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ASX Release

Heron Resources Limited

18 October 2013

KALGOORLIE NICKEL PROJECT UPDATED MINERAL RESOURCE ESTIMATE

SUMMARY

- **The total combined nickel laterite resource base of the Kalgoorlie Nickel Project (KNP) is updated to an estimate of 795.6 million tonnes grading approximately 0.70% nickel and 0.048% cobalt (approximately 5.6 million tonnes of contained nickel metal, 0.38 million tonnes of contained cobalt metal)**
- **The reporting methodology has been updated to reflect changes in the JORC 2012 reporting code**
- **These resources form the basis of ongoing metallurgical and mining studies, including the Simulus and Direct Nickel research projects, which aim to significantly reduce the capital and operating cost of processing KNP nickel laterite mineralisation**

Heron Resources Limited (ASX:HRR) (Heron) has completed updated mineral resource estimates for fifteen nickel laterite deposits covering the KNP including the Yerilla Region in the Eastern Goldfields of Western Australia. The Company's nickel laterite mineralisation is developed from the weathering and near surface enrichment of Achaean-aged olivine cumulate ultramafic units within an approximate 130 kilometre arc from northwest to east of Kalgoorlie, Western Australia (see Figure 1). Heron has 100% ownership over the majority of the nickel laterite tenements (minor exception is at Siberia), with full ownership details provided in the Heron 2013 Annual Report (refer 15 October 2013 ASX announcement). The total combined mineral resource base has been updated to an estimate of 795.6 million tonnes grading approximately 0.70% nickel and 0.048% cobalt (Table 1).

The estimates have been classified as Measured, Indicated and Inferred Mineral Resources in accordance with the JORC Code (JORC 2012) and supersedes the previously published JORC 2004 resource estimates for the Goongarrie South and Siberia North Prospects (2009), Highway and Goongarrie Hill Prospects (2009), Big Four Prospect (2009) and Yerilla Prospects (2008).

Heron reviewed and revised the previous resource estimates in light of the new JORC 2012 reporting code. Resources which were considered to be unlikely to be economic in the foreseeable future were removed from the reported resource inventory. All Mineral Resources were estimated, tabulated and reported using previously generated Ordinary Kriging (OK) block models and no additional drilling data was used in the updated models. Tenements held by Heron under application have been included in the resource statement. Heron does not foresee any reason why the conversion to granted mining tenure will not occur at a future date, and therefore includes the contained resources in the current resource inventory.

In order to further improve the transparency of the resource base estimates, the calculation method for resources has been revised from a combination of Uniform Conditioning (UC) and Ordinary Kriging (OK) estimates as reported in 2009, to the sole use of the Ordinary Kriging estimates for all deposits. The net effect of this change in reporting is to reduce the reported nickel grades by an average of 5% compared to the previously reported Uniform Conditioning estimates, while increasing the reported tonnage above cut-off grade (0.5% nickel) by approximately the same percentage for approximately the same total contained nickel content. Due to edge effects inherent in block modelling, there are some slight changes in allocation of resource classification between Indicated and Inferred categories for some of the deposits where the change in calculation method has taken place.

The resource revision was completed by applying the January 2010 KNP prefeasibility study economic model parameters to the KNP and Yerilla resources at a future nickel price of A$12.50 per pound nickel and accounting for open cut mining costs, processing costs, metallurgical recovery and royalties. It was considered that this approach to the reporting of resources likely to be economic in the future is reasonable, given the historic price range for nickel (since January 2007, the nickel price range has been approximately A$4.50 – 24.50 per pound).

Additionally, there is a likelihood of new technological developments in the processing of nickel laterite ores which will reduce operating costs. Heron is funding significant research projects designed to improve the profitability of processing the KNP nickel laterite resources (refer to various ASX announcements during 2013 regarding Simulus and Direct Nickel). If successful results are returned from this research, this will lead to a step change increase in the potential profitability of the KNP. The economic constraints applied to Heron's resources do not imply that any portion of the resource is currently economic and as a result, Heron is not reporting any Ore Reserves at this time.

The updated Mineral Resources based on Ordinary Kriging for both nickel and cobalt for each of the fifteen deposits is reported below in Table 1.

Table1 - Mineral Resource Estimates for Heron nickel laterite deposits (0.5% nickel cut-off grade)

Region	Prospect	Million Tonnes	Ni %	Co %	Resource Category	Estimation Method	Estimate Source	Study Period
Goongarrie	Goongarrie South*	5.8	1.08	0.105	Measured	Krige	Heron	Post PFS
	Goongarrie South*	54.2	0.79	0.066	Indicated	Krige	Heron	Post PFS
	Goongarrie South*	34.4	0.63	0.042	Inferred	Krige	Heron	Post PFS
	Highway	52.9	0.66	0.042	Indicated	Krige	Heron	Post PFS
	Highway	38.4	0.63	0.040	Inferred	Krige	Heron	Post PFS
	Ghost Rocks	24.8	0.67	0.047	Inferred	Krige	Snowden	Pre PFS
	Goongarrie Hill	53.6	0.60	0.037	Inferred	Krige	Heron	Post PFS
	Big Four	42.6	0.69	0.052	Indicated	Krige	Heron	Post PFS
	Big Four	12.4	0.54	0.054	Inferred	Krige	Heron	Post PFS
	Scotia	11.2	0.77	0.080	Inferred	Krige	Snowden	Pre PFS
	Sub-total	**330.3**	**0.68**	**0.049**				
Siberia	Siberia South	104.4	0.66	0.035	Inferred	Krige	Snowden	Pre PFS
	Siberia North	10.8	0.64	0.051	Indicated	Krige	Snowden	Post PFS
	Siberia North	60.0	0.66	0.040	Inferred	Krige	Snowden	Post PFS
	Black Range	20.1	0.75	0.103	Inferred	Krige	Snowden	Pre PFS
	Sub-total	**195.3**	**0.66**	**0.043**				
KNP West	**Total**	**525.6**	**0.67**	**0.047**				
Bulong	Taurus	14.2	0.83	0.051	Inferred	Krige	Snowden	Pre PFS
	East	15.9	0.89	0.046	Indicated	Krige	Snowden	Pre PFS
	East	24.3	0.78	0.053	Inferred	Krige	Snowden	Pre PFS
	Sub-total	**54.4**	**0.87**	**0.054**				
Hampton	Kalpini	75.4	0.73	0.044	Inferred	Krige	Snowden	Pre PFS
	Sub-total	**75.4**	**0.73**	**0.044**				
KNP East	**Total**	**129.8**	**0.79**	**0.048**				
Yerilla	Jump Up Dam‡	3.8	0.94	0.048	Measured	Krige	Snowden	PFS
	Jump Up Dam	41.7	0.79	0.044	Indicated	Krige	Snowden	PFS
	Jump Up Dam	18.5	0.64	0.035	Inferred	Krige	Snowden	PFS
	Boyce Creek	26.8	0.77	0.058	Inferred	Krige	Heron	PFS
	Aubils**	49.4	0.70	0.066	Inferred	Krige	Heron	PFS
KNP Yerilla	**Total**	**140.2**	**0.73**	**0.052**				
Company Total		**795.6**	**0.70**	**0.048**				

* Includes 33.4 million tonnes at 0.70% nickel and 0.040% cobalt located on a pending mining lease.

