ACACIA RESOURCES LTD

EXPLORATION LICENCE 7812
UNION REEFS NORTH

SEVENTH ANNUAL REPORT
FOR THE YEAR ENDED JANUARY 5, 2000

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Distribution:
1 NT Department of Mines & Energy
2 Acacia Resources Ltd., (Darwin)
3 Acacia Resources Ltd., (Field)
4 Acacia Resources Ltd., (Melbourne)
5 Acacia Resources Ltd., (Union Reefs Gold Mine)
**SUMMARY**

Exploration Licence (EL) 7812 - Union Reefs North in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement lies approximately 7 km north of Acacia’s Union Reefs Gold Mine.

A compilation of all geophysical, geological and geochemical data was undertaken at the start of the reporting year. As a result of this work, a program of reconnaissance rock chip sampling and mapping, 7 line km of auger sampling and 600m of RC was proposed. Due to changing priorities, as a direct result of the falling gold price in late May, the planned programme was deferred until 2000, and no field work was completed.
# TABLE OF CONTENTS

1. INTRODUCTION 5
2. TENEMENT STATUS 5
3. LOCATION AND ACCESS 5
4. REGIONAL GEOLOGY 5
5. LOCAL GEOLOGY 6
6. PREVIOUS WORK 6
7. WORK COMPLETED PERIOD ENDING 5<sup>TH</sup> JANUARY 2000 7
8. ENVIRONMENT 7
9. EXPENDITURE FOR PERIOD ENDING 5<sup>TH</sup> JANUARY 2000 8
10. PROPOSED PROGRAM AND EXPENDITURE FOR PERIOD ENDING 5<sup>TH</sup> JANUARY 2001 8
11. REFERENCES 9
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>EL7812 Union Reefs North, Tenement Location</td>
<td>1:200 000</td>
</tr>
<tr>
<td>Figure 2</td>
<td>EL7812 Union Reefs North, Regional Geology</td>
<td>1:200 000</td>
</tr>
</tbody>
</table>

LIST OF APPENDICES

Appendix 1  Environmental Register
1. INTRODUCTION

Exploration Licence (EL) 7812 - Union Reefs North in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement lies approximately 7 km north of Acacia’s Union Reefs Gold Mine, which has a published resource of 19.3Mt @ 2.0g/t Au, June 1997. The north east area of the lease is along strike from Mt Porter, with a resource of 210, 000t @ 4.7g/t Au.

2. TENEMENT STATUS

Exploration Licence 7812 (Union Reefs North) covering 18 blocks was granted to The Shell Company of Australia Limited on 6 January 1993 and subsequently assigned to Acacia Resources Limited. A partial reduction of 9 blocks was completed on December 5, 1994 and a further reduction of 3 blocks was completed on December 5, 1995.

An application for a waiver of reduction to extend the period of six remaining blocks to 5 January 1999 was granted on 9 June 1998. An application for a renewal of the licence for a further two years was granted on 23 November 1998. The current renewal period ends on 5th January 2001. Covenant for the current reporting period was set at $19, 000 and the tenement remains at 6 blocks.

3. LOCATION AND ACCESS

Union Reefs North lies to the north west of the Union Reefs Gold Mine (Figure 1). The centre of the tenement is approximately 20 km north of the township of Pine Creek. Access to the area is via the well maintained Frances Creek and Mount Wells gravel roads and local gravel tracks.

4. REGIONAL GEOLOGY

Union Reefs North is located in the central portion of the Pine Creek Geosyncline (Figure 2). The geosyncline comprises early Proterozoic metasedimentary rocks unconformably overlying gneissic and granitic Archaean basement. The metasedimentary rocks are part of a preserved basinal sequence up to 14km thick (Needham et al., 1980) which were tightly folded and metamorphosed to predominantly greenschist facies at about 1890 - 1870 Ma (Ferguson, 1980). Greenschist and amphibolite facies metamorphism occurs in contact aureoles of syn- to post-orogenic granitoid intrusions.

The geosynclinal sequence is intruded by transitional igneous rocks including pre-deformational dolerite lopoliths and dykes, and post-deformational granites. Weakly deformed middle and late Proterozoic, Cambro-Ordovician and Mesozoic cover sediments unconformably overlie the early Proterozoic metasedimentary rocks.
5. **LOCAL GEOLOGY**

The intrusive Mount Porter Granite dominates the lease area, and the north and southwest margins by sediments of the lower Proterozoic Burrell Creek Formation with a lesser portion Mount Bonnie, Gerowie Tuff and Koolpin Formations (Figure 2). The sediments have been folded to produce upright NNW trending folds and sub-vertical to steeply dipping bedding throughout the area. Greenschist facies metamorphism appears to broadly synchronous with this deformation.

