

# **MAGIC PLACE PTY. LTD.**

**ACN 123 957 380**

## **REPORT ON EL26951**

**for the period**

**29/7/2012 to 28/7/2013**

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## **1. Summary:**

EL26951 was applied for with the intention of exploring for gold as in the past gold had been recovered from this area by prospectors with metal detectors. There is a significant cover of alluvium over much of this area. The location of workable alluvial resources can often lead to the discovery of hard rock resources.

It has been found in the past that removal of economic alluvial material provides a clearer vision for future exploration in addition to an earlier cash flow for the operation.

Exploration work completed in the area to date has not revealed a source for the gold recovered by metal detecting or a company sized hard rock resource.

## **2. History:**

The area of EL26951 has been explored by various operators with various target minerals being sought ranging from Uranium (Kewanee (Aust.) P/L in 1975 to Gold (Geo-Peko, Carpentaria and others to date) The Carpentaria Exploration Company carried out a regional exploration programme for precious and base metals in the region in the late 1980's and early 1990's following the discovery of Tom's Gully in 1989

It is understood that in early 1999 the late Steve Lewis discovered gold in the area of what is now known as "Steve's Hill". This was reported as "a rich patch of nuggetty gravel". Mr Lewis subsequently applied for EL 22068 in July of that year.

Unfortunately, however, Mr Lewis suffered a prolonged illness which ultimately resulted in his death. Little information is available relating to the exploration work he undertook. It has been suggested that the gravels where the nuggets were found could contain an economic grade of alluvial gold. This was in part the motivation to apply for EL26951.

Renison Consolidated Mines NL reported (2008) of "Steve's Hill, *"The source of the significant surface mineralisation found by the local prospectors in the form of nuggets and specimen pieces has not as yet been located by any significant hard rock intercepts. Several low order anomalies have been found, but none significant enough to explain the amount found by prospectors."*

## **3. Climate**

The Marrakai area is in general terms typical Top End country comprising open Eucalypt woodland and open savannah grasslands. The Top End enjoys an annual rainfall around 1500mm, most of which falls in the Wet Season, from November to April.

## **4. Geology**

### **Regional Geology**

Renison Consolidated Mines NL (2008) in their final report on EL22068 which encompassed all or part of the area of EL26951 most eloquently as below;

*EL 22068 is located within the Pine Creek Geosyncline, which has been interpreted as an intracratonic basin lying on an Archaen basement, and containing a 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 The Mount Partridge Group that is unconformably overlain by the South Alligator Group, which comprises most of the tenement areas. Cainozoic sediments overlie the Proterozoic units. Tertiary and Quaternary soils and gravel"s unconformably overlie all the lower lying portions of the tenement area, generally referred to as "Black Soils Regions". All of the Early Proterozoic sediments and volcanics in the region 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. Syn and post tectonic granites have intruded the metasedimentary package. As can be seen in Figure 2.*

### **2.1 The Mount Partridge Group**

#### **2.1.1 Wildman Siltstone**

*The Mount Partridge Group is represented by the Wildman Siltstone, which is interpreted to be up to 1500m thick. The Wildman Siltstone consists of laminated and banded shale, carbonaceous and often pyritic siltstone inter bedded with undifferentiated volcanics in up to 100m interbeds, minor dolomitic sediments may also be present. The Wildman Siltstone is interpreted to be prospective for large tonnage, low-grade gold deposits and small tonnage, high-grade deposits. The Wildman Siltstone hosts the Tom"s Gully gold deposit.*

### **2.2 The South Alligator Group**

*The Koolpin Formation, Gerowie Tuff and the Mount Bonnie Formation represent the South Alligator Group. The rocks of the South Alligator Group are considered to be prospective for either large tonnage, low grade gold deposits (such as that at the nearby Rustler"s Roost gold mine) or small tonnage, high grade deposits.*

#### **2.2.1 Koolpin Formation**

*The Koolpin Formation comprises ferruginous siltstone and shale, which 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 is one of the most prospective units in the region, hosting gold mineralisation at West Koolpin, Taipan, BHS and North Koolpin at the nearby Quest 29 dump leach operation.*

#### **2.2.2 Gerowie Tuff**

*The Gerowie Tuff conformably overlies the Koolpin Formation and has similar characteristics of siltstones and shales but is not as iron rich. It is dominated by graded*

*beds of siliceous, tuffaceous mudstones grading to greywacke and arenite, diagenetically altered, up to 600m thick, and generally poorly mineralised. The highly siliceous component of the tuffs and arenites make them resistant to erosion, and they tend to form areas of high relief. 7*

### **2.2.3 Mount Bonnie Formation**

*The Mount Bonnie Formation 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.*

## **2.3 Finnis River Group**

### **2.3.1 Burrell Creek Formation**

*Conformably overlying the Mount Bonnie Formation is the Burrell Creek Formation 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. 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 deposits such as Bandicoot, Marrakai and the Ringwood line which all lie on a major deep-seated magnetic trend (the Noonamah-Corrobooree trend).*

## **2.4 Intrusives**

### **2.4.1 Dolerite**

*The Zamu Dolerite occurs as small bodies that are poorly exposed due to the easily erodable nature of the dolerite. 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 sediments but this is not fully understood at this stage.*

## **2.5 Deformation & Metamorphism**

*Regional deformation at around 1800My resulted in the formation of regionally significant southwest plunging isoclinal to open folds. Regional metamorphism has resulted in the conversion of the sedimentary packages to greenschist and sometimes higher to amphibolite metamorphic assemblages. This event also resulted in the intrusion of thin sills of Zamu Dolerite, and the post – tectonic emplacement of felsic granitic suites at 1790 + 110 My in the region. Structural deformation of the metasediments is complex.*

## **5. Exploration:**

The assistance of the author has been enlisted in order to comply with the reporting requirements of EL26951. This has proven to be a little difficult as he has not been directly involved with any of the work completed on site. It is understood that 50 samples of approximately 5lts. each were taken from the area of "Steve's Hill". This was divided into two areas of 25 samples each from an area of approximately 40 metres square.

The alluvial/colluvial material was collected by scraping the vegetation and/or topsoil away from the sample site before removing the sample. This material was wet screened to minus 6mm and gravity concentrated by hand washing in a prospector's dish.

The logic of this approach was to gain as representative sample as possible without digging a large trench which would require the submission of a mine plan etc.

It is understood that most of the samples provided some visible gold in the concentrates produced. This based on the past experience of the author would indicate the presence of a potentially viable alluvial operation in addition to the possibility of a hard-rock gold resource being located.

## **6. Further work required:**

The main focus recommended for the following years work is to determine the alluvial potential of the area. Bulk sampling is required to prove the viability of this area. To this end four samples of up to 100 cubic metres each should be taken from EL26951. This will require the approval of a mine plan etc.

## **7. Expenditure:**

See expenditure report previously submitted.