

Quarterly Report for the period ended 31 March 2006

HIGHLIGHTS

- ◆ NORTHERN STAR TO RECOMMENCE DRILLING FOR NICKEL, GOLD AND PLATINUM IN ITS EAST KIMBERLEY PROJECTS
 - 2006 exploration program finalised, with initial drilling scheduled to commence in early May focussing on priority gold, nickel sulphide and platinum targets.
 - Exploration program includes 2,000m reverse circulation (RC) drilling program to further evaluate high-grade gold and silver mineralisation at the **Range Prospect** (Wilson River Project).
 - Additional tenement areas totalling 1,045km² secured (the **Tunganary Project**), 80km north-northwest of Halls Creek, following confirmation of the epithermal gold potential of Northern Star's East Kimberley project areas.
 - Planning for 800m RC drilling program completed at the **West Robin** nickel sulphide prospect (Springvale Project) to test a number of strong conductors identified from last year's EM survey.
 - 2,000m program of aircore and RC drilling to be carried out on Red Billabong Project, including at the **Bond Prospect** to follow up the significant platinum mineralisation reported earlier this year.

- ◆ NORTHERN STAR TO ASSESS URANIUM POTENTIAL OF ITS EAST KIMBERLEY PROJECTS
 - 'Wet season' review of the Company's East Kimberley tenement holding identifies a number of prospect areas that yielded highly anomalous uranium mineralisation in previous exploration (including rock chip samples assaying **1.23% U₃₀₈**, **0.76% U₃₀₈** and **0.38% U₃₀₈** within the Dunham Project, **0.15% U₃₀₈** within the Wilson River Project, and **0.157% U₃₀₈** from the Tunganary Project.
 - Uranium potential of these prospect areas to be assessed during the 2006 field season.

OVERVIEW

Northern Star Resources (ASX Code: NST) has three project groups centred on Halls Creek in the largely under-explored East Kimberley region of Western Australia (Figure 1). The project groups cover an area of approximately 4,200 km² and are highly prospective for nickel-copper-cobalt and platinum group elements (PGE) mineralisation, gold, diamonds and base metals.

The highlights from the highly successful 2005 exploration field season included confirmation of the epithermal gold potential of its East Kimberley projects with the discovery of high-grade gold-silver mineralisation at the Range and Hunter Prospects. The Company also enjoyed success with its nickel-PGE exploration programs at the Red Billabong and Springvale Projects in the Halls Creek region of the East Kimberley.

The 2005 field season has generated several priority drilling targets for the Company and laid the foundations for a very active 2006 field season which will include follow-up drilling of the high-grade gold mineralisation intersected at the Range Prospect, drilling of a strong EM conductor identified at the Springvale Project and accelerated field exploration and drilling activities at several other nickel-PGE and base metal targets.

Wilson River Project Group (100% NST)

The Wilson River Project Group, situated about 150 km north of Halls Creek and centred 50 km west of the Argyle diamond mine, comprises seven exploration licences (ELs) and five exploration licence applications (ELAs) covering approximately 2,280 km².

Together with the present ground holdings at the Wilson River, Dunham and new Tunganary projects (covering some 900 km² of potential host rocks) the Company is a major landholder in the East Kimberley district and is strategically well placed to take advantage of the emerging epithermal style of gold mineralisation in the region.

The silicified quartz veins at the Range and Hunter prospects are remarkably similar to those from mineralised epithermal quartz vein systems in Queensland's Drummond Basin. Examples of low sulphidation epithermal gold mineralisation in Australia are the **multi-million ounce** Pajingo-Vera-Nancy and Cracow deposits in Queensland, although these are of a younger age.

Range Prospect, Wilson River Project - Gold

Approximately 2,000m of RC drilling will be undertaken to further evaluate the high grade gold and silver mineralisation defined at the Range prospect, located about 130 km north of Halls Creek. The programme will focus on testing the mineralisation already intersected, as well as holes to determine the overall scale and potential of the mineralised system at the Range prospect. The mineralised veins identified to date are contained within a north-northeast trending corridor that is over 2 km long and 1 km wide.

Previous Work

During 2004 and early 2005, Northern Star reported rock chip samples from the Range prospect that returned encouraging high grade gold in quartz veins which exhibit low sulphidation epithermal textures. The results, including **40.84g/t Au (10.5g/t Ag)**, are from zones of quartz veining that are generally 3m to 5m wide but can be up to 15m in width.

The first phase of drilling was completed in August 2005 (20 shallow RC percussion holes for a total of 1,214 metres) and reported to the ASX on 28 September 2005, with a number of high-grade gold intersections including an outstanding high-grade intersection of **5m @ 15.08g/t Au and 34.94g/t Ag from 23m.**

Two follow-up diamond drill holes, for a total of 48.24m, were completed late last year to twin the significantly mineralised RC holes announced previously. Significant results included **6.15m @ 10.48g/t Au, 45.03g/t Ag** from 21.5m and **3.65m @ 2.45 g/t Au, 1.23g/t Ag** from 6.35m, as reported to the ASX on 31 January 2006.

