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Unlisted options exercisable at \$0.25 11,155,011

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Extensive gold anomalism at the Goongarrie Nickel Cobalt Project

- In excess of 15 kilometres of strong gold anomalism are present in the laterites of the Goongarrie Nickel Cobalt Project (GNCP).
- Anomalies at Goongarrie significantly exceed the strength of laterite gold anomalies typical of the region.
- The GNCP seems to be globally unique in the close spatial relationship of nickel-cobalt-scandium laterite mineralisation overlying orogenic gold mineralisation, here hosted within the Bardoc Tectonic Zone.
- New drilling results include:
 - ABFA0245: 6 m at 2.0g/t Au from surface.
 - o ABFA0188: 24 m at 0.8g/t Au from 12 m,
- Assessment of historic results in light of the recent drilling includes:
 - o AGSR0076: 2 m at 1.01g/t Au from 56 m.
 - and 8 m at 2.22g/t Au from 64 m.
- Work is underway to design follow up drill programs to test the extent of the underlying gold mineralisation and will include 80x40m pattern RC drilling over all nominated aircore anomalies.

Commenting on the gold opportunity at Goongarrie, Ardea CEO Andrew Penkethman said:

"The stacking of the nickel-cobalt-scandium laterite mineralisation upon the gold being located in the crustal-scale Bardoc Tectonic Zone appears to be globally and geologically unique. The extent and strength of gold anomalism as a conceptual target is exceptional.

Though much work remains to define the full gold potential, the possibility of multiple revenue streams from nickel, cobalt, scandium and gold at Goongarrie is tantalising. Forthcoming integrated drilling programs to define gold resources will complement and potentially add significant value to the economics of our flagship Goongarrie Nickel Cobalt Project."

Gold Anomalism and Recent Results from Big Four

The Big Four Gold Prospect is located within the Bardoc Tectonic Zone (BTZ) at Goongarrie and offers an exceptional gold exploration opportunity for Ardea Resources ("Ardea" or "the Company").

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

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

These same structures in the current studies have had extensive gold anomalism confirmed (refer Figure 1).

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

Gold structures within the GNCP

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

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

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

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

Results of the recent Big Four gold drilling program

As a first-pass gold exploration program, 265 aircore holes for 4,861 m (average 18.3 m) were drilled to blade refusal at the Big Four Prospect (refer Figure 1).

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

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

Despite this lowered sensitivity, the drilling has identified a number of highly anomalous gold intercepts that will require further investigation. For reference, gold anomalies of 20–40 parts per billion (or 0.02–0.04 g/t) within a laterite profile are commonly the basis for further gold exploration in the Eastern Goldfields of Western Australia.

The intensity of the gold anomalism mapped throughout the GNCP and surrounds is at least <u>10</u> times the values typical of the region's gold-anomalous laterites (refer Figure 1).

Results of the recent GNCP Big Four drilling include:

- ABFA0245, 6m at 2.0g/t Au from surface to end of hole (EOH).
- ABFA0188, **24m at 0.8g/t Au** from 12m.
- ABFA0197, 12m at 0.3g/t Au from 78m to EOH.
- ABFA0209, 42-48m, 6m at 0.4g/t Au from 42m, and 18m at 0.1g/t from 66m to EOH.
- ABFA0152, 4m at 0.3g/t Au from 6m to EOH.

The drilling has identified a clearly alkaline dacitic volcaniclastic stratigraphy within the predominant mafic volcanic suite which overlies the WWF. The feeder dykes for the dacitic flows are identically finger-printed as the dykes intersected in the WWF laterite drilling which show a strong spatial association with gold intercepts within the nickel laterite.

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

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



Interrogation of historical datasets

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



Recent interrogation and re-treating of the historic datasets by Ardea has identified numerous gold anomalies (refer Figure 1 and 2). Gold mineralisation is present, for example, within and beneath the Elsie North nickel-cobalt deposit, to the west of the Pamela Jean nickel-cobalt deposit.

Significant intercepts include:

- AGSR0076, 2m at 1.01g/t Au from 56m
 - and 8m at 2.22g/t Au from 64m (322422 mE, 6669680 mN)
- AGSR0200, 2m at 1.94g/t Au from 34m (322581 mE, 6669438 mN)
- GSRC0025, 5m at 0.59g/t Au from 18m (322545 mE, 6669355 mN)
- AGSR0077, 1m at 0.55g/t Au from 54m (322337 mE, 6669684 mN)
- AGSR0201, 4m at 0.35g/t Au from 52m (322338 mE, 6669840 mN)

Note that gold-anomalous drill-holes are dominantly from Ardea ("AGSR" labelling), reflecting the fact that Ardea is the first project holder to recognise the precious metal potential, and hence systematically assay for gold and its pathfinder elements in its drilling.

High-resolution aeromagnetic geological interpretation from Ardea's survey shows that there are distinct sets of late-stage faults that appear to control gold mineralisation within the GNCP, particularly at Elsie North. These sets are present throughout the full BTZ from Paddington to Menzies and appear to control gold distributions at the GNCP anomalies.

Elsie North will be a prime target for future Ardea follow-up gold drilling.

Goongarrie gold mining opportunities

There is the possibility of evolving mining operations at the GNCP, whereby development of nickel-cobaltscandium open pits at Goongarrie effectively pre-strips material for the subsequent mining of gold beneath the laterite. However, much work is required to further define gold mineralisation at depth beneath the laterite deposits, to a level that would facilitate such sequential mining operations.

An opportunity exists as historic laterite drill exploration was shallow and did not seek to drill test below the saprock into the bedrock. Generally, as nickel and cobalt were the historic focus, no gold assays were completed on historic drill samples.

The presence of significant gold alteration systems and anomalism has only come about as a result of the detailed multi-element assay suite that Ardea uses in its GNCP research and development (R&D) programs.

Next steps

The gold targets identified in the Big Four aircore drilling are of a comparable magnitude to historic Eastern Goldfields RAB/aircore drill anomalies that have led to significant gold mine discoveries such as Tropicana and Kanowna Belle. Accordingly, systematic follow-up drilling is required at Big Four, including:

- 1. 80x40m pattern RC drilling over all nominated aircore anomalies.
- Gold targets at Goongarrie South, specifically Elsie North, Pamela Jean and Patricia Anne will be RC drill tested, but will be combined as confirmation exercises for GNCP nickel laterite and neutraliser studies.
- 3. Data from the historic Big Four gold mine drilling will be compiled to better quantify the exploration potential adjoining the old mine.
- 4. Subsidiary targets for magnesite neutraliser, VMS base metals and REE will also be further drill tested but are behind the gold targets in work priority (see Annexure A).

ABOUT ARDEA RESOURCES

Ardea Resources ("Ardea" – ASX:ARL) is an ASX listed resources company, with 100% controlled Australian based projects, prioritising a three-pronged value creation strategy which is:

- development of the Goongarrie Nickel Cobalt Project, which is part of the Kalgoorlie Nickel Project, a globally significant series of nickel-cobalt deposits which host the largest nickel-cobalt resource in the developed world, coincidentally located as a cover sequence overlying fertile orogenic gold targets;
- advanced-stage exploration at WA gold and nickel sulphide targets within the Eastern Goldfields world-class nickel-gold province; and
- the demerger of the NSW gold and base metal assets with planned in-specie share distribution, with projects located within the Lachlan Fold Belt world-class gold-copper province.



