



Heron Resources Limited

ASX Release

23 June 2014

Exploration Update – Western Australia

Heron Resources Limited (ASX: HRR) is pleased to provide an update on the results of current exploration being carried out at its wholly owned Bedonia Nickel-Copper-Gold Project in the transitional Albany Fraser Province of Western Australia .

- Soil auger follow-up sampling at the Mordicus Prospect has returned strong nickel-copper-PGM anomalies on the margins of the Jimberlana Dyke.
- Soil auger sampling at the Beaker Prospect has returned a strong coherent nickel-copper anomaly on the northern margin of an Archaean ultramafic unit, possibly related to basal contact nickel sulphide mineralization.
- Reconnaissance sampling over “bulls-eye” style magnetic anomalies at the Waldorf Prospect has returned encouraging nickel and copper results.
- Follow-up soil auger sampling is planned to better define anomalies prior to potential EM surveying and drill testing

ASX:HRR

Issued Shares	253M
Share Price	\$0.11
Market Cap	\$27.8M
Cash (Mar 2014)	\$33.6M
Investments	\$ 6.4M
Total C+I	\$40.0M

Bedonia Nickel-Copper Project (Heron 100%)

The Company’s Bedonia Project covers some 1,500 km² (combination of pending and granted Exploration Licences) and is located 75km east of Norseman, Western Australia. The project is some 60km west of the Nova-Bollinger nickel-copper deposit (owned by Sirius Resources NL), and straddles the Archaean - Proterozoic boundary along the northern margin of the Albany-Fraser Mobile Zone.

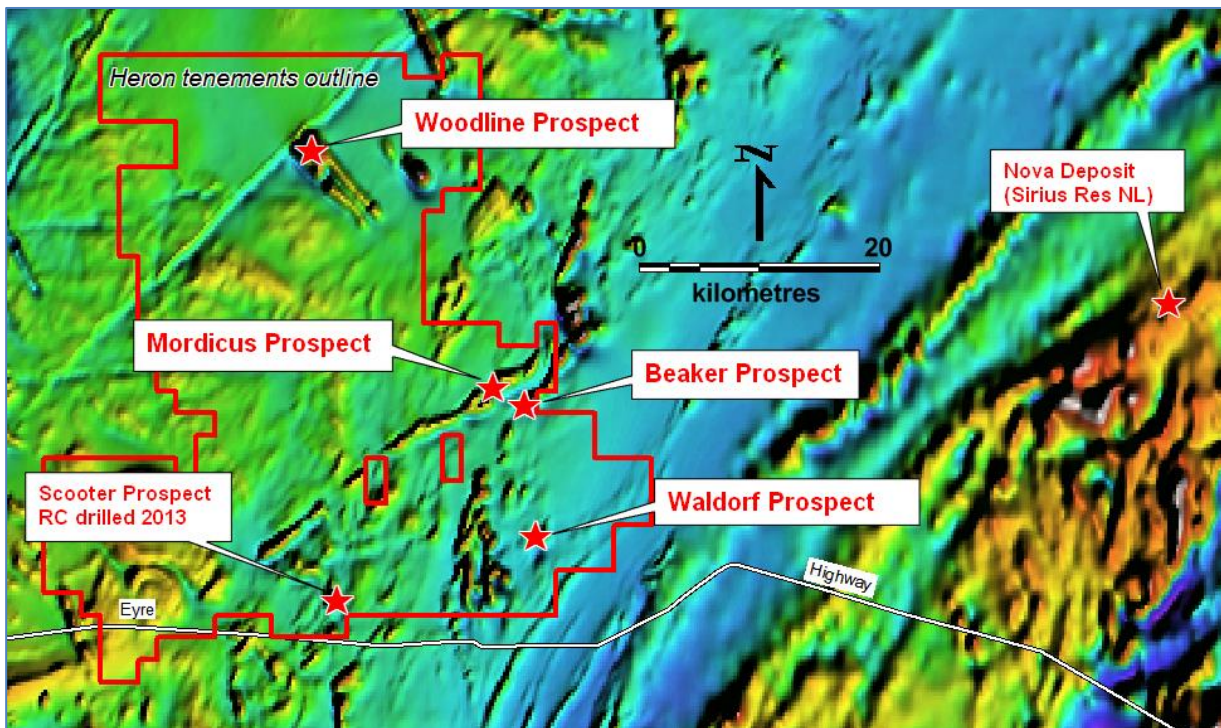
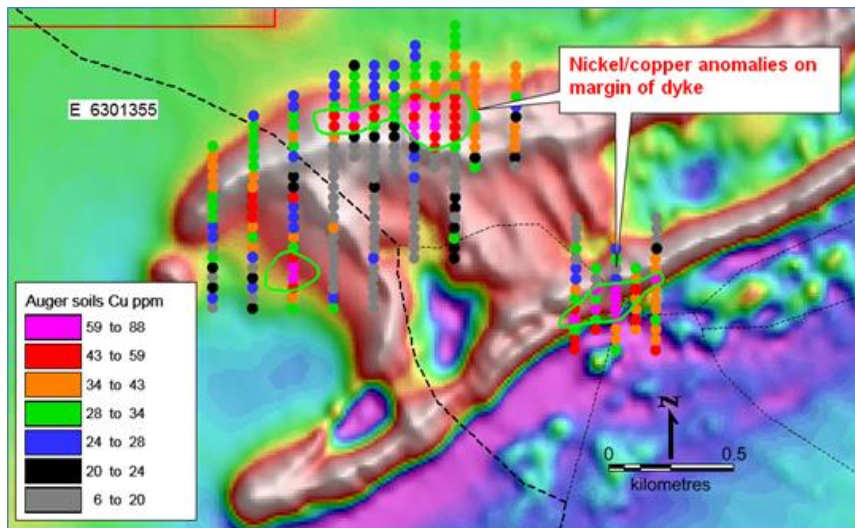


