

**November 2016**



**Galvanising Heron's Future at Woodlawn**



**Heron Resources** Limited

**ASX : HRR**

**TSX : HER**



#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This presentation contains forward-looking statements and forward-looking information within the meaning of applicable Canadian securities laws, which are based on expectations, estimates and projections as of the date of this presentation. This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Canada, Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information. Although the forward-looking information contained in this presentation is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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

#### Compliance Statement (JORC 2012 and NI43-101)

This presentation incorporates by reference the complete ASX announcement relating to the Feasibility Study results which were released to the market on 29 June 2016 and is entitled "Heron Resources delivers robust Feasibility Study for Woodlawn Project" ("FS Announcement"). The FS Announcement is available from the Company's website at [www.heronresources.com.au](http://www.heronresources.com.au) or from the ASX or SEDAR, and contains the JORC Table 1 relating to the Mineral Resources and Ore Reserves as well as the detailed technical and financial assumptions which underpin the FS results.

The technical information in this release relating to the exploration results and forward program at the Woodlawn Project is based on information compiled by Mr David von Perger, who is a Member of the Australian Institute of Mining and Metallurgy (Chartered Professional – Geology). Mr von Perger is a full time employee of Heron Resources Limited and has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 edition) and "qualified person" as this term is defined in Canadian National Instrument 43-101 ("NI 43-101"). Mr von Perger has reviewed and approved the technical information this presentation.

The zinc equivalent ZnEq calculation takes into account, mining costs, milling costs, recoveries, payability (including transport and refining charges) and metal prices in generating a Zinc equivalent value for each block grade for Au, Ag, Cu, Pb and Zn.  $ZnEq = Zn\% + Cu\% \times 3.12 + Pb\% \times 0.81 + Au \text{ g/t} \times 0.86 + Ag \text{ g/t} \times 0.03$

Metal prices used in the calculation are: Zn US\$2,300/t, Pb US\$ 2,050/t, Cu US\$6,600/t, Au US\$1,250/oz and Ag US\$18/oz. It is Heron's view that all the metals within this formula are expected to be recovered and sold.

# Heron Resources

The Introduction



**Dual Listing**

**ASX:HRR & TSX:HER**

**Cash**

**A\$19.8M** (30 Sep 2016)

**Listed Investments**

**A\$ 1.7M**



## Project Portfolio

- **Woodlawn Zinc-Copper Project** – advanced high grade polymetallic Mineral Resources + Mineral Reserves
- **Ardea Resources Ltd** (spin-out IPO expected to be completed late Nov, early Dec) –
  - Non-Woodlawn assets
  - NSW Exploration – quality Au and base metal properties
  - WA Exploration – quality Au and Ni properties

**Heron is focused on the near term development of the high grade  
Woodlawn Zinc-Copper Project**

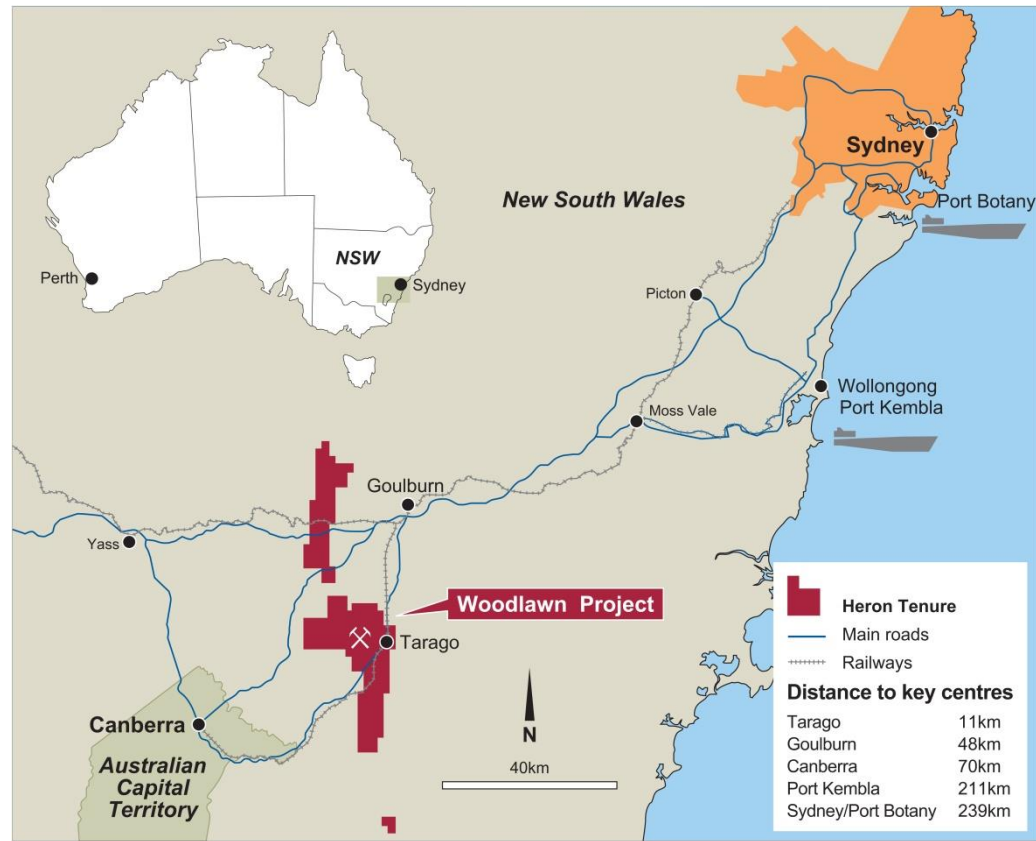
# Woodlawn Project Overview

High grade and high value deposit



## Woodlawn Zinc-Copper Project

- High grade Zn+Cu+Pb+Ag+Au - high value deposit
- Compelling zinc market fundamentals
- One of the few near-term production projects
- Two independent ore sources – low risk
- Feasibility Study demonstrates robust economics
- A clear pathway to production
- Granted mining lease and project approvals
- Unrivalled infrastructure
- Significant exploration upside to expand mine life
- Heron remains very well funded
- Financing discussions underway





# HERON Corporate Summary

ASX:HRR | TSX:HER



## Capital Structure

Shares:	415 million
Options:	23.5 million
Share Price:	A\$0.135
Market Capitalisation:	A\$56 million
Cash:	A\$19.8 million (30 Sep 2016)
Listed Investments:	A\$1.7 million