The results from the RC and diamond drilling are considered very significant for reconnaissance exploration and confirmed the potential for the prospect area and the region in general to host low sulphidation style epithermal deposits.

Hunter Prospect, Dunham Project - Gold

Exploratory work to define the extent of the gold bearing quartz veining at the Hunter Prospect will be ongoing with drilling planned for the latter part of the 2006 field season.

Previous Work

Exploration by Northern Star generated highly encouraging results from rock chip sampling at the Hunter prospect (Dunham Project) located some 200 km north northeast of Halls Creek. The Hunter prospect occurs some 80 km to the northeast of Northern Star's Range prospect.

Systematic rock chip sampling of six of the zones of quartz veining over a one square kilometre area at the Hunter Prospect returned high grade gold and silver results, including **50.65g/t Au (10.4g/t Ag), 13.85g/t Au (20.3g/t Ag), 4.88g/t Au (3.7g/t Ag), 1.30g/t Au (23.9g/t Ag), 0.54g/t Au (27.0g/t Ag).** Zones of quartz veining are generally 1m to 3m in width and up to 400m in length.

These results add further weight to Northern Star's confidence in the potential of the emerging epithermal style mineralisation in the East Kimberley district and are in line with the early rock chip results that were returned from the Range prospect.

Tunganary Project

Following the successful confirmation of the potential for the region to host low sulphidation style epithermal style deposits, additional ground was applied for in the Tunganary area. This project, located some 80 km north-northwest of Halls Creek, comprises five ELAs over an area of approximately 1,045 km².

Systematic mapping and sampling of the key areas within the project area will be undertaken on grant of the tenement applications, expected to be in the latter part of the 2006 field season.

East Kimberley Nickel Project Group (100% NST)

The East Kimberley Nickel Project Group comprises six tenement holdings – Springvale, Toby, Foal Creek, Red Billabong, Castlereagh and McGowan – covering an approximate area of 1,575 km².

This commanding land holding covers known and inferred mafic/ultramafic intrusive rocks, which are considered prospective for nickel-copper-platinum and base metal mineralisation.

Springvale Project

Springvale, located some 45 km north of Halls Creek, comprises two ELs and one ELA covering an area of approximately 372 km².

West Robin Prospect – Nickel-PGEs

As part of the 2006 field season, an initial program of 800m of RC drilling is scheduled to be carried out at the West Robin prospect to test electromagnetic anomalies, identified from ground geophysical surveys, to establish if the conductive responses are due to nickel sulphide mineralisation.

A moving loop ground EM survey completed late last year covered the two zones of ultramafic/mafic intrusions in the West Robin area. A number of conductors were highlighted from the survey with a strong conductor identified on line 1600mE and a weaker conductor on line 800mE. Both conductors are associated with elevated base metal and PGE values in the soils and are 200m to 300m in length.

The limited strike length of the electromagnetic anomalies, the associated geochemistry and the ultramafic lithologies indicate a high probability that the conductors are sourced by sulphides.

Previous Work

Previous explorers reported two zones of ultramafic/mafic intrusions in the West Robin Soak area, hosting nickel–copper gossans, chromite bands, and ferruginous rocks. Past rock chip sampling of these intrusions within Northern Star’s tenement holdings contain up to **1.23% Ni** and **0.19% Cu**.

Soil sampling on nominally 400m spaced traverses was completed covering the northern and western portions of the ultramafic units. The grid covers an area approximately 5.5 km by 1.25 km, and elevated platinum and palladium values, peaking at 80ppb and 66ppb respectively, were returned over four intervals up to 160m wide and with a strike length of 800m.

A moving loop ground EM survey (16 line kilometres over 15 lines) was completed late last year over the two zones of ultramafic/mafic intrusions in the areas associated with elevated base metal and PGE values in the soils.

Red Billabong Project

The Red Billabong Project, located between 30 to 70 km west and southwest of Halls Creek, comprises five ELs covering an area of approximately 710 km².

Bond Prospect - Platinum

The initial programme of 2,000m of aircore and RC drilling planned for the Red Billabong Project will include follow-up the significant **platinum group element (PGE)** mineralisation intersected late last year at the Bond Prospect. New results released to the ASX on 31 January 2006 (and included in the December 2005 Quarterly Report) included an intersection of 9m @ 0.3g/t platinum, 0.4g/t palladium and 0.06g/t gold (0.78g/t PGE+Au) from 26m including **1m @ 1.08g/t Pt, 1.3g/t Pd, 0.11g/t Au (2.49g/t PGE+Au)**.

The drilling to date has been widely-spaced geochemical drilling in an under-explored area with poorly exposed bedrock geology. The current drilling will be focused on better defining the extent and character of the PGE mineralisation at the Bond prospect which is associated with mafic / ultramafic host rocks coincident with a weak north-east trending magnetic anomaly some 1.5 km in strike length.

