Ardea Resources Limited

High-grade, shallow gold discovery at Zeus, 10m at 13g/t gold

- **The "Zeus" gold discovery** is defined by shallow high-grade orogenic gold mineralisation beneath ~8m of transported cover on a granted mining lease.
  - This is the second discovery in recent weeks **in the Bardoc Tectonic Zone on Ardea's GNCP tenure**.
  - WA mines department (DMIRS) notified of discovery.
- Results include:
  - ABFR0303: **10m at 12.97g/t Au from 42m**
    including **4m at 28.25g/t Au from 44m**
  - ABFR0304: **6m at 2.07g/t Au** from 68m
- **Gold mineralisation is open in every direction.** Follow-up drilling planned.
- Discovery resulted from reappraisal of historic gold anomalism that was not adequately followed up by previous tenement holders. Historic results include[1]:
  - SCR0806: **9m at 4.23g/t Au from 67m** (April 1999)
    including **1m at 17.50g/t Au from 68m**
  - SCRC0310: **8m at 3.52g/t Au from 17m** (July 1999)
  - BFRC026: **4m at 1.33g/t Au from 32m** (April 2012)
- Zeus is located on a **~1,000m long line of strong regolith gold anomalism** that requires testing in fresh rock. There are no historic workings present or surface expression of the gold mineralisation.
- Awaiting full multi-element assay suite results for in-depth evaluation.

Ardea Resources Limited (Ardea or the Company) is pleased to announce the Zeus gold discovery near the Big Four gold deposit.

Zeus is located on a granted mining lease that is part of Ardea's Goongarrie Nickel-Cobalt Project (GNCP), to the east of the nickel-cobalt deposits. Eight closely-spaced RC drill holes were completed for 569m on three sections only 20m apart to successfully determine the orientation of gold mineralisation. Assay results show that gold mineralisation is continuous and open along strike and down dip.

Ardea's Managing Director, Andrew Penkethman, said:

"Ardea's gold targeting under cover strategy continues to reward with the discovery of primary orogenic gold mineralisation at Zeus. Like the recent Lily Albany discovery, Zeus is located only 70km northwest of the City of Kalgoorlie-Boulder. These gold discoveries are very important for the development of the GNCP because they offer potential early revenue through fast-tracked mining as well as delimiting constraints on infrastructure distributions for the adjacent Goongarrie Nickel Cobalt Project. These early "greenfields" successes are a credit to the exploration team and provide confidence in the Company's approach to maximise value for shareholders through realisation of the full mineral potential of our tenure."

[1] Source – DMIRS, WAMEX Open File reports.

ASX & Media Release
9 November 2020

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

Matt Painter
General Manager Exploration

Issued Capital
Fully Paid Ordinary Shares
127,670,582

Directors/Employee Performance Rights
3,711,000

ABN 30 614 289 342

ASX Listed

For personal use only

Zeus gold discovery

Zeus is the second gold discovery announced by Ardea in as many weeks. It is located around 4km SSW of the recent Lily Albany gold discovery and is less than 2km east of Ardea's 25km long line of nickel-cobalt laterite deposits that define the GNCP. Zeus is located on one of the granted GNCP mining leases.

The Zeus discovery comes from a thorough reassessment of historic open file datasets that indicated strong gold anomalism that had not been adequately followed up, as historic drilling orientations were undertaken at a sub-optimal orientation to the gold mineralisation trend. Following Ardea's rigorous in-house reinterpretation and targeting process, a new south-westerly drill direction was defined and gold lode orientations determined. Results include:

ABFR0303	**10m at 12.97g/t Au** from 42m (Lode 1) *including* **4m at 28.25g/t Au** from 44m
ABFR0304	**6m at 2.07g/t Au** from 68m (Lode 1) *including* 2m at 2.41g/t Au from 68m *and* 2m at 2.52g/t Au from 72m
ABFR0305	**2m at 1.08g/t Au** from 20m (Lode 1)

These new results confirm and build on open file (publicly available) results such as:

SCR0806	**9m at 4.23g/t Au** from 67m (April 1999) (Lode 2) *including* **1m at 17.50g/t Au** from 68m
SCRC0310	**8m at 3.52g/t Au** from 17m (July 1999) (Lode 1) *including* **2m at 8.91g/t Au** from 19m
BFRC026	**4m at 1.33g/t Au** from 32m (April 2012) (Lode 1) *including* **2m at 2.03g/t Au** from 32m

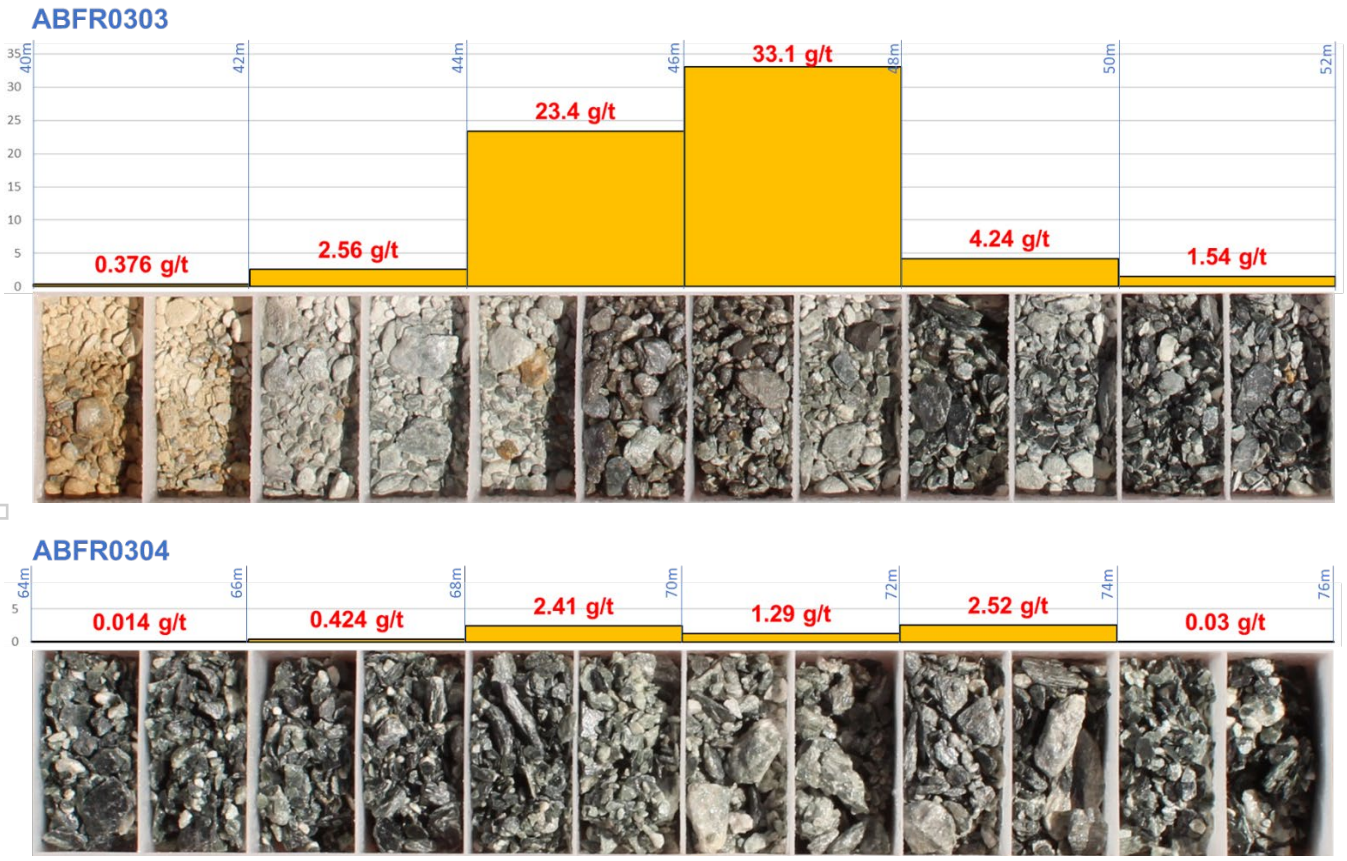


Figure 1 – Chip trays and gold grades for drill holes ABFR0303 and ABFR0304 at Zeus, showing extensive alteration and veining in the mineralised zone. These intervals are shown in the cross section in Figure 2.

For personal use only

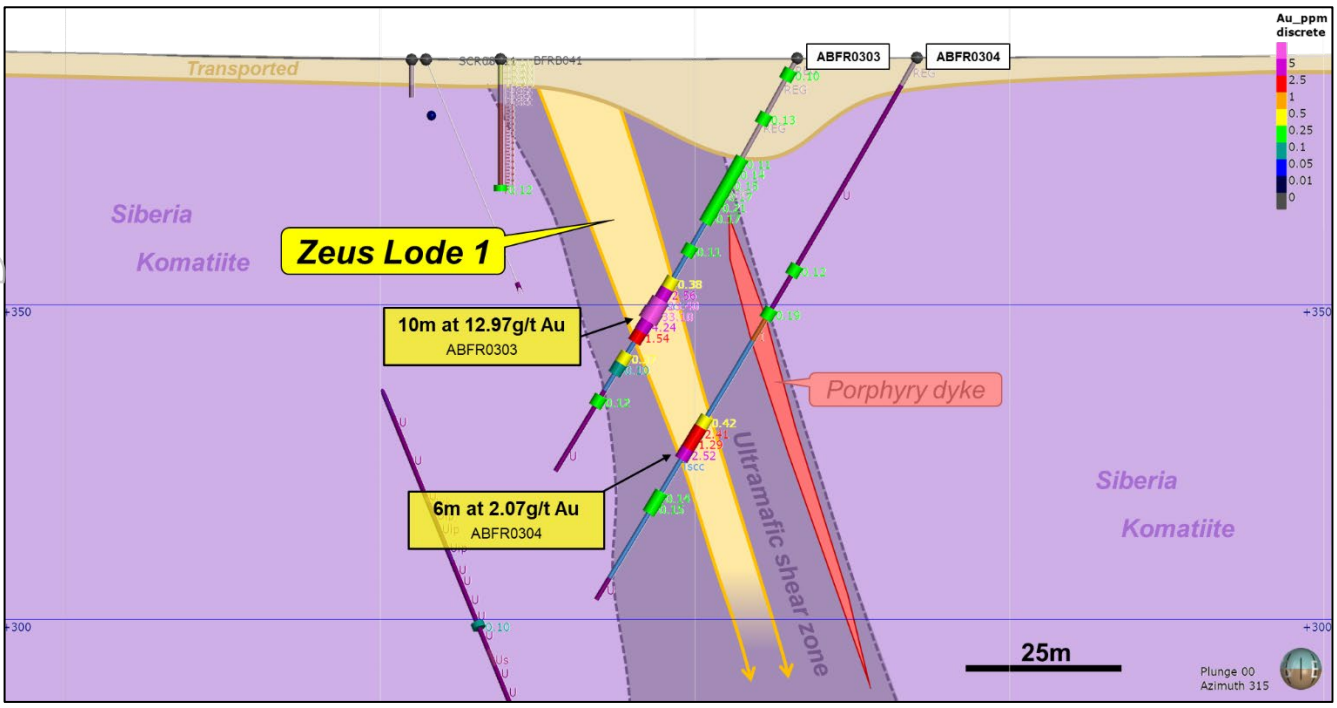


Figure 2 – Interpreted cross section for drill holes ABFR0303 and 0304, showing continuity of gold mineralisation at Zeus, looking northwest. This is the north-western most drilling, meaning that the high-grade mineralisation shown is open in every direction, but hidden from surface by about 8m of transported cover. Note that one of the historic holes (which were drilled off section) is subparallel to the mineralisation, showing why historic efforts could not adequately define mineralisation at Zeus.

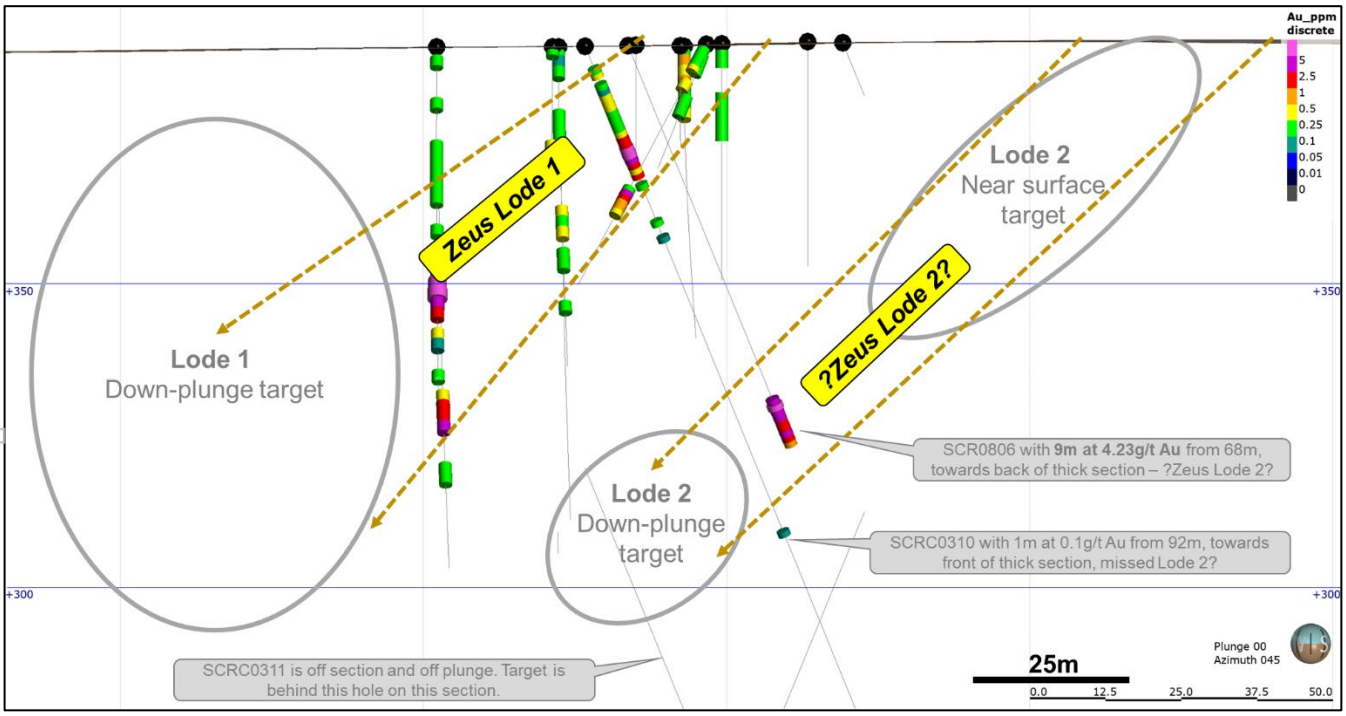


Figure 3 –Long section (50m search window) for Zeus, looking northeast. Ardea's drill holes appear vertical in this section which is looking down the drill lines. Older holes appear angled. The main Zeus Lode 1 shows a moderate plunge to the northwest (left). A second lode, Zeus Lode 2, is inferred by a deeper intercept in historic hole SCR0806 with 9m at 4.23g/t Au from 68m (Note that there is around 40m in the northeast direction into the page between SCR0806 and the adjacent hole on this thick section).

For personal use only

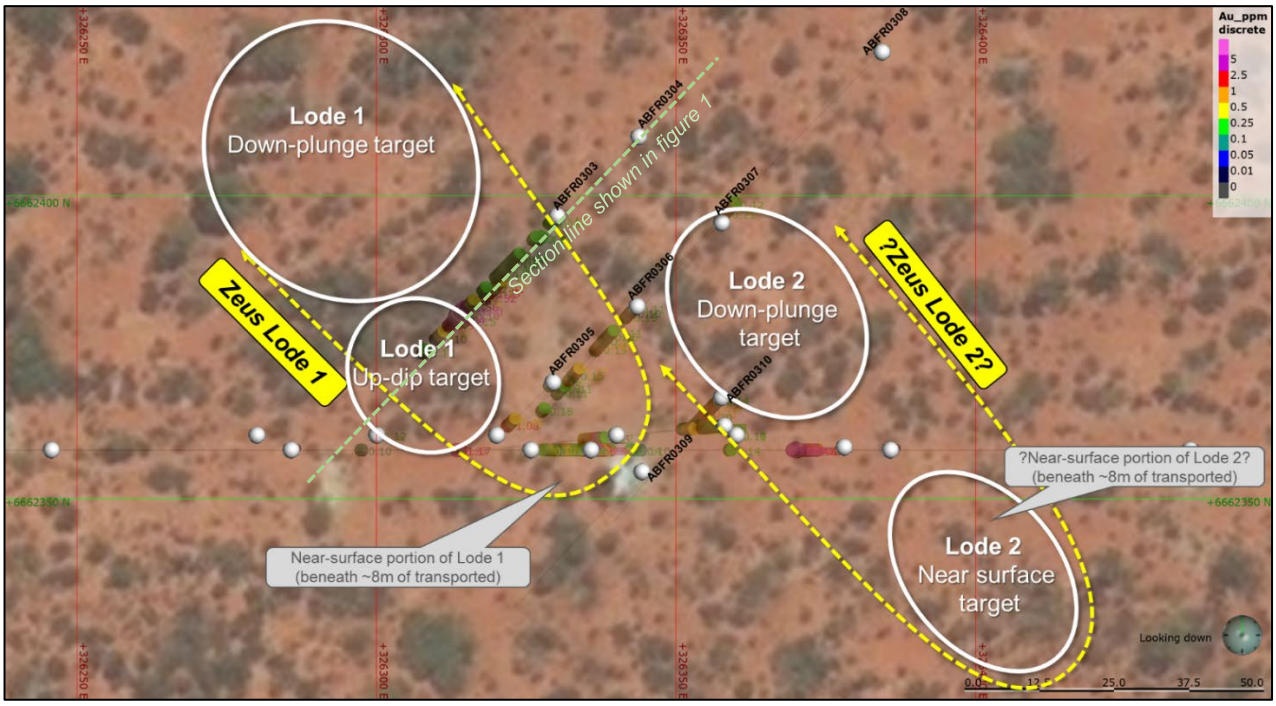


Figure 4 – Plan view of the Zeus area (partially transparent surface imagery), showing the eight recent RC drill holes (labelled) and historic drill holes (unlabelled). All Ardea holes were drilled to the southwest. The approximate footprint of the two lodes are shown, with the near-surface portion of each at the southeasternmost extent. Targets for follow-up drilling are shown with gold mineralisation open in every direction.

Importantly, the orientation of drilling and its close spacing have allowed correlation between drill holes to confidently define the trend of mineralisation at Zeus as a precursor to follow up drilling.

Gold mineralisation at Zeus is hosted by an ultramafic (to mafic) shear zone within the Siberia Komatiite. Extensive carbonate-sericite-pyrite alteration coincides with the drilled quartz shear veins and gold mineralisation.

Drill program rationale

The target at Zeus is **shallow high-grade gold mineralisation that is amenable to open pit mining**. Any new mineralisation discovery would supplement the Ardea Big Four gold deposit (178kt at 2.7g/t Au, ASX announcement, 14 May 2020).

Several historic aircore and RC drill programs were performed between 1999 and most recently 2012 but did not manage to define a suitable mineralisation model for follow-up drilling.

Ardea's analysis indicated that the mineralisation is likely to be oriented at a low angle to the historic east-west drill lines, so the rigs were turned to orient drill holes towards the southwest. Close-spaced drilling in this direction enabled definition of continuity and orientation of mineralisation.

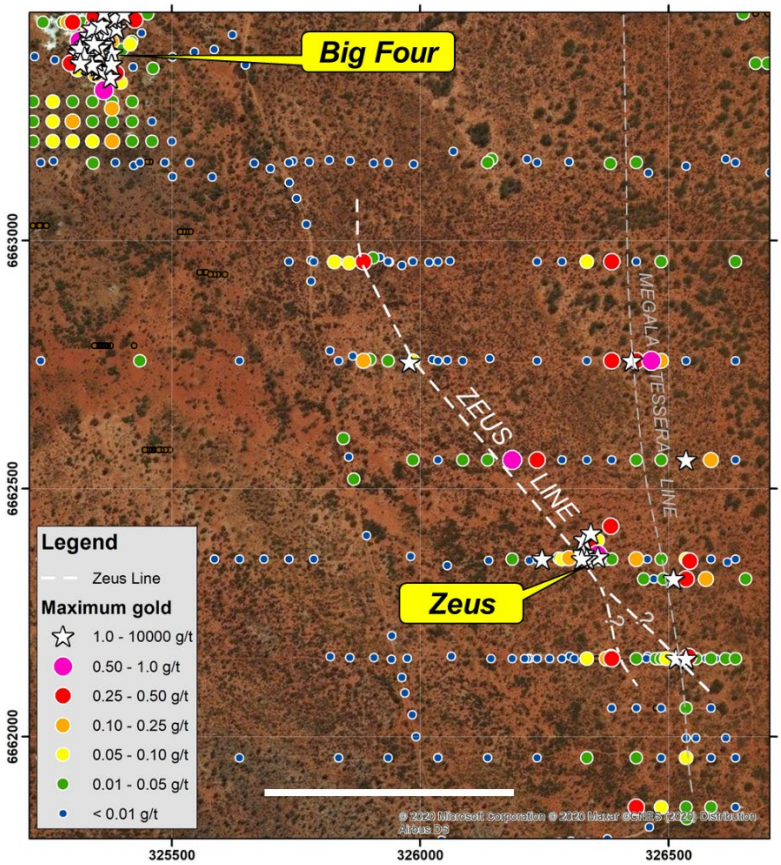


Figure 5 – Location of Zeus prospect and Big Four gold deposit, showing the extent of the Zeus Line as defined by gold anomalism in drillholes (mostly aircore outside of Zeus and Big Four) and geophysical datasets.

For personal use only

Further work

It is important to note that the **Lode 1 shoot is open immediately to the northwest of the highest grades intercepted at Zeus.** Depending on the vertical extent of Lode 1 (which is yet to be determined), extensions may be evident from as shallow as around 8m (below transported cover).

Multi-element assay results are still pending for Zeus. Once received, these will be incorporated into models to further and more accurately define and refine controls and targets for gold mineralisation.

Multiple targets have been defined for follow-up drilling. For the Lode 1 shoot, both up-dip and down-plunge targets are defined (Figures 2, 3 and 4). For the Lode 2 shoot, defined using legacy drill data, a near-surface target area has not been drilled historically, and down-plunge is also open.

Part of a broader, kilometre-long trend

Analysis of historic data and Ardea's detailed geological interpretation of the area suggests that **gold mineralisation around Zeus may extend for over 1,000m of strike length**. Gold anomalism encountered in historic drill holes up to 750m to the northwest and up to 250m to the southeast is consistent with the magnetic datasets and their derived interpretations. These show a distinct NW trending shear zone extending the full length of this trend that cross-cuts the Siberia Komatiite and coincides directly with the historic gold anomalism.

Given the appearance of distinct shallow to moderate plunges to mineralised shoots at Zeus and the inferred closely-spaced repetition of these mineralised shoots, it is not reasonable to suggest that mineralisation would continue as one single coherent body along the entire strike length of the Zeus Line. Rather, the exploration model will test for **multiple, similarly mineralised shoots along the full length of the Zeus Line**.

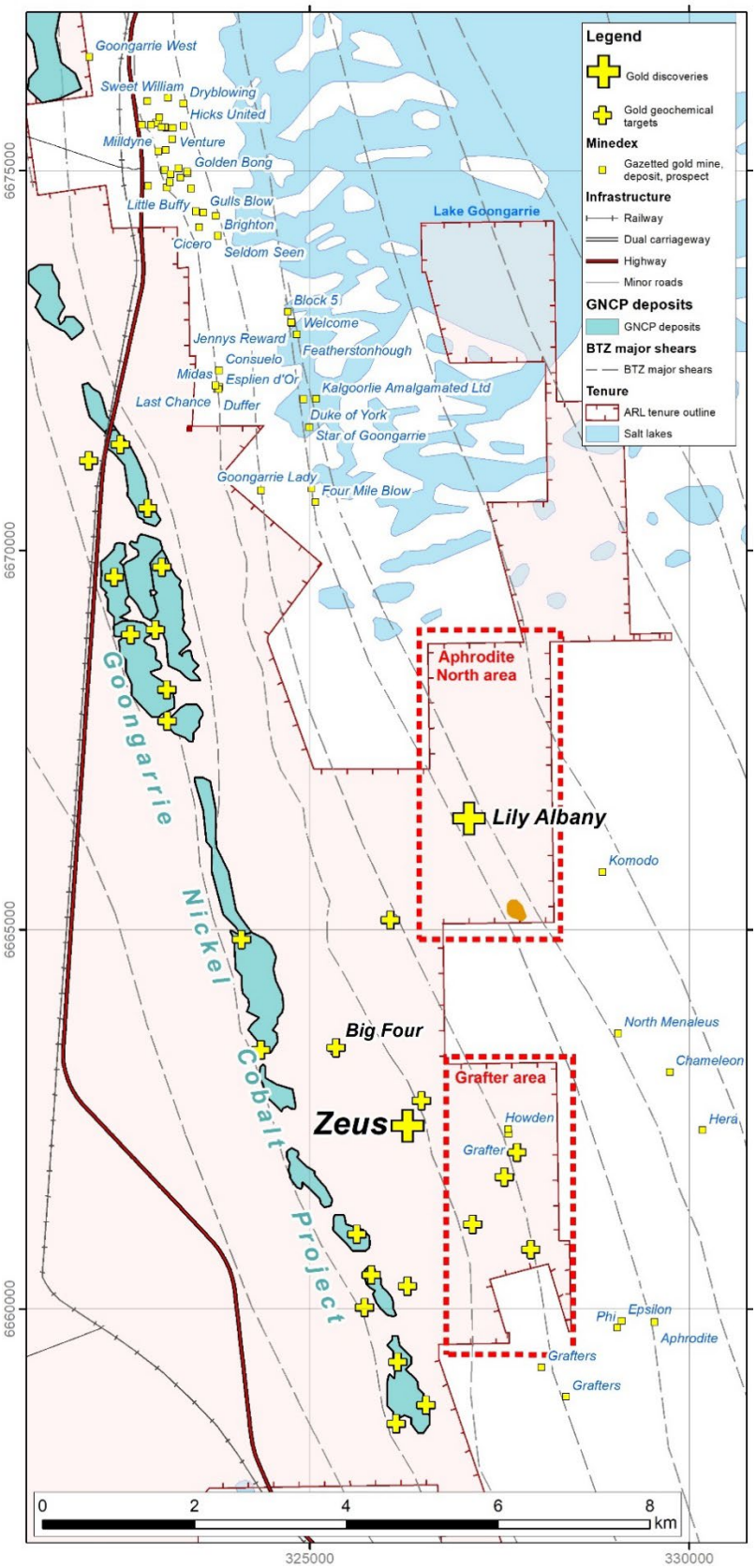


Figure 6 – Location of the Zeus gold discovery. Also shown is the recent Lily Albany discovery and the Big Four gold deposit amongst numerous gold geochemical anomalies that are yet to be tested. Structural targets are not shown.

The design of drill programs to test the greater Zeus Line is underway.

For personal use only

Ardea Resources Limited

Ongoing work at Grafter area

Zeus was drilled as an assessment of a series of gold targets throughout Ardea's Bardoc Tectonic Zone (BTZ) gold project, which included the Lily Albany discovery, Lady Charlotte and the Grafter area, Windanya, and Elsie North. Results are still pending for several of these target areas.

Initial results through from the Grafter area, including Lady Charlotte, have shown numerous zones of gold anomalism, but a coherent high grade trend has yet to be defined. Work is ongoing in the area to better define the controls on gold mineralisation, including:

- Multielement assay data is yet to be returned with gold geochemical vectors such as arsenic, bismuth, molybdenum and tungsten to be used, once available, to fully interpret the gold mineralisation potential of the area. These elements have been utilised successfully for targeting gold throughout the Eastern Goldfields and globally.
- Drilling identified extensive, commonly strong carbonate+sericite+pyrite alteration which is commonly indicative of gold mineralisation throughout the area, particularly at Grafter Target B. Some of these zones are anomalous in gold, with further work required to determine the controls on gold mineralisation.

Authorised for lodgement by the Board of Ardea Resources Limited.

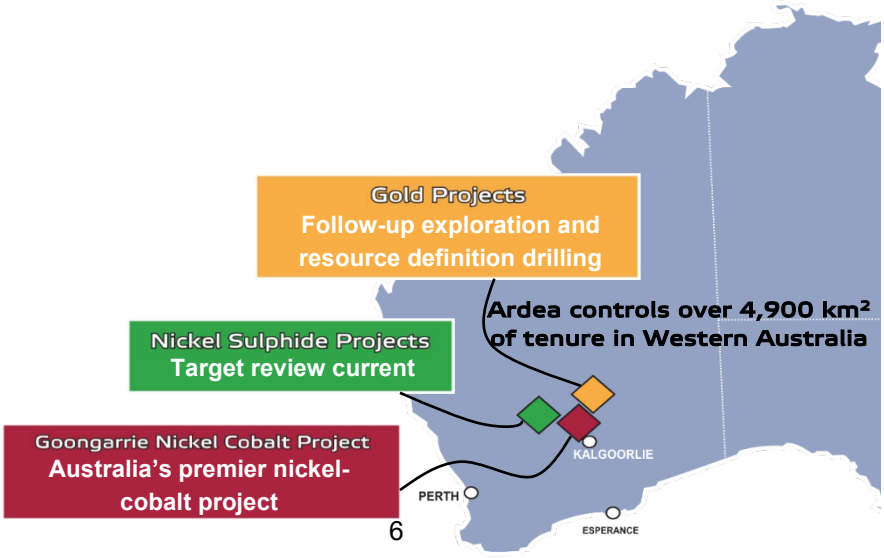
For further information regarding Ardea, please visit https://ardearesources.com.au/ or contact:

Ardea Resources:
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 Goongarrie Nickel Cobalt Project (GNCP), which is part of the Kalgoorlie Nickel Project (KNP), 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;
- Systematic evaluation of gold targets within the GNCP to quantify joint gold and nickel-cobalt development opportunities and consequent joint infrastructure "dividends"; and
- Advanced-stage exploration at WA nickel sulphide and gold targets within the Eastern Goldfields world-class nickel-gold province, for potential contribution of nickel sulphide to GNCP financial models and gold for potential IPO.



For personal use only

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, 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 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.

For personal use only

Appendix 1 – Collar location data

Collar location data for all new RC drill holes completed by Ardea Resources within the Zeus area.

Drill hole	Type	Depth (m)	Tenement	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
ABFR0303	RC	76	M24/778-I	MGA94_51	326330.1	6662396.6	389.1	-60	225
ABFR0304	RC	100	M24/778-I	MGA94_51	326343.7	6662409.8	389.2	-60	225
ABFR0305	RC	30	M24/778-I	MGA94_51	326329.4	6662368.8	389.1	-60	225
ABFR0306	RC	60	M24/778-I	MGA94_51	326343.4	6662381.5	389.1	-60	225
ABFR0307	RC	90	M24/778-I	MGA94_51	326357.6	6662395.5	389.3	-60	225
ABFR0308	RC	97	M24/778-I	MGA94_51	326384.3	6662424.0	389.4	-60	225
ABFR0309	RC	60	M24/778-I	MGA94_51	326344.3	6662353.9	389.3	-60	225
ABFR0310	RC	56	M24/778-I	MGA94_51	326357.5	6662366.3	389.2	-60	225

Appendix 2 – Assay results

All assays from recent RC drilling program at Zeus.

Abbreviations used: Au – gold, Ag – silver, As – arsenic, Sb – antimony, W – tungsten, S – sulphur, m – metre, g/t – grams per tonne, ppm – parts per million, b.d. – below detection, TBD – to be determined (assays pending).

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	W (ppm)	S (%)
ABFR0303	0	2	AR035234	0.054	TBD	TBD	TBD	TBD	TBD
ABFR0303	2	4	AR035235	0.102	TBD	TBD	TBD	TBD	TBD
ABFR0303	4	6	AR035237	0.076	TBD	TBD	TBD	TBD	TBD
ABFR0303	6	8	AR035238	0.02	TBD	TBD	TBD	TBD	TBD
ABFR0303	8	10	AR035239	0.042	TBD	TBD	TBD	TBD	TBD
ABFR0303	10	12	AR035240	0.13	TBD	TBD	TBD	TBD	TBD
ABFR0303	12	14	AR035241	0.028	TBD	TBD	TBD	TBD	TBD
ABFR0303	14	16	AR035242	0.032	TBD	TBD	TBD	TBD	TBD
ABFR0303	16	18	AR035243	0.034	TBD	TBD	TBD	TBD	TBD
ABFR0303	18	20	AR035244	0.106	TBD	TBD	TBD	TBD	TBD
ABFR0303	20	22	AR035245	0.14	TBD	TBD	TBD	TBD	TBD
ABFR0303	22	24	AR035247	0.154	TBD	TBD	TBD	TBD	TBD
ABFR0303	24	26	AR035248	0.166	TBD	TBD	TBD	TBD	TBD
ABFR0303	26	28	AR035249	0.208	TBD	TBD	TBD	TBD	TBD
ABFR0303	28	30	AR035250	0.168	TBD	TBD	TBD	TBD	TBD
ABFR0303	30	32	AR035251	0.05	TBD	TBD	TBD	TBD	TBD
ABFR0303	32	34	AR035252	0.028	TBD	TBD	TBD	TBD	TBD
ABFR0303	34	36	AR035253	0.11	TBD	TBD	TBD	TBD	TBD
ABFR0303	36	38	AR035254	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0303	38	40	AR035255	0.016	TBD	TBD	TBD	TBD	TBD
ABFR0303	40	42	AR035257	0.376	TBD	TBD	TBD	TBD	TBD
ABFR0303	42	44	AR035258	2.56	TBD	TBD	TBD	TBD	TBD
ABFR0303	44	46	AR035259	23.4	TBD	TBD	TBD	TBD	TBD
ABFR0303	46	48	AR035260	33.1	TBD	TBD	TBD	TBD	TBD
ABFR0303	48	50	AR035261	4.24	TBD	TBD	TBD	TBD	TBD
ABFR0303	50	52	AR035262	1.54	TBD	TBD	TBD	TBD	TBD
ABFR0303	52	54	AR035263	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0303	54	56	AR035264	0.368	TBD	TBD	TBD	TBD	TBD
ABFR0303	56	58	AR035265	0.1	TBD	TBD	TBD	TBD	TBD
ABFR0303	58	60	AR035267	0.026	TBD	TBD	TBD	TBD	TBD
ABFR0303	60	62	AR035268	0.068	TBD	TBD	TBD	TBD	TBD
ABFR0303	62	64	AR035269	0.118	TBD	TBD	TBD	TBD	TBD
ABFR0303	64	66	AR035270	0.024	TBD	TBD	TBD	TBD	TBD
ABFR0303	66	68	AR035271	0.06	TBD	TBD	TBD	TBD	TBD
ABFR0303	68	70	AR035272	0.026	TBD	TBD	TBD	TBD	TBD
ABFR0303	70	72	AR035273	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0303	72	74	AR035274	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0303	74	76	AR035275	0.02	TBD	TBD	TBD	TBD	TBD
ABFR0304	0	2	AR035277	0.08	TBD	TBD	TBD	TBD	TBD
ABFR0304	2	4	AR035278	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0304	4	6	AR035279	0.024	TBD	TBD	TBD	TBD	TBD
ABFR0304	6	8	AR035280	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0304	8	10	AR035281	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0304	10	12	AR035282	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	12	14	AR035283	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	14	16	AR035284	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0304	16	18	AR035285	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0304	18	20	AR035287	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0304	20	22	AR035288	0.016	TBD	TBD	TBD	TBD	TBD

