BRIDGING REPORT

EXPLORATION LICENCE 10347

_Burnside Project – Golden Dyke Dome_

15 April 2010 to 15 January 2011

REVISED

Distribution:-

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

Report Number: EL10347 BR2010

Marcelle Watson
June 2011
# TABLE OF CONTENTS

1 EXECUTIVE SUMMARY ........................................................................................................3
2 INTRODUCTION ..................................................................................................................4
3 LOCATION AND ACCESS ....................................................................................................4
4 TENEMENT DETAILS ..........................................................................................................4
5 GEOLOGICAL SETTING ........................................................................................................6
   5.1 Regional Geology ...........................................................................................................6
   5.2 Local Geology ................................................................................................................7
6 PREVIOUS EXPLORATION ..................................................................................................8
7 EXPLORATION ACTIVITY 15 APRIL 2010 TO 15 JANUARY 2011 .............................10
8 FORWARD PROGRAM YEAR ENDING 15 JANUARY 2012 ........................................11
9 REFERENCES .....................................................................................................................12
1 EXECUTIVE SUMMARY

Exploration Licence (EL) 10347 is one of the significant tenements located 145km SE of Darwin, and is centered on the Golden Dyke Dome, a faulted anticlinal feature at the southern end of the historic Yam Creek-Golden Dyke gold-mineralised belt. Several historic gold mines occur within the tenement including Golden Dyke, Davies No 2, Fishers Adit, Afghans Gully and Langley's.

Gold mineralisation in the tenement is associated with the middle Koolpin Formation of the South Alligator Group. Prospects lie along an arcuate fold axis trend, (Good Shepherd Anticline) which is parasitic to the west limb of the Dome. The gold closely follows stratigraphy and the bulk of mineralisation is confined to the contact zone between the Koolpin Formation and the Zamu Dolerite. It is hosted mainly by dark, nodular, cherty, chloritic and magnetic iron formation horizons thought to correlate with the same strata at the Cosmopolitan Howley Mine 16km to the west.

Several gold bearing localities, within or close to the tenement, have been worked intermittently since 1872. These are listed as the Golden Dyke Mine, Davies No.1, Fishers Lode, Corbetts, Langleys, Black Rock Shaft and Afghans Lode. Base metal occurrences have been recorded near the eastern boundary of the EL and along the Golden Dyke trend. Heatley's Prospect includes lead-zinc and copper occurrences. The Davies Creek Prospect is a reported lead-zinc occurrence.

Exploration on EL10347 was conducted by JV partner Thundelarra Resources who carried out a field reconnaissance mapping for uranium, on the western flank of the Golden Dyke Dome deposit. Mapping identified doleritic rocks, tourmalinites, quartz-tourmaline veins and sulphides north of the Fishers Lode pit. Similar lithological units have been found around the Thunderball deposit, highlighting the uranium potential for this tenement.

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 EL10347.
2 INTRODUCTION

EL 10347 is one of the significant tenements within Crocodile Gold Australia's portfolio due to its potential for gold, base metals and uranium mineralisation. Several historic gold mines occur within the tenement including Golden Dyke, Davies No 2, Fishers Lode, Afghans Gully and Langley's. Recent discovery of uranium mineralisation in adjacent tenement (EL 23431) points towards its potential for uranium mineralisation.

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 14 April 2010 and the new group Technical Reporting Anniversary of 15 January 2011.

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

3 LOCATION AND ACCESS

The tenement is centered about 145 km SE of Darwin, NT and 14 km SE of the Brocks Creek exploration and mining office. It is accessed via the Stuart Highway a few km south of Hayes Creek roadhouse, taking a turnoff north towards the Grove Hill Siding and Mt Bonnie access road. The unsealed road crosses the EL just north of the Stuart Highway.

The topography of the area comprises a series of low hills and ridges with sub-crop present on the crests and flanks. Seasonal creeks forming the headwaters of the Margaret River have incised the area. In the north-west Sandy Creek has been extensively dammed for process water as part of extensive historic and recent alluvial gold mining. The location of the EL10347 is shown in Figure 1.

4 TENEMENT DETAILS

EL 10347 comprises three contiguous blocks. The EL was granted on 15 April 2002 for a period of 6 years, expiring on 14 April, 2008. The tenement was renewed on 15 April 2008 for a period of 2 years and was expected to expire on 15 April 2010. A renewal submission has been logged with Northern Territory Department of Resources.

EL 10347 was held 50% by Buffalo Creek Mines Pty Ltd and 50% Territory Goldfields NL, previously called the Burnside JV. GBS Gold made a successful takeover of Northern Gold NL during 2005, and entered into an agreement to purchase Harmony Gold's 50% share of the JV. GBS Gold Australia went into voluntary administration on 15 September 2008. In June 2009, Crocodile Gold Australia announced to purchase all assets held by GBS Gold Australia in the Northern Territory, and after meeting statutory and regulatory requirements, these assets including EL 10347 were transferred to Crocodile Gold Australia.

