

Prospectus

For an initial public offer of up to 40,000,000 Shares at an issue price of \$0.20 each, to raise up to \$8,000,000 (before costs) (**General Offer**). The General Offer is subject to a Minimum Subscription requirement to raise at least \$4,500,000 (before costs).







## **Corporate Directory**

#### **Directors**

Mark Sykes – Non-Executive Chairman Ian Buchhorn – Non-Executive Director Andrew Stewart – Non-Executive Director

#### **Chief Executive Officer**

David Greenwood

#### **Company Secretary**

Sam Middlemas

## **Registered Office**

Suite 2, 45 Ord Street West Perth WA 6005

Telephone: +61 8 6244 5136

Email: info@godolphinresources.com.au

#### Website

www.godolphinresources.com.au

## **Proposed Stock Exchange Listing**

Australian Securities Exchange (ASX)
Proposed ASX Code: GRL

## Share Registry\*

Automic Pty Ltd Level 2, 267 St Georges Terrace Perth WA 6000 Telephone

(within Australia): 1300 288 664 (outside Australia): +61 2 9698 5414

#### Auditor\*

Butler Settineri (Audit) Pty Ltd Unit 16, First Floor Spectrum, 100 Railway Road, Subiaco WA 6008

## Legal Adviser

Bellanhouse Lawyers Level 19, Alluvion, 58 Mounts Bay Road Perth WA 6000

#### **Investigating Accountant**

Butler Settineri Unit 16, First Floor Spectrum, 100 Railway Road, Subiaco WA 6008

### **Independent Technical Assessor**

Cube Consulting Pty Ltd Level 4, 1111 Hay Street Perth WA, 6005

#### Solicitor (Tenements)

Resource Legal Pty Ltd 1A Rosemead Road Hornsby NSW 2077

#### Lead Manager

Panthea Capital Pty Ltd Level 4, 9-11 York Street Sydney, NSW 2000 (AFSL 456663)

Cover photograph – Historic marble quarry at Lewis Ponds. Note the subvertical orientation of the deformed carbonate units that evidences the structural evolution of the area.

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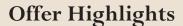
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## "Godolphin"

named from the Godolphin Fault, a major crustal-scale structure that hosts significant mineral deposits along its entire strike length, including the 65km of strike held by the Company

<sup>\*</sup> These entities are included for information purposes only. They have not been involved in the preparation of this Prospectus.



The Company will acquire approximately 3,216 km² of largely contiguous, unencumbered 100%-owned tenure in the Lachlan Fold Belt (**LFB**) of New South Wales, a mineral province which hosts world-class, bulk tonnage and low cost porphyry gold-copper mining operations at both **Cadia-Ridgeway** and **Northparkes**, as well as potential new discoveries as evidenced by the recent **Boda** gold-copper drill results.

- The Company has JORC-compliant mineral resources with an aggregate of **431,000 ounces of gold in three deposits**<sup>1</sup>, all open in multiple directions, all with systematic resource drill-outs planned:
  - Mount Aubrey Epithermal Gold Project located at the north margin of the Lachlan Transverse Zone (LTZ), covering
    multiple gold vein systems, three pits which were historically mined by BHP Gold to 40 metre free-dig depths in the
    1990s.
  - Lewis Ponds Gold-Base Metal Project located at the north margin of the LTZ, covering a continuous 65km strike of the major orogenic gold-hosting structure termed the Godolphin-Narragal Fault Zone (which hosts the McPhillamy's gold deposit 15km south of Company tenure).
  - Yeoval Copper-Gold Project located at the north margin of the LTZ, historic mineralised drill-holes require follow up.
- Copper Hill East Gold-Copper Project, which is located at the eastern margin of the Boda-hosting Molong Volcanic Belt
  (MVB) south along the MVB structure from Boda and north from Cadia-Ridgeway. Soil geochemistry confirms anomalies
  associated with stockwork copper-veined monzonite intrusive.
- Experienced board and management team with excellent credentials in the LFB.
- Established operations base in Orange in the heart of the LFB.
- Funds raised will be prioritised on direct project expenditure aimed at expanding known resources and making new
  discoveries. The Company intends to conduct up to 24,000 metres of reverse circulation drilling and up to 7,000 metres of
  diamond drilling over the next 24 months, noting however, that these intentions are subject to various factors outside of the
  Company's control, including results from future drilling work, and may change without prior notice from the Company.

# **Key Offer Details**

## PRO FORMA CAPITAL STRUCTURE

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Offer Price per Share	\$0.20 per Share			
Shares offered under the Offers				
- Minimum Subscription	22,500,000 Shares			
- Maximum Subscription	40,000,000 Shares			
Cash raised under the Offers (before expenses)				
- Minimum Subscription	\$4,500,000			
- Maximum Subscription	\$8,000,000			
In-Specie Shares to Ardea Shareholders	30,000,000 Shares			
Admission Facility Shares** 1,000,000 Share				
Total number of Shares on issue following the Offers*				
- Minimum Subscription	53,500,100 Shares			
- Maximum Subscription	71,000,100 Shares			

<sup>\*</sup> As at the date of this Prospectus, the Company will have 100 Shares on issue. Pursuant to the Demerger Implementation Deed, dated 3 October 2019 the Company will issue a further 30,000,000 Shares as part consideration for the acquisition of the NSW Assets. Of these 30,000,000 will be transferred to Ardea Shareholders pursuant to a proposed In-specie Distribution. See Section 6.2 for further details on the Demerger Implementation Deed. \*\* Please refer to Section 6.2(b) for details of the Admission Facility Shares. Note: Please refer to Section 1.6 for further details relating to the proposed capital structure of the Company.

## **Indicative Timetable**

EVENT	DATE
Lodgement of this Prospectus with ASIC	29 October 2019
Ardea Offer Record Date	1 November 2019
Opening Date of the Offers	6 November 2019
Ardea Offer Closing Date	25 November 2019
General Offer Closing Date	29 November 2019
Record date for In-specie Distribution	5 December 2019
Completion of In-specie Distribution	12 December 2019
Issue of Shares under the Offers	13 December 2019
Despatch of holding statements	17 December 2019
Expected date for Shares to commence trading on ASX	20 December 2019

Note: The dates shown above are indicative only and may vary subject to the Corporations Act, the Listing Rules and other applicable laws. In particular, the Company reserves the right to vary the Opening Date and the Closing Dates without prior notice, which may have a consequential effect on the other dates. Applicants are therefore encouraged to lodge their Application Form as soon as possible after the relevant Opening Date if they wish to invest in the Company. The Company also reserves the right not to proceed with any of the Offers at any time before the issue of Shares to applicants.

Please see page 5, 7, 8 and 9 of the Independent Technical Assessment for a breakdown of resource categories, grades and tonnages.



# **Important Information**

#### **Prospectus**

This Prospectus is dated 29 October 2019 and was lodged with ASIC on that date. ASIC, ASX and their respective officers do not take any responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

Within 7 days of the date of this Prospectus, the Company will make an application to ASX for the Shares offered pursuant to the Prospectus to be admitted for quotation on ASX.

Shares will not be issued pursuant to this Prospectus later than 13 months after the date of this Prospectus.

Persons wishing to apply for Shares pursuant to the Offers must do so using the applicable Application Form attached to or accompanying this Prospectus. Before applying for Shares potential investors should carefully read the Prospectus so that they can make an informed assessment of:

- the rights and liabilities attaching to the Shares and Options;
- the assets and liabilities of the Company; and
- the Company's financial position and performance, profits and losses, and prospects.

Investors should carefully consider these factors in light of their own personal financial and taxation circumstances.

No person is authorised to give any information or to make any representation in relation to the Offers which is not contained in this Prospectus. Any information or representation not so contained may not be relied upon as having been authorised by the Company or the Directors in relation to the Offers.

#### Risks

Any investment in the Company should be considered highly speculative. Before deciding to invest in the Company, potential investors should read the entire Prospectus and, in particular, in considering the prospects of the Company, potential investors should consider the risk factors that could affect the financial performance and assets of the Company. Investors should carefully consider these factors in light of their personal circumstances (including financial and taxation issues). The Shares offered by this Prospectus should be considered highly speculative. Please refer to Section 3 for details relating to risk factors. Persons considering applying for Shares pursuant to the Prospectus should obtain professional advice from an accountant, stockbroker, lawyer or other adviser before deciding whether to invest. No guarantee is given as to the success of the Company, the repayment of capital, the payment of dividends, or the price at which the Shares will trade on ASX.

#### Offer outside Australia

The offer of Shares made pursuant to this Prospectus is not made to persons to whom, or places in which, it would not be lawful to make such an offer of Shares. No action has been taken to register the Offers under this Prospectus in any jurisdiction outside Australia. The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law in those jurisdictions and therefore 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.

#### Forward-looking statements

This Prospectus contains forward-looking statements which incorporate an element of uncertainty or risk, such as 'intends', 'may', 'could', 'believes', 'estimates', 'targets' or 'expects'. These statements are based on an evaluation of current economic and operating conditions, as well as assumptions regarding future events. These events, as at the date of this Prospectus, are expected to take place, but there is no guarantee that such will occur as anticipated or at all given that many of the events are outside the Company's control.

Accordingly, the Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur. Further, the Company may not update or revise any forward-looking statement if events subsequently occur or information subsequently becomes available that affects the original forward-looking statement.

#### **Exposure Period**

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to applying for Shares. This examination may result in the identification of deficiencies in this Prospectus and, in those circumstances, any Application that has been received may need to be dealt with in accordance with section 724 of the Corporations Act. Applications for Shares under the Offers set out in this Prospectus will not be processed by the Company until after the expiry of the Exposure Period. No preference will be conferred on Applications lodged prior to the expiry of the Exposure Period.

#### **Conditional Offers**

The Offers contained in this Prospectus are conditional on certain events occurring. If these events do not occur, the Offers will not proceed and investors will be refunded their Application Monies without interest. Please refer to Section 1.5 for further details on the conditions attaching to the Offers.

## **Electronic Prospectus**

If you have received this Prospectus as an electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the applicable Application Form. If you have not, please contact the Company at +61 8 6244 5136 and the Company will send you, at no cost, either a hard copy or a further electronic copy of the Prospectus or both. Alternatively, you may obtain a copy of the Prospectus from the Company's website at www.godolphinresources.com.au.

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

#### **Diagrams**

Diagrams used in this Prospectus may not be drawn to scale.

#### Miscellaneous

All references to "\$", "A\$", "AUD", "dollar" and "cents" are references to Australian currency unless otherwise stated.

All references to time relate to the time in Perth, Western Australia unless otherwise stated.

A number of terms and abbreviations used in this Prospectus have defined meanings which appear in Section 9.



## Letter from the Chairman

Dear Investor,

On behalf of the Directors, I look forward to welcoming you as a Shareholder of Godolphin Resources Limited (**Company**). The Company is gold and base metal focused with a clear strategy of fast-tracking the development of its projects in the Lachlan Fold Belt (**LFB**) of New South Wales, which includes 431,000 ounces of gold in JORC-compliant mineral resources<sup>1</sup>.

The Company's New South Wales assets are solely within the Lachlan Fold Belt in a largely contiguous land holding associated with structures hosting acknowledged world-class mines including Cadia-Ridgeway and Northparkes. Notably, the Company's eastern projects (Lewis Ponds, Copper Hill East, Ophir and Caledonian) are within the geological setting which hosts the new Boda porphyry gold-copper discovery announced by Alkane Resources Limited on 9 September 2019. The NSW Assets will comprise:

- (a) **Mount Aubrey Epithermal Gold Project** located at the north margin of the Lachlan Transverse Zone (**LTZ**), covering multiple gold-hosting epithermal vein systems, three of which were historically mined by BHP Gold to shallow depths in the 1990s, with high grade drill intercepts unmined beneath the pits.
- (b) Copper Hill East Gold-Copper Project located at the east margin of the Boda-hosting Molong Volcanic Belt (MVB), south along the MVB structure from Boda and north from Cadia-Ridgeway, with previous Company soil geochemistry confirming copper anomalies requiring drill testing.
- (c) Lewis Ponds Gold-Base Metal Project located at the north margin of the LTZ, covering a continuous 65km strike of the major orogenic gold-hosting structure termed the Godolphin-Narragal Fault, prospects from southeast to northwest are Lewis Ponds, Mt Bulga, Mt Lindsay, Ophir, Calula and Caledonian. The Lewis Ponds Gold Base Metal Project includes the underlying freehold land.
- (d) **Yeoval Porphyry Copper-Gold Project** located at the north margin of the LTZ, covering the Yeoval porphyry copper-gold-molybdenum-rhenium targets, with mineralisation open in all directions.
- (e) **Wiseman's Creek Gold-Silver Project** located within the central LTZ, epithermal gold-silver discovery by Ardea.
- (f) Calarie Gold Project located at the south margin of the LTZ, in the Parkes Fault Zone orogenic gold structure.
- (g) Gundagai Gold Project historic gold mines on the Cootamundra Fault with visible gold in quartz veins.

I lead an experienced, well-balanced Board of Directors and exploration team who have extensive skills in exploration and mine development, with expertise in the Lachlan Fold Belt.

The purpose of the Offers is to raise sufficient funds to facilitate resource definition and extension drilling, to be prioritised on the Mount Aubrey and Lewis Ponds gold resources, as well as for further exploration on the NSW Assets, including Copper Hill East. At the same time, as a condition of the Offers, we seek a listing of the Company on the ASX.

I encourage you to read this Prospectus, request that you consider the risks of investment in Section 3, and invite you to become a Shareholder in the Company, which I believe has great potential to further develop its Lachlan Fold Belt mineral resources. You should also note the Company's intention to undertake a 1 for 3 Loyalty Option to be issued at no cost approximately three months after Admission.

1 Please see page 5, 7, 8 and 9 of the Independent Technical Assessment for a breakdown of resource categories, grades and tonnages.





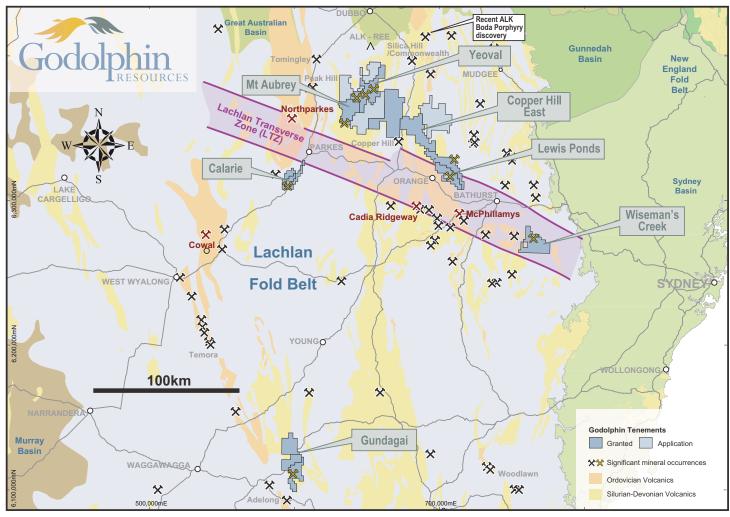
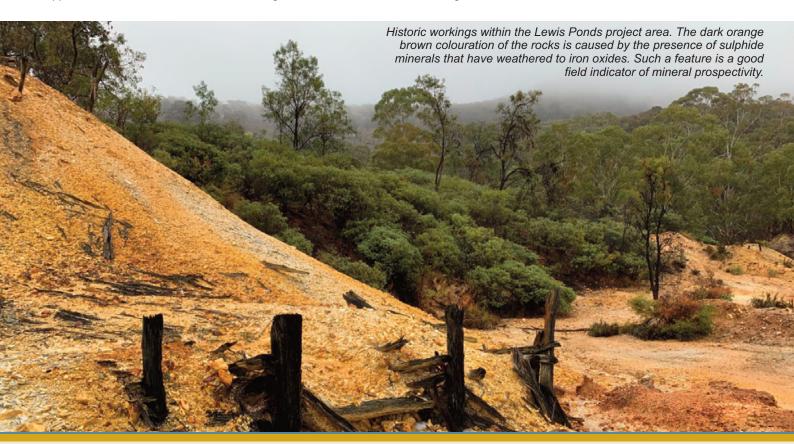


Figure 1 Godolphin has a contiguous tenement holding from Mount Aubrey to Lewis Ponds in the Lachlan Transverse Zone (LTZ). In particular, the recently announced Boda discovery by Alkane Resources (ASX:ALK) significantly upgrades the prospectivity of the Copper Hill East to Lewis Ponds tenure along the eastern contact of the Molong Volcanic Belt.



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# **Investment Overview**

This Section is not intended to provide full information for investors intending to apply for Shares offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety. The Shares offered pursuant to this Prospectus carry no guarantee in respect of return of capital, return on investment, payment of dividends or the future value of the Securities.

Торіс		Summary		More information
Introduction				
Who is the Company and what does it do?	Godolphin Resources Limited (ACN 633 779 950) (Company) is an Australian company incorporated in Australia by its current parent company, Ardea Resources Limited (Ardea).			Sections 2.1 and 2.2
	The Company's corporat	e structure at listing will be	e as follows:	
	G	odolphin Resources Ltd		
		100%		
	G	odolphin Tenements Pty Ltd		
		100%		
		TriAusMin Pty Ltd		
	undertaken any activities owned subsidiary of Arde Group. TriAusMin holds	in this Prospectus, the Cols since incorporation. TriAusea and forms part of the cotenements and freehold laies when it is transferred to sets or liabilities.	usMin is a 100% onsolidated Ardea nd, and will have	
What are the Company's projects?	on ASX, the Company w	Demerger Implementation ill own, or have the right to enements in New South V	o own, a 100%	Sections 2.3 and Schedule 5
	Project area	Licence no.		
	Lewis Ponds**	EL 5583	-	
	Ophir	EL 8323	-	
	Copper Hill East	EL 8556	-	
	Mt Bulga	ELA5794	-	
	Caledonian	ELA5812	-	
	Mount Aubrey	EL 8532	_	
	Yeoval	EL 8538	-	
	Yallundry	ELA5780-Area1*	-	
	Obley West	ELA5780-Area2*	_	
	Obley North	ELA5780-Area3*	-	
	Cumnock Wiseman's Creek	EL 8890 EL 8554	-	
	Calarie	EL 8555	-	
	Calarie Central	EL 8580	-	
	Calarie Lachlan Mine	ML 0739	-	
	Gundagai South	EL 8061	-	
	Gundagai North	EL 8586	_	
	Gundagai	EL 8889	-	



Торіс	Summary	More information
CONTINUED	*Formal offer of tenements awaited from NSW Department of Planning, Industry and Environment.  ** The original EL 1049, which comprises less than 5% of 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 proceeds from sale of the EL or 1/3 of net profits from production, or 30% of any royalties received from production. For further information see Section 6.4.  See Schedule 1 for full details of the Tenements.  The Company projects include JORC-compliant mineral resources at Mount Aubrey, Lewis Ponds and Yeoval. The resources include some 431,000 ounces of gold, as well as associated base metals and silver, see Schedule 5 Independent Technical Assessment.	
What is the Company's financial position?	The Company was incorporated in June 2019 and has not traded, therefore, the Company has not earned any revenue nor incurred any expenses from its activities (other than the expenses of the Offers).  Section 4 contains historical financial information for the Company. The Board is satisfied that upon completion of the Offers, the Company will have sufficient working capital to meet its stated objectives.	Section 4
What is the proposed capital structure of the Company?	Following completion of the Offers under this Prospectus and completion of the Demerger Implementation Deed, the proposed capital structure of the Company is as set out in Section 1.6.	Section 1.6
What is the proposed use of funds raised under the Offers?	The Company proposes to use the funds raised from the Offers, to facilitate resource definition and extension drilling, prioritised on the Mount Aubrey, Copper Hill East and Lewis Ponds gold projects, as well as to cover the costs of the Company's application for admission to the Official List.  The Company's proposed exploration program includes up to 24,000 metres of reverse circulation drilling and up to 7,000 metres of diamond drilling. The program is based on the Company's current intention and is subject to change and depending on the funds raised under the Prospectus, future drill results, and other matters outside of the Company's control.	Section 1.7
What is the Company's strategy?	<ol> <li>Work towards production         <ul> <li>Mount Aubrey Gold - complete the drill-out of the known gold-silver resource, then undertake feasibility programs ahead of financial studies to ascertain if it's economic to mine and if so, determine the optimum development strategy.</li> <li>Lewis Ponds – complete core drilling of the defined mineralisation, focussing on interpreted gold-enriched zones, then undertake metallurgical studies ahead of feasibility programs.</li> </ul> </li> <li>Exploration         <ul> <li>a. Copper Hill East Gold -Copper –further refinement of "Boda-Ridgeway porphyry gold-copper potassic alteration" in the east margin of the Molong Volcanic Belt through the development of exploration models and drill testing.</li> <li>All other tenure - complete the Company's standard multi-element soil geochemistry on defined targets.</li> </ul> </li> <li>Corporate         <ul> <li>Evaluate mergers and acquisitions that strengthen the Company's production base.</li> <li>Farm-out tenure that doesn't meet corporate objectives.</li> </ul> </li> </ol>	Section 2.5



Topic	Summary	More information			
Summary of key risks					
set out in Section 3, and oth in the future. Accordingly, a	Prospective investors should be aware that subscribing for Shares in the Company involves a number of risks. The risk factors set out in Section 3, and other general risks applicable to all investments in listed securities, may affect the value of the Shares in the future. Accordingly, an investment in the Company should be considered <b>highly speculative</b> . This Section summarises the key risks which apply to an investment in the Company and investors should refer to Section 3 for a more detailed summary of the risks.				
Funding	At the date of this Prospectus, the Company has no income producing assets and will generate losses for the foreseeable future. Exploration success and favourable equity markets are required to maintain funding for high levels of activity after the initial two years following IPO.	Section 3.1			
Commodity Prices	The Company's ability to proceed with the development of its mineral projects will depend on market factors, some of which may be beyond its control. It is anticipated that any revenues derived from mining will primarily be derived from the sale of gold and copper.	Section 3.1			
Non-renewal of Title	A number of the Company's tenements are subject to application or renewal. There is a risk that the Company may not acquire or retain title to these Tenements.	Section 3.1, 5			
Land-owner and Access Risk	The Company will be required to negotiate access arrangements and pay compensation to land-owners, local authorities, traditional land users and others who may have an interest in the area covered by a mining tenement. The Company's ability to resolve access and compensation issues will have an impact on the future success and financial performance of the Company's operations. Legal processes are available in the case of disputes, but in preference Godolphin has made respectful and fair land-owner interactions an integral component of its operational strategy.  A portion of the Wiseman's Creek tenement is Crown Land. Access to this land will be through the process of "right to negotiate". There are no current access agreements in place.	Section 3.1, 5			
Management and Key Personnel	The Company's management consists of three non-executive Directors and a Chief Executive Officer. Should there be a resignation, there may be difficulties in recruiting similarly high-quality personnel.	Section 3.1			
Limited Exploration	Other than Mount Aubrey, Lewis Ponds, Yeoval and Calarie, the Company's projects have been subjected to only limited historic drill testing. Further exploration may fail to validate current targets.	Section 2.3, 3.1, 4			
Resource Estimate	There is a degree of uncertainty to the estimation of Mineral Resources and Ore Reserves and corresponding grades being mined for future production. Estimates and viability can only be absolutely definitive at the sale of future marketable production.	Section 3.1			
Venture Parties, Agents and Contractors	The Company is unable to predict the risk of future financial failure or default by a participant in any future joint venture to which the Company may become a party (noting that the Company has no current joint venture intentions).	Section 3.1			
Exploration, Development, Mining and Processing Risks	The business of mineral exploration, project development and mining by its nature contains elements of significant risk including in relation to technical, financial, legal and social matters.	Section 3.1, 4			
	L	L			



Торіс	Summary	More information
Climate Change Risks	Climate change is a risk the Company has seriously considered, particularly related to its operations in the mining industry. The climate change risks particularly attributable to the Company include regulatory and weather conditions, or international responses or barriers due to Australian government policy.	Section 3.1
Environment	Godolphin will be required to rehabilitate land affected by exploration activities, and failure to do so may render the Tenements liable to cancellation. As has been the case under Ardea's stewardship, it is Godolphin's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.	Section 3.1,4
Annual Rents and Levies	An annual rental and an administrative levy are payable, based on the size of the Tenements. Tenements are also subject to expenditure requirements. Failure to meet statutory requirements may result in loss of tenure.	Section 3.1, 5
Taxes and Royalties	There is a risk that the Commonwealth or New South Wales Governments may seek to introduce further, or increase existing, taxes and royalties.	Section 3.1
Economic Conditions	General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates and currency exchange rates may have an adverse effect on the Company's exploration, development and production activities.	Section 3.1
Insurance Risk	The Company intends to put in place an insurance program aligned to the scale of its activities and in accordance with industry practice. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the Company.	Section 3.1
Liquidity Risk	There can be no guarantee that there will be an active market for Shares or that the price of Shares will increase.	Section 3.1
Litigation Risk	The Company is subject to litigation risks. All industries, including the minerals exploration industry, are subject to legal claims, with and without merit. Defence and settlement costs of legal claims can be substantial, even with respect to claims that have no merit.	Section 3.1. 5
Native Title and Aboriginal Heritage 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 the Company's operations and future plans.	Section 3.1, 5
	Tenements EL 8323 "Ophir" and EL 8538 "Yeoval" overlap with a registered native title claim. The grant of any future tenure to the Company over areas that are covered by registered claims or determinations will likely require engagement with the relevant claimants or native title holders (as relevant) in accordance with the Native Title Act. This engagement could cause delays to the Company's plans and/or the Company may incur higher than anticipated costs.	
	A number of the Company's tenements contain known Aboriginal heritage sites. The Company 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. There are currently no Aboriginal heritage agreements or arrangements in place affecting the Tenements, though future negotiations are expected in the course of general exploration.	



Торіс	Summary	More information
Exempted Areas	Under section 30 of the Mining Act the holder of an exploration licence must obtain the consent of the Minister before exploration activities may be conducted in an "exempted area", which includes State Forests, State Conservation Areas and Crown Land. This currently applies to selected areas within Affects EL 8323 "Ophir", EL 8554 "Wiseman's Creek" and EL 8586 "Gundagai North".	Section 3.1, 5
	Obtaining the consent of the Minister for exploration activities to be conducted in an "exempted area" will require environmental assessment of any proposed ground-disturbing exploration activities.	
Competing Tenement Application	The Yeoval South exploration licence application (ELA 5780) is the subject of a competing tenement application. There is a risk that the area granted by the NSW Department of Planning and Energy will be significantly less than the 253 units applied for.	Section 3.1, 5
Social Licence	In order to explore, develop or operate in communities, the general acceptance by certain stakeholder populations may be required. This may include formal agreements that can require extended negotiations with large numbers of stakeholders. There can be no guarantee these negotiations will be concluded successfully or not be protracted and cause significant delay to the Company's plans.	Section 3.1



Торіс	Summary	More information	
Directors, Related Party Interest and Substantial Holders			
Who are the Directors?	The Directors are:  (a) Mark Sykes – Non-Executive Chairman  (b) Ian Buchhorn – Non-Executive Director  (c) Andrew Stewart – Non- Executive Director	"Corporate Directory" and Section 5.1	
What experience do the Directors have?	Mark Sykes is a qualified Mining Engineer (WASM) and Mineral Economist (Macquarie University) with over 25 years' experience in the mining sector at both operational and executive levels. Based in NSW, Mr Sykes has previous ASX experience with a focus on mineral exploration and building companies with a diversified growth strategy. Mr Sykes worked for BHP for 10 years and was head of the resource investment division for a Japanese trading house, being directly involved in over \$3 billion of investment in Australia and North and South America. Mr Sykes' experience covers a variety of commodities including platinum group metals, coal, iron ore and copper. Mr Sykes has overseen the development of projects within the Lachlan Fold Belt and specifically within the Lachlan Transverse Zone. Mr Sykes has a passion for the mining industry and has been involved in the development and commercialisation of innovative and sustainable mining practices.  Mr Sykes is a Director of Pacific American Holdings Limited and previously a Director of Golden Cross Resources Limited and Bass Metals Limited.  Ian Buchhorn is a Mineral Economist (Macquarie University) and Geologist with over 35 years' experience. Mr Buchhorn was the founding Managing Director of Heron Resources Limited for a period of 11 years until 2007 and returned to that role in 2012 after a period as Executive Director. Mr Buchhorn first managed exploration programs in the Lachlan Fold Belt in 1981, corresponding to the recognition of Northparkes and Temora as significant porphyrylepithermal mineral provinces. Mr Buchhorn previously worked with a number of international mining companies and has worked on gold, nickel, bauxite and industrial mineral mining and exploration, gold and base metal project generation and corporate evaluations. For the last 25 years Mr Buchhorn has acquired and developed mining projects throughout the Eastern Goldfields of Western Australian and has operated as a Registered Mine Manager.  During the last three years, Mr Buchhorn has been a Di	Section 5.2	



Topic	Summary			More information
Who is the CEO and what experience do they have?	David Greenwood has an in-depth knowledge and more than 30 years' broad-based experience in the resources industry across a range of commodities including precious metals, base metals, industrial minerals, mineral sands, and bulk commodities. Mr Greenwood was educated in the UK and has worked internationally in the resources industry in exploration, production, marketing, business development and investment analysis. Mr Greenwood was Executive General Manager for Straits Resources Ltd, where he was responsible for exploration, marketing, corporate affairs, investor relations and investments. Mr Greenwood has held board positions with junior resource companies, including President (CEO) of Goldminco Corporation, a previously listed Canadian exploration company with assets in the Lachlan Fold Belt, NSW. Mr Greenwood has specific expertise in resources evaluation and financing, from exploration through to mine development, in addition to business development, minerals marketing and investor relations.			Section 5.3
What benefits are being paid to the Directors?	executive directors	, Mark Sykes, Ian Buchr	opointment with the non- norn and Andrew Stewart.	Sections 5.8 and 6.6
	Pursuant to these a pay on and from ac		Company has agreed to	
	(i) Mr Sykes an a GST).	annual director's fee of \$	60,000 (plus applicable	
	\$45,000 (plus	and Dr Stewart each an applicable GST or supe e Company as Directors	rannuation) for services	
	Pursuant to the Company's Employee Incentive Plan, the non-executive directors also received:			
	(i) Mark Sykes - 500,000 Incentive Options;			
	(ii) Ian Buchhorn	- 250,000 Incentive Opt	tions; and	
	(iii) Andrew Stewa	art – 250,000 Incentive 0	Options.	
What benefits are being paid to the CEO?	The Company has entered into an executive services agreement with David Greenwood (Greenwood Agreement).			Section 6.5
	The Company will remunerate Mr Greenwood for his services with an executive remuneration package comprising the following:			
	(i) a base salary of superannuation	of \$275,000 per annum (e n);	exclusive of	
	· ·	centive of up to \$50,000	based on meeting criteria	
	(iii) 500,000 Emplo	oyee Options; and		
			s necessarily incurred by s services as an executive.	
What interests do Directors have in the securities of the Company?	The Directors and their related entities do not have any interests in Shares and Options as at the date of this Prospectus. Based on the intentions of the Directors at the date of this Prospectus and subject to the Company's allocation policy, the Directors and their related entities will have the following interests in Shares and Options upon Listing:			Section 5.7
	Director	Shares	Options	
	Mark Sykes	100,000	500,000	
	lan Buchhorn	5,699,845	250,000	
	Andrew Stewart	Up to 50,000	250,000	



Торіс	Summary	More information
What important contracts with related parties is the	The Company has entered into the following related party transactions on arms' length terms:	Sections 6.2, 6.6 and 6.9
Company a party to?	(a) letters of appointment with each of its Directors on standard terms (refer Section 6.6 for details);	
	(b) Executive services agreement with David Greenwood (refer Section 6.5 for details);	
	(c) Deeds of indemnity, insurance and access with each of its Directors on standard terms (refer Section 6.9 for details);	
	(d) the Demerger Implementation Deed (refer to Section 6.2 for details).	
Who are the additional key management personnel?	The key management personnel are:  (a) Johan Lambrechts – Exploration Manager  (b) Sam Middlemas – Company Secretary	Section 5.5 and 5.4
Who will be the substantial holders of the Company?	As at the date of this Prospectus the Company is a wholly-owned subsidiary of Ardea.  Based on the information known as at the date of this Prospectus, and assuming the Minimum Subscription is achieved, on Admission the following persons will have an interest in 5% or more of the Company's shares on issue:	Section 7.5
	Name of Shareholder Shares % at % at minimum maximum subscription subscription	
	lan Buchhorn 5,699,845 10.9 8.0	
	Investors should note the details above do not include any Ardea Shareholder who participates in the Ardea Offer.	
What are the Lead Manager's interests?	The Company entered into a mandate agreement appointing Panthea Capital as Lead Manager to the Offers on 16 September 2019 (Lead Manager Mandate)	Section 6.3
	Panthea will receive the following fees under the Lead Manager Mandate:	
	(a) Management Fee of 1% (plus GST) of total funds raised in the General Offer plus 2,000,000 Advisor Options;	
	(b) Fees of 5% (plus GST) of funds raised from third party transactions on which Panthea Capital has introduced the client; and	
	(c) \$5,000 (plus GST) per month for the period of engagement, which will be offset against the Management Fees at the end of the engagement.	



Topic	Summary	More information	
What are the Offers?			
What are the Offers?	The Prospectus is for a conditional initial public offering of a minimum of 22,500,000 and up to a maximum of 40,000,000 fully paid ordinary shares in the Company.	Section 1.1 and 1.6	
	The offer comprises a public General Offer and the Ardea Offer to Eligible Ardea Shareholders (together, <b>Offers</b> ).		
	The Shares being offered will represent approximately 40.5% of the issued capital of the Company at Admission on a Minimum Subscription basis and approximately 57.1% of the issued capital of the Company at Admission on a Maximum Subscription basis.		
What is the Offer Price?	\$0.20 per Share.	Section 1.1	
Will the Shares be quoted?	The Company will apply to the ASX for its admission to the Official List and quotation of Shares on the ASX (expected to be under the code "GRL") within seven days of the date of this Prospectus.	Important Information	
What is the Minimum Subscription amount under the Offers?	The Offer is conditional on the Company raising at least \$4,500,000. If the Company fails to raise the Minimum Subscription within three months after the date of this Prospectus, the Company will either repay the Application Monies (without interest) to applicants or issue a supplementary prospectus or replacement prospectus and allow applicants one month to withdraw their Applications and have their Application Monies refunded to them (without interest).	Section 1.3	
	The maximum amount to be raised is \$8,000,000.		
What are the conditions of the Offers?	The Offers remain conditional upon the following events occurring:  (a) Ardea obtaining shareholder approval for the In-specie Distribution;	Section 1.5	
	(b) the Demerger Implementation Deed becoming unconditional;		
	(c) the Company raising the Minimum Subscription, being \$4,500,000 (before costs), under the Offers; and		
	(d) ASX granting in-principle approval to admit the Company to the Official List on conditions which the Directors are confident can be satisfied.		
	If these conditions are not satisfied then the Offer will not proceed and the Company will repay (without interest) all Application Monies received under the Offers in accordance with the Corporations Act.		
Why are the Offers being	The purposes of the Offers are to:	Section 1.4	
conducted?	(a) raise up to \$8,000,000 pursuant to the Offers (before associated costs);		
	(b) assist the Company to meet the requirements of ASX and satisfy Chapters 1 and 2 of the Listing Rules, as part of the Company's application for Admission to the Official List;		
	(c) provide funding for the purposes outlined in Section 1.4;		
	(d) provide the Company with access to equity capital markets for future funding needs; and		
	(e) enhance the public and financial profile of the Company.		



Торіс	Summary	More information
Are there any escrow arrangements?	Yes, there are compulsory escrow arrangements under the ASX Listing Rules.	Section 1.13
	No securities issued under the General Offer or Ardea Offer will be subject to escrow.	
	The Company has applied for and been granted, on an in-principle basis, a waiver from ASX to allow the Consideration Shares to be distributed in-specie to Ardea Shareholders, without being subject to the escrow restrictions set out in Listing Rules, subject to certain conditions.	
	As at the date of this Prospectus the Company expects approximately:	
	(a) 3,457,656 Shares (being Shares acquired by Ardea directors pursuant to the In-specie Distribution);	
	(b) 15,000,000 Consideration Options issued to Ardea;	
	(c) 1,000,000 Incentive Options to be issued to Directors;	
	(d) 2,000,000 Employee Options to be issued to employees, including the CEO;	
	(e) 2,000,000 Advisor Options; and	
	(f) 100 Shares held by Ardea already on issue at the date of the Prospectus,	
	to be subject to the 24 months escrow.	
What is the Offer period?	An indicative timetable for the Offers is set out on page 1 of this Prospectus.	"Indicative Timetable"
Are the Offers underwritten?	The Offers will not be underwritten.	Sections 1.8

Topic	Summary	More information	
Additional information			
Will the Company be adequately funded after completion of the Offers?	The Directors are satisfied that on completion of the Offers, the Company will have sufficient working capital to carry out its stated objectives. Additionally, the proposed issue of the Loyalty Options will provide an opportunity for follow-up funding during the second year following listing.	Section 1.7	
What rights and liabilities attach to the Shares on issue?	All Shares issued under the Offers will rank equally in all respects with existing Shares on issue. The rights and liabilities attaching to the Shares are described in Section 7.1.	Sections 7.1	
What are the tax implications of investing in Securities under the Offers?	The tax consequences of any investment in Securities under the Offers will depend upon your particular circumstances.  Prospective investors should obtain their own tax advice before deciding to invest.	Section 1.18	



Topic	Summary	More information		
Who is eligible to participate in the Offers?				
	The Ardea Offer is open to Eligible Ardea Shareholders registered on the Ardea Offer Record Date of 1 November 2019.			
How do I apply for Shares under the Offers?	Applications for Shares under the Offers must be made by completing the relevant Application Form in accordance with the instructions.	Section 1.10		
	It is the Board's current intention to offer Loyalty Options and Anti- Dilution Options approximately 3 months after Admission. If issued, the Loyalty Options and Anti-Dilution Options will be issued subject to a separate prospectus. Investors are not required to take any action to receive Loyalty Options or Anti-Dilution Options.			
What is the allocation policy?	Whilst priority will be given to Eligible Ardea Shareholders, the Directors in consultation with the Lead Manager, will allocate Shares at their sole discretion with a view to ensuring an appropriate Shareholder base for the Company going forward.	Section 1.11		
	Apart from the issue of In-specie Shares, there is no assurance that any applicant will be allocated any Shares, or the number of Shares for which it has applied.			
When will I receive confirmation that my Application has been successful?	It is expected that holding statements will be sent to successful applicants by post on or about 17 December 2019.	Section 1.11 and Indicative Timetable		
What is the Company's dividend policy?	The Company does not expect to pay dividends in the near future as its focus will primarily be on using its cash reserves to develop its projects.	Section 2.5		
	Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend upon matters 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. No assurances are given in relation to the payment of dividends, or that any dividends may attach franking credits.			
How can I find out more about the Prospectus or the Offers?	Questions relating to the Offers and Applications for Shares can be directed to the Company on +61 8 6244 5136.	Section 1.19		



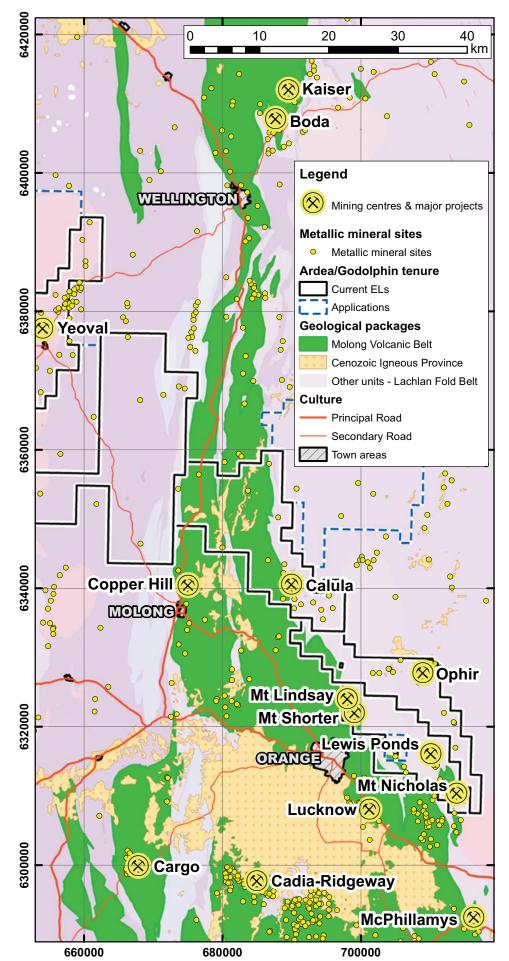


Figure 2 The Molong Volcanic Belt hosting the Boda porphyry gold-copper discovery.

Godolphin has defined "
Boda-style" target areas
(being intrusive complexes in
Ordovician andesite with
potassic alteration) within its
Copper Hill East and Lewis
Ponds tenure.

Targets from north to south include Calula, Mt Lindsay, Mt Shorter and Mt Nicholas, all of which have known gold mineralisation hosted within favourable lithologies and structures.

Photographs next page, clockwise from top: Godolphin Exploration Manager, Johan Lambrechts, assessing historic mine workings at Lewis Ponds. Volcanic flow breccia at Mount Aubrey. Note the orange iron staining indicative of alteration and project prospectivity. The fluids associated with the igneous activity are largely responsible for the gold and base metal mineralisation through much of the region; Surface gossan sample located at Copper Hill East.



## 1. Details of the Offers

#### 1.1 General Offer and Ardea Offer

This Prospectus invites potential investors to apply for up to 40,000,000 shares at an issue price of \$0.20 each to raise up to \$8,000,000 (before costs).

The Offers comprise a public General Offer, which also incorporates the Ardea Offer to Eligible Ardea Shareholders (together, **Offers**).

The Company is offering Eligible Ardea Shareholders the opportunity to subscribe for Shares through a priority offer (**Ardea Offer**). Whilst priority will be given to Eligible Ardea Shareholders, the Directors, in consultation with the Lead Manager, will allocate Shares at their sole discretion with a view to ensuring an appropriate Shareholder base for the Company going forward and to meet the ASX spread requirements. While it is intended that as many Eligible Ardea Shareholders as possible receive at least the minimum allocation of 10,000 Shares (\$2,000) under the Ardea Offer, there is no guarantee that all Eligible Ardea Shareholders will have their Applications accepted in full. Eligible Ardea Shareholders are encouraged to submit an Application Form as soon as possible.

Any Applications from Eligible Ardea Shareholders which are not received and accepted by the Company by the Ardea Offer Closing Date will be taken as Applications under the General Offer. The Ardea Offer closes five Business Days before the General Offer closes, in order to facilitate this process.

The Shares to be issued pursuant to the Offers are of the same class and will rank equally in all respects with the existing Shares in the Company. The rights and liabilities attaching to the Shares are further described in Section 7.1 of this Prospectus.

Applications for Shares under the General Offer must be made on the Application Form accompanying this Prospectus and received by the Company on or before the General Offer Closing Date. Persons wishing to apply for Shares under the General Offer should refer to Section 1.10(a) for further details and instructions.

Applications for Shares under the Ardea Offer must be made on the Application Form accompanying this Prospectus and received by the Company on or before the Ardea Offer Closing Date. Persons wishing to apply for Shares under the Ardea Offer should refer to Section 1.10(c) for further details and instructions.









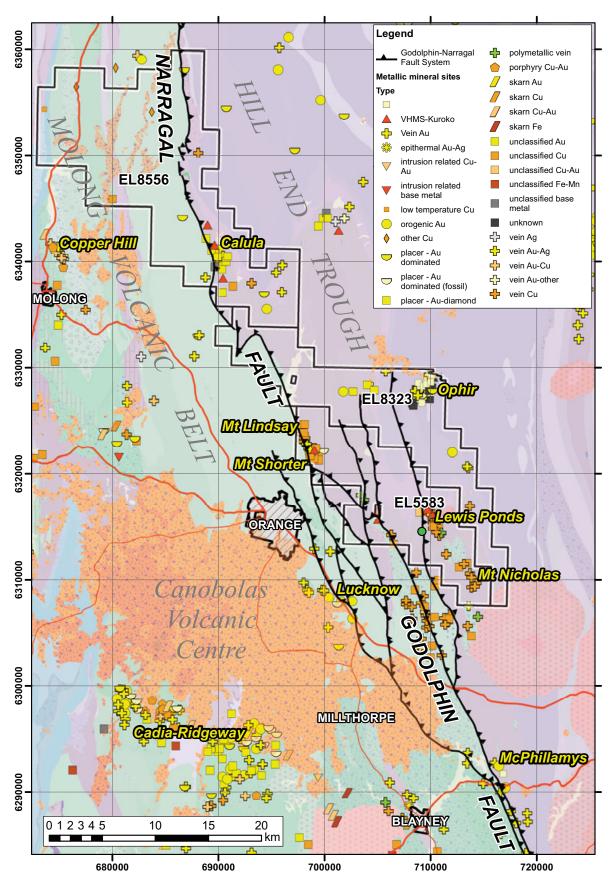


Figure 3 The Godolphin-Narragal fault system (black), separating the Late Ordovician Molong Volcanic Belt of the Macquarie Arc (greens) from the younger, overlying, sedimentary-dominated Early Devonian sequences of the Hill End Trough (and its proximal portion, the Mumbil Shelf – purples).

These rocks, faults, and the mineralisation that they host are all overlain by the much younger Cenozoic rocks of the Canobolas Volcanic Centre (orange-brown) south of Orange.

The clear control of the fault system on mineralisation centre distributions has driven the acquisition and exploration of ground.



## 1.2 Loyalty Options and Anti-Dilution Options

Approximately 3 months after the successful completion of the Offers and Admission, the Company intends to offer Shareholders 1 free Loyalty Option for every 3 Shares held at an exercise price of the higher of \$0.25 or 25% premium to the 5 day VWAP prior to the Loyalty Option prospectus, and an expiry date 12 months after the date of issue.

The offer of the Loyalty Options will be made under a separate prospectus which will be provided to eligible Shareholders shortly after a record date is set (which is intended to be three months following the Admission).

The Company will send eligible Shareholders a copy of the prospectus containing the offer of Loyalty Options shortly after the record date.

Under the Demerger Implementation Deed, the Company is required to issue Ardea and the recipients of the Consideration Options, Incentive Options and Employee Options one additional Option on the same terms as the Loyalty Options for every three Options held (**Anti-Dilution Options**). It is intended that the issue of the Anti-Dilution Options will be made contemporaneously with the issue of Loyalty Options and subject to the Listing Rules.

See Section 7.2 for the proposed terms and conditions of the Loyalty Options and Anti-Dilution Options.

## 1.3 Minimum Subscription

The minimum level of subscription for the Offers is 22,500,000 Shares to raise \$4,500,000 (before costs) (**Minimum Subscription**).

None of the Shares offered under this Prospectus will be issued if Applications are not received for the Minimum Subscription. Should Applications for the Minimum Subscription not be received within three months from the date of this Prospectus, the Company will either repay the Application Monies (without interest) to applicants or issue a supplementary prospectus or replacement prospectus and allow applicants one month to withdraw their Applications and have their Application Monies refunded to them (without interest).

## 1.4 Purpose of the Offers

This Prospectus has been issued for the purposes of:

- (a) raising up to \$8,000,000 pursuant to the Offers (before associated costs);
- (b) assisting the Company to meet the requirements of ASX and satisfy Chapters 1 and 2 of the Listing Rules, as part of the Company's application for Admission to the Official List;
- (c) providing funding for the purposes outlined in Section 1.7;
- (d) providing the Company with access to equity capital markets for future funding needs; and
- (e) enhancing the public and financial profile of the Company.

## 1.5 Conditional

The Offers under this Prospectus are conditional upon the following events occurring:

- (a) Ardea obtaining Shareholder approval for the In-specie Distribution;
- (b) the conditions precedent to the Demerger Implementation Deed being satisfied or waived;
- (c) the Company raising the Minimum Subscription being \$4,500,000 under the Offers; and
- (d) receipt of a conditional admission letter from ASX on terms which the Directors are confident can be satisfied.

If these conditions are not satisfied then the Offers will not proceed and the Company will repay all Application Monies (without interest) received under the Offers in accordance with the Corporations Act.



## 1.6 Capital structure

The proposed pro forma capital structure of the Company following completion of the Offers is as follows:

	No. of Shares (Minimum Subscription)	% of Shares	No. of Shares (Maximum Subscription)	% of Shares
Shares currently on issue	100	0.0	100	0.0
Shares issued to Ardea Shareholders pursuant to the In-Specie Distribution	30,000,000	56.1	30,000,000	42.3
Admission Facility Shares <sup>1</sup>	1,000,000	1.9	1,000,000	1.4
Shares to be issued pursuant to the Offers <sup>2</sup>	22,500,000	42.1	40,000,000	56.3
Total Shares on issue at the listing date	53,500,100	100.1	71,000,100	100.0

	No. of Options (Minimum Subscription)	% of Options	No. of Options (Maximum Subscription)	% of Options
Consideration Options <sup>3</sup>	15,000,000	75.0	15,000,000	75.0
Advisor Options <sup>4</sup>	2,000,000	10.0	2,000,000	10.0
Employee Options <sup>5</sup>	2,000,000	10.0	2,000,000	10.0
Incentive Options <sup>6</sup>	1,000,000	5.0	1,000,000	5.0
TOTAL OPTIONS	20,000,000	100.0	20,000,00	100.0
Loyalty Options <sup>7</sup>	17,833,333	-	23,666,667	-
Anti-Dilution Options <sup>7</sup>	6,000,000	-	6,000,000	-

#### Notes:

- 1. Up to 1,000,000 Admission Facility Shares may be issued to the Ardea in accordance with the formula set out in Section 6.2(b).
- 2. As at the date of this Prospectus, the Company intends to raise a minimum of \$4,500,000 (22,500,000 shares) and up to a maximum of \$8,000,000 (40,000,000 shares) at an issue price of \$0.20 per Share.
- 3. 15,000,000 unquoted Options to be issued to Ardea, with an exercise price of \$0.25 expiring 36 months after the date of issue on the terms in Section 7.2;
- 4. 2,000,000 unquoted Options to be issued to the Lead Manager, with an exercise price of \$0.25 expiring 36 months after the date of issue on the terms in Section 7.2;
- 5. 2,000,000 unquoted Options to be issued to certain management personnel of the Company, including the CEO, exercisable at \$0.25 expiring 36 months after the date of issue on the terms in Section 7.2;
- 6. 1,000,000 unquoted Options to be issued to Directors of the Company, exercisable at \$0.25 expiring 36 months after the date of issue on the terms in Section 7.2;
- 7. The Company intends to issue the Loyalty Options on the terms in Section 7.2. Subject to the Listing Rules, the Company intends to issue the Anti-Dilution Options in conjunction with the Loyalty Options. Both of these issues are intended to occur approximately 3 months after Admission and in both instances the numbers are subject to rounding; and
- 8. Rounding errors may occur.

The Company's free float at the time of Admission will be not less than 20%.



## 1.7 Proposed use of funds

Following the Offers, it is anticipated that the following funds will be available to the Company:

Source of funds	Minimum Subscription \$	Maximum Subscription \$
Existing cash as at the date of this Prospectus	100	100
Proceeds from Offers	4,500,000	8,000,000
Total funds available	4,500,100	8,000,100

The Company intends to apply the funds raised from the Offers as follows over the next 24 months:

Use of funds	Minimum Subscription	Maximum Subscription \$
IPO costs and costs repayable under the Loan Agree	ement <sup>1</sup> 500,000	1,000,000
Corporate, management after listing	950,000	1,400,000
Exploration, drilling, assays, supervision	2,700,000	5,030,000
Modelling, resource estimate, reporting	55,000	100,000
Tenement holding costs	70,000	70,000
Contingency for exploration, new targets	225,000	400,000
Total	4,500,000	8,000,000

#### Notes:

- 1. For further information on costs repayable under the Loan Agreement, please see Section 6.7.
- 2. Expenses paid or payable by the Company in relation to the Offers are set out in Section 7.8.

The Company's proposed exploration program includes up to 24,000 metres of reverse circulation drilling and up to 7,000 metres of diamond drilling, focussing on Mount Aubrey, Copper Hill East and Lewis Ponds. The program is based on the Company's current intention and is subject to change and depending on the funds raised under the Prospectus, future drill results, and other matters outside of the Company's control.

The above table is a statement of current intentions as at the date of this Prospectus. Investors should note that, as with any budget, the allocation of funds set out in the above table may change depending on a number of factors, including the results of exploration, outcome of offtake marketing and development activities, studies, regulatory developments and market and general economic conditions. In light of this, the Board reserves the right to alter the way the funds are applied.

## 1.8 Underwriting

The Offers are not underwritten.

## 1.9 Lead Manager

Panthea Capital has been appointed as Lead Manager to the General Offer on the terms and conditions summarised in Section 6.3 of this Prospectus.



## 1.10 Applications

#### (a) General

Applications for Shares under the Offers can only be made using the relevant Application Form accompanying this Prospectus. For further information on how to complete the Application Form, you should refer to the instructions set out on the online form.

All Applications must be made online at either:

- (i) https://investor.automic.com.au/#/ipo/godolphin (for Applicants under the General Offer); or
- (ii) https://investor.automic.com.au/#/ipo/godolphinpriority (for Applicants under the Ardea Offer).

The Company does not intend to accept hard copy Application Forms. Applicants who are unable to submit an online Application Form are encouraged to call the Share Registry on 1300 288 664 (within Australia) or +61 (2) 9698 5414 (outside Australia).

No brokerage, stamp duty or other costs are payable by investors. All Application Monies will be paid into a trust account.

#### (i) Option 1: Submit an Application Form and pay with BPAY®

For online applications, investors can apply online with payment made electronically via BPAY®. Investors applying online will be directed to use an online Application Form and will be given a BPAY® biller code and a customer reference number (**CRN**) unique to the online Application once the online Application Form has been completed.

BPAY® payments must be made from an Australian dollar account of an Australian institution. Using BPAY® details, Applicants must:

- (A) access their participating BPAY® Australian financial institution either via telephone or internet banking;
- (B) select to use BPAY® and follow the prompts to enter the biller code and unique CRN that corresponds to the online Application Form;
- (C) enter the amount to be paid which corresponds to the value of Shares under the online Application Form;
- (D) select which account payment is to be made from;
- (E) schedule the payment to occur on the same day that the online Application Form is completed. Applications without payment will not be accepted; and
- (F) record and retain the BPAY® receipt number and date paid.

Applicants should confirm with their Australian financial institution whether there are any limits on the Applicant's account that may limit the amount of any BPAY® payment and the cut off time for the BPAY® payment.

Investors can apply online by following the instructions at <a href="https://investor.automic.com.au/#/ipo/godolphin">https://investor.automic.com.au/#/ipo/godolphin</a> or <a href="https://investor.automic.com.au/#/ipo/godolphinpriority">https://investor.automic.com.au/#/ipo/godolphinpriority</a> (as applicable) and completing a BPAY® payment. If payment is not made via BPAY®, the Application will be incomplete and will not be accepted. The online Application Form and BPAY® payment must be completed and received by no later than the Closing Date.

## (ii) Option 2: Submit an Application Form and pay via Electronic Funds Transfer "EFT"

Investors can apply online with payment made electronically via EFT. Investors applying online will be directed to use an online Application Form and will be given a payment reference number unique to the online Application once the online Application Form has been completed.

EFT payments must be received in Australian dollars (\$AUD). Using EFT payment details, Applicants must:

- (A) use the unique payment reference number that corresponds to the online Application Form;
- (B) enter the amount to be paid which corresponds to the value of Shares under the online Application Form;
- (C) select which account payment is to be made from;
- (D) schedule the payment to occur on the same day that the online Application Form is completed. Applications without payment will not be accepted; and
- (E) record and retain the EFT receipt number and date paid.



Applicants should confirm with their Australian financial institution whether there are any limits on the Applicant's account that may limit the amount of any EFT payment and the cut off time for the funds transfer.

A completed and lodged Application Form together with confirmation of BPAY or EFT for the Application Monies, constitutes a binding and irrevocable offer to subscribe for the number of Shares specified in the Application Form. The Application Form does not need to be signed to be valid. If the Application Form is not completed correctly or if the accompanying payment is for the wrong amount, it may be treated by the Company as valid. The Directors' decision as to whether to treat such an Application as valid and how to construe amend or complete the Application Form is final. However, an Applicant will not be treated as having applied for more Shares than is indicated by the amount of the BPAY or EFT for the Application Monies.

It is the responsibility of Applicants outside Australia to obtain all necessary approvals for the allotment and issue of Shares pursuant to this Prospectus. The return of a completed Application Form with the requisite Application Monies will be taken by the Company to constitute a representation and warranty by the Applicant that all relevant approvals have been obtained and that the Applicant:

- (i) agrees to be bound by the terms of the relevant Offer;
- (ii) declares that all details and statements in the Application Form are complete and accurate;
- (iii) declares that, if they are an individual, they are over 18 years of age and have full legal capacity and power to perform all its rights and obligations under the Application Form;
- (iv) authorises the Company and its respective officers or agents, to do anything on their behalf necessary for the Shares to be issued to them, including to act on instructions of the Company's Share Registry upon using the contact details set out in the Application Form;
- (v) acknowledges that the information contained in, or accompanying, the Prospectus is not investment or financial product advice or a recommendation that Shares are suitable for them given their investment objectives, financial situation or particular needs; and
- (vi) acknowledges that the Shares have not, and will not be, registered under the securities laws in any other jurisdictions outside Australia and accordingly, the Shares may not be offered, sold or otherwise transferred except in accordance with an available exemption from, or in a transaction not subject to, the registration requirements of applicable securities laws.

The Offers may be closed at an earlier date and time at the discretion of the Directors, without prior notice. Applicants are therefore encouraged to submit their Application Forms as early as possible. However, the Company reserves the right to extend the Offers or accept late Applications.

## (b) General Offer

Applications under the General Offer must be for a minimum of 10,000 Shares (\$2,000) and then in increments of 2,500 Shares (\$500).

Applications for Shares under the General Offer must be made via an online Application Form, available from <a href="https://investor.automic.com.au/#/ipo/godolphin">https://investor.automic.com.au/#/ipo/godolphin</a> on or before the Closing Date. Persons wishing to apply for Shares should refer to Section 1.10(a) for further details and instructions.

## (c) Ardea Offer

Applications for Shares under the Ardea Offer can only be made via the online Application Form available from <a href="https://investor.automic.com.au/#/ipo/godolphinpriority">https://investor.automic.com.au/#/ipo/godolphinpriority</a>, on or before the Ardea Offer Closing Date. The Ardea Offer is not renounceable and it cannot be transferred.

The Ardea Offer is not a rights issue or entitlement offer. Eligible Ardea Shareholders may apply for as many Godolphin Shares as they wish, noting the minimum application amount of \$2,000 and that final allocations will be subject to Board discretion.

Whilst priority will be given to Eligible Ardea Shareholders, the Directors will allocate Shares in accordance with the allocation policy set out in Section 1.11.

Any Applications from Eligible Ardea Shareholders which are not received and accepted by the Company by the Ardea Offer Closing Date will be taken as Applications under the General Offer. The Ardea Offer closes five Business Days before the General Offer closes, to facilitate this process.



Application Forms must not be circulated to prospective investors unless accompanied by a copy of this Prospectus.

Applications under the Ardea Offer must be for a minimum of 10,000 Shares (\$2,000) and then in increments of 2,500 Shares (\$500). No brokerage, stamp duty or other costs are payable by applicants.

## (d) Loyalty Options

It is the Board's current intention to offer Loyalty Options approximately 3 months after Admission. If issued, the Loyalty Options will be issued subject to a separate prospectus. Investors are not required to take any action to receive Loyalty Options.

#### 1.11 Allocation and issue of Shares

Whilst priority will be given to Eligible Ardea Shareholders, the Directors will allocate Shares at their sole discretion in consultation with the Lead Manager with a view to ensuring an appropriate Shareholder base for the Company going forward and satisfying the ASX spread requirements. There is no assurance that any Applicant will be allocated any Shares, or the number of Shares for which it has applied.

The Directors reserve the right to reject any Application or to issue a lesser number of Shares than that applied for. If the number of Shares allocated is less than that applied for, or no allotment is made, any surplus Application Monies will be promptly refunded without interest.

Subject to the conditions of the Offer being met, the issue of Shares will occur as soon as practicable after the Offers close and after completion of the In-specie Distribution. Holding statements will be despatched as required by ASX. It is the responsibility of applicants to determine their allocation prior to trading in the Shares.

Applicants who sell the Shares before they receive their holding statement will do so at their own risk.

## 1.12 Application Monies to be held in trust

Application Monies will be held in a separate bank account on behalf of applicants until the Shares are issued. If the Shares to be issued under this Prospectus are not admitted to quotation within a period of three months from the date of this Prospectus, the Company will either repay the Application Monies (without interest) to Applicants or issue a supplementary prospectus or replacement prospectus and allow Applicants one month to withdraw their Applications and have their Application Monies refunded to them (without interest).

## 1.13 Escrow arrangements & ASX In-Principle Waiver

ASX will classify certain existing Shares on issue in the Company (as opposed to those to be issued under this Prospectus) as being subject to the restricted securities provisions of the Listing Rules. These Shares would be required to be held in escrow for up to 24 months and would not be able to be sold, mortgaged, pledged, assigned or transferred for that period without the prior approval of ASX. During the period in which these Shares are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.

The Shares offered under the General Offer and Ardea Offer will not be subject to any escrow restrictions.

The Company has applied for and been granted an in-principle waiver (In-principle Waiver) from ASX that the Consideration Shares being distributed Ardea Shareholders will not be subject to escrow. The In-Principle Waiver sets out that ASX would be likely to grant a formal waiver subject to the:

- (a) Ardea Shareholders approving the In-specie Distribution prior to the Company making an application to list on ASX; and
- (b) the Company prominently disclosing a summary of the In-principle Waiver in the Prospectus.



As at the date of this Prospectus the Company expects approximately:

- (a) 3,457,656 Shares (being Shares acquired by Ardea directors pursuant to the In-specie Distribution);
- (b) 15,000,000 Consideration Options, to be issued to Ardea;
- (c) 2,000,000 Employee Options to be issued to employees of the Company, including the CEO;
- (d) 1,000,000 Incentive Options to be issued to Directors;
- (e) 2,000,000 Advisor Options; and
- (f) 100 Shares held by Ardea already on issue at the date of the Prospectus,

to be subject to the 24 months escrow.

## 1.14 CHESS and issuer sponsorship

The Company will apply to participate in CHESS. All trading on the ASX will be settled through CHESS. ASX Settlement, a wholly-owned subsidiary of the ASX, operates CHESS in accordance with the Listing Rules and the ASX Settlement Operating Rules. On behalf of the Company, the Share Registry will operate an electronic issuer sponsored subregister and an electronic CHESS sub-register. The two sub-registers together make up the Company's principal register of securities.

Under CHESS, the Company will not issue certificates to Shareholders. Rather, holding statements (similar to bank statements) will be sent to Shareholders as soon as practicable after allotment. Holding statements will be sent either by CHESS (for Shareholders who elect to hold Shares on the CHESS sub-register) or by the Company's Share Registry (for Shareholders who elect to hold their Shares on the issuer sponsored sub-register). The statements will set out the number of existing Shares (where applicable) and the number of new Shares allotted under this Prospectus and provide details of a Shareholder's holder identification number (for Shareholders who elect to hold Shares on the CHESS sub-register) or Shareholder reference number (for Shareholders who elect to hold their Shares on the issuer sponsored sub-register). Updated holding statements will also be sent to each Shareholder at the end of each month in which there is a transaction on their holding, as required by the Listing Rules.

## **1.15 Risks**

As with any share investment, there are risks associated with investing in the Company. The principal risks that could affect the financial and market performance of the Company are detailed in Section 3 of this Prospectus. The Shares on offer under this Prospectus should be considered highly speculative. Accordingly, before deciding to invest in the Company, applicants should read this Prospectus in its entirety and should consider all factors in light of their individual circumstances and seek appropriate professional advice.

#### 1.16 Overseas investors

An offer made pursuant to this Prospectus is not made to persons or in places which would not be lawful to make the offer. No action has been taken to register the Offers under this Prospectus in any jurisdiction outside Australia.

The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law in those jurisdictions and therefore persons who come into possession of this Prospectus should seek advice on and observe any such restrictions. Failure to comply with such restrictions may constitute a violation of applicable securities laws.

Applicants who are resident 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 in respect of the Offers, except to the extent permitted below.



## 1.17 Privacy disclosure

By filling out an Application Form to apply for Shares, you are providing personal information to the Company through the Company service provider, the Share Registry. The Company, and the Share Registry on its behalf, collect, hold and use that personal information in order to process your Application, service your needs as a Shareholder, provide facilities and services that you request and carry out appropriate administration.

If you do not provide the information requested in the Application Form, the Company and the Share Registry may not be able to process or accept your Application. Your personal information may also be used from time to time to inform you about other products and services offered by the Company which it considers may be of interest to you.

Your personal information may also be provided to the Company's agents and service providers on the basis that they deal with such information in accordance with the Company privacy policy and as authorised under the *Privacy Act* 1988 (Cth), the Company's agents and service providers may be located outside Australia where your personal information may not receive the same level of protection as that afforded under Australian law.

