ACACIA RESOURCES LTD

EXPLORATION LICENCE 8457
ESMERALDA WEST

FIFTH ANNUAL REPORT
FOR THE YEAR ENDED 30th NOVEMBER 1999

Author: Penny Large
Date: November 1999

Report No: 08.10586
Copy No: 1

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

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

Exploration Licence (EL) 8457, in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement is located approximately 3km north of the Pine Creek township and 6km south-east of the Union Reefs Gold Mine and treatment facilities and only 1km southwest of geological resources defined a the Esmerelda Prospect with ERL 130. This report summarises the exploration activities conducted within EL8457 during the fifth year of tenure ending 30th November 1999.
TABLE OF CONTENTS

1. INTRODUCTION ........................................................................................................5

2. TENEMENT STATUS ..................................................................................................5

2.1. Aboriginal Areas Protection Authority ..................................................................5

3. LOCATION AND ACCESS ..........................................................................................5

4. REGIONAL GEOLOGY ...............................................................................................6

5. LOCAL GEOLOGY ......................................................................................................6

6. PREVIOUS WORK .....................................................................................................7

6.1. 1994/95 - Report 08.7754 ....................................................................................7

6.2. 1995/96 - Report 08.8483 ....................................................................................7

6.3. 1996/97 - Report 08.8967 ....................................................................................7

6.4. 1997/98 - Report 08.10005 ................................................................................7

7. WORK COMPLETED FOR PERIOD ENDING 30TH NOVEMBER 1999 ...........8

8. ENVIRONMENTAL ISSUES ......................................................................................8

9. EXPENDITURE FOR PERIOD ENDING 30TH NOVEMBER 1999 ....................9

10. PROPOSED WORK AND EXPENDITURE FOR PERIOD ENDING 30TH NOVEMBER 2000 .................................................................9

11. REFERENCES .........................................................................................................10
FIGURE LISTING

Figure 1  Esmeralda West EL 8457
          Tenement Location Plan
          1:200,000

Figure 2  Esmeralda West EL 8457
          Regional Geology
          1:200 000

APPENDIX LISTING

Appendix 1  Environmental Register
1. **INTRODUCTION**

Exploration Licence (EL) 8457, in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement is located approximately 3km north of the Pine Creek township and 6km south-east of the Union Reefs Gold Mine and treatment facilities. This report details all work carried out in EL 8457 for the year ending 30th November, 1999, the fifth year of the licence tenure.

2. **TENEMENT STATUS**

EL 8457 comprises 1 graticular block, covering 3.4 square kilometres, and was granted to Astron Resources NL and Solomon Pacific Resources NL on the 1st December 1994 for a period of 2 years. Astron Resources having 75% interest in the tenement and Solomon Pacific Resources a 25% interest. Under a joint venture agreement signed between these parties and Acacia Resources, Acacia could earn up to 70% of the tenement by funding exploration activities.

Acacia Resources purchased Astron Resources share of the joint venture in 1995. The joint venture remained in force between Acacia Resources (75%) and Solomon Pacific (25%), with Acacia Resources earning up to 70% of Solomon Pacific’s interest through exploration expenditure.

Acacia Resources completed a successful takeover of Solomon Pacific Resources on 24th June 1996, assuming Solomon Pacific’s interest in EL 8457. Acacia Resources currently holds 100% of the Esmeralda West licence.

A renewal was granted in 1996, extending the lease for a further two years. A second renewal application for a further two years was lodged with the NTDME on the 26th August 1998 and granted on 17th November 1998.

A covenant of $40,000 was set by the NTDME for the fifth year of exploration.

2.1. **Aboriginal Areas Protection Authority**

The AAPA issued Authority Certificate No. C98/149, for a period of two years commencing on the 18th December 1998. There are no registered sites of significance within the tenement.

3. **LOCATION AND ACCESS**

The centre of EL 8457 is located approximately 3km north of the township of Pine Creek in the Northern Territory, (Figure 1). The licence area can be accessed via a service track along the old Darwin to Katherine Railroad. The service track is located approximately 50m from the T-intersection of the Stuart Highway and the Kakadu Highway. The licence can be reached after travelling about 3 kilometres along the service track.
4. REGIONAL GEOLOGY

EL 8457 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 and 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 8457 lies in the southern part of a neck of metasediments, assigned to the Burrell Creek and Mt Bonnie Formations (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

Esmeralda West is dominated by Burrell Creek Formation (Pfb) in the eastern portion of the licence and underlying Mt Bonnie Formation (Pso) in the west. The licence area is largely obscured by shallow alluvium and black soils, with only occasional outcrop of shales and greywackes of the Burrell Ck Formation. Mt Bonnie Formation does outcrop in the north-eastern part of the tenement.

