

**NORTHERN MINING LIMITED**

# **Northern Mining Limited 2012 Annual General Meeting Presentation**

**[www.northernmining.com.au](http://www.northernmining.com.au)**



23 November 2012



# NORTHERN MINING LIMITED

## DISCLAIMER

This presentation has been prepared by Northern Mining Limited to provide a brief overview of its key projects. It is for general information purposes only.

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Accordingly, the actual results and developments may differ from those expressed or implied by these forward looking statements due to a variety of factors.

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### **Competent Persons Statement**

The information in this report that relates to Exploration Results and the George's Reward Mineral Resource Estimate is based on information reviewed and approved by Mr Greg Wilson, full time employee of Northern Mining Limited, who is a Member of the Australasian Institute of Mining and Metallurgy and who has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Wilson consents to the inclusion in the report of the matters based on the information in the form and context in which they appear.



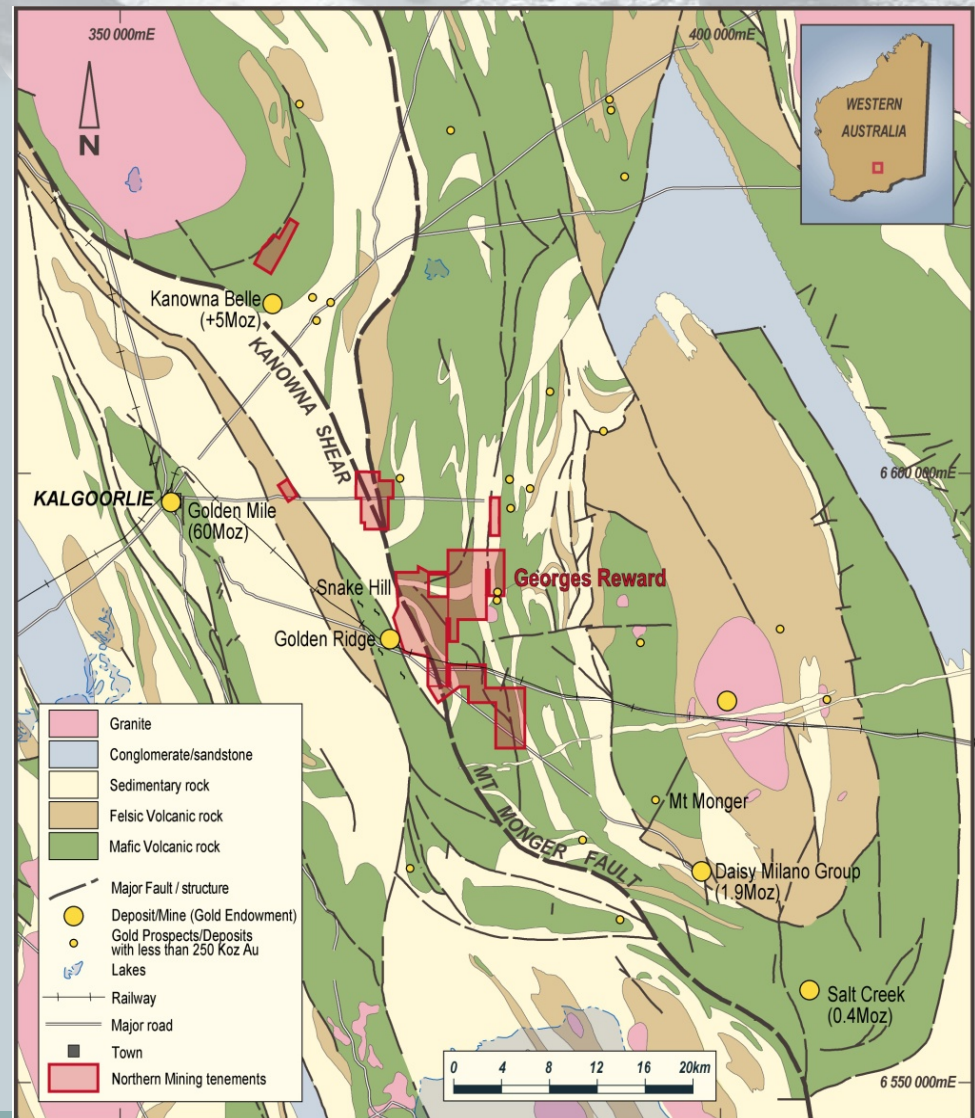
## **The Year.... HIGHLIGHTS**

- **Mt Monger Fault confirmed potential to host significant gold mineralisation.**
- **Snake Hill emerges as priority gold exploration target.**
- **Northern Zone Deeps recognised as large gold mineralised system.**
- **Structural Corridor linking Georges Reward and Northern Zone Deeps is under evaluated.**
- **Heritage approvals received for Camel Manganese prospect, regulatory approvals expected by the end of November.**



# EAST KALGOORLIE PROJECT WESTERN AUSTRALIA

- **Located in the heart of Western Australia's Premier Gold Province, 23 kms east of Kalgoorlie Boulder.**
- **Prospects located over or adjacent to major regional structure – Mt Monger Fault**
- **Major gold mineralisation to the north and south of the EKP is proximal to the Mt Monger Fault associated with subsidiary or splay structures off the Mt Monger Fault**
- **13 kilometres cumulative strike of the Mt Monger Fault**
- **Combination of quality exploration targets, including grass roots auger anomalies, RAB drill intercepts and advanced exploration targets**

