.6	18.4	9.7	1	0
AHID0010	46	48	AR043772	0.47	0.021	0.17	17	0.38	14.7	14.6	1.7	18.4	9.6	1	0
AHID0010	48	50	AR043773		0.019	0.17	16	0.40	14.0	15.2	1.6	18.4	9.6	1	0
AHID0010	50	52	AR043774		0.016	0.16	17	0.33	11.8	16.0	1.7	19.2	9.8	1	0
AHID0010	52	54	AR043775		0.014	0.16	17	0.30	11.1	16.9	1.8	18.8	10.0	1	0
AHID0010	54	56	AR043776		0.024	0.25	17	0.42	12.7	15.2	1.3	19.4	9.9	2	0
AHID0010	56	58	AR043777		0.014	0.10	13	0.34	11.8	13.8	1.1	22.2	8.9	0	0
AHID0010	58	60	AR043778		0.009	0.09	21	0.31	6.9	14.0	2.8	22.0	5.7	5	1
AHID0010	60	62	AR043779		0.005	0.07	23	0.20	5.9	15.2	2.9	23.2	5.8	4	1
AHID0010	62	64	AR043782	0.12	0.00	0.10	11	0.44	6.2	20.0	1.3	17.0	14.4	1	0
AHID0010	64	66	AR043782		0.01	0.10	10	0.26	6.1	20.0	1.3	17.0	13.8	2	0
AHID0010	66	68	AR043784	0.22	0.01	0.03	13	0.15	6.0	20.7	1.2	17.8	12.3	2	0
AHID0010 AHID0010	68	70	AR043784		0.01	0.08	9	0.13	6.4	20.8	0.9	17.5	12.3	2	0
AHID0010 AHID0011	08	2	AR043785		0.011	0.08	6	0.18	4.8	4.9	1.3	14.8	27.1	4	1
AHID0011	2	4	AR043787		0.011	0.05	7	0.65	8.7	3.6	1.0	28.2	11.8	2	1
AHID0011	4	6	AR043788		0.016	0.12	6	0.59	8.0	1.9	0.5	34.0	6.8	2	1
AHID0011	6	8	AR043789		0.036	0.21	8	0.89	10.9	1.0	0.9	34.6	3.7	3	1
AHID0011	8	10	AR043792		0.016	0.08	6	0.87	7.9	3.8	0.5	33.5	5.9	1	0
AHID0011	10	12	AR043793		0.022	0.13	7	1.03	10.0	5.0	0.3	31.4	7.3	1	0
AHID0011	12	14	AR043794		0.018	0.11	9	1.24	13.3	1.4	0.6	33.2	3.4	2	0
AHID0011	14	16	AR043795	0.34	0.013	0.09	7	0.88	10.1	2.7	0.4	34.9	3.4	1	0
AHID0011	16	18	AR043796		0.014	0.11	5	0.59	7.6	5.8	0.2	34.0	4.9	1	0
AHID0011	18	20	AR043797		0.018	0.11	7	1.04	8.6	7.0	0.4	31.0	5.7	1	0
AHID0011	20	22	AR043798		0.005	0.03	2	0.13	2.8	15.8	0.1	20.6	24.7	1	0
AHID0011	22	24	AR043799		0.005	0.04	3	0.67	3.9	1.6	0.2	41.2	1.8	1	0
AHID0011	24	26	AR043802		0.007	0.06	4	0.65	4.6	1.4	0.1	41.0	1.7	1	0
AHID0011	26	28	AR043803	0.28	0.009	0.06	4	0.66	5.2	3.3	0.1	37.3	4.3	1	0
AHID0011	28	30	AR043804	0.43	0.005	0.04	3	0.57	3.4	9.1	0.2	28.4	17.0	1	0
AHID0011	30	32	AR043805	0.29	0.008	0.06	3	0.31	3.7	18.8	0.1	9.0	37.4	0	0
AHID0011	32	34	AR043806	0.18	0.007	0.04	4	0.73	5.2	4.9	0.1	33.9	9.3	1	0
AHID0011	34	36	AR043807	0.23	0.01	0.07	5	1.01	7.7	2.8	0.2	35.9	4.9	2	0
AHID0011	36	38	AR043808	0.2	0.012	0.06	6	0.65	6.9	1.2	0.1	39.3	2.2	1	0
AHID0011	38	40	AR043809	0.21	0.015	0.11	4	0.51	6.4	3.3	0.1	36.2	6.2	0	0
AHID0011	40	42	AR043812	0.27	0.012	0.09	4	0.33	5.4	14.8	0.1	15.9	28.0	0	0
AHID0011	42	44	AR043813	0.22	0.015	0.10	3	0.39	5.6	11.0	0.1	21.5	21.9	0	0
AHID0011	44	46	AR043814	0.21	0.014	0.09	4	0.38	5.5	11.8	0.1	21.4	21.9	0	0
AHID0011	46	48	AR043815	0.22	0.011	0.08	4	0.30	5.0	15.8	0.1	15.6	29.0	0	0
AHID0011	48	50	AR043816	0.22	0.013	0.08	3	0.36	4.9	19.3	0.1	9.5	32.9	0	0
AHID0011	50	52	AR043817	0.19	0.01	0.08	4	0.47	5.6	12.9	0.1	21.3	20.2	0	0
AHID0011	52	54	AR043818	0.27	0.009	0.08	4	0.38	6.1	13.2	0.1	21.0	20.2	0	0
AHID0011	54	56	AR043819	0.21	0.01	0.07	4	0.61	6.5	9.2	0.1	26.5	13.9	0	0
AHID0011	56	58	AR043822		0.012	0.09	4	0.60	6.2	14.1	0.1	21.8	16.5	0	0
AHID0011	58	60	AR043823		0.01	0.07	4	0.45	6.2	13.6	0.7	22.9	14.9	0	0
AHID0012	0	2	AR043824	0.10	0.008	0.04	22	1.04	17.4	1.7	3.5	25.8	7.6	2	1
AHID0012	2	4	AR043825	0.49	0.033	0.04	22	0.51	8.6	1.1	3.2	33.5	5.8	7	2
AHID0012 AHID0012	4	6	AR043826		0.193	0.03	10	0.40	7.2	3.2	1.8	30.5	9.3	91	24



Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0012		8	AR043827	1.48	0.071	0.07	7	0.35	5.6	8.3	1.1	25.5	17.6	12	3
AHID0012	8	10	AR043828	0.66	0.018	0.04	6	0.26	4.1	15.9	0.5	14.3	32.2	3	1
AHID0012	10	12	AR043829	0.27	0.012	0.05	2	0.17	3.0	17.5	0.1	12.1	35.6	1	0
AHID0012	12	14	AR043832	0.24	0.009	0.04	2	0.14	2.7	20.9	0.0	8.8	40.0	0	0
AHID0012	14	16	AR043833	0.39	0.008	0.02	1	0.04	0.9	23.6	bd	6.9	43.7	0	0
AHID0012	16	18	AR043834	1.05	0.013	0.07	2	0.20	4.3	17.1	0.1	14.3	32.6	0	0
AHID0012	18	20	AR043835	1.77	0.019	0.12	4	0.41	7.3	8.6	0.1	24.7	18.5	0	0
AHID0012	20	22	AR043836	1.29	0.014	0.08	3	0.25	4.6	14.7	0.1	17.6	28.8	0	0
AHID0012	22	24	AR043837	1.09	0.012	0.06	2	0.15	3.4	18.1	0.0	13.3	34.4	0	0
AHID0012	24	26	AR043838	0.3	0.008	0.06	2	0.20	3.6	21.0	0.1	8.9	39.6	0	bd
AHID0012	26	28	AR043839	0.23	0.008	0.06	2	0.20	3.9	20.5	0.0	9.7	38.6	0	bd
AHID0012	28	30	AR043842		0.008	0.06	2	0.22	4.1	19.7	0.1	10.8	37.1	0	0
AHID0012	30	32	AR043843	0.19	0.008	0.07	2	0.25	4.2	19.3	0.1	11.4	36.5	0	0
AHID0012		34	AR043844		0.006	0.05	2	0.15	3.3	20.9	0.0	9.7	39.0	0	bd
AHID0012	34	36	AR043845	0.2	0.008	0.07	2	0.23	4.6	19.2	0.1	11.0	36.4	bd	bd
AHID0012	36	38	AR043846	0.19	0.008	0.07	2	0.17	4.2	20.4	0.0	9.7	38.4	0	bd
AHID0012		40	AR043847		0.007	0.07	2	0.17	4.2	19.6	0.0	10.9	36.9	0	bd
AHID0012	40	42	AR043848	0.18	0.007	0.07	2	0.14	4.1	20.7	0.0	9.5	38.6	bd	bd
AHID0012	42	44	AR043849	0.2	0.008	0.07	3	0.23	4.8	18.7	0.1	12.1	35.1	0	bd
AHID0012		46	AR043852		0.008	0.07	2	0.22	4.4	20.3	0.1	9.9	37.7	0	bd
AHID0012	46	48	AR043853		0.009	0.08	2	0.32	5.2	20.2	0.1	12.8	30.3	0	bd
AHID0012	48	50	AR043854		0.013	0.10	3	0.43	6.8	25.0	0.1	16.3	12.4	0	bd
AHID0013	0	2	AR043855		0.008	0.03	23	0.48	6.8	0.7	3.9	35.1	5.4	5	1
AHID0013	2	4	AR043856		0.009	0.04	31	0.45	8.4	0.5	3.5	34.8	4.7	3	1
AHID0013	4	6	AR043857	0.6	0.033	0.05	83	0.48	9.2	0.6	3.5	33.6	4.9	3	1
AHID0013	6	8	AR043858	1.74	0.092	0.08	8	0.28	5.0	11.7	0.8	21.2	23.4	54	15
AHID0013	8	10	AR043859		0.007	0.04	2	0.13	2.4	19.3	0.1	12.8	36.0	1	0
AHID0013		12	AR043862		0.008	0.04	5	0.11	2.5	20.5	0.2	10.7	38.2	0	0
AHID0013		14	AR043863		0.011	0.04	2	0.09	2.1	22.6	0.1	7.8	42.0	3	1
AHID0013		16	AR043864		0.005	0.02	2	0.07	1.5	21.9	0.1	9.4	40.5	0	0
AHID0013		18	AR043865		0.005	0.02	2	0.08	1.8	23.0	0.1	7.3	42.7	0	0
AHID0013		20	AR043866		0.006	0.04	2	0.14	2.6	22.0	0.0	8.2	41.2	0	0
AHID0013	20	22	AR043867	0.18	0.006	0.04	2	0.12	2.4	21.9	0.1	8.4	41.0	0	0
AHID0013		24	AR043868		0.005	0.03	2	0.08	1.6	24.4	0.0	4.9	45.5	0	bd
AHID0013		26	AR043869	0.2	0.007	0.05	3	0.17	3.4	20.3	0.1	10.2	38.3	0	0
AHID0013		28	AR043872	0.16	0.004	0.04	2	0.12	2.4	22.2	0.0	8.0	41.4	0	bd
AHID0013	28	30	AR043873	0.17	0.005	0.05	2	0.13	2.8	21.6	0.0	8.9	40.2	0	0
AHID0013		32	AR043874		0.004	0.04	2	0.12	2.8	22.1	0.0	8.1	41.2	0	bd
AHID0013	32	34	AR043875	0.2	0.006	0.05	3	0.12	3.3	21.7	0.1	8.5	40.1	0	0
AHID0013		36	AR043876	0.18	0.006	0.05	2	0.14	3.3	20.6	0.1	10.4	37.7	0	bd
AHID0013		38	AR043877		0.007	0.06	3	0.22	3.7	18.2	0.1	14.1	33.2	0	bd
AHID0013		40	AR043878		0.003	0.03	2	0.12	2.1	22.9	0.1	7.4	42.2	0	bd
AHID0014	0	2	AR043879	0.06	0.004	0.03	19	0.57	15.2	2.3	6.1	14.1	18.0	4	1
AHID0014	2	4	AR043882		0.011	0.04	34	0.76	20.1	2.1	10.4	12.2	14.5	4	1
AHID0014		6	AR043883		0.005	0.03	22	0.40	10.9	2.1	4.9	13.6	22.4	5	1
AHID0014		8	AR043884		0.063	0.32	111	0.90	23.5	1.1	11.2	12.5	12.2	5	1
AHID0014	8	10	AR043885	0.37	0.084	0.42	16	0.55	13.1	4.2	6.5	23.3	8.4	2	1
AHID0014		12	AR043886	0.16	0.013	0.08	4	0.18	3.6	7.0	7.9	25.8	6.0	0	0
AHID0014	12	14	AR043887		0.025	0.11	8	0.62	12.1	0.8	0.6	34.7	3.6	6	1
AHID0014		16	AR043888		0.044	0.08	9	0.93	12.6	4.0	1.3	30.2	5.0	3	1
			15050	5.55	0.011	0.00	5	0.00			2.0	33.2	5.0	5	

