

**MACPHERSONS PROJECT  
COOLGARDIE**

**SOUTH EAST YILGARN REGION, W.A.**

**COMBINED ANNUAL TECHNICAL REPORT  
C127/2010 MACPHERSONS**

**Tenements  
M15/128, M15/133, M15/147, M15/237, M15/731  
P15/4792-4795, P15/5209**

**For the Period: 1<sup>st</sup> July 2009 to 30<sup>th</sup> June 2010**

**Holder: MacPhersons Reward Gold Ltd, Killoran Ltd, Kurana Pty Ltd,  
Sammy Resources**

**Operator: MacPhersons Reward Gold Ltd**

**Author: L. Money**

**Date: October 2010**

**Report No: MRGL\_2010\_10\_1**

**Distribution: 1. MacPhersons Reward Gold Ltd  
2. Department of Industry and Resources, W.A. (Disk only)**

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## 1 SUMMARY

This report documents exploration activities completed on the MacPhersons project area between 1 July 2009 and 30 June 2010. The MacPhersons Project comprises the tenements M15/128, M15/133, M15/147, M15/237, M15/731, P15/4792-4795 and P15/5209 located approximately 6km SSE of Coolgardie, and can be located on the Yilmia (3135) 1:100,000 and Boorabbin (SH51-13) map sheets.

Exploration completed MacPhersons during the reporting period includes:

- Compilation of the extensive previous exploration of the leases
- Refurbishment of the MacPhersons Reward pit areas
- Diamond drilling on M15/133 (10 holes for 1722.63m)
- Resources calculations of the MacPhersons and Bakers Find orebodies.
- Drilling programme planning for the Bakers Find area
- Geological mapping in the MacPhersons, A-Cap and Bakers Find pit areas.
- Thin section work on rock samples from Powell Pit and historical drill core

## 2 INTRODUCTION

The MacPhersons project is located 6km SSE from Coolgardie in the Eastern Goldfields of Western Australia. The area has produced significant gold since from the nearby Brilliant, Tindals and MacPhersons Reward workings.

The leases are currently being explored by MacPhersons Reward Gold Ltd under arrangements with the holders, MacPhersons Reward Pty. Ltd., Killoran NL., Kurana Pty Ltd, Focus Minerals, T. Tatterson and Sammy Resources. This report covers the work carried out by MacPhersons Reward Gold Ltd in the first full year of involvement in the area.

## 3 TENEMENT AND AGREEMENTS

Tenement outlines are shown in Figure 1.

Table 1 outlines the tenement holders. All tenements currently not held by MRGL are under the terms of option to purchase agreements. The tenements are currently being explored for gold.

The tenements cover an area of 1110.04 hectares.

<b>MACPHERSONS TENEMENT SCHEDULE</b>					
<b>Tenement</b>	<b>Project</b>	<b>Locality</b>	<b>Status</b>	<b>Holder</b>	<b>Area (Ha)</b>
M15/0128	MACPHERSONS	Coolgardie	LIVE	Killoran	191.4
M15/0133	MACPHERSONS	Tindals	LIVE	MRPL	60.74
M15/0147	MACPHERSONS	Bakers Find	LIVE	MRPL	9.7
M15/0237	MACPHERSONS	Tindals	LIVE	Kurana Pty Ltd	26.36
M15/0731	MACPHERSONS	Burbanks	LIVE	MRPL	4.836
P15/4792	MACPHERSONS	Burbanks	LIVE	Sammy Resources	187
P15/4793	MACPHERSONS	Burbanks	LIVE	Sammy Resources	195
P15/4794	MACPHERSONS	Burbanks	LIVE	Sammy Resources	180
P15/4795	MACPHERSONS	Burbanks	LIVE	Sammy Resources	148
P15/5209	MACPHERSONS	Burbanks	LIVE	Kurana Pty Ltd	107

Table 1: MacPhersons Tenement Schedule

#### 4 GEOLOGY AND MINERALISATION

The tenements are located in the Archaean rocks of Eastern Goldfields of W.A. The area is dominated by mafic and ultramafic rocks with minor shale horizons and felsic intrusives. The greenstones wrap around a granitic dome located to the west. The rocks are of greenschist facies metamorphism and dips are generally subvertical. Gold mineralisation in the district is generally associated with quartz veins / stockworks near the intersection of contrasting lithological contacts and/or shears. Gold occurrences are numerous and have a variety of styles. Figure 2 shows regional geology, and Figure 3 depicts a more local geological interpretation.

