ANGLOGOLD AUSTRALASIA LIMITED

ENNIS OPTION
MCN 4031

ACTIVITY REPORT FOR THE YEAR
ENDING 20TH FEBRUARY, 2000

Author: Damien Stephens  Report No: 08.10924

Date: May 2000  Copy: 5

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

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1. INTRODUCTION

AngloGold Australasia Limited is currently exploring Mineral Claim (MCN) 4031. Acacia previously operated this licence under an option agreement with the titleholders, R M Biddlecombe and M Dundas. Acacia exercised its option to purchase the title from Mr M Dundas in August 1996. Transfer D6409 from M Dundas to Acacia Resources Limited was registered on 7th August 1996 with the NTDME. The tenement is now held 100% by Anglogold, following the takeover of Acacia Resources Limited by AngloGold Australasia Limited in late 1999.

MCN 4031 forms part of AngloGold's "Ennis" tenements, which also includes EL8172 and previously included MCN's 3996 & 4203. The latter 2 mineral claims expired on the 20th February 1996. MCN 4031 was renewed on 28th February 1996 for the period up to the 20th February 2001.

This report documents all work carried out within MCN 4031 in the year ending 20th February 2000.

2. LOCATION AND ACCESS

MCN 4031, is located approximately 24km NNW of Pine Creek, Northern Territory (Figure 1), and covers an area of 9.31 Ha.

Access is via the Spring Hill road turning east off the Stuart Highway approximately 22km north of Pine Creek. A narrow 4WD track turns south off the Spring Hill Road about 1.7km SW of the intersection of the Spring Hill and Mt Wells Roads.

3. REGIONAL GEOLOGICAL SETTING

The Ennis option is located centrally within the Pine Creek Geosyncline (Figure 2). The geosyncline contains Early Proterozoic metasedimentary rocks resting on Archaean basement of gneiss and granite. The metasediments represent a preserved basinal sequence up to 14km thick (Needham et all, 1980). These rocks were tightly folded and metamorphosed to greenschist facies (in some places amphibolite) at about 1899 - 1870 Ma (Ferguson, 1980).

Transitional igneous rocks, including predeformational dolerite lopoliths and dykes and post-deformational granites intrude the geosynclinal sequence. Largely undeformed platform cover of Middle and Late Proterozoic, Cambro-Ordovician and Mesozoic strata rest on geosynclinal sediments with marked unconformity.

MCN 4031 lies at the northern end of a corridor of metasediments between two lobes of the Cullen Batholith (Figure 2). This corridor, which is dominated by the turbiditic Burrell Creek Formation, plays host to both the Pine Creek and Union Reefs ore bodies as well as numerous areas of historic workings, including Spring Hill (Au), Flora Belle (Ag, Pb), McKinlay (Ag, Pb), Esmeralda (Au) and Elizabeth (Au).
4. **TEIEMENT GEOLOGY & MINERALISATION**

Turbiditic shale and greywacke lying on the eastern limb of a large southerly plunging anticline dominate the Mineral Claim. The majority of bedding strikes NNW and appears to dip steeply to the east. Bedrock is obscured by 1-2 metres of alluvial and eluvial cover over much of the area.

Mineralisation occurs as narrow, roughly bedding-parallel quartz vein systems, with a visually significant weathered sulphide component. A number of these systems have been worked in the past, most recently in 1992 when two exploration shafts were sunk by Kevin Ennis.

5. **WORK COMPLETED PRIOR TO 20TH FEBRUARY 1999**

The area incorporated by MCN 4031 has been included in a regional geophysical data compilation of AngloGold’s Pine Creek tenement holdings. This work included the following:

- Merged and leveled the multiple aeromagnetic and radiometric data sets that AngloGold has acquired to allow easier comparison of the images across the boundaries of the different surveys.
- Revised reduced to pole and first vertical derivative plots were produced after processing to merge the detailed aeromagnetic and multiclient datasets.
- A revised geological interpretation of the Pine Creek region was completed using regional gravity data, the multiple detailed and multiclient aeromagnetic data sets and IP surveys acquired between 1992 and 1997.

6. **WORK COMPLETED FOR THE PERIOD ENDING 20TH FEBRUARY 2000**

- A detailed airborne geophysical survey was completed over the northern Pine Creek region, including Ennis. The survey specifications are given as Appendix 2. Flight lines and Contours are Appendix 3. The detailed aeromagnetic and total count radiometric images are Figures 3 & 4 respectively.
- A reinterpretation of the regional geology of the northern Pine Creek was carried out following the geophysical survey. The interpreted geology is Figure 5.

