ACACIA RESOURCES LIMITED

CALEDONIAN MCN's 1093 to 1114

ACTIVITY REPORT
PERIOD 17th JULY 1998 TO 16th JULY 1999

Author: N Martin
Drafting: A Horner
Date: October 1999

Report No: 08.10574
Copy No: 1

1:250,000 Pine Creek 52-08
1:100,000 Pine Creek 5270

Distribution:
Copy 1 :NT Department of Mines & Energy
         2 :Acacia Resources - Melbourne
         3 :Acacia Resources - Darwin
         4 :Acacia Resources - URGM
         5 :Acacia Resources - Field
SUMMARY

Mineral Claims N1093 - N1114, in the Pine Creek area, NT, are currently being explored by Acacia Resources Limited. The mineral claims are located approximately 3km north of the Pine Creek township and 8km south east of Acacia's Union Reefs Gold Mine and treatment facilities.

During the 12 months to 16th July 1998, Acacia Resources did not undertake any field activities, and concentrated on a review of existing data in a regional context.
CONTENTS

1.0 INTRODUCTION

2.0 LOCATION AND ACCESS

3.0 TENEMENT ISSUES
   3.1 Aboriginal & Heritage Issues

4.0 REGIONAL SETTING

5.0 TENEMENT GEOLOGY

6.0 WORK COMPLETED YEAR ENDING 16th JULY 1999

7.0 ENVIRONMENTAL

8.0 WORK PLANNED YEAR ENDING 16th JULY, 2000

9.0 EXPENDITURE STATEMENT
   9.1 Expenditure year ending 16th JULY, 1999

10.0 REFERENCES
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE NO</th>
<th>TITLE</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MCN’s 1093-1114, Caledonian Tenement Location</td>
<td>1:200,000</td>
</tr>
<tr>
<td>2</td>
<td>Pine Creek Project Regional Geology</td>
<td>As Shown</td>
</tr>
<tr>
<td>3</td>
<td>MCN’s 1093-1114, Caledonian, Sacred Site Locations</td>
<td>1:20,000</td>
</tr>
</tbody>
</table>

### LIST OF APPENDICES

- Appendix 1: Environmental Register
1.0 INTRODUCTION

Mineral Claims North (MCN's) 1093 - 1114 (referred to as the Caledonian MCN's) cover a combined area of 373.36 Ha approximately 3km to the north of Pine Creek in the Northern Territory. The area is currently being explored by Acacia Resources as part of a regional exploration programme centred on the Union Reefs Gold Mine.

This report details all work carried out in the Caledonian MCN's for the 12 month period to 16th July, 1999.

2.0 LOCATION AND ACCESS

The Caledonian MCN's cover a continuous, approximately rectangular, area of 373.36 hectares centred 3km to the north of Pine Creek in the Northern Territory (Figure 1). Access is via the North Australia Railway easement track turning north off the Kakadu Highway approximately 1km north east of Pine Creek. The area is flat and easily accessible in the dry season but has very limited access during the wet season.

3.0 TENEMENT ISSUES

MCN's 1093 - 1114 were granted on 2nd March 1989. The Shell Company of Australia Ltd acquired the tenements from Goldman Capitol Ltd on 15th April 1993. The tenements were due to expire on the 16th July 1994, however an application for the renewal of the claims was lodged with the Northern Territory Department of Mines and Energy on 15th April 1994. The mineral claims were renewed on 28th December, 1994 for a period of 3 years, ending 31st December, 1997. A renewal application was lodged to the NTDME on the 10th October, 1997.

3.1 Aboriginal & Heritage Issues

A new Aboriginal Areas protection Authority (AAPA) clearance was commissioned, and certificate C98/149 was granted. One aboriginal site has been identified as being located within the tenement boundaries (Figure 3).