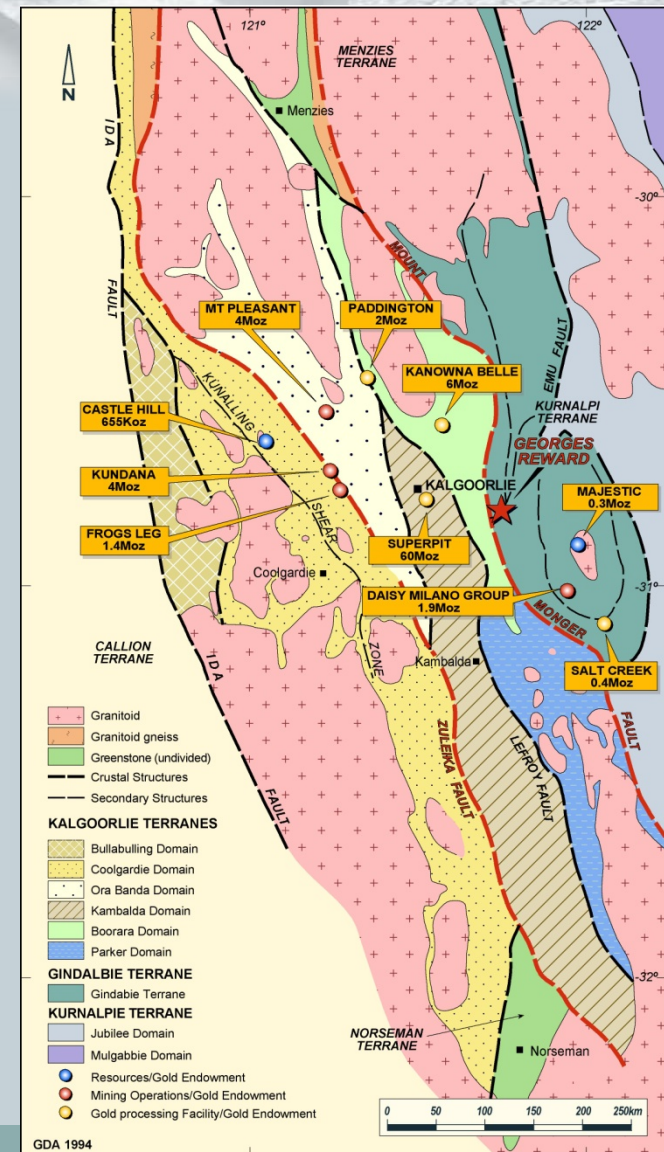






# MT MONGER FAULT AN UNDEREXPLORED MAJOR STRUCTURE!

- **Mt Monger Fault analogous to the Zuleika Fault/Shear, located west of Kalgoorlie.**
- **Zuleika Fault contains the +4 Moz Kundana Mine Camp, 1.4 Moz Frogs Leg Deposit and numerous smaller gold deposits and prospects.**
- **Kundana Mine Camp comprises 7 open pits, 3 closed underground mines and 4 underground operations either in development or in operation within a 6 km x 1.2 km corridor.**
- **Typical Kundana mineralisation varies in width from 0.5m up to 15m in places with grades of between 3 and 100 g/t.**