The types of agents and service providers that may be provided with your personal information and the circumstances in which your personal information may be shared are:

- (a) the Share Registry for ongoing administration of the Shareholder register;
- (b) printers and other companies for the purpose of preparation and distribution of statements and for handling mail;
- (c) market research companies for the purpose of analysing the Company's Shareholder base and for product development and planning; and
- (d) legal and accounting firms, auditors, contractors, consultants and other advisers for the purpose of administering, and advising on, the New Securities for associated actions.

You may request access to your personal information held by (or on behalf of) the Company. You may be required to pay a reasonable charge to the Share Registry in order to access your personal information. You can request access to your personal information by writing to or telephoning the Share Registry as follows:

Automic Pty Ltd Level 2, 267 St Georges Terrace Perth WA 6000

(within Australia): 1300 288 664 (outside Australia): +61 (2) 9698 5414

If any of your information is not correct or has changed, please contact the Share Registry or the Company to update your information. In accordance with the requirements of the Corporations Act, information on the Share Register will be accessible to members of the public.

#### 1.18 Taxation

It is the responsibility of all persons to satisfy themselves of the particular taxation treatment that applies to them in relation to the Offers, by consulting their own professional tax advisers. Neither the Company nor any of its Directors or officers accepts any liability or responsibility in respect of the taxation consequences of the matters referred to above.

## 1.19 Enquiries

This is an important document and should be read in its entirety. Investors should consult with their professional advisers before deciding whether to apply for Shares under this Prospectus. Any investment in the Company under this Prospectus should be considered highly speculative.

Questions relating to the Offers and the completion of an Application Form can be directed to the Company on +61 8 6244 5136.



## 2. Overview of the Company

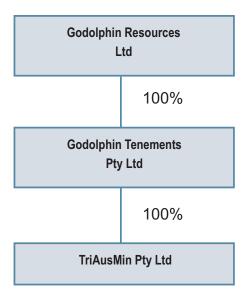
## 2.1 Company history

The Company was incorporated on 19 June 2019 and, other than as disclosed in this Prospectus, has not undertaken any activities since incorporation. As at the date of this Prospectus, the Company is a wholly-owned subsidiary of Ardea.

On 3 October 2019, the Company and GTPL entered into a demerger implementation deed with Ardea, TriAusMin and AEPL (**DID**) to acquire the NSW Assets (including the Tenements and TriAusMin). Under the DID, the Company also made an offer of employment to certain Ardea employees. The effect of the DID is that the Company will, subject to satisfaction of the conditions precedent, acquire the NSW Assets for 30,000,000 Shares at a deemed issue price of \$0.20 per Share (**Consideration Shares**) and 15,000,000 Options (**Consideration Options**). See Section 6.2 for further information on the DID.

## 2.2 Corporate structure

Upon listing, the Company's corporate structure will be as set out in the following diagram:



TriAusMin is a 100% owned subsidiary of Ardea and forms part of the consolidated Ardea Group. TriAusMin holds tenements and freehold land, and will have no other assets or liabilities when it is transferred to the Company.

GTPL was incorporated on 26 June 2019 and has no material assets or liabilities.

From Admission, the Company will hold its exploration assets in GTPL and TriAusMin, and believes this is an appropriate corporate structure for an exploration and development company aiming to progress towards production.

## 2.3 Project Summary

The Company's corporate strategy is to explore and develop its large, contiguous tenement land holding within the Lachlan Fold Belt, a leading Australian province for bulk tonnage, low operating cost gold-base metal mines such as the Cadia-Ridgeway gold-copper mine, Northparkes copper-gold mine and Cowal gold mine. This strategy has been validated by Alkane Resources Limited's (**Alkane**) ASX announcement on 9 September 2019 of its Boda porphyry gold-copper discovery.

All of the Tenements were applied for in 2016 to 2019 on the basis of known mineralisation, underpinned by the Company's subsequent JORC-compliant resource estimates, which comprise in aggregate 431,000 ounces of gold<sup>1</sup>, as set out below and in the Independent Technical Assessment in Schedule 5.

The Company is in a unique position of being a Lachlan Fold Belt junior explorer with significant JORC-compliant mineral resources.

<sup>&</sup>lt;sup>1</sup> Please see page 5, 7, 8 and 9 of the Independent Technical Assessment for a breakdown of resource categories, grades and tonnages.



## (a) Mount Aubrey Epithermal Gold Project

Mount Aubrey was acquired by Ardea as a quartz vein stockwork gold system. Gold mineralisation is typically hosted by 0.5–3m thick chalcedonic epithermal quartz veins and stockworks. The site was mined via three shallow open pit gold-mines by BHP Gold in 1990 and 1991. Based on observed quartz vein textures, including diagnostic carbonate replacement, Mount Aubrey is an epithermal system which has implications for vein zoning and continuity at depth. Additionally, the observed high gold grades are typically "epithermal", with unmined intercepts below the base of the pits including 7 metres at 16.48 g/t gold and 4 metres at 22.75 g/t gold.

Resource Category	Cut-off	Tonnes	Au	Contained gold
	Au g/t	(Mt)	(g/t)	(oz)
Inferred	≥0.50	1.21	1.61	62,400

A Competent Person Statement is included in respect of the resource estimate in Section 2.4. Information required by Listing Rule 5.8.1 and 5.8.2 is contained in the Independent Technical Assessment in Schedule 5.

## (b) Copper Hill East Gold-Copper Project

The Copper Hill East Gold-Copper Project occurs within the east margin of the Molong Volcanic Belt. On 9 September 2019, Alkane¹ announced that its drill intercept at Boda in the MVB demonstrates "clear evidence of Cadia-style mineralisation and grade over hundreds of metres." The northern MVB, within the eastern Lachlan Fold Belt "is considered highly prospective for large porphyry gold-copper mineralisation, as demonstrated by the presence of the world class Cadia Valley porphyry district located 110km to the south (~49Moz Au; Newcrest website)". Alkane detailed "a zonation pattern of outer propylitic and sodic alteration from the top of hole vectoring to a copper rich outer calc-potassic core (biotite + chlorite + chalcopyrite ± kspar ± magnetite ± bornite mineral assemblage). The style of alteration and mineralisation has several apparent similarities with the upper sections of the Cadia East Deposit (2,900Mt @ 0.36g/t gold, 0.26% Cu, Newcrest Mining Limited global resource Annual Report 2018)".¹ Identification of potassic alteration has been a core focus of the Company in all of its on-ground exploration and will remain a focus as the Company further explores its model at the Copper Hill East Gold-Copper Project within the eastern MVB contact.

## (c) Lewis Ponds Gold-Base Metal Project

The Lewis Ponds group of projects covers a 65km strike length of the highly prospective Godolphin-Narragal Fault Zone, which significantly, hosts orogenic shear-hosted gold deposits including the McPhillamy's deposit some 15km south of Lewis Ponds and Commonwealth deposit some 100km north. Exploration has historically been on the basis of a narrow high-grade underground mining model. Godolphin has reinterpreted the project as a bulk tonnage open pit model and has generated an indicated and inferred mineral resource totalling 20.24Mt at 0.5g/t Au, 33.3g/t Ag, 1.5% Zn, 0.7% Pb and 0.1% Cu.

The breakdown for the full Lewis Ponds resource categories is as follows:

Resource Category	Cut-off (ZnEq%)	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)
Open Pit							
Indicated	1	7.88	0.3	26.3	1.1	0.4	0.1
Inferred	1	6.51	0.5	27.4	1.3	0.6	0.1
Subtotal	1	14.39	0.4	26.8	1.2	0.5	0.1
Underground							0.1
Indicated	3	0.07	0.2	20.0	1.8	0.5	0.1
Inferred	3	5.78	0.7	49.5	2.1	1.1	0.1
Subtotal	3	5.85	0.7	49.1	2.1	1.1	0.1
Total Mineral Res	source	20.24	0.5	33.3	1.5	0.7	0.1

<sup>1</sup> As announced by Alkane Resources Limited on 9 September 2019. Neither Alkane, nor Newcrest Mining Limited (**Newcrest**), has provided its consent to be named in this Prospectus. The Company has not independently verified the technical data underpinning the statements made by Alkane or Newcrest.



The zinc equivalent assumptions are set out on page 65 of the Independent Technical Assessment.

	Zn/t	Cu/t	Pb/t	Au/oz	Ag/oz
Metal prices US\$ (21/06/2019)	2,585	5,960	1,915	1,393	15.50
Zinc Equivalent Estimate					
Recovery for ZnEq calc	80%	80%	80%	90%	80%
ZnEq recov multiply factor	1.000	2.306	0.741	1.949	0.019
Gold Equivalent Estimate					
Recovery for AuEq calc	80%	80%	80%	100%	80%
AuEq recov multiply factor	0.577	1.331	0.428	1.000	0.011

A Competent Person Statement is included in respect of the resource estimate in Section 2.4. Information required by Listing Rule 5.8.1 and 5.8.2 is contained in the Independent Technical Assessment in Schedule 5.

## (d) Yeoval Porphyry Copper-Gold Project

Yeoval is located within the Macquarie Arc, 60km northeast of the Northparkes copper-gold mine. The tenement covers an area of 138km² and is intensely mineralised with more than 60 historic copper workings trending in a north-easterly direction along a 20km strike. The exploration concept is a large tonnage porphyry copper-gold-molybdenum-rhenium system. Yeoval has an Inferred Mineral Resource as follows:

Resource Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Molybdenum (g/t)	
Inferred	12.8	0.38	0.14	2.20	120	

A Competent Person Statement is included in respect of the resource estimate in Section 2.4. Information required by Listing Rule 5.8.1 and 5.8.2 is contained in the Independent Technical Assessment in Schedule 5.

#### (e) Wiseman's Creek Gold-Silver Project

Wiseman's Creek is located 35km southeast of Bathurst, NSW, around the logging town of Oberon. Epithermal gold mineralisation within the tenure is hosted largely within Late Silurian to Early Devonian-aged sediments, with geology through the centre of the tenure comprising the andesitic Ordovician-aged Rockley Volcanics (equivalent units host the Cadia and Northparkes gold-copper operations).

## (f) Calarie Gold Project

Calarie is associated with the highly mineralised Macquarie Arc Ordovician andesites (Parkes Volcanics) some 5-30km SSW of Parkes within the strongly gold-endowed Parkes Fault Zone.

## (g) Gundagai Gold Project

The Gundagai tenements are located 315km southwest of Sydney. Several old gold workings hosted by mineralised porphyry units exist in the Company tenure, with historic RC drilling at Big Ben returning up to 20 metres at 1.58g/t gold within a quartz-limonite-pyrolusite stockworks system (as first announced to ASX in the Ardea prospectus dated 9 November 2016).



## 2.4 JORC Competent Persons Statement

The information in this Prospectus that relates to the Mount Aubrey Mineral Resource, Lewis Ponds Mineral Resources and Yeoval Mineral Resource is based on and fairly represents information compiled or reviewed by Johan Lambrechts, who is a member of the Australian Institute of Geoscientists. Mr Lambrechts is a full time employee of Ardea Resources Limited and will become a full time employee of the Company on Admission, and has sufficient experience that 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 Resources. Mr Lambrechts consents to the inclusion in the report of the matter based on his information in the form and context in which it appears.

## 2.5 Business strategy / objectives

Godolphin views the LFB as the premium province in Australia in which to find and develop bulk tonnage gold-base metal deposits, with Cadia-Ridgeway, Northparkes and Cowal evidencing the province's production potential. The region's exploration potential is further evidenced by McPhillamy's gold discovery (Regis Resources Limited) and now the spectacular Boda porphyry gold-copper discovery hole (Alkane Resources Limited).

Having settled on the LFB as a favoured exploration province, Ardea systematically set about building the vehicle to deliver shareholder value. Since its admission to the Official List, Ardea has:

- (a) compiled available historic data notably drilling into geographic information systems to build up a data base that emphasises the controls on mineralisation, notably crustal-scale structures such as the LTZ, Godolphin-Narragal Fault, Gilmore Suture and Boda-hosting Molong Volcanic Belt;
- (b) recruited an exceptional exploration team in Orange, the heart of the LFB; and
- (c) incorporated Godolphin as the corporate vehicle to explore then develop the identified targets.

The Company's strategy has three well-defined activities for application to the selected targets:

## (a) Work towards production

- (i) Mount Aubrey Gold complete the drill-out of the known gold-silver resource, then undertake feasibility programs ahead of financial studies to ascertain if it's economic to mine and if so, determine the optimum development strategy.
- (ii) **Lewis Ponds** complete core drilling of the defined mineralisation, focussing on interpreted gold-enriched zones, then undertake metallurgical studies ahead of feasibility programs.

## (b) Exploration

- Gold-Copper Project further refinement of the "Boda-Ridgeway porphyry gold-copper potassic alteration" concept through the development of exploration models and drill testing.
- (ii) All other tenure complete the Company's standard multi-element soil geochemistry on defined targets to elucidate drill testing requirements.

#### (c) Corporate

- (i) Evaluate mergers and acquisitions that potentially strengthen the Company's future production base.
- (ii) Farm-out tenure that doesn't meet corporate objectives.
- (iii) Continue to lodge tenement applications on vacant ground that supports the Company's mineralisation models.

The Company does not expect to pay dividends in the near future as its focus will primarily be on developing the Mount Aubrey and Lewis Ponds projects.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend upon matters 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. No assurances are given in relation to the payment of dividends.



## 3. Risk Factors

As with any share investment, there are risks involved. This Section identifies the major areas of risk associated with an investment in the Company, but should not be taken as an exhaustive list of the risk factors to which the Company and its Shareholders are exposed. Potential investors should read the entire Prospectus and consult their professional advisers before deciding whether to apply for Shares.

Any investment in the Company under this Prospectus should be considered highly speculative.

## 3.1 Risks specific to the Company

## (a) Funding

At the date of this Prospectus, the Company 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, it 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 Offers. Neither the Company 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 the Company.

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

#### (b) Commodity prices

The Company's ability to proceed with the development of its mineral projects and benefit from any future mining operations will depend on market factors, some of which may be beyond its control. It is anticipated that any revenues derived from mining will primarily be derived from the sale of gold and copper. Consequently, any future earnings are likely to be closely related to the price of these commodities and the terms of any off-take agreements that the Company enters into.

Commodity prices fluctuate and are affected by numerous factors beyond the control of the Company. 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 the Company'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 the Company may not be able to secure an attractive price for its commodity products.

#### (c) Non-renewal of title and new applications

A number of the Company's tenements are subject to application or renewal, the details of which are set out in the Solicitor's Report in Schedule 4. There is a risk that the Company may not acquire or retain title to these Tenements.

Under New South Wales law, exploration tenements are valid for set periods of time and renewal is subject to the approval of the State Minister. There is no guarantee that the Company 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, the Company may suffer damage through loss of the opportunity to discover and/or develop any mineral resources on these tenements.



#### (d) Land-owner and access Risk

The Company will be required to negotiate access arrangements and pay compensation to land owners, local authorities, traditional land users and others who may have an interest in the area covered by a mining tenement. The Company's ability to resolve access and compensation issues will have an impact on the future success and financial performance of the Company's operations. If the Company is unable to resolve such compensation claims on economic terms, this could have a material adverse effect on the business, results or operations and financial condition of the Company. Access to land for exploration purposes can be affected by land ownership, nature reserves and national parks, government regulation and environmental restrictions. Access is critical for exploration and development to succeed and the ability to be able to negotiate satisfactory commercial arrangements with landowners, farmers and occupiers is often essential.

Further a portion of the Wiseman's Creek tenement is Crown Land. Access to this land will be through the process of "right to negotiate". There are no current access agreements in place.

## (e) Management and Key Personnel

The Company's management presently consists of three non-executive Directors and a Chief Executive Officer.

Recruiting and retaining qualified personnel are important to the Company's success. The number of persons skilled in the exploration and development of mining properties is limited and competition for such persons is strong. There can be no assurance given that there will be no detrimental impact on the Company if one or more key employees leave the Company.

## (f) Limited exploration

Other than Mount Aubrey, Lewis Ponds, Yeoval, Calarie and Gundagai (see Section 2.3), the Company's projects have been subjected to only limited historic drill testing. Whilst gold and/or base metal 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 previously 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.

To the extent that further exploration extends the Company's current resource estimates, there is no guarantee that the Company will be capable of sustaining commercial development.

#### (g) Resource estimate

There is a degree of uncertainty to the estimation of Mineral Resources and Ore Reserves and corresponding grades being mined or dedicated to future production. Until Mineral Resources or Ore Reserves are actually mined and processed, the quantity of Mineral Resources and Ore Reserves must be considered as estimates only. In addition, the grade of Mineral Resources and Ore Reserves may vary depending on, among other things, metal prices. Any material change in quantity and grades of Mineral Resources, Ore Reserves, or stripping ratio may affect the economic viability of the properties. In addition, there can be no assurance that metal recoveries in small-scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production.

Fluctuation in the prices of relevant commodities, results of drilling, metallurgical testing and the evaluation of mine plans subsequent to the date of any estimate may require revision of such estimate. Any material reductions in estimates of Mineral Resources and / or Ore Reserves, could have a material adverse effect on Company's financial condition.

## (h) Joint Venture Parties, Agents and Contractors

The Company is unable to predict the risk of financial failure or default by a participant in any future joint venture to which the Company may become a party (noting that the Company has no current joint venture intentions). Further, the Company is unable to predict the risk of insolvency or managerial failure by any of the contractors used by the Company in any of its activities or the insolvency or other managerial failure by any of the other service providers used by the Company for any activity. The effects of such failures may have an adverse effect on the Company's operations.



## (i) 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 continuous success of these activities is dependent on many factors such as:

- (i) geological conditions;
- (ii) the discovery and/or acquisition of economically recoverable ore reserves;
- (iii) successful conclusions to feasibility studies;
- (iv) alterations to programs and budgets;
- (v) access to adequate capital for project development;
- (vi) design and construction of efficient mining and processing facilities within capital expenditure budgets;
- (vii) securing and maintaining title and access to tenements and compliance with the terms of those tenements;
- (viii) industrial action, disputation or disruptions;
- (ix) unavailability of transport or drilling equipment to allow access and geological and geophysical investigations;
- (x) obtaining consents and approvals necessary for the conduct of exploration and mining; and
- (xi) 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.

## (j) Climate change risks

Climate change is a risk the Company has considered, particularly related to its operations in the mining industry. The climate change risks particularly attributable to the Company include:

- (i) the emergence of new or expanded regulations associated with the transitioning to a lower-carbon economy and market changes related to climate change mitigation. The Company may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage. These examples sit amongst an array of possible restraints on industry that may further impact the Company and its profitability. While the Company will endeavour to manage these risks and limit any consequential impacts, there can be no guarantee that the Company will not be impacted by these occurrences; and
- (ii) climate change may cause certain physical and environmental risks that cannot be predicted by the Company, including events such as increased severity of weather patterns and incidence of extreme weather events and longer-term physical risks such as shifting climate patterns. All these risks associated with climate change may significantly change the industry in which the Company operates.

#### (k) Environment

As a condition of the Tenements, the Company will be required to rehabilitate, level, re-grass, reafforest or contour land that has been damaged or adversely affected by exploration activities, failure to do so may render the Tenements liable to cancellation. Godolphin is also required to lodge rehabilitation security by way of cash deposit.

It is the Company's intention to continue to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.

## (I) Annual Rents and Levies

An annual rental and an administrative levy are payable, based on the size of the Tenements. Tenements are also subject to expenditure requirements in accordance with work programs approved by the NSW Department of Planning and Environment. Payment of rentals and levies are currently up to date. Failure to comply with future expenditure requirements may render the Tenements liable to cancellation.



## (m) Taxes and Royalties

Tenement holders must pay royalties to the NSW government on minerals (including material containing minerals) obtained from a mining tenement. Royalties are payable quarterly and must be accompanied by a royalty return in the 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 for group 1 minerals, comprising metallic minerals, are generally 4% of the value of the mineral recovered. There is a risk that the Commonwealth or New South Wales Governments may seek to introduce further, or increase existing, taxes and royalties.

#### (n) Unforeseen Risks

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

## (o) Economic conditions

General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates and currency exchange rates may have an adverse effect on the Company's exploration, development and production activities, as well as on its ability to fund those activities. If activities cannot be funded, there is a risk that the tenements comprising the NSW Assets may have to be surrendered or not renewed. General economic conditions may also affect the value of the Company's Shares and its valuation regardless of its actual performance.

## (p) Insurance risk

The Company intends to put in place an insurance program aligned to the scale of its activities and in accordance with industry practice. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company.

#### (q) Liquidity risk

There can be no guarantee that there will be an active market for Shares or that the price of Shares will increase. There may be relatively few buyers or sellers of Shares on ASX at any given time. This may affect the volatility of the market price of Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is less or more than the price paid under the Offers.

## (r) Litigation risk

The Company is subject to litigation risks. All industries, including the minerals exploration industry, are subject to legal claims, with and without merit. Defence and settlement costs of legal claims can be substantial, even with respect to claims that have no merit.

Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding to which the Company is or may become subject could have a material effect on its financial position, results of operations or the Company's activities.



## (s) Native Title and Aboriginal Heritage 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 the Company'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.

Tenements EL 8323 "Ophir" and EL 8538 "Yeoval" overlap with a registered native title claim. The grant of any future tenure to the Company over areas that are covered by registered claims or determinations will likely require engagement with the relevant claimants or native title holders (as relevant) in accordance with the Native Title Act. This engagement could cause delays to the Company's plans and/or the Company may incur higher than anticipated costs.

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.

A number of the Tenements contain known Aboriginal heritage sites. The Company 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 and may require heritage agreements to be entered into prior to work being undertaken. There is a risk that the negotiation of these agreements could cause delay to the Company's plans.

There are currently no Aboriginal heritage agreements or arrangements in place affecting the Tenements, though future negotiations are expected in the course of general exploration. There remains a risk that additional Aboriginal sites may exist on the land the subject of the Tenements. The existence of such sites may preclude or limit mining activities in certain areas of the Tenements.

#### (t) Exempted Areas

Under section 30 of the Mining Act the holder of an exploration licence must obtain the consent of the Minister before exploration activities may be conducted in an "exempted area", which includes State Forests, State Conservation Areas and Crown Land. This currently applies to selected areas within Affects EL 8323 "Ophir", EL 8554 "Wiseman's Creek" and EL 8586 "Gundagai North".

Obtaining the consent of the Minister for exploration activities to be conducted in an "exempted area" will require environmental assessment of any proposed ground-disturbing exploration activities. The assessment will be undertaken by the NSW Department of Planning and Environment in consultation with the relevant government department. It would also be expected that such consent would only be granted or denied in consultation with the relevant government department and, if granted, subject to the terms of an access agreement reached with that department in addition to any owner or occupier access agreement. For further information, please see the Solicitor's Report at Schedule 4.

## (u) Competing Tenement Application

The Yeoval South exploration licence application (ELA 5780) is the subject of a competing tenement application. There is a risk that the area granted by the NSW Department of Planning and Energy will be significantly less than the 253 units applied for.

#### (v) Social Licence

In order to explore, develop or operate in communities, the general acceptance of certain stakeholder populations may be required. This may include formal agreements that can require extended negotiations with large numbers of stakeholders, for example indigenous communities and groups with native title rights. There can be no guarantee these negotiations will be concluded successfully or not be protracted and cause significant delay to the Company's plans.



### (w) Stock market conditions

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

- (i) general economic outlook;
- (ii) movements in or outlook on interest rates and inflation rates;
- (iii) currency fluctuations;
- (iv) commodity prices;
- (v) changes in investor sentiment towards particular market sectors; and
- (vi) the demand and supply for capital.

## (x) Negative publicity may adversely affect the Share price

Any negative publicity or announcement relating to any of the Company's substantial Shareholders, key personnel or activities may adversely affect the stock performance of the Company, whether or not this is justifiable. Examples of such negative publicity or announcements may include involvement in legal or insolvency proceedings, failed attempts in takeovers, joint ventures or other business transactions. No such issues are currently known to affect the Company.

## 3.2 Investment speculative

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by prospective investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus.

Therefore, the Shares issued pursuant to the Offers carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Shares.

Potential investors should consider that the investment in the Company is highly speculative and should consult their professional advisers before deciding whether to apply for Shares.



## 4. Financial information

## 4.1 Financial information

The Investigating Accountant's Report contained in Schedule 3 sets out the pro-forma statement of financial position for the Company as at 30 June 2019.

Investors are urged to read the Investigating Accountant's Report in full.

## 4.2 Forecast financial information

There are significant uncertainties associated with forecasting future revenues and expenses of the Company. In light of uncertainty as to timing and outcome of the Company's growth strategies and the general nature of the industry in which the Company will operate, as well as uncertain macro market and economic conditions in the Company's markets, the Company's performance in any future period cannot be reliably estimated. On these bases and after considering ASIC Regulatory Guide 170, the Directors do not believe they have a reasonable basis to reliably forecast future earnings and accordingly forecast financials are not included in this Prospectus.



## 5. Directors, Key Management and Corporate Governance

## 5.1 Board of Directors

As at the date of this Prospectus, the Board comprises of:

- (a) Mark Sykes Non-Executive Chairman;
- (b) Ian Buchhorn Non-Executive Director; and
- (c) Andrew Stewart Non-Executive Director.

## 5.2 Director profiles

Details of the Directors comprising the Board are set out below.

## (a) Mark Sykes - Non-Executive Chairman

BSc, B.Eng (Mining), Masters Min and Energy Econ

Mark Sykes is a qualified Mining Engineer (WASM) and Mineral Economist (Macquarie University) with over 25 years' experience in the mining sector at both operational and executive levels. Based in NSW, Mr Sykes has previous ASX experience with a focus on mineral exploration and building companies with a diversified growth strategy. Mr Sykes worked for BHP for 10 years and was head of the resource investment division for a Japanese trading house, being directly involved in over \$3 billion of investment in Australia and North and South America. Mr Sykes' experience covers a variety of commodities including copper, platinum group metals, coal and iron ore. Mr Sykes has overseen the development of projects within the Lachlan Fold Belt and specifically within the Lachlan Transverse Zone. Mr Sykes has a passion for the mining industry and has been involved in the development and commercialisation of innovative and sustainable mining practices.

Mr Sykes is a Director of Pacific American Holdings Limited and previously a Director of Golden Cross Resources Limited and Bass Metals Limited.

## (b) Ian Buchhorn - Non-Executive Director

BSc (Hons), Dip Geosci (Min Econ), MAusIMM

lan Buchhorn is a Mineral Economist (Macquarie University) and Geologist with over 35 years' experience. He was the founding Managing Director of Heron Resources Limited for a period of 11 years until 2007 and returned to that role in 2012 after a period as Executive Director. Mr Buchhorn first managed exploration programs in the Lachlan Fold Belt in 1981, corresponding to the recognition of Northparkes and Temora as significant porphyry/epithermal mineral provinces. Mr Buchhorn previously worked with a number of international mining companies and has worked on gold, nickel, bauxite and industrial mineral mining and exploration, gold and base metal project generation and corporate evaluations. For the last 25 years Mr Buchhorn has acquired and developed mining projects throughout the Eastern Goldfields of Western Australian and has operated as a Registered Mine Manager.

During the last three years, Mr Buchhorn has been a Director of Ardea Resources Limited, Heron Resources Limited, RBR Group Limited and Golden Cross Resources Limited.

#### (c) Andrew Stewart - Non-Executive Director

BSc, PhD, MAIG & MSEG

Dr Stewart is an exploration geologist with over 15 years' experience in mineral exploration; primarily focused on project generation, project evaluation and exploration strategy development throughout Asia and Eastern Europe. Dr Stewart has particular expertise in porphyry copper-gold and epithermal gold deposits, but has worked across a diverse range of commodities. He holds a BSc (Hons) from Macquarie University and a PhD from the Centre of Ore Deposits and Exploration Studies at the University of Tasmania. During his time at Ivanhoe Mines and Vale, Dr Stewart held various technical and management positions in Mongolia and Indonesia and has been involved in several greenfields discoveries. Dr Stewart is currently Chief Executive Officer of Xanadu Mines Limited.



## 5.3 Chief Executive Officer - David Greenwood

David Greenwood has an in-depth knowledge and more than 30 years' broad-based experience in the resources industry across a range of commodities including precious metals, base metals, industrial minerals, mineral sands, and bulk commodities. Mr Greenwood was educated in the UK and has worked internationally in the resources industry in exploration, production, marketing, business development and investment analysis. Mr Greenwood was Executive General Manager for Straits Resources Ltd, where he was responsible for exploration, marketing, corporate affairs, investor relations and investments. Mr Greenwood has held board positions with junior resource companies, including President (CEO) of Goldminco Corporation, a previously listed Canadian exploration company with assets in the Lachlan Fold Belt, NSW. Mr Greenwood has specific expertise in resources evaluation and financing, from exploration through to mine development, in addition to business development, minerals marketing and investor relations.

## 5.4 Company Secretary – Sam Middlemas

Sam Middlemas is a Chartered Accountant and the principal of a corporate advisory company and has over 30 years of experience providing financial and corporate secretarial services. He has previously held a number of Senior Executive and Board positions in ASX listed resource companies, following experience in the Australian audit division of Pricewaterhouse including secondments to Canada and the United Kingdom. His expertise includes corporate secretarial, financial accounting, financial and management reporting in various industries including mining expertise, initial public offerings, capital raisings, corporate governance and various corporate transactions.

Mr Middlemas holds a Bachelor of Commerce degree from the University of Western Australia, a Graduate Diploma in Business (Accounting) from Curtin University and is an Associate Member of the Institute of Chartered Accountants in Australia.

## 5.5 Key personnel

## Johan Lambrechts - Exploration Manager

BSc (Hons) Geology, AIG

Johan Lambrechts is a Geologist with over 16 years' experience in geological management and production. Mr Lambrechts started his geological career in the platinum fields of South Africa where he worked in open cut and underground mines. Mr Lambrechts later joined the mine management team of Anglo Platinum and obtained his blasting and mine overseers' certificates during a period in which he managed a large underground production section with several hundred miners reporting to him. Mr Lambrechts has also worked as senior resource geologist for the Glencore Mount Isa operation, which is particularly relevant to the Lewis Ponds project. Mr Lambrechts has managed production geology teams in multi commodity environments such as gold, lead-zinc and platinum. Most recently, Mr Lambrechts has managed the exploration projects for Ardea in NSW including statutory compliance, stakeholder liaison, for the full range of LFB commodities including orogenic and epithermal gold, porphyry copper-gold and stratiform base metals.

## 5.6 Interests of Directors

No Director of the Company (or entity in which they are a partner or director) has, or has had in the two years before the date of this Prospectus, any interests 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 of the Offers; or
- (c) the Offers,

and no amounts have been paid or agreed to be paid and no value or other benefit has been given or agreed to be given to:

- (d) any Director to induce him or her to become, or to qualify as, a Director; or
- (e) any Director of the Company for services which he or she (or an entity in which they are a partner or director) has provided in connection with the formation or promotion of the Company or the Offers,

except as disclosed in this Prospectus and as follows.



## 5.7 Security holdings of Directors

The Directors and their related entities do not have any interests in Shares and Options as at the date of this Prospectus.

Based on the intentions of the Directors at the date of this Prospectus in relation to the Offers, and due to the In-Specie Distribution the Directors and their related entities will have the following interests in Shares and Options on Admission:

Director	Shares	Options	
Mark Sykes	100,000	500,000	
lan Buchhorn	5,699,8455	250,000	
Andrew Stewart	Up to 50,000	250,000	

#### Notes:

- 1. See Section 7.2 for details of Options.
- 2. Assuming a 1 for 3.910 ratio for the In-specie Distribution for illustrative purposes only. This assumes no further securities are issued by Ardea.
- 3. Mark Sykes intends to subscribe for up to 100,000 Shares under the General Offer.
- 4. Andrew Stewart intends to subscribe for up to 50,000 Shares under the General Offer, this figure being subject to change.
- 5. Ian Buchhorn's shares comprise:
  - a. 3,199,845 Shares from the In-Specie Distribution; and
  - b. 2,500,000 Shares he intends to apply for in the Ardea Offer.

### 5.8 Remuneration of Directors

The Directors will receive the following annual remuneration, accruing from Godolphin's admission to ASX:

Director <sup>1</sup>	Remuneration	
Mark Sykes	\$60,000	
lan Buchhorn	\$45,000	
Andrew Stewart	\$45,000	

#### Note:

- 1. Note that Directors will be issued security incentives in the form of Incentive Options under the Employee Incentive Securities Plan. Mr Sykes will receive 500,000 Options with a Black Scholes Value of \$35,300 and Mr Buchhorn and Dr Stewart will both receive 250,000 Options each with a Black Scholes value of \$17,650. The Options were approved at a Shareholder's Meeting held on 3 October 2019 and will be issued prior to Admission, subject to completion of the DID. The Board members will also receive per diem fees for additional services as requested by the Board/CEO as and when provided.
- 2. The Company has also appointed a Chief Executive Officer, Mr David Greenwood who will receive an annual salary of \$275,000 plus 9.5% superannuation. He will also receive, on or prior to Admission, 500,000 Employee Options under the Employee Incentive Securities Plan with a Black Scholes value of \$35,300.

## 5.9 Related party transactions

The Company has entered into the following related party transactions on arms' length terms:

- (a) the Company has entered into three agreements with Ardea, being:
  - (i) the DID in relation to the spin-out and for the sale and purchase of the NSW Assets (refer Section 6.2)
  - (ii) Loan Agreement whereby Ardea provided funds and personnel to the Company in conjunction with its application for Admission (refer Section 6.7 for further details); and
  - (iii) Consultancy Agreement whereby Ardea will provide personnel to the Company on an as needs basis post Admission (refer Section 6.8 for further details);
- (b) letters of appointment with each of its Directors on standard terms (refer Section 6.6 for details);
- (c) deeds of indemnity, insurance and access with each of its Directors on standard terms (refer Section 6.9 for details); and
- (d) executive services agreement with Mr David Greenwood on standard terms (refer to Section 6.5 for details).

At the date of this Prospectus, no other material transactions with related parties and Directors' interests exist that the Directors are aware of, other than those disclosed in the Prospectus.



## 5.10 Corporate Governance

The Board is committed to conducting the Company's business in accordance with the highest standards of corporate governance to create and deliver value for its shareholders. The Board has established a corporate governance framework, as described in this Section 5.10, including corporate governance policies, procedures and charters, to support this commitment. The framework will be reviewed regularly and revised in response to changes in law, developments in corporate governance and changes to the Company's business.

In establishing its corporate governance framework, the Board has referred to the 4th edition of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (**Recommendations**). To the extent applicable, commensurate with the Company's size and nature, the Company has adopted the Recommendations.

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined below and further details on the Company's corporate governance procedures, policies and practices will be available from the Company website at <a href="https://www.godolphinresources.com.au">www.godolphinresources.com.au</a> following Admission.

## (a) Board of Directors

The Board is responsible to Shareholders for the long-term performance of the Company and for overseeing the implementation of appropriate corporate governance with respect to Godolphin's affairs.

The Board has adopted a formal Board Charter that details the Board's role, authority, responsibilities, membership and operations, and will be available on our website at www.godolphinresources.com.au.

The Charter sets out the matters specifically reserved for the Board and the powers delegated to any of its Committees and to the Managing Director.

The Board delegates responsibility for the day-to-day management of Godolphin to the Chief Executive Officer, but retains responsibility for the overall strategy, governance and performance of the Company.

In general, the Board assumes (among others) the following responsibilities:

- (i) setting the direction, strategies and financial objectives of Godolphin and ensuring appropriate resources are available;
- (ii) overseeing management's implementation of the Company's strategic objectives and its performance generally;
- (iii) monitoring compliance with control and accountability systems, regulatory requirements and ethical standards;
- (iv) ensuring the preparation of accurate financial reports and statements;
- (v) reporting to Shareholders and the investment community on the performance and state of the Company;
- (vi) maintaining written agreements with each Director which detail the terms of their appointment;
- (vii) approving operating budgets and major capital expenditure;
- (viii) overseeing the integrity of the Company's accounting and corporate reporting systems including the external audit;
- (ix) overseeing the Company's process for making timely and balanced disclosure of all material information concerning the Company that a reasonable person would expect to have a material effect on the price or value of the Company's securities;
- (x) ensuring that the Company has in place an appropriate risk management framework and setting the risk appetite within which the Board expects management to operate; and
- (xi) monitoring the effectiveness of the Company's governance practices.



## (b) Composition of the Board

Election of Board members is substantially the province of the Shareholders in general meeting. Upon Listing, the Board will be comprised of the Chief Executive Officer and three Non-Executive Directors. From the commencement of Listing, the Board shall at all times have at least three members, a majority of whom shall be independent Directors. As the Company's activities develop in size, nature and scope, the composition of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

#### (c) Identification and management of risk

The Board's collective experience will assist in the identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

#### (d) Ethical standards

The Board is committed to the establishment and maintenance of appropriate ethical standards.

#### (e) Independent professional advice

Subject to the Chairman's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

## (f) Remuneration arrangements

The remuneration of any executive director will be decided by the Board, without the affected executive director participating in that decision-making process.

In addition, subject to any necessary Shareholder approval, a Director may be paid fees or other amounts as the Directors determine where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director (e.g. non-cash performance incentives such as options).

Subject to any necessary shareholder approval and the Corporations Act, the Board may offer Directors Shares in lieu of Directors' fees upon such terms and conditions as the Board determines.

Directors are also entitled to be paid reasonable travel and other expenses incurred by them in the course of the performance of their duties as Directors.

The Board reviews and approves the Company's remuneration policy in order to ensure that the Company is able to attract and retain executives and Directors who will create value for Shareholders, having regard to the amount considered to be commensurate for an entity of the Company's size and level of activity as well as the relevant Directors' time, commitment and responsibility.

The Board is also responsible for reviewing any employee incentive and equity-based plans including the appropriateness of performance hurdles and total payments proposed.

#### (g) Securities trading policy

The Board has adopted a policy that sets out the guidelines on the sale and purchase of securities in the Company by its directors, employees, contractors and consultants. The policy generally provides that the written acknowledgement of the Chairman (or the Board in the case of the Chairman) must be obtained prior to trading.

## (h) Audit and risk

The Company will not have a separate audit or risk committee until such time as the Board is of a sufficient size and structure, and the Company's operations are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee, including but not limited to, monitoring and reviewing any matters of significance affecting financial reporting and compliance, the integrity of the financial reporting of the Company, the Company's internal financial control system and risk management systems and the external audit function.

## (i) External audit

The Company in general meetings is responsible for the appointment of the external auditors of the Company, and the Board from time to time will review the scope, performance and fees of those external auditors.



## (j) Social media policy

The Board has adopted a social media policy to regulate the use of social media by people associated with the Company or its subsidiaries to preserve the Company's reputation and integrity. The policy outlines requirements for compliance with confidentiality, governance, legal, privacy and regulatory parameters when using social media to conduct Company business.

#### (k) Whistleblower policy

The Board has adopted a whistleblower protection policy to ensure concerns regarding unacceptable conduct including breaches of the Company's code of conduct can be raised on a confidential basis, without fear of reprisal, dismissal or discriminatory treatment. The purpose of this policy is to promote responsible whistle blowing about issues where the interests of others, including the public, or of the organisation itself are at risk.

#### (I) Anti-bribery and anti-corruption policy

The Board has a zero-tolerance approach to bribery and corruption and is committed to acting professionally, fairly and with integrity in all business dealings. The Board has adopted an anti-bribery and anti-corruption policy for the purpose of setting out the responsibilities in observing and upholding the Company's position on bribery and corruption provide information and guidance to those working for the Company on how to recognise and deal with bribery and corruption issues.

## **5.11 Departures from Recommendations**

Following Admission to the Official List, the Company will be required to report any departures from the Recommendations in its annual financial report.

The Company's departures from the Recommendations as at the date of this Prospectus are detailed in the table below.

Principles and Recommendations	Explanation for departure
1.5 Diversity Policy	While the Company is committed to workforce diversity, the Board believes that with its scale of activities and relatively small number of employees, it is not appropriate in the Company's current circumstances that the Board set and disclose measurable objectives for achieving gender diversity; and annually assesses objectives and the entity's progress in achieving them.
2.1 Nomination Committee	The Company will not have a separate nomination committee until such time as the Board is of a sufficient size and structure, and the Company's operations are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee.
4.1 Audit Committee and 7.1 Risk Committee	The Company will not have a separate audit or risk committee until such time as the Board is of a sufficient size and structure, and the Company's operations are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee.
8.1 Remuneration Committee	The Company will not have a separate remuneration committee until such time as the Board is of a sufficient size and structure, and the Company's operations are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee.



## 6. Material Contracts

#### 6.1 Introduction

The Directors consider that certain contracts entered into by the Company are material to the Company or are of such a nature that an investor may wish to have particulars of them when making an assessment of whether to apply for Shares under the Offers. The provisions of such material contracts are summarised in this Section.

## 6.2 Demerger Implementation Deed

On 3 October 2019, the Company and Ardea (and various subsidiaries) entered into a demerger implementation deed in relation to the spin-out and for the sale and purchase of the NSW Assets (**DID**). The effect of the DID is that the Company acquires the NSW Assets for 30,000,000 Shares at a deemed issue price of \$0.20 per Share and 15,000,000 Options in Godolphin exercisable at \$0.25, expiring 3 years after the date of issue.

## (a) Conditions precedent

The conditions precedent for completion of the DID include:

- (i) the Company making offers of employment to Johan Lambrechts and Michael Ostrowski, which have now been made;
- (ii) receipt of the private tax ruling from the Australian Taxation Office confirming the Demerger Relief on terms that are acceptable to Ardea (acting reasonably);
- (iii) Ardea obtaining irrevocable board approval for the In-Specie Distribution;
- (iv) Ardea obtaining shareholder approval for the In-specie Distribution;
- (v) Ardea completing the transfer of the Tenements and TriAusMin;
- (vi) the Company issuing the Consideration Shares to Ardea;
- (vii) the Company issuing the Consideration Options to Ardea;
- (viii) the Company receiving valid applications for not less than \$4,500,000 under the General Offer (which includes valid applications made under the Ardea Offer);
- (ix) the Company obtaining escrow relief from ASX and confirmation in relation to the number of Ardea Shareholders that can be counted towards satisfying the ASX spread test; and
- (x) receipt of ASX conditional admission letter in relation to the Company,

## (together, the Conditions)

The Conditions may be waived by mutual agreement, or in respect of certain Conditions, by the party entitled to the benefit of the Condition. The Condition set out in Section 6.2(a)(ii) may be waived by Ardea in the event that a private tax ruling from the Australian Taxation Office confirming the Demerger Relief on terms that are acceptable to Ardea is delayed or not received.

## (b) Other material terms

- (i) (Representations and warranties) The parties provide representations and warranties that are considered standard for agreements of this nature, with the maximum amount of any claim recoverable by the Company limited to \$500,000.
- (ii) (**Funding**) Ardea will cover the costs expended for the benefit of the Company comprising the following from 1 June 2019 until Admission, by way of the Loan Agreement set out in Section 6.7:
  - (A) wages and fees associated with the employees and contractors employed by Ardea working on the Company's activities as identified by monthly timesheets;
  - (B) rents, rates and exploration costs on the Tenements;
  - (C) any duty payable on the transfer of the Tenements or the TriAusMin Shares to the Company; and
  - (D) adviser and legal expenses associated with the In-Specie Distribution and General Offer.



At Admission, the Company will repay the Godolphin Expenses, in accordance with the following formula, provided that at Admission, the Company has net assets of not less than \$4,000,000:

- (iii) \$500,000 subject to the funds raised under this Prospectus not exceeding the Minimum Subscription amount; or
- (iv) 12.5% of funds raised under this Prospectus where the Capital Raising exceeds the Minimum Subscription.

In the event that the Godolphin Expenses exceed the above formula, the Company will be obliged to issue Shares with a deemed value of up to \$0.20 up to a value of \$200,000 (**Admission Facility Shares**). As at the date of the Prospectus, approximately \$700,000 in Godolphin Expenses have been accrued.

## **6.3** Lead Manager Mandate

The Company entered into a mandate agreement appointing Panthea Capital as Lead Manager to the Offers on 16 September 2019 (Lead Manager Mandate). Panthea Capital is not underwriting the Offers.

Under the Lead Manager Mandate, Panthea Capital will provide services and assistance customarily provided in connection with marketing and execution of an initial public offer.

Panthea will receive the following fees under the Lead Manager Mandate:

- (a) Management Fee of 1% (plus GST) of total funds raised in the General Offer plus 2,000,000 Advisor Options;
- (b) Fees of 5% (plus GST) of funds raised from third party transactions on which Panthea Capital has introduced the client; and
- (c) \$5,000 (plus GST) per month for the period of engagement, which will be offset against the Management Fees at the end of the engagement.

The Lead Manager Mandate contains other terms and conditions customary for an agreement of this nature.

## 6.4 Finder's Fee Agreement

On 25 July 1991, Tri Origin Exploration Limited and Mr David Timms (a geologist and unrelated party) entered into to a Finder's Fee Agreement (**Finder's Fee Agreement**) pursuant to which Mr Timms is eligible to receive a finder's fee in relation to a mineral property in Australia, comprising 2.56 km², and designated as EL 1049 in New South Wales, Australia (**Property**).

The mining tenement designated as EL 1049 was cancelled in a broader process of replacing a number of licences in the area with a single new licence, EL 5583 (**EL 5583**). TriAusMin (an entity that will become a wholly owned subsidiary of the Company), is the registered holder of EL 5583.

The area referred to as the Property in the Finder's Fee Agreement is now located within the boundaries of EL 5583. On this basis, a portion of EL 5583 (being the 2.56km² Property) is subject to a finder's fee, payable to David Timms. The fee is capped at \$2 million and is based on 1/3 proceeds from the sale of the Property, or 1/3 of net profits from production from the Property, or 30% of any royalties received from production from the Property (as the context requires).



## 6.5 Executive services agreements

The Company has entered into an executive services agreement with David Greenwood (Greenwood Agreement).

Under the Greenwood Agreement, David Greenwood is engaged by the Company to provide executive services to the Company as a chief executive officer on a full-time basis. The Company will remunerate Mr Greenwood for his services with an executive remuneration package comprising the following:

- (a) a base salary of \$275,000 per annum (exclusive of superannuation);
- (b) a short-term incentive of up to \$50,000 based on meeting criteria set by the Board;
- (c) 500,000 Employee Options; and
- (d) reimbursement for reasonable expenses necessarily incurred by Mr Greenwood in the performance of his services as an executive officer.

In addition, Mr Greenwood is entitled to participate in bonus and/or other incentive schemes that may be implemented in the future.

The Greenwood Agreement is for an indefinite term, and will continue until terminated by either the Company or Mr Greenwood by the giving of three months' written notice of termination (or shorter period in limited circumstances). In the event of a change of control, Mr Greenwood is entitled to a gross payment equivalent to 3 month's base salary.

## 6.6 Non-Executive Director Letters of Appointment

The Company has entered into letters of appointment with the non-executive directors, Mark Sykes, Ian Buchhorn and Andrew Stewart.

Pursuant to these letter agreements, the Company has agreed to pay:

- (a) Mr Sykes a director's fee of \$60,000 (plus applicable GST); and
- (b) Mr Buchhorn and Dr Stewart on and from admission each a director's fee of \$45,000 (plus applicable GST or superannuation) per year for services provided to the Company as Directors.

## 6.7 Loan Agreement

On 3 October 2019, the Company entered into a loan agreement with Ardea to fund the Company's expenses prior to Admission (**Loan Agreement**).

Under the Loan Agreement, Ardea will cover the costs expended by the Company comprising the following from 1 June 2019 until Admission:

- (a) wages and fees associated with the employees and contractors employed by Ardea working on the Company's activities as identified by monthly timesheets;
- (b) rents, rates and exploration costs on the Tenements;
- (c) any duty payable on the transfer of the TriAusMin Shares, Tenements or the Lewis Pond Freehold Land to the Company; and
- (d) adviser and legal expenses associated with the In-Specie Distribution and General Offer,

(together, the Godolphin Expenses).

An estimate of the Godolphin Expenses is set out in Section 7.8.

At Admission, the Company will repay the Godolphin Expenses, in accordance with the following formula set out in Section 6.2(b)(ii).

The Loan Agreement terminates upon repayment of the Godolphin Expenses as above unless otherwise agreed between the parties.

The Loan Agreement contains other terms and conditions customary for an agreement of this nature.



## 6.8 Consultancy Agreement

On 3 October 2019, the Company entered into a consultancy agreement with Ardea for the engagement of certain Ardea senior employees and management including geologists, exploration and data managers to provide consultancy advice to the Company as it begins to progress its projects (**Consultancy Agreement**). Under the Consultancy Agreement, the relevant persons will charge the Company at an hourly rate commensurate with the relevant person's skill and experience.

The Consultancy Agreement commences the Business Day after the Company's securities are admitted to quotation on ASX and continues indefinitely until terminated by 1 months' notice from the Company or Ardea.

The Consultancy Agreement contains other terms and conditions customary for an agreement of this nature

## 6.9 Deeds of indemnity, insurance and access

The Company has entered into deeds of indemnity, insurance and access with each of its Directors and the Company Secretary. Under these deeds, the Company agrees to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company or a related body corporate (subject to customary exceptions). The Company is also required to maintain insurance policies for the benefit of the relevant officer and must also allow the officers to inspect board papers and other documents provided to the Board in certain circumstances.



## 7. Additional Information

## 7.1 Rights and liabilities attaching to Shares

A summary of the rights attaching to the Shares is detailed below. This summary is qualified by the full terms of the Constitution (a full copy of the Constitution is available from the Company on request free of charge) and does not purport to be exhaustive or to constitute a definitive statement of the rights and liabilities of Shareholders. These rights and liabilities can involve complex questions of law arising from an interaction of the Constitution with statutory and common law requirements. For a Shareholder to obtain a definitive assessment of the rights and liabilities which attach to the Shares in any specific circumstances, the Shareholder should seek legal advice.

- (a) (Ranking of Shares): At the date of this Prospectus, all Shares are of the same class and rank equally in all respects. Specifically, the Shares issued pursuant to this Prospectus will rank equally with existing Shares.
- (b) (Voting rights): Subject to any rights or restrictions, at general meetings:
  - (i) every Shareholder present and entitled to vote may vote in person or by attorney, proxy or representative;
  - (ii) has one vote on a show of hands; and
  - (iii) has one vote for every Share held, upon a poll.
- (c) (Dividend rights): Shareholders will be entitled to dividends, distributed among members in proportion to the capital paid up, from the date of payment. No dividend carries interest against the Company and the declaration of Directors as to the amount to be distributed is conclusive.
  - Shareholders may be paid interim dividends or bonuses at the discretion of the Directors. The Company must not pay a dividend unless the Company's assets exceed its liabilities immediately before the dividend is declared and the excess is sufficient for the payment of the dividend.
- (d) (**Variation of rights**): The rights attaching to the Shares may only be varied by the consent in writing of the holders of three-quarters of the Shares, or with the sanction of a special resolution passed at a general meeting.
- (e) (Transfer of Shares): Shares can be transferred upon delivery of a proper instrument of transfer to the Company or by a transfer in accordance with the ASX Settlement Operating Rules. The instrument of transfer must be in writing, in the approved form, and signed by the transferor and the transferee. Until the transferee has been registered, the transferor is deemed to remain the holder, even after signing the instrument of transfer.
  - In some circumstances, the Directors may refuse to register a transfer if upon registration the transferee will hold less than a marketable parcel.
- (f) (**General meetings**): Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.
  - The Directors may convene a general meeting at their discretion. General meetings shall also be convened on requisition as provided for by the Corporations Act.
- (g) (Unmarketable parcels): The Company's Constitution provides for the sale of unmarketable parcels subject to any applicable laws and provided a notice is given to the minority Shareholders stating that the Company intends to sell their relevant Shares unless an exemption notice is received by a specified date.
- (h) (Rights on winding up): The assets of the Company must on a winding up be applied in repayment to members in proportion to their respective holdings.



## 7.2 Terms and conditions of Options

The terms of issue of the Options, which will be issued subject to the satisfaction of the conditions precedent to the DID, are:

## (a) (Entitlement)

Each option entitles the holder (**Optionholder**) to subscribe for one fully paid ordinary share in the capital of the Company (**Share**) upon exercise of the option (**Options**).

## (b) (Exercise Price and Expiry Date)

The exercise price of the Option is as follows:

Option Category	Exercise Price	Expiry Date	
Consideration Option	\$0.25	5:00 pm (WST) 3 years from the date of issue	
Employee Option	\$0.25	5:00 pm (WST) 3 years from the date of issue	
Incentive Option	\$0.25	5:00 pm (WST) 3 years from the date of issue	
Advisor Option	\$0.25	5:00 pm (WST) 3 years from the date of issue	
Loyalty Option and Anti-	The higher of:	5:00 pm (WST) 12 months	
Dilution Options The higher of:	- A\$0.25; or	from the date of issue	
	<ul> <li>a 25% premium to 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 (being at the discretion of the Board and intended to be approximately three months following the date of listing of Godolphin).</li> </ul>		

## (c) Vesting Condition

The Godolphin Employee Options and Incentive Options are subject to vesting conditions as set out below:

Option Category	Vesting Conditions	Expiry Date
Employee Option	24 months of continuous employment by the Optionholder (or controller of the Optionholder)	5:00 pm (WST) 3 years from the date of issue
Incentive Option	The Company successfully listing on the Australian Securities Exchange within 12 months of the date of issue of the Incentive Option	

Should the relevant Vesting Condition not be fulfilled, the Options will lapse.

#### (d) Exercise Period

The Options are exercisable at any time and from time to time on or prior to the Expiry Date.

## (e) Quotation of the Options

The Options will be unquoted.



## (f) Transferability of the Options

<b>Option Category</b>	Transferability
Consideration Option	The Consideration Options will be transferable subject to compliance with the Corporations Act and Listing Rules
Employee Option	The Employee Options will not be transferrable
Incentive Option	The Incentive Options will not be transferrable
Advisor Option	The Advisor Options will be transferable subject to compliance with the Corporations Act and Listing Rules
Loyalty Option	The Loyalty Options will not be transferrable

## (g) Notice of Exercise

The Options may be exercised by notice in writing to the Company in a form reasonably acceptable to the Company (Notice of Exercise) and payment of the Exercise Price for each Option being exercised in Australian currency by cheque or electronic funds transfer.

Any Notice of Exercise of an Option received by the Company will be deemed to be a notice of the exercise of that Option as at the date of receipt.

#### (h) Shares Issued on Exercise

Shares issued on exercise of the Options rank equally with the then Shares of the Company.

#### (i) Timing of Issue of Shares

Save for in relation to the Loyalty Options, within 15 Business Days after the later of the following:

- receipt of a Notice of Exercise given in accordance with these terms and conditions and payment of the Exercise Price for each Option being exercised; and
- (ii) when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

the Company will:

- (iii) issue the Shares pursuant to the exercise of the Options;
- (iv) give ASX a notice that complies with section 708A(5)(e) of the Corporations Act; and
- (v) apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If the Company is unable to deliver a notice under paragraph (iv) or such a notice for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company will lodge with ASIC a "cleansing prospectus" prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors. Where a "cleansing prospectus" is required, any Shares issued on exercise of Options will be subject to a holding lock until such time as a prospectus is issued by the Company.

In respect of the Loyalty Options, the Company reserves the right to delay the issue of the Loyalty Options by up to 60 days from the Notice of Exercise.

## (j) Participation in New Issues

There are no participation rights or entitlements inherent in the Options and Optionholders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options.



## (k) Adjustment for Bonus Issues of Shares

If the Company makes a bonus issue of Shares or other securities to existing Shareholders (other than an issue in lieu or in satisfaction of dividends or by way of dividend reinvestment):

- (i) the number of Shares which must be issued on the exercise of an Option will be increased by the number of Shares which the Optionholder would have received if the Optionholder had exercised the Option before the record date for the bonus issue; and
- (ii) no change will be made to the Exercise Price.

## (I) Adjustment for Entitlements Issue

If the Company makes an issue of Shares pro rata to existing Shareholders (other than as a bonus issue, to which paragraph 7.2(k) will apply) there will be no adjustment of the Exercise Price of an Option or the number of Shares over which the Options are exercisable.

#### (m) Adjustments for Reorganisation

If there is any reorganisation of the issued share capital of the Company, the rights of the Optionholders will be varied in accordance with the Listing Rules.

## 7.3 Loyalty Options and Anti-Dilution Options

It is the Board's current intention to offer Loyalty Options and Anti-Dilution Options approximately 3 months after Admission. If issued, the Loyalty Options will be issued subject to a separate prospectus. Investors are not required to take any action to receive Loyalty Options.

Loyalty Options will be issued on a pro-rata basis to holders of Shares at the record date set in the prospectus issued in relation to the Loyalty Options (Loyalty Option Record Date). Subject to the Listing Rules, Anti-Dilution Options may be issued to Ardea, Directors and employees of the Company who hold Options at the Loyalty Option Record Date.

## 7.4 Summary of Company's Employee Securities Incentive Plan

The Company adopted an Employee Securities Incentive Plan on 3 October 2019.

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

- (a) (Eligible Participant): Eligible Participant means a person that:
  - (i) is an "eligible participant" (as that term is defined in ASIC Class Order [CO 14/1000]) in relation to the Company or an Associated Body Corporate (as that term is defined in ASIC Class Order [14/1000]); and
  - (ii) has been determined by the Board to be eligible to participate in the Plan from time to time.
- (b) (**Purpose**): The purpose of the Plan is to:
  - (i) assist in the reward, retention and motivation of Eligible Participants;
  - (ii) link the reward of Eligible Participants to Shareholder value creation; and
  - (iii) align the interests of Eligible Participants with shareholders of the Group (being the Company and each of its Associated Bodies Corporate), by providing an opportunity to Eligible Participants to receive an equity interest in the Company in the form of Securities.
- (c) (**Plan administration**): The Plan will be administered by the Board. The Board may exercise any power or discretion conferred on it by the Plan rules in its sole and absolute discretion. The Board may delegate its powers and discretion.
- (d) (Eligibility, invitation and application): The Board may from time to time determine that an Eligible Participant may participate in the Plan and make an invitation to that Eligible Participant to apply for Securities on such terms and conditions as the Board decides. On receipt of an Invitation, an Eligible Participant may apply for the Securities the subject of the invitation by sending a completed application form to the Company. The Board may accept an application from an Eligible Participant in whole or in part. If an Eligible Participant is permitted in the invitation, the Eligible Participant may, by notice in writing to the Board, nominate a party in whose favour the Eligible Participant wishes to renounce the invitation.



- (e) (**Grant of Securities**): The Company will, to the extent that it has accepted a duly completed application, grant the Participant the relevant number of Securities, subject to the terms and conditions set out in the invitation, the Plan rules and any ancillary documentation required.
- (f) (Terms of Convertible Securities): Each 'Convertible Security' represents a right to acquire one or more Shares (for example, under an option or performance right), subject to the terms and conditions of the Plan. Prior to a Convertible Security being exercised a Participant does not have any interest (legal, equitable or otherwise) in any Share the subject of the Convertible Security by virtue of holding the Convertible Security. A Participant may not sell, assign, transfer, grant a security interest over or otherwise deal with a Convertible Security that has been granted to them. A Participant must not enter into any arrangement for the purpose of hedging their economic exposure to a Convertible Security that has been granted to them.
- (g) (Vesting of Convertible Securities): Any vesting conditions applicable to the grant of Convertible Securities will be described in the invitation. If all the vesting conditions are satisfied and/or otherwise waived by the Board, a vesting notice will be sent to the Participant by the Company informing them that the relevant Convertible Securities have vested. Unless and until the vesting notice is issued by the Company, the Convertible Securities will not be considered to have vested. For the avoidance of doubt, if the vesting conditions relevant to a Convertible Security are not satisfied and/or otherwise waived by the Board, that Convertible Security will lapse.
- (h) (Exercise of Convertible Securities and cashless exercise): To exercise a Convertible Security, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of Convertible Securities (see below), pay the exercise price (if any) to or as directed by the Company, at any time prior to the earlier of any date specified in the vesting notice and the expiry date as set out in the invitation. An invitation may specify that at the time of exercise of the Convertible Securities, the Participant may elect not to be required to provide payment of the exercise price for the number of Convertible Securities specified in a notice of exercise, but that on exercise of those Convertible Securities the Company will transfer or issue to the Participant that number of Shares equal in value to the positive difference between the Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities.

'Market Value' means, at any given date, the volume weighted average price per Share traded on the ASX over the 5 trading days immediately preceding that given date, unless otherwise specified in an invitation.

A Convertible Security may not be exercised unless and until that Convertible Security has vested in accordance with the Plan rules, or such earlier date as set out in the Plan rules.

- (i) (Delivery of Shares on exercise of Convertible Securities): As soon as practicable after the valid exercise of a Convertible Security by a Participant, the Company will issue or cause to be transferred to that Participant the number of Shares to which the Participant is entitled under the Plan rules and issue a substitute certificate for any remaining unexercised Convertible Securities held by that Participant.
- (j) (Forfeiture of Convertible Securities): Where a Participant who holds Convertible Securities ceases to be an Eligible Participant or becomes insolvent, all unvested Convertible Securities will automatically be forfeited by the Participant, unless the Board otherwise determines in its discretion to permit some or all of the Convertible Securities to vest. Where the Board determines that a Participant has acted fraudulently or dishonestly, or wilfully breached his or her duties to the Group, the Board may in its discretion deem all unvested Convertible Securities held by that Participant to have been forfeited.

Unless the Board otherwise determines, or as otherwise set out in the Plan rules:

- any Convertible Securities which have not yet vested will be forfeited immediately on the date that the Board determines (acting reasonably and in good faith) that any applicable vesting conditions have not been met or cannot be met by the relevant date; and
- (ii) any Convertible Securities which have not yet vested will be automatically forfeited on the expiry date specified in the invitation.
- (k) (Change of control): If a change of control event occurs in relation to the Company, or the Board determines that such an event is likely to occur, the Board may in its discretion determine the manner in which any or all of the Participant's Convertible Securities will be dealt with, including, without limitation, in a manner that allows the Participant to participate in and/or benefit from any transaction arising from or in connection with the change of control event.



- (I) (Rights attaching to Plan Shares): All Shares issued under the Plan, or issued or transferred to a Participant upon the valid exercise of a Convertible Security, (Plan Shares) will rank pari passu in all respects with the Shares of the same class. A Participant will be entitled to any dividends declared and distributed by the Company on the Plan Shares and may participate in any dividend reinvestment plan operated by the Company in respect of Plan Shares. A Participant may exercise any voting rights attaching to Plan Shares.
- (m) (**Disposal restrictions on Plan Shares**): If the invitation provides that any Plan Shares are subject to any restrictions as to the disposal or other dealing by a Participant for a period, the Board may implement any procedure it deems appropriate to ensure the compliance by the Participant with this restriction.

For so long as a Plan Share is subject to any disposal restrictions under the Plan, the Participant will not:

- (i) transfer, encumber or otherwise dispose of, or have a security interest granted over that Plan Share; or
- (ii) take any action or permit another person to take any action to remove or circumvent the disposal restrictions without the express written consent of the Company.
- (n) (Adjustment of Convertible Securities): If there is a reorganisation of the issued share capital of the Company (including any subdivision, consolidation, reduction, return or cancellation of such issued capital of the Company), the rights of each Participant holding Convertible Securities will be changed to the extent necessary to comply with the Listing Rules applicable to a reorganisation of capital at the time of the reorganisation. If Shares are issued by the Company by way of bonus issue (other than an issue in lieu of dividends or by way of dividend reinvestment), the holder of Convertible Securities is entitled, upon exercise of the Convertible Securities, to receive an allotment of as many additional Shares as would have been issued to the holder if the holder held Shares equal in number to the Shares in respect of which the Convertible Securities are exercised. Unless otherwise determined by the Board, a holder of Convertible Securities does not have the right to participate in a pro rata issue of Shares made by the Company or sell renounceable rights.
- (o) (Participation in new issues): There are no participation rights or entitlements inherent in the Convertible Securities and holders are not entitled to participate in any new issue of Shares of the Company during the currency of the Convertible Securities without exercising the Convertible Securities.
- (p) (Amendment of Plan): Subject to the following paragraph, the Board may at any time amend any provisions of the Plan rules, including (without limitation) the terms and conditions upon which any Securities have been granted under the Plan and determine that any amendments to the Plan rules be given retrospective effect, immediate effect or future effect. No amendment to any provision of the Plan rules may be made if the amendment materially reduces the rights of any Participant as they existed before the date of the amendment, other than an amendment introduced primarily for the purpose of complying with legislation or to correct manifest error or mistake, amongst other things, or is agreed to in writing by all Participants.
- (q) (Plan duration): The Plan continues in operation until the Board decides to end it. The Board may from time to time suspend the operation of the Plan for a fixed period or indefinitely, and may end any suspension. If the Plan is terminated or suspended for any reason, that termination or suspension must not prejudice the accrued rights of the Participants. If a Participant and the Company (acting by the Board) agree in writing that some or all of the Securities granted to that Participant are to be cancelled on a specified date or on the occurrence of a particular event, then those Securities may be cancelled in the manner agreed between the Company and the Participant.

Directors, including non-executive Directors, are able to participate in the Plan.

## 7.5 Substantial Shareholders

As at the date of this Prospectus the Company is a wholly-owned subsidiary of Ardea.

