

Quarterly Report for the period ended 31 March 2007

SUMMARY

EAST KIMBERLEY EXPLORATION PROJECTS

- 2007 exploration field season commences with drilling of key zinc and nickel targets within the Red Billabong Project.
- Drilling underway targeting high-grade zinc mineralisation at Emull Prospect (previous intercepts include **7.85m @ 7.39% Zn** including **2.74m @ 12.1% Zn**).
- Drilling will also target four areas with elevated nickel values at Red Billabong Project to test for nickel sulphide mineralisation.
- Significant 200m wide and 700m long platinum anomaly defined at Lamboo Prospect within the Red Billabong Project (**+35ppb Pt** with peak value of **+125ppb Pt**), rock chip values of up to **2.74g/t Pt**.
- Drilling to test this anomaly will commence following the Emull zinc drilling program.
- Highly encouraging rock chip values returned from gossanous quartz vein sampling from McGowan Project, including:
 - 0.25g/t Au, **7.35% Cu**; 0.45g/t Au, **4.6% Cu**; **1.79g/t Au, 3.67% Cu**;
0.29g/t Au, **5.01% Cu**; **1.30g/t Au**, 0.16% Cu
- Agreement concluded with ASX-listed uranium explorer, **U308 Ltd**, on the uranium rights within Northern Star's East Kimberley portfolio to significantly accelerate uranium exploration on these highly prospective tenements

CORPORATE & OTHER

- Notification received subsequent to the end of the Quarter of a competing application for exploration licences covering part of the Wilson River Project.
- \$3.2 million in cash at the end of the Quarter.

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 2,720 km² and are highly prospective for nickel-copper-cobalt and platinum group elements (PGE) mineralisation, gold, uranium, diamonds and base metals.

Drilling completed last year confirmed the prospectivity of the Company's tenements, particularly the epithermal gold potential within the Wilson River and Tunganary Project Groups. The Company also confirmed the epithermal gold potential of the Hunter Prospect, within the Dunham Project group, after rock chip sampling returned high-grade gold and silver values.

During the March Quarter, Northern Star compiled the results from the 2006 field season as the basis for its exploration activities during 2007. The Company has already commenced drilling of several priority targets as part of its 2007 exploration field season, including key base metal (nickel and zinc) and platinum targets at the Red Billabong Project.

The Company is also committed to accelerating exploration during 2007 through its Joint Venture with uranium exploration company, U3O8 Limited, to assess the potential of the Wilson River and Tunganary Project Group areas to host uranium mineralisation.

Subsequent to the end of the Quarter, Northern Star received notice of an application to the Mining Registrar by Fraka Investments Pty Ltd ("Fraka") for exploration licences covering a portion of the ground within the Company's Wilson River Project. The area of Fraka's application covers the epithermal-style mineralisation and associated zones of quartz veining identified by Northern Star at the Range Prospect, but not those at the Dunham (Hunter prospect) or Tunganary Projects.

Information to hand suggests that Fraka's application covers ground included in ELs 80/2426 and 80/2427 (Figure 2). Northern Star had previously applied for an extension of those ELs in accordance with the Mining Act and Mining Regulations, and the Company has accordingly lodged a formal objection to Fraka's application with the Mining Registrar. The principal basis of Northern Star's objection is that the ground applied for by Fraka is already the subject of the ELs held by Northern Star and is accordingly not available for grant to another party.

Northern Star intends to vigorously pursue all legal remedies available to it to ensure that the Company retains title to the relevant ground. Based on preliminary legal advice received to date, Northern Star believes that Fraka's application will fail and the Company's title to the ground will be confirmed.

The Wilson River, Dunham and Tunganary Projects are the subject of a farm-out agreement with U3O8 Limited for uranium announced to the market on 20 February 2007. The potential for uranium mineralisation is not significantly impacted by Fraka's application as the primary targets within the Wilson River Project are outside the area covered by its application.

East Kimberley Nickel Project Group (100% NST)

The East Kimberley Nickel Project Group comprises five tenement holdings – Springvale, Toby, Foal Creek, Red Billabong, and McGowan – covering an approximate area of 820 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.

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 330 km².

- ***Red Billabong Project (Emull Prospect) – Zinc***

Within the Red Billabong Project, Northern Star will further evaluate the Emull Prospect during the 2007 exploration field season. Zinc-rich mineralisation hosted by the Emull gabbro occurs over a strike length of 500m and a maximum width of 50m. The Company's objective is to define high-grade zinc shoots within a mineralised zone which has previously been broadly drilled (typically 100m traverse spacing). The grade potential of this zone is supported by intercepts from previous drilling including 7.85m @ 7.39% Zn including 2.74m @ 12.1% Zn and 4m @ 4.61% Zn within a broader zone of 33m @ 1.02% Zn, 7m @ 3.55% Zn and 6m @ 4.12% Zn from recent drilling completed by the Company.