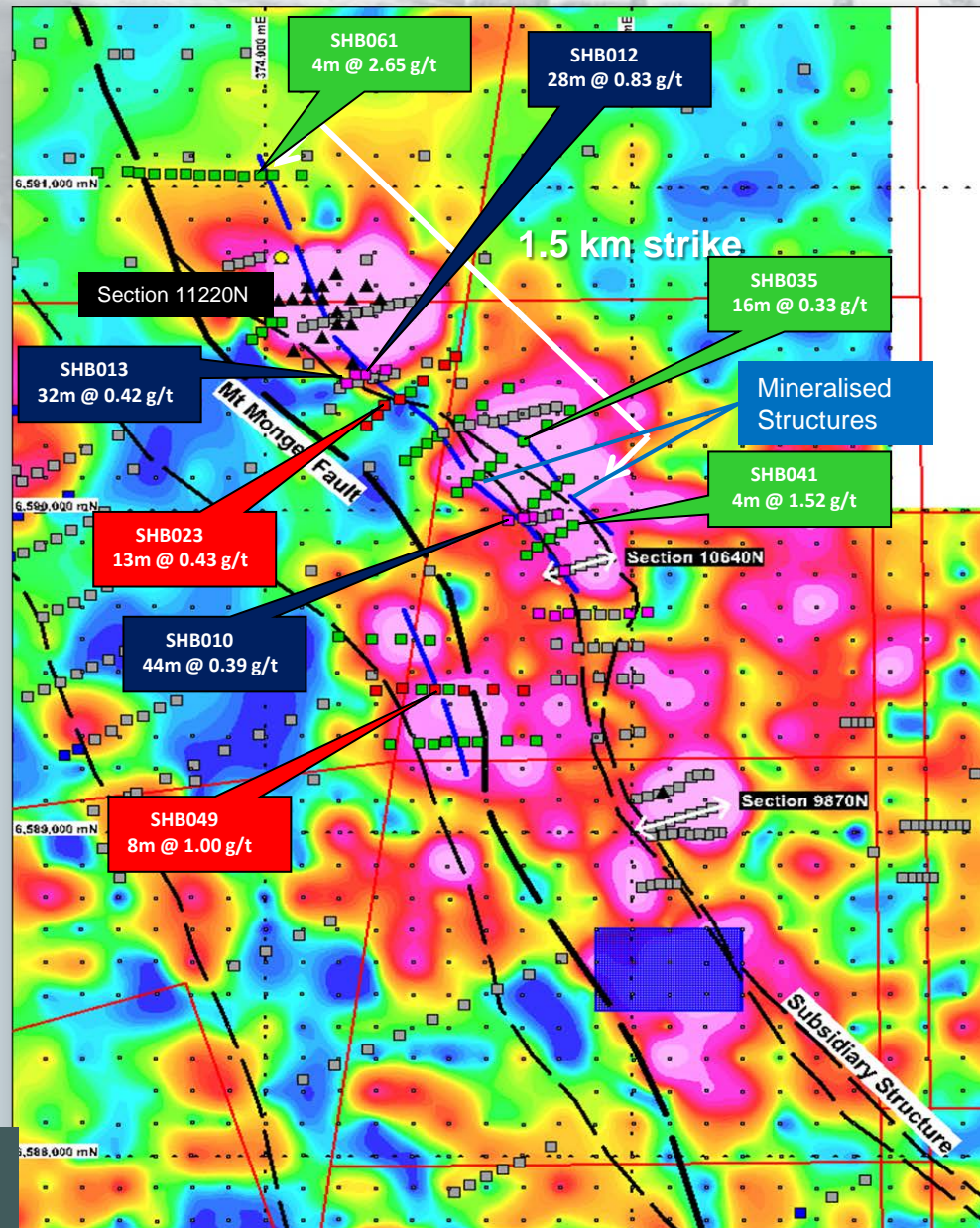
## EAST KALGOORLIE PROJECT

### Snake Hill Prospect

(NMI 79%, Balagundi Gold Pty Ltd 21%)

- 3 km long x 1.5 km wide Au in auger geochemical anomaly (>20 ppb Au)
- RAB drilling identified bedrock gold mineralisation over 1.5 km of strike with intercepts of :
  - 44m @ 0.39g/t from 76m
  - 28m @ 0.83g/t from 52 m
  - 32m @ 0.42g/t from 64m
  - 13m @ 0.43g/t from 72m
  - 4m @ 2.65g/t from 48m
- Mineralisation identified on Mt Monger Fault with intercept of :
  - 8m @ 1.00g/t from 48m
- “Parallel Structure” identified over 300m strike length with intercept of
  - 4m @ 1.52 g/t from 36m

## Three Gold Mineralised Structures Identified



Gridded geochemistry image - magenta > 20 ppb Au, Magenta Squares – December 2011 RAB Drilling, Red Squares – February 2012 RAB Drilling, Grey squares – Previous RAB drilling, Black triangles – RC drilling, Yellow circles - Diamond drilling, Small circles – auger sampling points.

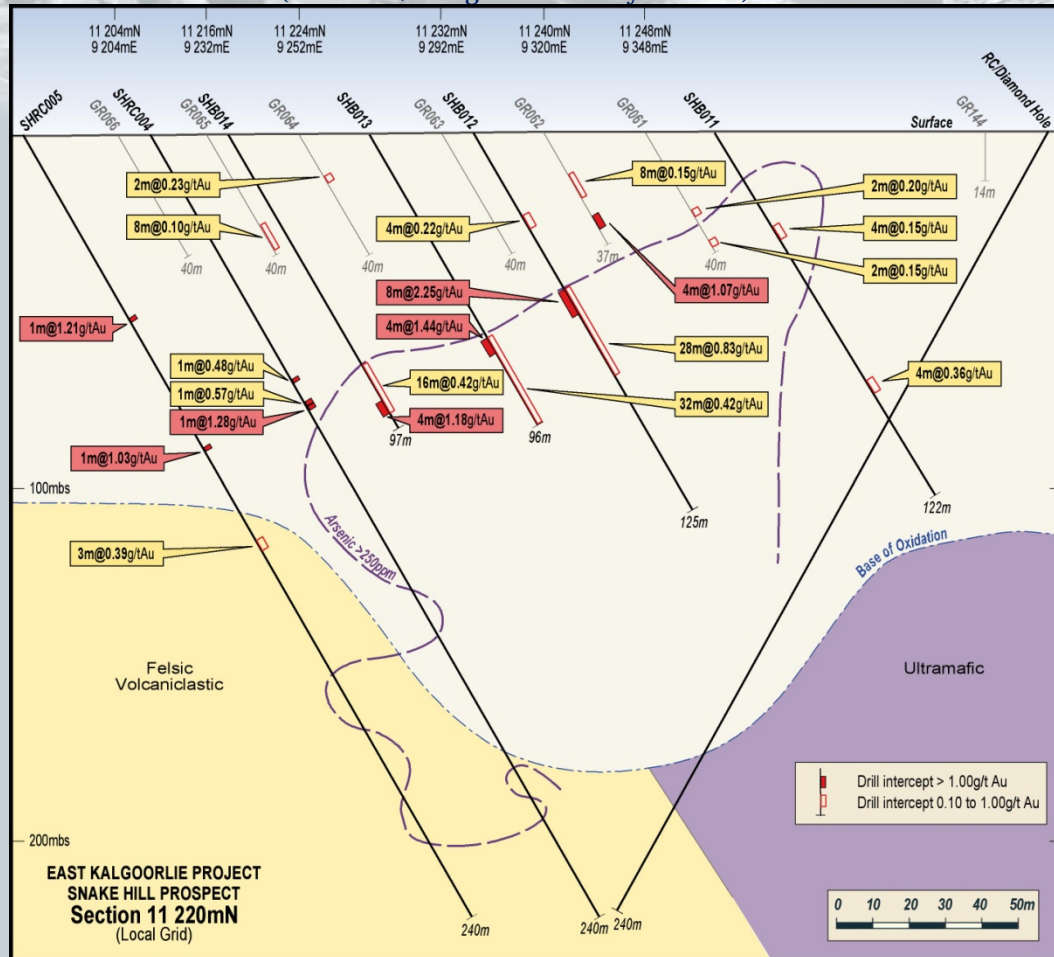




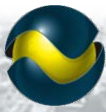
## EAST KALGOORLIE PROJECT

# Snake Hill Prospect

(NMI 79%, Balagundi Gold Pty Ltd 21%)



