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ASX Release

7 May 2019

New High-Potential Drill Targets Identified Adjacent to Woodlawn Mine

- **Large area (4.0km x 2.4km) Induced Polarisation (IP) survey recently completed north of the Woodlawn Mine has delineated a number of significant IP anomalies, with two key targets:**
  - **Coincident chargeability and conductivity anomaly at Murphy's prospect**
  - **Large chargeability anomaly at Bucklands North prospect**
- **Anomalies lie on Heron's granted mining lease and within 2.5km of the Woodlawn plant site, currently being commissioned**
- **Targets will be drill tested in the coming weeks**

Heron Resources Limited (ASX:HRR "Heron" or the "Company") is pleased to report on the results of an IP geophysical survey at its wholly-owned Woodlawn Zinc-Copper Project, located 250km south-west of Sydney, New South Wales, Australia. The program consisted of a modern IP survey within Heron's granted mining lease and covers an area of 4.0km x 2.4km directly north of the Woodlawn Mine.

Commenting on the new program, Heron Resources Managing Director and CEO, Mr. Wayne Taylor said: *"Our exploration team is focusing on the area around the Woodlawn Mine with the specific aim of discovering a new Woodlawn-style deposit. Modern geophysical techniques are ideally suited for this style of mineralisation and this IP survey has generated some of the most exciting responses since the discovery of the Kate Lens electro-magnetic anomaly. We look forward to mobilising a drilling rig in the coming weeks to drill test these anomalies."*

IP geophysical surveys were successful in identifying the original Woodlawn deposit in the early 1970s; however, the early surveys could penetrate only to depths of approximately 150m whereas the modern high powered surveys can penetrate considerably deeper to approximately 700m. An IP survey was recently completed directly north of Woodlawn (Figure 1) in an area which contains the Woodlawn volcanogenic massive sulphide (VMS) host rocks, in an effort to identify anomalies at-depth that could be related to potential new Woodlawn style deposits. Survey lines were spaced at 400m with some infill in the south to 200m.

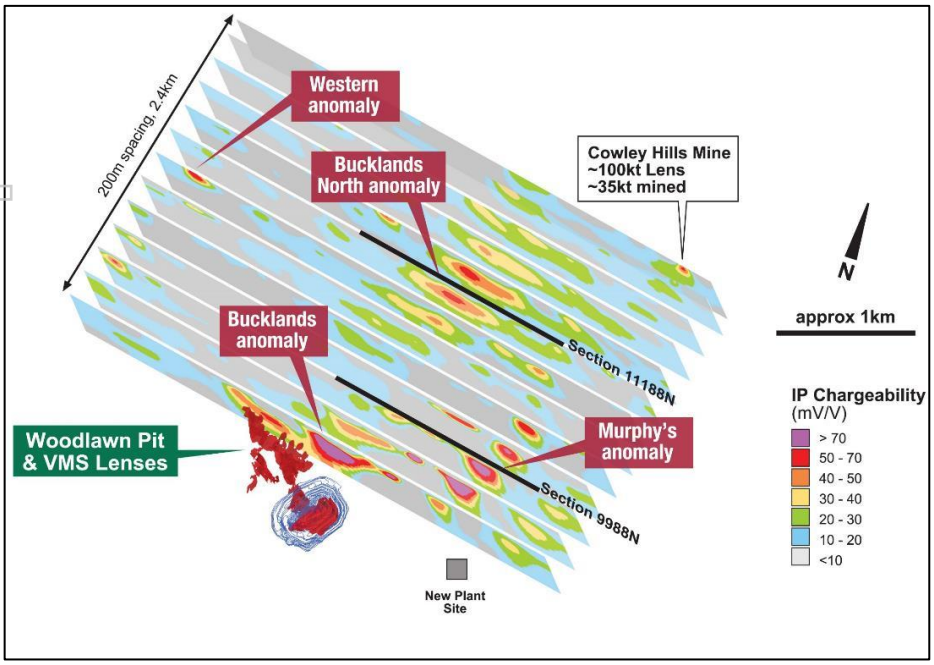


Figure 1: 2D slices through 3D IP geophysical model showing chargeability responses in the area surveyed. The Woodlawn open pit and VMS lenses are shown to scale; and position relative to the plant site.

