BURNSIDE OPERATIONS P/L

ANNUAL EXPLORATION REPORT
EL24058

“Yam Creek East”

YEAR ENDING 9th August 2005

BURRUNDIE 1:50,000 SHEET

Distribution:-

1. DBIRD Darwin NT
2. Northern Gold NL Perth
3. Burnside Operations P/L Brocks Creek
4. Harmony Gold (Australia) Perth

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SUMMARY

EL24058 is located 150km SE of Darwin, NT and 20km ESE of Burnside’s Brocks Creek mine office. It lies just east of the Yam Creek-North Point mining centre.

The tenement is subject to the Burnside Joint Venture, managed by Burnside Operations P/L comprising Territory Goldfields NL and Buffalo Creek Mines P/L. The latter are subsidiaries of Northern Gold NL and Harmony Gold (Australia) Ltd respectively.

The licence encompasses a suite of metasedimentary rocks that are part of the Pine Creek Geosyncline sequence being a cyclic sequence of turbidites and mudstones, cherty horizons and tuff rich units.

This is the first year of the licence and the annual expenditure for the block was set at $4,000.00.

The joint venture has been actively exploring the Burnside region since its formation in April 2002. Work to date has been focused on establishing open pit resources through RC drilling at Yam Creek, Mottrams, Chinese South, Fountain Head, Cosmo Howley, and Woolwonga. Underground development and diamond drilling has been carried out at the Zapopan Mine.

Work on EL24058 focused on remote sensing and interpretation to establish its ranking within the overall Burnside region tenements. It was concluded that the tenement ranks low within the joint venture schedule as the ground lacks most of the structural parameters that favour gold deposition in the Pine Creek region.

The database validation and review of geochemical records in the area of EL24058, including adjacent EL23540 commenced during late 2004. With reporting costs added, the expenditure on remote sensing work amounted to $1,000.00.
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1. INTRODUCTION

EL24058 (Yam Creek East) was applied for to cover vacant ground east of Yam Creek and lies on the western flank of the Burrundie Dome.

The Burnside Joint Venturers comprising Buffalo Creek Mines NL and Territory Goldfields NL have other mineral assets in the immediate area: at Mt Bonnie to the south west and along the Yam Creek-Golden Dyke trend that lies just west of the EL.

Since April 2002 the joint venture has carried out extensive drilling programs on joint venture tenements in the Burnside region and developed the Zapopan underground mine in 2003. RC drilling programs have also been carried out at Princess Louise and North Point, along the Yam Creek trend.

This report deals with exploration activity carried out during the first year of this tenement, ending 9th August 2005.

2. TENURE DETAILS

EL24058 was granted on 10th August 2004 and expires on 9th August 2010. It comprises one graticular block that comprises approximately 3.33sq. km.

It lies near to the eastern extremity of the Burnside Joint Venture holdings. The tenement is registered in the name of Territory Goldfields NL and Buffalo Creek Mines P/L in equal shares. It is unencumbered by third party tenements.

The expenditure covenant set for the year was $4,000.00.

3. LOCATION AND ACCESS

EL24058 is situated 150km SE of Darwin NT and 5km SE of the Grove Hill Pub on the Darwin-Adelaide railway.

Access to the tenement is via the Stuart Highway, thence north via the Grove Hill unsealed road that passes west of the tenement. Access can be gained via bush tracks that peel off north from the Mt Bonnie access road, towards Iron Blow. The location may be seen on Figs. 1, 2.

The headwaters of the Margaret River and Saunders Creek pass through the tenement and flow northwards.

The tenement falls on the Pine Creek 1:250,000 sheet and on the Burrundie 1:50,000 sheet. The tenement also is within the Douglas Pastoral Lease.

The topography comprises undulating hills and ridges of low to moderate relief.
4. GEOLOGICAL SETTING

4.1 Regional Geology

EL24058 is situated within the Pine Creek Geosyncline, a tightly folded sequence of Lower Proterozoic rocks, 10km to 14km in thickness, laid down on a rifted granitic Archaean basement during the interval ~2.2-1.87Ga. The sequence is dominated by pelitic and psammitic (continental shelf shallow marine) sediments with locally significant inter-layered cherty tuff units. Pre-orogenic mafic sills of the Zamu Dolerite event (~1.87Ga) intruded the lower formations of the South Alligator Group.

During the Top End Orogeny (Nimbuwah Event ~1.87-1.85Ga) the sequence was tightly folded, faulted and pervasively altered with metamorphic grade averaging greenschist facies with phyllite in sheared zones. The Cullen intrusive event introduced a suite of fractionated calc-alkaline granitic batholiths into the sequence in the period ~1.84-1.80Ga. These high temperature I-type intrusives induced strong contact metamorphic aureoles ranging up to (garnet) amphibolite facies, and created regionally extensive biotite and andalusite hornfels facies.