## Gold Bearing Structure Identified By Strong Au–As Association



## EAST KALGOORLIE PROJECT

# Blair North Prospect – Northern Zone Deeps

(NMI 79%, Balagundi Gold Pty Ltd 21%)

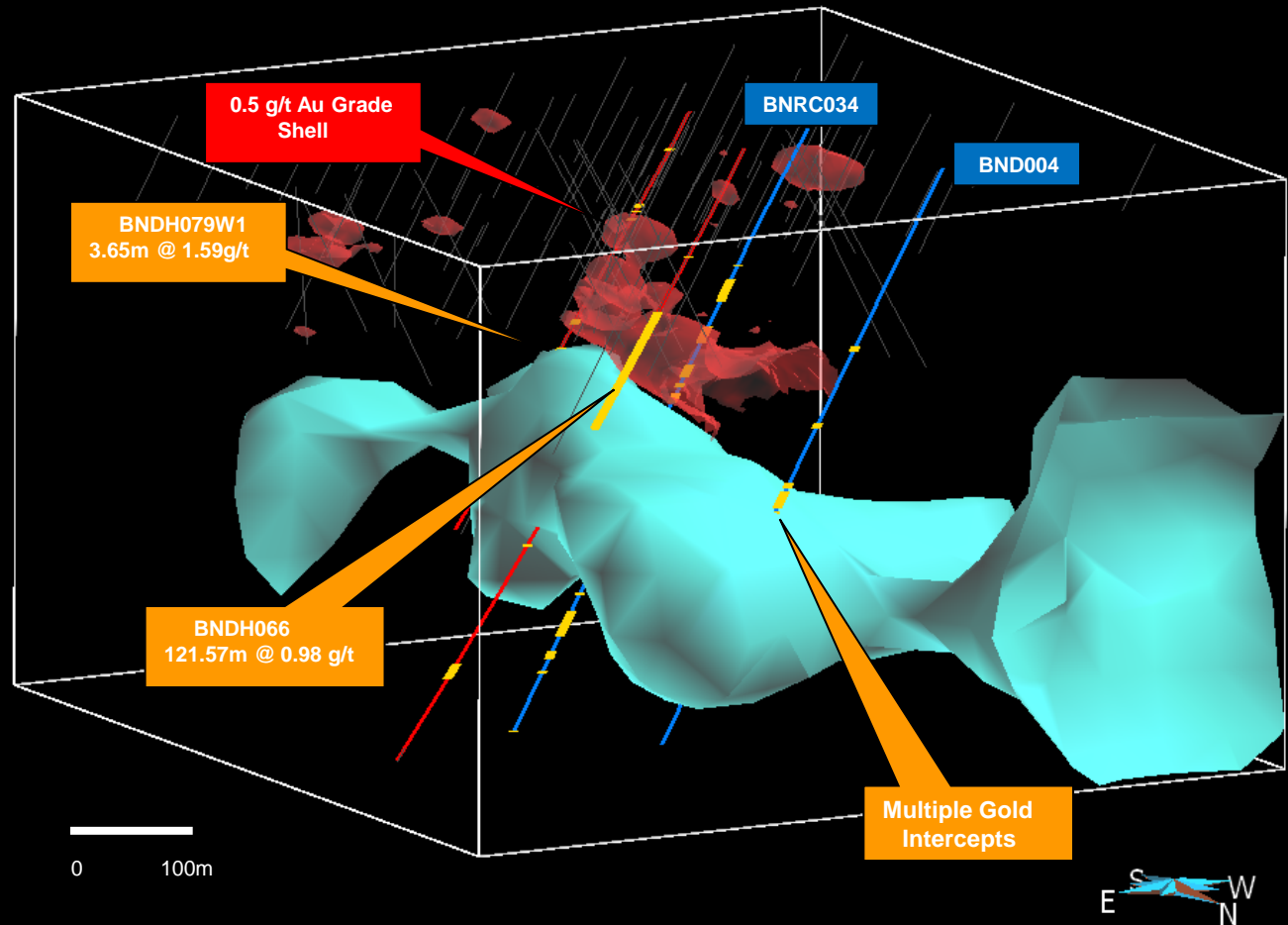
Significant Gold Mineralised System within a granodiorite intrusive.

Gold Mineralisation is broadly coincident with IP anomaly (Blue Shell).

Mineralisation is approximately 50 to 100 metres wide with intercept grades varying from 0.40 g/t to 1.16 g/t.

With reported individual grades up to 126.5 g/t.

Mineralisation is open along strike to both north and south.