** Includes 49.4 million tonnes at 0.70% nickel and 0.066% cobalt located on a pending mining lease.

‡ Includes approximately 20,000 tonnes at 1.3% nickel and 0.050% cobalt in stockpiles from the 2008 trial pit.

Notes:

1. Tonnage (dry) and grade estimates have been rounded to reflect the estimation precision.
2. Economic parameters for the KNP are based on a Pre-feasibility Study completed by Vale Inco under farm-in arrangements between April 2005 and July 2009, and re-optimized by Heron between August 2009 and January 2010. The Vale Inco farm-in ended in July 2009 and Vale Inco has no retained rights in respect of the KNP tenements.
3. Economic parameters for Yerilla are based on a Pre-feasibility Study completed by Heron between June 2006 and April 2009, and re-optimized by Shanshan under joint venture between May 2009 and May 2011. The Shanshan joint venture expired in May 2011 and has been the subject of re-negotiation. Shanshan currently has no retained rights in respect of the Yerilla tenements.

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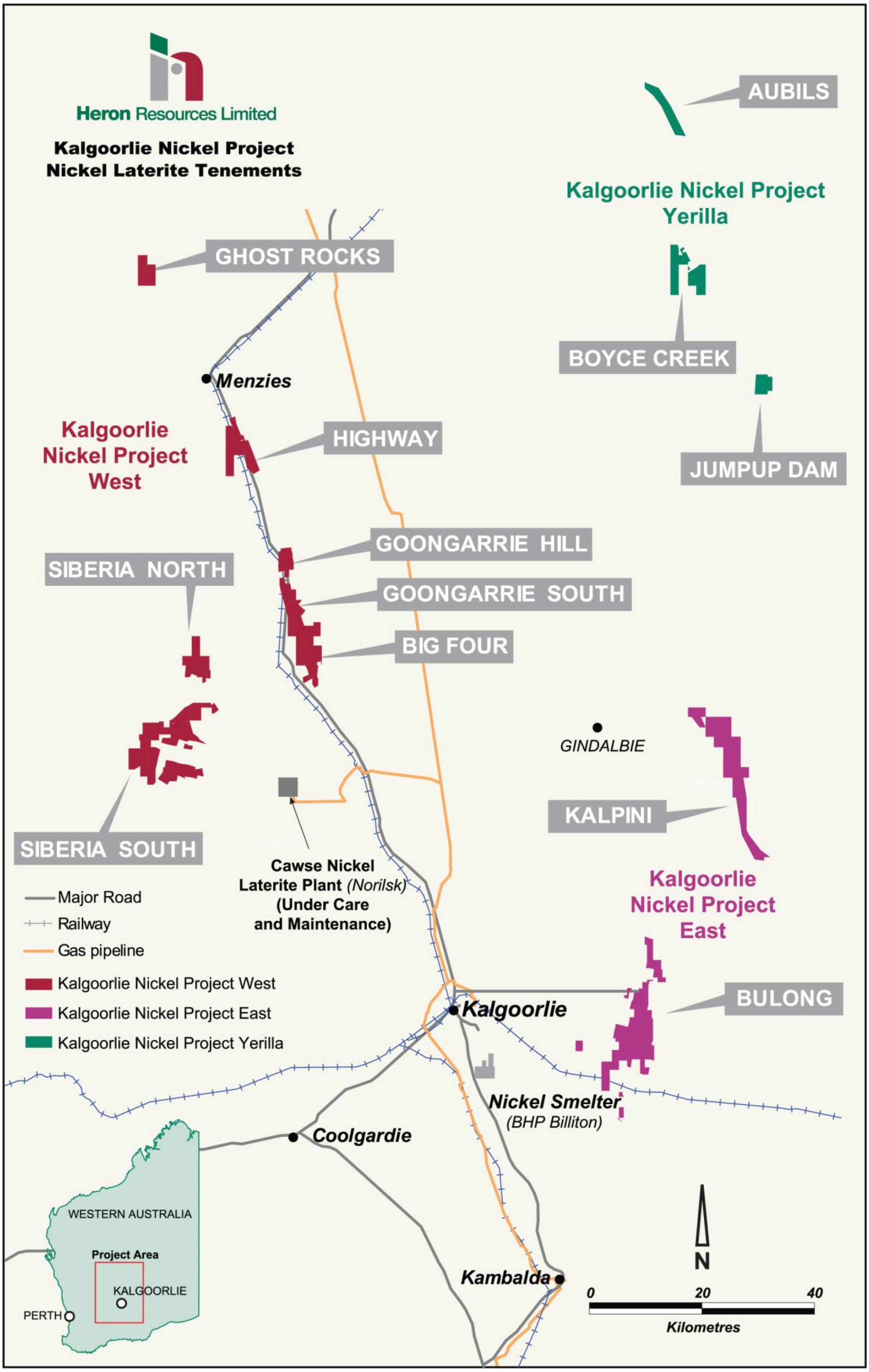
The information in this report that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled by a former Heron Resources Limited resource geologist and validated by Steve Jones in 2013. Both are Members of the Australasian Institute of Mining and Metallurgy. Steve Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is 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'. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience 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'. Steve Jones a full time employee of Heron Resources Limited validated the Snowden Mining Siberia North estimate in 2013. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to exploration and resource data (including drilling data, database quality, geological interpretation and density modelling) is based on information originally compiled by previous full time employees of Heron Resources Limited and Steve Jones. Steve Jones is currently a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activities undertaken 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'. Steve Jones has validated the original resource estimates during 2013. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

Figure1 - Mineral Resource Location Plan for Heron Resources Limited



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JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary

Sampling techniques
 	
Note: Due to the similarity of the deposit styles, procedures and estimations used this table represents the combined methods for all Heron (HRR) Nickel Laterite Resources. Where data not collected by HRR has been used in the resource calculations, variances in techniques are noted.
	• *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.*
	• *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.*
		• The nickel laterite resources were sampled by drilling using dominantly Reverse Circulation (RC) with occasional Diamond Drill (DD) on various grid spacing between 10x10 metre and 80x160 metre spacing. Holes were usually vertical (-90 degree dip), designed to optimally intersect the mineralisation. The majority of holes were sampled on 2 metre, or less commonly 1 metre down hole intervals.
		• RC holes form the majority of the samples used in the resource calculation.
		• DD holes were drilled for a combination of:
		  • twin testing of RC drilling;
		  • density determination;
		  • geotechnical logging and test work;
		  • geological logging (structural logging); and
		  • metallurgical test work.
		