The data was collected on 2D lines and then modelled in 3D to provide the slices shown in Figure 1. The survey recorded chargeability, conductivity and magneto telluric data. Electrical noise (interference) levels were low, providing the survey with good depth of penetration and signal resolution. The northern-most line covered the Cowley Hills VMS deposit (35kt of massive sulphides mined in the 1990s) and showed a relatively weak response, which provides a guide for the other responses detected in the current survey.

The two main IP anomalies at the Murphy's and Bucklands North prospects have been selected for immediate drill follow-up. The anomalies at Bucklands (directly north-west of the Woodlawn pit) and the Western prospect also warrant follow-up drilling but have been prioritised below the two initial anomalies.

The anomaly at the Murphy's prospect is a strong coincident chargeability and conductivity anomaly extending down 600-800 m below the surface (Figures 2 and 3) and covering a strike extent of some 600 m. Murphy's has a strong surface geochemical anomaly and shallow drilling here in the 1980s and 1990s intersected broad zones of relatively weak zinc, lead and copper mineralisation within a mixed sequence of hydrothermally altered Woodlawn Volcanics and De Drack Formation volcaniclastic and sedimentary package. The IP results indicate the mineralisation may continue and potentially get stronger at depth. A proposed 780 m deep drill hole is being planned to provide an initial test of this anomaly (Figures 2 & 3).

Figure 2: Cross section looking north through the Murphy's prospect showing charegability response and proposed drill hole.

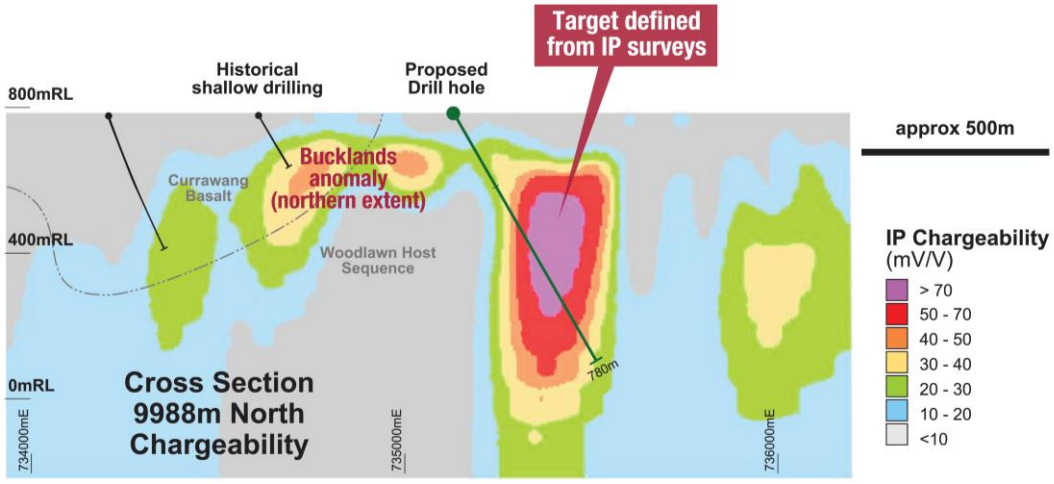
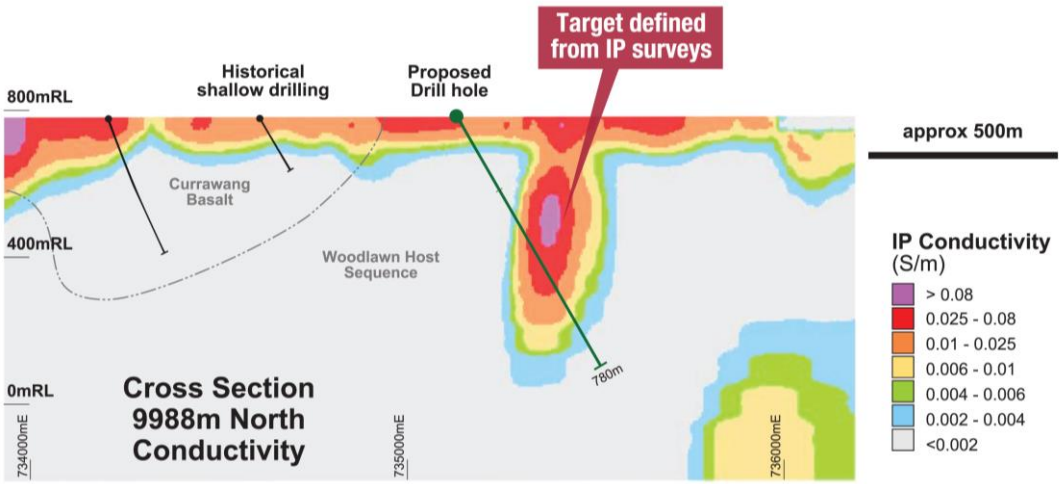


Figure 3: Cross section looking north through the Murphy's prospect showing conductivity response and proposed drill hole.