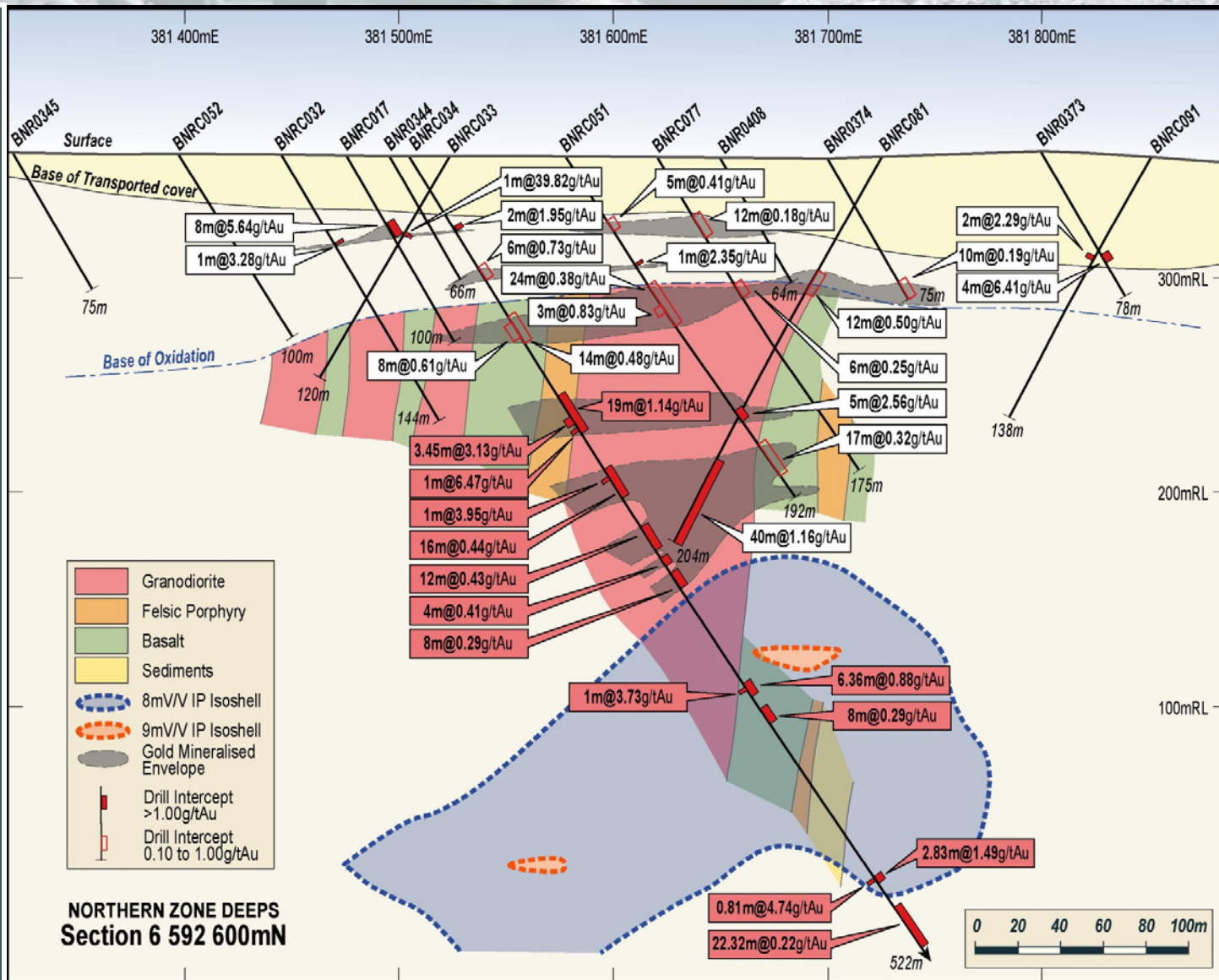


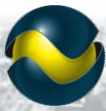
# Blair North Prospect – Northern Zone Deeps

(NMI 79%, Balagundi Gold Pty Ltd 21%)

## Gold Mineralisation is

- Associated with pervasive hematite-carbonate alteration and fine disseminated pyrite
- Higher gold grades associated with shallow dipping east-west to northwest to southeast striking quartz veins
- Occurs in an un echelon array centred within granodiorite.
- Drilling is interpreted to be sub-parallel to mineralised envelopes