		Where appropriate the results of diamond core sampling and assays were used in the resource calculation.
		
		• A number of bulk sample holes employing either Calweld (900 to 1200mm, large diameter well boring rig) or Sonic drilling techniques were also completed at Jump Up Dam, Goongarrie, Highway and Siberia Deposits. These holes were primarily for obtaining bulk samples for metallurgical studies and the assay results were not used in the resource calculation.
		• Bulong East resources were calculated using the database of Bulong Mining Pty Ltd (in Receivership). Techniques employed were broadly similar to those used by Heron.
		• Goongarrie Hill, Goongarrie South, Highway and Siberia Deposits were all partially explored by Vale between 2002 and 2007. Vale employed the same drilling and sampling techniques as Heron for these deposits.

Drilling techniques	• *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,*	• RC drilling was performed with a face sampling hammer (bit diameter between 4 1/2 and 5 1/4 inches) and samples were collected by either a cone (majority) or riffle splitter using 2 metre composites. Sample condition, sample recovery and sample size were recorded for all drill

Criteria	JORC Code explanation	Commentary
	whether core is oriented and if so, by what method, etc).	samples collected by HRR. • DD holes were drilled with HQ triple tube. All material of sufficient competence was oriented using spear or Easymark™ techniques. All diamond holes were logged for geotechnical, geological and density. Where appropriate (holes not drilled for metallurgical purposes), holes were whole core sampled to geological boundaries (approximately 1 metre) and assayed. • Calweld samples (not used in resource model but used for metallurgical testing) were collected in bulka bags on 1 metre down hole intervals. • Sonic drill samples were collected as whole core samples, 6 inches diameter of up to 1 metre lengths in sealed clear plastic wrap. Sonic core of longer lengths was split as it was retrieved from the drill string to facilitate handling of the heavy samples.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• RC chip sample recovery was recorded by visual estimation of the reject sample, expressed as a percentage recovery. Overall estimated recovery was approximately 80%, which is considered to be acceptable for nickel laterite deposits. RC Chip sample condition recorded using a three code system, D=Dry, M=Moist, W=Wet. DD Core recovery was recorded during logging. A small proportion of samples were moist or wet (11.5%), with the majority of these being associated with soft goethite clays, where water injection has been used to improve drill recovery. • Measures taken to ensure maximum RC sample recoveries included maintaining a clean cyclone and drilling equipment, using water injection at times of reduced air circulation, as well as regular communication with the drillers and slowing drill advance rates when variable to poor ground conditions are encountered. • For diamond drilling, drill runs were reduced to as little as 0.5 metre in poor ground conditions to maximise core recovery. Core recovery was excellent being over 90% for all deposits. • Recovery from Sonic drilling was excellent with very good recoveries experienced in soft goethite clays where water injection was required in RC to facilitate acceptable recoveries. • In Calweld drilling, drill bit diameter was changed to account for ground hardness to maximise sample recovery and bore hole penetration. A specialized shoot was constructed to maximise the recovery from the drill head. Samples were stored in bulka bags to prevent contamination or sample loss. • A number of twin holes using both DD and RC methods were drilled to confirm that the RC sampling was repeatable and therefore representative and without significant bias. These twin holes included areas where wet ground conditions were experienced during RC drilling. No statistically significant bias was recorded in the results.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• For RC drilling, visual geological logging was completed for all RC drilling on 1 metre intervals. The logging system was developed by Heron specifically for the KNP and was designed to facilitate future geo-metallurgical studies. Logging was performed at the time of drilling, and planned drill hole target lengths adjusted by the geologist during drilling. The geologist also oversaw all sampling and drilling practices. A mixture of Heron employees and contract

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	geologists supervised all drilling. A small selection of representative chips were also collected for every 1 metre interval and stored in chip-trays for future reference. Only drilling contractors with previous nickel laterite experience and suitable rigs were used. • For DD holes, both visual geological and geotechnical logging were performed on all drill core. Core was also selectively sampled for both geological and metallurgical test work. • Calweld and Sonic holes were visually geologically logged prior to being sampled for metallurgical test work. • The geological legend used by Heron is a qualitative legend designed to capture the key physical and metallurgical features of the Nickel laterite mineralisation. Logging captured the colour, regolith unit and mineralisation style, often accompanied by the logging of protolith, estimated percentage of free silica, texture, grain size and alteration. Logging correlated well with the geochemical algorithm developed by Heron for the Yerilla Nickel Project for material type prediction from multi-element assay data. • Drilling conducted by Vale at Highway, Goongarrie and Siberia was logged in similar detail to Heron's procedures, but used a slightly modified geological legend. There is a direct translation between the Vale and Heron logging legends.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• RC Drilling; 2 metre (and rarely 1 metre) composite samples were recovered using a 15:1 rig mounted cone splitter or trailer mounted riffle splitter during drilling into a calico sample bag. Sample target weight was between 2 and 3kg. In the case of wet clay samples, grab samples taken from sample return pile, initially into a calico sample bag. Wet samples stored separately from other samples in plastic bags. • For RC sampling QAQC was employed on all programs. A standard, blank or duplicate sample was inserted into the sample stream 10 metres on a rotating basis. Standards were either quantified industry standards, or standards made from homogenised bulk samples of the mineralisation being drilled (in the case of the Yerilla project). Every 30th sample a duplicate sample was taken using the same sample sub sample technique as the original sub sample. Sample sizes are appropriate for the nature of mineralization. QAQC results were verified against each program prior to loading into the database. • A small percentage of holes were separately resampled post drilling to confirm the integrity of the different sampling techniques employed. • For DD holes, where not required for metallurgical or geotechnical purposes, samples were taken using whole core, and submitted for assay. No duplicates of core samples were taken, but standards and blanks were employed as for the RC drilling. Whole core sampling was used to increase the sample size to approximate the same sample mass as for the RC drilling for the purposes of comparing of twinned holes, and to eliminate difficulties in biasing of samples during the splitting of core, with its inherent variable hardness.
Quality of assay data and laboratory	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or*	• All Heron and Vale samples were prepared and analysed by Ultratrace Laboratories in Perth by silicate fusion / XRF analysis (lab method XRF202) for multiple grade attributes (Ni, Co,

