



# **GBS GOLD Australia Pty Ltd**

HOLDER: Micheal Daniel TEELow

## ***PARTIAL RELINQUISHMENT REPORT***

***“Bowerbird”***

**YEAR ENDING OCTOBER 14<sup>th</sup> 2006**

# **EL24127**

**Mt Evelyn 1:250,000 SD5305  
Ranford Hill 1:100,000 5370**

Report Number: PC/BJV/07/01  
Compiled by: M Muir  
January 2007

## SUMMARY

EL 24127 is located approximately 190km SE of Darwin and 2km to 10km to the north and west of the Moline mine.

The tenement was granted on the 15th October 2004 to TEELow Michael Daniel. At the end of the second year of exploration it was decided to relinquish ground. The ground was reduced from 29 blocks (88.33 km<sup>2</sup>) to 18 blocks (approx 60 km<sup>2</sup>). The retained area is in two parts, three blocks in the SW and 15 blocks in the NE. The blocks recommended for surrender are underlain mainly by granite in the west.

Work completed over the relinquished ground within EL24127 included

1. Planning / review of data
2. Administrative Duties
3. Report Preparation/desktop study to recommend partial surrender

Work in the region has been deferred because company resources have been concentrated on the recommencement of mining in the district by GBS Gold. Commissioning of the of the dual-mill 2.5Mtpa Union Reefs CIL gold plant in the Northern Territory commenced as of September 2006. The two initial open pit (FountainHead and Rising Tide deposits) ore sources came online mid September and High Grade ore was sourced from the Brocks Creek Underground Mine (Zapopan) in late September. Exploration will be an integral part of GBS Golds plan to continue to replenish supply to the mill.

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## 1.0 INTRODUCTION

The licence is situated to the north and west of the Moline Mine. This report contains details of exploration activities conducted within the relinquished ground for EL24127 for the period 15<sup>th</sup> October 2004 to 14<sup>th</sup> October 2006. The tenement was partially relinquished at the end of the second year of tenure.

## 2.0 TENEMENT DETAILS

Exploration Licence 24127 was granted to TEELow Michael Daniel on the 15<sup>th</sup> October 2004 for a period of six years.

The tenement originally comprised 29 blocks covering an area of 88.33 square kilometers. During 2006 it was decided that the ground should be partially relinquished at the end of the tenements second year. The decision was made to reduce EL24127 ground from 29 blocks (88.33km<sup>2</sup>) to 18 blocks (approx 60km<sup>2</sup>). See Figure 1 for approximate ground relinquished.

The retained area is in two parts, three blocks in the SW and 15 blocks in the NE. The blocks recommended for surrender are underlain mainly by granite in the west.

Descriptions of the areas for retention are as follows:-

SOUTHWEST AREA starting from the NE corner:

13° 40S	132° 06E
13° 43S	132° 06E
13° 43S	132° 05E
13° 40S	132° 05E

NORTHEAST AREA starting from the NE corner;

13 °35S	132° 10E
13° 36S	132° 10E
13° 36S	132° 12E
13° 39S	132° 12E
13° 39S	132° 10E
13° 38S	132° 10E
13° 38S	132° 09E
13° 37S	132° 09E
13° 37S	132° 06E
13° 35S	132° 06E

**TABLE 1:** Original Tenement Details EL24127

Ten. ID	Grant date	Effective Date	Date Expiry	Status	Area
EL24127	15/10/2004	15/10/2004	14/10/2010	grant	29 blocks

### 3.0 LOCATION AND ACCESS

EL 24127 is located approximately 190km SE of Darwin on the Mt Evelyn 1:250,000 SD5305 mapsheet and the Ranford Hill 1:100,000 5370 map sheet and lies between latitudes 13 degrees 35'S and 13 degrees 43'S and longitudes 132 degrees 05'E and 132 degrees 12'E.

Access is via the Stuart Highway, and then from Pine Creek to north east for approximately 40 kilometres to the Moline Mine region. Access to the tenement would be through several four wheel drive and exploration tracks.

### 4.0 GEOLOGICAL SETTING

EL24127 is situated within the Pine Creek Geosyncline, 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 minor inter-layered tuff units. Pre-orogenic mafic sills of the Zamu Dolerite event (~1.87Ga) intruded the lower formations of the South Alligator Group.

