

# MT BERGHAUS GRAVITY SURVEY DELINEATES COMPELLING NEW DRILL TARGETS

*Located north and proximal to the 11.2m ounce HEMI deposit (ASX: DEG)*

## Highlights

- **A high resolution ground-borne gravity survey completed which has delineated 4 compelling new drill targets in proximity to extensive “gold halos” from prior drilling**
- **WA Government Exploration Incentive Scheme (EIS) grant submitted**

Mantle Minerals Limited (**ASX:MTL**) (“Mantle”) (“the Company”) is pleased to advise that it has received the results from the Gravity survey conducted at the Mount Berghaus tenement E45/ 5899.

The Company has completed significant work over the project including commissioning high resolution aeromagnetics, air core drilling and reverse circulation programs focused on magnetic and structural targets.

Drilling from these programs intersected Mallina Formation sediments along with dioritic and felsic intrusives which have generally returned geochemically anomalous gold. More recent drilling in the south-east of the project defined elevated gold over an 800m trend, with best intercepts returning 12m @ 1.37g/t Au, 32m @ 0.16g/t Au and 5m @ 1.10g/t . (ASX:MTL Release 25/11/2024).

A high-level review of the project completed by CORE Geophysics in December 2024, interpreted various magnetic trends parallel to the Mallina/Berghaus shears across the project along with discrete magnetic responses of interest. In order to further refine these responses a high-resolution gravity survey was commissioned to define the significance of these responses and prospectivity for mineralisation.

The review has delineated four key gravity targets (refer figure 1). MTB\_T1 and MTB\_T2 have the appearance of magnetic intrusives and have not been drill tested. MTB\_T3 located to the east and close to themineralised drilling is interpreted to represent alteration within the sediment. MTB\_T4 provides a discrete gravity response aligned along an interpreted magnetic structure. Depth modelling indicated all drill targets are relatively shallow beneath cover.

