

# PEGASUS RESOURCE MORE THAN DOUBLES TO 763KOZ AT 11.4GPT

*New deposit to contribute additional  
50,000ozpa to Northern Star*

## KEY POINTS

- ▶ Resource at the Pegasus deposit in WA more than doubles to 2.1Mt at 11.4gpt for 763Koz<sup>1</sup>, representing a 16% increase in grade and 115% in contained ounces
- ▶ Pegasus, which is part of the Kundana project (NST 51%), set to contribute an additional ~50,000ozpa to Northern Star's production from mid-CY2015
- ▶ This will lift Kundana's total production rate to 125,000ozpa. All-in sustaining costs at Kundana were A\$706/oz in March Quarter, 2014
- ▶ Capital cost of bringing Pegasus into production will be just \$10m, with ore being accessed via existing decline at adjacent Rubicon mine
- ▶ Pegasus set for long mine life, with Kundana's historical conversion rate from resource to reserve running at ~80%
- ▶ Pegasus remains open at depth and along strike, highlighting significant potential for further resource increases, both at Pegasus and surrounding areas
- ▶ A resource-reserve update for the adjacent Rubicon-Hornet deposit at Kundana will be released in the September Quarter 2014

### ASX ANNOUNCEMENT 25 JUNE 2014

Australian Securities  
Exchange Code: NST

#### Board of Directors

Mr Chris Rowe  
*Non-Executive Chairman*

Mr Bill Beament  
*Managing Director*

Mr Peter O'Connor  
*Non-Executive Director*

Mr John Fitzgerald  
*Non-Executive Director*

Ms Liza Carpeno  
*Company Secretary*

#### Issued Capital

Shares 579M

Options 3.5M

Current Share Price \$1.295

Market Capitalisation  
\$749 million

Cash/Bullion and Investments  
31 Mar 2014 - \$80 million

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Northern Star Resources Limited (ASX: NST) is pleased to announce that it has more than doubled the resource at its high-grade Pegasus deposit at the Kundana mine in Western Australia to 763,000 ounces at 11.4gpt<sup>1</sup>.

The outstanding result paves the way for a significant increase in low-cost production from Northern Star's 51%-owned Kundana mine beginning in the March Quarter of 2015. Joint Venture Partners, Rand Mining Ltd (ASX: RND) and Tribune Resources Ltd (ASX: TBR) own the remaining 49%.

Kundana, which has operated consistently with a +10gpt head grade and some of the lowest production costs in the industry, has an enviable ~80% historical conversion rate from resource to reserve.

Pegasus is forecast to produce 100,000ozpa (Northern Star's share: 50,000ozpa) from July 2015. All-in sustaining costs at Kundana were A\$706/oz in the March Quarter 2014.

This is expected to increase Northern Star's share of production at Kundana to 125,000ozpa, in turn helping Northern Star lift its total output to 600,000ozpa at a targeted all-in sustaining cost of less than A\$1,050/oz.

The revised Pegasus JORC-compliant resource estimate of 2.1 million tonnes at 11.4gpt for 763,000oz<sup>1</sup> is based on an anticipated 2m minimum mining width and a 3.7gpt cut-off grade (refer Tables 1 to 3). This is a 16% increase in grade and 115% increase in ounces compared with the previous figure of 355,000oz at 9.8gpt.

Development of Pegasus is well advanced, with access to the orebody being gained via the existing decline at the Rubicon mine, which is also part of Kundana, just 350m away. This means that the capital cost of bringing Pegasus into production will be just \$10 million.

First development ore at Pegasus is expected to be intersected in the December Quarter 2014, with production commencing in early 2015 and ramping up to 100,000oz per annum by July 2015.

Northern Star Managing Director Bill Beament said Pegasus would generate significant free cashflow, add years of life to what is a very low-cost operation at Kundana and provide outstanding potential to grow the Company's high-grade gold inventory further.

"This resource increase supports our view that Pegasus is one of the best high-grade gold discoveries in Australia in the past ten years," Mr Beament said. "It is every gold miner's ideal scenario - a deposit rapidly approaching one million ounces at a grade of +10gpt located immediately next to an existing operation.

"This gets even better when it is remembered that Pegasus has significant potential for further resource increases. It remains open along strike and at depth and we also have outstanding exploration results up to 8km away on the same structure."

Recent drilling not included in this resource update has further extended the Pegasus deposit, with visible gold intersected in the main structure some 700m below surface, indicating the mineralised zone is highly likely to continue (awaiting assays). Significant intersections of 3.7m at 24.5gpt, 1.9m at 13.6gpt and 1.0m at 16.9gpt, all of which are outside the updated resource, are shown in Figure 1 and Table 4.