In the MacPhersons Reward and A-Cap pit areas, gold is associated with quartz veins/stockworks in a North-East trending tonalite which is approximately 100m wide. The tonalite is flanked by mafic and ultramafic rocks and extends south over 1km from the end of the A-Cap pit.

At Bakers Find, the geology consists of a sequence of sub vertical mafic and ultramafic rocks, with felsic intrusives running along contacts some contacts. Mineralisation is hosted in sheared and brecciated zones at a contact between mafic and ultramafic rocks.

Current understanding of the geology in the Franks Find and Queensland areas is as yet not fully understood. Franks Find is thought to be located on a sheared zone in a mafic/ultramafic package, and historically reported to be associated with a porphyritic intrusion. The majority of the Queensland tenements consist of linear ultramafic and mafic rocks characteristic of the Coolgardie area. In the vicinity of the Queensland workings, felsic intrusives have been mapped during previous exploration activities.

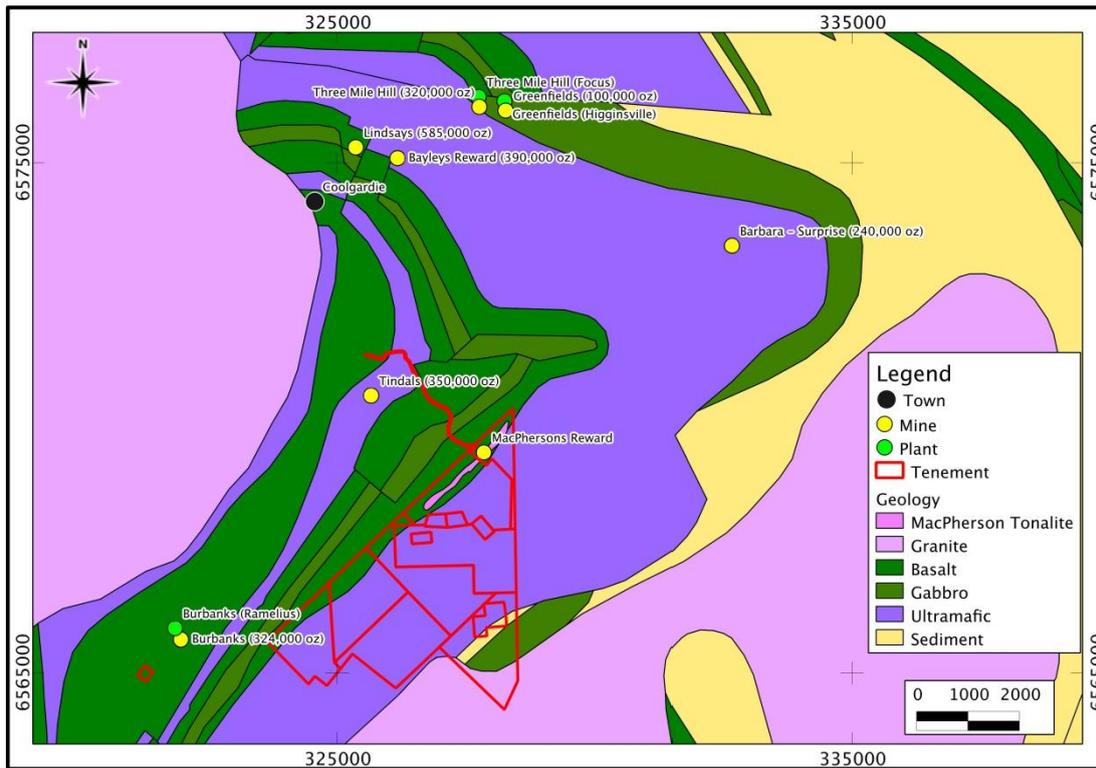


Figure 2: Regional Geology of the Coolgardie Region

## 5 PREVIOUS EXPLORATION

A summary of previous exploration is outlined in Appendix 5. Past exploration has been focussed along the length of the MacPhersons Tonalite, and around historical diggings.

Most of the previous exploration has not been particularly systematic. Future drilling programmes should be planned to provide adequate tests of targets, generally with fences of drill holes rather than single holes.

Significant exploration was undertaken, in chronological order, by:

- A-Cap Development Ltd
- Antimony Nickel NL – later known as Roebuck Resources NL
- Baker Burbanks Joint Venture
- Bill Powell
- Roebuck Resources
- Belgravia Resources
- Coolgardie Gold
- Goldfan
- Electrum
- Marapana Gold NL (Mineral Resource Consultants)

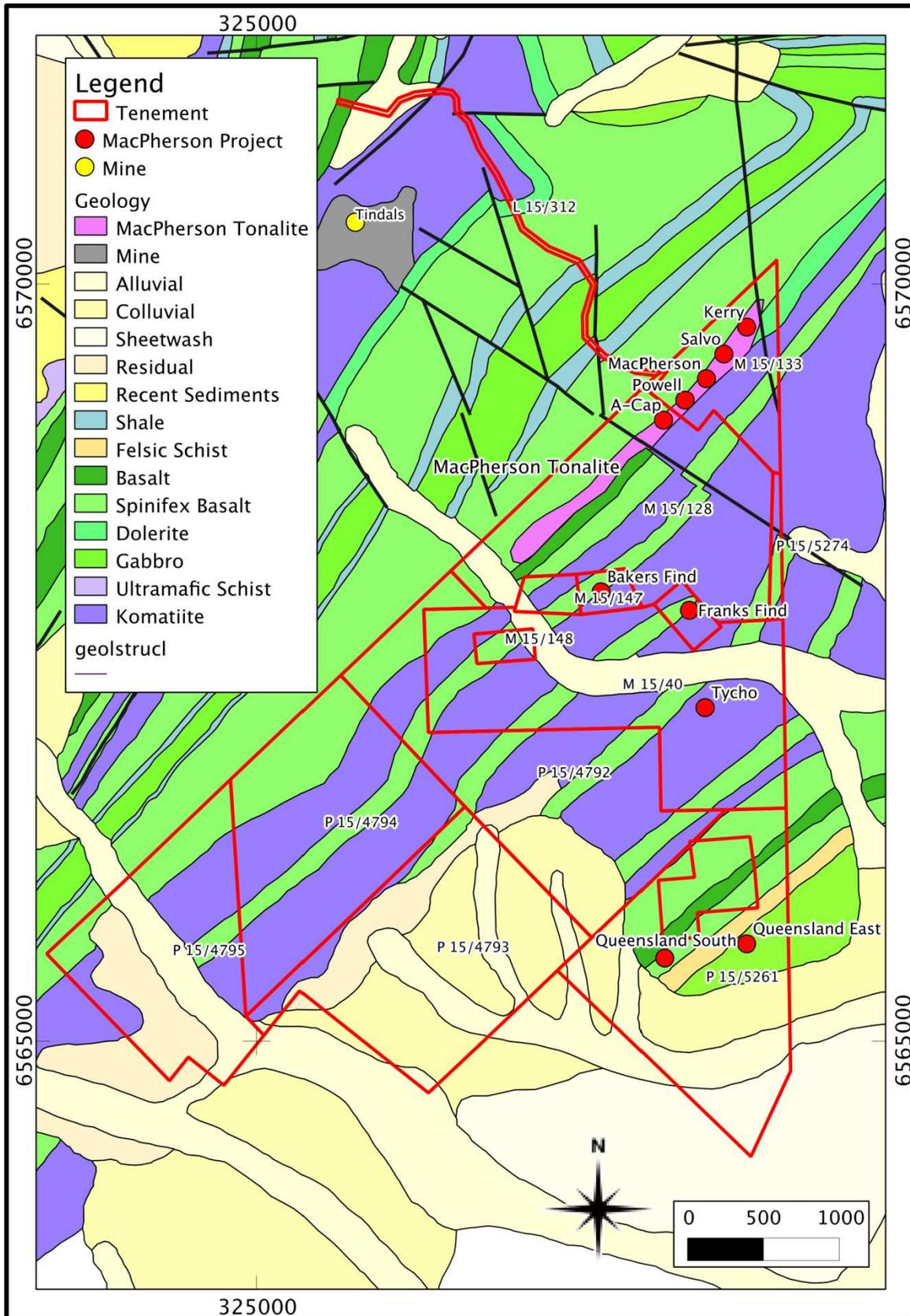


Figure 3: MacPhersons Project Local Geology

- Samantha Exploration NL (for Marapana)
- Callion Mining
- Croesus Mining NL
- Mt Kersey Mining NL
- Spinifex Gold NL
- Gutnick Resources
- Cazaly Resources Ltd
- Redemption Joint Venture (Focus Minerals)

## **6 WORK UNDERTAKEN IN THE PERIOD**

Compilation of the extensive previous exploration of the leases was undertaken. Conversion of the data from historical local grids to GDA94-based grids was commenced in a sequence relating to fieldwork priorities.