The sediments have been intruded by the Allamber Springs and Mount Porter Granites in the middle and SE corner of the tenement. The Mount Porter Granite is a pink/green, coarse, porphyritic hornblende - biotite granodiorite. The Allamber Springs Granite is a concentrically zoned biotite leucogranite and hornblende-biotite granodiorite dated at 1825-1818 Ma, which post-dates the Mount Porter Granite.

6. **PREVIOUS WORK**

Exploration previous to the granting of EL7812 was dominantly by Billiton Australia in joint venture with Coronation Gold Mines in 1989. This work included limited stream sediment sampling in the area of the outcropping Mt Porter and Allamber Springs granites, which produced negative results. The stream sediment sampling was considered ineffective because of the low relief of the granite outcrop and lack of trapsites.

Work conducted by Billiton Australia and consequently Acacia Resources since the granting of EL7812 is detailed below.

**Year Ending 5th January 1994 - Report 08.6666**

- Interpretation of aerial photography that identified a number of faults and general fold structures.
- Review of the previous work conducted by Billiton Australia in 1989.
- Partial reduction (50%) of 9 blocks.

**Year Ending 5th January 1995 - Report 08.7288**

- Collection of 12 stream sediment samples which were assayed for Au, Cu, Pb, Zn and As in the area of a magnetic high identified in the northern part of the tenement. Results were negative.
Year Ending 5th January 1996 - Report 08.7756

- Compilation and re-interpretation of previous work.
- 5.2 line km of gridding on 200 x 50m grid lines.
- 207 spot soil samples in the southwestern part of the tenement.
- Partial reduction (30%) of 3 blocks.

Year Ending 5th January 1997 - Report 08.8726

- Reprocessing of multi-client aeromagnetic data to produce total magnetic intensity (TMI) and first vertical derivative (1VD) images.
- Flew 1:25 000 colour aerial photography.

Year Ending 5th January 1998 - Report 08.8971

- 5.5 line km gridding.
- 432 soil samples from the north western part of the lease.
- Detailed aeromagnetic and radiometric survey in southern part of the lease.

Year Ending 5th January 1999 - Report 08.10007

- 4.5 line km gridding (N-S baseline 331.5° MN).
- 183 hand soil samples
- Regional geophysical data compilation

7. WORK COMPLETED PERIOD ENDING 5th JANUARY 2000

A compilation of all, geophysical, geological and geochemical data was carried out at the start of the year. As a result, a program of reconnaissance rock chip sampling and mapping, 7 line km of auger soil sampling and 600m of RC, pending the auger results was proposed.

The drop in gold price, necessitated a change in exploration priorities. The focus moved to immediately RC drillable targets on existing mining leases. As a consequence of this, no field exploration work was carried out on the tenement.

With the recovery of the gold price, exploration will again turn to more long range targets. A further factor is that most of the walk up RC targets will have been tested by mid-year 2000, leaving Acacia free to concentrate it's efforts elsewhere within the region.

8. ENVIRONMENT

No environmental disturbance was caused in this reporting period. An environmental register is Appendix 1.
9. EXPENDITURE FOR PERIOD ENDING 5\textsuperscript{TH} JANUARY 2000

The exploration expenditure for Union Reefs North for the period ending 5\textsuperscript{th} January, 2000 is detailed below:

\begin{center}
\begin{tabular}{lc}
Staffing & 5,084 \\
Consumables & 186 \\
Administration (15\%) & 791 \\
\hline
\textbf{Total} & \textbf{$6,061} \\
\end{tabular}
\end{center}

The expenditure commitment for this reporting period was $19,000

10. PROPOSED PROGRAM AND EXPENDITURE FOR PERIOD ENDING 5\textsuperscript{TH} JANUARY 2001

Proposed work for the period ending 5\textsuperscript{th} January 2001 includes reconnaissance mapping, rockchip sampling and infill soil sampling as follow up on previous results. The proposed expenditure is detailed below:

\begin{center}
\begin{tabular}{lc}
Staffing & 9,000 \\
Regional Mapping & 6,000 \\
Surveying / Gridding & 5,000 \\
Soil Sampling & 7,000 \\
Assays & 2,000 \\
\hline
\textbf{Total} & \textbf{$29,000} \\
\end{tabular}
\end{center}
11. REFERENCES

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APPENDIX 1

ENVIRONMENTAL REGISTER
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER

LAND STATUS RECORD

Project: Union Reefs North

Tenement Name: Union Reefs North  Loc. Code: UR03

Tenement No's: EL7812

Registered Holder(s): Acacia Resources Ltd

Date Granted: 6/1/93  Term: 6yrs  Area: 19km^2

Bond/Security: $20,000

JV Partners (if any): NA

Land Classification: (Crown, Private, Lease) Lease

Land Holder/Occupier: Gary Hamilton  Station: Mary River West

Address: 9 Pall Mall Currumbin QLD  Phone: (075) 534 7408

Contacted By: E Wakefield  Date: 1995

Pastoral Notes: (Stock, Cultivation, Access, Rainfall)
Open grazing land, little evidence of domestic livestock.
Access via the Mt Wells Rd, the North Australia Railway Easement or any number of unmarked bush tracks.

Environmental Notes: (Flora/Fauna, Erosion, Bushfires, Flooding)
Open tropical savannah. Prone to flooding during the wet. Access difficult during the wet.

Groundwater: (Bores/Wells/Dams, streams, drainage, test data)

Aboriginal Notes: (Sacred Sites, Cultural)
There are no recorded cultural or scared sites in EL7812. The lease was covered by AAPA certificate C97/058, which expired on 6th May 1999 and C98/149, expiring on the 18th December 2000, during the reporting period.

Historic Relics: (Mine Workings, Equipment, Homesteads etc.)
There are no recorded historic sites in EL7812

Previous Activity: (Mining, Exploration, Forestry, etc.)
The area was previously explored by Billiton Australia in joint venture with Coronation Hill. Previous exploration included stream sediment sampling and caused minimal.
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name: Union Reefs North  
No(s): EL7812

Exploration Activity Area: Northwestern part of current licence

Shafts/Pits/Dumps: NA

Track/Access: Stuart Highway, Spring Hill Road, and Mt Wells Rd. Numerous bush tracks.

Line Clearing: NA

Costeanning: NA

Drill Sites: NA

Other: Gridding and soil sampling

Location Data:

Compiled by: Jane Ham  
Date: December 1997
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA ENVIRONMENTAL IMPACT RECORD

Tenement Name: Union Reefs North
Report Ref No’s: 08.6666 (1994)
                08.7288 (1995)
                08.7756 (1996)
                08.8726 (1997)
                08.8971 (1998)
                08.10007 (1999)
                08.10599 (2000)

Exploration Activities: Gridding, stream sediment sampling, soil sampling

Grids & Traverses: 5.2 line km (1995/96)
                    5.5 line km (1997/98)
                    4.5 line km (1998/99)

Soil Sampling: 207 spot soil samples (1995/96)
                432 spot soil samples (1997/98)
                183 spot soil samples (1998/99)

Costeans / Pits: NA
Drilling: NA
Drill Traverses: NA
Drill Pads: NA
Ground Geophysics: NA
Access Tracks: NA
Camps: NA
Other: 12 stream sediment samples (1994/95)

Compiled by: Jane Ham
Date: December 1998
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Union Reefs North  No(s): EL9581
Disturbance: gridding, soil sampling  Date: December 1999
Rehabilitation: Ongoing

Grids & Traverses:
5.2 line km - minimal disturbance (1995/96)
5.5 line km - minimal disturbance (1997/98)
4.5 line km - minimal disturbance (1998/99)
grid pegs left for future reference

Soil Sampling:
207 soil samples - minimal disturbance (1995/96)
432 soil samples - minimal disturbance (1997/98)
183 soil samples - minimal disturbance (1998/99)
soil sample sites backfilled at time of sampling

Costeans/Pits: NA
Drilling: NA
Drill Traverses: NA
Drill Pads: NA
Ground Geophysics: NA
Access Tracks: NA
Camps: NA
Other: 12 stream sediment samples - minimal disturbance

Inspected / Clearance:  Bond/Security released:

Compiled by: Damien Stephens  Date: December 1999

Follow-up Inspection Report: