



# Heron Resources Limited

# Quarterly Report

December 2017

Level 7, 191 Clarence Street, Sydney NSW 2000

heron@heronresources.com.au

+61 2 9119 8111

ABN: 30 068 263 098

30 January 2018

## HIGHLIGHTS

### Woodlawn Zinc-Copper Project

- **Earthworks** – significant works completed over the process plant area, ROM pad, site access road and administration areas. Works commenced on Tailings Storage Facility 4, box-cut and haul road construction
- **EPC** – engineering design is 50% completed and procurement 30%. Civil works are scheduled to start in the current quarter
- **Project Schedule** – the project critical path schedule remains on track and on budget
- **Underground Mining Contract** – discussion are well advanced with award expected in the current quarter
- **Port Contract** – discussions are well advance and award is expected in the current quarter
- **Operational Readiness** – recruitment continues with a focus on the operational superintendents with a number of appointments expected in the current quarter

### Woodlawn Exploration

- **Mineral Resource Increase:**
  - Shallow G2 Mineral Resource was calculated with majority categorised as higher-confidence Indicated Mineral Resource for incorporation into the mining schedule
  - Global underground Mineral Resource revised with a 12% increase in total Measured & Indicated tonnes
- **Woodlawn Regional Exploration:**
  - Currawang - Down-hole electromagnetic (DHEM) surveys identified a number of significant off-hole conductors
  - Peelwood - base-metal camp was acquired through tenement applications, which includes the area covering the previously reported JORC 2004 Mineral Resources and Ore Reserves
  - Kangiara - RAB drilling program (41 holes for 639 m) completed with assays pending

### Corporate

- **Board of Directors** – Dr Ian Pattison was appointed to the Heron Board as a Non-Executive Director
- **Cash** – A\$109M unrestricted cash as at 31 December 2018
  - **A\$1.9M** received for Heron's Ardea Resources Loyalty options
  - **A\$1.8M** received as Heron's 2017 R&D concession
- **Debt** – US\$60M senior secured facility and US\$16M silver prepayment facility remain undrawn
- **Consolidation** – the Company consolidated its listed and unlisted securities on a 1 for 10 basis

Heron Resources Ltd ("Heron" or the "Company") is pleased to provide its report for the December 2017 Quarter. During this reporting period the Company principally focused on the construction of the Woodlawn Zinc-Copper Project.



# Heron Resources Limited

## Quarterly Report

December 2017

### WOODLAWN ZINC-COPPER PROJECT

Heron holds a direct 100% ownership of the mineral rights at the Woodlawn Mine site situated 40km south of Goulburn and 250km south-west of Sydney, in southern NSW, Australia (Figure 1). It is Heron's aim to create a profitable, long-life, low-cost mining operation producing base metal concentrates.

Heron also holds a portfolio of advanced stage exploration tenements adjacent to and contiguous with the Woodlawn site covering the prospective felsic volcanic units that host the Volcanogenic Massive Sulphide (VMS) deposit at Woodlawn.

The last 36 months have seen Heron directing its efforts to developing the Woodlawn Zinc-Copper Project with the successful completion of a Preliminary Economic Assessment (PEA) in 2015, followed by the Feasibility Study (FS) in June 2016 and now the completion of project financing in September 2017. Construction activities also commenced in September and the Project is expected to be commissioned in December this year. The price outlook for all metals to be produced at Woodlawn remains strong, particularly zinc which continues to face a significant supply shortfall.

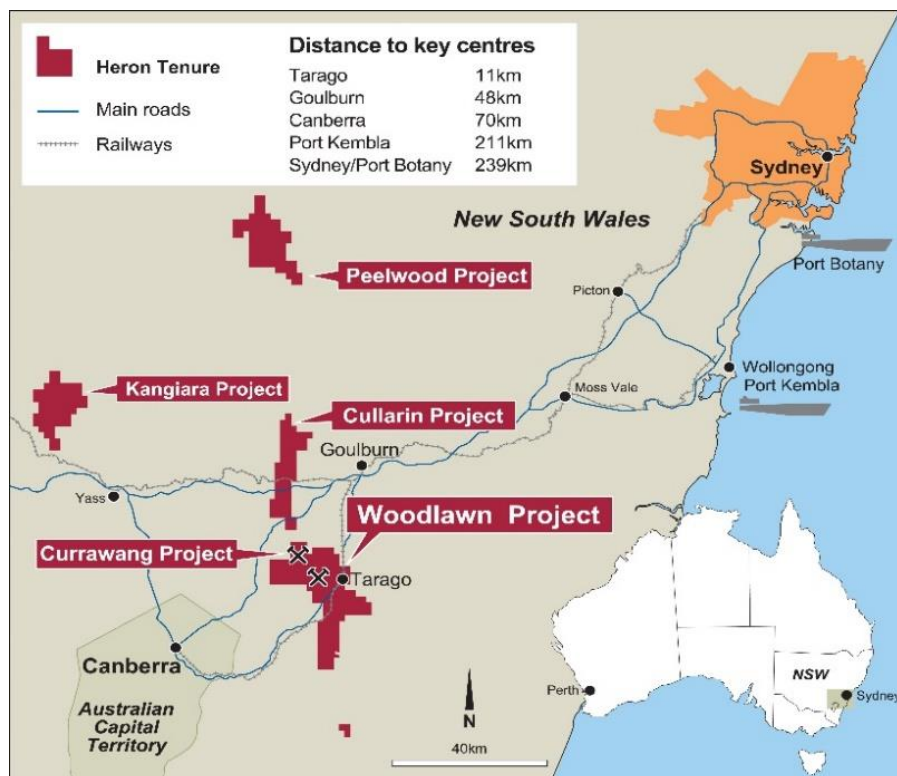


Figure 1: Woodlawn Project location and tenement map

### Woodlawn Project – Development Progress

Construction activities commenced last quarter (9 September 2017) and have continued with site activities focused on the initial plant site earthworks. The project remains on schedule to commission the processing plant late in 2018 and deliver the first shipment of concentrate to market in the first quarter of 2019. Activities undertaken during the December Quarter include:

- **Safety & Environment:** There have been no significant safety or environmental incidents since construction commenced. From the commencement of construction the site has achieved 102 days Lost Time Injury free to the end of December.



