

## **Report on the aircore drilling program of Anomaly 7**

**16 August 2012**

Location	Annaburroo Station
Drill rig	Explorer 200 Aircore rig (Underdale Drilling)
Number of lines	3 (2 lines of 13 holes separated by 1 line of 4 holes; 200m apart)
Number of scheduled holes	30
Number of holes drilled	33 (1 repeat and 2 extra holes)
Total metres drilled	1166
Number of samples submitted	301
Sampling frequency	4 metre composites
Assaying	Au; Ag and As Fire assay by Amdel P/L
Drilling dates	03.08.12 – 14.08.12

### **Methodology**

Samples from each 1m interval were collected by bucket and placed in heaps, samples from the heaps were then sieved and washed and the chips collected into chip trays. 4 metre composite samples were taken into calicos for assay. Also any samples that were of particular interest were analysed by Niton XRF. Particular note was taken of any occurrence of quartz in the samples when they were logged.

### **Drilling**

Drilling was by aircore blade and the hammer was used where applicable, this was mainly at the western end of the two long lines where drilling proved to be problematic in terms of getting to any depth in the highly variable lithologies encountered. Variability in drilling is illustrated by the number of metres drilled per full day, varying from 61m (western end) to 233m at the eastern end where drilling was much easier.

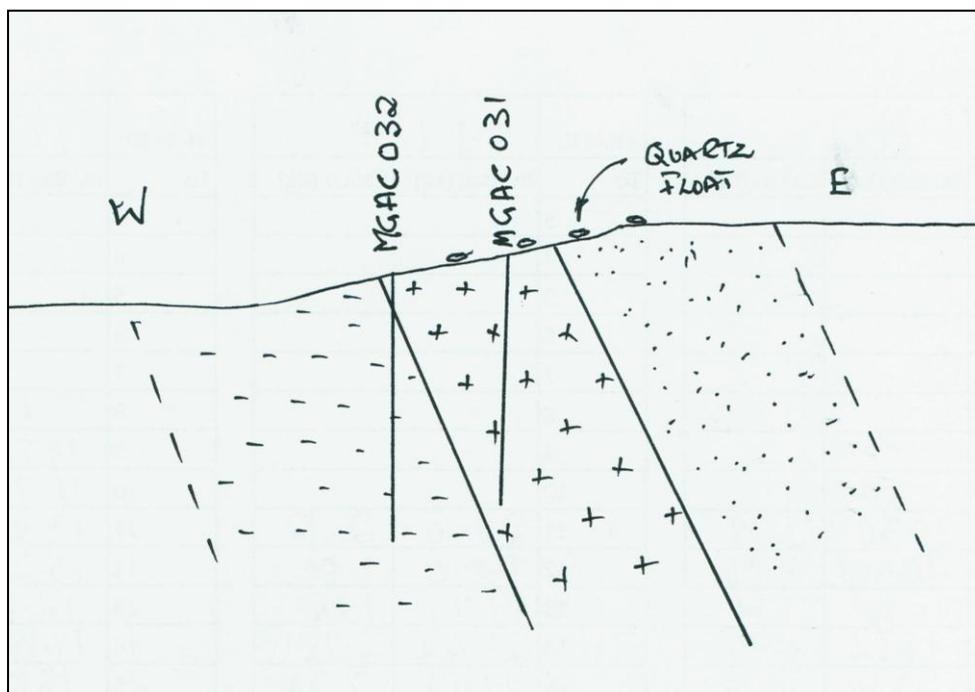
In hole MGAC014 drilling by blade proceeded to 30m when a quartzite band was encountered. It was decided to try the hammer to penetrate below the band which was easily passed through. Below the quartzite was clay which passed into very heavily fractured hard black Fe stained material, this sequence being interpreted as a palaeosurface within the Palaeozoic. The drill string was moving up and down easily within this lithology with no signs of bogging, however, when the hole was canned at 34m due to a lack of mineralisation, the hammer became bogged when attempts were made to retract it through the quartzite band to the point when rotation ceased.

## Results

In MGAC001 the black volcanic lithology at the end of the hole was of very similar appearance to the lithology encountered in the RC hole recently drilled in the Mervs Prospect which indicated gold on the Niton XRF. This was tested by the Niton XRF and showed 12ppm gold (sample 14135 at 21-22m), however this may easily be due to spectral confusion by the machine.

Most holes did not have any quartz or very little. MGAC022 however had significant amounts of quartz, with the driller reporting over a metre of straight quartz at around 16 – 17m depth. The hole was drilled into highly weathered granitic material that had an anomalous brown surface soil and termite mound colour among the local light grey soil colours. The brown soil was followed to the North for 400m and the strike direction along the margin was determined to be N – S. As it crossed the E – W trending road its width was approximately 35m. Quartz float was also found to the East of the anomaly on higher ground, so it must be assumed that the lithology flanking the anomaly to the East also hosts significant quartz veins. The dip deduced from bits of core that came up with the drill chips throughout the program was always at about 75°.

2 extra holes were planned in order to test the parameters of the anomaly. MGAC031 was drilled to test the continuation of the anomaly northwards i.e. 50m northwards along the perceived strike from MGAC022 and showed very similar lithology. MGAC032 was drilled near the western border of the anomaly to test the direction of dip, this hole had 2-3 m of heavily weathered granitic material before entering a shale/siltstone lithology, indicating a dip to the East. It also verified soil colour to be an indicator as to what lies beneath.



Conceptual cross section of the Quartz rich zone with the granitic material having the brown soil colour. MGAC022 would lie in a similar position to MGAC031

In the image below the N –S striking soil anomaly appears beside an obvious geobotanical /lithological anomaly that crosses line1 between MGAC009 and MGAC010. Neither of these holes intersect the soil anomaly, but MGAC010 does have significant quartz between 6 and 14m indicating a high probability of a southerly continuation of the quartz rich zone.



Google Earth image of relevant lengths of the two long drilling lines. Red strikes across the lines indicate the approximate positions of MGAC022 and MGAC023 on the top line and MGAC009 and MGAC010 on the bottom line. The geobotanical/lithological anomalous N – S striking feature that is related to the occurrence of vein quartz is clearly visible lying between these points.

No visible gold was seen in the quartz chips and only the assay results will determine whether to proceed with further investigation.