ACACIA RESOURCES LTD

EXPLORATION LICENCE 7893 - BONROOK STATION

SIXTH ANNUAL REPORT

FOR THE YEAR ENDED 4TH FEBRUARY 1999

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Date: February 1999
Report No: 08.10031
Copy No: 1

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

Distribution:

1 NT Department of Mines & Energy
2 Nullarbor Holdings Limited (Sydney)
3 Acacia Resources (Darwin)
4 Acacia Resources (Melbourne)
5 Acacia Resources (URGM)
6 Acacia Resources (Field)
SUMMARY

Exploration Licence (EL) 7893, in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement is located 8km east of the township of Pine Creek and approximately 20km south east of Acacia’s Union Reefs Gold Mine and treatment facilities. The lease is part of the Bonrook Joint Venture with Nullabor Holdings. No field work was conducted on the lease this year because work was focused on the Ponytail and Nagshead prospects in the adjacent leases of the joint venture.
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1. INTRODUCTION

Exploration Licence (EL) 7893, in the Pine Creek area, NT, is being explored by Acacia Resource’s Limited under a joint venture agreement with Nullabor Holdings Limited. The centre of the tenement is located approximately 20km south east of the Union Reefs Gold Mine and treatment facilities and 8km south east of the township of Pine Creek.

This report details work conducted in the year ending 4 February 1998, the third year of the licence tenure.

2. TENEMENT STATUS

EL 7893 comprising 10 blocks was granted on 5 February 1993 for a period of 5 years to Nullabor Holdings Limited. Under a letter agreement reached between Nullabor Holdings and Solomon Pacific on 23 November 1994, Nullabor held a 66.67% interest in the tenement and Solomon Pacific NL a 33.33% interest. Under a new joint venture agreement signed in December 1994, between Nullabor Holdings Limited, Solomon Pacific Resources NL and Acacia Resources, Acacia could earn up to 70% of the tenement by funding exploration activities.

Through Acacia’s take-over of Solomon Pacific Resources on the 24th June 1996, Acacia assumed Solomon Pacific’s interest in EL 7893. Acacia has earned a 79.9% interest in the joint venture by sole funding of exploration activities.

The current licence area is three blocks. A renewal for the licence was lodged on the 18 November 1997 and granted on 21st July 1998, for a further two years.

2.1 Aboriginal Areas Protection Authority Clearance

Aboriginal Areas Protection Authority (AAPA) certificate C98/149 expiring 18th December 2000 covers the lease area. No sites are recorded on the tenement.

3. LOCATION AND ACCESS

The centre of EL 7893 is located approximately 8km south east of the township of Pine Creek in the Northern Territory, (Figure 1). The licence area can be accessed via the Stuart Highway from Darwin to Pine Creek and then via the Old Stuart Highway a further 6-7km to the western margin of the licence. Further access can be gained to the central and eastern parts of the tenement via station tracks on Bonrook Station.
4. REGIONAL GEOLOGY

EL 9361 is located in the Pine Creek area in the central Pine Creek Geosyncline (Figure 2). The geosyncline contains Early Proterozoic metasedimentary rocks resting on a gneissic and granitic Archaean basement. The metasediments represent a preserved basinal sequence up to 14km thick (Needham et al., 1980). These rocks were tightly folded and metamorphosed to greenschist or amphibolite facies at about 1890 to 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.

EL 7893 lies in the southern part of a neck of metasediments, assigned to Burrell Creek Formation (Stuart-Smith, 1987), which separates two lobes of the Cullen Batholith. This metasedimentary neck contains both the Union Reefs (Au) and Pine Creek (Au) ore bodies as well as numerous areas of historic workings.