Criteria	JORC Code explanation	Commentary
tests	*total.* • *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.* • *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.*	MgO, FeO, Al_2O_3, SiO_2, CaO, Mn, Cr, Cu, Zn, As, S and Cl). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and Ultratrace is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits. • Ultratrace routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. • Heron also inserted QAQC samples into the sample stream at a 1 in 10 frequency, alternating between duplicates splits, blanks (quartz or garnet sands) and standard reference materials. • All of the QAQC data has been statistically assessed and the precision and accuracy of the assay data for the important grade components has been found to be acceptable and suitable for use in resource estimation. • A small number of historic samples at Bulong, Goongarrie and Highway were assayed by KAL Laboratory in Kalgoorlie using four acid digestion (4AD) and either AAS or ICP_OES finish for Ni, Co, MgO, FeO, Al_2O_3, CaO, Mn, Cr, Cu and Zn. XRF analysis of pressed powder (PP) for Ni. Co, MgO, FeO, Al_2O_3, SiO_2, CaO, Mn, Cr, Cu and Zn was also used initially at Goongarrie. Nickel and cobalt assays of laboratory pulp duplicates show the analytical precision for all three methods to be acceptable. However, there is potentially significant bias in MgO, FeO, Al_2O_3, Mn and Cr assays based of 4AD_ICP_OES and PP_XRF analyses. Both four acid digest methods were unable to analyse for SiO_2, due to incomplete digestion. As a result, whilst the nickel and cobalt results were suitable for use in modelling, the geochemical modelling of the Goongarrie deposits requires additional sampling and assaying, in particular for SiO_2.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• A selection of samples have been analysed at an alternate laboratory (SGS Analabs) using XRF fusion technique to verify the results reported by Ultratrace. The compared results show a high degree of precision and no systematic bias. • Two metre composites for the twinned RC and DD or Sonic hole pairs have been statistically compared and determined to have similar unbiased chemical compositions for Jump Up Dam, Highway, Goongarrie deposits. Whilst there was some variability in the geology of the close spaced drill holes, the short range variance is typical of Nickel Laterite deposits in WA. • Where geology agreed within the twinned holes, assays were generally similar between the different methods. There was a slight negative bias in the material reporting to the fines component of RC sampling (which includes Ni, Co, FeO, Al_2O_3 and Mn) compared to the Sonic drilling in some of the twinned holes at Goongarrie and Highway, and a corresponding upgrade in coarse material (calcrete, carbonates and siliceous material). • Despite the evidence for grade differences in some of the twined holes related to the RC drilling process, overall, the RC drilling is still considered to provide samples that adequately represent the true geochemistry of the regolith which are suitable for the purpose of resource estimation.

Criteria	JORC Code explanation	Commentary
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill holes surveyed using an RTK DGPS system with either a 3 or 7 digit accuracy. The coordinates are stored in the exploration database referenced to the MGA Zone 51 Datum GDA94. • The majority of vertical holes used in the resource calculations were not down hole surveyed. The horizontal orientation of the mineralisation, combined with the soft nature of host material would result in minimal deviation of vertical RC drill holes. All diamond holes were down hole surveyed by an external contactor. A small number of vertical open RC holes were check surveyed at Jump Up Dam, and found to have deviation over 60m of less than 1 metre, which is considered sufficiently accurate for this style of mineralisation. • The grid system for all models is GDA94. Where historic data or mine grid data has been used it has been transformed into GDA94 from its original source grid via the appropriate transformation. Both original and transformed data is stored in the digital database. • Topographic control varies between the deposits. At Jump Up Dam, LIDAR data to ±10cm vertical and ±50cm horizontal was used to generate a contour plan which was then used construct a DTM of the topography. For Bulong existing picked up pit DTMs (from mine surveys) were added to a DTM constructed from drill hole collars to produce a topographic DTM post mining. For all other deposits, DTMs were constructed from picked up drill collar locations. The use of collar data is considered sufficiently accurate for reporting of resources, but is not suitable for mine planning and reserves.
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.*	• All deposits have been drilled on uniform grids of between 160m x 80m and 10x10m. • Classification of mineralisation varies from measured (applied to 10m x10m grids and mined stockpiles), indicated (applied to 20x40m to 40x80m grids, including remaining resources in the partially mined Bulong East deposits) and inferred (up to 160mx80m spaced drilling). These classifications match the practical performance of the progressive drill out of Heron's nickel laterite deposits. Measured resources reconciled well with trial mining at Jump Up Dam during 2006. • All Heron RC samples were composited to 2 metre prior to sampling during drilling. All DD twin holes and Vale 1 metre sampled RC holes have been digitally composited from 1 metre to 2 metre to match the RC composites prior to resource estimation.
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.* • *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.*	• The majority of the drill holes is vertical and give true width of the regolith layers and mineralisation. • On a local scale there is some variability due to sub-vertical to vertical structures which may not be picked up with the relatively broad spaced vertical drill pattern employed. This local variability is not considered to be significant for the project overall, but will have local effects on mining and scheduling later in the project life.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and accounted for by Heron employees during drilling. All samples were bagged into plastic bags and closed with cable ties. Samples were transported to Kalgoorlie from site by Heron employees in sealed bulka bags.

Criteria	JORC Code explanation	Commentary
		Consignments were transported to Ultratrace Laboratories in Perth by Coastal Midwest Transport. All samples were transported with a manifest of sample numbers and a sample submission form containing laboratory instructions. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Internal reviews of the database were routinely taken. The database has been checked prior to each model run for the following issues: ○ Unsurveyed drill hole collars (less than 1% of collars). ○ Drill Holes with overlapping intervals (0%). ○ Drill Holes with no logging data (less than 2% of holes). ○ Sample logging intervals beyond end of hole depths (0%). ○ Samples with no assay data (from 0 to <5% for any given project, usually related to issues with sample recovery from difficult ground conditions, mechanical issues with drill rig, damage to sample in transport or sample preparation). ○ Assay grade ranges. ○ Collar coordinate ranges ○ Valid hole orientation data. • Jump Up Dam 2007, Maxwell Geoservices database audit 2007 highlighted a number of database issues related to QAQC data, principally with the misallocation of QAQC sample types and standards, and some laboratory low level contamination of blank material. However, no material errors were identified in the data used in the resource estimate. • The Ultratrace Laboratory was visited by Heron staff in 2006, and the laboratory processes and procedures were reviewed at this time.

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.*	• See attached table 2
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Kalpini, Goongarrie South, Scotia, Goongarrie Hill, Ghost Rocks, Aubils, Jump Up Dam and Boyce Creek deposits were discovered and explored by Heron Resources Limited. • Siberia, Black Range and Big Four deposits were initially discovered and drilled by Anaconda Nickel Limited.

Criteria	JORC Code explanation	Commentary
		• The Highway deposit was discovered by Golden State Resources and drilled by Helix Resources, prior to Heron Resources acquiring and re-drilling. • The Bulong East and Taurus deposits were originally discovered and drilled by WMC Resources. WMC also ran a trial pit and performed the original pilot test work. The bulk of the drilling and the mining was carried out by Samantha Gold – Resolute Resources as the Bulong Nickel Project. Recent drilling by Heron centred on the Taurus deposit. • Vale Inco completed a prefeasibility study on the KNP which included extensive drilling of the Highway, Siberia, Goongarrie and Big Four deposits.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Company's nickel laterite mineralisation is developed from the weathering and near surface enrichment of Achaean-aged olivine-cumulate ultramafic units. The mineralisation is usually within 60 metres of surface and can be further sub divided on mineralogical and metallurgical characteristics into upper iron-rich material and lower magnesium-rich material based on the ratios of iron to magnesium. The deposits are analogous to many weathered ultramafic-hosted nickel-cobalt deposits both within Australia and world-wide.