# Heron Resources Limited

## Quarterly Report

December 2017

- **Earthworks:** By the completion of the quarter approximately 410,000 m<sup>3</sup> of material had been moved with 400,000 m<sup>3</sup> remaining. Ertech's earthmoving fleet increased to 45 pieces of plant and approximately 55 personnel. The main road entrance from Collector Road has been substantially completed and the main process plant site levelling and foundation preparation is due for completion in January (on plan). Civil works will commence once the process plant pads are finished. Work continues on the haulage road, the box cut for the underground access and construction of Tailings Storage Facility 4 has commenced.
- **Project EPC Works:** Engineering design is ongoing and 50% complete and procurement is 30% completed. A contract was executed with Outotec for the paste plant to support underground filling operations. The building of the IsaMill (Figure 2) in Germany remains ahead of plan. Civil works are due to commence on the process plant pads in the current quarter.
- **Schedule:** There have been 20 days lost due to wet weather to the end of December; however, this has not impacted the overall project schedule which remains on track. The project overall was reported at 17% completed at the end of the quarter.
- **Water Treatment:** Heron executed a \$2.5M water treatment services contract with Ixom Operations Pty Ltd on 21 December. This contract is for the supply, installation and commissioning of a water treatment plant under hire purchase terms. The plant is due for completion in the 4<sup>th</sup> Quarter of 2018.
- **Underground Mine Contract:** The underground mining contract tender progressed to a shortlisting of companies. Tender clarifications are underway and the contract will be awarded in the current quarter.
- **Port Contract:** discussions are well advance with potential service providers covering the bulk shipment of the zinc and copper concentrates commencing in 2019. Award of this contract is expected in the current quarter.
- **Water Management:** Water management activities and mine dewatering continued. The refurbishing of the existing borefield is nearing completion.
- **Compliance Activities:** The final management plans were underway and an annual compliance meeting with government agencies took place on 24 November. There were no matters of significance raised by the agencies.
- **Community:** A quarterly project community consultation committee meeting was held on 20 November with no concerns being raised.
- **Project Personnel:** Further recruitment of additional project and operational personnel continued. Further appointments in the operational superintendent roles is expected in the current quarter.



# Heron Resources Limited Quarterly Report

December 2017



*Figure 2: Heron's Isa Mill*



*Figure 3: Crushing of material for final pad pavement*





Heron Resources Limited  
**Quarterly Report**  
December 2017



**Figure 4: Final pavement being placed on process plant pad**



**Figure 5: Clearing of underground box cut area**



# Heron Resources Limited

## Quarterly Report

December 2017

### Woodlawn Exploration – New Mineral Resource on Shallow G2 Lens and Total Underground Resource Update

During the quarter a new mineral resource estimate for the G2 lens was announced (ASX release dated 13 November 2017) that followed on from the G2 drilling program completed in the previous quarter. The program focused on expanding the shallow G2 position in areas close to the proposed box-cut and decline route, and which are planned to be accessed early in the mine schedule.

Subsequently, the Total Underground Mineral Resource for Woodlawn was recalculated using separate cut-off grades for the polymetallic and copper domains and has resulted in a +9.1% increase in total tonnes and a slight lowering of the copper grades within the copper domains. Importantly the total Measured and Indicated Mineral Resource for the underground has increased by 0.5Mt or 12% which has the potential to add to the total reserve base.

#### G2 Lens

The G2 Lens is located to the south of the Kate Lens, and is adjacent to the planned route of the decline, 100-200m below surface (Figure 6). Last quarter, a program of 22 diamond core holes for 4,246m of drilling was completed to further define the shallow resource base. Three key mineralised horizons were identified, namely: G2 Main (G2); G2 Hanging-wall (GH); and the newly defined G2 Copper zone (GC).

The G2 Main was the primary target of the resource-expansion drilling campaign and comprises a zone of 5-10cm zinc sulphide-rich stringers which crosscut beds of coarse-grained volcanic breccia. The GH zone was discovered during the follow-up program and comprises very high-grade massive and stringer polymetallic sulphides occurring approximately 30 to 40m stratigraphically above the G2 Main zone hosted in mudstone. The GC zone is typical Woodlawn copper sulphide mineralisation consisting of both sulphide stringer and some massive sulphide (pyrite/chalcopyrite) in a chlorite alteration zone. Full assay results from the recent drilling program are provided in Heron's ASX release dated 19 September 2017.

#### G2 Lens Mineral Resource Estimate

The G2 Lens Mineral Resource estimate was undertaken by Heron and verified by SRK Consulting. It has been estimated in accordance with the JORC Code (2012) and the NI 43-101 guidelines. Two distinct types of mineralisation have been modelled: 1) Polymetallic mineralisation; and 2) Copper dominated mineralisation. Details of the estimation methodology used is reported within JORC 2012 in Table 1 of Heron's ASX release dated 13 November 2017.

#### G2 Mineral Resource Estimate 2017

(Cut-off grades are 7% ZnEq for polymetallic, and 1% Cu for copper mineralization)

##### Indicated Mineral Resources

Lens	Domain	Resource Category	Quantity (kt)	ZnEq (%)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)
G2	Polymetallic	Indicated	100	11.9	6.3	0.5	3.1	0.41	41
GC	Copper	Indicated	39	5.5	0.1	1.5	0.0	0.36	10
Total	Combined	Indicated	139	10.1	4.5	0.8	2.3	0.40	33





# Heron Resources Limited

## Quarterly Report

December 2017

### Inferred Mineral Resources

G2	Polymetallic	Inferred	25	11.9	6.1	0.4	3.2	0.76	46
GH	Polymetallic	Inferred	6	54.0	13.7	0.7	7.9	6.33	878
GC	Copper	Inferred	28	5.3	0.1	1.5	0.0	0.34	8
<b>Total</b>	<b>Combined</b>	<b>Inferred</b>	<b>58</b>	<b>13.3</b>	<b>4.0</b>	<b>0.9</b>	<b>2.2</b>	<b>1.16</b>	<b>117</b>

Notes: 1) Please refer to Heron's ASX release dated 13 November 2017 for Qualified Persons statements; 2) ZnEq refers to a calculated Zn equivalent grade the formula for which is stated at the end of this report; 3) Polymetallic Type refers to polymetallic massive sulphide mineralisation with high-grade Zn and Pb; Copper Type refers to Cu dominated massive and stringer sulphide mineralisation; 4) Some rounding related discrepancies may occur in the totals; 5) the Mineral Resource is reported in accordance with the the JORC Code (2012) and NI 43-101 43-101 guidelines; 6) further details of the Mineral Resources estimation are provided in the JORC Code (2012) Table 1 within Heron's ASX release dated 13 November 2017.

### Total Woodlawn Underground Mineral Resource 2017

The total Woodlawn underground Mineral Resource was recalculated as part of the update process, using a cut-off grade for the copper domain mineralisation of 1% Cu, which has led to a 9.1% increase in the total tonnes of the Mineral Resource with a slight reduction in the copper grades within the copper domains.

The use of a separate and tailored cut-off grade for the copper mineralisation was deemed to be more reflective of the physical and commercial performance of this potential production source.

A review of the potential total mining inventory is currently underway with current work focused on the G2 Ore Reserve estimation, selected metallurgical testing and updating of early mine schedule.