Quartz veining is apparent throughout the lease, in particular, the western margin of the lease, where veins <2-3m may be found in outcropping shale beds. There are extensive areas of quartz cobbles over the alluvial soils.

A series of tightly folded anticlines striking and plunging shallowly north-west occur within the lease. These anticlinal structures can be recognised in the occasional outcrop.

There are no known gold workings in the tenement.
6. PREVIOUS WORK

6.1. 1994/95 - Report 08.7754
During the first year of tenure Acacia conducted first pass exploration within the licence aimed at defining drill target areas. Work completed included:

- compilation of data
- construction of 11.6 line kilometres of 200m X 50m grid lines
- collection of 486 residual soil samples
- collection of 8 rock chip samples

Results from this phase of exploration delineated a number of Au in soil anomalies.

6.2. 1995/96 - Report 08.8483
During the second year of tenure Acacia commenced follow-up on the results of the earlier programme. Work completed included:

- 1.2 line km of gridding
- infill soil sampling for 33 samples
- aerial photography at 1:25,000 scale
- reprocessing of multi-client aeromagnetic data

Further work was curtailed by early rains toward the end of the field season.

6.3. 1996/97 - Report 08.8967
During the third year of tenure further work was undertaken to assist in the resolution of suitable gold targets prior to drilling. Work completed included:

- aeromagnetic and radiometric coverage by UTS on 50m line spacing
- processing and first pass interpretation of aeromagnetic data
- structural interpretation of the Esmeralda area by a consultant geologist incorporating data from the adjacent mineralised zones on ERL130

6.4. 1997/98 – Report 08.10005
Exploration completed during the fourth year of tenure has included angled vacuum drilling to investigate the nature of the regolith profile and geology, and the source of scattered Au soil anomalies. The work completed is summarised below:

- 1 RC hole for a total of 126m
- 20 vacuum holes for a total of 321m
- regional geophysical data compilation
- regional gravity survey
7. WORK COMPLETED FOR PERIOD ENDING 30TH NOVEMBER 1999

The current state of the gold price has forced Acacia to focus its exploration efforts on drill testing potential near mine resources. Due to lack of encouraging targets of this nature within the Esmerelda West lease no field based exploration work was completed within the tenement during the reporting period.

8. ENVIRONMENTAL ISSUES

No field based exploration was completed on EL8457 during the reporting period. An environmental ledger is included in Appendix 1.
9. **EXPENDITURE FOR PERIOD ENDING 30TH NOVEMBER 1999**

The program proposed in the 1998/99 report included a large allocation of RC drilling. This work could not be completed due to large, company wide, exploration budget cuts in response to the falling gold price. Consequently the total expenditure for the period ending 30th November 1999 is $1, 948. The breakdown of the expenditure is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology</td>
<td>251</td>
</tr>
<tr>
<td>Field Staff</td>
<td>58</td>
</tr>
<tr>
<td>Office Staff/Support</td>
<td>1,056</td>
</tr>
<tr>
<td>Vehicles</td>
<td>148</td>
</tr>
<tr>
<td>Contractor Payments</td>
<td>181</td>
</tr>
<tr>
<td>Administration</td>
<td>254</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,948</strong></td>
</tr>
</tbody>
</table>

Covenant for the reporting year was set at $40,000.

10. **PROPOSED WORK AND EXPENDITURE FOR PERIOD ENDING 30TH NOVEMBER 2000**

Proposed exploration for the next field season will involve a portion of the RC drilling intended for the 1998/1999 reporting period, designed to reach a decision point on the lease. This will involve drill testing of the interpreted projection of mineralised structures occurring on adjacent tenements. A breakdown of the proposed expenditure is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>7,000</td>
</tr>
<tr>
<td>Drilling</td>
<td>24,000</td>
</tr>
<tr>
<td>Assays</td>
<td>7,000</td>
</tr>
<tr>
<td>Surveying</td>
<td>1,000</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40,000</strong></td>
</tr>
</tbody>
</table>

