

# AUSTRALASIA GOLD LIMITED

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*A.C.N. 104 757 904*

## EL 22301 MT WELLS NORTH Y6 ANNUAL REPORT

14<sup>TH</sup> April 2008 – 13<sup>th</sup> April 2009

(Work completed by Australasia Gold Ltd)

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***KEY WORDS: Mt Wells, Exploration, Gold, Pine Creek Orogen, AC Drilling, EL22301, Australasia Gold Ltd***

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### ATTACHMENTS

1. Drilling data & assays table
2. Expenditure template

## SUMMARY

Previous exploration carried out within the EL22301 tenement was confined largely to the McKinlay Mine area with some rock chip and stream sediment sampling carried out elsewhere within the tenement. A drilling program was designed for 2008 to test for the potential of gold mineralisation under flood plain sediments of the McKinlay River system. The aircore drilling program consisted of 38 holes, however, only 5 of those 38 holes were drilled. Results showed no significant gold values under cover (<0.01ppm Au). Highest arsenic and lead values obtained were 41ppm and 91ppm respectively.

## LOCATION

Mt Wells tenement (EL22301) is located approximately 40km north of Pine Creek township and ~135km SE of Darwin. The access road (Spring Hill Road) intersects the Great Northern Highway 20km north of Pine Creek township, travelling NE across the railway and linking to the Mt Wells road (figure 1).

## TENEMENT AND OWNERSHIP

EL 22301 covers an area of 16 sub-blocks (53 sq km) and was granted on 14 April 2003 for a period of 6 years. A joint venture between Australasia Gold (AAO) and titleholder Softwood Plantations Pty Ltd grants to AAO 100% rights to gold deposits discovered within the EL while Softwoods retains 100% rights to other commodities. AAO is operator-manager and conducts exploration for gold, and coordinates exploration for other commodities which the titleholder may wish to fund.

AAO is a public company which listed on ASX in January 2006.

The circumstances of the tenement have changed significantly during the year. Ownership and management of Softwood Plantations Pty Ltd have passed to Outback Metals Ltd ("Outback"), which raised funds via an IPO and listed on ASX during 2008. Activities conducted by Outback during the year will be separately reported.

The Company's application for waiver of statutory reduction of area after two years was granted by the Department. At the third anniversary of the tenement the area was reduced to 16 blocks (Figure 1a). An application to waive the Company's obligation to reduce the area of this small EL was made in March 2008, and subsequently granted.

The Aboriginal Areas Protection Authority confirmed that there were no registered sacred sites within the tenement boundary

## PREVIOUS EXPLORATION

From 1986 to 1989 Kakadu Resources Limited reached agreement with Freeport-McMoRan Australia Limited whereby Freeport would gain equity in the tenement (EL4742, southern part of the current tenement EL22301) by conducting exploration over a specified period. The work conducted in this time period includes soil and rock chip sampling, geological mapping and drilling (7 holes, 354 metres).

Results from rock chip sampling indicated this area may be highly prospective as one of the samples returned values as high as 21g/t Au. Higher grades appeared to be associated with gossan development rather than the quartz veins. The drilling didn't return any significant results as it appears that the holes did not reach the zone of interest due to high water influx stopping the drill to dig further.

During 1986 – 1989 a lot of the work was conducted on the current McKinlay Gold Mine leases (MLN 808, 821 & 869) as well to the south of them by Hawk Nest Gold Pty Ltd (figure 2). The work included RAB drilling (36 holes for 205.5m) and soil sampling south of the McKinlay mine to determine whether the mineralisation associated with the adjacent ridges continued under the Quaternary alluvial cover. The results returned values of up to 0.25g/t Au in selected bedrock material and p to 0.29g/t Au in the cover.

Newmont Australia conducted soil and rock chip sampling on the eastern part of the tenement (EL22301) during the period from 1990 – 1991. No significant results were found (figure 2).

Between 1989 and 1992 Billiton Australia conducted work on the eastern portions of the tenement most of which included regional aeromagnetic interpretation, ground magnetic survey and stream sediment sampling. Aeromagnetic interpretation identified some NNW oriented magnetic highs which were later attributed to magnetite bearing sandstones and dykes. The ground magnetic survey was designed to test one of these magnetic highs but was later halted as preliminary data suggested that the magnetic high was due to stratigraphy and not pyrrhotite mineralisation. No significant gold values were found from stream sediment sampling.

