



ACN: 614 289 342

Ardea Resources Limited

PROSPECTUS



This Prospectus is:

- for an offer for the issue of up to 30 million New Shares at an issue price of A\$0.20 each to raise up to A\$6 million, with a Minimum Subscription of 17.5 million Shares to raise A\$3.5 million (**Public Offer**) including a priority offer of New Shares to Existing Heron Shareholders (**Priority Offer**);
- for an offer for the sale of up to approximately 5.4 million Shares under the Sale Facility (**Sale Facility Offer**);
- for an offer for the issue of 12,445,028 Options at nil consideration with an exercise price of A\$0.25 and term of three years from date of listing to Heron, the Lead Manager and the Corporate Adviser (**Option Offer**); and
- to satisfy the admission requirements to ASX.



Corporate Directory

Directors

Katina Law (Non-executive Chairman)
Matthew Painter (Managing Director)
Ian Buchhorn (Non-executive Director)

CFO and Company Secretary

Sam Middlemas

Registered and Business Office

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Website

www.ardearesources.com.au

Independent Technical Expert

Xstract Group
Level 10
50 St Georges Terrace
Perth WA 6000 Australia

Lead Manager

Euroz Securities Limited
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58 Mounts Bay Road
Perth WA 6000 Australia
AFSL No. 243302

Corporate Adviser

Azure Capital Limited
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2 The Esplanade
Perth WA 6000 Australia
AFSL No. 276569

Share Registry

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Fax: +61 8 9315 2233

Solicitors to the Offers

Mills Oakley Lawyers
Level 2
225 St Georges Terrace
Perth WA 6000 Australia

Investigating Accountant

Butler Settinieri (Audit) Pty Ltd
Unit 16, Level 1
100 Railway Road
Subiaco WA 6008 Australia

Auditor

Butler Settinieri (Audit) Pty Ltd
Unit 16, Level 1
100 Railway Road
Subiaco WA 6008 Australia

Front cover

From top to bottom:

- Nuggets from Taurus, part of 50 ounces found.
- Flow folding at Mt Zephyr; intense deformation.
- Underlay shaft, Lady Isobel gold mine at Ghost Rocks.
- Prospecting pit at Paul's Find, 42 ounces gold from the pit, again very strong deformation.

Back cover

- Pink rock alteration, Mt Zephyr North diamond drill core, indicating a potentially favourable environment for 'syenite-hosted gold', as at the Jupiter, Wallaby and Sunrise Dam gold mines. Note the 'Wallaby-style' magnetite-epidote alteration.

"Ardea"

a Latin noun for "Heron"
a Latin verb for "soaring"
pronounced in English
"aar-day-ah"



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Project Highlights

- **Strategy**
 - Increase shareholder value through a targeted and intensive exploration program - plan to spend up to A\$5 million mainly on drilling over two years on currently defined targets
 - Focused evaluation of each of the Company's four leading projects to assess and rank development priorities
 - Once ranked, seek to realise shareholder value through strategic corporate opportunities
- **Lewis Ponds gold-zinc project**
 - Main Zone and Tom's Zone JORC resource 6.6Mt at 1.5g/t gold and 2.4% zinc, strong potential to expand the tonnage, including untested up-dip surface oxide gold targets
 - Geological setting comparable to the Regis Resources McPhillamys 2.2Moz gold discovery located along structure 20km southeast
- **Mt Zephyr gold and nickel sulphide project**
 - Gale gold, associated with the domain boundary Celia Lineament, 273ppb gold in soils, 18m at 0.5g/t gold in RAB from surface to RAB refusal, no RC drilling of the central anomaly (700m x 100m RAB anomaly), geological setting comparable to the Dacian Gold Jupiter 'syenite-hosted gold' discovery located along structure 50km southeast
 - Jones Area A and B nickel sulphide, Mt Windarra ultramafic stratigraphy with discrete magnetic highs associated with 'Silver Swan-style' ultramafic channels, no previous RC drill testing or modern deep penetration ground and down-hole EM
- **Bardoc Tectonic Zone and East Kalgoorlie gold projects**
 - Big Four 6m at 8.6g/t gold historic drill-hole, open soil gold anomaly to south
 - Taurus 5m at 38g/t gold historic drill-hole, 50 ounces recent gold nugget discoveries
- **Kalgoorlie Nickel Project**
 - JORC 2012 resource 805Mt at 0.7% nickel and 0.05% cobalt, PFS focussing on high-cobalt resources

Indicative Timetable

Lodgement of Prospectus with ASIC	9 November 2016
Opening Date of the Offers	16 November 2016
Closing Date of the Priority Offer	16 December 2016
Closing Date of the Public Offer	23 December 2016
Effective Date of Distribution	3 January 2017
Issue of Shares under the Prospectus	4 January 2017
Despatch of holding statements	6 January 2017
Quotation of Shares on ASX	9 January 2017

This timetable is indicative only, and may change. The Company reserves the right to extend the Closing Date or close the Offers early without notice, in its absolute discretion. Quotation of Shares on ASX is at the discretion of ASX and is subject to the Company satisfying the listing requirements of ASX.

Key Offer terms and proposed capital structure upon listing

Price per Share	A\$0.20
Consideration Shares to be issued upon satisfaction of the Spin-Off Conditions	41,500,938
Shares offered under the Public Offer	30,000,000
Minimum amount to be raised (before costs) under the Public Offer	A\$3,500,000
Maximum amount to be raised (before costs) under the Public Offer	A\$6,000,000
Shares available under the Sale Facility Offer ¹	5,400,000
Maximum number of Shares on issue following the Public Offer (assuming Maximum Subscription)	71,500,938
Options to be issued as reimbursement of the Heron pre-listing expenses	10,000,000
Options to be issued to the Corporate Adviser and Lead Manager under the Option Offer	2,445,028
Total Options on issue on the Admission Date	12,445,028

¹ Ardea will issue 41,500,938 Shares to Heron in consideration for the Ardea Assets. On 29 September 2016 Heron's Shareholders approved the distribution of these Shares to Heron Shareholders, with the Sale Facility consisting of Shares not distributed to Ineligible Foreign Shareholders. See section 3.14 for details.

Important Notice

This Prospectus is dated 9 November 2016 and was lodged with ASIC on that date. No securities will be issued on the basis of this Prospectus later than 13 months after the date of this Prospectus.

Application will be made for listing of the Company's securities offered by this Prospectus to the ASX within 7 days after the date of this Prospectus. The fact that the ASX may list the securities of the Company is not to be taken in any way as an indication of the merits of the Company or the listed securities.

The ASX takes no responsibility for the contents of this Prospectus, makes no representations as to its accuracy or completeness and expressly disclaims any liabilities whatsoever for any loss howsoever arising from or in reliance upon any part of the contents of this Prospectus. ASIC takes no responsibility for the contents of this Prospectus.

The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Failure to comply with these restrictions may violate securities laws. This Prospectus does not constitute an offer in any place in which, or to any person to whom, it should not be lawful to make such an offer. No person is authorised to provide any information or make any representation in connection with the Offers which is not contained in this Prospectus.

Website – Electronic Prospectus

A copy of this Prospectus is available and can be downloaded from the website of the Company at www.ardearesources.com.au. Any person accessing the electronic version of this Prospectus for the purpose of making an investment in the Company must be an Australian resident and must only access the Prospectus from within Australia. Persons who access the electronic version of this Prospectus should ensure that they download and read the entire Prospectus.

The Corporations Act prohibits any person passing onto another person an application form unless it is attached to a hard copy of this Prospectus or it accompanies the complete and unaltered version of this Prospectus. Any person may obtain a hard copy of this Prospectus free of charge by contacting the Company. If you have received this Prospectus as an electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the application form. If you have not, please contact the Company and the Company will send you, for free, either a hard copy or a further electronic copy of the Prospectus or both.

Suitability of Investment & Risks

Before deciding to invest in the Company, prospective investors should read entirely this Prospectus and, in particular, the summary of the Company's projects in section 3 and the risk factors in section 4. They should carefully consider these factors in the light of their personal circumstances (including financial and taxation issues) and seek professional advice from their accountant, stockbroker, lawyer or other professional adviser before deciding to invest. Any investment in the Shares of the Company should be regarded as speculative.

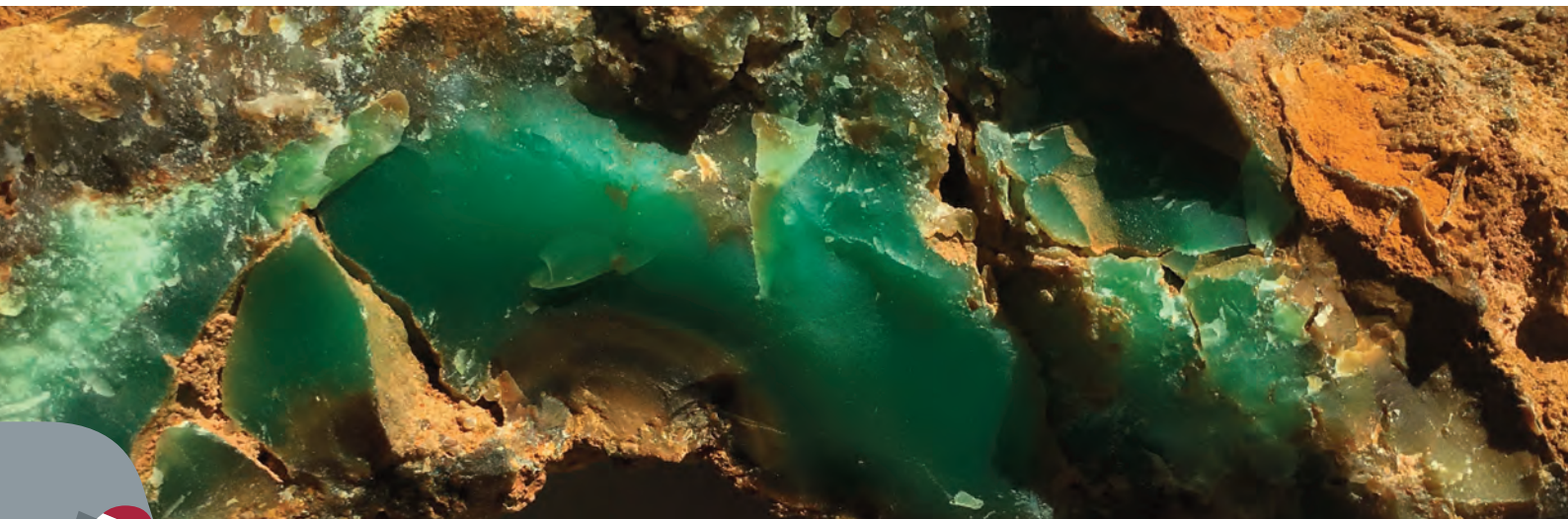
Definitions

Certain terms and abbreviations used in this Prospectus have defined meanings which are explained in the Glossary in section 13.

Exposure Period

This Prospectus is subject to an exposure period of 7 days from the date of lodgement with ASIC. This period may be extended by ASIC for a further period of up to 7 days. The purpose of this exposure period is to enable this Prospectus to be examined by market participants prior to the raising of funds. If this Prospectus is found to be deficient, any applications received during the exposure period will be dealt with in accordance with section 724 of the Corporations Act. Applications received prior to the expiration of the exposure period will not be processed until after the exposure period. No preference will be conferred on applications received in the exposure period and all applications received during the exposure period will be treated as if they were simultaneously received on the opening date.

Below: Chrysoprase is a highly prized green to aquamarine coloured gemstone. The Kalgoorlie Nickel Project contains a large number of chrysoprase occurrences which have previously been mined by small-scale 'tributers'. Ardea will evaluate development options for these occurrences as more modern mechanized operations. (photograph field of view 10cm)



1.0 Chairman's Letter

Dear Investor

On behalf of the Directors of Ardea Resources Limited (**Company** or **Ardea**), I am pleased to invite you to apply for New Shares in Ardea at an issue price of A\$0.20 each under the Offers.

The Company is seeking to raise up to A\$6 million through the issue of up to 30 million New Shares. If you are an Existing Heron Shareholder (being a Heron shareholder with a registered address in Australia or New Zealand as at the date of this Prospectus), you are entitled to participate in the Priority Offer and should use the enclosed blue personalized Priority Application Form to apply for New Shares. You may apply for as many Shares as you wish, subject to availability and Board allocation. If you are not an Existing Heron Shareholder, you may apply for the New Shares using the white Public Application Form attached to this Prospectus.

Ardea has been formed to allow the spin-off of Heron's extensive portfolio of non-Woodlawn exploration and development tenements. Following the positive Woodlawn Project Feasibility Study released in June 2016, Heron Resources has been focused on bringing the Woodlawn Project into development with only limited funding available for exploration. The tenements entrusted to Ardea are of sufficiently high quality to warrant further activity and funding in their own right and the listing of Ardea will ensure that the underlying value of these assets has every opportunity of being realised by Ardea to the benefit of all Shareholders.

Ardea's development focus will be the Lewis Ponds Gold-Zinc project in central NSW and Kalgoorlie Nickel Project in WA (**KNP**). Its exploration focus will be the Mt Zephyr gold and nickel and Bardoc Tectonic Zone/Kalgoorlie East gold projects in the Eastern Goldfields of WA. Ardea has a 100% interest in all of these projects.

The Company plans to drive shareholder value through a targeted drilling program. The data from this exploration will allow the Company to appropriately identify and rank our development priorities. In addition, the Company will assess strategic corporate opportunities that may have the potential to create additional value for all Shareholders.

Development

At **Lewis Ponds**, we have 6.6 million tonnes at 1.5g/t gold and 2.4% zinc with copper, lead and silver credits. Initially the Ardea focus will be two-fold:

- In terms of development, to complete an initial diamond drilling program to obtain metallurgical test material as a precursor to an updated mineral resource estimate. Additionally, shallow RC drilling for oxide gold targets is required up-dip of the known resource.
- In terms of exploration, the McPhillamys 2.2 million ounce gold deposit is located 20km southeast from our southern tenement boundary along the regional Godolphin Fault. Ardea controls some 50km of this structural target northwest to Copper Hill East, representing a premium quality gold exploration target.

At the **KNP**, our focus is to update the mining study and metallurgical flowsheet from the 2014 scoping study to a pre-feasibility level of study. In particular, Ardea will be assessing the cobalt development potential of the cobalt-rich segments of the KNP.

Exploration

Mt Zephyr is particularly exciting, being a close geological analogy of the Dacian Gold Mt Morgans gold project located 50km southeast along strike. Soil and RAB gold anomalies associated with syenite granitoid intrusions and 'donut' magnetic anomalies will be drilled.

Before deciding to invest in the Company, prospective investors should read entirely this Prospectus and, in particular, the summary of the Company's projects in section 3 and the risk factors in section 4.

Whilst the Company's projects have been subject to exploration and, in the case of Lewis Ponds and KNP, resources reported in accordance with the JORC Code, the Company's projects are subject to exploration and development risks, and an investment in the Company is considered speculative.

Ardea will hold a quality portfolio of development and exploration projects with great potential, and I encourage you to read the Prospectus, and invite you to participate as a Shareholder in the Company. We look forward to your support and can assure you of aggressive development and exploration programs. You should also note the 1 for 3 Loyalty Option to be issued at no cost three months after Ardea lists.

Yours faithfully



Katina Law *Chairman*

2.0 Investor Overview

This information is a selective overview only and is not intended to provide full information for investors intending on applying for Shares offered under this Prospectus. Prospective investors should read the Prospectus in full, including the experts' reports in this Prospectus before deciding to invest in Shares.

Question	Response	Section	
Introduction			
Who is issuing this Prospectus?	Ardea Resources Limited (ACN 614 289 342) (Company or Ardea), with respect to the Public Offer, Priority Offer and the Option Offer. Heron Resources Limited (ACN 068 263 098) (Heron) as Ardea’s controller with respect to the Sale Facility Offer.	3.1	
What is Ardea and what does it do?	Ardea was incorporated on 17 August 2016 to explore and develop Heron non-Woodlawn assets.	3.1, 3.2	
What is the Company’s capital structure prior to and following the completion of the Offers?	The Company will issue 41,500,938 Shares to acquire the Ardea Assets (Consideration Shares which will become the In-specie Shares) and on completion of the Offers will have: <ul style="list-style-type: none">up to 71,500,938 Shares on issue; andup to 12,445,028 Options on issue on listing Major shareholder Greenstone Heron Holdings LP will hold 9.2% and Ian Buchhorn and associates will hold 7.9% of the share capital assuming they do not participate in the Offers and the minimum subscription is raised under the Public Offer.	3.11	
What are the various Offers under this Prospectus?	Priority Offer is available to Existing Heron Shareholders (being Heron Shareholders with a registered address in Australia or New Zealand as at the date of this Prospectus).	Up to 30 million Shares. If you are a Heron Shareholder, use the blue Priority Application Form. Existing Heron Shareholders who apply for Shares under the Priority Offer will be allocated Shares offered under the Public Offer in priority to other investors.	10.3
	Public Offer open to any Australia or New Zealand resident.	Offer of between 17.5 and 30.0 million Ardea Shares for subscription which includes the Priority Offer. If you are not an Existing Heron Shareholder, use the white Public Application Form	10.1
	Sale Facility Euroz Securities, as nominee for Heron, are appointed to sell In-specie Shares entitled by Ineligible Foreign Shareholders under the Sale Facility	The sale of approximately 5.4 million Ardea Shares under the Sale Facility. The Sale Facility Offer is included to facilitate the secondary sale of the Shares sold under the Sale Facility.	3.1, 3.13, 10.5
	Option Offer not publicly available, included in the Prospectus for compliance	An offer of up to a total of 12.45 million Options to Heron, Azure Capital and Euroz Securities. The Option Offer is not open to others.	10.15, 10.17
What is the purpose of this Prospectus?	This Prospectus is issued to raise funds under the Public and Priority Offers, to facilitate the Sale Facility Offer and the Option Offer, and for listing on ASX.	10	
Is there a Minimum Subscription?	Yes. Shares will not be issued pursuant to, or transferred under, this Prospectus until the Minimum Subscription of A\$3.5 million is reached and conditional approval has been given by ASX for the Company to be admitted to the Official List.	10.7	



Question	Response	Section
What are In-specie Shares?	Upon satisfaction of the Spin-Off Conditions, Ardea will issue to Heron Resources Limited 41.5 million Shares in consideration for the Ardea Assets. There will be a 1 for 10 distribution of Consideration Shares which will be transferred at no cost to Heron Shareholders who were holders as at 6 October 2016 and who were resident in Australia or New Zealand. Non- resident Ineligible Foreign Shareholders will have their pro rata entitlement sold on their behalf under the Sale Facility and the net proceeds (if any) paid to them.	3.1, 3.13, 3.14
Will Loyalty Options be issued?	Yes. Ardea will undertake a bonus issue of Loyalty Options at no cost to all Ardea Shareholders on a record date approximately 3 months from the date Ardea is admitted to the Official List. One Option will be issued for every three Ardea Shares held. Exercise price will be the greater of A\$0.25 or a 25% premium to the 5-day VWAP 3 months after listing. Options will expire 12 months after issue. Under the Demerger Implementation Agreement Ardea will issue Heron options on the same terms as the Loyalty Options.	3.12
<i>Our Strategy and Projects</i>		
What is the Company's strategy?	The Company's strategy is to: <ul style="list-style-type: none"> • Increase shareholder value via a targeted and intensive exploration program by spending up to A\$5 million over two years on drilling of currently defined targets • Focused evaluation of Company projects to assess and rank development priorities • Seek to realise shareholder value through strategic corporate opportunities 	3.1
Lewis Ponds, Lachlan Fold Belt of New South Wales	Located on the domain boundary Godolphin Fault 20km NW along strike of the 2.2Moz McPhillamys gold resource, the Lewis Ponds resource is 6.6Mt at 1.5g/t Au and 2.4% Zn. Ardea controls some 50km of the mineralised Godolphin Fault structure, with mineralised centres from southeast to northwest including Mt Nicholas, Tom's, Main Zone, Mt Shorter and Calula.	3.3
Mt Zephyr, Eastern Goldfields of Western Australia	Located on the domain boundary Celia Lineament, 50km NW along strike from the Dacian Gold (ASX:DCN) Mt Morgans Westralia BIF and Jupiter syenite gold resources of 3.3Moz. Drill-ready targets at Gale with 250ppb Au soil anomaly with 18m at 0.5g/t Au from surface in RAB and Mt Zephyr BIF with 3km strike of historic gold shafts, and minimal previous RC drilling at Gale granitoid and Mt Zephyr BIF.	3.4
Bardoc Tectonic Zone, Eastern Goldfields of Western Australia	Located on the gold-endowed Bardoc Tectonic Zone between Broad Arrow and Menzies, several historic gold mining centres require drill-testing, notably at Big Four with previous RC drill intercepts up to 6m at 8.6g/t gold and at Ghost Rocks with rock chip samples up to 5.3g/t gold.	3.5
Kalgoorlie Nickel Project, Eastern Goldfields of Western Australia	Located 40-150km north and east of Kalgoorlie, the KNP is a world-significant undeveloped nickel-cobalt laterite resource of 805Mt at 0.7% nickel and 0.05% cobalt. Ardea's initial focus will be high grade cobalt zones at Goongarrie South and Black Range.	3.6
<i>Financial</i>		
How will the funds be used?	The Company intends to use the funds raised under the Offers to: <ul style="list-style-type: none"> • undertake further development and exploration to advance projects towards feasibility. The Company will focus on Lewis Ponds in NSW and Mt Zephyr, Taurus and the KNP in WA; and • complete prospectivity ranking of all projects and look to deal as required. 	3.8
What material contracts has Ardea entered into?	Ardea has entered the following material contracts: <ul style="list-style-type: none"> • Demerger Implementation Agreement with Heron under which the parties have transferred tenements and mineral rights (both directly and through wholly owned subsidiaries) and granted pre-emptive rights over each other's current tenements for a term of two years after listing (four years for the Lewis Ponds project); • Corporate Advisory & Lead Manager Mandate; and • Executive Service Agreement with Managing Director Matthew Painter. 	3.9, 5
What are the tax implications of investing in New Shares?	The tax consequences of any investment in New Shares will depend upon an investor's particular circumstances. Applicants should obtain their own tax advice prior to deciding to invest.	11.2
Will the Company pay dividends?	The Company's focus will be on mineral exploration through which capital growth is expected to be generated. As the Company is a mineral exploration company and is not generating revenue, Ardea is unlikely to declare or distribute dividends in the near term.	3.16

Question	Response	Section
Key risks		
<p>There are a number of risks associated with investing in the share market generally and in the Company specifically. The following is a summary of the key risks that may affect the financial position of the Company, the value of an investment in the Company, as well as the Company's operations. Full details of these risks are set out in section 4 of this Prospectus.</p> <p>Please consider the risks described below and the information contained in other sections of this Prospectus. You should also consider consulting with your professional advisers before deciding whether or not to apply for New Shares.</p>		
Non-renewal of title	<p>Under both New South Wales and Western Australian law, exploration tenements are valid for set periods of time and renewal is subject to the approval of the respective State Minister. There is no guarantee that Ardea will be successful in the renewal of exploration tenements as they reach their expiry date, though statutory mechanisms exist to extend title.</p> <p>If tenements are not renewed, Ardea may suffer damage through loss of the opportunity to discover and/or develop any mineral resources on these tenements.</p>	4.1(a)
Management	Ardea's management presently consists of two non-executive Directors and a Managing Director. Prior to appointing the full-time management team, the Managing Director will manage Ardea's exploration programs.	4.1(b)
Limited exploration	<p>Aside from Lewis Ponds and the KNP, the projects have been subjected to only limited drill testing. Whilst gold and/or nickel mineralisation as the case may be has been located in multiple previous drill intersections, there is a risk that the mineralisation in adjacent drill holes is not continuous between drill holes. There is also a risk that the presently completed drill holes may not be representative of the overall mineralisation present. Further drill tests are required to determine if mineralisation extends further beyond the geometry as defined in current drill patterns.</p> <p>There is no guarantee that if exploration extends the current resources that they will be capable of sustaining commercial development.</p>	4.1(c)
Resource estimates	Resource estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates, which were valid when made, may change significantly when new information becomes available. In addition, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. Should Ardea encounter mineralisation different from that predicted by past sampling and drilling, resource estimates may have to be adjusted and mining plans may have to be altered in a way which could have either a positive or negative effect on Ardea's operations.	4.1(d)
Exploration and operating risks	<p>The business of mineral exploration, project development and mining by its nature contains elements of significant risks. The current and future operations of Ardea, including exploration, appraisal, development and possible production activities may be affected by a range of exploration and operating factors.</p> <p>Whether or not income will result from projects undergoing exploration and development programs depends on the successful establishment of mining operations. Factors including costs, integrity of mineralisation, consistency and reliability of ore grades and commodity prices affect successful project development and mining operations.</p>	4.1(e), 4.3
Native Title	<p>The Native Title Act 1993 (Cth) recognises and protects the rights and interests in Australia of Aboriginal and Torres Strait Islander people in land and waters, according to their traditional laws and customs. There is significant uncertainty associated with Native Title in Australia and this may impact on Ardea's operations and future plans.</p> <p>Ardea must also comply with Aboriginal heritage legislation requirements which require heritage survey work to be undertaken ahead of the commencement of exploration and mining operations.</p>	4.4
General risks	Economic risks, commodity prices, environment, mining tax and royalties, contract risk or encumbrances on title, funding and unforeseen risks exist in all mineral-based endeavours.	4.1, 4.2



Question	Response	Section
Directors and Management		
Who are the Directors of the Company and what benefits are being paid to Directors	Katina Law Non-executive Chairman Remuneration A\$60,000 pa Matthew Painter Managing Director Remuneration A\$250,080 pa Ian Buchhorn Non-executive Director Remuneration A\$40,000 pa	5
Who is the management of the Company?	Matthew Painter Management, corporate and technical Sam Middlemas CFO and Company Secretary	5.2
Will Employee Options be issued at some future date?	The Company has established the Ardea Incentive Plan to provide an opportunity to eligible participants to participate in the Company's future growth and provide an incentive to contribute to that growth.	3.15
Miscellaneous		
How do I apply for Shares?	If you are an Existing Heron Shareholder (namely a Heron shareholder with an Australian or New Zealand registered address as at the date of this Prospectus) you can apply for New Shares under the Priority Offer. Applications under the Priority Offer must be made using the enclosed blue personalized Priority Application Form and will be given priority in the allocation of Shares offered under this Prospectus. If you are not an Existing Heron Shareholder , applications for New Shares under the Public Offer must be made by completing the white Public Application Form attached to this Prospectus in accordance with the instructions relating to it.	10.2-10.6
What is the Priority Offer?	Existing Heron Shareholders can apply for Shares through the Priority Offer. It is intended that as many Existing Heron Shareholders as possible will receive at least the minimum allocation of Shares (being 10,000 Shares or A\$2,000) under the Priority Offer however there is no guarantee that all Existing Heron Shareholders who subscribe for Shares through the Priority Offer will have their Applications accepted in full. The Directors will allocate Shares at their discretion. Existing Heron Shareholders who would like to subscribe for Shares are encouraged to submit their blue personalised Priority Application Form as soon as possible. New Shares not subscribed and Applications from Existing Heron Shareholders not accepted by the Company under the Priority Offer will be available for subscription under the Public Offer. The Priority Offer closes earlier than the Public Offer to facilitate this process.	10.3
Is there a limit as the number of Shares able to be applied for by Existing Heron Shareholders?	No. Existing Heron Shareholders may apply for as many Shares as they wish, up to 30 million Shares, but the number allocated will depend upon the level of demand and how early the Priority Application Form is received. As always, final allocation will be at the discretion of the Ardea Board.	10.3
What is the Sale Facility?	Ardea has agreed to issue approximately 41.5 million Shares to Heron to acquire Heron's non-Woodlawn assets (Consideration Shares). In conjunction with the Company's listing on ASX, Heron has obtained shareholder approval to distribute these Shares free of charge to its shareholders on a pro rata basis. To comply with foreign laws, Ineligible Foreign Shareholders will have their Consideration Shares (totalling approximately 5.4 million) sold and the net proceeds paid to them. The Lead Manager has been appointed to conduct the sale under the Sale Facility. To comply with the Corporations Act, Consideration Shares available through the Sale Facility are offered under this Prospectus.	3.14
Are the Offers underwritten?	No, the Offers are not underwritten.	10.9
What are the expenses of the Offers and who is paying for them?	Assuming the Public Offer is fully subscribed, the total cost of the Offers (including fundraising costs, expert's fees, legal and accounting costs, ASIC and ASX fees) is estimated to be approximately A\$900,000 in total, of which approximately A\$500,000 is pre-listing expenses that are being paid by Heron (and reimbursed through the issue of 10 million Options to Heron).	10.19
Where will the Shares be quoted?	An application will be made to ASX for quotation of the Shares. Ardea has reserved the trading symbol 'ARL'.	10.10
How can I obtain further advice?	By speaking to your accountant, stockbroker or other professional adviser. If you require assistance or copies of the Prospectus, please contact the Company on +61 8 6500 9200.	

3.0 Company and Project Overview

3.1 Introduction

On 10 August 2016, Heron announced its intention to restructure its non-Woodlawn asset portfolio in New South Wales (NSW) and Western Australia (WA), with a focus on gold and nickel exploration and development, through the proposed listing of Ardea on ASX.

Ardea holds or will hold rights to Heron's Kalgoorlie Nickel Project and other non-Woodlawn portfolio of assets; which includes the following leading projects:

- (a) Lewis Ponds, New South Wales;
- (b) Mt Zephyr, Eastern Goldfields of Western Australia;
- (c) Bardoc Tectonic Zone, Eastern Goldfields of Western Australia; and
- (d) Kalgoorlie Nickel Project

(together, the **Ardea Assets**).

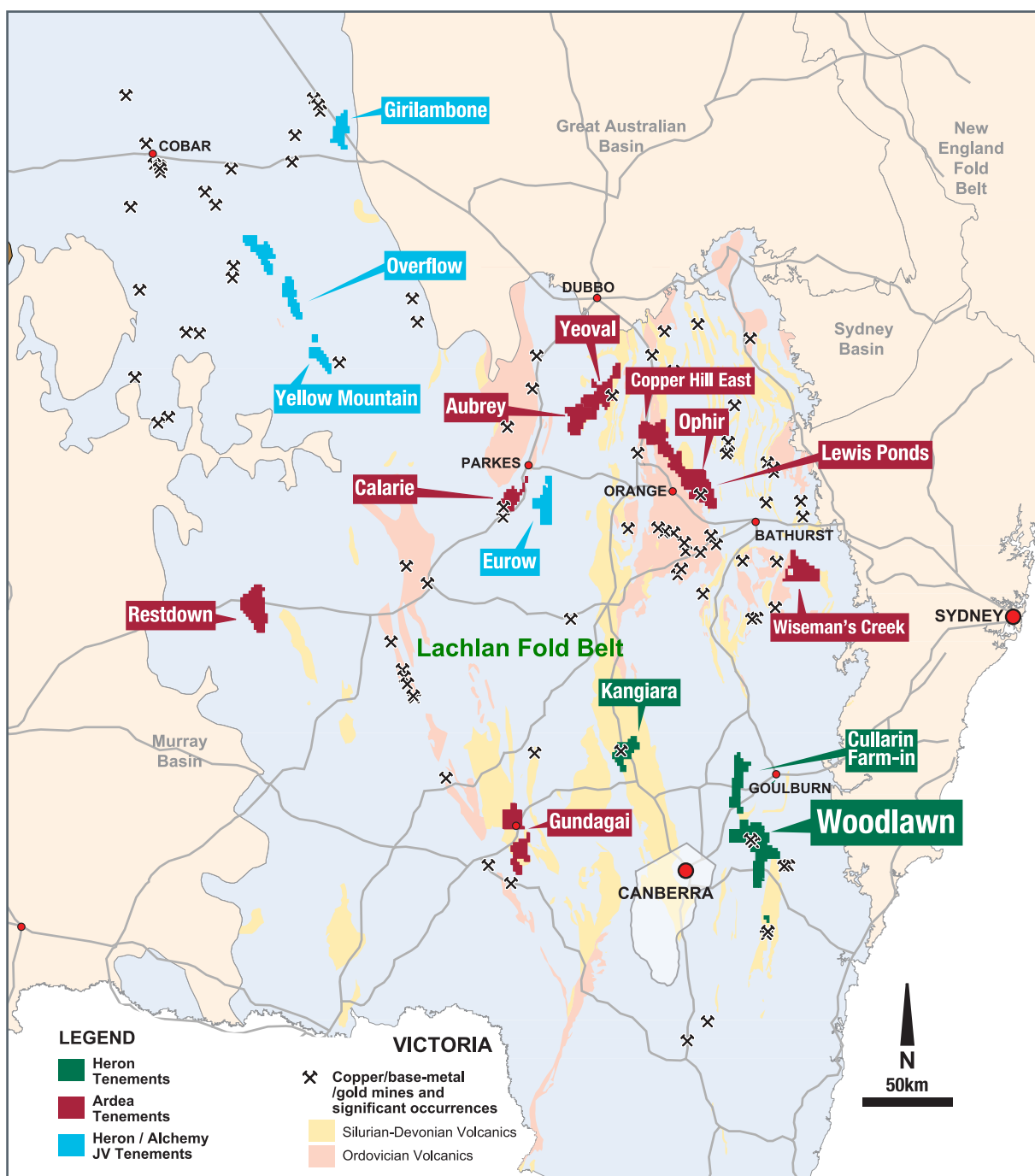


Figure 1 Ardea Resources Limited, Project Locations, Lachlan Fold Belt of NSW, also showing retained Heron tenure



Ardea plans to increase shareholder value by spending up to A\$5 million from funds raised under this Prospectus on an intensive exploration program over the two years following listing, including in excess of 20,000 metres of drilling. As set out in section 3 and 6, the Company has identified a number of targets on which it will immediately commence work following the listing. During the first 12 months, the Company will use the new exploration data collected to identify and rank the development priorities for the Company. In addition, the Company will continually assess strategic corporate opportunities that may have the potential to create additional value for all Shareholders.

Ardea will issue 41,500,938 Shares to Heron in consideration for the Ardea Assets (**Consideration Shares**). The Consideration Shares will be transferred as a 1 for 10 distribution at no cost to Heron Shareholders who were holders as at 6 October 2016 (**In-specie Shares**). Heron Shareholders with a registered address in Australia or New Zealand will receive Shares whilst Heron Shareholders with a registered address outside Australia or New Zealand will have their Shares sold and will receive net proceeds from the sale if any.

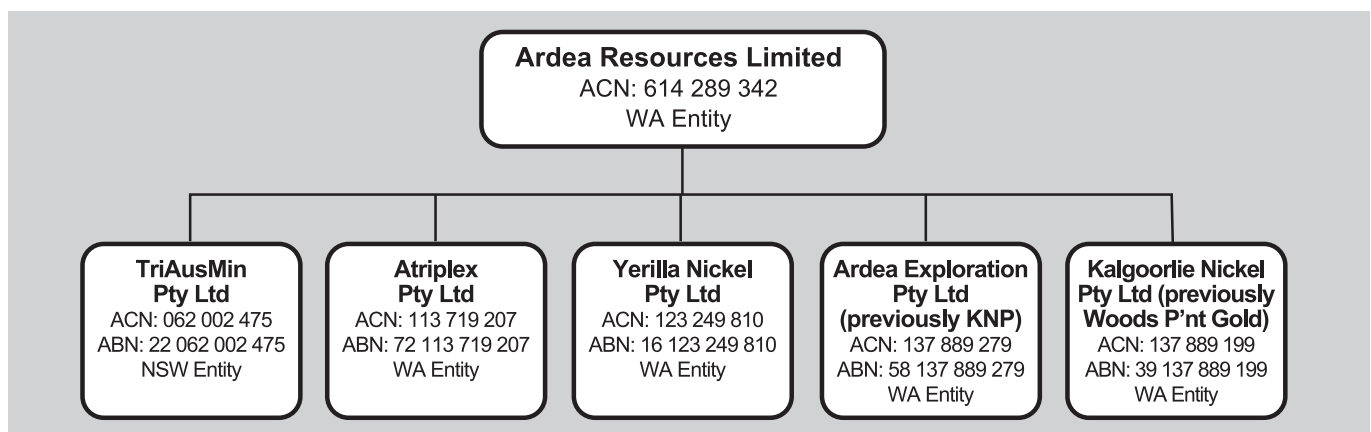
On 29 September 2016 Heron's shareholders approved the distribution of the Consideration Shares to Heron Shareholders on the record date of 6 October 2016 (**Spin-Off**).

To comply with applicable laws, Consideration Shares will not be distributed to Ineligible Foreign Shareholders. Instead, a sale facility has been established under which these Shares will be sold and the net proceeds paid to the Ineligible Foreign Shareholders (**Sale Facility**).

Further information on the Spin-Off and treatment of Ineligible Foreign Shareholders are set out in sections 3.13 and 3.14.

3.2 Corporate structure of Ardea following the Spin-Off

The corporate structure of the Company upon listing will be as follows:



Ardea will secure beneficial ownership of all assets, including tenements owned by these subsidiaries.

3.3 Lewis Ponds, Lachlan Fold Belt, New South Wales

(a) Description, Location and Access

Lewis Ponds is located 15km east of Orange in central NSW in a region of well-established mining infrastructure (Cadia-Ridgeway mining centre). The main project is within granted EL5583 and is 100% Ardea-owned. Access is good, with extensive road networks servicing cleared agricultural land.

Details of the tenements which together comprise Lewis Ponds, together with Ardea's interest and encumbrances are set out in the Solicitors' Report on Tenements (section 9).

(b) History

The district of Lewis Ponds has had a long history of mining with the discovery of gold in the 1850s and open pit and shallow underground mining during the period 1887 to 1921.

The Lewis Ponds district has been subject to modern exploration by several well-credentialed companies following its recognition as a VMS setting by the Shell Company of Australia in the 1980s. Tri Origin Australia NL discovered and delineated the current deposit in the early to mid-1990s.

(c) Geological Setting, Mineralisation and Deposit Types

Lewis Ponds is within a Volcanogenic Massive Sulphide (**VMS**) province in the eastern Lachlan Fold Belt (**LFB**), hosted by N-S trending Silurian-aged felsic volcanic rifts with deposits including from south to north Stockmans, Captains Flat, Woodlawn, Cullarin and Lewis Ponds.

Specifically, the Lewis Ponds property lies within a belt of Silurian-aged felsic volcanics and associated sedimentary rocks including limestone breccias on the western margin of the Hill End Trough sub-basin.

Regis Resources' McPhillamys gold project, which hosts 73.2Mt at 0.94g/t Au for 2.21Moz, is located some 20km southeast along strike from the southern tenement boundary, with the gold-hosting-structure and soil gold anomalism trending into the Ardea tenure along the Godolphin Fault.

In addition to VMS base metal targets, Ardea controls some 50km of the favourable McPhillamys gold-hosting Godolphin Fault structure from Lewis Ponds in the southeast to Copper Hill East in the northwest.

The Lewis Ponds deposit consists of two stratabound, disseminated to massive sulphide lenses, Main Zone and Tom's Zone, which occur in a sequence of steeply dipping, tightly folded and faulted volcanics. The deposit is highly deformed with mineralisation extending over a strike length of more than 2km.

The Ophir Gold prospect is located in the northeast project area and has a profusion of historic gold workings. Systematic evaluation is required.

The Copper Hill East prospect includes porphyry copper-gold targets at Mystery 3km NE from Copper Hill along structure, and McPhillamys-style gold hosted by Silurian-aged felsic volcanics at the Calula Mines.

(d) Mineral Resource and Mineral Reserve Estimates

TriAusMin Limited (which was acquired by Heron in August 2014) announced a JORC Code 2004 resource estimate on 6 October 2005 with an updated JORC 2012 resource completed in October 2016.

The independently estimated Mineral Resource at Lewis Ponds reported in accordance with JORC Code is divided into resources from two zones, Main Zone and Tom's Zone.

The cut-off grade applied to the calculation of Lewis Ponds Mineral Resources was 3.0% zinc equivalent (ZnEq). The following 2005 metal prices were used to calculate zinc equivalent values applied to the Kriged Mineral Resource estimate.

Zinc	1240	USD/t	or	56.2	US Cents/lb
Copper	2860	USD/t	or	129.7	US Cents/lb
Lead	900	USD/t	or	40.8	US Cents/lb
Gold	430	USD/oz		Silver	6.75 USD/oz

The ratio of these metal prices are similar to present prices, meaning the 3.0% ZnEq cut-off grade used is still relevant. Details of the Mineral Resources for the Lewis Ponds project are as follows:

Lewis Ponds Project Mineral Resources

Reported at a 3% ZnEq lower cut-off grade

Resource Category	Quantity (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Cu (%)	Pb (%)
Indicated						
Main Zone	5.82	1.5	59	2.1	0.1	1.1
Tom's Zone	0.54	1.7	172	5.5	0.3	3.8
Total Indicated	6.35	1.5	68	2.4	0.2	1.4
Inferred						
Main Zone	0.17	0.9	47	1.7	0.1	0.8
Tom's Zone	0.10	1.4	174	5.0	0.2	3.6
Total Inferred	0.27	1.1	96	3.0	0.1	1.9
Total Mineral Resource	6.62	1.5	69	2.4	0.2	1.4

Further information on Lewis Ponds is set out in the Technical Assessment Report.

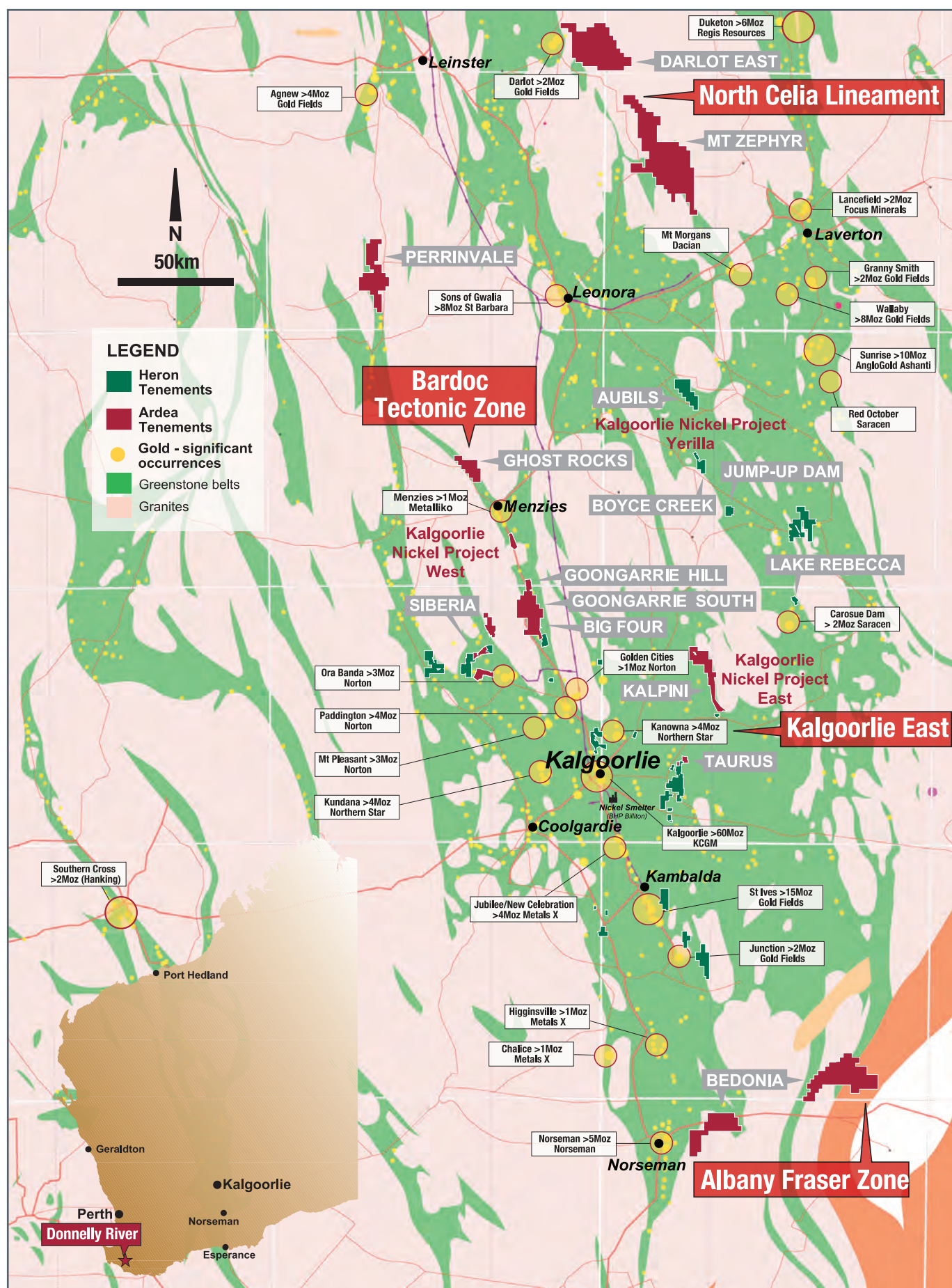
This information was prepared and first disclosed under the JORC Code 2004 and has now been independently updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

(e) Program and Budget

Subject to the amount raised through the Offers, an A\$1.4 million two year program is proposed at Lewis Ponds, including 3,100m of diamond drilling, 1,600m of RC drilling and 3,000m of RAB drilling, and importantly, metallurgical piloting. The RC drilling will in part evaluate the up-dip oxidized projection of the ore body, which is currently largely untested.



Figure 2 Ardea Resources Limited, Project Locations, Eastern Goldfields of WA also showing retained Heron tenure



3.4 Mt Zephyr, Eastern Goldfields of Western Australia

(a) Description, Location and Access

The Mt Zephyr prospects are located 60km NNE of Leonora in WA. The project area has excellent mining infrastructure with well established milling capability (Sunrise Dam and Darlot). The main gold and nickel prospects are within granted Exploration Licences and are 100% Ardea-owned.

The tenure covers the northwestern strike extension of Dacian Gold's Mt Morgans tenure in association with the Celia Lineament. Gold camps are located from 50km SE and are mainly hosted by granitoid (Jupiter, Wallaby, Sunrise Dam) and Banded Iron Formation (**BIF**) (Mt Morgans, Lancefield).

Details of the tenements which together comprise Mt Zephyr, together with Ardea's interest, encumbrances and risk factors are set out in the Solicitor's Report on Tenements (section 9).

(b) History

Nord Resources explored the historic Mt Zephyr shaft workings for gold in BIF and Aurora Gold/Newcrest Mining explored for granitoid-hosted gold. Heron has explored for VMS base metals since last acquiring tenure in 2012.

(c) Geological Setting, Mineralisation and Deposit Types

Mt Zephyr has major historic underground shaft gold workings associated with the northern strike extension of Dacian Gold's Mt Morgans BIF. Limited drilling in the 1980s by Nord Resources only sampled the BIF lodes, with assaying stopping in ore grade. Collars in general were too close to the old workings so drilling failed to test below the surface depleted regolith:

- MZP4 33-34m 1m at 2.45g/t Au BIF at porphyry contact

Significantly, RAB drilling regional soil gold anomalies in the Mt Zephyr project at the Gale prospect in the 1990s by Aurora Gold intersected 0.5 to 3.12g/t Au which were considered sub-economic grades at prevailing low gold prices (Gale has comparable grades to material that would now be included in Dacian Gold's Jupiter resource model).

