

YULE RIVER GRAVITY SURVEY HIGHLIGHTS TARGETS FOR POTENTIAL DRILLING PROGRAM

Highlights

- **High-resolution gravity and passive seismic (HVSR) surveys successfully completed across the Yule River Project, refining bedrock architecture beneath transported cover.**
- **Identification of multiple discrete gravity anomalies, including non-magnetic targets representing additional mineralisation targets not detectable by magnetics alone.**
- **Nine priority drill targets identified (YRG1–YRG9), spanning VHMS, orogenic gold and magmatic Ni-Cu-PGE mineralisation styles.**
- **Planning underway for a Phase 1 drilling program targeting multiple high-priority anomalies.**

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 Yule River Project (E47/3857) that was announced on 21 October 2025.

Yule River Project Background

The project is located approximately 35 km west of Port Hedland and is now considered highly prospective for gold, VHMS base metals, and magmatic nickel-copper mineralisation.

The survey covers a structurally complex portion of the Mallina Basin, where the Scholl Shear Zone (SSZ) and the Yule River Shear Zone (YRSZ) converge — a geological setting analogous to the region hosting De Grey Mining’s Hemi Gold Deposit.

The ground was last systematically explored by Western Mining Corporation (WMC) between 1991 and 1993. WMC completed 14 reverse-circulation drill holes (MDRC 1–14) targeting magnetic anomalies derived from early surveys. Drilling confirmed the presence of serpentinised ultramafic, felsic volcanic and cherty units, representing Archaean greenstones. Significantly, hole MDRC 4 intersected a talc–antigorite–magnetite–hematite alteration zone with geochemically anomalous gold (46 ppb Au). This alteration assemblage is strongly suggestive of the passage of oxidising silica-rich fluids, typical of Volcanic Hosted Massive Sulphide (VHMS) feeder systems.