11. REFERENCES


FIGURES
Figure 2
APPENDIX 1

ENVIRONMENTAL REGISTER
<table>
<thead>
<tr>
<th><strong>Project:</strong></th>
<th>Esmeralda West</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenement Name:</strong></td>
<td>Esmeralda West</td>
</tr>
<tr>
<td><strong>Loc. Code:</strong></td>
<td>UR22</td>
</tr>
<tr>
<td><strong>Tenement No's:</strong></td>
<td>EL8457</td>
</tr>
<tr>
<td><strong>Registered Holder(s):</strong></td>
<td>Acacia Resources</td>
</tr>
<tr>
<td><strong>Date Granted:</strong></td>
<td>1 December 1994</td>
</tr>
<tr>
<td><strong>Term:</strong></td>
<td>2 years</td>
</tr>
<tr>
<td><strong>Area:</strong></td>
<td>1 Block</td>
</tr>
<tr>
<td><strong>Bond/Security:</strong></td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>JV Partners (if any):</strong></td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Land Classification:</strong></td>
<td>(Crown, Private, Lease) Lease</td>
</tr>
<tr>
<td><strong>Land Holder/Occupier:</strong></td>
<td>Gary Hamilton (Equest Pty Ltd)</td>
</tr>
<tr>
<td><strong>Station:</strong></td>
<td>Mary River West</td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>9 Mall Mall</td>
</tr>
<tr>
<td><strong>CURRUMBIN QLD</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Phone:</strong></td>
<td>(075) 534 7408</td>
</tr>
<tr>
<td><strong>Contacted By:</strong></td>
<td>Elaine Wakefield</td>
</tr>
<tr>
<td><strong>Date:</strong></td>
<td>Early 1995</td>
</tr>
<tr>
<td><strong>Pastoral Notes:</strong></td>
<td>(Stock, Cultivation, Access, Rainfall)</td>
</tr>
<tr>
<td><strong>Environmental Notes:</strong></td>
<td>(Flora/Fauna, Erosion, Bushfires, Flooding)</td>
</tr>
<tr>
<td><strong>Groundwater:</strong></td>
<td>(Bores/Wells/Dams, streams, drainage, test data)</td>
</tr>
<tr>
<td><strong>Aboriginal Notes:</strong></td>
<td>(Sacred Sites, Cultural)</td>
</tr>
<tr>
<td><strong>Historic Relics:</strong></td>
<td>(Mine Workings, Equipment, Homesteads etc.)</td>
</tr>
<tr>
<td><strong>Previous Activity:</strong></td>
<td>(Mining, Exploration, Forestry, etc.)</td>
</tr>
</tbody>
</table>
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name: Esmeralda West

No(s): EL 8457

Exploration Activity Area: Soil sampling carried out by Cyprus Gold

Shafts/Pits/Dumps: Nil

Track/Access: Access track along old Darwin - Katherine railway cuts south-west corner of lease.

Line Clearing:

Costeanning:

Drill Sites:

Other:

Location Data:

Other Ref:

Compiled by: Niki Vela

Date: 9/12/97
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA ENVIRONMENTAL IMPACT RECORD

Tenement Name: Esmeralda West
No(s): EL 8457

Report Ref No's: 08.7754, 08.8483, 08.10005

Exploration Activities: Gridding, soil sampling, vacuum drilling

Grids & Traverses: 11.6 line km of gridding marked at 200m x 50m spacing with iron fence droppers (1995).
1.2 line kilometres of infill gridding marked at 50m X 100m spacings with iron fence droppers (1996)

32 soil samples collected (1996)

Costeans / Pits: Nil

Drilling: 1 RC hole (126m) and 20 vacuum holes (321m) (1998).

Drill Traverses: Nil

Drill Pads: Nil

Ground Geophysics: Nil

Access Tracks: Nil

Camps: Nil

Compiled by: Jane Ham Date: 17/11/98
Revised by: Penny Large Date: 15/11/99
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Esmeralda West

No(s): EL 8457

Disturbance: Rehabilitation: Date: ongoing

Grids & Traverses: 200m x 50m fence droppers still in field.

Soil Sampling: Sample sites repair immediately after sampling.

Costeans/Pits:

Drilling: Vacuum holes backfilled after sampling
RC hole pad ripped, residue sample bags removed to
sample farm and collar capped and buried.

Drill Traverses:

Drill Pads:

Ground Geophysics:

Access Tracks:

Camps:

Inspected / Clearance: Bond/Security released:

Compiled by: Jane Ham Date: 17/11/98

Revised by: Penny Large Date: 15/11/99

Follow-up Inspection Report: