



# Heron Resources Limited

## JORC-compliance statement

### JORC Code, 2012 Edition – Table 1

#### 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"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Rockchip samples (Sussex and Kamandra) comprised taking small fragments of rocks from various locations in an approximately 10m radius of the sample point to provide a semi-representative sample of the material present. In the case of the channel samples taking small fragments of rock along a 1m interval.</li> <li>Soil samples (Kamandra) were taken by scraping off organic material and digging down about 10cm into the soils. The material was then screened at 2mm and the undersize collected in numbered calico bags.</li> <li>Soil Auger samples (Sussex) were taken from the end of hole auger spoils (holes are between 1 and 4m depth) which are sieved to -2mm and placed in a sample geo-chemistry packet. Each sample is approximately 500grams of material.</li> <li>RAB samples (Sussex) were taken from drill spoils. All drill spoils were collected in the rig mounted cyclone using manual choke to separate intervals of 1 meter length. Spoils were placed on the ground in separate 1m piles. Samples were taken as 4m scoop composite samples. Samples were collected from the 1m spoils piles on an equal volume basis to approximately 3kg of total sample size per numbered calico bag.</li> <li>Both rockchip and soil samples weighed approximately 1kg (Kamandra and Sussex).</li> <li>One quality control sample (alternating between assay standards, blank assay material and field duplicates) are inserted on a nominal each 10 sample basis. Multi element standards were used for all multi element assays.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RAB drilling was performed by a 200cfm truck mounted rotary air blast rig with cyclone recovery.</li> <li>A blade bit was used for all drilling</li> <li>All holes were drilled to blade refusal, or fresh rock, in the case of softer lithologies.</li> <li>All holes were drilled under geological control.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>In the RAB drilling, sample condition and recovery were noted during sampling.</li> <li>A geologist supervised the drilling of all holes in the program.</li> <li>There were no significant issues with either sample recovery or sample condition in the Sussex drilling program.</li> <li>Ground conditions were excellent for the drilling</li> </ul>

Criteria	JORC Code explanation	Commentary
		method employed.
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>A brief description of each rockchip sample was recorded at the time of sampling and transferred to the database.</li> <li>End of hole soil auger samples were collected in geochemical chip trays for each auger sample. These were examined by a geologist.</li> <li>All RAB holes were geologically logged at the time they were drilled by the supervising geologist using the Heron Percussion Drilling Geological Legend. End of hole rock chips were collected for each hole and stored in chip trays for future reference.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>All samples weighed, dried and reconciled against company submission.</li> <li>Rock chip samples jaw crusher to nominal 70% passing -6mm.</li> <li>All samples pulverised in a ring pulveriser (LM5) to a nominal 85% passing 75 micron.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample preparation and assaying was conducted through ALS Laboratories, Orange, NSW.</li> <li>Gold determined by 30g fire assay fusion with ICP-AES analysis to 1ppb LLD.</li> <li>Other elements determined by aqua-regia digestion followed by ICP-AES analysis. This may not provide a full digestion/analysis of certain elements.</li> <li>Potential iron-ore material (Kamandra) was analysed for a typical iron-ore suite by fused disk XRF. This is considered total analysis of the sample.</li> <li>Laboratory quality control standards (blanks, standards and duplicates) are inserted at a rate of 5 per 35 samples for ICP work and 5 per 43 for XRF work.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of results was undertaken by company personnel. No independent verification undertaken at this stage.</li> <li>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.</li> <li>Quality control samples from both the Company and the Laboratory are assessed by the DBA and reported to Company geologist's for verification. All assay data must pass this data verification</li> </ul>

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		and quality control process before being reported.
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• All sample points located with handheld GPS, with accuracy of about 5m. This is considered appropriate at this early stage of exploration.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• At Kamandra rock chip samples were taken between 10 and 100m apart along the strike of the outcropping ironstone.</li> <li>• At Kamandra Soils samples were taken along E-W lines across the strike of the ironstone at 20m interval along lines spaced between 260m and 420m.</li> <li>• Soil Auger Samples (Sussex) were taken on an 80x1200-800m grid.</li> <li>• RAB drilling (Sussex) was performed on a 320x1500m grid with infill holes as selected by the geologist down to 80x160m spacing. All holes were vertical and composite sampled on 4m intervals.</li> <li>• Sampling and compositing was appropriate for the early stage of exploration</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Sampling orientation was appropriate for the early stage of exploration</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were secured in green plastic bags and transported via a local courier service. Beyond this there were no specific security measures.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews were undertaken due to the early stage of exploration.</li> </ul>

