ANGLOGOLD AUSTRALIA

CULLEN PROJECT
EL 8047 BAN BAN
SEL 8335 NORTH BAN BAN
FIFTH GROUP ANNUAL REPORT
FOR THE YEAR ENDED

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Map Sheets:

1:250, 000 Pine Creek SD52-08
1:100, 000 Bachelor 5172
1:100, 000 McKinley River 5271
1:100, 000 Pine Creek 5270

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SUMMARY

The Cullen Project, comprising Exploration Lease (EL) 8047 and Substitute Exploration Licence (SEL) 8335, is currently being explored by AngloGold Australia. The centre of the tenement package is located approximately 25km east of AngloGold's Brocks Creek Gold Mine and treatment facilities.

The Cullen Project is located in the Margaret River area of the Pine Creek Geosyncline. This area was originally part of a joint venture between title holders Platsearch NL and Solomon Pacific Resources NL. Acacia Resources Limited assumed management of Solomon Pacific's interests on 24th June 1996 including management of the Cullen JV. Acacia gained a 100% holding of the two tenements, with Platsearch reverting to a royalty on gross gold production. AngloGold assumed control of the project following the successful take over of Acacia in late 1999.

The North Ban Ban licence was surrendered on the 16th of April 2001.

This report details all work carried out in EL 8047 for the year ending 23rd November, 2001 and SEL 8335 for the year ending 16th April 2001.
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1. **INTRODUCTION**

Exploration Licence (EL) 8047, Ban Ban and Substitute Exploration Licence North Ban Ban (SEL 8335), in the Margaret River area, Central Pine Creek Geosyncline NT, are currently being explored by AngloGold Australia Limited. The centre of the tenement package is located approximately 140 km south east of Darwin and 25km east of the Brocks Creek Gold Mine and treatment facilities. This report details all work carried out in EL 8047 for the year ending 23rd November, 2001, and SEL 8335 for the year ending 16th April 2001, the fifth year of group reporting for these tenements.

2. **TENEMENT STATUS**

EL 8047, comprising fifty two (52) blocks was granted to North Exploration on the 24th November 1993 for a period of six (6) years. SEL 8335, comprising eighteen (18) blocks was granted to North Exploration on the 21st October, 1993 for a period of four (4) years. Platsearch NL purchased both EL 8047 and SEL 8335 from North Exploration with transfer of ownership of both tenements taking effect from 20th October 1995. Under a letter of agreement signed between Solomon Pacific Resources and Platsearch NL on the 15th April 1996, Solomon had the right to earn a 65% interest in the tenements. On the 24th June 1996, Acacia Resources Limited assumed management of Solomon Pacific Resources NL and all Solomon Pacific interests. Under the existing joint venture agreement signed between these parties Acacia Resources earned 65% of the tenement by sole funding of exploration activities. Platsearch then reverted to a royalty interest in gross gold production, leaving Acacia with 100% ownership.

An application for group reporting on the Cullen Joint Venture tenements was lodged by Acacia Resources on the 10th June, 1997 and approval from the NTDME was granted on the 10th July, 1997.

In December, 1996 an application for full waiver of reduction in area for Ban Ban (EL 8047) was granted by the NTDME allowing the retention of fifty two (52) blocks for a further twelve (12) months. A further application for partial waiver of reduction of the Ban Ban licence (EL 8047) was granted by the NTDME on the 17th June, 1998, requesting a waiver of ground reduction against twelve (12) blocks and the retention of forty (40) blocks. A further application for partial relinquishment of ten (10) blocks, retaining thirty (30) was sent to the NTDME in October 1998. An additional four (4) blocks were surrendered on the 19th of July 1999, reducing the licence tenure to twenty six (26) blocks. Acacia lodged a renewal on EL 8047 on the 23rd of August 1999.

An application for renewal of SEL 8335 for a further period of two years was granted by the NTDME on the 23rd December, 1997. A further two year renewal for SEL 8335 was submitted to the NTDME on 21st July 1999 and was approved on the 27th January 2000.