Historic 1990s Gale prospect RAB drill intercepts by Aurora Gold include:

- MZR4 0-18m 18m at 0.51g/t Au sericitic granitoid
- MZR19 0-18m 18m at 0.48g/t Au sericitic granitoid
- MZR49 0-6m 6m at 1.26g/t Au sericitic granitoid

Limited RC drilling by Newcrest Mining restricted to the extreme northern part of the Gale prospect returned consistent 0.1-0.7g/t Au assays.

The Gale intercepts have not been adequately followed up, and represent walk-up drill targets. In particular, recent exploration by Ardea has confirmed the eastern contact of the Gale granitoid has higher grade gold of up to 1.5g/t Au hosted by gossanous quartz veins rather than granitoid.

The observed level of gold anomalism in shallow drilling and float samples, combined with the demonstrated hematite-epidote altered syenite intrusive association at Mt Zephyr North, confirms a high priority 'Jupiter-style' exploration target. In particular, the 'donut'-shaped circular magnetic low anomaly between Paul's Find and Mt Zephyr North is an untested high priority drill target.

(d) Mineral Resource and Mineral Reserve Estimates

The historic drilling requires in-fill RC drilling programs to be suited to resource estimation. These programs are planned following the listing of Ardea.

(e) Program and Budget

Subject to the amount raised through the Offers, an A\$1.4 million two year program is proposed, including 2,100m of diamond drilling, 5,700m of RC drilling and 4,000m of RAB drilling.



3.5 Bardoc Tectonic Zone, Eastern Goldfields of Western Australia

(a) Description, Location and Access

The Bardoc Tectonic Zone (**BTZ**) Big Four to Ghost Rocks prospects are located from Bardoc 60km north of Kalgoorlie to Ghost Rocks 150km north of Kalgoorlie in the Eastern Goldfields of WA.

The project straddles the Kalgoorlie to Menzies Highway and is based upon the Kalgoorlie Nickel Project tenure.

The tenure covers the Walter Williams Formation komatiite (host of the KNP nickel laterite) at its eastern contact with the Siberia Komatiite. This contact has pervasive gold endowment, with the main gold mining centres from south to north including Paddington, Broad Arrow, Bardoc, Big Four/Aphrodites, Goongarrie, Lady Shenton/Menzies and Ghost Rocks.

Details of the tenements which together comprise the Bardoc Tectonic Zone, together with Ardea's interest, encumbrances and risk factors are set out in the Solicitor's Report on Tenements (section 9).

(b) History

Heron acquired its KNP nickel laterite tenure within the BTZ tenements from 1997, from which time gold exploration effectively ceased (resulting in a large strategic parcel of ground which simply has never been subject to the modern gold exploration 'boom' which has discovered extensive mineralisation on the BTZ since the 2000s).

(c) Geological Setting, Mineralisation and Deposit Types

Big Four-Goongarrie is a line of historic gold shafts occurring over a 300m strike length. Heron undertook limited drilling at Big Four in 2012, with drill hole BFRC028 intersecting 6m at 8.6g/t Au from 125m within a north plunging shoot in intermediate porphyry intruding ultramafic (BFRC0028 was the deepest lode hole within the lode shoot, 140m deep).

Goongarrie Hill adjoins the historic Goongarrie gold mines located to the immediate east. Recent sampling has identified target zones for follow up.

Ghost Rocks has several substantial historic underground gold mines at Lady Isobel which require drill appraisal. Recent exploration by Ardea has confirmed up to 5.3g/t Au in mine mullock quartz vein stockworks. Of particular interest, the projected line of lode extends northwest beneath soil cover along the shores of Lake Ballard, with the recessive weathering of otherwise prominent ridge lines suggesting enhanced alteration.

(d) Mineral Resource and Mineral Reserve Estimates

There is minimal historic drilling which is not suited to gold resource estimation. The requisite drill programs are planned following the listing of Ardea.

(e) Program and Budget

Subject to the amount raised through the Offers, an A\$0.6 million two year program, including 800m of diamond drilling and 400m of RC drilling, is proposed. This program will facilitate initial prospect ranking.



Facing north along the line of lode, collapsed stopes on old Big Four gold workings, note the sub-vertical massive white quartz reef in the lower left of photograph, hosted by yellow-brown clay altered diorite

3.6 Kalgoorlie Nickel Project, Eastern Goldfields of Western Australia

(a) Description, Location and Access

The Kalgoorlie Nickel Project (**KNP**) prospects are located from Bardoc to Ghost Rocks 60-150km north of Kalgoorlie, and 40-60km east of Kalgoorlie from Bulong to Kalpini, all in the Eastern Goldfields of WA.

The project has excellent mining infrastructure and resources are mainly within granted Mining Leases. The tenements are currently 100% Heron-owned, with Ardea acquiring either full mineral or nickel-cobalt laterite rights.

The tenure covers the Walter Williams Formation komatiite which is the main host of the KNP nickel-cobalt laterite.

Under the Demerger Implementation Agreement, there are two types of Ardea tenure for the KNP Tenements:

- (i) Tenure where all mineral rights are owned 100% unencumbered by Ardea, being the BTZ and Kalgoorlie East projects.
- (ii) Tenure where Ardea has the right to acquire nickel-cobalt and all other non-gold-silver rights, with Heron retaining gold-silver rights by virtue of pre-existing agreements or undertakings:
 - Under a Tenement Sale and Rights Agreement signed on 20 October 2016, Heron has agreed to sell its Siberia and Black Range tenure (except for M24/757) to Eastern Goldfields Ltd but will retain the right to explore, mine and process nickel and associated minerals on these tenements. Heron has agreed to assign its mineral rights in the Siberia and Black Range tenure to Ardea;
 - Heron has a 20% free-carried joint venture interest in the Southern Gold (ASX:SAU) Bulong project. Ardea has a first right of refusal over this Heron tenure;
 - Heron has agreed to divest its Yerilla tenure to a third party, but still retains certain rights, with Ardea having a first right of refusal over those rights; and
 - Heron has provided an option for a third party to farm-in for precious metal rights on its Lake Rebecca tenure, with Ardea having a first right of refusal over those rights.

Certain tenements in the KNP consist of tenement applications or are currently held by either Heron or its various subsidiaries other than Ardea. Under the Demerger Implementation Agreement, Ardea has the right to acquire nickel-cobalt laterite rights on these tenements (either directly or through wholly owned subsidiaries). See section 3.9(a) for details.

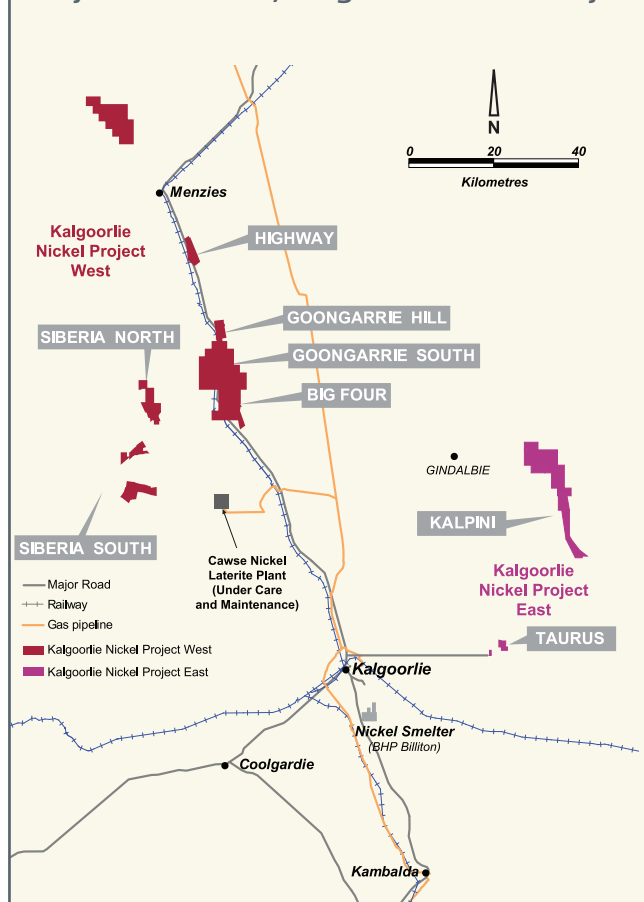
Details of the tenements which together comprise the KNP, together with Ardea's interest and encumbrances are set out in the Solicitor's Report on Tenements (section 9).

(b) History

Vale Inco farmed in to the KNP between 2005 and 2009, spending A\$34.5 million to deliver a Pre-Feasibility Study (**PFS**) that included some 95,000 metres of drill data, a JORC 2004-compliant Mineral Resource estimate, and detailed geo-metallurgy modelling.

Vale Inco concluded that a High Pressure Acid Leach (**HPAL**) was the preferred flowsheet for developing the KNP and modelled a 2.50 million tonnes per annum (**Mtpa**) leach feed flow sheet with pre-production capital costs of A\$2.1 billion for 22.2 thousand tonnes per annum (**ktpa**) nickel production in a Mixed Hydroxide Product (**MHP**), operating costs of US\$4.54/lb of nickel (refer Heron ASX announcement dated 8 April 2014). The Vale Inco study was of a very high quality and has provided the key data for subsequent studies.

Figure 3 Ardea Resources Limited, Project Locations, Kalgoorlie Nickel Project



Heron (with consultants) in 2010 developed an optimised HPAL flow-sheet with 3.75Mtpa leach feed sourced from high grade beneficiable ore, pre-production capital costs of A\$2.8 billion for 36.7ktpa nickel production in MHP and operating costs of US\$4.17/lb of nickel (refer Heron ASX announcement dated 8 April 2014).

Both Vale Inco (2009) and Heron (2010) only accessed ore from four of the 15 separate KNP deposits, confirming the potential due to the extensive resource base for longer mine-lives and more aggressive screen rejection of barren silica fragments to increase the nickel-cobalt leach feed grades.

Because of the significant capital costs associated with HPAL technology, Heron's more recent focus has been to investigate alternative flow sheets for the potential development of the KNP which have lower capital intensity (refer below in *Mineral Processing and Metallurgical Testing*).

(c) Geological Setting, Mineralisation and Deposit Types

The tenure covers Walter Williams Formation olivine adcumulate lithologies in the BTZ and Siberia, and olivine mesocumulate lithologies and komatiite at Kalgoorlie East and Yerilla.

Mineral Processing and Metallurgical Testing

Simulus Engineers in July 2013 with its related company Carbon Friendly Nickel Production (**CFNP**) undertook sulphuric acid-based hydrometallurgical testwork on various KNP ore-types. The Simulus technology seeks to change the KNP economics through the recycling of a large component of the sulphuric acid, thereby reducing the amount of neutralizing agents required in nickel-cobalt hydrometallurgical processing.

Initial bench-scale testwork on three representative samples from KNP deposits showed nickel recoveries of between 94-97% for clay-rich and saprolite ore types and 85% for the iron-rich limonite ore types. Acid recoveries for initial bench-scale tests were up to 70%, combining membrane recovery, iron sulphate hydrolysis and magnesium sulphate calcining. The 2014 Scoping Study examined the flow-sheet characteristics for a 10ktpa commercial scale nickel-cobalt production plant, utilizing Atmospheric Leaching and acid recovery technology (refer Heron ASX announcement dated 8 April 2014).

Simulus in April 2014 estimated process plant capital from its 'off-the-shelf' supplier responses. Heron generated non-plant costs by scaling down the 2010 KNP capital estimates (from the Heron PFS Optimization, typically applying a factor of 0.45 based on a generally accepted industry scaling formula).

For the base case 10ktpa of nickel production, the estimated capital intensity was US\$14.54/annual pound of nickel production, which is a 'step-change' improvement in the overall KNP economics.

(d) Mineral Resource and Mineral Reserve Estimates

The total KNP Mineral Resource is approximately 805Mt at 0.70% Ni and 0.05% Co (JORC 2012) (ASX announcement October 2016, Heron 2016 Annual Report).

(e) Program and Budget

Ardea will undertake the following further feasibility work on the KNP, particularly focusing on cobalt-rich resources at Goongarrie South and Black Range:

- Up-scaling of the 2014 study from 10ktpa to 20ktpa to assess the impact of economies of scale on both operating costs and capital costs, including a revised mining plan and estimates for mining capital and operating costs;
- Additional bench-scale acid leach tests will be carried out on the mining inventory identified in the up-scale study on the full range of KNP ore types, aiming to better characterize geo-metallurgical performance under atmospheric leaching conditions; and
- Ardea will commence partner studies, seeking a partner to commercialize the 'KNP Optimized Flowsheet'.

An A\$1.0 million, two year Pre-Feasibility Study is proposed by Ardea, consisting of testing beneficiation, leaching, acid and metal recovery, designing a mining schedule, updating engineering and studies on environment, tailings, hydrology and heritage. It is anticipated that the study, by virtue of the innovative style of technologies being evaluated, would qualify for some degree of Commonwealth Government R&D reimbursement (assumed net expenditure for indicative budget is A\$0.6 million).

3.7 JORC disclosure

Heron has previously reported pursuant to JORC Code 2004 and JORC Code 2012 including the information required in relevant sections of Table 1 of the JORC Code as follows:

1. Lewis Ponds – TriAusMin Limited 6 October 2005, 31 July 2015 (Heron June 2015 Quarterly Report), October 2016 (Heron 2016 Annual Report) and 31 October 2016 (Heron September 2016 Quarterly Report)
2. Mt Zephyr – 10 August 2016
3. Bardoc Tectonic Zone – 13 March 2012, 26 June 2012 and 24 July 2012
4. Kalgoorlie East – 6 March 2014, 28 March 2014, 28 April 2014 (Heron March 2014 Quarterly Report)
5. KNP – 21 October 2013, 31 July 2014, 28 August 2015 (Heron 2015 Annual Report) and October 2016 (Heron 2016 Annual Report)
6. Ardea miscellaneous exploration projects – 23 June 2014, 10 August 2016, October 2016 (Heron 2016 Annual Report)

The 'Scheme Booklet, for a scheme of arrangement implementing the proposed merger between TriAusMin Limited (ASX:TRO TSX:TOR) and Heron Resources Limited (ASX:HRR)' dated 6 June 2014, provided comprehensive JORC disclosure for the Lewis Ponds, Calarie, Gundagai, Mt Zephyr, KNP, Kalgoorlie East - Kalpini and Bedonia projects.

Descriptions of the contents of the JORC Tables 1 (which is primarily of interest to professional analysts or advisors or investors with similar specialist information needs) are contained in the section 6 Independent Technical Report, and copies have been lodged with ASIC so that the contents are taken, by reason of section 712 of the Corporations Act, to be included in this Prospectus. Copies are available from www.asx.com.au or www.heronresources.com.au. Alternatively, Ardea will provide copies of these documents free of charge to anyone who requires them during the application period under the Prospectus.

3.8 Use of funds raised under the Offers

The proposed use of funds raised under the Offers is as follows.

Description	Minimum Subscription (A\$'000)	Maximum Subscription (A\$'000)
<i>Available funds</i>		
Funds to be raised under the Prospectus	3,500	6,000
Total funds available	3,500	6,000
<i>Expenditure</i>		
Lewis Ponds (feasibility)	750	1,400
Mt Zephyr (exploration)	530	1,400
Bardoc Tectonic Zone Gold (exploration)	500	600
Kalgoorlie Nickel Project (feasibility)	600	600
Other projects (exploration)	600	800
Advisory and equity raising fees of the Offers	275	400
Business development, transaction expenses	0	400
Overheads	245	400
Total expenditure	3,500	6,000

The cost of the Offers (excluding corporate advisory and lead manager fees payable to Azure Capital Limited and Euroz Securities Limited) is estimated to be approximately A\$500,000 and has been or will be paid by Heron, and which will be reimbursed through the issue of 10,000,000 Options to Heron. Details of the cost of the Offers are set out in section 10.19.

In the event that more than the Minimum Subscription is raised, the net funds are intended to be equally applied to the Lewis Ponds and Mt Zephyr projects, with KNP fixed at A\$0.6 million after potential R&D credits.

The use of funds set out above represents Ardea's current intentions based upon the present plans and business conditions. The amounts and timing of the actual expenditures may vary significantly and will depend upon numerous factors, including the timing and success of Ardea's exploration and development efforts.



3.9 Material Contracts

Ardea is a party to the following material contracts:

(a) Demerger Implementation Agreement

Heron and Ardea have entered into an implementation agreement under which they agree as follows:

- (i) The parties will fully co-operate and take all reasonable steps to implement the proposed listing of Ardea on ASX, including by doing all things reasonably necessary so that the Ardea Assets are held (whether directly or through wholly owned subsidiaries) by Ardea.
- (ii) Ardea will issue Heron 41,500,938 Shares in consideration for the transfer of the Ardea Assets to Ardea (which has occurred).
- (iii) Heron has agreed to pay approximately A\$500,000 to be used to implement the proposed listing of Ardea on ASX and meet current tenement holding costs on Tenements listed in section 9 up until Ardea lists. Amounts advanced will be reimbursed upon Ardea's listing on ASX through the issue of 10 million Options to Heron (exercise price of A\$0.25 and three year term).
- (iv) For a period of 2 years following Ardea's listing on ASX (and 4 years for Heron on the New Ardea Lewis Pond Tenements and New Ardea Woodlawn Tenements as those terms are defined in the agreement), each party has the pre-emptive right to acquire any tenements the subject of this agreement (on the same terms as any proposed sale, transfer, assignment or dealing) together with an opportunity to acquire any tenement the subject of this agreement proposed to be relinquished by a party, by paying A\$1,000 to cover administrative costs to acquire the relinquished tenement.
- (v) Heron has agreed to assign its mineral rights for the Siberia and Black Range tenure to Ardea. Those rights allow Ardea to explore for nickel (including all forms of nickel and associate minerals and all other co-elements that are naturally occurring components of nickel ore).

(b) Corporate Advisory & Lead Manager Mandate

Ardea has appointed Azure Capital Limited (**Azure**) and Euroz Securities Limited (**Euroz**) as Ardea's Corporate Adviser and Lead Manager respectively to provide all assistance necessary to achieve a successful listing of Ardea on ASX, including the raising of capital (**Capital Raising**).

Azure will be paid a corporate advisory fee of A\$100,000 in cash or Shares at Azure's election. Euroz will be paid a 1% management fee on the total gross proceeds raised pursuant to the Capital Raising and a 4% equity raising fee payable on the total gross proceeds raised pursuant to the Capital Raising, excluding any funds invested by any Existing Heron Shareholders.

Ardea will issue each of Azure and Euroz Options equal in number to 1.50% of the fully diluted share capital of Ardea on issue at the time of listing, exercisable at a 25% premium to the Public Offer issue price with an expiry date three years from the listing date with two year's escrow applying to the Options and any Shares issued pursuant to Option exercise.

(c) Executive Service agreement

See section 5.3 for a summary of the Executive Service Agreement entered into with Managing Director Matthew Painter.

(d) EL 5583 is subject to a finder's fee, payable to geologist David Timms, following commencement of production, or sale of the EL, capped at A\$2 million. The fee is based on one third of proceeds from sale of the EL, or 1/3 of net profits from production, or 30% of any royalties received from production.

3.10 Sufficiency of working capital

The Directors are of the opinion that the Company will have sufficient working capital to carry out its business objectives as described in this Prospectus.

3.11 Capital structure

Ardea's pro forma capital structure following completion of the Offers (and based on shareholdings in Heron as at 10 October 2016) will be as follows:

Shares	Current		Minimum Subscription		Maximum Subscription	
	Number	%	Number	%	Number	%
Greenstone Heron Holdings	5,413,166	13.0	5,413,166	9.2	5,413,166	7.6
Ian Buchhorn direct & indirect	4,679,096	11.3	4,679,096	7.9	4,679,096	6.5
Other Heron Shareholders	25,971,966	62.6	25,971,966	44.0	25,971,966	36.3
Ineligible Foreign Shareholders	5,436,711	13.1	5,436,711	9.2	5,436,711	7.6
Shares issued under the Offers	N/A	N/A	17,500,00	29.7	30,000,000	42.0
Total Shares	41,500,938	100	59,000,938	100	71,500,938	100

Options	Current		Minimum Subscription		Maximum Subscription	
	Number	%	Number	%	Number	%
Heron	n/a	n/a	10,000,000	82.8%	10,000,000	80.4%
Azure	n/a	n/a	1,035,014	8.6%	1,222,514	9.8%
Euroz	n/a	n/a	1,035,014	8.6%	1,222,514	9.8%
Total Options following the Offers ¹	n/a	n/a	12,070,028	100.0%	12,445,028	100.0%

¹ See section 10.17 for terms and conditions of Options under the Option Offer.

This assumes the Spin-Off is effected and no Shares are acquired by Heron Shareholders under this Prospectus (including Ian Buchhorn).

Details of Directors' holdings are set out in section 5.4.

As at the date of this Prospectus, the Company does not have any other class of securities on issue.

3.12 Loyalty Options

After the successful completion of the Offers and Ardea's listing on ASX, the Company intends to offer Shareholders one free Loyalty Option for every three Shares held at an exercise price of the higher of A\$0.25 or 25% premium to the 5-day VWAP with a 12 month expiry date. The offer of the Loyalty Options will be made under a separate prospectus which will be provided to eligible shareholders with a record date to be set three months from Ardea's listing on ASX. The Company will send eligible shareholders a copy of the prospectus containing the offer of Loyalty Options shortly after the record date. Pursuant to ASIC Corporations (Options: Bonus Issues) Instrument 2016/77, an application form will not accompany the prospectus. Eligible shareholders will be issued the number of Loyalty Options that they are entitled to without the need to complete an application form.

Under the terms of the Options to be issued to Heron in reimbursement for the costs of the Offers, Heron is also entitled to be issued one additional option on the same terms of the Loyalty Options for every three Options Heron holds on the record date for the Loyalty Options issue.



3.13 Spin-Off

Ardea will issue 41,500,938 Shares (**Consideration Shares**) to Heron in consideration for the Ardea Assets.

On 29 September 2016 Heron's Shareholders approved the distribution of these Shares on a pro rata basis to Heron Shareholders (**Distribution**).

The Consideration Shares will be transferred as a 1 for 10 distribution at no cost to Heron Shareholders who were holders as at 6 October 2016 (the **In-specie Shares**).

The Distribution remains conditional upon the following (together, the **Spin-Off Conditions**):

- (a) receipt of a draft class ruling from the Australian Taxation Office confirming the availability of Demerger Relief (which has occurred);
- (b) Ardea receiving subscriptions for Shares for the Minimum Subscription of A\$3.5 million;
- (c) Ardea obtaining a conditional admission letter from ASX on terms satisfactory to Ardea's Directors, acting reasonably; and
- (d) final approval by Heron's directors.

There is no certainty that the above conditions will be satisfied. In the event the Spin-Off Conditions are not met then the listing of Ardea on ASX will not proceed and all Application Monies received will be returned to applicants without interest.

3.14 Treatment of Ineligible Foreign Shareholder entitlements

To comply with relevant local laws where they reside, Heron Shareholders on 6 October 2016 with an address outside Australia or New Zealand (**Ineligible Foreign Shareholders**) will have their pro-rata entitlement to Consideration Shares (**In-specie Shares**) sold by the Lead Manager (as nominee for Heron) through a share sale facility (**Sale Facility**) and the net proceeds paid to the Ineligible Foreign Shareholder. The offer for sale of Shares under the Sale Facility is made under this Prospectus.

The Lead Manager has been appointed as Heron's nominee in relation to the Sale Facility.

Shareholders with a registered address outside Australia or New Zealand have the following options under the Sale Facility:

- (a) Ineligible Foreign Shareholders who wish to retain their In-specie Shares will need to complete and return a Share Retention Form (which was sent to all Ineligible Foreign Shareholders after 6 October 2016) to Heron's share registry. In this case, their In-specie Shares will be transferred to these shareholders at no cost through the Sale Facility, subject to the holder warranting that the transfer complies with all applicable laws. Should you require a replacement Share Retention Form, please telephone the Company on +61 8 6500 9200 (Australia) or +1 64 7862 1157 (Canada) or email ardea@ardearesources.com.au.
- (b) Have their In-specie Shares sold – the Lead Manager will attempt to sell In-specie Shares for which Ineligible Foreign Shareholders do not choose Option (a) above (and instead do nothing), and account to these Ineligible Foreign Shareholders (or their intermediary, such as an investment dealer, bank or other financial institution, where an Ineligible Foreign Shareholder's Heron shares are held by the intermediary) for the net proceeds.

The Lead Manager, as Heron's nominee, will attempt to sell Ardea Shares under the Sale Facility either:

- (c) under this prospectus and in conjunction with the Public Offer, in which case the sale price under the Sale Facility will be A\$0.20 per Share; or
- (d) following Ardea's listing on ASX, as soon as reasonably practicable at such prices and on such other terms as the Lead Manager determines in its absolute discretion (acting in good faith and with the objective to achieve the best price reasonably obtainable having regard to factors such as the prevailing market conditions), and at the risk of the Ineligible Foreign Shareholder, provided that:
 - (i) In-specie Shares sold off-market are sold at a price that is no less than A\$0.20, being the price at which Shares will be offered under the Public Offer; and
 - (ii) In-specie Shares sold on-market will be offered in the ordinary course of trading on ASX.

In addition, the Lead Manager will use reasonable endeavours to ensure that the price at which it sells In-specie Shares (whether on or off-market) is consistent with an orderly market and ordinary commercial practice. The Lead Manager, subject to the above, will have absolute discretion to determine the timing and price at which the In-specie Shares may be sold and the manner of any such sale. There is no guarantee that the Lead Manager will be able to sell the Shares of Ineligible Foreign Shareholders on ASX or at all.

Sale proceeds will be calculated on an average basis so that all Ineligible Foreign Shareholders will receive the same price for each In-specie Share sold on their behalf, subject to rounding down to the nearest whole Australian cent.

If the In-specie Shares under the Sale Facility are sold on-market, the sale price of these In-specie Shares and, therefore, the sale proceeds to be received by each Ineligible Foreign Shareholder, cannot be guaranteed, as the market price of Shares will fluctuate over time. Shareholders will be able to obtain information on the market price of Shares on the ASX's website (www.asx.com.au) following Ardea's listing on ASX.

The sale proceeds (less 1% brokerage fee of the value of the In-specie Shares sold), if any, will be remitted to each Ineligible Foreign Shareholder by:

- (i) direct credit to the nominated bank account as notified to Heron's share register; or
- (ii) where an account has not been provided, by cheque sent by mail to the Ineligible Foreign Shareholder's address as shown on Heron's share register,

and in any event no later than eight weeks following Ardea's listing on ASX.

Heron, Ardea and the Lead Manager take no responsibility for the outcome of the sale of Ineligible Foreign Shareholder's In-specie Shares or the inability to sell such shares.

On 17 October 2016, Heron sent to each Ineligible Foreign Shareholder a letter asking them how they elect to proceed under the Sale Facility.

Heron has applied to ASIC for certain relief to conduct the Sale Facility.

3.15 Employee Share and Option Plan

The Company has established the Ardea Incentive Plan (**Incentive Plan**) to provide an opportunity to eligible participants to participate in the Company's future growth and provide an incentive to contribute to that growth. The Incentive Plan is further designed to assist in attracting and retaining employees.

Subject to prior shareholder approval, Directors are entitled to participate in the Incentive Plan. No invitations have been as yet issued under the Incentive Plan. The Directors do not currently participate in the Incentive Plan, but may do so in the future. The extent of any future participation in the Incentive Plan is unknown.

A summary of the terms of the Incentive Plan is set out below:

- (a) The Company must obtain Shareholder approval under the Listing Rules and/or the Corporations Act before the participation under the Incentive Plan of any eligible participant who is a Director of or otherwise a related party of the Company.
- (b) Subject to the Corporations Act and the Listing Rules, the Board may at such times as it determines, issue invitations (in such form as the Board decides from time to time) to eligible participants, inviting applications for a grant of incentive securities up to the number specified in the invitation (**Specified Securities**) and specifying an acceptance period.
- (c) The number of Specified Securities will be determined by the Board in its absolute discretion.
- (d) Awards granted under the Incentive Plan (**Awards**) will be granted free of charge.
- (e) The Board may impose performance criteria for the vesting of Specified Securities.
- (f) The Board may in its absolute discretion determine the general terms of the Awards subject to the Corporations Act, the Listing Rules and the Company's Constitution.
- (g) In the event of a takeover bid for the Company, any Awards granted to an eligible participant will vest where, in the Board's absolute discretion and subject to the Listing Rules, pro rata performance is in line with the performance conditions applicable to those Awards. In addition, in the event of a court-ordered arrangement or compromise, a compulsory acquisition following a takeover bid or the winding up of the Company, the Board may, in its absolute discretion, determine that some or all of an eligible participant's Awards vest if pro rata performance is in line with the performance conditions applicable to those Awards.
- (h) Where a participant ceases to be an employee of the Company, that participant's Awards will continue to be held by the participant (or by his or her estate as representative) and continue to be subject to the terms of the Incentive Plan except that any continuous service condition will be deemed to have been waived.
- (i) However, prior to or within 60 days after a participant ceases to be an employee of the Company, the Board may determine (in its absolute discretion) that some or all of a participant's Awards will:
 - (i) vest or become exercisable;
 - (ii) are only exercisable for a prescribed period and will otherwise lapse;
 - (iii) continue to be subject to some or all of the performance conditions; or
 - (iv) lapse on the date of cessation of employment.



- (j) Unless otherwise determined by the Board, the exercise price of each Specified Security will be a minimum of the market value of a Share when the Board resolves to offer the securities.
- (k) An invitation or offer of incentive securities may only be made under the Incentive Plan if the number of Shares that may be acquired when aggregated with:
 - (i) the number of Shares which would be issued if each outstanding offer or Award, being an offer made or option or performance right acquired pursuant to the Incentive Plan or any other employee share scheme was to be accepted or exercised; and
 - (ii) the number of Shares issued during the previous 3 years pursuant to the Plan or any other employee share scheme, but disregarding any offer made, or Award acquired or Share issued, by way of or as a result of:
 - (iii) an offer to a person situated outside of Australia at the time of receipt of the offer; or
 - (iv) an offer which did not require disclosure to investors under the Corporations Act; or
 - (v) an offer made under a disclosure document (within the meaning under the Corporations Act),
 does not exceed 5% of the total number of issued Shares of the Company as at the time of the invitation or offer.

3.16 Dividend policy

The Company does not intend to pay dividends on securities for the financial year ending 30 June 2017.

As the Company is a mineral exploration company and is not currently mining, generating revenue or making profits, the Directors do not anticipate that Ardea will declare or distribute dividends in the period the subject of the program and budget proposed in this Prospectus.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and the rules of the relevant securities exchange. However, where possible, the Directors intend to adopt a policy of declaring the highest possible rates of dividends after taking into account factors such as the availability of distributable earnings, the operating results and financial condition of the Company, future capital requirements, general business and other factors considered relevant by the Directors.

3.17 Company tax status and financial year

The Company will be taxed in Australia.

From the next financial year, the financial year of the Company will end on 30 June annually.

3.18 Litigation

Legal proceedings may arise from time to time in the course of the Company's business. As at the date of this Prospectus, the Company or its subsidiary or its controlled entities are not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against the Company, its subsidiary or its controlled entities.



4.0 Risk Factors

An investment in the Company is not risk free. Before deciding to apply for the Shares, Shareholders and interested investors should read the entire Prospectus, consider at least the following risk factors in light of their personal circumstances and investment objectives (including financial and taxation issues) and seek professional advice from their accountant, stockbroker, lawyer or other professional adviser.

The operating and financial performance and position of the Group, the value of Shares and the amount and timing of any dividends that the Company may pay will be influenced by a range of factors. Many of these factors will remain beyond the control of the Group and the Directors. Accordingly, these factors may have a material effect on the Group's performance and profitability which may cause the market price of Shares to rise or fall over any given period.

This section identifies the areas the Directors regard as major risks associated with an investment in the Company. This list is not intended to be an exhaustive list of the risk factors to which the Group is exposed.

4.1 Specific Risks

Ardea's exploration projects represent the main business activity and focus of Ardea. Risks specific to these projects and Ardea's circumstances include the following:

(a) Non-grant or non-renewal of title

A number of Ardea's Tenements are subject to application or renewal, the details of which are set out in the Solicitors' Report. In particular, the Mt Zephyr project consists of 8 tenements, of which 6 are subject to grant. Of these, 3 are subject to objection, and require an access agreement with the holders of prior infrastructure tenements.

There is a risk that Ardea may not acquire or retain title to these Tenements.

Under both New South Wales and Western Australian law, exploration tenements are valid for set periods of time and renewal is subject to the approval of the respective State Minister. There is no guarantee that Ardea will be successful in the renewal of exploration tenements as they reach their expiry date, though statutory mechanisms exist to extend title.

If in future Tenements are not extended, Ardea may suffer damage through loss of the opportunity to discover and/or develop any mineral resources on these Tenements.

(b) Management

Ardea's management presently consists of two non-executive Directors and a Managing Director. Prior to appointing the full-time management team, the Managing Director will manage Ardea's exploration programs.

(c) Limited exploration

Aside from Lewis Ponds and the KNP, Ardea's projects have been subjected to only limited drill testing. Whilst gold and/or nickel mineralisation as the case may be has been located in multiple previous drill intersections, there is a risk that the mineralisation in adjacent drill holes is not continuous between drill holes. There is also a risk that the presently completed drill holes may not be representative of the overall mineralisation present. Further drill tests are required to determine if mineralisation extends further beyond the geometry as defined in current drill patterns. There is no guarantee that if exploration extends the current resources that it will be capable of sustaining commercial development.

(d) Resource estimates

Resource estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates, which were valid when made, may change significantly when new information becomes available. In addition, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. Should Ardea encounter mineralisation different from those predicted by past sampling and drilling, resource estimates may have to be adjusted and mining plans may have to be altered in a way which could have either a positive or negative effect on Ardea's operations.



(e) Exploration and Operating Risks

The current and future operations of Ardea, including exploration, appraisal, development and possible production activities may be affected by a range of exploration and operating factors, including:

- (i) geological conditions;
- (ii) limitations on activities due to seasonal or adverse weather patterns;
- (iii) alterations to program and budgets;
- (iv) unanticipated operational and technical difficulties encountered in geophysical surveys, drilling, metallurgical laboratory work and production activities;
- (v) mechanical failure of operating plant and equipment, industrial and environmental accidents, acts of terrorism or political or civil unrest and other force majeure events;
- (vi) industrial action, dispute or disruptions;
- (vii) unavailability of transport or drilling equipment to allow access and geological and geophysical investigations;
- (viii) unavailability of suitable laboratory facilities to complete metallurgical testwork investigations;
- (ix) failure of metallurgical testing to determine a commercially viable product;
- (x) shortages or unavailability of manpower or appropriately skilled manpower;
- (xi) unexpected shortages or increases in the costs of consumables, spare parts, plant and equipment;
- (xii) prevention or restriction of access by reason of inability to obtain consents or approvals; and
- (xiii) Certain of Ardea's tenements are subject to agreements with third parties which limit the commodities that Ardea may exploit on these tenements; with third parties having certain rights. Whilst Ardea does not consider these limitations to be unduly onerous, there is a risk that these restrictions may not be in Ardea's best interests or that the third parties may, in asserting their rights over Ardea's tenements, not act in Ardea's best interests.

(f) Commodity Prices

Ardea may derive some of its future revenue from the sale of commodity products, or from the sale of either intermediate or fully-separated products. Consequently, any earnings will be closely related to the price of these commodities together with the terms of any off-take agreement(s) under which Ardea's products may be sold.

Commodity prices fluctuate and are affected by numerous factors beyond the control of Ardea. These factors include worldwide and regional supply and demand for the specific commodity, prevailing commodity trading terms, general world economic conditions and the outlook for interest rates, inflation and other economic factors on both a regional and global basis. These factors may have a positive or negative effect on Ardea's exploration, project development and production plans and activities, together with the ability to fund those plans and activities. Furthermore, some products are not traded upon terminal, liquid, commodity exchanges. There is a risk therefore that Ardea may not be able to secure an attractive price for its commodity products.

(g) Environment

The projects are subject to Western Australian, New South Wales and Federal laws and regulations regarding environmental matters and the discharge of hazardous wastes and materials. As with all mining projects, the projects would be expected to have a variety of environmental impacts should development proceed. In particular, the Donnelly River project application covers areas of private land and state forests. There is a risk that owners' rights and environmental requirements may restrict or prevent Ardea from carrying out its exploration activities.

Ardea intends to conduct its activities in an environmentally responsible manner and in accordance with applicable laws and industry standards. Areas disturbed by Ardea's activities are rehabilitated as required by applicable laws.

(h) Mining Tax and Royalties

There is a risk that the Commonwealth, New South Wales or Western Australian Governments may seek to introduce further, or increase existing, taxes and royalties.

(i) Encumbrances on Title

Ardea may at a future date be required to encumber part or all of its tenure to expedite future commercial transactions.

(j) Funding

At the date of this proposed listing of Ardea on ASX, Ardea has no income producing assets and will generate losses for the foreseeable future. Until it is able to develop a project and generate appropriate cashflow, Ardea is dependent upon being able to obtain future equity or debt funding to support long term exploration, after the expenditure of the net proceeds raised under the proposed listing of Ardea on ASX. Neither Ardea nor any of the Directors nor any other party can provide any guarantee or assurance that if further funding is required, such funding can be raised on terms acceptable to Ardea.

Any additional equity funding will dilute existing Shareholders. Also, no guarantee or assurance can be given as to when a project can be developed to the stage where it will generate positive cashflow. As such, a project would be dependent on many factors, for example exploration success, subsequent mine development, commissioning and operational performance.

Should it choose in future to enter joint ventures, Ardea may not be able to earn or maintain proposed equity interests in its tenements if it fails to meet the ongoing expenditure commitments. Accordingly, Ardea may potentially lose entitlement or rights to interests in tenements and projects where ongoing expenditure commitments are not met.

(k) Unforeseen Risks

There may be other risks which the Directors are unaware of at the time of issuing this Prospectus which may impact on Ardea and its operations, and on the valuation and performance of Ardea's Shares.

(l) Contract Risk

The Company has contractual rights, such as its rights to nickel and gold in relation to the Siberia and Black Range tenure, pursuant to a Tenement Sale and Rights Agreement between Heron Resources Limited, Atriplex Pty Limited and Eastern Goldfields Limited. The Directors are unable to predict the risk of:

- (i) financial failure or default of a party to a contract to which the Company is a related party;
- (ii) insolvency or managerial failure of a party to a contract to which the Company is a party;
- (iii) activities, operations or lack thereof that jeopardise the good standing or underlying tenure to which the contract rights of the Company relate;
- (iv) mechanical, commercial or operating failures of a party to a contract to which the Company is a party which lead to a reduction in value of the Company's rights.

The occurrence of such an event may result in litigation, loss or variation of the contractual rights or alterations to the plans of the Company, which may, in turn, adversely affect the Company's operations.



4.2 General Economic Risks and Business Climate Risks

Share market conditions may affect the listed securities regardless of operating performance. Share market conditions are affected by many factors such as:

- (a) general economic outlook;
- (b) movements in or outlook on interest rates and inflation rates;
- (c) currency fluctuations;
- (d) commodity prices;
- (e) changes in investor sentiment towards particular market sectors; and
- (f) the demand and supply for capital.

Commodity prices are influenced by physical and investment demand for those commodities. Fluctuations in commodity prices may influence individual projects in which Ardea may have an interest.

4.3 Exploration, Development, Mining and Processing Risks

The business of mineral exploration, project development and mining by its nature contains elements of significant risk. Ultimate and continuing success of these activities is dependent on many factors such as:

- (a) the discovery and/or acquisition of economically recoverable ore reserves;
- (b) successful conclusions to feasibility studies;
- (c) access to adequate capital for project development;
- (d) design and construction of efficient mining and processing facilities within capital expenditure budgets;
- (e) securing and maintaining title to tenements and compliance with the terms of those tenements;
- (f) obtaining consents and approvals necessary for the conduct of exploration and mining; and
- (g) access to competent operational management and prudent financial administration, including the availability and reliability of appropriately skilled and experienced employees, contractors and consultants.

Adverse weather conditions over a prolonged period can adversely affect exploration and mining operations and the timing of revenues.

Whether or not income will result from projects undergoing exploration and development programs depends on the successful establishment of mining operations. Factors including costs, integrity of mineralisation, consistency and reliability of ore grades and commodity prices affect successful project development and mining operations.

Mining is an industry which has become subject to increasing legislative regulation including but not limited to environmental responsibility and liability. The potential for liability is an ever present risk. The use and disposal of chemicals in the mining industry is under constant legislative scrutiny and regulation. The introduction of new laws and regulations or changes to underlying policy may adversely impact on the operations of Ardea.

4.4 Native Title Risks

The Native Title Act 1993 (Cth) recognises and protects the rights and interests in Australia of Aboriginal and Torres Strait Islander people in land and waters, according to their traditional laws and customs. There is significant uncertainty associated with Native Title in Australia and this may impact on Ardea's operations and future plans.

Native Title can be extinguished by valid grants of land or waters to people other than the Native Title holders or by valid use of land or waters. It can also be extinguished if the indigenous group has lost their connection with the relevant land or waters. Native Title is not extinguished by the grant of mining leases, as they are not considered to be grants of exclusive possession. A valid mining lease prevails over Native Title to the extent of any inconsistency for the duration of the title.

For tenements to be validly granted (or renewed) after 23 December 1996 the special 'right to negotiate' regime established by the Native Title Act must be followed.

It is important to note that the existence of a Native Title claim is not an indication that Native Title in fact exists to the land covered by the claim, as this is a matter ultimately determined by the Federal Court.

Ardea must also comply with Aboriginal heritage legislation requirements which require heritage survey work to be undertaken ahead of the commencement of exploration and mining operations.

5.0 Directors and Corporate Governance

5.1 Directors

Ardea's Board consists of the following:

- (a) Katina Law (Non-executive Chairman) (BCom, CPA, MBA, GAICD) (appointed 7 November 2016)

Katina Law has over 25 years' experience in the mining industry covering corporate and site based roles across several continents. Over the past ten years she has worked with a number of ASX listed resources companies in strategic financial advisory and general management roles. She has worked on a number of development and evaluation projects which were later subject to corporate transactions including the Deflector gold and copper project and the King Vol polymetallic zinc project. Ms Law was Executive Director and CEO of East Africa Resources Limited from 2012 to 2015. Ms Law has also held senior positions at Newmont Mining Corporation's head office in Denver, USA producing the company's financial plans and providing financial information and analysis to the Board of Directors and the Executive Committee. She held the position of New Business Development Executive at LionOre International based in Perth where she was responsible for the financial assessment of development projects. Ms Law has a Bachelor of Commerce degree from UWA, is a Certified Practising Accountant and has an MBA from London Business School. She is a currently a non-executive Director of headspace and Gumala Enterprises Pty Ltd. Ms Law has no other public company directorships.



- (b) Matthew Painter (Managing Director) (BSc (Hons), PhD) (appointed 7 November 2016)

Matthew Painter is a geologist with over 20 years' professional experience including SRK Consulting, Sabre Resources, AngloGold Ashanti, Geological Survey of WA and MIM Exploration. His expertise is in ore deposit geology and structural geology, and his work has been instrumental in the successful discovery, exploration, and development of greenfields and brownfields deposits globally. Dr Painter has extensive on-ground experience throughout Australia and overseas including east, west, and southern Africa, central and south-eastern Asia, and South America, across a broad range of commodities including gold, copper, zinc-lead-silver, uranium, tin and manganese. Dr Painter has extensive managerial and ASX-listed company corporate experience. He has a Bachelor of Science with Honours degree from the University of Melbourne and has a Doctor of Philosophy (PhD) in Economic Geology from the University of Queensland. Dr Painter has no other public company directorships.



- (c) Ian Buchhorn (Non-executive Director) (BSc (Hons), Dip Geosci (Min Econ), MAusIMM) (appointed 17 August 2016)

Ian Buchhorn is a mineral economist and geologist with over 35 years' experience. Prior to listing Heron in 1996 as founding Managing Director, Mr Buchhorn worked with Anglo American Corporation in southern Africa, and Comalco, Shell/Billiton and Elders Resources in Australia variously as a corporate and research geologist, as well as setting up and managing Australia's first specialist mining grade control consultancy. For the last 25 years Mr Buchhorn has developed mining projects throughout the Eastern Goldfields of Western Australia and operated as a Registered Mine Manager. Mr Buchhorn is an executive director of Heron Resources Limited and non-executive director of RBR Group Limited. Mr Buchhorn's role is to provide continuity from Heron's stewardship of the assets to Ardea's.



- (d) Sam Middlemas (CFO and Company Secretary) (appointed 20 October 2016)

Sam Middlemas is a chartered accountant with more than 20 years' experience in various financial and company secretarial roles with a number of listed public companies operating in the resources sector. He is the principal of a corporate advisory company which provides financial and secretarial services specializing in capital raisings and initial public offerings. Previously Mr Middlemas worked for an international accountancy firm. His fields of expertise include corporate secretarial practice, financial and management reporting in the mining industry, treasury and cash flow management and corporate governance. Mr Middlemas is currently CEO and Company Secretary of Bauxite Resources Limited, and CFO/Company Secretary of RBR Group Limited, Alto Metals Limited and Enterprise Metals Limited.



5.2 Management and Consultants

Matthew Painter	Managing Director
Sam Middlemas	CFO and Company Secretary

5.3 Material contracts

Ardea and Matthew Painter have entered into an executive services agreement under which Dr Painter was appointed as Managing Director. Dr Painter will be paid a base salary of A\$250,080 per annum plus in addition all statutory superannuation and short and long-term incentives as negotiated and based on Company performance. The agreement is subject to a mutual 3 month notice period.



5.4 Directors' holdings

On completion of the Offers and if no Shares are subscribed for by Directors under the Offers, the Directors' interests in Shares of the Company will be as follows:

Directors	Directly Held	Indirectly Held
Katina Law	nil	nil
Matthew Painter	nil	nil
Ian Buchhorn	251,824 ¹	4,427,272 ¹

¹ These Shares will be acquired under the Distribution.

5.5 Remuneration of the Directors and their related entities

To date Directors have not received any remuneration for acting as Ardea's Directors. Upon listing, the remuneration to be paid to Directors will be as follows:

Directors	Annual Director's fee A\$	Wages, salaries and/or bonuses A\$	Benefits paid in the previous two years A\$
Katina Law ¹	60,000	nil	nil
Matthew Painter	nil	250,080	nil
Ian Buchhorn ¹	40,000	nil	nil

¹ The Company has entered into letters of appointment with these Directors. Agreed fees are exclusive of any statutory payments including superannuation.

A Director may also be paid fees or other amounts as the Board determines if a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director. A Director may also be reimbursed for out of pocket expenses incurred as a result of their directorship or any special duties.