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm
AHID0014	16	18	AR043889	0.32	0.021	0.06	6	0.69	8.1	2.0	0.5	37.1	2.9	2	0
AHID0014	18	20	AR043892	0.67	0.039	0.11	11	1.46	14.5	3.3	1.1	28.7	5.4	1	0
AHID0014	20	22	AR043893	0.57	0.038	0.19	9	1.39	13.3	9.1	0.5	25.1	7.3	0	0
AHID0014	22	24	AR043894	0.33	0.019	0.21	5	0.80	7.6	11.1	0.2	28.6	6.5	0	0
AHID0014	24	26	AR043895	0.35	0.025	0.17	6	0.81	8.4	12.6	0.3	26.5	7.3	0	0
AHID0014	26	28	AR043896	0.27	0.016	0.09	5	0.66	7.2	8.4	0.2	31.9	5.2	0	0
AHID0014	28	30	AR043897	0.32	0.019	0.17	6	0.73	8.1	7.9	0.2	31.5	5.2	0	0
AHID0014	30	32	AR043898	0.3	0.02	0.16	5	0.80	8.3	9.5	0.2	29.7	5.9	0	0
AHID0014	32	34	AR043899	0.34	0.025	0.18	6	0.87	8.9	6.2	0.2	32.3	4.8	1	0
AHID0014	34	36	AR043902	0.48	0.027	0.18	10	1.15	11.6	3.2	0.3	32.3	4.7	1	0
AHID0014	36	38	AR043903	0.39	0.023	0.16	8	0.85	9.0	3.7	0.2	34.4	4.1	1	0
AHID0014	38	40	AR043904	0.44	0.024	0.18	7	1.00	11.1	3.8	0.3	32.7	4.5	1	0
AHID0014	40	42	AR043905	0.47	0.031	0.22	9	1.05	11.1	6.0	0.3	29.8	5.9	1	0
AHID0014	42	44	AR043906	0.38	0.028	0.18	6	0.79	8.8	5.7	0.2	32.7	4.8	1	0
AHID0014	44	46	AR043907		0.019	0.13	5	0.61	7.2	2.7	0.2	37.1	3.4	1	0
AHID0014	46	48	AR043908		0.015	0.14	4	0.59	6.5	2.9	0.2	37.4	3.3	0	0
AHID0014	48	50	AR043909	0.27	0.014	0.11	4	0.58	6.1	3.1	0.2	38.1	2.8	0	0
AHID0014	50	52	AR043912	0.25	0.014	0.13	4	0.56	5.9	4.4	0.2	36.2	4.2	0	0
AHID0014	52	54	AR043913	0.25	0.016	0.15	5	0.58	6.5	3.3	0.2	36.9	3.9	0	0
AHID0014	54	56	AR043914		0.014	0.11	4	0.62	6.8	3.3	0.2	37.0	3.5	0	0
AHID0014	56	57.5	AR043915		0.014	0.12	5	0.58	6.7	1.9	0.2	38.3	3.0	0	0
AHID0015	0	2	AR043916		0.003	0.02	13	0.19	5.7	1.7	6.3	20.3	18.3	7	2
AHID0015	2	4	AR043917		0.004	0.02	15	0.38	9.4	2.1	10.1	18.2	15.8	3	1
AHID0015	4	6	AR043918		0.009	0.03	19	0.60	11.2	0.7	13.3	19.5	11.4	2	1
AHID0015	6	8	AR043919		0.006	0.02	26	0.80	18.0	0.4	13.3	15.9	10.6	3	1
AHID0015	8	10	AR043920		0.011	0.02	11	1.42	46.2	0.2	6.0	2.8	11.6	4	1
AHID0015	10	12	AR043921	0.1	0.006	0.02	15	2.03	37.4	0.3	8.9	4.6	14.0	6	2
AHID0015	12	14	AR043922	0.1	0.005	0.01	27	1.82	25.3	0.3	10.1	13.2	11.9	2	1
AHID0015	14	16	AR043923		0.01	0.03	8	0.65	6.3	0.3	0.4	40.4	1.9	0	0
AHID0015	16	18	AR043926		0.012	0.04	4	0.43	11.0	1.1	6.9	28.0	7.2	2	1
AHID0015	18	20	AR043927		0.011	0.04	2	0.30	4.5	3.4	11.7	24.2	9.2	1	0
AHID0015	20	22	AR043928		0.008	0.02	4	0.72	5.9	11.0	0.8	29.9	5.1	2	0
AHID0015	22	24	AR043929		0.008	0.03	2	0.18	3.8	4.8	7.9	28.5	6.6	1	0
AHID0015	24	26	AR043930	0.3	0.005	0.04	1	0.06	2.6	2.4	9.8	29.3	5.7	0	0
AHID0015	26	28	AR043931	0.31	0.008	0.03	2	0.16	2.4	3.2	7.1	32.4	4.9	0	0
AHID0015	28	30	AR043932		0.003	0.02	1	0.02	1.0	1.4	9.3	32.6	5.1	0	0
AHID0015	30	32	AR043933		0.003	0.12	3	0.58	5.4	7.2	4.0	27.7	3.0	1	0
AHID0015	32	34	AR043936		0.014	0.43	4	0.91	12.9	2.4	1.0	31.2	4.6	1	0
AHID0015	34	36	AR043937	0.4	0.005	0.32	4	0.51	8.6	1.7	0.4	36.9	2.7	1	0
AHID0015	36	38	AR043938	0.4	0.045	0.23	4	0.69	8.9	1.7	0.4	37.0	2.7	1	0
AHID0015	38	40	AR043939		0.061	0.26	8	2.44	16.1	2.2	0.5	28.5	5.4	2	0
AHID0015	40	40	AR043940		0.001	0.18	4	0.53	8.2	2.1	0.1	37.2	2.7	0	0
AHID0015	42	44	AR043941		0.031	0.13	4	0.53	8.0	3.6	0.1	36.1	3.2	0	0
AHID0015	44	44	AR043941		0.021	0.13	3	0.33	7.6	2.7	0.1	37.1	2.9	0	0
AHID0015 AHID0015	44	40	AR043942		0.021	0.13	4	0.44	7.6	3.8	0.2	32.7	7.5	0	0
AHID0015	40	50	AR043945		0.023	0.27	3	0.42	6.2	3.4	0.1	35.8	5.4	0	0
AHID0015 AHID0015	40 50	50	AR043946 AR043947		0.018	0.21	3	0.35	6.6	3.2	0.1	37.7	3.0	0	0
AHID0015 AHID0015	50	54.2	AR043947		0.017	0.15	3	0.32	6.6	5.2	0.1	35.6	3.9	0	bc
AHID0015 AHID0016	52 0	2	AR043948 AR043949	0.23	0.014	0.10	3 20	0.39	12.9	4.6	3.3	27.6	6.6	6	1
AHID0016 AHID0016	2	4	AR043949 AR043952		0.009	0.04	20	0.31	8.1	4.6	4.2	27.6	8.3	8	2