Recent drill results indicate that the potentially higher grade mineralisation is plunging to the south west and not to the south east as was previously interpreted (Figure 3). Approximately 1,000 metres of RC drilling is currently underway to resolve this and confirm the location of higher grade mineralised zones within the existing mineralised envelope.

- ***Red Billabong Project (Areas 1, 4, 5, 6) – Nickel Sulphide***

Approximately 1,500m of aircore (AC) drilling will be undertaken during the June Quarter at a number of prospect areas in the northern portion of the Red Billabong project area to test whether elevated nickel values returned in previous AC drilling are due to the presence of nickel sulphide mineralisation.

The previously unrecognised prospective areas occur in the heavily covered region to the north and west of the Moola Bulla Complex (Figure 4). Previous drilling in this region intersected mafic/ultramafic lithologies with anomalous base metal geochemistry.

The priority areas with the potential to host nickel sulphide and/or PGE mineralisation include:

Area 1: A single hole RBR-107 (EOH 36m) returned 20m @ 0.17% nickel from 16m including 7m @ 0.29% nickel from 17m from a traverse across the Moola Bulla Complex. Hole spacing is 500m. Depth of cover sediments is 11m.

Area 4: A single traverse of nominally 200m spaced holes testing an aeromagnetic high, approximately 3 km west of the Moola Bulla Complex, returned strongly elevated nickel values including RBR-168 (EOH 60m) 8m @ 0.08% nickel from 37m, RBA-169 (EOH 68m) 40m @ 0.10% nickel from 28m including 7m @ 0.20 % nickel from 29m, RBA-170 (EOH 55m) 16m @ 0.10% nickel from 32 and RBA-569 (EOH 47m) 15m @ 0.11% nickel from 32m. The depth of the cover in this area varies from 10 to 25m. Ultramafic rocks were identified from the logging.

Area 5: A single traverse of nominally 200m spaced holes testing an aeromagnetic high and associated airborne electromagnetic anomaly, located approximately 6 km north west of the Moola Bulla Complex, returned strongly elevated nickel values. Significant intercepts include RBA-147 (EOH 58m) 30m @ 0.16% nickel from 28m and RBA-148 (EOH 39m) 7m @ 0.07% nickel from 32m. Cover depths vary from 7m to 21m.

Area 6: A traverse of three 100m spaced holes testing a ‘bulls-eye’ magnetic anomaly returned anomalous nickel values including RBA-164 (EOH 45m) 5m @ 0.06% nickel from 40m and RBA-165 (EOH 50m) 22m @ 0.06% nickel from 28m. Cover depth is about 30m. This drilling intersected ultramafic rocks.

- ***Lamboo Platinum***

During the 2006 field season the Company completed an initial evaluation of the platinum potential of the Lamboo Ultramafics which outcrop poorly on the south eastern portion of the Red Billabong Project.

An exploration grid based -80 mesh soil sampling (80m spaced sampling on 200m spaced traverses) over a 2.8 km² area defined an approximately 200m wide and 700m long northeast trending +35ppb platinum (Pt) anomaly, with a peak value of 125ppb Pt. Limited rock chip sampling (four samples) returned highly elevated platinum values including one sample which returned **2.74ppm Pt**, 0.47ppm palladium (Pd) and 42ppb Au.

Drilling of this area is scheduled to be undertaken in the current round of drilling following the drilling program at the Emull Zinc Prospect.

McGowan Project

The McGowan Project comprises a single exploration licence which covers 114 km² and is located 85 km to the south west of Halls Creek (Figure 5).

The tenement covers a number of poorly outcropping gabbro intrusives and is prospective for base metal mineralisation. Previous exploration identified a number of gossanous quartz veins (Cu-Ag-Au-Zn) hosted within gabbroic rocks which returned up to 4.5m @ 3.1% copper and 1.5m @ 2.9% copper from shallow drilling. The one hole drilled below the base of oxidation returned 3m @ 0.7% copper from 56m.

The Company acquired low-level, closed space aeromagnetic data over the Project last year in order to better target potential mineralisation in the poorly outcropping terrain.

A programme of reconnaissance rock chip sampling (11 samples) over the gossanous quartz veins has highlighted at least four areas which have returned elevated gold, copper and silver values.

All samples which returned significant values are tabulated below and shown on Figure 6.

Sample	Easting	Northing	Au	Ag	Cu
	AGD66	AGD66	ppm	ppm	%
NSX601566	281021	7937237	0.72	15.9	0.14
NSX601567	280931	7937227	0.45	17.4	0.17
NSX601568	280891	7937233	0.22	7.55	0.25
NSX601569	280874	7937237	0.25	0.8	7.35
NSX601570	280402	7937262	0.29	2.35	0.1
NSX601571	280408	7937260	0.12	1.75	0.04
NSX601572	280405	7937272	0.01	3.05	0.14
NSX601573	280391	7937301	0.45	6.5	4.6
NSX601574	280078	7936015	1.79	12.3	3.67
NSX601575	280796	7937243	0.29	7.2	5.01
NSX601576	280787	7937243	1.30	18.6	0.16

The zones of veining are hosted within gabbroic rocks and vary in strike length (up to 250m) and width (up to 7m). The veining is associated with the margins of an approximately 600m wide and 3,000m long magnetic low within the gabbro.

