

22 May 2015

# Gold Intersected in Drilling at Canegrass (WA)

## highlights

- Gold intersected in Aircore drilling at Canegrass
- Best intersection of 8m @ 2.03 g/t Au
- Mineralisation remains open beyond current drilling
- Small follow-up drilling program proposed for current June quarter



## Canegrass Gold Project (WA)

### Tenements E58/232, E58/236 & E58/282

Flinders Mines Limited (FMS) 100%

New assays have returned gold intercepts from a March drilling program by Flinders Mines Limited (ASX: "FMS") on the Company's wholly owned Canegrass project in central Western Australia.

The small Aircore (AC) drilling program was undertaken at the project's Honeypot and Boulder gold prospects located approximately 60km south east of Mt Magnet (Figure 1). This program was designed to follow up the significant gold in soil anomalies identified during previous phases of exploration. A total of 106 holes for 1,904m were drilled at the Honeypot Prospect, which remains open to the north, and 30 holes for 753m at the Boulder Prospect (Figures 2 and 3).

## Aircore Drilling Results

All assays for the drilling have now been received and verified. The highlight is an intersection of 8m @ 2.03 g/t Au from 12m in hole HAC022 at the Honeypot Prospect (Table 1 and Figure 2).

Other results at the Honeypot Prospect include a trend of holes with anomalous gold values up to 68 parts per billion (ppb). This trend is coincident with a significant

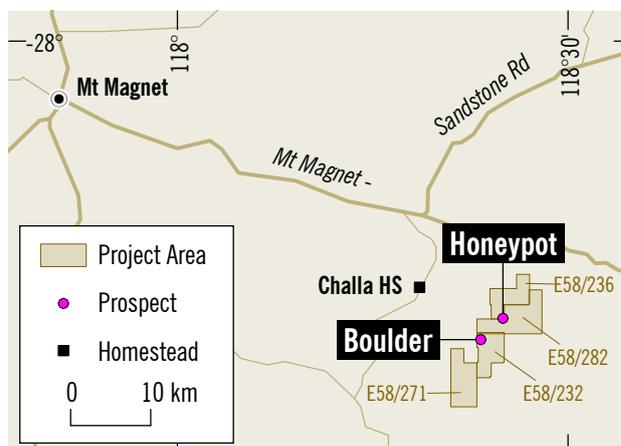


Figure 1 : Canegrass Gold Project, located approximately 60km SE from Mt Magnet, Western Australia

Table 1 : Significant intersections summary for 2015 AC drillholes.

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au g/t
HAC022	Honeypot	12	20	8	2.03
BAC007	Boulder	16	20	4	0.13
BAC025	Boulder	12	16	4	0.13
BAC030	Boulder	24	28	4	0.20

All other holes returned intersections less than 0.10 g/t Au.

north-south shear zone clearly visible on regional magnetic datasets (Figure 2). Drill holes along this shear zone intersected a very deformed and foliated mafic schist as well as late stage underformed granitic dykes and quartz veining. Hole HAC022 is located at the northern end of this trend and the mineralisation remains open to the north. It is also of interest to note that the identified mineralisation does not appear to adequately explain the significant soil anomaly in the area.

At the Boulder Prospect, only very low grade mineralisation was intersected (Table 1) with the best result being 4m @ 0.20 g/t Au from 24m in hole BAC030 (Figure 3).

### Further Work

A small (~A\$40,000) follow-up Aircore drill program is planned in June to extend the current drilling to the north to cover the intersection of the major shear zone and a secondary fault (Figure 2). Given the result in hole HAC022, this area now represents the primary target for further work.



