



Heron's Woodlawn Project - New Mineral Resource on Shallow G2 Lens and Total Underground Resource Upgrade

- **New Mineral Resource estimate provided for the first mineralisation (G2 Lens) to be accessed in the Woodlawn underground mine – expected to have a positive impact on early cash flow**
- **G2 Mineral Resource now has three defined domains: G2 Main (G2), G2 Hanging Wall (GH) and G2 Copper Zone (GC)**
- **Combined Mineral Resource for G2 now estimated at:**
 - 139kt @ 10.1% ZnEq¹ (4.5% Zn, 0.8% Cu, 2.3% Pb, 0.4g/t Au, 33g/t Ag) - Indicated Category
 - 58kt @ 13.3% ZnEq (4.0% Zn, 1.0% Cu, 2.2% Pb, 1.2g/t Au, 117 g/t Ag) - Inferred Category
- **Total underground Mineral Resources for Woodlawn were recalculated as part of this update with separate cut-off grades used for polymetallic and copper domains resulting 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 Ore Reserve estimation, selected metallurgical testing and updating of early mine schedule is underway**

Heron Resources Limited (ASX:HRR TSX:HER, “Heron” or the “Company”) is pleased to report an upgrade to the Mineral Resource estimate for the shallow G2 Lens and a revision of the total underground Mineral Resources at its wholly-owned Woodlawn Zinc-Copper Project, located 250km south-west of Sydney, New South Wales, Australia. The resource upgrade follows on from the recently completed drilling program that focused on expanding the shallow G2 position, in areas close to the proposed box-cut and decline.

Commenting on the results, Heron Resources Managing Director and CEO, Mr Wayne Taylor, said:

“This significant upgrade to the G2 Lens and total underground Mineral Resources is an encouraging development for the early stages of the mine development and we are looking forward to incorporating this material into the mine plan. It is expected to have a positive impact on the early cash flows of the project as the G2 area did not contribute to the feasibility study projections and will be the first source of underground production. These results along with the remaining extensional positions continue to demonstrate the discovery potential and economic upside at Woodlawn.”

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 the surface (see Figures 1-4). Recent drilling has targeted this area for its ability to add to the early mine inventory. A program of 22 diamond core holes for a total of 4,246m was recently completed to further define the resource. Three key mineralised horizons have been 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 recent drilling campaign and consists of a zone of 5-10cm zinc sulphide-rich stringers crosscutting 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

¹ ZnEq % used in this release refers to the calculated Zn equivalent grade based on the Zn, Cu, Pb, Au and Ag grades, the formula for which is provided at the end of this report.



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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 provided below and within the JORC (2012) Table 1 at the end of this report.

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

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
Total	Combined	Inferred	58	13.3	4.0	0.9	2.2	1.16	117

Notes: 1) Please refer to the end of this release 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 at the end of this report.

Total Woodlawn Underground Mineral Resource 2017

The total Woodlawn underground Mineral Resource was recalculated as part of the update process, now 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 Ore Reserves and potential total mining inventory has commenced and is to be released in the coming weeks.



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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	Ind+Mea	2.7	21.6	10.9	1.5	4.0	0.7	79
All Lenses	Copper	Ind+Mea	1.9	9.7	0.7	2.6	0.1	0.2	14
Total	Combined	Ind+Mea	4.6	16.7	6.7	1.9	2.4	0.5	52

Inferred Mineral Resource

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

Notes: 1) Please refer to the end of this release 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 at the end of this report.

Mineral Resource Description and Methodology

The Woodlawn Volcanogenic Massive Sulphide (VMS) mineralisation is hosted in Late Silurian deep water marine mudstones and volcanoclastic debris flows associated with a rhyolitic volcanic centre within the Goulburn Basin. The Woodlawn deposit comprises of 12 known sulphide lenses which form three mineralised horizons locally disrupted by faulting. The Zn, Cu and Pb mineralisation occurs as massive and stringer sulphide lenses, interpreted to have formed both on the sea floor and as replacement mineralisation in coeval mudstones and volcanic breccia flows. The mineralisation is derived from hydrothermal fluids which emanated from the adjacent volcanic centre and is associated with an aerially extensive, zoned alteration envelope.

The G2 lens mineralisation is part of the broader G Lens complex, located at the southern end of the uppermost mineralised horizon. Mineralisation is hosted in both mudstones, and volcanic derived breccia flows. The G Lens was previously mined from the G1 and G2 Lenses, and the new mineralisation identified by Heron is a combination of extensions to the previously mined lenses and newly identified mineralisation positioned to the south of and below the known lenses.

The Mineral Resource at Woodlawn is defined by both historic and recent Heron diamond drilling, as well as underground mapping in previously mined areas. Drill intercept spacing varies from 15x15 m to 20x30 m across the modelled lens area.

The G2 Lens Mineral Resources were estimated using block models constrained within wire-framed domains defined mainly by interpreted geologic and structural contacts, using lower cut off grades based on population breaks of 4.0% Zn in polymetallic domains, and 1% Cu in copper domains. Where appropriate, some material of lower grade was included with the mineralised domains for purposes of continuity. Estimations were carried out using ordinary kriging for Zn, Cu, Pb, Fe, Ag and Au. Specific gravity (density) determinations collected from samples of drill cores were applied to blocks using grade-based regression equations.



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Tonnages and grades were reported above 7.0% ZnEq for the polymetallic mineralisation as in keeping with previous Mineral Resource statements, and at a 1% Cu cut-off grade for the copper mineralisation. The Mineral Resource estimate has been separately classified for each individual lens based on both geological interpretation confidence and geostatistical variance of assay composites between drill holes into the following categories: Measured (15x15m spaced drilling with geological backs mapping); Indicated (up to 20x30m spaced drilling); and Inferred (greater than 20x30m spaced drilling). Mineral Resource estimation was undertaken for the entire G Lens complex, however, there were no material changes to the G1 and G3 domains and they are therefore, not separately reported here.

G2 Lens Mineral Resources are expected to be mined using underground mechanised underhand long-hole stoping with paste backfill. Extraction of separate Zn, Cu and Pb concentrates for sale is planned utilising a new processing facility which is currently under construction at the site.

Ore Reserve estimation, selected metallurgical testing and the updating of the early mine schedule has commenced on the new G2 resource and will be reported on separately.

