Ardea Resources Limited

Drilling defines shallow, high-grade gold at Big Four Gold, Goongarrie

- Drilling at Ardea's Big Four gold prospect within the footprint of the Goongarrie Nickel Cobalt Project has defined strong, near-surface gold intercepts.
- Drilling confirms historic results from adjacent drill holes, boosting confidence in historic drilling data.
- Results include:
  - ABFR0270: **18 m at 3.38 g/t gold** from 18 m
    including **6 m at 6.03 g/t gold** from 20 m
  - ABFR0272: **14 m at 2.40 g/t gold from 6 m**
    including **4 m at 5.73 g/t gold** from 6 m
  - ABFR0274: **20 m at 2.91 g/t gold** from 76 m
    including **2 m at 13.60 g/t gold** from 76 m
    and **2 m at 5.29 g/t gold** from 82 m
    and **2 m at 5.01 g/t gold** from 92 m

Ardea Resources Limited (Ardea or the Company) has completed an 11-hole RC drilling program at the historic Big Four gold mine, south of Goongarrie. Big Four Gold is located within the footprint of the Goongarrie Nickel-Cobalt Project (GNCP), Ardea's flagship asset.

Importantly, each of the 11 drill holes completed contained significant gold intercepts.

Systematic gold exploration across the GNCP represents another opportunity to enhance overall project economics. Presently, strong, coherent, and extensive gold anomalism is associated with surface lateritic nickel-cobalt mineralisation and could be indicative of underlying primary bedrock orogenic gold mineralisation.

Ardea's Managing Director, Andrew Penkethman, said:

"Ardea is highly encouraged by these first-pass drill results from Big Four. The fact that all planned holes intersected significant gold mineralisation confirms the geological model. Mineralisation is still open at depth and a possible fault off-set structural repetition has been modeled along strike to the north and will now be tested to define the extent of this mineralised system.

Ardea will continue to test the prospectivity of its large Eastern Goldfields land holding for gold and nickel sulphides, in parallel to de-risking the nickel-cobalt resources within the broader Kalgoorlie Nickel Project."

ASX & Media Release
26 February 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

Issued Capital
Fully Paid Ordinary Shares
117,300,435
Directors/Employee Performance Rights
4,476,000

ABN 30 614 289 342

Big Four gold prospect

The recent drill program at Big Four Gold has confirmed significant shallow gold mineralisation hosted predominantly within an alkaline, porphyritic intrusive and surrounding Siberia Komatiite that had previously been intercepted in historic drill programs. In doing so, some of the best gold mineralisation intercepts historically recorded at the deposit were encountered.

New gold intercepts

Significant gold mineralisation has been confirmed at Big Four Gold at shallow levels (see Appendix 1 for full listing). Intercept calculation parameters were 0.5 g/t cutoff, minimum intercept thickness of 1 m, and maximum internal waste of 2 m.

The shallow high-grade intercepts include:

ABFR0267	8 m at 2.28 g/t gold from 18 m
	including **2 m at 4.94 g/t gold** from 22 m
ABFR0269	6 m at 2.32 g/t gold from 32 m
ABFR0270	**18 m at 3.38 g/t gold** from 18 m
	including **6 m at 6.03 g/t gold** from 20 m
ABFR0272	**14 m at 2.4 g/t gold** from 6 m
	including **4 m at 5.73 g/t gold** from 6 m
ABFR0273	**4 m at 5.78 g/t gold** from 38 m (see Figure 1)
	including **2 m at 10.90 g/t gold** from 38 m
ABFR0274	**20 m at 2.91 g/t gold** from 76 m
	including **2 m at 13.60 g/t gold** from 76 m
	and **2 m at 5.29 g/t gold** from 82 m
	and **2 m at 5.01 g/t gold** from 92 m
ABFR0276	6 m at 1.64 g/t gold from 30 m
	including 2 m at 4.01 g/t gold from 30 m

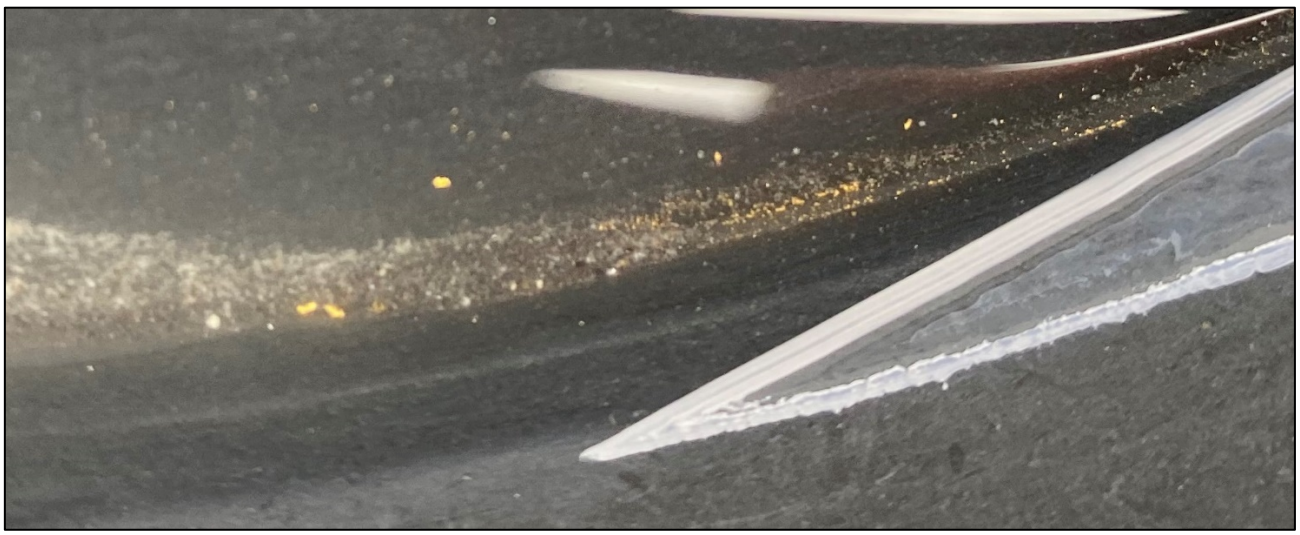


Figure 1 – Panned gold from a small sample of ABFR0273, 38-42 m (4 m at 5.78 g/t gold). View is approximately 20 mm across.

Orogenic gold mineralisation at Big Four Gold is hosted by both the intermediate porphyry and the host Siberia Komatiite within vein sets, shear zones, and breccia zones. Gold is associated with strong alteration that is commonly pyritic, so is visually easily identifiable.

Gold mineralisation is characterised by sporadic high grades distributed within a more moderate-grade halo. Hydraulic brecciation of the host rocks is commonly associated with highest grade gold mineralisation in the deposit, some examples of which are shown in Table 1.

Table 1 – Selected high-grade assay results from recent drilling at Big Four Gold

Drill hole	From (m)	To (m)	Sample No.	Gold (g/t)
ABFR0274	76	78	AR030595	**13.60**
ABFR0273	38	40	AR030531	**10.90**
ABFR0276	54	56	AR030696	**10.40**
ABFR0270	20	22	AR030433	**10.20**
ABFR0272	8	10	AR030501	**8.39**
ABFR0270	30	32	AR030439	**6.69**
ABFR0274	82	84	AR030599	**5.29**
ABFR0276	48	50	AR030693	**5.24**
ABFR0274	92	94	AR030604	**5.01**
ABFR0267	22	24	AR030327	**4.94**

The gold tenor at Big Four Gold appears to be high, with very low to below detection levels of silver, arsenic, and antimony (Appendix 3). The gold deposits of the Eastern Goldfields commonly have associations with these metals, and overly high values can be problematic for gold recoveries. This does not appear to be an issue at Big Four Gold.