The multiplicity of these gossanous veins, the significant outcropping strike extent of some of the veins – which may continue beneath alluvial cover – and the limited amount of historic drill testing all indicate that this project area has excellent potential for the discovery of significant mineralisation.

Wilson River Project Group (100% NST)

The Wilson River Project Group is located about 150 km north of Halls Creek and centred 50 km west of the Argyle diamond mine. Together with the present ground holdings at the Wilson River, Dunham and new Tunganary projects, 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 within the Wilson River Project Group are remarkably similar to the 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.

A part of this project area is subject to a tenement complication which has been subject to a separate ASX release on 27 April 2007 (see above). Northern Star intends to vigorously pursue all legal remedies available to it to ensure that it retains title to the relevant ground

- ***Uranium Exploration***

During the Quarter, the Company reached agreement with ASX-listed uranium explorer, **U3O8 Ltd**, on the uranium rights within its East Kimberley exploration portfolio. The agreement will provide a platform to significantly accelerate uranium exploration on these highly prospective tenements.

A number of known uranium anomalies exist within Northern Star's Wilson River group of tenements, including A3, Frog, Frog West, and Last. While no previous drilling has been reported on the tenements, preliminary exploration by Northern Star last year confirmed the uranium potential of the region. Significant uranium rock chip assays have been recorded at Frog (**0.38% U₃O₈**), Frog West (**1.23% U₃O₈**) and A3 (**0.16% U₃O₈**).

Significantly, a large number of major uranium-rich radiometric anomalies have been identified in the area. These target horizon areas are up to 7 km long and have never been explored for uranium.

Under the joint venture agreement, U3O8 can earn a 75% interest in the uranium rights of the tenements by carrying Northern Star to completion of a Bankable Feasibility Study, with a minimum expenditure commitment of \$200,000 per annum. The Wilson River and Tunganary tenement groups comprise highly prospective ground between Halls Creek and Kununurra.

The agreement with U3O8 Ltd will enable the Company to draw on U3O8's expertise as a specialist uranium explorer to assess the potential for uranium mineralisation in this region. The joint venture will result in a coordinated approach to exploration within a consolidated tenement holding including U3O8's existing East Kimberley exploration holdings. The combined tenements cover some 2,200sq km and cover 220 km of prospective mineralised unconformity.

During the 1970s, rock chip sampling at U3O8 Ltd's Mad Gap project, adjacent to the Tunganary tenements, produced outstanding results of 4.65% U₃O₈, 4.42% U₃O₈ and 1.69% U₃O₈. Drill holes in the areas returned assays of greater than 0.2% U₃O₈.