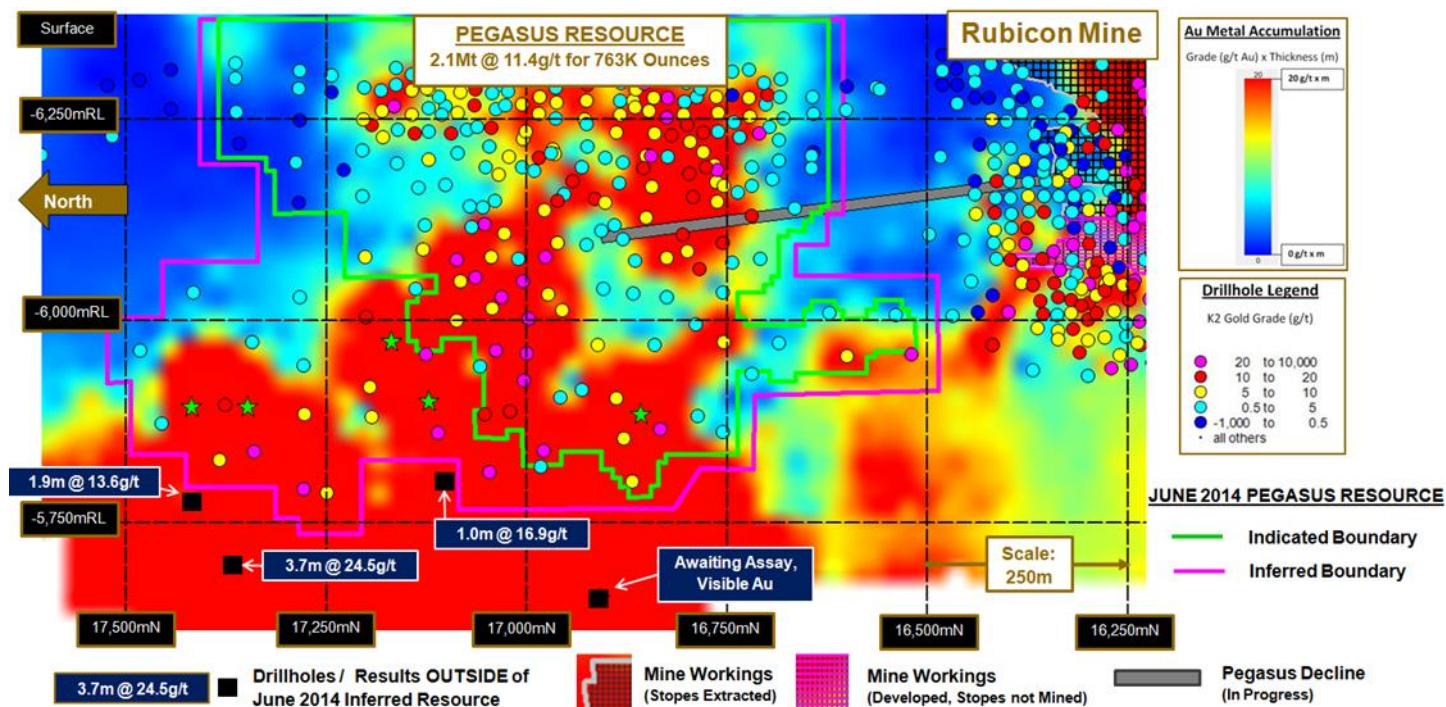


Figure 1: Long projection of the K2 footwall structure (looking east) showing the June 2014 Pegasus Update Resource Classification Boundaries, showing the extent of Indicated and Inferred Resource. The significant intersections shown outside of the inferred resource demonstrate the growth potential of the Pegasus Resource. Background shading is metal accumulation (grade x width). Drill hole intersections noted are downhole width.

Targeted regional exploration along the Kundana structural corridor has identified significant mineralisation 2km north of previous mining activities and 8km north of Pegasus, highlighting the regional potential for future discoveries. This area will be a major focus of the Company's regional exploration team in the coming year.

Reconnaissance drilling at the Ambition prospect returned assays of 2m at 6gpt and 2m at 1.8gpt gold in the interpreted K2 position, indicating the structure continues to the north of previous mining activity. This area is poorly tested at depth and along strike. The location of Ambition relative to the Pegasus project is shown in Figure 2.

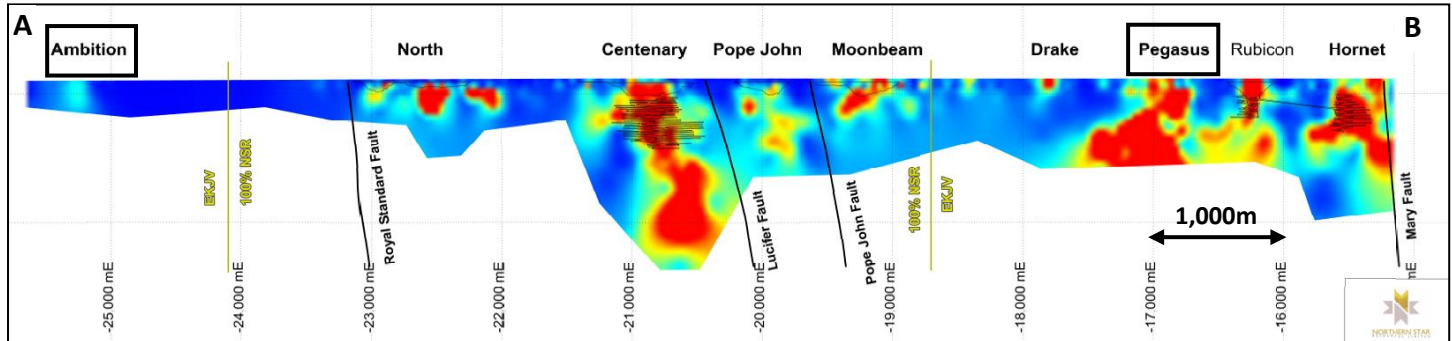


Figure 2: Plan and Long Projection view (A-B) (looking East) of the K2 Structure, showing the location of Pegasus relative to Ambition. Red shading on the long projection is metal accumulation greater than 20gptm Au.