Based on the information known as at the date of this Prospectus, and assuming only the Minimum Subscription is achieved, on Admission the following persons will have an interest in 5% or more of the Shares on issue. Investors should note the details below do not include any Ardea Shareholder who participates in the Ardea Offer:

Name	Number of Shares	% of Shares	
Ian Buchhorn	5,699,845	10.7	



## 7.6 Interests of experts and advisers

#### (a) No interest except as disclosed

Other than as set out below or elsewhere in this Prospectus, no persons or entity named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus holds at the date of this Prospectus, or held at any time during the last 2 years, any interest in:

- (i) the formation or promotion of the Company;
- (ii) property acquired or proposed to be acquired by the Company in connection with its formation or promotion, or the Offers; or
- (iii) the Offers,

and the Company has not paid any amount or provided any benefit, or agreed to do so, to any of those persons for services rendered by them in connection with the formation or promotion of the Company or the Offers.

## (b) Share registry

Automic Pty Ltd has been appointed to conduct the Company's share registry functions and to provide administrative services in respect to the processing of Applications received pursuant to this Prospectus, and will be paid for these services on standard industry terms and conditions.

## (c) Auditor

Butler Settineri (Audit) Pty Ltd has been appointed to act as auditor to the Company. The Company has not accrued any expenses in relation to audit work prior to the date of the Prospectus. During the 24 months preceding lodgement of this Prospectus with ASIC, Butler Settineri (Audit) has not provided services to the Company (but provided audit services to the parent company Ardea).

#### (d) Australian legal adviser

Bellanhouse Lawyers has acted as the Australian solicitors to the Company in relation to the Offers. The Company estimates it will pay Bellanhouse Lawyers \$80,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Bellanhouse Lawyers has not provided services to the Company (but provided legal services to the parent company Ardea).

#### (e) Investigating Accountant

Butler Settineri has acted as Investigating Accountant and has prepared the Investigating Accountant's Report which is included in Schedule 3 of this Prospectus. The Company estimates it will pay Butler Settineri a total of \$10,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Butler Settineri has not provided services to the Company (but provided accounting services to the parent company Ardea).

## (f) Independent Technical Assessor

Cube Consulting has prepared the Independent Technical Assessment which is included in Schedule 5 of this Prospectus. The Company estimates it will pay Cube Consulting a total of \$55,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Cube Consulting has not provided services to the Company (but provided consulting services to the parent company Ardea).

## (g) Solicitor

Resource Legal Pty Ltd has acted as the Solicitor and has prepared the Solicitor's Report which is included in Schedule 4 of this Prospectus. The Company estimates it will pay Resource Legal Pty Ltd a total of \$10,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Resource Legal Pty Ltd has not provided services to the Company (but provided legal services to the parent company Ardea).

## (h) Lead Manager

Panthea Capital have acted as Lead Manager to the Offers. Details of the payments to be made to the Lead Manager is set out in Section 6.3. During the 24 months preceding lodgement of this Prospectus with ASIC, the Lead Manager has not provided services to the Company.



## 7.7 Consents

(a) Chapter 6D of the Corporations Act imposes a liability regime on the Company (as the offeror of Securities under this Prospectus), the Directors, any persons named in the Prospectus with their consent having made a statement in the Prospectus and persons involved in a contravention in relation to the Prospectus, with regard to misleading and deceptive statements made in the Prospectus.

Although the Company bears primary responsibility for the Prospectus, the other parties involved in the preparation of the Prospectus can also be responsible for certain statements made in it.

Each of the parties referred to below:

- (i) does not make the Offers;
- (ii) does not make, or purport to make, any statement that is included in this Prospectus, or a statement on which a statement made in this Prospectus is based, other than as specified below or elsewhere in this Prospectus;
- (iii) to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of this Prospectus other than a reference to its name and a statement contained in this Prospectus with the consent of that party as specified below; and
- (iv) has given and has not, prior to the lodgement of this Prospectus with ASIC, withdrawn its consent to the inclusion of the statements in this Prospectus that are specified below in the form and context in which the statements appear.

#### (b) Share Registry

Automic Pty Ltd has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as Share Registry of the Company in the form and context in which it is named.

#### (c) Auditor

Butler Settineri (Audit) Pty Ltd has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as auditor of the Company in the form and context in which it is named.

## (d) Australian legal adviser

Bellanhouse Lawyers has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Australian legal adviser to the Company in the form and context in which it is named. Bellanhouse Lawyers has provided legal advice to Ardea and during the 24 months preceding lodgement with ASIC, has received approximately \$45,000 in fees from Ardea. Bellanhouse Lawyers has not provided advice to Godolphin in respect of its negotiations with Ardea.

#### (e) Investigating Accountant

Butler Settineri has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Investigating Accountant to the Company in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Investigating Accountant's Report in the form and context in which it is included.

## (f) Independent Technical Assessor

Cube Consulting has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Independent Technical Assessor in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Independent Technical Assessment in the form and context in which it is included.

#### (g) Independent Solicitor

Resource Legal Pty Ltd has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Independent Solicitor to the Company in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Independent Solicitor's Report in the form and context in which it is included.

## (h) Lead Managers

Panthea Capital has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Lead Manager to the Offers in the form and context in which it is named.



## 7.8 Expenses of the Offers

The total approximate expenses of the Offers payable by the Company will be determined by the Loan Agreement. The Godolphin Expenses that will accrue in respect of the Offers and will be payable under the Loan Agreement will be approximately as follows:

Expense	Minimum Subscription raised \$	Maximum Subscription raised \$
ASX fees	80,000	80,000
Legal fees	80,000	80,000
Investigating Accountant fees	10,000	10,000
Solicitor's Report	10,000	10,000
Independent Technical Assessment fees	55,000	55,000
Consultant fees	40,000	40,000
Printing, postage and administration fees	30,000	30,000
Lead Manager's fees <sup>1</sup>	270,000	480,000
TOTAL	575,000	785,000
Other Godolphin Expenses <sup>2</sup>	700,000	700,000
TOTAL (payable by the Company) <sup>3</sup>	500,000	785,000
Approximate value of Admission Facility Shares <sup>4</sup>	200,000	200,000

#### Note:

- 1. Refer to Section 6.3.
- 2. Being the Godolphin Expenses as set out Sections 6.2(b)(ii)(A) and 6.2(b)(ii)(B) but not including the fees set out in Sections 6.2(b)(ii)(C) and 6.2(b)(ii)(D).
- 3. Godolphin Expenses will be paid by Ardea under the Loan Agreement set out in Section 6.7, with the Company reimbursing Ardea in accordance with the Loan Agreement.
- 4. Admission Facility Shares will be repayable in accordance with Section 6.2(b) with a deemed price of \$0.20.

Prospective investors should note that the Godolphin Expenses are not limited to the above costs. For a summary of the Godolphin Expenses, please see Section 6.7.

## 7.9 Continuous disclosure obligations

Following Admission, the Company will be a "disclosing entity" (as defined in section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Shares (unless a relevant exception to disclosure applies). Price sensitive information will be publicly released through ASX before it is otherwise disclosed to Shareholders and market participants. Distribution of other information to Shareholders and market participants will also be managed through disclosure to ASX. In addition, the Company will post this information on its website after ASX confirms that an announcement has been made, with the aim of making the information readily accessible to the widest audience.

## 7.10 Litigation

So far as the Directors are aware, there is no current or threatened civil litigation, arbitration proceedings or administrative appeals, or criminal or governmental prosecutions of a material nature in which the Company or its subsidiaries is directly or indirectly concerned which is likely to have a material adverse effect on the business or financial position of the Company or its subsidiaries.

See also Section 3.1(r) for litigation risk.



## 8. Directors' Authorisation

The Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors.

In accordance with section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with ASIC and has not withdrawn that consent.

Signed for and on behalf of the Company.

Mark Sykes

Non-Executive Chairman Godolphin Resources Limited

29 October 2019



## 9. Definitions

Admission means admission of the Company to the Official List, following completion of the Offers.

**Admission Facility Shares** has the meaning given in Section 6.2(b).

Advisor Options means Options to be issued to the Lead Manager on the terms and conditions in Section 7.2.

**Anti-Dilution Options** means Options to be issued Directors and employees of the Company after Admission subject to the Listing Rules on the terms set out in Section 7.2.

AEPL means Ardea Exploration Pty Ltd (ACN 137 889 279).

Application means an application for Shares pursuant to this Prospectus.

Alkane means Alkane Resources Limited (ACN 000 689 216).

**Application** means an application for Shares pursuant to this Prospectus.

**Application Form** means the online application form available from:

- (a) https://investor.automic.com.au/#/ipo/godolphin (for Applicants under the General Offer); or
- (b) https://investor.automic.com.au/#/ipo/godolphinpriority (for Applicants under the Ardea Offer).

**Application Monies** means the amount of money in dollars and cents payable for Shares at the Offer Price per Share pursuant to the Offers.

Ardea means Ardea Resources Limited (ACN 614 289 342)

**Ardea Group** means Ardea, TriAusMin, Atriplex Pty Ltd (ACN 113 719 207), Yerilla Nickel Pty Ltd (ACN 123 249 810), Ardea Exploration Pty Ltd (ACN 137 889 279) and Kalgoorlie Nickel Pty Ltd (ACN 137 889 199).

Ardea Offer means a priority offer of Shares to Eligible Ardea Shareholders, as described in Section 1.1.

**Ardea Offer Closing Date** means 5pm (WST) on the date specified as the closing date of the General Offer in the proposed indicative timetable, or such other time as the Board determines.

**Ardea Offer Opening Date** means the date specified as the opening date of the Ardea Offer in the proposed indicative timetable, or such other time as the Board determines.

**Ardea Offer Record Date** means 5:00pm (WST) on the date identified in the proposed indicative timetable, or such other time as the Board determines.

Ardea Shareholder means shareholders in Ardea.

ASIC means the Australian Securities and Investments Commission.

ASX means ASX Limited (ACN 008 624 691) or the Australian Securities Exchange, as the context requires.

ASX Settlement means ASX Settlement Pty Limited (ACN 008 504 532).

ASX Settlement Operating Rules means the settlement and operating rules of ASX Settlement.

Board means the board of Directors.

Business Day means Monday to Friday except for any day that ASX declares is not a business day.

Butler Settineri means Butler Settineri (Audit) Pty Ltd (ACN 112 942 373).

CHESS means the Clearing House Electronic Subregister System operated by ASX Settlement.

**CEO** means the chief executive officer, Mr David Greenwood.

Closing Dates means the Closing Date and the Ardea Closing Date.

Company or Godolphin means Godolphin Resources Limited (ACN 633 779 950).

**Consideration Options** means Options issued to Ardea in consideration for the NSW Assets on the terms set out in Section 7.2.

Consideration Shares means 30,000,000 Shares to be issued to Ardea in consideration for the NSW Assets.

**Constitution** means the constitution of the Company.

Consultancy Agreement has the meaning given in clause 6.8.

Copper Hill East or Copper Hill East Copper Gold Project means the exploration project located on EL 8556.



Corporations Act means the Corporations Act 2001 (Cth).

CRN means the customer reference number.

Cube Consulting means Cube Consulting Pty Ltd (ACN 094 321 829).

**DID** or **Demerger Implementation Deed** means the demerger implementation deed between Ardea, AEPL Godolphin, TriAusMin and GTPL dated 3 October 2019.

**Director** means a director of the Company.

EFT means an electronic funds transfer.

**Eligible Ardea Shareholders** means Ardea Shareholders who are registered with Ardea on the Ardea Offer Record Date.

**Eligible Participant** has the meaning given in Section 7.4(a).

EL means an exploration licence.

**EL 5583** has the meaning given in Section 6.4.

**Employee Incentive Securities Plan** or **Plan** means the employee incentive securities plan as adopted by Godolphin on 3 October 2019.

**Employee Option** means Options issued to employees and the CEO of the Company on the terms and conditions in Section 7.2.

**Exposure Period** means the period of 7 days after the date of lodgement of this Prospectus, which period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act.

Finder's Fee Agreement has the meaning given in Section 6.4.

**General Offer** means the public offer of up to 40,000,000 Shares at the Offer Price pursuant to this Prospectus to raise up to \$8,000,000 before costs, and includes the Ardea Offer.

**General Offer Closing Date** means 5pm (WST) on the date specified as the closing date of the General Offer in the proposed indicative timetable, or such other time as the Board determines.

Godolphin Expenses has the meaning given in Section 6.7.

**Greenwood Agreement** has the meaning given in Section 6.5.

GTPL means Godolphin Tenements Pty Ltd (ACN 634 219 999).

**Incentive Option** means Options issued to Directors under the Employee Incentive Securities Plan on the terms and conditions in Section 7.2.

**Independent Technical Assessment** means the report contained in Schedule 5 prepared by the Independent Technical Assessor.

Independent Technical Assessor means Cube Consulting.

**In-principle Waiver** has the meaning given in Section 1.13.

**In-specie Distribution** means the proposed in-specie distribution of the Consideration Shares to Ardea shareholders.

In-specie Shares means the Shares distributed pursuant to the In-specie Distribution.

Investigating Accountant means Butler Settineri.

**Investigating Accountant's Report** means the report contained in Schedule 3 prepared by the Investigating Accountant.

**Issue Date** means the date of issue of Shares pursuant to this Prospectus as set out in the proposed indicative timetable, or such other time as the Board determines.

**JORC** means the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition.

Lead Manager means Panthea Capital.

**Lead Manager Mandate** has the meaning given in Section 6.3.

Lewis Ponds Freehold Land means freehold land set out in Schedule 2.

Listing means commencement of quotation of the Company's securities on the Official List.



Listing Rules means the listing rules of ASX.

**Loan Agreement** has the meaning given in Section 6.7.

**Loyalty Options** means an Option intended to be issued on the terms set out in Section 7.2 under a separate prospectus.

Loyalty Option Record Date has the meaning given in Section 7.3.

LFB or Lachlan Fold Belt means the Lachlan Fold Belt mineralised province in New South Wales.

LTZ means the Lachlan Transverse Zone mineralisation influencing structure in New South Wales.

Maximum Subscription means the raising of \$8.0 million pursuant to the Offers.

**Minimum Subscription** means the raising of \$4.5 million pursuant to the Offers.

Mining Act means the Mining Act 1992 (NSW).

Minister means the NSW Minister for Energy and Environment.

MVB or Molong Volcanic Belt means the Molong Volcanic Belt mineralised province in New South Wales.

NGO means a non-governmental organisation.

**NSW** Assets means the Tenements and TriAusMin.

NPV means net present value.

Offer Price means \$0.20 per Share under the Offers.

Offers means the General Offer and the Ardea Offer

Official List means the official list of ASX.

**Opening Date** means the date specified as the opening date of the Offers in the proposed indicative timetable, or such other time as the Board determines.

**Option** means an option to acquire a Share.

ozs means ounces.

Panthea Capital means Panthea Capital Pty Ltd (ACN 620 836 722).

**Property** has the meaning given in Section 6.4.

**Prospectus** means this prospectus dated 29 October 2019.

**Recommendations** has the meaning given in Section 5.10.

**Section** means a section of this Prospectus.

Securities means the Shares and Options.

Share means a fully paid ordinary share in capital of the Company.

Share Registry means Automic Pty Ltd (ACN 152 260 814).

Shareholder means a holder of one or more Shares.

Solicitor means Resource Legal Pty Ltd (ACN 097 228 870).

**Solicitor's Report** means the report contained in Schedule 4 prepared by the Independent Solicitor.

Tenements means the tenements set out in Schedule 1.

TriAusMin means TriAusMin Pty Ltd (ACN 062 002 475).

**TriAusMin Shares** means fully paid ordinary shares in TriAusMin.

**Vesting Condition** has the meaning given in Section 7.2(c).

Vesting Date means the date that is 3 months following the commencement of trading of the Company's Shares on ASX.

**VWAP** means volume weighted average price.

**WST** means Western Standard Time, being the time in Perth, Western Australia.



## **Schedule 1 - Tenements**

Tenement	Project	Holder	Interest
EL 5583**	Lewis Ponds	TriAusMin	100% of Group 1 metals
EL 8323	Ophir	Ardea Exploration	100% of Group 1 metals
EL 8556	Copper Hill East	Ardea Exploration	100% of Group 1 metals
EL 8890	Cumnock	Ardea Exploration	100% of Group 1 metals
ELA5794*	Mt Bulga	Ardea Exploration	100% of Group 1 metals
ELA5812*	Caledonian	Ardea Exploration	100% of Group 1 metals
EL 8532	Mount Aubrey	Ardea Exploration	100% of Group 1 metals
EL 8538	Yeoval	Ardea Exploration	100% of Group 1 metals
ELA5780*	South Yeoval	Ardea Exploration	100% of Group 1 metals
EL 8554	Wiseman's Creek	Ardea Exploration	100% of Group 1 metals
EL 8555	Calarie	Ardea Exploration	100% of Group 1 metals
EL 8580	Calarie Central	Ardea Exploration	100% of Group 1 metals
ML 0739	Calarie Lachlan Mine	TriAusMin	100% of Group 1 metals
EL 8061	Gundagai South	Ardea Exploration	100% of Group 1 metals
EL 8586	Gundagai North	Ardea Exploration	100% of Group 1 metals
EL 8889	Gundagai	Ardea Exploration	100% of Group 1 metals

<sup>\*</sup> formal offer of tenements awaited from NSW Department of Planning, Industry and Environment

<sup>\*\*</sup> The 2.56km² Property located within EL 5583 is subject to a finder's fee, payable to geologist David Timms, capped at \$2 million. The fee is based on 1/3 proceeds from sale of the Property, or 1/3 of net profits from production from the Property, or 30% of any royalties received from production from the Property (as the context requires). For further information, see Section 6.4.



## Schedule 2 - Lewis Ponds Freehold Land

Title Reference	Street Address	Project	Holder
1/131668	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
107/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
108/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
115/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
33/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
34/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
51/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
55/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
7/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
71/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin
81/750418	500 Dry Creek Road, Lewis Ponds 2800	Lewis Ponds	TriAusMin



## Schedule 3 – Investigating Accountant Report





29 October 2019

The Directors
Godolphin Resources Limited
Suite 2, 45 Ord Street
WEST PERTH WA 6005

Dear Sirs

#### Investigating Accountant's Report for Godolphin Resources Limited

#### Introduction

This report has been prepared at the request of the directors of Godolphin Resources Limited ("Godolphin" or "Company") for inclusion in a Prospectus relating to the proposed issue by the Company of a minimum of 22,500,000 fully paid ordinary shares ("New Shares") and a maximum of 40,000,000 New Shares at an issue price of \$0.20 each to raise a minimum of \$4,500,000 and up to \$8,000,000 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 Appendix 1 of 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.

#### **Background**

The Company was registered by its current parent company Ardea Resources Limited ("Ardea") on 25 June 2019 following a strategic review by the Ardea board of its assets and a decision by the Ardea board to dispose of its New South Wales assets into the Company.

Subject to Ardea shareholder approval and satisfaction of various other conditions, the Company will acquire the New South Wales assets and Ardea will distribute approximately 30,000,000 New Shares to its shareholders.

The Prospectus invites potential investors to apply for up to 40,000,000 shares at a subscription price of \$0.20 each to raise up to \$8,000,000 (before costs), the public General Offer. The Company is also offering Eligible Ardea Shareholders the opportunity to subscribe for Shares through a priority offer, the Ardea Offer.



The Offers comprise the General Offer and the Ardea Offer (together, "the Offers") and remain conditional on the Company raising the Minimum Subscription under the Offers being \$4,500,000.

Following a successful Offer, the Company will become the parent entity of a group of three companies including Godolphin Tenements Pty Ltd and TriAusMin Pty Ltd.

Godolphin Tenements Pty Ltd was registered by its current parent company Ardea on 25 June 2019 and has been dormant since registration.

TriAusMin Pty Ltd was registered on 21 October 1993 and is currently audited as part of the Ardea Group of companies. Since the company was acquired by Ardea in February 2017 the company has not been operational and merely held tenements as part of the Ardea group.

#### Scope of review of Pro Forma Financial Information

You have requested us to prepare an Investigating Accountant's Report covering the reviewed Pro Forma Statements of Financial Position as at 30 June 2019 adjusted for the effects of the Offers and material events occurring subsequent to 30 June 2019.

The reviewed Pro Forma Financial Information set out in Appendix 1 of this report has been compiled based on historical financial information extracted from the financial statements of Ardea Resources Limited as at 30 June 2019 and the transactions relating to the Offers.

The extracted historical financial information relates to those assets and liabilities being acquired by the Company as a result of an asset disposal from Ardea.

The Pro Forma Statements of Financial Position incorporate the proposed transactions as detailed in Appendix 2 of this report.

## Directors' responsibility

The Directors are responsible for the preparation and presentation of the Pro Forma Financial Information, including determination of the Pro Forma adjustments. This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of Pro Forma Financial Information that is free from material misstatement, whether due to fraud or error.

## Our responsibility

Our responsibility is to express a limited assurance conclusion on the Pro Forma Financial Information based on the procedures performed and the evidence we have obtained.

We have conducted our engagement in accordance with the Standard on Assurance Engagements ASAE 3450 "Assurance Engagements Involving Corporate Fundraisings and/or Prospective Financial Information".

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures.

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.

A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.



#### Conclusion on the Pro Forma Financial 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 Appendix 1 of this report:

- a) Does not fairly represent the Pro Forma Statements of Financial Position adjusted for the effects of the Offers and material events occurring subsequent to 30 June 2019;
- 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.

## Other matters including 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 an 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 context in which it is included. At the date of this report, this consent has not been withdrawn.

Yours faithfully

MARIUS VAN DER MERWE CA

More

Director

ABN 61 112 942 373

Liability limited by a scheme approved under Professional Standards Legislation

RCA No. 289109



	Notes	30 June		rma Financial on 30 June 2019 Maximum
		2019	Subscription	Subscription
		\$'000	\$'000	\$'000
Current Assets				
Cash and cash equivalents	2	-	4,000	7,000
Total Current Assets		-	4,000	7,000
Non-Current Assets				
Property, plant and equipment	3	-	367	367
Exploration and evaluation costs	4	_	7,413	7,413
Total Non-Current Assets		-	7,780	7,780
Total Assets			11,780	14,780
Current Liabilities				
Trade and other payables	5	-	-	-
Total Current Liabilities		-	-	-
Total Liabilities			-	-
Net Assets			11,780	14,780
Equity				
Contributed equity	6	-	10,580	13,580
Reserves	7	_	1,200	1,200
Retained Earnings		-	-	-
Total Equity		-	11,780	14,780

TO BE READ IN CONJUNCTION WITH APPENDIX 2



## 1 Statement of significant accounting policies

#### Statement of Compliance

The Pro Forma Financial Information has been prepared in accordance with the measurement requirements, but not the disclosure requirements, of the Australian Accounting Standards.

#### **Basis of Preparation**

#### Going concern

The financial information has been prepared on a going concern basis which contemplates the continuity of normal business activities and the realisation of assets and discharge of liabilities in the ordinary course of business. The Company has not yet generated revenues from operations. As such, the Company's ability to continue as a going concern will depend on the successful closure of the Offers.

## **Accounting policies**

The financial information has been prepared on an accruals basis and is based on historical costs, except for certain financial instruments measured at fair value.

The following is a summary of the material accounting policies adopted by the Company in the preparation of the financial information.

## (a) Cash and cash equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to insignificant risk of changes in value.

## (b) Exploration and evaluation expenditure assets

Costs arising from the acquisition of exploration and evaluation activities are carried forward where these activities have not, at reporting date, reached a stage to allow a reasonable assessment regarding the existence of economically recoverable reserves. The ultimate recoupment of costs carried forward for exploration and evaluation phases is dependent on the successful development and commercial exploitation or sale of the respective areas of interest. Ongoing exploration activities are expensed as incurred.

Exploration and evaluation assets shall be assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount, in particular when exploration for and evaluation of mineral resource in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the company has decided to discontinue such activities in the specific area.

## (c) Property, plant and equipment

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the asset and costs directly attributable to bringing the asset to a working condition for their intended use.

#### (d) Trade and other payables

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost when the company becomes obliged to make payments resulting from the purchase of goods and services. The amounts are non-interest-bearing, unsecured and are usually paid within 30 days of recognition.



## 1 Statement of significant accounting policies (cont'd)

#### (e) Contributed equity

Ordinary shares are classified as equity. Costs directly attributable to the issue of new shares or options are shown as a deduction from the equity proceeds, net of any income tax benefit recognised.

## (f) Critical accounting estimates and judgements

The Directors evaluate estimates and judgements incorporated into the financial information based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained internally and externally.

#### (g) Share-based payments

The fair value of options granted is recognised as an expense with a corresponding increase in equity. The fair value is measured at grant date and recognised over the period during which the option holder become unconditionally entitled to the options.

The fair value of the options at grant date is independently determined using the Black-Scholes option pricing model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk-free interest rate for the term of the option.

The fair value of the options granted is adjusted to reflect market vesting conditions, but excludes the impact of any non-market vesting conditions (for example, profitability and sales growth targets). Non-market vesting conditions are included in assumptions about the number of options that are expected to become exercisable. At each reporting date, the entity revises its estimate of the number of options that are expected to become exercisable. The employee benefit expense recognised each period takes into account the most recent estimate. The impact of the revision to original estimates, if any, is recognised in the consolidated statement of comprehensive income with a corresponding adjustment to equity.

The fair value of these equity instruments does not necessarily relate to the actual value that may be received in future by the recipients.

#### 2 Cash and Cash Equivalents

S	Minimum Subscription \$'000	Maximum Subscription \$'000
Issue of shares pursuant to Prospectus	4,500	8,000
Repayment of loan	(500)	(1,000)
Total cash and cash equivalents	4,000	7,000

The loan was provided by Ardea Resources Limited and represents costs incurred by Ardea for the benefit of Godolphin from 1 June 2019 in relation to rent, rates and exploration costs on Tenements, any Duty payable on the transfer of the Tenements or the Lewis Ponds Freehold Land to Godolphin, wages, adviser and legal expenses associated with the In-Specie Distribution, Internal Restructure and General Offer ("the Offers"). Refer to note 5 for more details.



## 3 Property, plant and equipment

	Minimum	Maximum	
	Subscription \$'000	Subscription \$'000	
Lewis Ponds Freehold Land	367	367	
Total	367	367	

The details of the freehold land can be found in Schedule 2 to the Prospectus.

#### 4 Exploration and evaluation costs carried forward

	Minimum	Maximum	
	Subscription \$'000	Subscription \$'000	
Tenements acquired from Ardea Resources Ltd	7,413	7,413	
Total	7,413	7,413	

The value of the tenements to be acquired by the Company is based on the accumulated historical acquisition and exploration costs incurred by Ardea in respect of the New South Wales tenements.

There has been no impairment of these historical costs recorded as Ardea has maintained ownership of the underlying tenements, exploration activity has been ongoing and has not yet reached the stage which enables a reasonable assessment as to the existence or otherwise of economically recoverable reserves. This treatment is in accordance with the Company's accounting policy.

#### 5 Trade and other payables

	Minimum Subscription \$'000	Maximum Subscription \$'000
Trade and other payables		<u>-</u>

Total listing and listing related costs expected to be incurred in the General Offer of the Company are \$305K and its operating costs and exploration costs from 30 June 2019 to the date of listing are expected to be \$721K, leaving a total to be paid from proceeds of \$1,026K at the date of listing.

In addition to this the Lead Manager will be paid a fee of 1% on the total proceeds from the new equity and a 5% underwriting fee on all third party funds received.

In the pro-forma the repayments are deemed to have been paid to Ardea following the receipt of funds from the proceeds of the General Offer.

If only the minimum of \$4.5M is raised then the total cash repayment will be capped at \$500K with an additional \$200K paid in fully paid ordinary shares at the 20 cent subscription price. If more than the minimum \$4.5M is raised then the repayments will be on a sliding scale based on 12.5% of funds raised up to the maximum of \$1M. If the loan is greater than \$1M, then up to an additional \$200K will be paid in fully paid ordinary shares at the 20 cent subscription price.

In each case the balance of funds payable will be written off by Ardea limiting the payments for the Company and ensuring a minimum cash position of \$4M at the time of listing.



## 6 Contributed Equity

	Number of Shares	Minimum Subscription \$'000	Number of Shares	Maximum Subscription \$'000
Issued capital on registration	100	-	100	-
Share split on de-merger	30,000,0000	6,000	30,000,0000	6,000
Issue of share under General Offer	22,500,000	4,500	40,000,000	8,000
Loan partially repaid in shares	1,000,000	200	1,000,000	200
Costs of the General Offer	-	(120)	-	(620)
Total	53,500,100	10,580	71,000,100	13,580

#### 7 Options Reserve

	Number of options	Option reserve \$'000
Opening balance at 25 June 2019	-	-
Options issued to Ardea	15,000,000	1,059
Options issued to Lead Manager	2,000,000	141
Options issued to Directors and employees		-
Total	17,000,000	1,200

The Options issued to Directors and employees will be issued under the Company's Employee Incentive Security Plan and amortised over the life of the Option. As a result, they are not considered as a Pro Forma adjustment and have not been valued as such.

The Options have been valued using the Black Scholes valuation methodology. The following table lists the inputs used to value the Options to be issued under the General Offer.

Number of Options	17,000,000
Exercise price	\$0.25
Share price at grant date	\$0.20
Life of the Options	3 years
Risk free interest rate	1.50%
Volatility	61%
Value per Option	\$0.07055



# INVESTIGATING ACCOUNTANT'S REPORT APPENDIX 2

#### Actual and proposed transactions to arrive at the Pro Forma Statement of Financial Position

Actual and proposed transactions adjusting the company's statement of financial position as at 30 June 2019 in the Pro Forma Statements of Financial Position are as follows:

#### **Pro Forma Minimum**

- a) Through the issue of 30,000,000 Shares the Company will acquire exploration assets, collectively the NSW Assets, including Tenements and the Lewis Ponds Freehold Land.
- b) The Company will issue 15,000,000 Options to Ardea upon listing. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.
- c) The Company will issue 1,000,000 Incentive options to the Directors of the Company, 2,000,000 Options to certain employees of the Company and 2,000,000 Lead Manager Options to the Company's advisors in connection with the General Offer. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve as applicable.
- d) If the Minimum Subscription is achieved, the Company will issue 22,500,000 New Shares at \$0.20 each to participating shareholders.
- e) The Minimum Subscription will result in the following:
  - i) An increase in cash of \$4,500,000 before capital raising costs, with a corresponding increase in share capital.
  - ii) The issue of 1,000,000 Shares to Ardea in part settlement of the Loan Agreement.
  - iii) Payment of capital raising costs of \$500,000 and a corresponding decrease in share capital.

#### **Pro Forma Maximum**

- a) Through the issue of 30,000,000 Shares the Company will acquire exploration assets, collectively the NSW Assets, including Tenements and the Lewis Ponds Freehold Land.
- b) The Company will issue 15,000,000 Options to Ardea upon listing. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve.
- c) The Company will issue 1,000,000 Incentive options to the Directors of the Company, 2,000,000 Options to certain employees of the Company and 2,000,000 Lead Manager Options to the Company's advisors in connection with the General Offer. The value of these Options has been determined using the Black Scholes methodology and recorded in the option reserve as applicable.
- d) If the Maximum Subscription is achieved, the Company will issue 40,000,000 New Shares at \$0.20 each to participating shareholders.
  - e) The Maximum Subscription will result in the following:
  - i) An increase in cash of \$8,000,000 before capital raising costs, with a corresponding increase in share capital.
  - ii) The issue of 1,000,000 Shares to Ardea in part settlement of the Loan Agreement.
  - iii) Payment of capital raising costs of \$710,000 and a corresponding decrease in share capital.



# Schedule 4 - Solicitor's Report



29 October 2019

The Directors
Godolphin Resources Limited
Suite 2, 45 Ord Street
West Perth WA 6005
Australia

Dear Sirs

#### SOLICITOR'S REPORT ON NSW TENEMENTS

#### 1. INTRODUCTION

This report is prepared for inclusion in a prospectus (**Prospectus**) to be dated on or about 28 October 2019 for issue by Godolphin Resources Limited (ACN 633 779 950) (**Godolphin Resources**) for an Offer of up to 40,000,000 Shares at a price of \$0.20 each to raise up to \$8,000,000. The minimum subscription is 22,500,000 Shares at an issue price of \$0.20 each to raise a total of \$4,500,000.

The report relates to the mining tenements (**Tenements**) in which Godolphin Resources' wholly owned subsidiary Godolphin Tenements Pty Ltd (ACN 634 219 999) (**Godolphin Tenements** or **Company**) is the transferee under transfers to be lodged with the NSW Department of Planning and Environment (**DPE**), or are held by TriAusMin Pty Ltd (**TriAusMin**), which will become a wholly owned subsidiary Godolphin Resources.

The above transfers will be lodged upon all conditions precedent of a Demerger Implementation Deed (**DID**) dated 3 October 2019 being met or waived, notably receipt of a conditional admission letter from ASX in relation to the proposed listing of Godolphin Resources. The DID was entered into between Godolphin Resources and Godolphin Tenements (together **Godolphin**), TriAusMin and Ardea Resources Limited (**Ardea Resources**) and Ardea Exploration Pty Ltd (**Ardea Exploration**, together **Ardea**).

All of the Tenements are located in New South Wales (**NSW**). The attached Tenement Schedule (**Schedule**) and notes to the Schedule contain an overview of the Tenements.

Ardea holds a 100% interest in all of the Tenements. There are encumbrances registered against a number of the Tenements, noted in the Schedule.

#### 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 holder of the Tenements;
- (b) unless otherwise specified in this report, the Tenements are in good standing, and all applicable rents and levies have been paid;
- (c) there are encumbrances or dealings registered against a number of the Tenements;
- (d) none of the Tenements are subject to any unusual conditions of a material nature other than as disclosed in the Schedule; and

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Liability limited by a scheme approved under Professional Standards Legislation



(e) subject to the comments below relating to standard administrative authorisations, which are normally applied for at the time of finalising the details of individual exploration programs, 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.

#### SEARCHES

For the purpose of this report, we have obtained and reviewed:

- (a) searches of the Tenements in the mining tenement register (**Register**) maintained by the Division of Resources and Geoscience of the NSW Department of Planning and Environment (**DPE**) under the *Mining Act* 1992 (NSW) (**Mining Act**) and *Mining Regulation* 2016 (NSW) (**Mining Regulation**) conducted on 19 October 2019;
- (b) summary searches of the NSW Tenements on the 'MinView' online system maintained by the DPE conducted on 18 October 2019;
- (c) searches of the native title register maintained by the National Native Title Tribunal on 18 October 2019; and
- (d) searches of the Aboriginal Heritage Information Management System maintained by the Office of Environment and Heritage (NSW) on 17 June 2019.

#### 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 various government agencies;
- (b) we have been advised that there are no contracts, agreements or arrangements entered into by Ardea relating to the Tenements, except for the finder's fee agreement for Lewis Ponds (see Note 6 of the Schedule);
- (c) where any agreement, dealing or act (including disturbing the land for exploration) affecting the Tenements requires an authorisation, approval, permission or consent (**Authorisation**) under the 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 and been advised by Ardea that the relevant title holder has complied with all applicable provisions of the Mining Act and all other legislation relating to the Tenements; and
- (f) we have not researched the underlying land tenure in respect of the Tenements to determine if:
  - (i) native title rights have or have not been extinguished, or the extent of any extinguishment; or
  - (ii) the Tenements encroach on any private land in which the rights to minerals have been reserved to the owner of the land.

#### 5. **TENEMENT SCHEDULE**

The Tenements comprise 12 exploration licences (prefix **EL**) and one mining lease (prefix **ML**) granted under the Mining Act, and three applications for exploration licences (prefix **ELA**) to be granted under the Mining Act. The ELs are for Group 1 Minerals, comprising metallic minerals. ML 7039 "Calarie" is for gold, silver and platinum.

The Schedule sets out a brief description of the Tenements and a summary of any encumbrances.

In relation to the area of each Tenement specified in the Schedule:

- (a) the area is described by units, given by one minute of latitude by one minute of longitude on the earth's surface. In the general location of the Tenements each unit is approximately 2.9 square km. Areas given in square km are therefore approximate only. It is not possible to verify those areas without conducting a survey; and
- (b) the area might be reduced by a number of exclusions, including the existence of mining leases, National Parks or reserves situated within the boundaries of the relevant Tenement.



#### 6. BACKGROUND ON EXPLORATION LICENCES AND APPLICATIONS IN NSW

#### (a) Rights of a holder of an EL

The rights of a holder of an EL are subject to compliance by that holder with the provisions of the Mining Act and the terms and conditions of the licence.

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 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.

#### (b) Rights of an applicant for an ELA

The DPE 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.

#### (c) Term and transfer

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. However, ELs are generally granted and renewed for periods of three years, depending on the proposed work program and other factors. An EL may be transferred to another person upon approval by the Minister for Energy and Environment (**Minister**). In approving a transfer, the Minister may impose amended or additional conditions on the holder of the EL.

#### (d) Renewal

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 licence have been satisfactorily complied with, the full area of the EL has been effectively explored, and the proposed work program satisfactorily covers the full area to be renewed.

Provided the conditions of the Tenements continue to be met, we do not see any reason why the Minister would not grant a renewal of all of the units comprising the Tenements for further periods of three years.

#### (e) Conditions

Each of the ELs are subject to standard conditions that must be complied with, including expenditure to meet the annual proposed work program, 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 DPE prior to conducting any ground disturbing work, and include basic environmental and rehabilitation conditions, such as the removal of all waste and capping of drill holes..

The Minister's approval is required for a change of effective control of a licence holder. There is an exemption if the change of control occurs as a result of the acquisition of shares on a registered stock exchange. To the best of Resources Legal's knowledge, there is no reason why the Minister's approval will not be granted in due course.

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, re-grass, reforest or contour land that has been damaged or adversely affected by exploration activities, and the Community Consultation Code. A Review of Environmental Factors and an Agricultural Impact Statement may be required for surface-disturbing exploration activities such as drilling.

Failure by the holder of an EL to comply with these conditions may render the EL liable to cancellation.

#### (f) Access agreements

Prior to commencing exploration activities on private land, an access agreement must be entered into with the owner or occupier of the land¹. Compensation is payable for any loss or damage caused by the activities².

There are no current access agreements in place.

- 1 Section 140 Mining Act 1992 (NSW)
- 2 Section 263 Mining Act 1992 (NSW)



#### (g) Exempted areas

Under section 30 of the Mining Act the holder of an EL must obtain the consent of the Minister before exploration activities may be conducted in an "exempted area", which includes State Forests, State Conservation Areas and Crown Land. This currently applies to selected areas within Affects EL 8323 "Ophir", EL 8554 "Wiseman's Creek" and EL8586 "Gundagai North".

Obtaining the consent of the Minister for exploration activities to be conducted in an "exempted area" will require environmental assessment of any proposed ground-disturbing exploration activities. The assessment will be undertaken by the DPE in consultation with the relevant government department. It would also be expected that such consent would only be granted or denied in consultation with the relevant government department and, if granted, subject to the terms of an access agreement reached with that department in addition to any owner or occupier access agreement described in section 6(f) of this report.

#### (h) Annual rents and levies

An annual rental and an administrative levy are payable, based on the size of the EL. ELs are also subject to expenditure requirements in accordance with work programs approved by the DPE. These rental, levy and expenditure requirements are set out in the Schedule. Payment of rentals and levies are currently up to date. Failure to comply with expenditure requirements may render the EL liable to cancellation.

#### 7. BACKGROUND ON MINING LEASES IN NSW

#### (a) Rights of a holder of a ML

The rights of a holder of a ML are subject to compliance by that holder with the provisions of the Mining Act and the terms and conditions of the lease.

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

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.

#### (b) Term and transfer

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

#### (c) Conditions

The Minister's approval is required for a change of effective control of a lease holder. There is an exemption if the change of control occurs as a result of the acquisition of shares on a registered stock exchange. To the best of Resources Legal's knowledge, there is no reason why the Minister's approval will not be granted in due course.

Failure by the holder of an ML to comply with these conditions may render the ML liable to cancellation.

#### (d) Annual rents and levies

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



#### 8. ENVIRONMENTAL AND PLANNING LEGISLATION

Tenement holders may also be required to obtain approvals under and comply with environmental and planning and other legislation, including:

- (i) Environmental and Planning Assessment Act 1979 (NSW);
- (ii) Protection of the Environment Operations Act 1997 (NSW); and
- (iii) Water Act 1912 and Water Management Act 2000 (NSW).

#### 9. ROYALTIES

Tenement holders must pay royalties to the NSW government on minerals (including material containing minerals) obtained from a mining tenement. Royalties are payable quarterly and must be accompanied by a royalty return in the 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 for Group 1 Minerals, comprising metallic minerals, are generally 4% of the value of the mineral recovered<sup>3</sup>.

#### 10. REHABILITATION SECURITIES

The holder of a Tenement is required to lodge with the DPE 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. The security for each of the Tenements is \$10,000, with the exception of EL 5583 "Lewis Ponds", which is \$40,000, and ML 739 "Calarie", which is \$22,000.

#### 11. NATIVE TITLE

#### (a) Background

Native title or claims for native title exist over parts of NSW.

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 under 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**)<sup>4</sup>. 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, in this case grant the mining tenement, or if their claim becomes registered within four months after that notice.

#### (b) Right to negotiate

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

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.

#### (c) Searches

Searches conducted in the register maintained by the NNTT on 18 October 2019 showed that two Tenements, ELs 8323 "Ophir" and 8538 "Yeoval" overlap with a registered native title claim. The right to negotiate process has commenced in respect of EL 8323 "Ophir".

- 3 Section 73, Mining Regulation 2016 (NSW)
- 4 Section 233, Native Title Act 1993 (Cth)



#### (d) Effect of native title on the Tenements

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 mining lease over land where native title has not been extinguished is also subject to the right to negotiate process.

The DPE 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.

#### (e) Compensation

The Mining Act makes mining tenement holders liable for any native title compensation that may be payable as a result of the grant of the mining tenemen<sup>5</sup>. 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.

#### 12. 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 Mining Act. Subject to this exception, the NSW Heritage Act excludes the application of the 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) Heritage surveys

To satisfy the obligations under the relevant Heritage Act, 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) Heritage searches

We obtained and reviewed searches of the Aboriginal Heritage Information Management System maintained by the Office of Environment and Heritage (NSW) on 17 June 2019. The searches showed that the Tenements contain a number of known Aboriginal sites. The Company will review the location of each site when planning its exploration programs so as to ensure that activities near Aboriginal sites meet the requirements of the Commonwealth Heritage Act and the NSW Heritage Act.

There are currently no Aboriginal heritage agreements or arrangements in place affecting the Tenements, however terms have been agreed in respect of EL 8323 "Ophir", which provide for compensation payments and for heritage surveys to be conducted by the Native Title applicants prior to ground disturbing activities being conducted.



#### 13. CONSENT

This report is made on 18 October 2019 and relates only to the laws in force on that date. Resources Legal Pty Ltd has consented to the inclusion of this report in the Prospectus in the form and context in which it is included and has not withdrawn that consent prior to the lodgment of the Prospectus with ASIC.

#### 14. DISCLOSURE OF INTEREST

Resources Legal Pty Ltd will be paid normal and usual professional fees for the preparation of this report and related matters, as set out elsewhere in the Prospectus. In the past 24 months Resources Legal has performed legal work for Ardea Resources, the parent company of Godolphin Resources, and has been paid approximately \$4,000 for such work. Daven Timms, Director Principal of Resources Legal, is the son of David Timms, who holds a finder's fee set out in Note 6 of the Schedule. Daven Timms holds no interest in shares in Ardea Resources Limited or Godolphin Resources.

Yours faithfully

Daven Timms
Director Principal

**Resources Legal Pty Ltd** 



### **SCHEDULE – TENEMENTS**

Tenement	Holder <sup>1</sup>	No units/ approx. area sq km²	Grant Date	Expiry Date	Rental and levy³	Proposed expenditure⁴	Encumbrances
Godolphin Fault Gold-Base Me	etals						
EL 5583 "Lewis Ponds"	TRI	51/148	25.06.1999	25.06.2022	\$3,460 pa	\$81,000	Note "Lewis Ponds"
EL 8323 "Ophir"	AEPL	60/174	27.11.2014	27.11.2022	\$3,520 pa	\$50,000	Note "Ophir"
EL 8556 "Copper Hill East"	AEPL	100/290	05.05.2017	05.05.2020	\$6,100 pa	\$50,000	Nil
EL 8890 "Cumnock"	AEPL	149/432	26.08.2019	26.08.2024	\$9,040 pa	\$20,000	Nil
ELA 5794 "Mt Bulga"	AEPL	4/12	N/A	N/A	\$340 pa	\$10,000	N/A
ELA 5812 "Caledonian"	AEPL	120/348	N/A	N/A	\$7,300 pa	\$20,000	N/A
Mount Aubrey Gold							
EL 8532 "Mount Aubrey"	AEPL	67/194	07.03.2017	07.03.2020	\$3,160 pa	\$80,000	Nil
Yeoval Copper-Gold							
EL 8538 "Yeoval"	AEPL	100/290	19.03.2017	19.03.2020	\$5,980 pa	\$85,000	Nil
ELA 5780 "Yeoval South"	AEPL	253/733	N/A	N/A	\$6,820 pa	\$60,000	Note "Yeoval Sth"
Lachlan Transverse Zone Gold							
EL 8554 "Wiseman's Creek"	AEPL	79/229	04.05.2017	04.05.2020	\$4,840 pa	\$80,000	Note "W. Creek"
Forbes Gold							
EL 8555 "Calarie"	AEPL	35/102	05.05.2017	05.05.2020	\$2,200 pa	\$50,000	Nil
EL 8580 "Calarie Central"	AEPL	12/35	26.05.2017	26.05.2023	\$880 pa	\$75,000	Nil
ML 739 "Calarie Lachlan Mine"	TRI	0.18/0.5	23.05.1979	22.05.2021	\$510	\$35,000	Note "Calarie"
Gundagai Gold							
EL 8061 "Gundagai South"	AEPL	49/142	13.03.2013	13.03.2023	\$2,980 pa	\$69,500	Nil
EL 8586 "Gundagai North"	AEPL	47/136	20.06.2017	20.06.2020	\$2,920 pa	\$50,000	Nil
EL 8889 "Gundagai Central"	AEPL	32/93	26.08.2019	26.08.2024	\$2,020 pa	\$30,000	Nil

#### Notes

- 1. AEPL = Ardea Exploration Pty Ltd. At the date of this report AEPL, Godolphin Resources and Godolphin Tenements are wholly owned subsidiaries of Ardea Resources Limited (ASX:ARL).
  - TRI = TriAusMin Pty Ltd, a wholly owned subsidiary of ARL.
- 2. One unit is the area bounded by one minute of latitude by one minute of longitude and, depending on the location in NSW, comprises an area of approximately 2.9 square kilometres. As shown on the tenement maps contained in the Prospectus, portions have been excised from some of the units in the licences.
- 3. Schedule 9 of the Mining Regulation sets out tenement rentals and levies. The annual rental is \$60 per unit for ELs and \$6.50 per hectare for MLs. The annual administrative levy is 1% of the security deposit (1% of \$10,000 = \$100 for most tenements). The EL renewal application fee is \$2,000 plus \$12.50 per unit per year applied for, eg renewal fee for 100 unit EL for three years is \$2,000 plus \$37.50 x 100 = \$5,750. For a ML the renewal application fee is \$3,000 plus \$36 per hectare.
- 4. Proposed expenditure in the current year of the licence term, to be met through current exploration work programs approved by the DPE. For example, EL 5583 "Lewis Ponds" requires an expenditure of \$81,000 in the 12 months to June 2020. Work may include geological mapping, rock chip sampling, soil geochemical surveys, geophysical surveys, modelling of results, drilling and core logging.
- 5. Calarie: The current Mine Operations Plan for ML 739 provides only for exploration, and care and maintenance activities. Dealings and encumbrances include a Farm-in Agreement, however the farminee, Kimberley Diamonds Ltd, has withdrawn from its farm-in to Calarie.
- 6. Lewis Ponds: A portion of EL 5583, comprising former EL 1049 consisting of 2.56km² (**Property**), is subject to a finder's fee, payable to geologist David Timms, following commencement of production, or sale of the Property, capped at A\$2 million. The fee is based on 1/3 of proceeds from sale of the Property, or 1/3 of net profits from production, or 30% of any royalties received from production, from the Property.
- Ophir: Dealings and encumbrances include miscellaneous approvals, exempted area operations and native title right to negotiate (see section 11(c) of this report).
- 8. Wisemans Creek: Dealings and encumbrances include exempted area operations.
- 9. Yeoval South: The DPE has advised there is a competing tenement application; the area to be offered is likely to be significantly less than 253 units.



# Schedule 5 - Independent Technical Report

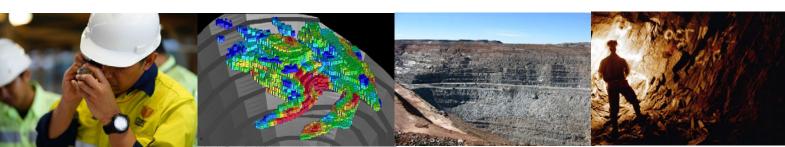


# **Independent Technical Assessment Report**

New South Wales Gold and Base Metal Projects

28/10/2019

Prepared for: Godolphin Resources Ltd



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# **Report Control Form**

**Document** Independent Technical Assessment Report, New South Wales Gold and Base

Title Metal Projects

Client Godolphin Resources Ltd

**Details** Suite 2 45 Ord St

West Perth, WA, Australia

**Issuer** Cube Consulting Pty Ltd **Details** Level 4, 1111 Hay Street

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Australia

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# **Signatures**

**Approval** 

Andrew Grieve **Coordinating Author Signature** 

BAppSc. (Geology)

MAIG

B.Sc.

**Contributing Author** Brian Fitzpatrick **Signature** 

MAusIMM CP (Geo)

Peer Reviewer Terje Hansen

B.Sc. (Geology)

**FAusIMM** 

**Signature** 

**Cube Manager** Rebecca Prain

B.Sc (Geology)

**Signature** 



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# **Key abbreviations and Glossary**

% Percent, percentage °C Degrees Celsius

μm Micron (one millionth of a metre)

Ag Silver

AIG Australian Institute of Geoscientists

Alluvial Sediment deposited by flowing water, as in a riverbed, flood plain or delta.

Alluvials Gold sourced from primary location and deposited in loose sediments by

water action

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.

Amygdaloidal Rock with a texture characterised by visible holes or open spaces

Anticline 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

As Arsenic

ASIC Australian Securities and Investments Commission

ASX Australian Securities Exchange

Au Gold

AC Air core – a drilling technique

Adit Horizontal underground working – usually developed into the side of a

hill/slope

A\$ Australian dollars

Auger Open hole drilling method using a screw-like drill rod
AusIMM Australasian Institute of Mining and Metallurgy

Ba Barium

BAppSc. Bachelor of Applied Science

B Sc Bachelor of Science

Base Metals Commonly copper, lead, nickel and zinc

Bi Bismuth

BLEG Bulk Leach Extractable Gold (assaying method)

Block Cave Underground mining method that enables the extraction of large

tonnages of material

Boda Porphyry copper-gold discovery made by Alkane Resources Ltd.

Announced September 2019 (Alkane Resources Ltd, 2019)

Boudin Usually a lenticular rock fragment enclosed within the same rock or

different rock type

Breccia A rock composed of angular fragments of minerals or rocks in a matrix

(cementing material)

Calc-alkaline Igneous rock classification – usually andesite-dacite-rhyolite series

Cambrian Geological time period – 541 to 485.4 million years ago

Carbonate Mineral containing calcium and/or magnesium, iron, manganese

carbonate

Carboniferous Geological time period – 355 to 300 million years ago

Chalcopyrite Copper iron sulphide mineral (CuFeS<sub>2</sub>)

Chert A crystalline siliceous rock usually of sedimentary origin



Co Cobalt

Colluvial Unconsolidated material deposited by the action of gravity

Conglomerate Coarse grained sedimentary rock

Crustiform Banded texture in quartz veining, generally indicative of epithermal gold

settings

Cu Copper

DD Diamond drilling method

Devonian Geological time period – 415 to 355 million years ago
Disseminated Mineralisation that is scattered throughout a rock

EL Exploration licence

ELA Exploration licence under application

EM Electromagnetic
En-echelon S-shaped veining

Epithermal Hot fluids in the upper crust (< 1 km deep)

Felsic Quartz rich composition

g/t Grams per tonne

Galena A lead sulphide mineral (PbS)

Gangue Non-mineralised material within zones of mineralisation

Godolphin Godolphin Resources Ltd

Gouge Material formed (usually clay and rock fragments) from intense

deformation

GPR Ground penetrating radar

Granite/granitoid/ An intrusive, felsic, igneous rock generally with a medium to coarse

granodiorite grained texture

Greenfield First pass exploration and/or areas that have had little or no exploration

Greenschist Low level metamorphism

GSNSW Geological Survey of New South Wales

Hanging wall The mass of rock above a geological structure, deposit, vein or fault

IPO Initial Public Offer

ITAR Independent Technical Assessment Report (VALMIN 2015)

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.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measure Mineral Resource and may only be converted to a

Probable Ore Reserve.

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.

Intermediate Igneous rock with 52-60% silica

Intrusive A body of igneous rock formed from a magma which has been emplaced

into other rocks

IΡ Induced polarisation

**IRGS** Intrusive Related Gold System Isoclinal A fold that is considered 'tight'

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

km Kilometre(s)

 $km^2$ Square kilometre(s) Koz One thousand ounces One thousand tonnes

Lamprophyre An igneous rock usually forms as dykes

A body of ore or geological feature that is thick in the middle and tapers Lens(es)

towards the ends like a convex lens

LFB Lachlan Fold Belt

Lode A vein or other tabular mineral deposit with distinct boundaries

LTZ Lachlan Transverse Zone

Metre(s) m M Million

Ma Million years ago

Mafic Igneous rocks composed dominantly of iron and magnesium minerals

Measured 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.

A Measure Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

Mesothermal Hot fluids in the upper crust (1.2-4.5 km deep)

Metamorphosed/ Rocks altered from their original form by the action of heat, pressure or metamorphic

fluids or a combination of either.



Mineral Resource/

A concentration or occurrence of material of intrinsic economic interest in Resource Estimate or on the Earth's crust in such form, quality and quantity that there are

reasonable prospects for eventual economic extraction

Mineralisation An occurrence of a mineral or element above normal levels – may or may

not be economic

MinView New South Wales Government Department of Planning and Environment

Geoscience database

ML Mining lease Mn Manganese Мо Molybdenum

Monzodiorite/Monzonite Intrusive igneous rock of intermediate composition

Mt Million tonne(s) MVA Molong Volcanic Arc

Ni Nickel

Ordovician Geological time period – 490 to 445 million years ago

Orogen Primary mechanism by which mountains are built on continents

ΟZ Ounce(s) Pb Lead

PEM Pulse electromagnetic

Phyllic Alteration associated with the intrusion of igneous rocks, includes the clay

mineral sericite

Placer Mineral accumulation due to the action of water

Porphyry Silica rich intrusive igneous rock

Potassic High temperature, high pH alteration style related to intrusions

dqq Parts per billion ppm Parts per million

Propyllitic Low temperature, high pH alteration style related to intrusions

**Pyrite** An iron sulphide mineral (FeS<sub>2</sub>) **Pyrrhotite** An iron sulphide mineral (Fe<sub>x</sub>S)

Rocks formed during explosive volcanic events **Pyroclastic** 

**QAQC Quality Assurance and Quality Control** 

Quaternary Geological time period – 2.6 million years ago to present

**RAB** Rotary air-blast drilling RC Reverse circulation drilling

Regolith Weathered profile of the rock strata

Rhyodacite An extrusive igneous rock

Rhyolitic A fine grained extrusive igneous rock containing quartz and feldspar – an

extrusive equivalent of a granite

Saddle Reef A quartz occurrence formed at the apex of folded rocks

Sedimentary Rocks formed by deposition of weathered rock particles carried by air,

water or ice

Shear A zone in which strain applied to rocks has caused textural changes

through movement

Silicic Rocks with high silica content

Silicified Original minerals have been replaced by silica

Siltstone Fine grained sedimentary rock

Silurian Geological time period – 440 to 410 million years ago



Skarn Rock formed by the contact between an intrusion and a carbonate rich

rock

Sphalerite A zinc sulphide mineral (ZnS)

Stockwork A three-dimensional vein network with no preferred vein orientation

Stope The underground excavation within the deposit where the main

production of ore takes place

Stratabound Restricted to a particular rock unit

Stratigraphic Pertaining to the composition, sequence and correlation of layered rocks
Synformal A downward fold in which strata dip away from one another forming a 'U'
Syenitic Coarse grained intrusive igneous rock with dominant feldspar and only

minor quartz

Metric tonne(s)

Tetrahedrite Copper-antimony-arsenic sulphide mineral

Tertiary Geological time period – 66 to 2.6 million years ago

Tuff/tuffaceous Extrusive igneous rock, often formed from ash falls and/or flows

US\$ United States dollar

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

VHMS Volcanogenic-hosted massive sulphide

Volcaniclastics Rocks derived from the weathering of volcanic rocks

W Tungsten

WA The state of Western Australia

WO<sub>3</sub> Tungsten oxide

Zn Zinc



# 1. Executive Summary

Cube Consulting Pty Ltd ("Cube") has been commissioned by Godolphin Resources Ltd ("Godolphin") to provide an Independent Technical Assessment Report ("ITAR") on the Godolphin New South Wales ("NSW") tenements for the purposes of the proposed listing of Godolphin on the Australian Securities Exchange ("ASX") during 2019. Cube understands the ITAR or abridged version thereof will form part of a prospectus for an Initial Public Offering ("IPO"). Godolphin has proposed that the IPO will raise a minimum of A\$4.5M, up to a maximum of A\$8M.

The purpose of this Report is to provide an independent technical assessment for inclusion in a prospectus to be issued by Godolphin to support the proposed listing on the ASX.

This Report does not provide a valuation of the mineral assets and has been prepared to the standard of, and is considered by Cube to be, a Technical Assessment Report in accordance with the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports ("VALMIN Code"). The VALMIN Code is the code adopted by the Australasian Institute of Mining and Metallurgy ("AusIMM"), The Australian Institute of Geoscientists ("AIG") and other relevant stakeholders. This standard is binding upon all AusIMM and AIG members. The VALMIN Code incorporates the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code") for the reporting of Mineral Resources and Ore Reserves.

This Report is not a Valuation Report and does not express an opinion as to the value of mineral assets or make any comment on the fairness and reasonableness of any transactions related to the proposed IPO. Aspects reviewed in this Report may include geological prospectivity, current and planned exploration activities, socio-political issues and environmental considerations; however, Cube does not express an opinion regarding the specific value of the assets and tenements involved.

Based on Cube's assessment of the NSW tenements, it is of our opinion that they are considered to be sufficiently prospective, subject to varying degrees of exploration risk, to warrant further exploration and assessment of their economic potential, consistent with the proposed programmes.

Proposed exploration expenditure for the current reporting period being two years following admission to the ASX (broadly FY2020 and FY2021) is expected to be A\$2.7M to \$5.5M (depending upon the total amount raised and progressive results), which Cube believes is sufficient to evaluate the properties to a level that Godolphin has stated in the IPO prospectus.

Neither Cube, nor the authors of this report, have or have previously had, any material interest in Godolphin or the mineral properties in which Godolphin has an interest. Our relationship with Godolphin is solely one of professional association between client and independent consultant. Cube has also not conducted any work for Ardea in the last two years. This report is prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report. Preparation of this report cost approximately A\$47,000 and is in line with the number of tenements, the areas covered and the volume of data and complexity.

Cube has based its report of the NSW tenements on information provided by Godolphin up to and including 26<sup>th</sup> October 2019. Additional information has included technical reports prepared by consultants, Government agencies, previous tenement holders project and annual technical reports, and other relevant published and unpublished data. Site visits to key prospects was also undertaken.

Where appropriate, and in accordance with ASIC Regulatory Guide 55, consent has been obtained to quote data and opinions expressed in unpublished reports prepared by other professionals on the properties concerned.



The legal status of the tenements, including Native Title considerations and other socio-political items, has not been independently verified by Cube. The current status of tenements listed in this report is based on information provided by Godolphin, and the report has been prepared on the assumption that the tenements will prove lawfully accessible for evaluation as has been the case to date.

Cube is an independent Australian owned company of consultants which has been providing a comprehensive range of specialist technical services to the mining industry in Australia and overseas since 2000.

This report has been compiled by Mr Andrew Grieve (BAppSc.), who is a professional geologist with over 25 years' experience in mine production, exploration and evaluation of mineral properties within Australia and overseas. Mr Grieve is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC code.

Mr Brian Fitzpatrick assisted in compiling the Yeoval section of the report and a technical review was completed by Mr Terje Hansen.

Cube has provided consent for the inclusion, in full or abridged by Cube, of the Independent Technical Assessment Report in the Prospectus, and to the inclusion of statements made by Cube, in the form and context in which the report and those statements appear, and has not withdrawn that consent before lodgement of the Prospectus with the ASX.

#### 1.1. Tenements

Godolphin holds interests in 10 Exploration Licences and one Mining Lease (Table 1-1). All tenements are located in Southern and Central NSW (Figure 1-1) and are held by Ardea Exploration Pty Ltd and its associated subsidiaries. A further five tenements are under application.

Cube has reviewed the list of tenements provided by Ardea using the NSW Government Department of Planning and Environment MinView database. As Cube is not qualified to provide a legal opinion of their status, potential caveats, agreements and obligations, potential investors are guided to read the accompanying Solicitors report in the Godolphin prospectus.



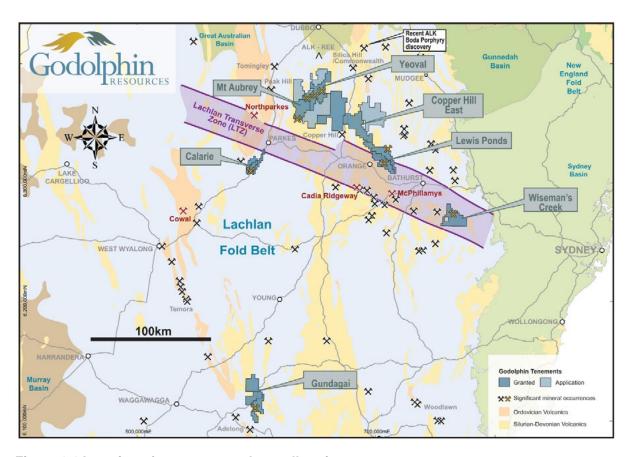


Figure 1-1 Location of tenements and overall project areas



**Table 1-1 List of Tenements** 

Project	Tenement No.	Status	Date Applied/Granted	Expiry	Area (units)	Holder (ARL Subsidiary)
Mt Aubrey	EL8532	Approved	07-03-2017	07-03-2020	67	Ardea Exploration Pty Ltd
Yeoval	EL8538	Approved	19-03-2017	19-03-2020	100	Ardea Exploration Pty Ltd
	ELA5806	Under application	16-05-2019	-	149	Ardea Exploration Pty Ltd
	ELA5780	Under application	14-03-2019	-	204	Ardea Exploration Pty Ltd
Copper Hill East	EL8556	Approved	05-05-2017	05-05-2020	100	Ardea Exploration Pty Ltd
	ELA5812	Under application	25-05-2019	-	120	Ardea Exploration Pty Ltd
Ophir	EL8323	Approved	27-77-2014	27-11-2022	60	Ardea Exploration Pty Ltd
Lewis Ponds	EL5583	Approved	25-06-1999	25-06-2022	51	TriAusMin Pty Ltd
	ELA5794	Under application	13-04-2019	-	4	Ardea Exploration Pty Ltd
Wisemans Creek	EL8554	Approved	04-05-2017	04-05-2020	79	Ardea Exploration Pty Ltd
Calarie	EL8555	Approved	05-03-2017	05-05-2020	35	Ardea Exploration Pty Ltd
	EL8580	Approved	26-03-2017	26-05-2023	12	Ardea Exploration Pty Ltd
	ML739	Approved	23-03-1979	22-05-2021	0.534	TriAusMin Pty Ltd
Gundagai	EL8061	Approved	13-03-2013	13-03-2023	49	Ardea Exploration Pty Ltd
	EL8586	Approved	20-06-2017	20-06-2020	47	Ardea Exploration Pty Ltd
	ELA5809	Under application	24-05-2019	-	32	Ardea Exploration Pty Ltd



#### 1.2. Resources

Ardea has completed and released new and updated Mineral Resource Estimates (JORC (2012)) in August 2019 for Mt Aubrey and Yeoval and for Lewis Ponds in September 2019. A summary of these Mineral Resource estimates is tabulated in Table 1-2. More detailed explanation of these Mineral Resource estimates can be found in the respective sections of this report.

Table 1-2: Summary of Mineral Resources (JORC (2012)) contained within Godolphin tenements<sup>1</sup>

Project	Tonne s (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)	AuEq (g/t)	Contained Au (Moz)	Contained AuEq (Moz)
Mt Aubrey	1.21	1.61	-	-	-	-	1.61	0.06	0.06
Yeoval	12.80	0.14	2.20	-	-	0.38	0.56	0.06	0.23
Lewis	20.24	0.50	33.30	1.5	0.7	0.10	1.80	0.31	1.16
Ponds									
TOTAL	34.25	0.40	20.48	0.9	0.4	0.20	1.32	0.43	1.45

<sup>\*</sup>Some rounding may occur

### 1.3. Regulatory Regime

All tenements fall under the NSW regulatory regime, which has a robust and workable system in place. There is considerable current mining activity and development within the area of the Godolphin tenure, including; Northparkes (China Molybdenum Co Ltd), Cadia (Newcrest Mining Ltd), McPhillamys (Regis Resources Ltd), Lake Cowal (Evolution Mining Ltd) and Tomingley (Alkane Resources Ltd).