5.6 No other Directors Interests

Other than as set out above or elsewhere in this Prospectus, no Director or proposed Director holds at the date of this Prospectus, or held at any time during the last two years before the date of lodgement of this Prospectus with ASIC, any interest in:

- (a) the formation or promotion of the Company; or
- (b) any property acquired or proposed to be acquired by the Company in connection with its formation or promotion of the Company or the Offers; or
- (c) the Offers; and

no amounts have been paid or agreed to be paid by any person and no benefits have been given or agreed to be given by any person:

- (d) to a Director or proposed Director to induce them to become, or to qualify as, a Director; or
- (e) for services provided by a Director or proposed Director in connection with the formation or promotion of the Company or the Offers.

5.7 Corporate Governance Statement

Ardea has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. Ardea is committed to administering these policies and procedures with openness and integrity, refer to www.ardearesources.com.au.

The primary responsibility of the Board is to represent and advance Shareholders' interests and to protect the interests of all stakeholders. To fulfil this role the Board is responsible for the overall corporate governance of the Company including its strategic direction, establishing goals for management and monitoring the achievement of these goals.

To the extent applicable, given the Company's size and nature, the Company has adopted the principles and recommendations of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (3rd edition) (**CG Recommendations**). The CG Recommendations are not prescriptive, but guidelines.

Under the Listing Rules the Company will be required to provide a corporate governance statement in its annual report disclosing the extent to which it has followed the CG Recommendations in the reporting period. Where the Company does not follow a CG Recommendation, it must identify the relevant recommendations or principles that has not been followed and give reasons for not following them.

Disclosure of these corporate governance practices will be given in accordance with the Listing Rules.

6.0 Technical Assessment Report

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Xstract Mining Consultants Pty Ltd has prepared this report on behalf of Ardea Resources Limited. Public disclosure, publication, or presentation of any information contained in this document must be accompanied by written consent from Xstract Mining Consultants Pty Ltd.

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Key abbreviations and Glossary

%	Percent, percentage
°	Degrees
°C	Degrees Celsius
adcumulate	Texture of an ultramafic rock
AIG	Australian Institute of Geoscientists
alluvial	Sediment deposited by flowing water, as in a riverbed, flood plain or delta.
Ardea or the Company	Ardea Resources Limited
alteration	A change in texture or chemistry of a rock due to the introduction of fluids, pressure, heat or a combination of all three.
AMIRA	Member based and funded organisation created to develop, broker, facilitate and manage collaborative research
amphibolite facies	Mineral classification of metamorphic rocks formed under conditions of moderate to high temperatures and moderate pressures
anticline/anticlinal / antiformal	An upward fold in which strata dip away from one another forming an inverted 'U'
Archaean	A geological time period ranging from 3,800 to 2,500 million years ago
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
Au	Gold
AUD	Australian dollars
auger	Open hole drilling method using a screw-like drill rod
AusIMM	Australasian Institute of Mining and Metallurgy
BIF	Banded iron formation
breccia	A rock composed of angular fragments of minerals or rocks in a matrix (cementing material)
carbonaceous	Rock containing carbon
carbonate	Mineral containing calcium and/or magnesium, iron, manganese carbonate
Carboniferous	Geological time period – 355 to 300 million years ago
chert	A crystalline siliceous rock usually of sedimentary origin
clastic	Sediments derived from erosion of pre-existing rocks
cleavage	Texture of a rock formed by the parallel alignment of minerals
Co	Cobalt
Company	Ardea Resources Limited
conglomerate	Coarse grained sedimentary rock
craton	A stable portion of the continental crust
dacite	An extrusive volcanic rock containing quartz and feldspar
Devonian	Geological time period – 415 to 355 million years ago
disseminated / dissemination	Mineralisation that is scattered throughout a rock
DMP	Department of Mines and Petroleum (Western Australia)
EL	Exploration licence

EM	Electromagnetic
ESS	electronic single shot
FAusIMM	Fellow of the Australasian Institute of Mining and Metallurgy
felsic	Quartz rich composition
Footwall	The mass of rock below a geological structure, deposit, vein or fault
g/t	Grams per tonne
galena	A lead sulphide mineral (PbS)
gneiss	A rock formed by high-grade regional metamorphic processes from pre-existing formations that were originally either igneous or sedimentary rocks
GPS	Geographic positioning system
granite or granitoid	An intrusive, felsic, igneous rock generally with a medium to coarse grained texture
graptolite	Marine fossils
greenfields exploration	Early stage exploration
greenschist	Low level metamorphism
greenstone belt	Volcanic sequence of rocks with associated sedimentary rocks that occur within Archaean and Proterozoic cratons between granite and gneiss bodies
GSNSW	Geological Survey of New South Wales
Hangingwall	The mass of rock above a geological structure, deposit, vein or fault
HPAL	High pressure acid leach – a nickel-cobalt laterite processing method
TAR	Technical Assessment Report (VALMIN 2015)
ignimbrites	Extrusive igneous rock formed by the flow of hot gaseous volcanic ash flows
Indicated Mineral Resource	That part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.
Inferred Mineral Resource	That part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.



intrusive	A body of igneous rock formed from a magma which has been emplaced into other rocks	PL	Prospecting licence
IOCG	Iron oxide copper-gold mineralisation	porphyry	Intrusive igneous rock, usually found in dyke-like formations
IP	Induced polarisation	Proterozoic	A geological time period from 2,500 to 542 million years ago
isoclinal	A fold that is considered 'tight'	QA	Quality Assurance
JORC Code (JORC)	2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Previous code issued in 2004 and updated in 2012	QC	Quality Control
km	Kilometre(s)	quartzite	A metamorphic rock consisting of essentially quartz
km²	Square kilometre(s)	RAB	Rotary air-blast drilling
komatiitic/ komatiite	Ultramafic extrusive rock containing dominantly mafic minerals	RC	Reverse circulation drilling
laterite	Clay-rich residual material overlying rock types from which it was derived and out of which silica and alkali elements such as potassium and sodium has been leached. Typically iron and aluminium-rich	regolith	Weathered profile of the rock strata
lens(es)	A body of ore or geological feature that is thick in the middle and tapers towards the ends like a convex lens	rhyolite	A fine grained extrusive igneous rock containing quartz and feldspar – an extrusive equivalent of a granite
LFB	Lachlan Fold Belt	schist	Fine grained, laminated metamorphic rock
lineament	A linear feature, generally recognisable in topography, of regional extent.	SEDEX	Sedimentary exhalative base metal deposit
lineations	Lines or line formed by the intersection of two planes	sedimentary	Rocks formed by deposition of weathered rock particles carried by air, water or ice
listric	A fault that curves towards the earth's surface and propagates from a flatter lying basal fault	serpentinised	A low level metamorphism of an olivine-rich ultramafic rock
lode	A vein or other tabular mineral deposit with distinct boundaries	shear	A zone in which strain applied to rocks has caused textural changes through movement
m	Metre(s)	silicified	Original minerals have been replaced by silica
M	Million	sphalerite	A zinc sulphide mineral (ZnS)
mm	millimetres	stockwork	A three-dimensional vein network with no preferred vein orientation
m³	Cubic metre(s)	stope	The underground excavation within the deposit where the main production of ore takes place
Ma	Million years	stratiform	Mineralisation restricted within an individual strata and parallel to that strata
mafic	Igneous rocks composed dominantly of iron and magnesium minerals	stratabound	Restricted to a particular rock unit
Mg	magnesium	stratigraphic	Pertaining to the composition, sequence and correlation of layered rocks
mineral resource	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction	Sub Level Caving	A stoping method in which relatively thin blocks of steeply dipping ore are caused to cave by successively undermining small panels.
mineralisation	An occurrence of a mineral or element above normal levels – may or may not be economic	synform	A downward fold in which strata dip away from one another forming a 'U'
MLEM	Moving loop electro-magnetic	syenitic	Coarse grained intrusive igneous rock with dominant feldspar and only minor quartz
ML	Mining lease	t	Metric tonne(s)
Mt	Million tonne(s)	tuff	Extrusive igneous rock, often formed from ash falls and/or flows
Ni	Nickel	ultramafic	Igneous rocks composed of ferromagnesian mafic minerals
nodular	Small ball-like rock particles	VALMIN Code	The VALMIN Code sets standards for the preparing of Independent Expert Reports for the assessment and/or valuation of mineral or petroleum assets or securities
Ordovician	Geological time period - 490-445 million years ago	variogram	Geostatistical calculation, displayed as a graph, that shows the continuity of mineralisation
orogen	Primary mechanism by which mountains are built on continents	VMS or VHMS	Volcanogenic massive sulphide or volcanogenic-hosted massive sulphide
oz	Ounce(s)	VTEM	Versatile time domain electro-magnetic
Pb	Lead	Xstract	Xstract Mining Consultants Pty Ltd
peridotite	An ultramafic rock made up mainly of the mineral olivine and with <45% silica		
peneplain	Flat low-relief area as a result of erosion		
PIMA	Portable infra-red mineral analyser		

1 Executive summary

Ardea Resources Limited ("Ardea") and Heron Resources Limited ("Heron") requested Xstract Mining Consultants Pty Ltd ("Xstract") to provide a Technical Assessment Report on Ardea's tenements for the purposes of the proposed listing of Ardea on the Australian Securities Exchange ("ASX"). Xstract understands that this Technical Assessment Report will be included by Ardea in a prospectus for the Initial Public Offering ("IPO") of Ardea shares.

Xstract is an Independent Mining Consultancy. This project is managed by Patrick Rice, MEng, GDE, HND, FAusIMM, Pr.Sci.Nat., PLATO, Manager & Principal Consultant – Geology, Xstract Mining Consultants, Perth. Mr Rice is a competent person in terms of the JORC Code and the VALMIN Code in relation to the matters referred to in this report. The effective date of this report is September 2016.

Xstract have conducted an independent Technical Assessment of the assets listed in the proposed transaction and listing of Ardea, including site visits to the key prospects in both the Eastern Goldfields of Western Australia ("WA") and Lachlan Fold Belt of New South Wales ("NSW").

In summary, Ardea holds a number of highly prospective tenements with numerous prospects that have not yet been fully explored or developed. Generally, the tenements cover geological terrains with or associated with known mineral endowment, as described in the body of this report. The tenements are located in established mining regions with good access and infrastructure.

The most prospective of these many prospects, and therefore those of the highest priority, are considered to be:

- Mt Zephyr (WA): Gale soil and RAB gold anomalies, olivine adcumulate channel nickel sulphide
- Lewis Ponds (NSW): Extension of the Main and Tom's Zone Mineral Resources
- Kalgoorlie Nickel Project (WA): Pre-feasibility study (Ni-Co), in particular high grade cobalt at Black Range (with PGE) and Goongarrie South
- Bardoc Tectonic Zone (WA): Big Four and Goongarrie gold
- East Kalgoorlie (WA): Taurus gold

Secondary priority prospects include:

- Lewis Ponds (NSW): McPhillamy North gold associated with the Godolphin Fault
- Calarie (NSW): main lode gold
- Gundagai (NSW): old gold workings, high priority soil gold anomalies
- Mt Zephyr (WA): BIF gold, highly endowed (Westralia 1 Moz gold to south)
- Bardoc Tectonic Zone (WA): Ghost Rocks gold workings
- Kalgoorlie East (WA): Kalpini gold and nickel sulphide

Numerous additional lower priority prospects are discussed in this report, which supplement Ardea's corporate value and strategic business options. Given the high number of promising prospects within the tenements, a prioritised and systematic approach is recommended, with divestment of prospects not enhancing the strategic direction.

1.1 Project Overview

1.1.1 Tenements

Ardea has a beneficial interest in fifty-six (56) granted tenements and four (4) tenement applications. Nine (9) are located in NSW and fifty-one (51) in WA. All tenements were applied for and or held by Heron or its subsidiaries, including Ardea. The schedule of tenements is set out in Table 1.1 and Table 1.2 as illustrated in Figure 1.1 and Figure 1.2.

Xstract has reviewed relevant government tenement databases and verified the details of the tenements provided by Ardea (Heron Resources Limited Notice of Meeting 29 August 2016 (ASX)) against these databases. Xstract is not qualified to provide legal opinion on tenements, their status or the rights and obligations conferred by the tenements. Investors are directed to the accompanying Solicitor's Report on Tenements in relation to the legal standing of the tenements and the agreements affecting the tenements. Tenements are broadly grouped into the two leading projects of Lewis Ponds in NSW and Mt Zephyr in the Eastern Goldfields of WA. There are a series of other prospective projects in both NSW and WA primarily covering gold and base metals, including the Kalgoorlie Nickel Project in WA.



Table 1.1: Summary of tenement listing Lachlan Fold Belt (NSW)

Project	Prospect	Tenement No.	Expiry	Area units*	Holder
Lewis Ponds	Lewis Ponds	EL5583	24-Jun-2017	51	TriAusMin Ltd
	Lewis Ponds	EL8323	27-Nov-2017	60	Ochre Res Pty Ltd
	Copper Hill East	ELA5337	Under application	100	Ardea Res Pty Ltd
Calarie	Calarie	EL7023	20-Jan-2017	12	Tri Origin Mining Pty Ltd
	Calarie	ML0739	22-May-2021	53.4	TriAusmin Pty Ltd
	Calarie	ELA5338	Under application	35	Ardea Res Pty Ltd
Gundagai		EL8061	13-Mar-2015	49	Ochre Res Pty Ltd
		ELA5323	Under application	47	Ardea Res Pty Ltd
Restdown	Restdown	ELA5335	Under application	95	Ardea Res Pty Ltd

* numbers in () are hectares, otherwise 'blocks' or 'units'

Refer to Solicitor's Report on Tenements, validation tenement status (Heron Resources Limited Notice of Meeting 29 August 2016 (ASX))

Figure 1.1: NSW Lachlan Fold Belt location plan (Heron Resources)

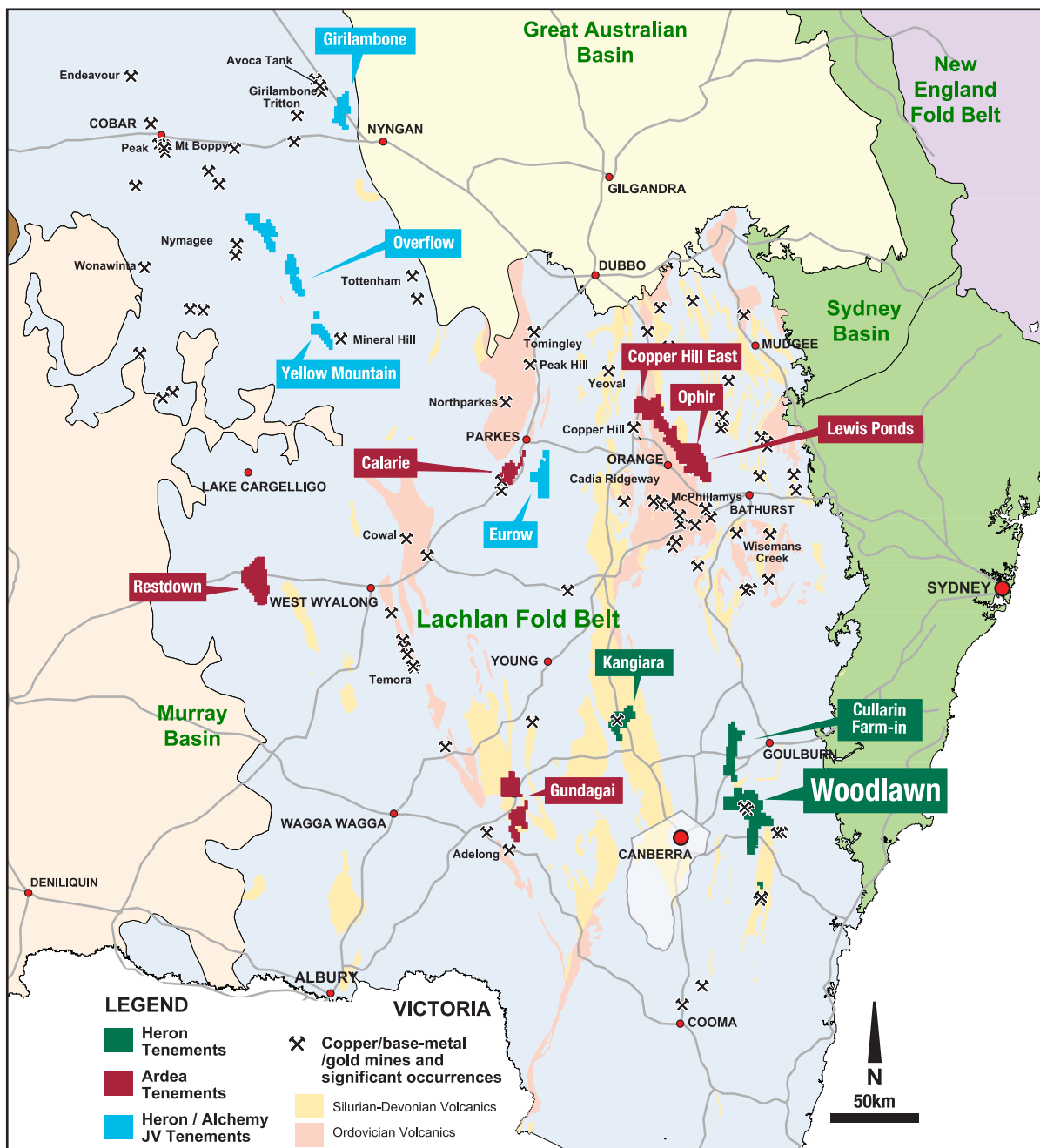


Table 1.2: Summary of tenement listing Eastern Goldfields (WA)

Project	Prospect	Tenement No.	Expiry	Area units*	Holder
Mt Zephyr	Mt Zephyr	E39/01706	23-Sep-2018	(20)	Heron Res Ltd
	Mt Zephyr	E39/01757	25-Feb-2019	(4)	Heron Res Ltd
	Mt Zephyr	E39/01854	Under application	(48)	Heron Res Ltd
	Mt Zephyr	E39/01985	Under application	(32)	Ardea Res Pty Ltd
	Mt Zephyr	E37/01271	Under application	(24)	Ardea Res Pty Ltd
	Mt Zephyr	E37/01272	Under application	(62)	Ardea Res Pty Ltd
	Darlot East	E37/01273	Under application	(60)	Ardea Res Pty Ltd
	Darlot East	E37/01274	Under application	(64)	Ardea Res Pty Ltd
BTZ Goongarrie	Goongarrie	M24/00541-I	13-Feb-2023	352.5	Heron Res Ltd
	Goongarrie	M24/00744-I	30-Apr-2022	6.7	Heron Res Ltd
	Goongarrie	M29/00167-I	24-Jun-2020	80.0	Heron Res Ltd
	Goongarrie	M29/00202-I	10-Apr-2022	593.6	Heron Res Ltd
	Goongarrie	M29/00272-I	30-Apr-2022	602.6	Heron Res Ltd
	Goongarrie	M29/00278-I	30-Apr-2022	478.0	Heron Res Ltd
	Goongarrie	M29/00423	30-Jun-2035	822.1	Kalgoorlie Nickel Project Pty Ltd
	Goongarrie	P29/02265	8-Apr-2017	200	Heron Res Ltd
	Goongarrie	E29/00934	Under application		Kalgoorlie Nickel Project Pty Ltd
	Goongarrie	M24/00731-I	20-Aug-2028	116.9	Heron Res Ltd
	Goongarrie	M24/00732-I	20-Aug-2028	201.7	Heron Res Ltd
	Goongarrie	M24/00778-I	20-Aug-2028	890	Heron Res Ltd
	Highway	M29/00214-I	24-Jan-2029	950	Heron Res Ltd
BTZ Ghost Rocks	Ghost Rocks	E29/00941	9-Jun-2020	(20)	Heron Res Ltd
Kalgoorlie East Taurus (with KNP rights)	Bulong	M25/00151	17-Mar-2029	366	Heron Res Ltd
	Bulong	M25/00187	28-Oct-2022	50.0	Hampton Nickel Pty Ltd
Kalgoorlie East Kalpini (with KNP rights)	Wellington East	E28/01224	19-Apr-2016 (exemption pending)	(17)	Heron Res Ltd
	Acra North	M28/00199	26-Sep -2022	975.7	Heron Res Ltd
	Acra North	M28/00201	26-Sep -2022	895.5	Heron Res Ltd
	Betsy Bore	M28/00205	26-Sep-2022	850.3	Heron Res Ltd
	Wellington North	M27/00395	26-Sep-2022	252.6	Heron Res Ltd
	Emu Lake	E27/00524	30-Jul-201 9	(6)	Heron Res Ltd
Bedonia	Bedonia	E63/01787	Under application	(49)	Atriplex Pty Ltd
Donnelly River	Donnelly River	E70/04804	Under application	(12)	Atriplex Pty Ltd
KNP (non-precious metal rights)					
Siberia KNP	Siberia	E24/00203	Under application	(3)	Atriplex Pty Ltd
	Siberia	E29/00889	24-Feb-2019	(1)	Heron Res Ltd
	Siberia	M24/00634-I	24-Oct-2021	185.2	Heron Res Ltd
	Siberia	M24/00660	13-Jun-2028	174	Heron Res Ltd
	Siberia	M24/00663	27-Jan-2032	306	Heron Res Ltd
	Siberia	M24/00664	27-Jan-2032	143	Heron Res Ltd
	Siberia	M24/00686	2-Feb-2032	35.6	Heron Res Ltd
	Siberia	M24/00915-I	31-Jan-2032	70	Heron Res Ltd
	Siberia	M24/00916	31-Jan-2032	277.1	Heron Res Ltd
	SMC Siberia	M24/00683-I	31-Jan-2032	56	Heron Res Ltd
	SMC Siberia	M24/00772-I	31-Jan-2032	55.7	Heron Res Ltd
	SMC Siberia	M24/00797-I	31-Jan-2032	396.3	Heron Res Ltd



Table 1.2: Summary of tenement listing Eastern Goldfields (WA) cont

Project	Prospect	Tenement No.	Expiry	Area units*	Holder
Black Range KNP	Black Range	M24/00757	4-Jul-2032	591	Heron Res Ltd
	Black Range	P24/04395	10-Aug-2017	192	Heron Res Ltd
	Black Range	P24/04396	10-Aug-2017	164	Heron Res Ltd
	Black Range	P24/04400	10-Aug-2017	200	Heron Res Ltd
	Black Range	P24/04401	10-Aug-2017	190	Heron Res Ltd
	Black Range	P24/04402	10-Aug-2017	172	Heron Res Ltd
	Black Range	P24/04403	10-Aug-2017	192	Heron Res Ltd

* numbers in () are hectares, otherwise 'blocks' or 'units'

Refer to Solicitor's Report on Tenements, validation tenement status (Heron Resources Limited Notice of Meeting 29 August 2016 (ASX))

Note: Kalgoorlie Nickel Project Pty Ltd name changed to Ardea Resources Pty Ltd and later that name was changed to Ardea Exploration Pty Ltd

1.1.2 Regulatory regime

NSW has a well-developed mining law and regulation. The Orange area has seen the development of a number of large-scale open pit and underground mining operations principally at Cadia-Ridgeway. Mining is a well-supported key industry in the district by State and Local Governments. It should be noted that elsewhere in NSW opposition to new coal and coal seam gas operations has drawn significant media attention and in some cases, potential operations have not proceeded.

WA has previously considered one of the best jurisdictions in Australia for exploration and mining with a well-defined regulatory regime and a supportive government and mines department. However, like many jurisdictions, the interplay of legislation at State and Federal level, such as environmental protection and Native Title, has increased the complexity of the approvals process. The time required to permit a new mining operation has increased and faces ever-higher standards.

1.1.3 Government royalties and taxes

New South Government Royalties on Gold, Copper and Base metals are set at 4% ex-mine value (less allowable deductions).

Western Australian Mining Regulations 1981 Part V Division 5, defines Mining Royalties and their calculation. Readers are directed to the Solicitor's Report on Tenements as part of this prospectus and to the relevant Mining Regulations.

1.1.4 Other royalties and Native Title

Mr David Timms owns a production royalty capped at AUD2 million in relation to Lewis Ponds Main Zone.

Production royalties maybe attached to mining tenements upon sale as part of the sale consideration by previous tenement holders. Ardea, Heron and its subsidiaries, acquired a majority of project tenements by application and therefore no royalties exist as part of a sales process regarding these application tenements.

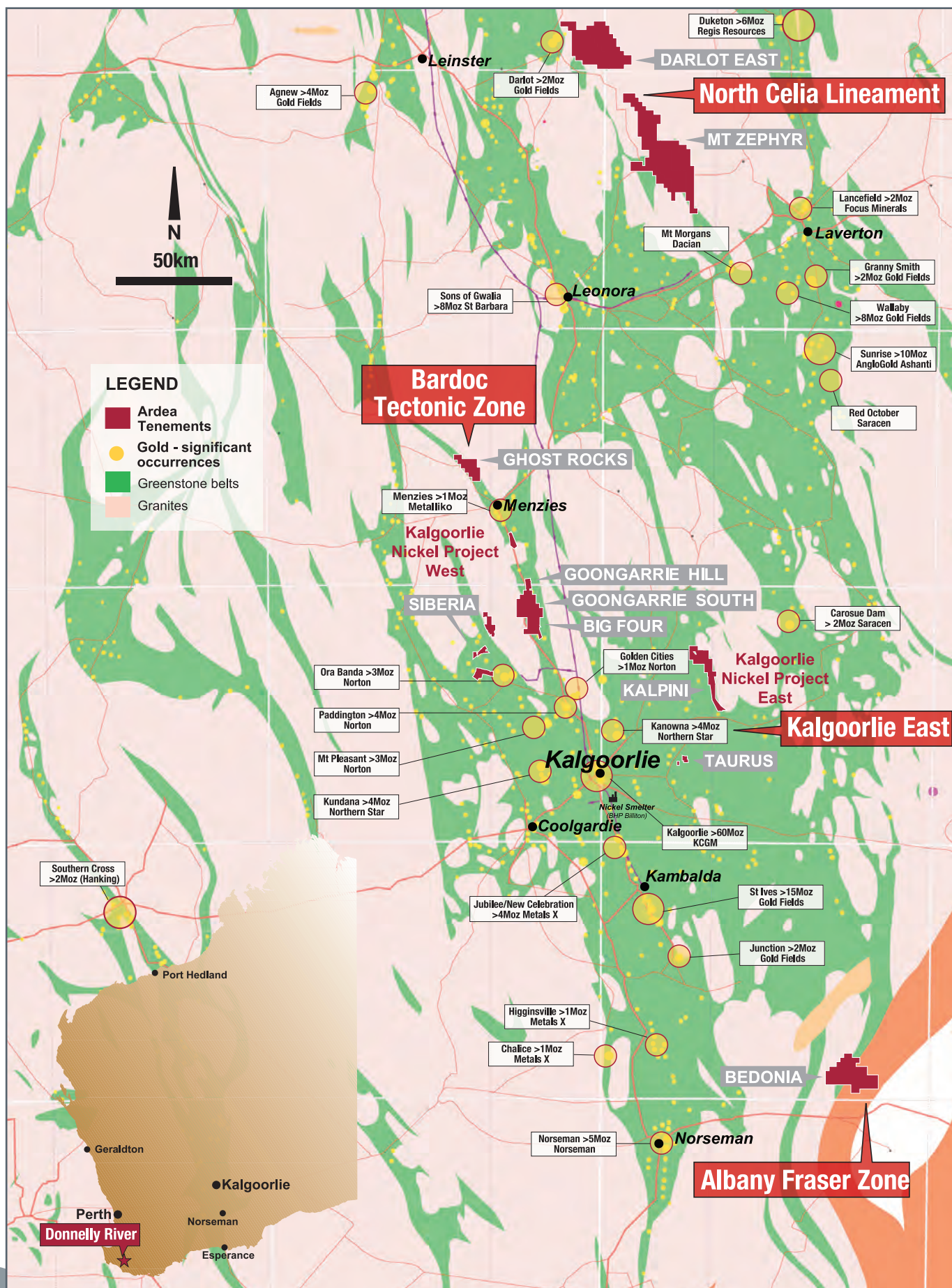
In some instances, agreements with Native Title claimants and holders contain royalty clauses in favour of the Native Title Parties. Xstract has not reviewed Native Title agreements in detail and the reader is directed to the Solicitor's Report on Tenements.

1.1.5 Lewis Ponds (NSW)

The Lewis Ponds project consists of two tenements and one tenement application (Table 1.1), located 12 km east of Orange, NSW (Figure 1.1). Orange is a major regional centre approximately 200 km west of Sydney, which also services the major Cadia-Ridgeway gold-copper mine. The Lewis Ponds project is held in the name of TriAusMin Pty Limited, a subsidiary of Heron and hence to be acquired by Ardea.

Exploration completed at Lewis Ponds has identified a combined Indicated and Inferred Mineral Resource (JORC 2012) of 6.62 Mt at 1.50 g/t Au, 69 g/t Ag, 0.15% Cu, 2.41% Zn, and 1.38% Pb (Cotton September 2016). The tenement package is located on the western margin of the Hill End Trough, within the eastern Lachlan Fold Belt. The section of the Lachlan Fold Belt hosts significant mineral deposits such as Cadia-Ridgeway, Northparkes and McPhillamys. The prospective Godolphin Fault hosts the McPhillamys resource 15 km to the south, where Regis Resources (ASX:RRL) has identified a gold mineral resource of 73.2 Mt at 0.94 g/t for 2,210 koz (Regis Resources Ltd 2016).

Figure 1.2: WA Eastern Goldfields location plan (Heron Resources)



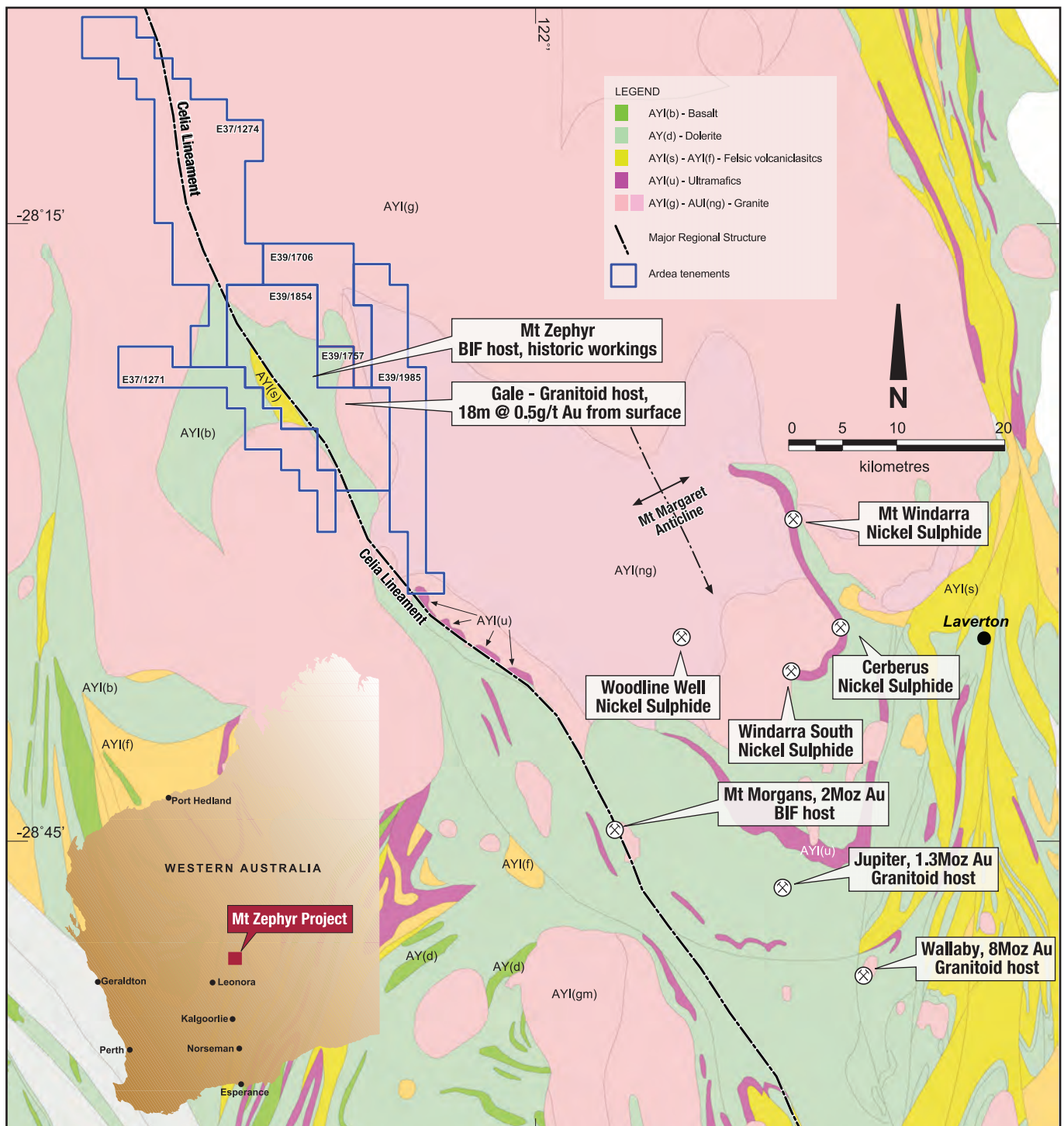
1.1.6 Mt Zephyr (WA)

The Mt Zephyr project consists of two (2) tenements and six (6) tenement applications (Table 1.2) located 60 km NNE of Leonora in the Northern Goldfields of WA (Figure 1.2). The project has excellent mining infrastructure and is located 100 km NNW of the Sunrise Dam gold mine and 80 km NNW of the Granny Smith gold mine. The project area straddles the boundary between the Kurnalpi and Laverton Terranes and is mainly within granted Exploration Licences and is 100% Heron-owned.

The tenure covers the north-western strike extension of the Dacian Gold Ltd (ASX:DCN) Mt Morgans tenure in association with the Celia Lineament. Gold camps are located from 30 km SE and are mainly hosted by granitoid (Jupiter, Granny Smith) and BIF (Mt Morgans, Lancefield).

Access to the Mount Zephyr project area is good, with the Nambi-Erlistoun road passing through the project area. This road provides a direct link to Leonora (west) and Laverton (east).

Figure 1.3: Mt Zephyr regional map (Heron Resources)



Exploration at Mt Zephyr has identified gold targets at the Gale prospect worthy of further work, including RAB results: 6 m at 1.26 g/t Au and 2 m at 3.12 g/t Au (Heron Resources Ltd 2011). Diamond drilling has also identified anomalous base metals and favourable host lithologies for Volcanogenic Massive Sulphide (“VMS”) style deposits. Xstract has reviewed all previous work and identified that these results remain to be adequately followed up. In addition, the remainder of the tenement package is prospective for gold and nickel sulphide mineralisation and further geochemical sampling is warranted.

1.1.7 Bardoc Tectonic Zone (WA)

The Bardoc Tectonic Zone (“BTZ”) consists of thirteen (13) tenements, one (1) tenement application (Table 1.2) and is located 50-150 km NNW of Kalgoorlie (Figure 1.2). All tenements are easily accessible via the Goldfields Highway and are close to other important infrastructure such as a rail line and the Goldfields Gas Pipeline.

The BTZ is a 150 km long and up to 12 km wide, intensely sheared corridor linked along strike to one of the richest orogenic gold shear systems in the world, the Boulder-Lefroy Shear Zone.

The projects in this zone have been divided up into Big Four, Goongarrie and Ghost Rocks areas which each have significant gold anomalies and occurrences which are compelling exploration targets to follow up.

1.1.8 Kalgoorlie East (WA)

Kalgoorlie East consists of eight (8) tenements (Table 1.2) and is divided into two general projects, Taurus Project (two tenements) and Kalpini Project (six tenements). Taurus is located 35 km due east of Kalgoorlie and Kalpini 60 km east-northeast of Kalgoorlie (Figure 1.2).

The Taurus Project contains a number of old historic workings centered around the Taurus Mine covering a strike length of approximately 400 m. The mined gold mineralisation is hosted in a north-northeast striking quartz stockwork plunging shallowly south, which is up to 4 m wide. Historic production records suggest that 62.95 kg of gold has been recovered, with a small portion of this (15 oz) reported from alluvial workings. A currently active tributer has reported the recovery of 50 oz of gold.

At the Kalpini Project, the Emu Lake Ultramafic forms an arcuate belt wrapping around and in contact with a large granite body to the east. Previous nickel exploration focused on this ultramafic for sulphide and laterite mineralisation. Along the south-western margin of the ultramafic, alluvial gold has been located.

Both areas are under-explored and represent good prospectivity.

1.1.9 Bedonia (WA)

This project, located 80 km east of Norseman consists of only one pending tenement (E63/01787), which was applied for in May 2016. The application covers the interpreted boundary between the Archean Yilgarn Block in the northwest and the Proterozoic Fraser Range Mobile Belt to the southeast. The application is still pending approval from the WA Department of Mines and Petroleum (“DMP”), therefore no further information is provided.

1.1.10 Donnelly River (WA)

This project is located 250 km south of Perth, 40 km south of the Greenbushes lithium operation, and 20 km west of Manjimup. The project consists of only one pending tenement (E70/04804), which was applied for in January 2016. The application was made to cover a prospective horizon for graphite mineralisation previously reported from the district. Historic underground graphite mining is evidenced by a number of old caved adits, shafts and the remains of an old washing plant been found, although no old production records have been found. The application is still pending approval from the DMP, therefore no further information is provided.

1.1.11 Kalgoorlie Nickel Project (WA)

The Kalgoorlie Nickel Project (“KNP”) package of eighteen (18) tenements and one pending tenement and in addition the BTZ and Kalgoorlie East tenements (Table 1.2) are located within a 150 km radius northwest and east of Kalgoorlie (Figure 1.2).

Within the KNP, both the Black Range Project and Goongarrie South prospects have significant mineral resources in excess of 0.1% Co (Heron’s 2016 annual report JORC Code 2012). Black Range has an Inferred Resource of 20.1 Mt at approximately 0.75% Ni and 0.103% Co (Heron’s 2016 annual report JORC Code 2012). The Goongarrie South Resource has approximately 5.8 Mt at 1.08% Ni and 0.102% Co in the Measured Resource category (Appendix C). These cobalt rich zones are recommended for further assessment.



1.1.12 Calarie (NSW)

The Calarie prospect consists of two (2) granted and one (1) pending tenement (Table 1.1) over approximately 134.5 km² and is located from 3 km to 25 km north of Forbes in central-west NSW (Figure 1.1). Historically significant gold production is reported and in 2004, Kimberley Diamonds Ltd reviewed a previous mining study (Hargreaves Resources NL 29 May 1996). In the vicinity of the Calarie mine, previous drilling has revealed that the western contact of the Daroobalgie Volcanics dips 70° west, and is faulted, strongly altered and mineralised. The faulting may be related to the London-Victoria High Strain Zone, which is interpreted to extend northwards from Forbes to Parkes and is the host to numerous gold occurrences. The contact displays strong gold endowment further north, being associated with the with the Peak Hill and Tomingley gold mines. On 6 March 2012 Goodrich Resources announced maiden Mineral Resource for the Lachlan deposit in terms of JORC 2004 (Goodrich Maiden Resource 2012 - ASX), which represents a highly prospective development prospect.

1.1.13 Gundagai (NSW)

The Gundagai project consists of one tenement and one pending tenement over approximately 310.4 km² and is located within a 30 km radius of Gundagai, approximately 320 km south west of Sydney, which covers an extremely diverse range of geology. The tenement covers numerous small historical mines, previously worked for gold, copper, lead, zinc, magnesite, barite and manganese, with significant mined production reported from Califat (37 tons copper) and Princess Marina (20 kg gold).

Recent sampling has confirmed gold anomalies around the Old Gundagai and Big Ben workings for which a drill program to test these is recommended.

1.1.14 Restdown (NSW)

ELA5335, Restdown covering one pending tenement of 95 blocks (Table 1.1), (approximately 271.7 km²) is located 56 km northeast of Griffith (Figure 1.1). Access is via the sealed Mid-Western Highway from West Wyalong and Andersons Lane. A large proportion of the tenement is covered by aeolian sand which conceals bedrock, with the tenement application based on an aeromagnetic anomalism.

The Exploration Licence Application ("ELA") is in the name of Ardea, details of the application are provided in Table 1.1 of this report. The tenement is prospective for lithium, tin and tungsten. Historical records report that tin was previously mined from the tenement. The tenement covers the Erigolia Granite intruding the sediments of the Clements Formation. Previous exploration identified anomalous lithium in rock and soil sampling. Lithium anomalism is offset to the historic tin workings. Lithium anomalism is related to altered sediments located in the roof zone to the intrusion and may represent veins coming off the top of the granite intrusion. At this stage, no lithium bearing minerals are identified in samples from the tenement. Further work to understand the distribution of lithium and the lithium-bearing minerals is required upon grant of the tenement

2 Introduction

Ardea and Heron have requested Xstract Mining Consultants Pty Ltd to provide a Technical Assessment Report (VALMIN 2015) covering Ardea's tenements for the purpose of inclusion in their IPO Prospectus for the proposed listing of Ardea on the ASX. Xstract understands that these tenements were part of the Heron group of companies, including Heron's subsidiaries. Ardea's rights are governed by a Demerger Implementation Agreement between Heron and Ardea, which is disclosed and reviewed in the investigating Solicitor's Report on Tenements in the prospectus. Xstract understands that Heron is transferring these tenements or rights to Ardea. Xstract is required to provide a technical assessment report but not a valuation of the tenements for inclusion in the prospectus.

2.1 Background

Heron has an extensive tenement portfolio including the Woodlawn Mine in NSW, which is at the funding stage after completion of a positive feasibility study in June 2016. Heron is vending the tenements and rights to Ardea to ensure the non-Woodlawn projects receive a dedicated exploration focus with an independent management team and funding. The assets include the Lewis Ponds and Mt Zephyr projects which are at advanced exploration stages and further prospective key project areas including the Bardoc Tectonic Zone and Kalgoorlie East gold projects. The KNP tenements and resources are a key non-gold project within the portfolio. A Pre-Feasibility Study costing some AUD34.5 million was completed in 2009 by Vale Inco and a re-optimization scoping study was completed by Heron on the KNP during 2014 (Heron Resources, KNP scoping study, ASX announcement, 8 April 2014 and 22 April 2014) based on the 2013 resources of 795 Mt at 0.7% Ni and 0.048% Co (Heron Resources Ltd 2013)(Appendix C).

2.2 Terms of reference and scope

The purpose of Xstract's Technical Assessment Report is to provide independent assessment of the technical data and merits of each project and commentary on the proposed exploration by Ardea.

Ardea provided Xstract with a tenement schedule to define the project areas for the Technical Assessment. The VALMIN Code 2015 outlines the scope and requirements of this Technical Assessment.

Xstract's written agreement with Ardea specifies the following scope.

The intended areas of review include:

- Permitting – associated caveats, approvals etc
- Royalties
- Data – source, validity and chain of custody
- Exploration – historic, current, planned and prospectivity
- Geology – local, regional and prospectivity
- Resources – current JORC compliance and recommendations
- A site visit to the key project assets is also required to verify and review:
 - Property infrastructure
 - Historic and recent mining activities
 - Exploration including any available diamond core

2.3 Reporting standard

This Technical Assessment report is prepared in accordance with the following codes:

- The 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of the Joint Ore Reserve Committee ("JORC Code")
- The 2015 edition of the Australasian Code for Public Reporting of Technical Assessments and Valuation of Mineral Assets ("VALMIN Code") mandatory from 1 July 2016.

2.4 Data sources

Xstract has validated tenement information provided by Ardea via the Western Australian Government Department of Mines and Petroleum and NSW Department of Industry – Division of Resources and Energy. However, Xstract is not qualified to express legal opinion and has not sought any independent legal advice on the ownership rights and obligations relating to the respective mineral assets under licence, or any other fiscal or legal agreements that Ardea may have with any third party. Xstract understands that a Solicitor's Report on Tenements forms part of the prospectus document and investors are directed to this report for a detailed expert opinion on these matters.

Ardea provided Xstract with copies of reports associated with the tenements, both historic open file company reports and reports by Ardea, Heron and current holders. Xstract has reviewed these reports and cross-checked a sample with the open file report databases of the WA Department of Minerals and Petroleum, the NSW Department of Industry – Division of Resources and Energy and against publicly available data. Xstract has accepted the data provided by Ardea subject to these checks at face value. Xstract has obtained written confirmation from the directors of Ardea and Heron Resources that all information available in their possession or knowledge relating to the tenements has been made available to Xstract.

Mr Patrick Rice has visited Goongarrie, Mt Zephyr, Black Range, Big Four, Ghost Rocks and Lewis Ponds project areas to conduct on site reviews. The site visit confirmed the reported previous exploration as reliable and representative of the historical exploration information reported. At each of the prospect sites visited, a reasonable sample of historical drillholes were found and their location confirmed. At each drill site visited, where possible, the remnant chips were inspected and where appropriate sampled to generally confirm the reported lithology, alteration and stratigraphy.

2.5 Reliance on other experts

Xstract has relied on other experts with respect to:

- Lewis Ponds (NSW) Mineral Resources: Xstract has relied on the report of Mr Bob Cotton (Mineral Appraisals Pty Ltd) in relation to the JORC 2012 Mineral Resource estimate for the Lewis Ponds Project. Mr Cotton has consented to Xstract relying on his report as part of this Technical Assessment as noted in Table 3.2.
- Kalgoorlie Nickel Project (WA) Mineral Resources: Xstract has relied on the reports by Snowden and Heron in relation to the published JORC 2012 Mineral Resource estimate for the Kalgoorlie Nickel Project. The authors have consented to Xstract relying on their report as part of this Technical Assessment as noted in Table 6.1.



Xstract has relied on the report of Kings Park Corporate Lawyers (WA) and Resources Legal (NSW) Solicitor's Report on Tenements accompanying this prospectus.

2.6 Competent Persons and Experts Statement

Xstract's consultants involved in the preparation of this report are Independent Specialists as defined by the VALMIN Code. They are also members of either the Australasian Institute of Mining and Metallurgy ("AusIMM") or the Australian Institute of Geoscientists ("AIG"), for which compliance with the JORC and VALMIN Codes is mandatory. Xstract's Competent Persons involved in the preparation of this report are members in good standing with one or more of these professional institutions and have the required qualifications and experience as defined in the JORC and VALMIN Codes to conduct this technical assessment.

The information in this report that relates to Exploration Results is based on information compiled by Mr Patrick Rice, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Rice is a fulltime employee of Xstract Mining Consultants. Mr Rice 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'. Mr Patrick Rice consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Lewis Ponds Mineral Resources (JORC 2012) reported herein have been exact extracts from Mr Robert Cotton's Lewis Ponds (Main and Tom's Zones) report (Cotton September 2016) as per his consent⁵.

2.7 Independence, disclaimer and warranty

Xstract is an independent mining consultancy based in Perth and Brisbane. Xstract confirms its independence of Ardea and Heron and the mineral properties outlined in this report for the purpose of the Australian Securities and Investment Commission's Regulatory Guide 112 – Independence of Experts (ASIC, 2011). Xstract has not undertaken assignments for Heron or its subsidiaries in the previous two and a half years prior to being commissioned to undertake this report. Previous assignments in February 2014 were on a fee per hour of work, based on Xstract's standard schedule of rates.