Confirmation of historic intercepts

Importantly, the results of this program provide confidence in the existing archival drill results and should assist in defining a new resource to JORC Code (2012) guidelines. Historic data can now be incorporated into any modelling with increased certainty (Figure 2).

Program parameters

A total of 11 drill holes were completed in late January 2020, for a total of 738 m (Appendix 2). The program achieved its aims of validating historic drilling of the deposit, and to infill shallow gaps in the historic database. All drilling was targeted at the shallow portion of the deposit that could potentially be the subject of an open pit mining study.

A total of 304 assays were taken from the 11 drill holes completed. All assay results are from 2 m composite samples. Drilling was aimed around the historic surface and shallow underground workings. Several drill holes intercepted voids that represent underground workings and likely corresponded to gold mineralisation. These are considered to have been the location of historically mined, high-grade gold mineralisation.

History

Limited historic mining around the 1920s to 1930s recovered 571.5t of ore for 10.53kg gold (~339oz gold), at an average grade of 18.4g/t Au. This gold occurrence cropped out at surface so was discovered by prospectors. Most of Ardea's tenure is covered by shallow alluvial cover and/or the development of a laterite profile which obscures the underlying gold potential.

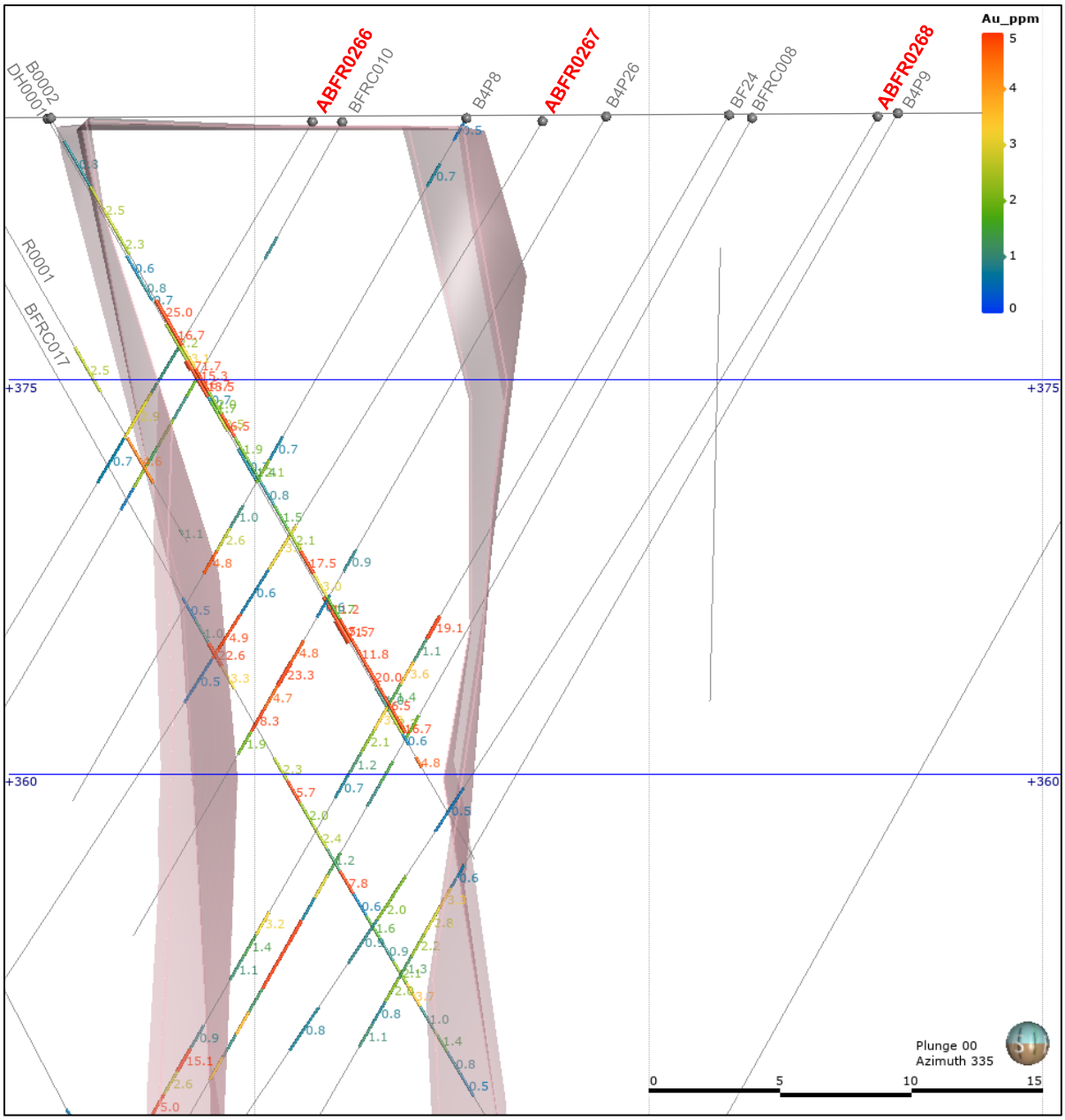


Figure 2 – Cross section 6663360mN +/- 5 m of the Big Four Gold deposit. Twinned pairs are as follows: ABFR0266 & BFRC010, ABFR0267 & B4026, ABFR0268 & B4P9. The Big Four Gold porphyry is shown in transparent pink. Looking towards 335˚. Projection: GDA94 MGA Zone 51.

GNCP gold targeting strategy

Since acquiring the GNCP in 2017, Ardea has included systematic gold assays in its analytical suite, on the basis of project location within the Bardoc Tectonic Zone. Previous explorers, however, only did desultory precious metal assaying, resulting in a drill data base that is often unsuited to gold target generation, so that magnetic interpretation is the key means of gold target generation.

Fortunately, Ardea has a large archival collection of KNP drill assay laboratory pulps which are available for re-assay using the Ardea methodology (61 elements including pathfinders).

Through detailed appraisal and assessment of the structure, geology, and available geochemistry over the area covered by the GNCP, Ardea considers this part of the Bardoc Tectonic Zone represents a largely buried gold camp that extends from Goongarrie in the north to Scotia Dam 20 km away in the south. Strong gold anomalism in historic

and recent nickel-cobalt laterite drilling is comparable to or greater than that observed associated with gold deposits in greenstone belts throughout the Eastern Goldfields of Western Australia.

Nearly all of Ardea's tenure over the GNCP is covered by deep laterite development and overlying transported material, obscuring the nature of the host bedrock sequence. Despite extensive drilling of the nickel-cobalt laterites, very few of these drill holes penetrate into fresh rock, and so are considered ineffective for gold. However, many of these contain strong and coherent gold anomalism within the laterite profile. Through extensive interpretation of its high-resolution magnetic dataset, Ardea has identified several representative type targets of a number of potential structural trap styles that are slated for testing in the coming months. Big Four Gold was one such target, tested as "proof of concept". The data generated will be used to identify and zoom in on a series of potential gold prospects.

Gold exploration as a means to advance the Goongarrie Nickel-Cobalt Project

The results from Big Four Gold are being used to help refine the controls on gold mineralisation and define additional targets under surface cover. Using Ardea's close spaced magnetic data, a fault offset structural repetition to the north of Big Four Gold has already been defined, along with a number of other targets.