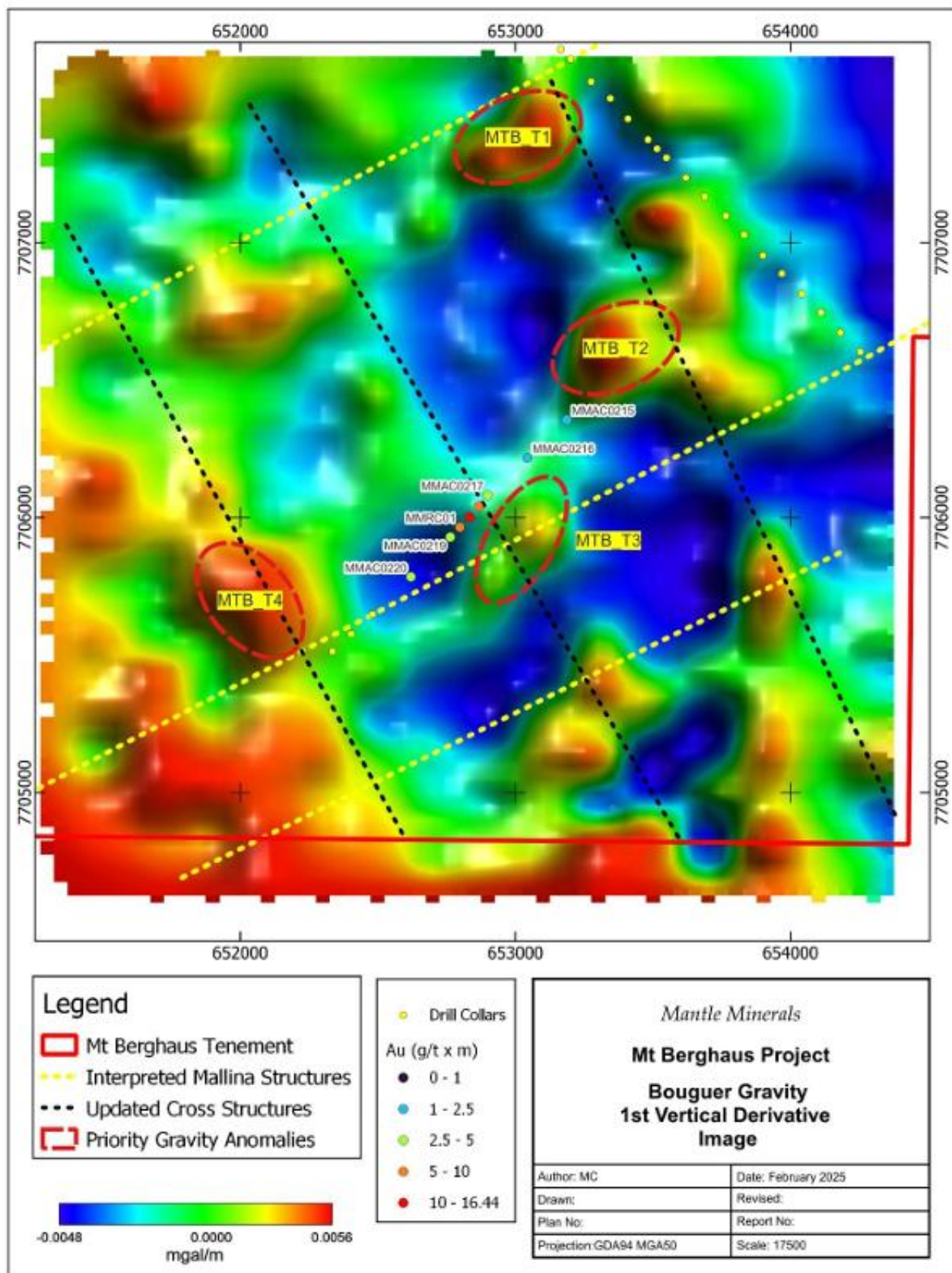


Figure 1: 1VD Gravity Derivative with targets circled. Targets are in proximity to anomalous drill collars as marked.

## EIS Grant Application

The company is pleased to advise it has submitted an EIS co-funding application to the WA state government to assist with funding the drilling of these targets.

## Other Work

The Company will soon commence fresh geophysical interpretation of its Yule River project E47/3857 covering the Sholl Shear Zone, perpendicular to the Mallina Shear aiming to identify exploration targets for future work.