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:*
	  ○ *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*
	  ○ *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.*
		• The drill hole data relating to the resource estimates in this report are all previously reported results. No new drilling has taken place since 2008. Ongoing studies for these deposits are focused on the metallurgical characteristics of the mineralisation and development of new process technology.

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 assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable to this report. All figures previously reported.
Relationship between	• *These relationships are particularly important in the reporting of Exploration Results.*	• The mineralisation of all Heron's nickel laterite resources has a strong global horizontal orientation. The majority of drill holes are vertical.

Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	With the exception of local offsets due to slumping, all vertical drill holes intersect the mineralisation at approximately 90 degrees to its orientation. All down hole widths approximate true widths for vertical holes.
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.*	• See figure 1 in the body of the text.
Balanced reporting	• *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.*	• Not applicable to this report. All figures previously reported.
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.*	• Not applicable to this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• There is no planned infill or extensional exploration work to be carried out on the nickel laterite resources at this stage. Heron is focusing on developing an improved process route for the extraction of nickel and cobalt from the current known resources. This may involve some further metallurgical sampling (including drilling) of the currently known resources.

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	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Heron employed a robust procedure for the collection of and storage of sample data. This included auto-validation of sample data on entry, cross checking of sample batches between the laboratory and the database and regular auditing of samples during the exploration phase. Sample numbers were both recorded manually and entered automatically. Discrepancies within batches (samples were batched on a daily basis) were field checked at the time of data entry, and resampled if errors could not be resolved after field inspection. • Data validation procedures include digital validation of the database on entry (no acceptance of overlapping intervals, duplicate hole and sample ID, incorrect legend information, out of range assay results, incorrect pattern of QAQC in sampling stream, failed QAQC, missing assays, samples and geological logging).

Criteria	JORC Code explanation	Commentary
		At the time of resource modelling all data was visually checked on screen, and manually validated against field notes. All changes to the database were verified by field checks.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The competent person, Steve Jones, was the site supervisor for the drill out of the Yerilla project, Big Four deposit, and portions of the Bulong East and Goongarrie Hill deposits. Steve Jones also made site visits to the Vale Inco Joint Venture exploration operations at Siberia and Highway deposits. The drilling, sampling and geological practices were standardized for all deposits. RC drilling was generally effective, although there were some minor localised issues with sampling accuracy of wet puggy clays. Overall procedures were robust, including data entry, for the RC drilling, and where tested, repeatable by alternate drilling methods. • No comment can be made on the validity of historic work by Helix, WMC and Anaconda, except to say that infill drilling has broadly similar results to the historic data.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• There is a strong correlation between the geology of adjacent drill holes in all of the resources. There is also a strong global correlation between weathering profile, lithology and mineralisation intensity. On a local scale the changes in weathering profile is often discrete, but of a complex geometry. There is good confidence overall in the geological model, and this has been confirmed at Jump Up Dam by the trial mining of 20,000 tonnes of mineralisation. • A combination of geological logging and assay data has been used to sub divide the mineralisation into high-iron and high-magnesium mineralisation types, within a mineralised domain. High-carbonate domains have also been defined. High-silica domains were more problematic to define, and further work is required on developing this geometallurgical domain. • The continuity of mineralisation is strongly controlled by bed rock alteration and palaeo water flow within the ultramafic host units. Areas of deep fracturing and water movement within the bedrock typically had higher grade and more extensive mineralisation in the overlying regolith. In the proximity of geological contacts between the ultramafic hosts and surrounding mafic and felsic lithologies there is often a distinctive increase in grade and widths of mineralisation, including the development of mineralisation along fracture planes in the adjacent felsic and mafic units. Where the host regolith overlies olivine adcumulate lithologies there is an increase in siliceous material and a loss of the high magnesium mineralisation horizon. In areas where the host ultramafic was altered to talc, or talc-carbonate lithologies there was no development of nickel mineralisation in the regolith. These areas typically formed along shears, and sheared contacts within the bedrock. • Mineralisation domains were developed using a combination observed geological logging, and multi element geochemical sampling. Lower cut-off grades for the nickel domain was 0.25% Ni for the Vale modelled Goongarrie, Scotia, Highway and Big Four deposits, and 0.4% Ni for all other domains. The domains do contain material of lower grades where continuity of interpretation warrants the addition of internal waste.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the*	• Resource dimensions vary between deposits, however the resources are usually sub horizontal, tabular with strike length over 1000 metres, widths between 100-600 metres and

Criteria	JORC Code explanation	Commentary
	upper and lower limits of the Mineral Resource.	thickness of 10-20 metres. Some resources outcrop, while most lie under thin (generally less than 30 metre thick) soils, cap rock or palaeo-channel sands and clays. Most of the modelled resources are less than 60 metres below surface.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• All deposits were Ordinary Kriged (OK), using variography of the domained Ni shells for Ni, Co, MgO, FeO, Al_2O_3 and SiO_2 assay suits. (SiO_2 was unavailable for Siberia, Kalpini and Ghost Rocks due to a lack of assays and was not modelled). In addition to the OK model estimates, Uniform Conditioning (UC) was applied to nickel only for Jump Up Dam, Boyce Creek, Aubils, Highway, Goongarrie, Big Four and Bulong deposits. Although previously reported, these figures have not been reported in the current resource statement.
		• Deposits were estimated using either Vulcan or Datamine mining software, with various versions of Visor being employed for the variography modelling. The original domain wireframe interpretations for Jump Up Dam were created in Micromine.
		• Block sizes varied between models based on drill spacing and deposit geometry as follows
		    ○ 40 x 120 x 2 metre Siberia, Kalpini, Siberia North and Ghost Rocks
		    ○ 80 x 80 x 4 metre Aubils
		    ○ 40 x 80 x 2 metre Highway
		    ○ 40 x 50 x 2 metre Bulong East and Taurus
		    ○ 60 x 120 x 4 metre Goongarrie Hill
		    ○ 40 x 40 x 4 metre Goongarrie South, Big Four
		    ○ 20 x 40 x 4 metre Boyce Creek
		    ○ 10 x 10 x 2 metre Jump Up Dam (global change of support was used to calibrate the estimates within the wider spaced drilling areas)
		  • All models used parent cell interpolation with sub-cells half the dimension of the parent cell to improve volume reporting.
		• Ni and Co are the principal economic minerals. Fe has the potential to be an economic mineral under some processing options being assessed. MgO, FeO, Al_2O_3 and SiO_2 are all important minerals in the classification of the different geometallurgical styles of mineralisation for both materials handling and metallurgic extraction processes. All have been individually estimated for most of the deposits using OK methods.
		• The domain boundary for mineralisation is similar for all deposits with a step change in nickel grades being modelled around the 0.4% Ni (or 0.25% Ni for Vale deposits – see geological interpretation above) threshold using a wireframe constraint. The two sub domains within the mineralised domain were usually geostatistically analysed and modelled separately. These internal domains relate to the high-iron, and high-MgO domains, which form the upper and lower portions of the mineralised weathering profile, and are usually separated by a sharp (although often geometrically complex) geological boundary. (Note: for some deposits only one or other geochemical domain is present). Depending on results of the variography, grades were modelled independently for each element modelled within the separate geochemical domains within the nickel wireframe shell.