# 1.4. Royalties and Taxes

The NSW Government can levy one of two types of royalties on non-coal minerals; Quantum and Ad Valorem. The minerals of interest to Godolphin are levied at 4% of the minerals recovered or ex-mine value, with some deductions allowed. For a more detailed explanation, readers are directed to read information on the NSW Government Department of Planning and Environment website.

# 1.5. Other Royalties

Mr David Timms owns a production royalty capped at A\$2 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. Godolphin and its subsidiaries acquired the majority of project tenements by application and therefore no royalties exist.

<sup>&</sup>lt;sup>1</sup> Gold equivalents (AuEq) were defined using the following values (21 June 2019 US\$ price, recovery): Zn (\$2585/t, 80%), Au (\$1393/oz, 100%), Ag (\$15.50, 80%), Pb (\$1915/t, 80%), Cu (\$5960/t, 80%). Au equiv. = Au(g/t) + 0.011Ag(g/t) + 0.577Zn(%) + 0.428Pb(%) + 1.331Cu(%). Gold equivalence is subjective thus indicative only and is used to allow comparisons between major deposits of the region.



# 1.6. Social Considerations, Environmental, Native Title and Land Access Issues

Most of the tenements are on freehold title held by external parties. The only exception is a portion of land within the Lewis Ponds Project that is owned by TriAusMin Pty Ltd (currently a subsidiary of Ardea Resources Ltd).

Portions of the tenements of Ophir and Wisemans Creek require Native Title agreements before access can occur. Negotiations are currently underway with the relevant parties to gain access to them.

Cube has reviewed supplied land access agreements, however, cannot form a legal opinion on these, therefore potential investors are directed to the Solicitors report accompanying the prospectus. Cube has not reviewed any Native Title agreements.

Due to the proximity to population centres and freehold land, exploration activities can be restricted. There are numerous small landholdings within some of the areas which can make negotiating access protracted. One of the highest priority exploration/development projects (Lewis Ponds) has numerous dwellings within visual contact of the potential mine workings and therefore mining activities such as blasting and placement of waste dumps will need to be carefully considered.

A review of historical exploration reports did note in some areas that there were difficulties in gaining access to freehold land to carry out exploration activities. First pass exploration carried out recently by Ardea indicates there is a good working relationship between the company and some landholders. This relationship needs to continue and build with other landowners to ensure Godolphin has access to carry out its planned activities.

# 1.7. Mt Aubrey

Mt Aubrey is located approximately 40 km northeast of Parkes and 30 km southeast of Yeoval and consists of one tenement (EL8543) of around 194 km<sup>2</sup>.

At the southern edge of the tenement there are three backfilled open pits that were mined by BHP in the early 1990s. It is reported that around 100,000 tonnes at 3.0 g/t Au were mined (Ostrowski M., 2019b) from an epithermal vein system. The tenement is also prospective for other deposit types, including porphyry copper-molybdenum, but only a few other minor historical workings are recorded.

The dominant rock types in the area are felsic intrusives, silicic to intermediate volcanics and minor sediments. There is an extensive sheeting of Tertiary and Quaternary alluvials over the tenement, especially over the southern and central portions.

Comprehensive stream sediment sampling has been carried out over the whole tenement. Other exploration activities include; surface mapping, geophysics and drilling, with the drilling mainly centred around the backfilled BHP pits.

A Mineral Resource Estimate was completed in August 2019 (Ardea Resources Ltd, 2019a), which is tabulated in Table 1-3. More details on the Mt Aubrey Resource can be found in Section 4.5.



Table 1-3: Mt Aubrey August 2019 Mineral Resource Estimate (JORC 2012<sup>2</sup>)

Category	Cut-off (Au g/t)	Tonnes (Mt)	Au (g/t)	Contained Au (oz)
Measured	-	-	-	-
Indicated	-	-	-	-
Inferred	≥ 0.50	1.21	1.61	62,400
Total		1.21	1.61	62,400

#### 1.8. Yeoval

The Yeoval tenement (EL8538) is located approximately 70 km north-west of Orange, centred around the town of Yeoval and covers an area of approximately 290 km<sup>2</sup>. This tenement is held by Ardea Exploration Pty Ltd. The area is underlain by granites, granodiorites and volcanics.

Two other adjoining tenements, ELA5780 and ELA5806 are currently under application.

There are numerous historical workings within the tenement, mainly for copper. Other later activities by various parties include; stream sediment, soil and rock chip sampling and limited drilling.

Ardea has carried out limited soil auger and rock chip sampling and the tenement is considered prospective for a porphyry copper-gold-molybdenum mineral systems.

A Mineral Resource Estimate was completed by Auger Resources in March 2009, and this has now been updated by Ardea in August 2019 (Ardea Resources Ltd, 2019b). This Mineral Resource Estimate is tabulated in Table 1-4. More details on this Mineral Resource Estimate can be found in Section 5.5.

Table 1-4: Yeoval August 2019 Mineral Resource Estimate (JORC 2012<sup>3</sup>)

Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Mo (g/t)
Inferred	12.8	0.38	0.14	2.20	120
Total	12.8	0.38	0.14	2.20	120

<sup>\*</sup>Based on a 0.2% Cu cut-off

# 1.9. Copper Hill East

The Copper Hill East Project consists of one tenement (EL8556) of around 290 km² and is located approximately 35 km north of Orange. A further tenement (ELA5812) located on the eastern side of EL8556 is currently under application.

The geology consists of Ordovician mafic volcanics and related intrusions, Silurian felsic volcanics and associated sediments.

<sup>&</sup>lt;sup>2</sup> In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A. The information in this report that relates to Mineral Resources for Mt Aubrey has been reviewed, and verified by Mr Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

<sup>&</sup>lt;sup>3</sup> In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A. The information in this report that relates to Mineral Resources for Yeoval has been reviewed, and verified by Mr Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



There are numerous historical copper and gold workings mainly concentrated in the southeast portion of the tenement. Between the tenement and the township of Molong, the Copper Hill deposit (which is located outside the current Godolphin tenement), is estimated to contain an Indicated and Inferred Resource (at 0.4% Cu cut-off) of 28 Mt @ 0.56% Cu and 0.53 g/t Au (Golden Cross Resources, 2019). The recent Boda discovery by Alkane Resources Ltd (Alkane Resources Ltd, 2019), located approximately 70 km to the north (Figure 1-1) highlights the potential of this area due to the similar geological setting.

Modern exploration activities commenced around 1975 and consisted of various greenfield exploration methodologies through to minor drilling. Ardea has carried out soil auger sampling over approximately 7 km strike length in the northwest portion of the tenement.

This area is prospective for porphyry hosted copper-gold, VHMS and epithermal/mesothermal gold deposits.

# 1.10. Ophir

The Ophir Project consists of one tenement (EL8323) of around 174 km<sup>2</sup>. It is located around 15 km northeast of Orange. Ophir is famous for being the location of Australia's first recorded gold rush. There are also several other workings in addition to the Ophir gold workings within the tenement.

The geology consists of Ordovician mafic volcanics, volcaniclastics and intrusions, Silurian-Early Devonian intermediate to felsic volcanics and volcaniclastics and Carboniferous felsic intrusions. The area appears to have a complex structural history with folding and thrust faulting present.

Only minor modern exploration activities have been carried out on the tenement, with stream sediment sampling being the most comprehensive.

This project is prospective for a variety of deposit styles including; porphyry hosted copper-gold, VHMS, orogenic gold and base metals.

#### 1.11. Lewis Ponds

Lewis Ponds consists of one tenement (EL5583) which covers approximately 148 km² located around 15 km east of Orange. This project is one of the highest priority targets for Godolphin due to the extensive historical workings and infrastructure (including the presence of historic on-site smelting), outcropping mineralisation, a current Mineral Resource Estimate and free-hold title held by TriAusMin (a subsidiary of Ardea). Another tenement (ELA5794) centred around historic workings at Mt Bulga is currently under application.

The project area contains sediments and volcanoclastic sediments, which have been structurally deformed.

The project hosts massive sulphide and shear hosted copper mineralisation with a potential later stage gold overprint.

An updated Mineral Resource was completed in July 2019 (Ardea Resources Ltd, 2019c), which is tabulated in Table 1-5. This table is the combined open pit and underground Resource. More details on the Lewis Ponds Resource can be found in Section 8.5.



Table 1-5: Lewis Ponds July 2019 Combined Mineral Resource Estimate (JORC 20124)

Category	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Measured		-	-	-	-	-
Indicated	7.95	0.3	26.2	0.1	1.1	0.4
Inferred	12.29	0.6	37.8	0.1	1.7	0.8
Total	20.24	0.5	33.3	0.1	1.5	0.7

<sup>\*</sup>Some rounding may occur

#### 1.12. Wisemans Creek

The Wisemans Creek Project is centred around the town of Oberon, consists of one tenement (EL8445) and covers an area of approximately 229 km<sup>2</sup>.

Historically this area has been an active mining area with commodities such as; gold, copper, tungsten, molybdenum, lead, zinc and silver being exploited.

Exploration in the area has been recorded from the late 1960s through to the present day. The project area is mainly prospective for epithermal gold-silver and skarn and mesothermal type mineralisation.

#### 1.13. Calarie

There are three tenements (EL8555, EL8580 and ML739) within the Calarie Project, covering an approximate area of 137 km<sup>2</sup>. The tenements are located directly to the north of the township of Forbes.

The tenements are located within the Forbes-Parkes Belt, which hosts numerous medium to large scale Mineral Resources and more recent historical and active gold mines including; London Victoria (BHP), Peak Hill (Alkane) and current Tomingley gold mine (Alkane). There are also numerous historical workings throughout the tenement, especially around the historic mining centre of Calarie.

The area is prospective for gold, which are usually structurally hosted within sediments and on favourable lithological contacts.

Systematic recent exploration has occurred over the area by various parties since the late 1980s, ranging from geochemical methods, geophysics, through to drilling.

Prior mineral estimation work has been undertaken at Calarie by various companies, however, these estimations are not compliant with JORC (2012) and cannot be disclosed by Godolphin.

## 1.14. Gundagai

There are two tenements within the Gundagai Project; EL8061 (Gundagai South) and EL8586 (Gundagai North) totalling around 278 km², located south and north respectively from the town of Gundagai. Another tenement (ELA58090) which joins together the already existing granted tenements is under application.

<sup>&</sup>lt;sup>4</sup> 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 Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



This area has a long history of mining and hosts abundant historical workings, mainly for gold, but also minor copper. There are no current mining activities or reportable Mineral Resources located within these tenements or adjacent areas.

Due to the past mining activities, exploration within the area commenced in the mid-1960s and has essentially continued at a low level since.

The area is prospective mainly for orogenic gold and Intrusive Related Gold Systems (IRGS), but also has the potential for VHMS and porphyry hosted copper-gold deposits.



### 2. Introduction

## 2.1. Scope and Terms of Reference

Cube has prepared this ITAR on behalf of Godolphin for use in a prospectus to support an IPO of their NSW tenements.

Godolphin's assets consist of 11 tenements (ten exploration licences and one mining lease) within the prospective Lachlan Fold Belt (LFB), covering approximately 1511 km² located in Central and Southern NSW. A further five exploration licence applications have been submitted. The current granted tenements have been divided into eight different Projects (Figure 1-1). These Projects include:

- Aubrey
- Yeoval
- Copper Hill East
- Ophir
- Lewis Ponds
- Wisemans Creek
- Calarie
- Gundagai

The Projects are mainly prospective for gold and base metals and the majority of these Projects have undergone historical mining activity. More recent exploration activities over these Projects have ranged from greenfield activities such as mapping and auger sampling, through to more advanced activities such as drilling and estimation of Mineral Resources.

A tenement schedule was supplied to Cube by Godolphin to define the project areas for the ITAR. The agreed scope with Godolphin included the following:

- Tenure, permitting and royalties (a high-level review as a detailed review will be undertaken separately by suitably qualified legal personnel).
- Environmental status, liabilities and land access (high-level).
- Data origin/source, validity, QAQC and management/storage.
- · Planned exploration activities.
- Geology local and regional.
- Prospectivity.
- Resources (Lewis Ponds, Yeoval and Mt Aubrey).
- Future activities development plans and budgets.
- A site visit to selected Projects was required to review:
  - o access and infrastructure
  - o on-ground geology
  - historical workings
  - o historical and current exploration activities and data.

This Report does not provide a valuation of the mineral assets and has been prepared to the standard of, and is considered by Cube to be, an Independent Technical Assessment Report in accordance with the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports (VALMIN Code). The VALMIN Code is the code adopted by the Australasian Institute of Mining and Metallurgy (AusIMM) and the standard is binding upon all AusIMM members. The VALMIN Code incorporates the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) for the reporting of Mineral Resources and Ore Reserves.



## 2.2. Background

Ardea has an extensive tenement portfolio throughout NSW and WA, which are at various stages of exploration and development (Figure 2-1). These projects include:

- the advanced Goongarrie Nickel-Cobalt Project in WA
- gold and nickel sulphide projects in WA
- gold and base metal projects in NSW.

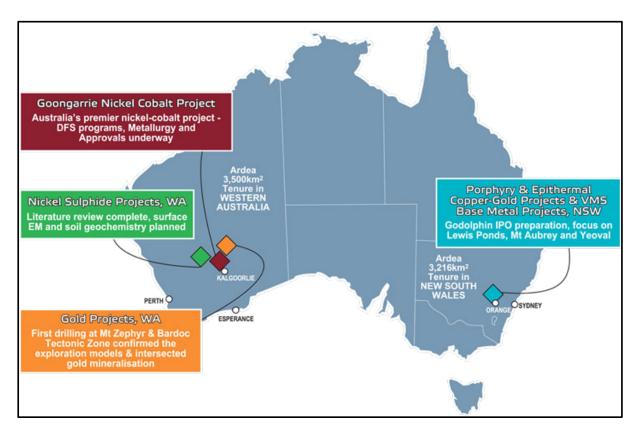


Figure 2-1 Location of Ardea Projects

The Goongarrie Nickel-Cobalt Project ("GNCP"), within the Kalgoorlie Nickel Project ("KNP"), is the most advanced, with a Mineral Resource of 773 Mt at 0.7% Ni and 0.05% Co. Pre-feasibility studies for 1.0 Mtpa and 1.5 Mtpa throughput options have been completed, as well as a Scoping Study for a 2.25 Mtpa option. Definitive Feasibility Study ("DFS") programs are currently in progress (Ardea Resources Ltd, 2019).

The WA gold and nickel sulphide assets are at various stages of exploration and development, with first pass drilling already completed at Mt Zephyr and the Bardoc Tectonic Zone.

The Ardea NSW tenements consist of eight Projects, which are prospective for gold and base metals. Most have a long history of mining activities, have various levels of modern exploration activities already carried out, and three have current Mineral Resource Estimates.

Ardea intends to spin out the NSW gold and base metal Projects into the separate listed entity of Godolphin to enable Ardea to concentrate on its WA projects. It is proposed that the IPO consist of the



issue of least 22.5M shares to a maximum of 40M shares, to raise from a minimum of A\$4.5M to a maximum of A\$8M.

## 2.3. Reporting Standards

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

Cube has relied on several sources of information, including relevant published and unpublished third-party information, and public domain data. This included copies of reports supplied by Ardea associated with the tenements, both historic and current open file company reports. Cube has reviewed these reports and cross-checked a selection with the open file report databases of the NSW Government Department of Planning and Environment Geoscience database ("MinView"). Cube has accepted the data provided by Godolphin subject to these checks at face value. Cube has sought written confirmation from the directors of Godolphin and Ardea that all the information available in their possession or knowledge relating to the tenements has been made available to Cube.

Cube has validated the tenement information provided by Godolphin via the NSW Government Department of Planning and Environment MinView database, however potential investors are recommended to review the accompanying Solicitor's Report on Tenements that is contained within the Prospectus, as Cube 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 may exist with any third parties.

Cube has sought and received written confirmation from the Directors of Godolphin and Ardea that a full, accurate and true disclosure of all material information has been supplied.

Mr Andrew Grieve has visited the Mt Aubrey, Yeoval, Copper Hill East, Ophir and Lewis Ponds Projects to conduct on-site reviews. The site visit confirmed the existence of historical mining activities, recent exploration activities, both mineralised and non-mineralised outcrop, access, infrastructure and potential socio-political issues. Site visits were not made to Wiseman's Creek and Gundagai as these Projects were considered as earlier stage exploration Projects.

## 2.5. Reliance On Other Experts

Cube has relied on other experts with respect to:

- Lewis Ponds, Yeoval and Mt Aubrey Mineral Resources: JORC (2012) Mineral Resource
  estimates have been completed by Mr Johan Lambrechts. Mr Lambrechts has consented on
  his report as part of this ITAR as noted in Table 1-3, Table 1-4 and Table 1-5.
- Tenement legality: Cube has relied on a report by Resources Legal Pty Ltd.

# 2.6. Competent Persons and Practitioner Statements

Information in this report that relates to Technical Assessment reflects information compiled and conclusions derived by Mr Andrew Grieve (BAppSc.), who is a Member of the Australian Institute of Geoscientists. Mr Grieve is a full-time employee of Cube Consulting Pty Ltd. Mr Grieve has sufficient



experience to the Technical Assessment under consideration and to the activity which he is undertaking to qualify as a Practitioner as defined in the as defined in the 2015 edition of the 'Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets'. Mr Grieve consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this Prospectus that relates to Mineral Resources is based on information compiled by Johan Lambrechts, B Sc (Hons), who is a Member of the Australian Institute of Geoscientists. Johan Lambrechts 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' (the "JORC Code"). Johan Lambrechts consents to the inclusion in this Prospectus of the statements based on his information in the form and context in which they appear.



# 3. Regional Information

## 3.1. Geology

The tenements lie within the Lachlan Fold Belt (LFB), also known as the Lachlan Orogen, which was part of a convergent plate margin that formed part of Gondwana. The LFB is dominated by Lower Palaeozoic sediments, calc-alkaline volcanics and granitic intrusions. Accretion started during the late Ordovician (~450 Ma) resulted in various stages of deformation and metamorphism (Foster & Gray, 2000).

On a more local scale, the Ardea tenements are located within or adjacent to the Lachlan Transverse Zone (LTZ). This is a west-northwest trending zone that extends from the western part of the LFB and into the Sydney Basin. The western part is defined by west-northwest trending faults with the eastern section having similar trending faults and folds, both of which are later than the main structures contained within the LFB. The LTZ is thought to be a reactivation of a deep crustal weakness (Glen & Walshe, 2010). Many of the significant mineral deposits in the area lie within or adjacent to this zone e.g. Cadia, McPhillamys and Northparkes (Figure 1-1).

Of particular interest, the Lewis Ponds, Ophir and Copper Hill East tenements, lie on or in close proximity to the Godolphin Fault. This is a shallow east-dipping structure, which forms part of an east dipping thrust zone. The Godolphin Fault and its northern correlative, the Narragul Fault, demarcates through a series of sidesteps and splays the domains of the Ordovician Macquarie Arc in the west from the Silurian Hill End Trough in the east. This structure hosts copper and gold mining centres and targets such as McPhillamys, Springfield, Mt Shorter, Calula and Copper Hill.

# 3.2. Climate, Vegetation and Topography

The Orange region has a temperate climate with mean maximum temperature of around 10°C and 25°C in winter and summer respectively. Snow falls are not uncommon. The average annual rainfall is 916 mm. Climate conditions have little or no impact on exploration or mining activity.

Topography varies from flat to low undulating around drainage areas to steeply undulating ranges and hills to the south-west and north-east of Orange at elevations up 922 m.

In the majority, the lower lying and undulating areas have only remnant vegetation and is mainly used for sheep and cattle grazing, while the steeper areas are forested with primary eucalypt or lumber (commonly pine) plantations. Elevated timbered areas are often characterised by historic mining activities.

#### 3.3. Infrastructure

Orange is a major regional centre, with a population of approximately 40,000 located about 200 km west-northwest of Sydney. The area is well serviced by major roads and has daily air and road services to Sydney. An extensive rail network already services the mining sector.

# 3.4. Current Mining Activity

There are several major open pit and underground mining operations in the vicinity of the Godolphin tenements including:



- Cadia Valley Operations (Newcrest Mining Ltd) Large tonnage underground block cave copper-gold mine, located 25 km southwest of Orange. In FY2017-18 it produced 600 Koz of gold and 62 Kt of copper. Cadia has a Mineral Resource of 38 Moz of gold and 8.3 Mt of copper.
- McPhillamys (Regis Resources Ltd) Located 8 km from Blayney and 20 km southeast along the Godolphin Fault structure from Lewis Ponds. McPhillamys has a Reserve of 60.1 Mt at 1.05 g/t Au and currently has development applications in progress.
- Northparkes (CMOC) Underground copper-gold mine. Processed 6.5 Mt in 2017. No public reportable Mineral Resources or Reserves are available.
- Tomingley (Alkane Resources Ltd) Current open pit gold with underground development in progress. Located approximately 50 km to the southwest of Dubbo and 50 km northwest of the Mt Aubrey Project. In FY 2017-18 produced 79 Koz of gold and has an Indicated and Inferred Mineral Resource of 6.8 Mt at 2.0 g/t Au.



# 4. Mt Aubrey

### 4.1. Location and Access

EL8532 is located approximately 70 km northwest of Orange, centred on the locality of Baldry (Figure 4-1). Renshaw McGirr Way, which is a sealed road running from Yeoval to Parkes, runs through the centre of the tenement. The tenement covers an area of approximatley 194 km<sup>2</sup>.

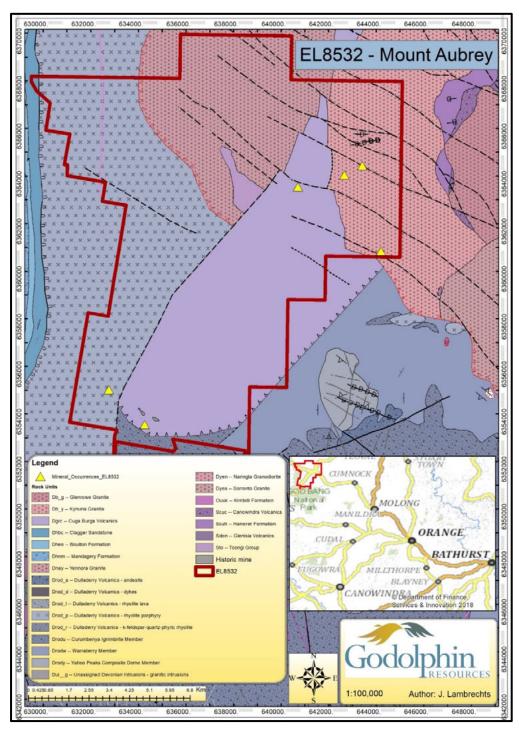


Figure 4-1: Location of the Mt Aubrey tenement (inset map), geology and mineral occurrences



## 4.2. History

This project has only minor historical workings (there are gold workings at Blue Hills (Figure 4-4) and there are references to other workings from the 1880s around Mt Aubrey). Recent activity did include BHP in 1990 mining three shallow oxide pits at Mt Aubrey, producing around 100,000 tonnes of ore at around 3.0 g/t Au. The deposit was based on an epithermal vein system.

## 4.3. Geology

### 4.3.1. Setting

The north to north-eastern part of the project area is dominated by the Yennora and Kynura granites. There are also small outcrops of the Cuga Burga mafic volcanics throughout and in the southern area the Dulladerry Volcanics. An amygdaloidal basalt within the Dulladerry Volcanics hosts the Mt Aubrey gold deposit mined by BHP.

There is an extensive sheeting of Quaternary gravels, particularly in the southern portions of the tenement, which has made the collection of relevant soil geochemistry difficult (requiring a vehicle-mounted auger typically drilling to 2 m to take a representative sample).

#### 4.3.2. Alteration and Structure

The north-eastern corner of the tenement is crossed by a series of northwest trending faults, which appear to slightly offset the stratigraphy.

A west-northwest orientation of the Mt Aubrey deposit is thought to be an en-echelon array partly controlled by the location of major north trending regional structures to the west and east of EL8532 (Ostrowski M., 2019a).

#### 4.3.3. Deposit Type and Mineralisation

The Mt Aubrey deposit, mined by BHP, is within an approximately 6 km long east-west trending vein system (Figure 4-2). Quartz vein textures and fluid inclusion studies indicate an epithermal type deposit (Ostrowski M., 2019a). The Cube site visit also noted similar style mineralisation and associated rock types including; bladed textures and siliceous cap material (Figure 4-3).



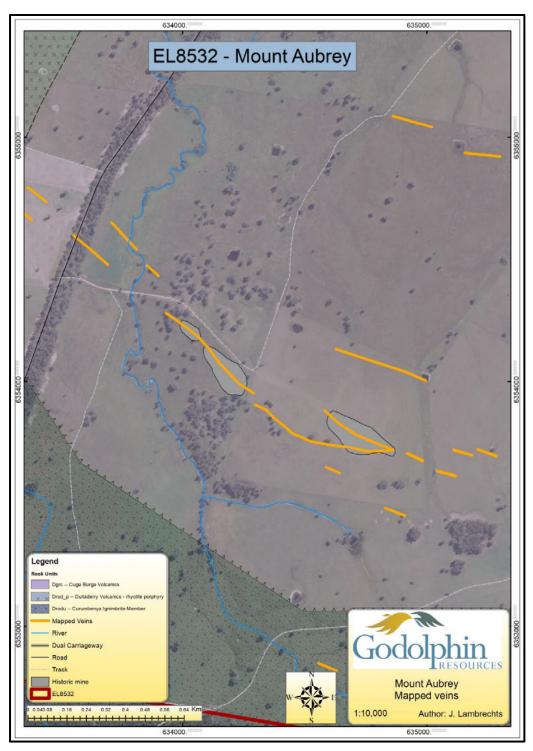


Figure 4-2: Mapped extent of Mt Aubrey vein system





Figure 4-3: Bladed textures and siliceous cap material

Surface mapping and drilling indicates that the Mt Aubrey vein system pinches, swells and bifurcates along strike and it is postulated that the vein system has preferentially developed within the more brittle and chemically favourable amygdaloidal basalts rather than the other surrounding felsic rocks.

Information pertaining to the Blue Hills workings (Figure 4-4) is scarce, with MinView database only noting epithermal veining, however mapping indicates this is a strike extension to the main Mt Aubrey vein set (Figure 4-2).

Further north, the Moly Veins (Figure 4-4) are noted to have molybdenite within veining hosted in the Kynuna Granite.

### 4.4. Previous Work

Records indicate that modern exploration commenced in the area by Anaconda in the 1960s. Numerous companies have been active in the area including; Samedan, Geopeko, BHP, Newcrest and Alkane. A brief summary of their activities is tabulated in Table 4-1. A tenement review by Ostrowski (2019a) has determined a series of prospect areas (Figure 4-4) and these are used to tabulate a summary of exploration activities and the results (Table 4-2).



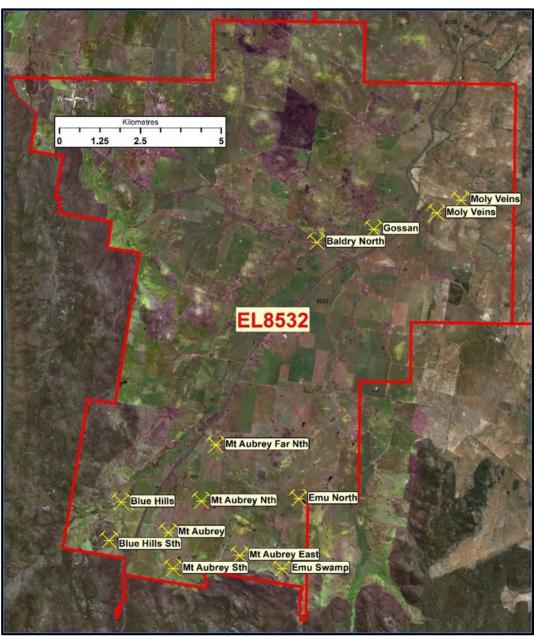


Figure 4-4: Prospect locations within the Mt Aubrey Project



Table 4-1 Summary of Historic Exploration Activities at Mt Aubrey and Surrounds (Source: (MinView, 2019))

Company	Year	Activities	
Geopeko	1980s	Reconnaissance mapping and sampling	
Samedan Oil Corp.	1982-1983	Regional mapping, stream sediment; rock chip sampling	
Austamax	1985	Regional reconnaissance; stream sediment; rock chip sampling	
ВНР	1989-1991	Stream; rock chip; soil geochemistry; IP; exploration/Resource definition drilling and mining of Mt Aubrey deposits	
Newcrest	1991	Drill testing of Mt Aubrey extensions	
Geopeko	1993	Reconnaissance; rock chip; stream sediment	
Mt Conqueror Minerals	1998	ock chip	
PMW Gold Mining	1998-2001	ock chip	
Alkane Resources	2000-2002	arget generation; RAB	
YTC Resources	2007-2015	Mapping; rock chip; drilling at Mt Aubrey and Blue Hills; IP at Mt Aubrey	
Ardea Resources	2017-present	Data review; mapping; auger; GPR at Mt Aubrey; 2019 Mineral Resource Estimate for Mt Aubrey	

Table 4-2 Summary of Exploration Results by Prospect within EL8352 (Source: (MinView, 2019) and (Ostrowski M., 2019a))

Prospect	Historic Activity	Modern Exploration	Results
		Activities	
Moly Veins	None	Surface geochemistry	Weakly anomalous Au, Pb and Zn
Gossan	None	Surface geochemistry	Weakly anomalous Au, Pb and Zn
Baldry North	None	Surface geochemistry; mapping; RAB	Alkane RAB drilling, 105 holes, no significant assays, anomalous BLEG and rock chips
Mt Aubrey Far North/Far North	None	Surface geochemistry; drilling; geophysics	Epithermal quartz float – 5.6 g/t and 2.25 g/t Au
Blue Hills/South	Underground and shallow surface workings - Au	Mapping; geophysics; sampling; drilling	No significant drilling results
Mt Aubrey	3 x BHP open pits	Drilling; mapping; rock chip; geophysics; GPR	Resource identified from drilling. Drilling along strike and below pits limited and shallow; 2019  Mineral Resource Estimate – 1.21 Mt @ 1.61 g/t Au (Inferred)
Mt Aubrey South	None	Mapping; surface	AC drilling – 2 m @ 1.45 g/t Au; 1 m @ 5.77 g/t Au; 2 m @1.16 g/t Au; IP anomalies drill tested
and East		Geochem; IP; drilling	- narrow < 1 g/t Au. Wider intercepts in eastern area - 19 m @ 0.52 g/t Au
Emu North/Emu	None	Surface geochemistry;	
Swamp		mapping; drilling	Sub-crop quartz identified; rock chip 3.35 g/t Au; 350 m x 100 m Au soil anomaly



Ardea has completed some ground-based activities including; general reconnaissance, GPR, rock chip sampling and auger drilling. The soil auger programs were completed along strike from the Mt Aubrey deposit and at the Emu Swamp prospect. The Mt Aubrey program returned anomalous results at both strike extensions (Figure 4-5) with results up to 103 ppb Au. The Emu Swamp program returned anomalous molybdenum values as shown in Figure 4-6, which were also associated with anomalous rock chip samples.

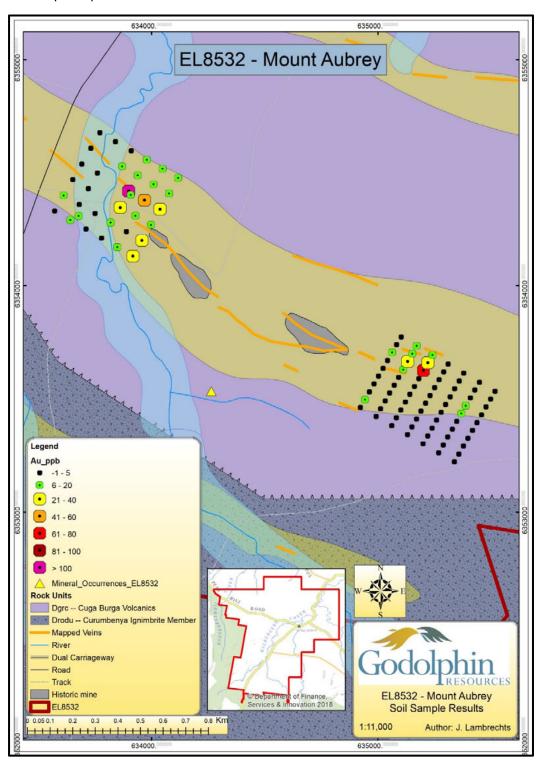


Figure 4-5: Soil auger results (Au ppb) - Mt Aubrey



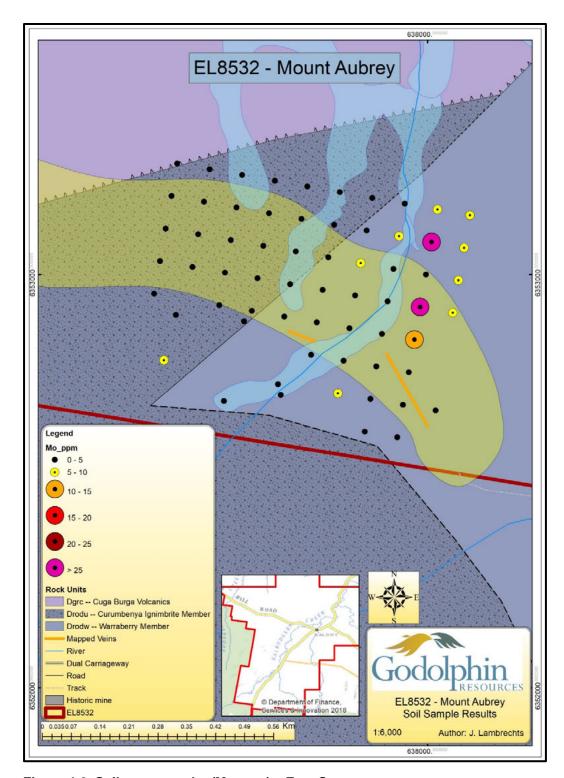


Figure 4-6: Soil auger results (Mo ppm) - Emu Swamp prospect

### 4.5. Resources

A Mineral Resource Estimate was completed in August 2019 (Ardea Resources Ltd, 2019a). The Mineral Resource Estimate was reported using a number of gold cut-off grades as tabulated in Table 4-3 and all Resources were classified as Inferred. A ≥0.5 g/t Au cu-off was used as a base case.



Table 4-3: Mt Aubrey August 2019 Mineral Resource Estimate (JORC 2012<sup>5</sup>)

Category	Cut-off (Au g/t)	Tonnes (Kt)	Au (g/t)	Contained Au (oz)
Inferred	≥0.25	2,140	1.07	73,600
	≥0.50	1.208	1.61	62,400
	≥ 0.75	894	1.96	56,300
	≥1.00	679	2.30	50,300

<sup>\*</sup> Tonnages are rounded to the closest one hundred thousand and gold to the second decimal place

The following is a summary of the data, parameters and methodology used in the 2019 Mineral Resource Estimate:

- The deposit is hosted in a 130 m thick pillow-textured, subaqueous amygdaloidal basalt and the mineralisation consists of low-sulphidation epithermal-style quartz veining that pinches, swells and bifurcates along an approximate 7 km strike length that trends in a west north-west direction.
- The percussion drilling (RC, RAB and AC) was sampled on 1 m intervals. The majority of the DD was sampled on 1 m, with some sampled on other interval lengths to take into account changes in geology and mineralisation. DD drilling samples were collected on half core.
- The Mineral Resource Estimate was calculated from 219 drillholes (157 RC, 3 DD, 28 AC and 31 RAB) consisting of 9,382 m of drilling. There were two major periods of drilling. These included:
  - BHP Gold (1987 1990)
  - o YTC Resources (2007 2011)
- The whole Resource was classified as Inferred. In some areas the drill spacing of 20 m x 20 m would be sufficient to classify as Indicated or Measured, but the Inferred category was assigned due to concerns about historic data integrity and assignment of void pit shapes using ground penetrating radar (GPR) rather than survey data.
- Analysis for gold was undertaken by fire assay.
- Four separate mineralisation domains were created using implicit modelling in Leapfrog software and these domains were estimated by ID<sup>2</sup> using Leapfrog Edge. Search parameters were based on the variogram models with ellipsoid searches being used to set a maximum of 20 and minimum of 10 samples for each interpolation. Parent cells of 5m (X), 10 m (Y) and 10 m (Z) and subcells of 1 m (X), 1m (Y) and 1 m (Z) were used. Validation of the estimation was carried out using historic production reports.
- No top-cuts were applied as it was considered that there were no extreme outliers. The Mineral Resource Estimate was reported on a ≥ 0.50 g/t cut-off, but also reported in ≥0.25 g/t, ≥0.75 g/t and ≥1.00 g/t (Table 4-3).
- No geotechnical or metallurgical testwork has been completed on Mt Aubrey drill samples. Due
  to the historic production from Mt Aubrey and similar low-sulphidation epithermal gold deposits
  within the LFB, it was assumed that it would be amenable to conventional open pit mining and
  processing.

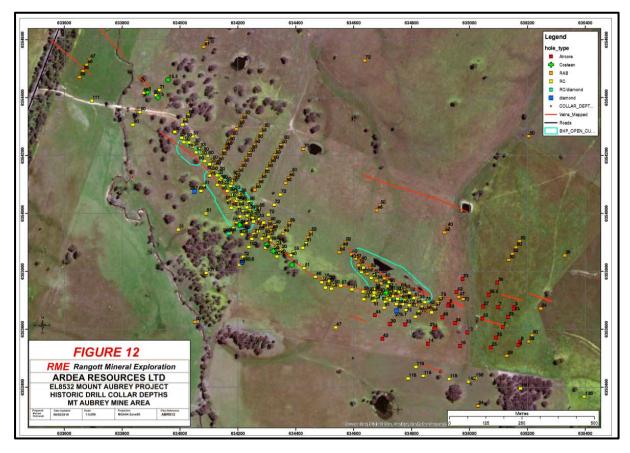
<sup>&</sup>lt;sup>5</sup> In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A. The information in this report that relates to Mineral Resources for Mt Aubrey has been reviewed, and verified by Mr Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



For a more detailed explanation of the Mt Aubrey 2019 Mineral Resource Estimate, readers are directed to read the Ardea ASX release dated 28<sup>th</sup> September 2019 (Ardea Resources Ltd, 2019a) or to Appendix 1 in this report.

# 4.6. Exploration Potential

There is a high potential to increase the current Mineral Resource for Mt Aubrey as most of the current drilling is restricted to around 50 m below surface and also restricted along strike (Figure 4-7), hence leaving large sections poorly or not tested at all. In 2007, YTC Resources drilled three diamond holes beneath the existing drilling in which all holes intersected anomalous values, but due to their wide spacing (250-350 m) higher grade shoots could have been missed. There is also some uncertainty on drill collar locations, in which Ardea where unable to confirm. It is recommended that drilling initially be targeted at down plunge areas of shoots that have already been identified.



Source: (Ostrowski M., 2019b)

Figure 4-7: Drilling types and locations in and around Mt Aubrey prospect

Modelled images from GPR that was commissioned by Ardea to determine the location and depth of the backfilled BHP pits, has highlighted potential veining below the existing pits that align with mapped surface veining (Figure 4-8). These require confirmation drill testing to determine their nature. Recent soil geochemistry by Ardea along strike to the east and west of the historic pits has also highlighted gold anomalies (Figure 4-5) again highlighting potential untested mineralised strike extensions.



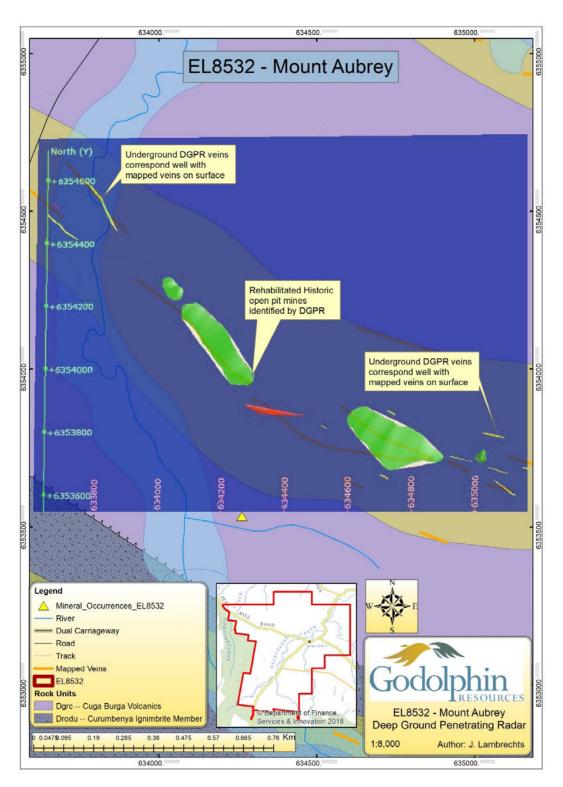


Figure 4-8: Modelled GPR Image

There are several other locations adjacent to main Mt Aubrey area that show interesting potential that warrant follow-up. These include (in no particular order):

 An area approximately 1 km north of Mt Aubrey (Mt Aubrey North) that has mapped east-west trending veins, significant areas of epithermal textured quartz float with anomalous gold values.
 This area also has co-incident induced polarisation (IP) anomalies similar to Mt Aubrey.



- The Emu Swamp area has returned molybdenum anomalies from recent soil auger testing, has
  mapped veins that have significant rock chips values, noted strong sericite alteration and is
  along strike from the known Mt Aubrey deposit.
- The area around the historic Blue Hills workings along strike from Mt Aubrey where there is mapped veining, significant rock chips and noted strong alteration.

# 4.7. Proposed Exploration

Godolphin is planning to undertake an RC drilling program in and around the Mt Aubrey deposit and use this to update the geological model and the current Mineral Resource Estimate. This may also lead to defining further drilling activities. Oriented core from diamond drilling is planned to define vein orientations and to obtain unbroken material for bench-scale metallurgical test work.

Portions of the tenement will also be soil sampled – mainly concentrating in the areas of Blue Hill, Mt Aubrey South, Far North and East, as well as Emu Swamp.

For the FY2020-21, expenditure is expected to be approximately A\$0.86M to A\$1.94M (depending upon the total amount raised and progressive results).



### 5. Yeoval

#### 5.1. Location and Access

The Yeoval Project is located approximately 70 km northwest of Orange in central New South Wales. The tenement EL8538 covers an area of approximately 290 km² (Figure 5-1). More than 60 historic mine workings occur within EL 8538 and these trend in a north-easterly direction along a 20 km strike length.

Two other tenements, ELA5780 and ELA5806 that abut the southern and northern boundary of EL8538, are currently under application.

The Yeoval Project area is readily accessible via sealed and unsealed roads and is adjacent to the Molong – Dubbo railway infrastructure. The Project area is within easy reach of the Mitchell Highway to the east.



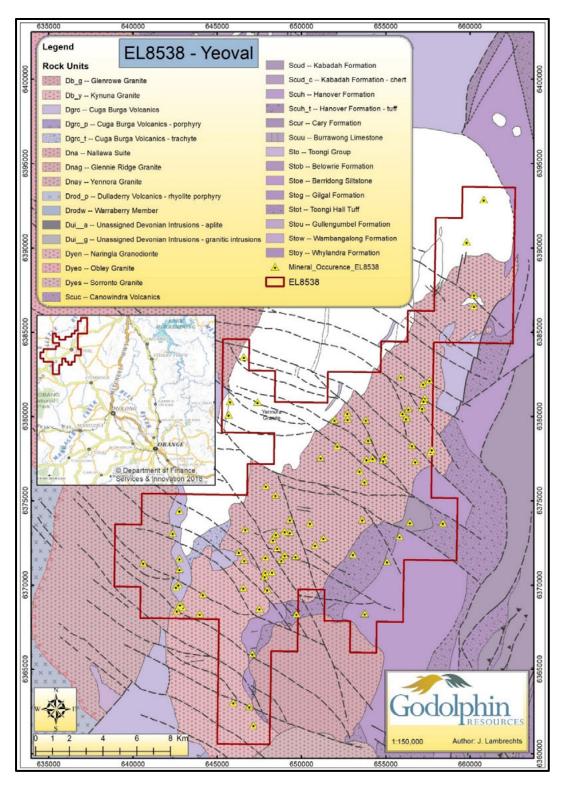


Figure 5-1 Location of Yeoval tenement (inset map), geology and mineral occurrences

# 5.2. History

The Yeoval Project has numerous minor scale copper and gold historical workings, with the most significant workings located in the Yeoval, Cyclops and Goodrich Prospects (Figure 5-2).



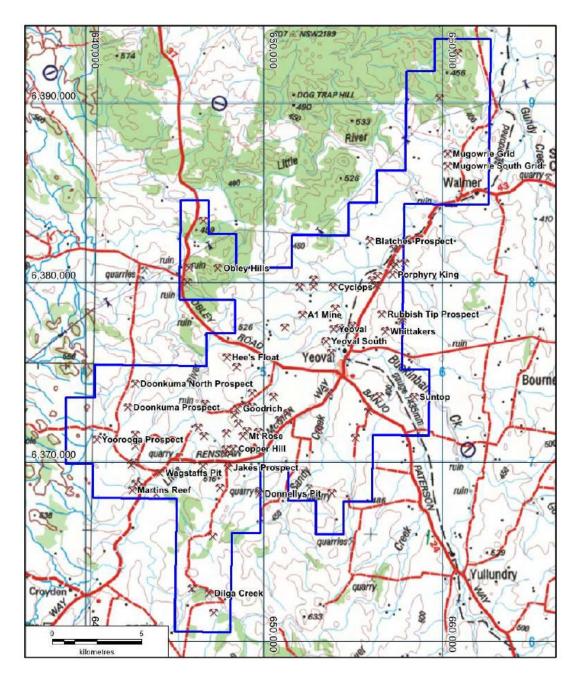


Figure 5-2 Location of Historical Workings within Yeoval Tenement (Arundell 2019)

The tenement (EL 8538) covers an area of ~290 km², was granted on 19 March 2017 to Ardea Exploration Pty Ltd. Ardea is exploring for a large tonnage porphyry copper-gold-molybdenum-rhenium system in the Yeoval area.

Previously the area included a number of smaller EL tenements. A summary of the history of the most significant of these tenements, identified by the prospect names where known, is summarised as follows.

The Yeoval prospect is a typical porphyry copper system. The many copper\gold showings in the Yeoval district have been explored almost continuously since the 1960s, though mostly at shallow levels only. The major explorers have been Noranda, Hastings\Geopeko, Glendale, Lynch Mining, BHP\Newcrest and CRAE.



Previous companies have explored a total of 38 prospects to varying degrees, with much of the work centred on the Yeoval and Goodrich prospects. Of these 38 prospects, 14 have been drilled, including 12 with RC drilling and 7 with diamond drilling. A total of 86 RC holes and 35 diamond drill holes have been completed in the Yeoval district by previous explorers (Meares, 1998).

Most of this exploration was carried out prior to the Discovery 2000 airborne magnetics and radiometrics becoming available for parts of the Lachlan Fold Belt including the Yeoval district.

Malachite Resources was the only explorer in recent years to hold all tenure over the Yeoval district, and thus the only explorer to systematically explore the district as a single mining camp.

During the past five years, Malachite conducted a comprehensive exploration program at Yeoval, mainly searching for porphyry style copper-gold deposits (e.g. Goodrich) but also high-grade gold vein systems (e.g. Thunderbolt). Work conducted has included compilation of previous exploration and mining records, gridding, geological mapping, soil and rock geochemistry, ground magnetics, induced polarisation (IP) surveying, trenching, and both reverse circulation drilling and diamond drilling programs.

Prospects tested by drilling include Goodrich (16 holes including three holes drilled in 2002), Thunderbolt (5 holes, including 2 holes drilled in 2002), Ironbark Hill (1), Bellmain (2), West Timbie (1) and Dilga Creek (2 holes). The only potentially economic mineralisation discovered in these programs was the disseminated chalcopyrite mineralised zone at Goodrich.

At Goodrich, a ring structure composed of vein-style quartz-magnetite-chalcopyrite ("QMC") mineralisation, with significant gold credits, has been mined to at least 54 m depth. It is the largest recorded copper\gold producing mine in the district. The Goodrich deposit (located on an excised mining lease which is surrounded by Godolphin tenure) was discovered around 1868 and worked intermittently to 1912. Initially it was worked from an open pit to ~46 m depth. A shaft on the north side of the open pit extends to approximately 90 m depth (300 feet) with working levels at 20 m, 36 m and 54 m below the surface. In addition, the first drill hole in Malachite's 1998 drilling program (GRDD 01) intersected the old workings at a depth of 85 m below surface. The mining exploited a cone-shaped structure comprising quartz-magnetite-chalcopyrite lodes up to 4 m wide, with strong similarities to the veining at Ridgeway. The production from the mine is uncertain but is estimated at about 299 t copper, 159 kg gold, 62 kg silver. The Goodrich ore consisted of disseminated chalcopyrite, with minor molybdenite, bornite and pyrite.

# 5.3. Geology

#### **5.3.1. Setting**

Ardea's Yeoval Project is located in the Cowra Zone of the Lachlan Orogen and contains Devonian granite and granodiorites of the Yeoval Batholith (Figure 5-3). East and north of the intrusive complex are Silurian and Devonian aged sedimentary and volcanic rocks.

A number of strike-extensive north-south trending fault structures have been mapped in the region, primarily in the Ordovician and Silurian lithologies lying to the east of the Yeoval Batholith. The Batholith itself trends northerly, in a general sense controlled by the north-south faulting. Internally, granodiorite, which forms the eastern third of the Batholith, trends north-north-easterly. Numerous north-westerly trending faults transect the Batholith. These structures also occur in the older lithologies in the south of the licence area. Some explorers have suggested that these north-westerly trending structures may have played some role in the location of mineralisation. However, mineralisation appears to be localised within the Yeoval Granodiorite, rather than along the length of faulting.



The Yeoval Project covers a broad area of the Devonian Yeoval Batholith which includes felsic to mafic intrusions of the Yeoval Complex – granite (Kynuna & Glenrowe), quartz monzodiorite, quartz diorite, granodiorite (Naringla), diorite and gabbro (Figure 5-1).

The Silurian Canowindra Volcanics (garnetiferous quartz-feldspar-cordierite tuffs, volcanics and breccias) and Hanover Formation (siltstone, shale and minor chert) lie to the east of the Batholith. A core of Ordovician sandstone, siltstone and minor limestone of the Kabadah Formation lies within the Silurian sediments and volcanics and is predominant in the central part of the licence area. Devonian volcanic and volcaniclastic rocks in the area comprise the Cuga Burga Volcanics (latitic, crystal-lithic sandstone, breccia, siltstone, tuff, latite) of the Gregra Group.

The interpretation of the local geology and the effects of faulting, has been aided by the regional airborne geophysical data, which was commissioned by the NSW Geoscience Mapping Accord and flown in 1991. Numerous northwest fault sets have been defined from mapping and aeromagnetic interpretation. Detailed magnetics flown by a number of companies – in particular Altius Mining (EL7036) - have enabled enhancement of the geological and structural interpretation of the Yeoval area.



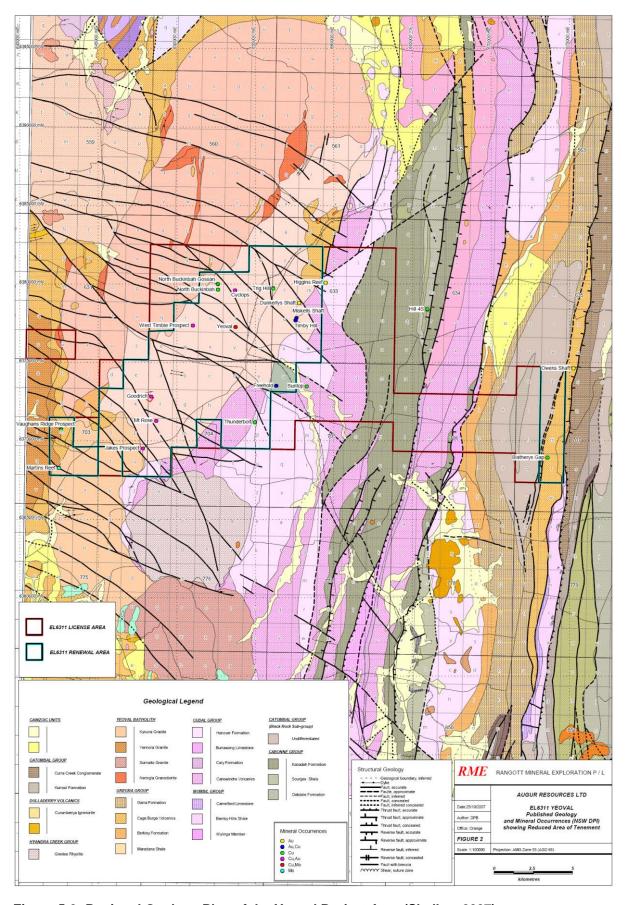


Figure 5-3: Regional Geology Plan of the Yeoval Project Area (Shelley, 2007)



#### 5.3.2. Deposit Type and Mineralisation

Copper, gold and other base metal mineralisation is widespread in the region and the main mineralisation styles include:

- Porphyry style copper-gold mineralisation associated with Devonian calc-alkaline intrusions e.g. Yeoval, Cyclops, Goodrich prospects.
- Skarn mineralisation hosted by mafic units in the Cuga Burga Volcanics.
- Low sulphidation epithermal gold mineralisation in Middle Devonian volcanics e.g. Mt. Aubrey gold deposit.
- Structurally controlled quartz-copper ± gold vein mineralisation in Ordovician to Devonian sedimentary rocks and volcanics.

Numerous copper-gold occurrences are known in the Yeoval Complex. Mineralisation ranges from disseminated chalcopyrite-gold within altered granodiorite (Yeoval, Yeoval South) to quartz\magnetite\chalcopyrite veining within structures(?) within the granodiorite, at the Goodrich Mine. Minor molybdenum is reported at the Martins Reef Prospect in the south-west of the licence area. The style of the mineral occurrences is indicative of a porphyry copper-gold setting.

Minor occurrences of copper ± gold mineralisation are present within the microgranite and granite of the Yeoval Complex. Scattered copper-gold prospects also occur within the Silurian and Devonian sequences east of the Yeoval Batholith.

#### 5.4. Previous Work

Over 70 copper and gold occurrences have been recorded within the Yeoval Complex, and a significant number of these are located on or close to the north-westerly trending structures. Most of these are of porphyry or vein style in intrusive-related settings, with the Goodrich (within excised area) and Yeoval (within Godolphin tenure) being the most significant deposits.

The many copper\gold showings in the Yeoval district have been explored at a low level almost continuously since the 1960s. The major explorers have been Noranda, Hastings\Geopeko, Glendale, Lynch Mining, BHP\Newcrest and CRAE. A brief summary of their activities is tabulated in Table 5-1. During the course of these activities and from historical naming, a series of prospect areas were named (Figure 5-2). Table 5-2 summarises the results of these exploration activities and the results.



Table 5-1 Summary of Historic Exploration Activities at Yeoval and Surrounds (Source: (MinView, 2019))

Company	Years	Activities		
CRAE	1991-1997	Data compilation and review; Rock Sampling, soil and drainage sampling; Airborne geophysical data acquisition and processing; RC and DD drilling; Petrographic and mineralgraphic determinations on 15 RC chip samples; Honours sponsorship - investigating porphyry Cu-Au styles of mineralisation within the Yeoval Granodiorite.		
Malachite Resources	1996-2002	Review of previous exploration was conducted, focus on the Goodrich, Cyclops and Dilga Creek Prospects. An option agreement was negotiated with Kevin Barker who holds title to ML 811 at the Goodrich Mine. An agreement to joint venture EL 5128 with ML 811 was reached with Malachite Resources NL. Compilation of Previous Exploration, Re-logging of Drill Core, Field Checking of Prospects, Prospect Explorer and Regional Datasets Study (Neural Network) & Soil Orientation Survey. Surface Mapping, trenching, RC and DD drilling. Petrological Studies.		
Champion Resources / Augur Resources Ltd / Zodiac Resources / Goodrich Resources / Kimberley Diamonds	2004-2015	Rock chip sampling; auger soils; sample water bores. RC and DD drilling. Geological modelling of the Yeoval Mine deposit (within Godolphin tenure); completion of the Yeoval Mine Resource estimate to JORC (2004) standards – 12.8 Mt @ 0.38% Cu, 0.14 g/t Au, 2.2 g/t Ag and 120 ppm Mo (Inferred), using 8 RC and 37 DD holes.		
Minotaur	2007	Compilation of open file historical exploration data and regional geological and geophysical datasets		
Greystoke Mines	2008-2013	Review of the historical geological and geophysical data was undertaken. Geophysical interpretation of existing NSW DPI airborne geophysical data. A new low-level aeromagnetic and radiometric survey of the tenement. Geophysical interpretation of the new low-level geophysical survey. Rock chip sampling and soil geochemistry over sever geophysical anomalies. Geological evaluation of several geophysical anomalies.		
Crystal / Altius Mining Ltd / Australian United Mining	2008-2014	High resolution aerial magnetic/radiometric survey.		
Minotaur	2010-2015	Compilation of open file historical exploration data and regional geological and geophys datasets. Airborne surveys (362 line-km of helicopter-borne VTEM & magnetics), geophysical processing and target identification were conducted. Soil and Rock chip sampling. IP surveys (8.5 line-km), and semi-regional gravity surveys; RC drilling (5 drill holes, 1187 m).		
Icarus	2015-2017	Airborne high-resolution magnetic and radiometric survey. Review and interpretation of high resolution magnetic and radiometric survey data collected. Reconnaissance mapping of four prospects focused on magnetic anomalies three of which lie on the northern margin of the Yeoval Granite Batholith. No samples taken with the mapping.		
Ardea	2017-present	Data compilation; 2019 Mineral Resource Estimate		



Table 5-2 Summary of Exploration Results by Prospect within EL8538 (Source: (MinView, 2019) and (Arundell, 2019))

Prospect	Historic Activity	Modern Exploration Activities	Results	
Yeoval	Surface Works (Cu,Au, Mo,Ag)	Mapping; geophysical data collection and processing; DD and RC drilling	2019 Mineral Resource Estimate - 12.8 Mt @ 0.38% Cu, 0.14 g/t Au, 120 g/t Mo, 2.2 g/t Ag (0.2% Cu cut-off)	
Goodrich	Open pit and underground (Cu\Au)	Mapping; soils; ground magnetics; RC and DD drilling		
Cyclops	Underground (Cu\Au)	RC and DD drilling	GRDD001: 50 m @ 0.40% Cu, 0.28 g/t Au	
Yeoval East	None	RC drilling	CRAE: 15 m @ 1.01% Cu	
Dilga Creek	Surface and underground (Au)	RC drilling	CRAE: 21 m @ 0.34% Cu, 0.04 g/t Au	
Vaughns Ridge	Surface Works (Cu)	Soils; magnetics; RC and DD drilling	DCRC2: 13 m @ 0.72 g/t Au, 0.88% Pb, 1.3% Zn; BHP 6 m @ 2.05 g/t Au	
Yeoval South	None		Obley Gossan: 34 m @ 0.15% Cu	
Ironbark Hill	None	Soils; RC drilling	CRAE: 21 m @ 0.15% Cu	
Thunderbolt	Underground (Au)	Soils; RC, Trenching	Noranda VR-1 – 8 m @ 0.34% Cu	
Hill Shaft South	None	Trenching		
Bellmain	None	Soils; RC drilling		
Yeoval North	None	Soils; RC drilling	3 m @ ~0.1% Cu	
Yeoval West	None	Geophysics; RC drilling		
West Timbie	Underground (Cu\Au)	Soils; RC drilling		
Uandi	None	Soils; Trenching		



Ardea have completed an approximate 2 km soil auger program in the southwest corner of the tenement (Figure 5-4.) Results show elevated copper values (200 ppm to >500 ppm) which warrant follow-up.

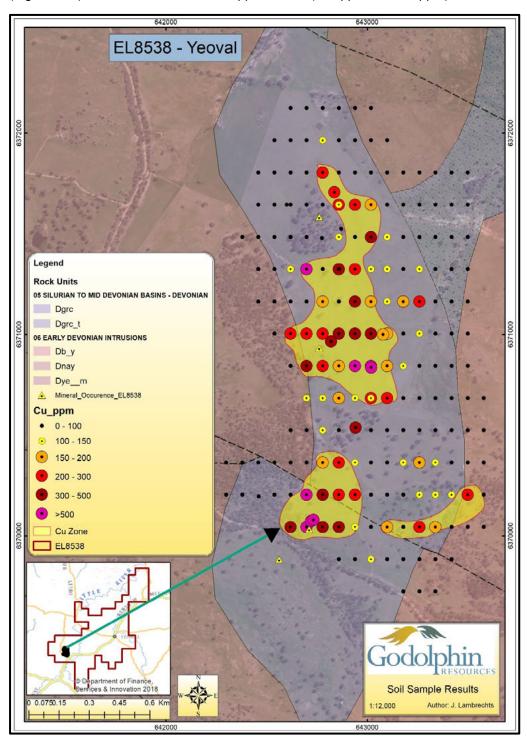


Figure 5-4: Soil auger copper results for Yeoval

### 5.5. Resources

Ardea completed a Mineral Resource Estimate update in August 2019 (Ardea Resources Ltd, 2019b). A detailed breakdown of the Mineral Resource Estimate at various cut-off grades is tabulated in Table



5-3. The 2019 Mineral Resource Estimate did not include any more drilling compared to the 2009 Mineral Resource Estimate.

Table 5-3: Yeoval Project 2019 Mineral Resource Estimate<sup>6</sup>

Category	Cut-off (Cu %)	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Mo (g/t)
	0.1	15.9	0.34	0.13	1.97	115
	0.2	12.8	0.38	0.14	2.20	120
Inferred	0.3	7.3	0.48	0.17	2.75	141
	0.4	4.5	0.56	0.19	3.26	162
	0.5	2.5	0.65	0.22	3.83	192

<sup>\*</sup>Tonnages have been rounded down to the nearest one hundred thousand, Cu, Au and Ag grades are rounded to the nearest second decimal place and Mo to the nearest g/t

The following is a summary of the data, parameters and methodology used in the 2019 Mineral Resource Estimate:

- The mineralisation style is considered to be a porphyry copper-gold style and consists of chalcopyrite, bornite and molybdenite veins and stockwork within porphyritic granodiorite and monzonites. Three main mineralisation domains were created using copper values ≥ 0.1%.
- RC drilling samples were collected by splitting 1 m intervals through a riffle splitter. DD drilling sample intervals varied depending upon mineralisation potential (0.5 m-1.0 m for identified mineralisation and 1.0 m-1.5 m intervals for non-mineralised material) and half core was submitted for assay. Some re-sampling by quarter core was carried out in 2009 on DD core obtained during the 1972-1974 drilling campaign.
- The Mineral Resource Estimate was based on 45 drillholes for a total 7,319 m. This consisted of eight RC holes (793 m) and 37 diamond holes (7,319 m). Drilling was carried out in two stages. This included and was completed by:
  - Hastings in 1972
  - North Broken Hill in 1975.
- The whole Mineral Resource Estimate is classified as Inferred as it is considered that:
  - o Collar and downhole survey data is sufficient.
  - o The continuity of copper mineralisation >0.1% is considered to be generally good.
  - The estimation of grades into the blocks is limited to blocks that have a first pass informing composite of <50 m.</li>
  - The removal from the estimate of barren post-mineralisation dykes.
- For the RC drilling programs, copper was analysed by Atomic Absorption Spectrometry (AAS), molybdenum by aqua regia digest and AAS analysis and gold\silver via acid digest and followed by AAS. For the DD drilling programs, copper was analysed using AAS, molybdenum via aqua regia and AAS and gold\silver by acid digest and AAS.
- An Ordinary Kriging estimate was carried out on three separate domains that were based on a >0.1% copper threshold. No separate domains for the other elements were created. Two metre sample composites were used to populate blocks of 10 m (X), 20 m (Y) and 10 m (Z) in dimensions. Post-mineralisation dykes and material above the base of weathering were depleted from the Resource.

<sup>&</sup>lt;sup>6</sup> In accordance with the Australian Security Exchange Limited Listing Rules Appendix 5A. The information in this report that relates to Mineral Resources for Yeoval has been reviewed, and verified by Mr Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of Data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



- No top-cuts were applied as it was considered there were no outlier values. The Mineral Resource Estimate is reported on a 0.2% copper cut-off grade, but cut-off grades of 0.1%, 0.3%, 0.4% and 0.5% copper were also reported (Table 5-3).
- No metallurgical or geotechnical studies have been completed on Yeoval drill samples, however as this deposit is considered to be similar other central NSW porphyry copper deposits, it has been assumed that it would be amendable to conventional open pit mining techniques and flotation-based processing.

For a more detailed explanation of the Yeoval 2019 Mineral Resource Estimate, readers are directed to read the Ardea ASX release dated 15<sup>th</sup> August 2019 (Ardea Resources Ltd, 2019b) or Appendix 2 in this report.

# 5.6. Exploration Potential

Due to the extensive mining history, encouraging drill results and current Resources, this Project is considered to have a good potential for further discoveries and\or extensions of known mineralisation.