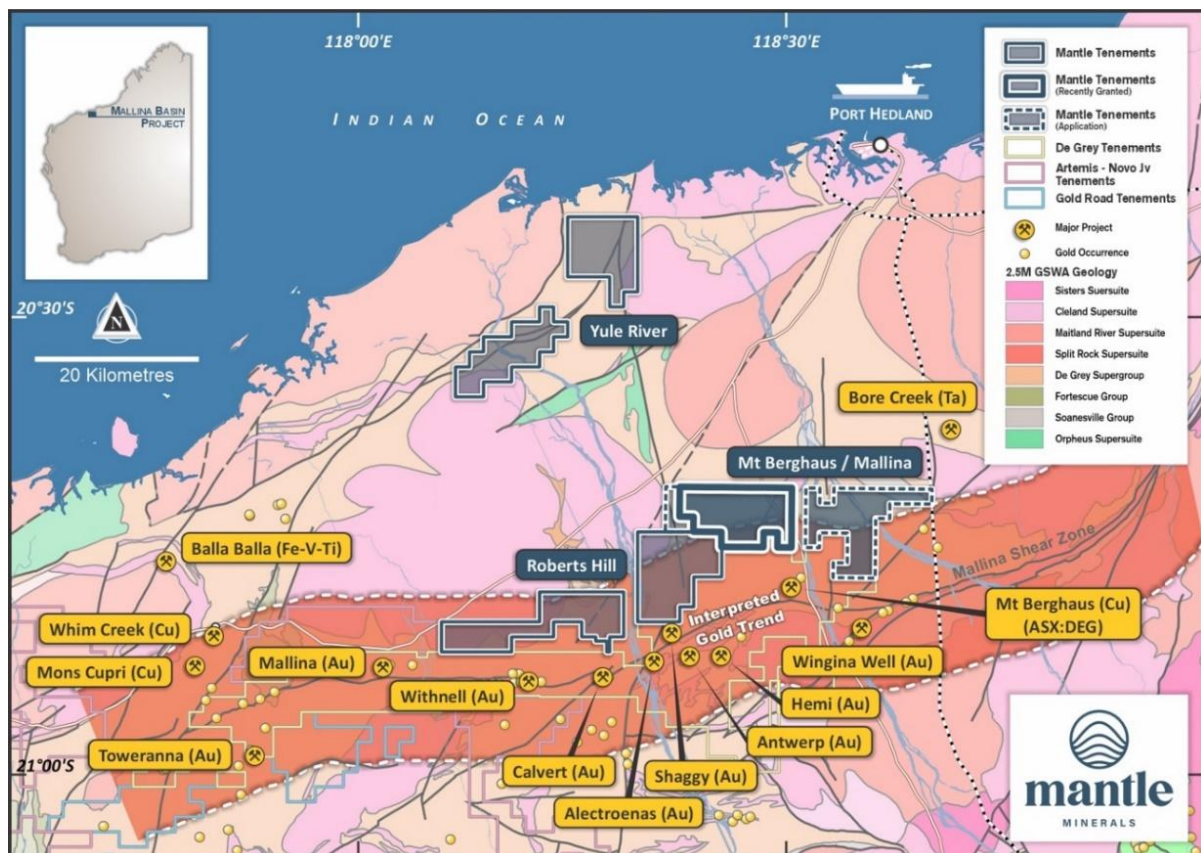


Figure 1: Roberts Hill and Mount Berghaus exploration tenements

This announcement has been authorised for release by the Mantle Minerals Limited Board of Directors.

**For Further Information, please contact:**

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## Competent Person Statement

The information within this announcement that relates to Exploration Results and Geological data at the Mt Berghaus and Roberts Hill Projects are based on information compiled by Mr. Robert Mosig and is subject to the individual consents and attributions provided in the original market announcements and reports referred to in the text of this announcement. Mr. Mosig is not aware of any other new information or data that materially affects the information included in the original market announcements or reports referred, and that all material assumptions and technical parameters have not materially changed.

Mr. Mosig is a director of the Company and he has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results Mineral Resources and Ore Reserves and he consents to the inclusion of the above information in the form and context in which it appears in this report.

## Forward-Looking Statement Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions, or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions, and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

## References

*For more information on the results disclosed in this release, please refer to the Company's ASX Announcements:*

30 July 2024                      Mount Berghaus Gold Results  
25 November 2024 RC Drilling Confirms Gold Mineralisation



## APPENDIX 1

De Grey Mining Limited (ASX:DEG) – Hemi Resource November 2024

**Table 1 Hemi - Mineral Resource Estimate (JORC 2012) by Deposit, November 2024**

Deposit	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz
Aquila				12.3	1.6	650	9.0	1.4	400	21.3	1.5	1,050
Brolga	12.7	1.4	588	30.7	1.4	1,345	14.9	1.1	546	58.3	1.3	2,479
Crow				23.2	1.1	850	14.5	1.4	668	37.7	1.3	1,517
Diucon				37.1	1.3	1,584	20.6	1.4	925	57.7	1.4	2,509
Eagle				19.7	1.2	743	29.8	1.4	1,338	49.5	1.3	2,081
Falcon				25.4	1.3	1,089	10.2	1.1	361	35.6	1.3	1,450
Antwerp							3.9	0.7	88	3.9	0.7	88
<b>Total Hemi</b>	<b>12.7</b>	<b>1.4</b>	<b>588</b>	<b>148.5</b>	<b>1.3</b>	<b>6,261</b>	<b>102.7</b>	<b>1.3</b>	<b>4,326</b>	<b>263.9</b>	<b>1.3</b>	<b>11,174</b>

Note: 0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 31 October 2024. Rounding may result in apparent summation differences between tonnes, grade and contained metal