During the Top End Orogeny (Nimbuwah Event ~1.87-1.85Ga) the sequence was tightly folded and pervasively altered with metamorphic grade averaging greenschist facies to phyllite. The Cullen intrusive event introduced a suite of fractionated calc-alkaline granitic batholiths into the sequence in the period ~1.84-1.80Ga. These high temperature I-type intrusives induced strong contact metamorphic aureoles ranging up to (garnet) amphibolite facies, and created more extensive biotite and andalusite hornfels facies.

Open-folded Middle and Late Proterozoic clastic rocks and volcanics have an unconformable relationship to the older sequences. Flat lying Cambro-Ordovician sandstone and limestone of the Daly River Basin along with hill-cappings of Mesozoic arenites overlie the folded basement.

Cainozoic sediments and proto-laterite overlie parts of the Pine Creek Geosyncline lithologies. Recent scree deposits occupy the lower hill slopes while fluvial sands, gravels and black soil deposits mask the river flood plain areas.

The relinquished ground of EL 24127 covers several rock types. These are described by the Northern Territory Geological Survey as:

- Mount Bonnie Formation (South Alligator Group): Interbedded carbonaceous sericitic and commonly pyritic or chloritic slate, phyllite, mudstone and siltstone; fine to coarse feldspathic metagreywacke; ferruginous phyllite (metasiltstone) with chert bands, lenses and nodules; dark grey crystal tuff and vitric tuff, pale green-grey siliceous argillite; minor banded iron formation, dolomite lenses and biotite-quartz schist. The depositional environment is described as shallow marine to mid shelf (turbidites)