### Woodlawn Total Underground Mineral Resource 2017

(7% ZnEq cog for Polymetallic and 1% Cu cog for Copper)

#### Indicated + Measured Mineral Resource

			Tonnes Mt	ZnEq %	Zn %	Cu %	Pb %	Au g/t	Ag g/t
All Lenses	Polymetallic	Meas+Ind	2.7	21.6	10.9	1.5	4.0	0.7	79
All Lenses	Copper	Meas+Ind	1.9	9.7	0.7	2.6	0.1	0.2	14
<b>Total</b>	<b>Combined</b>	<b>Meas+Ind</b>	<b>4.6</b>	<b>16.7</b>	<b>6.7</b>	<b>1.9</b>	<b>2.4</b>	<b>0.5</b>	<b>52</b>

#### Inferred Mineral Resource

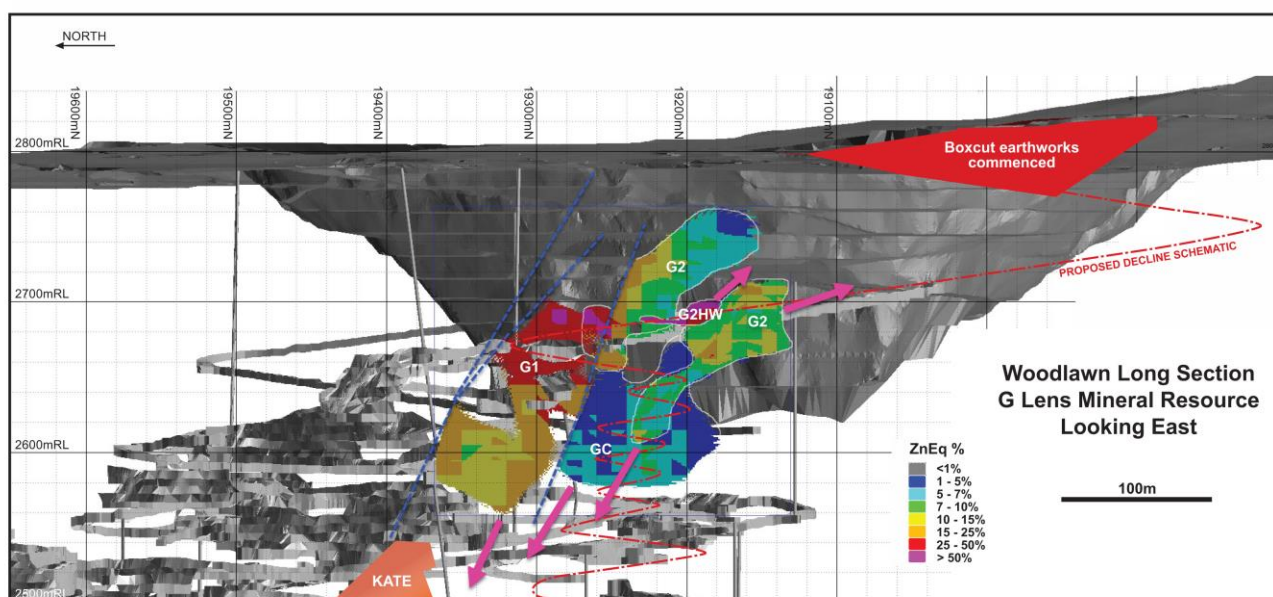
			Tonnes Mt	ZnEq %	Zn %	Cu %	Pb %	Au g/t	Ag g/t
All Lenses	Polymetallic	Inferred	1.9	16.9	7.3	1.5	3.0	0.8	61
All Lenses	Copper	Inferred	0.7	9.2	0.7	2.5	0.1	0.2	12
<b>Total</b>	<b>Combined</b>	<b>Inferred</b>	<b>2.6</b>	<b>14.9</b>	<b>5.6</b>	<b>1.8</b>	<b>2.2</b>	<b>0.6</b>	<b>48</b>

Notes: 1) Please refer to Heron's ASX release dated 13 November 2017 for Qualified Persons statements; 2) ZnEq refers to a calculated Zn equivalent grade the formula for which is stated at the end of this report; 3) Polymetallic Type refers to polymetallic massive sulphide mineralisation with high-grade Zn and Pb; Copper Type refers to Cu dominated massive and stringer sulphide mineralisation; 4) Some rounding related discrepancies may occur in the totals; 5) the Mineral Resource is reported in accordance with the JORC Code (2012) and NI 43-101 43-101 guidelines; 6) further details of the Mineral Resources estimation are provided in the JORC Code (2012) Table 1 within Heron's ASX release dated 13 November 2017.



# Heron Resources Limited Quarterly Report

December 2017



**Figure 6: Woodlawn G Lens complex long-section looking east showing key lens components in relation to the proposed box cut and decline. Kate lens shown for reference.**

## WOODLAWN REGIONAL PROSPECTS

Heron continues to maintain and explore a strategic, 974km<sup>2</sup> tenement package over the prospective Silurian volcanic rocks which host Woodlawn and surround the site (Figure 8 in Appendix A).

Heron's exploration strategy is to focus on known mineralisation with comparable metallurgy to Woodlawn and within proximal trucking distance of the proposed Woodlawn concentrator. A number of excellent targets exist, including Currawang, which is described in more detail below. Details of Heron's other regional prospects are contained in Appendix A. Details of Heron's joint venture projects are provided in Appendix B.

### Currawang Prospect

In the previous quarter five DDH holes for 2,994m were drilled at Currawang that targeted extensions to the existing lenses, as well as the broader testing of the genetic and post-mineral structural environment associated with high-grade volcanic massive sulphide (VMS) mineralisation that was previously mined in the mid-1990's (approximately 0.5Mt at similar grades to the Woodlawn polymetallic resources).

The second drill hole in Heron's program, targeted the down-plunge extension to the main Currawang Lens (Figure 7; DDH CWDD0002) and intersected 6.4m of 5 to 10cm stringers, and semi-massive Zn sulphide mineralisation from 485m within a broad zone of hydrothermal alteration hosted by the basalt sequence. Copper sulphides within this zone are thought to be responsible for the DHEM anomaly previously measured in this area.