Presently, gold anomalism associated with high nickel and cobalt grades is, in places, exceptional. Whilst the lateritic gold itself would not be easily recovered in a nickel hydrometallurgical circuit, the strength and coherence of these anomalies are consistent with the presence of gold mineralisation in the fresh bedrock below the lateritic nickel-cobalt deposits. It is imperative that gold mineralisation distributions be further defined throughout the footprint of the GNCP (Figure 3) and elsewhere within Ardea's extensive Eastern Goldfields tenement portfolio to help realise maximum project values.

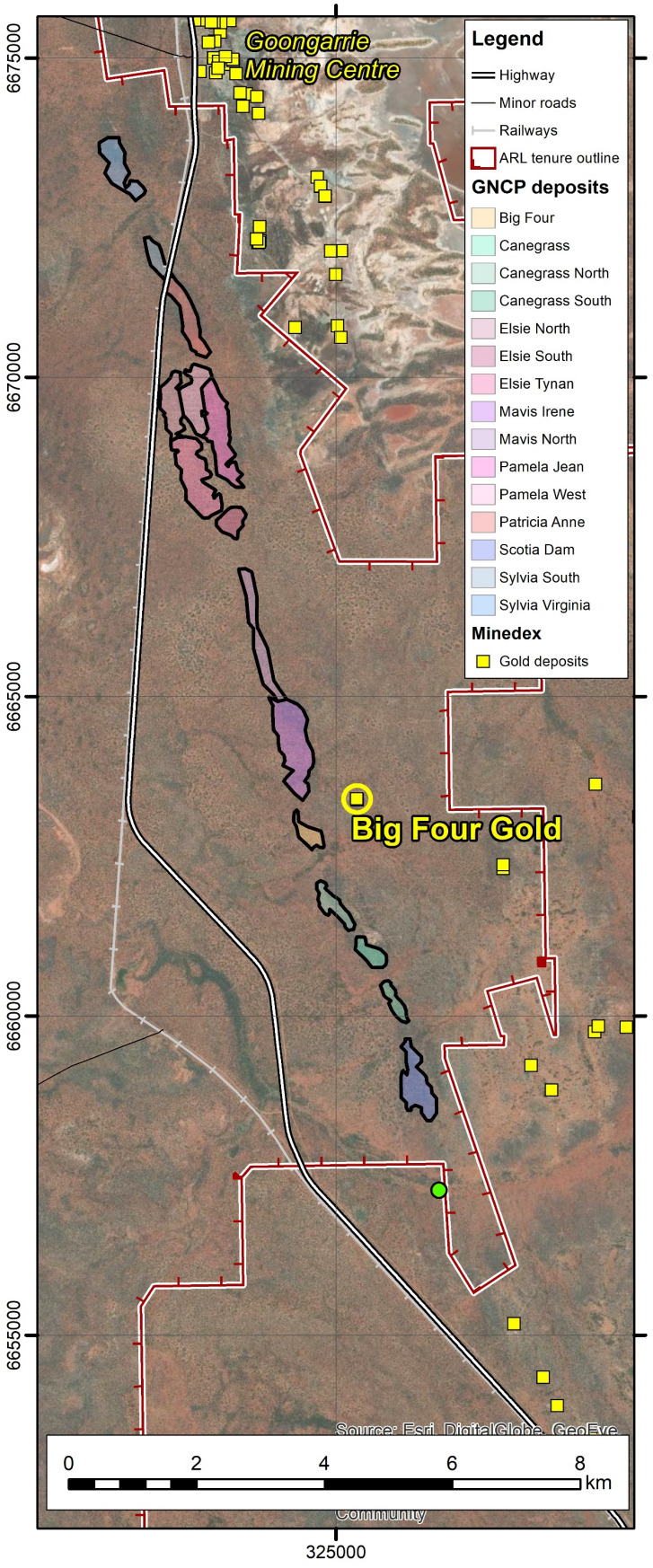


Figure 3 – Location of the Big Four Gold deposit in relation to the GNCP deposits and the Goongarrie Mining Centre. Projection: GDA94 MGA Zone 51.

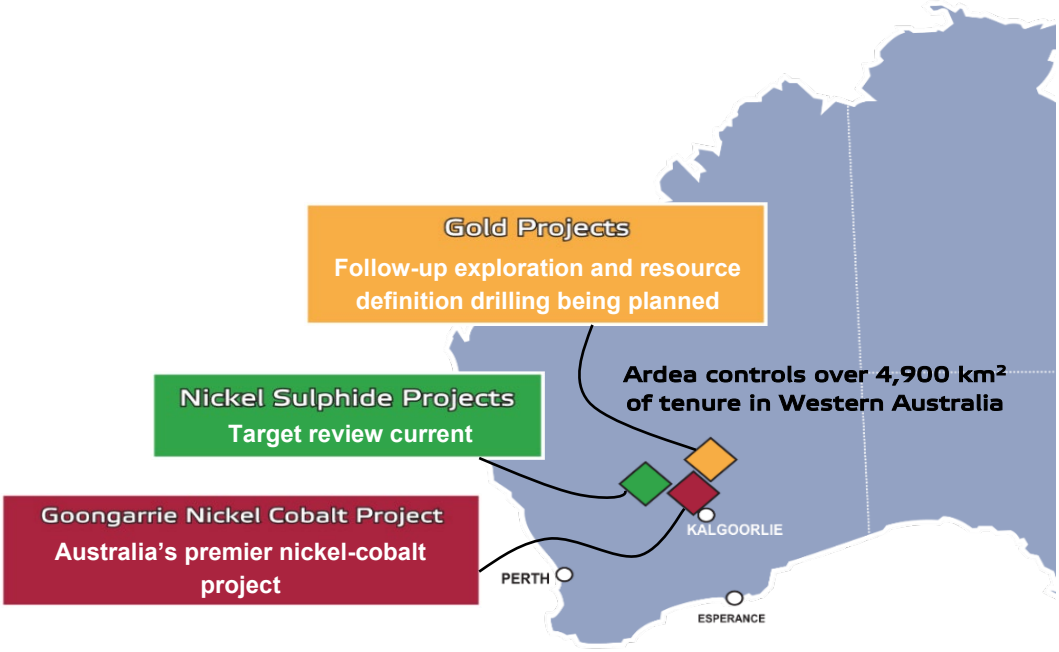
Mulga Plum and Lady Isobel drilling

Results were also received from the Mulga Plum and Lady Isobel first pass drill programs. These results are still being assessed with a peak intersection from Mulga Plum of 2 m at 8.84 g/t Au from 14 m, from drill hole AJAR0009. Several sub-grade mineralisation occurrences were also noted. Ardea will continue to assess these projects to define forward exploration strategies.

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, 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; and
- Advanced-stage exploration at WA nickel sulphide and gold targets within the Eastern Goldfields world-class nickel-gold province.



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

Ardea Resources:
Andrew Penkethman
Managing Director and Chief Executive Officer, Ardea Resources Limited
Tel +61 8 6244 5136

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

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

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time.

Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to complete the Ardea spin-out of Godolphin Resources Limited 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 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.

Appendix 1 – Collated intercepts

Parameters used to define gold intercepts at Big Four

Parameter	Gold	
Minimum cut-off	0.5 g/t	2.0 g/t
Minimum intercept thickness	1 m	1 m
Maximum internal waste thickness	2 m	2 m

Gold intercepts are defined using a 0.5 g/t Au cut-off on a minimum intercept of 1 m and a maximum internal waste of 2 m. Secondary intercepts (i.e. the "*including*" intercepts) are defined using a 2.0 g/t cut-off and the same intercept and internal waste characteristics.