Following a successful takeover in late 1999 AngloGold Australasia (now AngloGold Australia) assumed management of Acacia’s interests including the Cullen Project.

The North Ban Ban licence was surrendered on the 16th April 2001 and a final report on exploration was submitted to the NTDME (Company Rpt No. 08.11474).
2.1. **Aboriginal Area Protection Authority Clearance**  
The AAPA issued Authority Certificate No. C99/015, for a period of two years commencing on the 12th March 1999. There are no registered sites of significance within the tenement package. No field based exploration has been completed since the certificates expiry on the 11th March 2001.

3. **LOCATION AND ACCESS**  
The centre of the tenement package, Ban Ban (EL 8047) and North Ban Ban (SEL 8335) is located approximately 140km southeast of Darwin in the Northern Territory, approximately 40km south east of the Adelaide River Township and 20km north of the Brocks Creek Gold Mine and treatment facilities (*Figure 1*). The licence areas can be accessed via the Stuart Highway from Darwin to Hayes Creek, then via the Fountain Head and Woolwonga Roads to various station tracks on Ban Ban Springs Station. SEL 8335 may also be accessed via Fischer and Goodall roads and then by various station tracks on Mount Ringwood and Ban Ban Springs Stations.

Alternate access to the southern portions of the tenement can be gained from tracks leading north from the Fountain Head to Mount Wells Road.

EL 8047 falls within Ban Ban Springs and Mary River West Station pastoral titles and SEL 8335 lies within the Ban Ban Springs and Mount Ringwood Station pastoral titles.

Access is severely restricted between the months of December and April due to the wet season.

4. **REGIONAL SETTING**  
The Cullen JV is located in the central Pine Creek Geosyncline. 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 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.

EL 8047 and SEL 8335 lie in the central part of a neck of metasediments, assigned to the South Alligator Group, which have been intruded by the Prices Springs Granite (EL 8047) and the Margaret Granite (SEL 8335).
5. TENEMENT GEOLOGY AND MINERALISATION

The tenements, EL 8047, Ban Ban and SEL 8335, North Ban Ban cover areas of Early Proterozoic sediments containing tightly folded greywackes and siltstones of the Burrell Creek Formation unconformably underlain by carbonaceous phyllites, siltstones and banded cherts of the Mt Bonnie Formation, tuffaceous siltstones of the Gerowie Tuff and sills of Zamu Dolerite. The sedimentary succession occurring in EL 8047 is intruded by the Prices Springs granite and exhibits a contact aureole of minor hornfelsing. Quaternary alluvium (Qa) and deep humic soils (Qf) occur in low ground and along the Margaret River in the northern portion of the tenement (Figure 2).

The Ban Ban licence (EL 8047) extends from the east of the abandoned Woolwonga Open Cut Mine to west of Spring Hill (Figure 1). The tenement is divided by the intrusive Prices Springs Granite into two parts. The northern portion covering the Woolwonga district and southern portion the southern extension of the tenement into the Spring Hill district (Lea 1996).

The Northern area covers the drainage basin of the Margaret River and is relatively flat and featureless alluvial plain apart from a prominent range of hills in the north eastern portion containing a east –south east striking quartz reef.

The Southern area contains a series of four anticlinal structures within the Proterozoic sediments. The three southern most antiforms contain axial cores of the Koolpin Formation known to host thin stratiform auriferous veins in black shale and calc-silicate units elsewhere in the Pine Creek area.

In the North Ban Ban licence (SEL 8335) quartz veining is abundant in the south eastern portion of the tenement where sediments outcrop more regularly, across mapped anticlinal features. The mapped lithologies in this area suggest that the cores of the anticlines are Mt. Bonnie and Gerowie Tuff units. Quartz veining is not as abundant throughout the western and northern portions of the tenement.

The Margaret Granite has intruded the sediments of the South Alligator group to the east of the North Ban Ban licence and has resulted in minor zones of hornfelsing.

