ACACIA RESOURCES LIMITED

ENNIS OPTION
MCN 4031

ANNUAL REPORT FOR THE YEAR
ENDING 20TH FEBRUARY, 1999

Author: Jane Ham
Date: May 1997

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1:250 000 Pine Creek SD52-8
1:100 000 Pine Creek 5270

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5 : Acacia Resources - Field
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Appendix 1  Environmental Register
1. INTRODUCTION

Acacia Resources Limited is currently exploring Mineral Claim (MCN) 4031. This licence was previously operated by Acacia under an option agreement with the title holders, R M Biddlecombe and M Dundas. Acacia exercised its option to purchase the title from Mr M Dundas in August 1996. Transfer D6409 from M Dundas to Acacia Resources Limited was registered on 7th August 1996 with the NTDME. The tenement is now held 100% by Acacia Resources.

MCN 4031 forms part of Acacia’s “Ennis” tenements, which also includes EL8172 and previously included MCN’s 3996 & 4203. The latter 2 mineral claims expired on the 20th February 1996. MCN 4031 was renewed on 28th February 1996 for the period up to the 20th February 2001.

This report documents all work carried out within MCN 4031 in the year ending 20th February 1999.

2. LOCATION AND ACCESS

MCN 4031, is located approximately 24km NNW of Pine Creek, Northern Territory (Figure 1), and covers an area of 9.31 Ha.

Access is via the Spring Hill road turning east off the Stuart Highway approximately 22km north of Pine Creek. A narrow 4WD track turns south off the Spring Hill Road about 1.7km SW of the intersection of the Spring Hill and Mt Wells Roads.

3. REGIONAL GEOLOGICAL SETTING

The Ennis option is located centrally within the Pine Creek Geosyncline (Figure 2). The geosyncline contains Early Proterozoic metasedimentary rocks resting on Archaean basement of gneiss and granite. The metasediments represent a preserved basinal sequence up to 14km thick (Needham et al, 1980). These rocks were tightly folded and metamorphosed to greenschist facies (in some places amphibolite) at about 1899 - 1870 Ma (Ferguson, 1980).

The geosynclinal sequence is intruded by transitional igneous rocks, including predeformational dolerite lopoliths and dykes and post deformational granites. Largely undeformed platform cover of Middle and Late Proterozoic, Cambro-Ordovician and Mesozoic strata rest on these with marked unconformity.

MCN 4031 lies at the northern end of a corridor of metasediments between two lobes of the Cullen Batholith (Figure 2). This corridor, which is dominated by the turbiditic Burrell Creek Formation, plays host to both the Pine Creek and Union Reefs ore bodies as well as numerous areas of historic workings, including Spring Hill (Au), Flora Belle (Ag, Pb), McKinlay (Ag, Pb), Esmeralda (Au) and Elizabeth (Au).
4. TENEMENT GEOLOGY & MINERALISATION

The area is dominated by turbiditic shale and greywacke lying on the eastern limb of a large southerly plunging anticline. The majority of bedding strikes NNW and appears to dip steeply to the east. Bedrock is obscured by 1-2 metres of alluvial and eluvial cover over much of the area.

Mineralisation occurs as narrow, roughly bedding-parallel quartz vein systems, with a visually significant weathered sulphide component. A number of these systems have been worked in the past, most recently in 1992 when two exploration shafts were sunk by Kevin Ennis.

5. WORK COMPLETED

The area incorporated by MCN 4031 has been included in regional geophysical data compilation of Acacia’s Pine Creek tenement holdings. This work included the following:

Hungerford Geophysical Consultants merged and leveled the multiple aeromagnetic and radiometric data sets that Acacia has acquired to allow easier comparison of the images across the boundaries of the different surveys. Revised reduced to the pole and first vertical derivative plots were produced after following processing was applied to merge the detailed aeromagnetic and multiclient datasets:

- Regrid all surveys to 15m grid cell size.
- Add 47210nT to the UTS grid (if required)
- Boolean join of the multiclient and UTS grids
- Smooth the merged grid with a 3 x Hanning filter

A revised geological interpretations of the Pine Creek region was completed using recently acquired regional gravity data, the multiple detailed and multiclient aeromagnetic data sets and IP surveys acquired between 1992 and 1997 (Figure 3).