Hole	From	То	Sample	Ni (%)	Co (%)	Mn (%)	Sc	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd	Pr
	(m)	(m)	Number		_		(g/t)					1	-	(ppm) 5	(ppm)
AHID0016 AHID0016	4	6 8	AR043953 AR043954	0.22	0.007	0.05	16 35	0.25	5.8 8.4	15.1	3.0	17.1	21.0		1
AHID0016	8	。 10		0.2	0.013 0.015		46	0.15		13.9	8.6	16.8	9.8	3 10	2
AHID0016 AHID0016	° 10	10	AR043955 AR043956	0.11	0.015	0.07	40 51	0.05	8.0 8.1	15.8 13.6	11.3 10.5	13.1 15.2	11.1 11.1	6	1
AHID0016 AHID0016	12 14	14 16	AR043957	0.3 0.21	0.007	0.08	66 49	0.08	7.6 5.6	7.6 5.3	10.4 10.0	20.3 23.7	9.2 7.0	4	1 0
AHID0016 AHID0016	14	18	AR043958 AR043959	0.21	0.004	0.07	49 50	0.08	6.9	6.5	8.8	22.9	6.6	2	0
AHID0016 AHID0016	18	20	AR043959	0.17	0.004	0.05	38	0.07		6.0	0.0 8.8	22.9	5.8	1	0
AHID0016 AHID0016	20	20	AR043962						6.0						
AHID0016 AHID0016	20	22	AR043963	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0016 AHID0016	22	24	AR043964 AR043965	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	24	26		ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0016 AHID0016	28	28 30	AR043966	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
			AR043967	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0016	30 32	32 34	AR043968	0.12	0.007	0.08	34	0.07	6.5	10.6 9.4	9.1 7.6	20.3	7.2	5	1
AHID0016			AR043969		0.007	0.14	36	0.08	7.1			21.6	6.8	2	
AHID0016	34	36	AR043972	0.21	0.004	0.07	35	0.06	6.6	7.3	8.9	22.8	7.6	1	0
AHID0016	36	38	AR043973	0.09	0.014	0.10	70	0.11	7.8	16.1	11.0	13.3	11.1	2	1
AHID0016	38	40	AR043974	0.12	0.011	0.07	49	0.22	6.7	15.8	8.5	16.4	9.7	1	0
AHID0016	40	42	AR043975	0.09	0.011	0.10	48	0.11	8.1	13.4	6.9	18.4	7.6	4	1
AHID0016	42	44	AR043976	0.09	0.014	0.08	50	0.13	8.3	15.7	9.8	14.3	10.4	2	0
AHID0016	44	46	AR043977	0.11	0.01	0.09	33	0.29	6.9	13.2	4.2	21.5	5.5	6	1
AHID0016	46	48	AR043978	0.11	0.012	0.08	44	0.19	8.1	15.0	7.0	17.5	8.3	2	0
AHID0016	48	50	AR043979	0.09	0.007	0.04	20	0.14	4.4	10.0	3.3	29.9	5.2	0	0
AHID0017	0	2	AR043980	0.17	0.007	0.03	33	0.51	7.7	0.9	5.2	29.8	8.5	5	1
AHID0017	2	4	AR043981	0.23	0.01	0.04	94	0.92	14.0	1.0	7.7	23.3	10.1	6	1
AHID0017	4	6	AR043982	0.31	0.013	0.04	71	0.50	13.6	0.6	3.6	30.3	5.8	4	1
AHID0017	6	8	AR043983	0.26	0.01	0.04	15	0.21	7.6	1.7	0.7	35.4	5.9	3	1
AHID0017	8	10	AR043984	0.6	0.03	0.05	105	0.38	11.9	1.0	3.5	30.9	5.7	3	1
AHID0017	10	12	AR043985	0.53	0.021	0.04	55	0.35	10.7	0.9	2.4	33.8	4.3	2	0
AHID0017	12	14	AR043986	0.57	0.018	0.04	46	0.57	9.3	1.0	2.0	34.8	4.2	2	0
AHID0017	14	16	AR043987	0.2	0.005	0.06	11	0.19	2.9	3.2	2.0	37.9	2.1	0	0
AHID0017	16	18	AR043988	0.4	0.015	0.12	7	0.51	3.6	2.1	0.5	40.2	2.4	1	0
AHID0017	18	20	AR043989	0.74	0.018	0.11	7	0.54	6.5	19.7	0.4	10.5	31.0	1	0
AHID0017	20	22	AR043992	0.46	0.013	0.07	4	0.29	5.3	16.8	0.2	18.5	22.2	0	0
AHID0017	22	24	AR043993	0.11	0.006	0.06	3	0.15	3.2	4.2	0.1	40.1	2.0	0	0
AHID0017	24	26	AR043994	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0017	26	28	AR043995	0.67	0.022	0.16	8	0.36	10.6	11.1	0.4	26.5	6.3	0	0
AHID0017	28	30	AR043996	0.69	0.004	0.05	4	0.11	3.5	20.4	0.1	11.2	34.4	0	0
AHID0017	30	32	AR043997	0.38	0.009	0.08	7	0.23	5.8	7.7	0.3	32.5	7.3	0	0
AHID0017	32	34	AR043998	0.65	0.016	0.14	9	0.46	10.3	15.4	0.6	17.4	18.1	0	0
AHID0017	34	36	AR043999	0.6	0.022	0.17	11	0.47	11.5	16.0	0.8	19.8	10.3	0	0
AHID0017	36	38	AR044002	0.57	0.012	0.10	6	0.21	6.3	18.5	0.3	13.7	27.8	0	0
AHID0017	38	40	AR044003	0.56	0.02	0.16	9	0.59	9.9	15.1	0.5	22.5	8.8	0	0
AHID0017	40	42	AR044004	0.5	0.02	0.19	5	0.63	10.0	12.9	0.3	25.3	6.8	0	0
AHID0017	42	44	AR044005	0.51	0.018	0.18	6	0.99	9.4	14.4	0.4	23.8	7.5	0	0
AHID0017	44	46	AR044006	0.38	0.009	0.07	5	0.56	5.2	16.2	1.4	25.1	7.0	0	0
AHID0017	46	48	AR044007	0.77	0.018	0.26	5	0.66	10.0	14.0	2.2	21.3	7.5	0	0
AHID0017	48	50	AR044008	0.43	0.017	0.13	5	0.60	8.0	10.4	0.6	28.9	5.6	0	0
AHID0017	50	52	AR044009	0.3	0.011	0.09	4	0.40	5.9	15.6	0.1	16.3	26.2	0	0
AHID0017	52	54	AR044012	0.27	0.01	0.09	3	0.37	5.5	17.5	0.1	13.6	30.2	0	bd

