BRIDGING REPORT

EXPLORATION LICENCE 23270

Burnside Project – Woolwonga North

20 February 2010 to 15 January 2011

Distribution:-

1. DOR Darwin, NT
2. Crocodile Gold Australia, Humpty Doo

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EL 23270 is located 140km SE of Darwin, NT and 18km NE of Brocks Creek Siding. It was originally granted to Buffalo Creek Mines Pty Ltd (50%) and Territory Gold Fields Pty Ltd which are wholly owned subsidiaries of GBS Gold Australia. GBS Gold Australia went into voluntary administration on 15 September 2008 and all assets including EL 23270 were placed under care and maintenance. In 2009, Crocodile Gold Australia purchased all assets held by GBS Gold Australia (liquidated), and after meeting all statutory and regulatory requirements, EL 23270 along other assets were transferred to new owner.

The tenement comprises a suite of Palaeoproterozoic meta-sedimentary rocks, intruded by late orogenic granites, and form part of the Pine Creek Orogen sequence. It lies just north-east of the Woolwonga gold open pit. The Woolwonga gold deposit was mined from 1871 to 1908 by underground methods. The total production was 205kg of gold from 7457t of oxide ore and a further 26kg of gold from the cyanide leaching of 4600t of tailings. During 1985, Dominion Mining Ltd conducted an extensive exploration program on the deposit outlining a recoverable reserve of 2.1 Mt averaging 2.78 g/t Au. Mining commenced in 1991 and continued through to 1995.

Several companies explored the tenement conducting geological mapping, soil and chip sampling and minor drilling. Some gold anomalies were identified but not followed up.

GBS Gold Australia acquired the lease but went into voluntary administration in 2008. During most of 2009, EL 23270 remained under voluntary administration. The main activity was confined to a technical review, tenement ranking and evaluation in order to prepare assets for sale. In addition, reconnaissance visits to accompany interested parties were also undertaken. This exercise established the mineral potential of the tenement for gold and uranium. After meeting regulatory and statutory requirements, Crocodile Gold Australia acquired all assets including EL 23270 held by GBS Gold Australia (liquidated) on 6 November 2009. Following this transaction, Crocodile Gold Australia re-commenced gold mining and processing and first gold pour was achieved on 29 December 2009.

There was no exploration conducted on EL23270 during the reporting period.

During the next reporting period, Crocodile Gold will conduct regional scale geophysical and geochemical surveys over the Burnside Project area, part of which will cover EL23270.
2 INTRODUCTION

EL 23270 is considered as strategic landholding which was applied for to cover vacant ground north and east of the Woolwonga Group of tenements, containing the Woolwonga open pits. It is expected that Woolwonga style gold mineralisation may extend into EL 23270.

Crocodile Gold Australia applied for group technical reporting status on the group of tenements comprising the Burnside project area. This was approved by Department of Resources in December 2010 and the Burnside project area was given the group reporting number GR-185/11. This report has been written to bridge the gap between the previous annual report ending 19 February 2010 and the new group Technical Reporting Anniversary of 15 January 2011.

In this report, exploration activity conducted between 20 February 2010 and 15 January 2011 is documented.

3 LOCATION AND ACCESS

EL 23270 is situated 140km SE of Darwin NT and 18km ESE of Brocks Creek siding on the Darwin-Alice Springs railway. Access to the tenement is via the Stuart Highway, then north via the Fountain Head/Ban Ban Springs sealed road that comprised the haul road for Woolwonga in the mid 1990s. The access deteriorates beyond Woolwonga but reasonable dry season access can be gained using bush tracks that service the Ban Ban Springs pastoral area. The Margaret River and tributaries meander northward through the tenement.

The tenement falls on the Pine Creek 1:250,000 sheet and on the Ban Ban 1:50,000 sheet. The tenement also is within the Ban Ban Springs pastoral lease. Outcrops are relatively sparse through much of the tenement due to the influence of the Margaret River alluvial deposits. Due to steep incised banks, river crossings of the Margaret River are difficult except at prepared locations.

The location of the EL23270 is shown in Figure 1.

4 TENEMENT DETAILS

EL 23270 was granted on 20 February 2003 and was to expire on 19 February 2011. An application for renewal was lodged on 16 November 2010. The tenement comprises four blocks that cover approximately 12.9 km². It was granted to Territory Goldfields NL and Buffalo Creek Mines NL in equal shares which were the wholly owned subsidiaries of GBS Gold Australia. In September 2008, GBS Gold Australia went into voluntary receivership and all assets including EL 23270 were placed under care and maintenance. Crocodile Gold Australia announced to purchase all Northern Territory assets held by GBS Gold Australia in April 2009. After meeting all statutory and regulatory requirements, these assets including EL 23270 were transferred to Crocodile Gold Australia Pty Ltd.
Figure 1: EL23270 Tenement Location
5 GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

EL23270 is situated within the Pine Creek Orogen, 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 (Ahmad et al 1993). 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 batholith into the sequence in the period ~1.84-1.1.78Ga. 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 Orogen 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 Finniss River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies.

Gold mineralisation appears to be related to the I-type members of the Cullen Batholith, formed as a result of fractionation and differentiation processes during magma emplacement. That ultimately led to the evolution of hydrothermal fluids responsible for gold mineralisation in the adjacent meta-sediments (Bajwah, 1994).