A resource upgrade for the adjoining Rubicon-Hornet deposits is expected in the September Quarter 2014.

Northern Star acquired an interest in Pegasus, Rubicon and Hornet as part of its purchase of Barrick Gold's 51% stake in the East Kundana Joint Venture, effective from 1 March 2014.

Yours faithfully



**BILL BEAMENT**  
**Managing Director**  
**Northern Star Resources Limited**

### Competent Persons Statements

The information in this announcement that relates to mineral resource estimations, exploration results, data quality, geological interpretations and potential for eventual economic extraction, is based on information compiled by Darren Cooke, (Member Australian Institute of Geoscientists), who is a full-time employee of Northern Star Resources Limited. Mr. Cooke has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" for the Pegasus, Rubicon and Hornet Deposit and the Ambition prospect. Mr. Cooke consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

### Forward Looking Statements

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| EAST KUNDANA JOINT VENTURE GOLD MINERAL RESOURCES <sup>(1)</sup> |                |             |                |                |             |                |                |                |             |                |                   |             |                |
|--|----------------|-------------|----------------|----------------|-------------|----------------|----------------|----------------|-------------|----------------|-------------------|-------------|----------------|
| As at June 2014  |                |             |                |                |             |                |                |                |             |                |                   |             |                |
|  | MEASURED (M)   |             |                | INDICATED (I)  |             |                | (M)+(I)        | INFERRED (Inf) |             |                | TOTAL (M I & Inf) |             |                |
|  | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Ounces (000's) | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Tonnes (000's)    | Grade (gpt) | Ounces (000's) |
| <b>Pegasus Deposit</b>   |                |             |                |                |             |                |                |                |             |                |                   |             |                |
| NST Attributable Resource (51%)                                  |                |             |                | 714            | 11.9        | 273            | 273            | 346            | 10.5        | 116            | 1,060             | 11.4        | 389            |
| R&T <sup>(2)</sup> Attributable Resource (49%)                   |                |             |                | 687            | 11.9        | 262            | 262            | 332            | 10.5        | 112            | 1,019             | 11.4        | 374            |
| <b>TOTAL</b>   | <b>-</b>       | <b>-</b>    | <b>-</b>       | <b>1,401</b>   | <b>11.9</b> | <b>535</b>     | <b>535</b>     | <b>678</b>     | <b>10.5</b> | <b>228</b>     | <b>2,079</b>      | <b>11.4</b> | <b>763</b>     |

(1) Resources are inclusive of reserves. Calculated at A\$1,850 gold price and an assumed minimum mining width of 2.0m  
(2) R&T refers to the combined holdings of Rand Mining Ltd (ASX: RND) and Tribune Resources Ltd (ASX: TBR)

**Table 1 - Pegasus Resources as at June 2014**

| EAST KUNDANA JOINT VENTURE GOLD MINERAL RESOURCES (BY DOMAIN) <sup>(1)</sup> |                |             |                |                |             |                |                |                |             |                |                   |             |                |
|--|----------------|-------------|----------------|----------------|-------------|----------------|----------------|----------------|-------------|----------------|-------------------|-------------|----------------|
| As at June 2014  |                |             |                |                |             |                |                |                |             |                |                   |             |                |
|  | MEASURED (M)   |             |                | INDICATED (I)  |             |                | (M)+(I)        | INFERRED (Inf) |             |                | TOTAL (M I & Inf) |             |                |
|  | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Ounces (000's) | Tonnes (000's) | Grade (gpt) | Ounces (000's) | Tonnes (000's)    | Grade (gpt) | Ounces (000's) |
| <b>Pegasus Deposit (Total)</b>   |                |             |                |                |             |                |                |                |             |                |                   |             |                |
| K2 Footwall Domain   |                |             |                | 826            | 13.9        | 369            | 369            | 407            | 13.6        | 178            | 1,233             | 13.8        | 547            |
| K2 Hangingwall Domain (K2E)  |                |             |                | 266            | 9.1         | 78             | 78             | 63             | 7.1         | 14             | 329               | 8.7         | 92             |
| K2 B Domain  |                |             |                | 96             | 9.7         | 30             | 30             | 42             | 5.1         | 7              | 138               | 8.3         | 37             |
| Pode Domain  |                |             |                | 213            | 8.5         | 58             | 58             | 166            | 5.5         | 29             | 379               | 7.2         | 87             |
| <b>TOTAL</b>   | <b>-</b>       | <b>-</b>    | <b>-</b>       | <b>1,401</b>   | <b>11.9</b> | <b>535</b>     | <b>535</b>     | <b>678</b>     | <b>10.5</b> | <b>228</b>     | <b>2,079</b>      | <b>11.4</b> | <b>763</b>     |

(1) Resources are inclusive of reserves. Calculated at A\$1,850 gold price and an assumed minimum mining width of 2.0m

