Ardea Resources Limited

Kalgoorlie Nickel Project – Additional Tenure Purchase

ASX & Media Release

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ASX Symbol

ARL

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Issued Capital

Fully Paid Ordinary Shares
127,670,582

Directors/Employee Performance Rights
4,236,000

ABN 30 614 289 342

Ardea Resources Limited (**Ardea**) advises of the purchase of additional mining tenure for its Kalgoorlie Nickel Project (**KNP**) to expand the project footprint.

The purchases relate to $1,800,000 for 1,549ha at the southern boundary of the Bulong Taurus nickel laterite deposit and $10,000 pursuant to a sale agreement clause in respect of the conversion of the Lady Charlotte Exploration Licences to a Mining Lease. The Bulong tenure is located 35km east and Lady Charlotte 65km northwest of Kalgoorlie.

The **KNP Kalpini Hub** includes the Bulong Taurus nickel laterite resource (Table 1) with an Inferred resource of 14Mt at 0.84% nickel and 0.051% cobalt for 119kt of contained nickel and 7kt of contained cobalt (Table 1-3, ARL ASX announcement 15 February 2021). The resource and host ultramafic rocks effectively extend to the Mining Lease northern, eastern and western lease boundaries. The southern boundary contains the historic Great Ophir underground gold mine and battery sand dump, so is not available for laterite mine infrastructure. The Bulong Taurus acquisition provides continuity of tenure (Figure 1 and 2) and access for the full Bulong nickel laterite resource (Table 1) containing 54Mt at 0.88% nickel and 0.053% cobalt for 477kt of contained nickel and 29kt of contained cobalt (Table 1-3, ARL ASX announcement 15 February 2021). It is intended that the gold rights for the Taurus acquisition will be transferred to the Ardea gold spin-out, Kalgoorlie Gold Mining Limited (**KalGold**) (ARL ASX announcement, 31 May 2021).