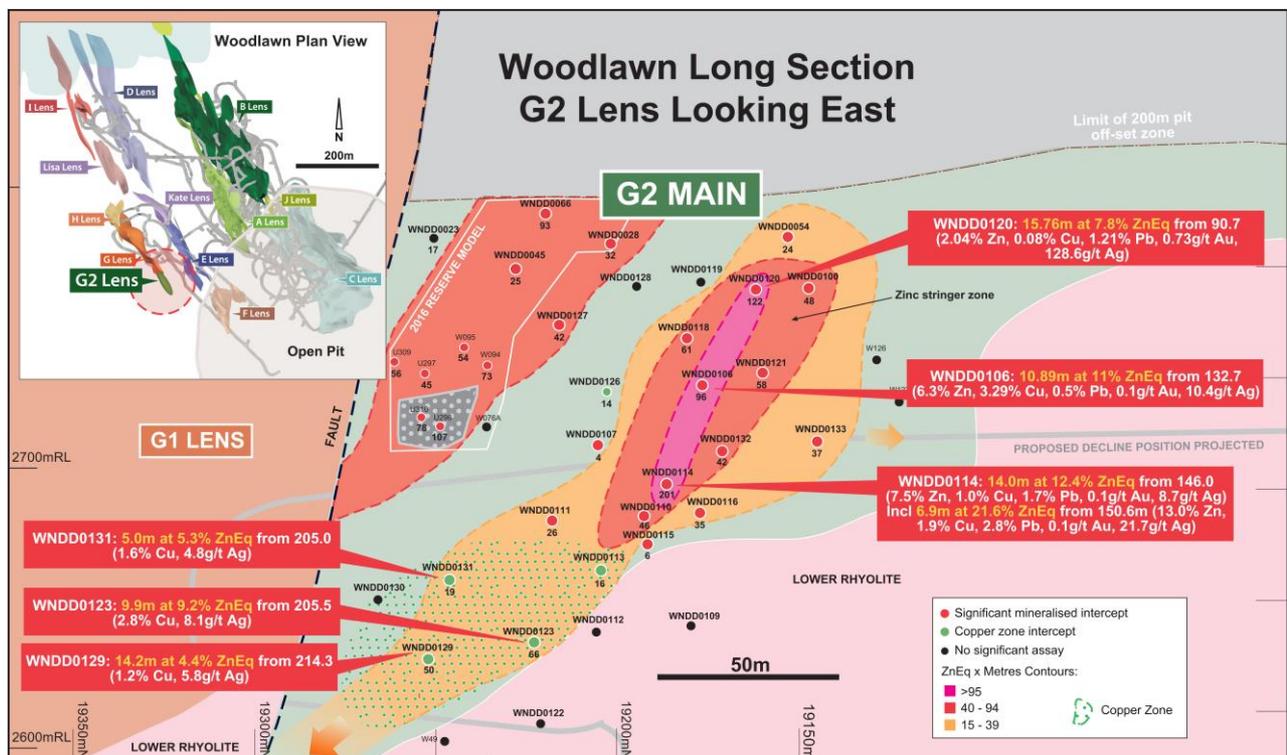


Figure 1: Woodlawn G2 Lens (G2 & GC) long-section showing interpreted lens shape, piercements of recent drilling and the position of proposed decline.



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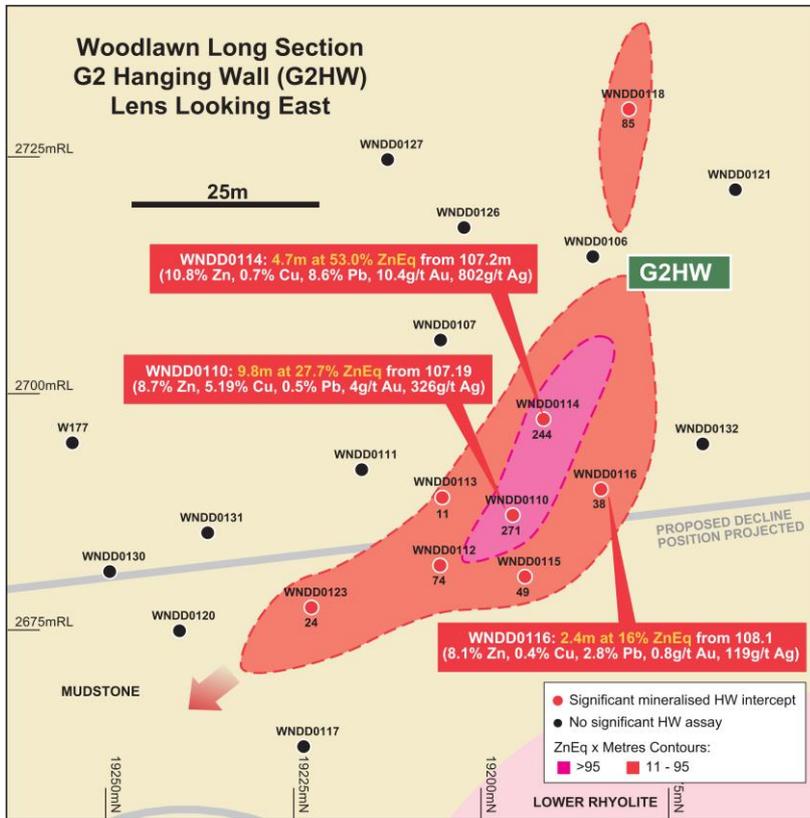


Figure 2: Woodlawn G2 Hanging Wall Lens (GH) long-section showing interpreted lens shape, piercements from recent drilling and the location of the proposed decline.

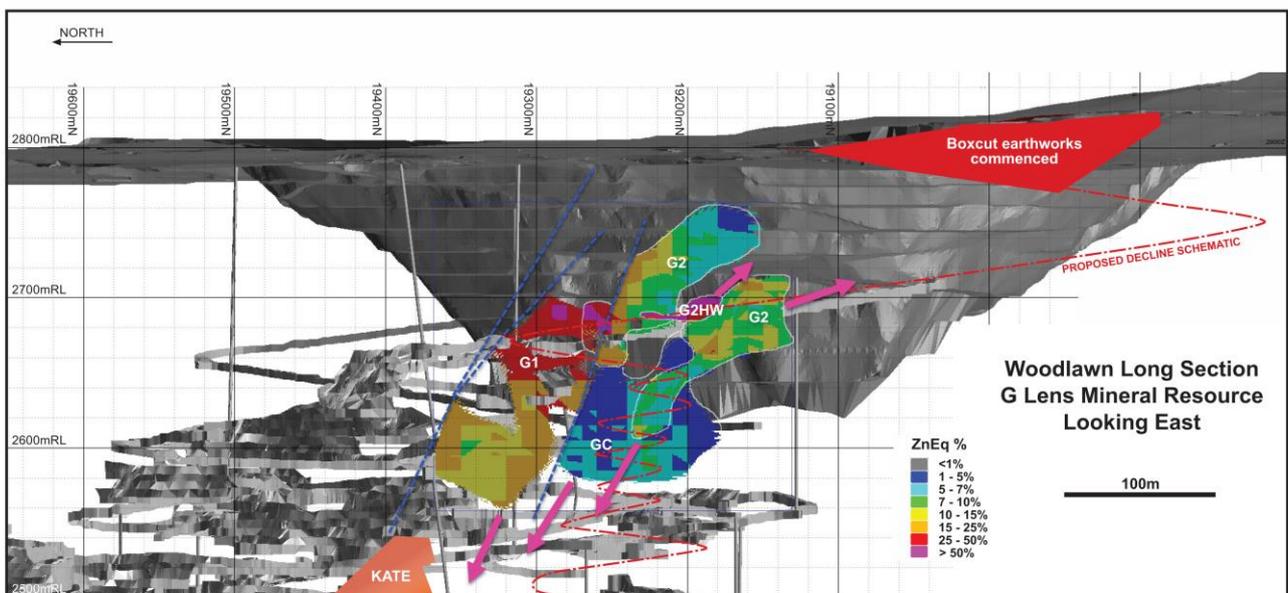


Figure 3: Woodlawn G Lens complex long-section looking east showing key lens components in relation to the proposed box cut and decline. Kate lens shown for reference.