Criteria	JORC Code explanation	Commentary
		No shells were developed for cobalt or any other minerals, and grades were interpolated into the same domain. • All deposits have been previously modelled, and were checked against previous models to confirm the expected changes between models. • Model estimates were validated against drilling by comparing input and output means, moving window comparative means and by visual inspection of the models. The results of these investigations were generally acceptable for level of resource confidence applied to each model. • In the case of Jump Up dam, where trial mining has taken place, reconciliation between measured resources and mining was very good for both nickel and cobalt. There were some discrepancies in the modelled mineralogical classification of the mineralisation which will have a local effect on processing, depending on the process method employed. These discrepancies were related to the highly complex geometry of the interface between high and low magnesium portions of the deposit, even within a 10 metre spaced drilling grid.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages reported are dry tonnes for all models. Dry density was determined from drill core and down hole gamma for the Jump Up Dam, Scotia, Highway and Goongarrie deposits. This dry tonnage was applied to the other deposits on a material type basis (see Bulk Density for more details).
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The 0.25 and 0.4% Ni cut-offs used for the wireframe domains of the deposits was based on two observed step changes in nickel grades across the drill holes. A 0.5% Ni grade was used for reporting purposes as this is a common lower grade cut employed during mining of Nickel Laterites.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Open pit mining via conventional dig and haul with minimum blasting is assumed for all deposits. Given the lateral extent of the models the selective mining unit SMU is likely to be 10x10x4(or 2) metres and this was used to develop the uniform conditional model grades for nickel for the deposits. • For the purposes of removing unlikely to be economic resources from the resource statement, a Whittle optimization of the KNP and Yerilla deposits was carried out using an A$12.50 per pound nickel price. Mining and processing costs, along with royalty and recovery factors were taken from the 2010 Heron PFS mining study for this process. The evaluation was carried out on the Kriged nickel and cobalt grades only (uniform conditioning models were not used).
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should*	• The KNP and Yerilla Projects are both subject to ongoing metallurgical studies. Processes being considered include, heap leaching, vat leaching, high pressure acid leaching, screen upgrades prior to leaching and pyrometallurical methods. All methods are capable of processing Nickel Laterite ore types into saleable products and are currently in use at different deposits across the world.

Criteria	JORC Code explanation	Commentary
	be reported with an explanation of the basis of the metallurgical assumptions made.	The current focus of studies into a preferred metallurgical approach is on acid leaching methods with a particular focus on improving the recovery of reagents during processing to improve unit costs.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• It is expected that waste rock material will largely be disposed of inside previously completed pits during the life of mine. Tailings disposal will consist of a mixture of conventional tailings dams and disposal in mined out pits. As all of the material mined will be of an oxidized nature, there is not expected to any acid generating minerals in the waste rock material. The processed tailings will need to be neutralized or recovered from the tailings stream prior to disposal in waste storage facilities. The expected land forms at the conclusion of the project will be of similar profile to the current land forms. • Environmental studies for the project have been started with base line surveys for flora and fauna. However, as the final process route is currently subject to research, the final environmental plans are yet to be developed. It is reasonable, given the existing nickel laterite operations in WA, that all environmental issues can be resolved and it will be possible to mine the resources within current environmental guidelines.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk densities were measured for the Jump Up Dam, Goongarrie and Highway, by both gamma down hole measurements, weight of recovered core versus drilled volume and wet/dry density measurement of drill core. Both the wet/dry and weight of recovered core methods include voids in the density assessment. The three measurements all gave similar reading for the in-situ density of the material (including any moisture within the in-situ material). Changes in mass were recorded for the recovered core between its as drilled mass, and mass after kiln drying to apply moisture content to the density measurements producing a dry density for resource estimation purposes. The variance in measured dry density was between 1.3 and 2.05/m^3 for all material types. Most of the mineralisation lies within the 'clay' material which has a dry density of between 1.30 and 1.33t/m^3. Densities were assigned to material based on the geochemical material classification scheme for each of the deposits. • All other deposits were not measured in the field. Densities based on the above measurements were applied to similar geology on these deposits, using either the geochemical material classification scheme, or, where assays not sufficient for classification, the average density for clay material.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• Classification varied slightly between the deposits. All classification of resource estimates were based on a combination of drill hole spacing, the ranges of mineralisation continuity (developed from variography studies), availability of all assay suits for geochemical classification and the slope of regression of the ordinary kriged nickel estimates.
		Measured Mineral Resource
		  • Drill spacing of 10x10 metre.
		  • All assays (Ni, Co, MgO, Mn, Cr, AL_2O_3, SiO_2, FeO, MgO, CaO) available for geochemical classification.

Criteria	JORC Code explanation	Commentary
		• Domains developed for both high Fe and High MgO domains. • Measured density values available for the material being modelled. • The expected global accuracy of this material is ± 10% for tonnes of nickel. • Applied to a small portion of Jump Up Dam and Goongarrie South resource models. **Indicated Mineral Resource** • Drill spacing of 20x40 metre to 40x100 metre (depending on deposit and variography results). • All assays (Ni, Co, MgO, Mn, Cr, AL_2O_3, $Si0_2$, FeO, MgO, CaO) available for geochemical classification. • Domains developed for both high Fe and high MgO domains. • Density values derived from either measured density values for that deposit, or derived from adjacent deposits and applied to similar material types. • The expected global accuracy of this material is ± 15% for tonnes of nickel. • Applied to significant portions of Goongarrie South, Highway, Big Four, Siberia North, Bulong East and Jump Up Dam. **Inferred Mineral Resource** • Drill spacing of over 40x40 metre, up to 80x160 metre, including material extended beyond the last line of drilling where deposits have not been closed out. • All assays (Ni, Co) available. Some deposits had additional elements available. • Limited accuracy or no information available for the development of geochemical domains for high Fe and high MgO domains. • Density values assumed for the material being modelled from results of other projects. • The expected global accuracy of this material is ± 30% for tonnes of nickel. • Applied to Ghost Rocks, Goongarrie Hill, Scotia, Aubils, Boyce Creek and Kalpini, as well as to the geological extensions to the well drilled portions of the other deposits.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• All resource estimates attributed to Snowden were reviewed internally by Snowden at the time of their creation, and externally by Heron. Models created in-house by Heron have been validated against previous models created by Snowden. All models have been checked by Heron employees both past and present and are considered to be reasonable estimates of resources given the level of confidence applied to each model.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates,*	• All models as reported provide reasonable global estimates of the available nickel and cobalt resources. Models have been validated visually against drilling for both the recoverable minerals nickel and cobalt, and important geometallurgical minerals modelled (FeO, MgO, Al_2O_3, CaO and SiO_2). • The measured resources trial mined at Jump Up Dam reconciled to within 5% of both tonnes mined and nickel grade of mined material (note this reconciliation is an “as-mined” reconciliation, as the material mined has not been processed to date). In the trial mine there were some significant departures in modelled geometallurgical material type, no doubt partially