4.0 REGIONAL SETTING

The Caledonian MCN's are located in the central part of the Pine Creek Geosyncline (Figure 2), which contains Early Proterozoic metasedimentary rocks overlying a gneissic and granitic Archean basement. The metasediments represent a preserved basinal sequence up to 14km thick (Needham et al, 1980) which were tightly folded and metamorphosed to greenschist facies (in some places amphibolite facies) between 1890 and 1870 Ma (Ferguson, 1980).

The geosynclinal sequence has been intruded by transitional igneous rocks including pre-deformational dolerite lopoliths and dykes, and post-deformational granitoids. Weakly deformed Middle and Late Proterozoic, Cambro-Ordovician and Mesozoic platform sequences unconformably overly the older basinal sediments.

The Caledonian MCN's overlie a narrow corridor of metasediments between two lobes of the Cullen Batholith (Figure 2). This corridor, which is dominated at surface
by Burrell Creek Formation, hosts both the Pine Creek and Union Reefs ore bodies and numerous historic prospects including; Spring Hill (Au), Flora Belle (Pb, Ag), Elizabeth (Au) and Esmeralda (Au).

5.0 TENEMENT GEOLOGY

The Caledonian MCN's lie over the flood plain of Caledonian Creek, which transects the area and drains to the east. Bedrock is largely obscured by transported cover, with the exception of rare metasediment and quartz subcrop and outcrop which tends to form low relief "rubbly" mounds.

Whilst outcrop is poor, aeromagnetics and aerial photographic interpretations suggest that the Pine Creek Shear Zone lies within the licences underneath the alluvial cover, and directly along strike from Union Reefs Gold Mine.

6.0 WORK COMPLETED YEAR ENDING 16th JULY 1999

A management decision to concentrate work in the immediate vicinity of the Union Reefs Gold Mine meant that no field work was undertaken during the reporting period. The work that was completed during the period included a further review of historical data, and modelling of the regional geological and geophysical datasets as part of a regional geological interpretation.

The geophysical interpretation has incorporated regional studies on aeromagnetics (Hungerford 1998a, 1998b), gravity (Serong, 1997; Latham 1997) and radiometrics (AMIRA project P491).

Statutory reporting was also undertaken.

7.0 ENVIRONMENTAL

No activities were undertaken that caused disturbance to the environment. An environmental register has been completed for the licence area and is included in Appendix 1.

8.0 WORK PLANNED YEAR ENDING 16th JULY, 2000

The Caledonian MCN's would appear to have limited prospectivity based on bedrock geochemistry results, but the licences are in the vicinity of the Pine Creek Shear Zone and may still have some potential for blind gold deposits in the style of the Union Reefs Gold Mine.

Exploration in 1999/2000 is likely to involve the definition and testing of drill targets identified from the regional geological interpretation. The aim of this programme would be to define prospective gold mineralisation or provide sufficient information to allow a decision on the future of the tenements.
9.0  EXPENDITURE STATEMENT

9.1  Exploration expenditure year ending 16\textsuperscript{th} JULY, 1999

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>$2,330</td>
</tr>
<tr>
<td>Overheads (15%)</td>
<td>$350</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$2,680</td>
</tr>
</tbody>
</table>

10.0 REFERENCES


HUNGERFORD, N.; 1998; Geophysical Interpretation of the Union Reefs - Pine Creek Area N.T.; Internal report prepared for Acacia by Hungerford Geophysical Consultants; Acacia Report No. 08.9603.

HUNGERFORD, N.; 1998b; Brocks Creek - Pine Creek Area, N.T. - Geophysical Interpretation; Internal report prepared for Acacia by Hungerford Geophysical Consultants; Acacia Report No. 08.9640.


MACKAY, C.; 1993; Annual Report for Caledonian MCN's 1093 to 1114; Report No. 08.6210. Unpublished report to the NTDME on behalf of The Shell Company of Australia Limited.

MARTIN, N.; 1998; Caledonian MCN's 1093 to 1114, Activity Report for the Period 17th July 1998 to 16th JULY 1999; Report No. 08.9643, Unpublished report to the NTDME on behalf of Acacia Resources Ltd.


SEWELL, D.; 1995; Caledonian MCN's 1093 to 1114, Sixth Annual Report for the Year Ending 2 March 1995; Report No. 08.7524. Unpublished report to the NTDME on behalf of Acacia Resources Ltd.

SPURWAY, C.; 1996; Caledonian MCN's 1093 to 1114, Seventh Annual Report for the Year Ending 2 March 1996; Report No. 08.7764. Unpublished report to the NTDME on behalf of Acacia Resources Ltd.

VELA, N.; 1997; Caledonian MCN's 1093 to 1114, Activity Report for the Period 3rd March 1997 to 16th July 1997; Acacia Report No. 08.8945 Unpublished report to the NTDME on behalf of Acacia Resources Ltd.
APPENDIX 1

Environmental Register
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Pine Creek

Tenement Name: Caledonian          Loc. Code: UR09

Tenement No's: MCN's 1093 - 1114

Registered Holder(s): Acacia Resources Limited

Date Granted: 28/12/94          Term: 3 years          Area: 373.36 Ha

Bond/Security: Nil

JV Partners (if any): Nil

Land Classification: (Crown, Private, Lease) Lease

Land Holder/Occupier: Gary Hamilton
                      (Equest Pty Ltd)

Station: Mary River West

Address: 9 Pall Mall
        Currumbin, Qld, 4223

Phone: (075) 534 7408

Date: Early 1995

Pastoral Notes: (Stock, Cultivation, Access, Rainfall)
Open grazing land, little evidence of domestic livestock.

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)
Several water bores are located near the south-western corner of the MCN's.
Water bores are town water supply.

Aboriginal Notes: (Sacred Sites, Cultural)
AAPA Certificate C98/149
There is one registered sacred site along the eastern margin of the licence site No.5270-5.

Historic Relics: (Mine Workings, Equipment, Homesteads etc.)
Caledonian alluvial Au mine beside the Kakadu Highway, covered by MCN's on the eastern boundary of the tenements.

Previous Activity: (Mining, Exploration, Forestry, etc.)
Licence previously covered by numerous exploration companies, no substantial disturbance evident.
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name: Caledonians
No(s): MCN's 1093 - 1114

Exploration Activity Area:

Shafts/Pits/Dumps: None evident

Track/Access:
Tenement can be accessed from western margin by turning east off the North Australia Railway easement.
Access tracks also exist along Power Transmission Lines.

Line Clearing: None
Costeasing: None
Drill Sites: None

Other:

Location Data:
1:250,000 Pine Creek SD52-08
1:100,000 Pine Creek 5270

Other Ref:

Compiled by: Neil Martin
Date: 1/10/98
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA ENVIRONMENTAL IMPACT RECORD

Tenement Name: Caledonian

Report Ref No's: 08.6210 08.9643
08.7026
08.7524
08.7764
08.8739
08.8945

No (s): MCN's 1093 - 1114

Exploration Activities: Remote activities only.

Grids & Traverses: Nil

Soil Sampling: Nil

Costeans / Pits: Nil

Drilling: Nil

Drill Traverses: Nil

Drill Pads: Nil

Ground Geophysics: Nil

Access Tracks: Nil

Camps: Nil

Other:

Compiled by: Neil Martin  Date: 1/10/98
# TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER

## ACACIA REHABILITATION RECORD

<table>
<thead>
<tr>
<th>Tenement Name:</th>
<th>Caledonian</th>
<th>No(s):</th>
<th>MCN’s 1093 - 1114</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbance:</td>
<td>Soil Sampling</td>
<td>Rehabilitation:</td>
<td>Nil</td>
</tr>
<tr>
<td>Date:</td>
<td>13/10/97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grids &amp; Traverses:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Sampling:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costeans/Pits:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drilling:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drill Traverses:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drill Pads:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Geophysics:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access Tracks:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camps:</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Inspected / Clearance:**

**Compiled by:** Neil Martin  
**Date:** 1/10/98

**Follow-up Inspection Report:**