Drillhole	Interval	Gold intercept (0.1 g/t cutoff)	Gold intercept (2.0 g/t cutoff)
ABFR0266	10–16 m	6 m at 1.53 g/t Au from 10 m	
ABFR0267	18–26 m	8 m at 2.28 g/t Au from 18 m	*including* 2 m at 4.94 g/t Au from 22 m
ABFR0268	30–42 m	12 m at 0.74 g/t Au from 30 m	
ABFR0269	32–44 m	6 m at 2.32 g/t Au from 32 m	
		and 2 m at 0.81 g/t Au from 42 m	
ABFR0270	18–36 m	18 m at 3.38 g/t Au from 18 m	*including* 6 m at 6.03 g/t Au from 20 m
ABFR0271	46–50 m	4 m at 1.32 g/t Au from 46 m	
ABFR0272	6–20 m	14 m at 2.4 g/t Au from 6 m	*including* 4 m at 5.73 g/t Au from 6 m
ABFR0273	38–58 m	4 m at 5.78 g/t Au from 38 m	*including* 2 m at 10.90 g/t Au from 38 m
		and 2 m at 3.04 g/t Au from 56 m	
ABFR0274	76–96 m	20 m at 2.91 g/t Au from 76 m	*including* 2 m at 13.60 g/t Au from 76 m
			and 2 m at 5.29 g/t Au from 82 m
			and 2 m at 5.01 g/t Au from 92 m
ABFR0275	26–50 m	2 m at 0.52 g/t Au from 26 m	
		and 2 m at 0.89 g/t Au from 48 m	
ABFR0276	30–56 m	6 m at 1.64 g/t Au from 30 m	*including* 2 m at 4.01 g/t Au from 30 m
		and 2 m at 1.14 g/t Au from 40 m	
		and 2 m at 5.24 g/t Au from 48 m	
		and 2 m at 10.4 g/t Au from 54 m	

Appendix 2 – Collar location data

New drill holes by Ardea Resources

Drill hole	Type	Depth (m)	Tenement	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)	Twin hole
ABFR0266	RC	26	M24/00778	MGA94_51	325346.0	6663362.0	384.8	-60	243	BFRC010
ABFR0267	RC	48	M24/00778	MGA94_51	325355.3	6663362.8	384.8	-59	249	B4P26
ABFR0268	RC	74	M24/00778	MGA94_51	325368.6	6663364.4	385.0	-60	244	B4P9
ABFR0269	RC	70	M24/00778	MGA94_51	325358.8	6663385.0	384.8	-60	242	B4P22
ABFR0270	RC	64	M24/00778	MGA94_51	325343.1	6663391.6	384.7	-60	255	*New infill*
ABFR0271	RC	70	M24/00778	MGA94_51	325350.3	6663397.3	384.6	-60	247	*New infill*
ABFR0272	RC	23	M24/00778	MGA94_51	325334.4	6663400.5	384.5	-60	246	B4P19
ABFR0273	RC	79	M24/00778	MGA94_51	325348.1	6663405.1	384.5	-60	251	BF26
ABFR0274	RC	130	M24/00778	MGA94_51	325368.5	6663417.2	384.7	-59	247	BFRC006
ABFR0275	RC	74	M24/00778	MGA94_51	325341.3	6663421.8	384.4	-60	243	BFRC014
ABFR0276	RC	80	M24/00778	MGA94_51	325310.9	6663376.7	384.5	-60	066	*New infill*

Ardea Resources Limited

Appendix 3 – Assay results from Big Four Gold

All assays from recent drilling program at Big Four Gold prospect.

