

14 December 2007

ASX RELEASE

ASX CODE-NST

## MAIDEN GOLD RESOURCE AT GOLDEN CROWN

### HIGHLIGHTS

**ASX Code: NST**

**Shares on Issue**  
**77,473,712**

**Current Share Price**  
**\$0.13**

**Market Capitalisation**  
**\$10.0 M**

**September 2007 Cash**  
**\$1.70 M**

#### **DIRECTORS**

**Chris Rowe (Chairman)**

**Bill Beament (MD)**

**Terry Ransted**

**Gary Lethridge**

**Peter Langworthy**

#### **COMPANY SECRETARY**

**Karen Brown**

#### **CONTACT DETAILS**

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- ▶ **NST's first JORC resource completed at Golden Crown**
- ▶ **323,000 tonnes @ 3.2 g/t Au containing 33,600 ounces**
- ▶ **JORC compliant Inferred Mineral Resource**
- ▶ **Potential to add ounces with further drilling**

Northern Star Resources Ltd (ASX: **NST** – “NST”) is pleased to advise that an Inferred Mineral Resource estimate and geological model has been completed for the **Golden Crown Project** located 20km east of the town of Halls Creek and 4km northeast of the 70,000 oz Palm Springs Gold Mine (Figure 1) in WA's East Kimberley region.

The total Inferred resource is estimated at 323,000 tonnes @ 3.2 g/t gold containing 33,600 ounces (Table 1). The total resource contains two deposits located about 600 metres along strike from each other, Golden Crown which contains 136,000 tonnes @ 3.8 g/t gold for 16,600 ounces and Faugh-a-Ballagh which contains 187,000 tonnes @ 2.8 g/t gold for 17,000 ounces.

The inferred mineral resource is based on RC and diamond drilling completed by the company and others. The estimation has been completed by Resource Evaluations Pty Ltd (“ResEval”), with the assistance of the NST geological team.

ResEval has highlighted that several lodes within the Golden Crown and Faugh-a-Ballagh deposits are open both along strike and at depth, highlighting the potential to add to the resource inventory with further drilling. There is also excellent potential for repetitions of the lodes to occur along strike, presenting a further opportunity to further increase the resource.

This is a very significant milestone for NST as it represents the first JORC compliant resource that the company has established since listing on the ASX in December 2003. The Company will shortly conduct an evaluation on drilling to prove up additional ounces and the conversion of this resource from Inferred to Indicated classification.

The deposits at the Golden Crown Project have potential to be developed as part of a high grade, low tonnage mining operation. The deposits lie within 100m of surface and would be amenable to extraction via simple open pit mining. Halls Creek is a well known historical goldfield which is well serviced in comparison to other remote communities. The close proximity to this established infrastructure also contributes to the attractiveness of the project.

The addition of this resource in conjunction with the very prospective Range and Hunter epithermal gold/silver prospects, which will be intensely drilled by the company early next field season commencing April/May, is a bonus to our gold portfolio.

The establishment of a maiden resource represents a milestone for the company. NST remains optimistic that this resource will be supplemented by additional JORC compliant resources, not only at this project, but also at our other projects such as Emull where the company announced promising Zinc assay results last week.