The Company believes that these PGE results represent an exciting new exploration opportunity given that limited drilling intersected anomalous PGE's in a number of widely-spaced holes in an area with no record of PGE mineralisation or previous drilling.

Emull area – Base Metals

Further exploration in the Emull area will include drilling to locate the source of the anomalous results highlighted by last years aircore drilling, as well as higher grade zinc shoots within the existing low grade deposit.

These areas include; Emull West (1.5 km west of the Emull deposit) where significant assay results included **15m @ 0.28% Zn, 0.25% Cu and 0.33% Pb from surface** and **3m @ 0.14% Zn, 0.04% Cu and 0.01% Pb** from 14m to EOH and **4m @ 0.17% Zn, 0.05% Cu and 0.01% Pb** from 2m.

In addition, further aircore drilling is planned around a single hole in the covered region to the west of Emull to determine the source and extent of the mineralisation. The hole returned anomalous gold and copper values in which gabbroic lithologies were logged, including **19m @ 19ppb Au and 514ppm Cu** from 65m, including **11m @ 144ppb Au and 615ppm Cu** from 68m and including **1m @ 742ppb Au and 717ppm Cu** from 69m.

Previous Work

Initial drilling within the southern Red Billabong project area (Emull area) confirmed a number of areas of interest that are anomalous in either **gold** and/or **base metals**. The results from the initial drilling were reported to the ASX on 31 August 2005 and 04 October 2005. Follow up drilling results were reported to the ASX on 31 January 2006.

Uranium Mineralisation (100% NST)

A review of the historical exploration open files and reviews of the mineral potential of the East Kimberley district of Western Australia carried out during the quarter has highlighted a number of areas within the Company's tenement holdings which have returned elevated uranium values from reconnaissance exploration. All the areas contain mineralisation or occurrences associated with major faults close to the contact of the Whitewater Volcanics and/or overlying sedimentary units of the Speewah Group (O'Donnell Formation). They include rock chip samples from Frog (**1.23% U₃O₈, 0.76% U₃O₈ and 0.38% U₃O₈**) within the Dunham Project, Antares (**0.15% U₃O₈**) within the Wilson River Project, and from A3 (**0.157% U₃O₈**) within the Tunganary Project. No drilling has been conducted previously in these areas.

Frog Prospect (Dunham Project)

The prospect geology is dominated by felsic pyroclastic and tuffaceous sedimentary rocks (Whitewater Volcanics), which are exposed in a large northeasterly trending anticline that has been truncated on the eastern margin by the Dunham Fault. The Whitewater Volcanics are unconformably overlain by metasedimentary rocks of the O'Donnell Formation (Speewah

Group). Granite outcrops to the east of the Dunham Fault, and contains quartz-filled faults with associated chlorite and hematite alteration, particularly along the Dunham Fault.

Mineralisation is associated with a radiometric anomaly coincident with the faulted contact between a porphyritic rhyolite and ferruginous, sericitic felsic agglomerate. Previous geological mapping indicates that the radiometric anomalies are spatially associated with zones of shearing. Maximum non-coincident assays were 0.38% ppm U_3O_8 and 1440 ppm fluorine.

Another substantial radiometric anomaly was located about 400 m east of the Frog anomaly. A single sample of 'ferruginized quartz breccia' with a radiometric maxima of 9000 cps from this area assayed 1.23% U_3O_8 and 1860 ppm fluorine.

Antares Prospect (Wilson River Project)

This prospect was discovered in 1973 following investigation of an anomalous airborne radiometric survey response. The Antares uranium–fluorine mineralisation occurs within a volcanoclastic succession of the Whitewater Volcanics about 100–200 m from the Greenvale Fault. Three costeans dug across the Antares anomaly in 1981 indicated a positive correlation between zones of intense jointing and radiometric response. Assay results up to 943 ppm U_3O_8 were reported.

Follow up work in 1990 returned rock chip sample results of up to 0.15% U_3O_8 , coinciding with high radiometric counts.

Airborne radiometrics have identified a number of other uranium channel anomalies in the Wilson River project area, including a large 7km by 2km target at Mt Remarkable within the volcanics, close to the unconformity with sandstones of the O'Donnell Formation. Very few of these targets have been subject to on-ground evaluation.

A3 Prospect (Tunganary Project)

The occurrence was discovered in 1973 following investigation of an anomalous airborne radiometric survey response. The A3 Uranium mineralisation occurs within porphyritic rocks of the Whitewater Volcanics, about 1.3km from the Greenvale Fault. The occurrence is associated with an approximately 3km long uranium channel airborne spectral anomaly. A rock chip sample is reported to have returned a value of 0.157% U_3O_8 .

The company intends to assess the potential of these areas to host potentially economic uranium mineralisation in the coming field season.

CORPORATE

The Company had \$1.8 million cash at the end of the quarter.

Charles Wilkinson
Managing Director

Information in this report is based on information compiled by Mr C S Wilkinson, MAusIMM, Managing Director of the Company, 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 Wilkinson 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 report of the matters based on his information in the form and context in which it appears.