## Board

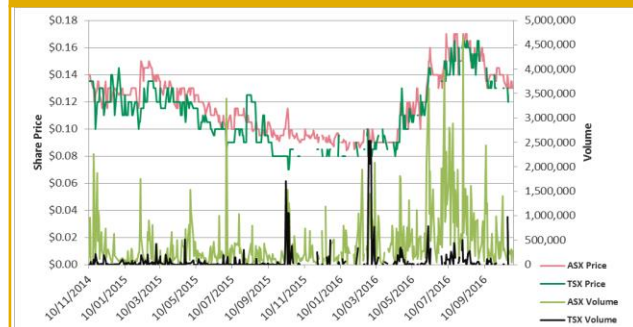
Chairman	Stephen Dennis
Non-Executive Director	Borden Putnam III
Non-Executive Director	Fiona Robertson
Non-Executive Director	Mark Sawyer
Executive Director	Ian Buchhorn
MD & CEO	Wayne Taylor

## Management

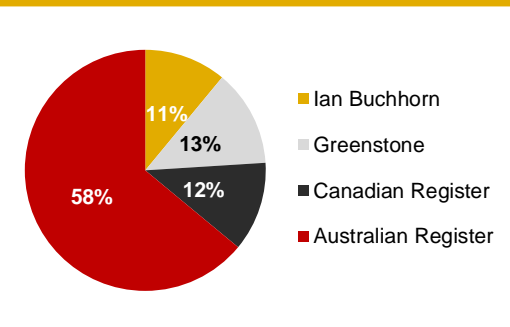
Managing Director & CEO	Wayne Taylor
Executive Director	Ian Buchhorn
Chief Operating Officer	Andrew Lawry
General Manager Exploration	Dave von Perger
General Manager Strategy	Charlie Kempson
General Manager Finance	Simon Smith
Woodlawn General Manager*	Brian Hearne
Woodlawn Process Manager*	Des O'Sullivan

\* Commenced 31 Oct 2016

## Share Price



## Share Register



# Woodlawn Feasibility Study (June 2016)

Robust Project Economics - Reserves Only ('Starter') Case





**Underground Mineral Reserves - 2.8Mt**



Polymetallic: **1.8Mt @ 16% ZnEq** (8.1% Zn, 1.2% Cu, 2.9% Pb, 0.56g/t Au, 57g/t Ag)  
Copper: **1.0 Mt @ 9% ZnEq** (0.6% Zn, 2.4% Cu, 0.1% Pb, 0.23g/t Au, 14g/t Ag)  
**TOTAL: 2.8Mt @ 14% ZnEq** (5.5% Zn, 1.6% Cu, 1.9% Pb, 0.45g/t Au, 42g/t Ag)







**Reclaimed Tailings Mineral Reserves - 9.5Mt**


**9.5Mt @ 6% ZnEq** (2.2% Zn, 0.5% Cu, 1.3% Pb, 0.31g/t Au, 31g/t Ag)



**Steady State Production**

**Zinc 40,000 tpa**

**Copper 10,000 tpa**

**Lead 12,000 tpa**

**Mine Life**

**9.3 Years**


**Post Tax NPV \***

**A\$207M**

**Post Tax IRR**

**32%**


**Payback**

**2.3 Years**


**Net Cashflow Post Tax**

**A\$402M**


**Peak Cash Requirement**

**A\$163M**

**C1 \*\***

**-US\$0.06/lb**

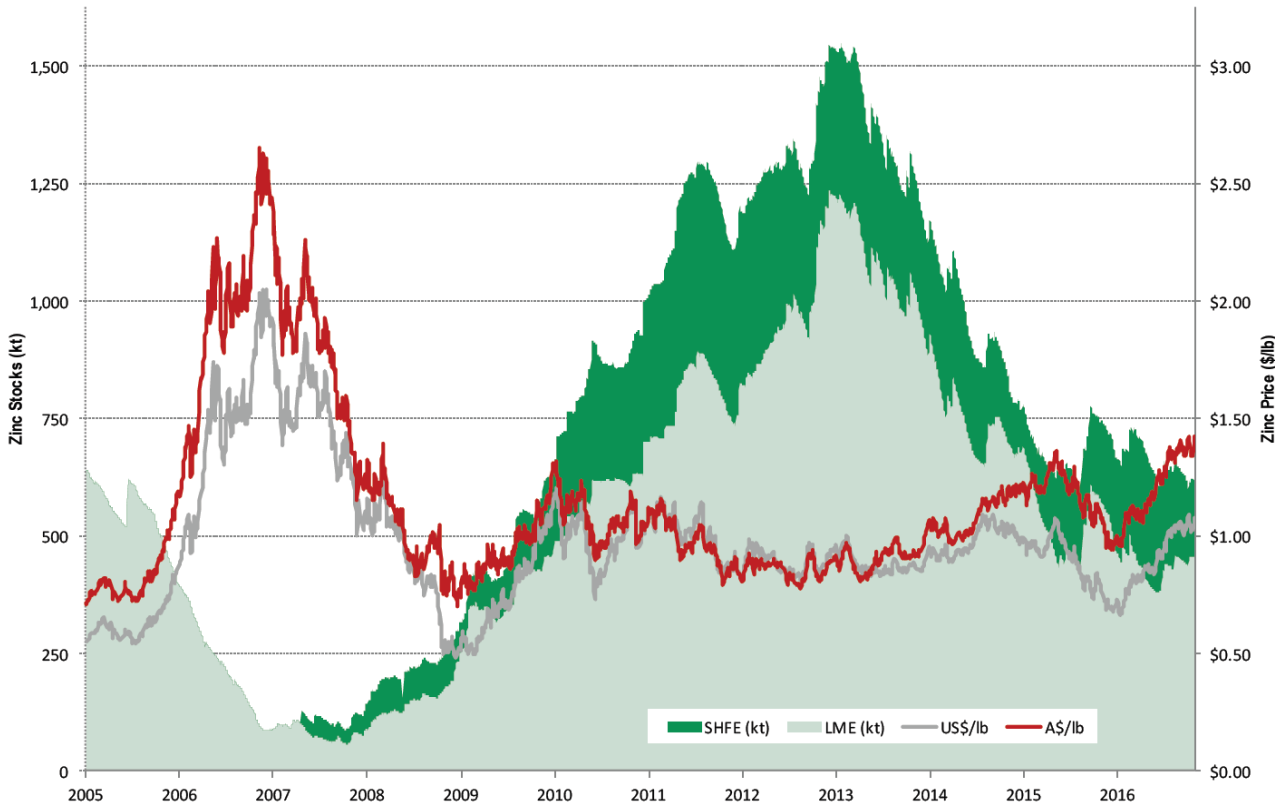
**C3 \*\***

**US\$0.34/lb**

\* Results reported using Mineral Reserves as estimated for the FS at an 8% post-tax real discount rate (approximately, 10% post-tax nominal), with AUD/USD FX 0.71, and with flat real commodity prices of US\$1.01/lb Zn, US\$3.00/lb Cu, US\$0.91/lb Pb, US\$17.80/oz Ag and US\$1,200/oz Au. Other assumptions are detailed in the release dated 29 June 2016.  
\*\* C1 and C3, refer to page 17 of the release dated 29 June 2016 for definitions. All currency amounts are in Australian dollars unless otherwise noted.

# Zinc Market

## Compelling Fundamentals



Source: Terra Studio

### ILZSG (31 Oct 2016)

- Global demand 2016 13.57Mt (↑0.6%)
- Global mine supply 2016 12.47Mt (↓5.6%)
- Global usage > production 2016 349,000t
- Global usage > production 2017 248,000t

### Mine closures:

Century (Aug 2015), Lisheen (Nov 2015), Black Star (Nov 2016)

### Mine production cutbacks:

Glencore (500ktpa), CBH's Endeavour (40ktpa), Perilya's Broken Hill (50ktpa)

### Mine additions and restarts:

Bisha (90ktpa), Middle Tennessee (50ktpa)

**Forecast remains for a continued tightening in the physical market that will support zinc prices**



# Woodlawn Project Site

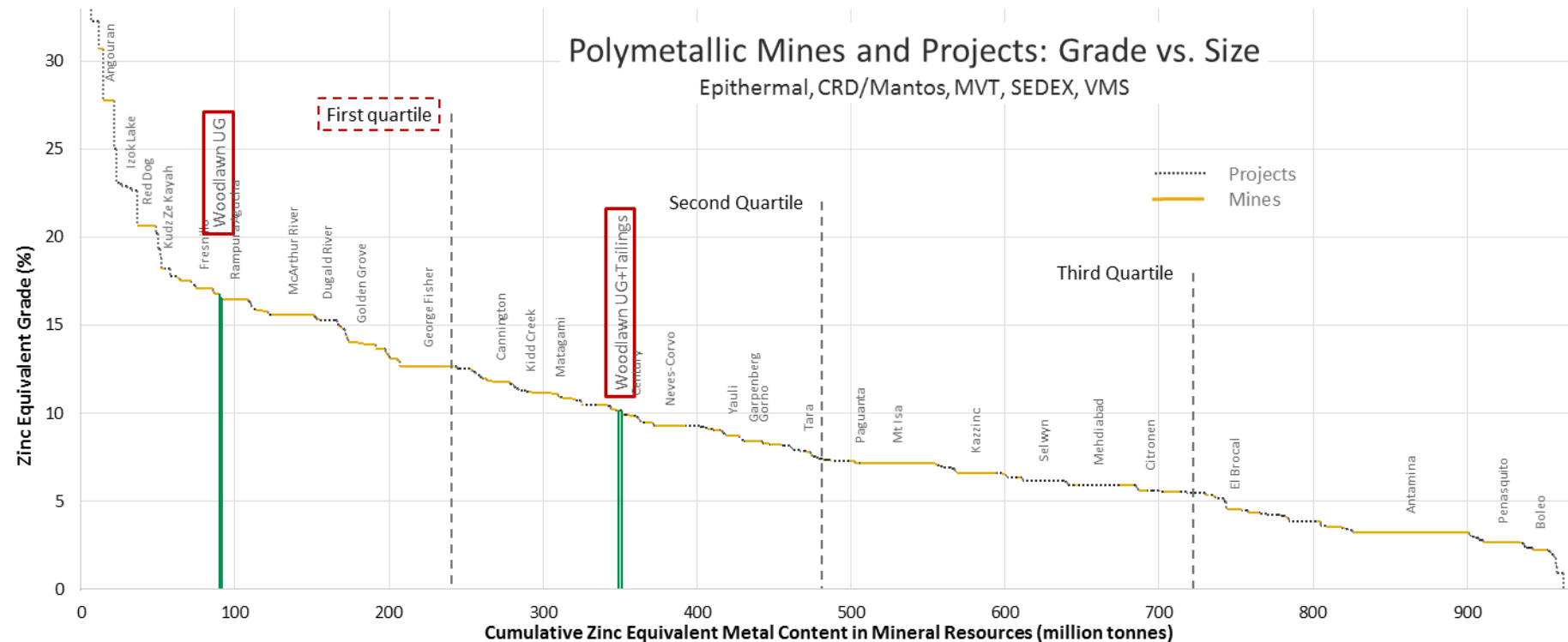
Unrivalled Infrastructure





# Woodlawn – a High Grade Deposit

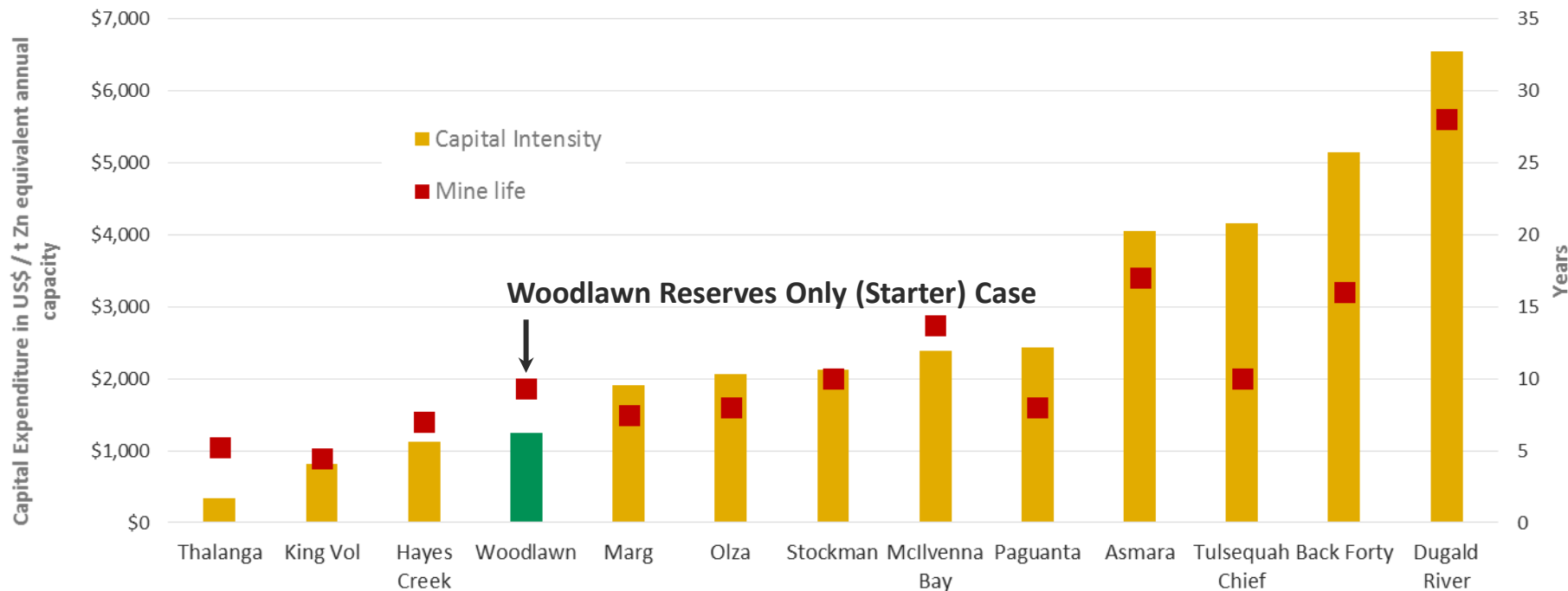
A compelling peer comparison



Notes: Polymetallic deposits containing at least 100,000 t of zinc metal, all deposit types except porphyry and deposit where zinc is not significant compared to other metals. Zinc equivalent grades and metal contents calculated using the following metal prices: copper \$2.20/lb, gold \$1,300/oz, lead \$0.80/lb, silver \$20/oz and zinc \$0.90/lb. Source: SNL Metals & Mining, Terra Studio.