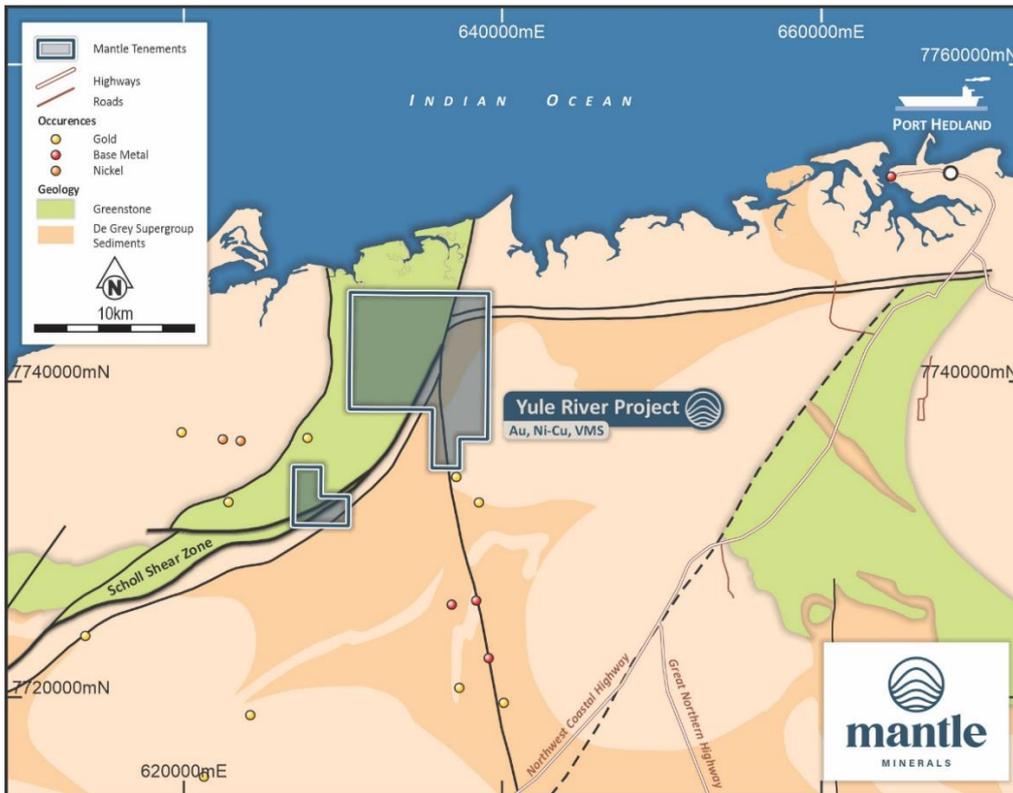


Figure 1: Yule River Project Location Map

Yule River Project Geophysical Interpretation Targeting

The geophysical program, conducted by Atlas Geophysics, was designed to target high-priority anomalies identified from the previous geophysical interpretation completed by Core Geophysics (Figure 2), which identified multiple targets with YR1 being the highest priority VHMS target.

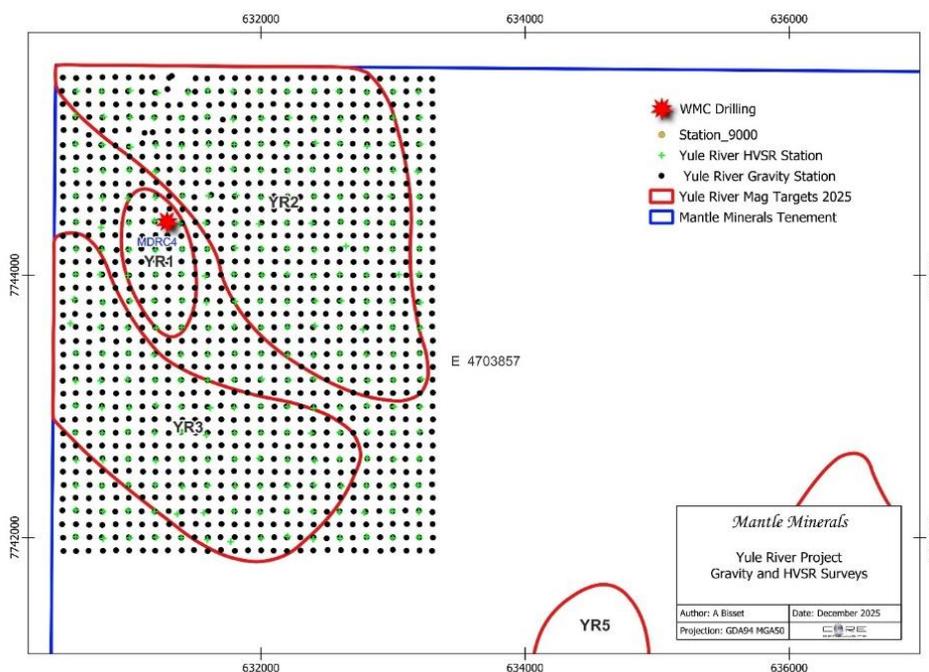


Figure 2: Yule River Project Gravity and HVSR Surveys Location

The new program was used to map bedrock topography and identify stratigraphic density variation beneath the extensive cover sequences. Core Geophysics integrated the new gravity and HVSR datasets with historical aeromagnetic data to resolve ambiguities in the magnetic data, specifically to determine whether the discrete magnetic anomalies (e.g., MDRC4) were associated with dense, massive sulphide mineralisation or simply magnetite-rich alteration, and to define drill-ready targets prospective for VHMS, Orogenic Gold, and Magmatic Ni-Cu mineralisation.

Ground Gravity Survey Results

The integration of high-resolution gravity with HVSR-derived depth constraints has proven highly effective. The HVSR data successfully mapped significant variations in cover thickness, revealing channel-like depressions and circular features that were invisible in the magnetic data. The survey results have identified discrete gravity highs with no magnetic association, which generated a new style of target (potential hematite-rich or non-magnetic sulphide bodies) that would have been missed by magnetic targeting alone.