**Table 2 Hemi - Mineral Resource Estimate (JORC 2012) by Depth, November 2024**

Depth	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz
0 – 390m	12.7	1.4	588	148.0	1.3	6,241	62.5	1.1	2,295	223.2	1.3	9,123
Below 390m				0.5	1.2	20	40.2	1.6	2,031	40.7	1.6	2,050
<b>Total Hemi</b>	<b>12.7</b>	<b>1.4</b>	<b>588</b>	<b>148.5</b>	<b>1.3</b>	<b>6,261</b>	<b>102.7</b>	<b>1.3</b>	<b>4,326</b>	<b>263.9</b>	<b>1.3</b>	<b>11,174</b>

Note: 0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 31 October 2024. Rounding may result in apparent summation differences between tonnes, grade and contained metal.

# 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><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No physical sampling of material was taken during the ground gravity or passive seismic geophysics surveys.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li><i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>This announcement refers to geophysical surveys and therefore, no drilling data.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This announcement refers to geophysical surveys and therefore, no drilling data.</li> </ul>
Logging	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This announcement refers to geophysical surveys and therefore, no drilling data.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	
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> <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>	<ul style="list-style-type: none"> <li>This announcement refers to geophysical surveys and therefore, no drilling data.</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>For the ground gravity survey a Scintex CG 6 AutogravTM Gravity Meter was used.</li> <li>This announcement refers to geophysical surveys and therefore, no assay data</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>For the ground gravity survey, repeats of readings were completed by Core Geophysics.</li> <li>This announcement refers to geophysical surveys and therefore, no sample data.</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>For the ground gravity survey, locations of the stations were undertaken using a ESVE300PRO GNSS Rover Receiver coupled with a One CHCi70+ GNSS Base Receiver. Coordinates are accurate to better than 10mm for the x, y, and z observables</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Survey stations were taken for an initial ground gravity survey at 200 x 200 metre station ground spacing. A subsequent survey was undertaken at a 50 x 50 metres spacing over areas of interest identified in the first survey.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <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>	<ul style="list-style-type: none"> <li>• For the ground gravity survey, data was collected on an equally spaced square grid in north-south &amp; east-west orientations. No consideration of orientation geological structures was considered in the acquisition.</li> </ul>
<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 taken in digital format and backed up to laptop computers the same day.</li> <li>• This announcement refers to geophysical surveys and therefore, no sample data.</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>• Reviews were carried out by Core Geophysics for the ground gravity survey</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>• All activity in this announcement was conducted within Exploration Licence E45/5899.</li> <li>• The Exploration Licence is located in the Pilbara region of Western Australia approximately 80kms south west of Port Hedland.</li> <li>• There are no known impediments to obtaining a licence to carry out exploration at the project.</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>• Very limited and poorly reported previous mineral exploration.</li> <li>• A literature review of the project area suggests that Mantle Minerals have conducted the first mineral exploration within the tenement.</li> <li>• The surrounding tenure has been heavily explored by De Grey gold</li> </ul>



Criteria	JORC Code explanation	Commentary
		(ASX:DEG) who are developing the Hemi Gold Deposit (~11.2M oz Au),
Geology	<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>• There are small and limited outcrops of in situ geology recently observed (September 2024) on the tenement near the Yule River.</li> <li>• Air Core Drilling, conducted by MTL, has confirmed there is between 5 and 20 metres of transported cover, over weathered material with widths of 10 to 60 metres.</li> <li>• Geology logged from drilling supports the interpretation of metasediments of the Mallina basin.</li> <li>• There are several locations where samples from drilling are igneous intrusive rocks which supports the interpreted geophysics.</li> <li>• Igneous intrusive rocks logged include intermediate, felsic and mafic rocks.</li> <li>• Preliminary geochemical assay results support the observations of drill sample logging in the field.</li> </ul>
Drill hole Information	<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 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></li> </ul>	<ul style="list-style-type: none"> <li>• This announcement refers to geophysical surveys and therefore, no drill hole data</li> </ul>
Data aggregation methods	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>should be clearly stated.</i>	
<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 the text accompanying this appendix.</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>• No Grades discussed.</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>• All known and relevant data has been reported.</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 main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further drilling is planned for 2025</li> </ul>