5. LOCAL GEOLOGY

EL 7893 is extensively covered by soil with Burrell Creek (Pfb) Formation rocks intruded by granitic rocks of the Bonrook Granite (Pgcb), the McCarthyys Granite (Pgcc) and undifferentiated highly fractionated granites (Pgc). Swarms of quartz and quartz breccia veins are present along the northern and western margins of the granites. In the south western area, quartz-carbonate and quartz veins up to 3m wide which are sulphide rich are known within greywacke and siltstone units of the Burrell Creek Formation. Minor hornfelsing is apparent around the veins. A large greisen alteration zone occurs at the granite contact approximately 1km south of Bonrook Station adjacent to a NNW trending structure.

There are no known gold workings in the tenement however nearby mineral occurrences include a tin prospect NW of Bonrook Station and a gold prospect (quartz vein in granite) at the southern boundary of the licence. The gold is reported in a 1-2m wide fracture / brecciated quartz vein with sulphide boxwork in places (Thornett, 1988).
6. **PREVIOUS WORK**

Work completed prior to 1994 is summarised in the Second Annual Report for Bonrook Station (08.7472). Work conducted since 1994 is summarised below.

**1994/95 - Report 08.7472**

- Compilation and reinterpretation of the data acquired from previous explorers.
- Established a grid in the southwestern portion of the tenement across prospective stratigraphy of the Burrell Creek Formation. In total about 7 line km of gridding was completed.
- Soil sampled the newly gridded area.
- Geological traversing through the western parts of the tenement.
- Partial 50% relinquishment of 5 blocks.

**1995/96 - Report 08.7761**

- Compilation and reinterpretation of the data acquired from previous explorers.
- Extensions to the established exploration grid in the southwestern portion of the tenement across prospective stratigraphy of the Burrell Creek Formation. In total approximately 10.5 line km of crossline gridding was completed.
- Soil sampling on the newly gridded area. In total 314 soil samples were collected.
- Geological traversing through the western parts of the tenement. In total 52 rockchip samples were collected.
- Application for a waiver on reduction of two (2) blocks was applied for and refused.

**1996/97 - Report 08.8737**

- Construction of approximately 5 line kilometres of 200m X 50m grid lines
- Collection of 17 spot soil samples
- Acquisition of 1:25,000 colour aerial photography
- Processing of aerial photography into scanned GIS images
- Digital elevation modelling of aerial photography

**1997/98 - Report 08.9592**

- Contoured Au, As, Cu, Pb and Zn soil sample data
- Field reconnaissance to determine the effectiveness of previous soil sampling programs
7. **WORK COMPLETED FOR PERIOD ENDING 4th FEBRUARY 1999**

7.1. **Regional Geophysical Data Compilation**

Hungerford Geophysical Consultants merged and levelled the multiple aeromagnetic data sets that Acacia has acquired to allow easier comparison of the images across the boundaries of the different surveys. The 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

Revised reduced to the pole and first vertical derivative plots were produced and a revised regional geological interpretation was produced utilising recently acquired regional gravity data, multiple detailed and multiclient aeromagnetic data sets and IP surveys acquired between 1992 and 1997.

8. **ENVIRONMENTAL ISSUES**

No ground disturbing exploration activities were conducted in the reporting period. An environmental register is supplied in Appendix 1.
9. **EXPENDITURE FOR PERIOD ENDING 4TH FEBRUARY 1999**

The expenditure for the period ending 4th February 1999 totalled $4,597. The breakdown of the expenditure is given below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>2,340</td>
</tr>
<tr>
<td>Support</td>
<td>1,519</td>
</tr>
<tr>
<td>Geophysics</td>
<td>139</td>
</tr>
<tr>
<td>Administration (15%)</td>
<td>599</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,597</strong></td>
</tr>
</tbody>
</table>

10. **PROPOSED WORK & EXPENDITURE FOR PERIOD ENDING 4TH FEBRUARY 2000**

Proposed exploration for the period ending 4th February 2000 includes vacuum soil sampling of the remaining untested of the lease. The are untested areas underlain by Burrell Creek Formation in the south-western area of the lease (Figure 3). Further infill vacuum soil sampling will be conducted if results are favourable. The proposed expenditure is detailed below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>3,000</td>
</tr>
<tr>
<td>Vacuum Drilling</td>
<td>4,000</td>
</tr>
<tr>
<td>Assays</td>
<td>2,500</td>
</tr>
<tr>
<td>Gridding/Surveys/Access</td>
<td>2,000</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,000</strong></td>
</tr>
</tbody>
</table>
11. REFERENCES