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

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	S (%)	Comments
ABFR0266	0	2	AR030301	0.230	b.d.	20	2.0	0.050	
ABFR0266	2	4	AR030302	0.103	b.d.	10	0.5	0.050	
ABFR0266	4	6	AR030303	0.092	b.d.	10	0.5	0.055	
ABFR0266	6	8	AR030304	0.007	b.d.	10	0.2	0.036	
ABFR0266	8	10	AR030305	0.110	b.d.	30	0.3	0.027	
ABFR0266	10	12	AR030306	1.010	b.d.	10	0.5	0.014	
ABFR0266	12	14	AR030307	2.900	b.d.	10	1.3	0.012	
ABFR0266	14	16	AR030309	0.676	b.d.	60	2.5	0.012	
ABFR0266	16	18	AR030310	0.059	b.d.	100	3.1	0.015	
ABFR0266	18	20	AR030311	0.027	b.d.	20	0.9	0.011	
ABFR0266	20	22	AR030312	0.039	b.d.	30	1.6	0.007	
ABFR0266	22	24	AR030313	0.021	b.d.	40	1.4	0.005	
ABFR0266	24	26	AR030314	0.011	b.d.	10	0.9	0.005	
ABFR0267	0	2	AR030315	0.418	b.d.	20	3.3	0.042	
ABFR0267	2	4	AR030316	0.262	b.d.	20	1.2	0.051	
ABFR0267	4	6	AR030317	0.134	0.1	20	0.9	0.062	
ABFR0267	6	8	AR030319	0.079	b.d.	10	0.7	0.052	
ABFR0267	8	10	AR030320	0.019	0.1	10	0.6	0.037	
ABFR0267	10	12	AR030321	0.010	b.d.	b.d.	0.6	0.023	
ABFR0267	12	14	AR030322	0.135	b.d.	b.d.	0.6	0.018	
ABFR0267	14	16	AR030323	0.078	b.d.	b.d.	3.0	0.016	
ABFR0267	16	18	AR030324	0.039	0.1	b.d.	1.0	0.009	
ABFR0267	18	20	AR030325	3.060	b.d.	b.d.	1.1	0.006	
ABFR0267	20	22	AR030326	0.612	0.1	20	2.0	0.004	
ABFR0267	22	24	AR030327	4.940	b.d.	20	0.7	0.006	
ABFR0267	24	26	AR030329	0.504	0.1	80	1.2	0.004	
ABFR0267	26	28	AR030330	0.078	b.d.	160	1.4	0.005	
ABFR0267	28	30	AR030331	0.073	b.d.	150	1.2	0.008	
ABFR0267	30	32	AR030332	0.042	b.d.	80	0.7	0.007	
ABFR0267	32	34	AR030333	0.029	b.d.	110	0.6	0.005	
ABFR0267	34	36	AR030334	0.013	b.d.	30	0.6	0.022	
ABFR0267	36	38	AR030335	0.009	b.d.	b.d.	0.7	0.099	
ABFR0267	38	40	AR030336	0.007	b.d.	20	1.0	0.030	
ABFR0267	40	42	AR030337	0.007	b.d.	b.d.	1.0	0.054	
ABFR0267	42	44	AR030339	0.005	b.d.	b.d.	1.0	0.020	
ABFR0267	44	46	AR030340	0.007	b.d.	30	1.4	0.028	
ABFR0267	46	48	AR030341	0.006	b.d.	20	1.5	0.036	
ABFR0268	24	26	AR030355	0.036	b.d.	10	0.7	0.003	
ABFR0268	26	28	AR030356	0.187	0.1	20	2.9	0.007	
ABFR0268	28	30	AR030357	0.426	b.d.	40	1.3	0.004	
ABFR0268	30	32	AR030359	0.535	b.d.	20	1.3	0.003	
ABFR0268	32	34	AR030360	0.205	b.d.	30	1.1	0.003	
ABFR0268	34	36	AR030361	1.970	0.3	b.d.	1.0	0.004	
ABFR0268	36	38	AR030362	0.867	0.1	10	0.7	0.004	
ABFR0268	38	40	AR030363	0.080	b.d.	10	0.5	0.009	
ABFR0268	40	42	AR030364	0.767	b.d.	10	0.5	0.063	
ABFR0268	42	44	AR030365	0.021	b.d.	b.d.	0.6	0.205	
ABFR0268	44	46	AR030366	0.074	b.d.	20	0.8	0.094	
ABFR0268	46	48	AR030367	0.452	b.d.	10	1.0	0.077	
ABFR0268	48	50	AR030369	0.059	b.d.	40	0.7	0.235	
ABFR0268	50	52	AR030370	0.013	b.d.	10	1.1	0.258	
ABFR0268	52	54	AR030371	0.025	b.d.	20	1.0	0.142	
ABFR0268	54	56	AR030372	0.049	b.d.	310	1.4	0.067	
ABFR0268	56	58	AR030373	0.011	b.d.	130	1.2	0.136	
ABFR0268	58	60	AR030374	0.013	b.d.	10	0.7	0.143	
ABFR0268	60	62	AR030375	0.006	b.d.	40	1.3	0.079	
ABFR0268	62	64	AR030376	0.006	b.d.	b.d.	0.8	0.036	
ABFR0268	64	66	AR030377	0.007	b.d.	20	1.0	0.062	
ABFR0268	66	68	AR030379	0.002	b.d.	70	1.2	0.049	
ABFR0268	68	70	AR030380	0.003	b.d.	b.d.	0.9	0.036	
ABFR0268	70	72	AR030381	0.003	b.d.	b.d.	1.2	0.032	
ABFR0268	72	74	AR030382	0.002	b.d.	20	1.2	0.043	
ABFR0269	16	18	AR030392	0.001	b.d.	b.d.	1.1	0.006	
ABFR0269	18	20	AR030393	0.003	b.d.	20	0.5	0.007	
ABFR0269	20	22	AR030394	0.004	b.d.	10	0.9	0.013	
ABFR0269	22	24	AR030395	0.006	b.d.	10	0.4	0.009	
ABFR0269	24	26	AR030396	0.001	b.d.	20	0.6	0.005	
ABFR0269	26	28	AR030397	b.d.	b.d.	b.d.	0.5	0.004	
ABFR0269	28	30	AR030399	0.005	b.d.	60	0.9	0.006	
ABFR0269	30	32	AR030400	0.010	0.2	170	0.8	0.004	
ABFR0269	32	34	AR030401	2.690	0.1	20	1.2	0.001	
ABFR0269	34	36	AR030402	3.070	0.1	30	1.2	0.004	
ABFR0269	36	38	AR030403	1.210	b.d.	40	0.3	0.004	
ABFR0269	38	40	AR030404	0.443	0.1	20	0.6	0.007	
ABFR0269	40	42	AR030405	0.067	0.2	10	0.3	0.006	
ABFR0269	42	44	AR030406	0.810	b.d.	10	0.2	0.005	
ABFR0269	44	46	AR030407	0.159	0.4	10	0.2	0.062	
ABFR0269	46	48	AR030409	0.036	0.2	60	0.3	0.090	
ABFR0269	48	50	AR030410	0.041	b.d.	200	0.4	0.087	
ABFR0269	50	52	AR030411	0.046	b.d.	230	1.8	0.026	
ABFR0269	52	54	AR030412	0.009	b.d.	10	0.4	0.196	
ABFR0269	54	56	AR030413	0.009	b.d.	b.d.	0.4	0.205	
ABFR0269	56	58	AR030414	0.001	b.d.	b.d.	0.7	0.153	
ABFR0269	58	60	AR030415	0.006	0.2	b.d.	0.5	0.108	
ABFR0269	60	62	AR030416	0.007	b.d.	b.d.	0.5	0.121	
ABFR0269	62	64	AR030417	0.007	b.d.	70	1.9	0.089	
ABFR0269	64	66	AR030419	0.002	b.d.	20	0.8	0.034	
ABFR0269	66	68	AR030420	0.001	b.d.	b.d.	0.8	0.030	
ABFR0269	68	70	AR030421	0.002	b.d.	160	1.5	0.029	
ABFR0270	8	10	AR030426	0.019	b.d.	10	0.5	0.011	
ABFR0270	10	12	AR030427	0.017	b.d.	10	0.7	0.011	
ABFR0270	12	14	AR030429	0.013	b.d.	b.d.	0.5	0.010	
ABFR0270	14	16	AR030430	0.015	b.d.	70	1.2	0.010	
ABFR0270	16	18	AR030431	0.029	b.d.	60	0.6	0.010	
ABFR0270	18	20	AR030432	1.280	0.2	30	0.6	0.009	
ABFR0270	20	22	AR030433	10.200	0.4	b.d.	0.3	0.002	
ABFR0270	22	24	AR030434	4.730	0.6	b.d.	0.5	0.006	
ABFR0270	24	26	AR030435	3.170	0.4	10	0.2	0.008	
ABFR0270	26	28	AR030436	1.200	0.2	10	0.4	0.004	
ABFR0270	28	30	AR030437	0.423	0.1	10	0.4	0.003	
ABFR0270	30	32	AR030439	6.690	0.1	10	0.3	0.003	
ABFR0270	32	34	AR030440	1.870	0.1	20	0.3	0.008	
ABFR0270	34	36	AR030441	0.816	0.2	70	0.2	0.007	
ABFR0270	36	38	AR030442	0.117	0.1	120	1.5	0.066	
ABFR0270	38	40	AR030443	0.044	b.d.	30	0.7	0.063	
ABFR0270	40	42	AR030444	0.043	b.d.	80	0.8	0.155	
ABFR0270	42	44	AR030445	0.018	b.d.	b.d.	0.3	0.247	
ABFR0270	44	46	AR030446	0.005	b.d.	b.d.	0.5	0.155	
ABFR0270	46	48	AR030447	0.004	b.d.	b.d.	0.7	0.088	
ABFR0270	48	50	AR030449	0.013	b.d.	b.d.	0.9	0.048	
ABFR0270	50	52	AR030450	0.097	b.d.	10	1.0	0.082	
ABFR0270	52	54	AR030451	0.014	b.d.	b.d.	0.6	0.036	
ABFR0270	54	56	AR030452	0.005	b.d.	b.d.	0.6	0.048	
ABFR0270	56	58	AR030453	0.018	b.d.	30	1.5	0.070	
ABFR0270	58	60	AR030454	0.028	b.d.	b.d.	1.4	0.153	
ABFR0270	60	62	AR030455	0.010	0.1	b.d.	1.5	0.063	
ABFR0270	62	64	AR030456	0.025	b.d.	b.d.	2.3	0.043	
ABFR0271	22	24	AR030470	0.066	b.d.	10	0.7	0.011	
ABFR0271	24	26	AR030471	0.041	b.d.	b.d.	0.6	0.004	
ABFR0271	26	28	AR030472	0.004	b.d.	b.d.	0.8	0.003	
ABFR0271	28	30	AR030473	0.015	b.d.	20	1.1	0.003	
ABFR0271	30	32	AR030474	0.018	b.d.	20	0.8	0.003	
ABFR0271	32	34	AR030475	0.066	b.d.	20	1.1	0.004	
ABFR0271	34	36	AR030476	0.306	0.1	40	0.9	0.004	
ABFR0271	36	38	AR030477	0.175	b.d.	20	2.1	0.005	
ABFR0271	38	40	AR030479	0.079	b.d.	10	0.7	0.007	
ABFR0271	40	42	AR030480	0.056	b.d.	20	0.9	0.059	
ABFR0271	42	44	AR030481	0.275	b.d.	20	1.4	0.022	
ABFR0271	44	46	AR030482	0.031	0.1	b.d.	0.8	0.118	
ABFR0271	46	48	AR030483	1.610	0.1	b.d.	0.8	0.225	
ABFR0271	48	50	AR030484	1.020	b.d.	60	1.1	0.174	
ABFR0271	50	52	AR030485	0.122	b.d.	440	2.1	0.055	
ABFR0271	52	54	AR030486	0.106	b.d.	430	4.3	0.099	
ABFR0271	54	56	AR030487	0.016	b.d.	30	0.9	0.267	
ABFR0271	56	58	AR030489	0.003	b.d.	b.d.	0.6	0.254	
ABFR0271	58	60	AR030490	0.005	b.d.	b.d.	0.8	0.119	
ABFR0271	60	62	AR030491	b.d.	b.d.	b.d.	1.0	0.089	
ABFR0271	62	64	AR030492	0.027	b.d.	b.d.	0.9	0.052	
ABFR0271	64	66	AR030493	0.011	b.d.	b.d.	0.9	0.050	
ABFR0271	66	68	AR030494	0.005	b.d.	b.d.	1.1	0.081	
ABFR0271	68	70	AR030495	b.d.	0.1	b.d.	0.7	0.066	
ABFR0272	0	2	AR030496	0.368	b.d.	80	2.8	0.056	
ABFR0272	2	4	AR030497	0.202	b.d.	170	1.3	0.035	
ABFR0272	4	6	AR030499	0.277	b.d.	80	1.2	0.023	
ABFR0272	6	8	AR030500	3.060	b.d.	50	1.0	0.015	
ABFR0272	8	10	AR030501	8.390	b.d.	10	0.5	0.022	
ABFR0272	10	12	AR030502	0.850	b.d.	b.d.	0.4	0.013	
ABFR0272	12	14	AR030503	*1.090*	b.d.	*20*	*0.8*	*0.014*	1.5 m void from 12.2 m
ABFR0272	14	16	AR030504	0.815	0.2	b.d.	1.0	0.008	
ABFR0272	16	18	AR030505	*1.220*	0.5	*b.d.*	*0.4*	*0.006*	1.0 m void from 17.0 m
ABFR0272	18	20	AR030506	*1.340*	0.2	*b.d.*	*1.4*	*0.004*	1.5 m void from 18.0 m
ABFR0272	20	22	AR030508	0.175	0.4	10	0.2	0.004	
ABFR0272	22	23	AR030509	0.105	0.2	b.d.	0.1	0.003	
ABFR0273	6	8	AR030513	0.033	b.d.	b.d.	0.3	0.009	
ABFR0273	8	10	AR030514	0.024	b.d.	10	0.6	0.009	
ABFR0273	10	12	AR030515	0.011	b.d.	b.d.	0.2	0.023	
ABFR0273	12	14	AR030516	0.005	b.d.	b.d.	0.3	0.017	