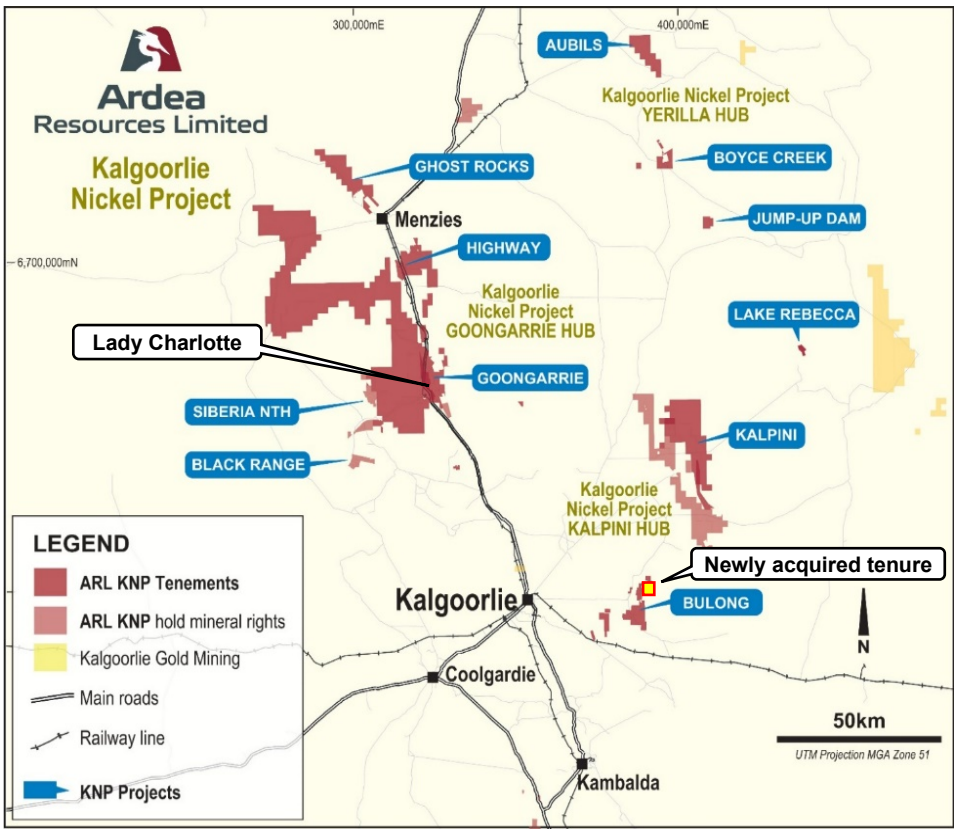

Figure 1 – KNP location plan, showing location of the newly acquired tenure.

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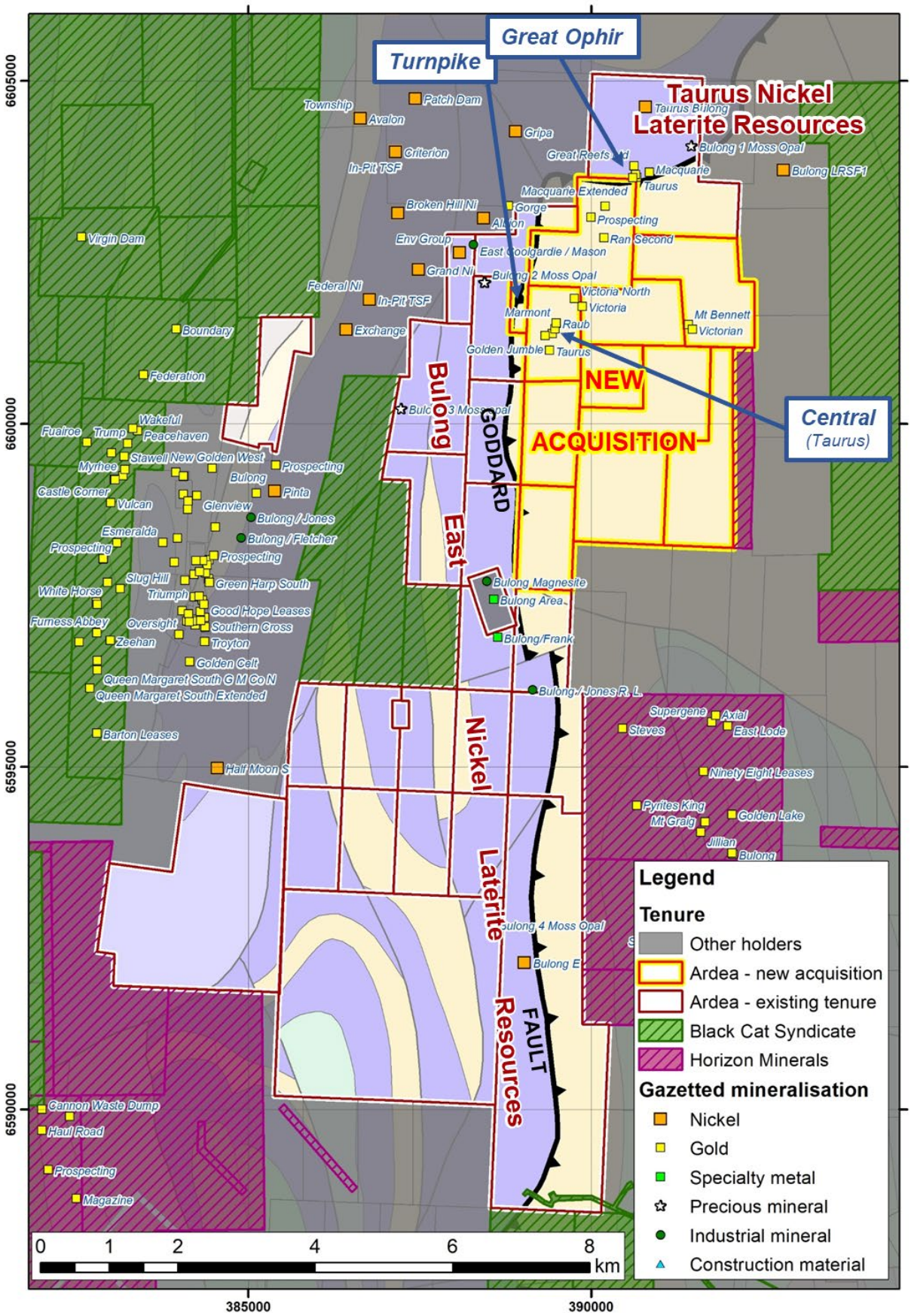

