ANGLOGOLD AUSTRALASIA LTD

RESOLUTION EXTENDED - MCN 4246
ANNUAL REPORT FOR THE PERIOD
ENDING 2ND FEBRUARY 2001

Author: Penny Large
Date: May 2001
Report No: 08.11469
Copy No: 1

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

Distribution:
Copy 1: NT Department of Mines (hardcopy + digital copy)
Copy 2: AngloGold – Perth (digital copy)
Copy 3: AngloGold – DRW (hardcopy + digital copy)
Copy 4: AngloGold – URGM (digital copy)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>2</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>2</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>2</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>2. TENEMENT STATUS AND LOCATION</td>
<td>3</td>
</tr>
<tr>
<td>3. GEOLOGICAL SETTING</td>
<td>3</td>
</tr>
<tr>
<td>4. PREVIOUS WORK</td>
<td>4</td>
</tr>
<tr>
<td>5. WORK COMPLETED FOR THE PERIOD ENDING 2\textsuperscript{ND} FEBRUARY 2001</td>
<td>4</td>
</tr>
<tr>
<td>6. ENVIRONMENTAL ISSUES</td>
<td>5</td>
</tr>
<tr>
<td>7. EXPENDITURE STATEMENTS FOR PERIOD ENDING 2\textsuperscript{ND} FEBRUARY 2001</td>
<td>5</td>
</tr>
<tr>
<td>8. PROPOSED WORK FOR THE PERIOD ENDING 2\textsuperscript{ND} FEBRUARY 2001</td>
<td>5</td>
</tr>
<tr>
<td>9. REFERENCES</td>
<td>6</td>
</tr>
</tbody>
</table>

# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Tenement Location</td>
<td>1:200 000</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Pine Creek Project, Regional Geology</td>
<td>1:200 000</td>
</tr>
</tbody>
</table>

# LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Environmental Register</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Digital Copy (PDF Format)</td>
</tr>
<tr>
<td></td>
<td>(Copy No. 1 only)</td>
</tr>
</tbody>
</table>
1. INTRODUCTION
AngloGold Australasia Limited are currently exploring for gold mineralisation within Mineral Claim 4246 (MCN 4246 - Resolution Extended). The tenement directly overlies the extension of the Pine Creek Shear Zone approximately 13 kilometres north-west of the Union Reefs Gold Mine. This report summarises the work completed within the licence during the last twelve months ending the 1st February 2001.

2. TENEMENT STATUS AND LOCATION
Resolution Extended (MCN 4246) was granted to Robert Geoffrey Brown on 2nd February 1992 for a period of eight years. On the 19th August 1996 the MCN was transferred to Acacia Resources Ltd following a cash payment to Mr. Brown. AngloGold Australasia Limited assumed control of the tenement following the successful takeover of Acacia Resources Limited in late 1999.

MCN 4246 is located approximately 10 kilometres east of Emerald Springs roadhouse, on the Pine Creek 100,000 topographic sheet and 13 kilometres north-west of the Union reefs Gold Mine (Figure 1). Access is via a track heading west off the Spring Hill Road, immediately south of the Hang Dong Creek cement crossing.

The lease is covered by AAPA certificate C98/149, which expired on 18th December 2000.

3. GEOLOGICAL SETTING
The MCN is situated in the SE limits of the Bonnie Ranges, overlying Burrell Creek Formation and at the southern end of the south-plunging Spring Hill anticline (Figure 2).

The lease is located in the central portion of the Pine Creek Geosyncline. The geosyncline contains Early Proterozoic metasedimentary rocks resting on a gneissic and granitic Archaean basement (Figure 2). 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 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.

A field visit by D.J. Louwrens for CRA in 1993 described the geology along Hang Dong Creek as comprising a sub-vertical to steeply dipping succession of siltstone, shale and greywacke striking approximately 330°. Louwrens described muscovite and sericite alteration as being common along the creek traverse and ferruginous staining and limonitic alteration common where there was quartz veining. Reconnaissance mapping conducted by Acacia in 1996 identified a low ridge striking N-S through the centre of the licence which hosts sheeted and stockwork quartz veining with boxwork textures.
4. PREVIOUS WORK

A number of old shafts and prospectors pits are located within and adjacent to the tenement which date back to the turn of the century.