## 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"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All work was undertaken on granted exploration licences EL5223, EL8057, EL8086 (Sussex) and EL8 EL8192 (Kamandra) all of which are 100% owned by Ochre Resources Pty Ltd, which in turn is a wholly owned subsidiary of Heron Resources Ltd.</li> <li>• The Kamandra and Sussex project areas land is privately held by local farmers who run sheep and cattle. Standard access and compensation agreements are being negotiated with land owners.</li> <li>• There are no known specific environmental or heritage impediments for the current phase of exploration.</li> </ul>
<i>Exploration done</i>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by</li> </ul>	<ul style="list-style-type: none"> <li>• The Kamandra project area was appraised for its</li> </ul>

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<i>by other parties</i>	<i>other parties.</i>	<p>iron-ore potential by Mt Hope Minerals NL in 1971. They conducted sampling of shallow costeans in the north of the area and analysed for Fe, Mn and Si. They concluded that iron-ore was not economic and conducted no further work. No appraisal of the copper potential has apparently been undertaken on the property.</p> <ul style="list-style-type: none"> <li>The Sussex project was explored by North Broken Hill explored the area for Cobar Style base metals using auger drilling 1978, identifying a number of anomalies, including North Pole. It was also explored for gold by BHP in 1985, using BLEG sampling with no success. In 2007 Independence Group explored for base metals. The Earl of Sussex base metal soil anomaly proved to be associated with an altered mafic dyke when tested with RC drilling.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Kamandra ironstone is located within the Ordovician, Hoskin's Chert Member of the Kirribili Formation. The Hoskin's Chert Member contains a number of related manganese occurrences to the south of the Kamandra project area.</li> <li>Further details and photos of the Kamandra ironstone unit are provided in the release.</li> <li>The Sussex project is located in the Ordovician rocks of the Girilambone Group. Recent mapping by the NSW geological service indicates that there is a potential unconformity within the tenements with a synclinal keel of Devonian rocks, including the North Pole prospect which may be analogous to the Cobar supergroup. Heron is looking for deposits typical of the Cobar group, including base metals, and gold deposits associated with major basin faults and dilatational structural jogs.</li> <li>Regional scale mapping by the geological survey of NSW is being used to provide the regional geological framework for both projects.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>At Sussex, RAB drilling has confirmed the presence of a number of low order base metal and gold anomalies below transported cover. One gold anomaly was also detected within transported sediments.</li> <li>Given the wide spacing of the first pass drilling, further drilling will be required to map out the dimensions and significance of these anomalies.</li> <li>Drilling also confirmed that the coincident gravity and magnetic anomaly at Sussex is related to a mafic intrusive body which does not outcrop. This unit explains some of the low level soil anomalism encountered in the soil auger program.</li> <li>A separate drill table is provided for significant assays only.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>Table of results for individual rock-chip samples is provide in Table 1 of the release. Simple average levels of the various elements are also provided.</li> </ul>

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	<p>stated.</p> <ul style="list-style-type: none"> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Only relevant elements are reported here. However a much larger suite of elements were assayed for.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>At Kamandra, actual width of ironstone is estimated from outcrop information, but a more reliable estimate of width would only be obtained through drilling.</li> <li>At Sussex, given the early stage of the exploration, no inference can be given about the relationship between widths and drill hole orientation. Further drilling will be required.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Maps relevant for current phase of exploration are included in the release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All iron-stone rock chip results are reported in Table 1 of the release.</li> <li>Indicative non-anomalous holes for each rock type are included in the RAB results table for the Sussex Project.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Processed, open-file, aeromagnetic data has been used to delimit the extents of the ironstone unit as described in the release at Kamandra.</li> <li>Further work is required to develop the targets identified at Sussex to date.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The proposed forward work program at Kamandra is described in the release and is planned to comprise a program of RC drilling to test the ironstone at depth.</li> <li>At Sussex the forward program is still being developed. An ongoing soil auger program is continuing at the Dilgies Target. It is envisaged that follow up RAB drilling of the remaining existing targets is warranted to define the size and tenor of the targets. Pending the results of these programs some targets are likely to be tested with ground based geophysical methods and/or RC drilling.</li> </ul>