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

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

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

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

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

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

Competent Person Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled or reviewed by Dr Matthew Painter, a Competent Person who is a Member of the Australian Institute of Geoscientists. Dr Painter is a full-time employee of Ardea Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Painter consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and Resource Estimates for the Goongarrie Nickel Cobalt Project is based on information originally compiled by previous and current full-time employees of Heron Resources Limited and current full-time employees of Ardea Resources Limited. The Exploration Results, Resource Estimates and data collection processes have been reviewed, verified and reinterpreted by Mr Ian Buchhorn who is a Member of the Australasian Institute of Mining and Metallurgy and currently a director of Ardea Resources Limited. Mr Buchhorn has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Buchhorn consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

Annexure A – Follow-up Target Inventory

Main targets are:

- <u>Gold</u>
 - ABFA0245, 0-6m (EOH), 6m at 2.0g/t Au, ultramafic saprock.
 - ABFA0188, 12-36m, 24m at 0.8g/t Au, 0.01% As, 0.03% Zn, protolith 26-41m, pyritic sodic intermediate porphyry host (0.2% S, 2.8% Na).
 - ABFA0197, 78-90m (EOH), **12m at 0.3g/t Au, 0.95g/t Ag**, 0.01% As, 2.3% S, 22ppm Cd, pyritic gabbro host.
 - ABFA0209, 42-48m, 6m at 0.4g/t Au, gabbro saprolite.

66-84m (EOH), 18m at 0.1g/t Au, 1.2g/t Ag, **0.2g/t Pd**, 0.3% S, silicified pyritic gabbro.

- ABFA0152, 6-10m (EOH), 4m at 0.3g/t Au, sodic intermediate host (5.4% Na).
- o ABFA0059, 18-26m (EOH), 8m at 0.2g/t Au, 0.02% Cu, 0.03% Zn, basalt host.

• ABFA0133, 12-24m (EOH), 12m at 130ppm As, 0.2% S, pyritic mafic host.

<u>Nickel Sulphide</u>

- o ABFA0169, 12-18m, 6m at 0.29% Ni, 0.09% Co, 0.4% Cr, 20ppb Pt, ultramafic host.
- <u>VMS</u>
 - ABFA0044, 30-45m (EOH), 15m at 1.1g/t Ag, 0.06% Cu, 0.3% Mn, with 24-30m upper contact with 172ppm Ce, 107ppm Nd within an altered basalt in the Black Flag Bed volcaniclastics.
 - o ABFA0211, 6-12m, 6m at 0.03% Cu, 0.34% Zn, 20ppm Cd, mafic lower saprolite.
 - o ABFA0106, 18-41m (EOH), 23m at 0.10% Zn, 20ppm Cd, mafic lower saprolite.
 - ABFA0049, 60-62m (EOH), 2m at 0.04% Cu, 0.02% Zn, **5.2% S**, 0.5% Mn, mafic volcanic.
 - ABFA0265, 0-17m (EOH), 17m at 0.05% Cu, 0.03% Zn, sodic intermediate volcanic.
- <u>Nickel Laterite</u>
 - o ABFA0184, 6-18m, 12m at 0.5% Ni, 0.04% Co, 0.4% Cr, ultramafic host.
- Magnesite Saprock (potential neutraliser source rock)
 - ABFA0001, 6-25m (EOH), **19m at 17.0% Mg, 33.3% LOI**, high quality magnesite saprock.
 - ABFA0023, 18-24m, 6m at 17.7% Mg, 31.0% LOI, high quality magnesite saprock.
 - o ABFA0119, 12-22m (EOH), 10m at 17.8% Mg, 20.4% LOI, olivine komatiite saprock.
 - ABFA0211, 12-32m (EOH), 20m at 15.2% Mg, 16.3% LOI, olivine-pyroxene cumulate saprock.
 - ABFA0218, 18-37m EOH), 19m at 14.6% Mg, 16.4% LOI, olivine-pyroxene cumulate saprock.
 - o ABFA0228, 6-26m (EOH), 20m at 16.6% Mg, 16.7% LOI, olivine-pyroxene cumulate saprock.
 - ABFA0248, 18-45m (EOH), 27m at 15.1% Mg, 15.7% LOI, olivine-pyroxene cumulate saprock.
 - ABFA0252, 0-26m (EOH), 26m at 15.8% Mg, 18.7% LOI, olivine-pyroxene cumulate saprock.
- <u>Scandium-vanadium Laterite</u>
 - o ABFA0012, 0-5m (EOH), 5m at 136g/t Sc, 0.04% V, 0.8% Cr in goethite hardcap.
 - ABFA0013, 12-30m, 18m at 66g/t Sc, 0.05% V, 0.6% Cr in goethite ultramafic.
 - ABFA0021, 0-12m, 12m at 88g/t Sc, 0.06% V, 1.0% Cr in goethite ultramafic.
- Rare Earth Elements
 - o ABFA0035, 12-46m (EOH), 34m at 72g/t Ce, 36g/t La, 37g/t Nd in alkali dacite.

Annexure B – GNCP Gold-Nickel Laterite Mineralisation Model

Relationship of the gold mineralisation to the nickel cobalt laterite orebodies.

Examination of the historic and newly acquired gold datasets over and surrounding the GNCP has allowed development of conceptual models for multifaceted nickel, cobalt, and gold mineralisation (see Figure 3). Close spatial association could allow mining of both the nickel cobalt laterite orebodies and the underlying primary gold mineralisation should sufficient gold resources and gold reserves be defined.



Figure 3 –Conceptual depiction of mineralisation styles at Goongarrie. Likely relationships are shown between nickel (blue-green), cobalt (light red), and scandium (orange-yellow) mineralisation in the laterite profile, primary orogenic gold mineralisation (yellow), and gold plume distributions (pink) in the laterite profile. Note that there are also likely minor gold placer deposits (orange) in the overlying transported material.

The unique attribute of Goongarrie is that a rock that only existed on the Earth 2.7 billion years ago, being the Walter Williams Formation olivine lava flows, has been intersected by one of the great gold structures of Earth history, being the Boulder Lefroy Fault through its northern strike extension the Bardoc Tectonic Zone.

These geological juxtapositions have resulted in the best Australian nickel laterite, the GNCP, covering and sitting on top of exceptional gold-fertile crustal structures.

A typical GNCP nickel laterite drill section is shown in Figure 4 following. The nickel laterite mineralisation occurs as a continuous sheet within the weathered clay mantle overlying the carbonated saprock bedrock. The drill-holes typically only go a short thickness into saprock and are then stopped. Holes AGSR0065 and 0396 only penetrate a few metres into saprock but have up to 0.51g/t gold associated with an intermediate intrusive. This is the style of target which requires follow-up with infill RC drilling.

This particular location at Patricia Anne is a potential neutraliser resource, so any follow up gold drilling will also benefit the GNCP laterite evaluation through better quantifying the neutraliser optimisations and mining schedule. Such a strategy is inline with Ardea's prudent financial management.

Figure 4 – Cross section from Patricia Anne Section 667 0800 mN, at Goongarrie, looking northward.

Annexure C – Behaviour of gold in the laterite profile at Goongarrie

In general, gold is quite mobile within laterite profiles. This is where the bulk of gold nuggets prized by prospectors usually develop (the "salt and pepper" association of black ironstone and white quartz veins).

