GBS GOLD AUSTRALIA PTY LTD

ANNUAL EXPLORATION REPORT
EL 23506
FOR PERIOD ENDING 8 May 2009
McKeddies, Northern Territory

Pine Creek SD5208 1:250,000
McKinlay River 5271 1:100,000
Pine Creek 5270 1:100,000

Titleholders: Geoffrey Robert Orridge (33.34%)
Gary Anthony Clarke (33.33%)
Michael Daniel Teelow (33.33%)

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/09-24

Zia U. Bajwah
June 2009
SUMMARY

EL 23506 is one of the significant tenements within GBS Gold Australia’s portfolio which is located about 190 km SE of Darwin and some 40 km NE of Pine Creek. It contains a number of mineral prospects/anomalies such as gold, iron, tin and uranium. The tenement falls on the Pine Creek 1:250,000 sheet and is located on the McKinlay River 1:100,000 sheet to the north, and Pine Creek 1:100,000 sheet to the south. GBS Gold Australia acquired the rights to explore the tenements from the titleholders and in turn have signed heads of agreement with Territory Resources Limited and Thundelarra Exploration Limited for the exploration of iron ore and uranium.

EL 23506 is situated within the Pine Creek Orogen, a tightly folded sequence of the Palaeoproterozoic rocks. The tenement area covers the Palaeoproterozoic Namoona Group (Masson Formation) and Mount Partridge Group (Mundogie Sandstone and Wildman Siltstone). These rock formations have been intruded and contact metamorphosed by the Zamu Dolerite and members of the Cullen Batholith.

A technical review of the project area was undertaken. Geological, geochemical and geophysical data support significant mineral potential of the project area, particularly for iron ore, uranium and gold. South of the project area contains a number of operating and abandoned iron ore deposits which are located within Frances Creek mineral field. In 2009-10 reporting year, project area will be explored for Iron, gold and uranium mineralisation. For this purpose, area identified during this review will undergo soil/rock chip sampling along with geological mapping. If encouraging results received, some RAB/RC drilling may also take place.
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1.0 INTRODUCTION

The project area is located about 40 km north-east of Pine Creek and contains a number of mineral anomalies such as gold, iron, tin and manganese. The area has been explored without success so far. GBS Gold plans to concentrate on gold exploration and assess the mineral potential of the project area.

2.0 LOCATION AND ACCESS

EL 23506 is situated approximately 200km SE of Darwin, and 40km NE of Pine Creek. Vehicle access is from the Mt Wells road to the west, or Mary River homestead road leading from the Kakadu Highway to the south. The tenement falls on the Pine Creek 1:250,000 sheet and is located on the McKinlay River 1:100,000 sheet to the north, and Pine Creek 1:100,000 sheet to the south (Figure 1).

3.0 TENEMENT STATUS AND OWNERSHIP

EL23506 was granted on 8 May 2003 to a consortium of Orridge, Clarke and Teelow, and will expire on 7 May 2009. It comprises 52 blocks that cover approximately 173.7 km². A deferral from reduction was granted for both Years 2 and 3.

A deed of agreement signed by the Titleholders in November 2005 exists between the Titleholders and Terra Gold Mining Ltd, a subsidiary of GBS Gold. The agreement gives Terra the sole and exclusive right of prospecting and exploring on a number of tenements held by the Titleholders, but excludes iron ore on ten graticular blocks within EL 23506 (refer below). Terra must exercise the option to purchase EL23506 (and other tenements) by 1st July 2009.

There is also a Heads of Agreement (HOA) between the Titleholders and Territory Iron Limited (TIL) dated January 2005, which gives TIL the rights to explore for iron ore on

**Figure 1:** Tenement Location Map of EL 23506
10 graticular blocks of EL23506 (SD521368C, SD521368D, SD521368J, SD521368M, SD521368N, SD521368O, SD521368R, SD521368S, SD521368W, SD521368Y; Figure 2).

A Heads of Agreement between TIL and GBS subsidiary Terra Gold Mining Ltd allows TIL to explore for and mine iron ore and manganese on selected GBS tenements, and GBS has the right to explore for and mine gold/silver on selected TIL tenements. This agreement covers the sharing of information (subject to confidentiality) between TIL and GBS, and so this report also covers exploration completed by TIL on EL 23506. In 2008, Thundelarra Exploration Limited also signed Heads of Agreement with GBS Gold to explore uranium on GBS tenements. Underlying cadastre is almost evenly split E-W between Mary River Wildlife Ranch Pty Ltd (PPL 1631) to the east, and Ban Ban Springs Station Pty Ltd (PPL 0695) to the west.

4.0 GEOLOGICAL SETTING

EL23506 is situated within the Pine Creek Orogen, a tightly folded sequence of Palaeoproterozoic rocks. A full description of the geology and stratigraphy of the Pine Creek Orogen can be found in several texts, including Ahmad et al. (1993). The 1:100,000 McKinlay River geology map (Wallace et al. 1981) covers the northern tenement area, and the 1:100,000 Pine Creek geology map covers the southern part of the tenement area (Stuart-Smith et al. 1987; Figure 3). The tenement area covers the Palaeoproterozoic Namoona Group (Masson Formation) and the Mount Partridge Group (Mundogie Sandstone and Wildman Siltstone). The Namoona Group comprises carbonaceous phyllites and slates with minor quartzite and carbonate horizons, has poor

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Figure 2: Graticular Blocks in EL 23506
outcrop in a broad central valley. The Mundogie Sandstone forms hill ranges bordering the central valley to the NE and SW. The main regional structure is a broad NW-plunging anticlinorium, with the axial region running centrally along the belt of the Namoona Group (Orridge, 2004). These rock formations have been intruded and contact metamorphosed by the Zamu Dolerite and members of the Cullen Batholith (Figure 3).

MODAT occurrences within the tenement include some iron ore occurrences (Frances Creek East) in the far south-east corner of the licence, and the Glenys Sn diggings, which comprise alluvial and quartz-cassiterite stringers in the Mundogie Sandstone. The McKeddies alluvial gold occurrence is within one of the excised tenement areas.

5.0 PREVIOUS MINING AND EXPLORATION

Orridge (2004, 2005) conducted a ‘preliminary review’ of work done within the tenement area. In summary, Orridge noted that the area has been in almost continuous exploration for tin, gold, uranium and base metals. During the 1980’s the Woodcutters Group (Nicron Resources) found stratigraphic, lithofacies and geochemical similarities to Rum Jungle along the granite margin on the eastern side of EL23506. Anomalous Cu, Pb and Zn values extended along a strike length of 25 km. The best drilling results came from the Black Bream anomaly, with 7.4m @ 0.89% Cu from 74.6m in ASDDH1 in the primary zone, and ASRC1 intersected 42m @ 0.26%Cu from 8m in the oxide zone. Zn and Pb were sporadic, with maximum values of 3940ppm Zn and 940ppm Pb, with slightly elevated Co (to 240ppm) and Ni (to 250ppm). Radiometric anomalies were noted by Total Mining Australia during exploration of EL4414. The anomalies are within the belt of carbonaceous shale and carbonates on the granite contact which correlate with the Rum Jungle sequence. Drilling only found narrow zones of U mineralisation. Orridge (2004) reported that gold exploration within EL23506 has been ‘essentially of a reconnaissance nature and may not be conclusive given the extensive soil cover and poor exposure in the central Masson Formation belt’. Iron ore mineralisation was found by
Figure 3: Geological setting of the project area
mapping, costeaining and percussion drilling at Frances Creek East, and an estimate of a possible 1.5Mt of ‘low grade ore’ may be present.

During the first year of grant of the tenement, the work consisted of a preliminary review of previous work, which focussed on the base metal mineralisation and drill results. Fieldwork by the Titleholder consisted of prospecting for gold in the area NW of McKeddies workings using metal detectors. The prospecting noted localities of quartz veinings and gossan/ironstone float. During the second year of tenure, the Titleholder carried out field inspection of the Dam Paddock ironstones (in the Frances Creek East area) with photogeological mapping. During the third year of tenure (2005-2006) Terra Gold expressed interest in exploring the tenement. In July 2005, Terra Gold was subjected to a reverse takeover by Emerson Exploration Inc (now GBS Gold International Inc) which was completed by November 2005. These changes in management and exploration staff during the year impacted on the gold exploration work done. A Heads of Agreement signed between the Titleholders and Territory Iron Pty Ltd (TIPL) in January 2005 gave TIPL the right to explore for iron ore in 10 of the southern graticular blocks of EL23506. Territory Iron conducted drilling and assaying of samples retrieved; a summary is given below:

a) excavation of drill access and drill pads

b) drilling of 5 RC holes for 146m, and

c) collection of 19 drill samples of iron mineralisation.

Drillholes were sited to test under the Northern Outcrop and the Central Outcrop. These two areas form part of a N-S striking line of ironstone mineralisation cropping out as a series of ridges over 2km. Geological appraisal of the percussion drill chips gave a ‘disappointing result’. However, analytical results were more encouraging, with values of 4m @ 62.57%Fe from surface in FERC004. Drill samples were collected for assay in 1m intervals in areas logged as hematite. Samples were riffle split and sample preparation carried out by North Australian Laboratories in Pine Creek. Sample pulps were freighted to Ultra Trace Analytical Laboratories of Canning Vale in WA. Samples were cast using
a 12:22 flux with added sodium nitrate, to form a glass bead that was analysed by XRF. Fe, SiO$_2$, Al$_2$O$_3$, TiO$_2$, CaO, Mn, P, S, MgO, and K$_2$O were determined by X-Ray Fluorescence Spectrometry, and reported in %. Loss on Ignition was determined between 105°C and 1000°C, and reported on a dry sample basis. Results of this program were provided in last year’s annual report.