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm
AHID0017	54	56	AR044013	0.26	0.011	0.09	3	0.36	5.5	15.6	0.1	16.7	27.2	0	bd
AHID0017	56	58	AR044014	0.25	0.01	0.08	4	0.37	5.5	16.2	0.1	17.5	24.1	0	bd
AHID0017	58	60	AR044015	0.24	0.01	0.10	3	0.42	5.1	20.4	0.1	10.3	32.0	0	0
AHID0017	60	62	AR044016	0.22	0.009	0.08	4	0.39	5.7	15.6	0.1	18.8	22.9	0	bd
AHID0017	62	64	AR044017	0.24	0.011	0.09	4	0.41	5.8	15.5	0.1	19.1	22.0	0	0
AHID0017	64	66	AR044018	0.21	0.011	0.10	3	0.39	5.0	18.8	0.1	13.0	27.2	0	bd
AHID0017	66	68	AR044019	0.22	0.01	0.10	3	0.34	4.9	20.3	0.1	10.8	29.2	0	0
AHID0017	68	70.9	AR044020	0.21	0.011	0.13	3	0.38	5.0	17.4	0.2	11.9	26.8	0	bd
AHID0018	0	2	AR044021	0.29	0.022	0.03	44	0.69	44.6	0.2	6.1	4.5	12.6	7	2
AHID0018	2	4	AR044022	0.26	0.017	0.03	44	0.79	40.4	0.2	6.8	6.7	12.5	6	1
AHID0018	4	6	AR044023	0.24	0.016	0.03	39	1.04	37.7	0.2	7.0	8.6	11.2	6	1
AHID0018	6	8	AR044024	0.34	0.016	0.03	47	1.49	37.4	0.3	6.1	9.6	10.3	6	2
AHID0018	8	10	AR044025	0.3	0.015	0.04	44	1.59	39.7	0.4	4.9	9.2	9.3	7	2
AHID0018	10	12	AR044026	0.34	0.014	0.03	33	0.95	27.1	2.7	4.1	17.8	8.0	5	1
AHID0018	12	14	AR044027	0.45	0.014	0.03	8	0.69	13.3	7.7	1.1	27.2	5.7	6	1
AHID0018	14	16	AR044028	0.88	0.036	0.15	15	1.05	22.1	4.6	3.0	19.4	8.9	5	1
AHID0018	16	18	AR044029	0.88	0.039	0.12	11	1.01	19.2	6.3	2.3	19.2	10.4	7	2
AHID0018	18	20	AR044032	0.37	0.041	0.10	6	1.03	10.2	2.4	0.5	32.8	5.6	2	1
AHID0018	20	22	AR044033	0.64	0.128	1.00	6	0.80	11.9	0.9	0.3	34.5	3.1	5	1
AHID0018	22	24	AR044034		0.036	0.27	8	1.11	14.2	3.6	2.2	27.5	5.9	2	0
AHID0018	24	26	AR044035	0.23	0.001	0.02	bd	0.02	0.6	0.9	13.9	27.2	6.3	1	0
AHID0018	26	28	AR044036		0.008	0.11	0	0.09	2.5	2.5	10.8	27.6	4.9	1	0
AHID0018	28	30	AR044037	1.12	0.069	0.49	15	2.42	31.4	1.0	1.0	19.2	3.8	3	1
AHID0018	30	32	AR044038	1.23	0.069	0.54	18	2.93	34.3	0.8	0.8	16.6	4.9	4	1
AHID0018	32	34	AR044039	0.39	0.022	0.16	5	0.76	10.5	0.4	0.2	36.9	2.2	1	0
AHID0018	34	36	AR044042		0.024	0.16	7	0.82	11.0	0.6	0.2	36.3	2.5	2	1
AHID0018	36	38	AR044043	1.16	0.019	0.26	6	0.67	9.0	4.6	7.6	24.1	7.0	2	0
AHID0018	38	40	AR044044	0.9	0.002	0.09	2	0.10	1.9	4.9	10.0	26.8	5.3	0	0
AHID0018	40	42	AR044045		0.024	0.35	8	0.99	9.6	7.1	0.9	29.1	6.7	1	0
AHID0018	42	44	AR044046		0.032	0.28	10	1.31	16.1	9.9	0.8	21.6	8.3	1	0
AHID0018	44	46	AR044047	0.00	0.029	0.22	10	1.57	16.2	10.5	0.5	20.8	8.7	2	0
AHID0018	46	48	AR044048	0.38	0.019	0.12	5	0.84	9.7	13.7	0.2	24.4	8.0	1	0
AHID0018	48	50	AR044049		0.013	0.12	5	0.84	9.4	16.6	0.2	22.0	9.1	1	0
AHID0018	50	52	AR044043		0.018	0.12	5	0.84	8.7	18.7	0.3	20.2	10.3	0	0
AHID0018 AHID0018	52	54	AR044052		0.019	0.17	4	0.88	7.4	11.1	0.3	20.2	6.3	0	0
AHID0018 AHID0018	52	56	AR044055		0.013	0.11	4	0.73	8.7	10.5	0.2	29.2	6.4	0	0
AHID0018 AHID0018	56	58	AR044054		0.017	0.12	4	0.97	8.3	10.5	0.5	26.9	7.1	0	0
	58	58 60	AR044055				4		8.3 6.8		0.2	26.9	7.1	0	0
AHID0018 AHID0019	58 0	2	AR044056 AR044057	0.29	0.013	0.09	4 51	0.69	6.8 14.1	14.6 0.5	13.3	26.3	7.9	11	3
	2	4		0.01	bd		51							6	3
AHID0019			AR044058		bd	0.03		0.03	19.0	1.6	13.3	7.1	20.8		2
AHID0019	4	6	AR044059		bd	0.03	52	0.04	21.0	1.5	13.2	7.7	18.6	6	-
AHID0019	6	8	AR044062	0.02	0.001	0.06	55	0.15	17.6	7.7	9.7	7.1	24.2	8	2
AHID0019	8	10	AR044063	0.17	0.01	0.27	103	0.71	38.2	0.8	7.1	7.4	11.7	25	5
AHID0019	10	12	AR044064		0.031	0.36	66	0.86	46.0	0.9	4.2	4.6	11.1	27	6
AHID0019	12	14	AR044065	0.28	0.044	0.44	44	0.71	41.0	1.4	4.6	6.9	11.6	35	8
AHID0019	14	16	AR044066	0.27	0.029	0.16	47	0.94	33.2	3.3	4.4	11.4	9.9	18	4
AHID0019	16	18	AR044067		0.067	0.46	30	0.93	25.1	5.8	3.0	11.8	15.2	16	3
AHID0019	18	20	AR044068	1.08	0.175	0.97	34	2.10	47.7	1.6	1.4	4.7	8.5	25	5
AHID0019	20	22	AR044069	1.45	0.179	1.09	34	2.84	52.7	0.7	1.0	2.0	7.6	49	10
AHID0019	22	24	AR044072	1.34	0.162	1.00	31	3.55	50.7	0.8	1.2	2.9	7.3	31	7



Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0019		26	AR044073	1.41	0.077	0.34	29	4.94	46.8	0.8	0.9	4.2	9.0	23	5
AHID0019	26	28	AR044074		0.025	0.11	11	1.47	17.8	1.2	0.4	29.6	4.4	6	1
AHID0019	28	30	AR044075	0.41	0.017	0.10	6	0.48	9.6	2.2	0.2	36.1	3.4	4	1
AHID0019	30	32	AR044076		0.032	0.26	4	0.27	8.3	1.7	0.1	37.9	2.7	1	0
AHID0019	32	34	AR044077		0.014	0.15	3	0.13	7.0	0.9	0.1	39.5	2.4	1	0
AHID0019	34	36	AR044078		0.015	0.17	5	0.15	8.1	2.3	0.1	33.5	7.2	0	0
AHID0019	36	38	AR044079		0.012	0.17	4	0.13	8.1	1.9	0.1	31.9	6.1	1	0
AHID0019	38	40	AR044082	0.3	0.015	0.17	4	0.14	8.4	1.1	0.1	37.8	3.2	0	0
AHID0019	40	42	AR044083		0.02	0.25	5	0.15	9.8	2.0	0.1	35.0	4.7	0	0
AHID0019	42	44	AR044084		0.017	0.14	4	0.11	7.7	1.8	0.1	37.6	3.5	0	0
AHID0019	44	46	AR044085	0.37	0.03	0.14	5	0.18	8.9	3.7	0.1	31.4	8.4	0	0
AHID0019	46	48	AR044086		0.01	0.14	4	0.13	6.4	7.2	0.1	20.4	21.5	0	0
AHID0019	48	50	AR044087	0.3	0.012	0.15	4	0.12	6.2	13.8	0.1	18.0	20.0	0	bd
AHID0019	50	52	AR044088		0.012	0.09	4	0.09	5.8	25.6	0.1	16.4	12.7	0	bd
AHID0019	52	54	AR044089		0.011	0.09	3	0.10	5.7	24.4	0.0	15.9	14.4	0	0
AHID0019	54	56	AR044092	0.3	0.012	0.10	4	0.11	6.0	26.5	0.1	16.8	10.3	0	0
AHID0019	56	58	AR044093		0.012	0.09	4	0.11	6.4	26.4	0.1	17.2	9.0	0	0
AHID0019	58	60	AR044094	0.3	0.012	0.09	4	0.13	6.3	26.3	0.1	17.4	8.9	0	bd
AHID0019	60	62	AR044095	0.3	0.012	0.10	4	0.22	6.3	26.9	0.1	16.7	9.3	0	bd
AHID0019	62	64	AR044096		0.012	0.10	4	0.18	6.4	27.2	0.1	17.4	7.0	0	0
AHID0019	64	66	AR044097		0.013	0.10	4	0.16	6.5	26.9	0.1	17.4	7.5	0	bd
AHID0019	66	68	AR044098		0.010	0.08	3	0.14	5.2	24.8	0.1	15.1	17.1	0	0
AHID0019	68	70.1	AR044099		0.012	0.09	4	0.19	5.8	26.0	0.1	16.8	11.1	0	0
AHID0019	0	2	AR044100		0.002	0.02	19	0.31	9.9	1.1	5.1	16.1	19.4	8	2
AHID0020	2	4	AR044101		0.005	0.02	21	0.61	13.6	2.8	8.1	16.3	15.7	3	1
AHID0020	4	6	AR044102		0.003	0.02	30	1.24	31.1	0.4	9.2	11.9	7.4	2	0
AHID0020	6	8	AR044103		0.003	0.02	24	0.97	31.7	0.4	10.0	10.1	9.7	1	0
AHID0020	8	10	AR044104		0.003	0.02	45	0.91	28.8	0.2	11.8	7.3	15.0	1	0
AHID0020	10	12	AR044105		0.003	0.02	53	1.06	32.1	0.2	15.0	3.3	15.0	2	0
AHID0020	12	14	AR044106		0.004	0.02	41	1.43	37.5	0.1	13.0	2.1	12.6	2	1
AHID0020	14	16	AR044107		0.004	0.02	38	2.02	44.4	0.1	9.5	1.3	10.1	2	1
AHID0020	16	18	AR044108		0.002	0.02	55	2.20	30.7	0.2	15.1	1.2	19.5	1	0
AHID0020	18	20		0.24	0.002	0.02	87	2.26	24.6	0.2	16.8	3.4	20.4	2	0
AHID0020	20	22	AR044112		0.01	0.02	124	2.56	31.2	0.3	9.5	8.2	13.8	4	1
AHID0020	22	24	AR044113		0.013	0.07	61	1.93	37.6	0.3	6.3	8.0	12.0	4	1
AHID0020	24	26	AR044114		0.013	0.10	46	2.05	40.1	0.3	5.9	6.6	11.2	8	2
AHID0020	26	28	AR044115		0.107	0.20	20	0.90	14.2	7.3	2.2	24.5	6.9	4	1
AHID0020	28	30	AR044115		0.023	0.20	10	0.55	10.8	7.0	0.9	29.7	5.1	2	1
AHID0020	30	32	AR044117		0.054	0.16	28	1.28	22.2	2.4	2.3	21.9	6.8	2	1
AHID0020	32	34	AR044118		0.122	0.42	31	1.85	21.8	2.5	2.8	20.9	6.9	4	1
AHID0020	34	36	AR044119	1.07	0.05	0.16	29	1.38	22.8	2.3	2.7	20.5	7.3	3	1
AHID0020	36	38	AR044113		0.021	0.10	13	0.78	12.1	2.0	1.0	32.4	4.8	2	0
AHID0020	38	40	AR044122 AR044123		0.021	0.07	10	0.78	9.1	2.0	0.7	34.9	4.0	1	0
AHID0020	40	40	AR044123		0.031	0.10	9	0.30	8.4	3.2	0.7	34.9	4.2	1	0
AHID0020 AHID0020	40	42	AR044124 AR044125		0.015	0.09	9 11	0.30	0.4 10.4	4.3	0.8	31.4	4.0 5.6	2	0
AHID0020 AHID0020	42	44	AR044125		0.025	0.25	11	0.40	10.4	4.5 6.5	1.1	25.3	7.3	1	0
AHID0020 AHID0020	44	46	AR044126 AR044127		0.034	0.27	16	1.32	14.5	9.3	1.1	25.3	8.3	1	0
AHID0020 AHID0020	46	48 50	AR044127 AR044128		0.041	0.33	17	0.95	13.5	9.3 5.2	1.5	21.4	8.3 6.5	1	0
AHID0020 AHID0020	48 50	50	AR044128 AR044129		0.037	0.25	15	0.95	10.6	3.4	0.9	32.0	5.8	1	0
		52 54					11								0
AHID0020	52	54	AR044132	0.56	0.011	0.03	11	0.34	10.1	3.0	0.7	32.7	5.7	1	U

