

ASX ANNOUNCEMENT 11 March 2015

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 Carpene Company Secretary

Issued Capital

Shares 592.4 million Options 3.9 million

Current Share Price A\$2.07

Market Capitalisation A\$1.23 billion

Cash and Cash Equivalents 31 Dec 2014 - A\$119.1 million

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PEGASUS RESOURCE UPGRADE INFORMATION UPDATE

In accordance with ASX Listing Rule 5.8.1, the Directors of Northern Star Resources Limited (ASX: NST) wish to emphasise the following information regarding the increase in Resources at its Pegasus Project in WA released to the ASX on 16 February 2015, and contained within Appendix 1 (JORC Table 1) of that announcement, with no material change.

The total revised Resource at Pegasus, which is part of the Kundana Project, is three million tonnes at 11.6gpt. Northern Star has a 51% interest and Joint Venture Partners, Rand Mining Ltd (ASX: RND) and Tribune Resources Ltd (ASX: TBR), own 12.25% and 36.75% respectively.

In the announcement released on 16 February 2015, as well as reporting the new Pegasus Resource, Northern Star presented extensive drill results received <u>post</u> the Resource drilling cut-off date. The following information should be read in conjunction with the ASX announcement of 16 February 2015.

PEGASUS RESOURCE

Geology and Geological Interpretation

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.

K2-style mineralisation (Pegasus, Rubicon, and 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 volcaniclastics (Spargoville formation).

Minor mineralisation, 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).

A 45°W dipping fault offsets this contact and is characterised by a zone of vein-filled brecciated material hosting the Pode-style mineralisation.

Drilling Techniques

Both RC and Diamond Drilling techniques were used at the K2 deposits.

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.

Core was orientated using the Reflex ACT Core orientation system.

RC Drilling was completed using a 5.75" drill bit, downsized to 5.25" at depth.

Some RC pre-collars were drilled followed by diamond tails. Pre-collar depth was to 180m or less if approaching known mineralisation.

Sampling and Sub-Sampling Techniques

Diamond core is routinely half core sampled to intervals defined by the Logging Geologist with samples not crossing geological boundaries. The remaining core is archived.

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All major mineralised zones are sampled, plus visibly altered material outside the ore zone into what is deemed as barren material, >5m of hangingwall/footwall. All other structures and quartz veining that have observed alteration and/or mineralisation outside of the known orezone is sampled with up to ±5m on either side.

Ideally, sample intervals are to be 1m in length, though range from 0.30m to 1.20m in length. Total weight of each sample generally does not exceed 3kg.

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 <3mm particle size. The entire crushed sample (if less than 3kg) or sub-sample is then pulverised 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.

Grind checks are performed at both the crushing stage (3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size.

Sample Analysis Method

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.

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.

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 0.2gpt are followed up, and re-assayed. New pulps are prepared if failures remain.

Estimation Methodology

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.

Ordinary Kriging was used in areas with good drill coverage, Simple Kriging was used to estimate areas with poor drill coverage

The local mean value used for Simple Kriging was calculated from the declustered mean of the top-cut composited sample data.

Search distances used for estimation based on variogram ranges and vary by domain.

Grades were estimated into 10m (N/S) x 10m (elev) panels.

Cut-Off Grade(s)

Top-cuts were applied to the sample data based on histograms and probability plots of the assay data and vary by domain. A series of topcuts were considered for each domain. The impact of each top cut on the mean, variance and coefficient of variance was examined to identify outliers. The outliers were examined spatially and found to be randomly distributed

Top-cuts range from 5gpt to 100gpt for high grade domains.

A lower reporting cut-off grade of 3.7gpt was adopted based on calculated costs and revenue at existing operations.

Mining and Metallurgical Methods and Parameters

A 2m minimum mining width was assumed for the evaluation.

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Where required the Resource was diluted to the minimum mining width using material with an assumed grade of 0.1 gpt.

Where the diluted grade was above the cut-off the material was added to the Resource inventory.

Dilution material added to make the minimum mining width was not included in the Resource inventory.

Metallurgical test work results show that the mineralisation is amendable to processing through the Kanowna Belle treatment plant.

Ore processing throughput and recovery parameters were estimated based on historic performance and potential improvements available using current technologies and practices.

Mining and Metallurgical recovery factors have been developed based on extensive experience processing similar material from the Kundana Area.

Criteria Used for Classification

The classification of the Resource is based on a series of factors including, geological and grade continuity, statistical evaluation of the quality of the kriging estimate, as well as but not wholly dependent on a strict drill spacing. Drill spacing is generally around 20m x 20m for the Indicated Resource and around 40m x 40m for the Inferred Resource.

Please refer to the Competent Person's statements and the detailed information given in JORC Table 1 on Appendix 1 of the announcement of 16 February 2015 for more information.

Yours faithfully

BILL BEAMENT Managing Director

Northern Star Resources Limited

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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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