Three broad areas were identified, a western circular feature and magnetic anomaly (**Feature 1**), an eastern circular feature with a gravity high and no magnetic response (**Feature 2**) and a residual gravity high follows the channel or bedrock low between the two circular features (**Gravity Ridge**).

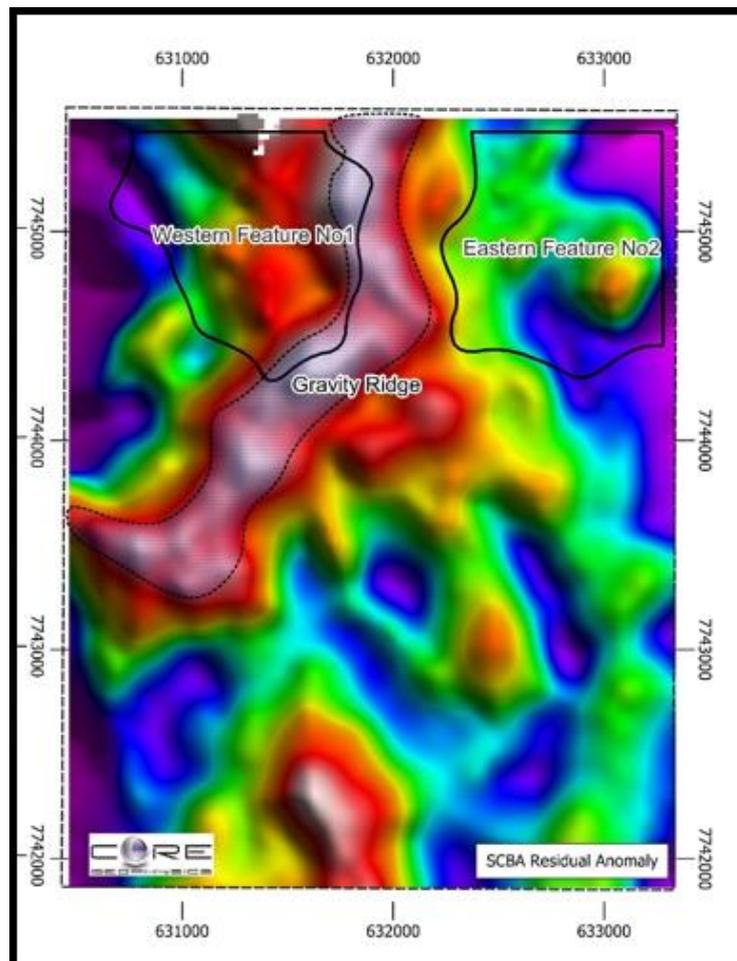


Figure 3: Yule River Project Gravity and Magnetic Features (Core Geophysics)

Potential Exploration Targets

Nine exploration targets have been identified and developed, representing a variety of mineralisation models. The targets are shown in Figure 4 below and detailed below in Table 1.