This hanging-wall position represents a potential new zone, or lens, of mineralisation at Currawang. DDH CWDD0002 continued to a depth of 640m and passed through a broad (50m+) zone of intense chlorite alteration with copper-sulphide stringers. These type of chlorite zones are typically associated with the massive sulphide feeders which create the main VMS lenses. Assay results that were reported last quarter include two significant intercepts from these two zones:





# Heron Resources Limited

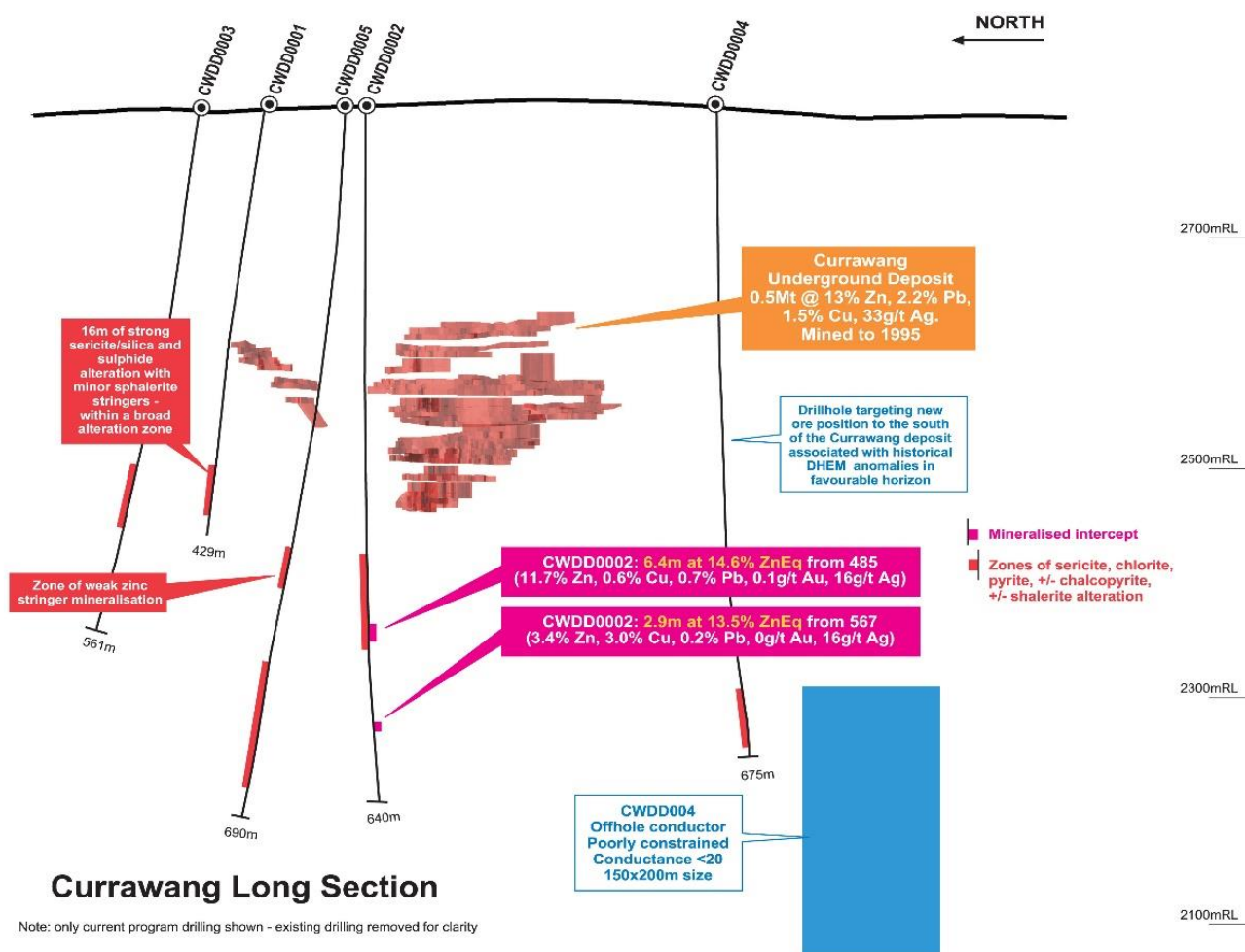
## Quarterly Report

December 2017

Thickness (m)	ZnEq <sup>1</sup> (%)	Downhole start (m)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)	Drill hole
6.4	14.6	484.9	11.7	0.6	0.7	0.1	16.0	CWDD0002
2.9	13.5	567.0	3.4	3.0	0.2	0.0	15.8	CWDD0002

These results are highly encouraging. The last DDH of the program (CWDD0005) was drilled beneath and down-plunge from these intercepts and intersected a broad zone (17.4m) of weak and low-grade Zn sulphides stringers from 428m depth.

Other DDH in the program targeted the primary Currawang structural controls along-strike to the north of the main Currawang Lens in an area of limited historic drilling (Figure 7; CWDD0001 and 03). DDH CWDD0001 intersected a broad interval (38m from 341m down-hole) of moderate to intense alteration comprising sericite, silica, pyrite, and chlorite development within a strongly foliated, and in-part brecciated basalt (the Currawang Basalt). Within this interval is 16m of an intensely developed hydrothermal alteration assemblage, with minor stringers of Zn sulphides with lesser amounts of Pb and Cu sulphides. DDH CWDD0003 intersected a broad zone of moderate to strong silica, chlorite, biotite alteration (381 to 433m depth) with some stringers of base-metal sulphides.



**Figure 7: Currawang long-section (looking east) showing the areas previously mined (shaded red) and the traces of the five DDH in this campaign.**



# Heron Resources Limited

## Quarterly Report

December 2017

DDH CWDD0004 was drilled to a depth of 675m testing the southern extent of the mineralisation, and intersected a weakly developed zone of silica, chlorite, pyrite alteration towards the bottom of the hole – this was less well developed than the other intercepts to the north.

Overall, the 5 DDH hole campaign was very successful, intercepting high-grade intercepts in new stratigraphic and structural positions, which both extend and further delineate the known extents of mineralisation and alteration.

Down-hole electromagnetic (DHEM) surveys were completed at Currawang with a number of significant off-hole conductors identified. However, further surveying has been recommended with different instruments by our consultant geophysicist to better locate the anomalies. Heron's exploration program is part of the NSW Government's Cooperative Drilling Program, with 50% of the direct drilling costs being reimbursable to Heron for the first 4 holes.

## CORPORATE

**Board of Directors:** Dr. Ian Pattison was appointed to the Board as a Non-executive Director. Dr Pattison is a highly respected metallurgist with over 30 years of Australian and international experience. For the past 10 years he has been the Group Manager Metallurgy for the Australian operations of Japan's Toho Zinc which incorporates the construction of the Rasp Mine in Broken Hill and operations at the Endeavor Mine in Cobar.

**Cash:** Heron held A\$108.9 million in cash (excluding bonds of \$A4.577 million) and A\$17 million in investments as at 31 December 2017. In the Quarter the Company received **A\$1.9M** for its Ardea Resources Loyalty options and **A\$1.8M** for the 2017 R&D concession.

**Debt** – The two debt facilities provided by Orion Mine Finance (US\$60M senior secured facility and US\$16M silver prepayment) remain undrawn. It is likely the Company will draw on the first of these facilities in the first quarter of 2018.

**Consolidation:** The Company consolidated Heron's listed and unlisted securities on a 1 for 10 basis. The revised listed number of shares outstanding is 241,666,912, unlisted options of 2,140,836 and performance rights of 2,895,000.

**Annual General Meeting:** The Company held its AGM on 28 November 2017 with all resolutions put to shareholders being passed.