Ardea commissioned Xstract on a fee for service basis, in accordance with Xstract's standard schedule of rates. Preparation of this report cost approximately AUD80,000 and is in line with the number of tenements, the areas covered and the volume of data and complexity. Xstract's fee is not contingent on the outcome of its report or the success or failure for the transaction for which the report was prepared.

Xstract's project manager and VALMIN Practitioner for this report is Mr. Patrick Rice, MEng, GDE, HND, FAusIMM, Pr.Sci.Nat., PLATO, Manager & Principal Consultant – Geology, Xstract Mining Consultants, Perth. Mr Rice is a competent person in terms of the JORC Code and of the VALMIN Code in relation to the matters referred to in this report. Mr Rice has overseen a technical team in preparing this report and where he has relied on other experts outside his areas of expertise these experts and the areas for which they take responsibility are detailed below.

Mr Rice has reviewed all available data for the tenements. Mr Rice takes responsibility for the contents of this report. Xstract has sought and received written confirmation from the Directors of Ardea and Heron that Xstract was provided with all material data available. Xstract has reviewed a sample of publicly available information to check information received from the commissioning parties.

Mr Rice's short form CV is as below;

Patrick has over 30 years' experience in the mining industry, during which time he gained a wealth of experience in various roles within the fields of exploration, geo-sciences and mineral resources, surveying and mine planning, as well as mining economic assessments. Patrick's broad range of skills and experience base offers unique flexibility. He has gained expertise in broad-based due diligence studies, corporate governance, technical reviews and asset optimisation reviews.

Patrick holds a Master of Engineering in Mineral Resources and a Graduate Diploma in Engineering specialising in Geostatistics/Geology. He is a registered professional natural scientist at the South African Council for Natural Scientific Professions, a registered Mine Surveyor with the South African Council for Professional Land and Technical Surveyors, and a Fellow of the Australasian Institute for Mining and Metallurgy.

Mr Rice has been assisted by Elizabeth Schollum, Andrew Grieve and the report was reviewed by William Sarunic.

⁵ In accordance with the Australian Stock Exchange Limited Listing Rules Appendix 5A, The information in this report that relates to Mineral Resources for the Lewis Ponds Project has been reviewed, and verified by Mr Robert Cotton who is a full time employee of Mineral Appraisals Pty Ltd. Mr Cotton who is a Fellow of the Aus IMM, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Cotton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code: Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cotton consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

A draft version of this report was provided to the directors of Ardea and Heron for comment in respect of omissions and factual accuracy. Ardea and Heron has presented in writing to Xstract that full disclosure has been made of all material information and that to the best of its knowledge and understanding, such information is complete, accurate and true.

As recommended in Clause 11.4 of the VALMIN Code, Ardea has provided Xstract with an indemnity under which Xstract is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required which:

- results from Xstract's reliance on information provided by Ardea and/or Independent consultants that is materially inaccurate or incomplete, or
- relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

This report may contain or refer to forward-looking information based on current expectations, including but not limited to timing of Mineral Resource estimates, future exploration or project development programmes and the impact of these events on the projects. Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Xstract assumes no responsibility to update or revise them to reflect new events or circumstances.

The conclusions expressed in this report are appropriate as at **30 September 2016**, the **effective date**. The opinion is only appropriate for this date and may change in time in response to results of exploration, market, legal or political factors. All monetary values outlined in this report are expressed in Australian dollars ("AUD") unless otherwise stated.

2.8 Lachlan Fold Belt Projects (NSW)

The Lachlan Fold Belt (LFB) in NSW (Figure 1.1) is a series of Palaeozoic folded sediments and volcanic rocks intruded by granites and smaller porphyritic intrusions located 100 km west of Sydney. The fold belt covers in excess of 200,000 km² with over 800 separate granite intrusive units and over 100 volcanic units recognised (Chappell 2004). There is a strong connection between the composition of the volcanics and the emplacement of granites within the LFB. The LFB is bounded by younger sedimentary basins to the east by the Sydney Basin, to the north by the Great Artesian Basin and to the southwest by the Murray Basin. The fold belt is a prolific host to gold, porphyry copper-gold and base metals mineralisation. In 1851, gold was officially first discovered in NSW in the LFB near Ardea's Lewis Ponds and Ophir project areas.

2.9 Eastern Goldfields Projects (WA)

Ardea's key Mt Zephyr project (Figure 1.2) consists of two exploration licences and six exploration licence applications, located on the Celia Lineament to the north of the Mt Morgans mining centre in the Eastern Goldfields of WA. The Celia Lineament is associated with gold mineralisation at Safari Bore, Deep South, Red October and Mt Morgans. The Celia Lineament is a major crustal break, which forms the boundary between the Kurnalpi Terrane to the west and the Laverton Terrane to the east. Numerous gold mineralised porphyries have intruded shear splays from the Celia Lineament and can be divided into two categories based on their alteration. The first category is a silica-sericite alteration such as Safari Bore and Mt Celia, the second style is haematite-biotite-magnetite-pyrite-chalcopyrite alteration of volcanics and associated porphyries as at Jupiter ('red rock alteration').



3 Lewis Ponds (NSW)

3.1 Regional information

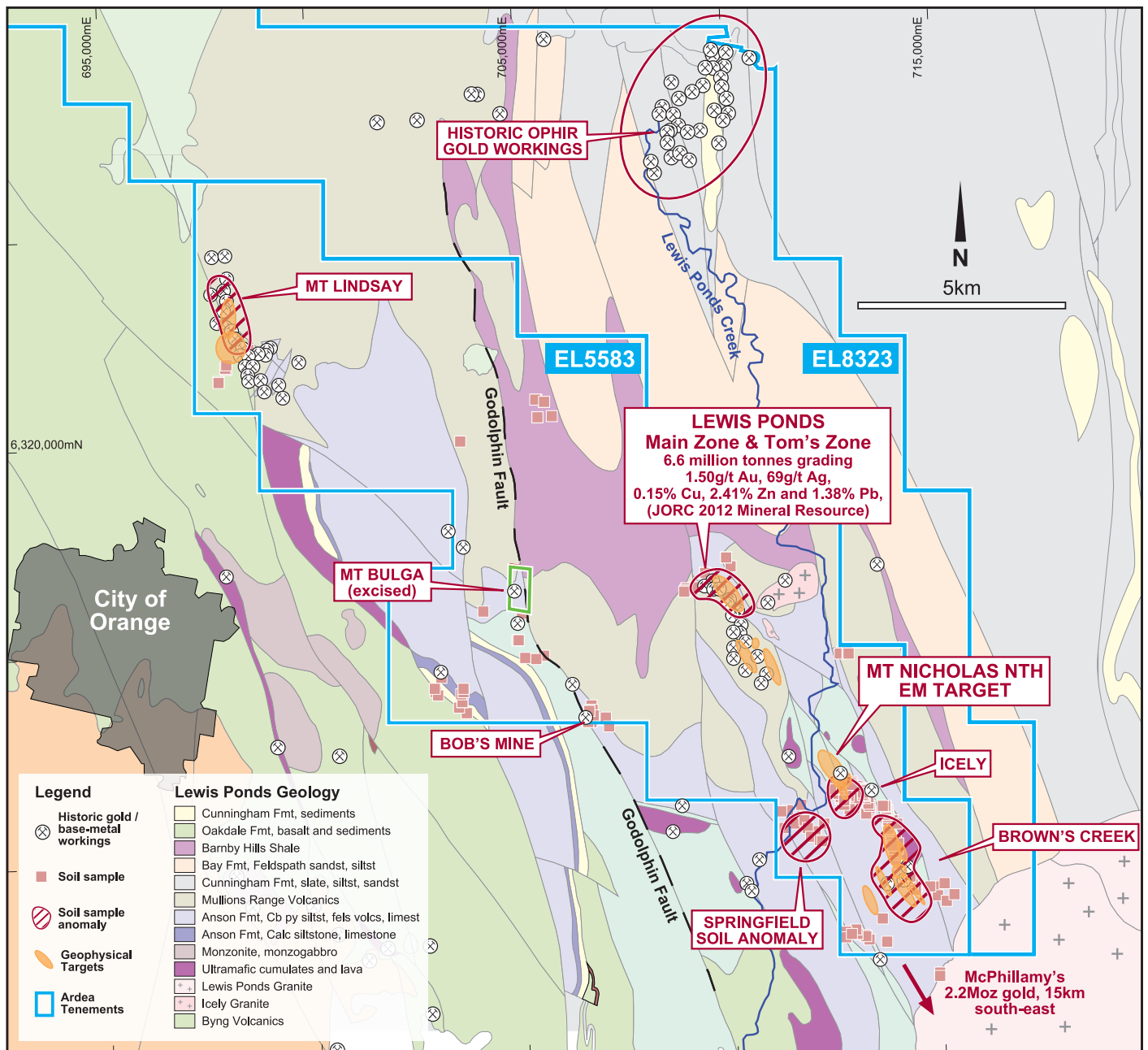
3.1.1 Location, access and infrastructure

The project area is located 12 km east of Orange, NSW. Orange is a major regional centre approximately 200 km west of Sydney and services the major Cadia-Ridgeway gold-copper mine. Access from Orange is via a number of sealed and unsealed roads including the Euchareena, Ophir, Lower Lewis Ponds and Icely Roads.

3.2 Climate, topography and vegetation

Topography varies from undulating to steeply undulating and is dominated by the north-trending Mullion Range. Orange has an elevation of approximately 1,000 m above sea level. The ridges are mainly eucalypt forested with several substantial pine plantations. Cleared land is primarily used for sheep and cattle grazing. The region has a temperate climate with cold winters and receives an average annual rainfall of 974 mm.

Figure 3.1: Lewis Ponds: EL5583 location plan (Heron Resources)



3.3 History

Historically, the Lachlan Fold Belt (LFB) was a significant producer of copper, lead, zinc and gold and over the past 20 years has become one of the important producing regions of gold and copper in Australia. In 1851, gold was officially first discovered in NSW in the LFB near Ardea's Lewis Ponds and Ophir project areas.

Despite apparent extensive exploration activity since the 1850s, the important ore bodies at Cadia, Ridgeway, The Peak, Lake Cowal, Brown's Creek, Endeavor and Northparkes were only developed in the late 1980s through to the mid-1990s. More recent discovery of McPhillamys, 15 km south along the Godolphin Fault suggests the ongoing potential for significant discoveries.

The project lies within a belt of Silurian felsic volcanics and associated sedimentary rocks occurring on the western margin of the Hill End Trough. Lewis Ponds occurs on the Lewis Ponds Fault; a subsidiary fault to the Godolphin Fault. This region is well known for being prospective for a variety of deposit types, especially VMS deposits and orogenic gold deposits.

Previous exploration on EL 5583 by TriAusMin has identified a VMS polymetallic deposit containing a combined Indicated and Inferred Mineral Resources of approximately 6.62 Mt (Table 3.2).

3.4 Geology

3.4.1 Local Geological setting

The Lewis Ponds mineralisation occurs in the Silurian Anson Formation, which overlies the Barnby Hills Shale and Mullions Range Volcanics, all which belong to the Mumbil Group. The Anson Formation is a fining upwards sequence from conglomerate at the base to finer pyritic siltstones at the top. This suggests a deepening upwards environment of deposition and potentially in accordance with a deep seafloor environment for the mineralisation. The Lewis Ponds Fault to the west of the mineralised area is a NNW trending fault interpreted to tap the Godolphin Fault at depth. The Godolphin Fault is interpreted by the GSNSW (in the cross section presented on the Orange 1:100,000 sheet) as detaching from the basement further east under the deeper section of the Hill End Trough. A second set of east-west orientated faults are mapped in the Lewis Ponds area. The fault to the north of the main prospect area appears to be folded by an antiformal structure. The interaction of these faults with smaller scale orthogonal fractures have previously been interpreted to control the location of mineralisation.

The deep water sediments and volcanics alternating at Lewis Ponds are consistent with a VMS mineralising environment. Stratabound base metal and gold mineralisation is interbedded with pyritic siltstone and rhyolitic volcanics at the Lewis Ponds and Mount Bulga deposits.

Regional metamorphism has altered the rocks to upper greenschist facies. There is a well-developed single cleavage throughout the project area.

3.4.2 Structure

The sequence hosting the deposits lies on the east limb of the Mullions Range Anticline, and dips steeply NE with average dips of 70° at Main Zone. The average dips at Tom's Zone are subvertical, ranging from 80° NE near surface to 80° SW at depth, as interpreted from drilling information. Primary layering is poorly preserved in most rocks. The dominant foliation is a regional NW-trending subvertical cleavage.

Rock units at Lewis Ponds are crosscut by two sets of faults. One set strikes SW and dips NW at 60°. These faults occur at approximately 150 m intervals along strike, and the Line 12N Fault appears to bound the northern margin of the Main Zone and truncates the volcanic stratigraphy. Other parallel faults appear to bound blocks of similar lithologies. Consequently, these faults are interpreted to be both post and possibly syn-mineralisation and syn-depositional (i.e. growth faults). The second set of faults strikes east-west and dips north at 80° to vertical. The age relationship of the second set of faults remains poorly understood. Only minor fault displacement of rock units on faults (where crossed by other faults) has been noted.



3.4.3 Mineralisation and deposit type

The Lewis Ponds polymetallic (gold–silver–copper–lead–zinc) massive and disseminated sulphide system includes two stratabound ore bodies, the Main Zone and Tom's Zone that contain a resource 6.62 Mt at 1.5 g/t Au, 69 g/t Ag, 0.2% Cu, 2.4% Zn, and 1.4% Pb (Cotton September 2016) as detailed in Table 3.2.

The Main Zone is stratabound, consists of a massive sulphide lens (Lens 1) with adjacent lower grade Hanging Wall and Footwall lenses (Lens 2 and Lens 3). (Tri Origin Exploration Pty Ltd (1994)) describes the aspects of the Central lens as varying from 2-25 m thick (average 15 m) and is distinctly zoned with a 1-5 m thick gold-rich top. It consists of locally banded and stratiform massive pyrite with lesser sphalerite, galena, chalcopyrite, pyrrhotite and tetrahedrite, while the gangue is predominantly chlorite, talc, carbonate and fine-grained quartz. The Hanging Wall lens is similar to the Central lens while the Footwall lens (Lens 2 and Lens 3) comprises of a sedimentary breccia consisting of abundant subangular clasts of limestone and lesser felsic tuff enclosed by a massive to disseminated sulphide matrix of disseminated to banded pyrite–sphalerite–galena and chalcopyrite. Overlying the massive sulphide lens is a talc–chlorite–carbonate alteration zone containing one or more disseminated to massive, polymetallic, banded sulphide zones (Tri Origin Exploration Pty Ltd 1994). Agnew (2002a) proposed that the Main Zone formed by sub-sea floor replacement of a thick and poorly sorted sedimentary breccia deposit with sulphides infilling secondary pore spaces and partially replacing a chlorite–dolomite altered breccia matrix.

The Tom's Zone, located 900 m south of Main Zone, consists of a stratabound massive sulphide lens that averages 4.7 m in horizontal thickness and extends from the surface to 500 m below the surface. Tom's Zone contains an Indicated Resource of 0.54 Mt at 1.65 g/t Au, 172 g/t Ag, 3.83% Pb and 5.48% Zn (Cotton September 2016), and stratigraphically overlies the polymictic breccias containing the Main Zone mineralisation (Agnew 2002a). Valliant and Meares (1998) noted that the Tom's Zone mineralisation is more banded and massive than the Main Zone.

Copper-rich veins and stringers covering an area of 200 m by 700 m within the footwall volcanic succession south of Tom's Zone are mapped, possibly representing a remobilised copper-rich stockwork that underlay the massive sulphide zones.

3.5 Previous work

3.5.1 Exploration

Gold was discovered at Lewis Ponds in the 1850s and open pit and shallow underground small scale mining commenced in the 1880s, primarily for copper and gold. Modern exploration commenced at Lewis Ponds in 1964.

Table 3.1: Lewis Ponds: Historic working prior to 1964

Date	Mine/operator	Ore type	Reported production	Depth of workings
1894 - 1903	New Lewis Ponds	-	-	-
1913 - 1921	Tom's Mine Sulphide Corporation	Pyrite	30,000 t/sulphuric acid	Shafts -61 m
1915	Spicers		4,622 t at 6.7% Pb, 187 g/t Ag	Shafts -71 m
1914	Queen of Ranges		328 t produced 231 oz Au	

Xstract has reviewed previous exploration (Appendix B). Tri Origin and subsequently TriAusMin have held the project since 1992. During this time the companies have undertaken detailed mapping and extensive drilling culminating in a number of resource estimates the most recent estimate is quoted below. There are extensive geophysical, geochemical and mapping datasets to compliment the data derived from drilling.

3.6 Resources

3.6.1 Mineral Resources

The mineralisation is accepted as VMS type. There is a reasonably well defined host rock assemblage between the hangingwall metasiltsstones and footwall coarse-grained quartz porphyries below. Although the best gold, silver, copper, lead and zinc grades are associated with massive sulphide mineralisation, there is an extensive envelope of disseminated mineralisation. This dissemination has not been modelled previously for inclusion in resources estimate models which, given the current metal prices should be available to be considered in future resource assessments.

The massive sulphide shoots were modelled within 3D wireframes and estimated separately using Kriging independent from the surrounding dissemination. This constraint was to avoid metal overestimation within the dissemination, and to avoid unrealistic downgrading of the massive sulphide shoots.

The Kriging approach required that continuity characteristics of each metal within each lens and shoot be investigated and determined by running multiple variograms to provide kriging parameters for the estimation of a total of 35 separate block models. The lens and shoot wireframes determined both the limits of the block modelling and ensured that only grade information within the appropriate wireframe was used for each estimate.

The 2005 resource estimate incorporates an additional 3,777 m of drilling acquired since the historical pre-JORC resource estimates. For the 2005 resource estimate, total drilling increased to 53,977 m. The previous JORC (2004) Mineral Resource estimate (TRO (ASX) 6 October 2005) was reviewed and re-stated during September 2016 by Mr Robert Cotton to comply with the JORC 2012 requirements and this report provided by Heron, although the reviewed resource did not change the tonnes, grade or category of the estimate.

Table 3.2: Lewis Ponds Mineral Resource (JORC 2012) ⁶

Category	Quantity (Mt)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Measured	-	-	-	-	-	-
Indicated	6.35	1.51	68	0.15	2.39	1.36
Inferred	0.27	1.10	96	0.17	2.96	1.90
Total	6.62	1.50	69	0.15	2.41	1.38

Compiled by Mr Robert Cotton and completed April 2005 and revised 2016 (Cotton September 2016)

⁶ In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A. The information in this report that relates to Mineral Resources for the Lewis Ponds Project has been reviewed, and verified by Mr Robert Cotton who is a full time employee of Mineral Appraisals Pty Ltd. Mr Cotton who is a Fellow of the AusIMM, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Cotton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code: Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cotton consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

3.7 Exploration potential

Exploration data compiled throughout the project area has identified numerous targets (Figure 3.1) that require systematic follow up. These targets range from 'drill ready' to those requiring grass roots exploration and/or more detailed reviews of previous work although resource extension and development should be the priority.

3.7.1 Lewis Ponds Resource Area potential

The potential to increase Mineral Resources in the immediate vicinity of the Lewis Ponds deposit is considered high and extensional and infill drilling is required at several targets. Further target generation work in the resource area should include the incorporation of all geology and alteration into a 3D model to compliment the current resource estimate. A program of re-logging core with a focus on stratigraphy and alteration complimented with multi-element geochemistry will provide a strong basis for further discovery. The following comments are based on Xstract's review of regional mapping stratigraphy and mapping carried out by Tri-Origin.



Based on the mapping and stratigraphic column on the Orange 1:100,000 sheet, mineralisation at Lewis Ponds is hosted in the Anson Formation of the Mumbil Group. The Anson Formation overlies the Barnby Hills Shale and Mullions Range Volcanics. This is a reversal of the earlier stratigraphy of the Bathurst 1:250,000 sheet and that was adopted by Tri-Origin in the early 1990s. The Anson Formation is a fining upwards sequence representing progressively deeper water sedimentation as the basin developed. The hosts to the mineralisation are an olive grey siltstone overlying a felsic tuff. Mineralisation is mapped as being semi-concordant with the contact between the felsic tuff and siltstone. In the Lewis Ponds Main Zone, the mineralisation is mapped on the eastern contact of the tuff and overlying sediments. In the Tom's Zone and Summer's Zones to the south, this concordant relationship is not as well displayed and mineralisation is mapped within the siltstone unit and on the apparent footwall of the tuff unit. Mineralisation and the footwall tuff are repeated three times however, mineralisation in the western lens appears the most continuous between the limestone quarry to the north and Summer's to the south, a distance of over 1,000 m. Mineralisation is always on the eastern contact of the tuff unit suggesting repetition is due to stratigraphic repetition rather than folding. At the Little Bell workings SW of Summer's, a copper-rich shear is mapped, possibly representing remobilisation of a footwall feeder zone.

Mapping south of Summer's shows the felsic volcanic sequence to increase in thickness significantly and far less sediment deposition, suggesting proximity to the volcanic vent. Further south, the sediment starts to inter-finger with the volcanics and Xstract suggests this area represents a very similar depositional environment to the Lewis Ponds Main Zone. There are a number of geochemical and geophysical anomalies located in this area requiring further follow-up and drilling.

Exploration should test the areas of limestone for copper and gold mineralisation typical of VMS feeder zones. Similarly, mapping and detailed geochemistry may be able to discern copper-gold rich feeder zones within the footwall tuff sequence.

Mapping has identified a number of fold axes within the Lewis Ponds prospect area. Drilling should target the sulphide horizon within synform structures where sulphide may be structurally thickened.

Xstract recommends preliminary metallurgical test work to identify likely recoveries of each of the constituent elements of the mineralisation and in particular where the estimated gold mineralisation will report and its recovery potential.

Sections interpreted by Gregory (2005) shown in Figure 3.2, suggest significant near surface resource extension potential located on the west of the central portion of the Lewis Ponds Mineral Resource area, that has not yet been tested. Additional near surface resources could significantly improve the economics of a mining study.

Systematic re-logging and geometallurgical sampling is required at Lewis Ponds, since the historic drilling is often of insufficient detail to confidently define mineralised domains for resource estimation (note differences in geometry between figure 3.2 and 3.3). It is felt that the recommended programs have the potential to increase the estimates of resource tonnage.

3.7.2 Lewis Ponds Regional targets

The Mt Nicholas Copper Mine is one of many in the Icely area and operated in 1888 and then again in 1907. NSW Geological Survey records state that over the mine's life historic production was 4,000 t of ore mined yielding 640 t of copper, equating to an average grade of 16% copper. Mt Nicholas was and remains a stand out conductor in the 2010 airborne electromagnetics ("AEM") survey.

3.7.3 Proposed exploration and study work

Ardea has indicated it intends to undertake mineral processing and metallurgical testwork studies upon listing. These will be complimented by significant diamond and RC drilling programs of mineralised targets and focusing on resource extension and definition. RAB drilling of earlier stage geochemical and mapping targets is proposed. Xstract recommends early environmental studies as part of engineering and production studies. An AUD1.4 million two-year program is proposed.

3.8 Environmental and social considerations

As noted earlier in the report, the Orange district supports large-scale mining e.g. Newcrest's Cadia-Ridgeway Operations. Xstract also noted that there has been resistance to coal mining and coal seam gas extraction in productive agricultural land, however this does not impact the Lewis Ponds project, but it does reflect an increase in the potential hurdles all new mining projects need to pass to gain approvals for production. There is resistance in parts of NSW to the use of cyanide for the extraction of gold from ores. Metallurgical test work is required as part of the exploration process to determine where gold mineralisation reports to and if cyanide is required or not. Xstract is informed by Heron and Ardea that no records of environmental materially negative correspondence relating to the Lewis Ponds project between the company and the regulators have been noted.

Figure 3.2: Lewis Ponds section 940N from Gregory (2005) showing near surface project potential (Heron Resources)

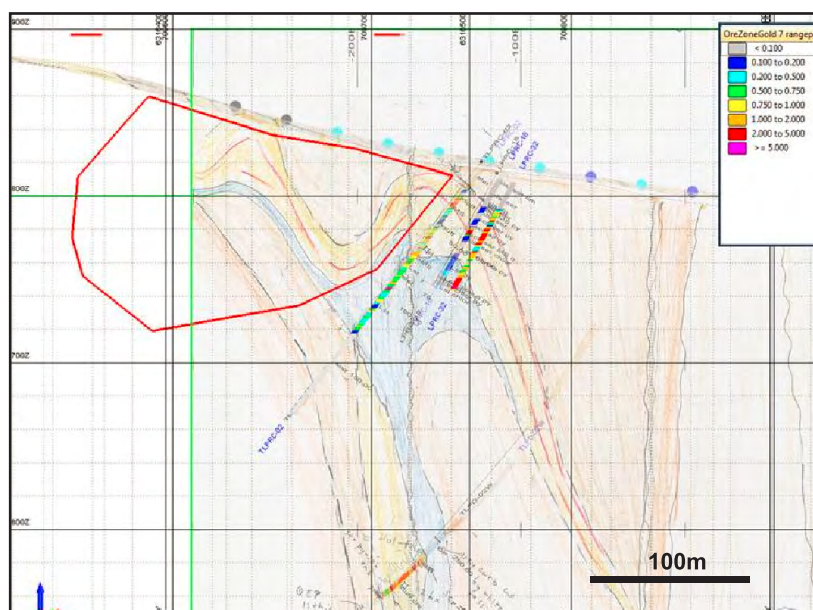
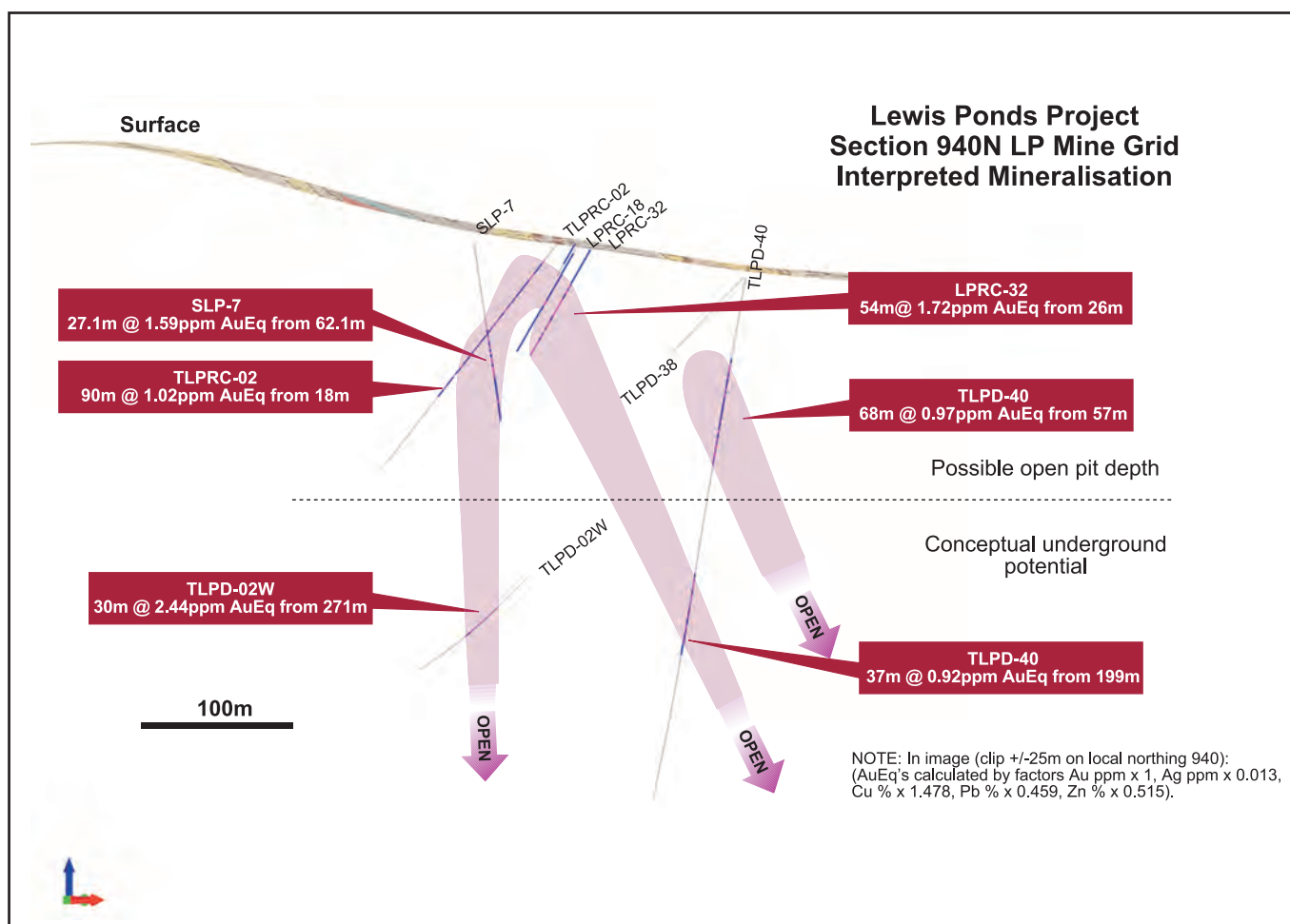


Figure 3.3: Lewis Ponds section showing current 2016 interpretation (Heron Resources)



4 Mt Zephyr (WA)

4.1 Regional information

4.1.1 Location, access and infrastructure

The Mt Zephyr prospects are located in the Northern Goldfields of WA (Figure 1.2), 60 km NNE of Leonora and immediately east of the Nambi Homestead. The district is well endowed with mining infrastructure; including rail at Leonora, gas to Murrin Murrin and bitumen road between Leonora and Laverton. Operating mines are located at Leonora, Murrin Murrin, Wallaby/Granny Smith and at Sunrise Dam. Advanced projects are located at Mt Morgans and Mt Windarra. The project area straddles the Celia Lineament, and consists of two granted ELs covering 69.8 km² and six EL applications covering 843.9 km² (Table 1.2).

Access to the Mount Zephyr project area is considered good, with the Nambi-Erlistoun road passing through the Mt Zephyr project area.

4.1.2 Climate, topography and vegetation

The topography is very flat in the north and south. Through the centre of the project, there are a series of north-west trending rises and low hills. The vegetation is dominated by acacia (mulga) scrub, with spinifex sand plains in low-lying areas.

4.2 Geology

4.2.1 Regional setting

The Celia Lineament dissects the Mt Zephyr project area (Figure 1.3) and is interpreted to be the boundary between the Murrin and Laverton Domains (Cassidy et al. 2006). The Mt Zephyr VMS prospect is located immediately SW of the Celia Lineament and within the Murrin Domain. The gold prospects of Gale, Dunns New Find and Mt Zephyr North are located to the east of the lineament in the Laverton Domain. The project is located to the NW of Mt Morgans along the Celia Lineament. Numerous gold occurrences are located either side of the Celia Lineament with the Laverton Domain on the eastern side hosting the larger deposits of Granny Smith, Wallaby, Sunrise Dam, Jupiter and Lancefield.

The Mt Zephyr project focusses on a relatively narrow Archaean Greenstone belt flanked on either side by granitoids and granite gneisses. The belt is widest (up to 12 km) in the north and narrows to less than 5 km near Two Bills Well. The dominant rock types within the greenstone belt are; basalts, dolerite, amphibolite, felsic volcanics and sediments.

Gold mineralisation is hosted in a number of lithologies including; banded iron formation ("BIF"), granites and syenitic porphyries and limited felsic porphyry intrusions to the SE of the Mt Zephyr tenement holding. In addition, to the north and west of the tenement holding lies the Darlot Goldfield.

The Murrin greenstone belt hosts the Murrin Murrin nickel laterite deposit, located approximately 50 km to the south of Mt Zephyr. The Murrin Murrin deposits are derived from serpentinized peridotite within a sequence of feldspathic clastic and volcanoclastic sedimentary rocks, mafic volcanics and sills (Stewart 2001). Also within the Murrin greenstone belt, near Murrin Murrin, are the Eulamina (Anaconda) and Nangaroo VMS base metal deposits.

4.2.2 Structure

The Celia Lineament dominates the Mt Zephyr project. Large 'external' granite plutons squeeze the greenstones generating a well-defined cleavage with amphibolite to upper amphibolite facies metamorphism.

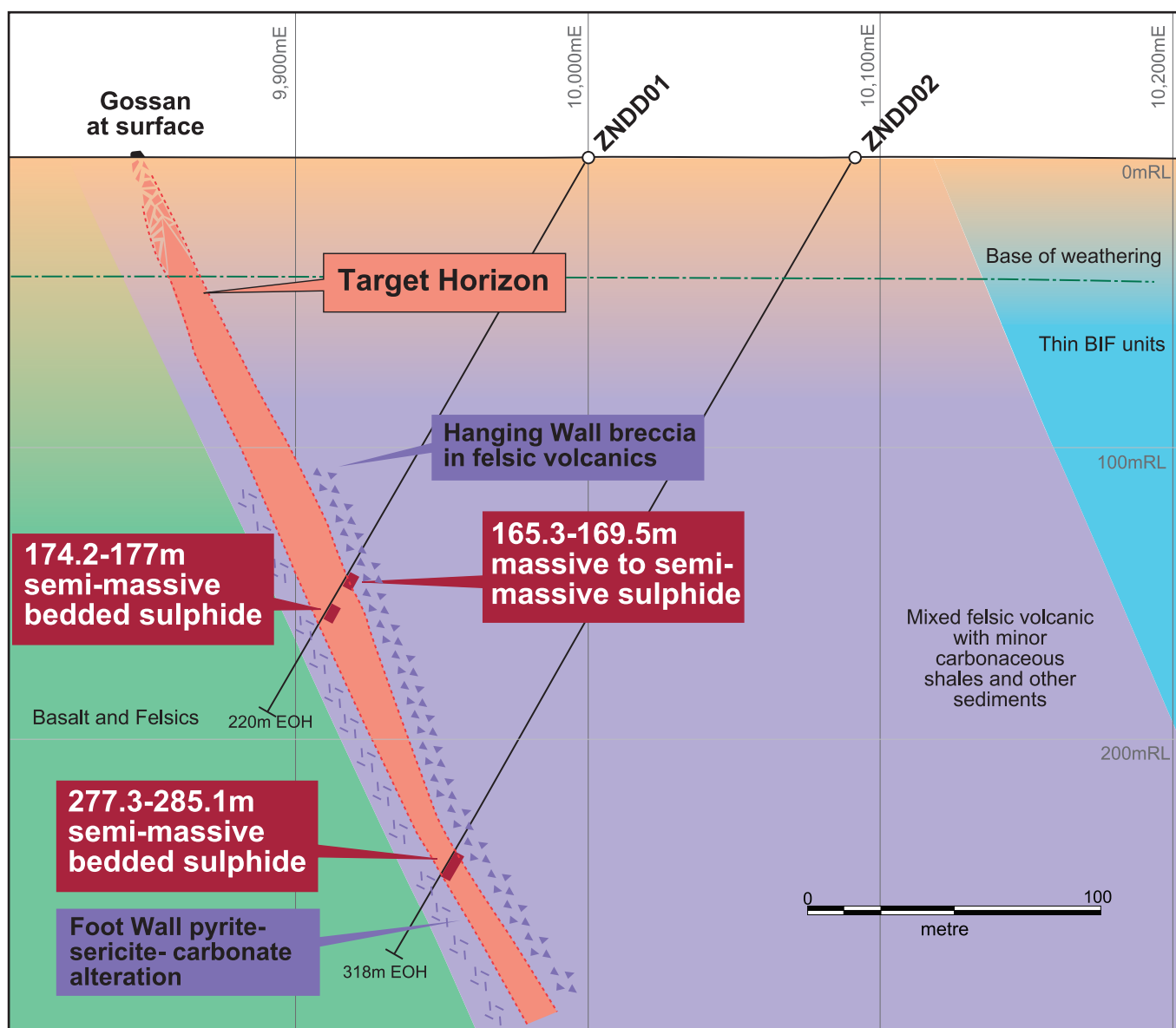
4.2.3 Mineralisation, deposit type and exploration potential

Both gold and VMS base metals mineralisation are recognised in the Mt Zephyr project area. Gold mineralisation is primarily identified at the northern Mt Zephyr line of lode (Dunn's New Find) and the Gale prospect. These are all east of the Celia Lineament in the Laverton Domain. VMS/base metal mineralisation occurs to the west of the Celia Lineament and within the Murrin Domain.

The Mt Zephyr North prospect is located near the north margin of a large granite pluton adjacent to the zone of contact with the greenstone belt. The aeromagnetic anomaly that defines the Mt Zephyr North prospect appears to occur at the intersection of faults, which are interpreted as possible conduits for iron-rich fluid that may be the source of the massive magnetite mineralisation seen in Heron diamond drilling.

Diamond drilling at Mt Zephyr North targeted a strong 'bullseye' magnetic anomaly and intersected massive magnetite bands. Subsequent gravity surveys identified a gravity anomaly offset from the magnetic anomaly. Diamond drilling also intersected haematite alteration associated with the magnetite mineralisation. This 'red rock alteration' is possibly analogous with the haematite-biotite-magnetite-pyrite-chalcopyrite alteration seen at the Jupiter gold mine 50 km southeast.

Figure 4.1: Mt Zephyr drill cross section showing geology and mineralisation (Heron Resources)



Gold mineralisation and associated small historical gold workings at Dunn's New Find is associated with BIF. Extensive sub/outcrop has been mapped by Heron and previous explorers. Recent sand and colluvium covers the strike extensions and appears relatively untested providing a significant future exploration target. The southern continuation of this BIF hosts significant mineralisation at Mt Morgans 50 km south and Lancefield 55 km east. BIF also hosts other gold mineralisation throughout the Laverton Domain.

Previous exploration in the first half of the 1990s by Aurora Gold at the Gale prospect identified sheared and sericite-biotite altered granite that is interpreted to be the source of the soil anomalism and significant RAB drilling anomalies greater than 0.5 g/t Au that are located at the southern end of the Gale Prospect. These previously reported results included:

- MZR4 0 to 18 m at 0.51 g/t Au
- MZR19 0 to 18 m at 0.48 g/t Au
- MZR49 0 to 6 m at 1.26 g/t Au

All these intercepts were from drilling in weathered sericite altered granite.



Figure 4.2: Drill core ZNDD02 (top) showing intersected mineralisation and gossan surface expression of mineralisation (bottom) (Heron Resources)



Mt Zephyr VMS project, upper photo is fresh sulphides as intersected in diamond drill-hole ZNDD-02 at 279-283m depth. The sulphides occur as finely laminated pyritic bands within black carbonaceous shale, which is typical of a distal VMS sedimentary mineralised system.

Lower photo is the weathered surface expression of the VMS sulphides, being intense red and yellow limonite weathering after pyrite to form distinctive 'gossans'. This style of gossan sampling by Ardea has generated several exploration targets at Mt Zephyr, including VMS, nickel sulphide and gold.

Field checking during the site visit by Xstrat was unable to identify any follow-up testing to these RAB anomalies as confirmed by the DMP historic exploration records. Exploration subsequent to Aurora Gold focused on the northern end of the Gale prospect leaving these anomalies untested. Xstrat understands Ardea will prioritise this target with RC drilling as the RAB drilling completed by Regal Resources has re-confirmed the earlier Aurora RAB drilling.

Esso Minerals identified the Mt Zephyr VMS prospect in a sequence of intercalated felsic volcanics, volcanoclastics, sediments and mafic volcanics striking NW and steeply dipping to the NE. Heron subsequently targeted a volcanogenic massive sulphide deposit based on geochemistry, magnetics and electromagnetic surveys.

These deposits usually host copper and zinc \pm lead, silver, and gold in stratiform lenses hosted in sequences characterised by bimodal volcanism and interflow sediments. The exploration model is based on the Teutonic Bore/Jaguar/Bentley VMS systems, situated approximately 60 km west of the Mt Zephyr project. Heron's diamond drilling intersected a horizon of semi-massive sulphide mineralisation with anomalous copper and zinc results hosted by a black shale horizon (Figure 4.1 & 4.2). Xstrat considers the drilling of stratiform sulphide as a confirmation of the exploration model, being the distal, less mineralised facies of a typical VMS system.

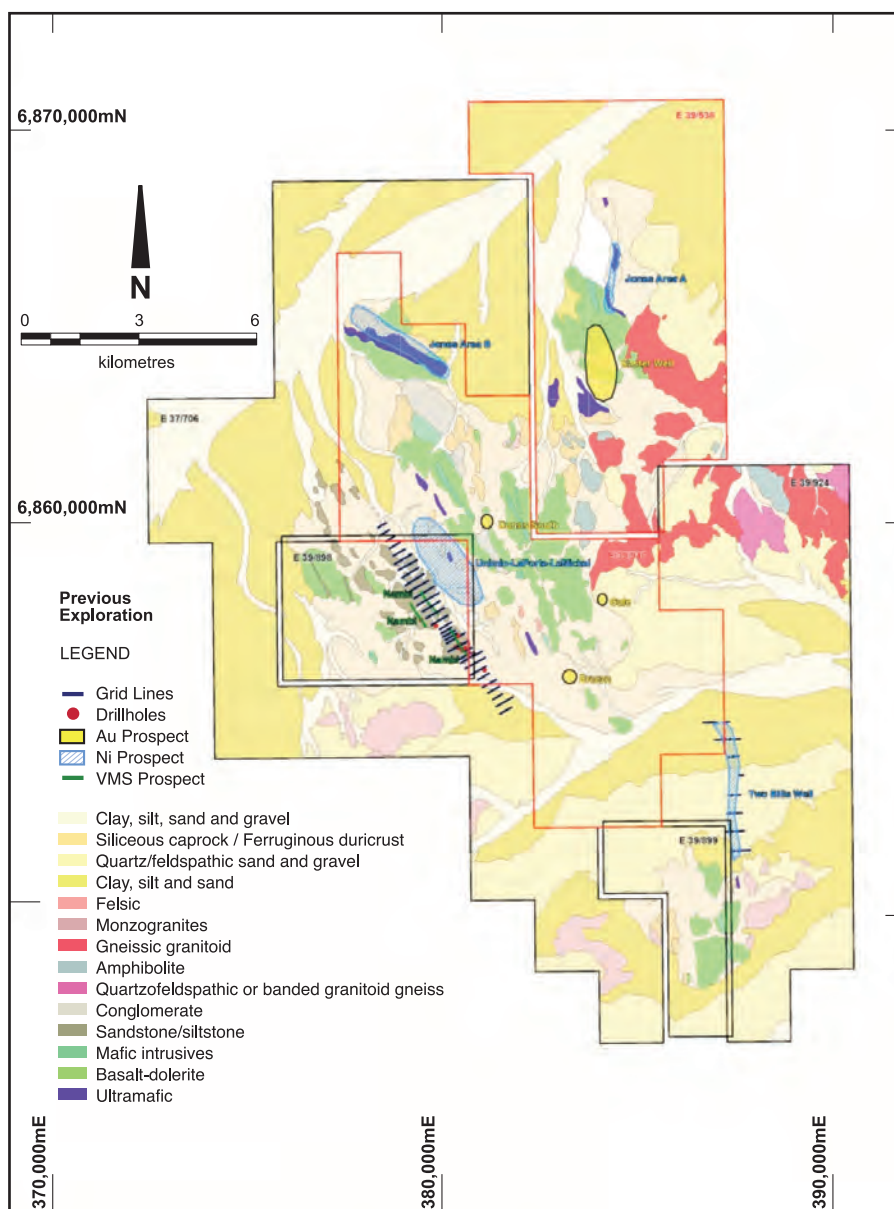
The mineralised horizon occurs near a contact between the felsic units and a basalt, and can be traced in aeromagnetics for approximately 6 km. While Xstrat recommends Ardea review this work and potentially follow up the VMS prospects, Xstrat views gold prospectivity at Mt Zephyr to be an order of magnitude greater than VMS base metals.

4.3 Previous work

4.3.1 Exploration

Xstrat reviewed reports on previous modern exploration which commenced in 1969 in the Mt Zephyr area (Appendix B). Initial exploration of geological mapping, geochemical sampling and RAB drilling (Figure 4.3) has identified a number of significant targets for further RC and diamond drilling. The project has a good dataset of regional and prospect scale information on which to base further exploration. The stand out target is the Aurora RAB gold intercepts from the southern Gale prospect detailed above.

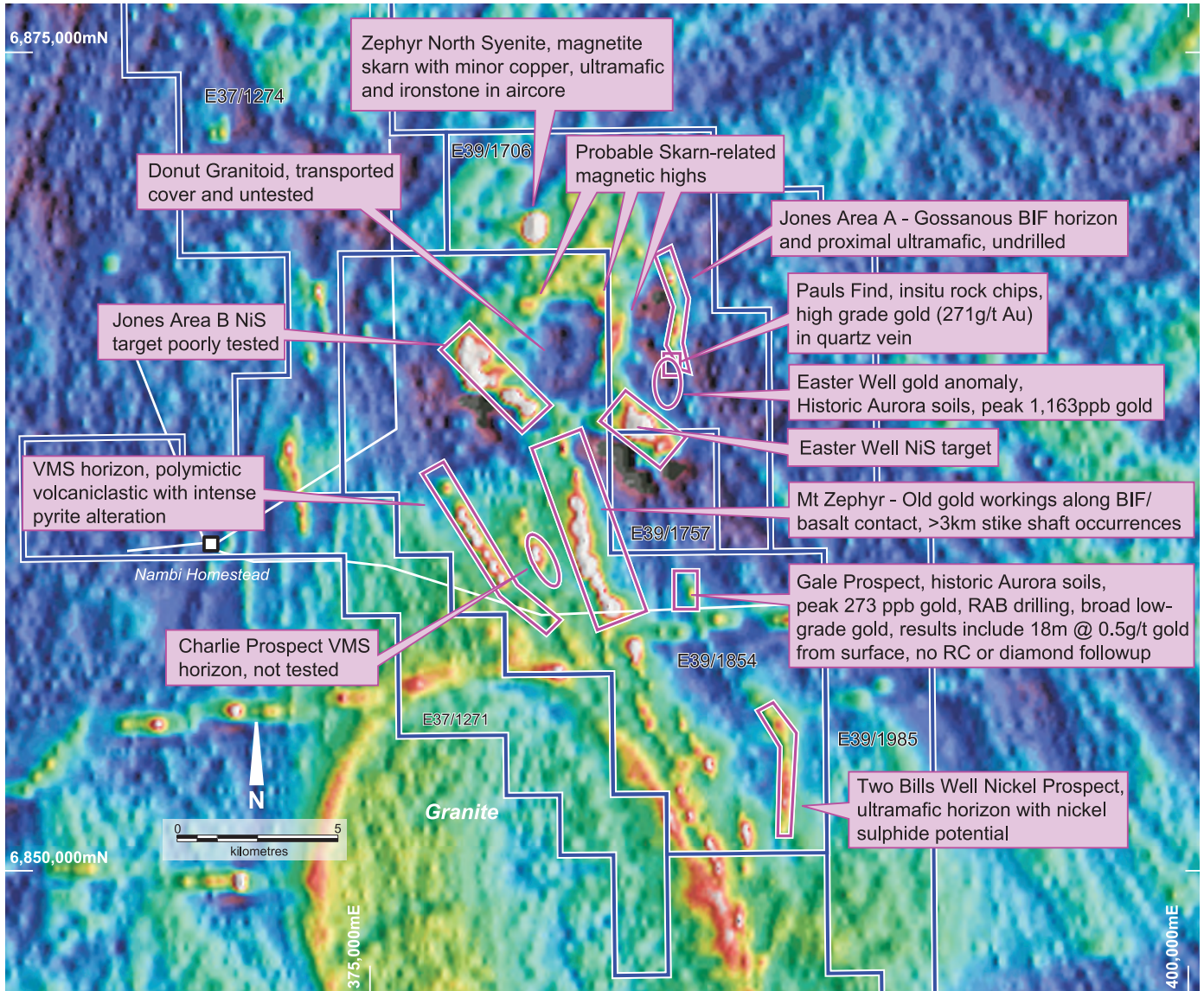
Figure 4.3: Mt Zephyr: general map showing previous exploration (Heron Resources)



4.4 Exploration potential

Exploration of the Mt Zephyr tenements has identified a number of anomalies and prospective exploration targets as illustrated in Figure 4.4. The overall NW-oriented magnetic trend is the regionally significant Celia Lineament. Much of the previous exploration was generally limited to the nickel and copper anomalies leaving the gold anomalies largely untested.