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0020	54	56	AR044133	0.45	0.012	0.06	13	0.67	9.0	8.2	1.4	28.2	7.3	0	0
AHID0020	56	58	AR044134	0.37	0.018	0.12	9	0.35	7.7	7.4	0.7	30.9	6.8	0	0
AHID0020	58	60	AR044135	0.34	0.014	0.09	8	0.32	6.7	8.3	0.5	31.4	6.4	0	0
AHID0020	60	62	AR044136	0.3	0.012	0.08	6	0.30	5.9	5.7	0.4	34.6	5.0	0	0
AHID0020	62	64	AR044137	0.23	0.012	0.10	7	0.26	5.2	9.4	0.4	31.4	7.1	1	0
AHID0020	64	66	AR044138	0.2	0.01	0.09	6	0.38	5.4	7.9	0.5	32.9	5.9	1	0
AHID0021	0	2	AR044139	0.15	0.01	0.07	11	0.17	3.4	9.2	2.0	16.1	23.0	4	1
AHID0021	2	4	AR044142	0.32	0.015	0.14	10	0.22	8.9	13.8	1.2	23.2	9.2	2	0
AHID0021	4	6	AR044143	0.32	0.018	0.14	14	0.28	9.3	13.9	1.7	22.7	8.6	2	0
AHID0021	6	8	AR044144	0.52	0.03	0.22	19	0.38	13.4	9.3	1.8	23.9	7.9	3	1
AHID0021	8	10	AR044145	0.46	0.021	0.17	20	0.70	10.2	13.4	2.7	20.8	9.1	3	1
AHID0021	10	12	AR044146	0.37	0.015	0.13	12	0.34	8.7	9.7	1.1	28.4	6.6	3	1
AHID0021	12	14	AR044147		0.016	0.14	17	0.47	9.5	12.9	1.6	23.7	8.3	2	0
AHID0021	14	16	AR044148		0.016	0.12	13	0.35	9.4	13.0	1.2	24.3	8.5	1	0
AHID0021	16	18	AR044149		0.016	0.13	15	0.52	10.0	16.2	1.8	20.1	9.8	1	0
AHID0021	18	20	AR044152		0.017	0.14	13	0.43	9.9	14.6	1.5	22.1	8.8	1	0
AHID0021	20	22	AR044153		0.01	0.10	25	0.39	6.5	14.2	3.5	21.4	5.9	4	1
AHID0021	22	24	AR044154		0.008	0.09	33	0.20	6.2	11.4	4.7	22.6	4.3	5	1
AHID0022	0	2	AR044155		0.007	0.04	78	1.12	41.1	0.4	6.3	7.0	10.6	4	1
AHID0022	2	4	AR044156		0.007	0.03	61	0.89	47.3	0.3	4.7	4.7	10.8	3	1
AHID0022	4	6	AR044157		0.018	0.03	45	0.48	46.5	0.2	4.7	5.2	11.7	5	1
AHID0022	6	8	AR044158		0.039	0.05	60	0.51	38.1	0.3	6.8	8.4	11.9	2	1
AHID0022	8	10	AR044159		0.028	0.08	79	0.71	37.9	0.4	7.0	7.9	12.2	4	- 1
AHID0022	10	12	AR044162		0.036	0.15	89	0.65	46.5	0.3	4.9	4.5	11.3	5	1
AHID0022	12	14	AR044163		0.071	0.35	64	0.86	43.9	0.4	5.1	5.8	10.5	9	2
AHID0022	14	16	AR044164		0.037	0.16	20	0.48	18.7	2.1	1.1	27.0	6.1	3	1
AHID0022	16	18	AR044165		0.059	0.31	31	0.90	31.0	2.5	1.8	16.9	7.3	11	2
AHID0022	18	20	AR044105		0.033	0.31	25	0.30	22.0	3.0	1.0	22.8	7.1	4	1
AHID0022	20	20	AR044167	1.14	0.04	0.22	25	0.62	24.6	2.8	1.4	21.2	7.4	6	1
AHID0022	20	24	AR044167	0.8	0.004	0.35	16	0.40	15.2	1.9	0.9	30.0	5.6	3	1
AHID0022 AHID0022	22	24	AR044108		0.049	0.27	21	0.40	16.1	3.8	1.8	25.7	6.9	2	0
AHID0022 AHID0022	24	20	AR044103		0.041	0.28	17	0.89	13.2	1.7	1.0	31.2	5.4	2	0
AHID0022 AHID0022	20	30	AR044172		0.018	0.19	22	0.91	16.6	4.8	2.2	23.4	7.9	1	0
	30										0.8				0
AHID0022		32	AR044174		0.022	0.21	11	0.30	10.4	2.7		32.8	5.6	1	
AHID0022	32	34	AR044175		0.023	0.19	13	0.39	11.2	3.2	1.1	31.4	6.0	0	0
AHID0022	34	36	AR044176		0.028	0.25	14	0.55	13.9	6.0	1.2	27.2	6.3	1	0
AHID0022	36	38	AR044177		0.029	0.32	14	0.97	12.7	10.1	1.3	24.0	7.6	1	0
AHID0022	38	40	AR044178		0.033	0.24	23	2.24	16.9	9.9	2.7	18.1	9.3	1	0
AHID0022	40	42	AR044179	0.6	0.02	0.15	15	1.36	11.5	9.1	1.8	24.6	8.1	0	0
AHID0022	42	44	AR044182		0.012	0.11	6	0.51	6.0	3.1	0.6	37.1	4.1	1	0
AHID0022	44	46	AR044183		0.01	0.07	5	0.23	5.5	2.3	0.3	38.8	3.7	1	0
AHID0022	46	48	AR044184	0.2	0.009	0.06	6	0.31	5.6	4.9	0.4	36.2	4.5	1	0
AHID0022	48	50	AR044185		0.012	0.08	8	0.35	6.7	5.8	0.5	34.2	5.3	0	0
AHID0022	50	52	AR044186		0.009	0.09	7	0.35	5.0	12.1	0.7	20.9	20.1	0	0
AHID0022	52	54.5	AR044187		0.01	0.08	7	0.22	5.3	23.1	0.6	15.4	18.0	0	0
AHID0023	0	2	AR044188		0.014	0.07	17	1.73	23.7	0.5	2.5	22.9	7.6	9	2
AHID0023	2	4	AR044189		0.008	0.03	11	0.91	10.7	5.6	3.6	26.6	7.7	4	1
AHID0023	4	6	AR044192		0.006	0.03	8	0.58	6.6	4.4	1.4	34.9	3.9	2	1
AHID0023	6	8	AR044193		0.003	0.03	5	0.55	6.7	0.3	0.4	39.6	2.5	2	0
AHID0023	8	10	AR044194	0.16	0.003	0.04	4	0.58	7.0	0.6	0.3	37.7	4.2	2	0

Hole	From (m)	To (m)	Sample Number	Ni (%)	Co (%)	Mn (%)	Sc (g/t)	Cr (%)	Fe (%)	Mg (%)	AI (%)	Si (%)	LOI (%)	Nd (ppm)	Pr (ppm)
AHID0023	10	12	AR044195	0.16	0.005	0.05	4	0.55	6.2	1.6	0.3	33.5	9.0	2	1
AHID0023	12	14	AR044196	0.17	0.006	0.04	3	0.58	6.2	1.4	0.2	36.8	5.6	2	1
AHID0023	14	16	AR044197	0.3	0.01	0.05	5	0.79	7.8	0.9	0.4	36.8	4.3	3	1
AHID0023	16	18	AR044198	0.29	0.012	0.06	5	0.79	7.8	0.9	0.5	37.6	3.5	3	1
AHID0023	18	20	AR044199	0.26	0.044	0.12	4	0.53	6.1	0.5	0.3	40.3	1.9	11	3
AHID0023	20	22	AR044202	0.31	0.038	0.09	6	0.62	6.9	0.5	0.8	38.8	2.6	5	1
AHID0023	22	24	AR044203	0.69	0.074	0.11	7	1.05	10.8	0.6	0.6	35.2	3.5	10	3
AHID0023	24	26	AR044204	0.43	0.041	0.08	4	0.63	7.0	0.5	0.3	39.5	2.1	4	1
AHID0023	26	28	AR044205	0.41	0.032	0.09	5	0.55	6.7	0.7	0.5	39.5	2.0	3	1
AHID0023	28	30	AR044206	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
AHID0023	30	32	AR044207	0.34	0.013	0.05	2	0.41	4.3	13.2	0.6	30.2	4.4	1	0
AHID0023	32	34	AR044208	0.97	0.022	0.14	3	0.53	5.2	14.6	1.9	25.0	8.0	1	0
AHID0023	34	36	AR044209	2.4	0.057	0.12	4	0.69	7.3	11.1	2.3	25.3	7.3	2	0
AHID0023	36	38	AR044212	0.2	0.007	0.05	3	0.51	6.3	2.1	0.5	38.4	2.4	1	0
AHID0023	38	40	AR044213	0.23	0.009	0.07	3	0.36	4.5	13.0	2.3	26.4	5.8	1	0
AHID0023	40	42	AR044214	0.18	0.009	0.06	2	0.35	4.2	14.7	2.0	26.0	5.2	0	0
AHID0023	42	44	AR044215	0.16	0.006	0.08	4	0.21	5.9	10.4	7.4	21.4	5.5	2	1
AHID0023	44	46	AR044216	0.06	0.002	0.04	2	0.08	2.3	3.5	9.5	27.8	2.2	7	2
AHID0023	46	48	AR044217	0.02	0.002	0.01	1	0.02	0.9	1.0	10.4	30.4	0.9	5	1
AHID0023	48	50	AR044218	0.01	0.001	0.01	bd	0.01	0.5	0.6	10.4	30.9	0.7	6	2
AHID0023	50	52	AR044219	0.01	0.001	0.01	1	0.01	0.5	0.5	10.5	31.0	0.5	11	3
AHID0023	52	54	AR044222	0.01	0.001	0.01	1	0.00	0.4	0.4	10.4	31.0	0.5	13	4
AHID0023	54	56	AR044223	0.01	bd	0.01	2	0.00	0.4	0.4	10.5	31.1	0.4	17	5
AHID0023	56	58	AR044224	0.12	0.004	0.02	3	0.15	1.5	4.5	7.9	29.3	2.6	7	2
AHID0023	58	60.3	AR044225	0.01	0.001	0.01	1	0.01	0.5	0.6	10.3	30.8	0.5	16	5



# Appendix 3 – Collated intercepts, Highway

#### Parameters used to define nickel, cobalt, scandium intercepts at Highway

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 Highway

All newly defined cobalt intercepts at Highway, KNP Goongarrie Hub (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.