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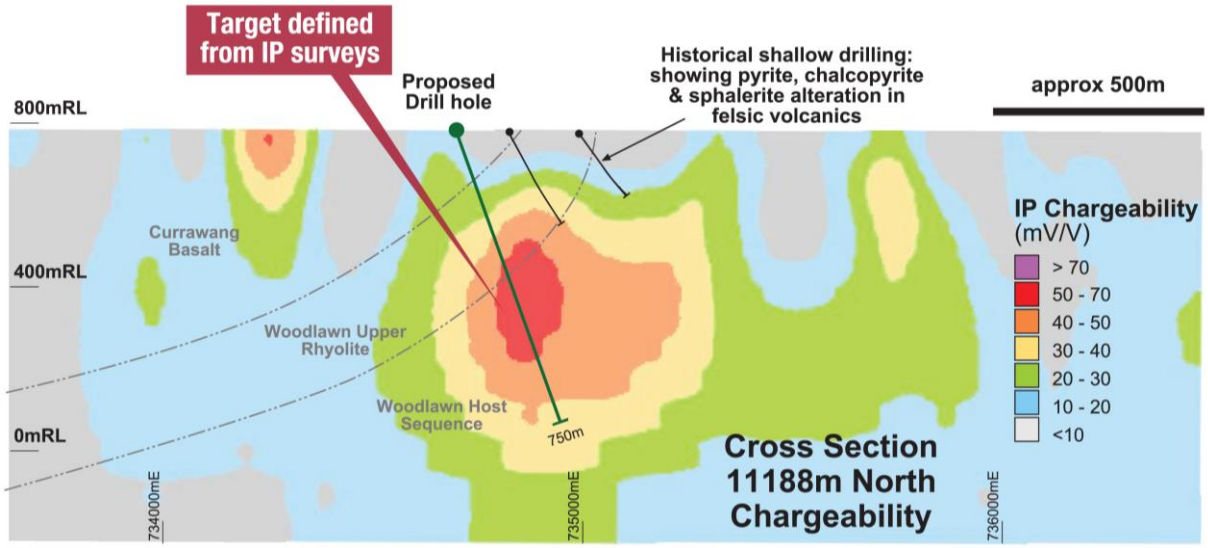
At the Bucklands North prospect a large, strong chargeability anomaly has been identified over some 600 m of strike (Figure 4). This chargeability anomaly is deeper and larger than the Murphy's target and may reflect a broad zone of disseminated sulphides surrounding a sulphide lens at depth. Weak base-metal sulphide mineralisation was returned from shallow drilling undertaken in the 1990s and indicates the possibility of a distal alteration halo surrounding a VMS system. The absence of a coincident conductivity anomaly in this area does not diminish the targets prospectivity: Woodlawn-style ore bodies produce relatively narrow conductivity anomalies compared to chargeability because the conductivity responds to small, narrow massive sulphide 'core' only, while the chargeability maps the volumetrically much larger disseminated sulphide halo. Therefore, it can be expected that a deep orebody may only be visible in the chargeability data and not in the conductivity data. A proposed 750 m deep drill hole has been planned to provide an initial test of this anomaly (Figure 4).

Figure 4: Cross section looking north through the Bucklands North prospect showing charegability response and proposed drill hole.



The drill program is in the final stages of planning with drilling expected to commence in the next few weeks.

About Heron Resources Limited (ASX:HRR)

Heron Resources Limited is engaged in the exploration and development of base and precious metal deposits in Australia. Heron's primary focus is on its 100% owned, high grade Woodlawn Zinc-Copper Project located 250km southwest of Sydney, New South Wales, Australia – one of the few new zinc projects that is fully-funded to production. Production of base metal concentrates is due to commence imminently and this places the Company on track to participate in the pricing environment supported by a strong zinc physical market. In addition, the Company holds a number of significant high quality, base and precious metal tenements regional to the Woodlawn Project.