Less deformed Middle and Late Proterozoic clastic rocks and volcanics have an unconformable relationship to the older sequences. Flat lying Palaeozoic and Mesozoic strata along with Cainozoic sediments and proto-laterite cementation overlie parts of the Pine Creek Geosyncline lithologies. Recent scree deposits sometimes with proto-laterite cement occupy the lower hill slopes while fluviatile sands, gravels and black soil deposits mask the river/creek flats areas.

There is a tendency for gold mineralisation to be focused in anticlinal settings within strata of the South Alligator Group and lower parts of the Finnis River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies. Dated at ~1740Ga (Sener 2004) the gold events post dated the Pine Creek Orogeny and Cullen intrusive events and has favoured suitable litho-structural sites in the biotite-hornfels contact facies.

4.2 Local Geology

The tenement encloses a portion of South Alligator Group sediments that lie on the north western flank of the Burrundie Dome, a regional anticlinal structure. The Margaret Syncline containing Mt Bonnie Formation rocks lies to the west and separates the older Burrundie Dome from the Yam Creek sequence.

According to the AGSO geology plan (Fig.4) South Alligator Group is mainly represented by Gerowie Tuff Formation and concordant sills of Zamu Dolerite. Both have been tightly folded on northerly plunging axes during the Pine Creek Orogeny. Faulting is extensive under the stress of the converging Hayes Creek Fault system.
(striking NE) to the west, and faulting to the east of the tenement that strikes NNW. Within the tenement the folded sequence has been broken up into blocks and wedges under the influence of the major faults. The pattern of fracturing may be seen in the interpreted SPOT image (Fig 3.).

4.3 Mineralisation and Prospectivity

The region has been prospected for gold and has most likely been the subject of soil, stream and rock chip sampling by previous explorers. The structural setting, that includes an anticlinal component, appears favourable for gold though the good exposure makes it less likely to be present.

The Iron Blow Cu-Pb-Zn-Au deposit lies within Mt Bonnie Formation rocks about 2km west of the tenement. The Pickfords Pb deposit and the Mt Bonnie base metal and gold deposits lie 4km south east and south west of the tenement respectively. Otherwise mineralisation is not known within or in the vicinity of the block.

As a working hypothesis, the intersection of interpreted WNW fractures and bedding could be favourable locations for gold deposition.

Overall, it is concluded that the block has a low prospectivity that could be readily determined with a few hours’ traversing and rock chip sampling.

5.0 PREVIOUS EXPLORATION

The area surrounding EL24058 has been explored on a regional basis by Euralba Mining, Geopeko, Dominion Mining Ltd and Zapopan NL. Stream sediment sampling and rock chip work is thought to have been carried out though evidence has yet to be found in the data base held by the Burnside JV.

Northern Gold NL and Territory Goldfields have conducted work in the vicinity of Iron Blow and Mt Bonnie North where anomalous rock chips were reported. The Mt Bonnie North rock chip and soil anomaly is 1km SW of the block, within SEL24352.

To date there is no evidence that gold anomalism has been detected by previous explorers within EL24058.

6.0 EXPLORATION YEAR ENDED 9TH AUGUST 2005

6.1 Introduction

During 2004-2005 exploration work was focused in the vicinity of the Cosmo Howley mine where diamond core drilling and resource modelling was undertaken on the Howley Deeps project. The Zapopan underground resource and workings were kept on care and maintenance. The nearby Princess Louise and North Point gold resources were both the subject of technical reviews during the year.

The Brocks Creek mill was sold to Tanami Gold NL in August 2004 and at the same time the Burnside JV purchased the mill and tenements at Union Reefs. This change
in infrastructure location and specifications has required that all gold assets within the JV be re-ranked and the better ones prepared for possible start up. The focus on proven gold assets that could support a renewal of mining in the area has had the effect of deferring more basic grass roots activity on ground such as EL24058.

### 6.2 Remote Sensing Interpretation

The SPOT image for the Burnside region was subjected to fracture pattern analysis and compared to the location of known prospects in the region of EL24058.

Figure 3 shows the interpretation. Light blue linears are mostly fracture systems of minor displacement. They appear to have accommodated stress within the region. The red WNW linears are considered to be more important and appear to be part of a swarm system that seems to be related to mineralisation. There is an important fault pair in blue, located to the east of EL24058, that strikes NNW. The Margaret Syncline within Mt Bonnie Formation rocks lies to the west of the tenement. This area also carries the channel of the Margaret River.

The cost of this interpretation plus reporting was $1,000.00. This falls short of the $4,000 expenditure covenant for the first year.

### 7. FORWARD PROGRAM YEAR ENDING 9TH AUG. 2006

It is desirable to identify details of previous exploration work in the tenement before embarking on significant new field work. A combination of database compilation and interpretation together with field reconnaissance base on the findings is required.

Following a complete database search it is proposed that the tenement be subjected to reconnaissance geological traversing with rock chip sampling. This will allow a decision to be made regarding its future role in the Burnside group tenements. The cost of this work with reporting is expected to be $1,100.00.
8. REFERENCES