During 2006-07 a reconnaissance visit and technical review of the EL 23505 was undertaken which highlighted multi-commodity potential of the project area. The main commodities of interest are gold, iron ore, tin, manganese and base metals. The main thrust of exploration was for the exploration and evaluation of iron mineralisation within the project area by Territory Iron Limited under an agreement with the tenement holders.

Five RC holes were drilled for 146 metre which are reported in 2007 (Bajwah, 2007). From this campaign, 18 samples (1 metre composite) were retrieved which were analysed for Fe%, P%, Al$_2$O$_3$, and SiO$_2$. In a number of samples, Fe content was above 60% but identified resource was too small for even selective mining.

During 2007-08 reporting period, 5 RC holes were drilled for 365 metres. A total of 12 composite samples ((RC chip) were selected and were analysed (XRF Method) for FeO$_3$, P, Al$_2$O$_3$, SiO$_2$, CaO, TiO$_2$, MgO, K$_2$O, MnO and S by Intertek Minerals Darwin. These samples are generally characterised by high Fe$_2$O$_3$, ranging from 6.33% to 78% with an average of 59.09%. Most of the samples are above 55% Fe$_2$O$_3$.

6.0 **EXPLORATION DURING CURRENT TENURE**

During the reporting period, company resources remained focused in the development of projects such as Chinese South (Extension), Toms Gully and Cosmo Deeps projects with a budget of tens of million dollars. Chinese South (Extension) came on-line in April and Toms Gully commenced production in July 2008. At the same time significant progress was made in developing Maud Creek deposit with the targeted production of over 75 000 ounces of gold per year. For this purpose a specialised circuit developed by GEOCOAT® technology will be built at Union Reefs treatment facility. This technology will have the ability to process refractory ore with upto 90% gold recovery. However, on 15 September
2008, GBS Gold Australia was declared under voluntary receivership, and all exploration and mining projects were placed under ‘Care and Maintenance’.

A technical review of the project area was undertaken. Geological, geochemical and geophysical data support significant mineral potential of the project area, particularly for iron ore, uranium and gold. South of the project area contains a number of operating and abandoned iron ore deposits which are located within Frances Creek mineral field. Further north-west some gold prospects are also known. Drilling and assaying data obtained in the last two years further support iron ore potential of the project area. There is a strong possibility that iron-rich formation may also contains appreciable concentrations of gold as it is evidenced by the presence of gold mineralisation at Cosmo Howley and Chinese South. Figure 4 shows a TMI image of the area which exhibits magnetically high NW-trending ridges which resembles with the gold-bearing structures in the area. It is important to note that they also resembles to those magnetic highs which contain iron mineralisation present in the south (Frances Creek mineral field).

In the past exploration programs, a number of uranium anomalies were identified by Total Mining Australia in the project area, which were not followed up due to depressed market conditions. Further south of the project area a number of uranium occurrences such as Cleo, Cliff, Dam and twin have been explored in the past (Lally and Bajwah, 2006). These occurrences as confined to the Masson Formation adjacent to the Allamber Springs Granite. Presence of the Masson formation in the project area further highlight the uranium potential which is being explored by Thundelarra Exploration Limited under an agreement with GBS Gold Australia. An assessment of full potential of the tenement is underway and some field mapping has been taken place. Currently, previous radiometric data available are being assessed to generate possible targets. In addition some areas of the tenement have been selected for Geoscience Australia sponsored airborne EM survey.

During 2008-09 additional work completed within the project area consisted of:
Figure 4: TMI image of the Project Area
1. Reconnaissance field visit

2. Tenement Administration

3. Report Preparation

During the current year, exploration activity costed $9630.00 and details are given in Appendix 1.

7.0 PLANNED EXPLORATION DURING 2009-10

Currently, GBS Gold Australia is under voluntary administration, however, Forbes Manhattan, a Canadian investment bank has announced to acquire all GBS Gold Australia assets with the intention to commence gold production in an immediate future. It is expected agreement between Forbes Manhattan and company Administrators will be signed soon and that will lead to company operations again in the region.

In 2009-10 reporting year, project area will be explored for Iron, gold and uranium mineralisation. For this purpose, area identified during this review will undergo soil/rock chip sampling along with geological mapping. If encouraging results received, some RAB/RC drilling may also take place. A minimum budget of $35000.00 is proposed for EL 23506 and details are given in Appendix 1.

8.0 REFERENCES