Figure 1 Tenement and Prospect Location map on regional scale aeromagnetic image



Mordicus Prospect

The Mordicus Prospect is located on the Proterozoic Jimberlana Dyke and is considered prospective for intrusive-related nickel-copper sulphide mineralization associated with feeder conduits for the Dyke (similar setting to nickel-copper-PGM mineralization within the Great Dyke in Zimbabwe).



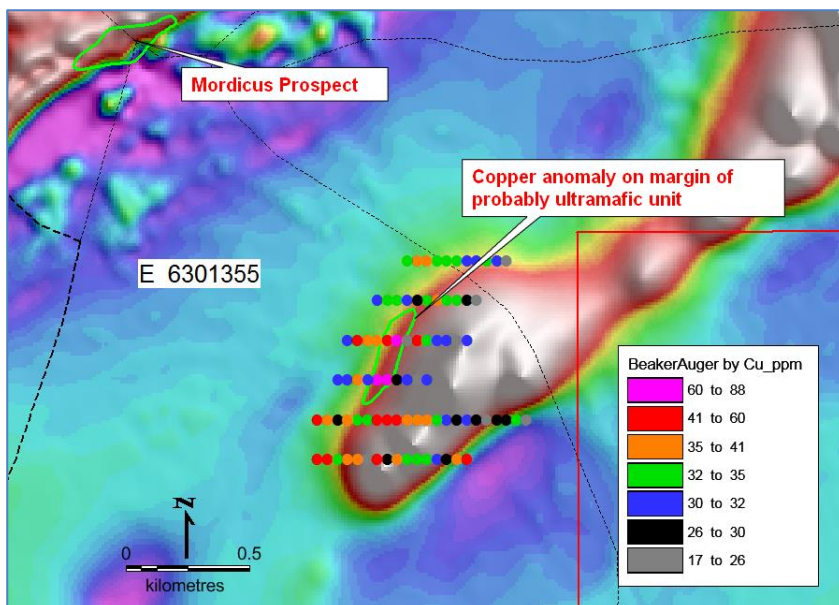
Sampling by previous explorers identified strong nickel and PGM anomalism along the Dyke which Heron has followed up with infill soil auger sampling. The infill sampling has confirmed the presence of nickel and copper anomalism in two separate locations being the north and south margins of the Dyke. The southern anomaly is of greater interest, having a coincident platinum and palladium anomaly up to 125ppb (combined Pt+Pd).

The mapped auger anomalies closely follow the basal more ultramafic layer of the Jimberlana lopolith intrusive. Copper anomalism within an ultramafic lithology is particularly significant.

Figure 2 Mordicus Prospect on aeromagnetic image showing location of the nickel-copper anomalies on the margin of the Proterozoic Jimberlana Dyke

Beaker Prospect

The Beaker Prospect is located on a probable Archaean ultramafic unit directly to the south-east of the Mordicus Prospect (Figure 3).



Heron auger sampling returned a discrete copper anomaly to 88ppm with nickel to 111ppm. Directly to the north-east of this anomaly the nickel results are stronger (up to 636ppm), but given the broad spaced sampling pattern (160m x 40m) there is scope for discrete nickel sulphide mineralization along this margin. The anomalous area is largely under a thin (1-10m) cover of transported colluvial and alluvial sediments which will dilute the soil geochemical response and so these results are considered particularly significant.