To gain a better understanding of mineralisation of the area it is recommended that any historical core be reviewed\re-logged. This would include core from Yeoval and Cyclops. According to previous reports, a selection of this core is stored at the NSW Government Department of Planning and Environment Londonderry core library. It is also recommended that for Yeoval East, the CRAE drill database be evaluated to assist in drill targeting. Similarly, the Yeoval prospect drill database requires further validation and with the current Mineral Resource Estimate, this will then outline what further drilling is required.

The Vaughans Ridge\Ironbark Hill\Obley Gossan area is a high priority for a soil auger program and in conjunction of a full review of existing soil data e.g. CRAE and GSNSW 1977 program will further assist in prioritising areas for follow-up.

# 5.7. Proposed Exploration

The next stage of exploration is expected to consist of reviewing historic data to compile conceptual geological models, extend soil sampling to the south of existing Godolphin soil sampling in the Vaughan's Ridge area and design a drill program around the current Yeoval Resource. The expenditure commitment is expected to be around A\$0.18M to A\$0.34M (depending upon the total amount raised and progressive results).



# 6. Copper Hill East

### 6.1. Location and Access

The Copper Hill East Project is located approximately 35 km north of Orange (Figure 6-1), centred on the locality of Boomey. Euchareena Road, which links the settlements of Molong and Euchareena, bisects the tenement. The tenement covers an area of approximatley 290 km<sup>2</sup>.

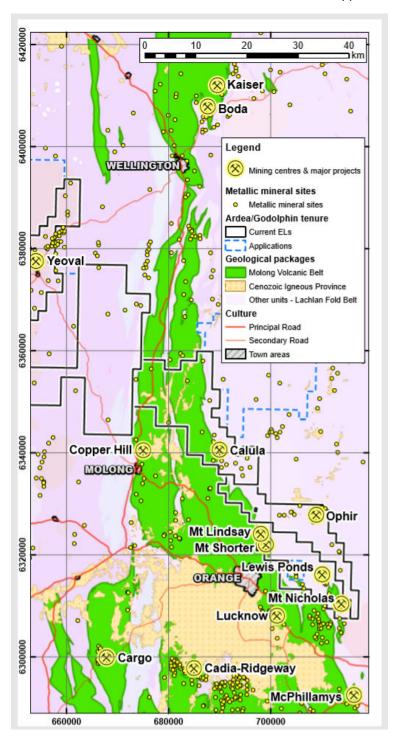


Figure 6-1 Location of Copper Hill East tenement, geology and surrounding mineral occurrences



# 6.2. History

The Copper Hill East Project has a long history of minor scale historical workings, mainly focussed in the southeast corner of the tenement (Figure 6-2). Most of the workings are concentrated on the margins\contacts of the Mullion Range Volcanics and the Barnaby Hill Shale and according to available data were exploited for pyrite (for the extraction of sulphur), gold (both hard rock and alluvial), copper and other base metals.

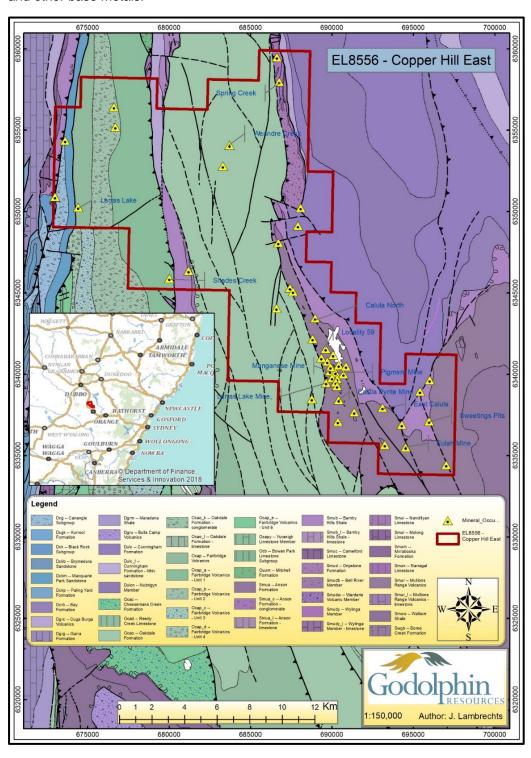


Figure 6-2: Location of historical workings, prospects and interpreted geology within the Copper Hill East Project



## 6.3. Geology

#### **6.3.1.** Setting

In general, the tenement contains the north trending Early Ordovician to Early Silurian Molong Volcanic Arc (MVA), in which the western portion within the tenement consists mainly of Ordovician mafic volcanics and volcaniclastics and the eastern portion consisting of Silurian felsic volcanics, sediments and limestones. The MVA hosts both porphyry hosted copper-gold mineralisation (Cadia-Ridgeway, Boda and Copper Hill) and skarn related deposits such as Browns Creek (Arundell, 2019).

#### 6.3.2. Alteration and Structure

The MVA is dominated by major north-south trending strike slip fault arrays which generally mark the contact between Ordovician volcanic rocks in the west and younger geological units in the east. These are thought to be relevant to the gold and base metal mineralisation in the area.

It is thought that north-westerly trending structures have significant control on mineralised intrusive bodies (Copper Hill) and post-mineralisation deformation at the majority of known copper-gold deposits in the area.

Previous workers have noted a variety of alteration assemblages. The most notable are the sericite, hematite, epidote, quartz and carbonate within the Oakdale Formation (located in the western portion of the tenement within the Ordovician volcanics). Weak potassic and propylitic alteration has also been observed in a monzodiorite intrusion in the northern part of the tenement.

#### 6.3.3. Deposit Type and Mineralisation

Work from previous exploration activities indicates that this project contains VHMS, skarn and mesothermal gold type occurrences. Lithologies within the tenement are conducive to these types of deposit styles. Most appear to be of limited extent and there appears to be a strong re-mobilisation component in the noted mineralisation.

Small scale epithermal\mesothermal deposits are characterised by small stockworks or brecciated and crustiform quartz, often associated with historical alluvial workings.

Lenses of massive sulphides/base metals have been noted e.g. Calula Pyrite Mine, but most other noted occurrences of base metals show strain, recrystallisation or other remobilised features.

#### 6.4. Previous Work

As far as can be ascertained, modern exploration activities commenced in the area in the mid-1970s. Numerous companies have been active in the area including; Kamilaroi Oil, Samedan, Aquitaine, Amoco/Shell, Tri Origin/Delta Gold JV, Alkane, Comet and Newmont. A brief summary of their activities is tabulated in Table 6-1. During the course of these activities and from review work conducted by (Arundell, 2019), a series of prospect areas were assigned (Figure 6-2). Table 6-2 summarises these exploration activities and the results.



Table 6-1 Summary of Historic Exploration Activities at Copper Hill East and Surrounds (Source: (MinView, 2019))

Company	Year	Activities	
Kamilaroi Oil/Samedan/ Aquitaine	1975-1977	Stream; soil; rock chip; mapping; airborne/ground EM/magnetics; RC/DD drilling	
Amoco/Shell	1977-1985	Soil; rock chip; costeaning; RC/DD drilling	
Tri Origin/Delta Gold	1992-2003	PEM geophysics; RC/DD drilling	
Comet Resources	2004-2012	RC drilling	
Alkane Resources	2009-2013	Ground reconnaissance	
Newmont	2009-2012	Mapping; soil, stream; rock chip	
Ardea Resources	2017-present	Data compilation; soil	

Table 6-2 Summary of Exploration Results by Prospect within EL8556 (Source: (MinView, 2019) and (Arundell, 2019))

Prospect	Historic Activity	Modern Exploration	Results
Maria I. I.	A 0	Activities	D
Woolshed	Au-Cu	Rock chip; soil; 4 RC	Rock chip 3.23 g/t, 2.96 g/t and 1.25 g/t Au; soil anomaly > 9 ppb Au; RC 2m @ 0.07 g/t Au
		holes	and 4m @ 0.11 g/t Au
Womera	none	Mapping; rock chip; soil;	Malachite and azurite staining; soil anomaly > 188 ppm Cu within 400 m × 1000 m; one IP
		IP; 3 RC holes	anomaly; RC holes > 200 ppm Cu throughout
Voodoo	none	Soil; mapping; rock chip	Weak Cu soil anomaly; soil 2 x anomalous Au; copper staining; rock chip 0.4 % Cu and 0.67
			g/t Au
Spring Creek	none	Soil; rock chip; mapping	5km zone of intense alteration noted. Weak soil anomalies
Weandre Creek	none	Mapping; petrology; rock	Anomalous soil; weak potassic and propylitic alteration; veining; rock chips > 1 ppm Au
		chips; spectral; soil	
Larras Lake	none	Mapping; rock chip; IP; 3	RC holes targeted at IP/rock chip-soil anomalies - Cu < 200 ppm
		RC holes; RAB	
Shades Creek	none	Mapping	Malachite staining
Calula North	Adit and 500 m of	Soil; rock chips	Anomalous Pb/Zn/Cu/As/Ag/Au and Ba
	workings	·	
Locality 59	none	Soils; rock chip	7.9 g/t Au rock chip; Soils anomalous Au/Pb
Pigment North	Three shafts + other	Soil; RC drilling	500 m × 300 m Zn anomaly; drilling - 11 m @ 1.15% Zn and 1 m @ 0.21 g/t Au
	workings		
Manganese Mine	unknown	Rock chip	0.08% Cu, 3.6% Pb, 0.67% Zn, 0.33 g/t Au
Pigment Mine	Adits, shafts, surface	EM; rock chips; 1 DD	Drilling - 4.1 m @ 0.16% Pb, 0.35% Zn
_	workings	hole	
Larras Lake Mine	Surface workings	Rock chip; geophysics	0.06% Cu, 1.2% Pb, 0.28% Zn, 1.64 g/t Au, 4 g/t Ag
Calula Pyrite Mine	Shafts and costeans	5 DD holes; geophysics	Up to 13.1% Zn + others, narrow intersections



Prospect	Historic Activity	Modern Exploration	Results
		Activities	
East Calula	Shafts, surface	Geophysics; open hole;	Geophysics anomaly; high Mn in drilling - 1 m @ 0.62 g/t Au
	alluvial workings	RC	
Eulah Mine	Surface/alluvial	Stream; rock chip	No data
	workings		
Sweetings Pits	Surface workings	Soil; rock chip	Rock chip 9.1 Au g/t; minor Au soil anomaly



Current work by Ardea includes field observations and an approximate 7 km long soil auger sampling program carried out in the northwest corner of the tenement (Figure 6-3 and Figure 6-4). The program was spaced at 80 m x 80 m grid and results have outlined one 800 m x 800 m copper anomaly (150-500 ppm Cu) and two small anomalies of lesser extent (Figure 6-3). There are also zinc anomalies but restricted to smaller areas (Figure 6-4). According to the NSW surface geology maps, the anomalous zone occurs between the Curra Creek and Neurea west dipping thrust faults and close to the contact between a conglomerate unit and an intermediate igneous rock. Cube field observations noted that the area is on, or close to a ridgeline and outcrop observed included conglomerates, carbonate veining, carbonate replacement textures and silica cap material (Figure 6-5).

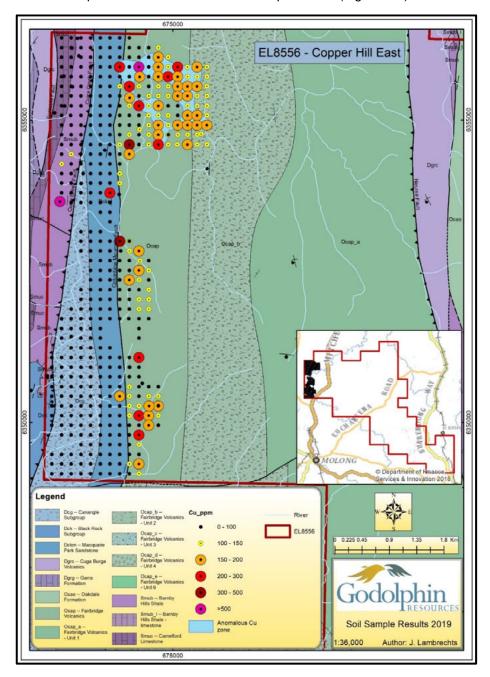


Figure 6-3: Soil auger copper results for Copper Hill East



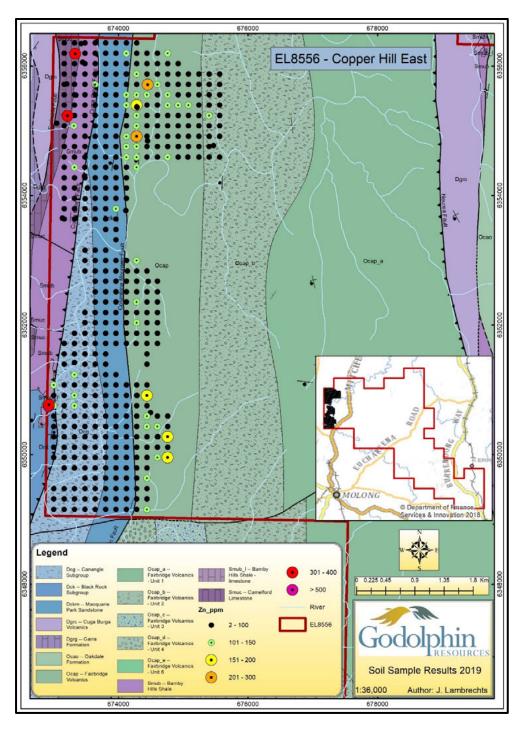


Figure 6-4: Soil auger zinc results for Copper Hill East





Figure 6-5: Clockwise from top left – conglomerate; carbonate veining within breccia; carbonate replacement textures and silica cap

For a more detailed explanation of recent exploration results at Copper Hill East, readers are directed to read the Ardea ASX release dated 29<sup>th</sup> April 2019 (Ardea Resources Ltd, 2019e) or Appendix 3 in this report.

#### 6.5. Resources

There are no recorded Mineral Resources located within this tenement.

# 6.6. Exploration Potential

This Project has the potential to host VHMS and skarn style deposits and to a lesser extent mesothermal gold mineralisation. The site visit by Cube to the northern part of the tenement did note some carbonate replacement textures, which indicate a higher-level mineralisation style compared to the mesothermal style initially proposed.

The potential to host porphyry copper-gold type deposits would appear to be low due to the paucity – at least in outcrop – of intrusive host rocks. However, the potential presence of buried porphyry type mineralisation cannot be ruled out but would require a more concerted exploration strategy to identify distal propylitic and then phyllic alteration to confirm or deny the presence at depth of the prime potassic alteration style – similar to a Cadia-Ridgeway and Boda mineralisation models. The fact that traces of copper mineralisation, associated alteration and the tenements location within a similar geological



setting to known porphyry copper-gold occurrences (Cadia-Ridgeway and Boda) has already been noted in this tenement, does highlight the potential of this area.

Historical workings and data from exploration activities appears to indicate that VHMS (sulphide lenses) and mesothermal style mineralisation are present, however they appear of limited extent. Drilling that has been carried out has produced narrow significant intersections only. However, it is noted that drilling has been very restricted in extent.

With the identification of the McPhillamy's orogenic gold deposit along a structure to the south and the historic Calula gold workings in particular require careful analysis for comparable mineralisation styles.

A more comprehensive data compilation and further soil geochemistry will allow Godolphin to vector into more prospective targets within this tenement. Historical soil chemistry has been carried out with some anomalies noted, however it is impossible to determine if the methodologies applied to these programs were appropriate and hence some caution should be applied to their results.

# 6.7. Proposed Exploration

The main proposed exploration activities will be based on gaining land access so the current soil sampling can be extended and areas that are considered prospective can be soil sampled and mapped. Expenditure is planned to be around A\$0.39M to A\$0.83M (depending upon the total amount raised and progressive results) for the coming reporting period



# 7. Ophir

### 7.1. Location and Access

The Ophir Project tenement (EL8323) runs from approximately 20 km north of Orange in a south-easterly direction to around 30 km southeast of Orange (Figure 7-1). The historic gold mining centre of Ophir is in the middle of the tenement. The tenement covers an area of approximately 174 km<sup>2</sup>.

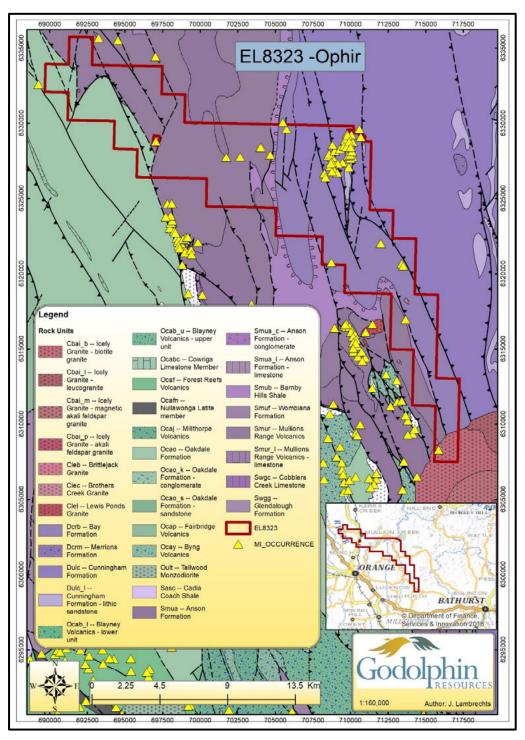


Figure 7-1: Location of the Ophir tenement (inset map), geology and mineral occurrences



## 7.2. History

The Ophir Project has a rich history of gold mining, with the first payable gold workings commencing in 1851. These workings are considered to be the first payable goldfield in Australia. Mining included hard rock, alluvial and deep lead mining. It is reported that small scale deep lead mining is still occurring or has only recently ceased (Vassallo J. , 2019b). Historical location names for workings included; Ophir, Dead Horse Gully, Summerhill Creek and Pine Forest. These are all recorded as being gold occurrences. This is one noted occurrence of copper workings (MinView, 2019) within the tenement, located approximately 4.5 km east of the Lewis Ponds workings.

## 7.3. Geology

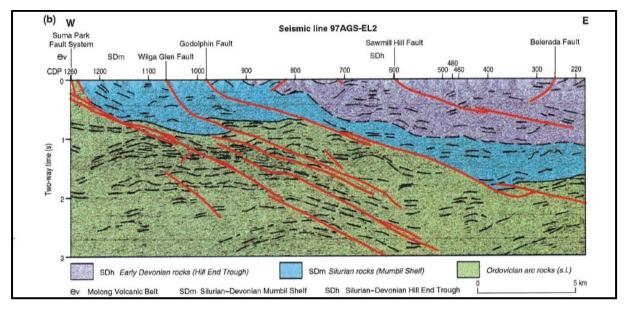
### **7.3.1. Setting**

The area contains the Early Devonian deep marine and volcanic rocks of the Bay and Cunningham Formations, which are part of the Hill End Trough and rocks of the Early to Late Silurian Mumbil Shelf Group including the Mullions Range Volcanics, the Barnby Hill Shale and the Anson Formation. The far northern part of the tenement contains the Oakdale Formation, which is within the Molong Volcanic Arc. There are also recordings of small Carboniferous granitic intrusions and capping by Tertiary basalts.

#### 7.3.2. Alteration and Structure

It appears that alteration is locally restricted to that associated with veining i.e. silica-chlorite-pyrite-sericite (Vassallo J., 2019b). No porphyry-style alteration assemblages have been identified.

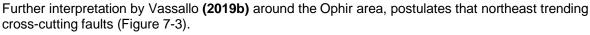
The area is structurally complex, especially the southern and central portions of the tenement, with major structures dominated by east over west thrusts and associated folding. Major faults such as the north-northwest trending McDonalds Hill, Lewis Ponds, and Godolphin Faults, which have been interpreted as east dipping low-angle thrust faults, are present in the southern and central section of the tenement. A seismic line (97AGS-EL2 conducted in 1992) which runs across the tenement and directly through the Dead Horse Creek historical workings, shows these low angle thrusts (Figure 7-2).

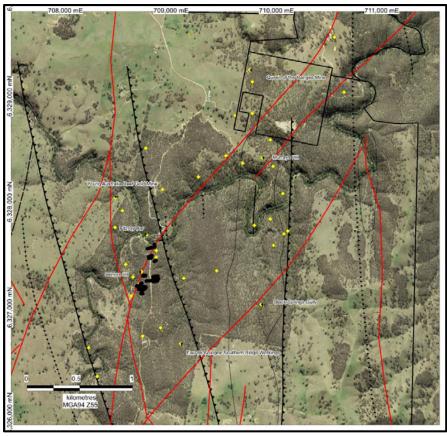


Source: (Glen, et al., 2002)

Figure 7-2 Interpreted seismic cross section image







Source: (Vassallo J., 2019b)

Figure 7-3: Interpreted cross cutting faults around Ophir workings (cross-cutting faults in red, underground workings in black)

#### 7.3.3. Deposit Type and Mineralisation

The tenement is prospective for orogenic gold deposits, similar to the hard rock shear and vein hosted deposits historically mined at Ophir, placer/alluvial and VHMS style mineralisation.

### 7.4. Resources

There are no recorded Mineral Resources located within this tenement.

## 7.5. Exploration Potential

The historical workings at Ophir extending over an area of approximately 4 km × 2 km, combined with significant interpreted structures (the main mineralisation is postulated to be shear related) and with the grades reported in historical workings, indicates the economic potential of this area. The potential is likely to be a large tonnage low-grade gold scenario as previous observations and workings have indicated that mineralisation is restricted to narrow shears\veins, which in a modern mining context is difficult to replicate.



Outside of the Ophir mining centre, VHMS deposits have the potential to exist due to the presence of lithologies (Mumbil Shelf Formation) within the tenement that host deposits in other locations nearby. This includes Lewis Ponds (Section 8) and Mt Bulga (historical production of 6.5% Cu). The Drapers Creek and Belgravia prospects are also prospective for VHMS-type deposits. Both of these are within the same stratigraphic and structural setting from the Calula and Larras Lake workings, located approximately 7 km to the north in the Copper Hill East tenure.

Although there is limited recorded outcrop of granitic intrusions, there is still the opportunity for porphyry-style copper-gold mineralisation being present. The potential for porphyry-style copper-gold mineralisation is considered to be lower and exploration more difficult than for orogenic gold and VHMS styles.

For Mullions, Pine Forest, Lennox Pinnacles and Kitty's Creek prospects, although some historical workings are present, these are high-level targets and require substantial work to determine prospectivity.

Lower Lewis Ponds is along strike and in the same structural setting i.e. hanging wall of the Lewis Ponds Fault, as the main Lewis Ponds deposit, however previous exploration has been at a very low level and similar to some of the other prospects in this tenement, require follow-up work.

Alluvial/placer deposits have been mined in the past; however, they are expected to be small and of low tonnages and hence in an exploration context, would be considered a low priority.

## 7.6. Proposed Exploration

The main focus will be to finalise Native Title agreements around the Ophir prospect, investigate soil\stream copper anomalies around Belgrave\Draper's Creek, Summer Hill Creek\Pine Forest and Dead Horse Gully. The planned expenditure for the reporting period is A\$0.06M to A\$0.17M (depending upon the total amount raised and progressive results).



## 8. Lewis Ponds

### 8.1. Location and Access

The Lewis Ponds Project consists of one tenement (EL5583) which runs in a north-westerly direction 15 km east of Orange and covers an area of approximately 148 km². Access to the tenement is via mainly the sealed White Rocks-Dry Creek-Lower Lewis Ponds roads.

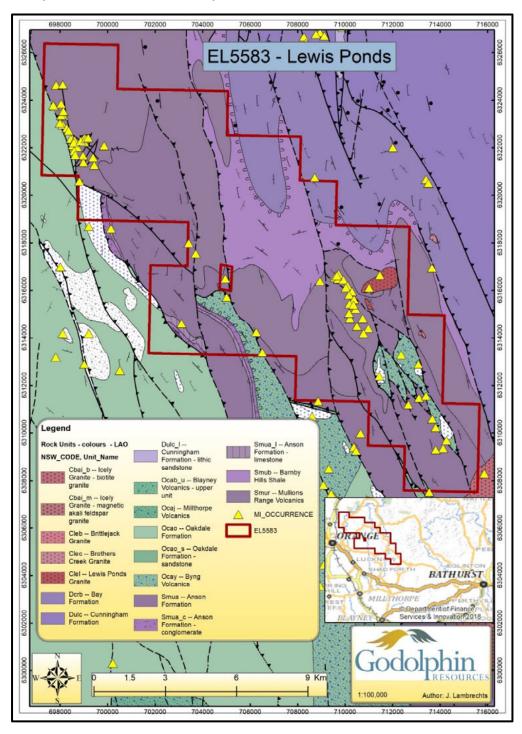


Figure 8-1: Location of Lewis Ponds tenement (inset map), geology and mineral occurrences



## 8.2. History

The Lewis Ponds area was an active mining centre from around 1884 till the 1920s. The workings were centred around two major areas; Main Zone (also called Spicers Mine) and Tom's Zone. Main Zone was actually the site of a smelter and an adjacent limestone quarry – postulated to be a flux source. Spicers Mine was reported to have produced around 6000 t of ore at 6.7% lead and 187 g/t silver (Rowe, 1999). Tom's Zone was reportedly a pyrite mine and was in operation from 1913 to 1921.

From the field visit by Cube, the workings were noted to be very extensive, consisting of numerous shafts (mostly collapsed) and shallow surface workings. In the southern area, multi-level stopes were observed. The extent of the workings is shown in Figure 8-2. These locations were mapped by Ardea to assist in identifying the surface expression of mineralisation and hence assist in the creation of a geological\mineralisation model.

Around two to three kilometres south of the Main Zone workings, there is another group of workings including; Mt Nicholas, Brittania, Icely and Ophir Copper Mine – recording anywhere from 30-650 t of copper produced (MinView, 2019).

In the western part of the tenement, around Mt Bulga, there is a line of workings and mineral occurrences running over a distance of approximately 6 km. The Mt Bulga Mine was reported to have a copper grade of 6.5% and also has a historical resource from 1970.

In the far northern part of the tenement, west of Summer Hill Creek, there are numerous workings and occurrences around the historical Mt Lindsay copper mine.



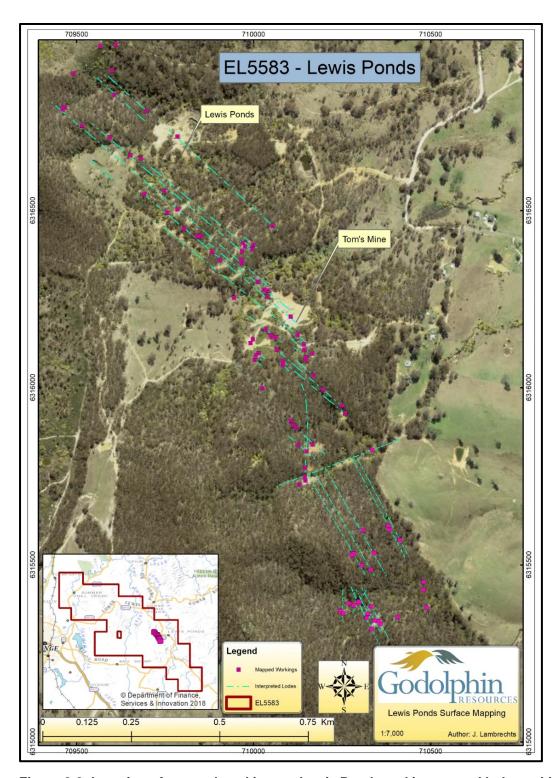


Figure 8-2: Location of mapped workings at Lewis Ponds and interpreted lode positions

# 8.3. Geology

## **8.3.1. Setting**

The Lewis Ponds deposit lies on the east limb of the Mullions Range Anticline and is hosted within the Late Silurian Mumbil Shelf sequence, part of the Mumbil Group. The actual mineralisation is hosted within the Anson Formation, a fining up sequence from a conglomeritic base to siltstones at the top.



The stratigraphic sequence has been metamorphosed to lower greenschist facies (Tri Origin Australia NL, 1999).

Other deposits in the region with similar mineralisation styles include; Daydawn, Calula, Mt Lindsay, Icely and Mt Bulga.

The host lithologies have been divided into three main units. From southwest to northwest and from the bottom of the sequence these are:

- a) A thick footwall unit of a felsic crystal tuff\sandstone of probable pyroclastic\volcaniclastic origin
- b) A 100-200 m thick unit of tuff, siltstone, limestone and debris flows that host the main sulphide deposits
- c) A thick hanging wall massive to laminated siltstone that contains disseminated pyrrhotite

Occasional rhyodacite porphyry and lamprophyre dykes have been noted in the area (Tri Origin Australia NL, 1999).

#### 8.3.2. Alteration and Structure

Within the sulphide lenses, alteration varies in intensity, mineralogy and distribution. Alteration usually consists of varying amounts of chlorite, sericite, carbonate, talc and silica and they either exist with and around the sulphide lenses, as pervasive alteration in the footwall and hanging wall or as foliation parallel zones.

Dip of the zones is generally steep to the northeast, however they can range from vertical to more steeply westerly dipping. This is generally thought to replicate the flexuring noted on the pervasive regional cleavage throughout the deposit.

The most prominent regional structure is the Lewis Ponds Fault, located less than one kilometre to the west of Lewis Ponds, which is interpreted as a splay off the Godolphin Fault. The mineral occurrences at Mt Lindsay also lie in a similar structural setting i.e. within proximity and within the hanging wall of a major regional fault; the Narragul Fault.

Two series of faults have been noted at Lewis Ponds (Tri Origin Australia NL, 1999). One regular set strikes southwest-northeast and dips to the northwest. Mapping has indicated that one of the faults truncates the stratigraphy just to the north of the limestone quarry. The second set are steep dipping and strike east-west. Apart from the fault near the limestone quarry, little offset has been noted.

Other items of interest that were noted during the Cube site visit was the intense deformation, represented by fault gouge and the apparent thrusting and associated minor drag folding within the limestone quarry. From observations it can be concluded that there has been a series of deformation events as a limestone boudin had preserved internal faulting. Also noted, at the southern end of the main Lewis Ponds-Toms Lode line of workings, was a series of workings ("Copper Workings") trending in a north-south direction i.e. a different to the northwest trending Lewis Ponds mineralisation, that contained copper mineralisation within narrow zones of fault gouge\breccia. Both of these field observations indicate that there is a structural component to this type of mineralisation.

The Little Bell, Brittania and Mt Regan Mines are offset to the east of the Lewis Ponds-Tom's line. It is unknown if this is due to a structural offset or a stratigraphic offset i.e. copper mineralisation present at Little Bell-Brittania-Mt Regan represents mineralisation deeper in the VHMS pile.

#### 8.3.3. Deposit Type and Mineralisation

The Lewis Ponds polymetallic deposit is a stratabound and disseminated sulphide system and is historically considered to be of a VHMS type. Godolphin has documented a later stage deformation and



an orogenic overprint that has introduced a component of remobilisation and the introduction of silica respectively into the system, as well as flexuring of the stratigraphy. This was noted by Cube during the site visit and also by Agnew (2002). The later stage fluid inflow was best observed around the Torphy's workings where bladed quartz structures with copper staining was found. The historical concept of synformal structures being present, resulting in the folding of one of the footwall lenses has now been discounted.

Agnew (2002) concluded that Tom's Zone was a sheet style VHMS deposit formed at or near the sea floor, which has later been deformed, remobilised and fluids introduced by the Lewis Ponds Fault. The Main Zone however has similarities with carbonate-hosted replacement deposits, where sulphides have infiltrated into the pore spaces of poorly sorted breccias. Textures within the sulphides indicate rapid sea water quenching.

Previous workers (Tri Origin Australia NL, 1999) have described the mineralisation consisting of three main domains; the massive sulphides of the Main Zone and Tom's Zone and the Footwall Stringer Mineralisation. A brief description of these is as below:

- Main Zone consists of three sub-parallel sulphide lenses (Central, Hanging Wall and Footwall Lenses). The Central and Hanging Wall Lenses are around 15 m and 4 m thick respectively and consist of alternating zones of massive to semi-massive sulphides interspersed with disseminated stringer zones (Figure 8-3). The Footwall Lens is approximately 18 m thick, consisting of a sulphide matrix within a tuffaceous and limestone clast host. Mineralisation consists of massive pyrite, red-brown sphalerite, galena, chalcopyrite, pyrrhotite, tetrahedrite and gold both as native and within pyrite.
- Tom's Zone consists of one massive sulphide lens (Figure 8-4) that is approximately 5 m thick and a current strike length of 300 m. Tom's contains higher grades of base metals but lower gold grades compared to Main Zone.
- Footwall Stringer located south of Tom's and is characterised by copper mineralisation hosted in quartz-chlorite-chalcopyrite veins, stringers and disseminations. These were noted at Little Bell and further south at Brittania and Mt Regan.

Although three main domains have been identified (as described above), there are also lessor concentrations of disseminated sulphides present locally between the main sulphide lenses. These zones have been identified and modelled in the 2019 Mineral Resource Estimate. This is expanded on in Section 8.5.



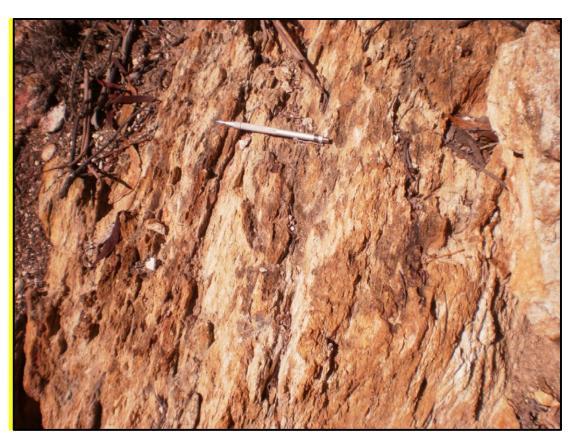


Figure 8-3: Stringer type mineralisation – located near Spicers Mine



Figure 8-4: Massive sulphide lens – located just north of Tom's Lode shaft



## 8.4. Previous Work

Modern exploration commenced in 1964 with companies including; Cominco, Amax and Shell (Rowe, 1999). A summary of previous explorers and work carried out is tabulated in Table 8-1. A summary of historical mining activities and more modern exploration activities and results for the more significant mineral occurrences located within the tenement are listed in Table 8-2.



Table 8-1 Summary of Historic Exploration Activities at Lewis Pond and Surrounds (Source: (MinView, 2019) and (Rowe, 1999))

Company	Year	Activities
Cominco	1969	Drilling
Kamilaroi Oil	1968-1975	Geophysics; drilling; stream; soil; ground reconnaissance
Aquitaine\Amax	1973-1979	IP; soil; DD
Esso\Le Nickel	1975-1978	Mapping; geophysics; drilling
Shell	1979-1983	Mapping; soil; DD; RAB; magnetics; airborne EM
Teck	1981-1983	Reconnaissance; EM
Renison	1984-1985	Reconnaissance mapping and sampling
Homestake	1986-1991	Mapping; RC
Tri Origin\TriAusMin\Heron	1991-2016	Mapping; DD; rock chip; data interpretation; EM; metallurgical testing; Mineral Resource Estimates (1994,
		2005 and 2016)
Ardea	2017-present	Mapping; DD; re-logging; data interpretation; database validation; Mineral Resource Estimate (2019) database validation

Table 8-2 Summary of Exploration Results by Prospect within EL5583 (Source: (MinView, 2019))

Prospect	Historic Activity	Modern Exploration	Results
		Activities	
Lewis Ponds	Extensive workings and Geophysics; mapping;		2016 Resource: Indicated and Inferred of 6.62 Mt @ 1.5 g/t Au, 69
	production; smelter; 4,622t	drilling	g/t Ag, 0.15% Cu and 2.41% Zn
	@6.7% Pb and 187 g/t Ag		2019 Resource: 20.24 Mt @ 0.5 g/t Au, 33.3 g/t Ag, 1.5% Zn, 0.7 %
			Pb and 0.1 % Cu (combined Lewis Ponds-Tom's)
Tom's Zone	Extensive underground	Geophysics; mapping;	
	workings; 30,000t of	drilling	
	sulphuric acid		
Mt Regan	Surface workings; 8.3 t of	IP	
	Cu and 4.8 t of Zn		
Brittania Mine	Shafts and surface	IP; drilling	22 m @ 0.2% Pb and 0.45% Zn
	workings		
Mt Nicholas/Icely/Ophir/Willams Lode	Extensive underground	Stream; mapping;	Stream base metal anomalies; mineralised drill intercepts 8 m @
	and surface workings (Cu);	geophysics; drilling	0.48% Cu and 0.47% Zn
	Mt Nicholas production –		
	4,000 t for 640 t of Cu		
	(16% Cu)		



Prospect	Historic Activity	Modern Exploration	Results
		Activities	
Mt Bulga	Underground and surface	Stream; drilling	1970 "Resource"
	workings		
Mt Lindsay	Surface and underground	Rock chip; trenching;	Drilling – no significant intersections. Trenching – several meters up
	(Cu/Au); alluvials (Au)	RC; geophysics	to 0.9% Pb



#### 8.4.1. Drilling

Drilling has been conducted at the Lewis Ponds Project since the late 1960s, with various minor programs carried out in 1973 (Amax), 1986 (Homestake), 1989 (Sabminco), before more intensive drilling was carried out from 1991 through to the present by Tri Origin\TriAusMin. Over 200 hundred holes have been drilled in and around Lewis Ponds with around 75% of the holes being diamond. The latest program, drilled in February-March 2017 by Ardea, consisted of four holes, mainly drilled to obtain samples for metallurgical testwork, but were also assayed. To assist in updating the geological model, these holes and other older holes on the same section (where suitable quality core still existed) were logged in a geological, mineralogical and structural context.

#### 8.4.2. Metallurgical Testwork

Material obtained from four PQ\HQ diamond drillholes (ALD0001-ALD0004) that were drilled in February-March 2017 at 200 m spacings through the deposit, was submitted to SGS (Perth) for metallurgical testwork. This was completed and reported in late 2018.

The testwork showed that an initial dense media separation (DMS) at a relatively large crushed particle size (-12.5 mm), over 90% of the sulphide and precious metals are recovered, on top of 25% of the material being rejected (Reynolds, 2018). DMS is a method that could be applied to ore feed that rejects lower grade or gangue material and hence allowing for higher grade process plan feed material or a lower mine cut-off.

Testwork indicated that two concentrates could be produced via gravity and flotation methods. The zinc concentrate contained 66% zinc and 64 g/t silver for 80% zinc recovery, while the second Cu-Pb concentrate contained 30.3 % lead, 4.78% copper, 1,619 g/t silver and 17.6 g/t gold for 70.3% lead recovery and 61.8% Cu recovery (Reynolds, 2018).

The metallurgical testwork concluded that:

- The flotation process is expected to be relatively simple
- The testwork material contained low talc
- A fine re-grind size (20-35 μm) may be required to liberate acceptable levels of galena (lead)
- A moderate grind size (40-60 µm) would be required for sphalerite (zinc) liberation
- Gold preferentially deports to copper-lead concentrate
- Intervals within ALD0001 (75-93 m and 110-122 m) showed poor zinc and lead recoveries respectively.

Cube notes that all the material submitted for testing was classified as 'fresh', therefore recoveries in the higher (oxide) portions, which has the potential for lower recoveries, has not been metallurgically tested. Although analysis of sulphides from the thin oxidised layer only showed minor mineralogical differences to sulphides in the fresh zone, which could imply no significant effect on recoveries, Cube recommends further metallurgical testing, both in the oxide zone and further confirmation testing in the fresh zone particularly in light of some intervals from ALD0001 showing poor recoveries.

More historical testwork was carried out by Amdel (1994 and 1995) and Metcon (1995) on two diamond holes. However, a different process route was being tested at that time (cyanide leach for gold, followed by flotation), so comparisons between the two series of testwork is not possible. The testwork did indicate that only approximately 54-74% of the gold could be extracted by gravity followed by cyanide leach, indicating a proportion of the gold is locked up in sulphides ( (Amdel Ltd, 1994) and (Metcon Laboratories Pty Ltd, 1995)).



#### 8.5. Resources

Mineral Resource Estimates have previously been reported in 2005 and 2016. No additional drilling was included in the 2016 update, however the Mineral Resource was reviewed and updated to comply with JORC (2012).

The revised 2019 Mineral Resource Estimate (Table 8-3) is based on and assisted by further work that was completed after the 2016 estimate. This included:

- Four equally spaced (200 m apart) diamond drillholes drilled along the strike length of the Lewis Ponds deposit
- A re-logging campaign of selected diamond core
- Modification and standardisation of historical geological logging
- Drill database validation
- Field mapping and spatial location of underground and surface workings.

The above points assisted in refining the geological model in preparation for an updated Mineral Resource Estimate.

The 2019 Mineral Resource Estimate was divided into an open pit Resource and an underground Resource. Figure 8-3 and Figure 8-4 tabulates the open pit and underground Resource respectively

Table 8-3: Lewis Ponds 2019 Open Pit Mineral Resource Estimate (JORC 2012)<sup>7</sup>

Category	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Measured	-	-	-	-	-	-
Indicated	7.88	0.3	26.3	0.1	1.1	0.4
Inferred	6.51	0.5	27.4	0.1	1.3	0.6
Total	14.39	0.4	26.8	0.1	1.2	0.5

Table 8-4: Lewis Ponds 2019 Underground Mineral Resource Estimate (JORC 2012)<sup>6</sup>

Category	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Measured	-	-	-	-	-	-
Indicated	0.07	0.2	20.0	0.1	1.8	0.5
Inferred	5.78	0.7	49.5	0.1	2.1	1.1
Total	5.85	0.7	49.1	0.1	2.1	1.1

The following is a summary of the data, parameters and methodology used in the 2019 Mineral Resource Estimate:

The Lewis Ponds deposit occurs within the Anson Formation, which is part of the Mumbil Group.
 The Anson Formation consists of a fining upwards sequence with conglomerate at the base and finer siltstone at the top. The sequence dips steeply to the north-east or sub-vertically. A mineralisation model was created consisting of massive sulphide and disseminated domains.

<sup>&</sup>lt;sup>7</sup> 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 Johan Lambrechts who is a full time employee of Ardea Resources Ltd. Mr Lambrechts who is a Member of the AIG, takes responsibility for the integrity of data that have been used to prepare the resource estimates, and for the Geological Model. Mr Lambrechts 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 Lambrechts consents to the inclusion in this report of the matters based on his information in the form and context that it appears.



There were seven massive sulphide domains and eight disseminated domains. The disseminated domains were interpreted using a dual approach of interpreting on zinc and gold equivalent values, while the massive sulphide domains were mainly based on where logging identified massive sulphide. As mentioned earlier, there are considerable drillhole intervals that have not been sampled, therefore the construction of the geological mineralisation model using the afore mentioned parameters was problematic in some areas

- Sampling was generally conducted on one metre intervals. RC drilling samples (3-5 kg) were collected by spear sampling and for DD half-core was sampled.
- The Mineral Resource Estimated was conducted using a dataset of 213 drillholes for a total of 63,335 m. This dataset consisted of 58,425.44 m of DD and 4,909.2 m of RC. These were drilled in various campaigns from 1971 to 2017.
- The Indicated Open Pit Resource is generally defined as areas with 50 m × 40 m or closer drill spacing with a kriging slope of regression of ≥0.70 and an average distance to composite data of 40 m − 50 m. The Inferred Open Pit Resource is defined by wider spaced drilling and limited by a digital terrain model defining the base of reasonable expectations of economic extraction and where sufficient drilling confidence exists that the continuity of geology and mineralisation can be extended. The Inferred portions of the Mineral Resource has an average kriging slope of regression of 0.4 to 0.5 and an average distance to informing composite data of 70 m − 80 m. The Underground Inferred Mineral Resource is classified as such due to the less continuous nature of the lodes and wider spaced drilling resulting in composite date being >75 m and kriging slope of regression of 0.22. Any areas with better parameters than this are classified as Indicated. No depletions to the Resource was undertaken to take into account the historic underground workings.
- The only information available on sample analysis was for the 2004 drilling campaign where gold was analysed on a 30 g sample using fire assay. Silver, copper, lead and zinc were analysed by aqua regia digestion followed by AAS.
- Ordinary Kriging estimation methodology was applied to the 15 individual domains and to the
  five grade attributes. Relevant search ellipses and kriging parameters were applied for each
  grade attribute. Drill hole assay data were composited to a uniform one metre density weighted
  length (best fit methodology) for geostatistical analysis and estimation. Parent block sizes used
  were 20 m (Y), 10 m (X) and 10 m (Z) with sub-blocking of 5 m (Y), 1.25 m (X) and 2.5 m (Z).
- Separate cut-off grades were used for the Open Pit and Underground Mineral Resource Estimates – both being based on zinc equivalents (ZnEq). The Open Pit and Underground Mineral Resource are reported at a cut-off of +1.0% and +3% ZnEq respectively. The ZnEq calculation is calculated by the following equation and assumptions:

 $ZnEq = Zn\% + (Au ppm \times 1.949) + (Ag ppm \times 0.019) + (Cu\% \times 2.306) + (Pb\% \times 0.741)$ 

- Listed commodity price assumptions as of 31 July 2019 are combined with estimated metallurgical recovery proportions as follows:
- o Zn US\$2585/t, 80% recovery,
- o Au US\$1393/oz, 90% recovery,
- o Ag US\$15.50/oz, 80% recovery,
- o Cu − US\$5960/t, 80% recovery,
- o Pb US\$1915/t, 80% recovery.
- The selection of 3% ZnEq cut-off (underground) corresponds to US\$77.55 per tonne or A\$115.75 per tonne in situ value (at 1 A\$ = 0.67 USD). The in-situ value at 1% ZnEq cut-off (open cut) is A\$38.58.
- The Open Pit Mineral Resource is constrained by a preliminary pit shell generated in Whittle software. The shell has been defined using the calculated ZnEq (as discussed within the above



cut-off grade section) together with an assumed A\$30/t processing cost and A\$4/t mining cost with 45° wall slopes. A shell showing a revenue factor of 1.9 was selected to limit the reporting of these Mineral Resources to within reasonable expectations of future economic extraction by open pit method. Within this shell, the model was subjected to a 1% ZnEq cut-off, whereas those portions of the model below the pit shell were subjected to a 3% ZnEq cut-off. Metallurgical testwork has shown that an initial dense media separation (DMS) at a relatively large crushed particle size (-12.5 mm), over 90% of the sulphide and precious metals are recovered, on top of 25% of the material being rejected. Testwork indicates that two concentrates could be produced via gravity and flotation methods, producing a zinc concentrate containing 66% zinc and 64 g/t silver for 80% zinc recovery and a copper-lead-silver-gold concentrate containing 30.3 % lead, 4.78 % copper, 1,619 g/t silver and 17.6 g/t gold for 70.3 % lead recovery and 61.8 % copper recovery.

Cube has reviewed the above assumptions and has concluded that they are appropriate. For a more detailed explanation of the Lewis Ponds 2019 Mineral Resource Estimate, readers are directed to read the Ardea ASX release dated 3<sup>rd</sup> September 2019 (Ardea Resources Ltd, 2019c) or to Appendix 4 in this report.

## 8.6. Exploration Potential

The potential to increase the Lewis Ponds Mineral Resource is considered to be high. Further infill drilling and drilling along strike not only has the potential to increase, but also to improve confidence in the Mineral Resource. There is the potential to increase the amount of contained gold as there are a considerable number of holes that intersect the interpreted domains that were not sampled for gold; for the Mineral Resource Estimate these intervals were assigned a gold grade of 0.0001 g/t. As well as the unsampled intervals, there are at least two obvious massive sulphide domains that are open at depth, as shown in Figure 8-5. A more thorough investigation of the block model in relation to existing drilling will have a high chance of identifying potential drill targets that may lead to increasing the Resource.

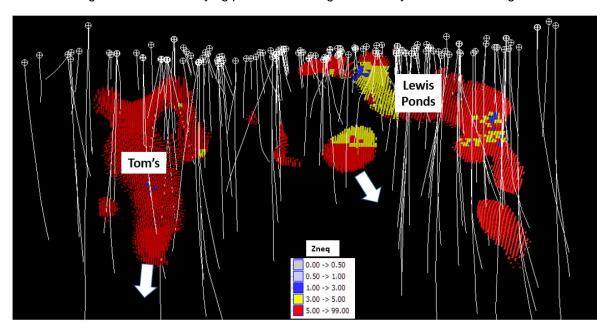


Figure 8-5: 2019 Mineral Resource Estimate block model showing massive sulphide domains open at depth (block model coloured on Zneg)

Historical workings within the immediate Lewis Ponds vicinity, from Mt Regan Mine (recorded production of over 8 t of copper and 4.9 t of zinc) to New Lewis Ponds runs over a distance of around 5 km, which highlights the potential strike of the mineralisation. A percussion hole drilled by Shell in



1982 below the Little Bell Mine (1.2 km southeast of Tom's) intersected 22 m @ 0.2% Pb and 0.45% Zn, further highlighting the extent of the mineralised system. Drilling from Little Bell Mine to Summers Mine to the north is scarce and wide spaced. Recent rock chip sampling carried out by Ardea between Little Bell Mine and Summers Mine confirms the extent of the mineralisation (Ardea Resources Ltd, 2019d).

The southern section of Lewis Ponds, around Summers Mine and "Copper Workings", shows higher copper values and this was confirmed from field observations of noted copper mineralisation. Although these copper occurrences appear to be structurally related, it could indicate a closer proximity to the feeder zone. More detailed geochemistry work may assist in vectoring in on feeder zones.

Although Ardea has completed a re-logging campaign on four drill sections, further benefit could be gained from further re-logging, as a large amount of historic diamond core is still stored on site. In conjunction with this, re-submitting core for assay – mainly the disseminated mineralisation, as the massive sulphide intersections would be too degraded to obtain meaningful assay results – would also be helpful, as there are significant downhole widths of core that were not assayed. This become apparent during the 2019 Mineral Resource update and as a result hindered the creation of a new geological model and subsequent estimate.

Ophir Copper Mine, Icely Mine and Mt Nicholas (650 t of copper produced) which are located over 6 km to the southeast of Tom's Lode, all lie within Mumbil Group which is the same host as Lewis Ponds. They also lie within a structurally complex zone of fault splays off the Lewis Ponds Fault. The fact that Icely Mine and Mt Nicholas, which have historic production of 508 t and 650 t of copper respectively, plus that the Icely Mine has noted stacked sulphide lenses (MinView, 2019) and drill intersections of 1.8 m @ 4.21% Cu and 3.2 m @ 3.99% Cu (Shepherd, 1972), highlight the potential of this area.

The Mount Lindsay prospect, located at the northern end of EL5583, is contained within the prospective Mumbil Group. Previous exploration activities do indicate the presence of narrow massive sulphide bodies. Gossanous outcrop with anomalous copper-lead-zinc has been observed and historical records from the Government Geological Surveyor in 1935 described 30 m deep shafts and conformable sulphide bodies (Kamilaroi Oil Co Ltd, 1971). Around 20 diamond holes drilled were drilled in the early 1970s. Significant intersections were found e.g. ~2 m at 1-6% Zn but were generally narrow and scattered (Kamilaroi Oil Pty Ltd, 1973), however recoveries were poor in noted zones of mineralisation. Further drilling in 1978 (Kamilaroi Mines Ltd, 1979) intersected similar narrow intersections of copper mineralisation of > 1%, but no significant zinc values were reported. Although it appears that later stage exploration activities in the Mt Lindsay area has been limited, further literature searches are required to fully evaluate this area.

# 8.7. Proposed Exploration and Further Studies

Diamond drilling at Lewis Ponds is planned to increase confidence in the Mineral Resource model and update the geological model. It has been suggested to drill horizontal or near horizontal holes through the whole sequence as previous drilling has not really achieved a complete cross section through the complete mineralised sequence. Cube concurs with this idea and logistically this is easily achievable due to topography and the availability of underground drilling rigs in the Orange-Parkes area.

Depending upon land access negotiations, mapping, rock chip sampling and general reconnaissance is planned for the Mt Lindsay and Mt Nicholas/Icely/Ophir/Williams Lode areas.

Due to the very extensive work in the area, and other areas within the Godolphin portfolio, that has been undertaken since the late 1960s, the MinView database contains a wealth of information that requires a thorough review to assist in targeting areas and avoiding doubling up of work programs. This is especially the case for the Mt Lindsay and Mt Nicholas/Icely/Ophir/Williams Lode areas.



Due to the location of Lewis Ponds and adjacent properties, Cube recommends that Godolphin commence environmental and social impact studies in conjunction with the above planned exploration activities.

Godolphin has proposed a budget of A\$0.79M to A\$1.51M (depending upon the total amount raised and progressive results) for the current reporting period.



## 9. Wisemans Creek

### 9.1. Location and Access

The Wisemans Creek Project (Figure 9-1) consists of the tenement EL8554, which is around 229 km<sup>2</sup> and is centred around the town of Oberon. It is approximately 130 km west-northwest of Sydney.

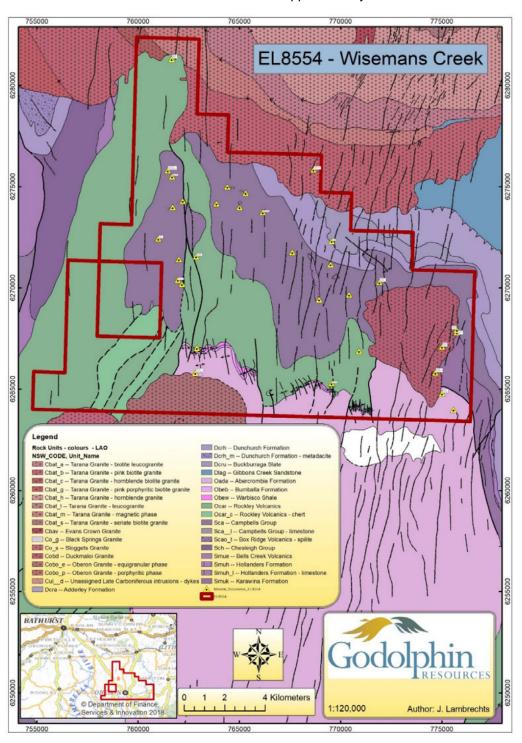


Figure 9-1: Location of Wisemans Creek tenement (inset map), geology and mineral occurrences



## 9.2. History

This area has a long history of mining, with numerous historical workings and numerous commodities being exploited including; gold, copper, tungsten, molybdenum, lead, zinc and silver.

## 9.3. Geology

#### 9.3.1. Setting

The region contains elements of the Ordovician-Early Silurian Macquarie Arc, Early Devonian Hill End Trough and Carboniferous Intrusions (Vassallo, J, 2019a).

The Tarara granite (part of the Carboniferous Bathurst Batholith) forms an arcuate belt within the far northern part of the tenement. Other granites of the Bathurst Batholith (Oberon and Duckmaloi granites) have intruded into the southern and eastern part of the tenement. Belts of sediments and volcanics of the Macquarie Arc and Hill End Trough are interspersed between the intrusives.

In the eastern part of the tenement, there is a 10 km wide corridor of north-northeast trending narrow dyke-like features. These features extend approximately 20 km north and south of the tenement boundaries (MinView, 2019). It appears that these have been interpreted from regional magnetics, but ground truthing confirmation of these is limited with the only noted occurrence of these appearing in the literature is at Copper Hill, where they have been described as leucocratic or dolerite dykes.

#### 9.3.2. Alteration and Structure

The main structural fabric is north-south trending, with faults, thrusts and isoclinal folds formed due to the compression and closure of the sedimentary basins.

Numerous alteration styles have been noted on this tenement, dependant on the mineralisation style. A review of Landsat (Vassallo, J, 2019a) imagery noted stronger iron oxide alteration within the eastern part of the tenement and the western part of the tenement being dominated by alumina-magnesium minerals.

#### 9.3.3. Deposit Type and Mineralisation

There are many mineralisation occurrences and styles scattered throughout the tenement. The location of major mineralisation occurrences is shown in Figure 9-2 and these are summarised in Table 9-1.



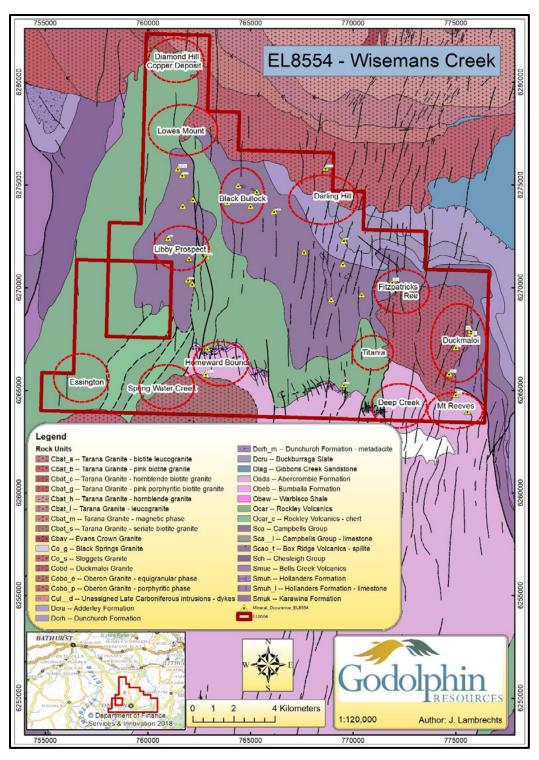


Figure 9-2: Location of Wisemans Creek Project Major Mineralisation Occurrences (adapted from Vassallo (2019a))



## Table 9-1 Summary of Deposit Type and Associated Occurrence Names

Deposit Type	Commodity	Deposit/Occurrence Name
Epithermal Au-Ag	Au, Ag	Black Bullock Mine
Orogenic Au	Au	Fitzpatricks Reef
Porphyry Cu-Au	Cu-Au	Oberon Prospect
Skarn	Cu-Au-W	Diamond Hill, Duckmaloi
Vein Au	Au	Lucks-all Reef, Faugh-a-Ballah, Lambert, Davis, Homeward Bound, Jocelyns, Malloys, Northwest Ridge,
		Trig Zone
VHMS	Cu, Zn, Pb, Au, Ag	Libby

Source: Modified from (Vassallo, J, 2019a)



### 9.4. Resources

There are no recorded Mineral Resources located within this tenement.

## 9.5. Exploration Potential

The Duckmaloi prospect has potential for both skarn-type tungsten-bismuth and mesothermal gold mineralisation, all related to the circular Duckmaloi granodiorite. The potential is highlighted by:

- There has been several other noted mineral occurrences on or close to the contact between the granodiorite and the Karawina Formation.
- The presence of limestone quarries (MinView, 2019) indicate favourable lithologies for skarn development.
- Significant historical production of bismuth (1.3 t according to available records)
- Drilling of known skarns by Australian Ores and Minerals in the early 1970s returned an intersection of 8.6 m @ 0.49% WO<sub>3</sub> and also recorded molybdenum stream anomalies.
- Shell Australia drilling in the mid to late 1980s intersected 24 m @ 0.18% WO<sub>3</sub> and 10 m @ 0.28 WO<sub>3</sub>.

Previous workers have noted that the skarns in this area are probably limited in extent, but further work is warranted.

Fitzpatricks Reef also has some noted similarities to the Duckmaloi prospect. Duckmaloi, Fitzpatricks Reef and other noted mineral occurrences in the southeast corner of the tenement, are located on or adjacent to the north-northeast dyke-like structures identified on regional magnetics (Section 9.3.1). This relationship warrants further investigation to determine if these linear structures are dykes or structurally related.

Fitzpatricks Reef and the area just to the northeast, close to the tenement boundary (also located on a north-northeast trending strong magnetic response) show strong anomalism in gold stream sediments, however lead, copper and arsenic stream sediment signatures are more concentrated around Fitzpatricks Reef itself.

Black Bullock has strong reasonably large gold and arsenic anomalies in stream sediments, however base metals appear to be of a lower degree and more restricted (Vassallo, J, 2019a). Due to the degree of historical mining activities and the potential for sediment dispersion from these areas, some caution needs to be applied to these results. Reasonably extensive drilling by BP Minerals, Central Western Gold and others returned mixed results, but with around 10 holes returning significant gold intersections of greater than 10 m downhole, this requires further investigation. Due to the heavily forested nature of this area, this will limit ground truthing and investigation and hence a full review of available data will need to be carried out before more targeted exploration commences.

The Libby prospect area is contained within the Campbells Group sediments and in conjunction with exploration results is prospective for VHMS-style mineralisation. This area contains a series of minor workings spread over an area of approximately 2 km². Sampling of a 2-3 m outcropping mineralised zone returned 2800 ppm copper, 560 ppm lead, and 8400 ppm zinc. Soil sampling, ground magnetics, IP and EM indicates that mineralisation is of limited extent, however confirmation of this has not been tested by drilling. Therefore, a targeted first pass drill program after further data compilation and review will assist in determining priorities in relation to other prospects in the tenement.

Diamond Hill, which sits close to the contact of Tarana Granite and Rockley Volcanics, is prospective for skarn and mesothermal type deposits. A zone of workings over 150 m in length is present and rock chips taken in this area indicate the presence of base metal mineralisation associated with a skarn.



Mapping has indicated that the skarn may exist over a length of around 350 m, however further groundwork is required to confirm the extent of the skarns.

There are no recorded historical workings with the Lowes Mount prospect area, however it does lie within a similar stratigraphic setting as the Copper Hill skarns i.e. on the contact between Tarana Granite and Rockley Volcanics. The area has one of the strongest gold stream sediment anomalies within the whole tenement and a strong copper anomaly. Due to the limited work, prospectivity is hard to determine at this early stage.

Mt Reeves, Deep Creek and Titania, located in the far south-eastern corner of the tenement, close to the Duckmaloi Granite, are low level targets requiring follow-up. Mt Reeves and Deep Creek have minor single workings, with Mt Reeves having a recorded rock chip sample of 0.15% zinc. All have stream sediment gold anomalies, but Mt Reeves also has copper and lead anomalies.

Essington and Oberon prospects in the southwest corner of the tenement are located within the Rockley Volcanics. There is a recorded instance of minor historical workings located at the Oberon prospect, with an adjacent rock chip sample returning 0.3% copper and 12.2 g/t gold. There is also potassium-thorium-uranium radiometric anomaly centred on the recorded workings, however these workings are actually located just within an adjacent tenement (EL6525) held by another party. Due to the interpreted structures and noted mineralisation style, this occurrence is most likely structurally controlled. Both prospects have weak steam sediment anomalies.

Other areas identified as being prospective (Vassallo, J, 2019a) include Spring Water Creek and Homeward Bound. Due to these being close to the town of Oberon and associated infrastructure these are not considered to be targets at this stage.

## 9.6. Proposed Exploration

A portion of the Wiseman's Creek tenement is Crown Land. Access to this land will be through the process of "Right to Negotiate". The highest priority activity planned is mapping and rock chip sampling over the Black Bullock prospect. Ground reconnaissance in other areas are also planned. A total expenditure of approximately A\$0.13M to A\$0.25M (depending upon the total amount raised and progressive results) for the reporting year has been proposed.



## 10. Calarie

### 10.1. Location and Access

The Calarie Project consists of the EL8555, EL8580 and ML739 tenements covering an approximate area of 137 km². The tenements run from just north of Forbes in a north-easterly direction ending approximately 7 km to the southwest of Parkes (Figure 10-1). The Newell Highway bisects the tenements.

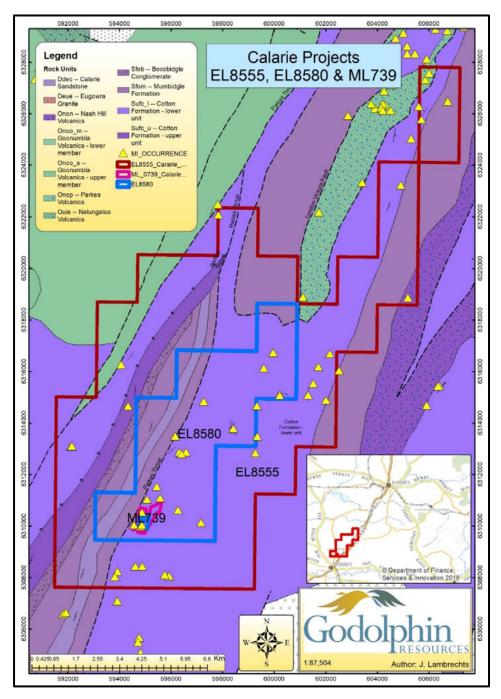


Figure 10-1: Location of Calarie tenements (inset map), geology and mineral occurrences



## 10.2. History

This area has a long history of mining, with the most significant being the London-Victoria gold mine and processing plant (which processed ore from the Mt Aubrey BHP open pits mined in 1990) located just to the north of the tenements.

In a more historical context, there are numerous workings located throughout the tenement, with major groupings of workings centred around the settlement of Calarie and the more modern London-Victoria Mine. All workings appear to be gold associated with a strong structural component.

## 10.3. Geology

#### 10.3.1. **Setting**

Two main rocktypes exist within the Calarie Project area (Ostrowski M., 2019b). These include:

- Parkes and Nash Hill Volcanics of the Ordovician Junee-Narromine volcanic arc (which hosts Northparkes porphyry copper deposit some 40 km north)
- Intermediate volcanics (Daroobalgie Volcanics, Cotton Formation, Calarie Sandstone, Bocobidgle Conglomerate and Mugincoble Chert) of the Ordovician-Silurian.

The project area is contained within the north-south trending Forbes-Parkes Belt, which forms part of the larger Junee-Narromine Volcanic Belt.