# Woodlawn Capital Comparison

## Comparative Low Development Cost



Notes: zinc equivalent production calculated using the following metal prices: copper \$2.20/lb, gold \$1,300/oz, lead \$0.80/lb, silver \$20/oz and zinc \$0.90/lb. AUD/USD = 0.75.

Source: company announcements, Terra Studio.

# Delivering

## Woodlawn's Pathway to Production



Aug 2014

✓ Merger  
HRR + TRO



Apr 2015

✓ PEA Finalised  
Delivered Robust  
Business Case



Jun 2016

✓ Feasibility Study  
Completed



18 Months  
Decision to Mine  
Project Funding  
Construction  
Commissioning

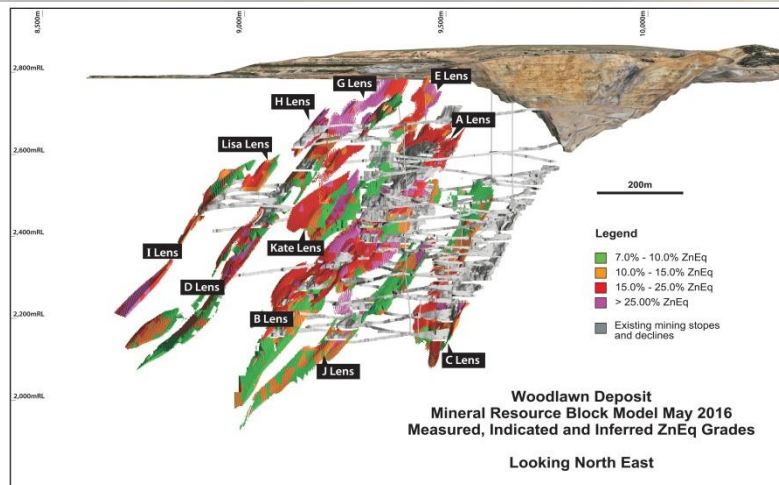
- On-time, on-budget
- Multiple high grade extensions
- Significant new shallow Resource
- New mine plan
- Successful metallurgical testwork
- Single plant WUP + WRP
- Strong business case

- \$11M FS completed
- On-time and under budget
- Reinforced PEA results with a strong business case:-
  - 'Starter Case'
  - 9.3 Yrs Reserves Only Mine Life
  - 40ktpa Zn
  - 10ktpa Cu
  - 12ktpa Pb

- Project funding in progress
- Post FS work streams:
  - Offtake
  - UG mine redesign
  - EPC & FEED
  - Long lead items
  - Owner's team
  - Agreements & mgmt plans
  - Early resource expansion
- Project construction (12-18 months)
- First production target is 1<sup>st</sup> half 2018