Crocodile Gold is in a JV partnership with uranium explorer, Thundelarra Resources. Underlying cadastre is NT Portion 2683, held by Branir Pty Ltd.
Figure 1: EL10347 Tenement Location
5 GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

EL10347 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 interlayered 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 ~1.84-1.178Ga. 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**

The tenement encloses a sequence of South Alligator Group rocks ranging from the Koolpin Formation in the centre of the Golden Dyke Dome area to the base and the Burrell Creek Formation on the flanks. The Koolpin Formation comprises mudstone, carbonaceous mudstone, and iron formation facies rocks. The overlying Gerowie Tuff comprises felsic cherty tuff and siltstone, and this is overlain by siltstone-greywacke-mudstone lithologies of the Mt Bonnie Formation. Several concordant sills of the Zamu Dolerite are interleaved with these sediments. Towards south, McMinns Bluff Granite intrudes the sequence.

These rocks have been tightly compressed into a series of north-south trending folds with west limbs generally shallower dipping than the east. North east striking faults have truncated parts of the Golden Dyke Dome and may have played a part in localising gold mineralisation. Gold mineralisation in the tenement is associated with the Middle Koolpin Formation of the South Alligator Group. Prospects lie along an arcuate fold axis trend, (Good Shepherd Anticline) which is parasitic to the west limb of the Dome. The gold closely follows stratigraphy and the bulk of mineralisation is confined to the contact zone between the Koolpin Formation and the Zamu Dolerite. Some may also be present between the Koolpin Formation and the Gerowie Tuff (Langley’s).

Mineralisation is hosted by dark, nodular, cherty, chloritic and magnetic iron formation horizons thought to correlate with the same strata at the Cosmo/Howley Mine 16km to the west.
Several gold bearing localities, within or close to the tenement, have been worked intermittently since 1872. These are listed as the Golden Dyke Mine, Davies No.1, Fishers Lode, Corbetts, Langleys, Black Rock Shaft and Afghans Lode. Base metal occurrences have been recorded near the eastern boundary of the EL and along the Golden Dyke trend. Heatley’s Prospect includes lead-zinc and copper occurrences. The Davies Creek Prospect is a reported lead-zinc occurrence.

The Golden Dyke area, containing some of the earliest worked gold deposits in the Northern Territory, was first prospected in 1872, after the initial discovery of alluvial gold. In 1915, using costean excavation, Jack Davis reported an auriferous lode, with an average of 0.5 ounce per ton for a length of 275m and a width of 4.5 to 7.6m. Following the favourable results, a shaft was sunk at the Shackle, the former name for the Golden Dyke Mine. From 1924 to 1925 additional shafts were sunk to test for mineralisation at depth. Battery treatment of open cut ore also commenced, yielding 80.0oz of gold from 275t of ore (9.0g Au/t) (Hossfeld, 1936).

In 1934, the Golden Dyke Mine (NL) took over the mine from Davis. The Golden Dyke Mine Company developed and worked the ore-shoot, averaging 10.8 to 12.4g/t gold in the Main Reef. Between 1934 and 1937, it is estimated that the Golden Dyke Mine (NL) treated 6,100t for 1600 ozs (Nicholson, 1985a). Based on the lack of thorough and systematic testing of the mineralised zone, and the primary focus on only the main ore-shoot, the 1936 AGGSNA report concluded that the mine would never become a large scale producer (Hossfeld, 1936). The mine closed in the late 1930’s amid allegations of mismanagement and government interference (Eupene in Nicholson, 1980).

Anglo-Queensland Mining Pty Ltd conducted costeaning and rock chip sampling to check previous results and with the hope of finding commercial ore shoots additional to that at the Golden Dyke Shaft (Blanchard, 1937). Sample checks were undertaken for the Golden Dyke Mine, Davies No. 1, Davies No. 2 and the Corbett workings. The results were generally lower than the original assays, down grading their potential. One of the discrepancies encountered was at Davies No. 2. The previous costean channel sampling returned 4.8m @ 36.0g/t Au, however, check sampling of this costean resulted in 6m @ 1.3 g/t Au (Blanchard, 1937). Anglo-Queensland Mining Pty. Ltd. concluded that commercial ore was confined to Golden Dyke main ore-shoot (Blanchard, 1937).

Later periods of production were estimated to have been carried out in 1940, by Waggaman Gold Mining Co. Ltd. (2,240t for 190ozs), and in 1970, by Casey (Nicholson, 1985). Recorded production totals 10,900t for approximately 2,100 ozs (Nicholson, 1985).

Prospector Mick Corbett secured leases over the most favourable ground in the late 1930’s, and intermittently worked the leases. In 1972, he sold the leases to Hans Koberstein.
In 1978, Peter Nicholson completed his thesis on the Golden Dyke area, which gave greater insight into the geology and ore controls on the Dome. Nicholson concluded that there are several favourable horizons throughout the sequence exposed in the domal structure, and recommended that the whole of the Dome be systematically explored for gold and base metals. Geopeko sponsored the thesis, and became interested in the area. Koberstein entered into an agreement with Geopeko who later entered into a JV agreement with CRAE tenements (Nicholson, 1980).