**Table 2 - Pegasus Resources by Mineralised Domain as at June 2014**

(table reflects the total Pegasus Resource, of which Northern Star's holds a 51% interest)

| TONNES GRADE TABULATION <sup>(1)</sup> |                |             |               |
|--|----------------|-------------|---------------|
| Based on 2.0m Minimum Mining Width     |                |             |               |
| CUTOFF (Au gpt)                        | TONNES (000's) | GRADE (gpt) | METAL (000's) |
| 3.7 <sup>(2)</sup>                     | 2,079          | 11.4        | 763           |
| 4.0                                    | 1,969          | 11.8        | 749           |
| 5.0                                    | 1,680          | 13.1        | 707           |
| 6.0                                    | 1,409          | 14.6        | 659           |
| 7.0                                    | 1,207          | 15.9        | 617           |
| 8.0                                    | 1,058          | 17.1        | 582           |
| 9.0                                    | 942            | 18.1        | 550           |

(1) Total Resource (NST: 51%, R&T: 49%)

(2) 3.7gpt is the Rubicon cutoff at A\$1850 gold price

**Table 3: Tonnes grade tabulation for the Pegasus Resource, based on a 2 metre minimum mining width and a 3.7gpt cut-off**

| PEGASUS K2 - EXTENSION DRILLING (Outside of June 2014 Resource) |                            |                             |                       |                      |                              |                       |                   |                 |                           |                |                        |
|---|----------------------------|-----------------------------|-----------------------|----------------------|------------------------------|-----------------------|-------------------|-----------------|---------------------------|----------------|------------------------|
| Drill Hole #  | Collar Easting (Mine Grid) | Collar Northing (Mine Grid) | Collar RL (Mine Grid) | Collar Dip (degrees) | Azimuth (degrees, Mine Grid) | End of hole depth (m) | Downhole From (m) | Downhole To (m) | Downhole Intersection (m) | Au (gpt) uncut | Est True Thickness (m) |
| PGCD14003   | 9487                       | 17389                       | 6345                  | -66                  | 90                           | 750                   | 711.85            | 715.50          | 3.7                       | 24.5           | 2.7                    |
| <b>PGCD14007<sup>(1)</sup></b>                                  | 9511                       | 16915                       | 6344                  | -65                  | 96                           | 759                   | 724               | 727             | 3.0                       | AA             | 2.1                    |
| PGCD14021   | 9530                       | 17426                       | 6343                  | -65                  | 90                           | 638                   | 609.4             | 611.3           | 1.9                       | 13.6           | 1.4                    |
| PGCD14024   | 9546                       | 17124                       | 6347                  | -66                  | 91                           | 606.0                 | 582.9             | 583.9           | 1.0                       | 16.9           | 0.7                    |

**Table 4: Exploration results outside of the June 2014 Pegasus resource.**

(1) Hole PGCD14007 is awaiting assays. The K2 footwall zone contains coarse visible gold. Estimates of intersection position and width are based on the experience of the competent person and the actual intersection will be formally reported upon receipt of the assay results.