Figure 4.4: Mt Zephyr magnetic map showing project exploration targets (Heron Resources)



Gale prospect area

Xstract considers the untested Aurora Gold RAB intersections at the southern end of the Gale prospect as the highest priority target within the Mt Zephyr project. The absence of systematic exploration along the strike extents of the Gale prospect and the BIF which hosts gold mineralisation at Dunn's New Find is also warranted. In Xstract's opinion, gold prospectivity at Mt Zephyr is significantly higher than the VMS potential, despite Heron having diamond drilled anomalous massive sulphides. This level of gold anomalism in soil geochemistry and shallow refusal RAB drilling, combined with the demonstrated syenite intrusive association at Mt Zephyr North and high grade gold at Paul's Find, confirms high priority exploration targets.

Shallow RAB drilling by Regal Resources returned anomalous geochemical results including 2 m at 3.12 g/t Au from 8 m in MZR020 and 2 m at 1.64 g/t Au from 2 m in MZR024. Xstract does not agree with the vertical interpretation Regal applied. Xstract interprets these results to be part of a flat lying secondary gold geochemical anomaly developed above primary mineralisation along the amphibolite-granite contact. Xstract also observes that much of the historic RAB drilling was shallow.

Mt Zephyr central BIF/Basal contact zone

Gold was first discovered and mined at Mt Zephyr in 1898. A number of historic underground gold workings exist (Figure 4.5) along the BIF/ Basal contact, which extend to a reported depth around 110 ft (35 m) at which point water ingress significantly inhibited progress. The BIF contact zone is associated with the northern strike extension of the Mt Morgans-style BIF-hosted gold mineralisation. A data search for the historic records of the previous workings has not been successful to date. During the 1980s, a limited drill program was undertaken with an encouraging result at the BIF-porphyry contact. Xstract however believes that these drill holes were collared too close to the old workings to test the true potential of this contact zone below the depleted regolith (Figure 4.5). Xstract recommends that a comprehensively researched model of the geology, geochemistry, geophysics and structure be developed to aid in design of a targeted drill program to effectively test this significant potential below the zone of surface depletion.

Figure 4.5: Mt Zephyr historic gold workings showing follow-up drill collar (photo taken during field inspection visit) (Heron Resources)



Mt Zephyr North

The 'donut'-shaped circular magnetic low anomaly between Paul's Find and Mt Zephyr North (Figure 4.4) lies under transported cover and is considered a compelling drill target. The 'donut' feature was ground checked and found to have a pervasive transported cover with total absence of outcrop or subcrop, which explained why previous soil samples did not show any anomalies.

The Jones Area B

The Jones Area B prospect is located to the northwest along strike of the BIF/basalt contact zone, and to the immediate west of the above donut shaped magnetic low anomaly (Figure 4.4). Jones Mining and Hawkestone Minerals initially defined nickel auger soil anomalies associated with gossanous BIF on the eastern side of a thin olivine adcumulate ultramafic flow. These shallow auger samples were followed up with ten angled percussion drillholes which confirmed the anomaly.

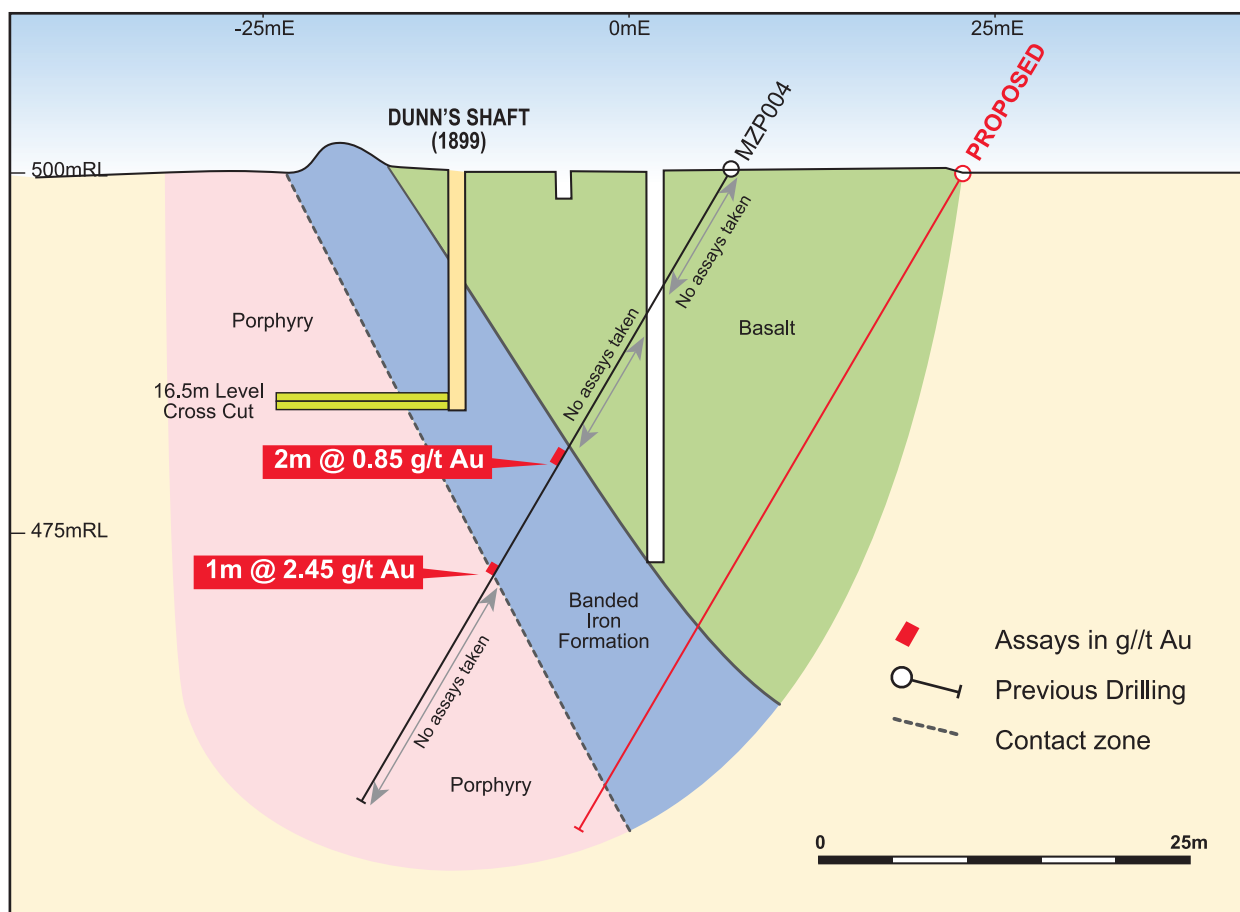
This nickel anomaly has not been fully drill tested and remains a potentially significant nickel sulphide target.



Dunn's New Find historical workings

Historical prospecting reports (Dunn 1898-1900) claim very significant gold grades in the shafts and cross-cuts of the old workings, although these reported assay grades in the cross-cuts (Figure 4.6) are considered highly unreliable and must be treated with caution. The only follow-up drilling showed encouraging gold grade at the BIF-porphyry contact (MZIP004), however the porphyry portion of this drillhole was not sampled. Dunn's historical reports suggest significant gold mineralisation in the porphyry unit (haematitised porphyritic granite), which to date is untested. Xstract supports the proposed drillholes (Figure 4.6) which should be assayed over the full length to test these historical claims.

Figure 4.6: Mt Zephyr – Dunns historical workings – section (Heron Resources)



A number of other gold anomalies along the Gale Shear, Pauls Find and Easter Well have been identified which have not yet been drill tested. To the west of the Celia Lineament (termed Ninnis Fault at this location) on the Breeze Shear are Dunns South and the Breeze gold anomalies.

Two Bills Well

The Two Bills Well ("TBW") nickel prospect is located 5 km southeast of the Gale prospect and was identified from aeromagnetism by Kennecott (1969 – 1975) as an ultramafic body dipping steeply east. The Two Bills Well ultramafic is on the western limb of the Mt Margaret Anticline, and interpreted to correlate with the unit that hosts nickel sulphide mines to the east at Windarra South and Mt Windarra and on the south hinge and east limb respectively of the Mt Margaret Anticline. Given this regional interpretation, Two Bills Well is overturned and the favourable basal flow contact should be on the eastern contact. Shallow percussion drilling showed a nickel anomaly along the strike of the magnetic high, and a local (four line) IP survey confirmed a moderate east-dipping polarisable source generally coincident with the ultramafic interpretation. This nickel anomaly potential has not yet been fully drill tested.

Historical reports by Newmont Australia (April 2004 – a068772) and Regal Resources (July 2007 – a075557) suggest that the currently available data set may not be complete. Xstract recommends that although TBW is considered a secondary exploration target, that a historical data search be conducted to compile a full data set to facilitate an informed study and assessment of this anomaly.

5 Bardoc Tectonic Zone (WA)

5.1 Regional information

5.1.1 Location, access and infrastructure

The Goongarrie Project is located approximately 80 km NNW of Kalgoorlie (Figure 1.2) within the area of the former Goongarrie (now CALM-owned) and Mount Vettors pastoral leases.

The project straddles the Goldfields Highway and rail line, and is approximately 20 km west of the Goldfields Gas Pipeline and 30 km north of the former Cawse nickel laterite operation. Station and fence line tracks and old grid lines provide reasonable internal access. The Big Four prospect is accessible from the Goldfields Highway 72 km north of Kalgoorlie, via an off-road track to the east, which travels east for 3 km.

5.1.2 Climate, topography and vegetation

The physiography of the Goongarrie Project area is a mature, sandy, low relief with flat plateau ridges of a former peneplain surface and a poorly developed drainage system. The drainage channels are broad and long-lived but currently inactive. The local drainage system flows into a salt lake system known as Lake Goongarrie.

The area is semi-arid with only sporadic and moderate rainfall during the winter months.

5.2 Geology

5.2.1 Regional setting

The Bardoc Tectonic Zone ("BTZ") is 150 km long and up to 12 km wide, intensely sheared corridor of Late Archaean supracrustal rocks that is bounded by pre- to syn-tectonic granites in the Eastern Goldfields Province, Yilgarn Craton. The BTZ is physically linked south along strike to the Boulder-Lefroy Shear Zone ("BLSZ"), one of the richest orogenic gold shear systems in the world. However, gold production in the BTZ has been an order of magnitude smaller than that of the BLSZ. The BTZ shear system has produced over 100 t of gold from a range of deposits. The mineralogical and geochemical data from five representative localities in the Bardoc Tectonic Zone have relatively uniform features which characterise a coherent group of orogenic-gold deposits.

5.2.2 Structure

The BTZ project area lies within the Kalgoorlie Terrane of the Eastern Goldfields Superterrane (EGS), which has been interpreted to have formed in a number of different settings, including, extensional basins, mantle plumes and volcanic arcs. Greenstone successions of the EGS are divided into elongate terranes based on the regional NNW trending faults. The greenstone terranes do not include widespread intrusive granites, and may be further divided into fault bounded domains.

5.2.3 Mineralisation and deposit type

The ultramafic volcanic rocks of the Menzies region form an almost continuous sheet-like suite of units, extending from Siberia to Ghost Rocks, northwest of Menzies (Hill, Gole & Barnes 1989). These units, comprising two main formations, form the basal komatiitic sequence of the Linger and Die Group within the Ora Banda Domain. The sequence is regionally continuous, mappable in outcrop and by aeromagnetic data. The dominant ultramafic units are the Walter Williams Formation (WWF) and the Siberia Komatiite. The contact between the WWF and the Siberia Komatiite is characterised by shearing, local presence of sedimentary lenses and a narrow unit of pyroxenite, gabbro and leucogabbro, which marks the eastern limit of the KNP Goongarrie nickel laterite mineralisation.

The WWF is an extensive komatiite body that is estimated to be 600–900 m thick and has a strike length of 51 km that trends approximately NNW along the Goongarrie Line. It is situated between gneissic granites to the west, with mafic volcanics (typically basalts) and sedimentary rocks to the east. It forms the lower part of the overall komatiite unit. Nickel laterite mineralisation is specifically hosted in the weathered mantle of the WWF, the lower-most adcumulate facies of the Linger and Die Group. The overlying Siberia Komatiite, which hosts the Big Four gold deposit, is a series of massive and olivine/pyroxene spinifex textured flows and minor gabbro. The uppermost komatiite unit is a 500 m thick sequence of variolitic, pillowed basalts (Big Dick Formation) capped by a discontinuous, thin sedimentary horizon.

Goongarrie

The Goongarrie Project area contains historic gold mining areas at the eastern contact of WWF with Siberia Komatiite, notably at Goongarrie Hill immediately west of the Goongarrie gold mine.



Big Four

Big Four Gold deposit is hosted within the Siberia Komatiite and locally within a NNW striking intermediate intrusive. The mineralising system comprises high-grade hydrothermal quartz veins and a silicified halo along the boundaries of an intermediate intrusive. The intrusive has been mapped from drilling over a strike length of about 100 m, but is observable in rock chips a further 100 m to the south. The lode has been offset by a series of faults that have complicated the orebody to the NNW, however grade trends appear to be mappable, with ore enrichment lying largely on the hangingwall and footwall portions of the intrusive.

Ghost Rocks

The Menzies District has been a significant source of gold, and hosts the Lady Shenton and the Menzies Consolidated Gold Mine. The Menzies Archaean greenstone belt divides into two to the north of Menzies. The Ghost Rocks prospect is located 14 km NW of Menzies and lies on the north-western limb of the Menzies Archaean greenstone south plunging anticline.

Ghost Rocks has a number of historical underground workings, notably Lady Isobel, where the gold is associated with quartz veins in mafic rocks, thought to be aligned to the third stage deformation of east/west faulting and folding. Quartz lode material sampled from the Isobel Group in 1989 confirmed significant gold anomalies. In the south-eastern portion is another group of historical working known as the Deviation workings, although no production records exist.

5.3 Previous work

5.3.1 Exploration

Gold at Goongarrie was discovered around the western shores of Lake Goongarrie in the 1890s, initial mining focused on high grade shoots along the margins of the numerous quartz blows found between the WWF and the western shore of Lake Goongarrie. Modern exploration commenced with Western Mining Corporation and CRA Exploration Pty Ltd in the mid-1960s, which culminated with Western Mining and Julia Mining developing the New Boddington and Franks Dam deposits in the late 1980s. Julia Mining retained tenure over the goldfield till the early 2000s. Heron Resources commenced acquiring tenements over the WWF in 1997 leading to the discovery delineation and study of the Goongarrie Hill, Goongarrie South and Big Four nickel laterite deposits.

At Big Four, gold was identified at the same time as at the Goongarrie Mining Centre. More recent exploration undertaken by Coopers Exploration in the 1980s included RC drilling and a mining study which showed mining was not economic at the time. Goldfields Exploration drilled the prospect in 1999 intersecting narrow high grade intercepts, however no further follow up was undertaken at the time as drilling was ongoing at the Aphrodite discovery to the south. Heron has explored the project area for nickel laterite and gold since 1998. Heron drilled eight reverse circulation holes for 1360 m, the results of which were publically announced on 24 June 2012. More recently a gold-in-soil anomaly has been identified to the south of previous exploration.

At Ghost Rocks, gold was discovered in the mid-1890s. Modern exploration commenced in 1966 with Newmont exploring for nickel, which was the focus of exploration on the project until 1974 when Falconbridge ceased exploration. From 1985 to 1999 gold was the focus of exploration, with a number of companies undertaking early stage geochemical exploration and reanalysis of the previous nickel exploration samples for gold. Heron first acquired the current project area in 1999 undertaking systematic exploration for nickel laterite and nickel sulphides. Nickel-copper gossans originally identified by Falconbridge were explored by Heron including rock chip sampling mapping geophysical surveys and limited drill testing.

Previous exploration is detailed in Appendix B.

5.4 Exploration potential

Big Four

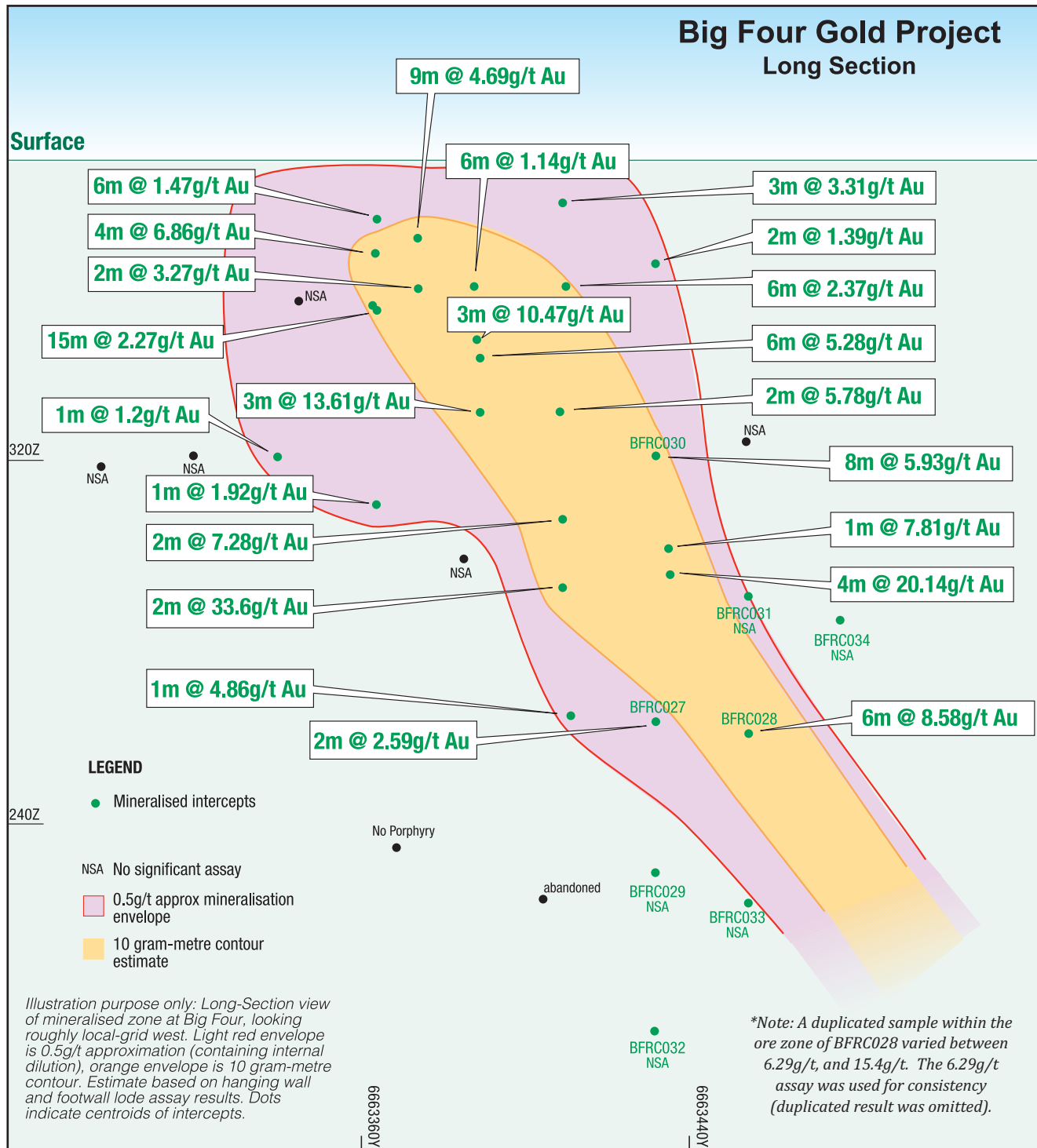
The Big Four gold prospect located south of Goongarrie Hill, some 70 km north of Kalgoorlie, contains a number of old gold workings from the 1900s and which was subject to limited shallow drill testing in the late 1980s (Coopers Resources) with results including 12 m at 4.65 g/t gold from 34 m. Coopers Resources conducted a drill program of eleven drillholes, and reported a mining study, which at the time showed mining was uneconomic (Coopers Resources N.L. 1989).

Goldfields Exploration drilled two RC holes in 1999 with a best result of 1 m at 47.2 g/t (SCRC300).

Recent Heron drilling has defined a potentially north plunging shoot – shown in long section below (Figure 5.1).

An up-date of the original model and resource estimate (Coopers Resources N.L. 1989) as suggested in Figure 5.1 is recommended. A RAB program is recommended to the southwest to follow up a recently identified soil gold anomaly.

Figure 5.1: Big Four – diagrammatic – section (Heron Resources)



Left to Right:

BFR021-
(1m @ 54g/t 112m downhole).

BFR006 -
(1m @ 65-566g/t
109m downhole).

BFR028 -
(1m @ 7g/t 144m downhole).



Goongarrie

Goongarrie Hill prospect lies to the west of the historic Goongarrie gold mines where the mineralisation is localised at sheared basalt and dolerite contacts close to discordant late stage faults that intersect or disrupt the major Bardoc Tectonic Zone ("BTZ"). Recent rock chip sampling by Ardea has indicated target zones requiring follow up.

Ghost Rocks

The historic Lady Isobel mine is the most prospective part of the tenement with recent rock chip samples from the workings showing significant copper and gold grades (Heron Resources Ltd 2016). No drilling has been undertaken around these reasonably extensive workings and therefore potential exists for defining mineralisation. Prospective geology also extends to the NW under lake sediments.

6 Kalgoorlie Nickel Project (WA)

6.1 Regional information

6.1.1 Introduction

The Kalgoorlie Nickel Project ("KNP") is a major undeveloped nickel laterite deposit of 805.3 Mt at 0.70% Ni and 0.048% Co (Table 6.1), including Black Range and Goongarrie South, with significant mineral resources of in excess of 0.1% Co (Heron's 2016 annual report JORC Code 2012). Black Range has an inferred resource of 20.1 Mt at approximately 0.75% Ni and 0.103% Co and the Goongarrie South Resource has approximately 5.8 Mt at 1.08% Ni and 0.102% Co in the measured category (Appendix C). These cobalt rich zones are recommended for further assessment.

6.1.2 Location, access and infrastructure

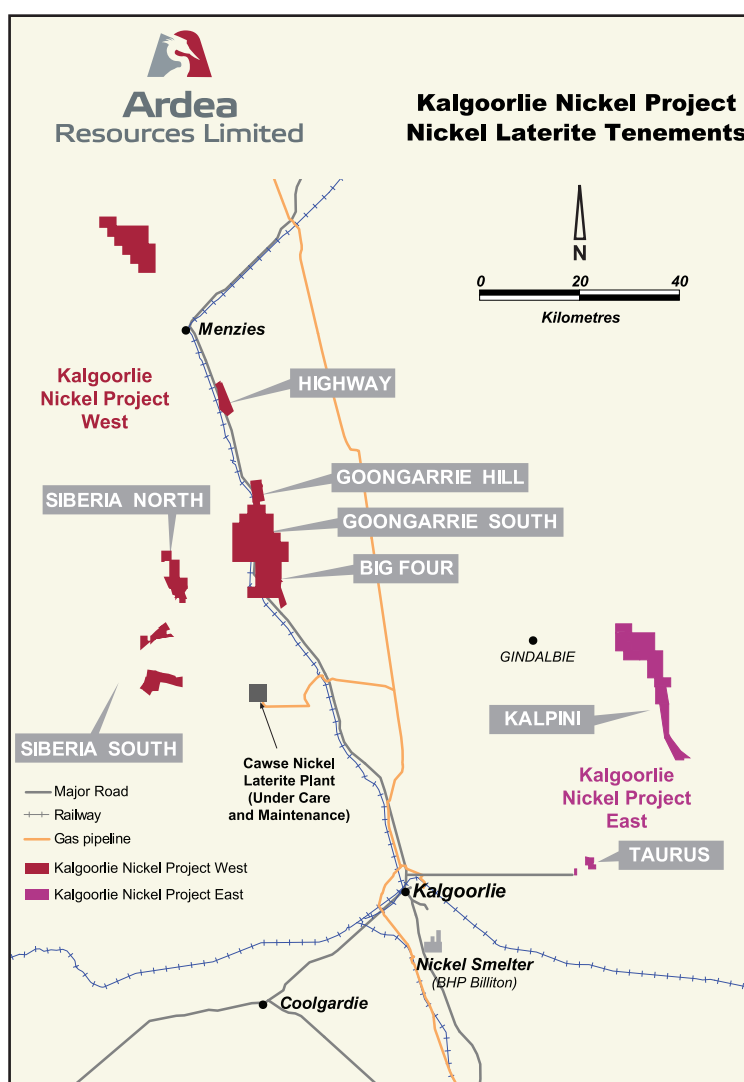
The KNP is located within a 150 km radius north and east of Kalgoorlie. It is divided into two main areas – KNP West and KNP East (Figure 6.1). Mining infrastructure within the Kalgoorlie district is considered good and includes rail, road and a gas pipeline. The KNP project includes the nickel-cobalt laterite within the BTZ and Kalgoorlie East tenure.

6.2 History

In June 1997, following the Federal government selling its physical gold reserves with consequent gold price collapse, and after Heron's listing on the ASX in 1996, Heron moved away from its previous gold focus to the nickel laterite located on a number of their leases, initially at Kalpini and subsequently proceeded to acquire the tenements that were to make up the KNP. In 2000, Centaur Mining and Exploration, the operators of the Cawse high pressure acid leach (HPAL) plant to the SW of Goongarrie launched a hostile takeover attempt on Heron that was eventually defeated. Subsequently Centaur Mining and Exploration went into receivership, allowing Heron to purchase many of their tenement assets.

In March 2004, Heron acquired the Bulong project mineral rights from the receivers of the Bulong Nickel Operation. Heron engaged Snowden Mining Industry Consultants ("Snowden") to undertake an independent estimation of the resources making up Heron's nickel laterite assets at about the same time the project name KNP was adopted. Snowden's estimate of nickel Mineral Resources (JORC1999) indicated one of the largest undeveloped nickel laterite resource bases in the world at the time and this formed the basis of an initial scoping study that was undertaken by SKM Engineers.

Figure 6.1: Location of KNP Nickel Laterite Tenements (Heron Resources)



In late 2004, expressions of interest were sought from significant companies with exposure to laterite nickel which resulted in a farm-in being formed in July 2005 between Heron and Inco of Canada. Inco, which was subsequently taken over by Vale of Brazil to become Vale Inco, undertook significant additional drilling, resource estimation, metallurgical test work and a Pre-Feasibility Study, based on a majority of Indicated Mineral Resources.

Heron optimised this study subsequent to the GFC and Vale Inco withdrawing from the farm-in. Heron regained 100% control of the KNP with in excess of AUD34.5 million expended by Vale Inco on drilling, metallurgical and study information.

On 8 April 2014, Heron announced the results of a scoping study evaluating a smaller project based on the Stimulus Carbon Friendly Nickel Production sulphuric acid leaching and reagent regeneration process.

6.3 Geology

6.3.1 Regional setting

The KNP West tenements, in particular Goongarrie South, are focused on the olivine adcumulate portion of the Walter Williams Formation (WWF), a regionally significant layered ultramafic unit within the Ora Banda Domain. The WWF displays good silica-goethite laterite development over the adcumulate portion of the unit and siliceous goethite mineralisation allows for beneficiation of mineralisation prior to leaching. The WWF is often the lowest unit of the Ora Banda Domain preserved in the Bardoc Tectonic Zone, as the western Missouri Basalt is stopped by the large granitoid of the Goongarrie - Mt. Pleasant Anticline. The Black Range Project is focused on the differentiated Ora Banda Sill southwest of Ora Banda town site. The Ora Banda Sill is layered and differentiated with ultramafic units, which are the source of the anomalous nickel, cobalt and platinum elements in the weathered profile.

6.3.2 Structure

The WWF can be traced from southwest of Siberia through Ora Banda, Mt Pleasant and north along the BTZ to Ghost Rocks. The unit is broadly folded in the Siberia (syncline) and Mt Pleasant (anticline) areas. Frequently the unit is cut and in places offset by NE trending later D3 shears and faults which control mineralisation.

Strain is partitioned into the meso-cumulate partially-serpentinised margins of the adcumulate unit. The adcumulate unit is more massive and is subject to brittle fracturing leading to enhanced permeability during the lateralisation process and thus enriched nickel laterite grades. At Goongarrie Hill, high grade zones within the deposit have a riedel shear geometry, i.e. NW trending within the overall N-S trending adcumulate unit.

6.3.3 Mineralisation and deposit type

Nickel laterite mineralisation at Highway, Goongarrie Hill, Goongarrie South and Big Four is best developed over the adcumulate sequence within the WWF. The high grade and consistent mineralisation observed at Goongarrie South is due to enhanced water flows and depth of weathering beneath the palaeolake and palaeochannel defined in drilling. Cobalt is significantly enriched in the central zone at Goongarrie South. Enhanced weathering and nickel enrichment is observed proximal to the Comet Vale Monzonite at the Highway project. The nickel laterite mineralisation is siliceous and strongly amenable to beneficiation.

6.4 Previous work

6.4.1 Exploration

Nickel mineralisation potential was initially recognised during the 'Nickel Boom' of 1966 to 1970, with the WWF targeted for nickel sulphide mineralisation. Western Mining Corporation drilled across the top of the Goongarrie South mineralisation but the early RAB drilling failed to penetrate the paleochannel and lake sediments to the nickel enriched zone below. Heron undertook exploration between 1997 to present. Xstract is of the opinion that the KNP is a potential development project when the nickel price is at a level to support the capital and operating costs. Xstract does not recommend further exploration for nickel as a priority, and instead, ongoing work should focus on metallurgical optimisation and generating cobalt feedstock for the lithium ion battery industry. Xstract recommends Ardea's KNP focus should be the Goongarrie South and Black Range cobalt prospects, but that current global events positively affecting the nickel price should be monitored.

Previous exploration is detailed in Appendix B.



6.5 Exploration potential

Black Range

Black Range is located 60 km northwest of Kalgoorlie and lies within the Norseman-Wiluna Archaean greenstone belt along the SE-NW trending mafic-ultramafic Ora Banda Sill which forms part of the Ora Banda Domain, within the Kalgoorlie Terrane. The Ora Banda Sill has been emplaced along a porphyritic basalt-sediment contact and contains a basal peridotite, progressing upwards through pyroxenite, norite to an uppermost gabbro-norite which outcrops to the south of the tenements. Tertiary laterite overlies the Ora Banda Sill. In 2001 Anaconda drilled 90 RC drillholes (2,737 m) and in 2002 announced both a nickel-cobalt and a Platinum Group Element (PGE quoted as Pt, Pd) resource estimate, which due to economics and technical extraction constraints at the time were considered uneconomic (Anaconda Nickel Limited (C6/2001) 2001).

In 2011, Heron drilled 71 RAB holes, testing an overlying Tertiary palaeochannel in the Carnage tenements. A number of significant gold anomalies resulted over the entire drilled strike length. The gold mineralisation is most pronounced at the base of the sand unit in contact with the underlying saprolite (65 to 75 m) although a number of variable intersections in the shallower puggy clay unit (15 to 30 m) are also worthy of more detailed follow up.

As noted, there is a historical 2001 nickel-cobalt and PGE resource estimate within the Black Range project. This report (Anaconda 2002) indicates that the tenements are fairly well covered by drilling, so the potential increase in resources would be limited.

Anomalous gold values were intersected but are at a very low level and are restricted to the Ora Banda Sill (Anaconda 2002).

6.6 Resources and reserves

6.6.1 Mineral Resources

Nickel-cobalt Resources have been defined within the KNP, from eleven separate deposits, but broadly grouped into KNP East, KNP West and KNP Yerilla. These are summarised in Table 6.1.

Table 6.1: KNP nickel-cobalt Mineral Resources (JORC 2012) Heron Annual Report 2016⁷

Category	Tonnes (Mt)	Ni (%)	Co (%)
Measured	9.6	1.02	0.081
Indicated	244.0	0.75	0.052
Total Measured and Indicated	253.6	0.76	0.053
Inferred	551.7	0.68	0.046
Total Resources	805.3	0.70	0.048

www.heronresources.com.au/resource-statement

Within the overall larger Mineral Resources of the KNP, the measured portion of the Goongarrie South resource is 5.8 Mt grading 1.08% Ni and 0.102% Co and the Black Range inferred resource of 20.1 Mt grading approximately 0.75% Ni and 0.103% Co (Heron 2016 Annual Report). These high cobalt portions of the resources should be the focus of any future cobalt studies.

⁷ In accordance with the Australian Securities Exchange Limited Listing Rules Appendix 5A,

The information in this report that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled in-house and validated by Steve Jones in 2013. Steve Jones is a member of the Australasian Institute of Mining and Metallurgy. Steve Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience 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'. Steve Jones validated the Snowden Mining Siberia North estimate in 2013. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

6.6.2 Studies

Initial studies evaluated the potential for the KNP to support a large long life mining and processing operation. The initial study was the SKM Scoping study of 2004 followed by the Vale Inco PFS of 2009 and subsequently Heron's PFS optimisation study of 2010. All these studies looked at a traditional high pressure acid leach processing route, involving significant capital and long life as disclosed to the market in announcements at the time of completion of each study.

In 2014, Heron commissioned a scoping study using the Stimulus Carbon Friendly Nickel Production ("CFNP") sulphuric acid leaching and recycling process. Heron announced the results of that study on 8 April 2014. This study investigated a smaller scale operation using atmospheric leach, processing only on a small portion of the overall KNP resource base. This study was generally considered positive, however the nickel price has deteriorated since the study's release.

Ardea has indicated a budget of AUD1 million over two years for an updated study to advance the KNP including:

- Investigating potential plant throughputs to optimise operating and capital costs.
- Upgrading by screening.
- Additional bench scale metallurgical test work to investigate atmospheric leach geo-metallurgical performance, including the optimisation of cobalt recoveries.

7 Kalgoorlie East (WA)

7.1 Regional information

7.1.1 Location, access and infrastructure

Bulong/Taurus are located 35 km due east of Kalgoorlie and 10 km north of the Bulong mining centre within the Hampton Hill Pastoral Lease and the Shire of Kalgoorlie Boulder. Access is by way of a sealed road as far as the former Bulong Nickel Operation processing plant and via mine roads thereafter.

The Kalpini project area is located 60 km east-northeast of Kalgoorlie north of the Kanowna to Kurnalpi road. Access throughout the project area is via farm tracks and historic cleared grid lines.

7.2 Geology and Mineralisation

The Taurus Project covers a folded east-west trending portion of the Bulong Ultramafic Complex in contact with felsic to intermediate volcanics, tuffaceous sediments, and finer grained sediments of the Gindalbie Formation. Significant shearing is present, frequently infilled with quartz veining and carbonate-chlorite-sericite alteration. Lateritic weathering of the ultramafic rocks has locally enhanced near surface concentrations of nickel and cobalt.

The Taurus Project contains a number of historic gold workings centred around the Taurus Mine and covering a strike length of approximately 400 m. The mined gold mineralisation is hosted in a north-northeast striking quartz stockwork plunging shallowly south, which is up to 4 m wide. Historic production records suggest that 62.95 kg of gold have been recovered, with a small portion of this (15 oz) reported from alluvial workings.

At the Kalpini Project, the Emu Lake Ultramafic forms an arcuate belt wrapping around and in contact with a large granite body to the east. Previous nickel exploration focused on this ultramafic for sulphide and laterite mineralisation. Along the southwestern margin of the ultramafic alluvial gold has been located.



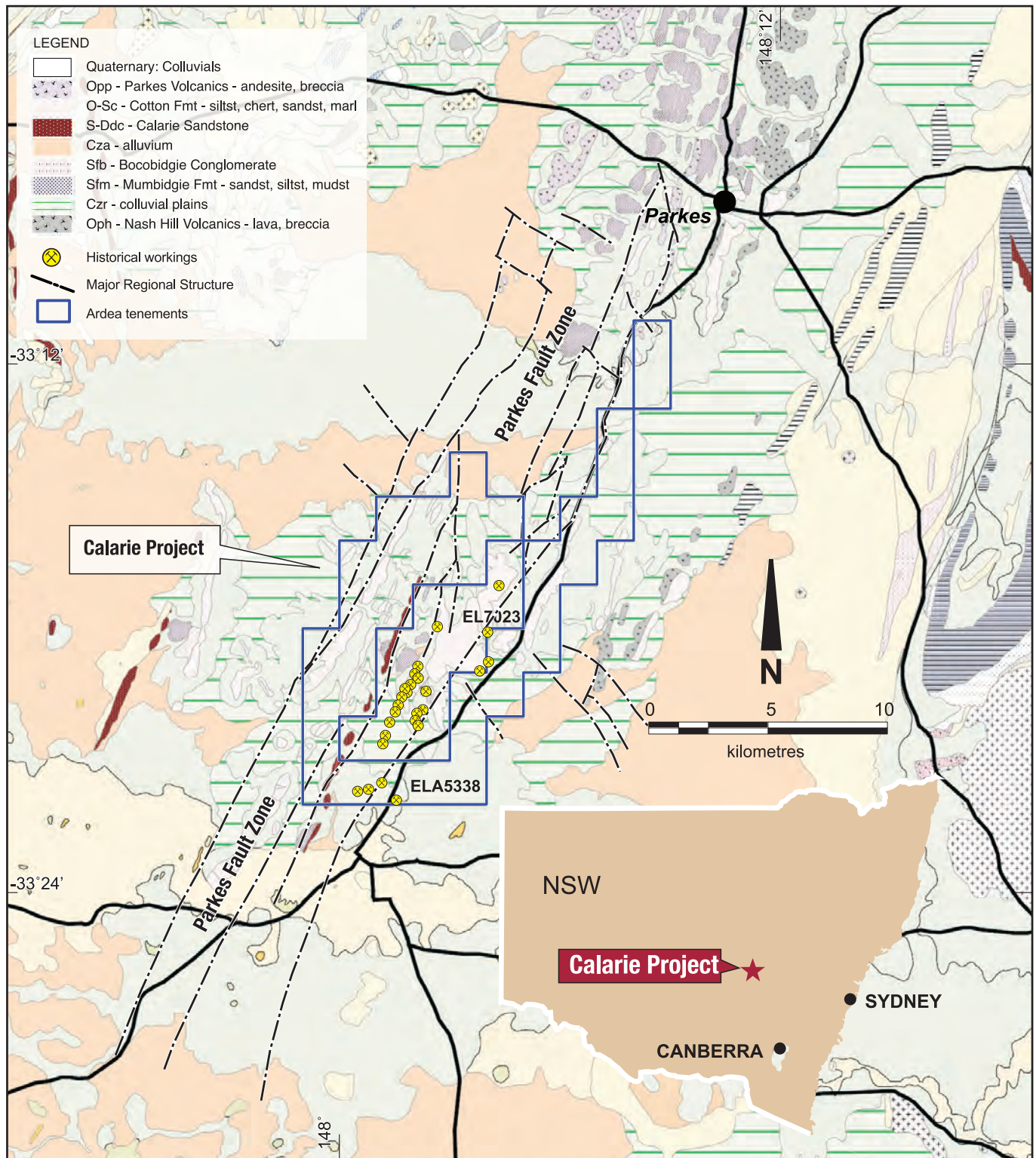
8 Calarie (NSW)

8.1 Regional information

8.1.1 Location, access and infrastructure

The Calarie project consists of two granted and one pending tenement over 134.5 km² and is located from 3 km to 25 km north of Forbes in central-west NSW. The area is well served with infrastructure including a major road, rail transport facilities, water and power.

Figure 8.1: Location of Calarie tenements (NSW) (Heron Resources)



8.2 History and previous exploration

Historical Calarie recorded gold production is summarised in Table 8.1:

Table 8.1: Previous recorded production

Mine	Production (Kg Au)	Grade Au (g/t)	Period
Lachlan	612	23	1896-1908
Nil Desperandum	31	11	1898-1905
North Lachlan	220	17	1902-1907

Source (Golden Cross Operations Pty Ltd 2003)

During 1995, Hargreaves Resources NL undertook a number of studies including mineralisation modelling and preliminary mining studies covering the historic Lachlan, North Lachlan and Nil Desperandum Mines. In 2004, Kimberly Diamonds Ltd reviewed the work of Hargreaves Resources and downgraded the resource estimate to an Inferred Resource under the then in-place JORC Code 2004 edition. Xstract recommends future exploration is guided by this work, therefore discovery of additional mineralisation is required prior to further resource studies.

8.3 Geology

8.3.1 Regional setting

The Daroobalgie 'Volcanics' are a competent feldspar porphyry which are mapped to intrude sediments of the Late Ordovician to Early Silurian Cotton Formation and are located in an 8 km long belt northeast of Forbes.

8.3.2 Mineralisation and deposit type

In the vicinity of the Calarie mine, previous drilling has revealed that the western contact of the Daroobalgie Volcanics dips 70° west, and is faulted, strongly altered and mineralised. The faulting may be related to the London-Victoria High Strain Zone, which is interpreted to extend northwards from Forbes to Parkes and is the host to numerous gold occurrences.

The contact displays strong gold endowment further north, being associated with the Peak Hill and Tomingley gold mines.

8.4 Exploration potential

Testing of the sheared and mineralised Daroobalgie Volcanics contact along strike and down dip is the primary exploration target at Calarie.

9 Gundagai (NSW)

The Gundagai tenement and applications cover some 280 km² located 315 km southwest of Sydney NSW and within the southern Lachlan Fold Belt. The area consists of northerly trending hills, underlain by the slates and other sediments, of the Silurian-aged Jakalass Slate Formation intruded by porphyry units, which are often closely associated with the gold mineralisation. Additionally, the Jackalass Slate Formation appears to have all the characteristics of a Volcanogenic Massive Sulphide (VMS) target, being a distal sulphidic shale unit, suggesting potential for copper mineralisation.

The tenement covers numerous small historical mines, previously worked for gold, copper, lead, zinc, magnesite, barite and manganese with significant mined production reported from Califat (37 tons copper) and Princess Marina (20 kg gold).

Recent reconnaissance work by Heron in the area has identified gold targets through panning of the crushed quartz veins sourced from a number of the old workings. The reported quantity of panned gold recovered from these samples indicates potential for high-grade epithermal quartz lodes. Rock chip grab samples assayed by Heron are reported to have returned a maximum grade of 2.04 g/t Au from quartz 'waste' rock from the Old Gundagai workings, and a maximum of 0.32 g/t Au from a quartz vein in altered porphyry at the Big Ben workings. A drill program to test these anomalies is recommended.



10 Declaration

10.1 Warranties and indemnities

Ardea and Heron have represented in writing to Xstract that full disclosure has been made of all material information and that to the best of their knowledge and understanding, such information is complete, accurate and true.

As recommended in Section 11.4 of the VALMIN Code, Ardea and Heron have provided Xstract with an indemnity under which Xstract is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required which:

- results from Xstract's reliance on information provided by Ardea, Heron and/or Independent consultants that is materially inaccurate or incomplete, or
- relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

10.2 Consent

Xstract consents to this report being included in Ardea's Prospectus in the form and context in which it is provided, and not for any other purpose. Xstract provides this consent on the basis that the technical assessments and opinions expressed elsewhere in the prospectus are considered with, and not independently of, the information set out in Xstract's complete report.