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	S (%)	Comments
ABFR0273	14	16	AR030518	0.009	b.d.	b.d.	0.4	0.017	
ABFR0273	16	18	AR030519	0.027	b.d.	10	0.4	0.010	
ABFR0273	18	20	AR030520	0.119	b.d.	20	0.3	0.011	
ABFR0273	20	22	AR030521	0.017	b.d.	10	0.3	0.012	
ABFR0273	22	24	AR030522	0.014	b.d.	b.d.	0.4	0.003	
ABFR0273	24	26	AR030523	0.009	b.d.	b.d.	0.2	0.003	
ABFR0273	26	28	AR030524	0.011	b.d.	40	0.9	0.004	
ABFR0273	28	30	AR030525	0.065	b.d.	150	1.0	0.029	
ABFR0273	30	32	AR030526	0.119	b.d.	200	1.0	0.106	
ABFR0273	32	34	AR030528						Void – no sample
ABFR0273	34	36	AR030529						Void – no sample
ABFR0273	36	38	AR030530	*0.183*	b.d.	*80*	*0.6*	*0.046*	Void – small sample
ABFR0273	38	40	AR030531	10.900	0.1	20	0.2	0.010	
ABFR0273	40	42	AR030532	0.654	b.d.	20	0.2	0.015	
ABFR0273	42	44	AR030533	0.158	0.1	b.d.	0.2	0.012	
ABFR0273	44	46	AR030534	0.048	0.4	10	0.2	0.019	
ABFR0273	46	48	AR030535	0.014	b.d.	b.d.	0.3	0.011	
ABFR0273	48	50	AR030536	0.064	b.d.	b.d.	0.3	0.105	
ABFR0273	50	52	AR030538	0.020	b.d.	b.d.	0.2	0.168	
ABFR0273	52	54	AR030539	0.006	b.d.	b.d.	0.3	0.216	
ABFR0273	54	56	AR030540	0.186	b.d.	160	0.6	0.183	
ABFR0273	56	58	AR030541	3.040	0.2	610	1.2	0.152	
ABFR0273	58	60	AR030542	0.034	b.d.	180	1.7	0.047	
ABFR0273	60	62	AR030543	0.027	b.d.	10	0.4	0.164	
ABFR0273	62	64	AR030544	0.006	b.d.	b.d.	0.4	0.122	
ABFR0273	64	66	AR030545	0.003	b.d.	b.d.	0.5	0.075	
ABFR0273	66	68	AR030546	0.010	b.d.	b.d.	0.7	0.172	
ABFR0273	68	70	AR030548	0.002	b.d.	b.d.	0.4	0.048	
ABFR0273	70	72	AR030549	0.129	b.d.	b.d.	0.4	0.051	
ABFR0273	72	74	AR030550	0.051	b.d.	20	0.6	0.059	
ABFR0273	74	76	AR030551	0.048	b.d.	b.d.	0.6	0.080	
ABFR0273	76	78	AR030552	0.005	0.5	b.d.	0.5	0.112	
ABFR0273	78	79	AR030553	0.003	b.d.	b.d.	0.5	0.037	
ABFR0274	52	54	AR030582	0.006	b.d.	b.d.	0.5	0.021	
ABFR0274	54	56	AR030583	0.020	0.1	40	1.3	0.052	
ABFR0274	56	58	AR030584	0.007	0.1	b.d.	0.5	0.211	
ABFR0274	58	60	AR030585	0.002	b.d.	b.d.	0.4	0.218	
ABFR0274	60	62	AR030586	0.034	b.d.	100	1.2	0.023	
ABFR0274	62	64	AR030588	0.005	b.d.	70	1.0	0.021	
ABFR0274	64	66	AR030589	0.016	b.d.	70	0.9	0.010	
ABFR0274	66	68	AR030590	0.016	b.d.	90	1.0	0.036	
ABFR0274	68	70	AR030591	0.010	b.d.	220	1.1	0.049	
ABFR0274	70	72	AR030592	0.016	b.d.	330	1.0	0.119	
ABFR0274	72	74	AR030593	0.049	b.d.	270	1.0	0.723	
ABFR0274	74	76	AR030594	0.012	b.d.	30	1.3	0.329	
ABFR0274	76	78	AR030595	13.600	0.7	b.d.	1.8	0.742	
ABFR0274	78	80	AR030596	1.890	b.d.	10	0.7	0.098	
ABFR0274	80	82	AR030598	0.039	b.d.	10	0.8	0.134	
ABFR0274	82	84	AR030599	5.290	0.1	b.d.	0.4	0.475	
ABFR0274	84	86	AR030600	0.262	b.d.	b.d.	0.9	0.209	
ABFR0274	86	88	AR030601	1.520	b.d.	b.d.	0.3	0.355	
ABFR0274	88	90	AR030602	0.567	b.d.	10	0.9	0.133	
ABFR0274	90	92	AR030603	0.306	b.d.	b.d.	1.0	0.173	
ABFR0274	92	94	AR030604	5.010	0.4	10	0.6	0.286	
ABFR0274	94	96	AR030605	0.643	0.2	510	0.9	0.258	
ABFR0274	96	98	AR030606	0.014	0.4	30	0.6	0.515	
ABFR0274	98	100	AR030608	0.003	b.d.	10	0.4	0.411	
ABFR0274	100	102	AR030609	0.010	b.d.	40	1.1	0.042	
ABFR0274	102	104	AR030610	0.016	b.d.	b.d.	0.7	0.156	
ABFR0274	104	106	AR030611	0.001	b.d.	b.d.	1.3	0.066	
ABFR0274	106	108	AR030612	0.005	b.d.	b.d.	0.8	0.077	
ABFR0274	108	110	AR030613	b.d.	b.d.	b.d.	1.0	0.075	
ABFR0274	110	112	AR030614	b.d.	b.d.	b.d.	1.0	0.042	
ABFR0274	112	114	AR030615	0.001	b.d.	b.d.	0.6	0.043	
ABFR0274	114	116	AR030616	0.001	b.d.	b.d.	0.9	0.058	
ABFR0274	116	118	AR030618	b.d.	0.2	b.d.	1.3	0.109	
ABFR0274	118	120	AR030619	0.003	0.1	b.d.	0.9	0.096	
ABFR0274	120	122	AR030620	0.007	b.d.	b.d.	0.9	0.061	
ABFR0274	122	124	AR030621	0.001	b.d.	b.d.	0.9	0.066	
ABFR0274	124	126	AR030622	0.010	b.d.	b.d.	0.8	0.075	
ABFR0274	126	128	AR030623	b.d.	0.3	b.d.	1.0	0.080	
ABFR0274	128	130	AR030624	0.005	b.d.	b.d.	1.0	0.078	
ABFR0275	0	2	AR030625	0.065	b.d.	b.d.	1.3	0.082	
ABFR0275	2	4	AR030626	0.005	b.d.	b.d.	0.5	0.030	
ABFR0275	4	6	AR030628	0.004	b.d.	b.d.	0.5	0.027	
ABFR0275	6	8	AR030629	0.010	0.1	b.d.	0.2	0.012	
ABFR0275	8	10	AR030630	0.018	b.d.	b.d.	0.2	0.010	