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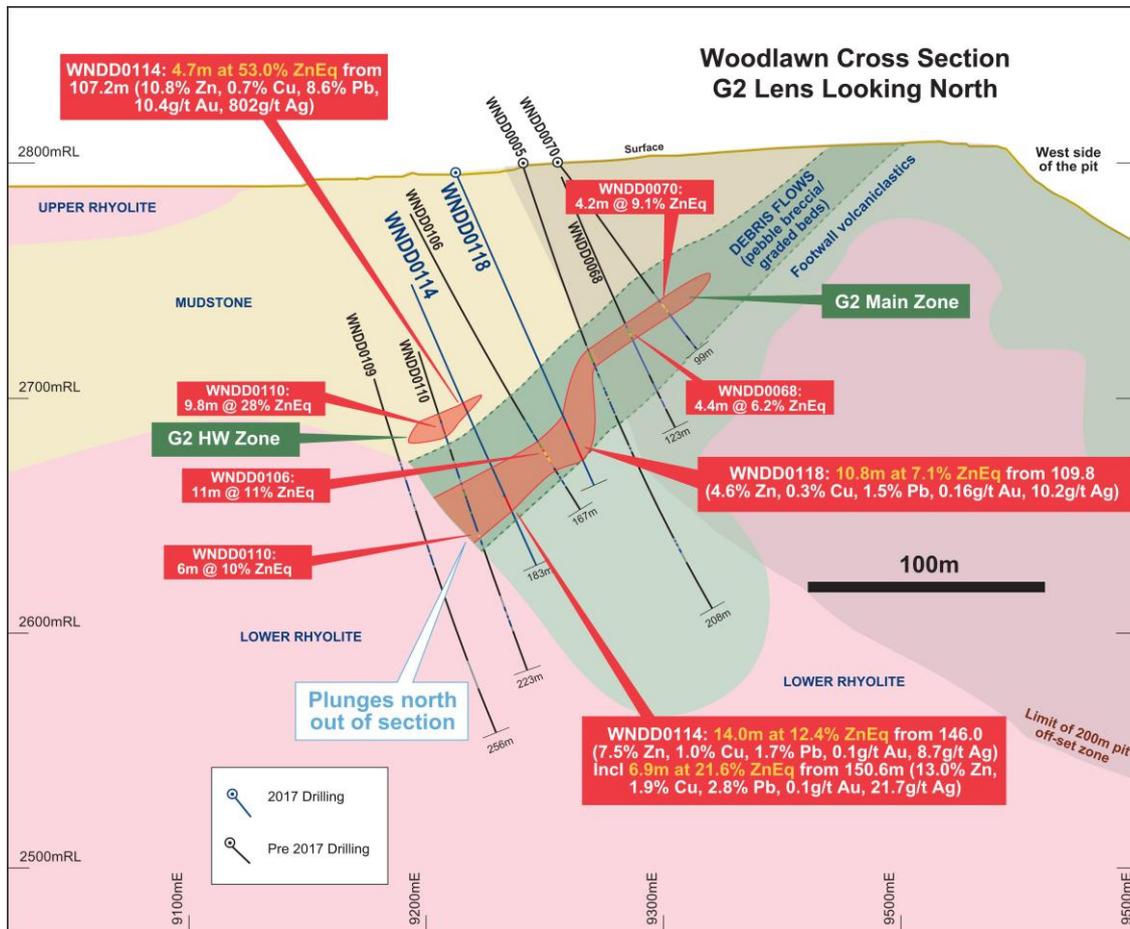


Figure 4: G2 Lens representative cross-section at approximately mine grid 19180 North.

About Heron Resources Limited:

Heron's primary focus is the development of its 100% owned, high grade Woodlawn Zinc-Copper Project located 250km southwest of Sydney, New South Wales, Australia. In addition, the Company holds a significant high quality, gold and base metal tenement holding regional to the Woodlawn Project.

For further information, please visit www.heronresources.com.au or contact:

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Compliance Statement (JORC 2012)

The technical information in this report relating to the Mineral Resource is based on information compiled by Mr. Steven Jones, who is a Member of the Australian Institute of Mining and Metallurgy (Chartered Professional – Geology). Mr. Jones is a full time employee of Heron Resources Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results". Mr. Jones has approved the scientific and technical disclosure in the news release.



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Compliance Statement (NI43 101)

The technical information in this report relating to the Mineral Resource is based on information compiled by Mr. Rodney Brown who is a Member of the Australian Institute of Mining and Metallurgy (Chartered Professional – Geology). Mr. Brown is a full time employee of SRK Consulting 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 an independent “qualified person” as this term is defined in Canadian National Instrument 43-101 (“NI 43-101”). Mr. Brown has approved the scientific and technical disclosure in the news release.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

*This report 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 report. 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 report 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 report.***



Zinc equivalent calculation

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. $ZnEq = Zn\% + Cu\% * 3.12 + Pb\% * 0.81 + Au\ g/t * 0.86 + Ag\ g/t * 0.03$. 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. 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 test work 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.

JORC Code (2012) – Table 1

Woodlawn Underground Mineral Resource Estimate (October 2017)

Section 1 Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> The sampling dataset that forms the basis of the Mineral Resource estimate consists mostly of drill samples that have been collected from the 1970's up to the present day and, for reporting purposes, is split into two groups, <i>Historical</i> being pre-1999 samples from Jododex, CRA and Denehurst exploration and mining operations, and <i>Recent</i> being post 1999 drilling samples from exploration by Heron Resources Ltd (Heron) and TriAusMin Ltd (TriAusMin). The Heron drilling was undertaken from September 2014 to October 2017 (Phase I, II, III and IV drilling programs) and the TriAusMin drilling was undertaken between January 2007 and May 2013. The Phase I and II drilling programs (104 DDH for 27,048 metres and 11 RC holes for 1,201 metres) completes the drilling required to estimate the Mineral Resource for the Woodlawn feasibility study (FS). Phase III and IV drilling comprises (29 DDH for 6,543.5m) Heron also drilled 23 geotechnical diamond drill holes (for 2,105 metres) to assist with engineering studies associated with the mine design and reserve calculations. The majority of Recent diamond core samples were taken from HQ3 sized core (with a smaller proportion of NQ2 and NQ3 sized core) and generally collected on a nominal interval length of 1m, with samples terminated at geological contacts. The core was halved along the core orientation line. In economic mineralised zones, quarter core was submitted for assaying, half core preserved for metallurgical testing, with the remaining quarter retained as reference material. In likely to be sub economic zones half core was submitted for assaying. The Recent percussion reverse circulation (RC) holes (11 holes drilled in 2014 with two of these used in the Mineral Resource estimate) were drilled using a 4.5 inch sized bit. Samples were collected on 1m intervals. In the waste zones, a sample spear was used to collect a split from each interval, which were subsequently combined to form 4m composites. In the mineralised zone, the 1m interval was retained and a split collected using a riffle splitter. The Recent sampling methods were consistent with accepted industry practice and are considered to provide representative samples for the mineralisation encountered. Historical RC drilling was not used in the Mineral Resource estimate. Historical surface and underground diamond drilling has been used in the Mineral Resource. The majority of the samples were collected from half NQ core, although some underground samples were taken from whole BQ core. Core was sampled on 1m intervals, with the intervals usually split at lithological boundaries. Some of the early exploration core was sampled on imperial intervals, which were subsequently metricised in the Historical database. Some Historical face chip samples have been used in the Mineral Resource calculation. This was limited to samples taken from cross cuts that spanned the complete section of the mineralised lens. Rock chip samples were taken as a continuous channel from the wall rocks on 1-2m intervals, with each sample weighing were approximately 2-3kg. Samples were taken to geological contacts. Resampling of the massive sulphide intervals from the Historical drilling has been undertaken where the drill core was still of reasonable quality. A total of 116 repeat samples were taken and