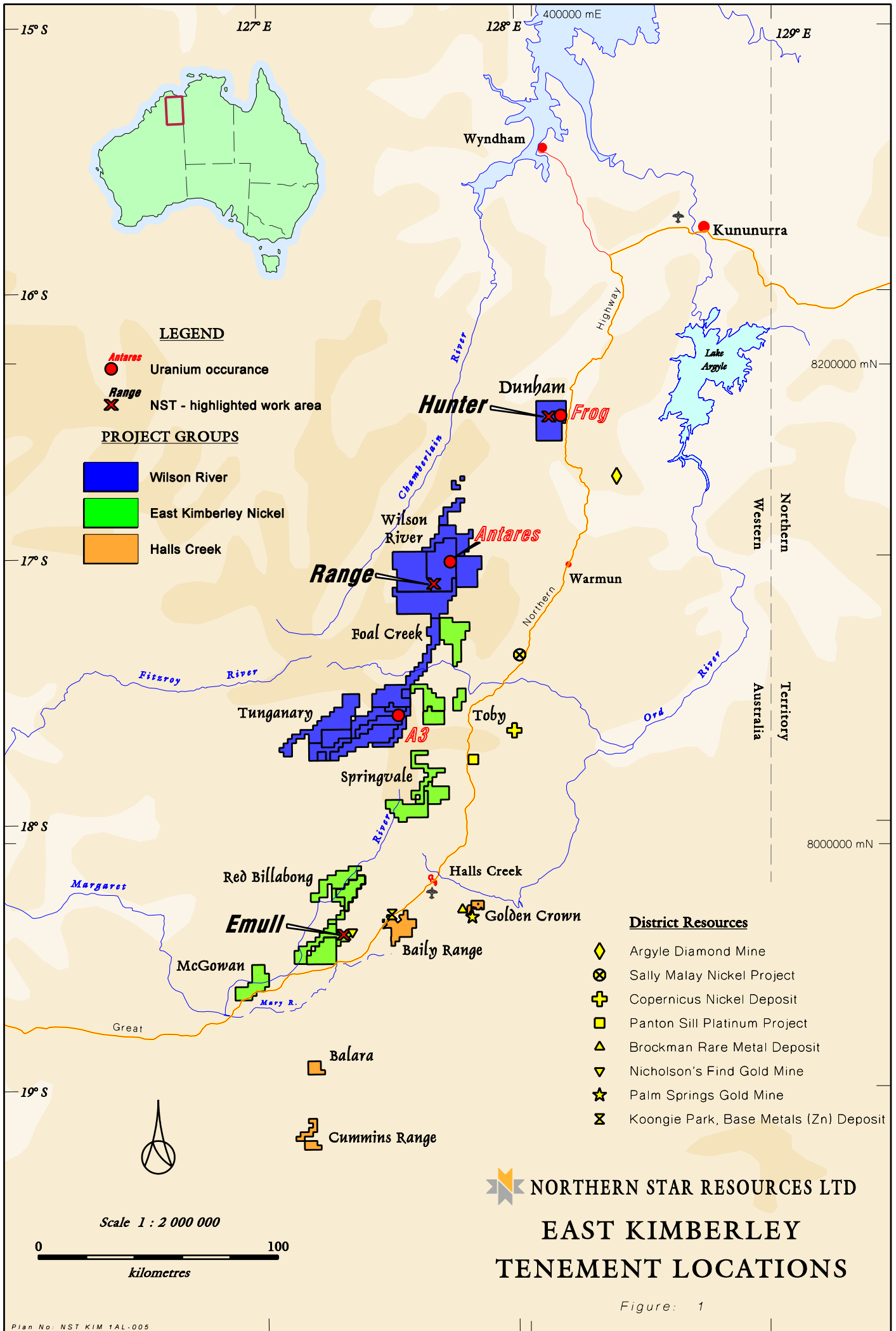
The U3O8 Ltd management team comprises some of the most experienced uranium explorationists in Australia, including Managing Director, Stephen Mann, and Chief Geologist, Xavier Moreau. Mr Mann was previously General Manager of Cogema Australia, a subsidiary of French nuclear energy group, AREVA. A uranium mineralisation specialist, Mr Moreau was a Senior Geologist and Structural Consultant for AREVA in Australia.