## JORC Code, 2012 Edition – Table 1 EKJV K2 Line of Deposits (Pegasus, Rubicon, Hornet, Ambition)

### Section 1 Sampling Techniques and Data

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

| Criteria                           | JORC Code explanation   | Commentary  |
|------------------------------------|---|---|
| <b>Sampling techniques</b>         | <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>Sampling was completed using a combination of Reverse circulation (RC) and Diamond Drilling (DD). RC drilling was used to drill pre-collars for many of the Resource definition holes with diamond tails. Diamond drilling constitutes the rest of the drilling.</li> <li>Diamond core was transferred to core trays for logging and sampling. Half core samples were nominated by the geologist from both NQ2 and HQ diamond core, with a minimum sample width of either 20cm (HQ) or 30cm (NQ2).</li> <li>RC samples were split using a rig-mounted cone splitter on 1m intervals to obtain a sample for assay. 4m Composite spear samples were collected for most of each hole, with 1m samples submitted for areas of known mineralization or anomalism.</li> <li>Samples were taken to Genalysis Kalgoorlie for preparation by drying, crushing to &lt;3mm, and pulverizing the entire sample to &lt;75µm. 300g Pulps splits were then dispatched to Genalysis Perth for 50g Fire assay charge and AAS analysis.</li> </ul> |
| <b>Drilling techniques</b>         | <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>Both RC and Diamond Drilling techniques were used at the K2 deposits.</li> <li>Diamond drillholes completed pre-2011 were predominantly NQ2 (50.5mm). All resource definition holes completed post 2011 were drilled using HQ (63.5mm) diameter core</li> <li>Core was orientated using the Reflex ACT Core orientation system.</li> <li>RC Drilling was completed using a 5.75" drill bit, downsized to 5.25" at depth.</li> <li>7 RC pre-collars were drilled followed by diamond tails. Pre-collar depth was to 180m or less if approaching known mineralization.</li> </ul>  |
| <b>Drill sample recovery</b>       | <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>RC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery. Moisture content and sample recovery is recorded for each RC sample. No recovery issues were identified during 2013 RC drilling. Recovery was poor at the very beginning of each hole, as is normal for this type of drilling in overburden.</li> <li>For diamond drilling the contractors adjust their rate of drilling and method if recovery issues arise. All recovery is recorded by the drillers on core blocks. This is checked and compared to the measurements of the core by the geological team. Any issues are communicated back to the drilling contractor.</li> <li>Recovery was excellent for diamond core and no relationship between grade and recovery was observed. For RC drilling, pre-collars were ended before known zones of mineralization and recovery was very good through any anomalous zones, so no issues occurred.</li> </ul>   |
| <b>Logging</b>                     | <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>All diamond core is logged for Regolith, Lithology, veining, alteration, mineralisation and structure. Structural measurements of specific features are also taken through oriented zones.</li> <li>All logging is quantitative where possible and qualitative elsewhere. A photograph is taken of every core tray.</li> <li>RC sample chips are logged in 1m intervals. For the entire length of each hole. Regolith, Lithology, alteration, veining and mineralisation are all recorded.</li> </ul>  |
| <b>Sub-sampling techniques and</b> | <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> </ul>  | <ul style="list-style-type: none"> <li>All Diamond core is cut and half the core is taken for sampling. The remaining half is stored for later use.</li> </ul>  |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| <b>sample preparation</b>                         | <ul style="list-style-type: none"> <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 RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-4kg in size. These samples were submitted to the lab from any zones approaching known mineralization and from any areas identified as having anomalous gold. Outside of mineralized zones spear samples were taken over a 4m interval for composite sampling.</li> <li>Field duplicates were taken for RC samples at a rate of 1 in 20</li> <li>Sample preparation was conducted at Genalysis Kalgoorlie, commencing with sorting, checking and drying at less than 110°C to prevent sulphide breakdown. Samples are jaw crushed to a nominal - 6mm particle size. If the sample is greater than 3kg a Boyd crusher with rotary splitter is used to reduce the sample size to less than 3kg (typically 1.5kg) at a nominal &lt;3mm particle size. The entire crushed sample (if less than 3kg) or sub-sample is then pulverized to 90% passing 75µm, using a Labtechnics LM5 bowl pulveriser. 300g Pulp subsamples are then taken with an aluminium scoop and stored in labelled pulp packets.</li> <li>Grind checks are performed at both the crushing stage(3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size.</li> </ul> |
| <b>Quality of assay data and laboratory tests</b> | <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>A 50g Fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested by HCl and HNO3 acids before Atomic absorption spectroscopy (AAS) determination for gold analysis.</li> <li>No geophysical tools were used to determine any element concentrations</li> <li>Certified reference materials (CRMs) are inserted into the sample sequence randomly at a rate of 1 per 20 samples to ensure correct calibration. Any values outside of 3 standard deviations are re-assayed with a new CRM.</li> <li>Blanks are inserted into the sample sequence at a rate of 1 per 20 samples, This is random, except where high grade mineralisation is expected. Here, a Blank is inserted after the high grade sample to test for contamination. Failures above 0.2g/t are followed up, and re-assayed. New pulps are prepared if failures remain.</li> <li>Field Duplicates are taken for all RC samples (1 in 20 sample). No Field duplicates are submitted for diamond core.</li> </ul>  |
| <b>Verification of sampling and assaying</b>      | <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>All significant intersections are verified by another Northern Star geologist during the drill hole validation process, and later by a Competent person to be signed off</li> <li>No Twinned holes were drilled for this data set</li> <li>Geological logging was captured using excel templates. Both a hardcopy and electronic copy of these are stored, as well as being loaded in to the database using automatic acquire loaders. Assay files are received in csv format and loaded directly into the database by the Database administrator (DBA). A geologist then checks that the results have inserted correctly. Hardcopy and electronic copies of these are stored. No adjustments are made to this assay data.</li> </ul>  |
| <b>Location of data points</b>                    | <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>A planned hole is pegged using a Differential GPS by the field assistants</li> <li>Underground diamond holes are picked up by mine surveyors</li> <li>During drilling single-shot surveys are every 30m to ensure the hole remains close to design. This is performed using the Reflex Ez-Trac system. Upon hole completion, a Gyroscopic survey is conducted by ABIMS, taking readings every 5m for improved accuracy. This is done in true north.</li> <li>The final collar is picked up after hole completion by Differential GPS in the MGA 94_51 grid.</li> <li>Quality topographic control has been achieved through Lidar data and survey pickups of holes over the last 15 years.</li> </ul>   |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Data spacing and distribution</b>                           | <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>Drillhole spacing across the area varies. For the Resource definition drilling, spacing was typically 40m x 40m, to allow the resource to be upgraded to indicated. For the Pode drilling spacing was approximately 20m x 20m. The HRPD drilling was much more wide spaced, as this is largely unclassified. Spacing is wider than 160m in some areas.</li> <li>No compositing has been applied to these exploration results, although composite intersections are reported.</li> </ul> |
| <b>Orientation of data in relation to geological structure</b> | <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>The majority of the structures in the Kundana camp dip steeply (80°) to WSW. The Pode structure has a much shallower dip in a similar direction, approximately 60°. To target these orientations the drillhole dips of 60-70° towards -060° achieve high angle intersections on all structures.</li> <li>No sampling bias is considered to have been introduced by the drilling orientation</li> </ul>  |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>  | <ul style="list-style-type: none"> <li>Prior to laboratory submission samples are stored by Northern Star Resources in a secure yard. Once submitted to the laboratories they are stored in a secure fenced compound, and tracked through their chain of custody and via audit trails</li> </ul>   |
| <b>Audits or reviews</b>                                       | <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 have recently been conducted on sampling techniques.</li> </ul>  |

## Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

| Criteria                                       | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Mineral tenement and land tenure status</b> | <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 holes mentioned in this report are located within the M16/309 and M16/326 Mining leases and are held by The East Kundana Joint Venture (EKJV). The EKJV is majority owned and managed by Northern Star Resources Limited (51%). The minority holding in the EKJV is held by Tribune Resources Ltd (36.75%) and Rand Mining Ltd (12.25%).</li> <li>The tenement on which the Rubicon, Hornet and Pegasus deposits are hosted (M16/309) is subject to two royalty agreements; however neither of these is applicable to the actual Pegasus deposit. The agreements that are on M16/309 but not relevant to the Pegasus project are the Kundana- Hornet Central Royalty and the Kundana Pope John Agreement No. 2602-13.</li> <li>Ambition is located on M16/326</li> <li>No known impediments exist and the tenements are in good standing</li> </ul> |

| Criteria                                 | JORC Code explanation   | Commentary  |
|--|---|---|
| <b>Exploration done by other parties</b> | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>   | <ul style="list-style-type: none"> <li>The first reference to the mineralization style encountered at the Pegasus project was the mines department report on the area produced by Dr. I. Martin (1987). He reviewed work completed in 1983 – 1984 by a company called Southern Resources, who identified two geochemical anomalies, creatively named Kundana #1 and Kundana #2. The Kundana #2 prospect was subdivided into a further two prospects, dubbed K2 and K2A.</li> <li>Between 1987 and 1997, limited work was completed.</li> <li>Between 1997 and 2006 Tern Resources (subsequently Rand Mining and Tribune Resources), and Gilt-edged mining focused on shallow open pit potential which was not considered viable.</li> <li>In 2011, Pegasus was highlighted by an operational review team and follow-up drilling was planned through 2012.</li> <li>This report is concerned solely with 2014 drilling that led on from this period.</li> </ul>  |
| <b>Geology</b>                           | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>   | <ul style="list-style-type: none"> <li>The Kundana camp is situated within the Norseman-Wiluna Greenstone Belt, in an area dominated by the Zuleika shear zone, which separates the Coolgardie domain from the Ora Banda domain.</li> <li>K2-style mineralisation (Pegasus, Rubicon, Hornet) consists of narrow vein deposits hosted by shear zones located along steeply-dipping overturned lithological contacts. The K2 structure is present along the contact between a black shale unit (Centenary shale) and intermediate volcanoclastics (Sparogville formation).</li> <li>Minor mineralization, termed K2B, also occurs further west, on the contact between the Victorious basalt and Bent Tree Basalt (both part of the regional upper Basalt Sequence).</li> <li>A 60° W dipping fault, offsets this contact and exists as a zone of vein-filled brecciated material hosting the Pode-style mineralisation.</li> <li>Ambition is interpreted similar in style to the north of Pegasus</li> </ul> |
| <b>Drill hole Information</b>            | <ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>Too many holes to practically list the complete dataset, the long section and plan reflect the hole positions used for previous estimation stated.</li> </ul>  |
| <b>Data aggregation methods</b>          | <ul style="list-style-type: none"> <li>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.</li> <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>All reported assay results have been length weighted to provide an intersection width. A maximum of 2m of barren material between mineralized samples has been permitted in the calculation of these widths.</li> <li>No assay results have been top-cut for the purpose of this report. A lower cut-off of 1gpt has been used to identify significant results, although lower results are included where a known ore zone has been intercepted, and the entire intercept is low grade.</li> <li>No metal equivalent values have been used for the reporting of these exploration results</li> </ul>   |



| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| <b>Relationship between mineralisation widths and intercept lengths</b> | <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>True widths have been calculated for intersections of the known ore zones, based on existing knowledge of the nature of these structures.</li> <li>Both the downhole width and true width have been clearly specified when used.</li> </ul>  |
| <b>Diagrams</b>   | <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>Appropriate plans and section have been included in the body of this report</li> </ul>   |
| <b>Balanced reporting</b>   | <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>Both high and low grades have been reported accurately, clearly identified with the drillhole attributes and 'From' and 'To' depths.</li> </ul>  |
| <b>Other substantive exploration data</b>                               | <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>Metallurgical testwork was conducted on 9 Pegasus samples. The results are summarized as follows:                             <ul style="list-style-type: none"> <li>All Pegasus recoveries were above 91% for the leach tests</li> <li>Gravity gold recovery estimated at 55%</li> <li>Cyanide consumption 0.62 kg/t; Lime 2.29 kg/t</li> <li>Oxygen Consumption 60 gpt per hour</li> <li>Bond Ball mill work index average 18.1 kWh/t</li> <li>Bond Abrasion Index average 0.1522</li> </ul> </li> </ul> |
| <b>Further work</b>   | <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>Further work will continue in 2014 to extend the indicated resource deeper by additional drilling. Advanced exploration work will also attempt to upgrade an area at depth spanning 1km of strike to an inferred resource. The continuation of the 'HRPD' trend will continue to be drill tested at depth, with the intention of linking the known deposits of Hornet, Rubicon, Pegasus and Drake.</li> <li>Further work will be conducted to test continuity of mineralisation at Ambition.</li> </ul>    |

