Bridging Report

Exploration Licence 23174

Mt Bundy Project

19 September 2010 to 15 December 2010

Distribution:
- DOR Darwin NT
- Crocodile Gold Australia Humpty Doo

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EL 23174 is strategic landholding which is situated about 80km East of Darwin NT, and 3.5 km north of the Toms Gully Mine along the Arnhem Highway.

EL 23174 is located within the Pine Creek Orogen, which has been interpreted as an intra-cratonic basin lying on an Archaean basement, and containing 14 km thick sequence of Proterozoic sediments, accompanied by lesser volcanics, granitic plutons and dolerite intrusions. In the tenement area rocks of the Mount Partridge Group, South Alligator Group and Finniss River Group are exposed.

Previous owner, GBS Gold Australia was declared under receivership on 15 September 2008, and as a result of that all exploration and mining projects were placed under ‘Care and Maintenance’.

On 6 November 2009, Crocodile Gold Australia took over the control of EL 23174 and other assets held by GBS Gold Australia (liquidated), and commenced mining, processing and exploration activities in the region. The new owner embarked on the due diligence of all the assets including EL 23174. The due diligence work highlighted a significant potential for gold, base metals and uranium mineralisation.

During 2009-2010, a soil sampling program was conducted over the Hardies Billabong prospect on EL23174, samples were found to be anomalous in Zn, Pb Mn and Co.

During the reporting period, anomalous results from soil sampling was followed up by 504m of RC drilling. Preliminary results from field tests using a Niton hand-held XRF returned base metal values in order of 100-400ppm from hole MBRC043. Hole MBRC045 returned an infield value of 1113ppm Zn over a 1m intersection of black shale.

During the next 2010-2011 reporting period, exploration activities for EL23174 will include a thorough review of all regional and local scale geophysical data. There will also be a review of all the regional exploration work completed by JV partner Rum Jungle. This will include follow up work on geochemical sampling from Rum Jungle drilling, exploring for copper/gold mineralisation.
2 INTRODUCTION

EL 23174 was applied for by previous owner Renison Consolidated Mines NL to cover ground on the north-east of Toms Gully Gold mine, which appears to follow a regional mineralised trend. In 2009, Crocodile Gold Australia took over the control of EL 23174 and other assets held by GBS Gold Australia (liquidated), and commenced mining, processing and exploration activities in the region.

Crocodile Gold Australia applied for group technical reporting status on the group of tenements comprising the Mt Bundy project area. This was approved by Department of Resources in December 2010 and the Mt Bundy project area was given the group reporting number GR-184/11. This report has been written to bridge the gap between the previous annual report ending 19 September 2010 and the new group Technical Reporting Anniversary of 16 December 2010.

This report deals with exploration activity carried out between 19 September 2010 and 15 December 2010.

3 LOCATION AND ACCESS

EL23174 is situated 80km East of Darwin NT and 3.5km north of the Toms Gully Mine along the Arnhem Highway. Access to the tenement is via the Arnhem Highway, then via secondary tracks that provide good access during the dry season although crossing creeks can be challenging. After heavy rain the tracks become impassable during the wet season. The existing bush tracks lead to and from Scott Creek, and in the east old station tracks were utilised to gain access into the denuded laterite and residual soil areas.

A major wet season creek (Scott Creek) drains the region to the northwest towards the Adelaide River Floodplains. Black soil plains cover the tenement and subdued areas of eroding laterite and residual soils cover the remainder.

The tenement falls within the Marrakai Pastoral Co. Pty Ltd (PPL 1131).

4 TENEMENT DETAILS

EL 23174 was granted on 19 September 2003 and expires on 18 September 2011. It comprises 21 graticular blocks that comprises approximately 54.88 km².

On 25 July 2007, GBS Gold Australia Pty Ltd by virtue of an agreement acquired all exploration and mining tenements and Toms Gully gold mine held by Renison Consolidated Mines NL including EL 23174 in Toms Gully area, Northern Territory. GBS Gold Australia went into voluntary administration on 15 September 2008 and as a result of that all mining and exploration assets were placed under care and maintenance. Crocodile Gold Australia announced to purchase these assets in June 2009 and after meeting all statutory and regulatory requirements, these assets including EL 23174 were transferred to Crocodile Gold Australia.
Figure 1: EL23174 Tenement Location
5 GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