Exploration in the recent past by Stockdale reported the occurrence of chrome spinels in the creeks proximal to the lease. Following an invitation by R. Brown in 1993 a field visit to the MCN was made by CRA Exploration following up on the chrome spinel reports, however, it is not known what conclusions the company drew from their visit. No reports exist for any work undertaken post-1993.

Work completed since the grant of the tenement is detailed below:

1996/97 - Report No. 08.8761
- reconnaissance mapping
- 10 rockchip samples from a ridge composed of interbedded siltstone and sandstone hosting quartz veining (best result 1500ppb Au)

1997/98 – Report No. 08.9607
- Compilation and contouring of all surface geochemical data.
- Modelling and target generation reviews by structural consultants Laing Exploration Pty Ltd (Regional program)
- Geophysical interpretation of multiclient and in-house aeromagnetic data sets by Hungerford Geophysical Consultants (Regional program)

1998/99 – Report No.08.10040
- Hungerford Geophysical Consultants merged and leveled the multiple aeromagnetic and radiometric (Regional program)
- Production of revised reduced to the pole and first vertical derivative plots.
- Regional geophysical compilation utilising regional gravity data, multiple detailed and multiclient aeromagnetic data sets and IP surveys acquired between 1992 and 1997

1999/00 – Report No. 08.10921
- Detailed aeromagnetic and radiometric survey completed over the tenement
- Regional aerial photograph interpretation completed
- Regional geological interpretation using all available data including the new detailed geophysical datasets.

5. WORK COMPLETED FOR THE PERIOD ENDING 2ND FEBRUARY 2001

No field based exploration was completed within Resolution Extended during the reporting period. This is partly due to the record wet experienced during the 1999/2000 monsoon season, which significantly effected access, and a change in exploration focus towards Mine Lease exploration.

Office based work on Resolution Extended was limited to program planning and fulfilling report writing commitments.
6. ENVIRONMENTAL ISSUES

No ground disturbing activities were conducted during the reporting period. An Environmental register is included as Appendix 1.

7. EXPENDITURE STATEMENTS FOR PERIOD ENDING 2ND FEBRUARY 2001

Expenditure for the period ending 2nd February 2001 was $1, 868.

<table>
<thead>
<tr>
<th></th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff and Support</td>
<td>1396</td>
</tr>
<tr>
<td>Office Costs</td>
<td>228</td>
</tr>
<tr>
<td>Administration</td>
<td>244</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 868</strong></td>
</tr>
</tbody>
</table>

8. PROPOSED WORK FOR THE PERIOD ENDING 2ND FEBRUARY 2001

The geological interpretation completed in 1999/2000 has identified a possible sheared hinge zone passing through the north east of the tenement. This increases the prospectivity of the tenement.

- Rockchip sampling in the north east of the tenement, around the interpreted sheared hinge zone.
- Rockchip sampling around the anomalous 1.5g/t Au rockchip result in the south west of the tenement.

The proposed expenditure is $2000.
9. REFERENCES


HAM, J. April 1999; Annual Report for the Period ending 2 February 1999 for MCN4246-Resolution Extended. Report 08.10040


APPENDIX 1

ENVIRONMENTAL REGISTER
**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**  
**LAND STATUS RECORD**

<table>
<thead>
<tr>
<th><strong>Project:</strong></th>
<th>Pine Creek</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenement Name:</strong></td>
<td>Resolution Extended</td>
</tr>
<tr>
<td><strong>Loc. Code:</strong></td>
<td>N020P</td>
</tr>
<tr>
<td><strong>Tenement No’s:</strong></td>
<td>MCN 4246</td>
</tr>
<tr>
<td><strong>Registered Holder(s):</strong></td>
<td>AngloGold Australasia Limited – Formerly Acacia Resources Limited (transferred from Mr. R. Brown on 19/8/96)</td>
</tr>
<tr>
<td><strong>Date Granted:</strong></td>
<td>3 February 1992</td>
</tr>
<tr>
<td><strong>Term:</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Area:</strong></td>
<td>15.00 ha</td>
</tr>
</tbody>
</table>