There are no known gold workings in SEL 8335, however, the Great Northern Alluvial Goldfield occurs adjacent to the western margin of the tenement.

6. WORK COMPLETED

No field based exploration was completed within the Cullen Project during the reporting period.

A final report was completed for the North Ban Ban licence summarising all work completed within the licence. Outstanding rehabilitation within the licence, including the removal of steel gridpegs was completed in September 2001. Inspection of former sample traverses showed natural re-vegetation was progressing well.

In October 2001 negotiations commenced with a number of interested parties regarding the farm-out of EL 8047. No conclusions to these discussions have been reached as yet.
7. ENVIRONMENTAL ISSUES

No field based exploration was completed within the licence during the reporting period. As stated above rehabilitation was completed within SEL 8335 following its surrender.

An environmental register has been compiled for the disturbance, pre-existing and current within the project areas. This register is supplied as Appendix 1.

8. EXPENDITURE STATEMENTS

8.1. EL 8047 (Ban Ban) - Year ending 23rd November 2001

Covenant for EL 8047 during the reporting period was set at $30,000. The actual expenditure for the licence is detailed below:

- Staffing and Support $3,084
- Contractor (rehab) $1,068
- Consumables $25
- Vehicles $10
- Administration $628

Total = $4,815

8.2. SEL 8335 (North Ban Ban) - Year Ending 16th April 2001

A total of $4,740* was spent within SEL 8335 by AngloGold during the six month period prior to the licence's surrender on the 16th April 2001. The covenant of $19,500 set by the NTDME was not met.

- Staffing and Support $3,959
- Vehicles $162
- Administration $618

Total = $4,740

*Note that the total expenditure of $2,443 quoted in the final report for the North Ban Ban licence (AngloGold report No. 08.11474) did not include the expenditure incurred during the compilation of the final report (ie. Drafting and geologists time). In addition expenditure resulting from the re-habilitation work was not incurred until after the report was submitted.
REFERENCES


APPENDIX 1

ENVIRONMENTAL REGISTER
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER

LAND STATUS RECORD

Project: Cullen JV

Tenement Name: Ban Ban & North Ban Ban  Loc. Code: CL01 & CL02

Tenement No’s: EL8047  SEL8335

Registered Holder(s): Platsearch NL

Date Granted: 24/11/93 & 22/10/93  Term: 6yrs and 3 yrs  Area: 22 & 18 blocks

Bond/Security: None

JV Partners (If any): AngloGold Australia Limited (formally Acacia)

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

Land Holder/Occupier: Britts Australia  Station: Ban Ban Springs

Address: Ban Ban Springs Station  Phone: (08) 8985 2430
          Fountain Head Road
          Hayes Creek

Contacted By: Helen Clark, Damien Stephens, Scott Marsh  Date: April 1997

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

Land Holder/Occupier: Bill Moon & Marcus Rathsmann

Station: Ban Ban Springs

Address: Mount Ringwood Station  Phone: (08) 8976 0919
          Tortilla Flats Road
          Adelaide River

Contacted By: Helen Clark  Date: May 1997

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

Land Holder/Occupier: Gary Hamilton  Station: Mary River West

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

Contacted By: Chris Spurway  Date: May 1997
Pastoral Notes: (Stock, Cultivation, Access, Rainfall)
Fenced grazing land, with cattle, water buffalo and horses. Ban Ban Springs station is operated by Britts Australia as a tourism venture. Access to all three properties is via the Stuart Highway.

Environmental Notes: (Flora/Fauna, Erosion, Bushfires, Flooding)
Open tropical savannah, prone to flooding during the wet season. Burn offs are carried out at the beginning of the dry season.

Groundwater: (Bores/Wells/Dams, streams, drainage, test data)
Margaret river is the largest watercourse in both tenements, with multiple smaller perennial creeks and stream occurring on both tenements, including Mcallum creek on SEL 8335.

