



24 March 2025

March Drilling Update McLaren Titanium Project

Highlights

- Drilling has consistently intersected visible heavy minerals
- Additional 10m of mineral hosting sediments identified in northern area
- Metallurgical sample collected and dispatched for test work
- Pressurised saline water encountered in several holes on northern drilling lines
- Gypsum occurrence confirmed in north-western corner of EL69/2388
- First parcel of analytical samples has been dispatched to Perth for analysis

McLaren Minerals Limited (ASX: MML) ("McLaren" or "Company"), is pleased to provide an update on the drilling program at its wholly owned McLaren Titanium Project.

McLaren Minerals are currently exploring the McLaren Deposit located approximately 40km west of Balladonia in Western Australia by means of Air Core drilling and surface geological investigations. The 2025 exploration program is progressing well and is approximately 40% complete.

The drilling program, targeting infill drilling to a previously interpreted mineral sands strandline, should be complete by mid-April. Onsite geologists have confirmed visual mineralisation within targeted sediments and are encouraged by the consistent nature of mineralising orientation. It should be noted that visual estimates recorded during drilling activities and laboratory results do not always align.

Heavy Mineral Consistently Intersected

Drilling consistently intersected sediments hosting Heavy Minerals (HM) and it is interpreted to occupy paleo marine sediments below modern cover and are predictably identified within the elevated topographic feature. The mineral hosting sediments are observed to gently rise in an easterly orientation and overlay crystalline basement displaying a consistent heavy mineral assemblage dominated by Ilmenite and observed to contain a relatively low level of trash minerals. It is noted that a vertical extension to the historical drilling has been identified in the northern area, with current drill holes intersecting an additional 10m of mineral hosting sediments to those previously interpreted. Heavy Mineral present in the metallurgical sample grid is consistent along strike within the mineralizing beds and displays predictable mineral composition. Figure 1 below displays visual confirmation of HM observed during metallurgical test holes within the current 2025 infill drilling activities.



Figure 1: HM in drillholes - Left Image MM01, central image MM06, right image MM57

Metallurgical Sample

The samples of mineralised sediments required for metallurgical test work at IHC Mining laboratory in Queensland have been collected and dispatched. The samples were taken from 69 drillholes with those holes broadly representative of the first 5 years of planned operations (Please see Figure 2 below).

The sample equated to approximately 6 tonnes of material and will be used to validate the flowsheet designed by IHC and to complete follow up tests to allow development of a slimes management strategy for McLaren. As per previous test work (ref APS ASX Announcement 24 Sept 2024) slimes settling was achieved using addition of 3% gypsum, resulting in significant improvement in flocculant dosing rates, down to 150-200g/t.

The test work produced final products of:

- Ilmenite of a suitable grade to be classified as sulphate ilmenite
- Rutile of a typical quality with 95.7% TiO_2 , 1.49% Fe_2O_3 ,
- Zircon of a typical standard zircon quality, noting levels of U + Th at 265ppm were considered very low.

Water Encountered

In very positive news, pressurised water has been encountered in 3 holes being drilled in the north-western part of the known deposit area. In these holes saline water flowed freely from the hole while the rods were downhole, and in the second hole the water flow continued after rods were withdrawn and until the hole was plugged.

The groundwater occurs within a gravel terrace draping basement clays and occurs at shallow depth (approximately 20m). The crystalline basement below saprolite clays display an amount of alteration consistent to a shearing environment. The location is identifiable in regional geophysics data adjacent to a small-scale faulting feature striking approximately north south. It is likely that the gravel terrace was formed in a fluvial drainage feature, eroding and incising the softer sheared zones in the basement, later confined by overriding cover units. Further investigation will be required to determine whether the water is of sufficient volume and quality to support operations.

Gypsum

Gypsum has been confirmed to occur in the northwestern part of the McLaren tenement holdings. The Gypsum observed is in sediments adjacent to modern alluvial drainage features

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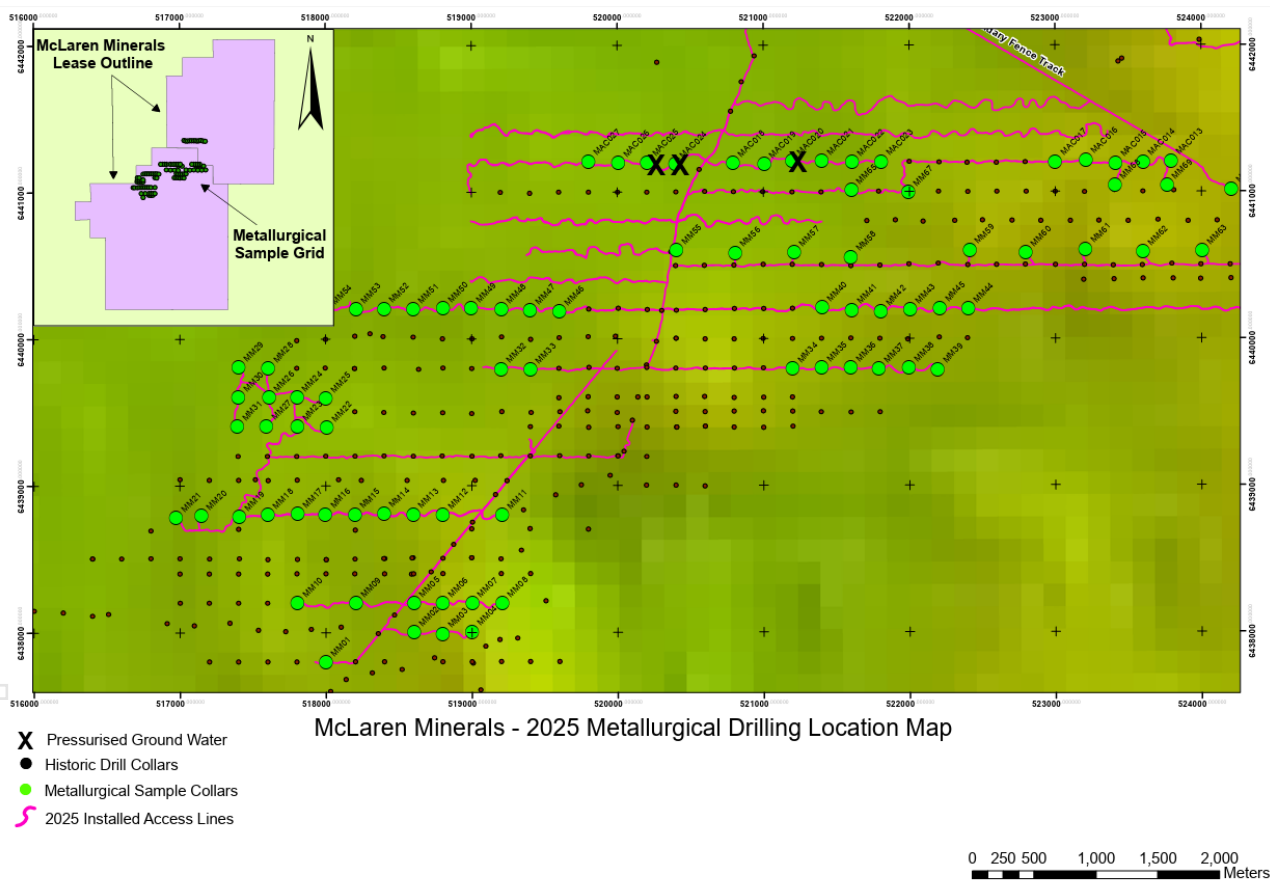
confirming the area is prospective for further occurrences. Gypsum development in modern cover units confirms the paleo marine sediment profile extending to the north of current work areas. Additional investigations will target the discovery of larger accumulations in areas adjacent to this surface material.

Grab samples were taken and will be submitted to a laboratory for further assessment.

Analytical Samples

Analytical samples are being collected from drilling and dispatched to Perth for laboratory analysis. Select Basement and Saprolite Clay samples will be submitted for multi-element analysis, while heavy mineral separation and analysis will be conducted on all samples collected throughout the drilling program.

No assays have been received so far but will be reported upon receipt.



The Geoloist Pty Ltd : 21/03/2025

Figure 2: Metallurgical Sampling drillholes and locations of pressurised groundwater

Weather

A significant weather event inclusive of rainfall in excess of 25mm impacted the Balladonia region on the evening of 12th March. This was followed by additional rainfall in excess of 30mm on the 13th so for reasons of safety and to minimise damage to access roads, drilling was paused on 13th and 14th March, before recommencing on the 15th.



McLaren Mineral's Managing Director Simon Finnis said:

"While expected, it is always gratifying to see plenty of mineral when drilling these types of orebodies, particularly when gathering samples for our important test work program. It is also very good to see an increase in the mineral sediment profile noted in the northern area.

Finding water was unexpected but a real bonus. Clearly more work is needed but for now just knowing there is pressurised water around ticks one of the boxes for our PFS.

Regarding the gypsum occurrence, we were advised by the vendor of its presence and provided with an approximate location. As outlined above, gypsum is likely to play a role in our slimes management strategy, so having a potential source within our own tenement package could offer meaningful benefits from an operating cost perspective. While we will still need to confirm the quality and extent of the occurrence, its presence is an encouraging development.

We are looking forward to finalising the program and continuing to progress our PFS."

Competent Persons Statements

The information in this report that relates to Exploration Results is based on, and fairly reflects, information compiled by Mr Adam Grogan, a Competent Person, who is contracted to McLaren, is a Member of the Australian Institute of Geoscientists (RPGeo). Mr Grogan has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results (JORC Code). Mr Grogan consents to the disclosure of information in this announcement in the form and context in which it appears.

This announcement refers to earlier releases to the ASX. The Company confirms that there is no new information or data that materially affects the exploration results or mineral resource estimates announced on 30 June 2022 and 5 August 2024, and that all assumptions underpinning the estimate continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

About McLaren Minerals Limited

McLaren Minerals is an exploration company focused on the future development of our high-value McLaren titanium project in the Eucla Basin of Western Australia. Titanium is considered a critical mineral and is essential for aerospace, defence and energy technologies.

This announcement has been authorised by the Managing Director.

For further information, please contact:

Simon Finnis

Managing Director
simon.finnis@mclarenminerals.com.au
+61 418 695 138

Paul Berson

Media and Investor Relations
Corporate Storytime
paul@corporatestorytime.com
+61 421 647 445



JORC Code, 2012 Edition – Table 1 report template

Section 1.01 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"> Nature and quality of sampling (e.g. 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. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<ul style="list-style-type: none"> Aircore drilling was used to obtain 1m interval samples for all infill drill holes, while 1.5m intervals were obtained for the Metallurgical sample holes. Each interval was captured to a fine weave calico bag. Each interval acquired was homogenized in the bag through manual mixing of the sample within the sample bag A standard sample of approximately 25 – 30g was removed from the sample bag and placed to a white pan and washed to estimate all geological attributes (SLIMES%, DOMINANT LITHOLOGY, GRAIN SIZING, INDURATION/ROCK%, THM%) Induration and rock types identified are categorized and THM% is visually estimated All geological attributes, collar position, commentary are recorded to a geological ledger during drilling and all information attained is transferred to a database at the completion of the drill hole. A standard size sample is used for all intervals to ensure a calibrated baseline to ensure confidence in visual estimates of HM%. A cone splitter is used to sample a 25% representative sample during acquisition with the samples drilled dry. Whereby groundwater saturation moistens or wets samples, the geological journal reflects such and the drilling system is arrested and flushed/dried prior to capturing the subsequent sample.
Drilling techniques	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> IDrilling contractor was appointed for the 2025 drilling program utilizing a reverse circulation drill system fitted with an aircore blade bit. Aircore drilling is considered as industry standard for Mineral Sands Exploration.

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Criteria	JORC Code explanation	Commentary
	<i>what method, etc).</i>	<ul style="list-style-type: none">• Aircore drilling with sealed RC inner tubes used to contain samples during drilling 3m runs with 3m rods.• NQ diameter rods and bits were used.• All drill holes were vertically aligned.• A Cone splitter was used to acquire a 25% representative sample for each interval.•
Drill sample recovery	<ul style="list-style-type: none">• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>• <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>	<ul style="list-style-type: none">• Drill sample recovery is monitored and noted in the geological ledger as dry, moist, wet or injected, depending on whether sample moisture is elevated due to ground conditions or drilling rig water injection.• Whereby samples are wet/injected, a note is inserted to the ledger to capture the reduced integrity of the sample.• Samples are collected at 1m intervals or 1.5m intervals depending on the intended use of the drill hole.• 1m drill intervals are collected to a calico sample bag as a 25% representative sample while 1.5m samples are collected to a calico bag for a 25% representative sample with the remaining residue being collected to a large green plastic sample bag for metallurgical test work.• Following the collection of stiff and/or moist clay intervals, the drill is cleared and the cyclone inspected/cleaned prior to capturing the subsequent intervals.• Samples generated with poor weights or excessive weights are noted in the comments field of the ledger as a "Poor Quality Sample"• The double tube system used for reverse circulation drilling is accepted as a 'clean' sample with sample captured being generated from the bit face.•
Logging	<ul style="list-style-type: none">• <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>	<ul style="list-style-type: none">• The intervals acquired during drilling are logged into a Microsoft excel logging template and immediately uploaded to a Microsoft Access Database.• Intervals uploaded to the database are validated.

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none">• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>• <i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none">• Intervals are logged for Lithology, Colour, Grainsize, Sorting, Hardness, Sample Condition, Washability, Estimated Slimes% and Estimated Heavy Mineral%, and additional comments of significance.• Every interval drilled was logged to completion.• Logging was undertaken in accordance with the Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection.•
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none">• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>• <i>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.</i>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none">• The samples drilled at 1m and 1.5m intervals were passed through a cone splitter to acquire a 25% representative sample for analytical assessment.• The samples were stored in large bulker bags in a dedicated laydown yard adjacent to the drilling grid.• Samples were dispatched from laydown facility to metallurgical laboratory.• No duplicates have been taken during drilling activities.• Twin holes of historic collar positions have been acquired to investigate historic assays as repeatable.• Laboratory standards are to be inserted during analytical assessment.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none">• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>• <i>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.</i>• <i>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</i>	<ul style="list-style-type: none">• Wet panning is implemented at the drill rig to estimate Slimes% and HM% which is sufficient to allow of identification of HM presence.• Standards are to be inserted 1:40 at the laboratory to confirm the quality of assessment from the sample treatment process.