Hole	From (m)	To (m)	Sample number	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	S (%)	Comments
ABFR0275	10	12	AR030631	0.057	b.d.	80	0.9	0.009	
ABFR0275	12	14	AR030632	0.006	b.d.	b.d.	0.3	0.007	
ABFR0275	14	16	AR030633	0.001	b.d.	b.d.	2.3	0.006	
ABFR0275	16	18	AR030634	0.007	b.d.	b.d.	1.1	0.007	
ABFR0275	18	20	AR030635	0.003	b.d.	b.d.	0.7	0.004	
ABFR0275	20	22	AR030636	0.028	b.d.	b.d.	3.0	0.009	
ABFR0275	22	24	AR030638	0.018	0.1	10	1.0	0.002	
ABFR0275	24	26	AR030639	*0.032*	b.d.	*b.d.*	*0.7*	*0.002*	1.0 m void from 25.0 m
ABFR0275	26	28	AR030640	0.515	0.2	b.d.	1.0	0.004	
ABFR0275	28	30	AR030641	0.045	b.d.	b.d.	1.7	0.005	
ABFR0275	30	32	AR030642	0.034	b.d.	b.d.	0.4	0.005	
ABFR0275	32	34	AR030643	0.174	b.d.	b.d.	0.5	0.006	
ABFR0275	34	36	AR030644	0.110	b.d.	b.d.	0.3	0.007	
ABFR0275	36	38	AR030645	0.058	b.d.	b.d.	0.3	0.004	
ABFR0275	38	40	AR030646	0.016	b.d.	b.d.	0.6	0.045	
ABFR0275	40	42	AR030648	0.073	b.d.	b.d.	0.2	0.110	
ABFR0275	42	44	AR030649	0.228	b.d.	b.d.	0.3	0.160	
ABFR0275	44	46	AR030650	0.140	b.d.	b.d.	0.1	0.159	
ABFR0275	46	48	AR030651	0.074	b.d.	b.d.	0.2	0.098	
ABFR0275	48	50	AR030652	0.889	0.2	40	0.4	0.092	
ABFR0275	50	52	AR030653	0.126	b.d.	280	2.1	0.078	
ABFR0275	52	54	AR030654	0.012	b.d.	50	0.7	0.063	
ABFR0275	54	56	AR030655	0.006	b.d.	10	0.4	0.067	
ABFR0275	56	58	AR030656	0.005	b.d.	b.d.	0.4	0.088	
ABFR0275	58	60	AR030658	0.003	b.d.	b.d.	0.4	0.104	
ABFR0275	60	62	AR030659	0.002	b.d.	b.d.	0.5	0.049	
ABFR0275	62	64	AR030660	0.002	b.d.	b.d.	0.6	0.063	
ABFR0275	64	66	AR030661	0.001	b.d.	b.d.	0.3	0.132	
ABFR0275	66	68	AR030662	0.178	b.d.	b.d.	0.5	0.136	
ABFR0275	68	70	AR030663	0.002	b.d.	b.d.	0.4	0.180	
ABFR0275	70	72	AR030664	b.d.	b.d.	b.d.	0.5	0.065	
ABFR0275	72	74	AR030665	b.d.	b.d.	b.d.	0.5	0.093	
ABFR0276	0	2	AR030666	0.073	b.d.	b.d.	0.6	0.054	
ABFR0276	2	4	AR030668	0.017	b.d.	b.d.	0.6	0.027	
ABFR0276	4	6	AR030669	0.009	0.2	10	0.7	0.027	
ABFR0276	6	8	AR030670	0.009	b.d.	b.d.	0.5	0.010	
ABFR0276	8	10	AR030671	0.002	b.d.	b.d.	0.6	0.007	
ABFR0276	10	12	AR030672	0.005	b.d.	b.d.	0.7	0.009	
ABFR0276	12	14	AR030673	0.003	b.d.	b.d.	0.5	0.013	
ABFR0276	14	16	AR030674	0.018	b.d.	b.d.	0.8	0.012	
ABFR0276	16	18	AR030675	0.022	b.d.	20	0.9	0.016	
ABFR0276	18	20	AR030676	0.024	b.d.	b.d.	0.4	0.010	
ABFR0276	20	22	AR030678	0.007	b.d.	10	0.7	0.006	
ABFR0276	22	24	AR030679	0.006	b.d.	b.d.	0.4	0.007	
ABFR0276	24	26	AR030680	0.022	b.d.	30	0.7	0.004	
ABFR0276	26	28	AR030681	0.052	b.d.	80	1.3	0.002	
ABFR0276	28	30	AR030682	*0.088*	b.d.	*50*	*1.0*	*0.008*	Void – small sample
ABFR0276	30	32	AR030683	*4.010*	0.3	*40*	*0.7*	*0.022*	Void – 1 m sample
ABFR0276	32	34	AR030684	0.122	0.1	40	0.3	0.010	
ABFR0276	34	36	AR030685	0.793	0.3	40	0.4	0.008	
ABFR0276	36	38	AR030686	0.457	b.d.	10	0.2	0.005	
ABFR0276	38	40	AR030688	0.201	b.d.	b.d.	0.3	0.009	
ABFR0276	40	42	AR030689	1.140	b.d.	b.d.	0.2	0.014	
ABFR0276	42	44	AR030690	0.346	b.d.	b.d.	0.2	0.007	
ABFR0276	44	46	AR030691	0.010	b.d.	b.d.	0.3	0.026	
ABFR0276	46	48	AR030692	0.026	b.d.	b.d.	0.3	0.052	
ABFR0276	48	50	AR030693	5.240	0.1	b.d.	0.3	0.148	
ABFR0276	50	52	AR030694	0.124	b.d.	b.d.	0.3	0.202	
ABFR0276	52	54	AR030695	0.057	b.d.	b.d.	0.4	0.312	
ABFR0276	54	56	AR030696	10.400	1	10	0.3	4.620	
ABFR0276	56	58	AR030698	0.166	b.d.	250	0.8	0.224	
ABFR0276	58	60	AR030699	0.039	b.d.	250	1.0	0.033	
ABFR0276	60	62	AR030700	0.030	b.d.	100	0.5	0.051	
ABFR0276	62	64	AR030701	0.049	b.d.	50	0.6	0.054	
ABFR0276	64	66	AR030702	0.063	b.d.	20	0.6	0.031	
ABFR0276	66	68	AR030703	0.006	b.d.	b.d.	0.3	0.089	
ABFR0276	68	70	AR030704	0.002	b.d.	b.d.	0.3	0.196	
ABFR0276	70	72	AR030705	0.002	b.d.	b.d.	0.3	0.318	
ABFR0276	72	74	AR030706	0.009	b.d.	b.d.	0.3	0.080	
ABFR0276	74	76	AR030708	0.004	b.d.	b.d.	0.3	0.028	
ABFR0276	76	78	AR030709	0.002	b.d.	b.d.	0.4	0.018	
ABFR0276	78	80	AR030710	0.003	b.d.	b.d.	0.3	0.020	

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. • The drill spacing was *ad hoc*, being defined by proximity to twinned drill holes, or through identification of a gap in data. Nominally, drill holes are around 10-20m apart. The drilling will also contribute to provide material for the purpose of metallurgical sampling should the need arise. • 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 50 gram samples for Au, Pt and Pd, and lithium borate fused-bead XRF analysis used for the remaining multi-element suite. Further details of lab processing techniques are found in Quality of assay data and laboratory tests below.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• In this program, Ardea drilled the Big Four Gold prospect with 11 reverse circulation (RC) drill holes . Holes were drilled to be parallel to historic twin holes, at a nominal 60˚→245˚. The only exception to this approximate orientation was ABFR0276 (60˚→066˚) as the preferred collar location was inaccessible due to historic mine workings. Twin holes were generally collared within 2 m north or south of the twin hole's collar position. 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 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 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.*
		• Drilling was undertaken for confirmation of historic results and gap infill. 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 RC 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, 738 m were drilled during the program, with the chips generated during entire program logged in detail.

Sub-sampling techniques and sample	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• 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

Criteria	JORC Code explanation	Commentary
preparation	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	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 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.

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. • All holes drilled as part of the Big Four Gold program were angled and were surveyed down hole at 30 m intervals and 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.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drill spacing ad hoc, designed to either twin a historic drill holes or infill gaps in near-surface data. Spacing between holes was generally of the order of 10-20 m. • The spacing is considered sufficient for the definition of Mineral Resources. Data will be assessed in detail prior to estimation of a Mineral Resource. • Samples were composited over 2 m for the entire drill program.
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 angled. They were designed to parallel historic holes for twinning, and were drilled at a nominal 60˚→245˚. The only exception was ABFR0276 (60˚→066˚) as the preferred collar location was inaccessible due to historic mine workings. Gold mineralisation is subvertical and striking approximately 335˚-340˚, associated with a subvertical, late-stage intermediate porphyry intrusive. Intercepts are as normal to the orientation of mineralisation as can be reliably defined using RC drilling. However, the detailed orientation of vein sets and breccia zones within and adjacent to the intrusive is not currently known.
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 Big Four Gold 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 Big Four Gold drilling was undertaken is M24/778-I. ARL, through its subsidiary companies, is the sole holder of the tenement. • Heritage surveys were carried out prior to application for the Program of Works to undertake the program. The tenement is part of a large group of tenements that is the subject of an agreement between ARL and the Maduwongga native title applicants.

Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Big Four Gold prospect has been subject to limited historic exploration, mostly as drilling.
		  • Limited historic mining around the 1920s to 1930s recovered 571.5t of ore for 10.53kg gold (~339oz gold), at an average grade of 18.4g/t Au. This gold occurrence cropped out at surface so was discovered by prospectors.
		  • Historic drilling of the Big Four Gold prospect has been undertaken by several companies between 1984 and present. In total, there have been 65 RC drill holes (prior to this program), and 2 diamond drill holes. Most drilling has been less than 100 m depth.
		  • Coopers Exploration (1980s), Heron Resources (late-2000s) and now Ardea are the main companies to have drilled at Big Four.
		  •

Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mineralisation at Big Four Gold is orogenic gold mineralisation. It is hosted within and around a late-stage, intermediate porphyritic hornblende-plagioclase intrusive that has intruded into the Siberia Komatiite. Pyritic, silicic, albitic, and chloritic alteration are directly associated with gold mineralisation in both shear and breccia hosts. Contrasting rheological characteristics between the porphyry and the rocks of the Siberia Komatiite (including tremolite-chlorite schist) likely result in fracturing contemporaneous with deformation and regional gold mineralising events.
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 2 – 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 at Big Four Gold, namely gold and associated tracefinder elements arsenic, antimony, and sulphur, are listed in "Appendix 3 – Assay results from Big Four Gold". 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 2 m down hole intervals. • Gold intercepts at Big Four Gold are defined using a 0.5 g/t cut-off on a minimum intercept of 1 m and a maximum internal waste of 2 m. Secondary intercepts (i.e. the "including" intercepts) are defined using a 2.0 g/t cut-off and the same intercept and internal waste characteristics. • All assay samples were composited over 2 m. . • 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*	• All drill holes in this program were angled. • Gold mineralisation is subvertical and striking approximately 335˚-340˚, associated with a subvertical, late-stage intermediate porphyry intrusive. Intercepts are as normal to the orientation of mineralisation as can be reliably defined using RC drilling. However, the detailed orientation of vein sets and breccia zones within and adjacent to the intrusive is not currently known.

Criteria	JORC Code explanation	Commentary
	lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, 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.*	• Appropriate sections and maps 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. Examples of high-grade mineralisation are labelled as such.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other data are, at this stage, known to be either beneficial or deleterious to recovery of the metals reported.
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 at Big Four Gold but has not yet been defined. Further drilling could include infill drilling, and extension of programs to the north and south along strike, and or down-plunge to the north. • Metallurgical assessment of all metals of interest at Big Four Gold will be undertaken prior to progression to a Pre-Feasibility Study (PFS) should such a study be warranted.