EXPLORATION LICENCE 23532 NORTH RINGWOOD

ANNUAL AND FINAL REPORT.

By G R Orridge

TABLE OF CONTENTS.

1. INTRODUCTION.

2. FEATURES OF THE GEOLOGY AND MINERALISATION.

3. PREVIOUS COMPANY EXPLORATION IN THE AREA OF EL23532.


5. EXPLORATION WORK CARRIED OUT BETWEEN 13 FEBRUARY 2013, AND 14 JANUARY 2014, THE LAST REPORTING PERIOD.

6. COPYRIGHT STATEMENT.

7. LIST OF REFERENCES.

8. LIST OF FIGURES AND ATTACHMENTS.
1. INTRODUCTION.

Exploration Licence 23532 was granted to Mr Michael Teelow for a six year term commencing 13\textsuperscript{th} February 2003. In November 2004 transfers were made of one third share of the Title each to Gary Clark and Geoffrey Orridge. The Licence was surrendered on 14\textsuperscript{th} January 2014.

The Tenement was one of a group of six held jointly by Teelow/Orridge/Clark and Teelow/Orridge/Pinniger and referred to as the TOC/TOP tenements.

During the first two years the exploration work was undertaken by the Titleholders, but from 2005 until January 2014 exploration and reporting was taken over by GBS Gold Pty Ltd., and Element 92 Pty Ltd, under the terms of various option agreements.

The Licence enclosed 25 one-minute graticular blocks and covered an area of approximately 84 square kilometres. Excluded from the Title were eight Mineral Claims, held by other parties, which covered old gold workings dating from the late nineteenth century.

The area is situated some 120km southeast of Darwin on the Mount Ringwood pastoral lease (Figure 1), and falls within the McKinlay River 1:100,000 topographic sheet area. Vehicle access is obtained by following station tracks for approximately 35 kilometres ESE from Mt Ringwood Station homestead: these tracks are commonly impassable during the wet season.

The northern and north-eastern parts of the tenement area are mainly low-lying, with poor bedrock exposure and extensive black soil plains. The central and south-western parts are formed by low to moderately elevated hill ranges, rising up to about 80 metres above the plains, having a well developed dendritic drainage pattern.

2. FEATURES OF THE GEOLOGY AND MINERALISATION.

The tenement area, and surrounding country, are underlain entirely by a sequence of metasediments formed by low grade regional metamorphism of shales, mudstones and greywackes of the Burrell Creek Formation in the upper part of the Proterozoic Pine Creek Orogen. Dominant lithologies are slates and massive meta-greywacke, with small intrusions of meta-dolerite (Zamu ‘Dolerite’) and lamprophyre.

The metasediments are tightly folded about axes which swing from near N-S trends in the south to NW-SE trends in the north. Fold plunges are to the north or northwest,
generally at low angles, although steep plunges are recorded in the vicinity of the North Ringwood gold workings.

Gold mineralization, associated with minor sulphides (pyrite, arsenopyrite, galena), is found within systems of generally small quartz veins having a variety of relationships to the metasediments, including bedding-parallel veins, saddle reefs (eg. North Ringwood workings), cross-cutting veins, and lenticular reefs along strike-parallel shears eg. South Ringwood workings (Figures 2, 3 & 5).

These gold-quartz veins were mined to shallow depths in the late nineteenth century for a recorded production of approximately 2,800 ounces of gold at recovered grades of about one ounce to the ton. Alluvial gold concentrations were also worked on a small scale.

3. PREVIOUS COMPANY EXPLORATION IN THE AREA OF EL23532.

Gold potential in the North Ringwood field was extensively tested in the 1980’s and 1990’s by a number of exploration and mining companies: details of this work are provided in Orridge 2004.

The only prospects where potentially significant gold mineralization was discovered were at Pelican Prospect and Old Workings Prospect (Figure 5).

Old Workings Prospect.

This includes historical underground and alluvial gold workings covering an area of some 600x600 metres at North Ringwood. The prospect was the target of detailed exploration campaigns by White Gold Mines, Soloman Pacific Resources and Acacia Resources between 1988 and 1996. Work included detailed geological mapping, rock chip sampling and soil sampling for gold on a 25x25m grid, trenching and RC drilling (24 holes).

In 1989 White Gold Mines estimated a combined inferred resource, in three zones, as totalling 50,000 tonnes @ 2.5g/t Au.
Pelican Prospect.

Soil sampling by White Gold Mines on a 20x200 metre grid over EL4220 (later ERL87) identified a belt of anomalous gold values trending NNW from the Old Workings prospect over a length of some 3000 metres. The strongest expression, in the extreme northwest of the ERL, with values in excess of 250ppb Au extending beyond the tenement boundary, was designated Pelican Prospect. They tested this portion of the anomaly by means of twelve trenches, roughly on 50m spaced cross sections, over widths of 200m to 300m and over a strike length of about 500m. The better results from trench sampling were followed up by fifteen RC drill holes, on roughly 50m spaced cross sections, testing a 200m strike length of the anomaly. Two core holes were drilled, paired with RC holes. On the basis of this work White estimated an Inferred Resource of +1,000,000 tonnes at a grade of 0.80 g/t Au, open to the NW and SE.