#### 10.3.2. Alteration and Structure

The generalised style of alteration noted within and adjacent to the mineralisation zones are low temperature albite-sericite-carbonate-chlorite-quartz ± pyrite assemblages. Within or close to the mineralisation pyrite-pyrrhotite-silicification assemblages become more common. Alteration zones appear to be conducive to detection by IP methods.

The deposits within this area are generally restricted within two northeast striking bounding faults which form part of the Parkes Fault System. They occur on these structures or linking structures of various orientations within this faulted domain (Figure 10-2).



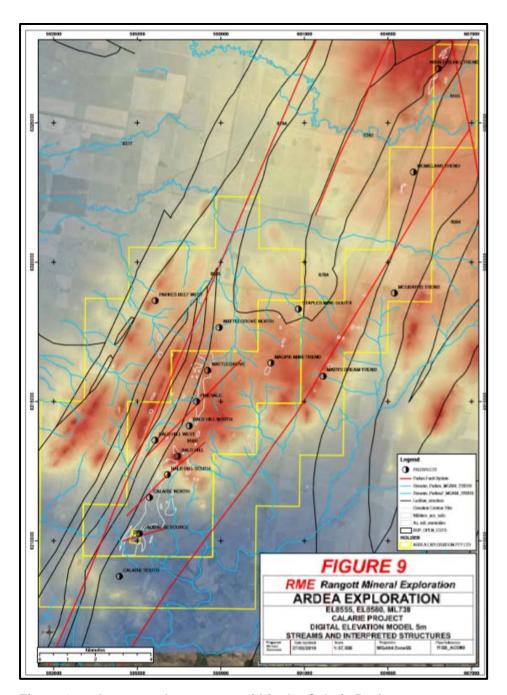


Figure 10-2: Interpreted structures within the Calarie Project (Source: (Ostrowski M., 2019b))

## 10.3.3. Deposit Type and Mineralisation

Deposits in the area are considered to be of a structurally hosted orogenic type. They occur either as saddle reef type quartz veins within the Cotton Formation or along favourable contacts between the volcanics and fine-grained sediments.

### 10.4. Resources

There are no current reportable Mineral Resources located on this tenement.



## 10.5. Exploration Potential

All prospects identified lie within the Parkes Fault Zone. This zone contains a very concentrated cluster of mineralisation occurrences and historical workings. There appears to be two main grouping of occurrences within this zone – both related to northwest trending cross cutting fault zones. One cross cutting zone is at the southern end of the tenements and one to the north which is outside the existing tenements.

The Calarie Project is considered to be the high priority walk up target, primarily due to extensive underground workings and the reported grades extracted. There is considerable evidence that the mineralisation extends below and along strike of the existing workings. In some cases, previous drilling has failed to intersect the prospective zones. Future drilling would have to be carefully targeted as it appears there are discreet lodes\shoots with a plunge component.

The prospects of Wattlegrove, Bald Hill and Pinehill occur along the same strong magnetic anomaly that hosts the Calarie deposit and hence the prospectivity is encouraging. Wattlegrove has reported some encouraging drill results which warrant further investigation. Combined with the potential of Bald Hill, due to the potential of structural traps and presence of chemically receptive limestones, the area directly along strike is considered prospective. It is believed that due to the cover around the Bald Hill prospect, previous exploration activities may not have been appropriate.

The more western and northern prospects (Nibblers, McMillan's, McGraths, Mary's Dream and Magpie-Staples) are considered to have lower prospectivity due to:

- Their location off the main mineralised Calarie trend.
- Their distance away from the northwest cross-cutting structures within the Parkes Fault Zone that appear to show concentrated mineral occurrences.
- Distance from the postulated fluid conduit of the Parkes Fault.

Parkes Fault West is a conceptual target only as it is close to the postulated fluid source structure of the Parkes Fault.

# 10.6. Proposed Exploration

Proposed exploration activities are heavily based on gaining land access. If this is achieved, it is planned to commence soil sampling around the Wattlegrove, Calarie and McMilliams Trend areas and evaluate the potential for ground magnetic programs. A total expenditure of around A\$0.15M to A\$0.26M (depending upon the total amount raised and progressive results) is planned.



# 11. Gundagai

### 11.1. Location and Access

The Gundagai Project consists of two tenements – EL8061 (Gundagai South) and EL8586 (Gundagai North) which cover an area of approximatley 278 km² and one tenement under application (ELA5809). EL8061 runs from the southern limits of the township of Gundagai for approximately 25 km to the south (Figure 11-1), while EL8586 is centred about 15 km to the north-northeast of Gundagai (Figure 11-2 and Figure 11-1). Ardea ELA5809, centred around the Gundagai townsite, links EL8061 and EL8586.

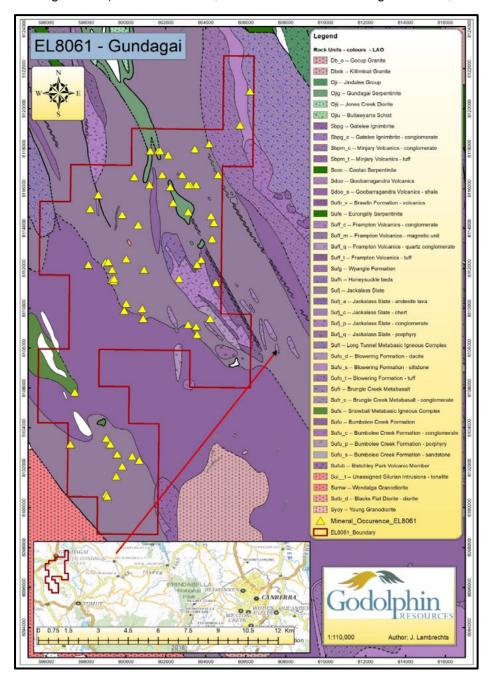


Figure 11-1: Location of Gundagai South tenement (inset map), geology and mineral occurrences



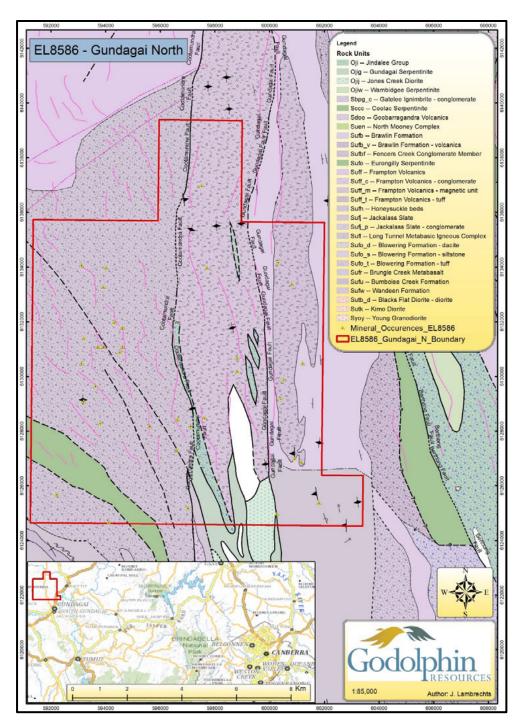


Figure 11-2: Location of Gundagai North tenement (inset map), geology and mineral occurrences

# 11.2. History

The area has long history of mining and prospecting. The first gold rush within the Gundagai and Adelong area was recorded in 1848, based on both alluvial and outcropping veins. The Gundagai-Adelong goldfield was considered to be within the top ten producers for the period from 1848 to mid-1900s (Hatfield, 2007). There were numerous small mines previously worked for gold, copper, lead, zinc, chromium, magnesite, barite and manganese. There have also been noted occurrences or



exploitation of asbestos, silica and talc. Significant producers include; Califat (37 t copper), McAlpine (5 t copper), Mt Mary (406 t chromite), Princess Marina (20 kg gold) and Big Ben alluvials. The mineral rich nature of the area can be seen in Figure 11-3, which shows recorded mineral occurrences. At the present time there are no current mining activities taking place in the area.

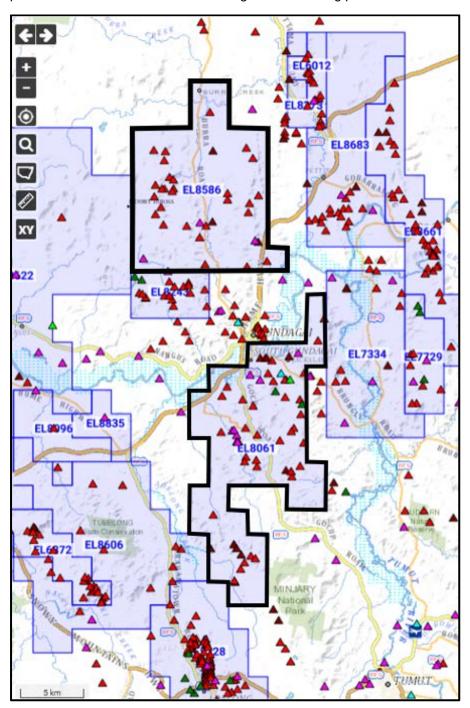


Figure 11-3: Mineral Occurrences in the Gundagai Project and surrounds – Godolphin tenements in black (Source: (MinView, 2019))



## 11.3. Geology

#### 11.3.1. **Setting**

Rocks within the tenement consist of the Cambrian to Silurian oceanic crest, Early Silurian Tumut Trough and Late Ordovician Molong Volcanic Arc, all part of the eastern Lachlan Fold Belt. The oceanic crustal material includes; serpentinites, basalts and cherts. The Tumut Trough material is characterised by felsic volcanics (Frampton Volcanics), feldspar porphyry intrusives and basinal sediments like the Jackass Slate. Early Devonian uplift was accompanied by felsic intrusives and rhyolitic volcaniclastics (Vassallo J., 2019c).

Late stage alluvial and colluvial cover sediments (part of the Tertiary Murray-Darling Basin) are present, mainly along and adjacent to the Murrumbidgee River.

#### 11.3.2. Alteration and Structure

Overall the area sits within the north-northwest trending Tumut Synclinorial Zone which is bounded to the east by the Mooney Thrust and to the west by the Gilmore Fault (Suture) Zone.

Most of the alteration noted by previous workers was alteration associated with porphyritic intrusions. This ranges from high temperature potassic and phyllic alteration through to chlorite-sericite-carbonate alteration. Other noted alteration assemblages described include; calc-silicate and chlorite-actinolite-anthophyllite-magnetite-biotite-quartz associated with thick lenses of sulphide.

#### 11.3.3. Deposit Type and Mineralisation

Most of the gold deposits in the region have been classified as orogenic or shear hosted. Later workers have postulated that some of these deposits, due to the relationship with porphyry dykes and the presence of quartz-biotite veins, are in fact Intrusion Related Gold Systems (IRGS). The base metalgold deposits are considered to be VHMS.

#### 11.4. Resources

There are no current reportable Mineral Resources located on this tenement.

## 11.5. Exploration Potential

Historical mining activity and recent exploration has shown that the Project contains numerous mineralisation types. These include; orogenic gold and/or IRGS, hydrothermal gold, porphyry hosted copper-gold, alluvial gold and VHMS.

Previous work carried out around existing workings tends to show that mineralisation in these areas is narrow and of limited extent. However, the potential exists for deeper large tonnage lower grade orogenic and/or IRGS gold systems, especially around porphyries that show alteration assemblages that are indicative of these styles of mineralisation. Detailed analysis of multi-element geochemistry will assist in targeting the more prospective areas.

Recent activities conducted by Ardea around the Big Ben Trend have highlighted anomalous gold and copper values with an associated manganese oxide overprint. This area will be one of the highest priority targets within this Project.



## 11.6. Proposed Exploration

Godolphin plans to conduct field activities such as; mapping, rock chip sampling and soil sampling in areas where access has already been granted. The highest priority will be to conduct further soil auger around the Big Ben area, following up previous anomalous auger and rock chip results. Activities in other areas will be dependent upon gaining land access. Approximately A\$0.13M to A\$0.26M (depending upon the total amount raised and progressive results) is planned to be spent in this reporting period.



# 12. Social Considerations, Environmental, Native Title and Land Access Issues

Within recent years some mining activities within NSW, especially those involving coal and coal seam gas, have had significant negative publicity, with the flow-on effect that some proposed mining operations were not able to proceed. It is now imperative for any project in NSW that the leaseholder be open, transparent and engaged with the local communities. Ardea has engaged a contract Community Liaison Officer who will continue to assist Godolphin in accessing land for exploration activities, to keep local communities informed and provide publicity on the positive economic effects of a mining operation. This will expand once exploration activities ramp up.

Most areas within the Godolphin tenements would be considered to be closely settled, with land ownership ranging from reasonably large agricultural enterprises to small lifestyle blocks. It appears that a considerable number of landholders would need to be consulted to request permission to access and carry out exploration activities. Cube's review of previous exploration reports noted several instances where the then tenement holder stated land access issues. Newmont stated in a 2014 exploration report that failure to gain access to parts of their tenement contributed to them dropping that particular tenement. Land access issues were also noted in the Calarie tenements. That said, it is uncertain whether these particular land access issues are still relevant to the current tenements. Although land access can pose problems, they are not insurmountable and again the engagement of the Community Liaison Officer will assist with this. Recent work carried out by Ardea and the nearly 30 land access agreements that have already been confirmed shows that the company has a good relationship with certain landholders and there is no reason why this could not extend to other landholders.

Further exploration, for example drilling around the Lewis Ponds deposit will not be hindered as the deposit is within land owned by TriAusMin Pty Ltd (currently a subsidiary of Ardea Resources Ltd), therefore this Project stands out as a good walk-up target. If the results of further drilling, Mineral Resource updates and economic studies are positive, considerable thought will need to be given to potential waste dump locations and how mining activities could impact on neighbouring properties, as the Lewis Ponds deposit lies on the side of a hill which is visible to numerous dwelling and farming properties.

Native title access is still being negotiated for parts of the Ophir and Wiseman's Creek Projects. Currently this affects approximately 20% of both tenements.

The Wisemans Creek Project also contains several state forests. Negotiations to access these areas are currently underway.

The main area of the historic Ophir gold workings has a cultural and historical significance associated with it as it is the site of the first recorded gold rush in Australia. There is a historical walk and park with notice boards around Lewis Ponds Creek to signify this aspect. Despite this public area being the site of original mining operations and being located adjacent to recent semi-active small-scale mining operations, any disruptive exploration around this immediate area is most likely not possible, however this represents only a small proportion of the total tenement area.

As previous mining activities tended to be small scale, Cube is unaware of any environmental liabilities such as acid mine drainage, tails dams or other associated items on any of the tenements held by Godolphin.



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# **Appendix 1**

# Mt Aubrey Resource JORC Code (2012) – Table 1

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>
1	

## Commentary

The following report details the historical data, checks, validation and methodology used to generate the Mineral Resource Estimates (MRE) for the Mount Aubrey gold deposit. The majority of the data used for the MRE was collected during multiple drilling campaigns by BHP Gold and YTC Resources.

- Reverse Circulation Percussion drilling (RC), Diamond core drilling (DD), Rotary Air Blast drilling (RAB) and Aircore drilling have contributed to the Mount Aubrev resource database.
- The Mount Aubrey Resource data consists of 219 drill holes over several decades with a total of 9,382m distributed as follows:

Year	Company	No. holes + type	Metres	% of total metres
1987	BHP Gold (BHP UTAH)	62 RC holes	1,327	14%
1988	BHP Gold	45 RC holes	2,611	28%
1989	BHP Gold	50 RC holes	2,208	24%
1990	BHP Gold	31 RAB holes	1,586	17%
2007	YTC Resources	3 Diamond holes	916.9	10%
2009	YTC Resources	28 Aircore holes	733.5	8%
TOTAL	_	219 drillholes	9,382	100%

- o The RC holes used were sampled at 1m intervals in most cases.
- The Aircore holes were sampled at 1m intervals. The RAB holes used were sampled at 1m intervals. Many of the RAB drill hole intervals were not assayed.
- The Diamond Drill holes were geologically and geotechnically logged before sampling. Diamond drill core was generally cut
  and half core sampled at 1m intervals. Some intervals of 0.5m to 2m length were also taken to accommodate changes in
  geology and mineralisation.
- The Resource is based on sub-surface samples obtained by the above drilling. Earliest drilling tested the delineated mineralized quartz veins and anomalous soils forming the Mt Aubrey deposit. This progressed into drilling on grid sections to test the mineralisation at intervals appropriate for improving confidence in mineralised continuity and mostly on a 20m spacing.
- The earliest drilling completed by BHP was completed using a Warman 1000 drill rig and using reverse circulation drilling. Drill hole
  azimuth and declination was supervised by the on site geologist. Down hole surveying was not used at that time. Drill collars were
  surveyed by the use of a registered surveyor. The BHP drill hole MAD001 was down hole surveyed using an Eastman down hole
  camera. Further BHP drilling programs includes reverse circulation and RAB drilling. Drill hole azimuth and declination was
  supervised by the on site geologist.



Criteria	JORC Code explanation	Commentary
		<ul> <li>Diamond drill holes completed by YTC Resources were down hole surveyed using a Reflex down hole camera. Collar coordinated were surveyed using a differential GPS generally giving &lt;10cm accuracy. Aircore and RC drill holes completed by YTC Resources were not down hole surveyed. Collars were picked up using a Garmin hand-held GPS giving 3m accuracy.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Percussive drilling techniques:</li> <li>28 Aircore holes were drilled by YTC resources using a 90mm aircore blade bit.</li> <li>31 Percussion Rotary Air Blast Drill were drilling by BHP Gold with limited information on drill rig configuration given except that a standard RAB open hole with RAB blade bit used. Drill chips were retrieved from the drill hole and collected in bulk bags through the use of a drill rig-mounted cyclone.</li> <li>157 Reverse Circulation drill were drilled by BHP and YTC Resources. In both cases a standard reverse circulation drilling configuration was used with a hammer and drill bit of 150mm size (approximate) used. Drill chips were retrieved from the drill hole and collected in bulk bags through the use of a drill rig-mounted cyclone.</li> <li>Core drilling Techniques</li> <li>4 Diamond Drill holes (only 3 used in the resource due to loss of historic data from one. (MAD001))</li> </ul>
		<ul> <li>MAD001 was drilled with a 60m RC pre collar with the rest of the hole being drilled by NQ diameter core with a single tube. MAD002,003 and 004 were drilled using HQ and NQ diameter core from the surface and used triple tube.</li> <li>A search of the historic data reveals that the BHP diamond hole MAD001 was orientated as well as being down hole surveyed. The methods for core orientation were not mentioned in reports. MAD001 was pre collared using reverse circulation and then drilled by NQ diameter coring using a single barrel. YTC drill holes MAD002,003 and 004 were drilled by a combination of HQ and NQ diameter drilling using triple tube and orientated core. Core orientation was achieved using a Reflex orientation tool. The drill holes were down hole surveyed using a Reflex down hole camera. Core samples are matched with orientation data. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation. Orientation quality is noted between orientation marks based on a tolerance. Systematic failures are immediately raised with the drilling contractor.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Diamond Drilling:     Geotechnical data including core recoveries were recorded for both the BHP and YTC diamond drill holes. Core recovery was generally good to excellent in most cases. Core recovery over mineralized intervals was excellent and did not produce bias in subsequent sampling and assaying.  Percussive Drilling
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>Drilling completed by BHP was completed using several drilling techniques. The bulk of the resource drilling over the Mt Aubrey deposit was drilling using reverse circulation drilling. Drilling methods generally gave good sample recoveries as mentioned in historic reports. Drilling completed by YTC Resources generally gave excellent recoveries. Samples were collected into 1m bulk bags at the drill rig cyclone and later composited. Intervals with poor recovery were generally noted on the drill logs. Wet samples were also noted on the logs.</li> <li>RAB Drilling</li> </ul>
		<ul> <li>BHP drilled a number of RAB holes mostly looking for extensions to mineralisation in the vicinity of the initial Mt Aubrey resource and mine areas. Limited information is available on sample recovery. RAB drill holes were drilled to shallow depths and generally to refusal. Sample and assay data from some of the BHP RAB holes at Mt Aubrey have been lost.</li> <li>Aircore Drilling</li> </ul>
		<ul> <li>YTC Resources used aircore drilling to test for extensions to the Mt Aubrey deposit. Aircore holes were drilled to refusal and generally did not test fresh rock. Samples were collected into 1m bulk bags at the drill rig cyclone and later composited. Sample recovery was noted as being adequate during the program with any poor recovery intervals noted on the drill logs.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a	RC, RAB, Aircore Chips
	level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>The drill chips were geologically logged at 1m intervals with generally good to detailed recording of lithology, alteration, mineralisation and other observations such as colour, moisture and recovery. Drill chips were collected and sieved before being placed into reference chip trays for visual logging at 1m intervals. Hard copy drill logs were mostly scanned and included in annual reports. BHP</li> </ul>



		COBE
Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>completed hard copy cross sections and plans of all drill holes showing lithology and assay results.</li> <li>BHP completed petrological analysis, XRD and metallurgical test work on drill chips and bilk samples. Gold identified in samples was reported to be relatively fine. Metallurgical recoveries were stated to be high suggesting that the fine gold was free and not refractory.</li> <li>The BHP reference chip trays from Mt Aubrey were stored at the London Victoria Mine after being removed from the site. No photographic reference could be found. The location of these materials is currently unknown.</li> <li>YTC Resources completed magnetic susceptibility on all drill samples and photographed all reference chip trays.</li> <li>100% of the chip intervals were logged.</li> <li>All YTC reference chip trays and diamond core are stored at Ardea's Orange premises. Diamond drill hole MAD004 is stored at the core library located at Londonderry.</li> <li>Diamond Drill Core</li> </ul>
		<ul> <li>The diamond drill core was geologically logged with the logging intervals being determined by the geology in the core. Geologically logging included weathering, lithology, alteration, mineralisation and structure. The assay intervals do not straddle geological intervals and thus the assay represents the grade within the geological unit. The data collected produced enough detail to support a mineral resource estimate.</li> <li>100% of the drill core was logged.</li> <li>The BHP diamond drill hole MAD004 from Mt Aubrey was stored at the London Victoria Mine after being removed from the site. No photographic reference could be found. The location of this core is currently unknown</li> <li>YTC Resources completed structural logging of diamond drill holes MAD002,003 and 004. Where core samples are orientated, drill core is logged for geotechnical and structural information by measuring alpha and beta angles including details of the structure, width and mineralisation.</li> <li>YTC Resources collected magnetic susceptibility readings at 1m intervals and photographed diamond drill hole core from MAD002,003 and 004 wet and dry before cutting and sampling.</li> <li>AYTC diamond drill hole MAD002 and 003 core is stored at Ardea's Orange premises. Diamond drill hole MAD004 is stored at the core library located at Londonderry.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the</li> </ul>	<ul> <li>RC-RAB-AC Chips</li> <li>The historic reports do not all specifically mention sub-sampling techniques, but it is assumed that the RC, RAB and aircore drilling rigs were equipped with a cone or multitier riffle splitter attached to the cyclone, or a separate multitier riffle splitter was used alongside the drill rig by BHP and YTC field staff. The splitter generally provided one bulk sample of approximately 10-20kg and a sub-sample of 2- 4kg per metre drilled.</li> <li>Bulk samples were collected in plastic bulk bags, with the sub-samples collected placed in calico sample bags. The drilling technique was sufficient to keep the majority of bulk samples collected dry and sufficiently representative of the intervals being drilled. Any wet samples or poor recovery were noted on the logs that were updated at the drill rig by the supervising geologist.</li> <li>The drill chips from the RC, RAB and aircore holes were mostly riffle split at the rig with the sample bagged for transport to the analytical laboratory. Some spear sampling may have been completed for moist and wet samples. Sample splitting was considered to give a satisfactory representative sample of the bulk bags. The quality of the split sample is assumed appropriate based on the reputation of the companies performing the sampling including BHP Gold Mines and YTC Resources. Both BHP and YTC Resources used qualified geologists at the drill rig during drilling and sampling ensuring a high standard of work.</li> <li>Sample size was not reported for all intervals drilled and collected, however satisfactory considering the level of supervision. Records were kept of poor recovery and wet samples.</li> <li>Diamond Core</li> </ul>
	grain size of the material being sampled.	• Diamond drill core is generally cut and sampled at 1m intervals. The diamond drill core has been cut longitudinally in half and at 1cm below the core orientation line. Where an orientation line was not present the supervising geologist placed a cut line that was sufficient to allow for representative sampling of the core. Sampling was undertaken at predominantly 1m intervals with a range of 0.5m length to 2m lengths to accommodate changes in geology and mineralisation. Cutting and sampling of the core was supervised by a geologist. Samples core was consistently taken from one side of the cut core down the hole to avoid biased samples.

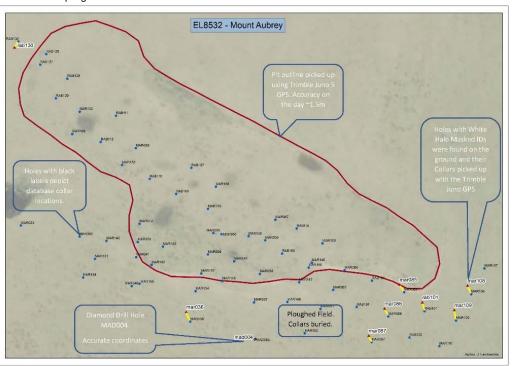


Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Selected base metals and path finders including Ag, As, Cu, Pb, Zn, Sb, W, Atomic Absorption Spectrometry (AAS). Not all intervals were assayed for these elements</li> <li>Au by Fire Assay. All intervals were assayed for gold.</li> <li>Samples were submitted to the Australian Analytical Laboratory (AAL) Orange NSW. 2007-2011 data:</li> <li>Crush entire sample nominal &gt;70% passing 6mm;</li> <li>If sample &gt; 3kg, Riffle split sample to maximum of 3.2Kg and pulverise split in LM5 to 85% passing 75 μm. Retain and bag unpulverised reject (bulk master). If sample &lt; 3.2kg, entire sample is pulverised;</li> <li>Multi element suite using laboratory techniques ME-ICP41, ME-ICP61</li> <li>Au by Fire Assay Au-AA25</li> <li>Samples from the 2007 program were submitted to the SGS Laboratory West Wyalong NSW. All other samples were submitted to the ALS laboratory in Orange NSW.</li> <li>ALS and SGS laboratories undertake internal QC checks to monitor performance. Laboratory duplicates and standards were deemed to be suitable for laboratory QA/QC at that time. No records of field duplicates, standards or blanks could be found.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All results from the BHP drilling programs including significant intersections were reviewed and analysed by senior BHP staff and reported in mandatory six-monthly and annual reports.</li> <li>No twinning of holes was completed.</li> <li>All drilling completed by BHP was logged in the field onto hard copy paper logs. Logs were validated after the completion of the programs and receipt of assay data. Geological and sample logs were updated with analysis results when received. Composite samples returning 0.2ppm Au were then assayed at 1m intervals. Geological logs, survey data and assay results were used to draft scale plans of all drilling and cross sections. The majority of land and cross sections were included in six-monthly and annual reports to the Mines Department. Paper logs were copied and included in regular six-monthly and annual reports. Hard copy data including geological logs, samples sheets, survey and assay data, drilling plans and cross sections were stored at BHP Gold's London Victoria Mine.</li> <li>All drilling completed by YTC Resources was logged in the field using paper logs and later digitized, validated and inserted into the YTC Resources database. This data was checked on receipt of assay results with some re assaying of composite intervals undertaken where Au results were anomalous.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Collar Survey</li> <li>Drill collars completed by BHP were surveyed using a registered surveyor located in Parkes NSW. All collars were surveyed using the data of the time and included easting, northing and RL. Most historic drill collars were reported in projected coordinate system AGD 1966 AMG Zone 55. The accuracy of the surveyed holes was not reported. YTC surveyed the diamond holes MAD002,003 and 004 using a differential GPS reporting at &lt;10cm accuracy. All other drill holes were surveyed with a hand-held Garmin GPS with reported 2-3m accuracy. YTC used the projected coordinate system GDA1004 MGA Zone 55.</li> <li>Down Hole Survey</li> <li>Methods used to downhole survey the BHP drill hole MAD001 were reported to be an Eastman downhole camera device. The survey intervals were not mentioned but were expected to be sufficient. YTC down hole surveyed the diamond holes MAD002,003 and 004 using a Reflex downhole camera with readings for azimuth and dip recorded at 30m intervals. YTC down hole surveyed their RC holes using a Reflex down hole camera lowered within the rods and readings for azimuth and dip taken at 30m intervals. A stainless-steel rod was used in the drill string allowing for accurate recording.</li> <li>Collar Survey Validation:</li> <li>The collar locations in the database was physically validated on the ground by using a Trimble Juno 5 professional GPS unit with accuracy on the day of 1.5m. Many of the drill collars were destroyed by the mining of the open cut in 1990, and later by cultivating the field surrounding the historic mine for cropping. The collars in the hanging wall of the two satellite pits were validated by finding 4</li> </ul>



Criteria JORC Code explanation Commentary

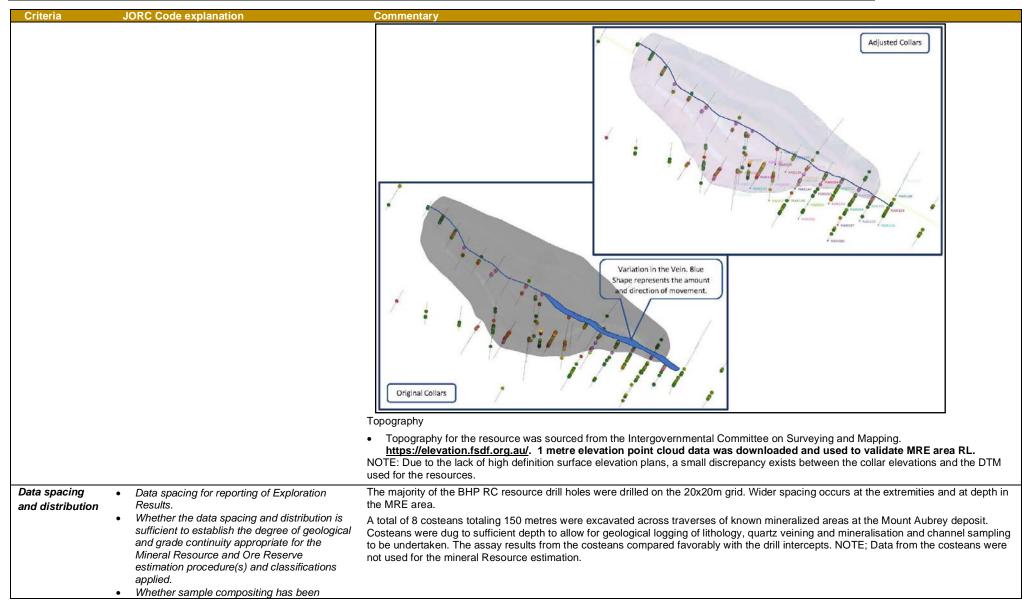
undestroyed collars. These were found to be accurate to within 2m. The collar in the hanging wall of the main pit was validated by finding 8 collar locations. The collars in this part of the resource were found to have an error of 2.24m East and -5.64m North. The error margin for the collar surveys can only be confirmed in these two locations and is considered acceptable for an inferred resource. Further drilling is planned for the near future and these collars will be surveyed via differential GPS. The data obtained from this and other future drill programs will be used to further validate historic data.





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Criteria	٠,	JORC Code explanation	Commentary
		applied.	
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Sample Orientation</li> <li>The nature and controls on mineralisation at the Mount Aubrey deposit are considered to be well understood in the area of the MRE.</li> <li>The drilling and sampling was mostly completed at an azimuth and dip sufficient for effective testing of the steeply dipping and NW striking mineralized vein system at Mt Aubrey. The drill hole azimuth and dip was generally consistent and reflects a vein system with a n relatively uniform steep dip and NW trend over its known extent. Most drill holes were drilled at a dip of -60 degrees and an azimuth of between 18 and 22 degrees magnetic making them perpendicular to the vein orientation.</li> <li>Based on the current understanding sampling is considered to be unbiased with respect to drill hole orientation versus strike and dip of mineralisation.</li> </ul>
Sample security	•	The measures taken to ensure sample security.	The samples and Resource estimate are of historic nature. Sample security is presumed adequate.
Audits or	•	The results of any audits or reviews of	No Audits have been conducted on the historic data to our knowledge.
reviews		sampling techniques and data.	The collar and survey data was visually validated for this estimation and found in order.



# **Section 2 Reporting of Exploration Results**

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

	J	JORC Code explanation	Commentary					
Mineral tenement and land tenure status	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<ul><li>LTD.</li><li>The land is owned by</li><li>There is no Joint ven</li></ul>	rospect, on which this resource was cald r Private land holders South of the towns ture or any other arrangements pertaining payed by Ardea Resources for EL8532	ship of Baldry. ng to this project, and a		·	dea Explorati
Exploration	•	Acknowledgment and appraisal	EL 8532 was granted to A	Ardea Resources Ltd on 7th March 2017	7 as a 67 graticular bloc	ck tenement for a period	d of 3 years.	
done by other parties		of exploration by other parties.	Elsewhere in the teneme portion of the licence area More recently, 14 compar	kings consisting of shallow pits and shant small exploration shafts and pits look a.  nies have undertaken exploration in the ide geological mapping, stream sedimen	ing for copper in and ar area ( <b>Table 2</b> ), predon	ound the Yeoval Intrus	ive Complex can be so for base metals.	found in the  Work underta
				Table: Pr	evious exploration over	EL 8532		
			Tenement	Company	Start date	End date	Elements	Units
			EL1952	Company Samedan Oil Corporation	Start date 1 October 1982	End date 1 October 1983	Cu Pb Zn	650
			EL1952 EL2275	Samedan Oil Corporation Austamax Gold Pty Lim Ted	Start date 1 October 1982 1 October 1984	End date 1 October 1983 1 June 1985	Cu Pb Zn Au	650 396
			EL1952 EL2275 EL2771	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited	Start date 1 October 1982 1 October 1984 1 November 1989	End date 1 October 1983 1 June 1985 1 October 1990	Cu Pb Zn Au Au	650 396 87
			EL1952 EL2275 EL2771 EL3934	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited	Start date 1 October 1982 1 October 1984 1 November 1989 1 June 1999	End date 1 October 1983 1 June 1985 1 October 1990 1 April 1993	Cu Pb Zn Au Au Au Cu Bi W	650 396 87 15
			EL1952 EL2275 EL2771 EL3934 EL764	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL	Start date 1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995	End date 1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995	Cu Pb Zn Au Au Au Cu Bi W Au Ag	650 396 87 15 9
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996	End date 1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au	650 396 87 15 9
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL	Start date 1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997	End date 1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au	650 396 87 15 9 8
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997	End date  1 October 1983     1 June 1985     1 October 1990     1 April 1993     4 May 1995     1 October 1998     10 February 1999     14 July 1999	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au	650 396 87 15 9 8 53
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997	End date  1 October 1983     1 June 1985     1 October 1990     1 April 1993     4 May 1995     1 October 1998     10 February 1999     14 July 1999     9 November 1997	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au	650 396 87 15 9 8 53 12
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998	End date  1 October 1983  1 June 1985  1 October 1990  1 April 1993  4 May 1995  1 October 1998  10 February 1999  14 July 1999  9 November 1997  12 August 2000	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au	650 396 87 15 9 8 53 12 78 20
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004	End date  1 October 1983     1 June 1985     1 October 1990     1 April 1993     4 May 1995     1 October 1998     10 February 1999     14 July 1999     9 November 1997     12 August 2000 26 September 2016	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Au	650 396 87 15 9 8 53 12 78 20 24
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311 EL6673	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd Defiance Resources Pty Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004 5 December 2006	End date  1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999 14 July 1999 9 November 1997 12 August 2000 26 September 2016 4 December 2015	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Au	650 396 87 15 9 8 53 12 78 20 24
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311 EL6673 EL6931	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd Defiance Resources Pty Ltd Bulldozer Prospecting Pty Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004 5 December 2006 1 November 2007	End date  1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999 14 July 1999 9 November 1997 12 August 2000 26 September 2016 4 December 2015 1 November 2009	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Au Au Au	650 396 87 15 9 8 53 12 78 20 24 16
			EL1952 EL2275 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311 EL6673 EL6931	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd Defiance Resources Pty Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004 5 December 2006	End date  1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999 14 July 1999 9 November 1997 12 August 2000 26 September 2016 4 December 2015	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Au	650 396 87 15 9 8 53 12 78 20 24
Geology	•	Deposit type, geological setting	EL1952 EL2775 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311 EL6673 EL6931 EL7036	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd Defiance Resources Pty Ltd Bulldozer Prospecting Pty Ltd Crystal Minerals Pty Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004 5 December 2006 1 November 2007 24 January 2008	End date  1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999 14 July 1999 9 November 1997 12 August 2000 26 September 2016 4 December 2015 1 November 2009 22 October 2014	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Cu Au Ag Cu Au Ag Cu	650 396 87 15 9 8 53 12 78 20 24 16 106 134
Geology	•	Deposit type, geological setting and style of mineralisation.	EL1952 EL2775 EL2771 EL3934 EL764 EL5126 EL5221 EL5322 EL5380 EL5507 EL6311 EL6673 EL6931 EL7036  Project Geology EL8532 is located within	Samedan Oil Corporation Austamax Gold Pty Lim Ted BHP Gold Mines Limited Peko Wallsend Operations Limited Compass Resources NL PMW Gold Mining Co Pty Limited Mount Conqueror Minerals NL LFB Resources NL Plato Mining Ltd Alkane Exploration NL Augur Resources Ltd Defiance Resources Pty Ltd Bulldozer Prospecting Pty Ltd	Start date  1 October 1982 1 October 1984 1 November 1989 1 June 1999 4 January 1995 1 October 1996 11 February 1997 15 July 1997 10 November 1997 13 August 1998 27 September 2004 5 December 2006 1 November 2007 24 January 2008	End date  1 October 1983 1 June 1985 1 October 1990 1 April 1993 4 May 1995 1 October 1998 10 February 1999 14 July 1999 9 November 1997 12 August 2000 26 September 2016 4 December 2015 1 November 2009 22 October 2014	Cu Pb Zn Au Au Au Cu Bi W Au Ag Au Au Au Au Au Au Au Cu Au Cu Au Ag Cu Au Cu Au Pb Zn Ag	650 396 87 15 9 8 53 12 78 20 24 16 106 134



Criteria JORC Code explanation  Commentary  rocks belonging to the Late Devonian Ha accumulations of tertiary and quaternary surrounds are likely derived from the eros More mafic rocks in the project area incluas belonging to the Dulladerry Volcanics. Yeoval have historically been included in Cuga Burga Volcanics  Mineralisation  Mineralisation within the Dulladerry Volca deposit which lies on the southern edge of Parkes Gold Mine between 1989-1991.  Gold mineralisation at Mt Aubrey is hoster	alluvium including of sion of elevated are ding andesitic and These mafic volca the Dulladerry Volcanics is restricted to of EL8532. The Mt A	gravels. The as compose basaltic lave nic rocks in canics, howe epithermal	e Tertiary gravels ed of felsic volca as, with cappings cluding basalts s ever more recen	s, forming she nics and silic s of welded rh poradically m t geochemica	eet-like de iclastic se hyolitic ig napped ir	eposits over ediments. nimbrites, and the area and	the Mt Aubrey Me re not conclusive ad extending nor	Mine area and ely identified th towards
accumulations of tertiary and quaternary surrounds are likely derived from the eros More mafic rocks in the project area incluas belonging to the Dulladerry Volcanics. Yeoval have historically been included in Cuga Burga Volcanics  Mineralisation  Mineralisation within the Dulladerry Volca deposit which lies on the southern edge of Parkes Gold Mine between 1989-1991.	alluvium including of sion of elevated are ding andesitic and These mafic volca the Dulladerry Volcanics is restricted to of EL8532. The Mt A	gravels. The as compose basaltic lave nic rocks in canics, howe epithermal	e Tertiary gravels ed of felsic volca as, with cappings cluding basalts s ever more recen	s, forming she nics and silic s of welded rh poradically m t geochemica	eet-like de iclastic se hyolitic ig napped ir	eposits over ediments. nimbrites, and the area and	the Mt Aubrey Me re not conclusive ad extending nor	Mine area and ely identified th towards
as belonging to the Dulladerry Volcanics. Yeoval have historically been included in Cuga Burga Volcanics  Mineralisation  Mineralisation within the Dulladerry Volca deposit which lies on the southern edge of Parkes Gold Mine between 1989-1991.	These mafic volca the Dulladerry Volca nics is restricted to of EL8532. The Mt A	nic rocks ind canics, howe epithermal	cluding basalts s ever more recen	poradically m t geochemica	napped in	the area an	d extending nor	th towards
Mineralisation within the Dulladerry Volca deposit which lies on the southern edge of Parkes Gold Mine between 1989-1991.	of EL8532. The Mt		gold style miner					
deposit which lies on the southern edge of Parkes Gold Mine between 1989-1991.	of EL8532. The Mt		gold style miner					
Gold mineralisation at Mt Aubrev is hoste		, ,						
main host quartz vein at Mt Aubrey strike strike. To the east the vein breaks down the deposition of the quartz hosted epithe constrained to the host basalt in the imme common.	s WNW, dips sub-v nto a quartz stockw rmal gold mineralis	ertically with ork zone. Tation at this	h a maximum thi The basalt in the s location. Moder	ckness of 9m Mt Aubrey M ate, pervasiv	n, with sig ine area re propyli	nificant pind have acted a tic alteration	th and swell vari as a chemical tra (epidote-calcite	ations along ap allowing for -quartz) in
The three open pits which formed the Mt utilised for cropping and grazing.	Aubrey Mine have	been backfi	illed and re-habil	itated followir	ng compl	etion of mini	ng, the mine are	a is now
• A summary of all information	source extension prom the Mt Aubrey no. Other companies istoric open pit minces also completed	ograms use nine area in completed es at Mt Au aircore and	ed RAB drilling a cluding the Blue exploration drillir ibrey and explored reverse circulat	nd were more Hills Prospecting away from the deal for extension drilling on	e explora et a short the Mou ons to th targets i	tory in natur distance to nt Aubrey m e deposit us more distal f	e. Many of the F the west and ha ine area. YTC R ing aircore and	RAB drill ve not be lesources reverse
drill hole collar  Hole ID MGA EAS			End of Hole m		Dip	Drill Type	Company	
o elevation or RL (Reduced MAAC024 634778		509	33	19	-60	AC	YTC	
Level – elevation above sea MAAC025 634725		509	39	19	-60	AC	YTC	
level in metres) of the drill MAAC026 634699		508	42	19	-60	AC	YTC	
hole collar MAAC027 634673		510	44	18	-60	AC	YTC	
o dip and azimuth of the hole MAD001 634167	6353931	501	240	18	-60	RC/DD	BHP Gold	
o down hole length and MAD002 634214 interception depth MAD003 634215		502	351	20	-60	DD	YTC	
hala langth		498	288	19	-62	DD	YTC	
WIAD004 034740		504	279	18	-61	DD	YTC	
is itself to be a deal to the total		514	60	18	-60	RC	BHP Gold	
information is not Material and		515	20	18	-60	RC	BHP Gold	
this evolution does not defined		516	20	18	-60	RC	BHP Gold	
from the understanding of the MAR004 634717 MAR005 634271	6353718 6353938	508 512	61 66	354 8	-60 -60	RC RC	BHP Gold BHP Gold	
report, the Competent Person MAR005 634271		512	72	8 17	-60	RC RC	BHP Gold	
should clearly explain why this is MAR007 634263		509	72 72	17	-60	RC	BHP Gold	
the case. MAR007 634305		508	72	18	-60	RC	BHP Gold	
MAR010 634090		505	61	19	-60	RC	BHP Gold	
MAR011 634248		510	72	17	-60	RC	BHP Gold	



Criteria	JORC Code explanation	Commentary									
<u> </u>			MAR012	634218	6353850	507	72	17	-60	RC	BHP Gold
			MAR013	634238	6353884	509	102	18	-60	RC	BHP Gold
			MAR014	634204	6353823	507	60	18	-60	RC	BHP Gold
			MAR015	634231	6354021	508	72	19.5	-60	RC	BHP Gold
			MAR016	634217	6354007	509	71	18	-60	RC	BHP Gold
			MAR017	634238	6354040	507	56	18	-60	RC	BHP Gold
			MAR018	634194	6353967	507	61	18	-60	RC	BHP Gold
			MAR019	634184	6353950	507	51	18	-60	RC	BHP Gold
			MAR020	634173	6353932	506	56	18	-60	RC	BHP Gold
			MAR021	634182	6354026	507	61	18	-60	RC	BHP Gold
			MAR022	634193	6354044	506	44	18	-60	RC	BHP Gold
			MAR023	634199	6354051	506	56	18	-60	RC	BHP Gold
			MAR024	634209	6354068	506	56	18	-60	RC	BHP Gold
			MAR025	634251	6353986	510	56	24	-60	RC	BHP Gold
			MAR026	634262	6354003	509	51	18	-60	RC	BHP Gold
			MAR027	634272	6354017	509		18	-60	RC	BHP Gold
			MAR028	634272	6353929		56 71	18	-60		BHP Gold
						511				RC	
			MAR029	634288	6353968	511	51	18	-60	RC	BHP Gold
			MAR030	634295	6353881	513	61	18	-60	RC	BHP Gold BHP Gold
			MAR031	634429	6353811	514	51	18	-60	RC	
			MAR032	634513	6353758	510	51	18	-60	RC	BHP Gold
			MAR033	634594	6353737	508	51	355	-60	RC	BHP Gold
			MAR034	634709	6353694	509	61	355	-60	RC	BHP Gold
			MAR035	634720	6353733	507	61	355	-60	RC	BHP Gold
			MAR036	634705	6353674	510	91	355	-60	RC	BHP Gold
			MAR037	634747	6353687	508	56	355	-60	RC	BHP Gold
			MAR038	634751	6353706	507	56	355	-60	RC	BHP Gold
			MAR039	634755	6353728	506	51	355	-60	RC	BHP Gold
			MAR040	634667	6353698	509	51	355	-60	RC	BHP Gold
			MAR041	634670	6353717	508	51	355	-60	RC	BHP Gold
			MAR042	634672	6353739	507	51	355	-60	RC	BHP Gold
			MAR043	634538	6353606	506	47	18	-60	RC	BHP Gold
			MAR044	634424	6353881	514	51	18	-60	RC	BHP Gold
			MAR045	634435	6353898	513	51	18	-60	RC	BHP Gold
			MAR046	634207	6353990	508	121	18	-60	RC	BHP Gold
			MAR047	634090	6353795	509	101	198	-60	RC	BHP Gold
			MAR048	633994	6353944	500	51	198	-60	RC	BHP Gold
			MAR049	634072	6354078	503	51	198	-60	RC	BHP Gold
			MAR050	634082	6354095	503	51	198	-60	RC	BHP Gold
			MAR051	634031	6354245	498	76	18	-60	RC	BHP Gold
			MAR052	634043	6354266	499	51	198	-60	RC	BHP Gold
			MAR058	633982	6354281	496	50	18	-60	RC	BHP Gold
			MAR059	634163	6354077	504	50	19	-60	RC	BHP Gold
			MAR060	634175	6354095	504	50	18	-60	RC	BHP Gold
			MAR061	634185	6354112	503	50	18	-60	RC	BHP Gold
			MAR063	634204	6354061	506	25	18	-60	RC	BHP Gold
			MAR064	634262	6354003	509	5	18	-60	RC	BHP Gold



Criteria	JORC Code explanation	Commentary									
Jilleila .	JONG Code explanation		AR065	634256	6353995	509	25	18	-60	RC	BHP Gold
			AR066	634726	6353732	507	51	175	-60	RC	BHP Gold
			AR067	634761	6353741	506	64	175	-60	RC	BHP Gold
			AR068	634236	6353982	505	50	106	-60	RC	BHP Gold
			AR069	634254	6353972	510	57	108	-60	RC	BHP Gold
			AR070	634211	6354038	507	45	17	-60	RC	BHP Gold
			AR071	634201	6354021	507	69	17	-60	RC	BHP Gold
			AR072	634241	6354010	500	33	19	-60	RC	BHP Gold
			AR073	634231	6353993	508.9	63	17	-60	RC	BHP Gold
			AR074	634270	6353981	110	33	18	-60	RC	BHP Gold
			AR075	634139	6354116	503	39	21	-60	RC	BHP Gold
			AR076	634129	6354098	504	63	18	-60	RC	BHP Gold
			AR077	634069	6354226	499	33	18	-60	RC	BHP Gold
			AR078	634056	6354211	498	57	17	-60	RC	BHP Gold
			AR079	634671	6353727	548	55	355	-60	RC	BHP Gold
			AR080	634632	6353730	508	56	355	-60	RC	BHP Gold
			AR081	634791	6353683	507	52	19	-60	RC	BHP Gold
			AR082	634781	6353667	507.9	75	19	-60	RC	BHP Gold
			AR083	634799	6353695	507	51	19	-60	RC	BHP Gold
			AR084	634807	6353708	506	51	18	-60	RC	BHP Gold
			AR085	634846	6353694	506	75	18	-60	RC	BHP Gold
			AR086	634835	6353678	506	75	20	-60	RC	BHP Gold
			AR087	634825	6353661	507	81	18	-60	RC	BHP Gold
			AR088	634813	6353643	508	60	17	-60	RC	BHP Gold
			AR089	634670	6353788	506	60	18	-60	RC	BHP Gold
			AR090	634312	6353907	514	39	198	-60	RC	BHP Gold
		MA	AR091	634028	6354340	499	60	18	-60	RC	BHP Gold
			AR092	634018	6354323	498	60	18	-60	RC	BHP Gold
		MA	AR093	634008	6354307	498	60	18	-60	RC	BHP Gold
		MA	AR094	634096	6354198	500	60	18	-60	RC	BHP Gold
			AR095	634086	6354181	500	60	18	-60	RC	BHP Gold
		MA	AR096	634124	6354165	501	57	18	-60	RC	BHP Gold
		MA	AR097	634113	6354147	501	60	18	-60	RC	BHP Gold
		MA	AR098	634103	6354131	502	75	18	-60	RC	BHP Gold
			AR099	634005	6354261	497	50	18	-60	RC	BHP Gold
			AR102	634516	6353766	510	33	18	-60	RC	BHP Gold
			AR103	634555	6353751	509	57	18	-60	RC	BHP Gold
			AR104	634468	6353781	512	46	18	-60	RC	BHP Gold
			AR105	634717	6353748	505	57	355	-60	RC	BHP Gold
			AR106	634628	6353798	506	51	18	-60	RC	BHP Gold
			AR107	634899	6353709	504	75	18	-60	RC	BHP Gold
			AR108	634890	6353692	505	57	18	-60	RC	BHP Gold
			AR109	634880	6353675	506	57	18	-60	RC	BHP Gold
			AR110	634869	6353658	506	63	18	-60	RC	BHP Gold
			AR111	634021	6354259	498	50	18	-60	RC	BHP Gold
			AR112	634013	6354246	497	50	18	-60	RC	BHP Gold
		MA	AR113	634144	6354123	500	30	18	-60	RC	BHP Gold



iteria	JORC Code explanation	Commentary									
nena	JONG Code explanation	Commentary	MAR114	634050	6354241	498	50	18	-60	RC	BHP Gold
			MAR114 MAR115	634043	6354229	498	50	18	-60	RC	BHP Gold
			MAR116	634079	6354211	499	50	18	-60	RC	BHP Gold
			MAR117	634072	6354198	499	50	18	-60	RC	BHP Gold
			MAR118	634110	6354183	500	50	18	-60	RC	BHP Gold
			MAR119	634102	6354170	500	30	18	-60	RC	BHP Gold
			MAR120	634135	6354143	502	20	18	-60	RC	BHP Gold
			MAR121	634128	6354131	502	50	18	-60	RC	BHP Gold
			MAR122	634157	6354107	503	20	18	-60	RC	BHP Gold
			MAR123	634149	6354094	504	40	18	-60	RC	BHP Gold
			MAR124	634187	6354078	505	20	18	-60	RC	BHP Gold
			MAR125	634180	6354064	505	55	18	-60	RC	BHP Gold
			MAR126	634222	6353940	509	50	18	-60	RC	BHP Gold
			MAR127	634214	6353927	508	60	18	-60	RC	BHP Gold
			MAR128	634290	6353926	512	50	198	-60	RC	BHP Gold
			MAR129	634283	6353913	512	24	198	-60	RC	BHP Gold
			MAR130	634313	6353933	513	25	198	-60	RC	BHP Gold
			MAR131	634331	6353886	515	24	198	-60	RC	BHP Gold
			MAR132	634338	6353898	515	55	198	-60	RC	BHP Gold
			MAR133	634383	6353855	516	30	198	-60	RC	BHP Gold
			MAR134	634391	6353868	516	55	198	-60	RC	BHP Gold
			MAR135	634497	6353775	511	18	18	-60	RC	BHP Gold
			MAR136	634489	6353762	510	50	18	-60	RC	BHP Gold
			MAR137	634502	6353744	509.8	60	18	-60	RC	BHP Gold
			MAR138	634531	6353753	509	50	18	-60	RC	BHP Gold
			MAR140	634650	6353727	508	30	18	-60	RC	BHP Gold
			MAR141	634643	6353716	508	60	18	-60	RC	BHP Gold
			MAR142	634687	6353724	508	40	18	-60	RC	BHP Gold
			MAR143	634680	6353712	508	60	18	-60	RC	BHP Gold
			MAR144	634734	6353714	507	30	18	-60	RC	BHP Gold
			MAR145	634726	6353701	508	64	18	-60	RC	BHP Gold
			MAR146	634785	6353713	506	55	18	-60	RC	BHP Gold
			MAR147	634777	6353700	507	56	18	-60	RC	BHP Gold
			MAR148	634769	6353687	508	40	18	-60	RC	BHP Gold
			MAR149	634166	6354043	506	55	18	-60	RC	BHP Gold
			MAR149A	634172	6354051	506	10	18	-60	RC	BHP Gold
			MAR150	634305	6353920	513	50	18	-60	RC	BHP Gold
			MAR151	634523	6353740	509	55	18	-60	RC	BHP Gold
			MAR152	634633	6353813	506	50	18	-60	RC	BHP Gold
			MAR153	634660	6353777	506	55	18	-60	RC	BHP Gold
			MAR154	634635	6353703	508	45	18	-60	RC	BHP Gold
			MAR155	634672	6353699	508	54	18	-60	RC	BHP Gold
			MAR156	634722	6353763	506	20	18	-60	RC	BHP Gold
			MAR157	634713	6353706	508	50	355	-60	RC	BHP Gold
			MAR158	634744	6353731	506	56	198	-60	RC	BHP Gold
			MAR159	634792	6353726	506	52	198	-60	RC	BHP Gold
			MAR160	634783	6353710	507	55	18	-60	RC	BHP Gold

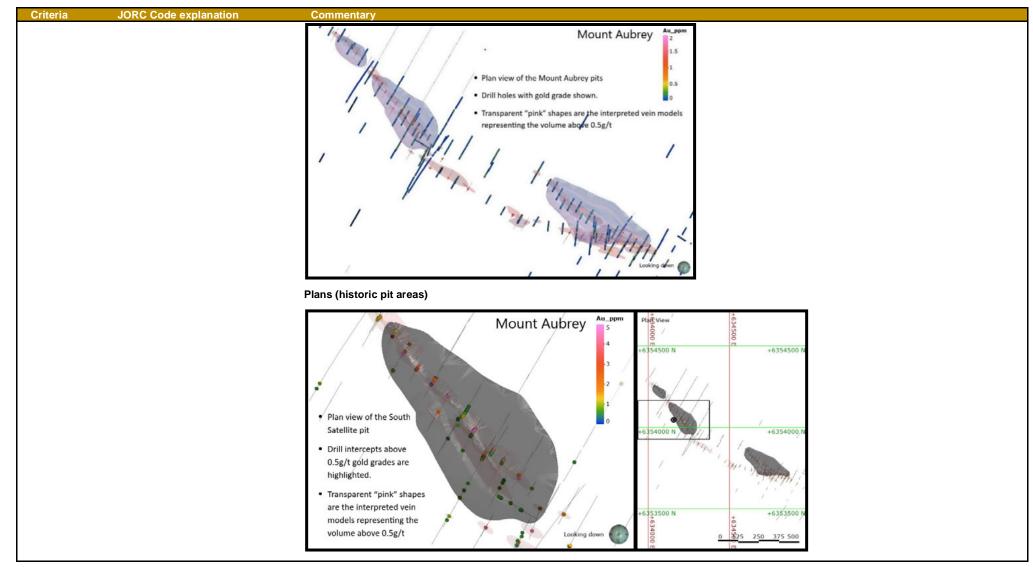


•	JORC Code explanation	Commentary									
			RAB019	634130	6354178	500	50	18	-60	RAB	BHP Gold
			RAB020	634120	6354162	501	50	18	-60	RAB	BHP Gold
			RAB021	634110	6354145	501	50	18	-60	RAB	BHP Gold
			RAB027	634189	6354121	503	50	18	-60	RAB	BHP Gold
			RAB028	634178	6354104	504	50	18	-60	RAB	BHP Gold
			RAB038	634259	6354082	505	50	18	-60	RAB	BHP Gold
			RAB042	634051	6353625	498	50			RAB	BHP Gold
			RAB101	634859	6353681	505	42	18	-60	RAB	BHP Gold
			<b>RAB102</b>	634849	6353664	505	56	18	-60	RAB	BHP Gold
			RAB103	634825	6353701	506	35	18	-60	RAB	BHP Gold
			RAB104	634815	6353684	506	53	18	-60	RAB	BHP Gold
			RAB105	634775	6353736	497	33	18	-60	RAB	BHP Gold
			RAB106	634766	6353719	497	50	18	-60	RAB	BHP Gold
			RAB107	634706	6353776	498	40	18	-60	RAB	BHP Gold
			<b>RAB108</b>	634696	6353758	502	55	18	-60	RAB	BHP Gold
			RAB110	634679	6353768	503	54	18	-60	RAB	BHP Gold
			RAB111	634657	6353810	505	32	18	-60	RAB	BHP Gold
			RAB112	634647	6353793	505	52	18	-60	RAB	BHP Gold
			RAB113	634560	6353883	507	49	18	-60	RAB	BHP Gold
			RAB114	634550	6353866	508	65	18	-60	RAB	BHP Gold
			<b>RAB115</b>	634366	6353947	511	51	18	-60	RAB	BHP Gold
			RAB116	634356	6353930	513	48	18	-60	RAB	BHP Gold
			<b>RAB117</b>	634377	6353966	509	58	18	-60	RAB	BHP Gold
			RAB118	634441	6353917	511	51	18	-60	RAB	BHP Gold
			RAB119	634451	6353934	510	52	18	-60	RAB	BHP Gold
			RAB120	634570	6353900	506	52	18	-60	RAB	BHP Gold
			<b>RAB122</b>	634310	6353970	510	46	18	-60	RAB	BHP Gold
			RAB123	634300	6353952	512	58	18	-60	RAB	BHP Gold
			RAB124	634327	6353960	511	49	18	-60	RAB	BHP Gold
			RAB125	634317	6353942	512	49	18	-60	RAB	BHP Gold
			RAB126	634611	6353850	506	40	18	-60	RAB	BHP Gold
			RAB127	634607	6353843	506	57	18	-60	RAB	BHP Gold
			RAB128	634624	6353834	506	40	18	-60	RAB	BHP Gold
			RAB129	634617	6353821	506	59	18	-60	RAB	BHP Gold
			RAB130	634592	6353859	506	40	18	-60	RAB	BHP Gold
			RAB158	634177	6354019	506	95	18	-60	RAB	BHP Gold
		•	RAB159	634228	6353967	509	78	18	-60	RAB	BHP Gold

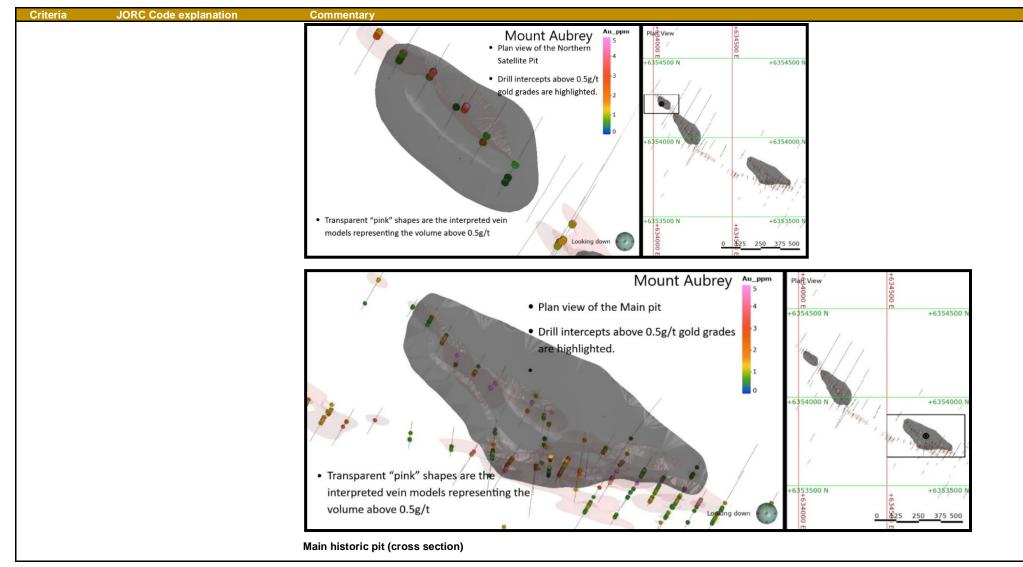


Criteria	JORC Code explanation	Commentary
	of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The holes were drilled predominantly at -60-degree dip and an azimuth of between 18-20 degrees magnetic and consistent with testing the mineralisation at a suitable angle.</li> <li>The mineralisation is modeled as being near vertical with a slight dip toward the south west.</li> <li>NOTE: The mineralisation is not being stated as a grade per meter statement, but rather as an interpolated resource block model which alleviates the risk of misrepresenting the mineralisation due to acute intersection angles between the drill hole and the mineralized unit resulting in exaggerated intersection lengths.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Plans (full resource area)  Mount Aubrey  Plan view of the Mount Aubrey pits  Drill holes with gold grade shown.  Transparent "pink" shapes are the interpreted vein models representing the volume above 0.5g/t

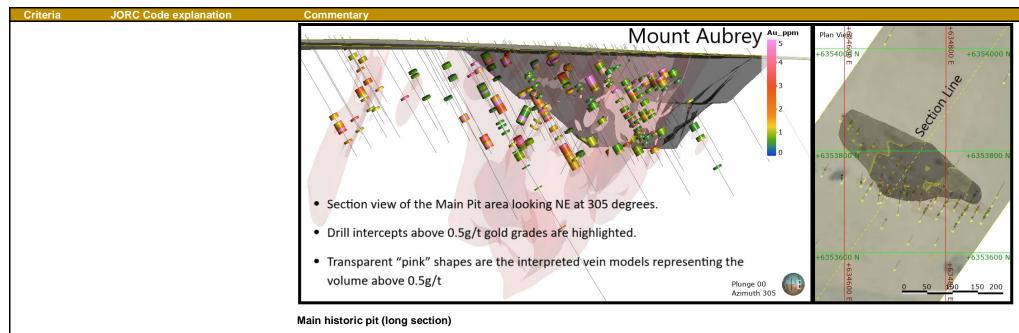




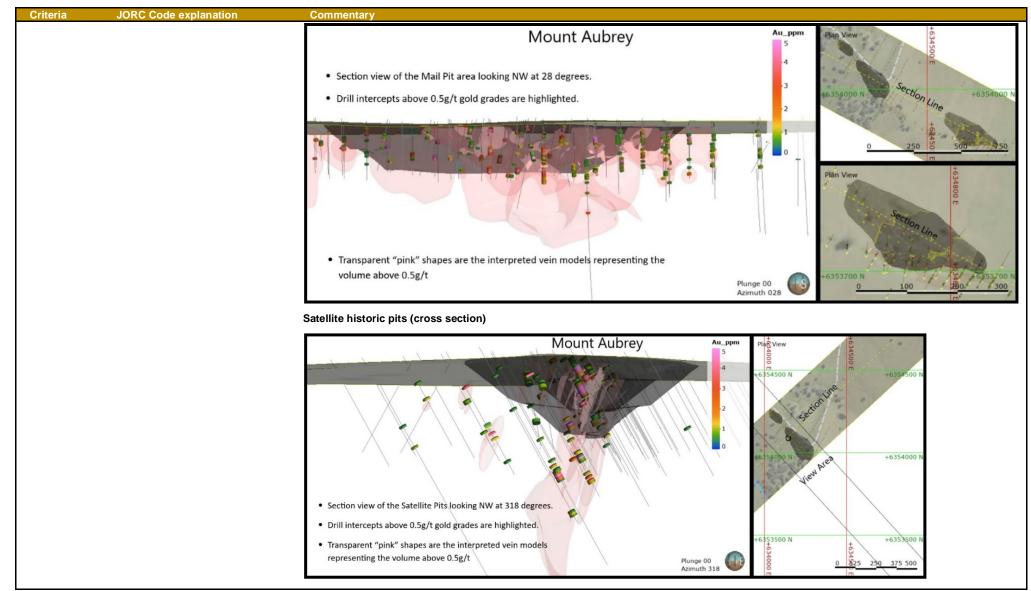




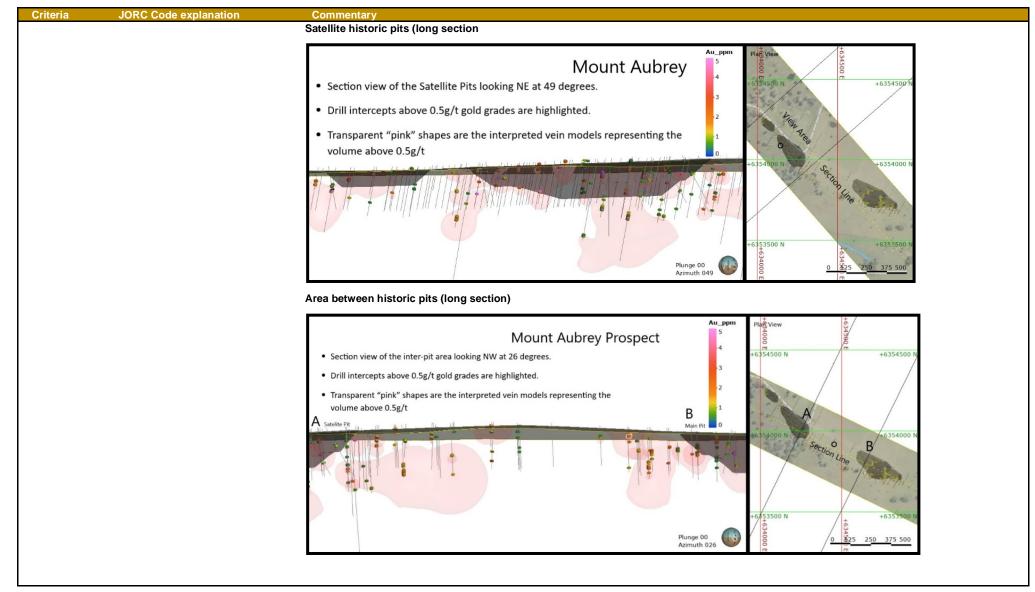








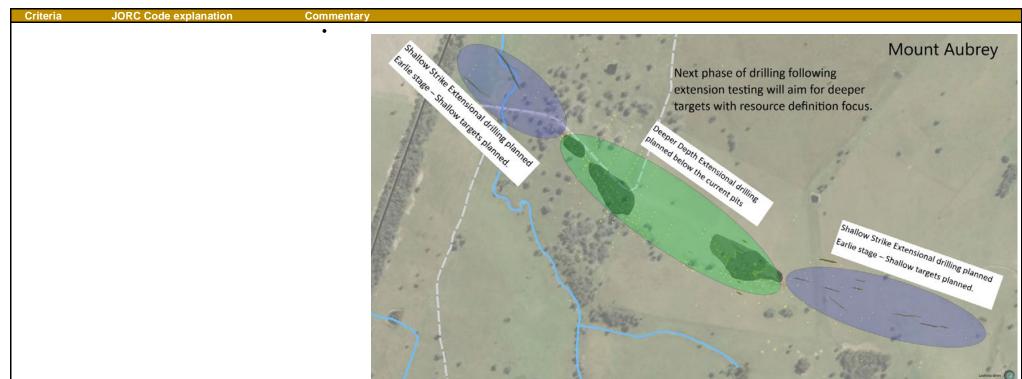






Criteria	JORC Code explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The Reporting of this resource is considered balanced since  Sample results were composited to 1m intervals/composites. Inverse Distance estimation method was used No top cuts were used
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Multiple companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over Mount Aubrey over the years and lots of work has been done on it. An IP study was completed in 2010    The companies have held the exploration license over the years and lots of work has been done on it. An IP study was completed in 2010   The companies have held the exploration license over the years and lots of work has been done on it. An IP study was completed in 2010   The companies have held the exploration license over the years and lots of work has been done on it. An IP study was completed in 2010   The companies have held the years and lots of work has been done on it. An IP study was completed in 2010   The companies have held the years and lots of work held the years and lots of work held the years and lots of work hel
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The mineralisation is open in all directions and exploration efforts for the near future would include:</li> <li>Strike extensional drill targeting</li> <li>Depth extensional drill targeting</li> <li>Next phase – Resource definition below defined targets from phase one.</li> </ul>







## **Section 3 Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>

## Commentary

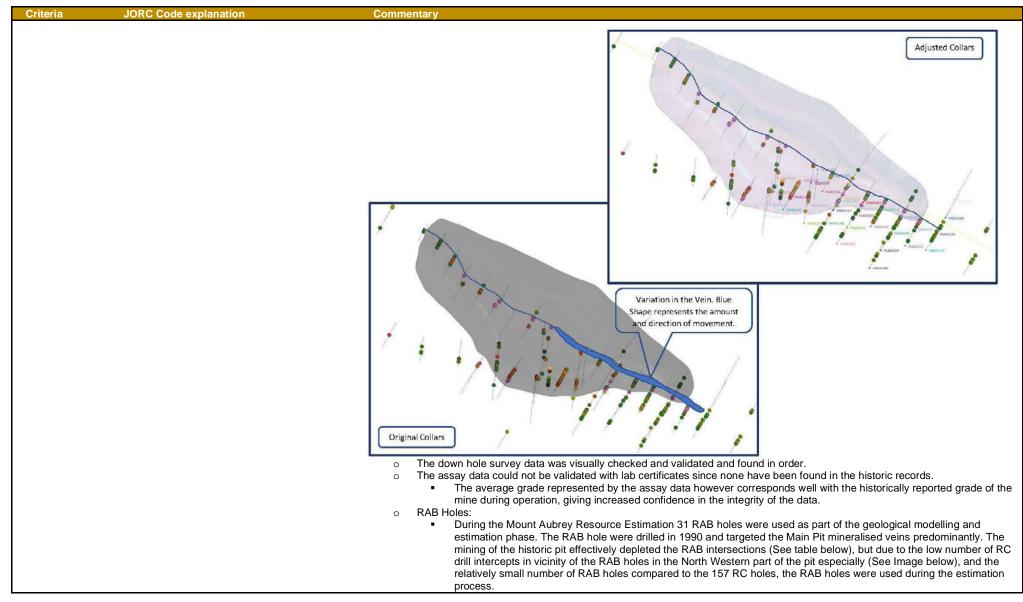
- The data used for this resource estimate is historic in nature.
- Physical aspects of the database were validated on the ground by Ardea Resources personnel and include:
  - The collar data was visually checked using leapfrog software and locations validated using historic maps and reports.
  - The competent person also validated the collar locations on site using a Trimble Juno 5 GPS unit. Some minor discrepancies were identified.
    - The collar data surrounding the two satellite pits validated within 2m.



