EXPLORATION LICENCE 10322
GREAT NORTHERN

ANNUAL REPORT ON EXPLORATION ACTIVITIES

Prepared for G A Clark & J B Briggs
by G R Orridge, BSc. PhD.,
18th January 2004.

Dept. Business, Industry
& Resource Development

23 JAN 2004
Received: Titles Division
Minerals & Energy Group

CR 2004-0037
TABLE OF CONTENTS

1. Introduction.
2. Geological Features.
3. Previous Mining and Exploration Activities in the Area.
4. Exploration Work Carried Out During the First Year of the Licence.
5. Summary of Expenditures.
6. Proposals for Exploration Work During the Second Year of the Licence.

Figure 1. General Location Map.
Figure 2. Tenement Map
Figure 3. Location of Work Areas.
1. INTRODUCTION.

Exploration Licence 10322 was granted to Gary Anthony Clark and Brian John Briggs for a three year term commencing 18th November 2002. It consists of two graticular one minute blocks having a total area of approximately 6.7 square kilometres. Excluded from the EL area are nine mineral claims and mineral claim applications which cover most of the old mine workings known as the Great Northern (refer Figures 2 & 3).

The tenement is located approximately 35km east of the Adelaide River township, and 5km east of the former open pit mine at Goodall. Access is obtained by various station tracks via the Mt Ringwood homestead to the north or from Goodall minesite. Topography is mainly subdued, being moderately hilly in the northwest, near the old mining areas, but with only isolated low hills, interspersed with extensive soil covered and alluvial flats, towards McCallum Creek in the east. Vegetation consists of open savannah woodlands typical of the region.

2. GEOLOGICAL FEATURES.

The area is covered by the Batchelor – Hayes Creek Region 1 ;100,000 geological sheet, BMR 1985. The entire tenement area is underlain by metamorphosed (greenschist facies) shales, siltstones and greywackes of the Early Proterozoic Burrell Creek Formation. These are host to pods of barren white quartz, which may form pronounced outcrops, and also narrow, often ferruginous, quartz veins which locally contain high gold values; these latter veins are relatively poorly outcropping.

The Proterozoic formations are tightly folded into generally north-plunging structures. Regional trend lines suggest that the concentration of gold mineralisation at Great Northern is situated on the hingeline of a north-plunging anticline, and in this respect is closely analogous in geological setting to the orebodies at Goodall, Pine Creek, Fountain Head, Shoobridge among others in the Pine Creek Geosyncline.

3. PREVIOUS MINING AND EXPLORATION ACTIVITIES IN THE AREA.

There is little historical information on the early gold mining at Great Northern. Production figures for this portion of the field (including Great Western and Star of the North) are recorded as about 2,800 ounces of gold between 1894 and 1902. One large reef more than four metres wide was worked, together with a number of smaller reefs. The deepest shaft in 1904 was at 36 metres.

There was considerable gold exploration activity in the area between 1982 and 2000, including work on Exploration Licences 2631, 2632 and 4218. Work included rock chip sampling, loam/stream sediment sampling and traverses of RAB drilling. This has not yet been researched in detail; it will be part of the year two program of work.
4. EXPLORATION WORK CARRIED OUT DURING THE FIRST YEAR OF THE LICENCE.

General prospection and traversing with metal detectors was carried out over the entire area of the Licence. This led to the discovery of three prospects which were then subjected to intensive prospection with metal detectors and shallow excavation, and in one case backhoe trenching and trench sampling. The locations of the prospects (Golden Nob, Carls Patch and Backhoe Hill) are shown in Figure 3.

Golden Nob is a low ridge of slaty Burrell Creek Formation, extending over a N-S length of some 70 metres. Metal detecting discovered ferruginous quartz containing coarse gold streaks and small nuggets.

At Carls Patch a small area of gold specimens was found to be associated with a 10cm to 15cm quartz reef which can be traced for about 40m on a N-S trend. Abundant fine gold was found by panning crushed quartz samples which did not show visible gold. Quartz from this site shows a distinct purplish colouration in the iron oxides.

Backhoe Hill is just west of the Great Northern claims in the NW of the tenement. It is an outlying hill to the west of the ridge along the line of old workings. At the northern end of the hill an outcropping quartz reef with specimen gold is traceable for about 20m, with a width of some 20cm. Specimens of gold up to four ounces, in quartz, have come from this vicinity.

Chinese alluvial diggings are present in a soil-covered flat to the west of Backhoe Hill. This area was tested by means of an E-W backhoe trench. The excavation was 2.5-3.0m deep over a length of 40 metres. It exposed a bed of quartz gravel with a thickness of 1.0-1.5m resting on clay: it is overlain by about 1.5m thickness of silt overburden. Samples of the basal wash, and the central portion of the gravel, were collected on three cross sections, and a portion of each sample panned for gold. A tail of fine gold was found in the basal wash samples: no gold was observed in the middle gravel samples.

5. SUMMARY OF EXPENDITURES.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhoe 2 days work and travel</td>
<td>2,500</td>
</tr>
<tr>
<td>Toyota Landcruiser 20 days</td>
<td>1,500</td>
</tr>
<tr>
<td>Fuel for Landcruiser 2400km</td>
<td>250</td>
</tr>
<tr>
<td>Labour 20 days</td>
<td>3,000</td>
</tr>
<tr>
<td>Camp and survey consumables</td>
<td>400</td>
</tr>
</tbody>
</table>

**TOTAL** $7,650
6. PROPOSALS FOR EXPLORATION WORK DURING THE SECOND YEAR OF THE LICENCE.

1. Detailed research, collation and compilation at 1:10,000 scale of past company exploration work.

2. Geological mapping and preparation of geological/topographical base map at 1:10,000 scale.

3. Fire assay of gravel samples collected from trench at Backhoe Hill.

4. Continuation of prospection of selected prospects using metal detectors.

5. Detailed mapping, rock chip and/or soil sampling at selected prospects.

An expenditure of $6,000 is estimated for this program.
NOTE TO MAP USERS: Mining and Exploration Tenure depicted here are plotted from descriptions supplied by the holders and the Northern Territory takes no responsibility as to their accuracy. User should be aware that inconsistencies may occur between some information.