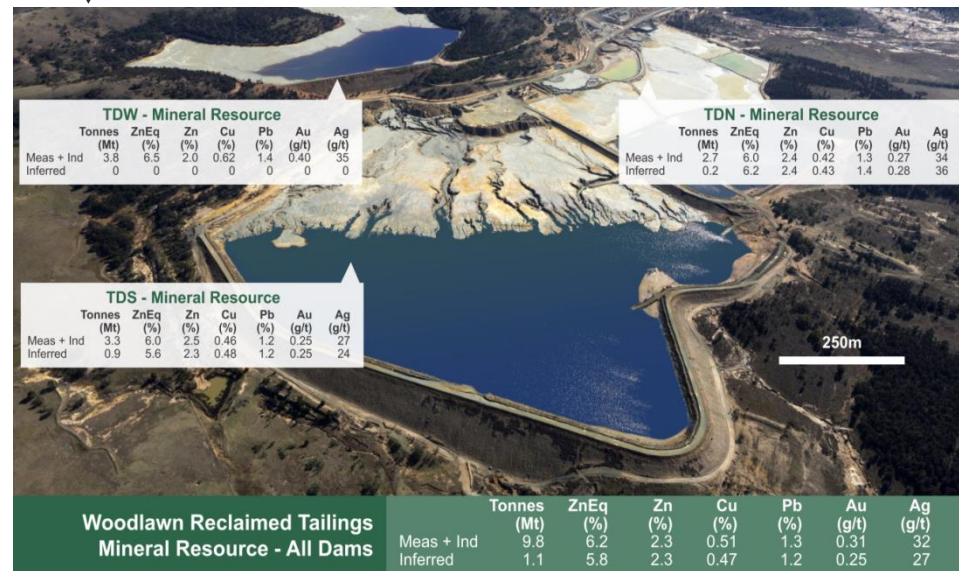
# 2016 Woodlawn Mineral Resources



← **Underground  
&  
Retreatment**  
↓

Reported at a 7% ZnEq lower cut-off grade

Type	Resource Category	Quantity (Mt)	ZnEq (%)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)
Polymetallic	Measured	0.4	23	13	1.3	4.4	0.21	72
Polymetallic	Indicated	2.2	21	10	1.5	3.9	0.78	80
Polymetallic	Inferred	2.0	17	7.3	1.5	2.9	0.75	56
Copper	Indicated	1.5	10	0.8	2.8	0.2	0.23	15
Copper	Inferred	0.5	10	0.8	2.8	0.2	0.09	14
<b>All Total</b>	<b>Mea+Ind</b>	<b>4.1</b>	<b>18</b>	<b>7.2</b>	<b>2.0</b>	<b>2.6</b>	<b>0.52</b>	<b>55</b>
<b>All Total</b>	<b>Inferred</b>	<b>2.5</b>	<b>15</b>	<b>5.9</b>	<b>1.8</b>	<b>2.3</b>	<b>0.61</b>	<b>47</b>



Notes: Refer to Slide 2 for ZnEq (%) calculation. Mineral Resources are inclusive of Mineral Reserves.

# Woodlawn Mineral Reserves & Mine Planning

A new high grade underground mine



Underground Mineral Reserves - 2.8Mt

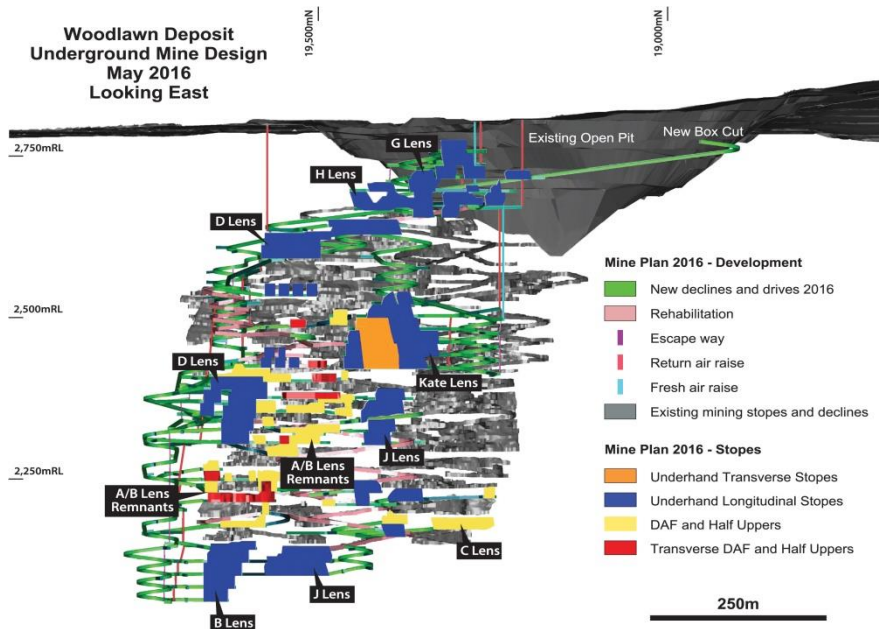


Polymetallic: **1.8Mt @ 16% ZnEq** (8.1% Zn, 1.2% Cu, 2.9% Pb, 0.56g/t Au, 57g/t Ag)

Copper: **1.0 Mt @ 9% ZnEq** (0.6% Zn, 2.4% Cu, 0.1% Pb, 0.23g/t Au, 14g/t Ag)

**TOTAL: 2.8Mt @ 14% ZnEq** (5.5% Zn, 1.6% Cu, 1.9% Pb, 0.45g/t Au, 42g/t Ag)

Woodlawn Deposit  
Underground Mine Design  
May 2016  
Looking East



#### Mine Plan 2016 - Development

- New declines and drives 2016
- Rehabilitation
- Escape way
- Return air raise
- Fresh air raise
- Existing mining stopes and declines

#### Mine Plan 2016 - Stopes

- Underhand Transverse Stopes
- Underhand Longitudinal Stopes
- DAF and Half Uppers
- Transverse DAF and Half Uppers



Reclaimed Tailings Mineral Reserves - 9.5Mt



**9.5Mt @ 6% ZnEq**

(2.2% Zn, 0.5% Cu, 1.3% Pb, 0.31g/t Au, 31g/t Ag)

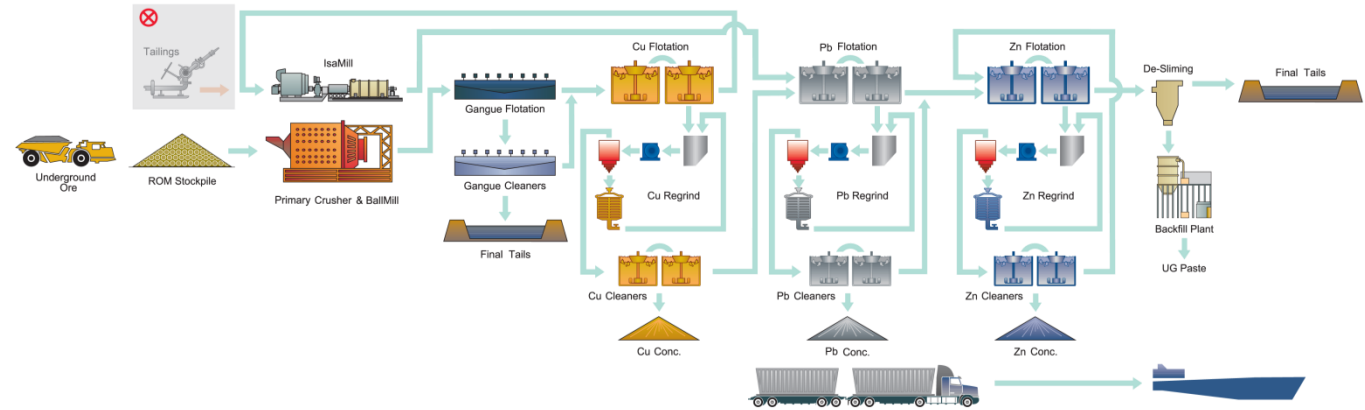


# Woodlawn Process Plant

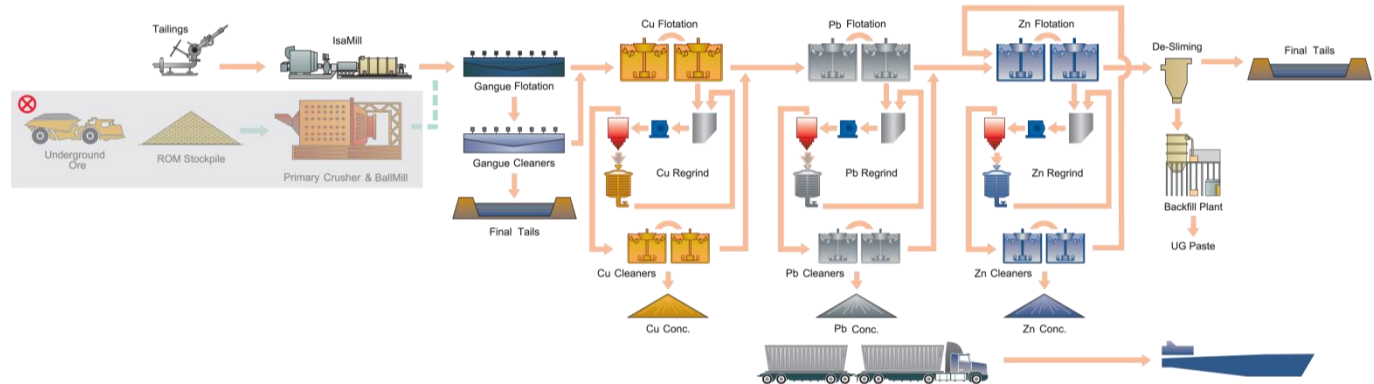
Campaign Treatment from Two De-coupled Ore Sources



## Underground Ore Configuration



## Reclaimed Tailings Ore Configuration





# Woodlawn Infrastructure Advantages

Unique project with early commercialisation potential



- Extensive stakeholder consultation through EA process
- Strong local community and government support
- Single immediate landowner – Veolia
- Agreements in place to purchase land over operational footprint
- On-site collaboration – Veolia

**State Government Project Approval – July 2013**

**Box Cut Modification Approval – Apr 2016**

**Mining Lease – SML20 renewed for 15 Years – Nov 2029**

**Mine Operations Plan (MOP) Approved – Nov 2015**

**COMMUNITY** ✓

**POWER** ✓

**WATER** ✓

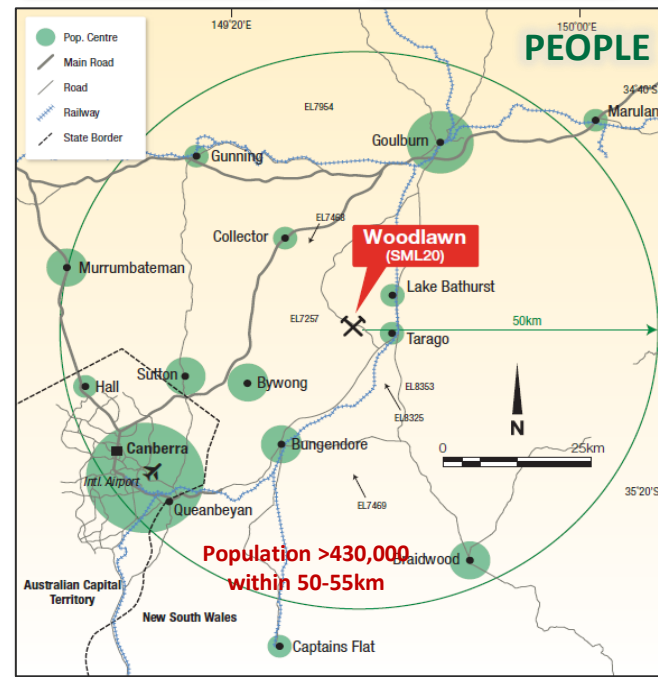
**PERMITTING** ✓

**ACCESS** ✓

**PORT** ✓

**LABOUR** ✓

**MINING LEASE** ✓



# Woodlawn - Post FS

## Work Streams



### Financing

Debt and equity components advancing well  
Estimate 2-4 months to complete

### Offtake

Strong competitive interest  
Execution synced with financing

### Owners Team

Added General Manager - Woodlawn  
Added Process Manager – Woodlawn

### UG Mine Planning

External review – higher utilisation of existing development  
Mine establishment rate improved  
Reduction in capital and operating development costs

### EPC, FEED & Long Lead Items

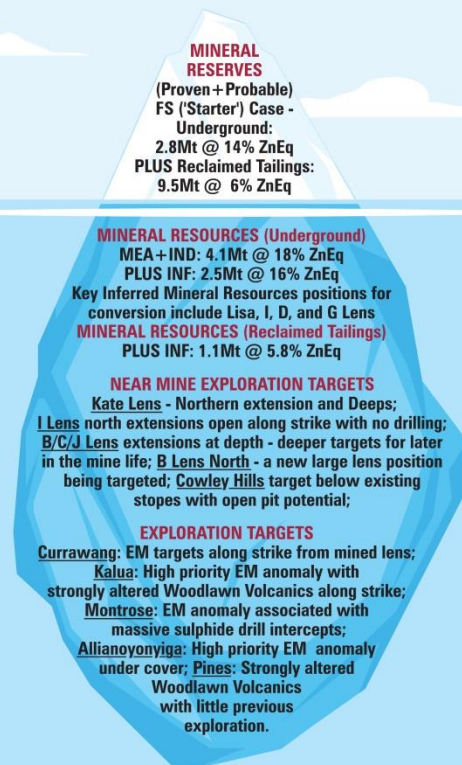
Expected award of Front End Engineering Design in next few weeks  
Long lead items identified and decision on orders in the next 1-2 months

### Agreements & Mgmt Plans

Finalising Environmental Protection Licence (EPL)  
Update to Veolia Co-operation Agreement  
Construction management plans all well advanced

### Early Operations Resource Expansion

Open shallow positions (G2 Lens)  
New high grade drill intercepts  
Adjacent to existing access design



## Mineral Reserves within the Feasibility Study represent a Starter Case

### Growth Potential / Mine Life Extensions:

- Upgrade existing Inferred Mineral Resources
- In-mine lens discovery and extensions
- Known regional massive sulphide positions
- Regional prospect discovery