**Table 1: Inferred Mineral Resource for Golden Crown (1g/t Au lower cut off)**

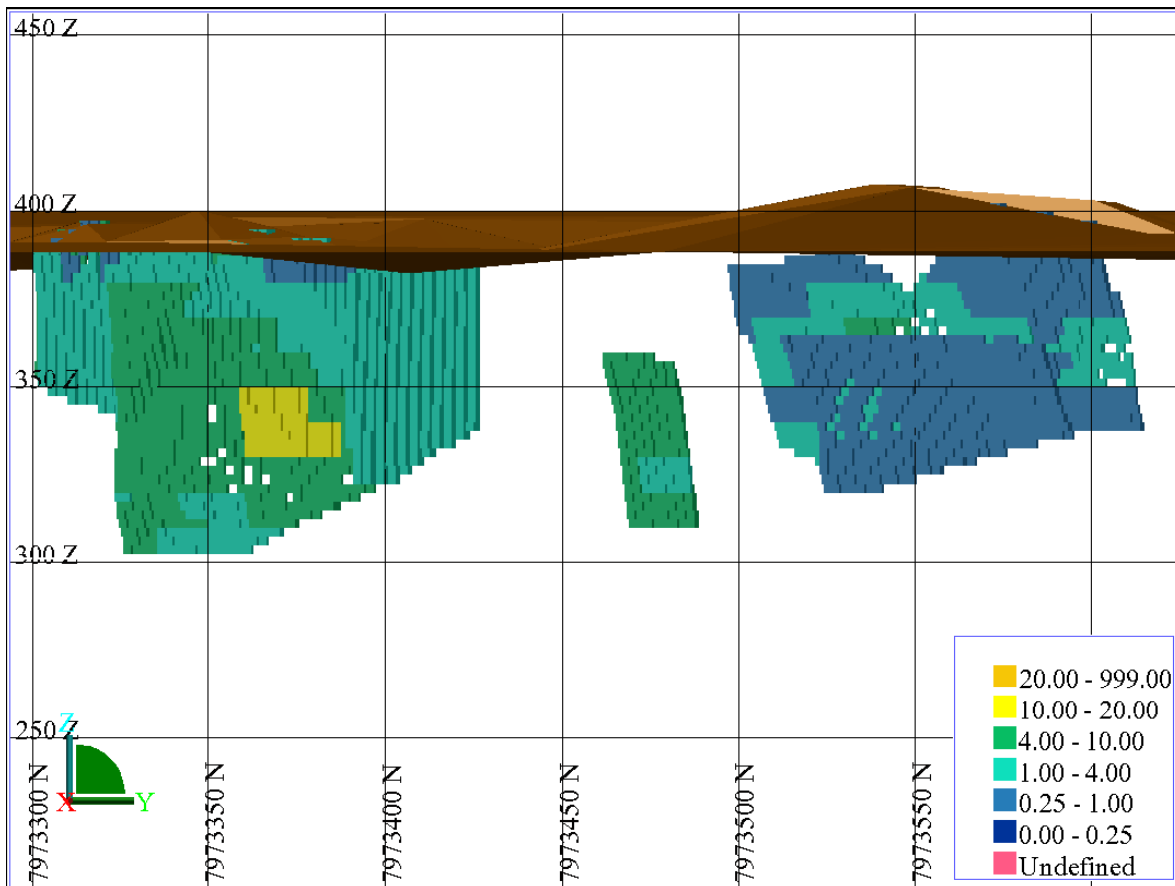
Type	Inferred		
	Tonnes T	Au g/t	Au Oz
Oxide			
Transition			
Fresh	323,000	3.2	33,600
<b>Total</b>	<b>323,000</b>	<b>3.2</b>	<b>33,600</b>

The Inferred Mineral Resource estimation has been completed by Resource Evaluations Pty Ltd with the assistance of the NST geological team. The resource estimate was completed using the following parameters:

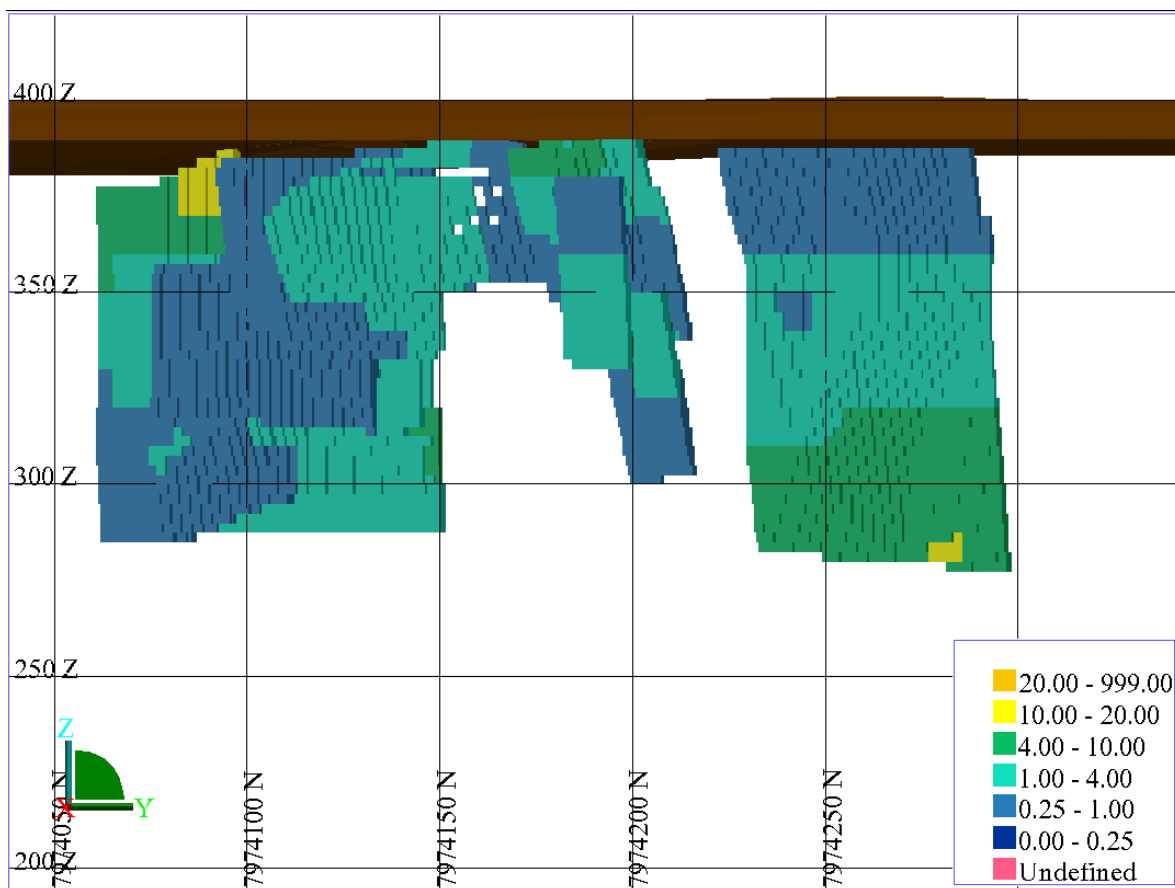
- The Golden Crown/Faugh-a-Ballagh resource area had a combined total of 660m lateral strike extent. The vertical extent of the resource for Golden Crown and Faugh-a-Ballagh is 100m from surface.
- Total drill holes used in the resource estimate included 72 surface RC holes, and 4 surface diamond holes for a total of 1,965m of drilling. The majority of holes were drilled at 20-40m section spacings throughout the deposits and orientated at 60° at a bearing of 125° however several holes are orientated in different directions. 30 drill holes were completed by NST with the others completed by previous explorers.
- RC and diamond drilling was used in the resource estimate with samples being collected at even 1m intervals. Half core samples were taken from core drilling using a diamond saw and RC samples were collected via a riffle splitter.
- Samples were assayed for Au by Fire Assay with an atomic absorption spectrometry finish.
- The majority of drill hole collars have been accurately surveyed by licensed surveyors and transformed to AMG grid. Two holes remain to be surveyed.
- Wireframes were constructed using cross sectional interpretations based on geological contacts and a nominal 0.3g/t Au cut-off grade.
- Samples within the wireframes were composite to even 1.0m intervals for both Golden Crown and Faugh-a-Ballagh. A range of high grade cut from 40g/t to 100g/t were applied to Au values based on statistical analysis.
- A Surpac block model was used for the estimate with a block size of 10m NS x 5m EW x 10m vertical with sub-cells of 2.5m x 1.25m x 2.5m.
- Inverse Distance Squared grade interpolation was used for both the Golden Crown and Faugh-a-Ballagh deposits with an oriented search ellipse based on individual lode geometry. An 'ellipsoid' search method was used.
- No bulk density determinations were available from the deposits. Information provided by NST suggested that the weathering profile is very shallow and a bulk density of 2.7t/m<sup>3</sup> was assumed for both deposits.

**For further Information please contact:**

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**Long Section - Golden Crown Resource Coloured by Gold Grade.**



**Long Section - Faugh-a-Ballagh Resource Coloured by Gold Grade.**

## BACKGROUND – GOLDEN CROWN

The Golden Crown project covers approximately 40 km<sup>2</sup> and is located 20 km east of Halls Creek. Previous exploration has outlined numerous gold targets associated with structural zones within syenitic intrusives and stockworks within turbiditic sediments, and shear hosted mineralisation.

Drilling by others has defined a number of areas of mineralisation within the tenements, including Golden Crown and Faugh-a-Ballagh. These prospects are located within an equivalent stratigraphic and structural setting of the Palm Springs gold mine, located 3.5 km to the southwest of Golden Crown, where production during the mid-1990's recovered approximately 70,000 ounces of gold.

At the historical Golden Crown and Faugh-a-Ballagh workings many high grade gold intercepts were recorded from previous drilling within the intrusive syenite rocks including:

- 4m @ 64.2 g/t Au
- 7m @ 11.4 g/t Au
- 5m @ 23.0 g/t Au

Drilling conducted by Northern Star confirmed that numerous quartz veins with high grade gold occur over a 250m strike length at Faugh-a-Ballagh and 130m strike length at Golden Crown. This structurally targeted drilling also confirmed the orientation and nature of the gold mineralised veins with significant narrow very high grades including:

- 0.8m @ 521.0 g/t Au
- 4.0m @ 284.2 g/t Au
- 0.4m @ 47.24 g/t Au
- 1.0m @ 19.06 g/t Au
- 4.0m @ 16.32 g/t Au

The strongly gold mineralised intervals intersected are characterised by fine disseminations, rather than nuggetty gold and are associated with quartz veins with variable sulphide content.