From 1971 to 1972, Central Pacific Minerals and AOG Minerals conducted geological mapping, soil and rock chip sampling, trenching, geophysical surveys and minor drilling. Several Zinc anomalies and one lead anomaly were identified at the Heatley’s prospect.

During 1980 to 1984, Geopeko completed a preliminary appraisal, rock chip sampling, stream sediment sampling, ground magnetic survey, down-hole logging and diamond drilling over Golden Dyke, Davies No. 1, Black Rock, Northern Costeans, Langleys and Good Shepherd. It was found that proven reserves of 27,000t @ 10.0g/t Au from surface to 40m existed at the Golden Dyke Mine, with a probable resource of 37,000t @ 10.0g/t Au above 70m. Geopeko research also concluded a probable resource at Black Rock of 27,000t @ 7.6 g/t Au. The results from the soil sampling also identified three areas of possible economic interest within the Golden Dyke Dome; Northern Costeans and the Good Shepherd Anticline, the Black Rock Flexure, and Langley’s Prospect. Stream sediment sampling identified 4 anomalies at Three Peaks, Telegraph Ridge, Central Dome and Langley’s Extension.

In 1985, Geopeko completed costeanning and rock chip sampling, under a joint venture agreement with Anaconda Australia. Henry and Walker Ltd farmed into the licence, and Anaconda sold its interest to Dominion Gold Operations Pty Ltd.

Henry and Walker Ltd acquired the tenement within the Golden Dyke area in the late 1980’s and developed four, small open-cut operations at Fisher’s Lode/Afghan’s Gully, Golden Dyke, Davies No. 2 and Langley’s. A total of 295,000t of ore at 4.0 g/t Au was produced and treated through the Mount Bonnie Plant (Dominion Gold Operations Pty Ltd report 1993).

From 1986 to 1988, Henry & Walker Ltd conducted costeanning and percussion and diamond drilling over the Fisher’s Lode deposit, Davies No. 2, Black Rock and Northern Costeans.

Oceania Exploration and Mining started exploration in the Golden Dyke area from 1987 to 1989, with mapping, geochemical sampling, ground magnetics and diamond drilling conducted. Oceania also increased the depth of 12 old trenches to between 2 and 3m to expose banded iron formations. Best result was 7m @ 10.58g/t Au from Trench 2. Soil sampling identified anomalous gold and arsenic associated with banded iron formations at three localities; Shady Camp, Marchfly and Rockwall area, southeast of Golden Dyke. Twelve holes were drilled using an airtrack rig at Shady Camp prospect, with best result of 4m @ 3.09g/t Au.

Zapopan N.L. conducted geochemical sampling and geological mapping in 1993, the peak gold result returned was 275 ppb Au, with a corresponding As value of 1,100 ppm.
Northern Gold conducted exploration from 1994 to 1997 including geological mapping, rock chip sampling and RC drilling at the Golden Dyke and Davies prospects. The programs targeted extensions to mineralization in the main reef north and south of Golden Dyke pit. Drilling from Golden Dyke returned anomalous ‘subeconomic’ mineralization, drilling at the Davies prospect was generally uneconomic. The Burnside JV focused its attention on the Zapopan, Cosmo Howley, Yam Creek and Woolwonga deposits between 2001 and 2003. Work on EL10347 in 2003 consisted of a remote sensing and structural study using SPOT imagery. During 2004 and 2005, work consisted of reporting and a review.

GBS Gold Australia obtained the licence in 2007 however EL10347 and other assets remained under care and maintenance during most of 2008/09. Under the instructions of Several Administrators, the tenement and other assets were reviewed, ranked and evaluated in order to prepare assets for sale. Crocodile Gold Australia purchased assets held by GBS Gold Australia (liquidated) in June 2009, and after meeting regulatory and statutory requires these assets including EL 10347 were transferred to Crocodile Gold Australia on 6 November 2009. Crocodile Gold immediately commenced mining and processing activities in the region. JV partner, Thundelarra Exploration Limited, flew a high resolution geophysical survey covering part of the project area.

7 EXPLORATION ACTIVITY 15 APRIL 2010 TO 15 JANUARY 2011

JV partner Thundelarra Resources carried out a field reconnaissance program on the western flank of the Golden Dyke Dome deposit. Recent interpretation suggests that the hydrothermal fluids responsible for the gold mineralisation around Afghan Gully and Fishers Lode has migrated northerly across the inferred Hayes Creek Fault Zone (HCFZ) along preferential lithological units and might be linked to the uranium mineralisation at the Thunderball deposit. Mapping has identified doleritic rocks, tourmalinites, quartz-tourmaline veins and sulphides north of the Fishers Lode pit. Similar lithological units have been found around the Thunderball deposit, highlighting the uranium potential for this tenement.

A total of $6,531 was the expenditure for the reporting period.
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 EL10347.

A minimum budget of $12,000 has been proposed for EL10347.
REFERENCES


Dominion Mining Limited 1993. Evaluation of the Mt Bonnie Project (unpubl)


Nicholson, P., 1980. Recent CRA Exploration Pty Ltd Leasing in the Golden Dyke Area, NT. Geopeko (unpubl)