Criteria	JORC Code explanation	Commentary
	and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	due to the small sample size of the mining volume, but also reflecting the short range complexity of the MgO horizon and difficulties in mining of the highly variable contact zone. • Overall the modelled resources present a very reasonable global estimate of the resources for Ni and Co. The also provide a reasonable global estimate for MgO, FeO and Al_2O_3 estimates within the ore domains. Where measured material has been modelled (ie 10x10 metre spaced drilling), the local estimate of nickel and cobalt reconciled well within industry standards.

Table 2 Tenure relating to the KNP and Yerilla Nickel Projects

Prospect	Location	Tenement ID	Heron Interest (%)	Area km2	Status	Notes
KALGOORLE NICKEL PROJECT						
Siberia Project						
Siberia North	78km NW of Kalgoorlie	E24/00158	100.0	2.80	Live	
Wongi Hill	78km NW of Kalgoorlie	E29/00889	100.0	2.80	Pending	
Siberia	78km NW of Kalgoorlie	M24/00634	100.0	1.85	Live	
Riches Find	75km NW of Kalgoorlie	M24/00658	100.0	3.75	Live	
Riches Find	75km NW of Kalgoorlie	M24/00660	100.0	1.74	Live	
Siberia	75km NW of Kalgoorlie	M24/00663	100.0	3.06	Live	
Siberia	75km NW of Kalgoorlie	M24/00664	100.0	1.43	Live	
Siberia	75km NW of Kalgoorlie	M24/00686	100.0	2.15	Live	
Wongi Bore	78km NW of Kalgoorlie	M24/00915	100.0	0.70	Live	
Siberia North	78km NW of Kalgoorlie	M24/00916	100.0	5.44	Live	
Siberia South Cave Hill	75km NW of Kalgoorlie	M24/00917	100.0	1.50	Live	
Siberia	78km NW of Kalgoorlie	M29/00312	100.0	4.78	Live	
Siberia	75km NW of Kalgoorlie	P24/04202	100.0	1.98	Live	
Siberia	75km NW of Kalgoorlie	P24/04203	100.0	1.65	Live	
Siberia	75km NW of Kalgoorlie	P24/04204	100.0	1.61	Live	
Siberia	75km NW of Kalgoorlie	P24/04205	100.0	1.93	Live	
Siberia	75km NW of Kalgoorlie	P24/04206	100.0	1.81	Live	
Theil Well	75km NW of Kalgoorlie	P24/04207	100.0	1.42	Live	
Theil Well	75km NW of Kalgoorlie	P24/04208	100.0	2.00	Live	
Siberia East	70km NW of Kalgoorlie	P24/04219	100.0	1.70	Live	
Siberia East	70km NW of Kalgoorlie	P24/04220	100.0	1.34	Live	
Siberia	75km NW of Kalgoorlie	P24/04221	100.0	0.12	Live	
Siberia	75km NW of Kalgoorlie	P24/04243	100.0	1.17	Live	1
Siberia South	75km NW of Kalgoorlie	P24/04652	100.0	0.07	Pending	
Riches Find South	75km NW of Kalgoorlie	P24/04653	100.0	0.52	Live	
25				**49.32**		
SMC Siberia Project						
Siberia North	78km NW of Kalgoorlie	M24/00683	100.0	0.56	Live	
Broad Arrow	71km NW of Kalgoorlie	M24/00772	100.0	1.98	Live	
Siberia North	78km NW of Kalgoorlie	M24/00797	100.0	8.06	Live	
3				**10.60**		
Black Range Project						
Black Range	63km NW of Kalgoorlie	M24/00757	100.0	5.91	Live	

Mt Carnage	63km NW of Kalgoorlie	M24/00912	100.0	2.84	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04395	100.0	1.92	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04396	100.0	1.64	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04400	100.0	2.00	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04401	100.0	1.90	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04402	100.0	1.72	Live	
Mt Carnage	70km NW of Kalgoorlie	P24/04403	100.0	1.92	Live	
8				**19.85**		
Siberia Tank Project						
Siberia Tank	75km NW of Kalgoorlie	M24/00665	90.0	8.25	Live	2
1				**8.25**		
Monarch Siberia Project						
Siberia South	71km NW of Kalgoorlie	M24/00845	100 of Ni only	8.97	Live	3
Siberia South	71km NW of Kalgoorlie	M24/00846	100 of Ni only	6.07	Live	3
Siberia South	71km NW of Kalgoorlie	M24/00847	100 of Ni only	8.12	Live	3
Siberia South	71km NW of Kalgoorlie	M24/00848	100 of Ni only	7.89	Live	
4				**31.05**		
Frances Lesely Project						
Carbine North	62km NW of Kalgoorlie	E16/00332	100 of Ni only	42.00	Live	3
1				**42.00**		
Theil Well Project						
Theil Well	70km NW of Kalgoorlie	P24/04434	100.0	1.63	Live	
Theil Well	70km NW of Kalgoorlie	P24/04435	100.0	1.75	Live	
Theil Well	70km NW of Kalgoorlie	P24/04436	100.0	1.79	Live	
Theil Well	70km NW of Kalgoorlie	P24/04437	100.0	1.71	Live	
Theil Well	70km NW of Kalgoorlie	P24/04438	100.0	2.00	Live	
5				8.88		
Ghost Rocks Project						
Ghost Rocks	140km NNW of Kalgoorlie	E29/00873	100.0	14.00	Pending	
1				**14.00**		
Goongarrie Project						
Scotia Dam	67km NNW of Kalgoorlie	M24/00541	100.0	5.20	Live	
Scotia North	75km NNW of Kalgoorlie	M24/00744	100.0	0.06	Live	
Goongarrie West	87km NNW of Kalgoorlie	M29/00167	100.0	0.80	Live	
Goongarrie West	86km NNW of Kalgoorlie	M29/00202	100.0	5.94	Live	