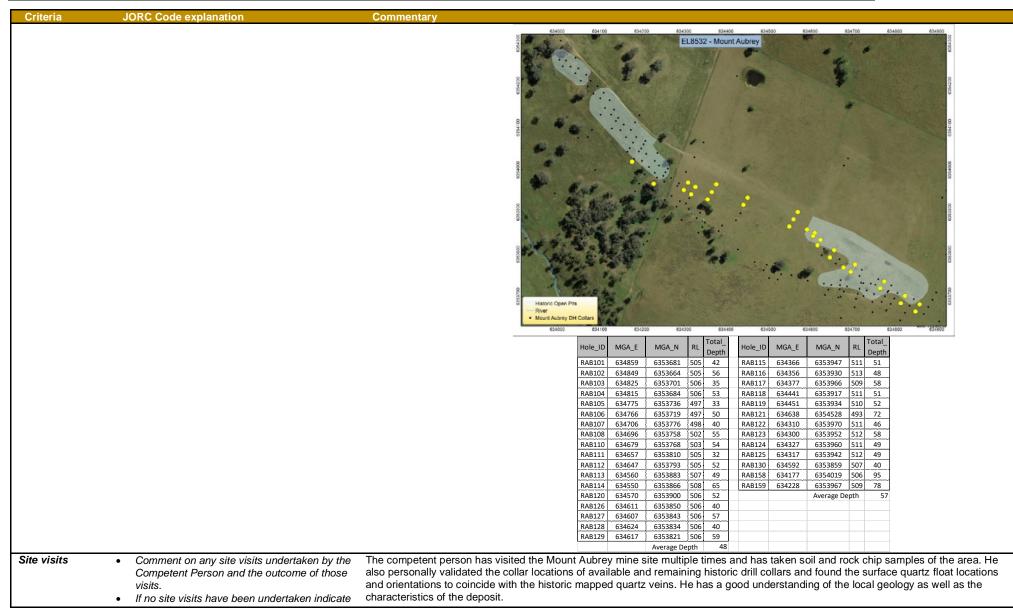


**JORC Code explanation** Criteria Commentary The collar data South of the main pit showed a larger error margin. The discrepancy is 2.24m East and 5.64m North (See image below.). This error could be validated using eight (8) collars still available in the area, but the remainder have all been destroyed by the mining of the open pit, or by agricultural activities such as ploughing the field to the south of the pit for cultivating crops. The resultant potential shift in the mineralization due to the shift in collar location has been checked in three dimensions and is deemed insignificant relative to the scale of the interpreted geology (See image below). It's localized status also increased the confidence instating the overall impact on the geology interpretation and thus the resource. EL8532 - Mount Aubrey Ploughed Field. Collars buried.

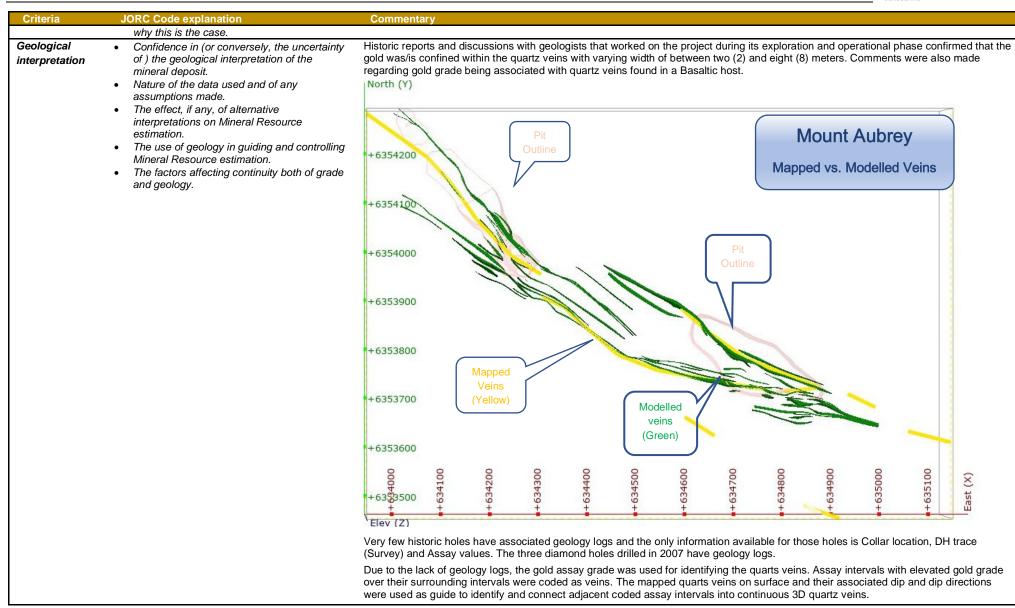




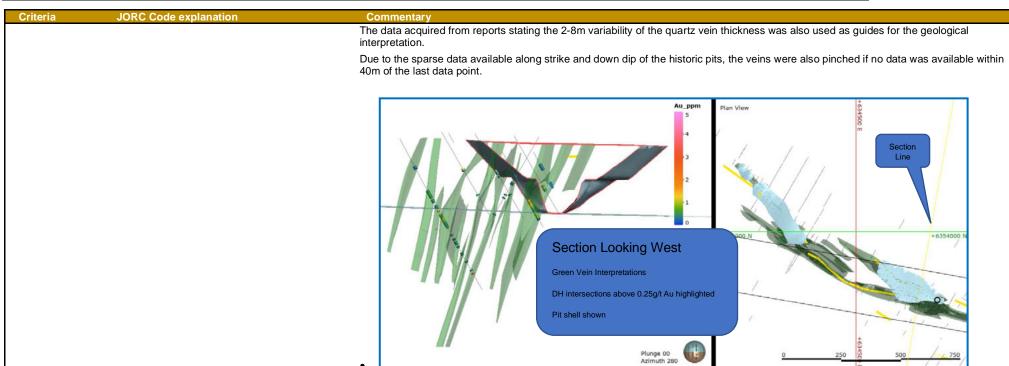




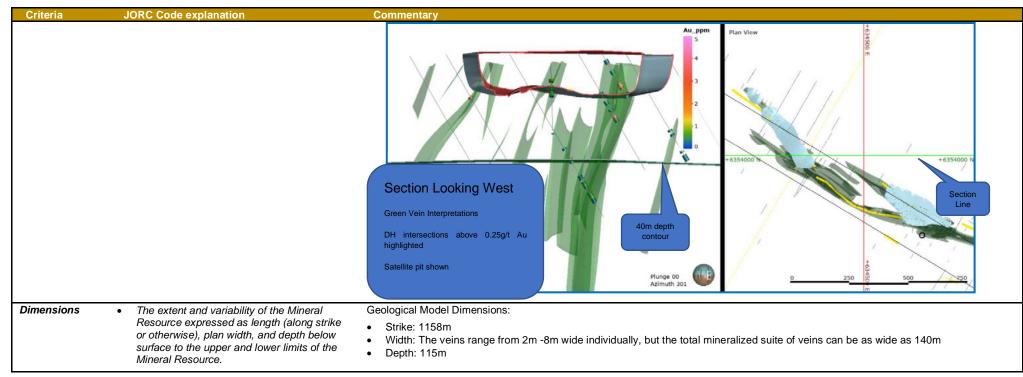




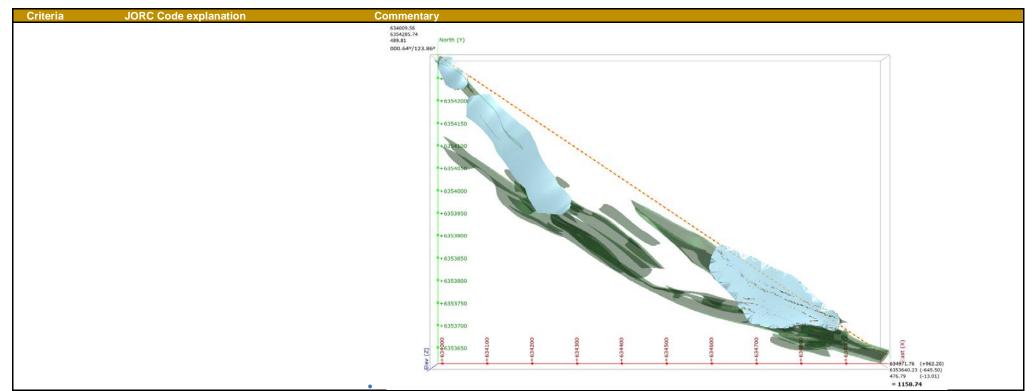




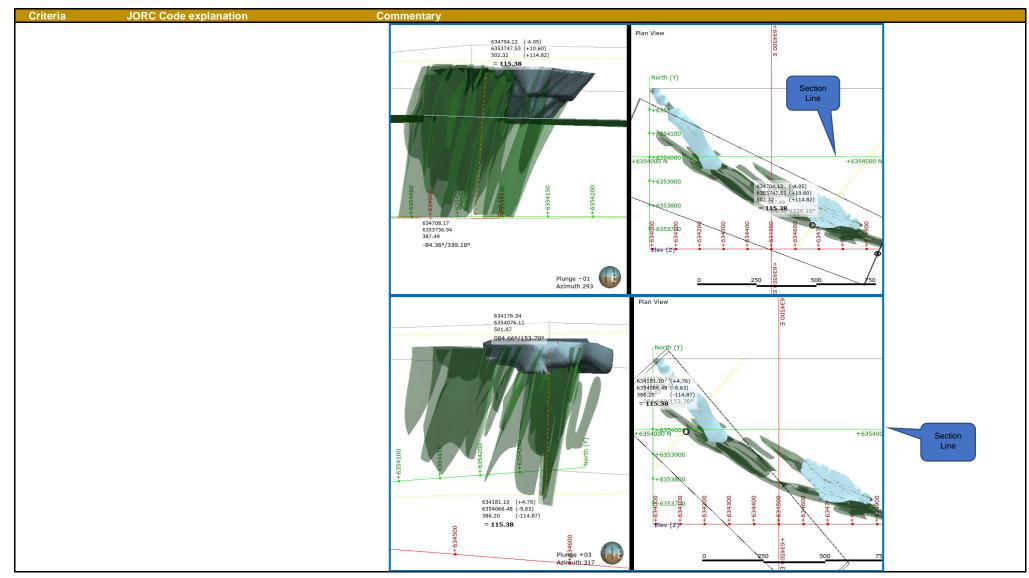














# Criteria Estimation and

modelling

techniques

# nd

## JORC Code explanation

# The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.

- The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
- The assumptions made regarding recovery of by-products.
- Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

## Commentary

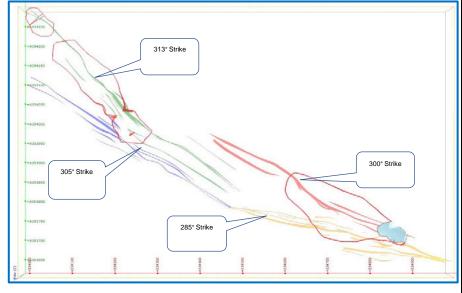
Estimation Technique: Inverse Distance

**Extreme grades:** No grade capping was employed during this estimation.

Software: LeapFrog Edge

## Modelling Techniques - Domains

- Domain wireframes have been created using Leapfrog.
- The domain wireframes were created using assay grade due to the low percentage geology intervals logged and available. The domains vein models were created in Leapfrog using implicit modeling techniques.
- Due to the changing strike directions throughout the deposit and the need to group vein models with similar strike so as to be able to use appropriate search criteria for each set of parallel veins, the interpreted vein models were split into four (4) separate groups.



Each set of parallel veins were individually estimated with individual estimation neighborhoods to ensure tailored criteria for optimal results.

### Modelling Techniques - Block Model Creation

- A sub blocked block model was built using the quartz veins and a digital terrain model of the surface. Only the quartz veins had been domained and modelled. Waste material was not subdivided into different geological units for this model.
- The parent cell of 5m x 10m x 10m in the X, Y and Z dimensions was chosen to reflect 2-8m vein width. This also reflects the drill hole intercept spacing of 20m x 20m for a significant portion of the deposit.
- The parent blocks were sub-celled to 1m x 1m x 1m to accurately estimate the volume of material inside each lens domain.
- The block model creation, and subsequent block interpolation and post processing was completed in LeapFrog Edge.
- Validation of outputs was conducted against historic production reports

#### Estimation of Grades

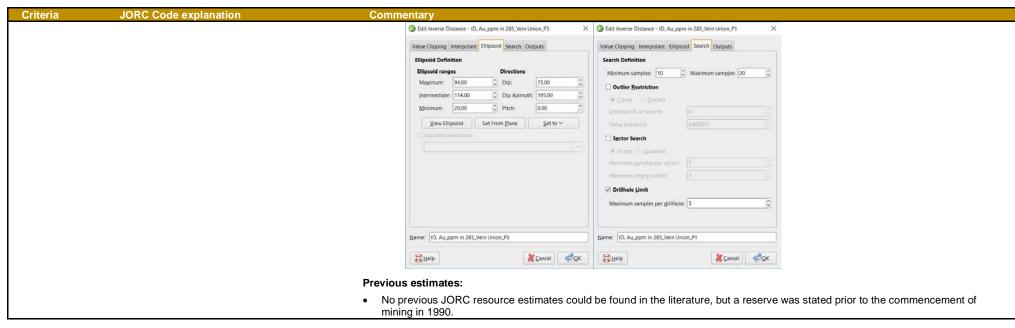
- Each individual group of parallel veins was interpolated separately. Lens boundaries are soft for the purposes of compositing and grade estimation with a range of between 0.12 and 0.43m from the hard vein boundary.
- For resource modelling purposes adjustments were made to assay data during prior to modelling;
  - No top cuts were applied
- Semi-variogram models for Au were created for each of the four vein groups. These geostatistical models are considered to be robust but a lack of data in the down dip direction is noted and may affect the down dip variogram range. The nugget indicated is low and may corroborate the reported fine gold grain.
- The inverse distance exponent factor was set to 0.1 which would increase the weighting for samples nearest the centroid of the block. This aims to prevent inappropriate grade smearing during this estimation.
- The maximum number of samples per drill hole was limited to five (5). This was done the ensure that a single hole would not be



Criteria **JORC Code explanation** allowed to produce an interpolated block and in so doing ensure a more robust estimation of the grade in the resource. Grades were interpolated using inverse distance estimation using LeapFrog Edge software. Search parameters were based on the variogram models with ellipsoid searches being used to set a maximum of 20 and minimum of 10 samples for each interpolation. Three interpolation passes were generated with the first matching the variogram range dimensions, the second multiplying those ranges by 1.5 and the third being twice the range of the variogram model. This was done to ensure the maximum number blocks were filled by the third search and were orientated to match the variography. The minimum number of samples of 10 also ensured that blocks without sufficient support would not meat eh estimation criteria and would thus not be populated with grade. • The resource was sated above a cut off grade of 0.5g/t Au. Interpolation parameters are shown below. G Edit Inverse Distance - ID, Au\_ppm in 285\_Vein Union\_P1 X G Edit Inverse Distance - ID, Au\_ppm in 285\_Vein Union\_P1 X G Edit Inverse Distance - ID, Au\_ppm in 285\_Vein Union\_P2 Value Clipping Interpolant Ellipsoid Search Outputs Value Clipping Interpolant Ellipsoid Search Outputs Value Clipping Interpolant Ellipsoid Search Outputs C Dip: 75.00 Ellipsoid ranges: Max = 47.0; Int = 57.0; Min = 10.0 Set From Plane Set From Plane View Ellipsoid E 0.6 0.2 Name: ID, Au\_ppm in 285\_Vein Union\_P1 Name: ID, Au\_ppm in 285\_Vein Union\_P1 Name: ID, Au\_ppm in 285\_Vein Union\_P2 Help Help <u>Cancel</u> 

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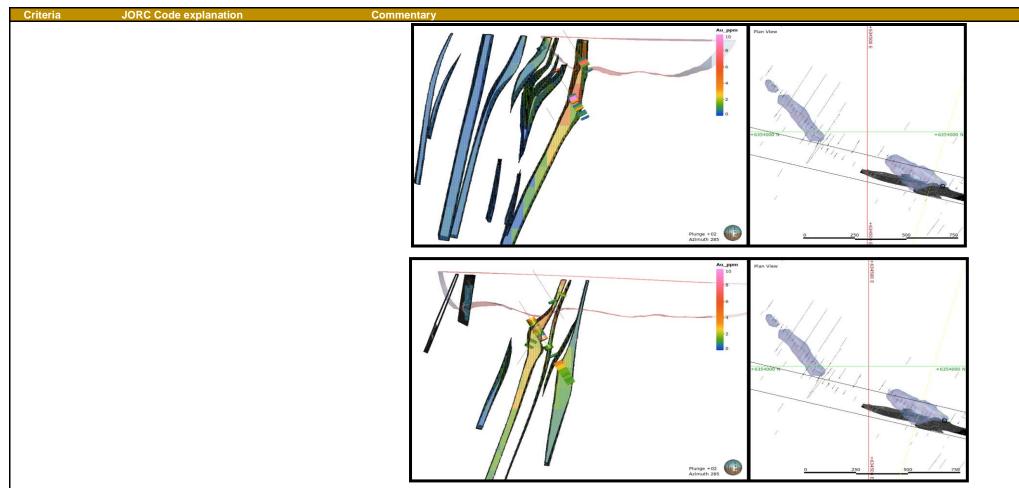






Criteria	JORC Code explanation	Commentary						
- Or itoria				TABLE 7				
			1	MT.AUBREY				
		N	PRELIMINARY MINEAE	BLE ORE RESERVE	ESTIMATES			
		. п	Total m <sup>3</sup> Ore m <sup>3</sup>	t 9/t	Waste_m <sup>3</sup> S.R. t	Д		
		\frac{1}{2}.	, ,,	5 g/t cut off				
		*	1.0	s grt cut on				
		Pit 1 7	70,550 4,140	9,110 3.36 [6.73	66,410 13.13	2:1		
		Pit 2 180	80,000 14,277 3	51,409 4.17 [7.89	165,723 9.50	0:1		
		Pit 3 436	6,900 36,250 7	9,750 3.26 [3.35	400,650 9.0	4:1		
			2.0	O g/t cut off				
		Pit. 1 7	70,550 4,140	9,110 3.36	66,410 13.1	2:1		
					166,630 10.2			
					401.215 9.2			
			2.5	5 g/t cut off				
		Pit 1 7	70,550 4,140	9,110 3.36	66,410 13.1	2:1		
		Pit 2 18	80,000 13,370	29,407 4.48	166,630 10.2	0:1		
		Pit 3	436,900 31,650	69,629 3.58	405,250 10.4	48:1		
		All grades g	given with .9 shape d	dilution factor				
			IP Gold reserve	e statement	t, circa 1990			
		Recovery of byproducts: None						
		Estimation of deleterious elements: None						
		Block size vs. average sample spacing						
		<ul> <li>Block size</li> <li>Parent - 5m x 10m x 10m</li> <li>Sub-Cell - 1m x 1m x 1m</li> <li>Drill spacing - 20m</li> </ul>						
		Validation:				Composite Mean	BM Mean	
		<ul> <li>The primary validation tools used were domain states estimated grades generally compare favorably with</li> </ul>			In Situ - Vein285	1.21	0.97	
		the composites for each domain.	ui uie ilieali gi		In Situ - Vein300		1.34	
		•			In Situ - Vein305		0.40	
					In Situ - Vein313		1.35	Variance
		<ul> <li>In addition, "on screen" checks were completed to</li> </ul>	o comparo ceti	mated		1.11	1.01	-8.7%
		block grades with the 1.0m composite Au grades.	There were no	nialeu o issues ide	entified during th	nis review process	i <b>.</b>	

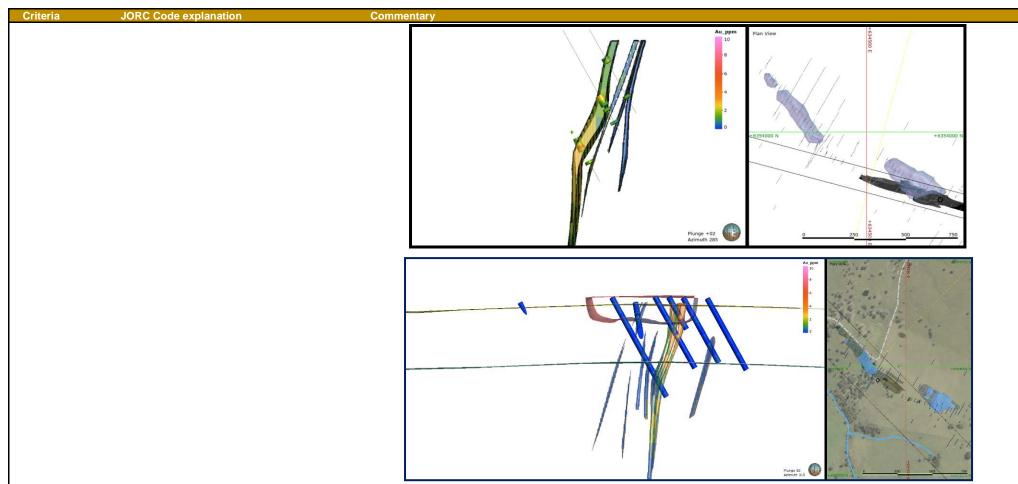




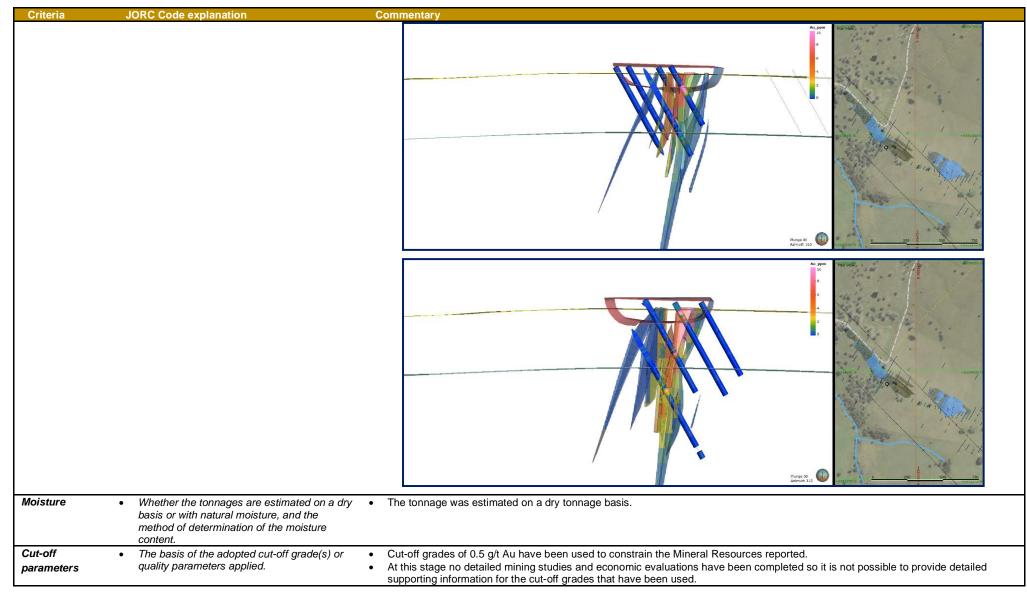














Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	No detailed mining studies have been completed.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	There have been no metallurgical studies completed on this project.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	There have been no studies or assumptions made regarding environmental factors.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the	<ul> <li>No bulk density studies have been completed on the Mount Aubrey project.</li> <li>The SG used for the estimation was 2.7 t/m3. This is the density of Quartz, which is the mineralized host and therefore considered appropriate. It is expected that increasing gold grade would increase the SG beyond 2.7t/m3 and thus this estimate would represent the lower end of the tonnage spectrum for this resource.</li> <li>Bulk density calculations are planned on the core produced from the first/next diamond drill program.</li> </ul>



Criteria	JORC Code explanation	Commentary
Classification	samples.  The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	The entire estimated Mount Aubrey resource has been classified as an Inferred Mineral Resource. In making this classification, the
	Resources into varying confidence categories.  • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).  • Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>Data integrity         <ul> <li>The data is of sufficient quantity and quality for an Inferred Mineral Resource classification with drill data spacing of 20m x 20m.</li> <li>Accuracy of collar and down hole surveys are sufficient for the spatial location of the drill holes. Please note discussion of collar accuracy stated earlier in this table one.</li> </ul> </li> <li>Geological modelling and grade continuity         <ul> <li>The estimation domains that have been constructed seem appropriate in relation to the currently understood model of formation of the mineralization, being an epithermal vein gold deposit.</li> <li>The estimation was conducted in three passes. The first having the range of the variogram model in each direction as its distance parameters, the second has 1.5 times that range and the third has twice the range distance as search ellipse. The minimum number of samples for each pass is 10 and the maximum is 20. In addition, each drill hole could only contribute 5 samples to the estimation of grade for any block. No top cuts were applied. The inverse distance interpolator was also set to assign maximum weight to samples closes to the centroid of the estimated block, thus preventing grade smearing.</li> <li>The majority of the drill data is in close proximity to the historic open pit mines and data density becomes sparse as one moves away from them. The modeled or body (Vein) solids were created using a max distance of 40m away from any data point, thus preventing the overestimation of both geology and grade away form sample data. The depth of the interpreted veins was clipped at 115m below surface. The bulk of the drill intercepts are at 40m depth below surface, but several deeper intercepts exist. Due to the weighting assigned to the proximity of the samples to the centroid of the estimated block, samples at depth with less sample support will receive low estimation weights and thus estimate lower grades in</li></ul></li></ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits have been performed on this resource.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated	The Mount Aubrey resource is considered accurate and appropriate to represent the inferred category of resource estimates.  The data integrity has been validated to the best of the geology teams ability using all available methods and means, for example, the physical validation of collar locations in the field and discussions with members of the geology team that worked on the deposit during its initial exploration and production phase in the 1980s and early 1990s.  The geological interpretation is also considered appropriate as it considers the geological data collected from the drill programs and does not extend long distances away from the data points, thus mitigating the possibility of overestimating the volume of the deposit. The search criteria and variography for the estimation were determined by statistical methods using the data associated with the deposit and



Criteria	JORC Code explanation	Commentary
	confidence limits, or, if such an approach is not deemed appropriate, a qualitative	is considered relevant. The estimated block model grades correlate well with the raw composite data indicating that it reflects the raw data and is thus considered accurate relative to the inferred classification thereof.
	discussion of the factors that could affect the	The resource is considered local and is based on the local data associated with the Mount Aubrey information available.
	relative accuracy and confidence of the estimate.  • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The reported mined ounces from historic reports indicate a total of 12,000 Oz mined from the combined open pits. This estimation calculates the mined/depleted ounces to be 11,495 Oz, thus correlating well with the historic reports and adding a further form of validation.



## **Appendix 2**

# Yeoval Resource JORC Code (2012) – Table 1

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Reverse Circulation Drilling Previous drilling completed by Hastings in 1972 (DHID = Y2) was collated by geologists from Augur Resources in 2009 and carefully compiled into a database. The work included:  Converting assay and geological data from feet to meters.  All assay and geological abbreviated lithology were entered into a geological database.  Data validation was completed by plotting and physical checking.  A significant proportion of the drill hole collars had been located and surveyed for spatial location by registered surveyors of hand-held GPS.  RC drilling was used to obtain 1 m samples from 8 holes. These samples were then pulverised and assayed as below:  Cu - Assayed via Atomic Absorption Spectrometry (AAS)  Mo - Assayed via Aqua Regia soluble and AAS  Au-Ag - Assayed via Acid Digest and AAS  Diamond Drilling  Previous drilling completed by Hastings in 1972 (DHID = Y1-Y15) and North Broken Hill in 1973 and 1973 (DHID = Y16-Y24) was collated by geologists from Augur Resources in 2009 and carefully compiled into a database. The work included:  Converting assay and geological data from feet to meters.  All assay and geological abbreviated lithology were entered into a geological database.  Data validation was completed by plotting and physical checking.  A significant proportion of the drill hole collars had been located and surveyed for spatial location by registered surveyors of hand-held GPS.  Significant sections of the historic drill core have been re-assayed for Cu, Au, Ag and Mo, and this data was incorporated into the data set.  Diamond drilling was used to obtain samples from 37 holes in accordance with their host lithology.  E.g.:  Un-mineralised intervals were sampled at 1.5m or 1m lengths.  Mineralised core was sampled in accordance with its individual length and thus the sample lengths varied from 0.5m -1m.  Mineralised and assayed as below:



Criteria	JORC Code explanation	Commentary
		<ul> <li>Cu – Assayed via AAS</li> <li>Mo – Assayed via Aqua Regia soluble and AAS</li> <li>Au, Ag, Pb, Zn, Ni, Co – Assayed via Acid Digest and AAS</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Reverse Circulation Drilling</li> <li>Diamond Drilling         <ul> <li>BQ, HQ and NQ core drilled from surface.</li> <li>Standard tube was used with no core orientation done.</li> </ul> </li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>1970s</li> <li>25 diamond drill holes were drilled between 1972 and 1974. Standard procedures were used during the drilling process with "stick-up" measured at the end of each run and core blocks with written record of run length and core loss (if any) indicated of each block. Core loss was calculated using the run length (based on the "stick up") and the physical core in the tray.</li> <li>The geologist logging the core would also measure the core and placing meter marks on the core. These meter marks are compared to the values on the core blocks to ensure accuracy.</li> <li>2008</li> <li>12 Diamond drill holes were drilled by Augur Resources on the Yeoval prospect.</li> <li>The same industry standard practices as described above were employed to ensure accurate sample recovery measurement and reporting.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>RC Chips         <ul> <li>The RC chips were geologically logged at 1m intervals. The logging intervals correspond with the assay sample intervals. The data collected produced enough detail to support a mineral resource estimate.</li> <li>100% of the chip intervals were logged.</li> </ul> </li> <li>Diamond Drill Core         <ul> <li>The diamond drill core was geologically logged with the logging intervals being determined by the geology in the core. The assay intervals do not straddle geological intervals and thus the assay represents the grade within the geological unit. The data collected produced enough detail to support a mineral resource estimate.</li> <li>100% of the drill core was logged.</li> </ul> </li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material</li> </ul>	<ul> <li>RC Chips         <ul> <li>The dry rock chips from the RC holes were riffle split at the rig with the sample bagged for transport to the analytical laboratory.</li> <li>The quality of the split sample is considered appropriate and is used throughout the industry.</li> <li>The complete sample interval was split as mentioned above to ensure representativeness of the in situ material.</li> </ul> </li> <li>Diamond Core         <ul> <li>Diamond core was taken from the tube and placed in core trays at the rig.</li> <li>Prior to sampling the core was cut in two equal halves with one halve being sent for sampling.</li> <li>The cut half core sample is considered appropriate and is used throughout the industry.</li> <li>The combination of drill procedures ensuring accurate depth measurements and knowledge of core loss with the geological log prior to cutting the sample ensures the sample being representative of the in situ material it was taken from.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
	collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled.	The holes resampled in 2009 were quarter cut from the half core that remained form the original sampling in 1972-1974.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>1972 data:</li> <li>Cu – Assayed via Atomic Absorption Spectrometry (AAS)</li> <li>Mo – Assayed via Aqua Regia soluble and AAS</li> <li>Au-Ag – not routinely assayed for this data set.</li> <li>1973-1974 data:</li> <li>Sample preparation and assaying was conducted by NBH Laboratories, Moonta, SA.</li> <li>Cu, Pb, Zn, Ag, Ni, Co, Mo and Au were determined by Acid digest and Atomic Absorption Spectrometry.</li> <li>No specific data was found regarding the QAQC of the data included in the resource, but the competent person that completed the 2009 resource stated in his report that the data quality control was to a sufficient standard to warrant resource estimation.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>There is no record of peer review performed on the data sets from either the 1970s or the drill program leading to the resource estimation in 2008.</li> <li>The Resource report form 2009 mentions a team of geologists ensuring appropriate QAQC standards.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Survey         <ul> <li>The 2009 resource report mentions that a significant number of the holes used for the estimate were surveyed by registered surveyors or via hand held GPS.</li> </ul> </li> <li>DH survey         <ul> <li>DH surveys for the estimate were validated by geologists from Augur Resources as well as the competent person of the resource estimate.</li> <li>The collars and drill traces have also been validated by Ardea Resources during 2019.</li> </ul> </li> <li>Grid system         <ul> <li>The drill collars were surveyed into GDA_1994_MGA_Zone_55</li> <li>The resource modeling was done in a local grid with transformation as below:</li></ul></li></ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological</li> </ul>	<ul> <li>The drill spacing for the estimated resource is about 50m x 70m with holes drilled predominantly near east-west azimuth.</li> <li>The data spacing is considered adequate to estimate a "bulk-tonnage" porphyry type resource considering its inherent general grade continuity.</li> </ul>



Criteria	JORC Cod	e explanation	С	ommentary Commentary C
	Mineral estimation applied.	de continuity appropriate for the Resource and Ore Reserve on procedure(s) and classifications r sample compositing has been	•	Compositing was applied to the assay data with a composite length of 2m.
Orientation of data in relation to geological structure	unbiased the extended the deposition of the relation orientation introduction the extended the e	r the orientation of sampling achieves of sampling of possible structures and ent to which this is known, considering posit type.  Itationship between the drilling from and the orientation of key used structures is considered to have been a sampling bias, this should be good and reported if material.	•	Sample Orientation  o The drilling was conducted around the East-West direction. The mineralised zones trend along the North-South direction and predominantly dip sub-vertically.  • The sampling is done at right angles to the mineralisation and is not believed to create sampling bias.
Sample security	The measurity.	asures taken to ensure sample	•	The samples and Resource estimate are of historic nature. The digital data was supplied by Augur Resources and thus there is no third party to potentially corrupt data.
Audits or reviews		ults of any audits or reviews of g techniques and data.	•	No Audits have been conducted to our knowledge.



## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Comment	ary					
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmenta settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul><li>Explora</li><li>The lar</li><li>There i</li><li>The se</li></ul>	ation Pty Ltd. Id is owned by Private land holde	rs north of th	ne township	of Yeoval. o this project, and	d also no	number 8538 and is held by Ardea
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	workings co More recer Elements (	onsisting of shallow pits and shaft	s looking for ken exploratious compar	r copper and tion in the a nies include	gold are readily rea (Table 2), p	observe redomin	or a period of 3 years. Small scale historical d in the Yeoval mineral field.  antly for gold, base metals and Rare Earth earn sediment, soil and rock-chip sampling,
		Table 2: Po Teneme nt	revious exploration over EL 853 Company	Start date	End date	Elements	Unit s	
		EL1131	BHP Ltd	1/08/197 9	1/01/198 0	Cu Pb Zn Ag Au	144	
		EL1441	Noranda Australia Ltd	1/01/197 9	1/01/198 0	Cu	261	
		EL1910	Noranda Australia Ltd	1/07/198 1	1/07/198 4	Au Cu Ag	189	
		EL1911	Noranda Australia Ltd	1/07/198 2	1/07/198 3	Cu Au	231	
		EL2464	International Mining Corporation NL	1/08/198 5	1/08/198 8	Au Cu Hg	287	
		EL2635	Cyprus Gold Australia Corporation	1/08/198 6	1/08/198 8	Au, Ag	25	
		EL3133	Cyprus Gold Australia Corporation	1/07/198 8	1/01/198 9	Cu Au	25	



Criteria	JORC Code explanation	Comment	ary					
		EL3134	Cyprus Gold Australia Corporation	1/07/198 8	1/01/198 9	Cu Au	65	
		EL3677	Homestake Gold of Australia Ltd	13/11/19 90	19/07/19 91	Au Cu	71	
		EL3857	Peko Wallsend Operations Ltd	1/05/199 1	1/05/199 2	Au Cu Bi W	32	
		EL4024	CRA Exploration Pty Ltd	14/08/19 91	13/08/19 95	Au Cu	81	
		EL4117	CRA Exploration Pty Ltd	11/11/19 91	10/11/19 93	Au Cu	95	
		EL4235	CRA Exploration Pty Ltd	1/04/199 2	31/03/19 94	Au Cu	98	
		EL5128	Woodham, SW.	1/10/199 6	1/10/199 8	Au Cu	52	
		EL5503	Malachite Resources NL	7/08/199 8	6/08/200 0	Au Cu	12	
		EL6311	Augur Resources Ltd	27/09/20 04	26/09/20 16	Au Cu	24	
		EL7036	Crystal Minerals Pty Ltd	24/01/20 08	22/10/20 14	Cu Au Pb Zn Ag	134	
		EL7108	Greystoke Mines Pty Ltd	25/08/20 08	25/03/20 14	Cu Au REE	115	
		EL7588	Minotaur Operations Pty Ltd	4/08/201 0	7/06/201 5	Au Cu Mo REE	51	
Geology	Deposit type, geological setting and style of mineralisation.	EL 8538 co	vers a large portion of the Early [	Devonian Ye	oval Batholit	h including felsio	to mafi	ic intrusives of the Yeoval Intrusive Complex.
		quartz diori		e, diorite and	l gabbro (Po	gson et al 1998).		ve lithologies – granite, quartz monzodiorite, ore fractioned intermediate phases are highly
		Silurian Ma		shonitic, in o	common with	the Ordovician	volcani	rifting event that split the Ordovician to Early ic rocks that host the Cadia and Northparkes



Criteria	JORC Code explanation	Commentary
		The south-eastern portion of the licence area hosts the Silurian aged Canowindra Volcanics - garnetiferous quartz-feldspar-cordierite tuffs, ashstone and breccias. A core of Ordovician sandstone, siltstone and minor limestone from the Kabadah Formation found within the Silurian sediments and volcanics. This area is considered prospective for low sulphidation Au-Ag mineralisation similar in style to the Ardea Mt Aubrey gold deposit to the south-west of the area.
		Emplacement of intrusives and extrusives in the Early Devonian which are related to the Boggy Plain Supersuite have given rise to intrusive related mineralisation.
		Numerous copper-gold occurrences are known in the Yeoval Complex. Mineralisation ranges from disseminated chalcopyrite-gold within altered granodiorite (Yeoval, Yeoval South) to quartz-magnetite-chalcopyrite veining within structures inferred within the granodiorite, at the Goodrich Mine. The style of the mineral occurrences is indicative of a porphyry copper-gold setting. Minor occurrences of copper ± gold mineralisation is present within the microgranite and granite of the Yeoval Complex. Minor molybdenum is reported at the Martins Reef Prospect in the south-west of the licence area. Scattered copper-gold prospects also occur within the Silurian and Devonian sequences east of the Yeoval Batholith.
		Mineralisation hosted within the Yeoval complex is centred in and around quartz monzonite porphyry complexes which intruded the volcanic centres, composing of pipes, dykes and stocks.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  a easting and northing of the drill hole collar elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	The holes used for the estimation of this resource is tabulated below. The holes were logged geologically and assayed as per the descriptions in section 1 of this table 1 report.

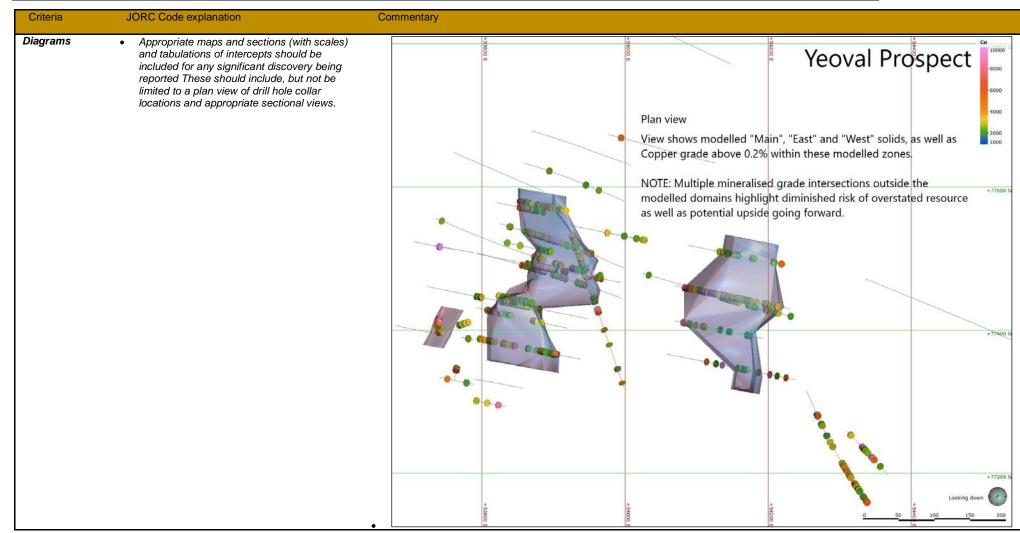


Criteria JORC Code ex	planation Commenta	ıry					
	HOLE ID	EASTING	NORTHING	RL	EOH	AZIMUTH	DIP
	Y1		6377406.1	383.0	127.1		-60
	Y10		6377525.3	385.0	87.8	281.3	-60
	Y10B		6377525.0	385.0	243.8		-60
	Y11	654230.9	6377429.8	376.2	243.8		-55
	Y12	654058.6	6377366.6	386.5	269.7		-50
	Y13	653921.7	6377545.9	383.4	304.8		-45
	Y14		6377369.1	389.3	144.2		-50
	Y15	653787.7	6377324.5	389.8	91.1		-60
	Y16		6377471.3	373.0	305.1		-50
	Y17			386.4	290.2		-50
	Y18			386.9	185.0		-50
	Y19	654070.2	6377412.8	386.2	188.1		-50
	Y2			388.2	39.6		-60
	Y20	653821.5	6377577.9	384.8	110.0		-50
	Y21						
		653878.3		389.2	94.5		-50
	Y22		6377647.8	381.0	182.0	101.3	-45
	Y23	654032.7		379.0	160.6		-45
	Y3		6377400.6	385.4	34.0	11.3	-43
	Y4			389.0	30.9	11.3	-45
	Y5		6377412.0	387.7	76.8	251.3	-45
	Y6		6377443.2	389.9	122.7		-45
	Y7.	653762.5	6377512.0	386.5	80.2		-43
	Y8		6377432.9	376.2	107.3		-38
	Y9	654225.7	6377490.9	376.2	274.3		-60
	YA001		6377509.3	385.2	140.0		-60
	YA002	653917.7	6377566.9	382.8	140.0		-60
	YA003	653873.1	6377437.8	387.7	108.0		-60
	YA004	653967.9		373.2	59.0	101.3	-60
	YA005	653833.0	6377293.2	388.5	93.0	281.3	-60
	YA006	654747.0	6371795.0	388.5	100.0	318.3	-60
	YA006A	654424.0	6371935.0	388.5	21.0	269.3	-60
	YA007	654500.0		388.5	132.0		-60
	YA008	654235.9	6377418.3	376.2	350.0		-55
	YA009	653792.0	6377508.2	386.2	316.9		-50
	YA010			385.9	401.3		-55
	YA011	653824.9	6377548.9	385.2	374.6		-60
	YA012		6377508.2	386.7	161.3		-70
	YA013		6377633.2	381.9	300.0		-60
	YA014		6377673.3	379.6	314.4		-60
			6377678.7			101.3	-60
	YA015	653868.8		380.7	298.7		
	YA016		6377402.9	389.7	263.4		-60
	YA017	654342.3	6377153.6	370.6	350.0	326.3	-60
	YA018	653856.7	6377318.9	389.6	143.0		-60
	YA019	654367.7	6377198.0	370.5	167.3	319.3	-60

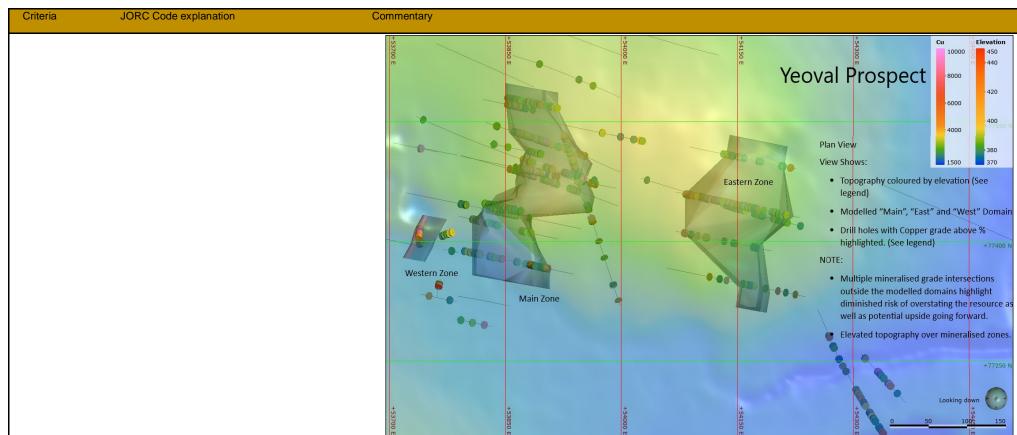


Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>The estimation technique used on this data is Ordinary Kriging</li> <li>No top cuts were not applied during this estimate</li> <li>No Aggregate intercepts were created.</li> <li>No metal equivalent was used for reporting</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The holes were drilled at an average of -60° declination.</li> <li>The mineralisation is modeled as being near vertical.</li> <li>NOTE: The mineralisation is not being stated as a grade per meter statement, but rather as an interpolated resource block model which alleviates the risk of misrepresenting the mineralisation due to acute intersection angles between the drill hole and the mineralised unit resulting in exaggerated intersection lengths.</li> </ul>

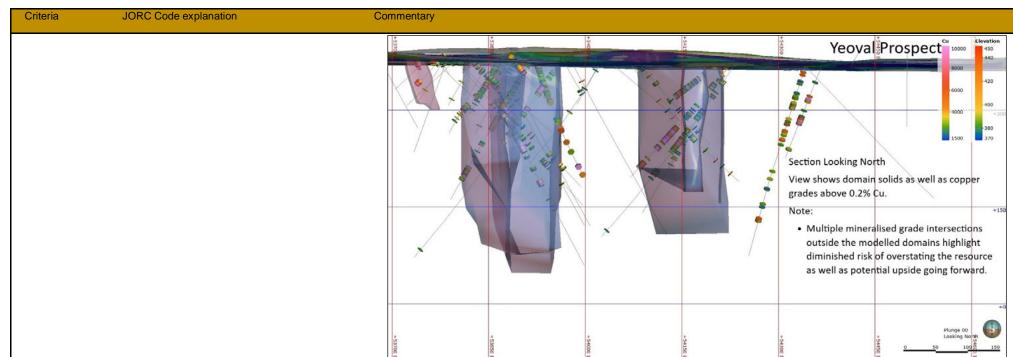




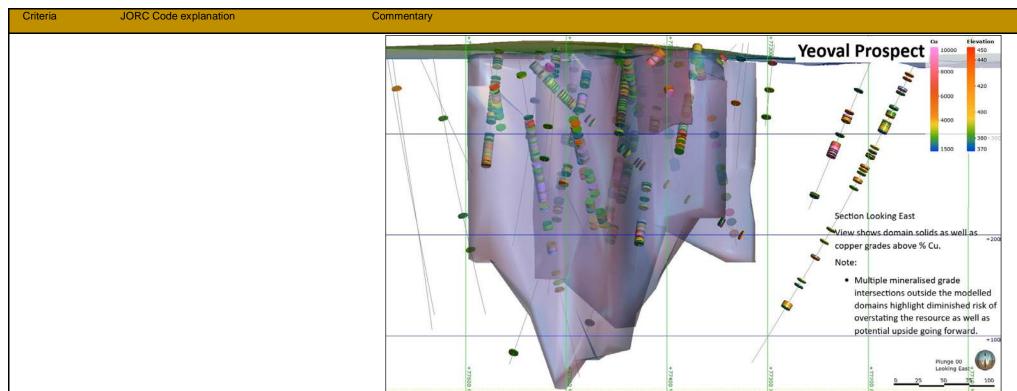








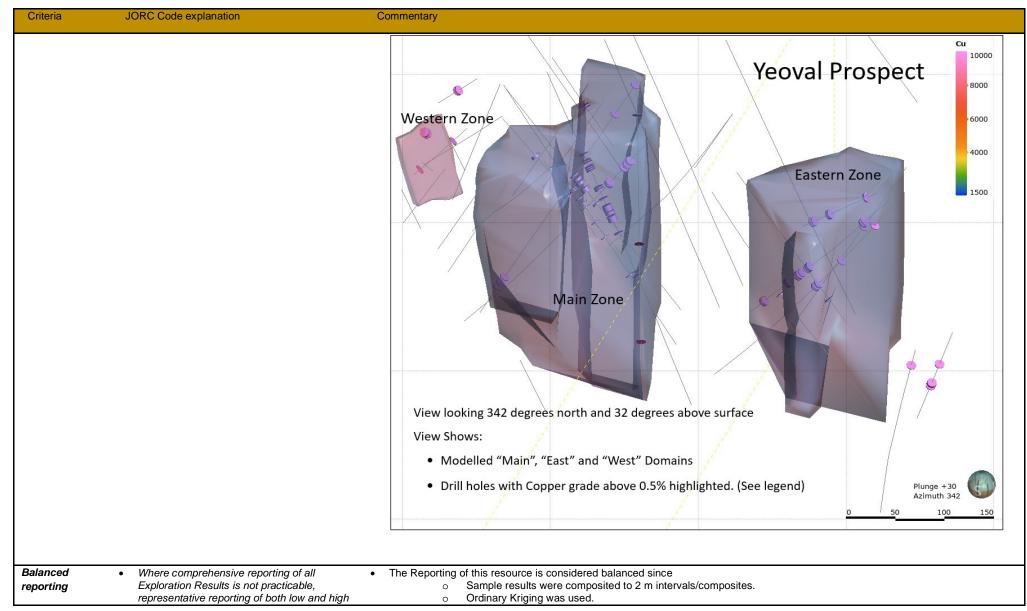












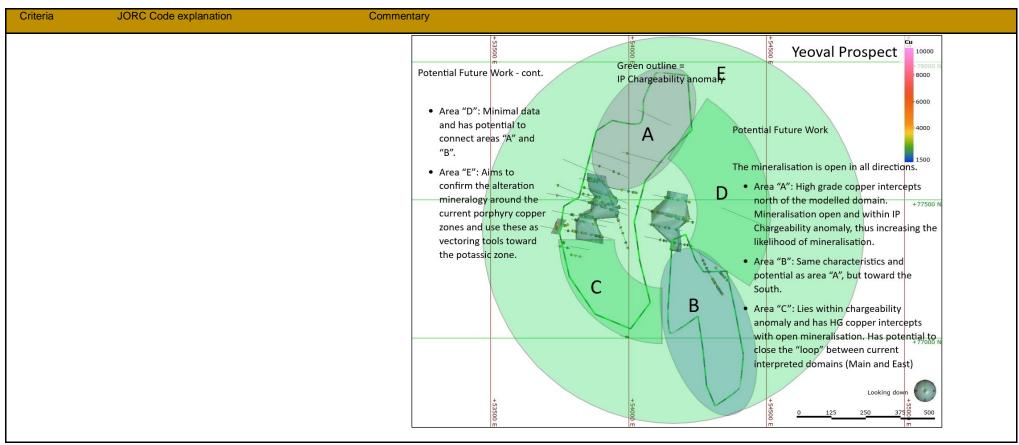


Criteria	JORC Code explanation	Commentary
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No top cuts were used.
Other Substantive Exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Multiple companies have held exploration licenses over Yeoval over the years and extensive work has been done. An IP stuc completed in 2011 identifying very positive chargeability anomalies that correspond well with the mineralization from resource completed.    Complete



Criteria	JORC Code explanation	Commentary
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling</li> </ul>	The mineralisation is open in all directions and exploration efforts for the near future would include:  Soil sampling: See image below.  • Area "E" aims to confirm the alteration mineralogy around the current porphyry copper zones identified with the aim of vectoring toward the gold-enriched Potassic Zone.
	areas, provided this information is not commercially sensitive.	Drilling: See image below.
		Area "A": High grade copper intercepts north of the modelled domain. Mineralisation open and within IP Chargeability anomaly, thus increasing the likelihood of mineralisation.  Area "B": Some observations and potential as area "A" but toward the South.
		<ul> <li>Area "B": Same characteristics and potential as area "A", but toward the South.</li> <li>Area "C": Lies within chargeability anomaly and has HG copper intercepts with open mineralisation. Has potential to close the</li> </ul>
		"loop" between current interpreted domains (Main and East).
1		<ul> <li>Area "D": Minimal data and has potential to connect areas "A" and "B".</li> </ul>





### **Section 3 Estimation and Reporting of Mineral Resources**

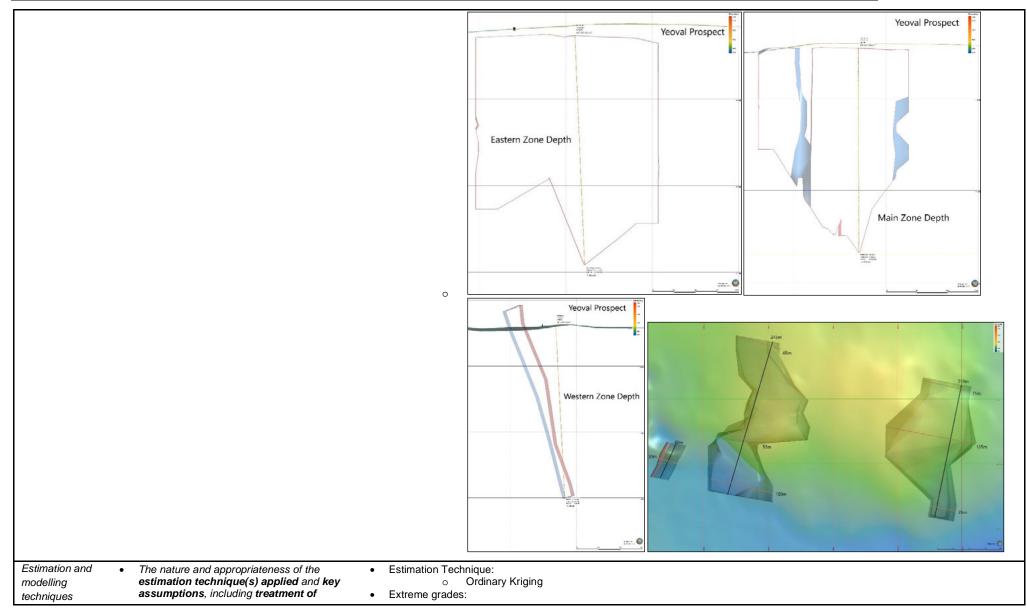
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation</li> </ul>	<ul> <li>The data supplied for this resource was compiled by personnel of Augur Resources and supplied to Fredericksen Geological Solutions Pty Ltd.</li> <li>Fredericksen Geological Solutions Pty Ltd state in the 2009 resource report that "Augur Resources geologists have maintained quality control and quality assurance processes during the compilation of the historical drilling information and also during the</li> </ul>



	purposes.  • Data validation procedures used.	sampling and re-assaying of the available historical drill core and the recent drilling data set and warrant that the combined dataset is of sufficient standard for reporting the current Mineral Resource estimate."  • Fredericksen Geological Solutions Pty Ltd also state in the 2009 resource report that:  • "Data integrity"  • "This work as stated by Augur Resource personnel who will be co signing this Mineral Resource estimate is of sufficient quantity and quality for an Inferred Mineral Resource classification."  • "Collar survey methods and down hole surveys are sufficient for the spatial location of the drillholes."
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The resource report produced by Fredericksen Geological Solutions Pty Ltd does not state any site visits by Mr. Fredericksen. The data supplied was guaranteed by Augur Resources and discussions with senior personnel from Augur Resources formed the basis of the geological information that would otherwise have been obtained by a site visit.</li> <li>The Competent Person for this resource, Johan Lambrechts, has spent considerable time visiting the Yeoval resource site and surrounding district, as he is based in the nearby regional city of Orange. He has a strong understanding of the local and regional geology.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the geological interpretation is moderately high. The estimation domain wireframes were created by contouring of grades on cross sections oriented parallel to the orientation of the drilling. A series of 25m spaced cross sections were created and the resulting overall wireframes constructed for the East Zone, Main Zone and West Zone.</li> <li>The data used for the interpretation was the drill assay results.</li> <li>The estimation was carried out on a horizontally adjusted axes of 10° from true north about a single point 53600mE and 77200mN to align the blocks with the approximate strike of the mineralisation.</li> <li>The understanding of continuity of mineralisation in this resource is currently limited by the amount of information available. With more drill intersections will come an increased understanding of the continuity of the mineralisation of the Yeoval deposit.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>Western Zone:         <ul> <li>Strike: 60m</li> <li>Width: 30m</li> <li>Depth: 80m</li> </ul> </li> <li>Main Zone:         <ul> <li>Strike: 245m</li> <li>Width: Max = 100m; Min = 60m</li> <li>Depth: 330m</li> </ul> </li> <li>Eastern Zone:         <ul> <li>Strike: 210m</li> <li>Width: Max = 120m; Min = 35m</li> <li>Depth: 265m</li> </ul> </li> </ul>







extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.

- The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
- The assumptions made regarding recovery of by-products.
- Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

- No grade capping was employed during this estimation.
- See table compiling domain statistics below.

Domain	Zone Code	# of Comps	Raw Cu% Min, Max, Mean		CV	Mean Grade Declustered Cells - 20X20X20	
Main Zone	101	579	0.006	4.59	0.349	1.29	0.332
West Zone	102	16	0.105	3.66	0.827	1.15	0.736
East Zone	103	287	0.001	2.79	0.321	1.28	0.309
Barren Zone	100	33	0.001	0.118	0.035	0.84	0.037
Domain	Zone Code	# of Comps	Raw Au g/t Min, Max, Mean		CV	Mean Grade Declustered Cells - 20X20X20	
Main Zone	101	398	0.005	1.07	0.05	2.15	0.05
West Zone	102	16	0.005	1.06	0.14	2.15	0.08
East Zone	103	201	0.005 2.65 0.27		1.54	0.25	
Barren Zone	100	33	0.005	0.02	0.01	0.41	0.01
Domain	Zone Code	# of Comps		Raw Ag g/t Min, Max, Mean		CV	Mean Grade Declustered Cells - 20X20X20
Main Zone	101	488	0.10	35.2	1.18	2.95	1.26
West Zone	102	16	0.40	48.3	9.26	1.34	7.55
East Zone	103	234	0.10	26.9	2.76	1.61	2.55
Barren Zone	100	28	0.10	1.35	0.14	1.63	0.12
Domain	Zone Code	# of Comps	Raw Mo ppm Grade Min, Max, Mean		CV	Mean Grade Declustered Cells - 20X20X20	
Main Zone	101	579	0.5	2810	92.7	2.44	100.0
West Zone	102	16	6	2660	722	0.93	525.0
East Zone	103	287	0.5	1840	126	1.93	115
Barren Zone	100	33	3.5	480	85.5	1.60	94.8

#### Domaining:

The estimation domain wireframes were created by contouring of grades on cross sections oriented parallel to the orientation of the drilling. A series of 25m spaced cross sections were created and the resulting overall wireframes constructed for the East Zone, Main Zone and West Zone. A low grade or barren internal domain contained within the Main domain was interpreted and modelled separately.