Within the laterite profile, gold is present as plumes that behave much like smoke, emanating from a goldbearing vein where the fresh rock intersects the saprock, and spreading from that source point (**Error! Reference source not found.**). Distance from the source point commonly corresponds to dilution of the gold plume.

A complicating factor for the GNCP is that groundwater migration can significantly offset the laterite gold occurrences from their primary source. As such, without understanding the laterite profile and groundwater movements, drilling directly beneath a lateritic gold anomaly could intercept barren rock if there has been significant migration of the plume.

Figure 5 – Idealised gold plume behaviour in the profile at Goongarrie, looking westward, where northerly groundwater flow causes lateral migration and dilution. A gold mineralised vein in the bedrock results in a "gold plume" in the laterite and transported profile (pink). Vertical drillholes are typical historic laterite drillholes that do not penetrate bedrock. Blue arrows represent groundwater volume and flow. Targeting a deeper drillhole beneath gold anomalism intercepted in the centre or right drillhole will result in a miss. For this reason it is imperative that the lateritic profile and the behaviour of gold within it is well understood.

Appendix 1 – Collar location data

New aircore drill holes by Ardea Resources at Big Four

Dellibele	T	Depth	Terrent	0.44	Easting	Northing	RL	Dip	Azimuth	Duill hale	T	Depth	Terrent	0.44	Easting	Northing	RL	Dip	Azimuth
	Туре	(m)	Man/00078		(mE)	(mN)	(mASL)	(°)	(°)		туре	(m)	MOA/00779		(mE)	(mN)	(mASL)	(°)	(°)
ABFA0001 ABFA0002	AC AC	25 13	M29/00278 M29/00278	MGA94_51 MGA94_51	324140 324217	6665216	390 390	-90 -90	000	ABFA0093 ABFA0094	AC AC	35 20	M24/00778 M24/00778	MGA94_51 MGA94_51	326144	6663180	390 390	-90 -90	000
ABFA0003	AC	39	M29/00278	MGA94_51	324308	6665205	390	-90	000	ABFA0095	AC	5	M24/00778	MGA94_51	325987	6663154	390	-90	000
ABFA0004	AC	5	M29/00278	MGA94_51	324387	6665205	390	-90	000	ABFA0096	AC	5	M24/00778	MGA94_51	325906	6663156	390	-90	000
ABFA0005 ABFA0006	AC AC	8	M29/00278 M29/00278	MGA94_51 MGA94_51	324462	6665188	390 390	-90 -90	000	ABFA0097 ABFA0098	AC AC	4	M24/00778 M24/00778	MGA94_51 MGA94_51	325859	6663162	390 390	-90 -90	000
ABFA0007	AC	6	M29/00278	MGA94_51	324607	6665183	390	-90	000	ABFA0099	AC	3	M24/00778	MGA94_51	325777	6663159	390	-90	000
ABFA0008	AC	5	M29/00278	MGA94_51	324634	6664957	390	-90	000	ABFA0100	AC	3	M24/00778	MGA94_51	325744	6663160	390	-90	000
ABFA0009 ABFA0010	AC AC	19	M29/00278 M29/00278	MGA94_51 MGA94_51	324668	6664318	390 390	-90 -90	000	ABFA0101 ABFA0102	AC	23 15	M24/00778	MGA94_51 MGA94_51	325730	6663085	390 390	-90 -90	000
ABFA0011	AC	2	M29/00278	MGA94_51	324777	6663683	390	-90	000	ABFA0103	AC	7	M24/00778	MGA94_51	325771	6663033	390	-90	000
ABFA0012	AC	5	M29/00278	MGA94_51	324811	6663380	390	-90	000	ABFA0104	AC	6	M24/00778	MGA94_51	325780	6662960	390	-90	000
ABFA0013 ABFA0014	AC	37 49	M24/00778	MGA94_51 MGA94_51	324649	6662765	390 390	-90 -90	000	ABFA0105 ABFA0106	AC	4	M24/00778	MGA94_51 MGA94_51	325760	6664524	390 390	-90 -90	000
ABFA0015	AC	29	M24/00778	MGA94_51	324858	6662809	390	-90	000	ABFA0107	AC	38	M24/00778	MGA94_51	325656	6664463	390	-90	000
ABFA0016	AC	36	M24/00778	MGA94_51	324906	6662837	390	-90	000	ABFA0108	AC	29	M24/00778	MGA94_51	325580	6664455	390	-90	000
ABFA0017 ABFA0018	AC	9 14	M24/00778	MGA94_51 MGA94_51	324942 324980	6662898	390 390	-90 -90	000	ABFA0109	AC	20 24	M24/00778	MGA94_51 MGA94_51	325490	6664321	390 390	-90 -90	000
ABFA0019	AC	10	M24/00778	MGA94_51	325023	6662959	390	-90	000	ABFA0111	AC	16	M24/00778	MGA94_51	325583	6663974	390	-90	000
ABFA0020	AC	61	M24/00778	MGA94_51	325059	6663001	390	-90	000	ABFA0112	AC	8	M24/00778	MGA94_51	325498	6663973	390	-90	000
ABFA0021 ABFA0022	AC	34	M24/00778	MGA94_51 MGA94_51	325104	6663078	390	-90 -90	000	ABFA0113 ABFA0114	AC	7	M24/00778	MGA94_51 MGA94_51	325380	6663985	390	-90 -90	000
ABFA0023	AC	34	M24/00778	MGA94_51	325123	6663134	390	-90	000	ABFA0115	AC	24	M24/00778	MGA94_51	325340	6663966	390	-90	000
ABFA0024	AC	12	M24/00778	MGA94_51	325180	6665158	390	-90	000	ABFA0116	AC	24	M24/00778	MGA94_51	325318	6663963	390	-90	000
ABFA0025 ABFA0026	AC	20 23	M24/00778 M24/00778	MGA94_51 MGA94_51	325224	6665156	390 390	-90 -90	000	ABFA0117 ABFA0118	AC	25 6	M24/00778 M24/00778	MGA94_51 MGA94_51	325301	6663956	390 390	-90 -90	000
ABFA0027	AC	26	M24/00778	MGA94_51	325338	6665155	390	-90	000	ABFA0119	AC	22	M24/00778	MGA94_51	325222	6663952	390	-90	000
ABFA0028	AC	11	M24/00778	MGA94_51	325418	6665155	390	-90	000	ABFA0120	AC	5	M24/00778	MGA94_51	325179	6663922	390	-90	000
ABFA0029 ABFA0030	AC	9	M24/00778	MGA94_51 MGA94_51	325490	6665156	390 390	-90 -90	000	ABFA0121 ABFA0122	AC	5	M29/00278	MGA94_51 MGA94_51	325094	6663860	390 390	-90 -90	000