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APPENDIX 1

Environmental Ledger
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Pine Creek

Tenement Name: Bonrook  Loc. Code: HK91

Tenement No’s: EL 7893

Registered Holder(s): Nullarbor Holdings Limited (66.67%)
                      Acacia Resources Limited (33.33%)

Date Granted: 5/2/93  Term: 5 years  Area: 10 blocks

Bond/Security: $1000, lodged by title holders

JV Partners (if any): Acacia Resources Limited (earning 80%)

Land Classification: (Crown, Private, Lease)  Lease

Land Holder/Occupier: Franz Weber Foundation  Station: Bonrook

Address: C/- Forwood Pastoral Services
          GPO Box 1547, Darwin NT, 0801  Phone: (089) 81 1508

Contacted By: Chris Spurway  Date: 7/2/96

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

Bonrook Lodge, Station Managers quarters and various sheds and stables.
Wild Horse Sanctuary, Station divided into various paddocks by ring lock and barb wire fences

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

Open Tropical Savannah

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

Several water bores are located on the property

Aboriginal Notes: (Sacred Sites, Cultural)
Lease covered by AAPA certificate C98/149, expires 18/12/2000

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

Historic Sn workings west of the Bonrook Homestead
Au working beside the old Stuart Highway, previously covered by MCN’s in southern portion of the tenement (see attached figure)
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: Bonrook
No(s): EL 7893

Exploration Activity Area:

Shafts/Pits/Dumps: Existing shallow pits existing beside Old Stuart Highway, in southern portion of licence area. Pits are up to 3m depth extending over approx 50m length, dump area surrounding these pits.

Recorded historic Sn workings west of Bonrook Homestead, area has not been visited.

Track/Access: Tenement bisected along western margin by sealed "Old Stuart Highway".

Access tracks exist along NT Gas Pipeline, along Power Transmission Lines.

Pastoral tracks constructed in and around Bonrook Homestead and leading to all water bores.

Line Clearing: None

Costeaming: None

Drill Sites: None

Other:

Location Data:
Other Ref:

Compiled by: Chris Spurway
Date: 15/2/96
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA ENVIRONMENTAL IMPACT RECORD

Tenement Name: Bonrook
No(s): EL 7893

Report Ref No’s: 08.7472
08.7761
08.7762
08.8737
08.9592

Exploration Activities:
Hand and mechanical auger sampling, 500 soil samples collected
Rock chip sampling, 58 samples collected.
No ground disturbing work conducted in 1997 or in 1998

Grids & Traverses:
Construction of two grid baselines marked by star pickets at 100m intervals
22km of gridding completed, marked at 50m intervals with metal fence droppers.

Soil Sampling:
500 mechanical auger to 4.5m or hoe pick samples collected, all sample sites backfilled after sample collection.

Costeans / Pits: Nil
Drilling: Nil
Drill Traverses: Nil
Drill Pads: Nil
Ground Geophysics: Nil
Access Tracks: Nil
Camps: Nil
Other: Nil

Compiled by: Jane Ham
Date: 9/2/99
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Bonrook

No(s): EL 7893

Disturbance: Soil Sampling

Rehabilitation: Backfilling

Date:

Grids & Traverses: 22 km's of 200 X 50m cross line gridding marked with galvanised fence droppers. Fence droppers left in place as future reference for exploration.

Soil Sampling: Backfilling of all sample sites completed at time of sampling.

Costeans/Pits:

Drilling:

Drill Traverses:

Drill Pads:

Ground Geophysics:

Access Tracks:

Camps:

Other:

Inspected / Clearance: Bond/Security released:

Compiled by: Jane Ham

Date: 9/2/99

Follow-up Inspection Report:

a.general/docs/reports/0810031.doc
Figure 2