Surveying of all the tenements was carried out to pick up all roads and tracks to major historical mine workings. Survey of lease pegs was carried out where applicable. Detailed surveying of major mine workings was carried out including 8 open pits with full pick-up of the Powell, MacPherson, Salvo, Kerry, A-Cap (2 pits) and Bakers Find (2 pits) open pits and waste dumps.

Construction of the MacPhersons Reward mine site office complex which included 2 office buildings, core sampling and storage shed facility, workshop, storage units, and 2 residences (for the Resident Manager and the Caretaker). Installation of services including power, water, sewerage, and telecommunications was completed during the period. The site was fully reticulated.

Construction of mine roads, levee banks, 2 causeways, floodway channels and 2 water dams. Cutbacks were carried out on 2 waste dumps to stabilise the embankments.

Three open cuts were re-opened to safely access the pit floors and approximately 87,149 tonnes (42,961 bcm) of waste material was removed from the Powell and MacPherson open pits at MacPhersons Reward (M15/133). Drainage channels, sumps, access roads into and within the pit areas were carried out as part of the earthworks. Open berms were barricaded to ensure no vehicular access to unbunded crests. Bunding was placed around the entire crest of the MacPhersons Reward pit perimeter.

Geological mapping was carried out in the Powell, MacPherson, Salvo, Kerry, A-Cap and Bakers Find open pit areas. A preliminary geological assessment was carried out of surface outcropping over all the tenements, including tracking the MacPherson tonalite dyke over a 3km strikelength across the tenements into the southern tenement areas, where shallow alluvial cover has concealed its continuity. A total of 86 rock samples were collected during mapping for Au analysis. Results and descriptions of samples are collated in Appendix 6.

28 samples were selected for petrographic work. 4 samples CSHS-1, 2, 4 and 5 were selected from Powell Pit, and 24 samples were sources from historical drill core located on M15/133. Appendix 4 contains the descriptions of the specimens. The purpose of the petrographical work was to provide a starting point for the identification of the different lithologies that would potentially seen in the diamond drilling programme

Diamond drilling on M15/133 commenced in May 2010, with 10 holes for 1722.63m completed by the end of the 2010 reporting period. An ongoing diamond drilling programme continued after the end of the reporting period.

Subsequent to the reporting period, mineral resources were being reviewed for the MacPhersons Reward, Bakers Find and Tycho deposits. A review of historical geophysical and geochemical data commenced after the end of the reporting period, which shows prospective structural and lithological features continue beneath the shallow alluvial cover to the south.

An expanded drilling programme is planned to commence in 2011. This programme will include extensive drilling along the entire strike length (>3km) of the MacPherson tonalite dyke, the Bakers Find – Tycho structural zone (fold nose) and more infill drilling at Salvo-Kerry pits with deeper drilling targets to be tested on the MacPherson and Powell zones.

Appendix 7 contains the verification listing.

## **7 CONCLUSIONS AND RECOMMENDATIONS**

The potential for shallow gold mineralisation in the lease appears to have not been adequately tested in historical exploration. There are significant gaps in the information, test methodology has improved and there are significant geochemical and geophysical anomalies that remain untested awaiting follow-up detailed work. A programme to follow MacPherson Tonalite dyke and intersection with the Bakers Find shear zone and Tycho mineralisation will form primary targets in 2011 drilling programmes as will the follow up of geophysical and geochemical anomalies.

There has been very limited drilling beneath the 100m depth, and with significant recent intersections showing visible gold at depths exceeding 260m, it is interpreted that the gold bearing systems remain open at depth. Further deeper drilling is planned for 2011.

**APPENDIX 1**  
**DIAMOND DRILL LOGS**  
**MRDH400 - MRDH407**

**APPENDIX 2**  
**DoIR FORMAT DATA FILES**  
(Disk Only)

**APPENDIX 3**  
**MACPHERSONS LITHOLOGY LEGEND**

**APPENDIX 4**  
**PETROGRAPHY REPORT**

**APPENDIX 5**  
**HISTORICAL EXPLORATION SUMMARY**

**APPENDIX 6**  
**GRAB SAMPLES**

**APPENDIX 7**  
**VERIFICATION LISTING**