ABFA0031	AC	27	M24/00778	MGA94_51	325657	6665159	390	-90	000	ABFA0123	AC	22	M29/00278	MGA94_51	324958	6663917	390	-90	000
ABFA0032	AC	24	M24/00778	MGA94_51	325741	6665161	390	-90	000	ABFA0124	AC	28	M29/00278	MGA94_51	324918	6663932	390	-90	000
ABFA0033 ABFA0034	AC AC	45 52	M24/00778 M24/00778	MGA94_51 MGA94_51	325819	6665159	390 390	-90 -90	000	ABFA0125 ABFA0126	AC AC	15 6	M29/00278 M29/00278	MGA94_51 MGA94_51	325056	6663762	390 390	-90 -90	000
ABFA0035	AC	46	M24/00778	MGA94_51	325978	6665163	390	-90	000	ABFA0127	AC	8	M29/00278	MGA94_51	325138	6663745	390	-90	000
ABFA0036	AC	27	M24/00778	MGA94_51	326058	6665160	390	-90	000	ABFA0128	AC	4	M24/00778	MGA94_51	325180	6663757	390	-90	000
ABFA0037 ABFA0038	AC	36	M24/00778	MGA94_51 MGA94_51	326541	6664869	390 390	-90 -90	000	ABFA0129 ABFA0130	AC	4	M29/00778	MGA94_51 MGA94_51	325219	6663677	390 390	-90 -90	000
ABFA0039	AC	18	M24/00778	MGA94_51	326462	6664861	390	-90	000	ABFA0131	AC	22	M24/00778	MGA94_51	325196	6663665	390	-90	000
ABFA0040	AC	14	M24/00778	MGA94_51	326383	6664859	390	-90	000	ABFA0132	AC	33	M24/00778	MGA94_51	325197	6663602	390	-90	000
ABFA0041 ABFA0042	AC	29 17	M24/00778	MGA94_51 MGA94_51	326254	6664861	390 390	-90 -90	000	ABFA0133 ABFA0134	AC	24 17	M24/00778	MGA94_51 MGA94_51	325222	6663599	390 390	-90 -90	000
ABFA0043	AC	27	M24/00778	MGA94_51	326210	6664862	390	-90	000	ABFA0135	AC	11	M24/00778	MGA94_51	325277	6663590	390	-90	000
ABFA0044	AC	45	M24/00778	MGA94_51	326137	6664860	390	-90	000	ABFA0136	AC	17	M24/00778	MGA94_51	325258	6663589	390	-90	000
ABFA0045 ABFA0046	AC	14	M24/00778	MGA94_51 MGA94_51	325261	6664966	390	-90	000	ABFA0137 ABFA0138	AC	10	M24/00778	MGA94_51 MGA94_51	325324	6663560	390	-90 -90	000
ABFA0047	AC	28	M24/00778	MGA94_51	325341	6664754	390	-90	000	ABFA0139	AC	7	M24/00778	MGA94_51	325283	6663551	390	-90	000
ABFA0048	AC	20	M24/00778	MGA94_51	325424	6664746 6664748	390	-90	000	ABFA0140	AC	5	M24/00778	MGA94_51	325443	6663534	390	-90	000
ABFA0050	AC	59	M24/00778	MGA94_51	325583	6664745	390	-90	000										
ABFA0051	AC	26	M24/00778	MGA94_51	325667	6664754	390	-90	000										
ABFA0052	AC AC	13 26	M24/00778	MGA94_51 MGA94_51	325734	6664768	390	-90 _90	000										
ABFA0055	AC	11	M24/00778	MGA94_51	325895	6664767	390	-90	000										
ABFA0055	AC	22	M24/00778	MGA94_51	325967	6664758	390	-90	000										
ABFA0056 ABFA0057	AC AC	16 32	M24/00778	MGA94_51 MGA94_51	325714	6663861	390	-90 _90	000										
ABFA0058	AC	35	M24/00778	MGA94_51	325730	6663964	390	-90	000										
ABFA0059	AC	26	M24/00778	MGA94_51	326626	6664350	390	-90	000										
ABFA0060	AC AC	29 27	M24/00778 M24/00778	MGA94_51 MGA94_51	326543 326455	6664377	390 390	-90 -90	000										
ABFA0062	AC	41	M24/00778	MGA94_51	326380	6664388	390	-90	000										
ABFA0063	AC	31	M24/00778	MGA94_51	326296	6664369	390	-90	000										
ABFA0064 ABFA0065	AC	34 21	M24/00778	MGA94_51 MGA94_51	326219	6664365	390 390	-90 -90	000										
ABFA0066	AC	59	M24/00778	MGA94_51	326053	6664377	390	-90	000										
ABFA0067	AC	40	M24/00778	MGA94_51	325981	6664360	390	-90	000										
ABFA0068	AC	43	M24/00778	MGA94_51 MGA94_51	325895	6664352	390	-90 -90	000										
ABFA0070	AC	35	M24/00778	MGA94_51	325741	6664349	390	-90	000										
ABFA0071	AC	19	M24/00778	MGA94_51	325665	6664365	390	-90	000										
ABFA0072 ABFA0073	AC	27	M24/00778	MGA94_51 MGA94_51	325898	6664575	390	-90 -90	000										
ABFA0074	AC	49	M24/00778	MGA94_51	325984	6664583	390	-90	000										
ABFA0075	AC	21	M24/00778	MGA94_51	326058	6664585	390	-90	000										
ABFA0070 ABFA0077	AC	88	M24/00778	MGA94_51 MGA94 51	326220	6664598	390	-90 -90	000										
ABFA0078	AC	40	M24/00778	MGA94_51	326301	6664600	390	-90	000										
ABFA0079	AC AC	35 20	M24/00778 M24/00779	MGA94_51	326379 326420	6664606	390 300	-90 _90	000										
ABFA0081	AC	17	M24/00778	MGA94_51	326460	6664612	390	-90	000										
ABFA0082	AC	19	M24/00778	MGA94_51	326535	6664613	390	-90	000										
ABFA0083	AC AC	22 11	M24/00778 M24/00778	MGA94_51 MGA94_51	326622 326704	6664620 6664625	390 390	-90 -90	000										
ABFA0085	AC	26	M24/00778	MGA94_51	326786	6663160	390	-90	000										
ABFA0086	AC	21	M24/00778	MGA94_51	326705	6663137	390	-90	000										
ABFA0087	AC AC	18 20	M24/00778	MGA94_51 MGA94_51	326536 326536	0003164 6663150	390 390	-90 -90	000										
ABFA0089	AC	23	M24/00778	MGA94_51	326460	6663136	390	-90	000										
ABFA0090	AC	22	M24/00778	MGA94_51	326383	6663155	390	-90	000										
ABFA0091 ABFA0092	AC	3∠ 29	wi∠4/00778	MGA94_51	326300 326215	6663164	390 390	-90 -90	000										

Appendix 2 – Assay results from the BTZ

Selected assays from calculated intercepts (Appendix 3) from recent drilling in the Big Four area, BTZ, with selected gold and related assays from the Elsie North nickel cobalt deposit.

Abbreviations used: Au – gold, Ag – silver, As – arsenic, Cu – copper, Sb – antimony, S – sulphur, m – metre, g/t – grams per tonne, ppm – parts per million, bd – below detection.

Detection limits: Au - 0.001 g/t, Ag - 10 ppm, As - 10 ppm, Cu - 5 ppm, Sb - 0.1 ppm, S - 0.001 %

Hole	From	То	Sample	Au	Ag	As	Cu	Sb	S
Now drilling	(m) Dia For	(m)	number	(g/t)	(g/t)	(ppm)	(ppm)	(ppm)	(%)
AREA0003	12	18	AR026970	0.015	bd	bd	10	03	0.037
ABFA0003	18	24	AR026971	0.056	bd	bd	40	0.4	0.017
ABFA0003	24	30	AR026972	0.065	0.1	bd	75	0.2	0.012
ABFA0003	30	36	AR026973	0.017	bd	bd	140	0.4	0.013
ABFA0023	0	6	AR027057	0.019	0.1	20	55	1.3	0.045
ABFA0014	18	24	AR027134	0.016	0.1	10	70	0.3	0.018
ABFA0014	24	30	AR027135	0.050	bd	20	110	0.4	0.017
ABFA0014	30	36	AR027136	0.025	bd	10	60	0.5	0.015
ABFA0014	36	42	AR027138	0.020	0.1	10	20	0.5	0.014
ABFA0015	24	29	AR027145	0.024	0.1 bd	20	115	0.3	0.007
ADFA0020	6	12	AR027101 AD027162	0.010	bd	20	125	9.0	0.037
ABF 40020	12	12	AR027102	0.010	bd	90	35	4.7	0.040
ABFA0020	18	24	AR027164	0.013	0.1	210	110	8.4	0.030
ABFA0020	24	30	AR027165	0.024	bd	240	100	8.4	0.027
ABFA0020	48	54	AR027170	0.036	bd	250	65	15.2	0.032
ABFA0020	54	60	AR027171	0.033	bd	140	10	4.9	0.016
ABFA0038	18	24	AR027204	0.020	0.4	30	485	0.3	0.101
ABFA0038	24	30	AR027205	0.078	0.4	bd	380	0.9	0.042
ABFA0038	30	36	AR027207	0.029	0.6	10	280	0.8	0.029
ABFA0044	30	36	AR027234	0.073	0.6	bd	185	1.0	0.021
ABFA0044	36	42	AR027235	0.050	2.5	10	770	0.7	0.016
ABFA0044	42	45	AR027237	0.018	0.2	20	200	0.0	0.013
ARFANNSO	12	18	AR027321	0.010	hd	20	115	0.7	0.047
ABFA0059	18	24	AR027327	0.191	bd	30	205	0.4	0.012
ABFA0059	24	26	AR027328	0.160	bd	40	265	0.4	0.005
ABFA0062	30	36	AR027345	0.029	0.2	bd	55	0.4	0.007
ABFA0062	36	41	AR027347	0.031	0.1	bd	50	0.4	0.007
ABFA0066	54	59	AR027375	0.015	bd	bd	75	0.7	0.035
ABFA0069	36	42	AR027397	0.023	0.1	bd	50	0.6	0.007
ABFA0069	42	43	AR027398	0.010	0.2	10	35	0.4	0.005
ABFA0074	36	42	AR027425	0.012	0.1	10	120	1.1	0.062
ABFA0074	42	48	AR027427	0.130	0.2	10	150	0.3	0.043
ABFA0074	40	49	AR027420	0.011	0.2 bd	10 bd	00	0.0	0.020
ABFA0070	40 5/	56	AR027442	0.024	0.1	bd	10	1.2	0.017
ABFA0077	6	12	AR027445	0.034	0.1	bd	20	0.9	0.054
ABFA0077	66	72	AR027457	0.044	bd	bd	15	0.8	0.011
ABFA0077	72	78	AR027458	0.046	0.2	10	30	1.5	0.072
ABFA0078	0	6	AR027461	0.016	bd	10	35	0.5	0.058
ABFA0078	24	30	AR027465	0.024	0.1	bd	5	0.4	0.014
ABFA0093	30	35	AR027539	0.019	bd	bd	60	0.1	0.015
ABFA0123	12	18	AR027632	0.016	bd	20	20	0.4	0.009
ABFA0123	18	22	AR027633	0.015	bd	10	15	0.3	0.006
ABFA0122	24	28	AR027639	0.015	0.1 bd	20	20	0.2	0.009
ADFA0133	6	12	AR027001	0.014	bd	20	40	1.6	0.030
ABFA0133	12	12	AR027663	0.015	0.2	140	30	2.5	0.020
ABFA0133	18	24	AR027664	0.027	bd	70	55	1.0	0.326
ABFA0152	0	6	AR027709	0.055	bd	30	40	0.3	0.051
ABFA0152	6	10	AR027710	0.258	bd	20	55	0.3	0.028
ABFA0153	0	6	AR027711	0.056	bd	20	130	0.6	0.038
ABFA0153	12	18	AR027713	0.018	bd	bd	145	0.2	0.008
ABFA0153	18	24	AR027714	0.018	0.1	bd	80	0.3	0.007
ABFA0156	0	3	AR027724	0.015	bd	bd	40	0.2	0.015
ABFA0181	18	24	AR027794	0.026	bd	bd	25	0.3	0.012
ABFA0101	24	30	AR027795	0.011	DO	20	20	0.4	0.005
ABFA0103	12	12	AR027003	0.050	0.1	20	100	0.7	0.017
ABEA018/	12	24	AR027010	0.017	bd	170	55	1.7	0.037
ABFA0184	24	30	AR027812	0.050	bd	220	115	9.4	0.020
ABFA0184	30	36	AR027813	0.025	0.1	60	75	0.9	0.025
ABFA0188	0	6	AR027823	0.026	bd	bd	40	0.4	0.059
ABFA0188	12	18	AR027825	1.250	bd	90	275	0.2	0.016
ABFA0188	18	24	AR027826	0.354	bd	90	45	0.3	0.016
ABFA0188	24	30	AR027827	0.029	bd	70	140	0.6	0.016
ABFA0188	30	36	AR027829	1.670	bd	180	65	1.4	0.014
ABFA0188	36	41	AR027830	0.081	0.1	150	30	1.0	0.226
ABFA0194	18	23	AR027846	0.029	bd	50	40	0.3	0.005
ABEA0107	0	6	ARU2/85/	0.046	bd	20	55	0.8	0.045
ABFAU19/	30	30	AKU2/863	0.050	0.1	10	95	1.3	0.031
ADEA0107	70	70	ARU2/009	0.024	0.2	20	55 70	0.7	0.02/
ADFAU19/	72	10	ARU2/0/1 AR027872	0.053	1.6	20	0	1.0	0.020
ABFA0197	84	90	AR027873	0.310	0.3	110	50	3.6	3.950
ABFA0199	04	6	AR027877	0.230	bd	20	30	0.0	0.007
			/ 1 102/0//	1 0.010	, vu			0.0	0.021

Hole	From	10	Sample	Au	Ag	As	Cu	Sb	S
	(m)	(m)	number	(g/t)	(g/t)	(ppm)	(ppm)	(ppm)	(%)
ABFA0209	18	24	AR027916	0.025	bd	bd	70	0.4	0.020
ABFA0209	24	30	AR027917	0.028	0.4	bd	55	0.5	0.010
ABFA0209	30	36	AR027919	0.032	0.3	bd	80	0.4	0.013
ABFA0209	36	42	AR027920	0.020	0.2	bd	100	0.5	0.019
ABFA0209	42	48	AR027921	0.408	0.2	bd	85	0.4	0.014
BFA0209	48	54	AR027922	0.113	0.3	bd	55	0.4	0.011
ABFA0209	54	60	AR027923	0.041	0.2	40	35	1.2	0.013
ABFA0209	60	66	AR027924	0.010	bd	10	65	0.8	0.014
ABFA0209	66	72	AR027925	0.103	0.9	30	65	1.5	0.185
ABFA0209	72	78	AR027926	0.080	bd	20	65	0.7	0.025
ABFA0209	78	84	AR027927	0.149	2.8	40	65	0.8	0.768
ABFA0211	0	6	AR027932	0.081	bd	10	70	0.5	0.033
ABFA0211	6	12	AR027933	0.059	bd	50	315	0.7	0.021
ABFA0211	12	18	AR027934	0.067	0.1	50	55	0.3	0.009
ABFA0211	30	32	AR027937	0.068	bd	20	20	0.5	0.124
ABFA0223	12	18	AR027973	0.025	bd	bd	85	0.4	0.006
ABFA0223	18	24	AR027974	0.032	0.1	bd	bd	0.2	0.012
ABFA0228	24	26	AR027991	0.019	bd	90	20	1.0	0.006
ABEA0245	0	6	AR028023	2 030	bd	10	40	10	0.020
ABFA0246	0	1	AR028024	0.025	bd	bd	55	0.2	0.017
101710210	-		741020021	0.020		50		0.2	0.011
Historic data	collatio	on. Els	e North deposit						
AGSD0020	18	20	AR005379	0.042	02	100	40	92	0.099
AGSD0020	42	44	AR005392	0.191	02	30	bd	12	0.041
AGSD0020	44	46	AR005394	0.040	0.2	10	bd	0.7	0.042
AGSD0020	46	48	AR005395	0.072	bd	10	bd	0.9	0.056
AGSD0020	48	50	AR005396	0 135	bd	10	bd	0.8	0.065
AGSD0020	50	51 5	AR005307	0.155	0.2	20	hd	0.0	0.000
AGSR0069	52	5/	AR003337	0.130	bd	70	bd	2.8	0.032
ACSP0070	14	16	AR001775	0.100	bd	10	5	3.2	0.004
ACSD0070	14	10	AD001705	0.023	bd	70	5	6.2	0.042
AGORUU/U	20	10	AR001700	0.023	0.2	200	5	16.1	0.000
AGSR0070	30	40	AR001799	0.012	0.3	200	65	10.1	0.095
403R0070	40	42	AR001000	0.003	0.2	190	00	10.1	0.114
AGSR0070	42	44	AR001001	0.013	bu	120	30	10.4	0.110
AGSKUU/U	44	40	AR001802	0.004	DO	30	DO	2.8	0.064
4G5R0070	40	40	AR001003	0.013	bu	20	Du	2.1	0.071
4G5R0070	48	50	AR001804	0.007	DO	20	5	2.5	0.064
AGSR0070	50	52	AR001805	0.132	bd	30	10	6.2	0.078
4G5R0070	52	54	AR001806	0.118	DO	30	5	4.0	0.076
AGSR0070	54	50	AR001808	0.267	Da	30	Da	3.4	0.071
AGSR0070	56	58	AR001809	0.584	bd	30	bd	2.3	0.058
AGSR0070	58	60	AR001810	0.204	0.1	30	bd	2.7	0.072
AGSR0070	60	62	AR001811	0.358	0.1	20	bd	2.8	0.065
AGSR0076	14	16	AR001965	0.022	bd	30	5	5.5	0.055
AGSR0076	54	56	AR001988	0.013	bd	530	90	56.1	0.122
AGSR0076	56	58	AR001989	1.010	bd	350	70	32.1	0.185
AGSR0076	58	60	AR001990	0.043	bd	350	75	31.8	0.204
AGSR0076	60	62	AR001991	0.031	0.2	370	70	28.2	0.200
AGSR0076	62	64	AR001992	0.096	0.3	300	675	19.7	0.180
AGSR0076	64	66	AR001993	6.850	2	340	1040	15.6	0.148
AGSR0076	66	68	AR001994	0.892	0.3	110	90	6.1	0.117
AGSR0076	68	70	AR001995	0.511	bd	120	65	6.8	0.103
AGSR0076	70	72	AR001996	0.616	0.2	210	70	10.4	0.114
AGSR0077	54	55	AR002028	0.549	0.1	bd	15	1.4	0.071
AGSR0081	56	58	AR002138	0.135	bd	60	55	1.7	0.108
AGSR0081	58	60	AR002139	0.414	bd	60	110	1.4	0.126
AGSR0081	60	62	AR002140	0.126	0.2	40	35	0.9	0.058
AGSR0084	10	12	AR002165	0.225	bd	10	bd	2.0	0.017
AGSR0085	60	62	AR002219	0.307	bd	300	100	22.7	0.161
AGSR0085	62	64	AR002220	0.292	bd	180	40	17.3	0.202
AGSR0085	64	65	AR002221	0.216	bd	180	30	19.2	0.226
AGSR0200	34	36	AR008408	1,940	bd	100	20	6.1	0.080
AGSR0201	52	54	AR008448	0.336	bd	30	10	2.1	0.086
AGSR0201	54	56	AR008449	0.370	bd	20	10	2.1	0.086
GSRC0025	18	23	GSRC025 18-23	0.586	bd	94	12		_
GSRC0174	50	54	GSRC174 50-54	0.233	bd	63	27	-	-
GSRC0174	54	57	GSRC174_54-57	0.200	bd	76	9	_	_
GSRC0175	48	52	GSRC175 /8-52	0.127	hd	53	22	_	_
GSRC0561	70	71	PR01/05	0.112	bd	62.8	220	5.8	0 111
GOROUDO I	71	70	PR01400	0.113	bd	02.0 8/	232	0.0	0.115
CODCUERS	11	12	DD01445	0.300	bd	04 51.0	14	0.0	0.110
CODCUERS	4/	40	DD01440	0.132	bd	04.∠ 31	14	1.0	0.001
CODCUERS	40	49	DD01440	0.100	bd	10 0	12	1.0	0.020
000002	49	20	DD01456	0.100	00	10.0	10	0.0	0.021
0000000	32	30	PRU1450	0.120	DU	14.0	4	0.2	0.017
GSRC0609	44	50	PR025/1	0.155	bd	9.2	-2	0.5	0.017

ABFA0194 18-23 m

5 m at 0.03 g/t Au from 18 m

Appendix 3 – Defined exploratory intercepts, Big Four area, BTZ

Parameters used to define exploratory gold intercepts at the BTZ

Parameter	Gold	
Minimum cut-off (deep laterite)	0.02 g/t	
Minimum intercept thickness	1 m (generally 6 m)	
Maximum internal waste thickness	2 m	

For exploration in deep laterite, gold anomaly values of significance over the BTZ are muted. This is in part due to the nature of gold's behaviour in deep profiles, but also in the style of drilling (aircore) and in the bulk sampling compositing of 6 m intervals in the Big Four area, both of which inherently result in diluted assay results. The exploratory results presented here are being used to vector in on expected primary gold mineralisation in the bedrock beneath the laterite profile and the nickel-cobalt deposits. They are not, and were never intended to be significant, economic gold intercepts. They are not comparable to intercepts derived from drilling of primary gold deposits. Gold intercepts are defined using a 0.02 g/t Au cut-off on a minimum intercept of 1 m (generally 6 m in this program) and a maximum internal waste of 2 m.