Carpentaria Gold explored the extensions of the Pelican anomaly in EL7389 adjacent to the boundary with ERL87. They conducted soil sampling (for gold and arsenic) on a 100x50 metre grid and geological mapping. Anomalous results were followed up by trenching (1,700m in 7 trenches) and RC drilling (465m in 9 holes). This work extended over an area of some 700x 800 metres.

Figure 6 summarises the works carried out at Pelican by the two parties.


During the first two years of tenure TOC undertook a comprehensive and detailed review of Open File Company Reports on exploration activities (between 1987 and 1999) within the Tenement area, and immediately adjoining ground, by White Gold Mines Ltd., Carpentaria Gold Pty Ltd., Acacia Resources Ltd., Billiton, Dominion Gold Operations and others (Orridge G. 2004). These works had led to the recognition of potentially significant gold mineralization at historical workings at ‘Old Workings Prospect’ and the new discovery at ‘Pelican Prospect’ some 3000m to the NW (Figure 5).

Other works included preliminary field reconnaissance at Pelican and Old Workings, metal detector prospecting for coarse gold in disturbed areas, and photogeological and satellite imagery interpretation over the prospective belt from Old Workings to northwest of Pelican (Orridge 2005).
During this period heads of agreement were negotiated with Terra Gold Mining Ltd. and GBS Gold Australia Pty. Ltd. for an option agreement over the Tenement, and GBS/Terra took over the exploration and reporting responsibilities for the period until GBS went into receivership during 2007/2008.

Accounts of the exploration activities over this time are given in Harris 2006, Bajwah 2007, Bajwah 2008 and Bajwah 2009. At this period GBS Gold were mainly committed to re-commissioning the Union Reefs gold treatment plant, and the ore reserve inventory, with emphasis on other deposits which might quickly brought into production such as Cosmo Howley and Brocks Creek deposits.

In relation to EL23532 works were essentially restricted to ‘desktop studies’ with limited field reconnaissance. Included were reviews of digital data from the NTGS database relating to soil sampling and drilling by Acacia, Soloman Pacific and Delta with entry into ‘Datashed’ and compilation of TMI imagery of the area (Figure 4).

Thundelarra Exploration Ltd/Element 92 Pty Ltd took up an option over the Tenement during the interval from 03 January 2010 to 18 January 2013, and exploration works are described in Adamson S, 2010, Bajwa Z, 2011, Bajwa Z, 2012 and Orridge G, 2013.

The only substantial exploration work during this period consisted of: -

(1). detailed low level aeromagnetic/radiometric surveys which covered the southern half of EL23532, and adjoining parts of EL24403:

(2). regional geological interpretive mapping prepared from remote sensing data including air photography and Landsat/Spot/Quickbird imagery.

These remote-sensing surveys provided useful detail and backup to published geological mapping, particularly in poorly exposed areas, but failed to reveal anomalies having possible economic interest.
5. EXPLORATION WORK CARRIED OUT BETWEEN 13 FEBRUARY 2013 AND 14 JANUARY 2014, THE LAST REPORTING PERIOD.

A final review was completed of all available gold exploration data for the North Ringwood Field.

It was concluded that the possibilities for discovering substantial low grade hardrock and alluvial gold resources, concealed by superficial cover in and around Pelican Prospect, had not been fully explored.

However, given the remoteness of the location, the limited wet season access, and low prevailing gold prices, it was concluded that ongoing exploration was not at that time warranted. Accordingly the tenement was surrendered on 14th January 2014.

6. COPYRIGHT STATEMENT.

This document and its contents are the copyright of M. Teelow, G. Orridge and G. Clarke. The document has been written by G Orridge for submission to the Northern Territory Department of Mines and Energy as part of the Tenement Reporting Requirements as per regulation of the Mineral Titles Act.

Any information in the Report that originates from historical reports or other sources is listed in the Reference section at the end of the document.

I authorise the Department to copy and distribute the document and associated data.

7. LIST OF REFERENCES.

Harris, P., 2006, EL23532, Annual Exploration Report.

8. LIST OF FIGURES AND ATTACHMENTS.

FIGURE 1. Location of TOC/TOP Group Tenements.
FIGURE 2. Geological Setting.
FIGURE 3. Geology of EL23532 Area.
FIGURE 4. Total Magnetic Intensity Image of the EL23532 Area.
FIGURE 5. EL23532 Tenement and Prospect Location Map.
FIGURE 6. Pelican Prospect, Plan of Trenching and Drilling.
FIGURE 1. Location of TOC/TOP Group Tenements.
Figure 2: Geological Setting of the Project Area

FIGURE 2. Geological Setting.
FIGURE 3. Geology of EL23532 Area.
FIGURE 4. Total Magnetic Intensity Image of the EL23532 Area.
FIGURE 5. EL23532 Tenement and Prospect Location Map.