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Appendix A: Detailed tenement lists

NSW Lachlan Fold Belt tenement list

Key WA Project	Province	Tenement ID	Project	Holder 1	Responsible Party	ARL Beneficial Interest	Status	Area (Units)	Area km2 actual	Act Year	Application Date	Grant Date	Renewal Date	Expiry Date	Annual Rent \$	Levy	Current Year Commitment	Security Held
Lewis Ponds																		
	Lachlan Fold Belt	EL5583	Lewis Ponds	TriAusMin Ltd	Ardea	100	Live	51	146	1992	4-Dec-1998	25-Jun-1999	27/11/2014	24-Jun-2017	3,060.00	400.00	81,000	40,000.00
	Lachlan Fold Belt	EL8323	Lewis Ponds	Ochre Res Pty Ltd	Ardea	100	Live	60	172.4	1992	6-Jun-2014	27-Nov-2014		27-Nov-2017	3,600.00	100.00	50,000	10,000.00
	Lachlan Fold Belt	ELA5337	Copper Hill	Ardea Res Pty Ltd	Ardea	100	Pending	100	286	1992	10-Aug-2016	Under application						
							Totals	211	604.4						6,660.00	500.00	131,000.00	50,000.00
Gundagai																		
	Lachlan Fold Belt	EL8061	Gundagai	Ochre Res Pty Ltd	Ardea	100	Renewal Pending	49	278.1	1992	14-Sep-2012	13-Mar-2013		13-Mar-2015	2,940.00	100.00	69,500	10,000.00
	Lachlan Fold Belt	ELA5323	Gundagai	Ardea Res Pty Ltd	Ardea	100	Pending	47	132.3	1992	15-Jul-2016	Under application						
							Totals	96	410.4						2,940.00	100.00	69,500.00	10,000.00
Calarie																		
	Lachlan Fold Belt	EL7023	Calarie	Tri Origin Mining Pty Ltd	Ardea	100	Live	12	34.44	1992	6-Jun-2007	20-Jan-2008		20-Jan-2017	720.00	100.00	42,000	10,000.00
	Lachlan Fold Belt	ML0739	Calarie	TriAusmin Pty Ltd	Ardea	100	Live	53.41	0.0053	1973		23-May-1979		22-May-2021	347.17	160.00	35,000	16,000.00
	Lachlan Fold Belt	ELA5338	Calarie	Ardea Res Pty Ltd	Ardea	100	Pending	35	100.1	1992	10-Aug-2016	Under application						
							Totals	53.41	12						1,067.17	260.00	77,000.00	26,000.00
Restdown																		
	Lachlan Fold Belt	ELA5335	Restdown	Ardea Res Pty Ltd	Ardea	100	Pending	95	271.7		2-Aug-2016	Under application						
							Totals	95	271.7						0.00	0.00	0.00	0.00



WA Eastern Goldfields tenement list

Key WA Project	Province	Tenement ID	Project	Holder 1	Responsible Party	ARL Beneficial Interest	Status	Area Units	HA	Area km2 actual	Lodgement	Commencement	Expiry	Term Granted (Years)	Annual Rent \$	Next Rental for Year End	Current Year Commitment	Current Bond
Mt Zephyr																		
	North Cella Lineament	E39/01706	Mt Zephyr	Heron Res Ltd	Ardea	100%	Live	20		58.2	4-Sep-2012	24-Sep-2013	23-Sep-2018	5	4029.00	23/09/2017	20,000	No Record
	North Cella Lineament	E39/01757	Mt Zephyr	Heron Res Ltd	Ardea	100%	Live	4		11.6	29-Jul-2013	26-Feb-2014	25-Feb-2019	5	805.80	25/02/2018	15,000	No Record
	North Cella Lineament	E39/01854	Mt Zephyr	Heron Res Ltd	Ardea	100%	Pending	48		139.7	13-Jan-2015	Under application						
	North Cella Lineament	E39/01985	Mt Zephyr	Ardea Res Pty Ltd	Ardea	100%	Pending	32		93.1	14-Jul-2016	Under application						
	North Cella Lineament	E37/01271	Mt Zephyr	Ardea Res Pty Ltd	Ardea	100%	Pending	24		69.8	14-Jul-2016	Under application						
	North Cella Lineament	E37/01272	Mt Zephyr	Ardea Res Pty Ltd	Ardea	100%	Pending	62		180.4	15-Jul-2016	Under application						
	North Cella Lineament	E37/01273	Darlot East	Ardea Res Pty Ltd	Ardea	100%	Pending	60		174.6	15-Jul-2016	Under application						
	North Cella Lineament	E37/01274	Darlot East	Ardea Res Pty Ltd	Ardea	100%	Pending	64		186.2	15-Jul-2016	Under application						
Totals														314	4,834.80		35,000	
BTZ Ghost Rocks																		
	BTZ - KNP	E29/00941	Ghost Rocks	Heron Res Ltd	Ardea	Heron 100%	Live	20		142.6	4-Nov-2014	10-Jun-2015	9-Jun-2020		2,590.00	6/09/2018	20,000	No Record
Totals														20	2,590.00		20,000	
BTZ Goongarrie																		
	BTZ - KNP	M24/00541-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	352.4963		3.5	21-Dec-1995	14-Feb-2002	13-Feb-2023	21	6,018.65	13/02/2018	35,300	No Record
	BTZ - KNP	M24/00744-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	6.6845		0.1	15-Apr-1998	1-May-2001	30-Apr-2022	21	11,935	30/04/2018	10,000	No Record
	BTZ - KNP	M29/00167-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	80.02		0.8	19-Sep-1994	25-Jun-1999	24-Jun-2020	21	1,381.05	24/06/2018	10,000	No Record
	BTZ - KNP	M29/00202-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	593.55		5.9	27-Sep-1996	11-Apr-2001	10-Apr-2022	21	10,127.70	4/10/2018	59,400	No Record
	BTZ - KNP	M29/00272-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	602.6		6.0	30-Sep-1999	1-May-2001	30-Apr-2022	21	10,281.15	30/04/2018	60,300	No Record
	BTZ - KNP	M29/00276-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	478.0103		4.8	24-Jan-2000	1-May-2001	30-Apr-2022	21	81,66.95	30/04/2018	47,900	No Record
	BTZ - KNP	M29/00423	Goongarrie	Kaigoorlie Nickel Project Pty Ltd	Ardea	100%	Live	822.0976		8.2	27-Aug-2013	1-Jul-2014	30-Jun-2035	21	14,032.15	30/06/2018	82,300	No Record
	BTZ - KNP	P29/02265	Goongarrie	Heron Res Ltd	Ardea	100%	Live	200		2.0	23-Aug-2012	9-Apr-2013	8-Apr-2017	4	500.00	4/08/2018	8,000	No Record
	BTZ - KNP	E29/00934	Goongarrie	Kaigoorlie Nickel Project Pty Ltd	Ardea	100%	Pending		41	119.3	28-Jul-2014	Under application						
	BTZ - KNP	M24/00731-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	116.9404		1.2	4-Mar-1998	21-Aug-2007	20-Aug-2028	21	1,994.85	20/08/2017	11,700	No Record
	BTZ - KNP	M24/00732-1	Goongarrie	Heron Res Ltd	Ardea	100%	Live	201.689		2.0	4-Mar-1998	21-Aug-2007	20-Aug-2028	21	3,444.10	20/08/2017	20,200	No Record

Appendix A: Detailed tenement lists cont

Key WA Project	Province	Tenement ID	Project	Holder 1	Responsible Party	ARL Beneficial Interest	Status	Area Units	HA	Area km2 actual	Lodgement	Commencement	Expiry	Term Granted (Years)	Annual Rent \$	Next Rental for Year End	Current Year Commitment	Current Bond
	BTZ - KNP	M24/00776-I	Goongarrie	Heron Res Ltd	Ardea	100%	Live	890		8.9	21-May-1999	21-Aug-2007	20-Aug-2028	21	15,174.50	20/08/2017	89,000	No Record
	BTZ - KNP	M29/00214-I	Highway	Heron Res Ltd	Ardea	100%	Live	950		9.5	13-Jan-1997	25-Jan-2008	24-Jan-2029	24	16,197.50	24/01/2018	95,000	No Record
							Totals	5294.0881	41	172.3					87,437.95		529,100	
Kalgoorlie East																		
Taurus																		
	Kalgoorlie East - KNP	M25/00151	Bulong	Heron Res Ltd	Ardea	100%	Live	366		3.7	9-Sep-1994	18-Mar-2008	17-Mar-2029	21	62,40.30	17/03/2018	36,600	No Record
	Kalgoorlie East - KNP	M25/00187	Bulong	Hampton Nickel Pty Ltd	Ardea	100%	Live	50.03		0.5	17-Nov-1995	29-Oct-2001	28-Oct-2022	21	86,955	28/10/2017	10,000	No Record
							Totals	416.03		4.2					7,109.85		46,600	
Kalgoorlie East																		
Kalpini																		
	Kalgoorlie East - KNP	E28/01224	Kalpini	Heron Res Ltd	Ardea	100%	Live		17	49.5	29-Aug-2001	20-Apr-2005	19-Apr-2016 (extension pending)	5 (extended)	8,799.20	19/04/2018	70,000	No Record
	Kalgoorlie East - KNP	M28/00199	Kalpini	Heron Res Ltd	Ardea	100%	Live	975.7		9.8	25-Mar-1998	27-Sep-2001	26-Sep-2022	21	16,640.80	26/09/2017	97,600	No Record
	Kalgoorlie East - KNP	M28/00201	Kalpini	Heron Res Ltd	Ardea	100%	Live	895.5		9.0	25-Mar-1998	27-Sep-2001	26-Sep-2022	21	15,276.80	26/09/2017	89,600	No Record
	Kalgoorlie East - KNP	M28/00205	Kalpini	Heron Res Ltd	Ardea	100%	Live	850.33		8.5	1-May-1998	27-Sep-2001	26-Sep-2022	21	14,509.55	26/09/2017	85,100	No Record
	Kalgoorlie East - KNP	M27/00395	Kalpini	Heron Res Ltd	Ardea	100%	Live	252.65		2.5	9-Oct-2000	20-Sep-2006	19-Sep-2027	21	4,313.65	19/09/2017	25,300	No Record
	Kalgoorlie East - KNP	E27/00524	Kalpini	Heron Res Ltd	Ardea	100%	Live		6	17.5	9-Aug-2013	31-Jul-2014	30-Jul-2019	5	1,208.70	30/07/2018	20,000	No Record
							Totals	2974.18	23	96.7					60,748.70		387,600	
Bedonia																		
	Albany-Fraser Mobile Zone	E63/01787	Bedonia	Atmplex Pty Ltd	Ardea	100%	Pending		49	142.6	2-May-2016	Under application						
							Totals		49	142.6								
Donnelly River																		
	Albany-Fraser Mobile Zone	E70/04804	Donnelly River	Atmplex Pty Ltd	Ardea	100%	Pending		12	34.9	15-Jan-2016	Under application						
							Totals		12	34.9								



Appendix A: Detailed tenement lists cont

Key WA Project	Province	Tenement ID	Project	Holder 1	Responsible Party	ARL Beneficial Interest	Status	Area Units	HA	Area km2 actual	Lodgement	Commencement	Expiry	Term Granted (Years)	Annual Rent \$	Next Rental for Year End	Current Year Commitment	Current Bond
Siberia Heron to retain residual gold rights under Proposed Sale	Siberia - KNP	E24/00203	Siberia Nickel-Cobalt	Atirplex Pty Ltd	EGS	100%	Pending	3		8.7	12-Oct-2015							
	Siberia - KNP	E29/00889	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	1		2.9	29/7/2013	25-Feb-2014	24-Feb-2019		311.60	24/2/2018	10,000	
	Siberia - KNP	M24/00634-I	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	185.15		1.9	28-Feb-1997	25-Oct-2000	24-Oct-2021	21	3,171.30	24/10/2017	18,600	No Record
	Siberia - KNP	M24/00660	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	174		1.7	23-May-1997	14-Jun-2007	13-Jun-2028	21	2,966.70	13/06/2018	17,400	No Record
	Siberia - KNP	M24/00663	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	306		3.1	26-May-1997	28-Jan-2011	27-Jan-2032	21	5,217.30	27/01/2018	30,600	No Record
	Siberia - KNP	M24/00664	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	143		1.4	26-May-1997	28-Jan-2011	27-Jan-2032	21	2,488.15	27/01/2018	14,300	No Record
	Siberia - KNP	M24/00686	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	356.121		0.4	26-Aug-1997	3-Feb-2011	2-Feb-2032	21	613.80	2/02/2018	10,000	No Record
	Siberia - KNP	M24/00915-I	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	70		0.7	25-May-2005	1-Feb-2011	31-Jan-2032	21	1,193.50	31/01/2018	10,000	No Record
	Siberia - KNP	M24/00916	Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	277.0803		2.8	25-May-2005	1-Feb-2011	31-Jan-2032	21	4,739.90	31/01/2018	27,800	No Record
	Siberia - KNP	M24/00685-I	SMC Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	56		0.6	23-Jul-1997	1-Feb-2011	31-Jan-2032	21	954.80	31/01/2018	10,000	No Record
	Siberia - KNP	M24/00772-I	SMC Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	55.683		0.6	29-Jan-1999	1-Feb-2011	31-Jan-2032	21	954.80	31/01/2018	10,000	No Record
	Siberia - KNP	M24/00797-I	SMC Siberia Nickel-Cobalt	Heron Res Ltd	EGS	100%	Live	396.2659		4.0	31-Aug-1999	1-Feb-2011	31-Jan-2032	21	6,768.85	31/01/2018	39,700	No Record
					Totals			1698.7913	4	28.6					29,019.10		198,400	
Black Range Heron to retain residual gold rights under proposed sale	Siberia - KNP	M24/00757	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	591		5.9	21-Oct-1998	5-Jul-2011	4-Jul-2032	21	10,076.55	7/04/2018	59,100	No Record
	Siberia - KNP	P24/04395	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	192		1.9	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	480.00	8/10/2018	7,680	No Record
	Siberia - KNP	P24/04396	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	164		1.6	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	410.00	8/10/2018	6,560	No Record
	Siberia - KNP	P24/04400	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	200		2.0	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	500.00	8/10/2018	8,000	No Record
	Siberia - KNP	P24/04401	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	190		1.9	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	475.00	8/10/2018	7,600	No Record
	Siberia - KNP	P24/04402	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	172		1.7	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	430.00	8/10/2018	6,880	No Record
	Siberia - KNP	P24/04403	Black Range Cobalt-Nickel	Heron Res Ltd	EGS	100%	Live	192		1.9	13-Aug-2008	11-Aug-2009	10-Aug-2017	4 (extended)	480.00	8/10/2018	7,680	No Record
					Totals			1701	0	17.0					12,851.55		103,500	

Appendix B: Previous exploration

Lewis Ponds: Historic working prior to 1964

LP Date	Mine/operator	Ore type	Reported production	Depth of workings
1894 - 1903	New Lewis Ponds	-	-	-
1913 - 1921	Tom's Mine Sulphide Corporation	Pyrite	30,000 t/sulphuric acid	Shafts -61 m
1915	Spicers		4622 t at 6.7% Pb, 187 g/t Ag	Shafts -71 m
1914	Queen of Ranges		328 t produced 231 oz Au	

Lewis Ponds: Modern exploration after 1964

LP Date	Explorer/ JV.	Geology	Geophysics	Geochemistry	Drilling	Other
1964	Australian Geophysical	Mapping	IP	Soil sampling	Core; LP1, LP2	
1969	Cominco					
?	Anax and Metals Investment A1 Consolidated		IP	Soil sampling	Core; ALP6-9	
1973	Aquitaine and Anax Metals Investment	Mapping		Soil sampling	Core; BOA101-110	
1979	Shell Co Aust and Aquitaine	Mapping	Dighern airborne EM, ground magnetics		Bedrock RAB core; SLP1-8	
1983	Aquitaine	Mapping			Reverse circulation percussion; LPRC1-33	
1986	Honestake Aust and Sabminco NL	Mapping			Core; TLPD 1-5	
1989	Tri Origin	Mapping	IP		Core; TLPD 6, 6a, 7 - 9, 9a, 10 -17	
1991		Mapping	IP, Down hole EM; TLPD 2w, 3-5, 6a, 7-8, 9a			
1992		Mapping				
1993		Mapping				
1994				Surface EM, down hole EM; TLPD 11,12,14,15,17,18,19,23,24,31 W,32	Core; 18-32	Metallurgical tests; TLPD 20, 21W
1995			Ground Mag, ground EM, down hole EM; TLPD 33,46a,48,49		Core; TLPD 33-50	
2000	TriAusMin	Compile data, revise geological interpretation	Airborne HoistEM survey	Soil sampling	RC & core drilling (holes ?)	Update Mineral Resource Estimate
2003		Revise structural model and exploration study	IP survey, downhole EM and moving loop EM, reinterpret HoistEM			Mining cashflow study of underground mining study - Main zone
2005			VTEM survey	Regional soil and rock sampling	RC & core drilling (holes ?)	Scoping & rehab study. JORC Indicated and Inferred Mineral Resource (6.6 Mt, at 2.4% Zn, 0.2% Cu, 1.4% Pb, 69 g/t Ag and 1.5 g/t Au)
2008		External data validation review	VTEM processing and interpretation			External Mineral Resource modeling and reconciliation
2010						3D modeling of Lewis Ponds
2011			VTEM processing and target generation		Rehabilitation and core storage, RC (9 holes - 869 m) and core (6 holes - 1317 m) to test VTEM targets	Environmental rehab, gates & fencing, tenement review (relinquished 6 units)
2013				Resample historic core, rock sampling	Rehabilitation of drill sites	Deposit 3D modeling - Lewis Ponds
2016	Heron	Regional reconnaissance				Up-grade resource to JORC 2012

Mount Zephyr: Exploration summary

MtZ Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1969-1975	Kennecott Exp Aust Pty Ltd; Shell Minerals Exp Aust Pty Ltd, CEC, Unimin/Le Nickel, Mineral Search & Development	Mt Zephyr Area	Geological Mapping	Air Magnetic, Magnetic, IP Survey	Rock & Costean Sampling, Petrography	Auger, Diamond and Percussion Drilling	Air Photography
1971-1973	Hawkstone Minerals Ltd; Jones Mining NL	Mt Zephyr Area	Geological Mapping	Magnetic Survey	Rock Sampling, Petrography	Auger, Vacuum and Percussion Drilling	
1977-1982	Esso Exploration Aust Inc	Mt Zephyr Area	Geological Mapping	IP & EM Survey	Rock & Soil Sampling, Petrography	RAB, Diamond and Percussion Drilling	
1982-1983	Nord Resources Pacific Pty Ltd	Mt Zephyr Area	Geological Mapping		Rock, stream sediment and soil sampling	RC drilling	
1984-1986	Charter Mining NL	Mt Zephyr Area	Geological Mapping		Rock Sampling		
1985-1986	Indian Ocean Resources Ltd	Mt Zephyr Area	Geological Mapping		Rock Sampling, Petrography		
1986-1988	Sundowner Minerals NL	Mt Zephyr Area	Geological Mapping	Air Magnetic Survey	Drainage, Rock & Soil Sampling	17 RC Drillholes	Air Photography
1987-1991	CRA Exploration Pty Ltd	Mt Zephyr Area	Geological Mapping	Air Magnetic Survey	Drainage, Rock & Soil Sampling	RCP & RAB Drilling	
1987-1992	BHP Minerals Ltd; CRA Exploration Pty Ltd & Newcrest	Mt Zephyr Area	Geological Mapping		Drainage, Rock & Soil Sampling, Petrography	Auger, RCP & RAB Drilling	
1992-1997	Dioro Exploration NL	Mt Zephyr Area			Rock & Soil Sampling, Petrography	RCP Drilling, 9 RAB Holes total 432 m	
1993-1996	Aurora Gold Ltd	Mt Zephyr Area	Geological Mapping	Magnetic Survey	Drainage, Rock & Soil Sampling	RAB Drilling	
1993-1998	MPI Ltd and Sons of Gwalia	Mt Zephyr Area	Geological Mapping	Air Magnetic Survey	Soil sampling	RC and RAB drilling	
1996-1997	Great Southern Mines NL	E39/520		Aeromagnetics		9 Water Bores Drillholes	Open File Research
1997 -1998	Great Southern Mines NL (JV option Anaconda Nickel)	E39/520	Mapping		11 Soil sampling, 67 Pisolite Sampling	RAB (50+27) and 33 Aircore	
1998-1999	Ranger Minerals Ltd	E39/520	Reconnaissance mapping		122 Soil and 11 rock chip sampling		Acquired DEMS data
1998-2001	Aarex Resources NL	Mt Zephyr Area	Geological reconnaissance		Rock & Soil Sampling		
2001	Ranger Minerals	E39/520	Geological reconnaissance	Re-interp AGSO			



Appendix B: Previous exploration cont

MtZ Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
2004-2005	Regal Resources Ltd	C42/2003 - E37/706, E 29/898, E39/899 & E39/924		aeromagnetic data (surveyed 1992). Aeromagnetic interpretation			Field Reconnaissance, compilation, plotting and interpretation. Field Reconnaissance. Data Search and Compilation.
2005-2006	Regal Resources Ltd	C42/2003 - E37/706, E 29/898, E39/899 & E39/924					
2006-2007	Regal Resources Ltd	C42/2003 - E37/706, E 29/898, E39/899 & E39/924		Open File aeromagnetic data interpretation		62 RAB Holes totaling 2980 m	Data compilation and interpretation. Field Reconnaissance.
2007	Regal Resources Ltd	C42/2003 - E37/706, E 29/898, E39/899 & E39/924		Regional Magnetic Interpretation. Open File aeromagnetic data interpretation	Soil, & Auger sampling	RAB Drilling	
2005-2010	Newcrest Mining Ltd	E39/940		Aeromagnetic survey	19 Soil Samples - west of previously identified Gale Au anomaly. 1 Rock Sample analysed by Heron	12 RC Drill holes (NGRC001-NGRC012) Total 1678 m	Historical review. Heron undertook field reconnaissance and review.
2010-2011	Heron Resources Ltd	C132/2010, E39/940, E39/1398, E39/1465, E39/1466 (within current Live & pending tenements)	Geological Mapping	Gravity survey, Geophysical modelling - Newexco Pty Ltd. MLEM over Mt Zephyr VMS.	8 vegetation samples, 563 soil samples, 7 rock/ gossan samples. PIMA analysis	304 RAB holes for 14330 m. 11 DD 3226.5 m Drilling Mt Zephyr North and Mt Zephyr VMS	Heritage survey - Mt Zephyr North & Mt Zephyr VMS prospects.
2011-2012	Heron Resources Ltd	C132/2010, E39/940, 1398, 1465, 1466 1045, 1574, 1575			30 Soil Samples	15 RC Drill Holes Total 2176 m	
2012-2013	Heron Resources Ltd	C132/2010, E37/1045; E39/940, 1465-1466, 1574 & 1575				1 DD total 294 m	
2013-2014	Heron Resources Ltd	C132/2010, E37/1045, E39/940, E39/1465, E39/1466, E39/1574, E39/1575, E39/1706			Soil Auger sampling North of Paul's Find		

Goongarrrie: Exploration summary

Goongarrrie Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1965-1966	Western Mining Corp Ltd	Goongarrrie Project	Geological Mapping	IP Survey	Rock & Soil Sampling		Air Photography
1968-1972	Resource Exploration NL	Goongarrrie Project	Geological Mapping	Magnetic & IP Survey	Rock Sampling	Diamond Drilling	
1968-1973	Western Mining Corporation	Goongarrrie Project	Mapping	Ground IP and Magnetic surveys		RAB, 1 RC and 5 Vacuum Drilling	
1966-1975	CRA Exploration Pty Ltd	Goongarrrie Project	Geological Mapping	Air Magnetic, IP, & Magnetic Survey	Rock Sampling, Petrography	Auger, Diamond and Percussion Drilling	Air Photography
1971-1975	Carpentaria Exp Co Pty Ltd	Goongarrrie Project		Magnetic Survey	Rock & Costean Sampling	RAB Drilling	
1972-1975	CRA Exploration Pty Ltd	Goongarrrie Project	Geological Mapping	Magnetic Survey	Rock & Soil Sampling, Petrography	Auger, Diamond and Percussion Drilling	Air Photography
1966-1976	Western Mining Corporation	Goongarrrie Project	Geological Mapping	Air Magnetic, IP & Magnetic Survey, Geophysical Logging, EM Survey, Remote Sensing	Drainage, Laterite, Rock & Soil Sampling, Petrography	Auger, Diamond, Vacuum, RCP, RAB and Percussion Drilling	Air Photography
1980-1981	Julia Mines NL, Western Mining Corp Ltd	Goongarrrie Project	Geological Mapping	IP Survey	Soil Sampling, Petrography	RCP, RAB, Diamond and Percussion Drilling	Air Photography
1983-1985	CRA Exploration Pty Ltd	Goongarrrie Project	Geological Mapping	Magnetic Survey	Rock Sampling	RAB Drilling	
1987-1988	Aberfoyle Resources Ltd	Goongarrrie Project		Air Magnetic & Magnetic Survey	Rock Sampling	RAB Drilling	
1987-1989	Conquest Mines NL	Goongarrrie Project		Air Magnetic Survey	Laterite Sampling		
1983-1990	Sarco Australia Ltd; Julia Mines NL; Sanidine NL; Technomin Australia NL	Goongarrrie Project	Geological Mapping	MIP Survey	Rock & Soil Sampling	RAB Drilling	
1986-1989	BHP Minerals Pty Ltd	Goongarrrie Project	Geological Mapping	Air Magnetic & Magnetic Survey	Rock & Soil Sampling	Auger, RCP and RAB Drilling	Air Photography
1989	Adapt Pty Ltd	Goongarrrie Project	Geological Mapping		Rock & Soil Sampling		
1987-1990	Lycio Resources	Goongarrrie Project	Geological Mapping		Rock & Soil Sampling	RAB & Vacuum Drilling	



Appendix B: Previous exploration cont

Goongarrie Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1988-1990	Julia Mines NL	Goongarrie Project				RAB Drilling	
1981-1992	Aberfoyle Exploration Pty Ltd; Coopers Resources NL	Goongarrie Project	Geological Mapping	Air Magnetic & Magnetic Survey	Costean, Rock & Soil Sampling	Diamond, RCP, RAB and Percussion Drilling	Air Photography, Ore Reserve Studies
1991-1992	Ashton Gold WA Ltd	Goongarrie Project			Rock & Soil Sampling, Petrography	Auger Drilling	
1996-1999	Austquip Pty Ltd; Stockdale Prospecting Ltd	Goongarrie Project			Drainage & Soil Sampling		
2004	Heron Resources Ltd	C170_2007					JORC2004 - Compliant Mineral Resource (Snowden - ordinary block kriging). Combined model for Goongarrie Hill, Goongarrie South and Big Four. Separate models for Highway, Scotia and Big Four. Scoping Study.
2007-2008	Heron Resources Ltd	C170_2007		Resistivity Survey by Geoforce Pty Ltd - Goongarrie South and Goongarrie Hill. Electrical Resistivity Imaging			
2008	Heron Resources Ltd	C170_2007				861 RC holes for 42,919 m and 52 sonic holes for 2551 m. 5 water bores for 377.3 m	Flora and vegetation survey (Goongarrie Hill, Goongarrie South and Highway tenements). Archaeological and ethnographic surveys.
2009	Heron Resources Ltd	C170_2007					Completion of updated mineral resource estimates (JORC2004, 16th Nov 2009). Completion of Pre-Feasibility Study of KNP by VIALP in Jan 2009 - Highway, Goongarrie Hill, Goongarrie South and Siberia North prospects. Rehabilitation of Vale Inco Drilling from 2005-2009 completed.

Appendix B: Previous exploration cont

Goongarrie Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
2011	Heron Resources Ltd	C170/2007					Initial resource estimate conducted on Goongarrie South - (JORC 2004, announced ASX Oct 2011). Mineral logical and Metallurgical studies with CSIRO.
2012	Heron Resources Ltd	C170/2007			Petrography	34 RC drillholes for 3662 m, 82 RAB for 1273 m, 312 soil Augers	Lateritic testwork - Direct Nickel Perth Laboratories - 5 samples sent. Quantitative X-Ray Diffraction - 10 samples sent to Amel Ltd Mineral Laboratories.
2013	Heron Resources Ltd	C170/2007					KNP Mineral Resource Estimate updated (JORC2012 - 18th Oct 2013). Rehabilitation of RC Drilling on Big Four Prospect M24/778. Sulphuric Acid-Based Metallurgical Test Work with Stimulus Engineers for development of Stimulus' Carbon Friendly Nickel Production.
2014	Heron Resources Ltd	C170/2007					Chrysophase Prospecting and Rehabilitation - M29/202. Scooping Study - 20 Ktpa.



Ghost Rocks: Exploration summary

Ghost Rocks Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1966-1972	Newmont Pty Ltd	Ghost Rocks Area	Exploration for ultramafic Ni-Co sulphide mineralisation			Drilling Occurred	
1972-1975	U.S. Steel International Inc.	Ghost Rocks Area	Ni-Co and Co-Zn Exploration mapping	Ground Magnetic Survey		Auger, Percussion and Diamond Drilling	
1973-1974	Falconbridge (Australia) Pty Ltd	MC 29/2368 TO 29/2375	Map 1:25,000 Regional Geology: 1:5,000 Detailed Geology Map.	Ground Total Magnetic Field Intensity Survey and a 1:5,000 contour map produced. Induced Polarization Test Survey (Magnetic and Electrical Induced Polarization)	Approx. 900 ironstone samples (July 1973). Soil geochem gridding programme (no. unknown) and contour maps produced Ni & Cu for Anomaly A-G. Major soil subdivision Map 1:5,000	2800-3800S Percussion Drill Programme (Sept 1973) - Total 2128 m, 30 Holes GRP1 to 3,3A,4 to 29, P31 to 75, 100-900S Percussion Drill Program (March-April 1974) - Total 462 m, 45 Holes GRP31-76, Diamond Drilling Program - Total 1102.8 m, 6 Holes GRDDH1-4,4A,5-6	
1985-1986	Delta Gold NL & Plagolmin Pty Ltd JV	Ghost Rocks Area	Reconnaissance geological survey Ni-Co & Au				
1987	Concor Mining Ltd	Ghost Rocks Area				Re-sampled old RAB Drilling - 211 Holes - Au Assay. Drilling 16 Holes 305 m - no significant results	
1987-1988	Taurus Resources NL	Ghost Rocks Area		Analysed Landsat Imagery and magnetic Data			
1987	Perilya Mines NL	Ghost Rocks Area - Riverina 1:100000 Map Sheet		Study Report - Reprocessing of Bureau of Mineral Resource Magnetic and Gravity Data by Mintec Pty Ltd for the Riverina 1:100,000 sheet			

Ghost Rocks Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1987-1990	Perilya Mines NL	Ghost Rocks Area	Geological Mapping	Ground Magnetics & Gravity Survey			
1989		E 29/47, E29/84, P 29/735-738 and P29/764	Geological Appraisal of Ghost Rocks Gold Project - by D.P Wilkinson				
1993	Wilga Mines	Ghost Rocks Area	Reconnaissance Exploration				
1994-1995	Golden State Resources NL	Ghost Rocks Area		Southern Geoscience Consultants - In Loop SIROTEM transient electromagnetic survey (Ghost Rocks North). Interpretation of 1:50,000 AGSO aeromagnetic data	400 m X 50 m Geochem grid	Vacuum drilling	
1996-1998	Julia Mines NL	E29/147		Digital processing aeromagnetic targets. Digital processing of Landsat Imagery	126 Soil and Magnetic lag samples	RAB Drilling 9 holes - Total 152 m, hole numbers 147/1 to 147/9. Review of 1974 DD holes and water sampling. Au check. GRDDH-1 Drill Hole site inspection	Historical exploration review since 1966 for Ni Laterite and Au potential. Field investigation of aeromagnetic targets. Lady Isobell workings investigation.
1999	Heron Resources Ltd	E29/147, E29/464, E29/465		Aeromagnetic Interpretation		92 RC Drill Program Total 3056 m- GRRC001 - GRRC092 (unconfirmed)	Literature Review of RC Drilling (Falconbridge - 1974). Resource Estimation.
2000-2001	Heron Resources Ltd	E29/147		Aeromagnetic Interpretation		81 RC Drilling Total 2299 m (GRRC093-173) - For Lateritic Ni-Co Mineralisation - intercept using a 0.75% cut-off was 37 m at 0.95% Ni, 0.047% Co and 1.13% Ni4Co. Ghost Rocks Assays: Al2O3; CaO; Co; Cr; Cu; FeO; MgO; Mn; Na; Ni; SiO2; Zn	Literature Review
2005-2006	Heron Resources Ltd	E29/517,563,P29/1681-1682				41 RC Drill Holes for Total 2450	



Appendix B: Previous exploration cont

Ghost Rocks Date	Explorer/ IV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
2006-2007	Heron Resources Ltd	C66/2006 TENEMENTS: E29/517, E29/563, P29/1681, P29/1682	Geological reconnaissance	(MLEM)		m	Data review
2007-2008	Heron Resources Ltd	C66/2006 TENEMENTS: E29/517, E29/563, P29/1958, P29/1959				37 RC Holes and 7 RC Water Bores	Data review, Drill hole targeting, Field Reconnaissance.
2008-2009	Heron Resources Ltd	C66/2006			Assays received for RC Drilling - Maximum assay values included 0.593% Ni, 0.101% Co, 0.151% Cu, 0.276% Zn, 0.703% Mn, 1.730% Cr and 17.4% Mg		Optimising the prefeasibility study (by VIALP Jan 2009). Rehabilitation occurred.
2009 - 2010	Heron Resources Ltd	C66/2006					Optimising the prefeasibility study (by VIALP Jan 2009). Independent Environmental Review by Heron Aug 2015 to photograph and review rehab of historical drillholes. Required for bond retirement (environmental obligation) Drillholes bags clean -up occurred (photo evidence available). metal detector prospecting - no detectable Au located. Significant review to the tenure IM construction for IPO.
2015-2016	Heron Resources Ltd	C66/2006	Geological Mapping (no new maps constructed); Review of historical geological data; Theoretical target ranking	Review of historical geophysical data	26 Rock samples (including ground traverse/ stream sampling). Highest sample with 11.25ppm Au from Lady Isobel Mine. 6 grab samples > / = 1.4ppm (11.25ppm; 5.09 ppm; 3.86 ppm; 2.04 ppm; 1.66 ppm; 1.4 ppm)	Theoretical target ranking	

Black Range: Exploration summary

Black Range Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1969-70	Westralian Nickel Exploration NL	Siberia Area		Ground Magnetic Surveys	Rock Chip and Gossan Sampling		
1983-1986	Western Mining Corporation Ltd	Siberia Area			Soil Sampling	RC Drilling	
1986-1989	Copperfield Gold NL & Spargos Mining NL	Siberia Area			Rock Chip Sampling	RC Drilling	
1987-1990	Carbine Gold NL & Black Mountain Gold NL	Siberia Area			Channel and BLEG sampling, Costeans	2 RC Drill Holes	
1987-1990	BHP Minerals Ltd	Siberia Area	Mapping		Rock Chip Sampling	Vacuum and RAB Drilling	
1991	Afmeco Pty Ltd	Siberia Area	Reconnaissance		BLEG Stream Sampling		
1992-1996	Hallmark Exploration NL	Siberia Area	Reconnaissance		Soil Sampling	Rotary Drilling	
1994	Not Listed. Authors: Grice J.D., Gartrell B., and Van Velthuizen J.	Siberia Area	Crystallography				
2000	Anaconda Nickel Ltd	P24/3396-3398, 3529,3563,3564 (partly within current tenements)				90 RC Drilling Totalling 2737 m. Assays: Al; As; Au; Ca; Co; Cr; Cu; Fe; Mg; Mn; Ni; Pd; Pt; Zn	
2003 - 2004	Siberia Mining Corporation Ltd	Within current tenements				RAB and Unknown Drilling.	
2005	Siberia Mining Corporation Ltd	Within current tenements				RC Drilling	
2004-2005	Heron Resources Ltd	C78/2005				RC Drilling	Beneficiation (Screening), Data Review (Historical drilling, historical surface geochemistry, regional geophysical data) Rehabilitation of previous work. Resource estimation (Snowden 2004) - ordinary block kriging.
2011-2012	Heron Resources Ltd	C78/2005			Soil Sampling, Rock sampling (unconfirmed Company - Heron)	71 RAB Holes Total 2091 m BRR001 - 071	



Appendix B: Previous exploration cont

Black Range Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
1969-70	Westralian Nickel Exploration NL	Siberia Area		Ground Magnetic Surveys	Rock Chip and Gossan Sampling		
1983-1986	Western Mining Corporation Ltd	Siberia Area			Soil Sampling	RC Drilling	
1986-1989	Copperfield Gold NL & Spargos Mining NL	Siberia Area			Rock Chip Sampling	RC Drilling	
1987-1990	Carbine Gold NL & Black Mountain Gold NL	Siberia Area			Channel and BLEG sampling, Costeans	2 RC Drill Holes	
1987-1990	BHP Minerals Ltd	Siberia Area	Mapping		Rock Chip Sampling	Vacuum and RAB Drilling	
1991	Afmeco Pty Ltd	Siberia Area	Reconnaissance		BLEG Stream Sampling		
1992-1996	Hallmark Exploration NL	Siberia Area	Reconnaissance		Soil Sampling	Rotary Drilling	
1994	Not Listed. Authors: Grice J.D., Gartrell B., and Van Velthuizen J.	Siberia Area	Crystallography				
2000	Anaconda Nickel Ltd	P24/3396-3398, 3529,3563,3564 (partly within current tenements)				90 RC Drilling Totalling 2737 m. Assays: Al; As; Au; Ca; Co; Cr; Cu; Fe; Mg; Mn; Ni; Pd; Pt; Zn	
2003 - 2004	Siberia Mining Corporation Ltd	Within current tenements				RAB and Unknown Drilling.	
2005	Siberia Mining Corporation Ltd	Within current tenements				RC Drilling	
2004-2005	Heron Resources Ltd	C78/2005				RC Drilling	Beneficiation (Screening), Data Review (Historical drilling, historical surface geochemistry, regional geophysical data) Rehabilitation of previous work. Resource estimation (Snowden 2004) - ordinary block kriging.

Kalpini Date	Explorer/ JV.	Tenement	Geology	Geophysics	Geochemistry	Drilling	Other
2005-2006	VALE Inco Australia Ltd JV with Heron Resources Ltd	C31/2002	Diamond drilling interpretation	Aeromagnetic interpretation	Soil sampling		Data review and validation. RC Relogging (167 Holes), RC reassays (440 pulps).
2006- 2007	VALE Inco Australia Ltd JV with Heron Resources Ltd	M27/395, M28/199 & M28/201		Resistivity surveys		RC Drilling	
2007-2008	VALE Inco Australia Ltd JV with Heron Resources Ltd	E28/1224, M28/205, M28/199, M28/201, M28/1000				306 RC Holes, 17 Sonic Holes	Field reconnaissance, Data review, Metallurgical testwork.
2008-2009	Heron Resources Ltd	C31/2002	Moving in-loo TEM survey				Vale completed rehabilitation of all drill sites at Kalpini.
2010	Heron Resources Ltd	E 28/1224			Soil sampling		
1960s	CRA	C31/2002 Area	Mapping		Gossan Sampling		



Appendix C: Reported Mineral Resources

Lewis Ponds Mineral Resource (JORC 2012) ⁸

Category	Quantity (Mt)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Measured	-	-	-	-	-	-
Indicated	6.35	1.51	68	0.15	2.39	1.36
Inferred	0.27	1.10	96	0.17	2.96	1.90
Total	6.62	1.50	69	0.15	2.41	1.38

Compiled by Mr Robert Cotton and completed April 2005 and revised 2016 (Cotton September 2016)

Lewis Ponds Mineral Resource by zone

Classification	Zone	Million tonnes	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Indicated	Main Zone	5.82	1.50	59	0.14	2.10	1.13
	Tom's Zone	0.54	1.65	172	0.25	5.48	3.83
Total Indicated Mineral Resource		6.35	1.51	68	0.15	2.39	1.36
Inferred	Main Zone	0.17	0.94	47	0.13	1.72	0.85
	Tom's Zone	0.1	1.37	174	0.24	5.00	3.61
Total Inferred Mineral Resource		0.27	1.10	96	0.17	2.96	1.90
Total Mineral Resource		6.62	1.50	69	0.15	2.41	1.38

⁸ See Table 3.2 for disclosures

KNP nickel-cobalt Mineral Resources (JORC 2012) Heron Annual Report 2016⁹

KNP Category	Tonnes (Mt)	Ni (%)	Co (%)
Measured	9.6	1.02	0.081
Indicated	244.0	0.75	0.052
Total Measured and Indicated	253.6	0.76	0.053
Inferred	551.7	0.68	0.046
Total Resources	805.3	0.70	0.048

⁹ See Table 6.1 for disclosures



KNP Mineral Resources by Category - 2016 Heron Resources Annual Report 2016¹⁰

Resource Category	Deposit	Tonnes (Mt)	Nickel (%)	Cobalt (%)
Measured	Goongarrie South	5.8	1.08	0.102
	Jump Up Dam	3.8	0.94	0.048
	Subtotal	9.6	1.02	0.081
Indicated	Big Four	42.6	0.69	0.051
	Boyce Creek	26.8	0.77	0.058
	Bulong East	15.9	1.06	0.055
	Goongarrie South	54.2	0.79	0.065
	Highway	52.9	0.66	0.042
	Jump Up Dam	41.6	0.79	0.043
	Siberia North	10.0	0.64	0.051
	Subtotal	244.0	0.75	0.052
Inferred	Aubils	49.4	0.70	0.066
	Big Four	12.4	0.62	0.054
	Black Range	20.1	0.75	0.103
	Bulong East	24.0	0.79	0.053
	Ghost Rocks	47.4	0.66	0.042
	Goongarrie Hill	53.6	0.60	0.037
	Goongarrie South	34.4	0.63	0.042
	Highway	34.1	0.64	0.038
	Jump Up Dam	18.4	0.64	0.034
	Kalpini	75.0	0.73	0.044
	Scotia	11.2	0.77	0.080
	Siberia North	48.9	0.65	0.040
	Siberia South	104.4	0.65	0.034
	Taurus	14.2	0.84	0.051
	Subtotal	551.7	0.68	0.046
Combined	Total	805.3	0.70	0.048

¹⁰ See Table 6.1 for disclosures

Mineral Resource Estimates for nickel laterite deposits (0.5% nickel cut-off grade)
Heron Annual Report 2016¹¹

Region	Prospect	Quantity (Mt)	Ni (%)	Co (%)	Resource Category	Estimation Method	Estimate Source	Study Period
Goongarrie	Goongarrie South	5.8	1.08	0.102	Measured	Krige	Heron	Post PFS
	Goongarrie South	54.2	0.79	0.065	Indicated	Krige	Heron	Post PFS
	Goongarrie South	34.4	0.63	0.042	Inferred	Krige	Heron	Post PFS
	Highway	52.9	0.66	0.042	Indicated	Krige	Heron	Post PFS
	Highway**	34.1	0.64	0.038	Inferred	Krige	Heron	Post PFS
	Ghost Rocks‡	47.4	0.66	0.042	Inferred	Krige	Snowden	Pre PFS
	Goongarrie Hill	53.6	0.60	0.037	Inferred	Krige	Heron	Post PFS
	Big Four	42.6	0.69	0.051	Indicated	Krige	Heron	Post PFS
	Big Four	12.4	0.62	0.054	Inferred	Krige	Heron	Post PFS
	Scotia	11.2	0.77	0.080	Inferred	Krige	Snowden	Pre PFS
Sub-Total Goongarrie		5.8	1.08	0.102	Measured	Krige		
		149.7	0.72	0.053	Indicated	Krige		
		193.0	0.64	0.043	Inferred	Krige		
Siberia	Siberia South#	104.4	0.65	0.034	Inferred	Krige	Snowden	Pre PFS
	Siberia North	10.0	0.64	0.051	Indicated	Krige	Snowden	Post PFS
	Siberia North	48.9	0.71	0.047	Inferred	Krige	Snowden	Post PFS
	Black Range	20.1	0.75	0.103	Inferred	Krige	Snowden	Pre PFS
Sub-Total Siberia		10.0	0.64	0.051	Indicated	Krige		
		173.4	0.68	0.046	Inferred	Krige		
Total KNP West		5.8	1.08	0.102	Measured	Krige		
		159.7	0.71	0.053	Indicated	Krige		
		366.4	0.66	0.044	Inferred	Krige		
Bulong	Taurus	14.2	0.84	0.051	Inferred	Krige	Snowden	Pre PFS
	East#	15.9	1.06	0.055	Indicated	Krige	Snowden	Pre PFS
	East*#	24.0	0.79	0.053	Inferred	Krige	Snowden	Pre PFS
Sub-Total Bulong*		15.9	1.06	0.055	Indicated	Krige		
		38.2	0.81	0.052	Inferred	Krige		
Hampton	Kalpini	75.0	0.73	0.044	Inferred	Krige	Snowden	Pre PFS
Sub-Total Hampton		75.0	0.73	0.044	Inferred	Krige		
Total KNP East		15.9	1.06	0.055	Indicated	Krige		
		113.2	0.76	0.047	Inferred	Krige		
Yerilla	Jump Up Dam†#	3.8	0.94	0.048	Measured	Krige	Snowden	PFS
	Jump Up Dam#	41.6	0.79	0.043	Indicated	Krige	Snowden	PFS
	Jump Up Dam#	18.4	0.64	0.034	Inferred	Krige	Snowden	PFS
	Boyce Creek#	26.8	0.77	0.058	Indicated	Krige	Heron	PFS
	Aubils#	49.4	0.70	0.066	Inferred	Krige	Heron	PFS
Sub-Total KNP Yerilla		3.8	0.94	0.048	Measured			
		68.4	0.78	0.049	Indicated			
		67.8	0.68	0.057	Inferred			
Company Total		9.6	1.02	0.081	Measured			
		244.0	0.75	0.052	Indicated			
		551.7	0.68	0.046	Inferred			



Notes:

1. This Mineral Resource was first reported to the ASX within the release dated the 18th October 2013 and has been adjusted subsequently for minor adjustments to tenement changes.
2. Tonnage (dry) and grade estimates have been rounded to reflect the estimation precision.
3. Economic parameters for the KNP are based on a Pre-feasibility Study completed by Vale Inco under farm-in arrangements between April 2005 and July 2009, and re-optimised by Heron between August 2009 and May 2010. The Vale Inco farm-in ended in July 2009 and Vale Inco has no retained rights in respect of the KNP tenements.
4. Economic parameters for Yerilla are based on a Pre-feasibility Study completed by Heron between June 2006 and April 2009, and re-optimised between May 2009 and May 2011.
5. Specific notes from table provided below:
- * Surrendered M25/162 Inferred Resource of 0.33Mt @ 0.59% nickel and 0.080% cobalt.
- ** Surrendered M29/416 Inferred Resource of 4.4Mt @ 0.59% nickel and 0.058% cobalt.
- ‡ New tenement E24/291 Inferred Resource of 22.4Mt @ 0.66% nickel and 0.036% cobalt added to project.
- † Includes approximately 20,000 tonnes @ 1.3% nickel and 0.050% cobalt in stockpiles from the 2006 trial.
- # The following tenements are held by Heron Resources. Ardea has pre-emptive rights on nickel-cobalt laterite resources as outlined in the Demerger Implementation Agreement.

Siberia South	M24/665	22.0Mt @ 0.66% nickel and 0.035% cobalt	Impress Ventures 10% Free Carried Interest
Siberia South	M24/845	15.82Mt @ 0.67% nickel and 0.040% cobalt	Subject to plaint for forfeiture
Siberia South	M24/846	7.88Mt @ 0.58% nickel and 0.036% cobalt	Subject to plaint for forfeiture
Bulong East	M25/59	2.68Mt @ 1.12% nickel and 0.063% cobalt	Southern Gold-Heron JV
Bulong East	M25/134	13.54Mt @ 0.85% nickel and 0.045% cobalt	Southern Gold-Heron JV
Bulong East	M25/161	13.93Mt @ 0.80% nickel and 0.057% cobalt	Southern Gold-Heron JV
Bulong East	M25/171	0.21Mt @ 0.75% nickel and 0.043% cobalt	Southern Gold-Heron JV
Bulong East	M25/209	3.12Mt @ 0.85% nickel and 0.060% cobalt	Southern Gold-Heron JV
Aubils	E39/1954	49.40Mt @ 0.70% nickel and 0.066% cobalt	Possible third party sale of non-laterite rights
Boyce Creek	E31/1092	20.84Mt @ 0.77% nickel and 0.061% cobalt	Possible third party sale non-laterite
Boyce Creek	M31/483	5.96Mt @ 0.77% nickel and 0.049% cobalt	Possible third party sale non-laterite
Jump-up Dam	M31/475	18.22Mt @ 0.74% nickel and 0.043% cobalt	Possible third party sale non-laterite
Jump-up Dam	M31/477	2.30Mt @ 0.69% nickel and 0.043% cobalt	Possible third party sale non-laterite
Jump-up Dam	M31/479	43.29Mt @ 0.76% nickel and 0.040% cobalt	Possible third party sale non-laterite

¹¹ See Table 6.1 for disclosures

7.0 Financial Information

7.1 Introduction

This section summarises the Company's pro forma financial information as at the date of the listing. No historical financial information has been provided as the previous three financial years ended 30 June 2016 all pre-date the Company's registration which occurred on 17 August 2016.