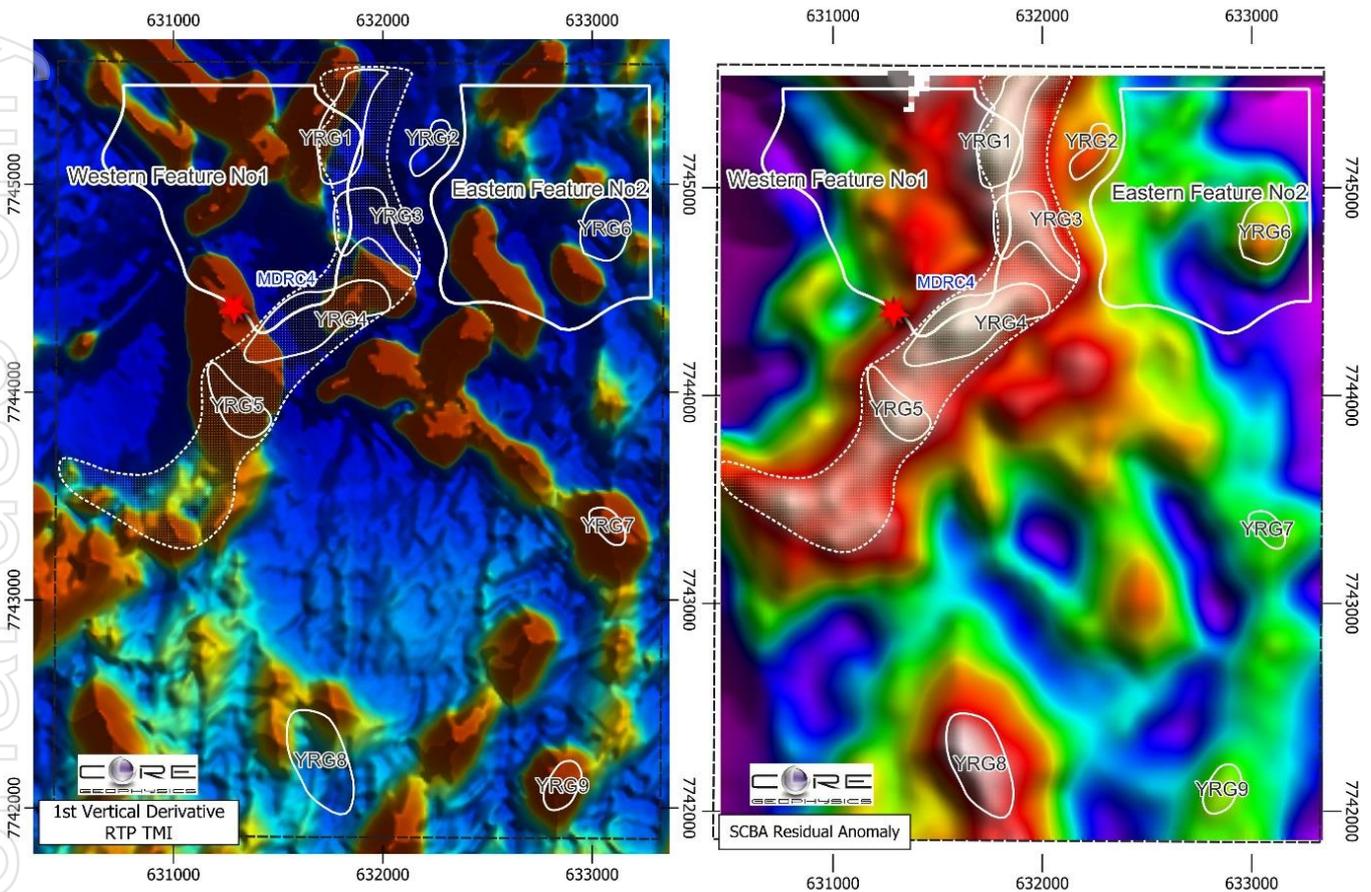


Figure 4: Yule River Project identified targets are overlain on the first vertical derivative of the RTP TMI (left) and the SCBA residual anomaly (right). Note that MDRC4 was drilled into a magnetite-rich zone just north of new target YRG5 (Core Geophysics)

East	North	Original Target	Name	Comments
631799	7745213	YR2	YRG1	Discrete, high-amplitude gravity anomaly located within the Gravity Ridge . The feature is non-magnetic and appears to wrap around the margin of a competent. Mod Priority
632227	7745149	YR2	YRG2	Discrete gravity high on the eastern margin of the Gravity Ridge . Forms a complementary structural flexure to YRG1. potentially hosting hematite-rich VHMS or gold-bearing sulphides. Mod Priority
631906	7744841	YR2	YRG3	Prominent, non-magnetic gravity high centrally located within the Gravity Ridge , equidistant between the Feature 1 and Feature 2 platforms.