**Bond/Security:**

**JV Partners (if any):**

**Land Classification:** (Crown, Private, Lease) Lease

| **Land Holder/Occupier:** | Gary Hamilton (Equest Pty Ltd) |
| **Station:**              | Mary River West                |
| **Address:**              | 9 Mall Currumbin, Qld          |
| **Phone:**                | (075) 534 7408                 |
| **Contacted By:**         | Elaine Wakefield               |
| **Date:**                 |                                      |

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

Open grazing land, little evidence of domestic livestock. Access via Spring Hill Road east off the Stuart Highway or any number of unmarked bush tracks.

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

Open Tropical Savanna. Prone to flooding during the wet, access difficult during the wet.

**Ground water:** (Bores/Wells/Dams, streams, drainage, test data)

Hang Dong Creek flows though the NW corner of the tenement.

**Aboriginal Notes:** (Sacred Sites, Cultural)

There are no sacred sites within the MCN listed under the AAPA register. AAPA Certificate C98/149.

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

There are no recorded historic sites within the tenement area.

**Previous Activity:** (Mining, Exploration, Forestry, etc.)

Area previously explored by Stockdale, which was restricted to surface sampling only.
**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**

**PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD**

<table>
<thead>
<tr>
<th><strong>Tenement Name:</strong></th>
<th>Resolution Extended</th>
<th><strong>No(s):</strong></th>
<th>MCN 4246</th>
</tr>
</thead>
</table>

**Exploration Activity Area:** Stream sediment sampling carried out by Stockdale.

**Shafts/Pits/Dumps:** Nil

**Track/Access:** Access via Spring Hill Road from the Stuart Highway.

**Line Clearing:** Nil

**Costeanning:** Nil

**Drill Sites:** Nil

**Other:** Nil

**Location Data:**

Other Ref:

**Compiled by:** Jane Ham  
**Date:** 7 May 1998
**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**

**ANGLOGOLD ENVIRONMENTAL IMPACT RECORD**

| Tenement Name: | Resolution Extended | No (s): | MCN 4246 |
|---------------|---------------------|---------|
| Report Ref No's: | Nil |
| Exploration Activities: | Rock chip sampling – 10 samples |
| 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: | Nil |
| Compiled by: | Penny Large |
| Date: | 2 May 01 |
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ANGLOGOLD REHABILITATION RECORD

Tenement Name: Resolution Extended  
No(s): MCN 4246

Disturbance: None  Rehabilitation: NA  Date: 2 May 2000

Grids & Traverses:

Soil Sampling:

Costeans/Pits:

Drilling:

Drill Traverses:

Drill Pads:

Ground Geophysics:

Access Tracks: Existing access tracks are currently used

Camps:

Other:

Inspected / Clearance:  
Bond/Security released:

Compiled by: Penny Large  
Date: 2 May 2001

Follow-up Inspection Report:
APPENDIX 2

DIGITAL COPY (PDF FORMAT)

(Copy Number one only)
MCN 4246 Resolution Extended
Regional Geology

Coord System: AMG 52 (AGD 84)

PINE CREEK PROJECT

G:\ANGLOGOLD\Projects\Mcn4246\Data\GES\GIS\GeolGeolGeolGeolGeol

Date: 03/05/2000

Pine Creek

locality

NT

Queensland

South Australia

New South Wales

Northern Territory

GEOLOGY

Zamu Dolerite

Cullen Batholith

Allamber Springs Granite

Daly River Group

Leads Springs Syenite

Edith River Group

Burrell Creek Formation

Finnis River Group

Koolpin Formation

South Alligator Group

Gerowie Tuff

Mount Partridge Group

Wildman Siltstone

Namona Group

Masson Formation

Umbrawarra Leucogranite

Pine Creek Shear Zone