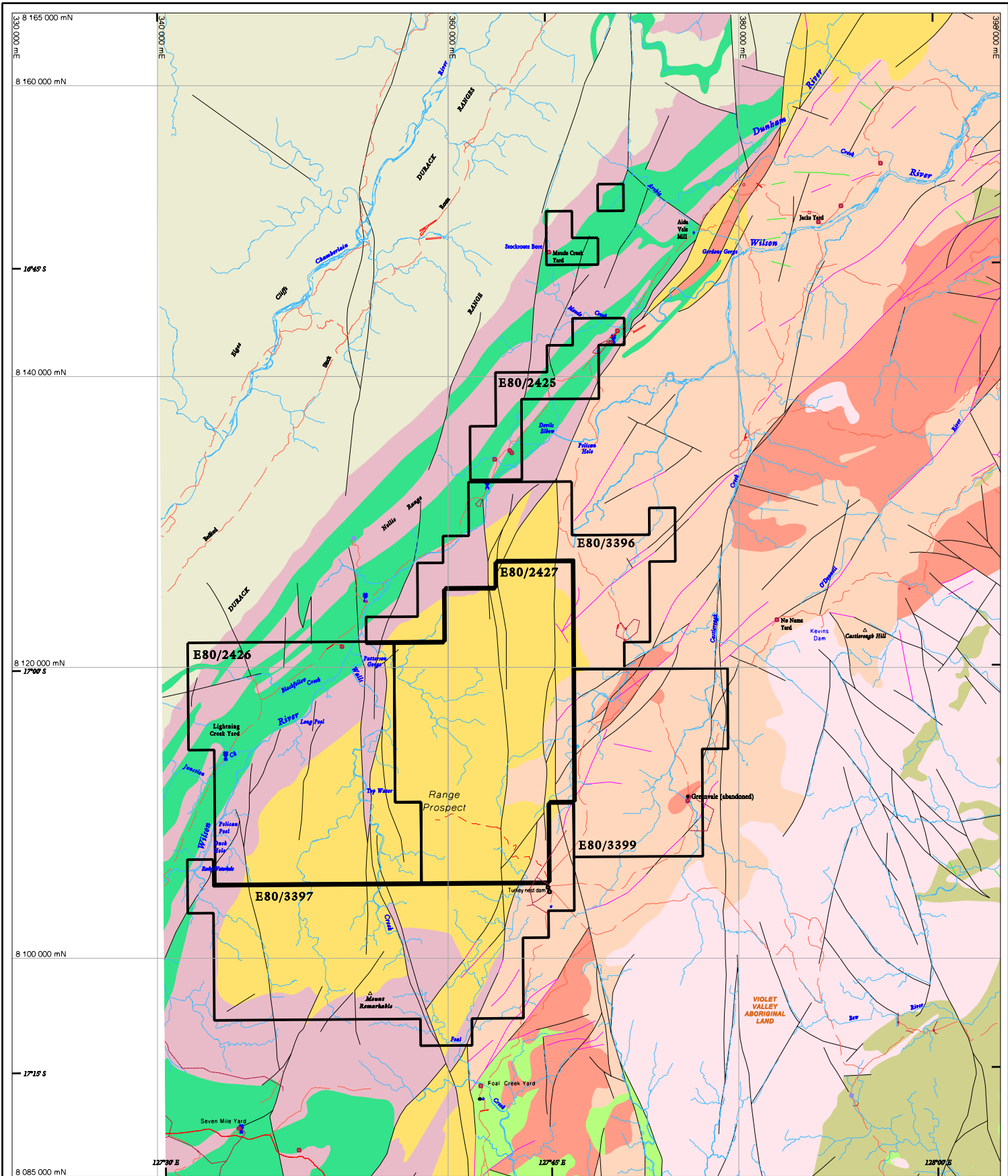
CORPORATE

The Company had \$3.2 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.





LEGEND

- | | | |
|--------------------------------------|---------------------------------------|---------------------|
| Heart Dolerite c1790Ma | Whittewater Volcanics (1865 - 1850Ma) | Geological boundary |
| KIMBERLEY GROUP c1800Ma | Castlerough Porphyry | Regolith boundary |
| Carson Volcanics | Tichelara Metamorphics | Fault |
| SPEERWAH GROUP c1835Ma | Mafic and ultramafic intrusions | Quartz vein |
| SALLY DOWNS SUPERSUITE | | Major Creek |
| PAPERBARK SUPER SUITS c1865 - 1850Ma | | Track |
| | | |



NORTHERN STAR RESOURCES LTD
KIMBERLEY REGION
WESTERN AUSTRALIA
Wilson River Project
Regional Geology

Compiled: NSR Plan No. : NSR WIL 1GA-006
 Drafted: DJM Date: January 2007 Figure No. : 2