East	North	Original Target	Name	Comments
631641	7744331	YR2	YRG4	Complex gravity high with variable magnetic response, located within the southern Gravity Ridge . The feature is cross-cut by SE-trending shears. Potential for both magnetic (non-magnetic) mineralisation.
631324	7743903	YR1	YRG5	Discrete gravity high located at the southern end of the MDRC4 magnetic anomaly, immediately south of Feature 1 . This represents a high-priority "offset" target
633041	7744751	YR2	YRG6	Priority Target. Discrete, non-magnetic gravity high situated within a distinct bedrock low at the centre of the Feature 2 caldera. Possible VHMS lens or a dense, altered vent complex protected from erosion.
633084	7743342	YR2	YRG7	Coincident magnetic and gravity anomaly located 1.4 km south of Feature 2 . Situated at the intersection of a major N-S shear and a late-stage NW fault. Potential (magmatic Ni-Cu target) or pyrrhotite-rich mineralisation. Lower Priority
631654	7742262	YR3	YRG8	Non-magnetic gravity high located along a flexure in the regional N-S shear corridor, ~2.3 km south of Feature 1 . Prospective for intrusion-related gold or skarn-style mineralisation. Lower Priority
632857	7742095	n/a	YRG9	Discrete, weak gravity high with a coincident magnetic response. Similar in style to YRG7, interpreted as a structurally controlled mafic intrusive or localised pyrrhotite alteration zone. Lower Priority

Table 1. Target identity, geographic location and rationale (GDA94, MGA Zone 50)

Potential Phase 1 Drilling Program

Building on the recently completed high-resolution gravity and passive seismic (HVSR) surveys, Mantle has defined a series of priority drill targets across the Yule River Project that warrant further exploration.

Mantle is presently adequately funded to commence a phase 1 drilling program to further explore the identified targets, with specific interest in YRG1, YRG3, YRG5 and YRG6. The Company will submit a Program of Work for the drill program this month with drilling planned for Q2 2026.

The Company has been attempting to engage with the relevant Native Title party regarding access for the drilling program. At this point in time the Company has not been able constructively progress these discussions and notes that timelines remain subject to heritage survey scheduling and access agreement processes.

Non-Executive Director Robert Mosig commented:

"The addition of this gravity data with our existing geophysical and geological information has significantly improved and disciplined our understanding of the Yule

River system. The results now clearly define coherent targets with characteristics consistent of a mineralised feeder structure warranting drill testing.

Importantly, Mantle has now advanced the Yule River Project from a largely conceptual greenfields opportunity to one supported by multiple, well-defined drill targets. Mantle's integrated geophysical dataset provides a strong advantage in targeting within this covered terrain."

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

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Competent Person Statement

The information within this announcement that relates to exploration results and geological data at the 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.

About Mantle Minerals Ltd

Mantle Minerals Ltd (ASX: MTL) is a Western Australian-based exploration and development company with a portfolio of battery and base-metal assets strategically located across the Pilbara and Kimberley regions.

The Company's key projects include:

Yule River Project – VHMS, orogenic gold and Ni-Cu-PGE targets near Port Hedland;

Pardoo Project – base-metal and ironstone mineralisation along the Pardoo Shear Zone; and

Carlton Hill Project – newly staked carbonate-hosted Pb-Zn-Ag ground in the north Kimberley.

Mantle remains focused on systematic, technically driven exploration to unlock value across these underexplored regions.