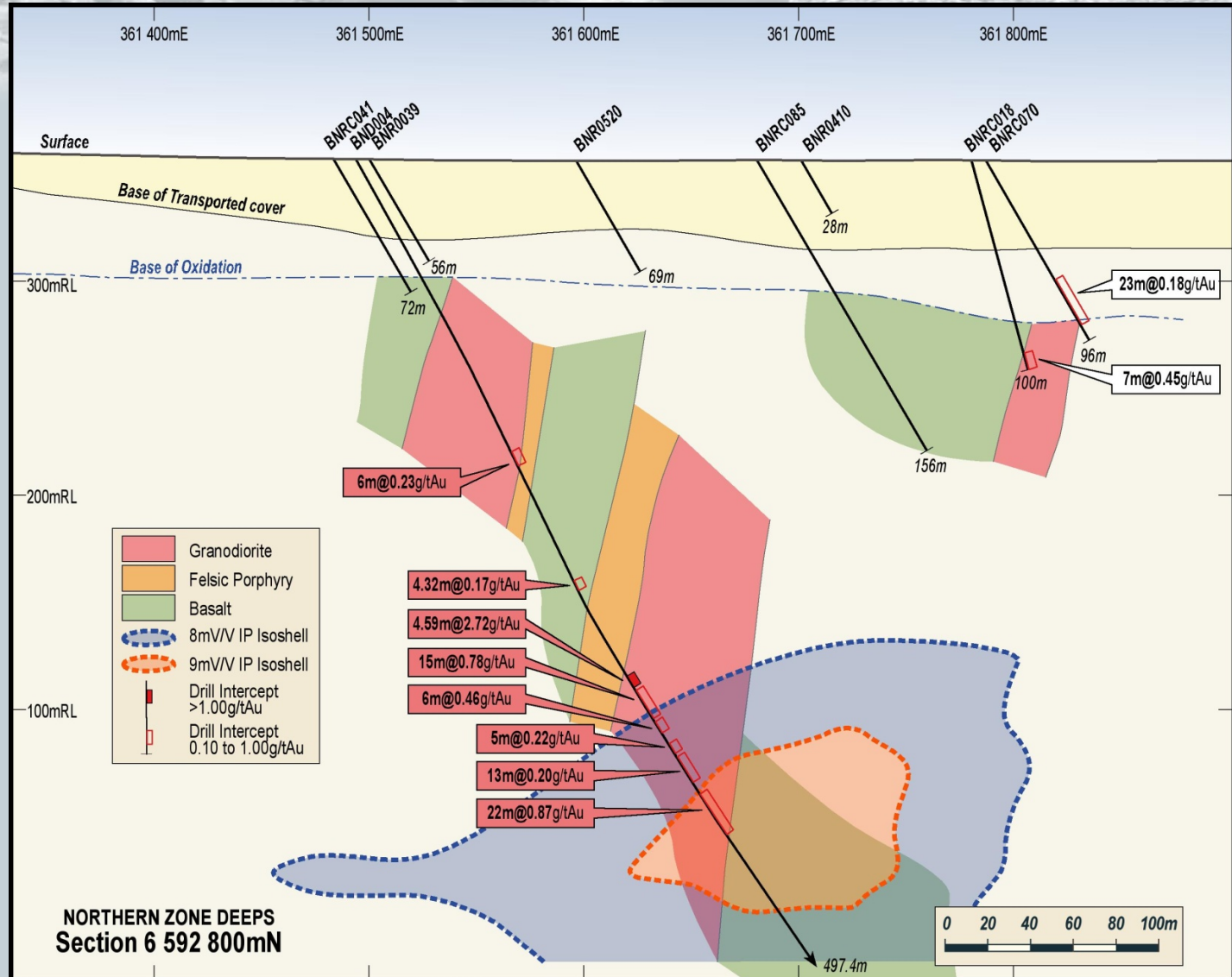
# Blair North Prospect – Northern Zone Deeps

(NMI 79%, Balagundi Gold Pty Ltd 21%)

- Mineralisation identified over a 300 metre strike length and remains open to the north and south.

- Potential for greater continuity and grade uplift with change in drill orientation

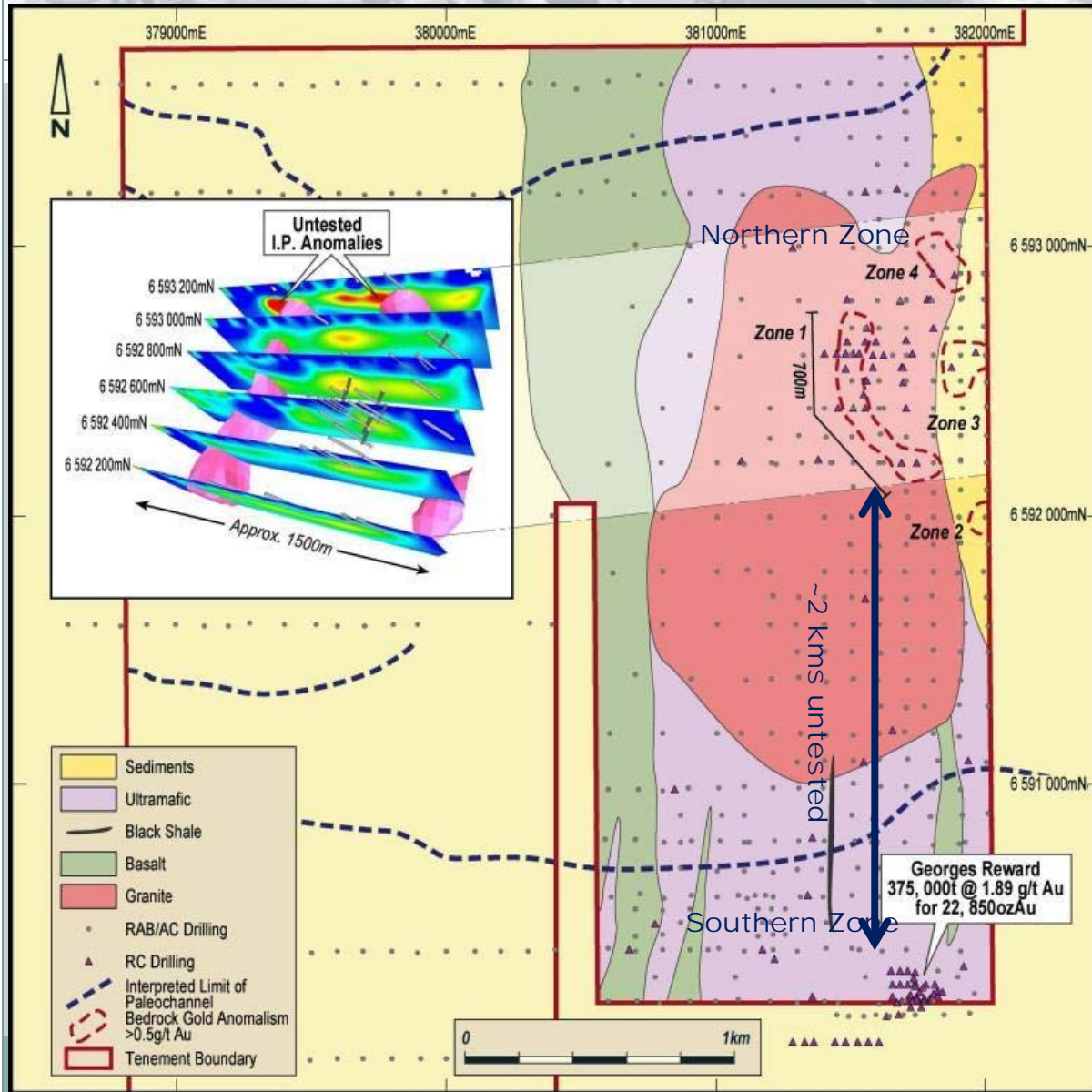
- Potential for outlining a large mineralised body with high grade gold shoots enveloped by a low grade gold halo