Criteria	Commentary
	<p>showed acceptable correlation with the reported Historical assay results. In addition, Historical production reconciliation suggests that there was an acceptable correlation between the grades derived from sampling and concentrate production over the life of the underground mine.</p>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> • The Recent diamond-core drilling was performed mostly using McCulloch DR800 rigs (or similar) for Phase I and Sandvik UDR650 for Phase II and III. Sandvik DE 710 track mounted rigs were used for phase IV drilling. Various techniques were employed to ensure the hole was kept within limits of the planned position, including directional drilling. The retrieved core was laid out in standard plastic cores trays. • The Recent RC drilling was performed using a Schramm T450WSI rig fitted with a 4.5 inch face sampling hammer. One metre samples were collected via a Jones 5:1 splitter fitted to the rig cyclone. • Historical diamond drilling was undertaken by both surface and underground rigs. The full drill company and rig details are poorly understood, however anecdotal evidence indicates it was conducted with standard drill equipment and procedures for that time. Historical core stored on site represents approximately fifty percent of the historical drilling. The majority of core is intact and in good condition, apart from some limited surface oxidation and degradation of the sulphide zone in the vicinity of joint planes. Metre marks, sample marks and hole numbers are visible for almost all holes stored on site. Select key holes have been stored off site at Geological survey of NSW Maitland core library and the University of Newcastle.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • The drill core was transported to an enclosed facility for logging and preparation. The average recovery exceeds 95%. The core was orientated, where possible and marked with 1 metre downhole intervals for logging and sampling. • The recoveries for the Recent RC drilling were visually estimated, with most being close to 100%. • Historical core stored on site shows a similar level of recovery to that from the recent diamond drilling. With the exception of some geotechnical holes, the Historical exploration and underground core does not appear to have been orientated.
<i>Logging</i>	<ul style="list-style-type: none"> • For recent drilling, both diamond core and RC holes were geologically logged. Geotechnical logging was conducted on selected core intervals. Samples for metallurgical testing were stored in a freezer to reduce oxidation prior to metallurgical testing. • Historical core was geologically logged. Some holes were geotechnically logged, and some were used for metallurgical test work.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • For recent drilling, all core samples were crushed and then pulverised in a ring pulveriser (LM5) to a nominal 90% passing 75 micron. For each interval, a 250g pulp sub-sample was taken, with the remainder stored for reference. • For recent programs a quartz flush was put through the LM5 pulveriser prior to each new batch of samples. Multiple quartz flushes were also put through the pulveriser after each massive sulphide sample processed. A selection of the flush material was analysed and reported by the lab to gauge the potential level of contamination that may be carried through from one sample to the next. • The recent RC samples were pulverised in an LM5 ring pulveriser. The same quartz flush procedures as those described above were used. • For the majority of Historical sampling, preparation and analysis was carried out on site by Denehurst Analytical Services Pty Ltd, a NATA accredited laboratory. An independent review of the laboratory was carried out in 1986 by Robertson Research. At that time the following procedures were being used: 1) All samples were crushed to 1.5mm using a combination of jaw and roll crushers; 2) Crushed samples were quartered to obtain a 150gram cut for pulverising in a Rocklabs bowl and puck pulveriser; 3) A quartz flush was used between individual samples. • A number of Historical samples, including all early exploration surface diamond drilling, were prepared at other commercial laboratories using methods that are understood to be similar to those described above.



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Criteria	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> Recent sample preparation and assaying was conducted by ALS Laboratories, Orange, New South Wales with the final analysis of the pulps undertaken at ALS Laboratory, Brisbane or Townsville, Queensland. Recent Gold assays were determined by 30g fire assay fusion with AAS analysis to 1ppb LLD. Recent other elements were assayed by mixed acid digestion followed by ICP analysis. The digest is considered to be a total digest. Recent Laboratory quality control standards (blanks, standards and duplicates) were inserted at a rate of 5 per 35 samples for ICP and AAS analysis. Most of the Historical sample preparation and assaying was carried out by Denehurst Analytical Pty Ltd (Denehurst Laboratory), which was a NATA accredited laboratory operating at the Woodlawn site. Zinc, lead and copper grades were determined by acid digest and AAS finish. An aliquot from each pulp was also analysed by XRF pressed powder for precious metals, iron, silicon, aluminium, magnesium and barium, along with repeats of zinc, lead and copper. Gold assays over 2g/t were retested by fire assay and AAS finish. QAQC procedures included Standards inserted at a frequency of 1:30, however the actual QAQC data have not been located. Anecdotal evidence indicates the Denehurst Laboratory was well regarded at the time of operation and was used for umpire assaying by other laboratories. Some sample preparation and assaying for the Historical data, in particular the early exploration diamond drilling samples, were carried out by various other commercial laboratories. Exact details have not been located for these samples and the Historical database does not contain information describing which laboratories or assay methods were used for the various programmes.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> For recent data, an internal review of results was undertaken by company personnel. Independent verification has also been undertaken by the Company's geological consultants. Until July 2017 all Heron field and laboratory data were entered into a database using a consultant database administrator (DBA), who was based in the Company's Perth office. Validation of both the field and laboratory data was undertaken prior to final acceptance and reporting of the data. From July 2017 this function has been passed to a permanent Heron employee DBA, working from the Woodlawn site. For recent drilling, quality control samples from both the Company and the Laboratory were assessed by the DBA and reported to the Company geologists for verification. Company procedures dictate that all assay data must pass this data verification and quality control process before being reported. All data from Historical data bases were entered into the Heron Database by the DBA. Original source data and laboratory records have not been located and the assay data has not been verified. At the time of Historical data collection, QAQC checks were not routinely carried out by the mine geology department, however the laboratory did do internal standard analysis at the rate of 1 in 30 samples. During operations, the mine claim grades (derived from the Reserve and Resource models) were routinely reconciled against the mill concentrate grades. As a semi-quantitative test, this suggests that the Historical drilling assay results are sufficiently accurate for the prediction of mining grades. No adjustments have been made to assay data within the database.
<i>Location of data points</i>	<ul style="list-style-type: none"> The deposit is not thought to contain magnetic minerals in concentrations that may adversely affect survey equipment. For recent drilling, drill collars were initially located with a combination of handheld GPS and licenced surveyor using a DGPS system, to an accuracy of approximately 1m. The final drill collar locations are surveyed by a licenced surveyor. For recent drilling, downhole surveys were conducted using an Eastman, Pathfinder or Ranger survey tool to record the magnetic azimuth and dip of the hole. These recordings were taken approximately every 30 metres downhole. Approximately 80% of the recent holes were also surveyed with gyroscopic equipment. For recent drilling in the Phase I program a north seeking gyroscopic tool was used to provide



