

# **PDAC Presentation**

**Galvanising Heron's future at Woodlawn** 

**March 2017** 

# CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

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", "". "mav" and similar expressions have been used to identify such forward-looking information. Forwardlooking 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 licenseintends 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

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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 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%\*3.12+Pb%\*0.81+\*Au g/t\*0.86+Ag g/t\*0.03

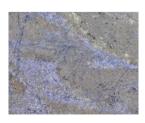
Metal prices used in the calculation are: Zn US\$2,300/t, Pb US\$ 2,050/t, Cu US\$6,600/t, Au US\$1,250/oz and Ag US\$18/oz. It is Heron's view that all the metals within this formula are expected to be recovered and cold

# **HERON RESOURCES**









#### **OVERVIEW**

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



Dual Listing: TSX: HER

ASX: HRR



**Cash:** A\$16.5M (31 December 2016)



Listed Investments: A\$1.5M\*



Project Portfolio: •

- Woodlawn Zinc-Copper Project advanced high grade polymetallic mineral resources + mineral reserves
- Woodlawn Regional Exploration Projects
- Non-Woodlawn Assets: Ardea Resources Ltd (Spin-Out - ASX:ARL trading 9 Feb 2017)



# HERON CORPORATE SUMMARY



#### **CAPITAL STRUCTURE**

Shares: 415 million

Options: 23.5 million

Share Price: C\$0.135

Market

C\$56 million

Cash:

(31 Dec 2016) A\$16.5 million

Listed Investments: A\$1.5 million\*



#### **BOARD**

Chairman Stephen Dennis

MD & CEO Wayne Taylor

Executive Director lan Buchhorn

Non-Executive Director
Borden Putnam III

Non-Executive Director
Fiona Robertson

Non-Executive Director
Mark Sawyer



#### **MANAGEMENT**

Managing Director & CEO Wayne Taylor

Executive Director lan Buchhorn

Chief Operating Officer Andrew Lawry

General Manager Exploration
Dave von Perger

General Manager BD Charlie Kempson

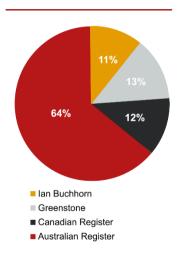
General Manager Finance Simon Smith

Woodlawn General Manager Brian Hearne

Woodlawn Process Manager Des O'Sullivan



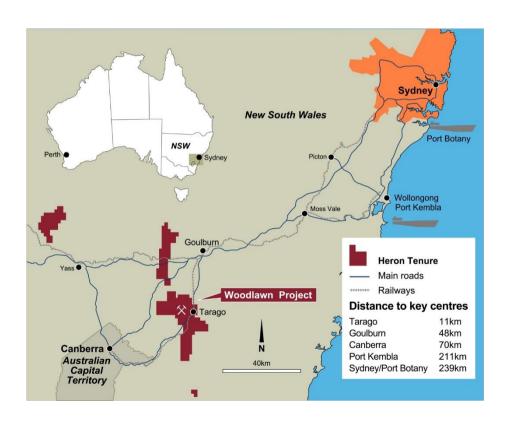
#### **SHARE REGISTER**





\* Excludes 10 million 25c ARL options

### WOODLAWN ZINC-COPPER PROJECT



- High grade Zn+Cu+Pb+Ag+Au
- Near-term production project
- Feasibility Study confirmed robust economics
- Granted mining lease and project approvals
- Unrivalled infrastructure
- Significant exploration upside
- Heron remains very well funded
- Advanced financing discussions

