

25 October 2004
ASX RELEASE

CONFIRMATION OF NEW “EPITHERMAL GOLD PROVINCE”

Highlights

- ◆ High grade gold values including **38.34 g/t, 10.92 g/t, 5.91 g/t and 5.61 g/t** returned from rock chip sampling of quartz veins at the Range prospect.
- ◆ Gold values of 224 ppb, 197 ppb and 88 ppb returned from infill soil sampling.
- ◆ Anomalous gold mineralisation now identified over a 1.7 km length at the Range prospect.
- ◆ Stream sediment sampling has identified further areas that require testing.
- ◆ No gold mineralisation was known in the area prior to this evaluation. The gold potential of the district has been significantly enhanced.

Exploration Results - Range Prospect, Wilson River Project (130 km north of Halls Creek, WA)

In late August 2004, seven quartz veins at the Range prospect were systematically rock chip sampled at approximately 10m to 20m intervals along their length. Assaying has returned high grade gold values from a number of the veins, with peak results from individual veins of **38.34 g/t, 10.92 g/t, 5.91 g/t and 5.61 g/t** (Figure 1).

Mapping at the Range prospect has identified at least five east-west trending veins, ranging in length from 150 to 400m. Veins are generally sub-vertical to steeply north dipping.

Zones of quartz veining, generally 5 to 6m in width, with individual quartz veins displaying open space, colloform, laminated, and brecciation textures, are hosted within zones of fractured, altered and silicified volcanics, that may be up to 25 or 30 metres in width.

Recent soil sampling on 100m spaced lines with a 20m sample spacing returned elevated gold values adjacent to veins reporting high gold values in rock chips. Peak gold in soil values are 224 ppb, 197 ppb and 88 ppb. The southern end of the soil grid will be extended as a rock chip sample from a quartz vein outside the grid area returned **1.42 g/t** gold.

Limited stream sediment sampling, nominally at six samples per km², has been completed in and around the prospect area. At least three other areas outside the prospect were identified as requiring follow up evaluation, including geochemical sampling.

Further work will include mapping, additional rock chip and soil sampling, submission of the samples for base metal analysis, prioritisation of the other low level anomalies for follow up

geochemical sampling, and the interpretation of a recently completed low level aeromagnetic survey to determine the controlling structures with the aim of defining drill targets.

The Wilson River project is developing as a significant gold project within Northern Star's exploration portfolio. In the remainder of the 2004 field season Northern Star will focus on access to the greater region to expand the size and tenor of the significant results received to date. Systematic evaluation of the Range prospect and regional stream anomalies will commence after the Kimberley wet season.

Discussion

The Company is highly encouraged by the recent results received from the Range prospect. Not only do these significant results occur in an area where no previous gold mineralisation has been documented, they are also the highest grade gold results reported in the East Kimberley district from quartz veins exhibiting textures consistent with low sulphidation epithermal mineralisation.

Low sulphidation epithermal gold mineralisation in Australia is characterised by the multi-million ounce Vera - Nancy (Pajingo) and Cracow deposits in Queensland, although these are of a younger age.

With the present ground holdings at the Wilson River and Dunham projects, the Company is strategically placed to take advantage of the identification of a new province of epithermal style of gold mineralisation in the Kimberley region.

Background

The Wilson River project area is dominated by felsic volcanic rocks that have been subjected to various phases of exploration for diamonds, gold and base metals between 1972 and 1999.

Northern Star's initial focus in the Wilson River area was to evaluate the gold and base metal potential of the project area.

Compilation and evaluation of the past exploration data, particularly low order gold anomalies from stream sediment sampling, highlighted the Range prospect as an area for potential gold mineralisation. No gold mineralisation was known in the area prior to this evaluation.

Field reconnaissance in 2003 identified a number of quartz veins at the Range prospect distributed over an area of at least 2.5 km². The veins display textures characteristic of epithermal gold mineralisation and contained up to **0.97 g/t Au** and **2.1 g/t Ag** in rock chips.

In July 2004, the first systematic soil sampling in the prospect area returned elevated gold values (>50 ppb) on three separate lines. Peak gold values included 570, 272 and 234 ppb.

Limited rock chip sampling, conducted during the July soil sampling program, returned elevated gold values of up to 0.7 g/t. The work identified at least two and possibly four, 200m to 500m long east-west trending gold anomalous zones. Further sampling of the anomalous zones was recommended as they remained open to the north, south and east.

Charles Wilkinson
Managing Director

Information in this report has been compiled by Mr C S Wilkinson, MAus IMM, Managing Director of the Company, who is a competent person as defined in the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, September 1999, and accurately reflects the information compiled by the competent person.