Aboriginal Notes: (Sacred Sites, Cultural)
An AAPA clearance certificate (23392) has been granted for both tenements.

Historic Relics: (Mine Workings, Equipment, Homesteads etc.)
No recorded site of historical significance.

Previous Activity: (Mining, Exploration, Forestry, etc.)
Although the Cullen JV tenements have previously been held by several companies, exploration activities has caused only minimal environmental impact.
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name: Ban Ban & North Ban Ban  No(s): EL8047 & SEL8335

Exploration Activity Area: Cullen Joint Venture

Shafts/Pits/Dumps: Nil

Track/Access:
Access via Stuart Highway, and/or Fountainhead road and/or Mount Wells road and/or established station tracks on Ban Ban Station and Ringwood Station.

Line Clearing:
Some line clearing completed by North Exploration along RAB and Aircore traverses on the western margin of EL 8047. Similarly minimal line clearing on was carried out on the north eastern margin of SEL8335.

Costeaneing: Nil

Drill Sites:
Shallow RAB drilling at Gas Pipeline prospect in EL 8047 and in North Ban Ban by North Exploration in 1994

Other:

Location Data:

Other Ref: 08.8471, 08.8420, 08.9654, 08.10579

Compiled by: Helen Clark  Date: 20/11/97
### TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER

#### ANGLOGOLD ENVIRONMENTAL IMPACT RECORD

**Tenement Name:** Ban Ban & North Ban Ban  
**No(s):** EL8047 & SEL8335

**Report Ref No’s:**
- 08.8471
- 08.10579
- 08.8420
- 08.10962
- 08.9654
- 08.11473
- 08.11763 (this report)

**Exploration Activities:**
- Grid based, posthole RAB, shallow soil sampling and rock chip soil sampling, Base of slope sampling

**Grids & Traverses:**
- 7 line km of baseline extension at Ban Ban (oriented at 334°57'55'"")
- 7.5 line km of gridding on AGD84 AMG zone 52 (wooden pegs)

**Soil Sampling:**
- Soil Sampling holes were plugged and backfilled upon completion
- 1999/2000 - 79 Hand samples at Ban Ban

**Costeans / Pits:** None

**Drilling:**
- Ban Ban 491 RAB postholes; North Ban Ban 239 postholes.

**Drill Traverses:** None

**Drill Pads:** None

**Ground Geophysics:** None

**Access Tracks:** Pre-existing access tracks utilised

**Camps:**
- Fly Camp on banks of Margaret River when Gridding EL 8047.

**Other:**

**Compiled by:** Helen Clark, Damien Stephens  
**Date:** 12/11/98

**Revised by:** Penny Large  
**Date:** 16/10/2001
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER

ANGLOGOLD REHABILITATION RECORD

Tenement Name: Ban Ban - North Ban Ban  No(s): EL8047, SEL8335

Disturbance: Minimal

Rehabilitation: Ongoing within EL 8047  
Completed within SEL 8335  Date: 17/10/2001

Grids & Traverses: Baselines and traverse lines cleared “blade up” - no rehabilitation required. Marked with steel droppers. The droppers within SEL 8335 have been removed.

Soil Sampling: Sample pits filled on completion

Costeans/Pits: none

Drilling: RAB derived sample piles were spread over ground and pin flags removed. All holes capped on completion of holes.

Drill Traverses: As for grids and traverses

Drill Pads: None

Ground Geophysics: None

Access Tracks: Grading and upkeep of tracks is carried out with land holder.

Camps: Camp sites rehabilitated upon completion of programs

Other:

Inspected / Clearance: Bond/Security released:

Compiled by: Damien Stephens Helen Clark  Date: 12/11/98

Compiled by: Penny Large  Date: 16/10/2001

Follow-up Inspection Report:
APPENDIX 2

DIGITAL COPY OF REPORT
ADOBE ACROBAT FORMAT
(ORIGINAL COPY ONLY)