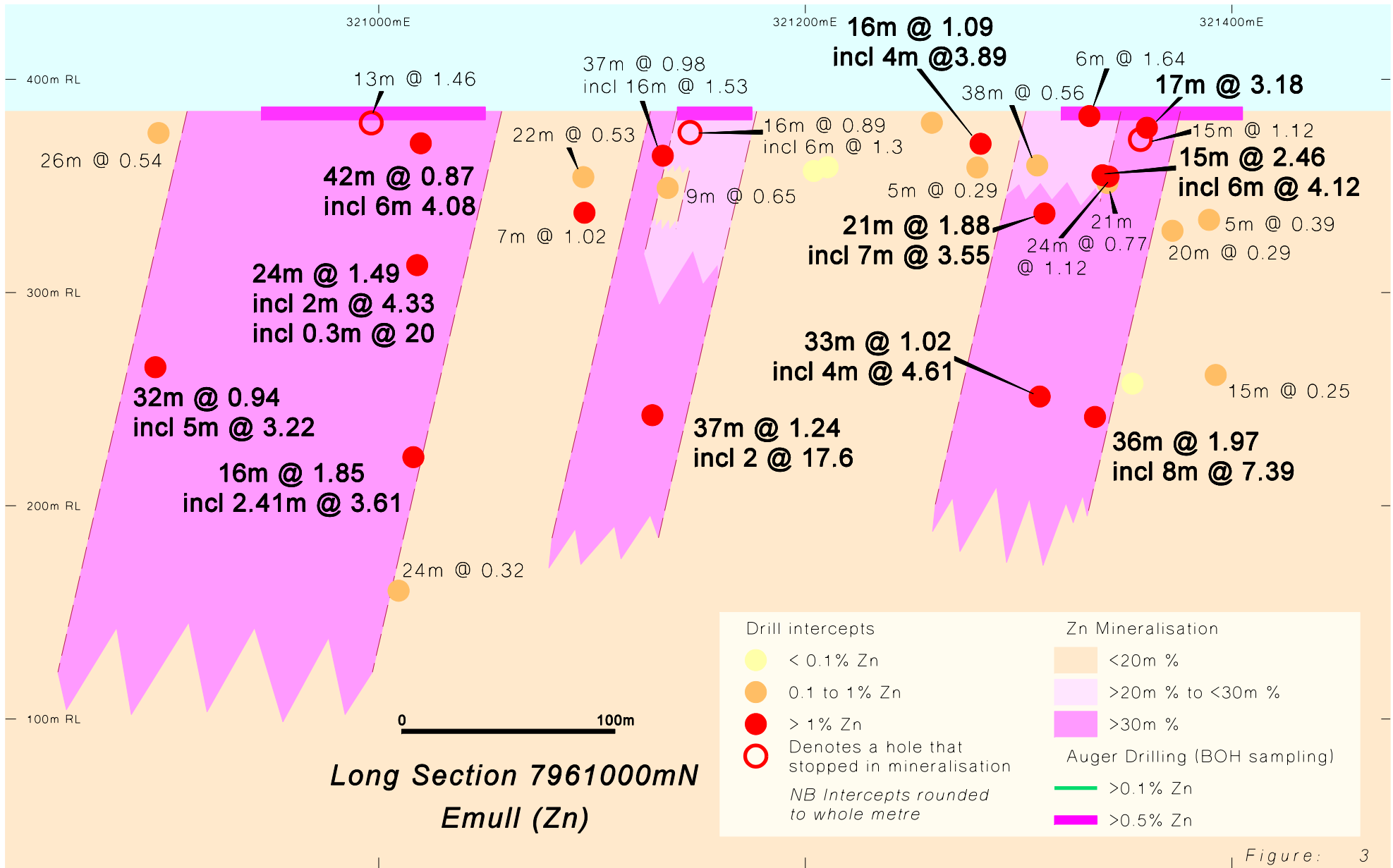
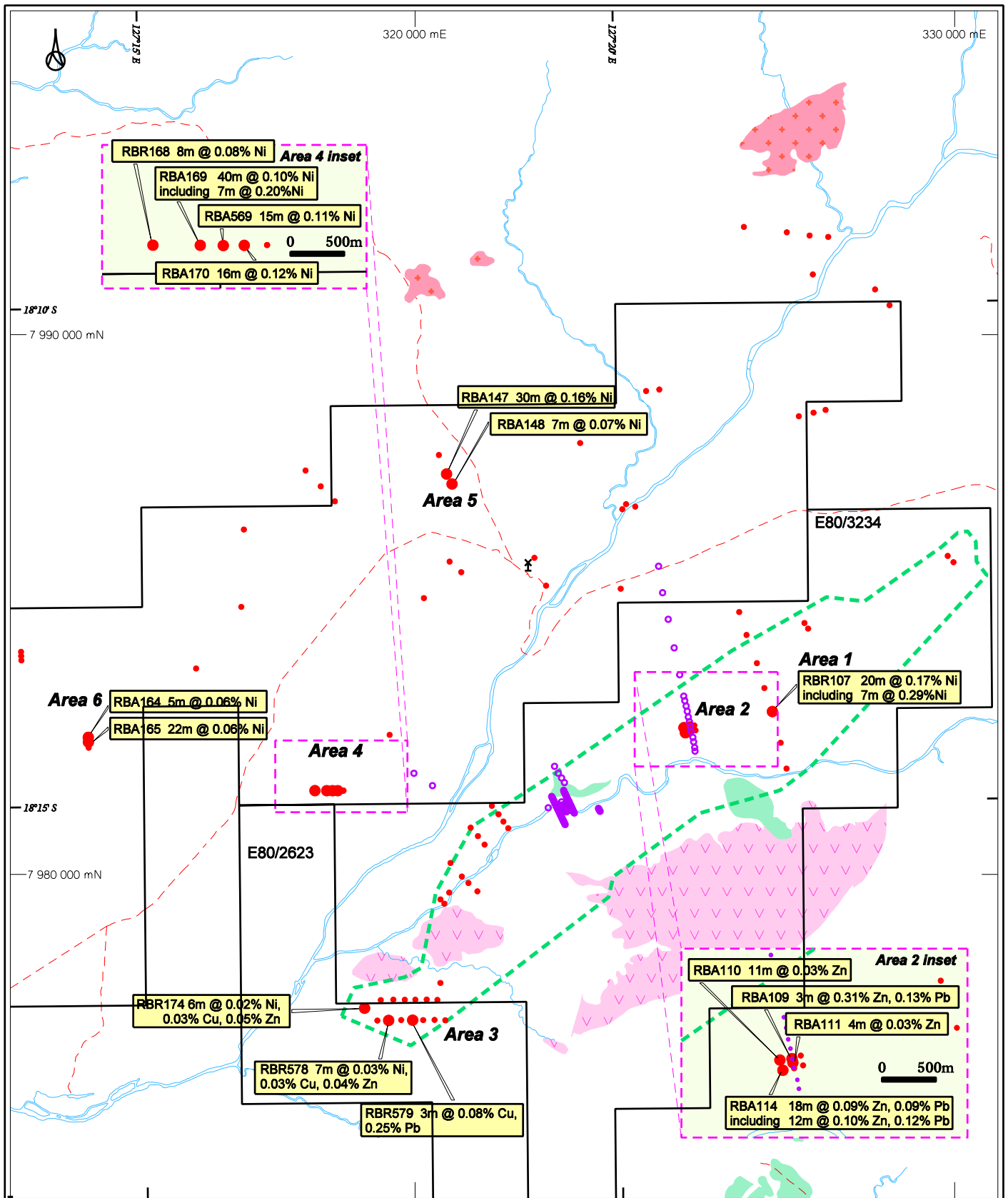
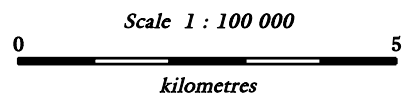


Figure: 3



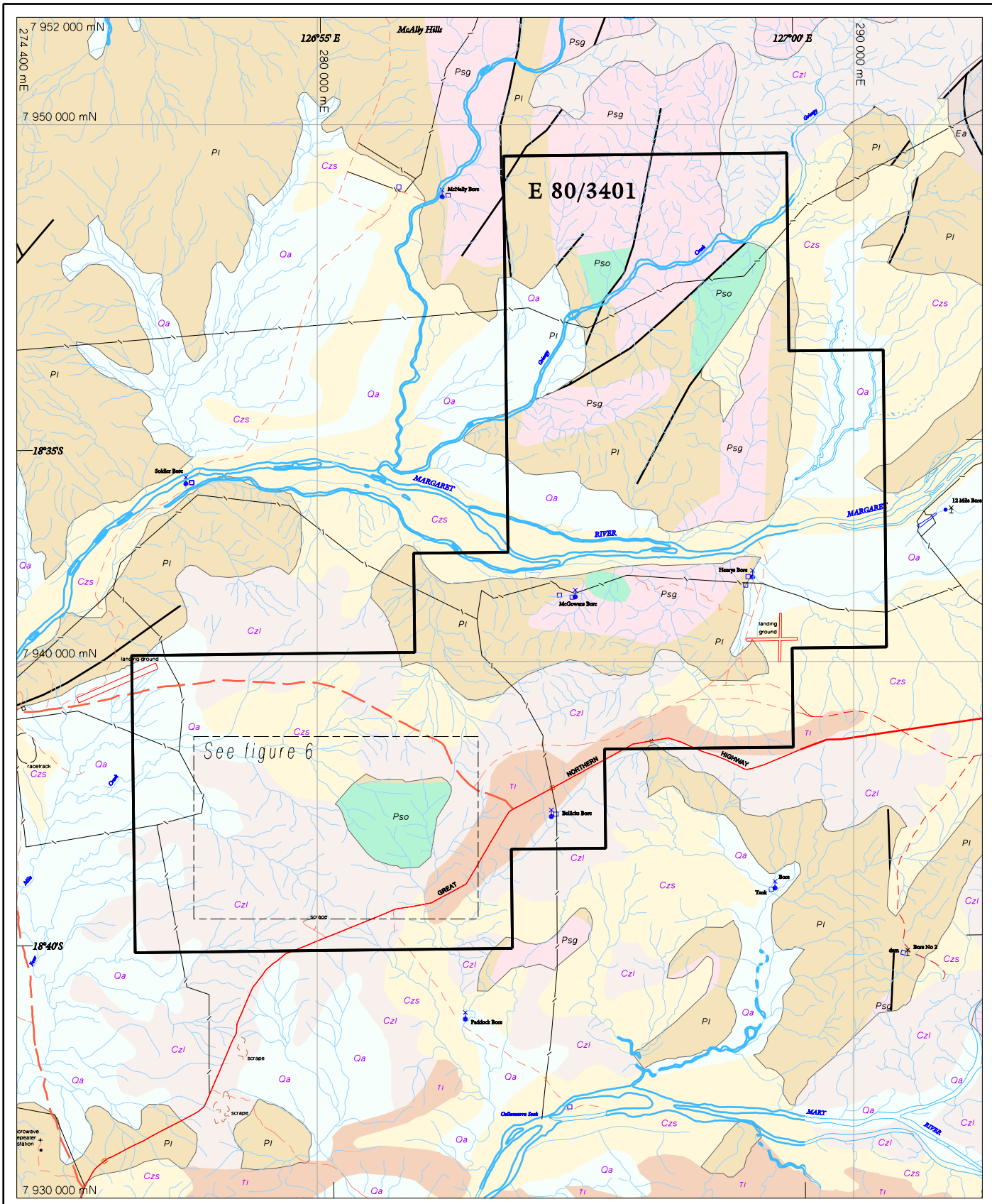
LEGEND

- Cover
- GSWA outcrop geology
 - CAMBRIAN volcanics and conglomerates
 - Gabbro
 - Granodiorite
- Moola-Bulla-Complex
- NST - RAB/AC drill hole location
- Historical drill hole location



NORTHERN STAR RESOURCES LTD
 KIMBERLEY REGION
 WESTERN AUSTRALIA
 Red Billabong Project