EL23174 is located within the Pine Creek Orogen, which has been interpreted as an intra-cratonic basin lying on an Archaean basement, and containing 14 km thick sequence of Proterozoic sediments, accompanied by lesser volcanics, granitic plutons and dolerite intrusions. The Northern portions of the project area contain the oldest sediments of the Mount Partridge Group that are unconformably overlain by the South Alligator Group, which comprises most of the tenement areas. The southern portion of the Project area is comprised of Burrell Creek Formation, which conformably overlies the South Alligator Group. Tertiary and Quaternary Soils and Gravel’s unconformably overlie all the low lying portions of the tenement areas, generally referred to as “Black Soils Regions”. All of the Palaeoproterozoic sediments and volcanics in the Mount Bundy area were folded in a major deformation event dated around 1800 million years. The fold axes trend north-northeast, and generally plunging gently to the south. General geology of the project area in regional context is presented in Figure 2.
5.2 LOCAL GEOLOGY

The Mount Partridge Group is represented by the Wildman Siltstone, which is interpreted to be up to 1500m thick. In the Mount Bundy Region the Wildman Siltstone consists of laminated and banded shale, carbonaceous and often pyritic siltstone interbedded with undifferentiated volcanics up to 100m interbeds, minor dolomitic sediments may also be present. The sediments near the granite intrusion are generally hornfelsed. The Wildman Siltstone is interpreted to be prospective for large tonnage, low-grade gold deposits and small tonnage, high-grade deposits. Wildman Siltstone hosts the Tom’s Gully gold deposit. The majority of EL23174 is within Wildman Siltstone.

The South Alligator Group is represented by the Koolpin Formation, which comprises ferruginous siltstone and shale and is commonly carbonaceous and pyritic. Chert bands and nodular horizons are common and lenses of ironstone occur occasionally, as haematitic breccias throughout the sequence into undisturbed quartz-veined siltstone and shale. Minor components of dolomite can also occur. The Koolpin Formation is one of the most prospective units in the Mount Bundy region for hosting mineralisation (West Koolpin, Taipan, BHS and North Koolpin Open Pits at Quest 29 are all within Koolpin Formation).

The South Alligator Group is represented by the Gerowie Tuff which comprises siltstone, argillite and crystal tuff. Pale green, brown or grey siliceous siltstone and phyllite interbedded with pale cherty argillite, black cherty crystal tuff, spotted feldspathic crystal tuff and lithic tuff; minor felsic ignimbrite, chloritic volcanioclastic shale, lithic tuff and lapilli tuff; porphyritic dacite. The depositional environment is described by the NTGS as Subaerial dacitic volcanic ash with shallow marine lutites.

The South Alligator Group is represented by the Mount Bonnie Formation which conformably overlies the Gerowie Tuff and is dominated by a shallow marine sequence of interbedded and graded siltstone, chert and greywacke with occasional BIF’s. The unit can be up to 600m thick and is generally iron rich and may be siliceous in places. The Mount Bonnie Formation hosts the Rustler’s Roost deposit.

The Finniss River Group is represented by the Burrell Creek Formation which conformably overlies the Mount Bonnie Formation and is interpreted as a flysch sequence of fine to coarse marine sediments and appears to be part of continuous sedimentation process. Due to the lack of marker horizons and poor exposure the width of the unit is unknown but is thought to be >1000m thick. This formation is considered prospective for large low-grade gold deposits as typified by the Batman deposit of Mount Todd. The potential also exists for small high-grade deposits similar to Possum and Happy Valley with John Shields GIGIAC Theory (Gold in Greywacke in Anticlinal Crests). Also high-grade deposits such as Bandicoot, Marrakai and the Ringwood line which all lie on a major deep-seated magnetic trend.

Intrusives within the Exploration Licence include the Zamu Dolerite. This occurs as small bodies that are poorly exposed, as a result of its weathering, some rubble boulders may be present at surface. It consists of altered quartz dolerite and gabbro and is generally narrow and broadly conformable to bedding as thin sills. The Zamu Dolerite is the only known suite of mafic intrusives that were emplaced prior to regional metamorphism and deformation. The Zamu Dolerite appears to have a controlling
influence on the mineralisation at Quest 29 within the Koolpin Formation but this is not fully understood at this stage. Mineralisation is also hosted within this unit at Quest 29 and Chinese Howley.