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MANAGING DIRECTOR

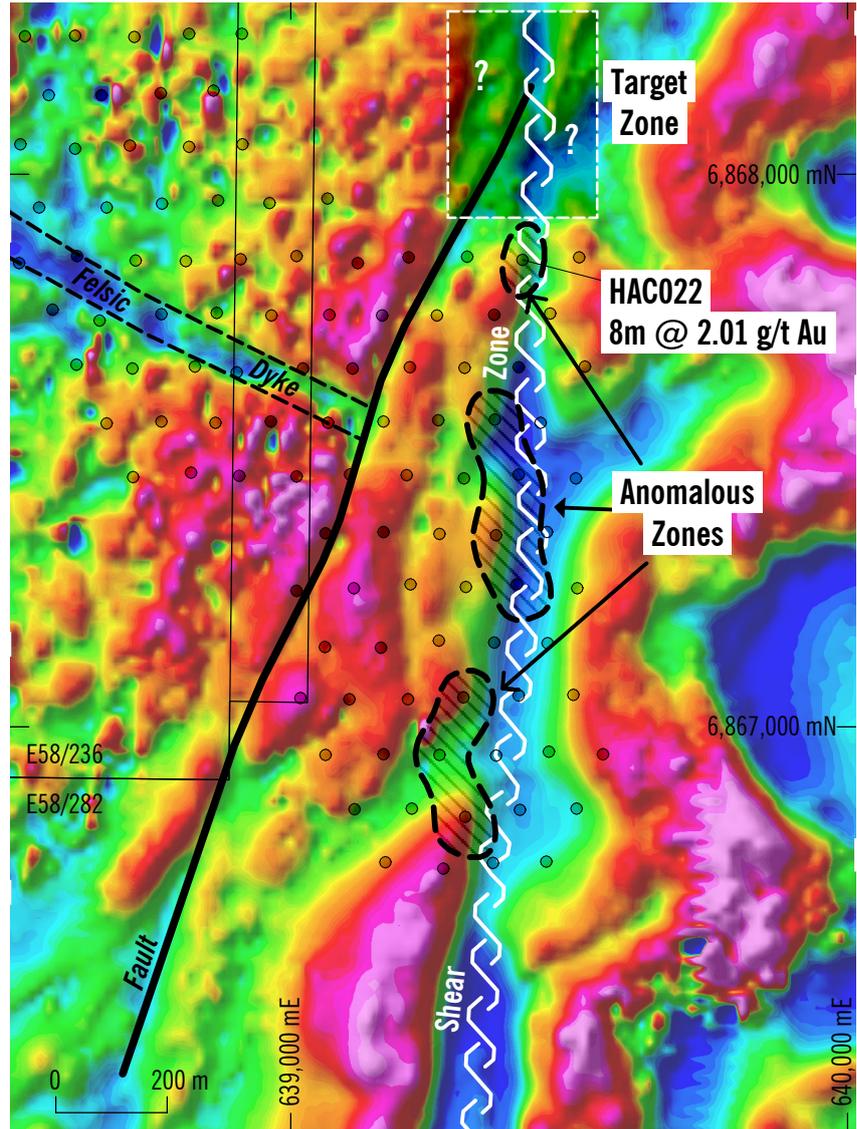


Figure 2 Honeygot prospect AC drillholes over ground TMI (magnetic) image.