# Heron Resources Limited

## Quarterly Report

December 2017

### APPENDIX A – REGIONAL EXPLORATION PROJECTS

#### East Lachlan Regional Projects

The Company retains a significant portfolio of tenements in the East Lachlan area of New South Wales within truck haulage distance from Woodlawn. The key project areas include Cullarin (Breadalbane Prospect), Kangiara (Crosby Prospect) and Peelwood. Figure 8 shows the location of these projects and their ranking in terms of the exploration priorities, based on a risk-reward assessment.

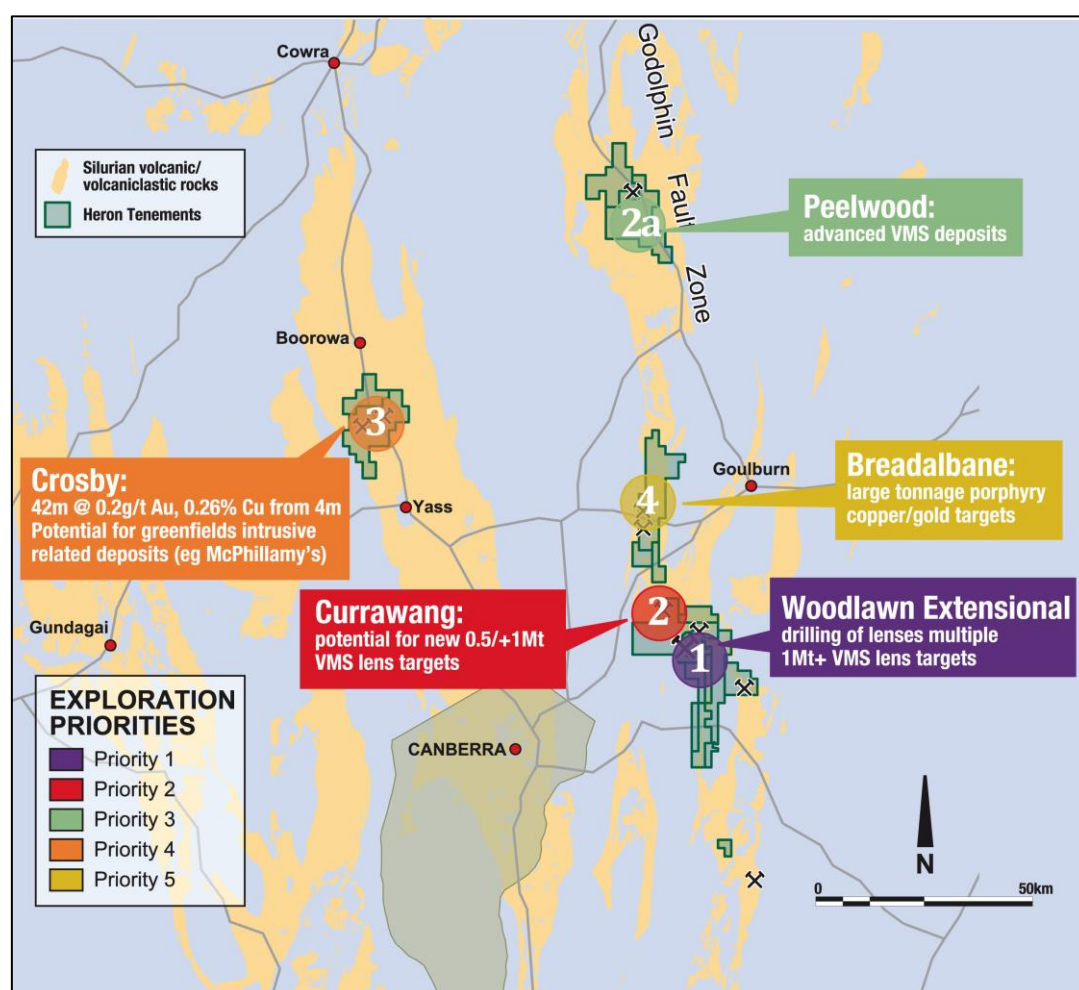


Figure 8: Heron's Woodlawn Regional Projects

#### Peelwood Project (ELA5583, ELA5586, ELA5604, 100% Heron)

The Peelwood Project is located 100km north of Woodlawn and covers Silurian aged rocks consisting of the sedimentary rocks of the Cuddiyong Formation and the felsic volcanic rocks of the Kangaloolah Volcanics (Figure 9). The Peelwood Mine is a VMS system that was a significant historic copper, lead, zinc and silver producer.

During the quarter, Heron applied for ELA5604 that covers the entire 12km long prospective Peelwood base-metal horizon and includes the VMS style deposits, namely the Peelwood, John Fardy, Cordillera and Mt Costigan deposits. Each of these historical deposits includes a number of massive sulphide lenses located at, or adjacent to, the sheared contact between the





# Heron Resources Limited

## Quarterly Report

December 2017

Cuddiyong Formation and the Kangaloolah Volcanics. Deposit descriptions have been provided in Heron's ASX release dated the 15 November 2017.

As previously reported, the ground contains previously released JORC (2004) Mineral Resources and Ore Reserves at the John Fardy and Peelwood deposits and Heron is currently compiling the drill data to verify these estimates. High-powered EM is being planned to cover the priority target areas to generate further targets.

An agreement has been reached with the previous titleholders, Balamara Resources Ltd, to acquire their drilling database and all other project data, including drill core that they own. It is expected that this will speed-up the Company's review process considerably. Discussions with the local landowners are also underway.

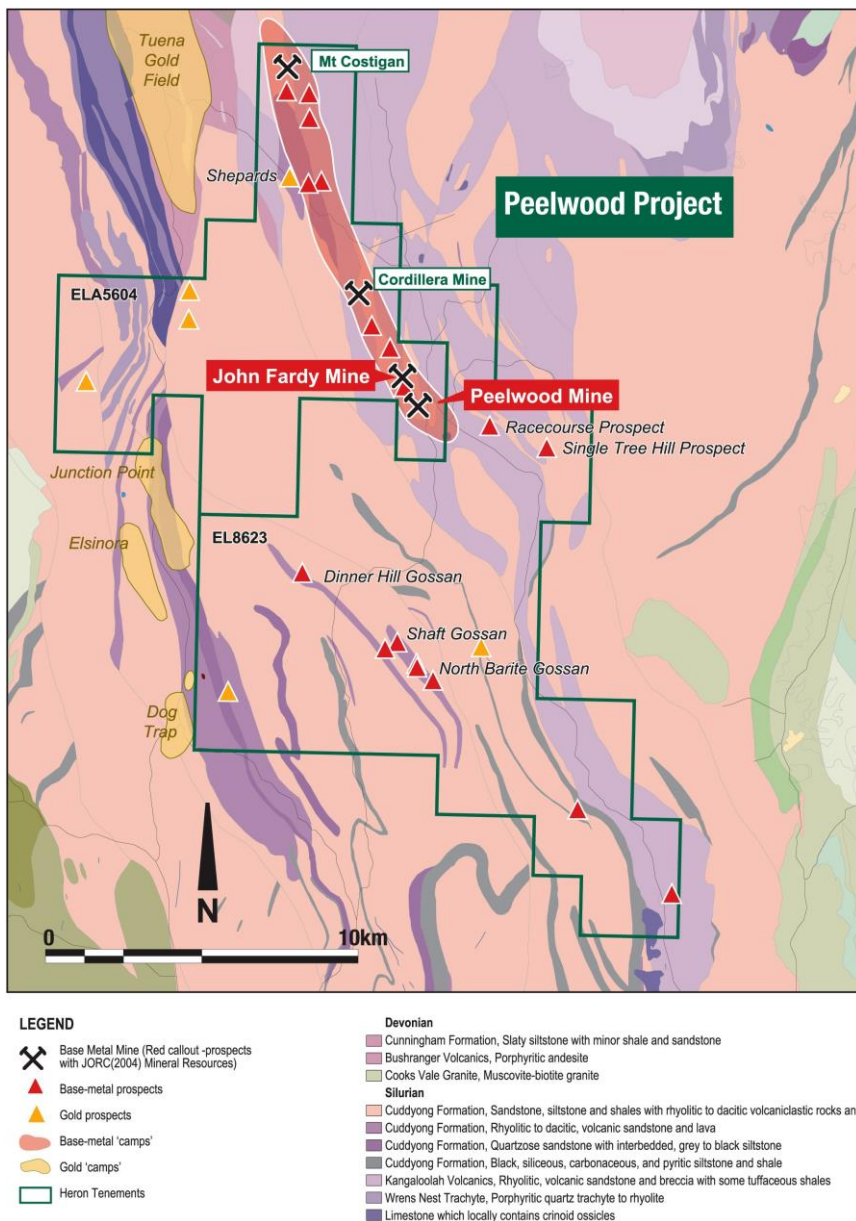


Figure 9: Heron's Peelwood Project



# Heron Resources Limited

## Quarterly Report

December 2017

### Kangiarra (EL8400, EL8573, 100% Heron)

The Kangiarra Project is located 90km NW of Woodlawn and 26km NNW of the town of Yass, and is a historical copper mine where previous explorers delineated a small, low-grade, gold, silver, copper, lead, zinc deposit (non-JORC). The geology comprises felsic volcanic and related sedimentary rocks of the Silurian Douro Group.

A program of 33 rotary air-blast (RAB) holes for 743m was completed in May 2017 providing a first pass test of strong soil geochemical anomalies at the Crosby Prospect with significant results including:

- 10m @ 0.11g/t Au, from 30m to end of hole (CRRB007)
- 3m @ 0.77 g/t Au, from 33m depth to end of hole (CRRB008)
- 4m @ 0.96% Zn, 0.36% Pb and 0.07g/t Au, from 54m (CRRB024)
- **42m @ 0.20 g/t Au and 0.26% Cu from 4m to end of hole (CRRB027)**
- 4m @ 0.25% Cu from 24m to end of hole (CRRB029)

A further review of historical data in this area has identified a broad IP chargeability and geochemical (Cu and Au in soils) anomaly associated with the result from CRRB027 that extends 750m north-south and some 400m east-west.

A follow-up program of a total of 41 RAB holes for 639m was completed in December 2017 with 39 holes drilled at the Crosby North Prospect (Copper Anomaly) and 2 holes drilled at the Crosby Prospect (Gold Anomaly). A package of felsic intrusives, volcanoclastics and sedimentary units were drilled. Anomalous base metals zones were identified with a portable XRF and these zones were typically sericite, silica altered with very fine grained pyrite. Assay results from these samples are pending and are expected during the next quarter.

### Cullarin Project (EL7954, EL7468, 100% Heron)

The Cullarin Project is located 20km NW of Woodlawn and 30km W of Goulburn (Figure 10) and covers the prospective Silurian-aged Wet Lagoon Volcanics – a sequence of rhyolite and dacitic volcanic and volcanoclastic rocks with potential for VMS, skarn and shear-related gold and base-metal deposits. A previous compilation of historic drilling (1970 Astley Consolidated Holding P/L) identified significant Cu results at Breadlebane, B2:

- 12.8m @ 1.15% Cu from 73m (B2-01)
- 5.7m @ 0.25% Cu from 103m incl. 0.4M @ 2.0% Cu (B2-02)
- 2.7m @ 3.3% Cu from 102.8m and 2.0m @ 1.1% Cu from 113.7m (B2-03)
- 1.6m @ 8.0% Cu from 168.4m (B2-04)

Little drilling has been completed at this prospect since the 1970s and there is good potential for skarn-style magnetite/copper mineralisation to be delineated through further drilling in this area. In addition, a broad weaker magnetic high to the north of the B2 prospect represents a first-rate porphyry copper target under shallow alluvial cover, which also has not been drill tested. No field work was undertaken during the Quarter.



# Heron Resources Limited

## Quarterly Report

December 2017

### APPENDIX B - EXPLORATION JOINT VENTURE PROJECTS

Heron retains a high quality tenement holding in the Lachlan Fold Belt of NSW and the Eastern Goldfields of Western Australia. This tenure is held through farm-in and joint ventures interests and includes several other free-carried residual or royalty interests which results in minimal costs to Heron.

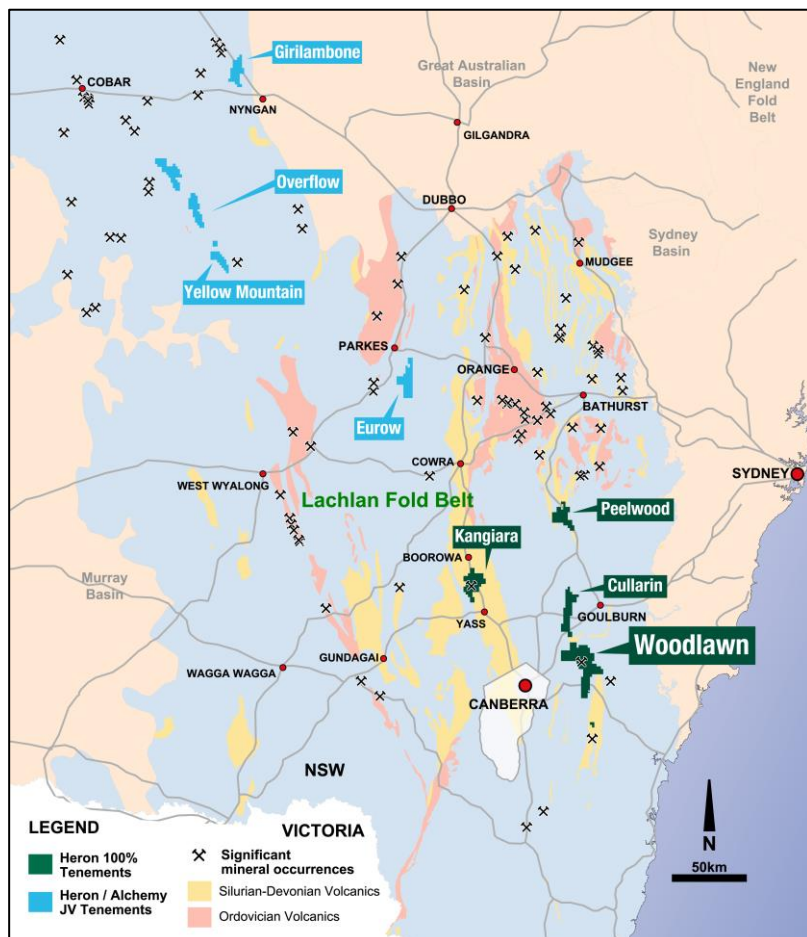
#### ***Alchemy Farm-In and JV (Overflow, Girilambone, Eurow and Yellow Mountain)***