The success of this drilling underpinned NST's decision to commission Resource Evaluations Pty Ltd to undertake a mineral resource estimate for the Golden Crown and Faugh-a-Ballagh deposits.

*Information in this announcement is based on information compiled by Mr P Payne, MAusIMM, Resource Evaluations Pty Ltd, who is a competent person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Payne is a Principal Geologist for Resource Evaluations Pty Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken, and consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.*

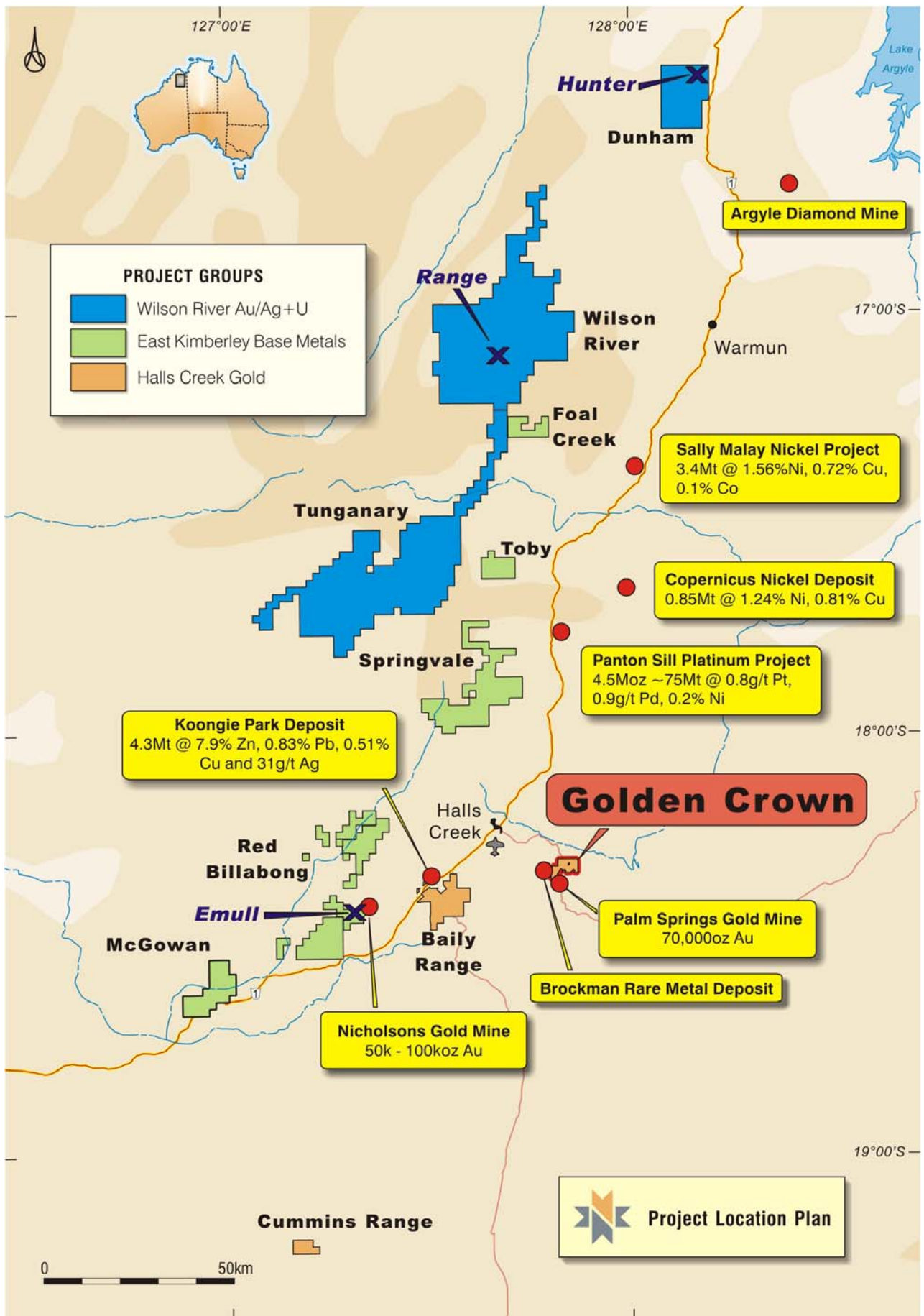


Figure 1 – Golden Crown Location Plan