Drillhole	Interval	Exploratory gold intercept (0.02 g/t cutoff)
Big Four ar	ea, BTZ	
ABFA0003	12–36 m	24 m at 0.04 g/t Au from 12 m
ABFA0014	18–42 m	24 m at 0.03 g/t Au from 18 m
ABFA0015	24–29 m	5 m at 0.02 g/t Au from 24 m
ABFA0020	0–60 m	30 m at 0.02 g/t Au from surface
	and	12 m at 0.03 g/t Au from 48 m
ABFA0023	0–6 m	6 m at 0.02 g/t Au from surface
ABFA0038	18–36 m	18 m at 0.04 g/t Au from 18 m
ABFA0044	30–45 m	15 m at 0.05 g/t Au from 30 m
ABFA0058	24–30 m	6 m at 0.02 g/t Au from 24 m
ABFA0059	12–26 m	14 m at 0.15 g/t Au from 12 m
ABFA0062	30–41 m	11 m at 0.03 g/t Au from 30 m
ABFA0066	54–59 m	5 m at 0.02 g/t Au from 54 m
ABFA0069	36–43 m	7 m at 0.02 g/t Au from 36 m
ABFA0074	36–49 m	13 m at 0.07 g/t Au from 36 m
ABFA0076	48–56 m	8 m at 0.02 g/t Au from 48 m
ABFA0077	6–78 m	6 m at 0.03 g/t Au from 6 m
	and	12 m at 0.05 g/t Au from 66 m
ABFA0078	0–30 m	6 m at 0.02 g/t Au from surface
	and	6 m at 0.02 g/t Au from 24 m
ABFA0093	30–35 m	5 m at 0.02 g/t Au from 30 m
ABFA0123	12–22 m	10 m at 0.02 g/t Au from 12 m
ABFA0124	24–28 m	4 m at 0.02 g/t Au from 24 m
ABFA0133	0–24 m	24 m at 0.02 g/t Au from surface
ABFA0152	0–10 m	10 m at 0.14 g/t Au from surface
ABFA0153	0–24 m	6 m at 0.06 g/t Au from surface
	and	12 m at 0.02 g/t Au from 12 m
ABFA0156	0–3 m	3 m at 0.02 g/t Au from surface
ABFA0181	18–30 m	12 m at 0.02 g/t Au from 18 m
ABFA0183	6–12 m	6 m at 0.06 g/t Au from 6 m
ABFA0184	12–36 m	24 m at 0.04 g/t Au from 12 m
ABFA0188	0–41 m	6 m at 0.03 g/t Au from surface
	and	29 m at 0.70 g/t Au from 12 m

Appendix 4 – JORC Code, 2012 Edition, Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 All holes were sampled "in-principle" on a 6 metre down hole interval basis, with exceptions being made due to visual geological/mineralogical breaks, and end of hole final-lengths. All sampling lengths were recorded in ARL's standard sampling record spreadsheets. Sample condition, sample recovery and sample size were recorded for all drill-core samples collected by ARL. The drill spacing was highly variable, utilising pre-existing access tracks across the area. Along individual lines, holes were drilled every 40 m over areas of interest, narrowed to 20 m spacing in some areas to test specific features. Industry standard practice was used in the processing of samples for assay, with 6m intervals of AC chips collected in green plastic bags. A definitive interpretation of the mineralisation awaits further drilling. Assay of samples utilised standard laboratory techniques with standard ICP-AES undertaken on 50 gram samples for Au, Pt and Pd, and lithium borate fused-bead XRF analysis used for the remaining multi-element suite. Further details of lab processing techniques are found in Quality of assay data and laboratory tests below.
Drilling techniques	 Drill type (e.g. core, reverse circulation, 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). 	 In this most recent program, Ardea drilled the Bardoc Tectonic Zone (BTZ) with 265 aircore (AC) drill holes on historic drill access tracks. These were to provide a detailed sampling of the entire laterite profile and a full assay suite. Historic drilling was generally very shallow with assays comprising only a handful of elements, sometimes without gold assays. Holes were vertical (-90 degree dip). AC drilling was performed with a face sampling blade (bit diameter between 4½ and 5¼ inches) and samples were collected by either a cone (majority) or riffle splitter using 6 metre composites. Sample condition, sample recovery and sample size were recorded for all drill samples collected by ARL.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 AC sample recovery was recorded by visual estimation of the reject sample, expressed as a percentage recovery. Overall estimated recovery was high. RC Chip sample condition recorded using a three code system, D=Dry, M=Moist, W=Wet. A small proportion of samples were moist or wet (11.5%), with the majority of these being associated with soft goethite clays, where water injection has been used to improve drill recovery. Measures taken to ensure maximum AC sample recoveries included maintaining a clean cyclone and drilling equipment, using water injection at times of reduced air circulation, as well as regular communication with the drillers and slowing drill advance rates when variable to poor ground conditions are encountered.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Drilling was undertaken for first pass exploration purposes. The level of logging detail utilised supports future potential resource estimation and was as follows: Visual geological logging was completed for all drilling both at the time of drilling (using standard Ardea logging codes), and later over relevant met-sample intervals with a metallurgical-logging perspective. Geochemistry from historic data was used together with logging data to validate logged geological horizons. Visual geological logging was completed for all AC drilling on 1 metre intervals. Logging was performed at the time of drilling, and planned drill hole target lengths adjusted by the geologist during drilling. The geologist also oversaw all sampling and drilling practices. A mixture of ARL employees and contract geologists supervised all drilling. A small selection of representative chips were also collected for every 1 metre interval and stored in chip-trays for future reference. In total, 4,861 m were drilled during the program, with the chips generated during entire program logged in detail.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and 	 2 metre composite samples were recovered using a 15:1 rig mounted cone splitter or trailer mounted riffle splitter during drilling into a calico sample bag. Sample target weight was between 2 and 3kg. In the case of wet clay samples, grab samples taken from sample return pile, initially into a calico sample bag. Wet samples were stored separately from other samples in plastic bags and riffle split once dry. QAQC was employed. A standard, blank or duplicate sample was inserted into the