Heron entered into a Farm-In Agreement with Alchemy Resources Limited (Alchemy) (ASX:ALY) covering a portfolio of Heron's NSW exploration tenements (see Figure 10) in May 2016. The Farm-In Agreement covers 674km<sup>2</sup> of the central Lachlan Orogen in NSW, including the following exploration tenements: EL5878 Overflow, EL7941 Overflow, EL8267 Overflow, EL8192 Eurow, EL8318 Girilambone and EL8356 Yellow Mountain.

Approval for follow-up drilling at Overflow has been delayed due to Native Title clearance and negotiations for this are currently underway. A 3-line (roughly east-west lines with holes spaced 5km x 200m) auger program for 385m was completed at Girilambone (EL 8318) that included 122 holes. Weakly anomalous Cu, Pb, Zn, Au, As, Sb, Sn, Bi, Ni, K were found in the NE and SW corners of EL8318, with Cu/Sc anomalism at the western end of the central line.

A total of 118 regional 500m x 500m spaced soil samples were collected at Eurow (EL8192) and results are pending.

**Figure 10: Heron NSW Projects (including Alchemy JV tenure)**







# Heron Resources Limited

## Quarterly Report

December 2017

### **Bulong Gold JV (Heron 20%, Southern Gold Ltd 80%; Heron 100% nickel laterite rights Bulong East)**

The Bulong Gold Project is located 30km east of Kalgoorlie with Southern Gold (ASX:SAU) managing the joint venture as part of their exploration efforts around the producing Cannon Gold Mine. Work completed by SAU during the Quarter included:

- Results of geochemical sampling on P25/2062 (24 rock chip, 33 soil samples), confirmed the presence of low grade gold anomalism associated with thin quartz veining along and parallel to the sediment/ultramafic contact. Soil sampling confirmed the previously interpreted NW trend to anomalous Au-in soil without adding extra detail. A prospector undertook some dozer pushing and detecting with minor success (several nuggets <10g and minor small gold fragments).
- Geochemical sampling on P25/2062, M25/134 and M25/209 was conducted with field mapping and sampling (33 rock chip samples). Results pending.

### **Compliance Statements (JORC 2012 and NI43-101)**

*The technical information in this report relating to the exploration results 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 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 and "qualified person" as this term is defined in Canadian National Instrument 43-101 ("NI 43-101"). Mr. von Perger has reviewed this report and approves the scientific and technical disclosure related to exploration results within. He consents to the inclusion in this report of the exploration information in the form and context in which it appears.*

### **Zinc equivalent calculation – Woodlawn**

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 Au, Ag, Cu, Pb and Zn.  $ZnEq = Zn\% + Cu\% * 3.12 + Pb\% * 0.81 + Au\text{ g/t} * 0.86 + Ag\text{ g/t} * 0.03$ . 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. These metal prices are based on Heron's long-term view on average metal prices. It is Heron's view that all the metals within this formula are expected to be recovered and sold. Metallurgical metal recoveries used for the formula are: 88% Zn, 70% Pb, 70% Cu, 33% Au and 82% Ag; these are based on historical recoveries at Woodlawn and supported by metallurgical testwork undertaken during the 2015-16 feasibility study. Commodity prices and metallurgical recoveries are factored into the zinc equivalent calculation using a standard metal equivalent formula.

### **CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION**

*This news release contains forward-looking statements and forward-looking information within the meaning of applicable Australian and Canadian securities laws, which are based on expectations, estimates and projections as of the date of this news release. This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and ability to complete the Ardea spin-off, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability*



# Heron Resources Limited

## Quarterly Report

December 2017

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

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







# Heron Resources Limited

## Quarterly Report

December 2017

### Appendix 5B

#### MINING EXPLORATION ENTITY QUARTERLY REPORT

Name of entity

HERON RESOURCES LIMITED
-------------------------

ABN

30 068 263 098
----------------

Quarter ended

31 December 2017
------------------

#### Consolidated statement of cash flows

	Current Qtr \$A'000	Year to Date (6 months) \$A'000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors		
1.2 Payments for: (a) production		
(b) development		
(c) administration	(1,217)	(4,212)
1.3 Dividends received	409	462
1.4 Interest and other items of similar nature received		
1.5 Interest and other costs of finance paid	4,125	4,125
1.6 Taxes (paid)/refunded (R&D/GST)	-	-
1.7 Other –GST		
<b>Net Operating Cash Flows</b>	<b>3,317</b>	<b>375</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a) plant and equipment	(10)	(20)
(b) equity investment	-	-
(c) mine under construction	(19,822)	(30,484)
(d) exploration activities	(230)	(1,217)
(e) prospects	(20)	(20)
1.9 Proceeds from sale of: (a) prospects	-	-
(b) equity investment	2,307	2,401
(c) other fixed assets	-	-
1.10 Loans to other entities		
1.11 Loans repaid by other entities	238	238
<b>Net Investing Cash Flows</b>	<b>(17,537)</b>	<b>(29,102)</b>
1.12 Total operating and investing cash flows (carried forward)	<b>(14,220)</b>	<b>(28,727)</b>



# Heron Resources Limited

## Quarterly Report

December 2017

1.12 Total operating and investing cash flows (brought forward)	(14,220)	(28,727)
<b>Cash flows related to financing activities</b>		
1.13 Proceeds from the issue of shares, options, etc.	-	140,115
1.14 Realised foreign exchange loss – equity raise	-	(4,956)
1.15 Payment for FX Hedges	(657)	(657)
1.16 Repayment of borrowings	-	-
1.17 Dividends paid		
1.18 Payment of Share issue costs	(195)	(3,925)
<b>Net financing cash flows</b>	<b>(852)</b>	<b>130,577</b>
<b>Net increase (decrease) in cash held</b>	<b>(15,072)</b>	<b>101,850</b>
1.19 Cash at beginning of quarter/year	128,612	11,690
1.20 Other	-	-
<b>1.21 Cash at end of quarter</b>	<b>113,540</b>	<b>113,540</b>

**Payments to directors of the entity and associates of the directors, payments to related entities of the entity and associates of the related entities**

	Current Qtr \$A'000
1.22 Aggregate amount of payments to the parties included in item 1.2 and 1.8	
1.23 Aggregate amount of loans to the parties included in item 1.10	

1.24 Explanation necessary for an understanding of the transactions

Director's fees, salaries and superannuation for the quarter (A\$312,820).

### Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

See attached schedule



# Heron Resources Limited

## Quarterly Report

December 2017

### Financing facilities available

Add notes as necessary for an understanding of the position

	Amount available \$A'000 (at exchange rate of AUD:USD\$0.79)	Amount used \$A'000
3.1 Loan facilities	96,202	0
3.2 Credit standby arrangements		

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	500
4.2 Development	40,000
4.3 Production	-
4.4 Administration	1,200
<b>Total</b>	<b>41,700</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to related items in the accounts as follows.

	Current Quarter \$A'000	Previous Quarter \$A'000
5.1 Cash on hand and at bank	6,803	2,879
5.2 Deposits at call	101,960	120,956
5.3 Bank Overdraft		
5.4 Other (provide details)		
Environmental bonds	3,577	3,577
Bank Guarantee	1,200	1,200
<b>Total: cash at end of quarter (Item 1.21)</b>	<b>113,540</b>	<b>128,612</b>





# Heron Resources Limited

## Quarterly Report

December 2017

### 6.1 Interests in Mining Tenements transferred, relinquished, withdrawn, reduced or lapsed.

#### Interests in Mining Tenements sold, reduced or relinquished

Tenement	Location	Nature of Interest	% Beginning of Quarter	% At end of Quarter <sup>a</sup>

Note <sup>a</sup>: includes changes between end of quarter and release of report; b: see details of Siberia sale agreement within body of report, subject to registration of transfer documents

#### Interests in Mining Tenements acquired or increased

Tenement	Location	Nature of Interest	% Beginning of Quarter	% At end of Quarter <sup>a</sup>
ELA5583	100km north of Woodlawn	100	Pending	Approved
ELA5586	100km north of Woodlawn	100	Pending	Approved
ELA5600	90km west of Armidale	100	Pending	Approved
ELA5604	100km north of Woodlawn	100	Pending	Approved

Note a: includes changes between end of quarter and release of report

#### Heron Resources Ltd Tenement Schedule for December 2017 Quarterly Report

Tenement	Location	Heron Interest (%)	Status	Note
<b>Western Australia Projects – Joint Ventures</b>				
<b>Southern Gold Farm In Project – Southern Gold Ltd 80%, HRR 20%</b>				
M25/00059	34km East of Kalgoorlie	20	Live	1
M25/00134	40km E of Kalgoorlie	20	Live	1
M25/00145	40km E of Kalgoorlie	20	Live	1
M25/00161	40km E of Kalgoorlie	20	Live	1
M25/00171	40km E of Kalgoorlie	20	Live	1
M25/00209	40km E of Kalgoorlie	20	Live	1
P25/02256	40km E of Kalgoorlie	20	Live	1
P25/02257	40km E of Kalgoorlie	20	Live	1
P25/02258	40km E of Kalgoorlie	20	Live	1
<b>New South Wales Projects</b>				
<b>Woodlawn Project</b>				
EL7257	40km SSW of Goulburn	100	Live	
EL7468	5km E of Collector	100	Live	
EL7469	15km E of Bungendore	100	Live	
EL7954	25km W of Goulburn	100	Live	
EL8325	60km ENE of Canberra	100	Live	
EL8353	7.5km SE of Woodlawn	100	Live	
S(C&PL)L20	40km SSW of Goulburn	100	Live	
EL8400	27km NNE of Yass	100	Live	
EL8573	30km NNW of Yass	100	Live	
EL8623	90km north of Woodlawn	100	Live	
<b>Nyngan Project</b>				
EL8631	10km NW of Nyngan	100	Live	
<b>Alchemy Farm in &amp; JV Tenements</b>				
<b>Girilambone</b>				
EL8318	27km NW of Nyngan	100	Live	Alchemy
<b>Overflow/Eurow/Parkes</b>				
EL5878	100km NW of Condobolin	100	Live	Alchemy
EL7941	100km NW of Condobolin	100	Live	Alchemy



# Heron Resources Limited

## Quarterly Report

December 2017

Tenement	Location	Heron Interest (%)	Status	Note
EL8267	70km SE of Cobar	100	Live	Alchemy
EL8356	59km WSW of Tottenham	100	Live	Alchemy
EL8192	23km SE of Parkes	100	Live	Alchemy

Notes:

- Subject to Farm In agreement with Southern Gold Ltd (who have earned an 80% interest). Heron retains 100% of nickel laterite.
- Alchemy. Subject to Farm-in and Joint Venture between Alchemy Resources Ltd and Heron

### Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (\$)	Amount paid up per security (see note 3) (\$)
<b>7.1 Preference securities</b> (description)				
<b>7.2 Changes during Quarter</b>				
(a) Increases through share issues				
(b) Decreases through returns of capital, buybacks, redemptions				
<b>Ordinary securities</b>	241,666,912	241,666,912		
<b>7.3 Changes during Quarter *</b>				
(a) Increases through share issues				-
(b) Decreases through returns of capital, buybacks				
* During the quarter the Issued Capital was subject to a 1 for 10 Consolidation				
<b>7.4 Convertible debt securities</b> (description)				
<b>7.5 Changes during Quarter</b>				
(a) Increases through issues				
(b) Decreases through securities matured, converted				

### 7.6 Options

(description and conversion factor)

		Exercise Price	Expiry Date
1,650,000	Nil	\$0.72	4/12/2020
100,000	Nil	\$2.90	5/03/2018
85,836	Nil	\$0.70	20/11/2018
40,000	Nil	\$1.34	1/09/2021
265,000	Nil	\$1.10	01/02/2022
<b>7.7 Issued during Quarter</b>	2,895,000 Performance Rights	\$0.00	1 July 2020
<b>7.8 Exercised during Quarter</b>			



# Heron Resources Limited

## Quarterly Report

December 2017

7.9 Expired during Quarter	21,459	Nil	\$0.12	23/10/2017
7.10 Debentures (totals only)				
7.11 Unsecured notes (totals only)				

**Compliance 2.2** Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest.

*Nothing to report*

### Compliance Statement

1. This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
2. This statement does give a true and fair view of the matters disclosed.

Sign here: \_\_\_\_\_  
Company Secretary  
Print name: Simon Smith

Date: 30 January 2018

### Notes

1. The Quarterly Report is to provide a basis for informing the market how the entity's activities have been financed for the past Quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
2. The "Nature of Interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
3. **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
4. The definitions in, and provisions of, AASB 1022: *Accounting for Extractive Industries* and AASB 1026: *Statement of Cash Flows* apply to this report.
5. **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.