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Criteria	JORC Code explanation	Commentary
	<i>have been established.</i>	
Verification of sampling and assaying	<ul style="list-style-type: none">• <i>The verification of significant intersections by either independent or alternative company personnel.</i>• <i>The use of twinned holes.</i>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>• <i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none">• No Assay results require verification at this stage.
Location of data points	<ul style="list-style-type: none">• <i>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.</i>• <i>Specification of the grid system used.</i>• <i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none">• Drill Collar locations are captured using a Garmin hand held GPS with accuracy +/-2m• The datum used is GDA 94 and Coordinates projected in MGA zone 51
Data spacing and distribution	<ul style="list-style-type: none">• <i>Data spacing for reporting of Exploration Results.</i>• <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>• <i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none">• Drill holes are located 240m apart and extend to 1.5km from historic drilling grids.• The spacing of drill collars is considered appropriate for later inclusion for Mineral Resource estimates.• Sample compositing has not been applied to analytical samples.
Orientation of data in relation to geological structure	<ul style="list-style-type: none">• <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>• <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>	<ul style="list-style-type: none">• The drilling traverses align to historic drilling grids aligning East West.• The orientation of the mineralisation trends North North East to South South West.• All drill holes were vertical and the orientation of the mineralisation trends relatively horizontal.• The orientation of the drilling grid is considered appropriate to test the nature of mineralisation laterally and vertically in the absence of bias.
Sample security	<ul style="list-style-type: none">• <i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none">• Air core samples were stored in closed bulker bags on site at a dedicated laydown facility.• The samples were dispatched directly from the laydown facility to Metallurgical laboratories.• No significant storage time was experienced by the samples.

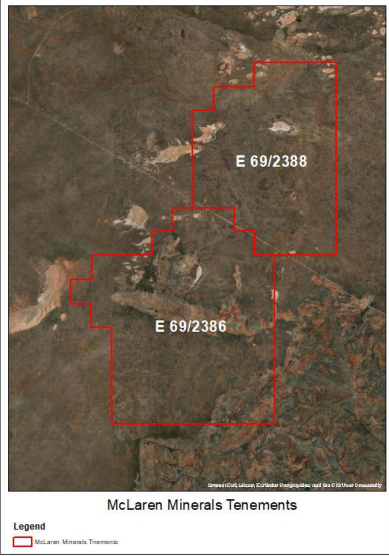
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Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"><i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none">Internal reviews and audits were completed to ensure integrity of information captured and throughout the drilling process.

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Section 1.02 Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<p><i>Mineral tenement and land tenure status</i></p>	<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"> Exploration activities were completed on E 69/2388 and E 69/2386 that are 100% owned by McLaren Minerals. All work was conducted with the relevant approvals from local and state authorities The tenure is secure with no impediments to obtaining a licence to operate. 
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historic exploration work was completed by BBI Group as an agent on behalf of Forge Resources Crown Pty Ltd with ERM Australia Consultants Pty Ltd completing a Mineral Resource Estimate in 2015 and a subsequent Mineral Resource Estimate completed in 2022.. McLaren Minerals cannot provide commentary as to the validity of this

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Criteria	JORC Code explanation	Commentary
		work.
Geology	<ul style="list-style-type: none">• <i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none">• The McLaren deposit occurs as a marine placer deposit within the Western Fraser Ranges, western Eucla Basin. The province is known to host economic mineral sand deposits.
Drill hole Information	<ul style="list-style-type: none">• <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">○ <i>easting and northing of the drill hole collar</i>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>○ <i>dip and azimuth of the hole</i>○ <i>down hole length and interception depth</i>○ <i>hole length.</i>• <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>	<ul style="list-style-type: none">• No Assay results are available for reporting currently.• Assay results will be reported in future statements and attached to an appendix.
Data aggregation methods	<ul style="list-style-type: none">• <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>• <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>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	<ul style="list-style-type: none">• No Drill hole assay data is reported currently
Relationship between	<ul style="list-style-type: none">• <i>These relationships are particularly important in the reporting of Exploration Results.</i>	<ul style="list-style-type: none">• No Drill hole assay data is reported currently



Criteria	JORC Code explanation	Commentary
<i>mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none">• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.• 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>Diagrams</i>	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• Figures and plans are reported in the main text and are clearly labeled, displayed in GDA94/UTM51 coordinates
<i>Balanced reporting</i>	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• No Drill hole assay data is reported currently
<i>Other substantive exploration data</i>	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• No information is being reported
<i>Further work</i>	<ul style="list-style-type: none">• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul style="list-style-type: none">• Finalisation of drilling for 2025 is ongoing with metallurgical assessment work to commence imminently