The information set out in this section and the pro forma financial information should be read together with:

- (a) the risk factors described in section 4;
- (b) the Investigating Accountant's Report on the Historical and Pro Forma Financial Information set out in section 8; and
- (c) the other information contained in this Prospectus.

The relevant accounting policies applied by Company are the same as those applied by Heron in its 2016 Annual Report.

7.2 Audited Financial Statements

Selected historical financial information has been extracted from Heron's audited financial reports for the financial year ended 30 June 2016. The extracted financial information relates to carried forward exploration and evaluation costs for Lewis Ponds and the KNP, Property, Plant and Equipment which will be owned by Ardea following the de-merger from Heron and Provision for Employee Entitlements for Heron employees transferring to Ardea.

7.3 Pro forma consolidated share capital

The pro forma share capital and number of Shares issued as at 17 August 2016 (date of incorporation of Ardea) reflects the significant events and proposed listing of Ardea on ASX as set out in the Investigating Accountant's Report.

If the Company is successful in raising between A\$3.5 million and A\$6 million under this Prospectus, the Company's share capital will increase by between 17.5 million and 30 million fully paid shares.

7.4 No prospective financial forecasts

The Directors have considered the matters outlined in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings because of the variable and uncertain nature of the Company's revenue. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

Notwithstanding the above, this Prospectus includes, or may include, forward-looking statements including, without limitation, forward-looking statements regarding the Company's financial position, business strategy, and plans and objectives for its business and future operations (including development plans and objectives), which have been based on the Company's current expectations. These forward-looking statements are, however, subject to known and unknown risks, uncertainties and assumptions that could cause actual results, performance or achievements to differ materially from future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Company's present and future business strategies and environment in which the Company will operate in the future.

Matters not yet known to the Company or not currently considered material to the Company may impact on these forward-looking statements. These statements reflect views held only as at the date of this Prospectus. In light of these risks, uncertainties and assumptions, the forward-looking statements in this Prospectus might not occur. Investors are therefore cautioned not to place undue reliance on these statements.



	Note	Pro forma Financial Information 17 August 2016		
		17 August 2016	Minimum Subscription	Maximum Subscription
		A\$'000	A\$'000	A\$'000
Cash		-	3,500	6,000
Trade and other receivables		-	0	0
Total current assets		-	3,500	6,000
Trade and other receivables		-	-	-
Investments		-	10	10
Property, plant and equipment	1	-	354	354
Exploration and evaluation costs carried forward	2	-	8,300	8,300
Total non-current assets		-	8,664	8,664
Total assets		-	12,164	14,664
Trade and other payables	3	-	(275)	(400)
Provisions (employee entitlements)		-	(18)	(18)
Total current liabilities		-	(293)	(418)
Provisions (employee entitlements)		-	(5)	(5)
Total non-current liabilities		-	(5)	(5)
Total liabilities		-	(298)	(423)
Net assets		-	11,866	14,241
Issued capital	4	-	(11,800)	(14,300)
Reserves (options)	5	-	(676)	(697)
Accumulated losses		-	610	756
Total equity		-	(11,866)	(14,241)

Note 1 – Property Plant and equipment

Pro forma Financial Information 17 August 2016

	Minimum Subscription	Maximum Subscription
	A\$'000	A\$'000
Freehold Land – Lewis Ponds	\$325	\$325
Plant and Equipment - WDV	\$29	\$29
Total	\$354	\$354

Note 2 – Exploration and Evaluation Costs carried forward

Pro forma Financial Information 17 August 2016

	Minimum Subscription	Maximum Subscription
	A\$'000	A\$'000
Kalgoorlie Nickel Project	\$3,397	\$3,397
Lewis Ponds	\$4,903	\$4,903
Total	\$8,300	\$8,300

Note 3 – Accounts Payable

Pro forma Financial Information 17 August 2016

	Minimum Subscription	Maximum Subscription
	A\$'000	A\$'000
Equity Raising Fee – Azure/Euroz	\$275	\$400

Note 4 – Contributed Equity

	Number of Shares	Minimum Subscription	Number of Shares	Maximum Subscription
		A\$'000		A\$'000
Issued Capital on date of incorporation	100	-	100	-
Share issue to acquire the Ardea Assets	41,500,838	8,300	41,500,838	8,300
Issue of Shares via Public Offering	17,500,000	3,500	30,000,000	6,000
	59,000,938	11,800	71,500,938	14,300



Note 5 – Option Reserve**Pro forma Financial Information 17 August 2016**

	Number of Options	Minimum Subscription A\$'000	Number of Options	Maximum Subscriptions A\$'000
Opening balance at 17 August 2016	-	-	-	-
Options issued to Heron to reimburse costs of Offers	10,000,000	560	10,000,000	560
Options issued to Azure/Euroz for successful completion of IPO	2,070,028	116	2,445,028	137
Closing balance	12,070,028	676	12,445,028	697

The Black Scholes valuation methodology has been used to value the options issued. The following table lists the inputs used to value the options issued.

Number of options (maximum)	12,445,028
Method adopted	Black Scholes
Average volatility (%)	50
Average risk free interest rate (%)	2%
Average expected life of option (years)	3
Exercise price	A\$0.25
Share price at grant date	A\$0.20
Average value per option	A\$0.056

8.0 Investigating Accountant's Report



BUTLER SETTINERI

24 October 2016

The Directors
Ardea Resources Limited
Level 1, 7 Havelock Street
WEST PERTH WA 6005

Dear Sirs

Investigating Accountant's Report for Ardea Resources Limited

Introduction

We have prepared this Investigating Accountant's Report ("Report") at the request of the directors of Ardea Resources Limited ("Ardea" or "Company") for inclusion in a Prospectus relating to the proposed issue by the Company of a minimum of 17,500,000 New Shares and a maximum of 30,000,000 New Shares at an issue price of \$0.20 each to raise a minimum of \$3,500,000 and up to \$6,000,000 before the costs of the issue (the "Prospectus").

Expressions defined in the Prospectus have the same meaning in this report.

Basis of Preparation

This report has been prepared to provide investors with information on the Pro Forma Financial Information as detailed in the scope below. The Pro Forma Financial Information is presented in an abbreviated form in this report and does not include all of the disclosures required by Australian Accounting Standards, Australian Accounting Interpretations and other authoritative pronouncements of the Australian Accounting Standards Board.

This report does not address any rights attached to the Shares to be issued in accordance with the Prospectus, nor the risks associated with the investment, and has been prepared based on the Offers being achieved. We have not been requested to consider the prospects for the Company, the shares on offer and related pricing issues, nor the merits and risks associated with becoming a shareholder and accordingly, have not done so. Accordingly, we take no responsibility for these matters or for any matter or omission in the Prospectus, other than responsibility for this report.

Scope

You have requested us to prepare an Investigating Accountant's Report covering the reviewed Pro Forma Statement of Financial Position as at 17 August 2016 adjusted for the effects of the Offers and material events occurring subsequent to 17 August 2016.

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Liability limited by a scheme approved under Professional Standards Legislation

Proactive ▶ Quality ▶ Supportive



Scope of review of Pro forma Financial Information

The reviewed Pro Forma Financial Information set out in this report has been compiled based on historical financial information extracted from the audited financial statements of Heron Resources Limited ("Heron") as at 30 June 2016 and the transactions relating to the Prospectus.

The extracted historical financial information relates to those assets and liabilities being acquired by the Company as a result of an asset disposal from Heron. As a result of this transaction, the Company will acquire exploration assets including the Lewis Ponds and Kalgoorlie Nickel Projects and associated land, plant and equipment.

The Directors are responsible for the preparation and presentation of the Pro Forma Financial Information, including determination of the pro forma adjustments. The Pro Forma Statement of Financial Position incorporates:

Pro forma Minimum

- a) Through the issue of 41,500,838 Shares the Company will acquire exploration assets, collectively the Ardea Assets, and other assets including the Lewis Ponds and Kalgoorlie Nickel Projects of \$8,664,000 in value and employee entitlements of \$23,000 as a result of the Spin Off from Heron.
- b) The Company will issue 10,000,000 Options to Heron upon listing in settlement of various costs of the Offers estimated at \$500,000. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.
- c) If the Minimum Subscription is achieved, the Company will issue 17,500,000 New Shares at 20 cents each to participating shareholders.
- d) The Minimum Subscription will result in the following:
 - i) An increase in cash of \$3,500,000 before capital raising costs, with a corresponding increase in share capital.
 - ii) Payment of capital raising costs being fees payable to the Corporate Advisor and Lead Manager resulting in a reduction in cash of \$275,000 to clear the associated accounts payable.
 - iii) The issue of 1,035,014 Options to each of the Corporate Advisor and Lead Manager. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.

Pro forma Maximum

- a) Through the issue of 41,500,838 Shares the Company will acquire exploration assets, collectively the Ardea Assets, and other assets including the Lewis Ponds and Kalgoorlie Nickel Projects of \$8,664,000 in value and employee entitlements of \$23,000 as a result of the Spin Off from Heron.
- b) The Company will issue 10,000,000 Options to Heron upon listing in settlement of various costs of the Offers estimated at \$500,000. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.
- c) If the Maximum Subscription is achieved, the Company will issue 30,000,000 New Shares at 20 cents each to participating shareholders.
- d) The Maximum Subscription will result in the following:
 - i) An increase in cash of \$6,000,000 before capital raising costs, with a corresponding increase in share capital.
 - ii) Payment of capital raising costs being fees payable to the Corporate Advisor and Lead Manager resulting in a reduction in cash of \$400,000 to clear the associated accounts payable.
 - iii) The issue of 1,222,514 Options to each of the Corporate Advisor and Lead Manager. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.

We have conducted our review of the Pro Forma Financial Information in accordance with Australian Auditing and Assurance Standard ASAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information".

We made such enquiries and performed such procedures as we in our professional judgement considered reasonable in the circumstances including:

- Enquiry of Directors, management and others;
- Review of the assumptions used to compile the Pro Forma Financial Information;
- Review of available financial information; and
- Review of work papers, accounting records and other documents.

These procedures do not provide all the evidence that would be required in an audit, thus the level of assurance provided is less than given in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Statement on pro forma information

Based on our review, which is not an audit, nothing has come to our attention which causes us to believe that the Pro Forma Financial Information, as set out in this report:

- a) Does not fairly represent the Pro Forma Statement of Financial Position adjusted for the effects of the Offers and material events occurring subsequent to 17 August 2016;
- b) Has not been prepared in accordance with the measurement and recognition requirements (but not all of the disclosure requirements) prescribed in Australian Accounting Standards, Australian Accounting Interpretations and other authoritative pronouncements of the Australian Accounting Standards Board.

Subsequent events

Apart from the matters dealt with in this report, and having regard to the scope of our report, to the best of our knowledge and belief no material transactions or events outside of the ordinary business of the Company have come to our attention that would require comment on, or adjustment to the information referred to in our report or that would cause such information to be misleading or deceptive.

Independence

Butler Settineri (Audit) Pty Ltd and I do not have any interest in the outcome of this issue other than in its capacity as Investigating Accountant for which normal professional fees will be received. Butler Settineri (Audit) Pty Ltd and I do not hold nor have interest in the ordinary shares of the Company.

Butler Settineri (Audit) Pty Ltd and I were not involved in the preparation of any other part of the Prospectus, and accordingly, make no representations or warranties as to the completeness and accuracy of any information contained in any other part of the Prospectus.

Butler Settineri (Audit) Pty Ltd and I consent to the inclusion of this report in the Prospectus in the form and consent in which it is included. At the date of this report, this consent has not been withdrawn.

Yours faithfully



LUCY P GARDNER
Director



9.0 Solicitor's Report on Tenements



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Level 2, 45 Richardson Street, West Perth 6005
Western Australia, Australia

21 September 2016

The Directors
Ardea Resources Limited
Level 1, 7 Havelock Street
West Perth WA 6005

Dear Sirs

SOLICITORS REPORT

1. Introduction

This report is prepared for inclusion in a prospectus (**Prospectus**) to be dated on or about 9 November 2016 for issue by Ardea Resources Limited ACN 614 289 342) (**Ardea**) for Offers up to 30,000,000 Shares at a price of \$0.20 each to raise up to \$6,000,000, the offer for sale of a further, approximately 5,400,000 Shares and the offer for the issue of 12,445,028 Options at nil consideration with an exercise price of \$0.25.

The report relates to both New South Wales and Western Australian mining tenements (**Tenements**) in which Ardea holds or will hold an interest. The attached Tenement Schedule (**Schedule**) and notes to the Schedule, contain an overview of the Tenements. Section 3.9 of the Prospectus sets out the basis of Ardea's interest in the Tenements. To the extent that this report relates to the New South Wales Tenements we have relied on the advice of our agent in New South Wales, Resources Legal Pty Ltd.

2. Opinion

Based on our searches and enquiries and subject to the assumptions and qualifications set out below, we confirm at the date of the searches that:

- (a) the details of the Tenements referred to in the Schedule are accurate as to the status and registered holders of those Tenements;
- (b) unless otherwise specified in this report, the Tenements are in good standing and all applicable rents have been paid;
- (c) none of the Tenements are subject to any unusual conditions of a material nature other than as disclosed in the Schedule;
- (d) this report provides accurate statements as to third party interests, including encumbrances in relation to the Tenements ascertainable from our searches and the information provided to us; and
- (e) subject to the comments below relating to standard, administrative authorisations (which are normally applied for only at the time of finalising the details of individual exploration plans), or as otherwise detailed in this Prospectus, there are no legal, regulatory or contractual impediments to the Company undertaking the proposed exploration on the Tenements as detailed elsewhere in the Prospectus.

KPCL Pty Ltd as the Trustee for KPCL Unit Trust, trading as Kings Park Corporate Lawyers
Liability limited by a scheme approved under Professional Standards Legislation

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3. Searches

For the purpose of this report, we have conducted the following searches and enquiries:

- (a) searches of the NSW Tenements in the mining tenement register (**DRE Register**) maintained by the Division of Resources and Energy of the NSW Department of Industry (**DRE**) pursuant to the *Mining Act 1992* (NSW) and *Mining Regulation 2016* (NSW) (**NSW Mining Act**) conducted on 15 August 2016;
- (b) summary searches of the NSW Tenements on the 'MinView' online system maintained by the DRE conducted on 14 September 2016;
- (c) searches of the WA Tenements in the mining tenement register (**DMP Register**) maintained by the Department of Mines and Petroleum of Western Australia (**DMP**) pursuant to the *Mining Act 1978* (WA) and Mining Regulations 1981 (WA) (**WA Mining Act**) conducted on 16 August 2016; and
- (d) quick appraisal searches of the WA Tenements summarising information obtained online from the 'TENGRAPH' system maintained by the DMP conducted on 13 September 2016.

4. Assumptions and qualifications

In preparing this Report:

- (a) we have assumed the accuracy and completeness of results of the searches of the registers maintained by the DRE and DMP and other information obtained from the DRE and DMP;
- (b) we have assumed all contracts, agreements or arrangements have been supplied to us and were within the capacity and powers of, and were validly authorised, executed and delivered by and binding on each party to them, and where applicable, duly stamped;
- (c) where any agreement, dealing or act (including disturbing the land for exploration or mining) affecting the Tenements requires an authorisation, approval, permission or consent (**Authorisation**) under the relevant Mining Act, or any other relevant legislation, we have assumed that Authorisation has been or will be granted in due course;
- (d) where any dealing in the Tenements has been lodged for registration but is not yet registered, we express no opinion as to whether the registration will be effected, or the consequences of non-registration;
- (e) we have assumed that the tenement holder has complied with all applicable provisions of the relevant Mining Act and all other legislation relating to the Tenements;
- (f) we have not researched the underlying land tenure in respect of the Tenements to determine if Native Title rights have or have not been extinguished, or the extent of any extinguishment; and
- (g) we have not researched the area of the Tenements to determine if there are any registered or unregistered sites of significance to aboriginal people within the area.

The Schedule sets out a brief description of the Tenements and a summary of any encumbrances. In relation to the Schedule, we make the following comments:

- (a) references to the areas of the Tenements are taken from the details shown on the tenement searches, it is not possible to verify those areas without conducting a survey which has not been undertaken;
- (b) the area of the Tenements as shown in the Schedule might be reduced by the existence of pre-existing mining tenements situated within the boundaries of the relevant Tenement and a subsequent requirement that the area of the earlier mining tenement is excised from the grant of the Tenement; and
- (c) the rights of a holder of a mining tenement are subject to compliance by that holder with the terms and conditions under the relevant Mining Act and the conditions specifically set out in the grant of the Tenements.

5. New South Wales Tenements

The NSW Tenements comprise four exploration licences (prefix **EL**) and one mining lease (prefix **ML**) granted under the NSW Mining Act, and three applications for exploration licences (prefix **ELA**) to be granted under the NSW Mining Act.

The ELs and ELAs are all for Group 1 Minerals, comprising metallic minerals. ML 739 'Calarie' is for gold, platinum and silver, and is over-pegged by EL 7023 which includes Group 1 Minerals.

- (a) Exploration Licences

An EL gives the holder the exclusive right to explore for minerals over a specific area of land. The holder of an EL may, in accordance with the conditions of the EL and subject to the NSW Mining Act, conduct exploration activities on the land specified in the EL for the group of minerals specified in the licence.



An EL does not permit mining, and an EL holder will not necessarily be permitted to mine in the future if a discovery is made.

An EL may be granted for up to six years and may be extended by successive periods of up to six years, on application by the holder. Generally, however, ELs are granted and renewed for periods of three years, depending in each case on the proposed work program and other factors. An EL may be transferred to another person upon approval by the Minister. In approving a transfer, the Minister may impose amended or additional conditions on the holder of the EL.

An EL will not usually be renewed over more than half the number of units comprising the original EL unless the Minister is satisfied that special circumstances exist, including that the conditions of the EL have been satisfactorily complied with, the full area of the EL has been explored effectively, and the proposed program satisfactorily covers the full area to be renewed.

An EL is subject to such conditions as the Minister may, when granting the EL, impose, including reporting requirements. Holders must also comply with the Exploration Codes of Practice, including the Environmental Management Code, the Rehabilitation Code, which requires the holder to rehabilitate, level, regrass, reforest or contour land that has been damaged or adversely affected by exploration activities, and the Community Consultation Code. Failure by the holder of an EL to comply with these conditions may render the EL liable to cancellation.

Prior to commencing exploration activities on private land, an access agreement must be entered into with the owner or occupier of the land. Compensation is payable for any loss or damage caused by the activities.

An annual rental and an administrative levy are payable, based on the size of the EL. ELs are also subject to minimum annual expenditure requirements which are set out in Schedule 1. Failure to comply with expenditure requirements may render the EL liable to cancellation.

Applications for Exploration Licences

The DRE will not register a transfer of an ELA, but there is no restriction on an applicant selling an application and providing for the registration of the transfer upon grant.

(b) Mining Leases

A ML gives the holder the exclusive right to mine for minerals over a specific area of land. The holder of a ML may, in accordance with the conditions of the ML and subject to the NSW Mining Act, conduct mining operations on the land specified in the ML for the group of minerals specified in the ML.

Applicants must demonstrate that there is an economically mineable mineral deposit within the area of the proposed ML, and they have the financial and technical resources to carry out mining in a responsible manner. A development consent under the *Environmental Planning and Assessment Act 1979* must be in place before a mining lease can be granted. A work program must be submitted, which details the proposed mining operations, community consultation, environmental management and rehabilitation.

A ML is subject to such conditions as the Minister may, when granting the ML, impose. Failure by the holder of a ML to comply with these conditions may render the ML liable to cancellation.

A ML remains in force for a maximum period of 21 years or such longer period as may be determined by the Minister.

An annual rental and an administrative levy are payable, based on the size of the ML. MLs are also subject to minimum annual expenditure requirements which are set out in Schedule 1. A failure to comply with expenditure requirements may render the ML liable to cancellation.

6. Western Australia Tenements

The Tenements in Western Australia comprise prospecting licences (prefixed "P"), exploration licences (prefixed "E") and mining leases (prefixed "M") granted pursuant to the WA Mining Act.

In accordance with the WA Mining Act, the holder of a mining tenement is permitted to explore for all minerals including oil shale, but excluding sand or clay occurring on private land. Exploration or mining for iron is also excluded unless it has been authorised by the Minister and endorsed on the mining tenement title. Under the *Petroleum and Geothermal Energy Resources Act 1987* (WA), petroleum and geothermal energy resources are also excluded from the grant of a mining tenement.

In addition to the authorisations and approvals described below, it is a requirement that any ground disturbing work carried out on a mining tenement has been approved by the DMP. Such approvals may involve referral by the DMP to other Government agencies and any approvals given may be subject to special conditions. Approvals are generally required for an exploration program to be undertaken and are submitted to the DMP for approval at an administrative level.

(a) Prospecting Licences

A prospecting licence authorises the holder to enter land for the purpose of prospecting for minerals. 'Prospecting' includes the use of vehicles, machinery and equipment, and permits the undertaking of operations and works such as digging pits, trenches and holes, sinking bores and tunneling, for the purpose of prospecting for minerals in, on, or under the land. The holder of a prospecting licence may excavate, extract or remove earth, soil, rocks, stone, fluid or mineral-bearing substances not exceeding 500 tonnes over the term of the licence.

Prospecting licences are granted for a term of four years. The Minister has discretion to extend the prospecting licence for one further four year period if satisfied that a prescribed ground for extension exists.

A 'prescribed ground' for extension includes circumstances where the holder experienced difficulties or delays arising from governmental, legal, climatic, or heritage reasons, where the work carried out justifies further prospecting, or where the Minister considers the land has been unworkable for whole or a considerable part of any year of the term.

During the term of a prospecting licence, the holder may apply for and have granted subject to the Mining Act, one or more mining leases over any part of the land subject to the prospecting licence. Where an application for a mining lease is made and the term of the prospecting licence is due to expire prior to the mining lease application being determined, the prospecting licence will continue in force over the land subject to the mining lease application pending the outcome of the mining lease application.

Annual rent and shire rates are payable for each granted prospecting licence. Prospecting licences are subject to minimum annual expenditure requirements, which are calculated at the rate of \$40.00 per hectare, subject to a minimum of \$2,000 per annum (based on expenditure requirements current as at date of this report). The holder may apply for exemption from compliance with minimum expenditure requirements on certain grounds set out in the Mining Act or at the discretion of the Minister. A failure to comply with expenditure requirements, unless exempted, renders the prospecting licence liable to forfeiture.

Forfeiture of Prospecting Licences

The Warden, on the application of the Minister, mining registrar, an authorised officer of the DMP, or any other person, may make an order for forfeiture of a prospecting licence for any of the following reasons:

- (i) refusal of an exemption from expenditure;
- (ii) failure by the holder to comply with a condition of a prospecting licence such as payment of rent, statutory royalty or lodgment of a report as required by the Mining Act;
- (iii) failure by the holder to satisfy a request of the Minister; or
- (iv) if the holder is convicted of an offence under the Mining Act.

An application for forfeiture in respect of expenditure conditions must be made during the expenditure year in which there is non-compliance, or within eight months thereafter.

A Warden may only make an order for forfeiture if the Warden is satisfied that non-compliance is of sufficient gravity to justify the forfeiture of the prospecting licence.

A Warden may, as he or she thinks fit in the circumstances, impose a penalty as an alternative to making an order for forfeiture of a prospecting licence. The penalty must not exceed \$10,000 in a case where expenditure conditions have not been complied with, and not exceed \$50,000 in any other case.

(b) Exploration Licences

An exploration licence permits the holder to explore over land up to a maximum 200 graticular blocks in designated areas of Western Australia and a maximum of 70 graticular blocks elsewhere. Graticular blocks comprise one minute of longitude by one minute of latitude and therefore range in area from approximately 2.8km² to 3.3 km². There is no limit to the number of exploration licences which may be held by any one person.

An exploration licence authorises the holder to enter land to explore using vehicles, machinery and equipment as may be necessary or expedient for the purpose of exploring for minerals in, on or under the land.

Significant amendments to the WA Mining Act (**Amendments**) came into operation on 10 and 11 February 2006. The exploration licences held by the Company were applied for or granted both before and after the Amendments.

The exploration licences were applied for or granted both prior to and after the Amendments. All were granted with 5 year terms. The terms of those applied for prior to the Amendments may be extended for up to 4 years in prescribed circumstances and further periods of 1 year in exceptional circumstances. The terms of those exploration licences applied for and granted after the Amendments may be extended by one period of five years and then by further two year periods if the Minister is satisfied that a prescribed ground for extension exists.



'Prescribed grounds' for extension include circumstances when the holder experienced difficulties or delays arising from governmental, legal, climatic or heritage reasons, where work carried out justifies further prospecting, or where the Minister considers the land has been unworkable for whole or a considerable part of any year of the term.

Exploration licences are subject to a requirement that the holder relinquishes portions of the licence during its term. Exploration licences applied for prior to the Amendments are subject to a requirement that 50% of the licence is relinquished at the end of the 3rd year of the term of the tenements, and another 50% of the area relinquished at the end of the 4th year of the term. Exemptions from both relinquishment requirements may be obtained.

Exploration licences applied for and granted after the Amendments carry a requirement that 40% of the tenement area be relinquished at the end of the initial five year period. The Minister may defer the relinquishment requirement for one further year if satisfied that a prescribed ground for deferral exists. No exemption from the relinquishment requirement is available.

During the first year of grant of an exploration licence, a legal or equitable interest in or affecting the exploration licence cannot be transferred or otherwise dealt with, whether directly or indirectly, without the prior written consent of the Minister.

During the term of an exploration licence, the holder may apply for and have granted subject to the WA Mining Act, one or more mining leases over any part of land subject to the exploration licence. Where an application for a mining lease is made, and the term of the exploration licence is due to expire prior to the mining lease application being determined, the exploration licence will continue in force over the land subject to the mining lease application pending the outcome of that mining lease application.

Annual rent and shire rates are payable in respect to exploration licences. Exploration licences are subject to minimum annual expenditure requirements which are set out in the Schedule. The holder of an exploration licence may apply for exemption from compliance with minimum expenditure requirements on certain grounds set out in the WA Mining Act or at the discretion of the Minister. A failure to comply with expenditure requirements, unless exempted, renders the exploration licence liable to forfeiture.

Forfeiture of Exploration Licences

The Minister may make an order for the forfeiture of an exploration licence for any of the following reasons:

- (i) failure to pay rent or royalty;
- (ii) non-compliance with conditions of an exploration licence such as lodgment of a report as required by the WA Mining Act;
- (iii) failure to comply with certain provisions of the WA Mining Act;
- (iv) failure to satisfy expenditure conditions; or
- (v) if the holder is convicted of an offence under the WA Mining Act.

An application for forfeiture in respect of expenditure conditions must be made during the expenditure year in which there is non-compliance, or within eight months thereafter.

The Minister may only make an order for forfeiture if the Minister is satisfied that non-compliance is of sufficient gravity to justify the forfeiture of the exploration licence.

The Minister may impose a penalty instead of forfeiting the exploration licence. The penalty must not exceed \$10,000 in a case where expenditure conditions have not been complied with, and not exceed \$50,000 in any other case.

Applications for Exploration Licences

The Tenements include some applications for exploration licences. The DMP will not register a transfer of an application for an exploration licence, but there is no restriction on an applicant selling an application and providing for the registration of the transfer upon grant.

(c) Mining Leases

A mining lease authorises the holder to work and mine the land, and take and remove from the land any minerals and dispose of them, and to do all acts and things necessary to effectually carry out mining operations in, on, or under the land subject to the mining lease.

From 10 February 2006, in addition to other terms and conditions, a mining lease may only be granted if the application is accompanied by either a mining proposal or a 'statement' setting out information about the mining operations that are likely to be carried out on the mining lease together with a mineralisation report prepared by a qualified person. If a statement and mineralisation report are lodged, the Director, Geological Survey must be satisfied that there is significant

mineralisation in, on, or under the land to which an application for a mining lease relates. For the purposes of the Mining Act 'significant mineralisation' is defined as a deposit of minerals where exploration results indicate that there is a reasonable prospect of minerals being obtained by mining operations.

Every granted mining lease is subject to a condition requiring the lessee, before carrying out mining operations of a prescribed kind on any part of the land the subject of the lease (including open-cut, underground, quarrying, dredging, harvesting, scraping, leaching and tailing treatment operations together with incidental construction activities), to lodge (and have approved) a mining proposal. Mining proposals are required to detail all matters relating to the environmental management of a proposed project including mine closure and rehabilitation.

A mining lease is granted for a term of 21 years and may be renewed for successive terms upon application to the Minister. A term of renewal must not exceed 21 years.

A holder of a mining lease may not transfer or mortgage a legal interest in the land or any part of the land without the prior written consent of the Minister, or of an officer of the DMP acting with the authority of the Minister.

Annual rent and shire rates are payable in respect to mining leases and the holder of a mining lease must expend, or cause to be expended, in mining, or in connection with mining, on the lease \$100 for each hectare, with a minimum of \$10,000 per year during each year of the term of the lease. If the mining lease does not exceed 5 hectares the minimum annual expenditure will be \$5,000.

Forfeiture of Mining Leases

The Minister may forfeit a mining lease in the same manner and for the same reasons as apply to an exploration licence (described above).

7. Royalties

Tenement holders must pay royalties on minerals (including material containing minerals) obtained from a mining tenement to the relevant state government. Royalties are payable quarterly and must be accompanied by a royalty return in an approved form. The holder of a mining tenement must provide a quarterly production report commencing at the expiration of the first quarter during which any mineral is produced or obtained from that mining tenement. Royalty rates and methods of calculation differ depending on the type of mineral produced or obtained from a mining tenement.

8. Rehabilitation levies or securities

The holder of a NSW Tenement is required to lodge a security by way of a cash deposit or banker's undertaking for the performance of its rehabilitation and other obligations arising under the Tenement.

In WA a mining rehabilitation levy system applies, although a company may in certain circumstances also be required to lodge a bank guaranteed performance bond to secure the performance of a tenement holders' rehabilitation obligations on a mining tenement. In WA a tenement holder may also be liable to pay a safety levy based on the number of hours spent working on a group of tenements (including all employees or contractors).

9. Native Title

Native Title or claims for Native Title exist over large areas of Western Australia and will likely affect new mining tenements. The Schedule sets out relevant Native Title claims (if any) affecting the Tenements. The existence of a lodged claim does not necessarily mean that Native Title exists over the area claimed, nor does the absence of a claim necessarily indicate that no Native Title exists in an area. The existence of Native Title will be established pursuant to the determination of claims by the Federal Court.

The grant of a mining tenement is a 'Future Act' for the purposes of the *Native Title Act 1993* (Cth) (NTA). A Future Act is an activity or development on land or waters that affects Native Title. Native Title claimants' gain the 'right to negotiate' in relation to the grant of certain mining tenements if their Native Title claim is registered at the time the government issues a notice (known as a section 29 notice), stating it intends to do the act (i.e. grant the mining tenement), or if their claim becomes registered within four months after that notice. The right to negotiate applies in the main to the grant of a mining lease and describes a process whereby the tenement applicant and Native Title claimant must negotiate in good faith to attempt to resolve any potential concerns the Native Title claimants may have arising from the mining lease application or its grant.

(a) New South Wales

Searches conducted in the register maintained by the National Native Title Tribunal (NNTT) on 17 August 2016 showed that none of the NSW Tenements overlaps with a registered Native Title claim.

ELs are generally subject to a condition that requires the holder to obtain the Minister's consent before carrying out exploration activity on land where Native Title has not been extinguished. Ministerial consent will only be granted after the right to negotiate process has been followed, or the land on which Native Title has not been extinguished has been



excised from the EL. The grant of a ML over land where Native Title has not been extinguished is also subject to the right to negotiate process. The right to negotiate process does not necessarily have to be followed in locations where an Indigenous Land Use Agreement (**ILUA**) has been negotiated with the relevant Aboriginal people and registered with the NNTT. In such cases the procedures set out in the ILUA must be followed for the ML to be granted. See Note 2 in Schedule 1 in respect of the ILUA available for the Gundagai Tenements.

The DRE has published guidelines on the evidence required to demonstrate extinguishment of Native Title. Native Title has been wholly extinguished over much of NSW, including through the grant of freehold estates, leases in perpetuity for grazing purposes under the *Western Lands Act 1901*, and the establishment of public works.

(b) Western Australia

In some cases (especially for exploration or prospecting licences) the Western Australia State Government applies a 'fast track' procedure (the 'expedited procedure') in place of the right to negotiate process. If the proposed grant of a mining tenement is advertised under the expedited procedure, Native Title parties can lodge an objection to the use of the expedited procedure for the grant of the mining tenement (as opposed to an objection to the grant of the mining tenement). If there is no objection lodged, the mining tenement can be granted. If an objection is lodged, the parties may either negotiate and reach agreement, or apply to the National Native Title Tribunal (**NNTT**) for a determination of the matter.

It is a policy of the DMP to apply the expedited procedure to the grant of exploration and prospecting licences in Western Australia where the applicant has executed a Regional Standard Heritage Agreement (**RSHA**) or has an existing Alternative Heritage Agreement (**AHA**) in place. In the absence of such an agreement applications will be subject to the right to negotiate procedure.

A RSHA or AHA is intended to address potential Aboriginal heritage concerns with respect to work on the area subject to a mining tenement. The agreements generally provide for a Native Title party to withdraw their objection to the expedited procedure and consent to the grant of the mining tenement upon the terms of the agreement, which include compensation conditions and requirements such as that a heritage survey be conducted prior to exploration activities.

10. Validity of titles

(a) Right to Negotiate Procedure

Mining tenements granted after 23 December 1996 that affect Native Title will be valid only if the applicable processes of the NTA have been complied with. Under the right to negotiate procedures, parties are required to negotiate in relation to the grant of the proposed Future Act, eg the grant of a mining tenement. Negotiations are initiated to obtain the agreement of the relevant Native Title parties to the carrying out of the proposed Future Act on the Native Title land. The right to negotiate procedure consists of a statutory minimum six month period of negotiation between the relevant government party, the Native Title party and the grantee, during which time the parties must negotiate in good faith with a view to reaching agreement about the doing of the Future Act.

If parties cannot reach agreement as to the terms of grant, a negotiation party may apply to the NNTT (as the arbitral body) to make a determination as to whether the grant may proceed (and if so, on what conditions).

(b) Compensation

The relevant Mining Acts make mining tenement holders liable for any Native Title compensation that may be payable as a result of the grant of the mining tenement. If the existence of Native Title is proven over any of the land subject to the Tenements, and the Native Title holders make an application to the Federal Court for compensation, the tenement holder may be liable to pay any compensation awarded.

(c) Conversion to Mining Lease

In relation to the tenements in Western Australia undergoing a conversion from an exploration licence or prospecting licence to a mining lease over an area where Native Title claims are lodged and registered, it will be necessary to go through the right to negotiate process, unless the Company has earlier entered into an agreement with the claimants that incorporates such conversion.

11. Aboriginal Heritage

(a) Commonwealth

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) (**Commonwealth Heritage Act**) is aimed at the preservation and protection of any Aboriginal areas and objects that may be located on the Tenements.

Under the Commonwealth Heritage Act, the Minister for Aboriginal Affairs may make interim or permanent declarations of preservation in relation to significant Aboriginal areas or objects, which can affect exploration activities. Compensation is payable by the Minister to a person who is, or is likely to be, affected by a permanent declaration of preservation.

(b) New South Wales

Under the *National Parks and Wildlife Act 1974 (NSW)* (**NSW Heritage Act**) land containing Aboriginal objects or sites may be reserved as an 'Aboriginal area' for the purpose of identifying, protecting and conserving such objects or sites. It is unlawful to prospect or mine for minerals in an Aboriginal area unless expressly authorised by an Act of Parliament or, among other things, an authority issued under the NSW Mining Act. Subject to this exception, the NSW Heritage Act excludes the application of the NSW Mining Act to lands in an Aboriginal area.

The NSW Heritage Act also authorises the Minister to declare a place that is or was of special significance to Aboriginal culture to be an 'Aboriginal place' and makes it an offence knowingly to destroy, deface or damage, or knowingly to permit the destruction, defacement of or damage to, an Aboriginal object or 'Aboriginal place' without the consent of the Director-General.

(c) Western Australia

Holders of mining tenements in Western Australia are subject to the *Aboriginal Heritage Act 1972 (WA)* (**WA Heritage Act**), which protects sites that may be of spiritual, cultural or heritage significance to Aboriginal people (**Aboriginal Site**). The Western Australia Department of Indigenous Affairs maintains a register of Aboriginal Sites but registration of an Aboriginal Site is not required by the WA Heritage Act.

To alter or damage an Aboriginal Site is an offence under the WA Heritage Act that can lead to prosecution (unless approval has been obtained under the WA Heritage Act). Any party disturbing an area of the State has an obligation to avoid interfering with an Aboriginal Site. To satisfy this obligation, tenement holders commonly undertake Aboriginal heritage surveys which involve the relevant traditional owners and as necessary, an archeologist or anthropologist walking the land identifying sites and discussing the impact of proposed exploration activity. The costs of a heritage survey are met by the tenement holder.

(d) Aboriginal Sites within the Tenements

We have not undertaken any searches or investigations as to whether there are or may be any sites protected by the relevant Heritage Act within the area of the Tenements. It is common practice for an explorer to undertake heritage surveys only over areas about to be disturbed and only when work is imminent.

12. Consent

This report is given on 21 September 2016 and unless specified to the contrary, speaks only to the laws in force on that date. Kings Park Corporate Lawyers has consented to the inclusion of this Report in the Prospectus in the form and context in which it is included and have not withdrawn that consent before the lodgement of the Prospectus with ASIC.

13. Disclosure of Interest

Kings Park Corporate Lawyers will be paid normal and usual professional fees for the preparation of this report and related matters, as set out elsewhere in the Prospectus.

Yours faithfully



Kings Park Corporate Lawyers



SCHEDULE 1 TENEMENTS

New South Wales Tenements

Tenement	Holder	Status	Area	Application Date	Grant Date	Expiry Date	Required Expenditure	Notes
Lewis Ponds Project								
EL 5583	TriAusMin	Live	146.0 sq km	4/12/1998	25/06/1999	24/06/2017	\$81,000 pa	Note 1
EL 8323	Ochre	Live	172.4 sq km	6/06/2014	27/11/2014	27/11/2017	\$50,000 pa	Note 2
ELA 5337	Ardea	Pending	286.0 sq km	10/08/2016	N/A	N/A	N/A	N/A
Gundagai Project								
EL 8061	Ochre	Live	140.1 sq km	14/09/2012	13/03/2013	13/03/2015	\$69,500 pa	Renewal, lodged on 12/03/2015, is pending. Notes 2 and 3
ELA 5323	Ardea	Pending	132.3 sq km	15/07/2016	N/A	N/A	N/A	Note 3
Calarie Project								
ML 739	TriAusMin	Live	0.053 sq km	-	23/05/1979	22/05/2021	\$35,000 pa	Notes 4, 5 and 6
EL 7023	Tri Origin	Live	34.4 sq km	6/06/2007	20/01/2008	20/01/2017	\$42,000 pa	Notes 6 and 7
ELA 5338	Ardea	Pending	100.1 sq km	10/08/2016	N/A	N/A	N/A	N/A
Restdown Project								
ELA 5335	Ardea	Pending	271.7 sq km	2/08/2016	N/A	N/A	N/A	N/A

Key

Ardea	Ardea Exploration Pty Ltd (formerly Ardea Resources Pty Ltd, and before that named Kalgoorlie Nickel Project Pty Ltd) ¹
Ochre	Ochre Resources Pty Ltd
TriAusMin	TriAusMin Pty Ltd ¹
Tri Origin	Tri Origin Mining Pty Ltd
¹	To be acquired by Ardea

Notes for New South Wales tenements

The notes below refer to particular conditions and endorsements of the Tenements. It is not an exhaustive list. For all conditions and endorsements attached to the Tenements, a search should be conducted of the register maintained by the DRE.

Each of the Tenements are subject to standard conditions that must be complied with including annual expenditure or work requirements, payment of government fees, and the requirement to lodge annual technical reports. Standard conditions also stipulate that a tenement holder obtain the consent of an officer of the DRE prior to conducting any ground disturbing work, basic environmental and rehabilitation conditions (such as the removal of all waste, capping of drill holes etc) and prohibitions or restrictions on disturbing existing infrastructure such as roads, powerlines, aerial landing ground, airstrips and geodetic survey stations. In addition to these standard conditions, the following applies:

- EL 5583 is subject to a finder's fee, payable to geologist David Timms, following commencement of production, or sale of the EL, capped at A\$2 million. The fee is based on 1/3 of proceeds from sale of the EL, or 1/3 of net profits from production, or 30% of any royalties received from production.
- The tenements held by Ochre will be transferred to TriAusMin.
- The Gundagai tenements are situated within the area of Indigenous Land Use Agreement (ILUA) number NIA1998/001, known as the Tumut Brungle Area Agreement.
- Delta Gold Exploration Pty Ltd's recorded interest in ML 739 Calarie is being transferred to TriAusMin.
- ML 739 Calarie is pending suspension regarding possible breach of mining operations, labour and expenditure conditions by a former joint venture partner.
- Kimberley Diamonds Ltd has withdrawn from its farm-in to two Calarie tenements.
- The tenement held by Tri Origin will be transferred to TriAusMin.

Western Australian tenements

Tenement	Holder	Status	Area	Application Date	Grant Date	Expiry Date	Required Expenditure	Notes
Mt Zephyr Project								
E37/1271	Ardea	Pending	24 blocks	14-Jul-2016	N/A	N/A	N/A	Note 26
E37/1272	Ardea	Pending	62 blocks	15-Jul-2016	N/A	N/A	N/A	
E37/1273	Ardea	Pending	60 blocks	15-Jul-2016	N/A	N/A	N/A	
E37/1274	Ardea	Pending	64 blocks	15-Jul-2016	N/A	N/A	N/A	Note 26
E39/1706	Heron	Live	20 blocks	4-Sep-2012	24-Sep-2013	23-Sep-2018	\$20,000	Note 25
E39/1757	Heron	Live	4 blocks	29-Jul-2013	26-Feb-2014	25-Feb-2019	\$15,000	Note 25
E39/1854	Heron	Pending	48 blocks	13-Jan-2015	N/A	N/A	N/A	Note 25
E39/1985	Ardea	Pending	32 blocks	14-Jul-2016	N/A	N/A	N/A	Note 26
Bardoc Tectonic Zone - Ghost Rocks Project								
E29/941	Heron	Live	20 blocks	04-Nov-14	10/06/2017	09/06/2020	\$20,000	Notes 25 and 27
Bardoc Tectonic Zone - Goongarrie Project								
M24/541-I	Heron	Live	352.5 ha	21-Dec-1995	14-Feb-2002	13-Feb-2023	\$35,300	Notes 14, 15, 16 and 25
M24/744-I	Heron	Live	6.68 ha	15-Apr-1998	1-May-2001	30-Apr-2022	\$10,000	Notes 15, 16 and 25
M29/167-I	Heron	Live	80.02 ha	19-Sep-1994	25-Jun-1999	24-Jun-2020	\$10,000	Notes 15, 16 and 25
M29/202-I	Heron	Live	593.6 ha	27-Sep-1996	11-Apr-2001	10-Apr-2022	\$59,400	Notes 15, 16, 18, 19 and 25
M29/272-I	Heron	Live	602.6 ha	30-Sep-1999	1-May-2001	30-Apr-2022	\$60,300	Notes 15, 16 and 25
M29/278-I	Heron	Live	478 ha	24-Jan-2000	1-May-2001	30-Apr-2022	\$47,900	Notes 15, 16 and 25
M29/423	KNP	Live	822.1 ha	27-Aug-2013	1-Jul-2014	30-Jun-2035	\$82,300	Notes 25 and 27
P29/2265	Heron	Live	200 ha	23-Aug-2012	9-Apr-2013	8-Apr-2017	\$8,000	Notes 25 and 27
E29/934	KNP	Pending	43 blocks	28-Jul-2014	N/A	N/A	N/A	Notes 8 and 25
M24/731-I	Heron	Live	116.9 ha	4-Mar-1998	21-Aug-2007	20-Aug-2028	\$11,700	Notes 21 and 25
M24/732-I	Heron	Live	201.7 ha	4-Mar-1998	21-Aug-2007	20-Aug-2028	\$20,200	Notes 21 and 25
M24/778-I	Heron	Live	890 ha	21-May-1999	21-Aug-2007	20-Aug-2028	\$89,000	Notes 21 and 25
M29/214-I	Heron	Live	950 ha	13-Jan-1997	25-Jan-2008	24-Jan-2029	\$95,000	Note 25
Kalgoorlie East - Taurus Project								
M25/151	Heron	Live	366 ha	9-Sep-1994	18-Mar-2008	17-Mar-2029	\$36,600	Note 25
M25/187	Hampton	Live	50.03 ha	17-Nov-1995	29-Oct-2001	28-Oct-2022	\$10,000	Note 25
Kalgoorlie East - Kalpini Project								
E28/1224	Heron	Live	17 blocks	29-Aug-2001	20-Apr-2005	19-Apr-2016	\$70,000	Notes 9 and 25
M28/199	Heron	Live	975.7 ha	25-Mar-1998	27-Sep-2001	26-Sep-2022	\$97,600	Notes 15, 19, 22 and 25
M28/201	Heron	Live	895.5 ha	25-Mar-1998	27-Sep-2001	26-Sep-2022	\$89,600	Notes 15, 19, 22 and 25
M28/205	Heron	Live	850.3 ha	1-May-1998	27-Sep-2001	26-Sep-2022	\$85,100	Notes 15, 19 and 25
M27/395	Heron	Live	252.6 ha	9-Oct-2000	20-Sep-2006	19-Sep-2027	\$25,300	Note 25
E27/524	Heron	Live	6 blocks	9-Aug-2013	31-Jul-2014	30-Jul-2019	\$20,000	Notes 10, 25 and 27
Bedonia Project								
E63/1787	Atriplex	Pending	70 blocks	2-May-2016	N/A	N/A	N/A	Note 25
Donnelly River Project								
E70/4804	Atriplex	Pending	12 blocks	15-Jan-2016	N/A	N/A	N/A	Notes 11 and 25



Western Australian tenements cont

Tenement	Holder	Status	Area	Application Date	Grant Date	Expiry Date	Required Expenditure	Notes
Ardea Nickel-Cobalt Laterite Rights - Siberia Project								
E24/203	Atriplex	Pending	4 blocks	12-Oct-2015	N/A	N/A	N/A	Notes 12 and 25
E29/889	Heron	Live	1 block	29-Jul-2013	25-Feb-2014	24-Feb-2019	\$10,000	Notes 13 and 25
M24/634-I	Heron	Live	185.2 ha	28-Feb-1997	25-Oct-2000	24-Oct-2021	\$18,600	Notes 23 and 25
M24/660	Heron	Live	174 ha	23-May-1997	14-Jun-2007	13-Jun-2028	\$17,400	Notes 17, 20, 24 and 25
M24/663	Heron	Live	306 ha	26-May-1997	28-Jan-2011	27-Jan-2032	\$30,600	Notes 24 and 25
M24/664	Heron	Live	143 ha	26-May-1997	28-Jan-2011	27-Jan-2032	\$14,300	Note 25
M24/686	Heron	Live	35.61 ha	26-Aug-1997	3-Feb-2011	2-Feb-2032	\$21,500	Notes 24 and 25
M24/915-I	Heron	Live	70 ha	25-May-2005	1-Feb-2011	31-Jan-2032	\$10,000	Note 25
M24/916	Heron	Live	277.1 ha	25-May-2005	1-Feb-2011	31-Jan-2032	\$54,400	Note 25
M24/683-I	Heron	Live	56 ha	23-Jul-1997	1-Feb-2011	31-Jan-2032	\$10,000	Notes 23 and 25
M24/772-I	Heron	Live	5568 ha	29-Jan-1999	1-Feb-2011	31-Jan-2032	\$19,800	Notes 23 and 25
M24/797-I	Heron	Live	396.3 ha	31-Aug-1999	1-Feb-2011	31-Jan-2032	\$39,700	Notes 23 and 25
Ardea Nickel-Cobalt Laterite Rights - Black Range Project								
M24/757	Heron	Live	591 ha	21-Oct-1998	5-Jul-2011	4-Jul-2032	\$59,100	Notes 23 and 25
P24/4395	Heron	Live	192 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$7,680	Note 25
P24/4396	Heron	Live	164 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$6,560	Note 25
P24/4400	Heron	Live	200 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$8,000	Note 25
P24/4401	Heron	Live	190 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$7,600	Note 25
P24/4402	Heron	Live	172 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$6,880	Note 25
P24/4403	Heron	Live	192 ha	13-Aug-2008	11-Aug-2009	10-Aug-2017	\$7,680	Note 25

Key

Ardea	Ardea Exploration Pty Ltd (formerly Ardea Resources Pty Ltd, and before that named Kalgoorlie Nickel Project Pty Ltd) ¹
Atriplex	Atriplex Pty Ltd ¹
Hampton	Hampton Nickel Pty Ltd
Heron	Heron Resources Limited
KNP	Kalgoorlie Nickel Project Pty Ltd (formerly Ardea Exploration Pty Ltd) ¹
¹	To be acquired by Ardea

Notes for WA Tenements

The notes below refer to particular conditions and endorsements of the Tenements. It is not an exhaustive list. For all conditions and endorsements attached to the Tenements, a search of the DMP Register should be conducted.