6. ENVIRONMENTAL

No environmental disturbances occurred on MCN 4031 during the reporting period. An environmental register is included in Appendix 1.

7. EXPENDITURE STATEMENT

As MCN 4031 is explored in conjunction with adjoining EL 8172, the expenditure is incorporated with expenditures for EL 8172. Expenditure apportioned from these figures to MCN 4031 total $470 for the period ending 20th February 1999.
8.0 REFERENCES


APPENDIX 1

Environmental Register
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Pine Creek

Tenement Name: Ennis Option  Loc. Code: UR11

Tenement No’s: MCN 4031

Registered Holder(s): Acacia Resources Limited

Date Granted: 20/02/96  Term: 5 years  Area: 9.31 Ha

Bond/Security: None

JV Partners (if any):

Land Classification: (Crown, Private, Lease) Lease

Land Holder/Occupier: Gary Hamilton  Station: Mary River West
(Equest Pty Ltd)

Address: 9 Pall Mall  Phone: (075) 534 7408
Currumbin, Qld, 4223

Contacted By:  Date:

Pastoral Notes: (Stock, Cultivation, Access, Rainfall)

Open grazing land, little evidence of domestic livestock.
Access via Springhill Rd, and any number of unmarked bush tracks.

Environmental Notes: (Flora/Fauna, Erosion, Bushfires, Flooding)

Open tropical savanna. Areas prone to flooding during the wet, access difficult during the wet.

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

No evidence of bores, wells, or dams.

Aboriginal Notes: (Sacred Sites, Cultural)

There are no recorded sacred sites within the MCN.

Historic Relics: (Mine Workings, Equipment, Homesteads etc.)

Previous Activity: (Mining, Exploration, Forestry, etc.)
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name: Ennis  No(s): MCN 4031

Exploration Activity Area:

Shafts/Pits/Dumps:

Track/Access: A section of the Springhill Rd lies within the MCN.

Line Clearing: None

Costeaming: None

Drill Sites: None

Other:

Location Data:

Other Ref:

Compiled by: Jane Ham  Date: 10/5/98
## TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
### ACACIA ENVIRONMENTAL IMPACT RECORD

<table>
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<th>Tenement Name:</th>
<th>Ennis</th>
<th>No (s):</th>
<th>MCN 4031</th>
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<tr>
<td>Grids &amp; Traverses:</td>
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<tr>
<td>Soil Sampling:</td>
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</tr>
<tr>
<td>Costeans / Pits:</td>
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</tr>
<tr>
<td>Drilling:</td>
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<td>Drill Traverses:</td>
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</tr>
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<td>Drill Pads:</td>
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</tr>
<tr>
<td>Ground Geophysics:</td>
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<tr>
<td>Access Tracks:</td>
<td>No new tracks have been constructed.</td>
<td></td>
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<tr>
<td>Camps:</td>
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<tr>
<td>Compiled by:</td>
<td>Jane Ham</td>
<td>Date:</td>
<td>7th May 1999</td>
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</table>
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Ennis
No(s): MCN 4031

Disturbance: None
Rehabilitation: None
Date: N/A

Grids & Traverses: None

Soil Sampling: None

Costeans/Pits: None

Drilling: None

Drill Traverses: None

Drill Pads: None

Ground Geophysics: None

Access Tracks: No new tracks have been constructed.

Camps: None

Other:

Inspected / Clearance:
Bond/Security released:

Compiled by: Jane Ham
Date: 7th May 1999

Follow-up Inspection Report: