GBS GOLD AUSTRALIA PTY LTD

ANNUAL EXPLORATION REPORT
MCN’s 3705-3707; MLN 1103
FOR PERIOD ENDING 30 APRIL 2008
WOOLWONGA GROUP
BURNSIDE PROJECT NT

Pine Creek SD5208 1:250,000
McKinlay River 5271 1:100,000

Titleholders:
Buffalo Creek Mines Pty Ltd 50%
Territory Goldfields NL 50%

Distribution:

1. DPIFM Darwin NT
2. GBS Gold Australia Perth
3. Burnside Operations P/L Brocks Creek
4. Union Reefs, Pine Creek

GBS Report No. PC/BJV/08-11

Zia U. Bajwah
May 2008
SUMMARY

The Woolwonga Group comprises 7 tenements which are located about 130 km SE of Darwin, NT and 16 km NE of the Brocks Creek mine. It covers the Woolwonga gold mine which is situated within the historical gold mining field. GBS Gold Australia Pty Ltd acquired the tenements in 2005 through a subsidiary Northern Gold Limited.

Gold mineralisation at Woolwonga is associated with quartz-sulphide veins which fill faults and fractures set in Mt Bonnie Formation. Mineralisation and historic workings on vein outcrops occurred over the full length of the original Main Ridge, and colluvial shedding from this extended for 500m SE of the ridge and was worked extensively by Chinese workers from the late 1880s to early in the 20th century. The gold is controlled by three main structural features such as the axial zone of the Woolwonga Anticline, SE dipping fracture zones and competency contrast sites.

Following extensive exploratory drilling and a feasibility study by the Dominion Mining, the company estimated a recoverable mining reserve of 2.1Mt @ 2.78g Au/t. Northern Gold NL acquired the tenements from Dominion following completion of the mining phase and rehabilitation of the mine site.

During the reporting period, a total of 42 Air Core holes were drilled for 869 metres to test the expression of gold mineralisation towards southeast of the present pit (Empire Prospect). A total of 364 samples were collected for assaying. Au was analysed by fire assay and base metals by AAS (3 acids digestion). Au contents vary from 0.001 to 1.52 ppm. From the data it is clear that Au contents are generally below 0.1 ppm. The highest concentration of gold came from sample no. EXD04438 (Drill hole WAC 141). The Woolwonga group of tenements has shown potential to host additional gold mineralisation. In the following exploration program, a further infill soil sampling program will be carried out to identify additional anomalous zones of mineralisation which may subsequently lead to RAB/RC drilling.
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1.0 INTRODUCTION

The Woolwonga group of tenements are located 130 km SE of Darwin, Northern Territory and 16 km NE of the Brocks Creek mine office. It was discovered in 1871 and was worked by underground method, producing 205 kg of gold. GBS Gold Australia Pty Ltd acquired the tenements in 2005 through a subsidiary Northern Gold Limited.

2.0 LOCATION AND ACCESS

The group is situated on the Ban Ban (14/3-III) 1:50,000 sheet and lies between latitudes 13°23'S and 13°25'S and longitudes 131°31’45”E and 131°34’ E (Figure 1). The tenements are enclosed by Perpetual Pastoral Lease No. 1111, Ban Ban Springs, held by Ban Ban Springs Station Pty Ltd.

Access to the area is via the Stuart Highway, the Mount Wells Road and Ban Ban Station tracks. From the Glencoe pits crossroads onwards, the old haul road comprises rapidly deteriorating bitumen. The tar seal terminates at the abandoned open pit complex that is now part back filled and flooded. The site has been rehabilitated. MCN3705-3707 straddle the Margaret River and its floodplain and form a contiguous group on the north east boundary of MLN1103. The Darwin-Amadeus Basin gas pipeline crosses the south west portion of MLN1103.

3.0 TENEMENT STATUS AND OWNERSHIP

Prior to 1984 the project was owned by Australian Coal and Gold. Dominion Mining Limited and Geopeko entered into a JV agreement with them and by 1988 Dominion had bought out the other parties. MCN’s 3705 to 3707 were granted on 17 October 1990 and expire on 5 August 2007. On 17 October 2007, application for further renewal of these tenements was made to the Department of Primary Industry, Fisheries and Mines. They have a total of 114ha (34.2ha, 39.9ha, 39.9ha respectively) MLN 1103 comprising the
Woolwonga Development Area, and amalgamating over 40 pre-existing titles, was granted to Dominion Mining Limited on 26th of February, 1991. It expires on 24 February 2016 and comprises 911.2ha. Details of the tenements are given in Table 1 below.

Table 1: Details of Woolwonga Group of Tenements

<table>
<thead>
<tr>
<th>Tenement No</th>
<th>Grant Date</th>
<th>Expiry Date</th>
<th>Area (Hect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCN 3705</td>
<td>17/10/1990</td>
<td>31/12/2007</td>
<td>34.2</td>
</tr>
<tr>
<td>MCN 3706</td>
<td>17/10/1990</td>
<td>31/12/2007</td>
<td>39.9</td>
</tr>
<tr>
<td>MCN 3707</td>
<td>17/10/1990</td>
<td>31/12/2007</td>
<td>39.9</td>
</tr>
<tr>
<td>MLN 1103</td>
<td>26/02/1991</td>
<td>24/02/2016</td>
<td>911.2</td>
</tr>
</tbody>
</table>

The tenement group was transferred from Dominion to Territory Goldfields N.L. in May 1995. The tenements were transferred to the Burnside Joint Venture (as 50% Territory Goldfields / 50% Buffalo Creek Mines) on 22nd October 2003. GBS Gold acquired Northern Gold NL in late 2005, and purchased Harmony’s 50% share of the Burnside JV. GBS Gold now controls 100% of the Burnside Project.

4.0 GEOLOGICAL SETTING

Regional geology is outlined in many publications, notably Ahmad et. al., (1994), and Needham and Stuart-Smith (1984), and Needham et. al (1988). The tenements are within the Pine Creek Orogen, a folded sequence of Palaeoproterozoic pelitic and psammitic sediments, with interlayered cherty tuff units. Mafic sills of the Zamu Dolerite (~1.87Ga) intruded lower formations of the South Alligator Group. The Woolwonga deposit lies along the 8km long NW-trending Woolwonga Anticline. The Gerowie Tuff, the overlying Mt Bonnie Formation and the Burrell Creek Formation all occur in the area.
Pre-orogenic sills of Zamu Dolerite have dilated part of the Mt Bonnie Formation. A major (post mineral) magnetic dolerite dyke striking parallel to the anticlinal axes passes west of the original Main Ridge. (This dyke system also passes though the Union Reefs mining centre). In addition, a suite of lamprophyre dykes cut the sequence in the mine region. Prior to open pit mining, outcrop in the area was on two resistant ridges that trended 310 degrees and hosted historic gold workings. The more easterly of the two, Main Ridge, followed the Woolwonga Anticline for 1.2km, while the Western Ridge followed a subsidiary anticline with parasitic folds more dominant on the eastern limb and was more subdued. Originally there was a Central Ridge comprising a complexly folded syncline. All ridges were originally flanked by Recent alluvium and colluvium and in the lower lying areas, a veneer of flat lying surficial Cambro-Ordovician limestones and sandstones cover much of the underlying Lower Proterozoic host rocks. The fold axis of the Woolwonga Anticline trends from 310° in the SE to 290° in the northern outcrops. The axial plane is vertical to SW dipping, the NE limb dipping more steeply than the SW limb. The average plunge is 30-35° to the SE, though in places the crest undulates to steeper and flatter plunges. A well developed axial planar cleavage through alignment of micaceous minerals is present in the mudstone and siltstone. The fold is cut by a series of en echelon fracture or shear zones trending 325-335° across the axis. The fractures are preferentially developed within the mudstone siltstone dominant units, and are important mineralisation host. These zones are vertical to steeply dipping and are up to 30m wide.

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 Finniss River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies. Some of the gold mineralisation appears to be related to the I-type members of Cullen Batholith, formed during the evolution of hydrothermal fluids as a result of fractionation and differentiation processes (Bajwah, 1994).

4.1 Local Geology

Gold mineralisation at Woolwonga is associated with quartz-sulphide veins which fill fault and fracture sets in Mt Bonnie Formation sediments (Figure 2). Mineralisation and
The gold is controlled by three main structural features:

The axial zone of the Woolwonga Anticline:

The SE plunge increases from about 8 degrees in the NW to 34 degrees in the SE within a distance of 900m. The anticline is roughly symmetrical with the NE limb at 60 degrees, slightly steeper than the SW limb at 55 degrees. The axial plane and associated cleavage dips 80-85 degrees SW. A sheeted vein system occupies cleavage-parallel fractures and shears.

Subvertical to SE dipping fracture zones trending 325-335 degrees:

Minor shearing with slickensides is associated with sheeted quartz veins developed along the above system. This carries the bulk of the mineralisation as quartz- pyrite-arsenopyrite stock-works and veins 1mm to 500m thick.

Competency contrast sites:

This style comprises bedding parallel veins between thin to medium bedded turbidites and carbonaceous mudstones, in the manner of saddle reefs, breccia veins and other detachment zone features. In addition mudstone units within the axial zone may host quartz stock-works. These were particularly noticeable in surface workings as saddle reefs up to 1.5m thick and make up to 30% of the ore. A study of the overall gold distributions on longitudinal section, using Leapfrog software, shows a distinct stacking of the higher grade saddle reef style bodies that plunge SE parallel to the axial closure. There are at least 9 of these bodies: five relating to the southern Wilson Pit and four to the northern Reward Pit. Axial planar mineralisation tends to link the shoots in a subvertical sense.

The dominant sulphides associated with gold at Woolwonga are pyrite and arsenopyrite. There are also minor amounts of sphalerite, galena and chalcopyrite, and trace amounts of native bismuth, pyrrhotite, covellite and chalcocite. Pyrite occurs as masses, blebs and stringers in massive white quartz veins. It is generally coarsely crystalline but also
replaces small garnets within mudstones in proximity to quartz veins. Arsenopyrite occurs as coarse euhedral crystals disseminated in the sediments flanking the quartz pyrite veins, or as massive arsenopyrite on the vein margins, or in the quartz veins themselves.

5.0 PREVIOUS EXPLORATION

Shaw (2005) has outlined previous exploration at the Woolwonga tenements, and this is incorporated here.

The Woolwonga gold mine was actively worked between 1889 and 1900 with a recorded production of 205kg (6604oz) of gold from 7,457t of ore. The mine was abandoned in 1901 owing to the lower recoveries and grades met in the primary mineralisation, and water inflow into the deeper levels. From 1907-1908 a further 26kg (833oz) of gold was recovered from cyaniding 4,600t of tailings. From 1970 to 1982 the property was evaluated by several companies for both bedrock and alluvial gold potential. In 1982 Australian Coal and Gold Holdings Ltd commenced a mapping and bulk sampling program of the alluvial deposits. The investigation indicated a potential near surface alluvial/eluvial reserve 305,000 cubic metres in the range 0.1 to 0.7g per cubic metre. In 1984 the Golden Dyke Joint Venture comprising Geopeko and Anaconda optioned the property from AG&C and commenced mapping, costeanning and diamond drilling.

In 1985 Dominion Mining Limited replaced Anaconda as manager of the JV and commenced diamond drilling to evaluate the open pit resource potential. The combined drilling data indicated a resource of 500,000t @ 3.0g Au/t. Further mapping and costeanning in 1986 and 1987 indicated a potential to increase the tonnage significantly and during 1987 two major reverse circulation percussion drilling programs were completed. This delineated an in situ geological resource of 2.48Mt grading 2.48g Au/t, comprising an oxide component of 737,000t @ 2.98g Au/t and 1,741,000t of sulphide mineralisation at 3.5g Au/t. A feasibility study indicated a recoverable mining reserve of 2.1Mt @ 2.78g Au/t. In 1989 further RC drilling indicated a global resource of 5Mt @ 3.0g Au/t.
During the 1989 field season work at Woolwonga was orientated towards pre-development activities with RAB drill sterilization and groundwater investigations being completed. Exploration over MLN 1103 was limited to core drilling for geotechnical information, metallurgical samples and assay verification of previously drilled RC percussion holes to enable a final pit design to be completed (Dominion, 1989). The drilling results obtained by Dominion Gold Operations Pty. Ltd. indicated that large tonnage deposits were restricted to the Woolwonga Anticline, but smaller ore bodies occur on the Central and Western Ridges (Dominion, 1989).