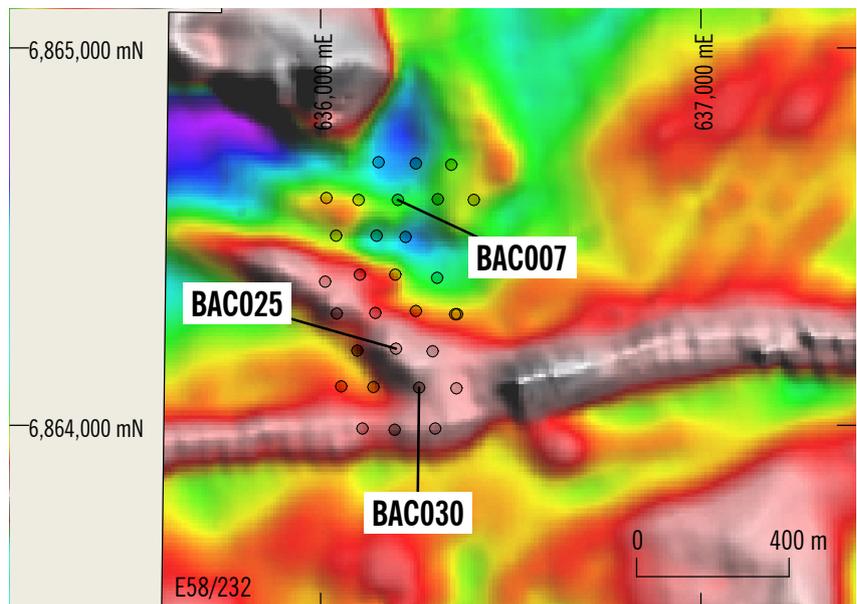


Figure 3 Boulder prospect AC drillholes over regional TMI (magnetic) image.

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## QUALIFYING STATEMENTS

### Forward-looking statements

*This release may include forward-looking statements. These forward-looking statements are based on management's expectations and beliefs concerning future events as of the time of the release of this document. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, some of which are outside the control of Flinders Mines Limited, that could cause actual results to differ materially from such statements. Flinders Mines Limited makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release.*

### Competent Persons

*The information in this report that relates to Exploration Targets, Exploration Results, or Mineral Resources is based on information compiled by Dr Graeme McDonald who is a member of the Australian Institute of Mining and Metallurgy and a full-time employee of Flinders Mines Limited. Dr McDonald has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr McDonald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## JORC 2012 - Table 1

### Canegrass Gold Project, May 2015

#### Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• Air-Core (AC) drilling was used to collect 1 to 4m downhole samples for assaying.</li> <li>• Typically, a sample up to 5kg was collected using a riffle splitter. All samples were sent for analysis via ICP-OES and ICP-MS.</li> <li>• Grade standards (Certified Reference Materials – CRM's) and field duplicate samples were used to monitor analytical accuracy and sampling precision.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• All downhole samples were collected from Air-Core (AC) drill holes of approximately 85mm diameter utilising a tungsten blade bit.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• Sample quality was continuously monitored during drilling to ensure that samples were representative and recoveries maximised.</li> <li>• AC sample recovery was recorded as good (G) or poor (P) based on visual appraisal of sample size. The majority of all samples were logged as good.</li> <li>• No assessment of loss/gain of fine/coarse material was undertaken.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• Detailed geological logging of all AC holes captured various qualitative and quantitative parameters such as rock type, mineralogy, colour, texture and sample quality.</li> <li>• AC holes were logged at 1m intervals.</li> <li>• All AC sample chips and piles were photographed for future reference.</li> <li>• Logging data is collected on paper and entered into excel spreadsheets. The data is subsequently validated and downloaded into a dedicated Geobank database for storage.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• AC drilling samples were collected in pre-labelled bags via a riffle splitter mounted directly below the cyclone.</li> <li>• All samples were collected dry.</li> <li>• Samples were stored on site prior to being transported to the laboratory.</li> <li>• Samples were sorted, dried and weighed at the laboratory where they were then crushed and riffle split to obtain a sub-fraction for pulverisation. The pulverised sample was reduced further and combined with various reagents prior to analysis.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• All AC samples were submitted to MinAnalytical laboratory in Perth, an accredited laboratory with the National Association of Testing Authorities (NATA).</li> <li>• MinAnalytical completed both the sample preparation and analytical assaying.</li> <li>• All samples were analysed for Gold via ICP-MS and a large number of major and trace elements via ICP-OES.</li> <li>• Field duplicates were collected and inserted anonymously into the sample stream at a rate of 2 per 100 samples.</li> <li>• Pulp standards (CRM's) were inserted into the sample stream as blind samples by field geologists at a rate of 5 per 100 samples.</li> <li>• Laboratory duplicates and standards were also used as quality control measures at different sub-sampling stages.</li> <li>• No formal analysis of sample size versus grain size has been undertaken, however, the sampling techniques employed are industry best practice.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• Significant intersections have been independently verified by company geologists.</li> <li>• A small number of samples (13) were re-split and assayed via the fire assay technique using a 25g charge. No significant difference to the primary assay via ICP-MS was identified.</li> <li>• No twinned holes were drilled.</li> </ul>