Figure 2 illustrates the regional geology of the Burnside project.
5.2 LOCAL GEOLOGY

Much of the EL covers a sequence of the Burrell Creek Formation (Finniss River Group) with minor lithologies of the Mount Bonnie Formation and Gerowie Tuff (South Alligator Group), which are present on the north-western corner of the EL.

Clastic sediments of these formations are folded and faulted on north-west strike trends in parallel with the Pine Creek Shear Zone that crosses the area (Shaw 2005, Ahmad et al 1993). A regional scale NE linear zone also passes between the Burnside and the Prices Spring Granites. The intersection of these two major linears may have significance in terms of local crustal geometry and gold focusing.

Within the tenement, topography is dominated by sparse low outcrops of Burrell Creek Formation which is typically a cyclic greywacke-dominated assemblage with minor dark siltstone and mudstone packages. Black soil and other alluvial deposits relating to the Margaret River and its tributaries mask large areas of the tenement. Several lineament sets cross the tenements and most appear to be related to the Pine Creek Shear Zone. The north easterly alignment can only be seen on regional scale geological plans.
PREVIOUS EXPLORATION

The Woolwonga gold deposit, situated to the west of EL23270, was mined from 1871 to 1908 by underground methods. The total production was 205kg of gold from 7457t of oxide ore and a further 26kg of gold from the cyanide leaching of 4600t of tailings. During 1985, Dominion Mining Ltd conducted an extensive exploration program on the deposit outlining a recoverable reserve of 2.1Mt averaging 2.78g/t Au. Mining commenced in 1991 and continued through to 1995.

During the late 1970’s, CRA explored the adjacent area covered by EL23270 for base metal mineralisation, conducting regional mapping and sampling of gossanous outcrops.

In 1979, AAR Limited conducted exploration for base metals and uranium in the northern part of the tenement. Exploration activities included rock chip sampling, geological mapping and radiometric readings.

From 1982 to 1988, Euralba Mining Ltd also conducted exploration over the northern part of EL23270 targeting alluvial gold (and to a lesser degree tin) as the area drained the Woolwonga goldfield. Euralba conducted rock chip sampling and mapping. Rock chip samples were taken from a number of massive quartz outcrops or small conical ridges and from quartz reefs in the Mt Bonnie and Gerowie Formations. Only one sample was within EL23270. Results were <4ppm Pb, <1ppm Ag and 0.1ppm Au. No further work was done.

Dominion Mining also explored the southern area of EL23270, the work conducted was minor with no results reported. Further exploration was conducted through the middle of the tenement during 1988 to 1989, conducting surface mapping scree sampling and RAB drilling. The surface mapping outlined two anomalous zones of residual soil/outcrop in the area, with scree sampling returning 1.18ppm Au. No further exploration was conducted.

Territory Resources NL explored the northern part of EL23270 in 1987 and collected 2 rock chip samples with disappointing results.

Territory Goldfields NL and Buffalo Creek Mines NL (Burnside JV) acquired the tenement in 2003. A structural interpretation of the Woolwonga North area was complete by J Shaw during 2005. The aim of the study was to investigate the importance of lineaments and the relationship to gold mineralisation.

GBS Gold Australia, of which Territory Goldfields NL and Buffalo Creek Mines NL were subsidiaries, went into voluntary administration in 2008. During most of 2009, EL 23270 remained under voluntary administration. The main activity was confined to a technical review, tenement ranking and evaluation in order to prepare assets for sale. In addition, reconnaissance visits to accompany interested parties were also undertaken. This exercise established the mineral potential of the tenement for gold and uranium. After meeting regulatory and statutory requirements, Crocodile Gold Australia acquired all assets including EL 23270 held by GBS Gold Australia (liquidated) on 6 November 2009. Following this transaction, Crocodile Gold Australia re-commenced gold mining and processing and first gold pour was achieved on 29 December 2009.
There was no further exploration conducted on EL23270 during the reporting period.
FORWARD PROGRAM YEAR ENDING 15 JANUARY 2012

This tenement now forms part of the Burnside Exploration project for both exploration activities and for group reporting. Exploration activities for this project for the coming year will include:

- Crocodile Gold is currently looking at a large scale regional exploration push during the 2011 and 2012 seasons, including a helicopter-borne VTEM survey, region geochemical sampling and mapping, this will include areas of the Burnside project.
- Desktop review of all exploration activities conducted by Joint Venture partner Thundelarra Exploration, particularly looking at exploration for gold and base metals.
- Detailed review of all historic and recent geophysical data for the project, with the aim of generating green field targets.
- Thorough review of all geochemical data for the project area, to be used in future target generation.
- Review of targets using satellite imagery in conjunction with regional geological mapping and the latest geophysical data
- Field mapping of targets highlighted from these reviews
- RAB and RC drilling of highest ranked targets
- A review of all historic deposits noted in the MoDAT database

Through these activities Crocodile Gold will target mainly gold and base metal targets in the Burnside Project area to add to existing mineral resources. By identifying additional deposits, the economic viability of this project area can be assured.

Crocodile Gold will conduct regional scale geophysical and geochemical surveys over the Burnside Project area, part of which will cover EL23270.

A minimum budget of $12,000 has been proposed for EL23270.
9 REFERENCES