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	W (ppm)	S (%)
ABFR0304	22	24	AR035289	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0304	24	26	AR035290	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0304	26	28	AR035291	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0304	28	30	AR035292	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	30	32	AR035293	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	32	34	AR035294	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0304	34	36	AR035295	0.02	TBD	TBD	TBD	TBD	TBD
ABFR0304	36	38	AR035297	0.038	TBD	TBD	TBD	TBD	TBD
ABFR0304	38	40	AR035298	0.122	TBD	TBD	TBD	TBD	TBD
ABFR0304	40	42	AR035299	0.03	TBD	TBD	TBD	TBD	TBD
ABFR0304	42	44	AR035300	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0304	44	46	AR035301	0.036	TBD	TBD	TBD	TBD	TBD
ABFR0304	46	48	AR035302	0.186	TBD	TBD	TBD	TBD	TBD
ABFR0304	48	50	AR035303	0.042	TBD	TBD	TBD	TBD	TBD
ABFR0304	50	52	AR035304	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0304	52	54	AR035305	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0304	54	56	AR035307	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	56	58	AR035308	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0304	58	60	AR035309	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0304	60	62	AR035310	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	62	64	AR035311	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	64	66	AR035312	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0304	66	68	AR035313	0.424	TBD	TBD	TBD	TBD	TBD
ABFR0304	68	70	AR035314	2.41	TBD	TBD	TBD	TBD	TBD
ABFR0304	70	72	AR035315	1.29	TBD	TBD	TBD	TBD	TBD
ABFR0304	72	74	AR035317	2.52	TBD	TBD	TBD	TBD	TBD
ABFR0304	74	76	AR035318	0.03	TBD	TBD	TBD	TBD	TBD
ABFR0304	76	78	AR035319	0.03	TBD	TBD	TBD	TBD	TBD
ABFR0304	78	80	AR035320	0.038	TBD	TBD	TBD	TBD	TBD
ABFR0304	80	82	AR035321	0.138	TBD	TBD	TBD	TBD	TBD
ABFR0304	82	84	AR035322	0.146	TBD	TBD	TBD	TBD	TBD
ABFR0304	84	86	AR035323	0.06	TBD	TBD	TBD	TBD	TBD
ABFR0304	86	88	AR035324	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0304	88	90	AR035325	0.074	TBD	TBD	TBD	TBD	TBD
ABFR0304	90	92	AR035327	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0304	92	94	AR035328	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0304	94	96	AR035329	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0304	96	98	AR035330	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0304	98	100	AR035331	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0305	0	2	AR035332	0.152	TBD	TBD	TBD	TBD	TBD
ABFR0305	2	4	AR035333	0.072	TBD	TBD	TBD	TBD	TBD
ABFR0305	4	6	AR035334	0.048	TBD	TBD	TBD	TBD	TBD
ABFR0305	6	8	AR035335	0.028	TBD	TBD	TBD	TBD	TBD
ABFR0305	8	10	AR035337	0.058	TBD	TBD	TBD	TBD	TBD
ABFR0305	10	12	AR035338	0.016	TBD	TBD	TBD	TBD	TBD
ABFR0305	12	14	AR035339	0.044	TBD	TBD	TBD	TBD	TBD
ABFR0305	14	16	AR035340	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0305	16	18	AR035341	0.05	TBD	TBD	TBD	TBD	TBD
ABFR0305	18	20	AR035342	0.456	TBD	TBD	TBD	TBD	TBD

For personal use only

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	W (ppm)	S (%)
ABFR0305	20	22	AR035343	1.08	TBD	TBD	TBD	TBD	TBD
ABFR0305	22	24	AR035344	0.06	TBD	TBD	TBD	TBD	TBD
ABFR0305	24	26	AR035345	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0305	26	28	AR035347	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0305	28	30	AR035348	0.04	TBD	TBD	TBD	TBD	TBD
ABFR0306	0	2	AR035349	0.114	TBD	TBD	TBD	TBD	TBD
ABFR0306	2	4	AR035350	0.1	TBD	TBD	TBD	TBD	TBD
ABFR0306	4	6	AR035351	0.13	TBD	TBD	TBD	TBD	TBD
ABFR0306	6	8	AR035352	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0306	8	10	AR035353	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0306	10	12	AR035354	0.058	TBD	TBD	TBD	TBD	TBD
ABFR0306	12	14	AR035355	0.114	TBD	TBD	TBD	TBD	TBD
ABFR0306	14	16	AR035357	0.158	TBD	TBD	TBD	TBD	TBD
ABFR0306	16	18	AR035358	0.14	TBD	TBD	TBD	TBD	TBD
ABFR0306	18	20	AR035359	0.404	TBD	TBD	TBD	TBD	TBD
ABFR0306	20	22	AR035360	0.148	TBD	TBD	TBD	TBD	TBD
ABFR0306	22	24	AR035361	0.052	TBD	TBD	TBD	TBD	TBD
ABFR0306	24	26	AR035362	0.052	TBD	TBD	TBD	TBD	TBD
ABFR0306	26	28	AR035363	0.042	TBD	TBD	TBD	TBD	TBD
ABFR0306	28	30	AR035364	0.096	TBD	TBD	TBD	TBD	TBD
ABFR0306	30	32	AR035365	0.33	TBD	TBD	TBD	TBD	TBD
ABFR0306	32	34	AR035367	0.152	TBD	TBD	TBD	TBD	TBD
ABFR0306	34	36	AR035368	0.346	TBD	TBD	TBD	TBD	TBD
ABFR0306	36	38	AR035369	0.038	TBD	TBD	TBD	TBD	TBD
ABFR0306	38	40	AR035370	0.112	TBD	TBD	TBD	TBD	TBD
ABFR0306	40	42	AR035371	0.114	TBD	TBD	TBD	TBD	TBD
ABFR0306	42	44	AR035372	0.032	TBD	TBD	TBD	TBD	TBD
ABFR0306	44	46	AR035373	0.06	TBD	TBD	TBD	TBD	TBD
ABFR0306	46	48	AR035374	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0306	48	50	AR035375	0.178	TBD	TBD	TBD	TBD	TBD
ABFR0306	50	52	AR035377	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0306	52	54	AR035378	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0306	54	56	AR035379	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0306	56	58	AR035380	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0306	58	60	AR035381	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	0	2	AR035382	0.054	TBD	TBD	TBD	TBD	TBD
ABFR0307	2	4	AR035383	0.044	TBD	TBD	TBD	TBD	TBD
ABFR0307	4	6	AR035384	0.028	TBD	TBD	TBD	TBD	TBD
ABFR0307	6	8	AR035385	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	8	10	AR035387	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	10	12	AR035388	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	12	14	AR035389	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	14	16	AR035390	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	16	18	AR035391	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	18	20	AR035392	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0307	20	22	AR035393	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0307	22	24	AR035394	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	24	26	AR035395	0.03	TBD	TBD	TBD	TBD	TBD
ABFR0307	26	28	AR035397	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	28	30	AR035398	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	30	32	AR035399	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0307	32	34	AR035400	0.056	TBD	TBD	TBD	TBD	TBD
ABFR0307	34	36	AR035401	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0307	36	38	AR035402	0.082	TBD	TBD	TBD	TBD	TBD
ABFR0307	38	40	AR035403	0.05	TBD	TBD	TBD	TBD	TBD
ABFR0307	40	42	AR035404	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	42	44	AR035405	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0307	44	46	AR035407	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0307	46	48	AR035408	0.032	TBD	TBD	TBD	TBD	TBD
ABFR0307	48	50	AR035409	0.036	TBD	TBD	TBD	TBD	TBD
ABFR0307	50	52	AR035410	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	52	54	AR035411	0.034	TBD	TBD	TBD	TBD	TBD
ABFR0307	54	56	AR035412	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	56	58	AR035413	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0307	58	60	AR035414	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	60	62	AR035415	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0307	62	64	AR035417	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	64	66	AR035418	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0307	66	68	AR035419	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0307	68	70	AR035420	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	70	72	AR035421	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	72	74	AR035422	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	74	76	AR035423	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	76	78	AR035424	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0307	78	80	AR035425	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0307	80	82	AR035427	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	82	84	AR035428	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0307	84	86	AR035429	0.07	TBD	TBD	TBD	TBD	TBD
ABFR0307	86	88	AR035430	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0307	88	90	AR035431	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	0	2	AR035432	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0308	2	4	AR035433	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0308	4	6	AR035434	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	6	8	AR035435	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	8	10	AR035437	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	10	12	AR035438	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	12	14	AR035439	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	14	16	AR035440	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	16	18	AR035441	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0308	18	20	AR035442	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	20	22	AR035443	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	22	24	AR035444	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	24	26	AR035445	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	26	28	AR035447	b.d.	TBD	TBD	TBD	TBD	TBD

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	W (ppm)	S (%)
ABFR0308	28	30	AR035448	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	30	32	AR035449	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	32	34	AR035450	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	34	36	AR035451	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	36	38	AR035452	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	38	40	AR035453	0.024	TBD	TBD	TBD	TBD	TBD
ABFR0308	40	42	AR035454	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	42	44	AR035455	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	44	46	AR035457	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0308	46	48	AR035458	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	48	50	AR035459	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0308	50	52	AR035460	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	52	54	AR035461	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	54	56	AR035462	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	56	58	AR035463	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	58	60	AR035464	0.026	TBD	TBD	TBD	TBD	TBD
ABFR0308	60	62	AR035465	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0308	62	64	AR035467	0.03	TBD	TBD	TBD	TBD	TBD
ABFR0308	64	66	AR035468	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	66	68	AR035469	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	68	70	AR035470	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	70	72	AR035471	0.124	TBD	TBD	TBD	TBD	TBD
ABFR0308	72	74	AR035472	0.278	TBD	TBD	TBD	TBD	TBD
ABFR0308	74	76	AR035473	0.214	TBD	TBD	TBD	TBD	TBD
ABFR0308	76	78	AR035474	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0308	78	80	AR035475	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0308	80	82	AR035477	0.012	TBD	TBD	TBD	TBD	TBD
ABFR0308	82	84	AR035478	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	84	86	AR035479	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	86	88	AR035480	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	88	90	AR035481	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	90	92	AR035482	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	92	94	AR035483	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0308	94	96	AR035484	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0308	96	97	AR035485	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	0	2	AR035487	0.05	TBD	TBD	TBD	TBD	TBD
ABFR0309	2	4	AR035488	0.05	TBD	TBD	TBD	TBD	TBD
ABFR0309	4	6	AR035489	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0309	6	8	AR035490	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0309	8	10	AR035491	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	10	12	AR035493	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	12	14	AR035494	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	14	16	AR035495	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	16	18	AR035496	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0309	18	20	AR035497	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0309	20	22	AR035498	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0309	22	24	AR035499	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0309	24	26	AR035500	0.028	TBD	TBD	TBD	TBD	TBD
ABFR0309	26	28	AR035501	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0309	28	30	AR035502	0.04	TBD	TBD	TBD	TBD	TBD
ABFR0309	30	32	AR035504	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	32	34	AR035505	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	34	36	AR035506	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	36	38	AR035507	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0309	38	40	AR035508	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	40	42	AR035509	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	42	44	AR035510	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0309	44	46	AR035511	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	46	48	AR035512	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	48	50	AR035514	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	50	52	AR035515	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0309	52	54	AR035516	0.016	TBD	TBD	TBD	TBD	TBD
ABFR0309	54	56	AR035517	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0309	56	58	AR035518	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0309	58	60	AR035519	0.01	TBD	TBD	TBD	TBD	TBD
ABFR0310	0	2	AR035520	0.14	TBD	TBD	TBD	TBD	TBD
ABFR0310	2	4	AR035521	0.524	TBD	TBD	TBD	TBD	TBD
ABFR0310	4	6	AR035522	0.5	TBD	TBD	TBD	TBD	TBD
ABFR0310	6	8	AR035524	0.734	TBD	TBD	TBD	TBD	TBD
ABFR0310	8	10	AR035525	0.2	TBD	TBD	TBD	TBD	TBD
ABFR0310	10	12	AR035526	0.124	TBD	TBD	TBD	TBD	TBD
ABFR0310	12	14	AR035527	0.364	TBD	TBD	TBD	TBD	TBD
ABFR0310	14	16	AR035528	0.02	TBD	TBD	TBD	TBD	TBD
ABFR0310	16	18	AR035529	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0310	18	20	AR035530	0.014	TBD	TBD	TBD	TBD	TBD
ABFR0310	20	22	AR035531	0.022	TBD	TBD	TBD	TBD	TBD
ABFR0310	22	24	AR035532	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0310	24	26	AR035534	0.006	TBD	TBD	TBD	TBD	TBD
ABFR0310	26	28	AR035535	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0310	28	30	AR035536	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0310	30	32	AR035537	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0310	32	34	AR035538	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0310	34	36	AR035539	0.046	TBD	TBD	TBD	TBD	TBD
ABFR0310	36	38	AR035540	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0310	38	40	AR035541	0.018	TBD	TBD	TBD	TBD	TBD
ABFR0310	40	42	AR035542	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0310	42	44	AR035544	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0310	44	46	AR035545	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0310	46	48	AR035546	0.008	TBD	TBD	TBD	TBD	TBD
ABFR0310	48	50	AR035547	0.004	TBD	TBD	TBD	TBD	TBD
ABFR0310	50	52	AR035548	0.002	TBD	TBD	TBD	TBD	TBD
ABFR0310	52	54	AR035549	b.d.	TBD	TBD	TBD	TBD	TBD
ABFR0310	54	56	AR035550	b.d.	TBD	TBD	TBD	TBD	TBD

Appendix 3 – Collated intercepts, Goongarrie South

Parameters used to define gold intercepts at Zeus

Parameter	Gold	
Minimum cut-off	0.5g/t	2.0g/t or 5.0g/t
Minimum intercept thickness	2m	2m
Maximum internal waste thickness	2m	2m

Gold intercepts are defined using a nominal 0.5g/t Au cut-off on a minimum intercept of 2m and a maximum internal waste of 2m. Considering the high grades locally present at Zeus, secondary intercepts (i.e. the "*including*" intercepts) are defined using either a nominal 2.0g/t or nominal 5.0g/t cut-off and the same intercept and internal waste characteristics. Where appropriate, consideration is also given to geological controls, such as vein and alteration zone distributions, in the definition of intercepts.