6  PREVIOUS EXPLORATION

The earliest record of exploration in this area of the Mount Bundy region was by Geopeko from 1974 until 1977. They were primarily looking for uranium and base metals using costeaming and the sampling of rock chips within EL142, however results from these samples were poor, with no economic value. Four costeans were completed in 1975, along with seven diamond drill holes and the collection of soil and rock chip samples. One further diamond hole was drilled in 1976.

During the 1980’s and into 1990 Western Mining Corporation used stream sediment sampling, trenching, and drilling to explore for gold and base metals in EL4720. Carpentaria Gold was also collecting stream sediments samples in 1989, within EL6223 following the discovery of Tom’s Gully by this method in 1987.

In 1992 Mount Isa Mines held the EL7554 tenure, and in 1993 Poseidon Exploration used stream sediment samples for location of gold anomalies in EL7568. From 1994 to 1995 Normandy Exploration held the EL7568 and EL8019 tenures, using stream sediment samples, and drilling in their exploration. In 1995 they completed three hundred twenty five RAB holes, and ten Percussion holes with diamond tails. This work has been compiled into GIS format for target generation.

During 2005 to 2006, initial work on EL 23174 comprised in-house interpretation of processed aeromagnetics and radiometric data along with reconnaissance and geological traverses. Subtle north to north-east trending magnetic anomalies reflect lithological and structural trends in the Wildman Siltstone. A north-east/south-west oriented magnetic linear feature in the south-eastern sector of the tenement probably indicates a deep seated dyke. Regionally, this feature passes just to the west of Toms Gully and continues to the south-west to underlie the Bandicoot and Williams gold occurrences.

During the period of 2006 to 2007, GBS Gold Australia purchased EL 23174 from Renison Consolidated Mines in July 2007 and embarked on the review of the data.

In 2008 to 2009, a high resolution TEMPSET geophysical survey was conducted. The interpretation of the TEMPEST profiles indicated thick folded graphitic siltstone units that are providing a conductive response throughout the area. These are thought to be prospective for gold, silver, base metals and uranium mineralisation.

During 2009 to 2010, Crocodile Gold Australia took over the control of EL 23174 and other assets held by GBS Gold Australia (liquidated), and commenced mining, processing and exploration activities in the region. The new owner embarked on the due diligence of all the assets including EL 23174. A soil sampling program was also conducted at Hardies Billabong on EL23174. A total of 56 samples were collected and found to be anomalous in Zn, Pb Mn and Co. The anomalous results were taken near an outcropping of rhyolite.
EXPLORATION ACTIVITY 19 SEPTEMBER TO 15 DECEMBER 2010

Following on from the soil sampling program conducted earlier in the year, five holes were drilled for 504m, four of which were drilled on the apron of a north-south trending outcrop. Preliminary results from field tests using a Niton hand-held XRF returned base metal values in order of 100-400ppm from hole MBRC043. Hole MBRC045 returned an infield value of 1113ppm Zn over a 1m intersection of black shale.

Figure 3: Drilling campaign over Hardies Billabong

Exploration activity for this period cost a sum of $63,784 and details are given in Appendix 1.
This tenement now forms part of the Mt Bundy Exploration project for both exploration activities and for group reporting. Exploration activities planned for this project for the coming year will include:

- Desk top review of all exploration activities conducted by Joint Venture partner Rum Jungle Resources, particularly looking at exploration for Gold and Base Metals
- Detailed review of all historic and recent geophysical data for the project
- Thorough review of all geochemical data for the project area, to be used in future target generation
- RC and diamond drilling with subsequent Mineral Resource estimation of advanced projects (such as Quest 29) in the Mt Bundy project area
- Review of targets using Satellite imagery in conjunction with regional geology mapping
- Field mapping of targets highlighted from these reviews
- RAB or RC drilling or highest ranked targets

Through these activities Crocodile Gold will target mainly Gold and Base Metal targets in the Mt Bundy Project area to add to the existing Mineral Resources at Mt Bundy (formally Rustlers Roost) and Tom’s Gully. By identifying additional deposits in this project area the economic viability of this project area can be assured.

During the 2011 reporting period, exploration activities for EL23174 will include a thorough review of all regional and local scale geophysical data. There will also be a review of all the regional exploration work completed by JV partner Rum Jungle. This will include follow up work on geochemical sampling from Rum Jungle drilling exploring for copper/gold mineralisation.

A minimum budget of $25,000 has been set-a-side for this program.
9 REFERENCES