### ZINC MARKET



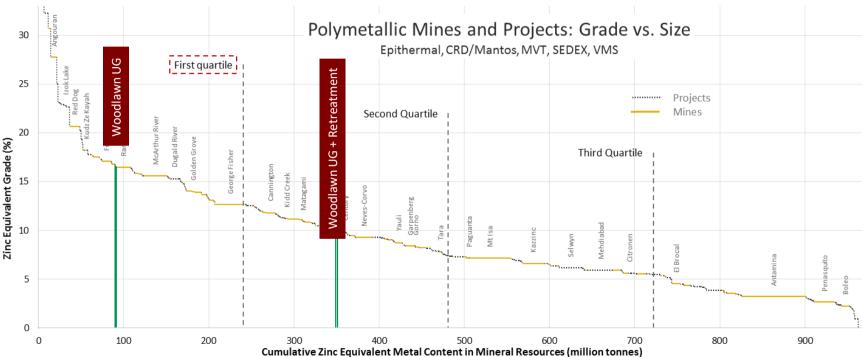
Forecast remains for a continued tightening in the physical market that will support zinc prices

- Market fundamentals:
  - Supply < Consumption</li>
  - Stocks have insulated from a physical metal shortage to date
  - Projections are for a continued draw on remaining stocks
- Current annual treatment charge negotiations - strong leading indicator that the front end of the supply chain is and will continue to struggle for material



# WOODLAWN A HIGH GRADE DEPOSIT



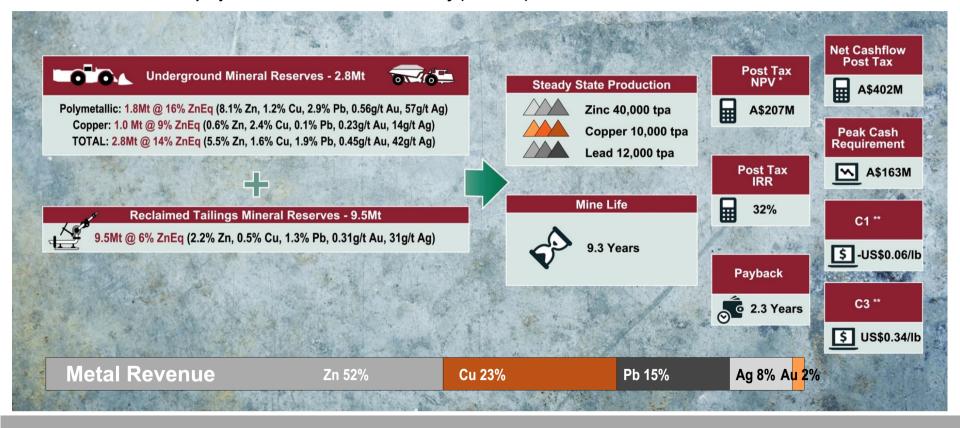


Notes: Polymetallic deposits containing at least 100,000 t of zinc metal, all deposit types except porphyry and deposit where zinc is non significant compared to other metals. Zinc equivalent grades and metal contents calculated using the following metal prices: copper \$2.20/lb, gold \$1,300/oz, lead \$0.80/lb, silver \$20/oz and zinc \$0.90/lb . Source: SNL Metals & Mining, Terra Studio.

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# WOODLAWN FEASIBILTY STUDY

June 2016 - Robust project economics - A Reserves only ("starter") case



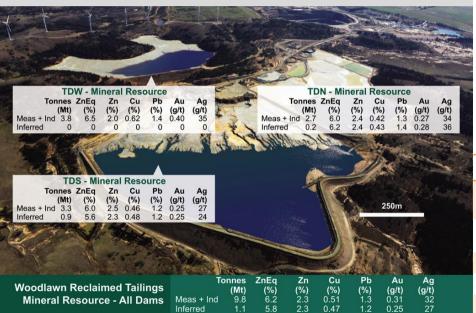
# **WOODLAWN PROJECT SITE**

Unrivalled infrastructure - road & rail access, power, water, labour and port

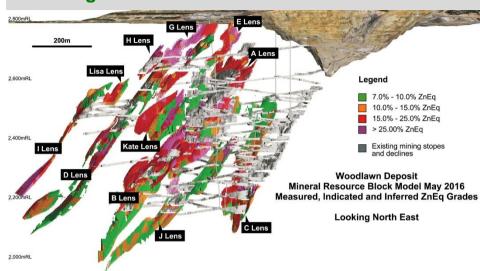


# 2016 WOODLAWN MINERAL RESOURCES

#### Retreatment



### **Underground**



#### Reported at a 7% ZnEq lower cut-off grade

Туре	Resource Category	Quantity (Mt)	ZnEq (%)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)
Polymetallic	Mea+Ind	2.6	21	10	1.5	4.0	0.69	79
Copper	Indicated	1.5	10	0.8	2.8	0.2	0.23	15
All Total	Mea+Ind	4.1	18	7.2	2.0	2.6	0.52	55
All Total	Inferred	2.5	15	5.9	1.8	2.3	0.61	47

Notes: Refer to Slide 21 for ZnEq (%) calculation. Mineral Resources are inclusive of Mineral Reserves.



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### WOODLAWN MINERAL RESERVES & MINE PLANNING

#### A new high grade underground mine

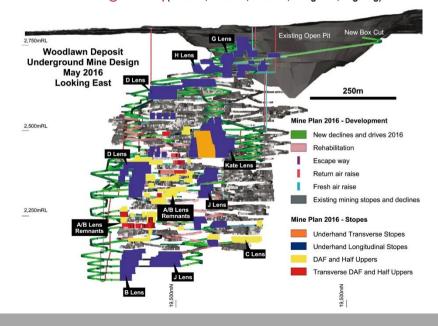


9.5Mt @ 6% ZnEq (2.2% Zn, 0.5% Cu, 1.3% Pb, 0.31g/t Au, 31g/t Ag)



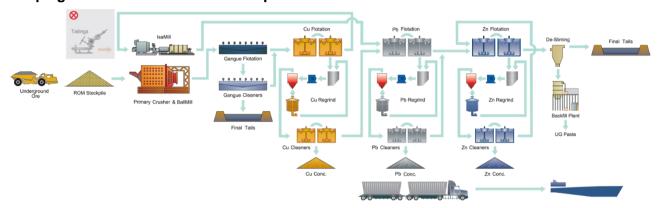


Polymetallic: 1.8Mt @ 16% ZnEq (8.1% Zn, 1.2% Cu, 2.9% Pb, 0.56g/t Au, 57g/t Ag)
Copper: 1.0 Mt @ 9% ZnEq (0.6% Zn, 2.4% Cu, 0.1% Pb, 0.23g/t Au, 14g/t Ag)
TOTAL: 2.8Mt @ 14% ZnEq (5.5% Zn, 1.6% Cu, 1.9% Pb, 0.45g/t Au, 42g/t Ag)

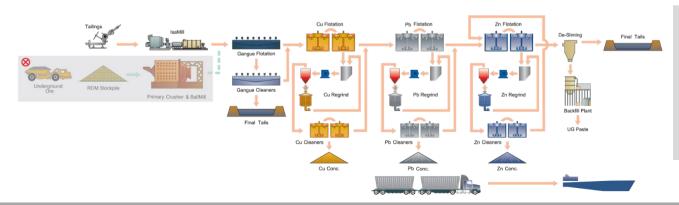


# **WOODLAWN PROCESS PLANT**

#### Campaign treatment from two de-coupled ore sources



Underground
Ore Configuration
←



Reclaimed Tailings
Ore Configuration





# WOODLAWN INFRASTRUCTURE ADVANTAGES

#### **Advanced starting position**





#### **ACCESS**

- Heavy haulage rated, sealed road 350m from plant site
- Rail access 6km east



#### **POWER**

- NSW State Grid Substation 350m from plant site
- Renewable power options available



#### **PEOPLE & COMMUNITY**

- Labour source >400,000 people within driving distance
- Strong local support for project development



#### **WATER**

- Existing bore field 6km southwest
- Pump and pipe installation in place



#### **PORT**

- 211km to dedicated concentrate berth at Port Kembla
- 239km to Australia's second largest container berth – Port Botany



#### **PERMITS & APPROVALS**

- Mining Lease SML20
- NSW State development approval



### WOODLAWN PREPARATION

Post FS work streams - Part 1







#### **FINANCING**

- Debt slow start, making good progress now
- Equity strong interest from potential cornerstone and institutional sources



#### **UNDERGROUND MINE PLANNING**

- External review higher utilisation of existing development, mine establishment rate improved
- Mine Entry Plan
- · Reduction in capital and operating development costs



#### **OFFTAKE**

- · Discussions well advanced
- Market fundamentals ensure strong competitive interest
- Ready to be finalised execution synced with financing



#### **AGREEMENTS & MANAGEMENT PLANS**

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



#### **HIGH CALIBRE TEAM**

- Key recruits General Manager & Process Manager
- Exceptional metallurgical/construction experience base (COO+GM+PM) + 100yrs
- Woodlawn operating knowledge



#### EARLY OPERATIONS RESOURCE EXPANSION

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



# **WOODLAWN PREPARATION**

Post FS work streams - Part 2

### **Front End Engineering Design (FEED)**



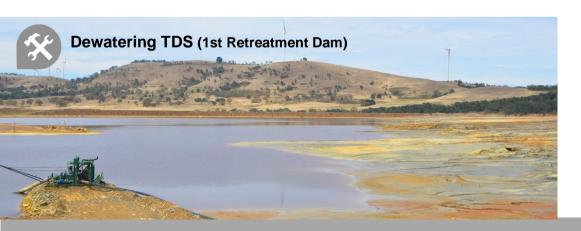
# **WOODLAWN PREPARATION**

Post FS work streams - Part 3



#### METALLURGICAL TEST WORK

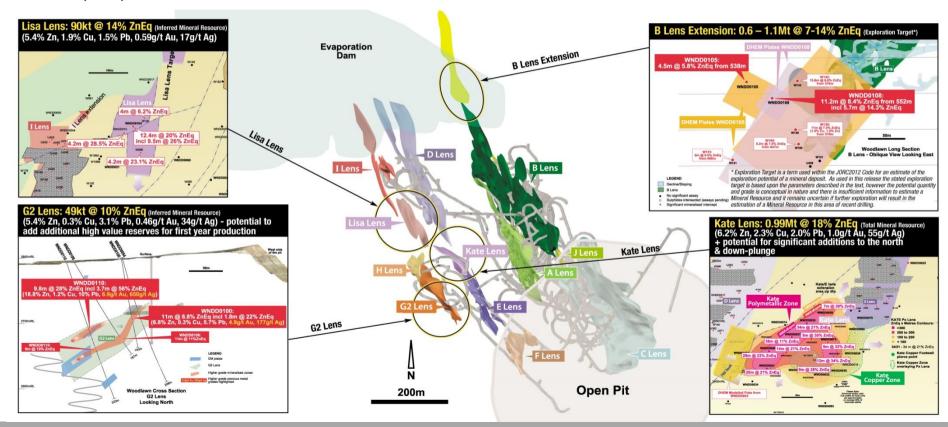
- Early underground production composite (1st 18 months)
  - Good recoveries, rapid optimisation
  - High precious metals in concentrates
- Tailings Dam West (2nd retreatment source year 5 onwards)
  - Good recoveries for Stage 2 retreatment