Drillhole	Interval	Gold intercept (0.5 g/t cutoff)		Gold intercept	Intercept cutoff
ABFR0303	42-52m	10m at 12.97g/t Au from 42m	*including*	4m at 28.25g/t Au from 44m	(5g/t)
ABFR0304	68-74m	6m at 2.07g/t Au from 68m	*including*	2m at 2.41g/t Au from 68m	(2g/t)
			and	2m at 2.52g/t Au from 72m	(2g/t)
ABFR0305	20-22m	2m at 1.08g/t Au from 20m			
ABFR0310	2-8m	6m at 0.59g/t Au from 2m			

For personal use only

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 on a 2 metre down hole interval basis, with exceptions being made for 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. • Industry standard practice was used in the processing of samples for assay, with 2m intervals of RC chips collected in green plastic bags. • Assay of samples utilised standard laboratory techniques with standard ICP-AES undertaken on 40 gram samples for Au, Pt and Pd, and lithium borate fused-bead XRF analysis used for the remaining multi-element suite. Other elements are determined by separate XRF and LA-ICP-MS analyses. Further details of lab processing techniques are found in Quality of assay data and laboratory tests below.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• In this program, Ardea drilled the Zeus area project with eight reverse circulation (RC) drill holes. All holes were drilled at -60° to 225° • RC drilling was performed with a face sampling hammer (bit diameter between 4½ and 5 ¼ inches) and samples were collected by either a cone (majority) or riffle splitter using 2 metre composites. Sample condition, sample recovery and sample size were recorded for all drill samples collected by ARL.
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.*	• RC chip 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 proportion of samples were moist or wet, with the majority of these being associated with soft kaolin-goethite clays, where water injection has been used to improve drill recovery. • Measures taken to ensure maximum RC sample recoveries included maintaining a clean cyclone and drilling equipment, using water injection at times of reduced air circulation, as well as regular communication with the drillers and slowing drill advance rates when variable to poor ground conditions are encountered.
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.*	• RC logging was undertaken on 1 metre intervals. 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 drilling data was used, where available, together with logging data to validate logged geological horizons. Aircore results cannot be used in a resource estimation. • 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. ARL employees supervised all drilling. A small selection of representative chips were collected for every 1 metre interval and stored in chip-trays for future reference. • In total, 569m were drilled during the drilling program, at Zeus, with the chips generated during the 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 appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of*	• 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 sample stream every 10 samples 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

For personal use only

For personal use only

Criteria	JORC Code explanation	Commentary
	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.*	appropriate for the nature of mineralisation.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*
		• All Ardea samples were submitted to Kalgoorlie Bureau Veritas (BV) laboratories and transported to BV Perth, where they were pulverised.
		  • 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_LA, Tl_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 using a robotic TGA system. Furnaces in the system were set to 110 and 1000 degrees Celsius. LOI1000 have been determined by Robotic TGA.
		  • Dry weight and wet weight 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 consistency between historically expected data, recent data, and geochemical values that would be expected in a nickel laterite profile.
		• All of the QAQC data has been statistically assessed. There were rare but explainable inconsistencies in the returning results from standards submitted, and it has been determined that levels of accuracy and precision relating to the samples are acceptable.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• 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. • Gyroscopic downhole surveys were undertaken with hole orientation measurements gathered every 10m during descent and then on ascent of the tool. • Topography is very flat. The topographic surface has been constructed from hole collar surveys. These are consistent with regional DTMs and are considered adequate for exploration purposes. • A DGPS pickup up of drill collar locations is considered sufficiently accurate for reporting of resources but is not suitable for mine planning and reserves.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drill line spacing was 80m, with collars defined on an ad hoc basis to delimit interpreted structure, lithological, and mineralised trends. • The spacing is not considered sufficient at this stage for the definition of Mineral Resources. • Samples were composited over 2m for the entire drill program apart from the upper transported lake clays, which were not sampled. This is justified by the results of the previous aircore program where transported overburden was shown to be barren of mineralisation.
Orientation of data in	• *Whether the orientation of sampling achieves*	• All drill holes in this program were angled. They were designed to delimit

For personal use only

Criteria	JORC Code explanation	Commentary
relation to geological structure	*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.*	mineralisation near surface and at depth. Where pre-existing drill holes were present, these were utilised to assist with delimiting mineralisation. A drill direction of 225° was chosen to drill approximately normal to the defined grain of the rock sequence depicted in magnetic imagery. • Without diamond drilling, the orientation of mineralised structures remains somewhat uncertain, but a steep northeast dip and northwesterly strike best fits the data collected to date. Geological interpretation of the geology of the Zeus area continues, but presently interpretations suggest that Ardea's drilling is approximately normal to the controlling structures.
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 current 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.*	• The tenement on which the drilling was undertaken is M24/778-I. ARL, through its subsidiary companies, is the sole holder of the tenement. The tenement is in good standing. • Barrick (PD) Australia Limited retains certain Au claw-back rights and royalty receivable • Heritage surveys over the area did not identify any areas of interest over or near the program area.

Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The target area has been subject to two significant periods of exploration
		  • Goldfields 1999 – SCR series of RAB holes and SCAC aircore holes were drilled on 200m-spaced east-west lines at ~50m spaced holes over the region, and identified anomalism prior to refusal at Zeus. Most holes vertical but some angled 60° east or west. Follow-up with targeted SCRC angled holes (mostly 60° east with some 60° west for scissor closure.
		  • Heron Resources 2012 –ABFA aircore holes drilled across the area at 400m line spacing and 80m spaced holes. BFRB RAB holes followed up ABFA anomalism again with 60° holes to the east and west.
		• Ardea's RC drilling program is the only drilling since 2012.
		• The data from these earlier programs was used to inform the design of this RC drill program and assisted with interpretations

Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geology of the target area is still under assessment. • The Siberia Komatiite is cross-cut by a NW-trending shear zone that hosts strong carbonate-sericite-pyrite alteration and quartz-carbonate shear veining. There is no outcrop. The entire area is covered by between 2m and 12m of transported sand and silt. • The target style of mineralisation is orogenic shear or vein hosted gold mineralisation. Veining and alteration styles intersected during drilling are consistent with this style

For personal use only

Criteria	JORC Code explanation	Commentary
		of mineralisation.
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 gold assay data at the target area are listed in "Appendix 2 – Assay results"., Multi-element assay results are pending, so gold-associated trace finder elements which are usually listed (arsenic, antimony, silver, tungsten, and sulphur) are shown as TBD (to be determined), Other elements were assayed and are also pending. 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.*	• Drill hole samples have been collected over 2m down hole intervals. • Gold intercepts are defined using a 0.5g/t cut-off on a minimum intercept of 1m and a maximum internal waste of 2m. In each case, geological contacts are taken into account. An additional 50m wide intercept of interest was calculated using a nominal 0.1g/t Au cutoff with larger internal dilution due justified on geological grounds. • All assay samples were composited over 2m. • 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, true width not known').*	• All drill holes in this program were angled at -60° to 225°. Mineralisation and the host shear zone appear to strike northwesterly, A drill direction of 225° was chosen to drill approximately normal to the defined grain of the rock sequence depicted in magnetic imagery. Intercept lengths are at present estimated to be around 90% of true thickness, but this is yet to be determined. Orientation of mineralisation and the host structure must be confirmed by diamond drilling before there is certainty around true thicknesses.
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.*	• Appropriate maps, a representative cross section, and a long section are shown in the body of the document.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not applicable to this report. All results are reported either in the text or in the associated appendices.
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. Multi-element assay results are still pending.
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 to identify the extent and nature of primary gold mineralisation in fresh rock. Both RC and diamond drill programs are flagged in the body of the announcement to increase the understanding of controls and orientation of mineralised structures, with several target areas identified. Initially, one or two diamond drill holes would be likely. Closely-spaced, pattern RC drilling is being considered to fully define the uppermost distributions of gold at Zeus.