Drillhole	Nickel Intercept 0.5%	From	То		Nickel Intercept 1%	From	То
AHID0001	2m @ 0.72% Ni and 0.11% Co	12	14				
	26m @ 0.73% Ni and 0.38% Co	24	50	including	2m @ 1.17% Ni and 1.42% Co	40	42
	4m @ 0.83% Ni and 0.10% Co	74	78				
AHID0002	42m @ 0.77% Ni and 0.11% Co	2	44	including	12m @ 1.01% Ni and 0.22% Co	16	28
				and	6m @ 1.00% Ni and 0.04% Co	38	44
AHID0003	36m @ 0.95% Ni and 0.08% Co	2	38	including	24m @ 1.11% Ni and 0.10% Co	4	28
AHID0003	6m @ 0.70% Ni and 0.05% Co	50	56				
AHID0004	40m @ 0.86% Ni and 0.10% Co	10	50	including	28m @ 0.96% Ni and 0.12% Co	14	42
AHID0005	22m @ 0.67% Ni and 0.03% Co	4	26	including	12m @ 0.73% Ni and 0.02% Co	14	26
	14m @ 0.54% Ni and 0.01% Co	38	52	and	2m @ 1.55% Ni and 0.02% Co	50	52
AHID0006	18m @ 0.77% Ni and 0.03% Co	2	20	including	4m @ 1.27% Ni and 0.04% Co	10	14
AHID0007	4m @ 0.64% Ni and 0.03% Co	2	6				
AHID0008	18m @ 1.08% Ni and 0.06% Co	4	22	including	14m @ 1.21% Ni and 0.06% Co	6	20
AHID0009	2m @ 0.80% Ni and 0.05% Co	4	6				
AHID0010	28m @ 0.87% Ni and 0.04% Co	14	42	including	8m @ 1.23% Ni and 0.05% Co	22	30
AHID0011	2m @ 0.64% NI and 0.02% Co	18	20				
AHID0012	6m @ 1.76% Ni and 0.09% Co	4	10	including	4m @ 2.31% Ni and 0.13% Co	4	8
	8m @ 1.30% Ni and 0.02% Co	16	24				
AHID0013	4m @ 1.17% Ni and 0.06% Co	4	8	including	2m @ 1.74% Ni and 0.09% Co	6	8
AHID0014	8m @ 0.530% Ni and 0.04% Co	14	22				
AHID0015	2m @ 0.52% Ni and 0.01% Co	22	24	including	2m @ 0.99% Ni and 0.06% Co	38	40
	8m @ 0.64% Ni and 0.06% Co	32	40				
AHID0017	12m @ 0.50% Ni and 0.02% Co	8	20				
	22m @ 0.57% Ni and 0.02% Co	26	48				
AHID0018	32m @ 0.71% NI and 0.04% Co	14	46	including	10m @ 0.86% Ni and 0.04% Co	28	38
AHID0019	10m @ 1.18% Ni and 0.12% Co	18	28	including	8m @ 1.32% Ni and 0.15% Co	18	26
AHID0020	28m @ 0.78% Ni and 0.04% Co	26	54	including	6m @ 1.08% Ni and 0.08% Co	30	36
				and	2m @ 1.02 Ni and 0.04% Co	46	48
AHID0021	2m @ 0.52% Ni and 0.03% Co	6	8				
AHID0022	34m @ 0.88% Ni and 0.04% Co	8	42	including	14m @ 1.14% Ni and 0.04% Co	16	30
				and	2m @ 1.01% Ni and 0.03% Co	38	40
AHID0023	2m @ 0.69% Ni and 0.07% Co	22	24				
	4m @ 1.68% Ni and 0.04% Co	32	36				

# 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.	<ul> <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 mineralisationthat are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'revrse 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.</li> <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 scents' investigation, such as down hole gamma sondes, or handheld XRF instruments.</li> <li>All cases where 'industry standard' work has been done this would be relatively simple (e.g. 'revrse 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.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole 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> <li>In this most recent program, Ardea drilled the Highway deposit with 23 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 mineralisation. 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.</li> </ul>
Drill sample recovery	<ul> <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> <li>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.</li> <li>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.</li> </ul>
Logging	<ul> <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> <li>The total length and percentage of the relevant intersections logged.</li> <li>Visual geological logging was completed for all of the total length and percentage of the relevant met-sample intervals with a 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, Quarter core of all drilling has been retained for reference.</li> <li>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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <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 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.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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 subsampling 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> <li>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.</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 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.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <li>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 (AI2O3, 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.</li> <li>BV 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>
Verification of sampling and assaying	<ul> <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> <li>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.</li> <li>BV 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. 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.</li> </ul>



Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <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> <li>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.</li> <li>All holes drilled as part of the Highway 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.</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>
Data spacing and distribution	<ul> <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> <li>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.</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>Samples were collected at 2 metre composites.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>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</li> <li>On a local scale, there is some geological variability due to probable shear structure. 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.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>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.</li> <li>The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <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> <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, mechanical issues with drill rig, damage to sample in transport or sample preparation).</li> <li>Assay grade ranges.</li> <li>Collar coordinate ranges</li> <li>Valid hole orientation data.</li> </ul> </li> <li>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.</li> </ul>



# 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	Type, reference name/number, location and	The tenement on which the Highway drilling was undertaken is M29/214.
land tenure status	<ul> <li>rype, reference maintentimer, hocard and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wildemess ornational 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> <li>The tenement and land tenure status for the KNP prospect areas containing continuous cobalt rich laterite mineralisation is documented in the Ardea 2021 Annual Report.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The Highway 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>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The KNP nickel-cobalt laterite mineralisation developed during the weathering and near surface enrichment of Archaean-aged olivine-cumulate ultramafic units. The mineralisation 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 mineralisation 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 Highway.</li> </ul>
Drill hole Information	<ul> <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:</li> <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>	<ul> <li>All holes drilled in this most recent program are listed in "Appendix 1 – Collar location data".</li> </ul>
Drill hole Information	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Materialand 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> <li>All assay data relating to the metals of interest at Highway, 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>
Data aggregation methods	<ul> <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 longerlengths 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> <li>Most drill hole samples have been collected over 2m down hole intervals.</li> <li>All newly defined nickel and cobalt intercepts at Highway were calculated using the following parameters: <ul> <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 0.05%.</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 mineralised 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 Highway.</li> </ul> </li> <li>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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Sc intercepts were defined by using a 20g/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 mineralisation 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>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation 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> <li>The nickel-cobalt laterite mineralisation at Goongarrie South has a strong global sub- horizontal orientation.</li> <li>All drill holes are vertical.</li> <li>All drill holes intersect the mineralisation at approximately 90° to its orientation</li> </ul>
Diagrams	<ul> <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>	Maps and sections of the nickel and cobalt mineralisation 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.	<ul> <li>Not applicable to this report. All results are report either in the text or in the associated appendices. Examples of high-grade mineralisation are labelled as such.</li> </ul>
Other substantive exploration data	<ul> <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> <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>
Further work	<ul> <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> <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 Highway is in progress under the current Definitive Feasibility Study (DFS) which commenced in mid-late 2021 within the KNP Goongarrie Hub.</li> </ul>