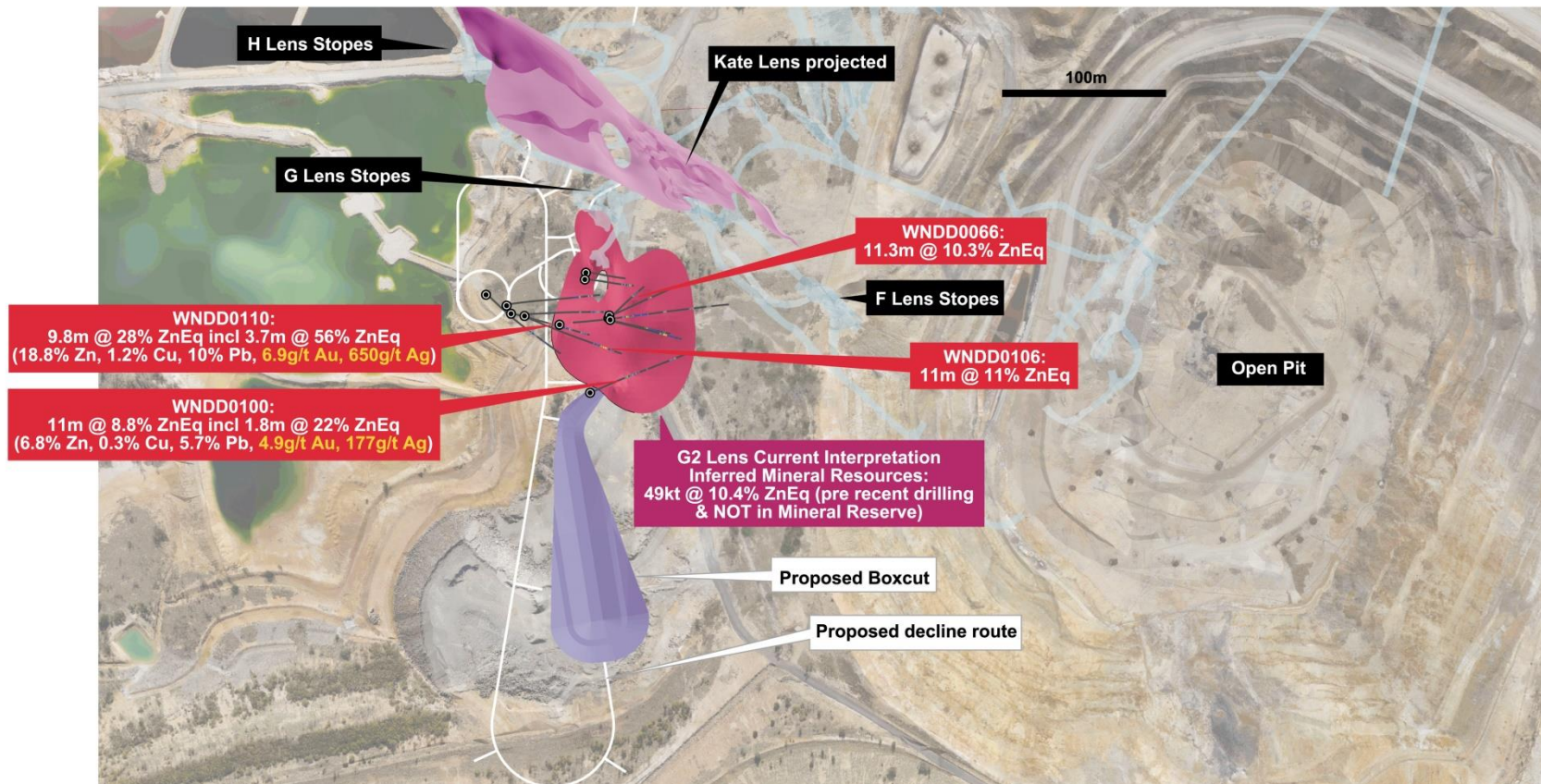
Notes: Mea+Ind is inclusive of Mineral Reserves. For detailed assay grades for the quoted ZnEq grades refer to slide 12 for Minerals Resources and slide 13 for Mineral Reserves.