Northern Gold NL through Territory Goldfields NL acquired the tenements in May 1995 on the completion of Dominion’s mining phase. Prior to formation of the Burnside JV, work mainly comprised data reviews. In April 2002 Territory Goldfields NL entered into a joint venture (Burnside JV) with Buffalo Creek Mines P/L. In 2002-2003 the Burnside Joint Venture conducted a ranking study and a structural and resource review. The deposit was ranked as medium priority and its potential to host additional economic gold mineralisation was acknowledged. A computerised study (Leapfrog Software) of gold distributions drew attention to south plunging bodies of higher grade that could form a focus for future exploration. It was concluded that there was scope for residual mineable tonnes at the project but the rehabilitation and pit backfilling had made a new evaluation more difficult and expensive.

In 2003-2004 the JV carried out a program of exploratory RC drilling on the Empire target, SE of the main workings. The program comprised 6 holes for 420m. (SET-001 to SET-006). SET-004 was the most successful hole, including 10m @ 6.97g/tAu from 73m. This hole was well (grid) east of the notional target. In 2004-2005 the JV carried out a programme of vertical RAB drilling along the SE strike extension of the Woolwonga Anticline. The RAB drilling comprised 30 holes for 568m on MLN1103. The results were disappointing, with a maximum 1m gold value of 0.16g/t Au at 20-21m in hole SWB-009.
6.0  EXPLORATION FOR YEAR ENDING 30 APRIL 2008

During the reporting period, a total of 42 Air Core holes were drilled for 869 metres to test the expression of gold mineralisation towards southeast of the present pit (Empire Prospect). Axial zone of SE plunging anticline was targeted for further extension of gold mineralisation of the Woolwonga deposit located on MLN 1103. Drillhole data along with assay data are given in Appendix 1. A total of 364 samples were collected for assaying. Au was analysed by fire assay and base metals by AAS (3 acids digestion). SGS Laboratories of Townsville assayed all samples and results are provided in Appendix 1.

During this campaign, shallow Air Core drill holes were drilled (200 x 100 metres grid) with depth ranging from 5 to 29 metres. Figure 3 shows the spatial distribution of drilling conducted during 2007-08. The project area is generally covered by alluvial cover of variable thickness. During drilling the alluvial cover generally varied from 5 to 10 metres. It is mainly composed of fine to medium grained soil/sediments which are generally khaki or buff colour. This alluvial cover could have been formed ‘in situ’, transported or both. Effects of weathering can be observed through the drilling column. In drill holes, alluvium will grade into saprolite/clayey zone, which in turn, will rest on sandstone or siltstone of the Mt Bonnie Formation or Burrell Creek formation. Sandstone or siltstone is generally fine to medium grained and marked by weak foliation and show hematite/goethite alteration. These rocks are intersected by quartz vein systems at various stratigraphic horizons.

Assay data show (Appendix 1) that Au contents vary from 0.001 to 1.52 ppm. From the data it is clear that Au contents are generally below 0.1 ppm. The highest concentration of gold came from sample no. EXD04438 (Drill hole WAC 141). The composite sample was taken from 0-3 metre interval which was a mixture of alluvium/soil and underlying sandstone. This sample is also characterised by high concentration of As (530 ppm) and moderate amounts of base metals (Cu 21, Pb 24 and Zinc 107 ppm). It may be noted that common values are around 0.02 to 0.06 ppm and point towards the anomalous nature of rocks and soil/alluvial horizon developed on top of it. Air Core drilling is of shallow nature and perhaps deeper RC drilling might be more encouraging.
Figure 3: Spatial distribution of Air Core drilling in the project area
Table 2: Expenditure details for Woolwonga Group of Tenements

<table>
<thead>
<tr>
<th>Tenement No</th>
<th>Expenditure ($)</th>
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<tbody>
<tr>
<td>MCN 3705</td>
<td>685.00</td>
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<td>685.00</td>
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<td>MLN 1103</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>56097.00</strong></td>
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7.0 FORWARD PROGRAMME FOR 2008-09

The Woolwonga group of tenements has shown potential to host additional gold mineralisation. Southwestern part of the project area lies within the northern extension of the Pine Creek Shear Zone, which is host to significant gold deposits in the region. In the following exploration program, a further infill soil sampling program will be carried out to identify additional anomalous zones of mineralisation which may subsequently lead to RAB/RC drilling. A minimum budget of $15000.00 has been reserved for this program.

8.0 REFERENCES


Needham, R.S., Stuart-Smith, P.G., and Page, R.W., 1988. Tectonic evolution of the
Pine Creek Inlier, Northern Territory. *Precambrian Research* 40/41, pp 543-564.