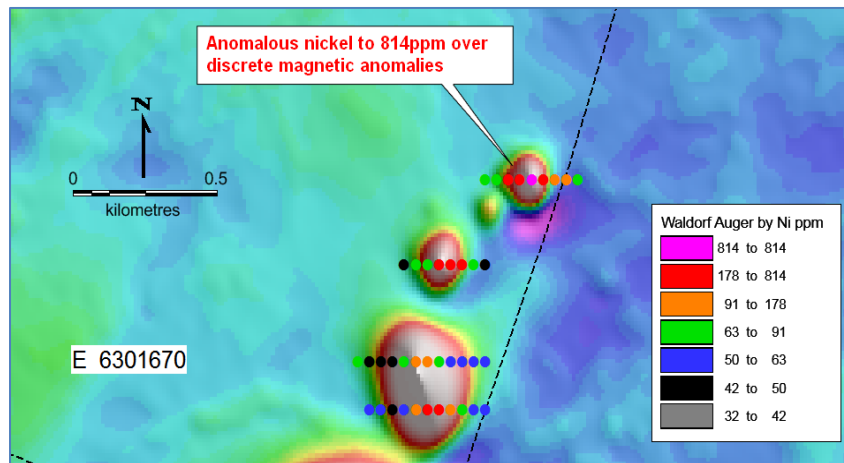
Further work is required to map out the anomaly in more detail prior to possible EM surveying and drill testing.

Figure 3 Beaker Prospect tenement outline on aeromagnetic image showing location of the copper anomalies on the northern margin of possible Archaean ultramafic unit.



Waldorf Prospect

The Waldorf Prospect is a series of discrete magnetic highs evident in the detailed open-file aeromagnetic data.



The prospect is located in a broad flexure with the Archaean-Proterozoic boundary which is a favourable structure for potentially mineralized intrusive pipes.

Reconnaissance sampling over the magnetic highs returned strongly anomalous nickel levels to 814ppm (Figure 4).

A copper anomaly (to 70 ppm) is associated with the magnetic anomalies but tends to be slightly off-set from the nickel peaks being towards the margins of the potential pipes.

Figure 4 Waldorf Prospect aeromagnetic image showing location of the nickel anomalies over discrete magnetic highs

There is also a larger magnetic anomaly directly to the south of these anomalies that did not have an associated nickel or copper anomaly. The samples from this prospect are also being re-analysed to check the potential for a carbonatite or kimberlite association for these magnetic anomalies, the exploration targets being Rare Earth Elements or diamonds respectively.

Woodline Prospect

The Woodline Prospect is located in the north-west corner of the Bedonia Project (Figure 1) and covers a magnetic anomaly that probably represents a Banded Iron Formation (BIF) within the Archaean bedrock. A large database of open-file auger geochemistry has been compiled for the area and reveals a number of subtle gold anomalies on broad spaced lines. Some check sampling has been completed by Heron and has confirmed the presence of anomalies.

Further field work is warranted to determine the depth of transported regolith in the area and thus determine if these subtle gold anomalies are potentially related to bedrock gold mineralization. The attraction of this target is the large scale of the folded BIF sequence and the fact it has received little or no systematic exploration in the past.

Strategy

The exploration program at Bedonia is in keeping with Heron's strategy to pursue worthwhile drill exploration targets generated in-house on 100% owned tenure. In particular, the nickel sulphide targets being pursued at Bedonia provide an opportunity to add significant value to the Company.

Ian Buchhorn

Managing Director

The information in this report that relates to Exploration is based on information compiled by David von Perger who is a Member of the Australasian Institute of Mining and Metallurgy. David von Perger is a full time employee of Heron Resources Limited. David von Perger has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration, and to the exploration activity that is being undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". David von Perger has consented to the inclusion in this report of the matters based on his information in the form and context that it appears.