To learn more, 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 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. Mr. von Perger has approved the technical disclosure in the news release.

JORC 2012 Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.*	• The Exploration Results relate to an Induced Polarisation (IP) geophysical program. • Resistivity, chargeability and magneto-telluric data was collected at each point along the line. A 65 channel MIMDAS system was used for the resistivity and chargeability acquisition. Magneto-tellurics were collected using EMI BF-4 Magnetometers. • The IP survey was undertaken a geophysical contractor: Geophysical Resources and Services Pty Ltd (GRS), a reputable geophysical contractor specialising in IP surveys in Australia. • The IP program, was conducted over an area of 2.4km x 4.0km (refer Figure 1 in body of report). East-west (approximate orientation) lines were spaced at a nominal 400m, with some infill lines to 200m in the south of the survey area. • Data along the lines was collected every 100m.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details.*	• The Exploration Results relate to an IP geophysical program and no drilling was undertaken.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• The Exploration Results relate to an IP geophysical program and no drill sampling was undertaken.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• The Exploration Results relate to an IP geophysical program and no drilling or logging was undertaken.
Sub-sampling techniques and sample preparation	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• The Exploration Results relate to an IP geophysical program and no sub-sampling was undertaken.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The Exploration Results relate to an IP geophysical program and no sampling for assaying was undertaken.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *Documentation of primary data, data entry procedures, data verification, data storage*	• The Exploration Results relate to an IP geophysical program and no sampling for assaying was undertaken.

Criteria	JORC Code explanation	Commentary
	(physical and electronic) protocols. • *Discuss any adjustment to assay data.*	
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Survey control for the program consisted of hand-help GPS receiver that have an accuracy of approximately 5m. Given the survey spacings (nominal 400m x 100m) this accuracy is considered sufficient.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• This IP program, was conducted over an area of 2.4km x 4.0km (refer Figure 1 in body of report). East-west (approximate orientation) lines were spaced at a nominal 400m, with some infill lines to 200m in the south of the survey area. • Data along the lines was collected every 100m. • The survey line in the far south of the area was non-linear to traverse around mine infrastructure such as evaporation dams. • The survey spacing was considered sufficient to provide the IP data coverage required to generate drill target anomalies during this early stage of exploration.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The IP survey lines were orientated roughly perpendicular to the strike of the geology units so as to provide optimum geophysical responses.
Sample security	• *The measures taken to ensure sample security.*	• No specific measures for data security were undertaken due to the nature of the geophysical survey that was being undertaken. The data was downloaded and provided to the Company from GRS on a semi-daily basis.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The IP survey results were reviewed by the Company's independent senior geophysicist employed through Mitre Geophysics Pty Ltd.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Woodlawn project is located 250km south-west of Sydney in the state of New South Wales. The area is on 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 the Company through the granted, special (Crown and Private Land) mining lease 20 (SML20). The lease has been renewed to the 16 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 mining and processing activities. A cooperation agreement is also in place between Veolia and the

Criteria	JORC Code explanation	Commentary
		Company that covers drilling and other exploration activities in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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 by Rio Tinto Ltd (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 studies on a tailings re-treatment process and further underground operations. Heron took 100% ownership of the project in August 2014 following the merger of the two companies and is currently (May 2019) commissioning the processing plant to begin production.
Geology	• *Deposit type, geological setting and style of mineralization.*	• The Woodlawn deposit comprises volcanogenic massive sulphide 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.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*	• The Exploration Results relate to an IP geophysical program and no drilling was undertaken.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• The Exploration Results relate to an IP geophysical program and no drilling or sampling was undertaken.
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	• The Exploration Results relate to an IP geophysical program and no drilling or sampling was undertaken.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figure 1-4 in the body of the report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable,*	• The reporting is considered to be balanced and all relevant results have been disclosed for this current phase of

Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Results.	exploration.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The Exploration Results in this release relate to an IP geophysical program that was recently completed directly north of the Woodlawn mine site. • The 2D field data was converted to 3D data and then sliced to produce the cross sections shown in Figures 1-4 in the body of this report. This work was undertaken by GRS who possess the proprietary geophysical computer software to model the raw IP data in this way. • As described in the body of the report a number of significant anomalies were recorded in the IP data. Please refer to the body of the report for a description of these anomalies.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• A drilling program is being planned to drill test the two highest priority IP anomalies in the coming weeks subject to regulatory approvals and drilling rig availability.