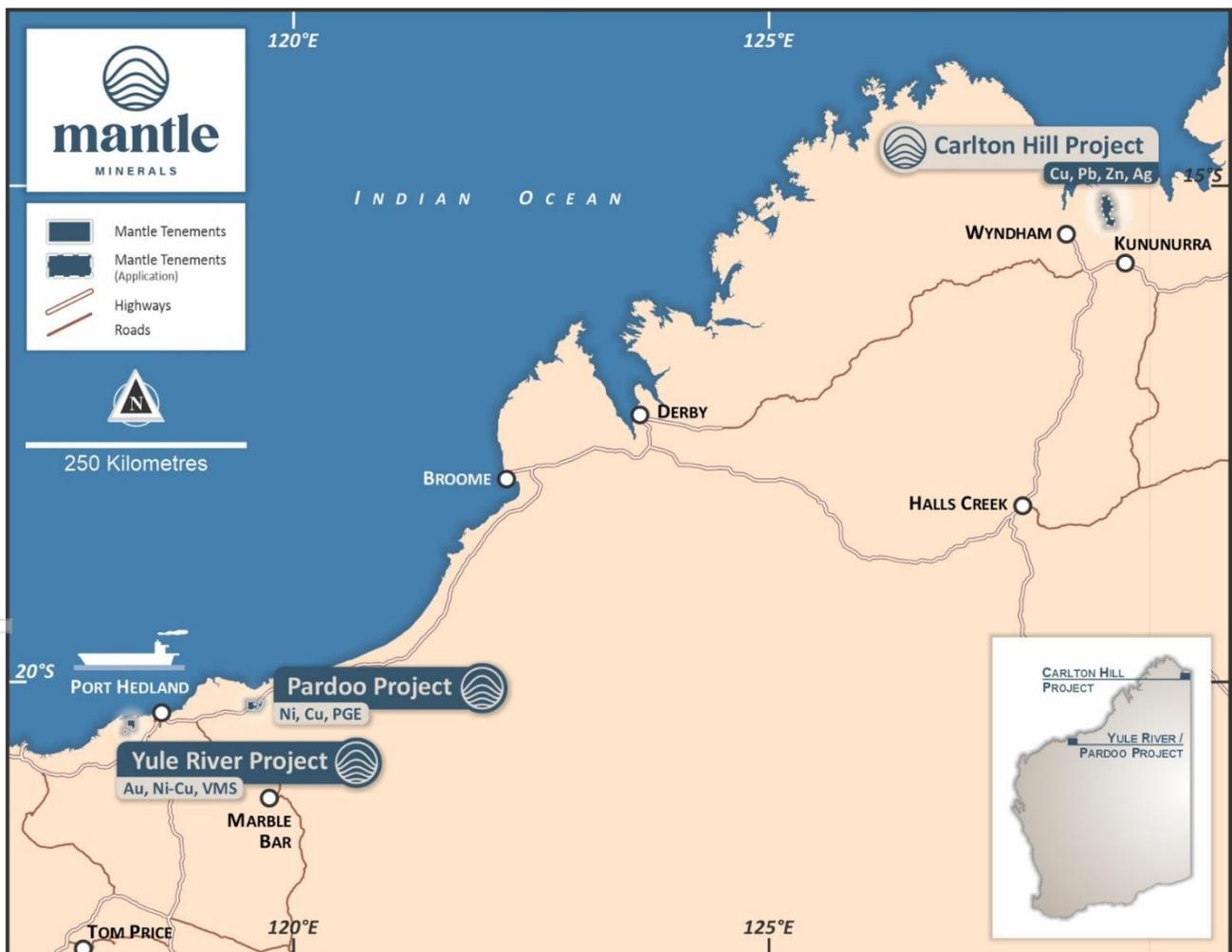


Figure 5: WA Regional Location Map

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary																																				
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> Atlas Geophysics were contracted to acquire ground gravity observations on a 100 x 100 metre grid. Atlas also acquired passive seismic readings over a 200 x 200 meter grid. Specifications for each survey are given in Table 1 and Table 2 below. Unless otherwise stated, all references to geographic coordinates in this report are in GDA94 MGA Zone 50. <p><i>Table 1. HVSR survey specifications</i></p> <table> <tr> <td>Survey Name:</td> <td>Yule River</td> </tr> <tr> <td>Magix Registration Number</td> <td></td> </tr> <tr> <td>Contractor:</td> <td>Atlas Geophysics</td> </tr> <tr> <td>Job Number</td> <td>P2025100</td> </tr> <tr> <td>Line Spacing</td> <td>200 metres</td> </tr> <tr> <td>Station Spacing</td> <td>200 metres</td> </tr> <tr> <td>Line Direction</td> <td>090 degrees</td> </tr> <tr> <td>Instrumentation</td> <td>4 x MoHo Tromino units</td> </tr> <tr> <td>Number of Stations</td> <td>252</td> </tr> </table> <p><i>Table 2. Ground gravity survey specifications</i></p> <table> <tr> <td>Survey Name:</td> <td>Yule River</td> </tr> <tr> <td>Magix Registration Number</td> <td></td> </tr> <tr> <td>Contractor:</td> <td>Atlas Geophysics</td> </tr> <tr> <td>Job Number</td> <td>P2025100</td> </tr> <tr> <td>Line Spacing</td> <td>100 metres</td> </tr> <tr> <td>Station Spacing</td> <td>100 metres</td> </tr> <tr> <td>Line Direction</td> <td>090 degrees</td> </tr> <tr> <td>Gravity Meter</td> <td>Scintrex CG5, Serial Number: 40.999743</td> </tr> <tr> <td>Number of Stations</td> <td>1073</td> </tr> </table>	Survey Name:	Yule River	Magix Registration Number		Contractor:	Atlas Geophysics	Job Number	P2025100	Line Spacing	200 metres	Station Spacing	200 metres	Line Direction	090 degrees	Instrumentation	4 x MoHo Tromino units	Number of Stations	252	Survey Name:	Yule River	Magix Registration Number		Contractor:	Atlas Geophysics	Job Number	P2025100	Line Spacing	100 metres	Station Spacing	100 metres	Line Direction	090 degrees	Gravity Meter	Scintrex CG5, Serial Number: 40.999743	Number of Stations	1073
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Drilling techniques		<ul style="list-style-type: none"> No drilling, logging sampling or assaying was conducted. 																																				
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Sub-sampling techniques		<ul style="list-style-type: none"> No drilling, logging sampling or assaying was conducted 																																				