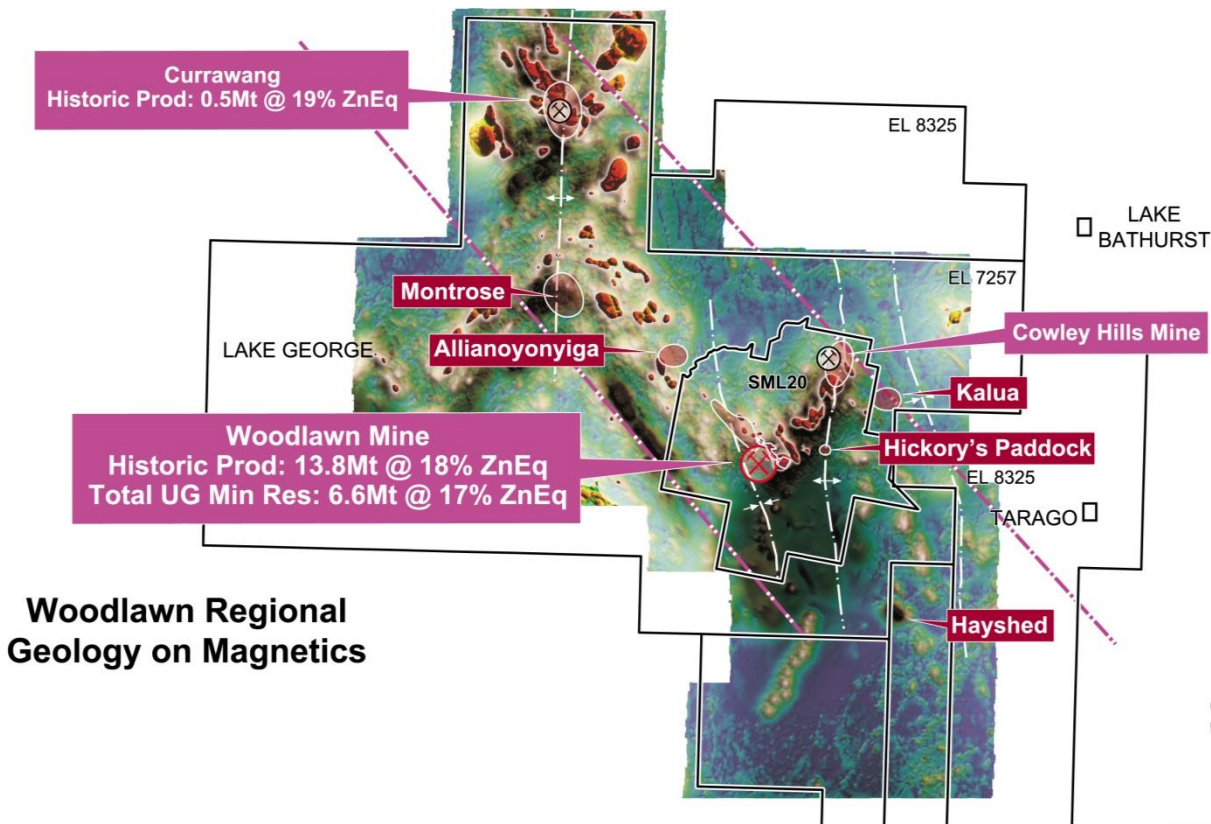


# Woodlawn Exploration

The Next Chapter - 'Upside In The Shallows' G2 Lens







## *A Quality VMS District*

### Dominant Regional Position

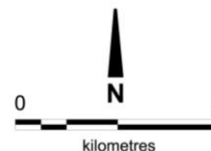
- 632 km<sup>2</sup> under tenure
- Coverage of VMS host rocks

### Confirmed Prospectivity - Satellite Production

- Currawang Mine
- Cowley Hills Mine

### Prospect & Target Generation

- New and historic remote sensing datasets
- Geochem anomalies
- Extensive areas under cover
- Limited systematic exploration for >30 yrs

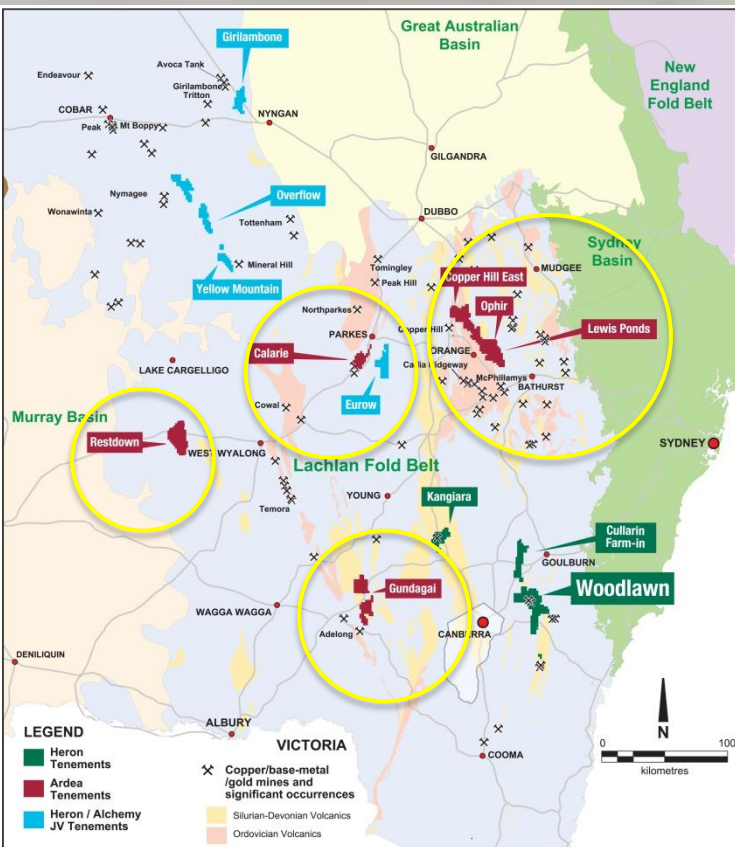


## Woodlawn Regional Geology on Magnetics



# Ardea Resources Ltd

Value Realisation – Heron's 'Other' Assets



Ardea Resources Limited

## Spin-out Non-Woodlawn Assets

IPO Qtr 4 2016

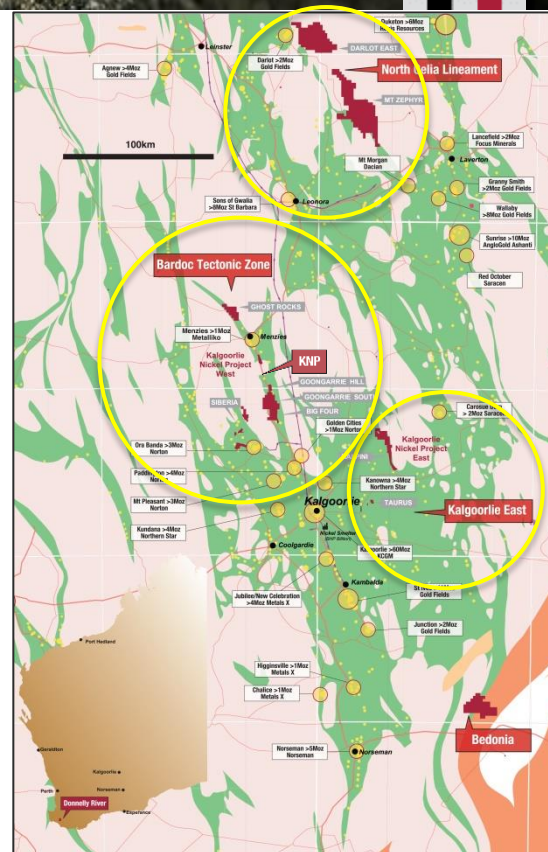
In-specie distribution to Heron Shareholders

Immediate Work Plan:-

Lewis Ponds (NSW) – drill shallow extensions

Mt Zephyr (WA) – drill Jupiter analogue

Taurus (WA) – follow-up 5m @ 32g/t Au



# Heron Investment Proposition



- ✓ Zinc – strong and transparent market
- ✓ Woodlawn Zinc-Copper Project
  - ✓ High grade / low risk / long life asset
  - ✓ Feasibility Study – delivered compelling ‘Starter Case’
  - ✓ Short lead time to production – funding process commenced
  - ✓ Demonstrated mine life and discovery upside
  - ✓ Favourable jurisdiction supported by excellent infrastructure
- ✓ Non-Woodlawn project portfolio managed through Ardea Resources
- ✓ Well capitalised and funded

**ASX : HRR**

**TSX : HER**



## ***Galvanising Heron's Future at Woodlawn***

**ASX : HRR      TSX : HER**

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