7. **ENVIRONMENTAL**

No environmental disturbances occurred on MCN 4031 during the reporting period. An environmental register is included in Appendix 1.
8. EXPENDITURE STATEMENT

As MCN 4031 is explored in conjunction with adjoining EL 8172, the expenditure is incorporated with expenditures for EL 8172. Expenditure apportioned from these figures to MCN 4031 total $130 for the period ending 20\textsuperscript{th} February 2000.
9. REFERENCES


APPENDIX 1

ENVIRONMENTAL REGISTER
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Pine Creek

Tenement Name: Ennis Option  Loc. Code: UR11

Tenement No’s: MCN 4031

Registered Holder(s): AngloGold Australasia Limited

Date Granted: 20/02/96  Term: 5 years  Area: 9.31 Ha

Bond/Security: None

JV Partners (if any):

Land Classification: (Crown, Private, Lease) Lease

Land Holder/Occupier: Gary Hamilton  Station: Mary River West
(Equest Pty Ltd)

Address: 9 Pall Mall  Phone: (075) 534 7408
Currumbin, Qld, 4223

Contacted By: Date:

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

Open grazing land, little evidence of domestic livestock. Access via Springhill Rd, and any number of unmarked bush tracks.

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

Open tropical savanna. Areas prone to flooding during the wet, access difficult during the wet.

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

No evidence of bores, wells, or dams.

Aboriginal Notes: (Sacred Sites, Cultural)

There are no recorded sacred sites within the MCN.

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

Previous Activity: (Mining, Exploration, Forestry, etc.)
# TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
## PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

<table>
<thead>
<tr>
<th>Tenement Name:</th>
<th>Ennis</th>
<th>No(s):</th>
<th>MCN 4031</th>
</tr>
</thead>
</table>

### Exploration Activity Area:

#### Shafts/Pits/Dumps:

#### Track/Access:
A section of the Springhill Rd lies within the MCN.

#### Line Clearing:
None

#### Costeanning:
None

#### Drill Sites:
None

### Other:

### Location Data:

#### Other Ref:

### Compiled by:
Jane Ham

### Date:
10/5/98
## TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
### ANGLOGOLD ENVIRONMENTAL IMPACT RECORD

<table>
<thead>
<tr>
<th>Tenement Name:</th>
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<th>MCN 4031</th>
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<td>08.6669, 08.8768, 08.9608, 08.10216, 08.10924</td>
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<tr>
<td>Exploration Activities:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Grids &amp; Traverses:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Sampling:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costeans / Pits:</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drilling:</td>
<td>None</td>
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<tr>
<td>Drill Traverses:</td>
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<tr>
<td>Drill Pads:</td>
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<td></td>
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</tr>
<tr>
<td>Ground Geophysics:</td>
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<tr>
<td>Access Tracks:</td>
<td>No new tracks have been constructed.</td>
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<tr>
<td>Camps:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compiled by:</td>
<td>Damien Stephens</td>
<td>Date:</td>
<td>15th May 2000</td>
</tr>
</tbody>
</table>
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ANGLOGOLD REHABILITATION RECORD

Tenement Name: Ennis  No(s): MCN 4031

Disturbance: None  Rehabilitation: None
Date: N/A

Grids & Traverses: None

Soil Sampling: None

Costeans/Pits: None

Drilling: None

Drill Traverses: None

Drill Pads: None

Ground Geophysics: None

Access Tracks: No new tracks have been constructed.

Camps: None

Other:

Inspected / Clearance:  Bond/Security released:

Compiled by: Damien Stephens  Date: 15th May 2000

Follow-up Inspection Report:
Appendix 2
Geophysical Survey Specifications
Detailed Aeromagnetic Survey Specifications

AircraftFU24-950
MagnetometerScintrex Caesium Vapour Cs2
Developco Vector Magnetometer
Resolution0.001nT
Sensitivity0.001nT
Recording Interval0.1 Seconds
CompensationRMS AADC II Compensator
Flight Line Separation50m
Flight Line Orientation060° True
Tie Line Separation500m
Tie line Orientation150° True
Mean terrain clearance25m
Sample Interval4 - 5 m
SpectrometerExploranium Model GR-820
NavigationNovatel 3951R 12 Channel Differential GPS
RACAL satellite DGPS correction receiver
AltimeterKing Model KRA-405 Radar Altimeter
Air DB Barometric Altimeter
Base Station SensorsScintrex “Envi-Mag” Proton Precession
Magnetometer
Geometrics G-856 Proton Precession
Magnetometer
Appendix 3
Geophysical Survey Flight Lines and Contours
Proterozoic (?) dolerite dyke (strongly magnetic)
Gerowie Tuff (non-magnetic; moderate K & U in o/c)
Koolpin Fm (strongly magnetic where massive ironstone; high U and K where carbonaceous; dense)
Granites (weakly magnetic; slightly less dense than host rocks)
Princess Spring Granite (high K, Th, U)
- Shear (predominantly strike slip)
- Fault (predominantly across strike)