Northern Location Plan



LEGEND

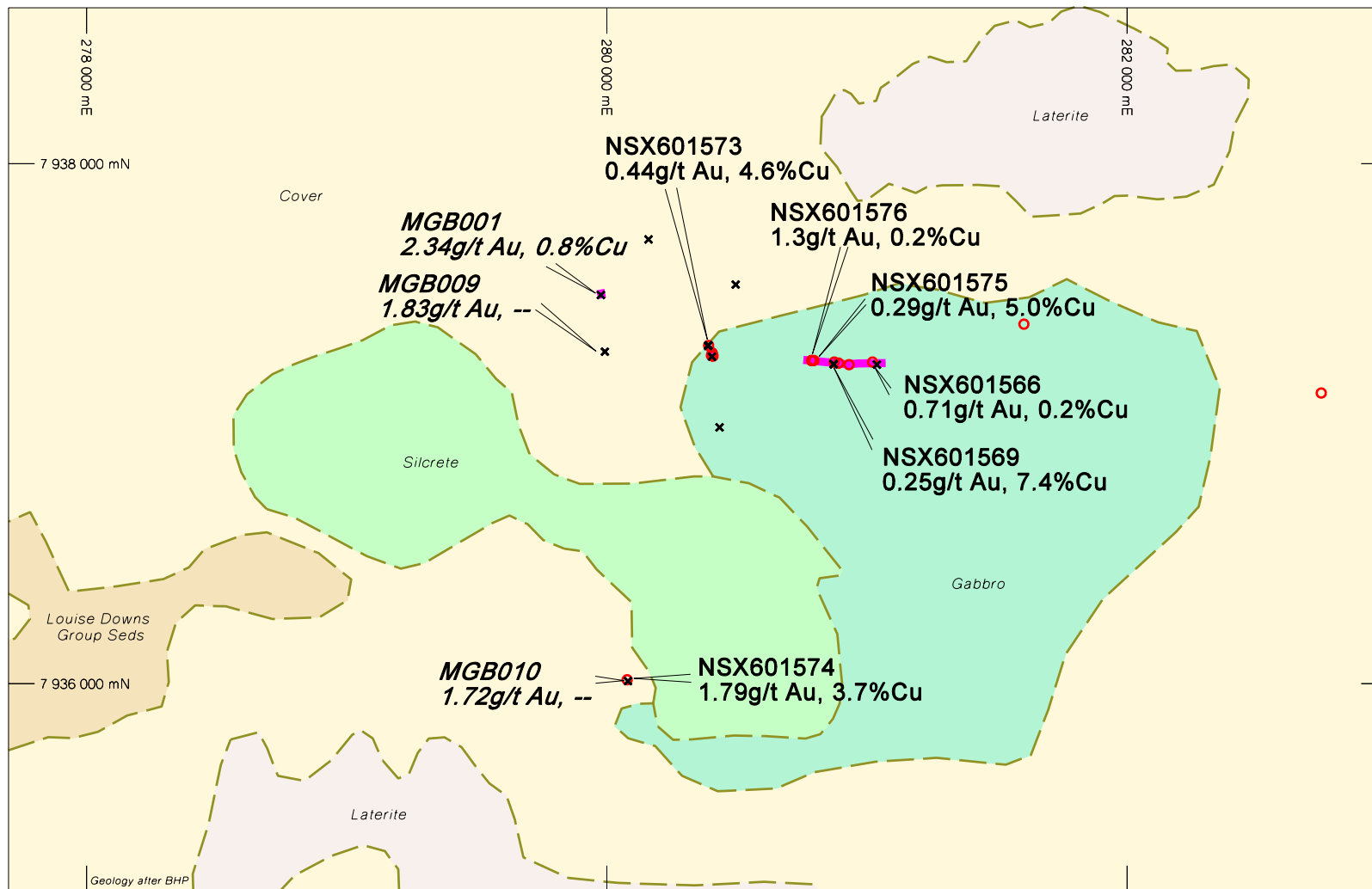
- | | |
|--|--|
| CAINOZOIC | PALAEZOIC |
| Oa Alluvium, unconsolidated sand silt and pebbles | Ea Antrim Plateau Volcanics, basaltic, generally weathered |
| Czs Colluvium: consolidated to unconsolidated sand, silt, gravel | NEOPROTEROZOIC |
| Czl Laterite: massive and pisolitic ferruginous duricrust | Pl Louise Downs Group: glaciene and marine sediments |
| Ti Lawford FM, limestone, calcareous siltstone | PALAEOPROTEROZOIC |
| | Psg Sally Downs Supersuite; granitic intrusives |
| | Pso Sally Downs Supersuite; gabbroic intrusives |
| Regolith contact boundary | |
| Fault | |
| Major creek, creek | |
| Highway, track | |

AMG zone 52 AGD66
(Geology after GSWA)

Scale 1 : 100 000
0 5km

NORTHERN STAR RESOURCES LTD
KIMBERLEY REGION
WESTERN AUSTRALIA
McGowans Project
E80/3401
**Geology
Bedrock & Regolith**

Plan No: NST MCG 1GA-004
Date: January 2007 Figure: 5



- █ Quartz gossan
- ✱ Historic sample
- NST rockchip sample

Scale 1 : 25 000
 0 1000
 metres

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**KIMBERLEY REGION
 WESTERN AUSTRALIA
 McGowans Project
 E80/3401**

Rockchip Samples

Plan No: NST MCG 1GA-005
 Date: April 2007 Figure: 6