Mining Development Corp Pty carried out rock chip sampling, geological mapping and stream sediment sampling in the western parts of the tenement. The results produced no gold above the detection limit but did show some anomalous arsenic values of up to 290ppm and lead values up to 1643ppm.

## **OBJECTIVES OF 2008 EXPLORATION PROGRAM**

### **Aircore Drilling**

An aircore drilling program covering most of the McKinlay (EL23824) and a portion of Mt Wells (EL22301) tenements was designed to provide broad-scale geochemical reconnaissance sampling of bedrock concealed beneath black soil and alluvial sediments of the floodplain of the McKinlay River and its tributaries. The program comprised of 135 holes on a 700x700m grid covering the western portion of Mt Wells tenement (figure 3) and McKinlay EL 23824 (adjacent to the east). Of the 135 hole program, 38 were located on the Mt Wells tenement.

Anticipated maximum depth of holes was 21 metres indicating the maximum total metres for the program as 800m.

## WORK COMPLETED

### Aircore Drilling

Out of the 38 holes programmed within EL22301 only 5 have been drilled, in the northern portion of the tenement (figure 3). Holes were excluded from the program due to access difficulties (vegetation), occurrence of basement outcrop in lieu of predicted alluvial cover, and early termination of the program due to rig breakdown and change of priorities. Completed holes are displayed on figure 3. A total of 72m was drilled and 15 samples collected. The average depth of the holes was 14m. Three of the 5 successfully penetrated weathered basement beneath the alluvial cover.

## GENERAL GEOLOGY

Mt Wells tenement is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places, medium grade, metamorphic assemblages. Most of the tenement is within the Burrell Creek Formation of the Finnis River Group, except for the northern parts of the tenement which contains Mount Bonnie Formation and a portion of Gerowie Tuff (figure 4).

The rocks have undergone tight to isoclinal folding about NNW-SSE axes which plunge mainly to the north at shallow angle. Both bedding and cross faulting have deformed the units. Quartz veins are generally confined to the axial planes of the folds. These structural settings are known as major depositional styles for gold mineralisation in Pine Creek Orogen. A fault passing through the northern portion of the tenement and trending NE-SW has been interpreted from the regional magnetic data (figure 4). Furthermore another fault has also been interpreted from magnetic data as trending NW-SE (parallel to the Pine Creek Shear zone), but appears to be cut off by the NE-SW trending fault to the south (figure 4).

## RESULTS AND INTERPRETATION

### Aircore Drilling

The results did not show any anomalous gold values in the northern portion of the tenement. The highest gold value obtained is 0.03g/t Au (hole WNAC003) which is a sample of what appears to be a paleochannel filled with sands and alluvium. Arsenic and lead values are not as high as previously encountered in the McKinlay tenement. The highest arsenic value is 41ppm (WNAC001) and the highest lead value is 91ppm (WNAC001, figure 4), values not considered to be of particular geochemical significance.

The rock types encountered in the drillholes are mainly greywackes and phyllites of the Burrell Creek Formation. The cover consists mainly of clay and colluvium and in some holes alluvium. It is on average

8m thick but can be up to 16m thick (WNAC003, rig did not penetrate the cover) as it appears that the hole is located on top of a paleochannel.

## **PROPOSED WORK**

Results from the previous exploration indicate potential gold mineralisation in the southern parts of the EL22301 tenement (near Mt Wells Tin mine). This area is poorly explored to date and a review of the previous work as well as a new drilling program should be planned in the vicinity of the Mt Wells tin mine. Some areas of the tenement still remain unexplored, mainly due to the fact that a lot of the tenement is under black soil cover. This remainder of the 2008 aircore drilling program on the Mt Wells tenement should be completed in 2009 to test for any potential gold mineralisation under cover.

## **EXPENDITURE**

• Wages/Salaries	\$ 10,028
• Consultants	\$ 550
• Drilling	\$ 17,261
• Assay	\$ 940
• Travel & Accommodation	\$ 5,698
• Vehicle operating costs	\$ 2,056
• Administration (15%)	\$ 5,480
<b>Total</b>	<b>\$ 42,013</b>