Criteria	Commentary
	<p>collar azimuth data for approximately half the diamond holes.</p> <ul style="list-style-type: none"> For Historical drilling collar surveys were carried out on all surface and underground holes using conventional Total Station equipment. Down-hole surveys of Historic holes were carried out using down-hole cameras of various types, and recording intervals of approximately 30m. Historical drill holes intersected in underground workings were routinely picked up by the mine surveyor. These data indicated the downhole survey azimuth accuracy was usually in the order of +/- 2 degrees. All Historical primary source data for collar surveys, and most down-hole surveys have been located and verified against the Historical drill hole database. Down-hole magnetic survey data have been checked and adjusted for changes in magnetic declination.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> Drill data spacing varies from 15m x15m in some remnant parts of the historical mine and recent G2 drilling to greater than 80m x 80m in some exploration areas. Historical backs mapping data covering all development (generally on 5m flitches) have been used to help define geological contacts in areas of previous mining. Geological structures identified in the mapping data have been used to constrain the dimensions of drilled extensions to previously mined lenses. Data are considered to be of sufficient spacing to establish geological and grade continuity for resource estimation, and the resource classification reflects the geological and grade continuity confidence of the modelled material. Lenses with insufficient drilling data have been modelled for exploration targeting purposes, but have not been assigned resource classifications or included in the resource inventory. This includes portions of the new Lisa Lens, portions of B Deeps and parts of the G lens extensions. The majority of the sample lengths are between 0.22m to 1.0m. Some Historical samples were taken over 3' intervals (converted to metric equivalents in the database). Some underground face samples are 2m in length. All samples were composited to 1m length for resource modelling purposes. All composites were density weighted.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> The recent drill hole orientations were designed to intersect the mineralised lenses at a close to perpendicular angle. The mineralised lenses dip at approximately 50-70 degrees to the west and the holes dip at approximately 60 degrees to the east. The majority of Historical drilling has been orientated to intersect the lenses at a close to perpendicular angle. Some underground drill holes have been collared in the footwall, and cross the lenses at a lower angle than 50 degrees. No significant sampling bias due to the orientation of the drilling has been identified.
<i>Sample security</i>	<ul style="list-style-type: none"> Sampling was conducted according to written procedures, and was performed by appropriately trained and supervised sampling personnel. Core was photographed after mark up, but before sampling. Half and quarter core samples were placed in numbered and tied calico sample bags. Samples were weighed on site and density of all samples determined before being sent to the laboratory. Samples were secured in plastic bags and are transported to the ALS laboratory in Orange, NSW via a courier service or with Company personnel. The sample security of Historical drilling is not known, however most samples were assayed at the onsite laboratory. All recent drilling, and approximately half of the Historical drilling is stored at the Woodlawn core yard.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> In September 2014 a review and assessment of the ALS laboratory procedures was carried out by company senior geology personnel resulted in some changes to the laboratory sample pulverising



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	<p>procedures resulting in additional quartz flushes being inserted after massive sulphide samples. Further ALS Laboratory visits were undertaken by Heron geologists to check procedures in 2015 and again in September 2017.</p> <ul style="list-style-type: none"> • The majority of Historical assay work was carried out by the NATA certified Denehurst Analytical Laboratory. • The Historical laboratory procedures were reviewed as part of a broader independent assessment of resources and reserves carried out by Mr R E Cotton of Robertson Research in 1986.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> • The Woodlawn Project is located 250km south-west of Sydney in the state of New South Wales. The area is near the top of the Great Australian Dividing range and has an elevation around 800m above sea-level. The mineral and mining rights to the project are owned 100% by Heron Resources through the granted, Special Mining Lease 20 (SML20), also known as S(C&P)L 20. The lease has recently been renewed for 15 years and has an expiry date of the 16th November 2029. • The project area is on private land owned by Veolia who operate a waste disposal facility that utilises the historical open-pit void. An agreement is in place with Veolia for the Company to purchase certain sections of this private land to facilitate future mining and processing activities. • A cooperation agreement is also in place between Veolia and the Company that covers drilling, other exploration activities and mining/processing in the area.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • The Woodlawn deposit was discovered by the Jododex JV in 1970 and open-pit mining began in 1978 and continued through to 1987. The project was bought outright by Rio Tinto (CRA) in 1984 who completed the open-pit mining. Underground operations commenced in 1986 and the project was sold to Denehurst Ltd in 1987 who continued underground mining up until 1998. The mineral rights to the project were then acquired by TriAusMin Ltd in 1999, who conducted further studies on a tailings re-treatment and revived underground operation. Heron took 100% ownership of the project in August 2014 following the merger of the two companies.
<i>Geology</i>	<ul style="list-style-type: none"> • The Woodlawn deposit comprises volcanogenic massive sulphide (VMS) mineralisation consisting of stratabound lenses of pyrite, sphalerite, galena and chalcopyrite. The mineralisation is hosted in the Silurian-aged Woodlawn Felsic Volcanic package of the Goulburn sub-basin on the eastern side of the Lachlan Fold Belt. • Mineralisation is hosted within strata bound lens shaped lodes. The lenses can be further divided into three favourable horizons which host multiple lenses. The lenses have an average strike of between 330 and 350 degrees, and dip at between 50 and 75 degrees to the west. There is a prominent northwest oriented plunge to the mineralisation of most lenses. Some of the lenses are further subdivided by later faulting, associated with regional deformation. Mineralisation is polymetallic with copper, lead and zinc being the primary economic metals along with secondary silver and gold.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • A total of 3,618 drill holes for 245,300 metres and associated assays and lithological data are currently held in the database for the Woodlawn deposit. • Due to the size of the database it is not practical to list every individual drill hole in Table 1. All Recent drilling results have been released to the market prior to the calculation of the Mineral Resource estimate.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • The details related to intercepts and assay management for Mineral Resource estimation are to be found under the Mineral Resource estimation section of the Table 1 (section 3).



Criteria	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> No exploration results in addition to those already published are included in the Mineral Resource estimate.
Balanced reporting	<ul style="list-style-type: none"> No exploration results in addition to those already published are included in the Mineral Resource estimate.
Other substantive exploration data	<ul style="list-style-type: none"> No exploration results in addition to those already published are included in the Mineral Resource estimate.
<i>Further work</i>	<ul style="list-style-type: none"> Phase III and IV drilling programs were designed to test for along strike mineralisation to the north of the B lens, and to initially test and the drill out the G2 lens and associated lenses in preparation for mine development. Further drilling is being considered to: 1) extend the known lens positions along strike and down plunge; 2) test for new lens positions where EM modelled plates are present (eg Kate Deeps); 3) test for entirely new lens positions along strike to the north and north-west where the system has not been closed off and; 4) extend known satellite ore systems at Cowley Hills and Currawang. 5) test targets within trucking distance of the proposed Woodlawn plant, now under construction.