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Criteria	JORC Code explanation	Commentary
<i>and sample preparation</i>		
Quality of assay data and laboratory tests		<ul style="list-style-type: none"> No drilling, logging sampling or assaying was conducted
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. 	<ul style="list-style-type: none"> No drilling completed. Geophysical data has been verified by external consultants Core Geophysics and the Competent Person to this Announcement.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Gravity and HVSr Data Specifications and Processing</p> <p>Atlas Geophysics were contracted to acquire ground gravity observations on a 100 x 100 metre grid. Atlas also acquired passive seismic readings over a 200 x 200 metre grid. Unless otherwise stated, all references to geographic coordinates in this report are in GDA94 MGA Zone 50.</p> <p>Note on Gravity Data Processing: The Spherical Cap Bouguer Anomaly</p> <p>All gravity data presented in this report has been processed to the Spherical Cap Bouguer Anomaly (SCBA) standard. Unlike the traditional "slab" Bouguer correction, which assumes the Earth is an infinite flat plain, the SCBA calculation accounts for the curvature of the Earth by modelling the crust as a spherical cap extending to a radius of 166.7 km from each station. This rigorous approach provides a significantly more accurate representation of the Earth's gravitational field, particularly for regional-scale surveys or areas with significant crustal density variations. By removing the geometric distortions inherent in the flat-slab assumption, the SCBA ensures that the resulting anomalies accurately reflect subsurface geological density contrasts.</p> <p>Note on the Residual Gravity Anomaly</p> <p>In interpreting gravity data, it is critical to distinguish broad, deep-seated geological features from discrete, near-surface targets that are the focus of exploration. The standard Bouguer Gravity data represent a composite signal, dominated by long-wavelength trends caused by crustal thickness variations and regional lithological changes. These powerful regional gradients can often mask the subtle, high-frequency responses associated with prospect-scale features.</p> <p>To address this, a Residual Gravity image has been generated. This dataset was created by removing the regional gradient (the background field) from the Bouguer Gravity Field.</p> <p>The resulting Residual Gravity highlights local density contrasts within the upper crust and immediate bedrock. In this dataset, positive anomalies are features that are denser than their surroundings (e.g., massive sulphides,</p>