# Blair North Prospect A NEW STRUCTURAL CORRIDOR !



Structural Corridor linking Georges Reward and Northern Zone Deeps interpreted from recent diamond drilling.

Previous drilling within corridor comprised 100m x 100m vertical aircore drilling.

The 2 km long corridor is considered to be under evaluated.

Georges Reward and Northern Zone Deeps are interpreted to occur from the same gold mineralising event.

Potential for additional mineralised zones within structural corridor is considered high.



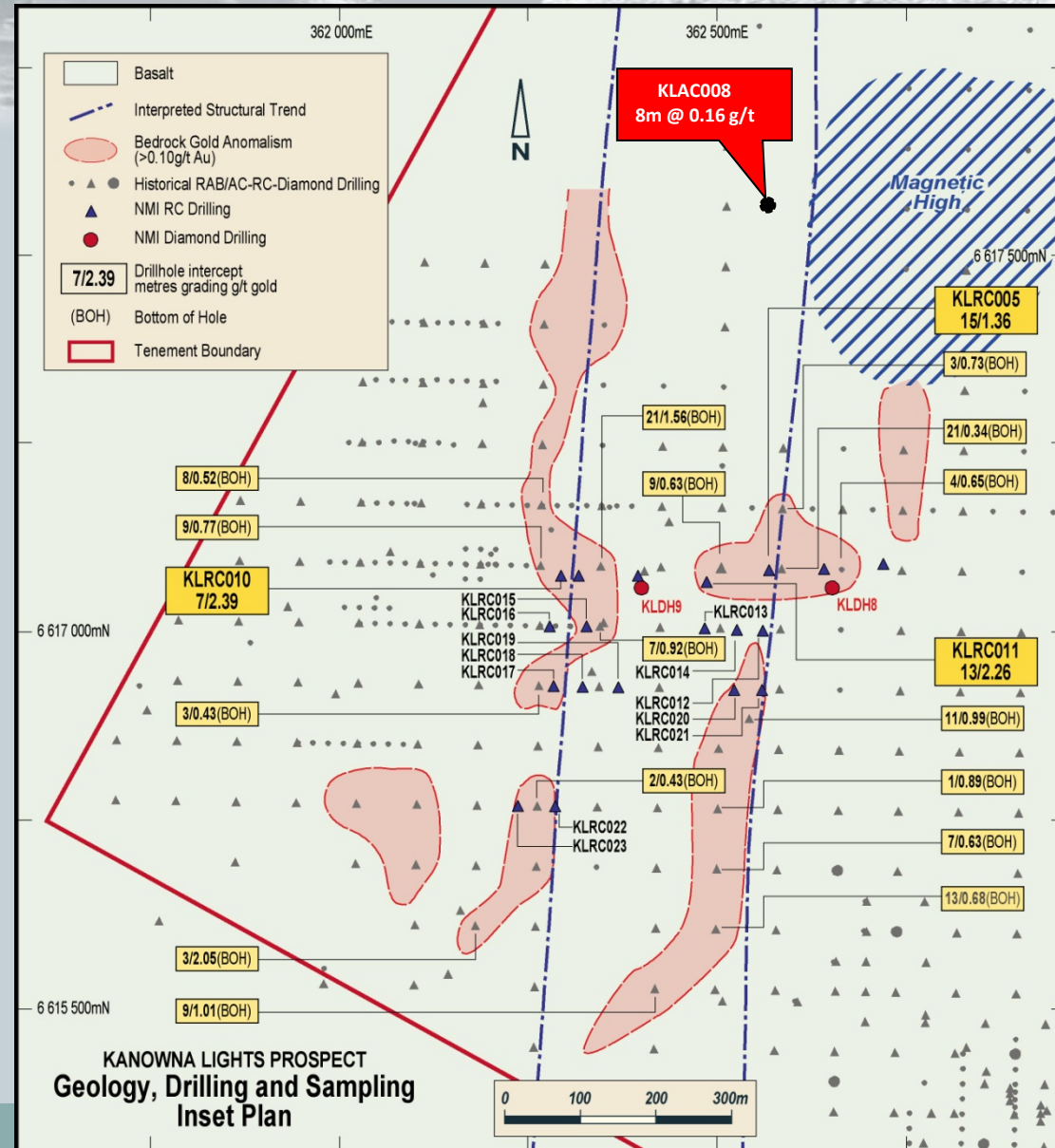


## EAST KALGOORLIE PROJECT

# Kanowna Lights Prospect

(NMI 79%, Balagundi Gold Pty Ltd 21%)