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	Commentary
Preamble and responsible people.	<ul style="list-style-type: none"> The revised underground Mineral Resource estimate for the Woodlawn Project has been largely undertaken in-house by Heron personnel, in particular Heron's Senior Resource Geologist (Mr Steven Jones, who is a member of the AusIMM – CP and deemed a competent person to sign off mineral resources for this style mineralisation).
<i>Database integrity</i>	<ul style="list-style-type: none"> For Recent data, all data were captured digitally, including, collar survey, down-hole survey, geological logging, geotechnical logging, sample selection and assay results. The geological and geotechnical logging and sampling data were validated on entry in the field. Clear written procedures outline how all data are entered and managed in the field, and field geologists update the procedures as changes are made to suit new data types (eg updating of geological legend). Digital records were uploaded into the database by the DBA. All source files were stored within the database. The database has internal validation procedures for most data types to minimise the chance of transcription errors. Initial data validation was done automatically (the database will not accept data contrary to validation criteria). Secondary validation was carried out as data was added to the database. Regular downloads from the database were validated in 3D mining packages by the geological team after each assay batch received. All updates and changes to the database, including corrections from the geological team, were carried out by the DBA.
<i>Site visits</i>	<ul style="list-style-type: none"> Mr Jones visited the site numerous times during the drilling and post drilling to check the successful implementation of site procedures, including drilling, logging, sampling, and density measurements. SRK Consulting conducted a site visit in March 2015 to inspect the project site, examine the geology, inspect core samples, and to discuss aspects of the data acquisition and deposit geology with site personnel. The geological setting and controls on mineralisation observed in the exposures (pit walls) and core samples are considered to be consistent with the geological understanding that has been used for the preparation of the geological model. There were no drill



Criteria	Commentary
	<p>rigs operating at the time of the site visit. However, an inspection of the core storage facilities indicated both the historical and recent core to be of an acceptable quality, and suitable for the preparation of resource estimates</p>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> The geological interpretation was built upon on from an extensive body of work by both researchers, and previous operators at the mine. The geological model of the mine was built up from detailed underground mapping, Historical underground and surface diamond drilling, and Recent RC and diamond drilling by TriAusMin and Heron. The underground mapping was completed during underground mining operations, and consisted of 1:500 and 1:250 scale backs maps of every underground development drive, including all flat back stope lifts. The mapping line work was digitised by Heron geologists and is used to develop wireframes of major faults and mineralisation domain boundaries. The majority of mineralisation domain boundaries correspond to the sharp contacts between the massive or stringer sulphide zones and the silicate host rock. As a result the mapped and logged geological contacts between sulphides and silicates provide a robust basis for the interpretation of volumes and the selection of samples for estimation of Mineral Resources. It was recognised in the previous mining operations that individual lenses can have distinct mineralisation characteristics, and this has been reflected in the domains used in the resource estimate. In particular polymetallic mineralisation (sphalerite, pyrite, galena, chalcopyrite and other minor components) has been separated from Copper zone mineralisation (principally pyrite, chalcopyrite) by domain boundaries, where appropriate, within the model. The impact of alternative interpretations on the resource quantities is considered to be adequately reflected in the classifications assigned to the resource estimates: <ul style="list-style-type: none"> Measured material is defined in areas where both sufficient drill hole and underground mapping data are available to confirm both the grades and controlling structures (and thus volumes) of the lenses. There is limited scope for an alternative interpretation that would result in significantly different volumes or grades. Indicated material is defined in areas where there is either sufficient drilling, or sufficient underground mapping data available to confirm the volume of the lenses. In previously mined areas, the drill spacing is wider than expected for Measured (from reconciliation work carried out on the block model vs production records), or there has been no previous mining and the interpretation is based on drilling and interpretation projections from adjacent mapped areas. In areas where grade and geological continuity can be demonstrated, but the geological data is limited to widely spaced drilling only, the resource classification has been set to inferred. Where insufficient intercepts are available to confirm continuity of either grade or geology between holes, the model cells have been flagged as 'Not Classified', and excluded from the resource estimates. There is some scope for reinterpretation of Inferred material geometry and considerable scope for alternate interpretation of Not Classified portions of the model. It is expected that further drilling will be required to improve the robustness of the interpretation of these materials. A similar approach to resource modelling was used during the Historical underground operations, and it was considered that the reconciliation between mine and mill supported the classification that had been assigned during this period. The geological model includes material that has been mined and the lens models closely match the models generated by the mining department during operation. Infill drill holes, drilled post the PEA study (Phase II, III and IV drilling) to enable upgrading the classification for some of the Inferred Resources to Indicated Resources, often intersected mineralisation, faults and dolerites close to the expected location indicated in the geology model. This indicates that the geology model is reasonably robust in the areas drilled.
<i>Dimensions</i>	<ul style="list-style-type: none"> The Resource Model has 37 separate domains, 27 of which are reported to contain either Measured and/or Indicated resources, and a further 10 containing only Inferred resources above



Criteria	Commentary
	<p>the modelled cut-off grade of 7% Zn Equivalent Grade (ZnEq). Two lenses contain low grade mineralisation below the reporting cut-off grade.</p> <ul style="list-style-type: none"> • The typical lens dimensions are 40 to 120m along strike, approximately 80 to over 500m down plunge and 2 to 30m across strike. • Mineralisation has been modelled to a depth of 820m below surface, however the deposit is considered to be open at depth. The current Mineral Resource estimate is constrained by the limited drill coverage below 700m.
<p>Estimation and modelling techniques</p>	<p>Modelling:</p> <ul style="list-style-type: none"> • All modelling of domains For the Feasibility Study were completed using a combination of Micromine and Leapfrog modelling software to generate domain wireframes. Mapping data was digitised using Micromine. Flagged lens outlines from the mapping data and drill hole pierce points were imported into Leapfrog where the footwall and hanging wall of each lens were modelled using implicit modelling routines appropriate for the geometry of the surface being modelled. The completed wall wireframes were wire-framed together in Micromine using appropriate geological constraints, including faults, adjacent lens domains and Boolean mathematics to build the final enclosed domain boundaries. • The G lens mineralisation was modelled in a similar manner, but using Leap Frog Geo software for all of the wire framing requirements (due to advances in software). • A regular block model was built using the lens boundaries and a digital terrain model of the surface. Only the sulphide portion of lenses has been domained and modelled. Waste material was not subdivided into different geological units for this block model, however a detailed wireframe model of geological units and faults relevant to early mining phases has been developed. • A parent cell size of 10m x 20m x 20m in the X, Y and Z directions was chosen for the FS to reflect the principal mining method of sub-level retreat long hole mining with paste fill. This also reflects the drill hole intercept spacing of 20m x 20m for a significant portion of the deposit. • For the G lens model update and study was completed on the sensitivity of block sizes for this more tightly drilled area of the model (15x15m nominal spacing). The study indicated that at this drill hole spacing either 5x5x5 or 10x10x10m block sizes would be appropriate for resource estimation. 5x10x10m in the X, Y and Z directions was chosen to reflect the sub-level retreat long hole mining with paste fill mining method planned for these lenses. • The parent cells were sub-celled to 1m x 1m x 1m to accurately estimate the volume of material inside each lens domain for mining assessment. <p>Estimation of grades:</p> <ul style="list-style-type: none"> • Each individual lens was interpolated separately from other lenses by the flagging of both drill hole assays and the block model. Lens boundaries were treated as <i>hard boundaries</i> for the purposes of modelling. • For resource modelling purposes two adjustments were made to assay data during modelling; <ul style="list-style-type: none"> ○ Not all of historical samples had been routinely assayed for Au. The detection limit of 0.01g/t has been applied to all absent Au assays prior to compositing and interpolation. ○ Fe assays were absent for a small number of holes in portions of the I, K and D lenses. Appropriate Fe values were assigned to the intervals based on nearby drill holes within the relevant domains during compositing. • Assays were selected and composited based on drill hole flagging that was independent of the domain wireframe boundaries. This technique was used to accommodate small differences in the accuracy of drill hole sample locations relative to the underground mapping data. • No cut grades were required for assays except for the following <ul style="list-style-type: none"> ○ Ag assays in the G1 domain, where a high- grade cut of 800 g/t was applied to