Criteria	JORC Code explanation	Commentary
Quality of assay data	 appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. The nature, quality and appropriateness of the assaying and laboratory procedures used and 	 sample stream 10 metres on a rotating basis. Standards were quantified industry standards. 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. All Ardea samples were submitted to Kalgoorlie Bureau Veritas (BV) laboratories and transported to BV Perth, where they were pulverised.
	 whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 The samples were sorted, wet weighed, dried then weighed again. Primary preparation has been by crushing and splitting the sample with a riffle splitter where necessary to obtain a sub-fraction which has then been pulverised in a vibrating pulveriser. All coarse residues have been retained. The samples have been cast using a 66:34 flux with 4% lithium nitrate added to form a glass bead. Al, As, Ba, Ca, Cl, Co, Cr, Cu, Fe, Ga, K, Mg, Mn, Na, Ni, P, Pb, S, Sc, Si, Sr, Ti, V, Zn, Zr have been determined by X-Ray Fluorescence (XRF) Spectrometry on oven dry (105°C) sample unless otherwise stated. A fused bead for Laser Ablation MS was created to define Ag_LA, Be_LA, Bi_LA, Cd_LA, Ce_LA, Co_LA, Cs_LA, Dy_LA, Er_LA, Eu_LA, Gd_LA, Ge_LA, Hf_LA, Ho_LA, In_LA, La_LA, Lu, LA, Mo_LA, Nb_LA, Nd_LA, Ni, LA, Pr_LA, Rb_LA, Re_LA, Sb_LA, Sc_LA, Se_LA, Sm_LA, Sn_LA, Ta_LA, Tb_LA, Te_LA, Th_A, TI_LA, Tm_LA, U_LA, V_LA, W_LA, Y_LA, Yb_LA, which have been determined by Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LAICP-MS). The samples have been analysed by Firing a 40 g (approx) portion of the sample. Lower sample weights may be employed for samples with very high sulphide and metal contents. This is the classical fire assay process and will give total separation of Gold, Platinum and Palladium in the sample. Au1, Pd, Pt have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. Loss on Ignition results have been determined gravimetrically. BV routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. Ardea also inserted QAQC samples into the sample stream at a 1 in 10 frequency, alternating between blanks (industrial sands) and standard reference materials. Additionally, a review was conducted for geochemical values that would be expected in a nickel laterite profile. All of the QAQC data has been statistically assessed. There were rare b
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 BV routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. Ardea also inserted QAQC samples into the sample stream at a 1 in 20 frequency, alternating between duplicates splits, blanks (industrial sands) and standard reference materials. All of the QAQC data has been statistically assessed. Ardea has undertaken its own further in-house review of QAQC results of the BV routine standards, 100% of which returned within acceptable QAQC limits. This fact combined with the fact that the data is demonstrably consistent has meant that the results are considered to be acceptable and suitable for reporting.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 All drill holes are to be surveyed using an RTK DGPS system with either a 3 or 7 digit accuracy. The coordinates are stored in the exploration database referenced to the MGA Zone 51 Datum GDA94. All holes drilled as part of the program were vertical. No holes were down-hole surveyed except at EOH. The grid system for all models is GDA94. Where historic data or mine grid data has been used it has been transformed into GDA94 from its original source grid via the appropriate transformation. Both original and transformed data is stored in the digital database. A DGPS pickup up of drill collar locations is considered sufficiently accurate for reporting of resources, but is not suitable for mine planning and reserves.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is 	 The drill spacing was highly variable, utilising pre-existing access tracks across the area. Along individual lines, holes were drilled every 40 m over areas of interest, narrowed to 20 m spacing in some areas to test specific features.

Criteria	JORC Code explanation	Commentary
	 sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The drilling is exploratory in nature and is not expected to result in the definition of Mineral Resources. Sample compositing has not been applied to the newly collected data.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 All drill holes in this program were vertical. The program was aimed provide information throughout the deep laterite profile with a focus on gold. Primary gold was not targeted. As such, the exploration intercepts defined can be considered true thickness within the laterite profile. This data will only be used to vector towards primary gold mineralisation in the bedrock.
Sample security	 The measures taken to ensure sample security. 	 All samples were collected and accounted for by ARL employees/consultants during drilling. All samples were bagged into calico plastic bags and closed with cable ties. Samples were transported to Kalgoorlie from logging site by ARL employees/ consultants and submitted directly to BV Kalgoorlie. The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No audit or review beyond normal operating procedures has yet been undertaken on the resultant dataset. ARL has periodically conducted internal reviews of sampling techniques relating to resultant exploration datasets, and larger scale reviews capturing the data from multiple drilling programs. Internal reviews of the exploration data included the following: Unsurveyed drill hole collars (less than 1% of collars). Drill Holes with overlapping intervals (0%). Drill Holes with no logging data (less than 2% of holes). Sample logging intervals beyond end of hole depths (0%). Samples with no assay data (from 0 to <5% for any given project, usually related to issues with sample recovery from difficult ground conditions, mechanical issues with drill rig, damage to sample in transport or sample preparation). Assay grade ranges. Collar coordinate ranges Valid hole orientation data. The BV Laboratory was visited by ARL staff in 2017, and the laboratory processes and procedures were reviewed at this time and determined to be robust.

Section 2 - Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Three tenements on which the drilling was undertaken are ARL's Big Four GNCP tenements, namely M29/278-I, M24/778-I, M24/731-I, and M24/732-I. ARL, through its subsidiary companies, is the sole holder of the tenement. Heritage surveys were carried out in 2017 by Kado Muir, Heritage Consultant (Masters CHS – Anthropology/Archaeology) prior to application for the Program of Works to undertake the program.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The Goongarrie South and Big Four series of nickel-cobalt deposits were initially discovered by Heron Resources Ltd and subsequently drilled by Vale Inco Limited in a Joint Venture. Several companies have explored for gold over the area east of the ultramafic sequence that hosts the Ni-Co deposits. The most intense recent work focused on ARL's tenure and to the east and south, was carried out by Goldfields Exploration and predecessors. Their work comprised several shallow drill programs that led to discover of the Aphrodite and Epsilon gold projects immediately east of ARL's tenure. Goldfields' work identified the Zeus and Dionysus prospects.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Primary orogenic gold mineralisation is the main target style of mineralisation. Drill testing during this program only sampled the overlying laterites to define exploratory vectors to primary bedrock mineralisation. Orogenic gold mineralisation is hosted by the various lithologies within the Bardoc Tectonic Zone, a regional crustal-scale fault known to host significant gold deposits along its extensive strike length, including the Paddington, Goongarrie, Comet Vale, and Menzies mining centres. Similar mineralisation is expected within the deeply buried bedrock within the explored tenements.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	 All holes drilled in this most recent program are listed in "Appendix 1 – Collar location data".
Drill hole Information	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 All assay data relating to the metals of interest, namely gold and associated tracefinder elements silver, arsenic, copper, antimony, and sulphur, are listed in "Appendix 2 – Assay results from the BTZ". Other elements were assayed but have not been reported here. They are of use and of interest from a scientific and metallurgical perspective, but are not considered material and their exclusion does not detract from the understanding of this report.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Most drill hole samples have been collected over 6 m down hole intervals. Exploratory gold intercepts for the BTZ are from laterite only, and are not intended to reflect actual gold endowment, nor are they comparable to primary gold intercepts. They are defined using a 0.02 g/t cut-off on a minimum intercept of 1 m (nominally 6 m due to sampling) and a maximum internal waste of 2 m. Assay compositing techniques were not used in this assessment. No metal equivalent calculations have been used in this assessment.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, 	 All drill holes in this program were vertical. The program was aimed provide information throughout the deep laterite profile with a focus on gold. Primary gold was not targeted. As such, the exploration intercepts defined can be considered true thickness within the laterite profile. This data will only be used to vector towards primary gold mineralisation in the bedrock.

Criteria	JORC Code explanation	Commentary
	true width not known').	
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 A map of the gold mineralisation is shown within the report. Cross sections are not shown as gold as the Company is still developing its understanding of the prospect.
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. 	 Results reported are all of absolute low values due to their inherent exploratory nature. Only results from defined intervals are reported. Gold results outside those reported tend towards lower detection limits.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 No other data are, at this stage, known to be either beneficial or deleterious to recovery of the metals reported.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further drilling is required but has not yet been defined. Further drilling will likely additional drill lines throughout the area, as well as extension of lines to the east and west as appropriate. Once sufficient characterisation of the lateritic profile gold distributions is attained, deeper prioritised diamond and RC drilling of the most prospective targets will be undertaken into fresh rock. Metallurgical assessment of all metals of interest throughout the BTZ will be undertaken prior to progression to a Pre-Feasibility Study (PFS) should such a study be warranted.