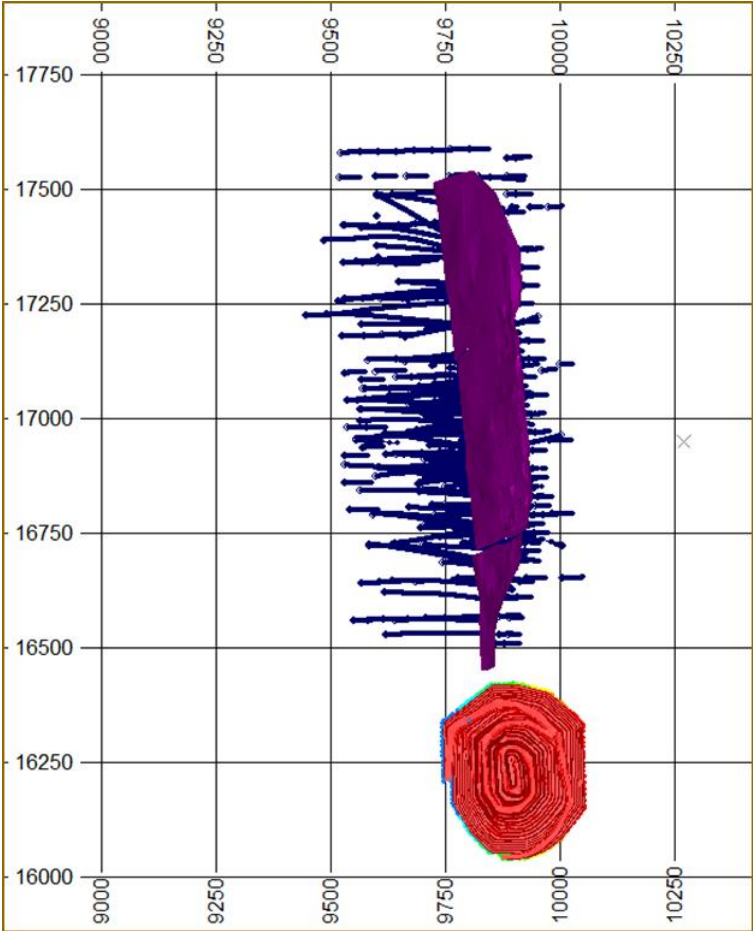
## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

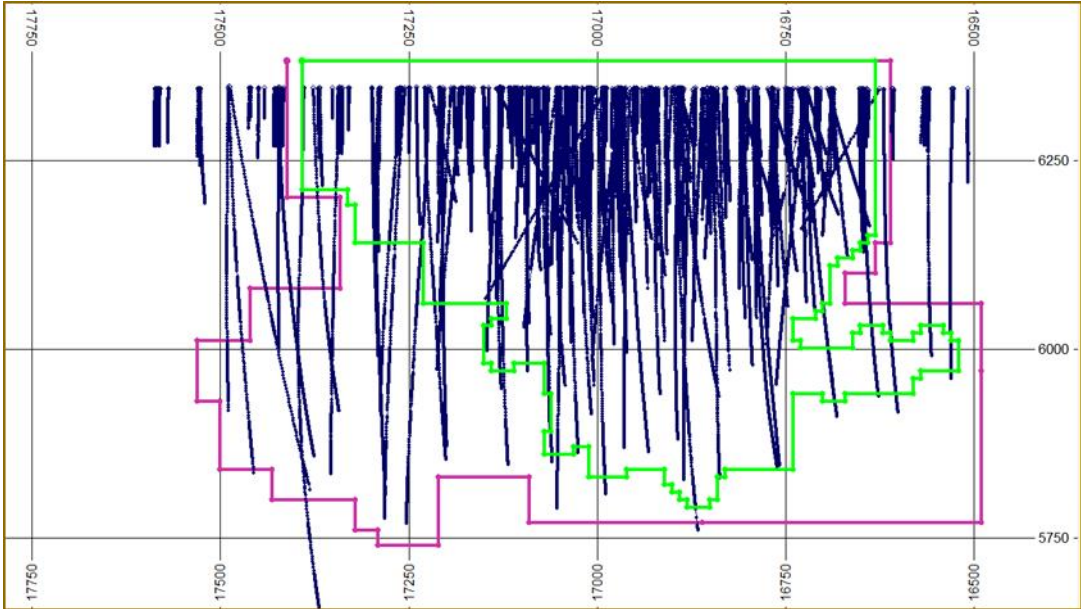
| Criteria                  | JORC Code explanation   | Commentary   |
|---------------------------|---|--|
| <b>Database Integrity</b> | <ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul> | <ul style="list-style-type: none"> <li>All data is stored in a digital database with logging of changes and management of data integrity. Validation is enforced when the data is captured.</li> <li>Data is exported to ASCII files before importation into resource modeling software, no manual editing is undertaken on any data during the export/import process</li> <li>All data is manually validated and only approved data is used for resource estimation.</li> </ul> |
| <b>Site Visits</b>        | <ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case</li> </ul>  | <ul style="list-style-type: none"> <li>Multiple site visits undertaken by the Competent Person, Geologists supervising the drilling programs and preparing the Geological interpretation.</li> </ul>   |