Criteria	Commentary
	<p>three samples in two adjacent holes.</p> <ul style="list-style-type: none"> Due to the limited number of samples in each domain, geostatistical modelling was carried out on all the domained assay data simultaneously, to produce global semi-variogram models for Au, Ag, Cu, Fe, Pb and Zn. These global geostatistical models were considered to be robust for all elements modelled. They show good continuity in general, with low nugget effects. No estimates of deleterious elements were carried out. Fe was estimated for all lenses to assist with the calculation of density for the mineralisation by way of a regression equation based on Fe, Zn and Pb grades. Grades were interpolated using Ordinary Kriging in Micromine software, with Kriging parameters derived directly from the semi-variogram models. Search parameters were based on the variogram models with octant searches being used to set a maximum of 32 samples for the initial search, and 16 and 4 for subsequent searches. Search sizes were set to ensure all blocks were filled by the third search and were orientated to match the variography. Only blocks filled for all elements in the first search were considered for Indicated or Measured classification. Although separate estimation parameters were used for each element modelled there is good correlation between lead and zinc, and moderate correlation between gold and silver. Copper was found to have a somewhat shorter variogram range than the other elements modelled. All element grades were broadly anisotropic and of similar orientation and plunge to the lenses. The maximum range of extrapolation for inferred resources was 80m. Mineralisation estimates beyond this range were not classified or reported. Zinc Equivalent Calculations <ul style="list-style-type: none"> ZnEq was calculated for each block from the estimated block grades. The ZnEq calculation used to report the resource model is the same as that used in the PEA to allow a direct comparison between the two figures. The 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. <ul style="list-style-type: none"> $ZnEq = Zn\% + Cu\% * 3.12 + Pb\% * 0.81 + Au\ g/t * 0.86 + Ag\ g/t * 0.03$ 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. Metal recoveries are provided in the section on metallurgy and it is Heron's view that all the metals within this formula are expected to be recovered and sold. Validation of Estimates: <ul style="list-style-type: none"> The volumes of the block model were checked against the calculated interior volumes of the wireframe models and found to be reasonable for the level of confidence of the model. All domains were checked visually, individually by element for assay composite grades against estimated block grades. 20m thick Swath plots in the vertical plane, north-south plane and east-west plane were produced for all lenses, comparing drill hole composite grades with block modelled grades. No significant departures in grades were noted for material classified as Measured or Indicated. Some differences in the mean and smoothing were detected for lens models that contained a significant portion of Inferred resources. This was deemed acceptable for the level of confidence assigned. Reconciliation of historical mine claim production records (where recorded in sufficient detail) to the block model were acceptable, with all Measured and most Indicated portions of the model accurately predicting both grade and tonnes mined to $\pm 10\%$ or better.
Moisture	<ul style="list-style-type: none"> All estimates were based on dry density. The rock mass is non-porous fresh rock and contains little residual moisture, except along major fault planes (less than 0.01% of the rock mass).
Cut-off parameters	<ul style="list-style-type: none"> A ZnEq cut-off grade of 7% minimum was applied to report Mineral Resources. This cut-off grade was based on the likely foreseeable minimum grade required for underground mining at the



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	<p>Woodlawn mine site. The ZnEq equation is the same as that used in the PEA study. It is not necessarily related to the FS or later reserve mining study economic assessments, which take into account more up to date prices and metallurgical performance. That being said, the 7% cut-off is not materially different to the results of the FS mining study cut-off grades.</p> <ul style="list-style-type: none"> The copper domains are reported at a 1% Cu cut off grade, which reflects the reduced processing costs and recovery factors for copper only mineralisation based on metallurgical test work.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> Dilution factors have not been applied to the Mineral Resource estimate. The deposit has previously been mined both as an open cut pit, and an underground mine. Open cut mining has not been considered for the Mineral Resource at this time. It is assumed that underground mechanised mining will be used to mine the deposit in the future. The Indicated and Measured portions of the resource model was assessed for underground mining as a part of the FS. Assessment was carried out by SRK mining engineers in conjunction with Beck geotechnical engineers. The study included both capital and operating underground mining costs, based on a contract mining scenario with trackless mining equipment and employing primarily long-hole stoping and paste backfill. Other considerations included the presence of existing historical underground development openings, filled and unfilled historical stopes, as well as the ongoing use of the open cut by Veolia. The mine design included new box-cut and decline access, ventilation design, escape-way design, ground support requirements, stockpiles and cross-cuts, as well as level development and stoping designs. The size of stopes, mining methods and dilution parameters are based on historical mining performance and geotechnical assessment of recent drilling, applied to the mining methods chosen by the study. The mining study is a thorough study of mining inventory to a FS level. Material assessed to be inaccessible or unrecoverable by underground mining during the FS were excluded from the Mineral Resource estimate and not reported. This includes material in non-recoverable pillars, the edge of previously mined stopes and areas of known collapse in the mining records from the previous underground mine.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> The deposit was previously mined and processed to produce saleable and profitable metal concentrates for copper, lead and zinc. Recent metallurgical test work by Heron on underground mineralisation intercepts, including material representing mining dilution, as a part of the FS indicates that good recoveries of saleable concentrates can be achieved for copper, lead and zinc concentrates from both the underground mineralisation, and tailings stored on site from previous mining operations. The test work was based on crushing and grinding underground mineralisation to 75µm, floating of a copper concentrate with separate talc pre-float, then regrinding the material to 30µm with separate talc pre-float, copper, lead, and zinc concentrate floats. Test work included the classification of tailings to produce material suitable for use as a paste fill in underground voids. Detailed work on the proposed metallurgical processing of the deposit, including estimated capital and operating costs, and plant preliminary designs, metal recoveries, concentrate grades and payabilities can be found in the body of the FS document.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> The site has been subject to previous mining activities, and has not been fully rehabilitated. On July 4th, 2013 the Company received project approval under Section 75J of the EP&A Act from the NSW Minister of Planning and Infrastructure in relation to the project, covering both: <ul style="list-style-type: none"> The Woodlawn Retreatment Project (WRP) — involving the establishment of a hard-rock processing facility and the processing of existing tailings material stored within three existing tailings dams; and The Woodlawn Underground Project (WUP) — involving excavation of a new box-cut and underground mining development to extract metalliferous sulphide material, subject to