- **Located within the +5 Million Ounce Kanowna Mining Centre.**
- **Three kilometres north of the Kanowna Belle Gold Mine.**
- **Two 800 metre long north-south linear structural trends identified with coincident bedrock anomalism.**
- **RC drilling confirmed potential for oxide mineralisation within trends with RC intercepts of 7m @ 2.39 g/t from 51 metres and 13m @ 2.26 g/t from 65 metres.**
- **Potential for significant bedrock gold mineralisation remains to be tested.**





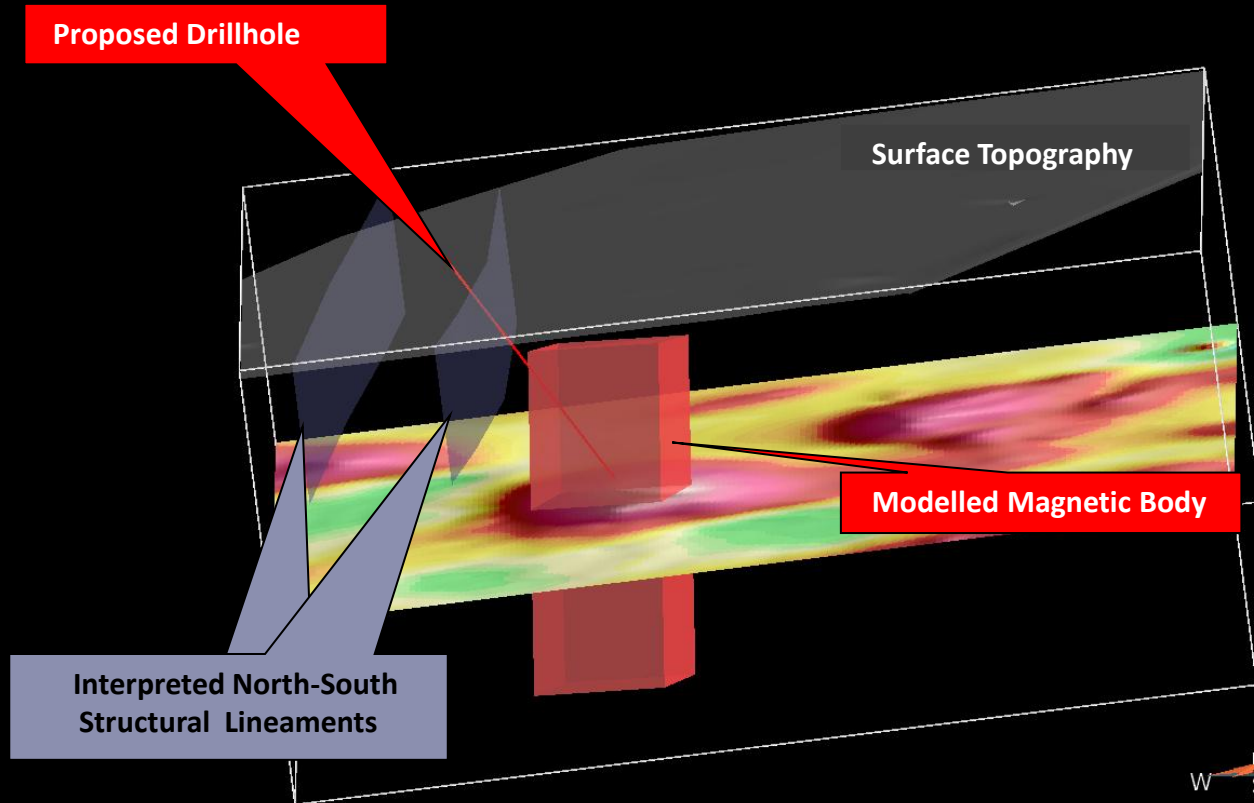
# Kanowna Lights Prospect A NEW MINERALISED SYSTEM!

Significant magnetic anomaly identified from aeromagnetics adjacent to north-south structural lineament.

Known geology of the area does not explain the magnetic feature.

Interpreted to be from hydrothermal magnetite, the result of a gold mineralising system.

Co-funding application to the WA Government for one diamond hole to evaluate the magnetic anomaly was successful.







# Camel Manganese Prospect Northern Territory

- **Aboriginal Heritage Clearance approval received, significant step forward to evaluating the manganese potential.**
- **Regulatory Approvals expected by the end of November.**
- **Two discrete areas 23 km apart with outcropping manganese.**
- **Area 1 – up to 5m wide with Mn up to 15.7%Mn.**
- **Area 2 – a small outcrop returned 45.6%.**
- **Area within and surrounding the outcrops covered in sand – strike could be more extensive.**
- **Numerous (3+) mangiferous layers are interpreted to be present.**

**Project Location**







## **The Year.....AHEAD**

### **Build upon the Exploration Success of 2012 through.....**

- **Evaluating and Extending the Snake Hill Mineralised Corridor using combination of RC drilling, targeted Diamond drilling and RAB drilling.**
  - **RC drilling program commenced 21 November 2012**
- **Evaluation of the George's Reward/Northern Zone Deeps structural corridor with Aircore and RC drilling.**
- **Complete targeting of other coincident gold in auger anomalies/structural targets within the East Kalgoorlie Project and conduct first pass drilling programs.**
- **Define a Mineral Exploration Target for the Camel Manganese Prospect, Northern Territory, with combination of drilling of known outcrops and reconnaissance mapping to identify additional manganiferous outcrops. Scheduled to commence in Early December.**

**GROWTH THROUGH EXPLORATION SUCCESS**



**NORTHERN MINING LIMITED**

**THANK YOU**