#### • Interpolation parameters:

	Cu – All domains	Mo all Domains	
Min # Composites	10	10	



Max # composites	25	30
Search Type	All	All
Max # Per	NA	NA
Quadrant/Octant		
Max # per hole	8	8

- Software:
- o Minesight.
- Previous estimates:

No JORC 2012 estimates have been previously completed for the Yeoval Project although a previous JORC 2004 estimate of 12.9Mt @ 0.38% Cu, 0.14g/t Au, 120.1g/t Mo and 2.20g/t Ag, above a 0.2% Cu cut-off, was reported by Augur Resources to the ASX on 23 March 2009. Non-JORC compliant estimates of 37Mt at 0.3% copper, 3Mt at 0.7 to 1% copper equivalent and 20Mt at 0.2% copper appear in literature.

- Recovery of byproducts: None
- Estimation of deleterious elements: None
  - o All estimation parameters are supplied for all elements interpolated.
- Block size vs. average sample spacing
  - o Block size 10m x 20m x 10m
  - o Drill spacing 25m
- Search parameters:

Dom	Domain						
Cu GEOCD = 101	C0	0.078					
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9	
345/0/0	C2	0.088	Range 2	22	122	57	
Cu GEOCD = 102	C0	0.078					
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9	
30/-75/0	C2	0.088	Range 2	122	122	57	
Cu GEOCD = 103	C0	0.078					
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9	
10/-75/0	C2	0.088	Range 2	122	122	57	
Cu GEOCD = 100	C0	0.078					
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9	
42/-75/0	C2	0.088	Range 2	122	122	57	
Au GEOCD = 100,101	C0	0.6					
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40	
345/-75/0							
Au GEOCD = 102	C0	0.6					
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40	
30/-75/0							
Au GEOCD = 103	C0	0.6					
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40	
10/-75/0							



Ag GEOCD = 100,101	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
345/-75/0	C2	4.8	Range 2	110	63	110
Ag GEOCD = 102	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
30/-75/0	C2	4.8	Range 2	110	63	110
Ag GEOCD = 103	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
10/-75/0	C2	4.8	Range 2	110	63	110
Mo GEOCD = 101	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
345/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 102	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 103	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 100	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100

- Description of how the geological interpretation was used to control the resource estimates.
- Grade capping:
  - o No grade capping was employed during this estimation.
- Validation:
- The primary validation tools used were domain statistics. The mean estimated grades generally compare favorably with the de-clustered mean grade of the composites for each domain. In addition "on screen" checks were completed to compare estimated block grades with the 2.0m composite Au grades. There were no issues identified during this review process.



						Mara Davidada	
				Domain	Zone Code	Mean Declustered Composite Grade	Model Grade
				Cu %	100	0.037	0.035
				Cu %	101	0.332	0.333
				Cu %	102	0.736	0.844
				Cu %	103	0.309	0.322
				Au g/t	100	0.01	0.02
				Au g/t	101	0.05	0.05
				Au g/t	102	0.08	0.11
				Au g/t	103	0.25	0.22
				Ag g/t	100	0.12	0.26
				Ag g/t	101	1.26	1.4
				Ag g/t	102	7.55	7.56
				Ag g/t	103	2.55	2.56
				Mo ppm	100	94.8	100
				Mo ppm	101	100	109
				Mo ppm	102	525	593
				Mo ppm	103	115	119
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnage wa	s estimated or	n a dry tonnage	e basis.	
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied.	At this stage no supporting inform	detailed minin mation for the	g studies and e	o constrain the Mineral Re economic evaluations have that have been used.	e been complete
Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the				eted. However, given that l	



Metallurgical	assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.  • The basis for assumptions or predictions	There have been no metallurgical studies completed on this project although given the similarities in mineralisation styles
factors or assumptions	regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	(disseminated and veined chalcopyrite and bornite) to other central NSW porphyry deposits and would be amenable to flotation methodologies.
Environmen-tal factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	There have been no studies or assumptions made regarding environmental factors.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.  Discuss assumptions for bulk density estimates used in the evaluation process of	<ul> <li>Augur Resources collected 23 samples 10–20cm in length from two diamond drill holes for determination of Bulk Densities. All of these samples are from fresh mineralisation and from a variety of lithological and grade distributions.</li> <li>These determinations have not been located spatially and the sample set too small to inform a block model or determine suitable density domains. As such the simple arithmetic average of these determinations 2.7 t/m³ has been applied to the block model in the fresh material.</li> </ul>



the d	different materials.	Bulk density determination on Yeoval Project samples						
u.10 u.1		SAMPLE DESCRIPTION	S.G. Unity	Hole	From			Comments
		12336	2.7	YA011	24.6	24.75	0.15	Moderately altered granodiorite (GRD)
		12337	2.73	YA011	30.8	31	0.2	Strongly altered GRD dacite porphyry
		12338	2.69	YA011	71.6	71.75	0.15	GRD GRD
		12339	2.68	YA011	94	94.2	0.2	CP mineralised GRD Sheeted CP veinlets in GRD Dolerite
		12340	2.69	YA011	116.7	116.85	0.15	BN + CP mineralised GRD Banded Rhyolite
		12341	2.75	YA011	144.3	144.5	0.2	CP mineralised GRD Quartz Feldspar Porphyry
		12342	2.74	YA011	158	158.15	0.15	Brecciated + carbonate veined GRD CP + Sheeted veined GRD
		12343	2.8	YA011	161.8	162	0.2	QTZ + Carb veined GRD GP
		12344	2.87	YA011	167.2	167.35	0.15	Sericite altered + CHL veined GP CHL altered GP
		12345	2.61	YA011	178.6	178.8	0.2	CP veined GP
		12346	2.7	YA011	182.7	182.9	0.2	CP mineralised, SIL CHL altered GP GP
		12347	2.67	YA011	185.3	185.5	0.2	Crowded quartz feldspar porphyry
		12348	2.68	YA011	203.8	204	0.2	
		12349	2.72	YA011	227.8	228	0.2	
		12350	2.71	YA011	146.7	146.9	0.2	
		12351	2.68	YA008	43.7	43.9	0.2	
		12352	2.67	YA008	96.4	96.6	0.2	
		12353	2.69	YA008	105.7	105.9	0.2	
		12354	2.7	YA008	133.2	133.4	0.2	
		12355	2.68	YA008	159.8	160	0.2	
		12356	2.66	YA008	218.4	218.6	0.2	
		12357	2.65	YA008	265.6	265.8	0.2	
		Average	2.7					
								Oxidised porphyrytic granodiorite (GP )
		12358	2.56	YA008	21.2	21.3	0.1	Not Used
Reso categ • Whet of all tonna data, metal of the	ources into varying confidence gories.  ether appropriate account has been taken Il relevant factors (ie relative confidence in lage/grade estimations, reliability of input la, confidence in continuity of geology and la values, quality, quantity and distribution	The entire estimated Yeoval Project deposit has been classified as an Inferred Mineral Resources.  In making this classification, the following factors have been considered.  Data integrity  The data is of sufficient quantity and quality for an Inferred Mineral Resource classification as statestimation in 2009 and also as validated by our own inspections of the data in the model folder.  Collar survey methods and down hole surveys are sufficient for the spatial location of the drill holes  Geological modelling and grade continuity:  The continuity of grades >0.1 % Cu is generally good.						



		<ul> <li>The estimation domains that have been constructed seem appropriate in relation to the currently understood model of formation of the mineralisation.</li> <li>The estimate of all elements has been limited to blocks that have first informing composites less than 50 m from the block center (A review of the model shows for the domains interpreted that the mean distance to the nearest composite is 28 meters). This is a reasonable limit to prevent kriging of grades into areas not adequately supported by drilling and is consistent with the resource classifications applied.</li> <li>The result of this estimation does reflect the competent person's view of the deposit. The domains are constrained by geology and do not extend far beyond data limits. The model grades also reflect the raw composite grades and is not over-estimating the grade in the deposit.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits have been performed on this resource.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The data integrity has been validated by the geological team that collected it. Historic data was validated by the same team using the same methods and historical assay data was bolstered by re-sampling holes by means of a multi element suite and more modern equipment. The geological interpretation is also considered appropriate as it considers the geological data collected from the drill programs and does not extend long distances away from the data points, thus mitigating the possibility of overestimating the volume of the deposit. The search criteria and variography for the estimation were determined by statistical methods using the data associated with the deposit and is considered relevant. The estimated block model grades correlate well with the de-clustered raw composite data indicating that it reflects



## **Appendix 3**

# Copper Hill East JORC Code (2012) - Table 1

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Rock chip samples         <ul> <li>These samples are collected from outcrop, float, or other exposure. Samples are clear of organic matter.</li> </ul> </li> <li>Soil samples         <ul> <li>These samples are collected from the "C" soil horizon at depths up to 75cm deep or just above bedrock in shallow sub crop areas. The samples are sifted to minus 2mm and are free of organic matter.</li> </ul> </li> <li>Soil auger samples         <ul> <li>These samples are collected from the "C" soil horizon at depths of up to 3m below surface or upon refusal depth being reached (&lt;3m). The samples are sifted to minus 2mm and are free of organic matter.</li> <li>In order to optimise the samples ability to represent the mineralisation, the deepest possible sample is taken (&lt;3m) in order to mitigate the misrepresentation caused by transported material.</li> <li>These sampling methods are standard industry methods and are believed to provide acceptably representative samples for the type of mineralisation encountered.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		Rock chip samples, soil samples as well as soil auger samples
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details.	Mechanical auger – using 10 cm bit.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Only bottom sample collected. Sample recovery is assumed to be 100% but is in context drilling type.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Bottom sample was geologically logged. Logging details included: rocktype, alteration, regolith, colour and mineralization.
Sub-sampling techniques and sample preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>All core and rock chip samples are crushed then pulverised in a ring pulveriser (LM5) to a nominal 90% passing 75 micron. An approximately 250g pulp subsample is taken from the large sample and residual material stored.</li> <li>A quartz flush (approximately 0.5 kilogram of white, medium-grained sand) is put through the LM5 pulveriser prior to each new batch of samples. A number of quartz flushes are also put through the pulveriser after each massive sulphide sample to ensure the bowl is clean prior to the next sample being processed. A selection of this pulverised quartz flush material is then analysed and reported by the lab to gauge the potential level of contamination that may be carried through from one sample to the next.</li> </ul>
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered	Sample preparation and assaying is being conducted through ALS Laboratories, Orange, NSW with certain final analysis of pulps being undertaken at the ALS Laboratory in Perth WA.



Criteria	JORC Code explanation	Commentary
	partial or total.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Gold is determined by 30g fire assay fusion with ICP-AES analysis to 1ppb LLD.</li> <li>Other elements by mixed acid digestion followed by ICP-AES analysis.</li> <li>Laboratory quality control standards (blanks, standards and duplicates) are inserted at a rate of 5 per 35 samples for ICP work.</li> <li>Ardea also insert blanks and standards at a frequency of 1 per 10 samples.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>An internal review of results was undertaken by Company personnel. No independent verification was undertaken at this stage.</li> <li>All field and laboratory data has been entered into an industry standard database using a database administrator (DBA) in the Company's Perth office. Validation of both the field and laboratory data is undertaken prior to final acceptance and reporting of the data.</li> <li>Quality control samples from both the Company and the Laboratory are assessed by the DBA and reported to the Company geologists for verification. All assay data must pass this data verification and quality control process before being reported.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Not applicable as no Mineral Resource Estimate was completed.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and</li> </ul>	<ul> <li>Soil auger on 160 m × 160 m spacing.</li> <li>Not applicable as no Mineral Resource Estimate was completed.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul><li>classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	No compositing was carried out.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Not applicable as this was first pass\orientation geochemistry drilling.
Sample security	The measures taken to ensure sample security.	Samples are being secured in poly weave bags and are transported to the ALS laboratory in Orange, NSW via a courier service or with Company personnel/contractors.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A review and assessment of the laboratory procedures was under taken by Company personnel in late 2016.

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in</li> </ul>	<ul> <li>The Copper Hill East project is 30km North of Orange in Central New South Wales, and has an elevation between 450 m and 600 m above sea-level.</li> <li>The exploration rights to the project are owned 100% by the Ardea Resources through the granted exploration license EL8556.</li> </ul>



Criteria	JORC Code explanation	Commentary
	the area.	
Exploration done by other	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Several companies have explored the district surrounding the Copper Hill workings.
parties		The variable cover over the northern portion of the tenement has likely resulted in past exploration programs in most cases, relying on geophysical (aeromagnetics and radiometrics) and geochemical surveys to generate targets for further work.  Follow up of regional targets was generally undertaken on smaller grids with soil sampling and detailed rock chip sampling followed by geological mapping and geophysical. If exploration results warranted it, prospects were RC drilled and rarely diamond drilled, or diamond tailed. Some RAB drilling was completed to test beneath shallow alluvial and colluvial sequences.  Early exploration was designed to test the Ordovician sequences for Copper Hill analogues including defining dacite porphyries and targeting magnetic depletion zones due to strong alteration in a NW trending dilational structural opening. The porphyries form narrow, typically less than 250 m in diameter, but vertically extensive pipes, greater than 900m. The Copper Hill porphyry occurs within a NW trending gravity low (dilation opening) indicating a felsic pluton at depth, and also strong magnetic low which is considered integral to their formation. Early exploration in the northern portion of EL8556 was designed to test the Ordovician sequences for Copper Hill analogues including defining dacite porphyries and targeting magnetic depletion zones due to strong alteration in a NW trending dilational structural opening.
Geology	Deposit type, geological setting and style of mineralisation.	Geology  The northern portion of the tenure straddles the Molong Volcanic Belt of the Ordovician Macquarie Arc and comprises of the Ordovician rocks of the Fairbridge Volcanics and Oakdale Formation. The units strike north-south and dip and young to the west. The Fairbridge Volcanics represent Phase 2 magmatism of the Macquarie Arc.  The southern portion of the tenement comprises the oldest sequence the Late Ordovician Oakdale Formation which occurs towards the west of the tenure.  The sequence is interpreted as been deposited in a relatively deep basinal environment.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> </ul>	Drill hole data not yet compiled.



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	No grade aggregation, weighting, or cut-off methods were used for this announcement.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	Early stage exploration means that these relationships are unknown.
Diagrams	Appropriate maps and sections     (with scales) and tabulations of     intercepts should be included for     any significant discovery being     reported These should include,     but not be limited to a plan view of     drill hole collar locations and     appropriate sectional views.	Maps incorporated into the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be	All results of Ardea's reconnaissance rock chip and soil sampling programs have been reported.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	practiced to avoid misleading reporting of Results.  Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable at this early stage of exploration.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	Currently under assessment. Follow-up work is required, as mentioned in body of the announcement.



### **Appendix 4**

# Lewis Ponds JORC Code (2012) - Table 1

#### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling rechniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Both Reverse Circulation Percussion drilling (RCP) and Diamond core drilling (DD) have contributed to the Lewis Ponds resource database.  The Lewis Ponds data consists of 213 drill holes over several decades as follows:  1971 to 1979 – 15 DD holes for 3,396.36 metres representing 5% of the total metres  1980 to 1988 – 6 DD holes for 1,805.70 metres representing 3% of the total metres  1980 to 1988 – 6 DD holes for 2,298 metres representing 3% of the total metres  1992 to 1997 – 118 DD/DD/WEDGE holes for 48,719.8 metres – 77% of the total metres  1992 to 1997 – 6 RCP holes for 612 metres representing 1% of the total metres  1992 to 1997 – 2 DD extension holes for 1,328 metres representing 2% of the total metres  2004 to 2017 – 8 DD holes for 2,409.08 metres representing 2% of the total metres  2004 to 2017 – 8 DD holes for 1,999.20 metres representing 3% of the total metres  2004 to 2017 – 7 DD extension holes for 766.50 metres representing 1% of the total metres  2004 to 2017 – 7 DD extension holes for 766.50 metres representing 1% of the total metres  2004 to 2017 – 7 DD extension holes for 766.50 metres representing 1% of the total metres  30 wedged diamond holes for 11,253.43 metres  30 wedged diamond holes for 2,094.50 metres  57 RCP holes for 4,909.20 metres  Sample type and assay metres is summarised as follows:  200

sub-5m accuracy collar positioning in year 2000 (removal of Selective Availability). The programs after and including 2004 used Trimble GPS for collar positioning. The first hole to have (Differential) GPS collar positioning was TLPD-55 which commenced 3 Nov



<ul> <li>hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> <li>Prior to 1980, HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size when rotation became an issue with NQ. In DD programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size when rotation became an issue with NQ. In DD programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size when rotation became an issue with NQ. In DD programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag reduced to BQ core size was used only to seat the casing to enable NQ coring to enable NQ</li></ul>	Criteria	JORC Code explanation	Commentary
hole fammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg over diameter, riple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Prior to 1980, HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag or endered to BQ core size when rotation became an issue with NQ. In Dp programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag or endered to BQ core size when rotation became an issue with NQ. In Dp programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag or endered to BQ core size when rotation become an issue with NQ. In Dp programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag or endered to BQ core size when rotation become an issue with NQ. In Dp programs subsequent to 1980 HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stag or secret when rotation to NQ and possibly BQ. After 1990 triple tube barrels were used to good effect minimising core loss, in the secret was an experiment of the secret was an experiment of the secret was the secret with the secret was an experiment of the secret was an experime			1995. The most recent drilling the ALD series utilised a Reflex EZ multishot down hole survey tool. About 40 percent of the metreage drilled was GPS located.
Method of recording and assessing core and chip sample recoveries and results assessed.   Measures taken to maximise sample recovery and ensure representative nature of the samples.   Measures taken to maximise sample recovery and ensure representative nature of the samples.   Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.   Core recoveries at Lewis Ponds have not in every case been recorded on a sample basis, however a good recoved database is provided by recoveries recorded in the Geological Logs. These show that significant core loss is a comparative event once the hole enters competent rock, and in most case is due to local stopped voids, faulting and/or shearing. Recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.   Core recoveries at Lewis Ponds have not in every case been recorded on a sample by sample basis, however a good recoved database is provided by recoveries recorded in the Geological Logs. These show that significant core loss is a comparative event once, and in most case is due to local stopped voids, faulting and/or shearing. Recovery and the velocity of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured by restoring the core, fitting individual pieces end to end where	Drilling techniques	hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core	<ul> <li>and Diamond Core Drilling (DD). Open hole techniques including Tricone, Blade and Hammer have been used to pre-collar through overburden and barren ground to place casing to facilitate deeper RC and/or DD.</li> <li>Prior to 1980, HQ core size was used only to seat the casing to enable NQ coring to start. Most of these holes at some stareduced to BQ core size when rotation became an issue with NQ. In DD programs subsequent to 1980 HQ core size was used then reduction to NQ and possibly BQ. After 1990 triple tube barrels were used to good effect minimising core loss, reduction to NQ became the norm with no further use of BQ coring.</li> <li>Diamond tails, as distinct from pre-collars, were used to extend RCP holes in the 2004 and 2005 programs. These totalled m in nine holes.</li> <li>No use of oriented core was made until 2004 where drillers marks on core assisted determination of vergence in folding adjunineralisation.</li> </ul>
Metal         Downhole Cutoff range         Total Metreage         Average Core Recovery % R	Drill sample recovery	<ul> <li>chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	database is provided by recoveries recorded in the Geological Logs. These show that significant core loss is a comparative event once the hole enters competent rock, and in most cases is due to local stopped voids, faulting and/or shearing. Recovered has been measured by restoring the core, fitting individual pieces end to end where possible. Lengths of the assemble were measured to compare with the intervals between drillers' downhole markers. The ratio between the measured length
Metal Cutoff range         Metreage         Recovery %         Zn%         Au g/t           Zn%         0 − 1         3811         98.3         0.21         0.17           Zn%         1 − 2         532         97.2         1.42         0.56           Zn%         2 − 3         242         99.2         2.41         0.99           Zn%         3 − 4         113         99.7         3.46         1.08           Zn%         4 − 5         70         99.7         8.36         3.47           • There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:           Metal         Downhole Cutoff range Metreage Recovery %         Zn%         Au g/t           Au g/t         0 − 1         3657         98.0         0.09         0.49           Au g/t         1 − 2         351         98.6         0.69         1.82           Au g/t         2 − 3         127         99.0         1.22         3.20           Au g/t         3 − 4         85         99.1         1.73         3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction.</li> <li>NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> </ul>
Zn%   1-2   532   97.2   1.42   0.56		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reducting NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> </ul>
Zn% 2-3 242 99.2 2.41 0.99     Zn% 3-4 113 99.7 3.46 1.08     Zn% 4-5 70 97.7 8.36 3.47     There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:    Metal   Downhole   Total   Average Core   Zn% Au g/t     Cutoff range   Metreage   Metreage   Recovery %   Zn% Au g/t     Au g/t 0-1 3657 98.0 0.09 0.49     Au g/t 1-2 351 98.6 0.69 1.82     Au g/t 2-3 127 99.0 1.22 3.20     Au g/t 3-4 85 99.1 1.73 3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> </ul>
Exp. 3 - 4 113 99.7 3.46 1.08 2n% 4 - 5 70 97.7 8.36 3.47  • There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:    Netal   Downhole   Cutoff range   Total   Average Core   Recovery % 2n% Au g/t		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> </ul> Metal Downhole Cutoff range Metreage Recovery % Zn% Au g/t Recovery % Downhole Cutoff range Metreage Recovery % Downhole Recovery % Downhole Cutoff range Metreage Recovery % Downhole Recovery % Downhole Downhole Recovery % Downhole Recovery % Downhole Downhole Recovery % Downhole Downhole Recovery % Downhole Recovery % Downhole Downhole Recovery % Downhole Recovery % Downhole Downhole Recovery % Downhole Downhole Recovery % Downhole Recovery % Downhole Recovery % Downhole Downhole Recovery % Downhole Downhole Recovery % Downh
There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:    Netal   Downhole   Cutoff range   Total   Average Core   Recovery %   Zn%   Au g/t		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>Metal Downhole Cutoff range Metreage Recovery % Zn% Au g/t</li> <li>Zn% 0-1 3811 98.3 0.21 0.17</li> <li>Zn% 1-2 532 97.2 1.42 0.56</li> </ul>
• There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:    Netal   Downhole   Cutoff range   Total   Average Core   Recovery %   Zn%   Au g/t		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>\( \frac{\text{Metal}}{2n\%} \frac{\text{Downhole}}{\text{Cutoff range}} \frac{\text{Netreage}}{\text{Metreage}} \frac{\text{Recovery \( \frac{\text{Verage Core}}{\text{Recovery \( \frac{\text{Vu}}{\text{Ol.77}}} \) Au g/t</li> <li>\( \frac{\text{Zn\%}}{2n\%} \frac{1-2}{1-2} \frac{532}{532} \frac{97.2}{97.2} \frac{1.42}{1.42} \frac{0.56}{0.56} \)</li> <li>\( \frac{\text{Zn\%}}{2n\%} \frac{2-3}{2-3} \frac{242}{242} \frac{99.2}{99.2} \frac{2.41}{2.41} \frac{0.99}{0.99} \end{array}</li> </ul>
Au g/t         0 - 1         3657         98.0         0.09         0.49           Au g/t         1 - 2         351         98.6         0.69         1.82           Au g/t         2 - 3         127         99.0         1.22         3.20           Au g/t         3 - 4         85         99.1         1.73         3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduct NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>\( \frac{\text{Metal}}{2n\text{W}} \frac{\text{Downhole}}{\text{Cutoff range}} \frac{\text{Netreage}}{\text{Metreage}} \frac{\text{Recovery \text{\text{W}}}}{\text{Recovery \text{\text{Metal}}}} \frac{\text{Au g/t}}{\text{Loust}} \)</li> <li>\( \frac{\text{Zn\text{\text{W}}}}{1-2} \frac{\text{532}}{532} \frac{\text{97.2}}{97.2} \frac{1.42}{1.42} \frac{0.56}{0.56} \)</li> <li>\( \frac{\text{Zn\text{\text{W}}}}{2-3} \frac{242}{242} \frac{99.2}{99.2} \frac{2.41}{2.41} \frac{0.99}{0.99} \)</li> <li>\( \frac{\text{Zn\text{\text{W}}}}{1.08} \frac{1.08}{0.000000000000000000000000000000000</li></ul>
Au g/t         0 - 1         3657         98.0         0.09         0.49           Au g/t         1 - 2         351         98.6         0.69         1.82           Au g/t         2 - 3         127         99.0         1.22         3.20           Au g/t         3 - 4         85         99.1         1.73         3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduct NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>\( \frac{\text{Metal}}{2n\text{W}} \frac{\text{Downhole}}{\text{Cutoff range}} \frac{\text{Netreage}}{\text{Metreage}} \frac{\text{Recovery \text{\text{W}}}}{\text{Recovery \text{\text{W}}}} \frac{\text{Au g/t}}{\text{Lu}} \frac{\text{Zn\text{\text{W}}}}{\text{Lu}} \frac{\text{Lu}}{\text{2}} \frac{\text{2}}{\text{3}} \frac{\text{97.2}}{\text{2}} \frac{1.42}{\text{0.56}} \frac{\text{2}}{\text{2}} \frac{\text{2}}{\text{99.2}} \frac{2.41}{\text{1}} \frac{0.99}{\text{0.99}} \frac{\text{Zn\text{\text{W}}}}{\text{4} \text{5}} \frac{\text{70}}{\text{97.7}} \frac{3.36}{3.36} \frac{3.47}{3.47} \right\)</li> </ul>
Au g/t 0 – 1 3657 98.0 0.09 0.49  Au g/t 1 – 2 351 98.6 0.69 1.82  Au g/t 2 – 3 127 99.0 1.22 3.20  Au g/t 3 – 4 85 99.1 1.73 3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduct NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>\( \frac{\text{Metal}}{2n\text{W}} \frac{\text{Downhole}}{\text{Cutoff range}} \frac{\text{Netreage Core}}{\text{Metreage}} \frac{\text{Recovery \text{\text{W}}}}{\text{Recovery \text{\text{W}}}} \frac{\text{Au g/t}}{\text{Lo.56}} \right.     \( \frac{\text{Zn\text{\text{W}}}}{2-3} \frac{242}{242} \frac{99.2}{99.2} \frac{2.41}{2.41} \frac{0.99}{0.99} \right.     \( \frac{\text{Zn\text{\text{W}}}}{3-4} \frac{113}{113} \frac{99.7}{99.7} \frac{8.36}{8.36} \frac{3.47}{3.47} \right.     \)</li> <li>There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:</li> </ul>
Au g/t 2 – 3 127 99.0 1.22 3.20 Au g/t 3 – 4 85 99.1 1.73 3.84		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>\( \frac{\text{Metal}}{\text{Downhole}} \) \( \frac{\text{Total}}{\text{Metreage}} \) \( \frac{\text{Average Core}}{\text{Recovery \choose N}} \) \( \frac{\text{Au g/t}}{\text{Dust}} \) \( \frac{\text{Au g/t}}{\text{Dust}} \) \( \frac{\text{NQ}}{\text{Dust}} \) \( \frac{\text{NQ}}{\text{Dust}} \) \( \frac{\text{NQ}}{\text{Dust}} \) \( \frac{\text{NQ}}{\text{Dust}} \) \( \frac{\text{NP}}{\text{NQ}} \) \( \frac{\text{NQ}}{\text{Dust}} \) \</li></ul>
Au g/t 3 – 4 85 99.1 1.73 3.84		recovery and grade and whether sample bias may have occurred due to preferential	weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.  Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduct NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.  Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:    Metal   Downhole   Total   Average Core   Recovery %   Zn%   Au g/t
<del>-</del>		recovery and grade and whether sample bias may have occurred due to preferential	<ul> <li>weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.</li> <li>Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduction.</li> <li>This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.</li> <li>Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:</li> <li>Metal Downhole Total Average Core Recovery W Au g/t</li> <li>Zn% 0-1 3811 98.3 0.21 0.17</li> <li>Zn% 1-2 532 97.2 1.42 0.56</li> <li>Zn% 2-3 242 99.2 2.41 0.99</li> <li>Zn% 3-4 113 99.7 3.46 1.08</li> <li>Zn% 3-4 113 99.7 3.46 1.08</li> <li>Zn% 4-5 70 97.7 8.36 3.47</li> <li>There seems to be no evidence for reduced core recoveries with increasing zinc grades, similarly with increasing gold:</li> <li>Metal Downhole Cutoff range Metreage Recovery Recovery 2n% Au g/t</li> <li>Au g/t 0-1 3657 98.0 0.09 0.49</li> </ul>
Au g/t 4 – 5 178 99.4 5.63 4.92		recovery and grade and whether sample bias may have occurred due to preferential	weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.  Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduced NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.  Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:    Metal   Downhole   Total   Average Core   Zn%   Au g/t
Results in the high 90's come from the higher cutoffs for Cu and Ag also.		recovery and grade and whether sample bias may have occurred due to preferential	weighed and the weight recorded. Any noticeably low weight recorded became a recovery factor in the sampling record.  Core loss was minimised by maintaining a satisfactory balance between core diameter and drilling cost. For the TOA, TRO TriAusMin programs between 1992 and 2004, also the Shell/Aquitaine 1981 program, the standard core size was HQ reduct NQ. This was the most significant factor in minimising core loss, to the extent that contract controlled drilling provisions we called for.  Tests of the database for sensitivity of core recovery to grade yielded the following results for diamond drill cores:    Metal   Downhole   Total   Average Core   Zn%   Au g/t



Criteria	JORC Code explanation	Commentary
		nickel in WA and Amax had to accept BQ core (diameter 36.5 mm) in part. The four Amax holes produced one significant Au assay (not sampled systematically for Au) and four significant Zn assays and thus is a low proportion of the overall database.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Logging of core and chips has been maintained throughout the Lewis Ponds programs. In the 1992 - 2004 programs, logs of downhole geology were generally prepared on paper proformas then entered digitally. In most cases scans of the hand logs have been made as well as the digital logs. The first objective has been to enable the lithology, alteration and mineralisation, and oxidation records to appear on screen together with grades for geological interpretive purposes. This has taken place to the standard required for mineral resource estimation and subsequent studies. The geological logging done, together with available photography, is considered to be adequate for mineral resource studies.  Where needed terms such as 'massive', semi-massive' 'stringer' or 'disseminated' have been used to describe the aspect of the metal sulphides. These qualitative terms are expected to be reflected in the assay results for the same intervals. This applies to logging both core and chips. Visual estimation of sulphide percentages has not been systematic throughout the drilling. Core photography has been carried out over the mineralised intervals in core obtained between TLPD33 and TLPD72 (Oct 1994 to April 1997) and the mineralised section of TLPD12. This represents approximately 50% of the total drilling, thus there is insufficient core photography to be a proxy for geotechnical logging in the event of a scoping study for Lewis Ponds.
		Geological logs exist for 95 percent of total RC plus DD drilling. Geotechnical logging appears to have been limited to two holes in the 2004 TRO program, TLPDD04001 and 04002, totalling 643 m (approx. 1% of all core). Basically, unless additional records come to light, for scoping study purposes geotechnical logging would have to be extended over stored core or further geotechnical drilling done.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>After core logging, generally routine 1m intervals to be assayed were split using a diamond saw and half-core samples bagged for assay. This was industry standard procedure. Paying for HQ coring was to achieve maximum representivity through higher volume samples.</li> <li>RC sampling, generally dry, was carried out on a metre by metre basis, collected directly into a plastic bulk bag from the rig cyclone. A 3-5kg sub-sample was taken by the spear method, bagged and submitted to the laboratory. Wet samples were mixed and quartered manually, but this was a rare necessity. The large volume of the sample and the use of the Reverse Circulation method was industry standard to achieve representivity. Normal quality control procedures were in place in the RCP drilling, in particular, cleaning the hole with air between each sampling run, and casing through overburden to avoid up hole contamination.</li> <li>With both RCP and DD drill sampling, a replicate sample was taken every 20m for quality control and submitted without special identification with other samples to the laboratory. It was rare for replicate sample assays, when compared with the original, to fall outside normal variability within the sampling/assay process. On some occasions a triplicate sample was taken for an umpire Au assay.</li> <li>The Lewis Ponds sulphides, whether massive or disseminated, have not raised problems of representivity with the RCP and DD sampling employed. Gold is a significant element of the Lewis Ponds metal value and could have representivity issues. Preliminary metallurgical study indicates that gold is largely refractory within sulphides. Coarse gold is therefore unlikely to be a problem in fresh rock at Lewis Ponds with attendant representivity issues. This may have to be reviewed if mineralisation in the oxide zone becomes a drilling target.</li> <li>No problems of ultra-fine grain size exist at Lewis Ponds and the sample sizes are considered adequate.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers,</li> </ul>	For DD in the 2004 drilling, entire half core samples were crushed to >70 percent passing -6mm mesh and weighed. For gold, 30g were taken for fire assay and AA finish. Sub-samples for Ag, Cu, Pb and Zn received aqua regia digestion followed by AA. The procedures were industry standard with a reputable laboratory. Procedures followed are considered to have built a good quality database for Lewis Ponds.  Field analysers have not contributed to the Lewis Ponds mineral resources assay database.
	handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and	QC Certificates of Analysis are held from the laboratory in respect of regular internal check assays of Standards, Blanks and Internal Duplicates from pulps of the original samples. Random checks give evidence of satisfactory procedures. Accuracy and Precision stats could be run for a marginally higher level of comfort.



Criteria	JORC Code explanation	Commentary
	their derivation, etc.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>All significant intersections (TRO, TOA and prior) have been independently verified by a senior consultant to the extent of re-logging to become familiar with the detailed characteristics. This was carried out in two phases and a full report has been presented describing each phase.</li> <li>The drill intercept spacing is perhaps surprisingly regular given the number of drilling campaigns that have contributed. One significant intersection twinned is:         <ul> <li>Drill hole</li> <li>East</li> <li>North</li> <li>Interval</li> <li>Au</li> <li>Ag</li> <li>Cu</li> <li>Pb</li> <li>Zn</li> </ul> </li> <li>Local m</li> <li>Local m</li> <li>Morth</li> <li>Interval</li> <li>Au</li> <li>Ag</li> <li>Cu</li> <li>Pb</li> <li>Zn</li> <li>W</li> <li>%</li> <li>%</li> </ul>
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	SLP-2 -0.4 760 2.1 13.5 486 2.73 3.44 5.21
		SLP-2W 2.1 761 2.1 3.9 370 0.32 5.3 5.8
		Another example approaches the twinning situation with a separation of 22 m. Comparable intercepts are:      Drill hole
		all drill holes, one sample per record. The data as had been entered was checked individually against source Assay Certificates and Sample Submission information. 289 errors were identified, listed and corrected. Of these 16 were significant errors. 9 of the 16 from early drilling could not be reconstructed and had to be deleted from the database. In those cases, original Assay Certificates were not available, and checks could only be made against scanned tables of assays or in some cases scans of assay results on drill cross sections.  From this exercise procedures were developed for the 2004 drilling: digitising sample submission (order numbers vs sample numbers vs intercepts), receiving digital Assay Certificates, and the critical 'synchronising' of assays and corresponding sample intercepts on spreadsheet. The new results were incorporated into the exploration software database and viewed on screen to see that there was geological sense in the results. The entire technical database was backed up daily on the server, together with corporate records. One backup tape was taken out of the building each evening and returned the following day.  One error which necessitated correction in the assay records came from a small block of assays having moved one line in the file relative to intercept.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> </ul>	Collar positions have been set in using a Trimble GPS instrument with a sub-5 metre level of accuracy. Collars of TOA and TRO holes have been picked up using a DGPS Sub-1 metre instrument since mid-1995. Prior to that, holes may have been sited relative to a pegged tape and compass grid with significant inaccuracies. However, in 1995 all previous hole collars appear to have been identified and surveyed by DGPS. No tape and compass coordinates are used to locate any item of drill data in the current database. In 2004 limited checks were made of surviving early hole collars (pre-1995) using DGPS with satisfactory results when compared with database.
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The Lewis Ponds grid was established in 1992 using a local grid north reference of 315 degrees magnetic. The Grid north orientation of 315 degrees (Mag) equates to 329 degrees MGA.</li> <li>To convert local grid bearing to magnetic subtract 45 degrees.</li> <li>To convert local grid bearings to MGA, subtract 31 degrees.</li> </ul>



Criteria	J	ORC Code explanation	Commentary
			<ul> <li>A number of points along the local grid baseline have been surveyed using real time DGPS with sub-metre accuracy.</li> <li>To allow for transformation into MGA coordinates two corresponding surveyed points are:</li> </ul>
			Local grid MGA (55) grid
			Easting (mE) Northing (mN) Easting (mE) Northing (mN)
			000 1100 709679.3 6316506.4
			000 -370 710436 6315245.4
			It is considered that all issues with the location of historic data points have been identified and remedied prior to the start of 2004 drilli
Data spacing and distribution	•	Data spacing for reporting of Exploration Results.  Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.	Drill spacing in mineralisation material to this mineral resource estimate (above 400mRL) is generally set out on 40 to 50m oblique sections (Azimuth 235°) in the best drilled areas increasing to 100m at the strike extremities. On section collar spacing varies from 40 50m at best providing intercept spacing in mineralisation of 50 to 80m down dip. The drilling density is increased marginally at surface with a number of shallow holes and at depth by the use of DD wedge drilling.
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have	As the lenses dip variably to the east, and the difficult topography is to the west, there has been little problem in siting holes to optimis the drill to mineralisation intersection angles. The strongest mineralisation dips about 50° to 70° east with vertical tails up to the west down to the east, i.e. sigmoid. This has resulted in intersection angles effectively normal to the thicker parts of the mineralisation. What the lenses tail up to the west and down to the east, the incident angles reduce to 40° to 60°.  No significant bias is likely as a result of the pattern of intersection angles.
		introduced a sampling bias, this should be assessed and reported if material.	
Sample security	•	The measures taken to ensure sample security.	For all programs care has been taken to have standard procedures for sample processing, and each past drilling program has recorded its procedures. These have been simple and industry standard to avoid sample bias. There is need to avoid classification bias in spesampling of RCP chips by thorough pre-mixing. This method needs to remain consistent.
			Perhaps the best security against potential sample tampering for a situation such as Lewis Ponds has been not to have to store the samples. Site processing of samples was by Company employees and when complete samples were less than an hour from the laboratory by company vehicle. Satisfactory internal security was maintained routinely by the Laboratory.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	A total review and audit of the Lewis Ponds database was carried out following the public float of Tri Origin Minerals Limited on 9 Jan 2004. Areas were: Grids and Collars, Downhole Surveys, Assays, Geology. Apart from this Review, previous resource estimates we studied for factors likely to introduce bias, up or down.



### **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Lewis Ponds project is 14km east-northeast of the city of Orange, central New South Wales, Australia. Local relief at the site is between 700 and 900m above sea level.</li> <li>The mineral rights to the project are 100 percent owned by Ardea Resources Limited (Ardea) through the granted Exploration Licence 5583. A capped (A\$2M) royalty and finders fee is payable to a private third party if the project is sold or commences production.</li> <li>\$40,000 Security Bond is in place</li> <li>The project is on partly cleared private land, most of which is owned by Ardea. Access agreements are in place for the private land surrounding the main deposit area. There are no national parks, reserves or heritage sites affecting the project area.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	EL 5583 was granted to TriAusMin in 1999 for an area of 71 units and replaced three previously held exploration licences (EL 1049, EL 4137 and EL 4432). In the 2006 renewal, the licence was party relinquished to 57 units and the following year TriAusMin purchased 289 hectares of freehold land over Lewis Ponds. Upon renewal in 2011, EL 5583 was reduced to 51 units for a further term until 24th June 2014. The second renewal of EL 5583 was granted until June of 2017 with no reduction in tenement size.
		On August 5th 2014, TriAusMin underwent a corporate merger with Heron Resources Limited which resulted in Heron acquiring 100% of EL 5583 and the 289 hectares of freehold land over Lewis Ponds. In 2017, Ardea Resources Ltd was "spun out" as a new company, and gained ownership of EL 5583, with TriAusmin becoming a wholly owned subsidiary of Ardea.
		In the 1850's gold was discovered at Lewis Ponds and shallow underground mining took place at Spicers, Lady Belmore, Tom's Zone and on several mines in the Icely area during the period 1887 to 1921. In 1964, a number of major companies including Aquitaine, Amax, Shell and Homestake explored the region looking for depth and strike extensions of the Lewis Ponds mineralisation but failed to intersect significant mineralisation. These companies had drilled approximately 8,500 metres. Not commonly noted, but of great significance is the fact that much of Lewis Ponds' early development was in lieu of the high grades of silver in its ores. It appears that silver was the major commodity mined at different points of the mines' history.
		Exploration activities at Lewis Ponds since the 1990s are as follows.
		<ul> <li>1990s         <ul> <li>Historic exploration data review, geological data compilation and mapping</li> <li>Rock chip sampling and detailed regional mapping, establishment of a regional grid baseline</li> <li>EM, dipole-dipole, induced polarization and magnetic, moving loop Sirotem surveys</li> <li>Diamond and RC drilling programs</li> <li>Integration of exploration data into digital GIS format and conversion of older grids</li> <li>Updated resource estimate</li> </ul> </li> <li>2000 – 2002</li> </ul>
ı		<ul> <li>Conversion of historic datasets into modern GIS databases</li> <li>Compilation, appraisal and reinterpretation of previous exploration data</li> <li>Geological re-interpretation of the Lewis Ponds deposit</li> <li>Updated Mineral Resource estimate 5.7 Mt at 1.9 g/t gold, 97/t silver, 0.15% copper, 1.1% lead and 2.4% zinc</li> <li>Identification of regional prospects and targets</li> <li>Co-sponsorship of PhD research on the Lewis Ponds Deposit</li> </ul>
1		<ul> <li>2003 – 2005</li> <li>Re-interpretation of the prospect geology and structure and investigation to exploit high-grade resource within Shoot 1 of the</li> </ul>



Criteria	JORC Code explanation	Commentary
		Main Zone
		<ul> <li>Economic study of Lewis Ponds deposit based on underground mining of the Main Zone</li> </ul>
		<ul> <li>RC and diamond drilling, both at Lewis Ponds and on regional prospects</li> </ul>
		Airborne HoistEM survey
		<ul> <li>Soil sampling and geochemistry</li> </ul>
		<ul> <li>Integration and validation of drill hole database, exploration review</li> </ul>
		<ul> <li>Extensive consultants study on the Lewis Ponds Deposit (P Gregory)</li> </ul>
		• 2005 – 2008
		<ul> <li>Regional mapping, soil and rock sampling</li> </ul>
		Reinterpretation of the HoistEM survey
		Multiple programs of RC and diamond drilling
		IP survey, downhole EM survey, moving loop EM survey
		<ul> <li>Scoping study, JORC Indicated and Inferred Resource estimate of 6.6 Mt at 2.4% zinc, 0.2% copper, 1.4% lead, 69 g/t silver and 1.5 g/t gold</li> </ul>
		<ul> <li>Target TEM processing and interpretation of previously flown HoistTEM data (concluded that the HoistEM survey was corrupt and should be disregarded)</li> </ul>
		o Rehabilitation and review
		<ul> <li>3D model of the resource area giving 10.9 Mt at 3 % zinc equivalent</li> </ul>
		<ul> <li>2008 – 2011</li> </ul>
		o Data review (external consultants)
		<ul> <li>Resource review and comparison, resource modelling (external consultants)</li> </ul>
		o Additional rehabilitation
		o Tenement wide VTEM survey
		o 3D modelling of Lewis Ponds deposit
		<ul> <li>VTEM data processing and interpretation</li> </ul>
		• 2011 – 2013
		<ul> <li>Significant rehabilitation – clean up or all historic core in core yard on the scale of tens of thousands of metres of core, rehabilitation of old holes</li> </ul>
		<ul> <li>Environmental work – new fencing, new gate, weeding</li> </ul>
		<ul> <li>VTEM data processing and regional drill targeting</li> </ul>
		<ul> <li>Ground assessment drill targets, significant amount of landowner liaison and engagement for earthworks, logistics and accommodation services</li> </ul>
		<ul> <li>RC drilling of southern, up-plunge extensions to Lewis Ponds deposit at Toms, 9 holes totalling 869 metres</li> </ul>
		o Diamond drilling 6 holes for 1,317 m into VTEM anomalies identified in 2010 – 2011
		<ul> <li>Re-processing of 1990's legacy IP over the Tom's Zone generated new targets, possible extensions to Lewis Ponds deposit</li> </ul>
		<ul> <li>Tenement scale project review and relinquishment of 6 units</li> </ul>
		<ul> <li>Prospect scale mapping and sampling of Mt Nicholas Prospect</li> </ul>
1		Re-sampling of historical drill core from Williams Lode
		Re-processing of the tenement-wide 2010 VTEM survey
1		Ongoing land management program.
1		Ground assessment of prospects, rock chip sampling and drill targeting.
		o Ongoing landowner liaison.
1		• 2013 – 2015
		Corporate merger with Heron Resources Limited.  Two reconnections and field trips, rook ship compling, followed by good given, good widely and good printing with the restriction.
		o Two reconnaissance field trips, rock chip sampling, followed by geological, geophysical and geochemistry review, drill targeting
		and planning.



Criteria	JORC Code explanation	Commentary
		<ul> <li>Commencement of drill program at Brown's Creek.</li> <li>2015 – 2016</li> <li>Completion of Drilling program assay results review for Browns Creek</li> <li>Regional Rock chip assay review, and grab sampling at Lewis Ponds</li> <li>2016- present</li> <li>Corporate spin-out of Ardea Resources Limited from Heron Resources, transfer of TriAusMin subsidiary to Ardea</li> <li>4 DD holes for 780m</li> <li>Metallurgical studies</li> <li>Surface mapping and sampling</li> </ul>



Criteria	JORC Code explanation	Commentary	
Geology	Deposit type, geological setting and style of mineralisation.	The Lewis Ponds Project occurs on the western margin of the Hill End Trough in the eastern Lachlan Fold Belt, which hosts a range of base metals in volcanic-hosted massive sulphide deposits (VMS), porphyry copper-gold and gold deposits, including Woodlawn (polymetallic), Cadia-Ridgeway (Cu-Au), North Parkes (Cu-Au), Copper Hill (Cu-Au), Tomingly (Au) and McPhillamy's (Au).  The Molong Volcanic Belt is west of the EL 5583 and comprises Ordovician to early Silurian basal units of mafic to ultramafic volcanic and sedimentary rocks of the Kenilworth and Cabonne Groups. These units are separated from the Hill End Trough by the extensive Godolphin Fault Thrust System.  The Mumbil Group unconformably overlies the Molong Volcanic Belt and comprises shallow-water Later Silurian sequence of felsic volcanics, volcanoclastics, siltstone and limestone. Part of this Group is the Barnby Hills Formation at Lewis Ponds and comprises (tuffaceous) siltstones overlying limestone and rhyodacitic volcaniclastics. To the east and conformably overlying rocks of the Mumbil Group, siltstone and minor sandstone units form part of the Silurian-Early Devonian Hill End Trough sedimentary sequence  The Lewis Ponds deposit is located in a locally highly structured zone within the western limb of a north-west plunging syncline. The deposit consists of stratabound, disseminated to massive sulphide lenses.  The deposit is hosted in Silurian felsic to intermediate volcanic rocks as a thin, mostly fine-grained sedimentary unit with occasional limestone lenses that has undergone significant deformation and is now defined as a steeply east dipping body with mineralisation that occurs over a strike length of more than 2km.	Color   Tolor   Tolo
breccia and Tom's mine of fine-grained tuffaceou unconformably overlie a hydrothermally altered o Mineralisation occurs in thicker, high-grade mine	The Southern mineralisation occurs within a limestone breccia and Tom's mine is hosted by siltstone and consists of fine-grained tuffaceous sediments. The mineralised zones unconformably overlie a sequence of strongly foliated and hydrothermally altered quartz-plagioclase dacite. Mineralisation occurs in two main styles: plunging shoots of thicker, high-grade mineralisation within the anticline and syncline axes; and as tabular lenses in fold limbs and shear zones.	Dot - Bay   Ocay - Dyng   Oc	
Drill hole Information	A summary of all information material to the understanding of the exploration results	Total drilling to the date of this report was 63,334.64 metres co  117 primary diamond holes for 41,253.43 metres	omprising of:
	including a tabulation of the following	30 wedged diamond holes for 15,077.51 metres	

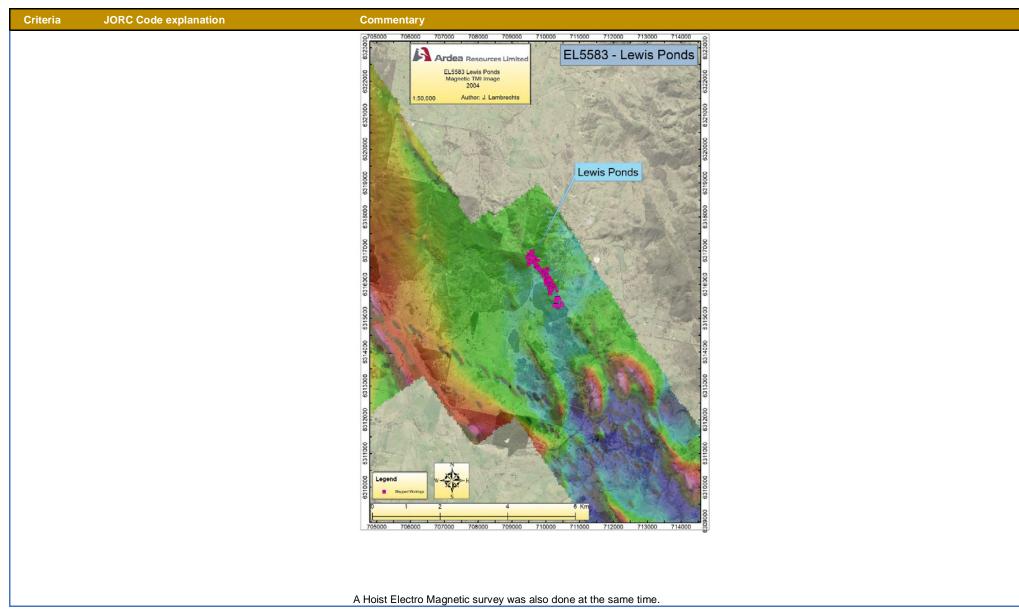


Criteria	JORC Code explanation	Commentary
Gilleria	information for all Material drill holes:	<ul> <li>9 diamond tails to RCP holes for 2,094.50 metres</li> <li>57 RCP holes for 4,909.20 metres</li> <li>Total sampling to the date of this report is summarised in the Table below:</li> <li></li></ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No new exploration results are reported in this release. Data aggregation methods used in the Mineral Resource Estimate are detailed in Section 3 Estimation and modelling techniques.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	The mineralised units are near vertical and drilling has almost exclusively been conducted from the east at perpendicular angles with the mineralised units. The drill angles vary, but is generally at 60 degrees down, resulting in mineralised intersections slightly longer than the true width. Interpretation of the mineralised units honour the true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	No new exploration results are reported in this release. The Mineral Resource Estimation has used all available project data.

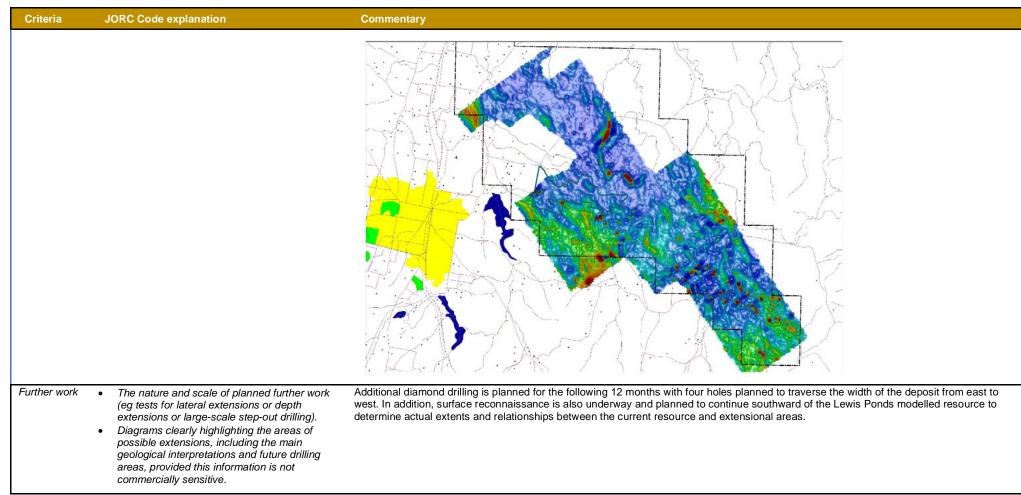


Criteria	JORC Code explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No new exploration results are reported in this release. The Mineral Resource Estimation has used all available project data.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	A Magnetic TMI survey was conducted in 2004 and found magnetic anomalies south east of Lewis Ponds.

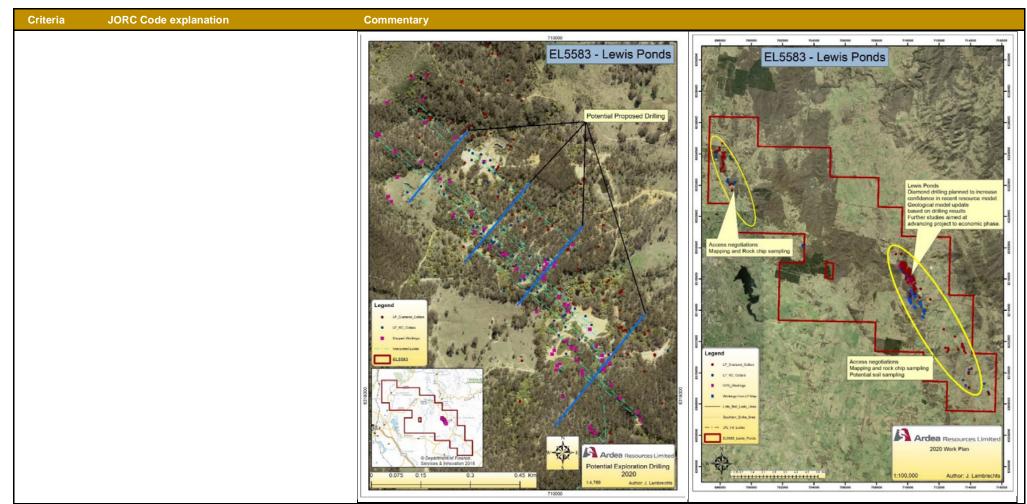














### **Section 3 Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

fidence in (or conversely, the uncertainty	site. He has walked the length of the resource becoming intimately familiar with the characteristics and used this knowledge to envisage the underground geological model.			
npetent Person and the outcome of those is. It is site visits have been undertaken indicate in this is the case. Indidence in (or conversely, the uncertainty	site. He has walked the length of the resource becoming intimately familiar with the characteristics and used this knowledge to envisage the underground geological model.			
	The approach taken in 2019 has been to encapsulate all anomalous mineralisation containing either zinc and/or gold mineralisation in			
<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> <li>The factors affecting continuity both of grade and geology.</li> <li>This calculation is different (more conservative) to the ZnE</li> <li>Troy ounce</li> <li>Au</li> <li>Troy ounce</li> <li>Tonne</li> <li>US\$15.5</li> <li>0.8</li> <li>This calculation is different (more conservative) to the ZnEq calculation used for the determination of the mineralisation containing either zinc and/or gold min broad domains. Within these broad domains massive sulphide lodes have been interpreted to contain the very high grad domains. Walphide mineralisation has been defined using a bulk and carry methodology which defines intercepts down hole based applied interpretation.</li> <li>The broad mineralisation has been defined using a bulk and carry methodology which defines intercepts down hole based applied interpretation of mineralised domains was calculated as:</li> <li>ZnEq= Zn% + (Au ppm* 1.559) + (Ag ppm *0.015) + (Cu% * 1.844) + (Pb% *0.593)</li> <li>The equivalent with an excepted internal dilution of 3m and total dilution of 9m per intercept.</li> <li>The zinc equivalent for the interpretation of mineralised domains was calculated as:</li> <li>ZnEq= Zn% + (Au ppm* 1.559) + (Ag ppm *0.015) + (Cu% * 1.844) + (Pb% *0.593)</li> <li>The equivalent with an excepted internal dilution of 3m and total dilution of 9m per intercept.</li> <li>The zinc equivalent with an excepted internal dilution of 3m and total dilution of 9m per intercept.</li> <li>The zinc equivalent with an excepted internal dilution of used interpretatio</li></ul>				
er er	use of geology in guiding and controlling tal Resource estimation. actors affecting continuity both of grade			



Criteria	JORC Code explanation	Commentary
		gold anomalous mineralisation. The high grade massive sulphide (MS) domains have been interpreted based primarily on geological logging and generally contain ZnEq values in excess of 5%. Geological confidence in the interpretation of the low grade halo mineralisation is high. These domains are projectable up and down dip and along strike.
		Continuity along strike is impacted by a number of cross cutting linear features, interpreted to be faults. The attitude and offset movement of these structural terminations is not fully understood and more work is required for them to be fully integrated into the estimate. Generally these features have been used as terminations along strike in the current interpretations.
		The bulk mineralisation approach serves to lower the risk of overestimation due to conditional bias.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below	The low grade halo domains are continuous over a horizontal strike length of 700 metres. Domains develop a maximum thickness of 60 to 80 metres. The grouped domains have a plan strike length of 1300 metres. A total of 8 low grade mineralised halo domains were interpreted.
	surface to the upper and lower limits of the Mineral Resource.	The interpreted MS domains as interpreted are generally less continuous with a maximum of 500 metres strike. The shoots at this high cut off are narrow, ranging less than 1 metre to about 3 metres in horizontal width. They have a similar vertical range to the lower grade halo domains but have less horizontal length. A total of 7 massive sulphide domains were interpreted.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of	The 15 individual mineralised domains have been geostatistically characterised for each of the five grade attributes. A single Surpac block model was defined to store the estimation. Drill hole assay data were composited to a uniform one metre density weighted length (best fit methodology) for geostatistical analysis and estimation. The density weighting has required a density value for each assayed interval. The weighting density used has been calculated using a regression formula developed from 1032 measured density data available and a ZnEq value calculated on sample support. The intervals where density was measured was used in place of the regressed value. Based on the measured density data the regression formula used was as follows:
		Weighting density = 0.0203*ZnEq+2.7928
		Grade attributes Au, Ag, Cu, Pb and Zn were estimated. High grade cuts were applied to reduce variability and limit the extent of outlier grade.
		Search parameter selection has been based on QKNA analysis of trial block outcomes by domain. This process tests and summarises a range of criteria including block size, search radii and number of composite data used. Optimal parameters were selected based on analysis of the summary tables by domain. Block size used was 20m N-S, 10m E-W and 10m vertical. A sub-blocking strategy to a minimum of 5m N-S, 1.25m E-W and 2.5m vertical was implemented to ensure close correlation between wireframe and block model
	<ul><li>by-products.</li><li>Estimation of deleterious elements or other</li></ul>	volume definition.  Potentially deleterious elements such as sulphur, iron and arsenic have in general not been assayed for and would require a campaign of
	<ul> <li>non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of</li> </ul>	resampling of core and/or check drilling
		Each grade item has been treated separately in the kriging process with its relevant search ellipse and kriging parameters.
	<ul><li>selective mining units.</li><li>Any assumptions about correlation between</li></ul>	
	variables.	
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	



Criteria	JORC Code explanation	Commentary					
	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>						
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	All tonnages have been	calculate	d from Dry	Bulk Densitie	es.	
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	value. Allowing for meta	allurgical overed va y R W Nic	losses to ta alue. The a ce (2006).	ls in the pros	cess of making for metallurgica	rces was (01 Sept 2016) equivalent to US\$70 or A\$93 in situ three concentrates, Cu Pb and Zn, this reduced to \$80 al losses are: Au:35% Ag:20% Cu:20-30% Pb:15-25% and Zn
		repeting or the 2010 in					0.019) + (Cu% * 2.306) + (Pb% *0.741)
		The equivalence calcula	_				
			Metal	Quantity	Price	Recovery for ZnEq	
			Zn	Tonne	US\$2585	1	
			Au	Troy ounce	US\$1393	0.9	
			Ag	Troy	US\$15.5	0.8	
			Cu	ounce Tonne	US\$5960	0.8	
			Pb	Tonne	US\$1915	0.8	_
							an optimisation reflecting the reasonable expectation of eventual ported below the optimisation base.
		Open pit Mineral Resou	rces are r	eported at a	a cut off of +	1.0% ZnEq and	d underground Mineral Resources at a cut off of +3% ZnEq.
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	of this MRE. The average not modelled in this holes without define records includes a to 6.7% Pb and 231 g/  Cube have assumed have not depleted the classification.  A reasonable expect The limit has been of the above cut-off gray Analyses of the results.	d mining vailable so MRE. A so d strike e otal of 30, t Ag and d that the ne Mineral tations lirelefined by ade section that she	has taken purface mapping mall number tent, supping the firm to the firm th	lace at the Loing revieweer of logged orting the smeet Toms Loone Queen of his mining acts. The risk at an applied to the an open pit of with an assoptimisation	Lewis Ponds produced by Cube indicatopes and voice all scale natured des (pyrite ore far Ranges for 23 ctivity is not massociated with the estimated Moptimisation produmed \$30/t produced in the color of the color	oject. No detailed survey of mining voids was available at the time cates that many shafts and pits are shallow and targeting lodes do are identified in geological logging of single diamond core to of this work. Reported project area production from historic for sulphuric acid production), 4,622t from the Spicers lode at



Criteria	JORC Code explanation	Commentary
		reporting of these mineral resources to within reasonable expectations of future economic extraction by open pit method.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>See Ardea Resources announcement dated 21 November 2018.</li> <li>Given 25% of gold reporting to gravity circuit and the balance to flotation feed, the assumptions for tailings losses are: Au:35% Ag:18% Cu:17% Pb:16% and Zn 9%, from three concentrates, Cu, Pb and Zn. These losses are from a 2006 review of previous Lewis Ponds metallurgical testing by RW Nice, Metallurgical Engineer. The high tailings loss for Au reflects refractory Au in pyrite and one recommendation was for a pyrite concentrate. In the 10 years since the Nice report, advances have been made which could improve Au recovery, desirable to maximise the gold contribution to a recoverable resource. Making a Cu concentrate maximises the Ag value of the resource.</li> <li>At Lewis Ponds, the Dense Media Separation studies found that at a 12.5 mm crush size, 94 % of sulphide and precious metal content can be recovered with the rejection 25 % of the mass resulting in a 1.25 upgrade factor.</li> <li>The studies also showed the zinc concentrate resulted in recovery of around 87 % of the contained metal from the feed. When including the zinc content of the Cu-Pb-PM concentrate, zinc recoveries exceed 90 %</li> <li>In the Cu-Pb-Precious Metal concentrate, lead recoveries of around 73% of the contained metal was achieved while copper saw 64 % recovery. These represent opportunities for future improvement.</li> </ul>
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>Topographically and logistically the Lewis Ponds site is amenable to mine construction. However, the plant location and tailings dam could raise community and/or adjacent landholder issues. The site options need to be identified in order of suitability, including environmental impact, then engagement with potential stakeholders started early.</li> <li>Baseline flora and fauna studies have been done (GHD) with respect to proposed drilling and sensitive species in this respect have been identified. In summary: "under the Commonwealth guidelines for significance of actions, it is unlikely that the proposed drilling programme would have a significant impact on the area, particularly in relation to the listed sensitive species. This statement is also applicable to the state legislation."</li> <li>If gold sales are via concentrates, CIL/CIP issues are bypassed. Metallurgical advice on this aspect will be important in maximising the resource.</li> </ul>
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.  The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Average density values have been assigned to the block model by geological lithotype using the measured density data available. The assigned density values were as follows:  • Fresh  • Felsic units 2.83  • Sedimentary units 2.78  • Tectonic units 2.69  • MS 3.35  •  • Transitional all lithologies  • 2.2  • Oxide all lithologies  • 1.8
Classification	The basis for the classification of the Mineral	Resource blocks have been classified as Indicated or Inferred on the basis of a range of criteria.



Criteria	JORC Code explanation	Commentary
	Resources into varying confidence categories.	Indicated open pit resources are defined generally on 50 x 40m or better spaced drilling which corresponds with a kriging slope of regression averaging 0.70 or greater and an average distance to composite data of 40 to 50m.
	<ul> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and</li> </ul>	Inferred open pit resources are defined by wider spaced drilling and limited by a DTM surface defining the base of reasonable expectations of economic extraction, where sufficient drilling confidence exists that the continuity of geology and mineralisation can be extended. The Inferred portions of the Mineral Resource has an average kriging slope of regression of 0.4 to 0.5 and an average distance to informing composite data of 70 to 80m.
	<ul> <li>metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	Underground Mineral Resources are classified as Inferred as a result of the less continuous nature of the lodes, wider spaced data defining the lodes and the resulting fewer informing composite data. The average distance to informing composite data within the primary massive sulphide lodes exceeds 75m with an average slope of regression of 0.22.
	Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or reviews have been undertaken on the 2019 Mineral Resource estimate.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Due to wide spaced drilling in areas, local variations can be expected within the narrow massive sulphide lodes and the surrounding low grade halo mineralisation. Unto unrecognised structural terminations may impact continuity of these two interpreted lode styles. The use of OK has assisted in reducing the risk associated with the relatively high nugget observed in the Zinc and gold distribution. The additional benefit of OK is it inherently assists in declustering the data during the estimate.  The Mineral Resources constitute a global resource estimate.  • As yet there is no opportunity to compare with production data.