Criteria	Commentary
	<p>successful exploration.</p> <ul style="list-style-type: none"> The approvals have been granted to allow mining operations at the Woodlawn site until 31st December 2034. The approvals come with a number of reasonable, workable operating conditions relating to hours of operations, operating standards, community consultation, conditions on site operations and restrictions on volumes and transport routes approved. Aside from the conditions the Company has designed a new tailings dam, and will be implementing a water management system (to ensure zero discharge of contaminated water off site). The company is also obliged to identify and implement a passive system for the treatment of potential acid forming seepage from the existing waste dump, refurbish, monitor and maintain the existing bore fields. Further environmental details can be found in the body of the FS document.
<i>Bulk density</i>	<ul style="list-style-type: none"> No verifiable historical density data has been located, although the taking of density measurements is mentioned in a number of historical resource reports. Earlier resource estimates used formulae similar to the one shown below to calculate densities. Historically, a default density of 3.9 t/m³ was used for polymetallic ore and 2.9 t/m³ for copper only mineralisation. Bulk densities were determined for all Heron samples by the wet weight/dry weight method on site, by suitably trained personnel. As the mineralisation is hosted wholly in non-porous fresh rock, it is reasonable to expect that dry density and bulk density of material are similar. Dry density for each block was determined via a historical regression equation based on the following formula for all polymetallic lenses. $\text{Dry Density} = 2.2118 + \text{Fe}\% * 0.0552 + \text{Zn}\% * 0.0226 + \text{Pb}\% * 0.0487$ For Copper lenses the polymetallic equation was found to underestimate density, and a new regression equation specific to copper domains was developed $\text{Dry Density} = 2.5479 + \text{Fe}\% * 0.0267 + \text{Fe}\%^2 * 0.0005$ The performance of the two regression equations against measured densities was validated by Heron and found to be sufficiently accurate for the purpose of the Mineral Resource estimate with the application of a lower limit to the regression. All densities below 2.70 were assigned a density of 2.70; this being the average value of non-mineralised measured densities from the recent Heron drilling. Waste was also assigned a density of 2.70, based on recent sampling and density work carried out by Heron. More detail on the examination and adjustments of density can be found in the FS report.
<i>Classification</i>	<ul style="list-style-type: none"> The resource classification was based on the findings from both geological and mining engineering assessments. Geological Criteria; <ul style="list-style-type: none"> Measured Mineral Resource classifications were applied where the geological confidence in the definition of controlling geological structures was robust, the drill spacing was generally 20m x 20m or less, and Kriging parameters indicated a high level of confidence in the interpolation. In the majority of cases Measured resources were supported by both underground geological mapping and drill hole data and represent recoverable sill pillars and remnants from previous mining operations. Indicated Mineral Resource classifications were applied where the geological confidence in the definition of controlling geological structures was robust, the drill spacing was between 15m x 20m and 40m x 40m depending on individual lens characteristics, and Kriging parameters indicated a high level of confidence in the interpolation. In the majority of cases Indicated resources were supported by well correlated drill hole data in areas not previously mined, or a mixture of geological mapping and drilling in areas previously mined. Inferred Mineral Resource classification was applied to areas where geological and grade continuity was proven by adjacent drill holes, and projection of geological data could be used to apply reasonable geological structural controls to the extents of mineralisation. Drill hole spacing was usually 80m x 80m or less for this domain, and included both lens extensions



Criteria	Commentary
	<p>and lenses previously not modelled, and was usually based on drill hole intercepts with projected geological interpretations from mapped areas.</p> <ul style="list-style-type: none"> • Areas of poor geological confidence, or limited sampling, whilst modelled, were not classified and have not been reported. • Engineering Criteria; <ul style="list-style-type: none"> • As a part of the PEA Heron completely remodelled the existing underground voids from the source survey data for the entire mine. This included making adjustments to the void model to reflect the shanty-back profiles of the cut-and-fill jumbo stoping used in much of the historical mine stoping. No resources were reported from within the modelled voids in the FS. • Areas adjacent to, and directly below existing historical stopes were excluded from classification as it was considered unlikely that this in-situ material could be recovered safely from the deposit. All stope skins were treated in this manner. • Areas in and around known zones of collapse in the previous mine were also not classified or reported. • Areas where mining recovery was considered uncertain, but may be possible, pending underground access and assessment, have been left classified as Mineral Resources, although some may not be included in the Mineral Reserve. • Estimated resource blocks below the likely future minimum mining grade of 7% ZnEq for polymetallic domains, or 1% Cu for copper domains were also removed from the resource inventory by the application of a low grade cut to reported blocks.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • Review of the Mineral Resource estimates have been carried out SRK Consulting. This included the following steps: <ul style="list-style-type: none"> • Regular discussions with Heron’s Senior Resource Geologist during the building of the geological model. • Visual examination of the final geological model against existing drill hole and mapping data • Variography of the major elements: Zn, Cu, Pb, Ag, Au and Fe, as described in a previous paragraph • Review of the kriging parameters used by Heron • Review of the resulting block model sizing used by Heron (Visually and statistically) • Review of the quality of the estimation through an evaluation of kriging quality parameters (slope of regression and kriging efficiency) • Review of the classification criteria and results. • The overall conclusion of the review is that the model and resource estimates are sound, based on a thorough analysis of the geology and the data. If anything, the results are conservative, as a number of zones are eliminated from the resources based on fairly strict criteria of confidence in the geology, data density and mineability.
<i>Discussion of relative accuracy confidence</i>	<ul style="list-style-type: none"> • The Competent Person has a relatively high confidence in the Mineral Resource estimate • The principal reasons are: <ul style="list-style-type: none"> • Underground backs mapping data has been digitised and used to develop a geological frame work for the Mineral Resource estimate which is inclusive of all geological observations made during previous mining of the deposit. • Lenses have been modelled on an individual basis, with a clear separation of the principal mineralisation styles within each lens. Interpretation of lens volumes and location directly incorporates underground mapping data, where available, significantly increasing the confidence in the geological model and the Mineral Resource estimate. • The modelling of the variography is sound and interpolation of the deposit using ordinary kriging is a robust and proven method for modelling this style of deposit. The method is employed to model other similar deposits, including current producing mines. • Because the quality of the variograms is generally very good, showing good grade continuity (low nugget effect, ranges varying between 25 and 100 m), the quality of estimation as quantified by indicators such as the slope of regression and the kriging efficiency is good. As expected, blocks classified as Indicated show better quality indices in general than Inferred



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	<p>blocks.</p> <ul style="list-style-type: none">• The resource estimates have been prepared and classified in accordance with the guidelines that accompany the JORC Code, and no attempts have been made to further quantify the uncertainty in the estimates.• The void model has been completely remodelled from original source data, significantly increasing the confidence in the location of remaining unmined material.• The Mineral Resource quantities should be considered as global and regional estimates only. The accompanying models are considered suitable to support mining planning studies, but not considered suitable for production planning, or studies that place significant reliance on the accuracy of the local estimates.• The deposit remains open at depth and along strike.• No recent production data exists to verify the accuracy of the resource estimate as the deposit is currently not being mined. Historical production figures are of a similar grade to the diluted resource model in areas which have been previously mined, and specific production records exist.