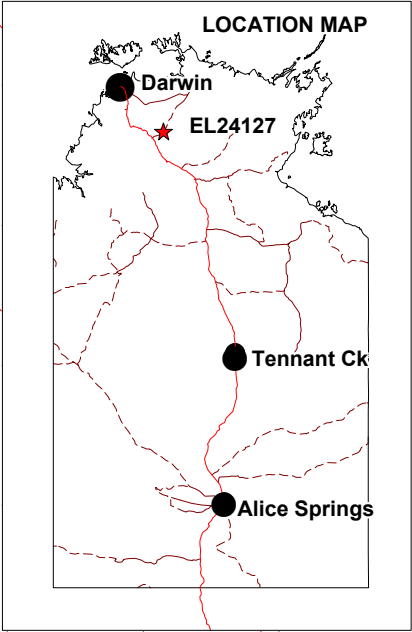
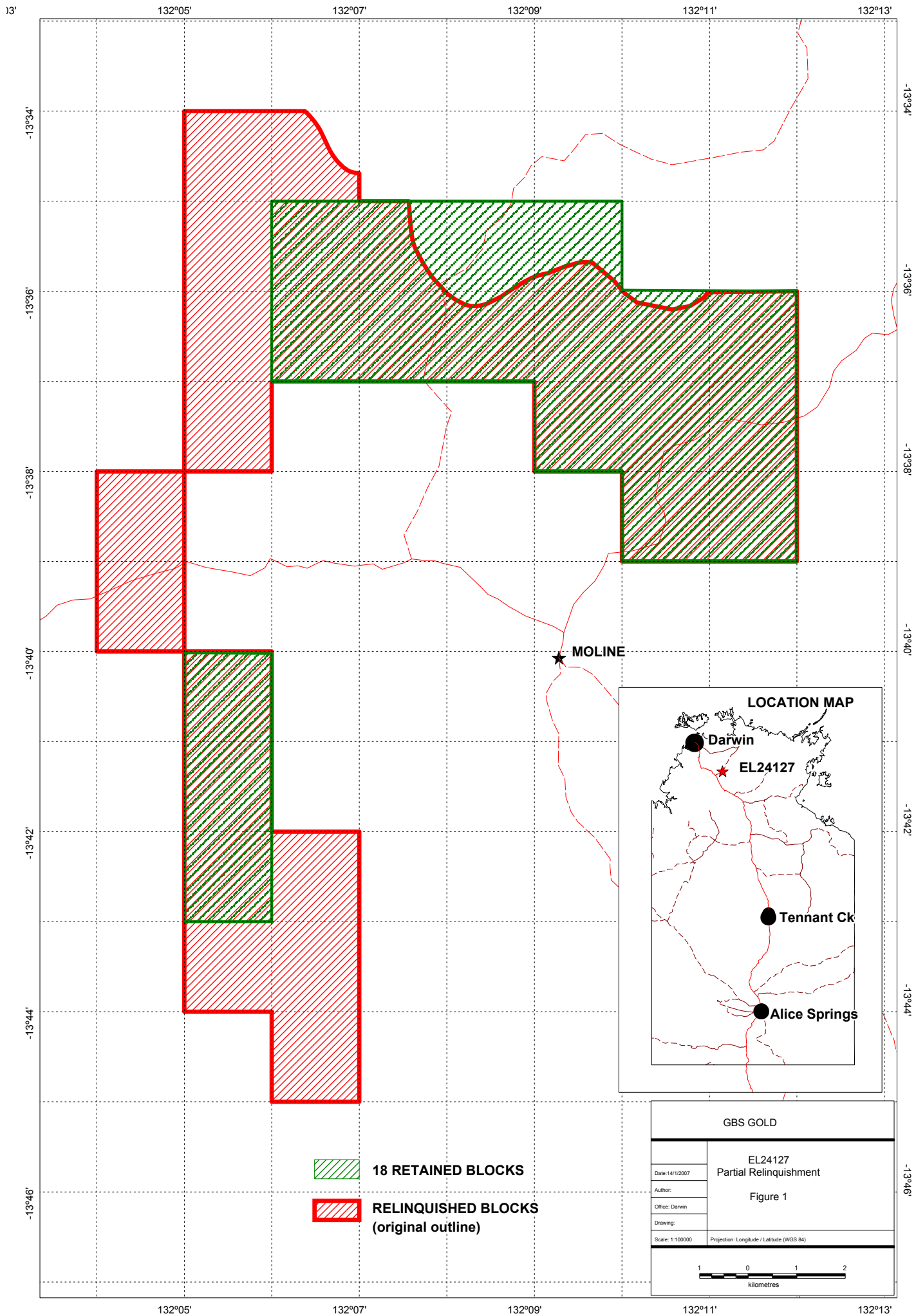
- Gerowie Tuff (South Alligator Group): Pale green, brown or grey siliceous siltstone and phyllite interbedded with pale cherty argillite, black cherty crystal tuff, spotted feldspathic crystal tuff and lithic tuff; minor felsic ignimbrite, chloritic volcanoclastic shale, lithic tuff and lapilli tuff; (Pda) porphyritic dacite. The depositional environment is described as subaerial dacitic volcanic ash with shallow marine lutites
- Burrell Creek Formation (Finniss River Group): Brown to grey-green, thickly bedded to massive, fine to coarse feldspathic metagreywacke with graded bedding in places and minor lenses of volcanolithic pebble conglomerate; brown to grey, laminated phyllite, slate and mudstone; minor quartz-mica schist; porphyroblastic quartz-mica hornfels near granite. The depositional environment is described as a Submarine fan
- Allamby Springs Granite (Cullen Supersuite): Pink and green, coarse porphyritic hornblende-biotite granite, I-type granitoid.
- Minglo Granite (Cullen Supersuite): Pink and green, coarse porphyritic hornblende-biotite granite, I-type granitoid.
- McCarthys Granite (Cullen Supersuite): Pink and green, coarse porphyritic hornblende-biotite granite, I-type granitoid.

## **5.0 EXPLORATION activity within the Relinquished ground of EL24127.**

Work completed over the relinquished ground within EL24127 included

1. Planning / review of data
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Work in the region has been deferred because company resources have been concentrated on the recommencement of mining in the district by GBS Gold. Commissioning of the of the dual-mill 2.5Mtpa Union Reefs CIL gold plant in the Northern Territory commenced as of September 2006. The two initial open pit (FountainHead and Rising Tide deposits) ore sources came online mid September and High Grade ore was sourced from the Brocks Creek Underground Mine (Zapopan) in late September. Exploration will be an integral part of GBS Golds plan to continue to replenish supply to the mill.



GBS GOLD	
EL24127 Partial Relinquishment Figure 1	
Date: 14/1/2007	
Author:	
Office: Darwin	
Drawing:	
Scale: 1:100000	Projection: Longitude / Latitude (WGS 84)