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Criteria	JORC Code explanation	Commentary
		<p>mafic intrusions, or silicification), while negative anomalies are features that are less dense than their surroundings (e.g., deep weathering troughs or porous sediments). Therefore, the Residual Gravity dataset is the primary dataset used in this assessment to define the geometry and location of specific drill targets.</p> <p>Passive Seismic (HVSr) Processing and Calibration</p> <ul style="list-style-type: none"> The passive seismic survey employed the Horizontal-to-Vertical Spectral Ratio (HVSr) method to estimate the thickness of the cover sequence and map the bedrock topography. Data acquisition was completed using four MoHO Tromino units, with a recording duration of 12 minutes per station.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<p>Atlas Geophysics were contracted to acquire ground gravity observations on a 100 x 100 metre grid. Atlas also acquired passive seismic readings over a 200 x 200 metre grid. Unless otherwise stated, all references to geographic coordinates in this report are in GDA94 MGA Zone 50.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> No drilling conducted
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> No drilling conducted
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Core Geophysics an external consultant conducted an internal review of all collected geophysical data

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> All work completed in this assignment was conducted on the Company's Exploration Licence E 47/3857

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historical exploration activities have been reference separately within this announcement.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The region consists of Archaean granite batholiths and surrounding greenstone belts, including the Loudon Volcanic Member and the Boodarie Greenstone Sequence. Exploration focuses on deformed granite margins and sheared greenstone units. Mantle Minerals is conducting ground gravity surveys (2025–2026) to define subsurface density variations and structure beneath the cover. The project is often mentioned alongside major nearby discoveries like Hemi, suggesting similar prospectivity, particularly for structural-hosted gold
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	<ul style="list-style-type: none"> No drilling has been reported in this announcement.
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>The calibration data from Station 9000 identified two distinct acoustic interfaces, interpreted to correspond to the weathering profile described in the MDRC4 drill log:</p> <ol style="list-style-type: none"> Primary Interface (Fresh Bedrock): A dominant low-frequency peak was observed between 1.8 Hz and 2.1 Hz. Using a calibrated average shear-wave velocity (Vs) of 350 m/s, this peak yields a pseudo-depth range of 42 m to 48 m. This correlates well with the transition to fresh, competent ultramafic bedrock. Secondary Interface (Weathering Horizon): A secondary, higher-frequency peak was observed between 2.6 Hz and 3.2 Hz. Using the same velocity model, this yields a shallower pseudo-depth range of 27 m to 33 m, correlating with the top of the weathered saprolite horizon (logged at ~30 m in MDRC4). <ul style="list-style-type: none"> Based on these results, a uniform average shear-wave velocity of 350 m/s

Criteria	JORC Code explanation	Commentary
		was applied across the survey area to convert the primary resonance frequency (f_0) into the depth-to-bedrock mode
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <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> 	<ul style="list-style-type: none"> • No interpretations carried out concerning interpreted widths of potential mineralization, volume grades or other economically significant data.
Diagrams	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Plans sections and diagrams are furnished in the main body of this announcement.
Balanced reporting	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • No drilling reported in this announcement.
Other substantive exploration data	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • All meaningful data and information considered material and relevant has been reported in this announcement.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <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> 	<ul style="list-style-type: none"> • Further work including drilling is outlined in the main body of this announcement.