



magnetic resources<sup>NL</sup>

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Level 1  
44A Kings Park Road  
PO Box 1388  
West Perth WA 6872  
Telephone 08 9226 1777  
www.magres.com.au

ABN 34 121 370 232

## 6KM OF GOLD GEOCHEMICAL TARGETS IDENTIFIED AT MERTONDALE

### Mertondale

Magnetic Resources has carried out reconnaissance shallow geochemical drilling on several target areas within the 81sq.km exploration licence E37/1258 at Mertondale, 20km NW the Cardinia Gold Project (193,000oz) and only 5km west of the Mertondale Deposit (395,000oz). The drilling forms part of a programme to test numerous target areas identified from interpretation of detailed 100m spaced aeromagnetic image data on its extensive tenement holdings in the Leonora area. Field work at Mertondale indicates that hardpan (cemented colluvium) cover is widespread and likely to render historical soil surface sampling ineffective. Sampling below the hardpan cover is likely to be much more effective in testing for the presence of gold mineralisation. Shallow RAB drilling (1 to 5m depth) at 50m intervals along scout lines 400m apart was carried out over 22 target areas with anomalous gold and pathfinder elements being identified at 7 of these targets as summarised in Figure 1.

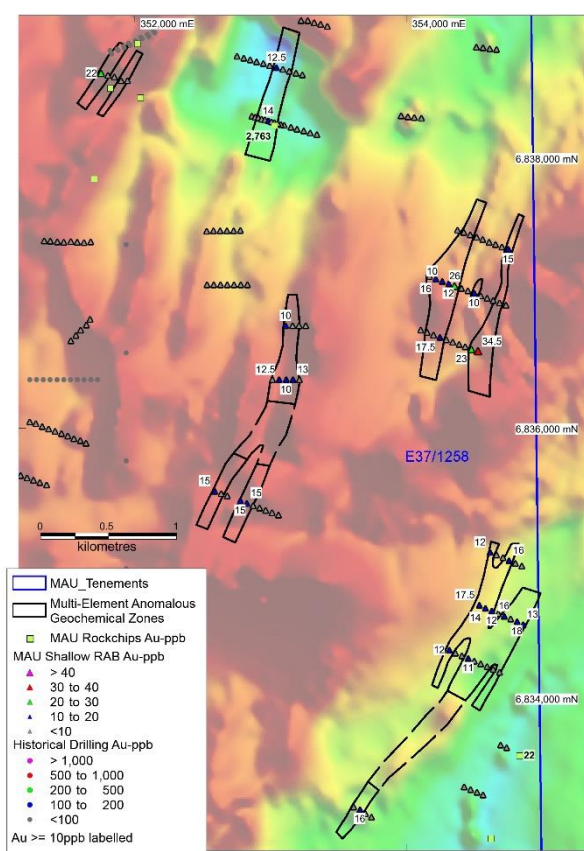


Figure 1 Shallow RAB geochemical targets superimposed on aeromagnetics

Anomalous gold values in highly leached saprolite below hardpan range from 10 to 35ppb compared to background values of 1 to 4ppb. Significantly, many of the anomalous gold values are supported in the same or adjacent holes by anomalous pathfinder elements such as silver, bismuth, arsenic, molybdenum and tungsten which indicate **coherent trends around 1km of strike, open along strike, and with potential to extend over an aggregate strike length of six kilometres.**

Magnetic is encouraged by these initial results from an area in a promising geological setting for gold where previous exploration is likely to have been ineffective and where very little historical drilling has been carried out. A programme of follow up geochemical drilling is being planned, to test the extent of the anomalous zones and to identify targets for deeper drilling.

Magnetic Resources Managing Director commented, “we are very encouraged by these large size gold and multi-element geochemical targets identified to date, totaling 6km in length, which are prospective for large size deposits. These extensive gold targets are found in an emerging gold region where Kin Mining have defined a high-grade deposit at Cardinia and are also working on the adjacent Mertondale Deposit, and we look forward to defining these anomalies and following them up with AC drilling. Note that all previous soil sampling was ineffective and opens up the prospectivity of all of the Mertondale and Christmas Well tenements.”

For more information on the company visit [www.magres.com.au](http://www.magres.com.au)

George Sakalidis  
Managing Director  
Phone (08) 9226 1777  
Mobile 0411 640 337  
Email [george@magres.com.au](mailto:george@magres.com.au)

The information in this report is based on information compiled by George Sakalidis BSc (Hons), who is a member of the Australasian Institute of Mining and Metallurgy. George Sakalidis is a Director of Magnetic Resources NL. George Sakalidis has sufficient experience which is relevant to the style of mineralisation and type of deposit 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'. George Sakalidis consents to the inclusion of this information in the form and context in which it appears in this report.

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>RAB geochemical drilling below hardpan to produce 1m samples laid out on the ground and sampled manually to produce 2-4m composite samples of approximately 2-3kg to be pulverized to produce a 10g charge for</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Rotary air blast</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Chips samples of highly leached saprolite were not logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>1m RAB samples were sub sampled using a trowel scoop. 2kg of initial sample was considered adequate to provide a representative sample.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were dispatched to MinAnalytical laboratory in Perth where the samples were pulverized and a 10g sub sample analysed using an aqua regia digest and determination of Au (lower limit of detection 1ppb), Ag, As, Bi, Cu, Mo, Ni, Pb, Sb, Te, W and Zn by ICPMS. Aqua regia will dissolve most oxides, sulphides and carbonates but will not totally digest refractory and silicate minerals. In a weathered, oxidized environment aqua regia digestion is considered adequate for exploration purposes. QA/QC measures included repeat analyses and the use of internal lab standards which indicated acceptable levels of accuracy and precision although in rare cases there is some indication of the presence of coarse gold.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Where duplicate analyses of individual samples were made the analytical results were averaged.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were located using a hand held GPS with an accuracy of +/- 4m.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was carried out at 50m spacing along drill lines. 1m RAB samples were manually composited into samples of 2-4m.</li> </ul>
Orientation of data in	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and</li> </ul>	<ul style="list-style-type: none"> <li>Drilling of vertical holes was carried out</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>relation to geological structure</i>	<p><i>the extent to which this is known, considering the deposit type.</i></p> <ul style="list-style-type: none"> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	perpendicular to target strike.
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were stored in a locked freight container in Laverton prior to dispatch to Perth using a commercial freight company.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sampling techniques and results have not been subject to audit.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mertondale is situated on exploration licence E37/1258 held by Magnetic Resources NL. The licence is granted with no known impediments to obtaining a licence to operate.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mertondale has been subject to systematic surface sampling by previous explorers but with records of very little drilling being completed. Available historical data has been compiled.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mertondale is situated adjacent to and west of the Mertondale Shear Zone, a known gold-bearing structure with a history of producing open cut gold mines and the site of recent successful gold exploration by other parties. The area is interpreted to be underlain by Archean greenstone belt rock types including basalt, dolerite and metasediments..</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is</i></li> </ul>	<ul style="list-style-type: none"> <li>A total of 260 shallow RAB holes (MHNRB001 to 150, total 1581m) were completed at Mertondale.. The details of this shallow geochemical drilling are not considered material at this stage other than as shown in the figures in the text.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No weighting or cutting of gold values, other than averaging of duplicate and repeat analyses.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to text.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Anomalous ranges used are stated in the text.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Geological assessment of below hardpan samples was made whilst RAB drilling was taking place.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the</i></li> </ul>	<ul style="list-style-type: none"> <li>Subject to field inspection, infill and step out shallow drilling, or other geochemical sampling, of the main gold anomalies is envisaged.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	