EXPLORATION LICENCE 7687
NOBLES NOB EAST

THIRD ANNUAL REPORT
21 APRIL 1994 - 20 APRIL 1995

LICENSEE:

TC8 PTY LTD
A.C.N. 009 644 188

TENNANT CREEK
SE53-14
1:250 000

TENNANT CREEK
5658
1:100 000

P. G. SIMPSON
TENNANT CREEK, N.T.
JULY, 1995
SUMMARY

Exploration Licence 7687, located about 15 kilometres southeast from Tennant Creek, was granted to TC8 Pty Ltd on 21 April 1992, for a term of 4 years. It originally covered 8 blocks and has been progressively reduced to 2 blocks by the end of the third year.

Targets are gold and copper orebodies.

Outcrops and regional magnetics both suggest that the EL is underlain by the magnetically identifiable Black Eye Member of the Carraman Formation, part of the Early Proterozoic Warramunga Group.

Work carried out in the third year of tenure included a review of the gravity data obtained during year 2. It was concluded that no firm decision could be reached regarding drill targets until the vacuum drilling and ground magnetics proposed for year 3 had been completed. This work was postponed pending the completion of negotiations to farm out EL7687, together with a number of other Exploration Licences held by the Company in the Tennant Creek goldfield.

An agreement has been entered into with Carpentaria Gold Pty Ltd, a wholly owned subsidiary of M.I.M. Holdings Limited. Exploration by Carpentaria, managers of the project, has already commenced over other parts of the Tennant Creek joint venture.

Due to staff changes and accounting procedural re-scheduling, the total expenditure for the year has not yet been compiled and will be submitted separately.
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# FIGURES

1. EL 7687 AND SURROUNDING TENEMENTS
2. BOUNDARIES FROM NTDME LICENCE DOCUMENT
1. **INTRODUCTION**

EL 7687, *Nobles Nob East*, is located near the Nobles Nob gold mine in the Tennant Creek goldfield. Exploration for gold and copper orebodies in the first and second years of the Licence consisted of rock chip and soil sampling, gridding and levelling, a detailed gravity survey, and geochemical vacuum drilling.

This report records the work done during the third year, from 21 April 1994 to 20 April 1995.

2. **LOCATION AND ACCESS**

Exploration Licence 7687 is located about 15 kilometres southeast from Tennant Creek, in the vicinity of the Nobles Nob, Rising Sun, Golden Kangaroo and Golden Forty mines.

The licence area is reached from Tennant Creek by following the Nobles Nob/Gosse River road and by numerous tracks which traverse the EL in the vicinity of the Peko, Golden Forty and Golden Kangaroo mines.

The terrain is mostly flattish to gently undulating, with a light cover of spinifex grass, bushes and low trees. Access by 4WD vehicle is possible over most of the area when the ground is dry.

Figure 1 shows the location of the EL and the surrounding tenements.

3. **TENURE**

EL 7687 was granted on 21 April 1992 to TC8 Pty Ltd, a wholly-owned subsidiary of Giants Reef Mining N.L., for a term of 4 years. The licence area originally covered 8 blocks, but was reduced to 4 blocks at the end of year 2, and to 2 blocks at the end of year 3. About one third of the remaining 2 blocks is taken up with pre-existing granted mineral leases and claims.

The licence area lies on land which became Aboriginal Freehold after the EL was granted.

Figure 2 shows the boundaries of the area.

4. **GEOLOGY**

EL 7687 is generally undulating, with little outcrop, as virtually all the outcrops within the licence area lie within the many pre-existing claims and leases.
The outcrops in these leases, and the regional magnetics, both suggest that the EL is underlain by the magnetically identifiable Black Eye Member of the Carraman Formation, part of the Early Proterozoic Warramunga Group.

The southern strip of the original area of EL 7687 is mapped as containing feldspar porphyries and may contain Warramunga Group sediments other than the Carraman Formation.

A major east-west anticlinal fold passes through the licence area about 0.5 kilometres north of the Nobles Nob and Rising Sun mines. A parallel synclinal fold occurs north of the Golden Kangaroo mine. Bedding angles are moderate to steep in these structures, and axial plane cleavage generally dips from 70° north to vertical.

The interpreted geology and the proximity of the Nobles Nob and other smaller mines give the licence a high prospectivity, although targets are expected to be concealed beneath shallow superficial cover.

5. WORK DONE DURING THE THIRD YEAR

Work carried out included a review of the gravity data obtained during year 2. Both of the two areas where detailed gravity surveys were undertaken show considerable variations in the reduced data (refer to Second Annual Report). Given the lack of outcrop in the survey areas and the suggestion from the gravity work that the underlying geology might be complex, it was concluded that no firm decision could be reached regarding drill targets solely on the results of the gravity surveys, and that a realistic interpretation would only be possible when the vacuum drilling and ground magnetics proposed for year 3 had been completed.

The vacuum drilling and ground magnetics was postponed pending the completion of negotiations to farm out EL 7687, together with a number of other exploration licences held by the Company in the Tennant Creek goldfield.

An agreement has been entered into with Carpentaria Gold Pty Ltd, a wholly owned subsidiary of M.I.M. Holdings Limited. Exploration by Carpentaria, managers of the project, has already commenced over other parts of the Tennant Creek joint venture.

6. CONCLUSIONS

Assessment of the gravity data has led to the conclusion that drill targets should not be selected on the basis of the gravity results alone, but should be chosen when the previously planned ground magnetics and vacuum drilling has been completed, and all relevant information can be considered in conjunction.
7. EXPENDITURE

Due to staff changes and accounting procedural re-scheduling, the detailed expenditure for the third year has not yet been compiled and will be submitted separately.

8. PROGRAMME FOR FOURTH YEAR

EL 7687 is part of the Grand Central Farm-in Agreement. At the date of this report, Carpentaria Gold, as manager of the Project has commenced exploration, starting with low level aerial colour photography and geological mapping.

9. PROPOSED EXPENDITURE

The total estimated minimum cost of the fourth year's work cannot be estimated at this stage, as the work programme will be decided upon by Carpentaria as managers of the project, but it is likely to be that part of the programme proposed but not carried out in year 3 which included:

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<td>Vacuum drilling</td>
<td>$22,000</td>
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<tr>
<td>Assaying</td>
<td>12,800</td>
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<td>Ground Magnetic survey</td>
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<td>Geological and Geophysical assessment</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$40,000</strong></td>
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Exploration programmes can be affected by results, and while this is the likely minimum expenditure, specific activities may vary according to assessment of the project by Carpentaria and the results achieved.

P. G. SIMPSON
EXPLORATION MANAGER
EL7687
4 BLOCKS
13 sq kms