Figure 2 – The newly acquired tenure at Taurus, near Bulong. The tenure is located in a highly prospective area that has been the focus of several recent gold tenement acquisitions. The tenure of neighbours Black Cat Syndicate and Horizon Minerals (their Glandore acquisition) is shown. The underlying geology comprises ultramafics, volcanics (purple), felsic volcanics and volcaniclastics (yellow), and mafic rocks (green). The Goddard Fault connects the Taurus gold mining centre here with the Daisy Milano gold mine to the south and is a significant regional gold-hosting structure occurring over 17km within Ardea's Bulong tenure.

Table 1 – KNP nickel and cobalt Mineral Resources at Bulong based on a 0.5% Ni cut-off grade (ARL ASX announcement 15 February 2021).

Camp	Prospect	Resource Category	Size (Mt)	Ni (%)	Co (%)	Contained Metal Ni (kt)	Contained Metal Co (kt)	Estimation Details Method	Estimation Details Source	Estimation Details Year
Bulong	Bulong Taurus	Inferred	14	0.84	0.051	119	7	OK	Snowden	2007
	Bulong East	Indicated	16	1.06	0.055	169	9	OK	Snowden	2004
	Bulong East	Inferred	24	0.79	0.053	190	13	OK	Snowden	2004
	Bulong Total	Indicated	16	1.06	0.055	169	9			
		Inferred	38	0.81	0.052	309	20			
		Combined	***54***	***0.88***	***0.053***	***477***	***29***			

The **KNP Goongarrie Hub** (Figure 1) requires drill-sterilised ground along the eastern contact of the laterite pits as infrastructure sites. Lady Charlotte was originally acquired for this purpose but "wildcat" drill holes during the last 12 months have consistently intersected high grade gold mineralisation (ARL ASX announcement 26 May 2021).

Ardea Managing Director, Andrew Penkethman, noted:

> *"A key element of the current Ardea KNP Feasibility Study programs is the provision of mine infrastructure sites.*
>
> *At both Lady Charlotte and Bulong Taurus, there is considerable gold endowment in adjoining infrastructure locations, which requires careful management. Assuming the KalGold IPO proceeds as planned and the Bulong gold rights are acquired by KalGold, the Taurus-Great Ophir prospect area in particular represents a high-quality asset with known high grade gold mineralisation at surface.*

Great Ophir Gold Mine at Taurus

In compiling historic Geological Survey of WA reports on the Taurus mining centre, Ardea noted encouraging gold drill intercepts and accordingly completed ground truthing of the old report gold intercepts around the Great Ophir workings. The drill collars were located within their approximate report locations and rock chip samples of the target workings (Figure 3) returned assays of up to 118g/t Au (ARL ASX announcement 20 August 2020). A separate lode structure that had not been subject to historical mining was identified during field mapping and returned a channel sample result of 52.4g/t Au (ARL ASX announcement 20 August 2020).

The Great Ophir lodes have a steep southerly dip and are located adjacent to Ardea's southern tenement boundary. Acquisition of this new tenure will enable drill targeting of down-dip and down-plunge gold mineralisation at the Great Ophir Deeps.

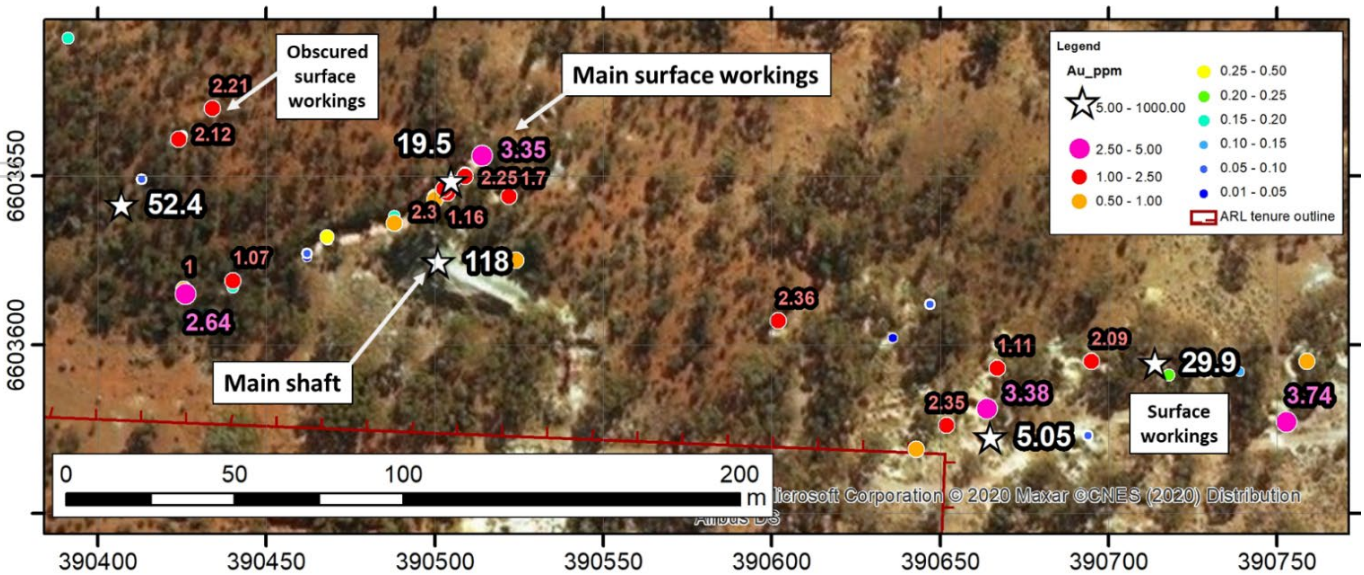

Figure 3 – Rock chip sampling from exposures around the Great Ophir historic gold workings at Taurus. Values are gold grades in grams per tonne (reproduced from ARL ASX announcement, 20 August 2020)

Any Bulong Taurus laterite mine mullock dumps would need to be located south of the gold mine line of lode.

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Other gold workings

In addition to Great Ophir and its deep extensions, the new tenure contains several historic gold occurrences, including Central and Turnpike that have been the focus of historic exploration efforts. Active mining of gold from alluvial, not a part of the acquisition agreement, is also ongoing, highlighting the gold prospectivity of the underlying host rock sequence. These areas will be avoided for any nickel laterite infrastructure requirements.

Authorised for lodgement by the Board of Ardea Resources Limited.

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

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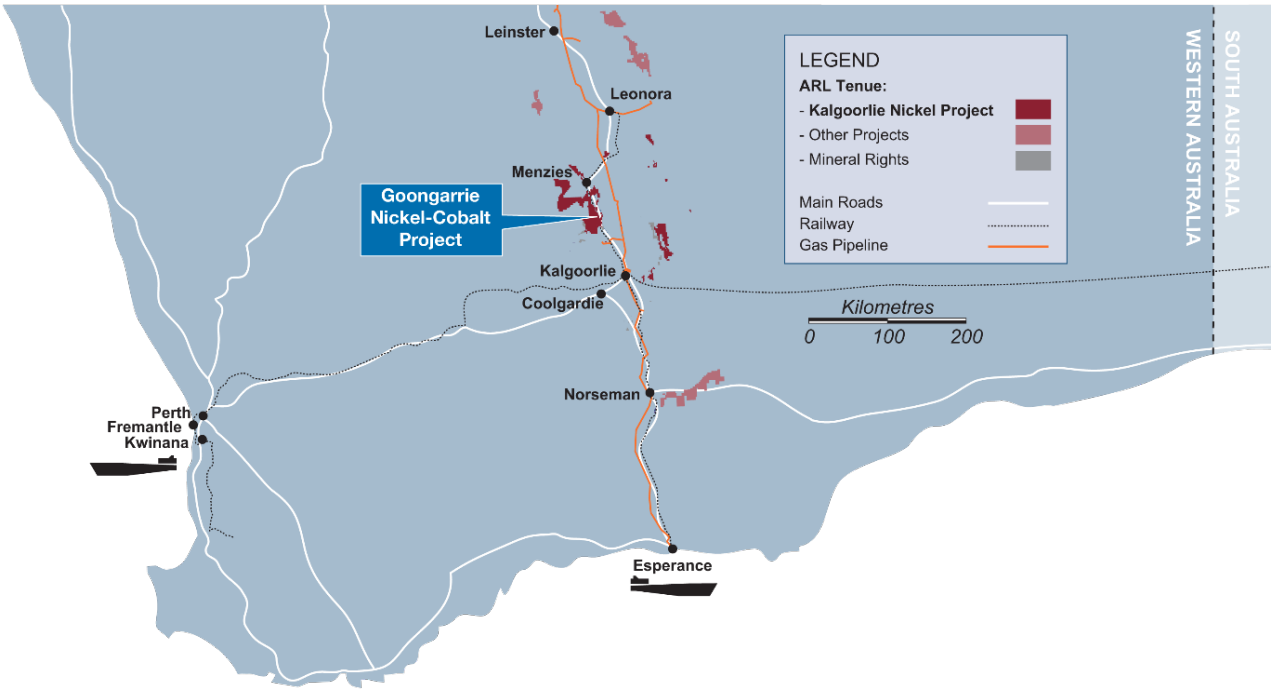
About Ardea Resources

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

- Development of the Kalgoorlie Nickel Project (**KNP**) and its sub-set the Goongarrie Hub, a globally significant series of nickel-cobalt and Critical Mineral deposits which host the largest nickel-cobalt resource in the developed world at **826Mt at 0.70% nickel and 0.046% cobalt for 5.8Mt of contained nickel and 384kt of contained cobalt** (ARL ASX announcement 15 February 2021) located in a jurisdiction with exemplary ESG credentials.
- Advanced-stage exploration at compelling nickel sulphide, Critical Minerals and gold targets within the KNP Eastern Goldfields world-class nickel-gold province, with all exploration targets complementing the KNP nickel development strategy.



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CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

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

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

Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to create and spin-out a gold focussed Company, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

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

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

Competent Person Statement

The technical information in this report relating to Mineral Resources and Exploration Results is based on information compiled by Mr Ian Buchhorn, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Buchhorn is a full-time employee of Ardea and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results. Mr Buchhorn consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr Buchhorn owns shares in Ardea.

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Appendix 1 – List of tenements discussed in this announcement.

Project	Tenement	**Status**	**Area** (km^2)
Lady Charlotte	E24/196	LIVE	4.86
	E24/209	LIVE	0.15
	Total		5.01
Taurus	M 25/19	LIVE	1.09
	P 25/2295	LIVE	0.20
	P 25/2296	LIVE	1.24
	P 25/2297	LIVE	1.21
	P 25/2304	LIVE	1.99
	P 25/2305	LIVE	1.32
	P 25/2306	LIVE	1.89
	P 25/2307	LIVE	1.75
	P 25/2308	LIVE	1.96
	P 25/2408	LIVE	2.00
	P 25/2409	LIVE	0.84
	Total		15.49