| Criteria                                   | JORC Code explanation   | Commentary  |
|--|---|---|
| <b>Geological Interpretation</b>           | <ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>   | <ul style="list-style-type: none"> <li>Extensive experience mining similar deposits immediately along strike supports high confidence in the quality of the Geological interpretation.</li> <li>The interpretation is primarily supported by Geological logging of Diamond Drill core.</li> <li>The interpretation of the main K2 structure is based on the presence of Quartz veining and the existence of the K2 structure.</li> <li>Structural features are known to offset the veining and K2 structure, these are incorporated into the resource model when they are identified in drilling.</li> </ul>  |
| <b>Dimensions</b>                          | <ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>  | <ul style="list-style-type: none"> <li>Mineralisation has been identified over a strike length approximately of 1000m and over a depth of approximately 600m.</li> <li>Mineralisation typically occurs as distinct domains between 1m and 2m thick</li> </ul>   |
| <b>Estimation and modelling techniques</b> | <ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul> | <ul style="list-style-type: none"> <li>Drill holes were composited into 1m intervals down hole within each interpreted domain. The composite lengths were allowed to vary between 0.5m and 1.5m to ensure that no sampling was lost during the compositing process. The average grade and total length of the composite data was compared against the average grade and total length of the uncomposited data to check the compositing process. The distribution of composite lengths was checked to ensure that the majority of the composites were close to the targeted length.</li> <li>Ordinary Kriging was used in areas with good drill coverage, Simple Kriging was used to estimate areas with poor drill coverage.</li> <li>The local mean value used for Simple Kriging was calculated from the declustered mean of the top-cut composited sample data.</li> <li>Search distances used for estimation based on variogram ranges and vary by domain.</li> <li>Grades were estimated into 10m(N/S) x 10m(elev) panels.</li> <li>Drill spacing is generally around 20m x 20m for the indicated resource and around 40m x 40m for the inferred resource.</li> <li>Top-cuts were applied to the sample data based on a statistical analysis of the data and vary by domain.</li> <li>The Kriging neighborhood was refined using statistical measures of Kriging quality.</li> <li>The estimated grades were assessed against sample grades and against declustered mean values</li> </ul> |
| <b>Moisture</b>                            | <ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>  | <ul style="list-style-type: none"> <li>Tonnes were assumed to be dry</li> </ul>   |
| <b>Cut-off parameters</b>                  | <ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>  | <ul style="list-style-type: none"> <li>Cut-off grades for reporting the resource were developed using a Gold Price of \$Au1850 and budgeted mining costs for 2014/15 for the adjacent Rubicon mine.</li> <li>A cut-off grade of 3.7gpt was adopted based on calculated costs and revenue</li> </ul>   |
| <b>Mining factors or assumptions</b>       | <ul style="list-style-type: none"> <li>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.</li> </ul>  | <ul style="list-style-type: none"> <li>A 2m minimum mining width was assumed for the evaluation</li> <li>Where required the resource was diluted to the minimum mining width using material with an assumed grade of 0.1gpt</li> <li>Where the diluted grade was above the cut-off the material was added to the resource inventory</li> <li>Dilution material added to make the minimum mining width was not included in the resource inventory.</li> </ul>  |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
| <b>Metallurgical factors or assumptions</b>        | <ul style="list-style-type: none"> <li>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 be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>  | <ul style="list-style-type: none"> <li>Metallurgical recovery factors have been developed based on extensive experience processing similar material from the Kundana</li> </ul>   |
| <b>Environmental factors or assumptions</b>        | <ul style="list-style-type: none"> <li>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.</li> </ul>  | <ul style="list-style-type: none"> <li>The utilization of existing infrastructure will minimize the impact of development of the project</li> <li>Existing waste rock and tailings storage facilities have adequate available capacity to accommodate the project</li> </ul>  |
| <b>Bulk density</b>                                | <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>  | <ul style="list-style-type: none"> <li>Bulk density measurements from project drilling and from production within the area were used to assign values within interpreted weathering horizons.</li> </ul>  |
| <b>Classification</b>                              | <ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>  | <ul style="list-style-type: none"> <li>The classification of the resource was based on a series of factors including:                             <ul style="list-style-type: none"> <li>Geological and grade continuity</li> <li>Density of available drilling</li> <li>Statistical evaluation of the quality of the kriging estimate</li> </ul> </li> </ul>   |
| <b>Audits or reviews</b>                           | <ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>   | <ul style="list-style-type: none"> <li>The resource model has been reviewed by Northern Star Resources staff</li> </ul>   |
| <b>Discussion of relative accuracy /confidence</b> | <ul style="list-style-type: none"> <li>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.</li> <li>The statement should specify whether it relates to global or local estimates, 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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul> | <ul style="list-style-type: none"> <li>This mineral resource estimate is considered as robust and representative of the Kundana style of mineralisation. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource</li> <li>The estimate is considered to be robust on a local scale for material classified as indicated. Material classified as inferred or sub-inferred is considered to be robustly estimated on a global scale.</li> </ul> |



Plan View Pegasus Drilling with K2 Footwall Wireframe



Long Section of Pegasus Drilling looking East with Resource Boundaries  
(Green – Indicated, Pink: Inferred)