Bedonia Nickel-Copper-Gold Project

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples were taken from shallow (0.5-1.5m) auger holes (2 inch diameter) and placed directly into brown paper sample packets (approximately 0.25kg per sample). Calcrete rich material was generally preferentially sampled and this was determined through applying dilute hydrochloric acid to the augered material and where the reaction was strongest indicated the most calcrete rich material. One quality control sample (alternating between assay standards, blank assay material and field duplicates) was inserted on a nominal 20 sample basis.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details. 	<ul style="list-style-type: none"> No drilling was undertaken.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> No drilling was undertaken.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The auger holes were briefly logged by the field technician who recorded things like type of soil, depth of holes and any special features like high calcrete or iron contents.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> The auger samples were delivered to the assay laboratory where they were weighed, dried and reconciled against the company submission sheet. All samples were then pulverised in a ring pulveriser (LM5) to a nominal 90% passing 75 micron. An approximately 250g pulp sub-sample is taken from the large sample and residual material stored. A quartz flush is put through the LM5 pulveriser prior to each new batch of samples.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample preparation and assaying was conducted through Bureau Veritas Laboratories, Canningvale, WA. Following sample preparation, a sub-sample of 40g is taken from eth sample pulp and digested with an aqua-regia acid. Gold is determined ICP-MS with lower detection limit of 1ppb. 13 other elements are also read from the same digest liquor using ICP-AES and ICP-MS techniques. Laboratory quality control standards (blanks, standards and repeats) inserted on a standard per



Criteria	JORC Code explanation	Commentary
		<p>cycle basis.</p> <ul style="list-style-type: none"> The aqua-regia digest will not give a complete digestion of all elements and is considered a partial digestion method for elements other than gold. This is considered appropriate for soil geochemistry where the relative level of the elements rather the absolute level is what is important in defining anomalies.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> An internal review of results was undertaken by company personnel. No independent verification was undertaken at this stage. All field and laboratory data has been entered into an industry standard database using a contract database administrator (DBA) in the Company's Perth office. Validation of both the field and laboratory data is undertaken prior to final acceptance and reporting of the data. Quality control samples from both the Company and the Laboratory are assessed by the DBA and reported to the Company geologists for verification. All assay data must pass this data verification and quality control process before being reported.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All sample points located with handheld GPS, with accuracy of about 5m. This is considered appropriate at this early stage of exploration.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Auger sampling was undertaken on spacing of 40m along the sample lines and combination of 80m, 160m or 320m between the lines. No compositing of the samples was undertaken. Sample spacing was appropriate for the early stage of exploration.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	<ul style="list-style-type: none"> Sampling orientation was appropriate for the early stage of exploration.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were secured in green plastic bags and transported to the laboratory by company personnel. Beyond this there were no specific security measures.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews were undertaken due to the early stage of exploration.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The auger sampling at the Mordicus and Beaker Prospects was undertaken on granted exploration licence E63/1355 (Bedonia) which is 100% owned by Heron and in good standing. The Waldorf and Woodline Prospects are on 100% Heron owned Exploration Licence applications. There are no known impediments for the eventual grant of these licences. The project area land is on vacant crown land which is covered by a proposed nature reserve that will require more rigorous environmental conditions but is not expected to significantly impede exploration or potential mining. There are no known specific environmental or heritage impediments for the current phase of exploration.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The project area has been explored most recently in the past by AngloGold Ashanti Australia Ltd and Sipa Resources Ltd. Both companies generated significant open-file exploration data including; extensive auger geochemical databases, aeromagnetic surveys, RAB drilling data and compilations of other open-file data. This data has been critical in the evaluation of the various prospects.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralization. 	<ul style="list-style-type: none"> The eastern prospects are being explored for nickel sulphide mineralisation associated with a variety of models. These include 1) mineralisation associated with the Jimberlana Dyke in a similar setting the Great Dyke mineralisation in Zimbabwe; 2) Komatiite hosted nickel sulphide mineralisation of the Kambalda style associated with the basal contact of ultramafic flows and 3) nickel mineralisation associated within discrete mafic to ultramafic magmatic lava pipes found in gneissic terrain (eg Nebo Babel type). At the Woodline Prospect we are seeking Archaean gold mineralisation associated with a fold BIF sequence.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth 	<ul style="list-style-type: none"> No drilling was undertaken.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ hole length. ● If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Only relevant elements are reported in this release, however, a suite of 14 elements in total were assayed for.
Relationship between mineralization widths and intercept lengths	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● There are no mineralised intercepts to report.
Diagrams	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Maps relevant for current phase of exploration are included in the release.
Balanced reporting	<ul style="list-style-type: none"> ● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> ● The reporting is considered to be balanced and all relevant results have been disclosed for this current phase of exploration.
Other substantive exploration data	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Processed, open-file, aeromagnetic data has been used to delimit the extents of the ultramafic units as described in the release.
Further work	<ul style="list-style-type: none"> ● The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	<ul style="list-style-type: none"> ● The nickel sulphide targets in the east of the Bedonia project will be followed-up with further in-fill auger soil sampling. ● If results from this follow-up sampling provide further encouragement then EM surveys and/or possible reconnaissance drill programs would be warranted to test for mineralised zones at depth.