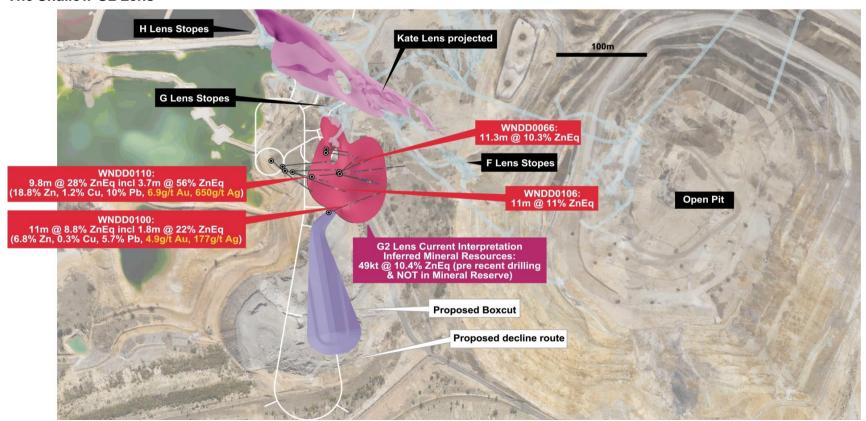
# WOODLAWN NEW DISCOVERIES

Kate, Lisa, B North & G2 Lenses

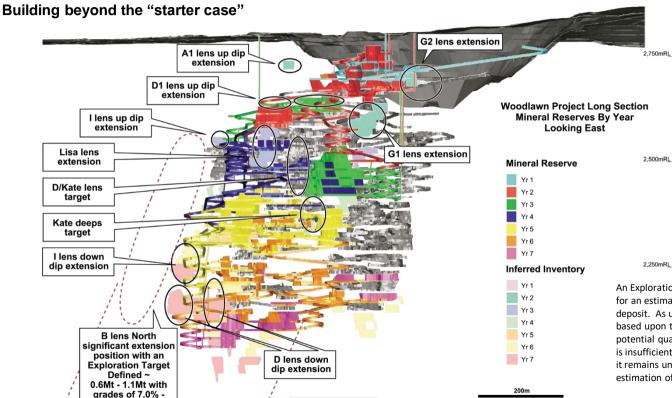


# **WOODLAWN EXPLORATION**

#### The Shallow G2 Lens



# WOODLAWN EXPANSION THROUGH EXTENSIONS



Depth extensions Target Area

14%ZnEq



An Exploration Target is term used within the JORC2012 Code for an estimate of the exploration potential of a mineral deposit. As used in this release the stated exploration target is based upon the parameters described in the text, however the potential quantity and grade is conceptual in nature and there is insufficient information to estimate a Mineral Resource and it remains uncertain if further exploration will result in the estimation of a Mineral Resource in this area of recent drilling.



### WOODLAWN EXPANDING THE POTENTIAL



### A High Quality VMS District

#### **Dominant Regional Position**

- Tenure of 779 km<sup>2</sup>
- 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



### HERON INVESTMENT PROPOSITION

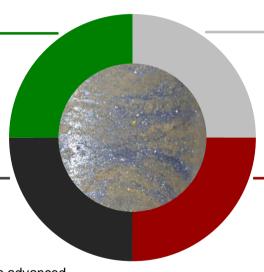
TSX: HER ASX:HRR

#### ZINC STRENGTH

- Leading base metal performer in 2016
- · Fundamentals for continued price strength

#### WOODLAWN ZINC-COPPER PROJECT

- High grade / low risk / long life asset
- Feasibility Study delivered compelling 'Starter Case'
- Short lead time to production funding process advanced
- Demonstrated mine life and discovery upside
- Favourable jurisdiction supported by excellent infrastructure



#### **EXCLUSIVE WOODLAWN FOCUS**

- Reduced asset portfolio gives 100% focus on bringing Woodlawn into production
- Successful spin out of non-Woodlawn assets into Ardea Resources (ARL) delivered shareholder value

#### WELL FUNDED

- A\$16.5 million cash (31 December 2016)
- A\$1.5 million in listed investments\*
- Well funded to advance site preparatory works ahead of securing project finance



# **HERON RESOURCES**

**Wayne Taylor – Managing Director** 

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