<b>Criteria</b>	<b>Commentary</b>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Drillhole collar locations have been surveyed using a hand held GPS with an accuracy of &lt; 5m for easting and northing coordinates. The elevation (RL) was determined by placing the hole collar's x, y coordinates on the digital terrain model (DTM).</li> <li>• Collar surveys are validated against planned coordinates and the topographic surface.</li> <li>• Downhole surveys have not been carried out as the vast majority of the drillholes are relatively shallow meaning that any minor departures from the planned drilling direction will have minimal to no impact.</li> <li>• The primary grid used is Map Grid of Australia 94, Zone 50 (GDA94). Vertical datum is the Australian Height Datum (AHD).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• For the AC drilling, a nominal spacing of approximately 100m by 100m is achieved. Each drill line is offset 50m from the previous to achieve a better coverage of the area.</li> <li>• No Mineral Resource or Reserve is being reported for this drilling.</li> <li>• The majority of samples were composited to 4m intervals with others between 1 to 4m as required depending on hole depth.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• The AC holes were drilled approximately at right angles to the strike and dip of targeted structures and geology where known.</li> <li>• The source and orientation of any mineralisation was unknown at the time of drilling.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• Sample chain of custody is managed by Flinders.</li> <li>• Samples in calico bags are packed into polyweave bags and then placed into heavy duty bulk bags for transport to Mt Magnet. They are then transported via commercial freight directly to the laboratory.</li> <li>• Consignment notes for each submission are tracked and monitored.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• No formal audits or reviews have been undertaken.</li> </ul>

## Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The Canegrass Gold Project comprises three 100% FMS owned tenements, E58/232, E58/236 and E58/282, located approximately 60km SE of Mt Magnet.</li> <li>Part of the Honeypot Prospect is covered by Prospecting Licences (P58/1584 and P58/1585), held by a third party.</li> <li>The tenements lie within the Badimia Native Title Claim.</li> <li>The tenements straddle the boundary between the Challa and Windimurra Pastoral Stations.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Very little previous exploration has been undertaken by other parties in the immediate area of the drilling. However, regional rock chip and soil sampling programs have been undertaken by various explorers. Maximus Resources drilled a small number of AC and RC holes in the area. Flinders have also defined Magnetite Fe-V resources within the region.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The local geology is dominated by the Windimurra Igneous Complex (WIC). The WIC is a large differentiated layered ultramafic to mafic intrusion emplaced within the Yilgarn craton of Western Australia. It outcrops over an area of approximately 2,500km<sup>2</sup> and has an age of approximately 2,800Ma. The complex is dominantly comprised of rocks that can broadly be classified as gabbroic in composition. It is dissected by large scale, strike slip shear zones. The mineralisation appears to be associated with structurally late and undeformed quartz veining. In the case of the Honeypot prospect, the quartz veining and gold may be associated with a late crosscutting granitic dyke. Both prospects are close to large late stage brittle fault zones identified on regional magnetic images.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A total of 106 AC holes for 1,904m were drilled at the Honeypot Prospect and 30 AC holes for 753m at the Boulder Prospect. Relevant details for all drill holes have been tabulated previously.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>All intersections are determined using a minimum 0.10 g/t Au assay. There was no internal dilution. Quoted intersections have been determined using length weighted averages.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Mineralisation is present within the regolith and is assumed to be relatively flat lying. All drillholes were drilled at an angle of 70 degrees. Thus, any intersection represents an approximation of the true width of the mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate diagrams are included as parts of the accompanying release, including a plan of drill hole collar locations.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Information for all drill holes has been reported previously. Significant intersections have been included for assays &gt; 0.10 g/t Au. All other assays are below this level.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>There is very little outcrop in the drilling areas. The AC drilling has been undertaken to identify the source of significant Au in soil anomalies identified via sampling in 2012/13. A detailed ground magnetic survey was also undertaken at this time to help identify geological and basement structural controls on mineralisation.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Further drilling is planned to follow up the significant intersection that remains open to the north at the Honeypot prospect.</li> </ul>