Each of the Tenements are subject to standard conditions that must be complied with including rent payments, annual expenditure requirements and the requirement to lodge annual technical reports. Standard conditions also stipulate that a tenement holder obtain the consent of an officer of the DMP prior to conducting any ground disturbing work, basic environmental and rehabilitation conditions (such as the removal of all waste, capping of drill holes etc) and prohibitions or restrictions on disturbing existing infrastructure such as roads, powerlines, aerial landing ground, airstrips and geodetic survey stations. In addition to these standard conditions, the following applies:

8. Aphrodite Gold Ltd has objected to the grant of this application.
9. An application to extend the term of this tenement has been lodged but not yet determined.
10. The Company's rights on this tenement exclude the right to explore for and mine gold (which rights are owed by KalNorth Gold Mines Ltd (**KalNorth**). Kalnorth holds a caveat over this tenement.
11. This tenement overlies large areas of private land and state forests.
12. Siberia Mining Corporation Pty Ltd has objected to the grant of this application.
13. This tenement has a forfeiture notice issued by the DMP outstanding.
14. The tenement holder must pay to Tarmoola Australia Pty Ltd (now deregistered) a royalty equal to 1.5% of the gold produced from the tenement.
15. This tenement is subject to a Native Title agreement with Marjorie May Strickland and Anne Joyce Nudding on behalf of the Maduwongga People. The Madduwongga Native Title Claim has since been dismissed.
16. This tenement is subject to a Native Title agreement with the Central West Goldfields People. The Central West Native Title claim has since been dismissed.
17. Lewis Lajos Kovacs holds a caveat over this tenement.
18. The tenement holder must pay to Goongarrie Gold Pty Ltd (now deregistered) a royalty equal to \$1.50 per dry metric tonne of ore mined from the tenement.
19. This tenement is subject to a Native Title agreement with the Central East Goldfields People. The Central East Native Title claim has since been dismissed.
20. Alan Ernest Gallop holds a caveat over this tenement.
21. Barrick (PD) Australia Pty Ltd (formerly Placer Dome Asia Pacific Pty Ltd) holds a right to clawback up to a 70% interests in any single resource on this tenement exceeding 300,000 ounces of gold by paying to the holder 2.5 times the expenditure incurred by the holder as well as a right of first refusal and 2% NSR royalty on gold produced from deposits developed on the tenement less than 300,000 ounces.
22. The tenement holder must pay a royalty to Adelphi Energy Pty Ltd (formerly Consolidated Gold NL) on each tonne of nickel bearing ore produced from the tenement.
23. Tenement holder has the rights to explore for and mine lateritic nickel and co-incident cobalt mineralization only.
24. The tenement holder must pay Lewis Lajos Kovacs a royalty of \$1.00 per tonne of ore mined.
25. Ardea's rights to the tenement are set out in section 3.9 of this Prospectus. Ardea's purchase of the tenement is subject to certain conditions, including the receipt of a conditional admission letter from the ASX on terms satisfactory to Ardea.
26. Murrin Murrin Holdings Pty Ltd and Glenmurrin Pty Ltd have objected to the grant of this tenement.
27. This tenement overlies certain waterways and proclaimed groundwater areas. Special conditions attach to the tenement to protect such areas.



10.0 Details of the Offers

10.1 Public Offer

Under this Prospectus, the Company offers for subscription up to 30 million New Shares at an issue price of A\$0.20 per Share to raise up to A\$6 million (before costs).

All of the New Shares offered under this Prospectus will rank equally with Shares on issue at the date of this Prospectus.

10.2 Opening and Closing Dates of the Public Offer

The opening date of the Offers will be 16 November 2016 and the Closing Date for the Public Offer at 5:00pm WST on 23 December 2016, unless otherwise extended.

The Directors reserve the right to close the Offers early or extend the Closing Date (as the case may be), should it be considered by them necessary to do so.

10.3 Priority Offer for Existing Heron Shareholders

The Prospectus also contains the Priority Offer for Existing Heron Shareholders (namely Heron shareholders with a registered address in Australia or New Zealand as at the date of this Prospectus). Existing Heron Shareholders can apply for as many Shares as they wish, which the Company will set aside under the Public Offer and Sale Facility Offer.

Applications under the Priority Offer must be made on the enclosed blue personalized Priority Application Form and will be considered in priority to other applications. It is intended that as many Existing Heron Shareholders as possible will receive at least the minimum allocation of Shares (being 10,000 Shares or \$2,000) under the Priority Offer however there is no guarantee that all Existing Heron Shareholders who subscribe for Shares through the Priority Offer will have their Applications accepted in full. The Directors will allocate Shares at their discretion. Existing Heron Shareholders who would like to subscribe for Shares are encouraged to submit their blue personalised Priority Application Form as soon as possible.

New Shares not subscribed and Applications from Existing Heron Shareholders not accepted by the Company under the Priority Offer will be available for subscription under the Public Offer. The Priority Offer closes earlier than the Public Offer to facilitate this process. Applications in excess of A\$6 million will be scaled back.

10.4 Opening and Closing Dates of the Priority Offer

The opening date of the Priority Offer will be 16 November 2016 and the Closing Date will be 16 December 2016 at 5:00pm WST, unless otherwise extended.

The Directors reserve the right to close the Priority Offer early or extend the Closing Date (as the case may be), should it be considered by them necessary to do so.

10.5 Sale Facility

Details of the Sale Facility are set out in section 3.14.

10.6 How to apply for New Shares

Applications for New Shares must be made by investors as follows:

- Existing Heron Shareholders should use the blue personalized Priority Application Form accompanying this Prospectus;
- All other Applicants should use the white Public Offer Application Form attached to this Prospectus.

and in all cases as directed by the Company.

Payment for New Shares must be made in full at the issue price of A\$0.20 per Share. Applications for New Shares must be for a minimum of 10,000 Shares and thereafter in multiples of 1,000 Shares.

Completed Application Forms and accompanying cheques must be mailed to the Company as follows:

Delivery by post

Ardea Resources Limited
C/-Security Transfer Australia Ltd
PO Box 535, Applecross WA 6953

Delivery by hand

Ardea Resources Limited
C/-Security Transfer Australia Ltd
770 Canning Highway, Applecross WA 6153

Cheques should be made payable to **"Ardea Resources Limited – Share Offer Account"** and crossed "Not Negotiable". Completed Application Forms and cheques must reach the address set out above by no later than the Closing Date.

BPAY is available for electronic payment. Follow the instructions on the blue personalized Priority Application Form which accompanies this Prospectus. If you are an Existing Heron Shareholder and do not have a copy of your blue personalized Priority Application Form, but wish to lodge your application electronically, please call Security Transfer Australia, on 08 9315 2333 and request that they email your Priority Application Form which will be accompanied by an electronic prospectus to allow payment by BPAY.

10.7 Minimum Subscription

The Minimum Subscription in respect of the Offers is A\$3.5 million. No Shares will be issued pursuant to this Prospectus until the Minimum Subscription is reached and conditional approval has been given by ASX for the Company to be admitted to the Official List.

If the Minimum Subscription has not been satisfied within 4 months after the date of this Prospectus, the Company will either repay the Application Monies to Applicants or issue a supplementary or replacement prospectus to allow Applicants one month to withdraw their Application and be repaid their Application Monies. No interest will be paid on this money.

10.8 Allocation and Issue of Shares

The issue or transfer of securities under this Prospectus will take place as soon as practicable after the Closing Date. Application Monies will be held in a separate subscription account until the Shares are issued. This account will be established and kept by the Company in trust for each Applicant. Any interest earned on the Application Monies will be for the benefit of the Company and will be retained by the Company irrespective of whether any Shares are issued and each Applicant waives the right to claim any interest.

The Company reserves the right to reject any Application or to allocate to any Applicant fewer Shares than the number applied for. The Company also reserve the right to reject or aggregate multiple applications in determining final allocations.

In the event an Application is not accepted or accepted in part only, the relevant portion of the Application Monies will be returned to Applicants, without interest.

The Company and Heron reserve the right not to proceed with the Offers or any part of them at any time before the allocation of the Shares to Applicants. If the Offers or any part of them is cancelled, all Application Monies, or the relevant Application Monies will be refunded.

The Company and Heron also reserves the right to close the Offers or any part of them early, or extend the Offers or any part of them, or accept late Applications either generally or in particular cases.

10.9 Not Underwritten

The Offers are not underwritten.

10.10 ASX Listing

The Company will apply to ASX for admission to the Official List and for official quotation of its Shares on ASX after the date of this Prospectus. If ASX does not grant permission for the quotation of the Shares offered under this Prospectus within 3 months after the date of this Prospectus, or such longer period as is permitted by the Corporations Act, none of the Shares offered by this Prospectus will be allotted or issued. In these circumstances, all applications will be dealt with in accordance with the Corporations Act including the return of all Application Monies without interest.

The fact that ASX may grant official quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or Shares now offered for subscription.

ASX takes no responsibility for the contents of this Prospectus, makes no representations as to its accuracy or completeness and expressly disclaims any liability whatsoever for any loss arising from or in reliance upon any part of the content of this Prospectus.

The Directors expect that trading of the Shares on the stock market conducted by ASX will commence as soon as practicable after approval for admission to the Official List of ASX is granted and all conditions (if any) have been fulfilled.

10.11 Applicants outside Australia

The distribution of the Prospectus in jurisdictions outside Australia may be restricted by law and therefore persons who come into possession of the Prospectus should seek advice on and observe any of these restrictions. Failure to comply with these restrictions may violate securities law. Applicants who are residents in countries other than Australia should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed to enable them to acquire Shares.

The return of a duly completed Application Form will be taken to constitute a representation and warranty that there has been no breach of such laws and that all necessary approvals and consents have been obtained.



10.12 Privacy

The Company collects information about each Applicant provided on an Application Form for the purposes of processing the Application and, if the Application is successful, to administer the Applicant's security holding in the Company.

By submitting an Application Form, each Applicant agrees that the Company may use the information provided by an Applicant on the Application Form for the purposes set out in this privacy disclosure statement and may disclose it for those purposes to the Share Registry, the Company's related body corporates, agents, contractors and third party service providers, including mailing houses and professional advisers, and to ASX and regulatory authorities.

If an Applicant becomes a Shareholder, the Corporations Act requires the Company to include information about the Shareholder (including name, address and details of the Shares held) in its public register. The information contained in the Company's public register must remain there even if that person ceases to be a Shareholder. Information contained in the Company's register is also used to facilitate distribution of payments and corporate communications (including the Company's financial results, annual reports and other information that the Company may wish to communicate to its security holders) and compliance by the Company with legal and regulatory requirements.

If you do not provide the information required on the Application Form, the Company may not be able to accept or process your Application. An Applicant has the right to gain access to the information that the Company holds about that person subject to certain exceptions under law. A fee may be charged for access. Such requests must be made in writing to the Company's registered office.

10.13 Restricted Securities

Directors, other related parties and promoters have received escrow on securities held by them for 24 months from the date of quotation of the Company's Shares on ASX.

None of the Shares offered under this Prospectus will be treated as restricted securities and will be freely transferable from their date of allotment.

ASX has granted a waiver so that Consideration Shares issued to non-related parties will not be subject to escrow.

The Company will enter into escrow agreements with related parties of Ardea and Heron in accordance with Chapter 9 of the Listing Rules prior to the Company's Shares being admitted to quotation on the ASX. The Company will announce the full details of the Shares required to be held in escrow to ASX.

10.14 Commissions Payable

Any commissions on capital subscribed will be at the discretion of Azure and Euroz.

10.15 Offer of securities to Heron, Azure Capital Limited and Euroz Securities Limited

Under this Prospectus and so that Shares issued on exercise of these Options may be quoted on ASX, the Company offers for issue 12,445,028 Options in total to Heron, Azure and Euroz. The Option Offer is not open to others.

10.16 Rights and Liabilities attaching to Shares

Full details of the rights attaching to Shares offered under the Offers are set out in Ardea's Constitution, a copy of which can be inspected at the Company's registered office at Level 1/7 Havelock Street, West Perth WA 6005.

The following is a summary of the principal rights which are proposed to attach to Shares:

(a) Voting

Every holder of Shares present in person or by proxy, attorney or representative at a meeting of Ardea Shareholders has one vote on a vote taken by a show of hands, and, on a poll every holder of Shares who is present in person or by proxy, attorney or representative has one vote for every Share held. At any general meeting a resolution put to the vote of the meeting must be decided on a show of hands unless a poll is effectively demanded and the demand is not withdrawn.

(b) Dividends

Dividends are payable out of Ardea's profits or out of a reserve set aside by the Directors and are declared by the Ardea Directors.

Ardea Shareholders are entitled to dividends as a result of ownership of their Shares in accordance with the Constitution.

(c) Transfer of Shares

An Ardea Shareholder may transfer Shares by a market transfer in accordance with any computerised or electronic system established or recognised by the Listing Rules or the Corporations Act for the purpose of facilitating dealings in Shares or by an instrument in writing in a form approved by ASX or in any other usual form or in any form approved by the Ardea Directors.

The Ardea Directors may refuse to register any transfer of Shares, where Ardea is permitted or required to do so by the Listing Rules or the ASX Settlement Operating Rules.

(d) Meetings and notice

Each Ardea Shareholder is entitled to receive notice of and to attend general meetings for Ardea and to receive all notices, accounts and other documents required to be sent to Ardea Shareholders under the Constitution, the Corporations Act or the Listing Rules.

(e) Liquidation rights

Ardea has only issued one class of Shares, which all rank equally in the event of liquidation. Once all the liabilities of Ardea are satisfied, a liquidator may, with the authority of a special resolution of Ardea Shareholders divide among the Ardea Shareholders the whole or any part of the remaining assets of Ardea. The liquidator can with the sanction of a special resolution of Ardea Shareholders vest the whole or any part of the assets in trust for the benefit of Shareholders as the liquidator thinks fit, but no Shareholder of Ardea can be compelled to accept any Shares or other securities in respect of which there is any liability.

(f) Ardea Shareholder liability

Ardea Shares are fully paid shares and are not subject to any calls for money by the Ardea Directors and will therefore not become liable for forfeiture.

(g) Alteration to the Constitution

The Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. At least 28 days' written notice, specifying the intention to propose the resolution as a special resolution must be given.

(h) Listing Rules

If Ardea is admitted to the Official List of ASX, then despite anything in Ardea's Constitution, if the Listing Rules prohibit an act being done, the act must not be done. Nothing in the Constitution prevents an act being done that the Listing Rules require to be done. If the Listing Rules require an act to be done or not to be done, authority is given for that act to be done or not to be done (as the case may be). If the Listing Rules require the Constitution to contain a provision or not to contain a provision the Constitution is deemed to contain that provision or not to contain that provision (as the case may be). If a provision of the Constitution is or becomes inconsistent with the Listing Rules, the Constitution is deemed not to contain that provision to the extent of the inconsistency.

10.17 Terms and conditions attaching to Options

The Options the subject of the Option Offer entitle the holder to subscribe for Shares on the following terms and conditions:

- (a) each Option entitles the holder to be issued one Share when exercised;
- (b) the Options are exercisable at any time on or before 3 years from the issue date (being date of listing);
- (c) the exercise price of the Option is A\$0.25 each;
- (d) the Options will not be quoted and are not transferrable;
- (e) the Company will provide to each Option holder a notice that is to be completed when exercising the Options (**Notice of Exercise**). Options may be exercised by the Option holder in whole or in part by completing the Notice of Exercise and forwarding to the Company Secretary to be received prior to the expiry date. The Notice of Exercise must state the number of Options exercised, the consequent number of Shares to be allotted and the identity of the proposed allottee. The Notice of Exercise by an Option holder must be accompanied by payment in full for the relevant number of Shares being subscribed, being an amount of the exercise price per Share;
- (f) all Shares issued upon the exercise of the Options will rank equally in all respects with the Company's then issued Shares. The Company will apply to the ASX for quotation of all Shares issued upon exercise of Options;
- (g) there are no participating rights or entitlements inherent in the Options and the holders will not be entitled to participate in new issues or pro-rata issues of capital to Shareholders during the term of the Options. Thereby, the Option holder has no rights to a change in the exercise price of the Option or a change to the number of underlying securities over which the Option can be exercised except in the event of a bonus issue. The Company will ensure, for the purposes of determining entitlements to any issue, that Option holders will be notified of a proposed issue after the issue is announced. This will give Option holders the opportunity to exercise their Options prior to the date for determining entitlements to participate in such issues;



- (h) if from time to time on or prior to the Expiry Date the Company makes a bonus issue of securities to holders of Shares in the Company (**Bonus Issue**), then upon exercise of Options a holder will be entitled to have issued (in addition to the Shares which are otherwise entitled to have issued upon such exercise) the number of securities which would have been issued under that Bonus Issue if the Options had been exercised before the record date for the Bonus Issue; and
- (i) in the event of any reconstruction (including consolidation, subdivisions, reduction or return) of the authorised or issued capital of the Company, all rights of the Option holder shall be reconstructed (as appropriate) in accordance with the ASX Listing Rules.

Loyalty Options

Ardea will undertake a bonus issue of Loyalty Options at no cost to all Ardea Shareholders on a record date 3 months from the date Ardea is admitted to the Official List. One Option will be issued for every three Ardea Shares held. Exercise price will be the greater of A\$0.25 or a 25% premium to the 5 day VWAP 3 months after listing. Options will expire 12 months after issue.

10.18 CHESS

The Company will apply to participate in the Clearing House Electronic Sub-register System (**CHESS**), operated by ASX Settlement (a wholly owned subsidiary of ASX), in accordance with the ASX Settlement Operating Rules. On admission to CHESS, the Company will operate an electronic issuer-sponsored sub-register and an electronic CHESS sub-register. These two sub-registers together will make up the Company's principal register of securities.

Under CHESS, the Company will not issue certificates to Shareholders. Instead, Shareholders will receive holding statements that set out the number of Shares each Shareholder owns. If a Shareholder is broker-sponsored, ASX Settlement will send the shareholder a CHESS statement. This statement will also advise investors of either their Holder Identification Number (HIN) in the case of a holding on the CHESS sub-register or Securityholder Reference Number (SRN) in the case of a holding on the issuer-sponsored sub-register.

A CHESS statement or issuer-sponsored statement will routinely be sent to Shareholders at the end of every calendar month during which the balance of their holding changes. A Shareholder may request a statement at any other time; however a charge may be imposed for additional statements.

10.19 Expenses of the Offers

The total estimated expenses of the Offers (excluding Corporate Advisory and Lead Manager fees payable to Azure and Euroz) are estimated to be approximately A\$500,000 consisting of the following:

Nature of Expense	Costing (A\$)
Legal fees (Australian and Canadian)	200,000
Investigating Accountants fee	20,000
Taxation advice	130,000
Independent Geologist	80,000
Share Registry fee	30,000
ASIC filing fee	2,500
Prospectus design and printing	30,000
Other miscellaneous expenses	7,500
Total	500,000

10.20 Queries

This Prospectus provides information for investors to decide if they wish to invest in the Company and should be read in its entirety. If you have any questions about investing in the Company, please contact your stockbroker, financial planner, accountant, lawyer or other professional advisers.

Any queries regarding the Offers should be directed to the Company Secretary on +61 8 6500 9200.

Any queries regarding the Application Forms should be directed to the Share Registry on +61 8 9315 2333.

11.0 Additional Information

11.1 Continuous disclosure

Upon admission to the official list of ASX the Company will be required to notify ASX of information which may have a material effect on the price or value of the Company's Shares apart from information which falls within the exceptions to continuous disclosure. To comply with its continuous disclosure obligations, the Company will conduct regular board meetings with continuous disclosure being a standing agenda item, and discuss which information if any is exempt from disclosure.

11.2 Taxation

The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All prospective investors in the Company are urged to take independent financial advice about the taxation and any other consequences of investing in the Company. To the maximum extent permitted by law, the Company, its officers and each of their respective advisers accept no liability or responsibility with respect to taxation and any other consequences of investing in the Company.

11.3 Interests of Experts and Advisers

Except as disclosed in this Prospectus, no expert, promoter or any other person named in this Prospectus as performing a function in a professional advisory or other capacity in connection with the preparation or distribution of the Prospectus, nor any firm in which any of those persons is or was a partner nor any company in which any of those persons is or was associated with, has now, or has had, in the two year period ending on the date of this Prospectus, any interest in:

- (a) the formation or promotion of the Company;
- (b) property acquired or proposed to be acquired by the Company in connection with its formation or promotion or the Offers;
- (c) the Offers.

Mills Oakley Lawyers has acted as legal adviser to the Company in connection with its application to list on ASX. The Company has paid or will pay an aggregate of approximately A\$45,000 to Mills Oakley Lawyers for these services. Mills Oakley Lawyers has not provided other professional services to the Group during the last two years.

Kings Park Corporate Lawyers has acted as WA tenement legal adviser to the Company in connection with its application to list on ASX. The Company has paid or will pay an aggregate of approximately A\$40,000 to Kings Park Corporate Lawyers for these services. Kings Park Corporate Lawyers has not provided other professional services to the Group during the last two years.

Peterson Law has acted as the Canadian legal adviser to the Company in connection with its foreign shareholders. The Company has paid or will pay an aggregate of approximately A\$20,000 to Peterson Law for these services. Peterson Law has not provided other professional services to the Group during the last two years.

Resources Legal Pty Ltd has acted as NSW tenement legal adviser to the Company in connection with its application to list on ASX. The Company has paid or will pay an aggregate of approximately A\$20,000 to Resources Legal for these services. Resources Legal has provided other professional services to the Group during the last two years to the value of approximately A\$59,000. The father of Resources Legal's director principal has a royalty interest in a Lewis Ponds Tenement.

Xstract Mining Consultants has prepared the Technical Assessment Report to the Company in relation to the Company's application to list on ASX. In respect of this work, the Company has paid or will pay a sum of approximately A\$80,000 for these services. Xstract Group has not provided other professional services to the Group during the last two years.

Butler Settineri (Audit) Pty Ltd has prepared the Investigating Accountant's Report in this Prospectus. In respect of this work, the Company has paid or will pay a sum of approximately A\$20,000 for these services. Butler Settineri (Audit) has not provided other professional services to the Group during the last two years.

Azure Capital has acted as corporate adviser to the Company in connection with its application to list on ASX. The Company has paid or will pay an aggregate of approximately A\$100,000 to Azure for these services. Azure has not provided other professional services to the Group during the last two years. See section 3.9(b) for details of their engagement.

Euroz Securities has acted as lead manager to the Company in connection with its application to list on ASX. The Company has paid or will pay an aggregate of approximately A\$300,000 to Euroz for these services. Euroz has not provided other professional services to the Group during the last two years. See section 3.9(b) for details of their engagement.



BDO have acted as tax advisors to the Group in conjunction with the Spin-off. The Company has or will pay an aggregate of approximately A\$130,000 to BDO for these services. BDO has not provided other professional services to the Group during the last two years.

11.4 Consents

Each of the persons referred to in this section:

- (a) has given and has not, before the date of lodgement of this Prospectus with ASIC withdrawn their written consent:
 - (i) to be named in the Prospectus in the form and context which they are named; and
 - (ii) where applicable, to the inclusion in this Prospectus of the statement(s) and/or reports (if any) by that person in the form and context in which it appears in this Prospectus;
- (b) has not caused or authorised the issue of this Prospectus;
- (c) has not made any statement in this Prospectus or any statement on which a statement in this Prospectus is based, other than specified below; and
- (d) to the maximum extent permitted by law, expressly disclaims all liability in respect of, makes no representation regarding, and takes no responsibility for, any part of this Prospectus, other than the references to their name and the statement(s) and/or report(s) (if any) specified below and included in this Prospectus with the consent of that person.

Name	Role	Statement/Report
Mills Oakley Lawyers	Solicitors to the Offers	Nil
Kings Park Corporate Lawyers	Independent Lawyers (WA)	Solicitor's Report (WA tenements)
Resources Legal	Independent Lawyers (NSW)	Solicitor's Report (NSW tenements)
Xstract Mining Consultants	Independent Geologist	Technical Assessment Report in section 6.
Butler Settineri (Audit) Pty Ltd	Investigating Accountant	Investigating Accountant's Report in section 8.
Azure Capital Limited	Corporate Adviser	Nil
Euroz Securities Limited	Lead Manager	Nil
Security Transfer Australia Pty Ltd	Share Registry	Nil
BDO	Tax consultants	Nil
David von Perger (Heron)	Competent person in respect to Exploration	Competent Person's Statement
Steve Jones (Heron)	Mineral Resource estimate for the KNP	Competent Person's Statement
Ian Buchhorn (Heron)	Competent person in respect to Exploration	Competent Person's Statement
Bob Cotton / Mineral Appraisals Pty Ltd	Mineral Resource estimate for Lewis Ponds	Competent Person's Statement

11.5 Competent Person's Statements

The information in this Prospectus that relates to the Mineral Resource for Lewis Ponds is based on information compiled by Mr Robert Cotton, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Cotton is a full time employee of Mineral Appraisals Pty Ltd. Mr Cotton has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and 'qualified person' as this term is defined in Canadian National Instrument 43-101 (**NI 43-101**). Mr Cotton consents to the inclusion in this Prospectus of the information in the form and context in which it appears.

The information in this Prospectus that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled by a former Heron Resources Limited resource geologist and validated by Mr Steve Jones in 2013. Both are Members of the Australasian Institute of Mining and Metallurgy. Mr Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jones consents to the inclusion in this Prospectus of the matters based on his information in the form and context that it appears.

The information in this Prospectus that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jones validated the Snowden Mining Siberia North estimate in 2013.

The technical information in this Prospectus relating to exploration results not covered by Mr Buchhorn below, is based on information compiled or reviewed by Mr David von Perger, who is a Member of the Australian Institute of Mining and Metallurgy (Chartered Professional – Geology). Mr von Perger is a full time employee of Heron Resources Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 edition) and 'qualified person' as this term is defined in NI 43-101. Mr von Perger has reviewed this Prospectus and consents to the inclusion of the information in the form and context in which it appears.

The exploration results for Lewis Ponds, Gundagai, Mt Zephyr, BTZ, Kalgoorlie East and KNP Tenements and forward programs are based on information reviewed by Mr Ian Buchhorn, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Buchhorn is a full time employee of Heron Resources Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results'. Mr Buchhorn has reviewed the Prospectus and consents to the inclusion of the information in the form and context in which it appears.



12.0 Directors' Responsibility and Consent

The Directors state that they have made all reasonable enquiries and on that basis have reasonable grounds to believe that any statements made by the Directors in this Prospectus are not misleading or deceptive and that in respect to any other statements made in the Prospectus by persons other than Directors, the Directors have made reasonable enquiries and on that basis have reasonable grounds to believe that persons making the statement or statements were competent to make such statements, those persons have given their consent to the statements being included in this Prospectus in the form and context in which they are included and have not withdrawn that consent before lodgement of this Prospectus with the ASIC, or to the Directors knowledge, before any issue of the Shares pursuant to this Prospectus.

Each Director has consented to the lodgement of this Prospectus with the ASIC and has not withdrawn that consent.

Signed for and on behalf of
Ardea Resources Limited by

A handwritten signature in black ink, appearing to read 'M Painter', written over a light grey rectangular background.

Matthew Painter
Managing Director

Signed for and on behalf of
Heron Resources Limited by

A handwritten signature in black ink, appearing to read 'S Dennis', written over a light grey rectangular background.

Stephen Dennis
Non-Executive Chairman

13.0 Glossary

Where the following terms are used in this Prospectus, they have the following meanings:

5 Day VWAP	means the volume weighted average market price (as defined in the Listing Rules) for Shares over the last 5 days on which sales in Shares were recorded prior to a prospectus being lodged for the Loyalty Options.
A\$ or \$	Australian dollars unless otherwise stated.
Applicant	a person who submits a valid Application Form pursuant to this Prospectus.
Application Form	an application form accompanying this prospectus to apply to subscribe for Shares pursuant to this Prospectus.
Application Monies	has the meaning given in section 10.7 and 10.8.
Ardea Assets	has the meaning given in section 3.1.
ASIC	Australian Securities and Investment Commission.
ASX	ASX Limited (ABN 98 008 624 691) or the Australian Securities Exchange (as the context requires).
ASX Settlement	ASX Settlement Pty Ltd (ACN 008 504 532).
ASX Settlement Rules	The operating rules of ASX Settlement.
Board	the Board of Directors of the Company.
BTZ	Bardoc Tectonic Zone (WA) which includes the Big Four, Goongarrie and Ghost Rock prospects.
Closing Dates	the closing dates for receipt of Priority Application Form under this Prospectus, estimated to be 5pm WST on 16 December 2016 and for Public Application Form under this Prospectus, estimated to be 5pm WST on 23 December 2016 or amended times as set by the Board.
Company or Ardea	Ardea Resources Limited (ACN 614 289 342).
Consideration Shares	means 41,500,938 Ardea Shares issued as Heron's consideration for the Ardea Assets.
Constitution	the constitution of the Company.
Corporate Adviser or Adviser	Azure Capital Limited.
Corporate Advisory & Lead Manager Mandate	agreement dated 19 July 2016 between the Company, Azure Capital Limited and Euroz Securities Limited as detailed in section 3.9.
Corporations Act	The Corporations Act 2001 (Cth) as amended.
Demerger Implementation Agreement	the Demerger Implementation Agreement entered into between the Company, Heron, Ochre Resources Pty Limited, Tri Origin Mining Pty Limited and Hampton Nickel Pty Ltd in November 2016 as summarised in section 3.9.
Director	a director of the Company and, where the context requires, any proposed director.
Distribution	has the meaning given in section 3.13.
Existing Heron Shareholders	Heron shareholders with a registered address in Australia or New Zealand as at the date of this . Prospectus.



Group	has the meaning of Ardea and its subsidiaries, refer sections 4 and 11.3.
Heron	Heron Resources Limited (ACN 068 263 098).
Heron Shareholder	a shareholder of Heron.
Ineligible Foreign Shareholders	has the meaning given in section 3.14.
In-specie Shares	are Consideration Shares which will be transferred as a 1 for 10 distribution at no cost to Heron Shareholders who were holders as at 6 October 2016. See sections 3.1, 3.13 and 3.14 for details
Investigating Accountant's Report	means the investigating accountants report in section 8.
JORC Code	the Joint Ore Reserves Committee, a committee overseeing the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, which is a professional code of practice that sets minimum standards for public reporting.
Lead Manager or Euroz	Euroz Securities Limited.
KNP	Kalgoorlie Nickel Project (WA) which includes the Siberia and Black Range prospects.
Listing Rules	the listing rules of the ASX.
Loyalty Options	options which Ardea will issue as a bonus issue to all Ardea Shareholders on a record date 3 months from the date Ardea is admitted to the Official List. There will be one free Option issued for every three Ardea Shares held. Exercise price will be the greater of A\$0.25 or a 25% premium to the 5 Day VWAP 3 months after listing. Options will expire 12 months after issue.
Maximum Subscription	30 million New Shares or A\$6 million.
Minimum Subscription	17.5 million New Shares or A\$3.5 million.
New Shares	shares offered under the Public and Priority Offers.
Offers	the Public Offer, the Priority Offer and the Sale Facility Offer.
Official List	the Official List of the ASX.
Option	an option to be issued a Share offered on the terms of exercisable at A\$0.25 with a term of three years from the date of Ardea's listing on ASX and otherwise as set out in section 10.17.
Option Offer	an offer of up to 12,445,028 Options at nil consideration with an exercise price of A\$0.25 and term of three years from date of listing.
PFS	Pre-Feasibility Study.
Public Application Form	the white form attached to this prospectus to be used by public Applicants to apply for New Shares under the Public Offer.
Priority Application Form	the blue personalized priority form accompanying this prospectus to be used by Existing Heron Shareholders, as set out in section 10.3, to apply for New Shares under the Priority Offer.
Priority Offer	an offer of New Shares to Existing Heron Shareholders in priority to other investors under the Public Offer, as set out in section 10.3.
Prospectus	This prospectus and includes the electronic version of this prospectus.
Public Offer	part of the offer for the issue of up to 30 million New Shares at an issue price of A\$0.20 each to raise up to A\$6 million.

Sale Facility	has the meaning given in section 3.1 and 3.14.
Sale Facility Offer	an offer for the sale of up to approximately 5.4 million Shares under the Sale Facility
Share	a fully paid ordinary share in the share capital of the Company.
Shareholder	a registered holder of Shares.
Spin-Off	has the meaning given in section 3.1.
Spin-Off Conditions	has the meaning given in section 3.13.
WST	Western Standard Time in Perth, Western Australia.



PUBLIC OFFER APPLICATION FORM

THIS DOCUMENT IS IMPORTANT. IF YOU ARE IN DOUBT AS TO HOW TO DEAL WITH IT, PLEASE CONTACT YOUR STOCK BROKER OR LICENSED PROFESSIONAL ADVISOR.

All Correspondence to:

Security Transfer Australia Pty Ltd
PO BOX 535, APPLECROSS WA 6953
770 Canning Highway, APPLECROSS WA 6153
T: +61 8 9315 2333 F: +61 8 9315 2233
E: registrar@securitytransfer.com.au
W: www.securitytransfer.com.au

ARDEA RESOURCES LIMITED

ACN: 164 289 342

BROKER STAMP

Broker Code

Advisor Code

PLEASE READ CAREFULLY ALL INSTRUCTIONS ON THE REVERSE OF THIS FORM

This application relates to the offer of Fully Paid Ordinary Shares at the price of \$0.20 per Share.

No share will be issued pursuant to the Prospectus later than 13 months after the date of the Prospectus.

Before completing this Application Form you should read the accompanying Prospectus and the instructions overleaf. Please print in BLOCK LETTERS.

I / We apply for:

, , shares at AUD \$0.20 per share

or such lesser number of shares which may be allocated to me/us by the Directors.



www.securitytransfer.com.au

BPAY® this payment via internet or phone banking.

Please visit our share registry's website: www.securitytransfer.com.au and complete the online application form.

If electronic payment cannot be made then cheque(s) or bank draft(s) can be used.

See reverse for further payment instructions.

I/We lodge full application of monies of:

A \$, , .

Full Name of Applicant / Company

Title (e.g.: Dr, Mrs) Given Name(s) or Company Name

Joint Applicant #2

Title (e.g.: Dr, Mrs) Given Name(s) or Company Name

Joint Applicant #3

Title (e.g.: Dr, Mrs) Given Name(s) or Company Name

Account Designation (for example: THE SMITH SUPERFUND A/C)

< >

Postal Address

Unit Street Number Street Name or PO BOX

Suburb / Town / City

State

Postcode

Country Name (if not Australia)

CHESS HIN (where applicable)

X

If an incorrect CHESS HIN has been provided (for example, an incorrect number as registration details do not match those registered) any securities issued will be held on the Issuer Sponsored subregister.

Tax File Number / Australian Business Number

Tax File Number of Security Holder #2 (Joint Holdings Only)

Contact Name

Contact Number

()

Email Address

@

Declaration and Statements:

- (1) I/We declare that all details and statements made by me/us are complete and accurate.
- (2) I/We agree to be bound by the Terms & Conditions set out in the Prospectus and by the Constitution of the Company.
- (3) I/We authorise the Company to complete and execute any documentation necessary to effect the issue of Securities to me/us.
- (4) I/We have received personally a copy of the Prospectus accompanied by or attached to this Application form, or a copy of the Application Form or a direct derivative of the Application Form before applying for the Securities.
- (5) I/We acknowledge that the Company will send me/us a paper copy of the Prospectus and any Supplementary Prospectus (if applicable) free of charge if I/we request so during the currency of the Prospectus.
- (6) I/We acknowledge that returning the Application Form with the application monies will constitute my/our offer to subscribe for Securities in the Company and that no notice of acceptance of the application will be provided.

This Application Form relates to the Offer of Fully Paid Shares in Ardea Resources Limited pursuant to the Prospectus dated 9 November 2016.

APPLICATION FORMS

Please complete all parts of the Application Form using BLOCK LETTERS. Use correct forms of registrable name (see below). Applications using the wrong form of name may be rejected. Current CHES participants should complete their name and address in the same format as they are presently registered in the CHES system.

Insert the number of Shares you wish to apply for. The application must be for a minimum of 10,000 Shares and thereafter in multiples of 1,000 Shares. The applicant(s) agree(s) upon and subject to the terms of the Prospectus to take any number of Shares equal to or less than the number of Shares indicated on the Application Form that may be allotted to the applicants pursuant to the Prospectus and declare(s) that all details of statements made are complete and accurate.

No notice of acceptance of the application will be provided by the Company prior to the allotment of Shares. Applicants agree to be bound upon acceptance by the Company of the application.

Please provide us with a telephone contact number (including the person responsible in the case of an application by a company) so that we can contact you promptly if there is a query in your Application Form. If your Application Form is not completed correctly, it may still be treated as valid. There is no requirement to sign the Application Form. The Company's decision as to whether to treat your application as valid, and how to construe, amend or complete it shall be final.

PAYMENT



www.securitytransfer.com.au

BPAY® your payment via internet or phone banking. Please visit our share registry's website:

www.securitytransfer.com.au and complete the online application form. All online applicants can BPAY their payments via internet or phone banking. A unique reference number will be quoted upon completion of the application.

Applicants should be aware of their financial institution's cut-off time (the time payment must be made to be processed overnight) and ensure payment is processed by their financial institution on or before the day prior to the closing date of the offer.

BPAY applications will only be regarded as accepted if payment is received by the registry from your financial institution on or prior to the closing date. It is the applicant's responsibility to ensure funds are submitted correctly by the closing date and time.

You do not need to return any documents if you have made payment via BPAY.

Your BPAY reference number will process your payment to your application electronically and you will be deemed to have applied for such securities for which you have paid.

All cheques should be made payable to **ARDEA RESOURCES LIMITED - SHARE OFFER ACCOUNT** and drawn on an Australian bank and expressed in Australian currency and crossed "Not Negotiable". Cheques or bank drafts drawn on overseas banks in Australian or any foreign currency will NOT be accepted. Any such cheques will be returned and the acceptance deemed to be invalid.

Sufficient cleared funds should be held in your account as your acceptance may be rejected if your cheque is dishonoured. Do not forward cash as receipts will not be issued.

LODGING OF APPLICATIONS

Completed Application Forms and cheques must be:

Posted to:

ARDEA RESOURCES LIMITED

C/- Security Transfer Australia Pty Ltd

PO Box 535

APPLECROSS WA 6953

OR

Delivered to:

ARDEA RESOURCES LIMITED

C/- Security Transfer Australia Pty Ltd

770 Canning Highway

APPLECROSS WA 6153

Applications must be received by no later than 5.00PM WST on the Closing Date 23 DECEMBER 2016 which may be changed immediately after the Opening Date at any time and at the discretion of the Company.

CHES HIN/BROKER SPONSORED APPLICANTS

The Company intends to become an Issuer Sponsored participant in the ASX CHES System. This enables a holder to receive a statement of holding rather than a certificate. If you are a CHES participant (or are sponsored by a CHES participant) and you wish to hold shares allotted to you under this Application on the CHES subregister, enter your CHES HIN. Otherwise, leave this box blank and your Shares will automatically be Issuer Sponsored on allotment.

CORRECT FORM OF REGISTRABLE TITLE

Note that only legal entities are allowed to hold securities. Applications must be in the name(s) of a natural person(s), companies or other legal entities acceptable to Ardea Resources Limited. At least one full given name and the surname are required for each natural person. The name of the beneficiary or any other non-registrable name may be included by way of an account designation if completed exactly as described in the example of the correct forms of registrable names below:

TYPE OF INVESTOR

Individual

Use given names in full, not initials.

Company

Use the company's full title, not abbreviations.

Joint Holdings

Use full and complete names.

Trusts

Use trustee(s) personal name(s). Do not use the name of the trust.

Deceased Estates

Use the executor(s) personal name(s).

Minor (a person under the age of 18)

Use the name of a responsible adult with an appropriate designation.

Partnerships

Use the partners' personal names. Do not use the name of the partnership.

Superannuation Funds

Use the name of the trustee(s) of the super fund.

CORRECT

Mr John Alfred Smith

ABC Pty Ltd

Mr Peter Robert Williams &
Ms Louise Susan Williams

Mrs Susan Jane Smith
<Sue Smith Family A/C>

Ms Jane Mary Smith &
Mr Frank William Smith
<Estate John Smith A/C>

Mr John Alfred Smith
<Peter Smith A/C>

Mr John Robert Smith &
Mr Michael John Smith
<John Smith and Son A/C>

Jane Smith Pty Ltd
<J Super Fund A/C>

INCORRECT

J A Smith

ABC P/L or ABC Co

Peter Robert &
Louise S Williams

Sue Smith Family Trust

Estate of Late John Smith
or
John Smith Deceased

Master Peter Smith

John Smith and Son

Jane Smith Pty Ltd Superannuation Fund

PRIVACY STATEMENT

Personal information is collected on this form by Security Transfer Australia Pty Ltd as the registrar for securities issuers for the purpose of maintaining registers of securityholders, facilitating distribution payments and other corporate actions and communications. Your personal details may be disclosed to related bodies corporate, to external service providers such as mail and print providers, or as otherwise required or permitted by law. If you would like details of your personal information held by Security Transfer Australia Pty Ltd or you would like to correct information that is inaccurate please contact them on the address on this form.



Finding new ore bodies for Ardea to develop doesn't always rely on highly sophisticated technology, clockwise from top left:

Lewis Ponds smelters 1890 – the fact that in the late 19th Century investors loaded bullock drays with the materials to build a smelter and hauled them through the bush confirms they had confidence that Lewis Ponds was a substantial mineralised system, as Ardea's diamond drilling program aims to confirm.

Dunns Find at Mt Zephyr 1900 – hopefully this historic letter describing a lode 32 foot wide assaying from a few penny weights to 3ozs/15dwts (9.8m at a few grams to 116g/t gold) was 'JORC 1900 compliant' (Fogarty, 1983, Final Report Mining Leases 39/7-39/10, Mt Zephyr, WA, Wamex A12352 Item 2222).

Zephyr North 1970 – was drilled for Mt Windarra-style nickel in the hope of being the next Poseidon discovery and instead found what four decades later is clearly 'red rock alteration' of the style associated with 'syenite gold', as at Jupiter, Wallaby and Sunrise Dam.

Taurus 2016 – the wheel has turned full circle back to the late 19th Century, with a modern prospector 'specking' quartz reef floaters some 200m southeast of the Taurus main shaft, with the coarse angular free gold confirming proximity to a primary reef.

Report 1. 1

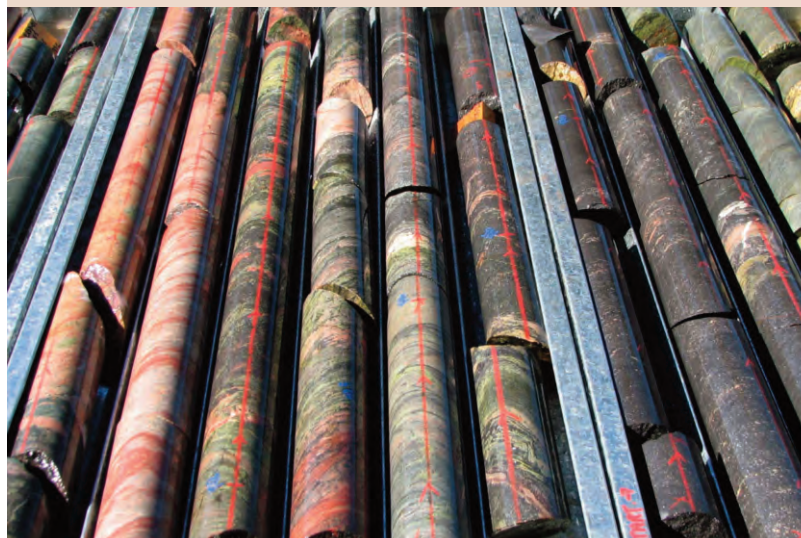
Apr. 1900 41

In regard to Dunns Find the prospector (Mr. John Dunn FRGS.) has submitted the following report to Mr. Alex Forest

Report on the progress carried out on leases known as the Crown of Nations since its discovery in August 1899.

This property consists of three G.M.L.'s containing 56 acres set in the Mt. Malcolm district. A large amount of prospecting work has been done on these leases. Up to the end of last year a shaft was carried down to 70 ft. and the lode cut and driven across which proved to be 32 ft. in width. The gold bearing matrix was found to be that of quartzite (ironstone) Jasper of a very hard and siliceous nature, and carrying gold of high quality, from a few dwts. to 3ozs/15dwts per ton. as per tests of the ore made in Perth. After these results, the property was proved to be a highly payable ore. It was decided to sink a new shaft to be carried down to a depth of 100 ft. or deeper to prove the value of the lode at depth. The work was started about the commencement of the year and located in a position such as to cut the lode at 150 ft. from the surface.

This is a good shaft 7½ ft x 4 ft. and carried down at all possible speed but at 110 ft. heavy water was encountered in sinking, making it impossible to continue deeper, owing to not having the appliances to control the water. All I could do then was to drive from the level to discover the lode





Ardea
Resources Limited



www.ardearesources.com.au