Goongarrie South	77km NNW of Kalgoorlie	M29/00272	100.0	6.03	Live	
Canegrass	74km NNW of Kalgoorlie	M29/00278	100.0	8.03	Live	
Goongarrie South	75km NNW of Kalgoorlie	M29/00283	100.0	5.53	Live	
Goongarrie South	76km NNW of Kalgoorlie	M29/00413	100.0	8.22	Pending	
Goongarrie	76km NNW of Kalgoorlie	M29/00423	100.0	8.22	Pending	
Scotia Dam	67km NNW of Kalgoorlie	P24/04531	100.0	1.83	Live	
Goongarrie	82km NNW of Kalgoorlie	P29/01960	100.0	0.24	Live	
Goongarrie Hill	90km NNW of Kalgoorlie	P29/02264	100.0	1.03	Live	
Goongarrie Hill	90km NNW of Kalgoorlie	P29/02265	100.0	2.00	Live	
Goongarrie Hill	90km NNW of Kalgoorlie	P29/02266	100.0	1.22	Live	
Goongarrie Hill	90km NNW of Kalgoorlie	P29/02267	100.0	0.85	Live	
15				**55.19**		
Placer Big Four Project						
Placer Big Four	70km NNW of Kalgoorlie	M24/00731	100.0	6.03	Live	4
Placer Big Four	70km NNW of Kalgoorlie	M24/00732	100.0	5.09	Live	4
Placer Big Four	70km NNW of Kalgoorlie	M24/00778	100.0	8.90	Live	4
Placer Big Four	70km NNW of Kalgoorlie	M29/00169	100.0	9.74	Live	4
4				**29.76**		
Highway Project						
Highway West	105km NNW of Kalgoorlie	E29/00850	100.0	28.00	Live	
Highway	100km NNW of Kalgoorlie	M29/00214	100.0	9.50	Live	
Highway Extended	90km NNW of Kalgoorlie	M29/00416	87.5	4.50	Live	
3				**42.00**		
Bulong Project						
Bulong	38km E of Kalgoorlie	E25/00476	100.0	14.00	Live	
Gumbulgera Hill	34km E of Kalgoorlie	M25/00059	100 Ni Lat	0.84	Live	6
Bulong	40km E of Kalgoorlie	M25/00111	100 Ni Lat	1.19	Live	6
Bulong	40km E of Kalgoorlie	M25/00134	100 Ni Lat	8.16	Live	6
Bulong	40km E of Kalgoorlie	M25/00145	100 Ni Lat	1.72	Live	6
South West Taurus Dam	38km E of Kalgoorlie	M25/00151	100.0	3.66	Live	
Bulong	40km E of Kalgoorlie	M25/00161	100 Ni Lat	6.40	Live	6
Bulong	40km E of Kalgoorlie	M25/00162	100 Ni Lat	3.66	Live	6
Bulong	40km E of Kalgoorlie	M25/00165	100 Ni Lat	{4.45}	Pending	6
Bulong	40km E of Kalgoorlie	M25/00171	100 Ni Lat	1.01	Live	6
Gumbulgera Hill	40km E of Kalgoorlie	M25/00187	100.0	0.50	Live	
Bulong	34km E of Kalgoorlie	M25/00191	100 Ni Lat	{3.63}	Pending	6
Bulong	40km E of Kalgoorlie	M25/00206	100 Ni Lat	2.14	Live	6

Bulong	40km E of Kalgoorlie	M25/00207	100 Ni Lat	1.82	Live	6
Bulong	40km E of Kalgoorlie	M25/00208	100 Ni Lat	1.21	Live	6
Bulong	40km E of Kalgoorlie	M25/00209	100 Ni Lat	9.60	Live	6
Bulong	40km E of Kalgoorlie	M25/00210	100 Ni Lat	9.58	Live	6
Bulong	40km E of Kalgoorlie	M25/00220	100 Ni Lat	1.21	Live	6
Bulong	40km E of Kalgoorlie	M25/00234	100 Ni Lat	6.06	Live	6
Bulong	40km E of Kalgoorlie	M25/00260	100 Ni Lat	0.04	Live	6
Bulong	40km E of Kalgoorlie	M25/00341	100 Ni Lat	0.02	Live	6
Bulong	40km E of Kalgoorlie	P25/02050	100 Ni Lat	1.20	Live	6
Bulong	40km E of Kalgoorlie	P25/02062	100 Ni Lat	1.20	Live	6
Bulong	40km E of Kalgoorlie	P25/02170	100 Ni Lat	1.21	Live	6
Bulong	40km E of Kalgoorlie	P25/02171	100 Ni Lat	1.21	Live	6
Lake Rebecca	113km NE of Kalgoorlie	P31/02038	100.0	1.21	Pending	
Lake Rebecca	113km NE of Kalgoorlie	P31/02039	100.0	1.16	Pending	
Lake Rebecca	113km NE of Kalgoorlie	P31/02040	100.0	1.99	Pending	
28				**82.00**		
Kalpini Project						
Emu Lake	67km NE of Kalgoorlie	E27/00524	100.0	16.80	Pending	
Wellington East	63km NE of Kalgoorlie	E28/01224	100.0	47.60	Live	
Wellington North	68km NE of Kalgoorlie	M27/00395	100.0	2.53	Live	
Acra North	65km NE of Kalgoorlie	M28/00199	100.0	9.76	Live	
Acra North	65km NE of Kalgoorlie	M28/00201	100.0	8.96	Live	
Betsy Bore	66km NE of Kalgoorlie	M28/00205	100.0	8.50	Live	
6				**94.14**		
Total KNP Tenements:	**104**		**Total KNP Area:**	**487.05**		
YERILLA NICKEL PROJECT						
Yerilla SE	140km NNE of Kalgoorlie	E31/00684	100.0	14.00	Live	5
Boyce Creek	140km NNE of Kalgoorlie	E31/00797	100.0	19.60	Live	5
Aubils	170km NNE of Kalgoorlie	E39/01736	100.0	126.00	Pending	5
Jump Up Dam	129km NE of Kalgoorlie	M31/00475	100.0	1.21	Live	5
Jump Up Dam	129km NE of Kalgoorlie	M31/00477	100.0	1.47	Live	5
Jump Up Dam	129km NE of Kalgoorlie	M31/00479	100.0	7.70	Live	5
Boyce Creek North	146km NNE of Kalgoorlie	M31/00483	100.0	2.02	Live	5
Aubils	170km NNE of Kalgoorlie	M39/01085	100.0	18.05	Pending	5
Total Yerilla Tenements	**8**		**Total Yerilla Area:**	**190.05**		

Notes:

1 Britannia Gold Ltd retained precious metal rights

2 Impress Ventures Ltd has a 10% equity free-carried interest to a decision to mine.

3 Swan Gold Limited holds the tenement, Heron retains nickel rights

4 Placer Dome Australia Limited retains certain gold rights.

5 Heron has entered a binding framework agreement with Ningbo Shanshan Co Ltd, Shanshan may earn a 70% interest in the Yerilla Nickel-Cobalt Project.

6 Subject to Farm In agreement with Southern Gold Ltd.

Areas in brackets are not included in the total areas due to overlying tenure