ASX Announcement

24 March 2025

POSITIVE MINERALOGICAL RESULTS AT FARRELLY

KEY POINTS

- QEMSCAN™ test work confirms favourable mineralogical characteristics at the high-grade Farrelly Mineral Sands Deposit:
 - Zircon concentrate is high-grade with negligible coatings of clay or iron oxides
 - Rutile concentrate is clean and high-quality with only minor accessory minerals such as leucoxene present
 - The ilmenite streams comprised clean ilmenite mineral grains with the potential for further improvement of the quality of the ilmenite concentrate through the removal of minor accessory minerals
 - Monazite concentrate recovered >99% of the monazite and xenotime present with further test work needed to determine the overall grade and the REE content
 - Farrelly confirmed to have a coarser grain size relative to Victorian WIM-style deposits indicating potential for simplified processing and higher recoveries
- Falcon continues to explore options to gain access to private land for further low impact exploration at Farrelly
- Results received for regional mineral sands aircore drilling program with no significant intercepts returned

Falcon Metals Limited (ASX: FAL) ("Falcon" or "the Company") advises that it has received results from the QEMSCAN™ test work carried out on its Farrelly Mineral Sands Deposit ("Farrelly") located 12km south of Boort in Victoria (see Figure 1), following the discovery announced on 28 May 2024 (See ASX Announcement "High-grade Mineral Sands Discovery").

A 65-kilogram sample, with a Total Heavy Mineral (**THM**) grade of 12.2%, was composited from the existing aircore samples for a sighter test conducted by Allied Mineral Laboratories in Perth, Western Australia (see Appendix 1 for location of the bulk samples). The results of the sighter test were announced on the ASX on 29 August 2024 (See ASX Announcement "Favourable Metallurgical Characteristics at Farrelly"). Following these positive results, eight samples were selected for **Quantitative Evaluation of Minerals by SCAN**ning electron microscopy (**QEMSCAN**), including six concentrates produced from the sighter test (See Figure 2). These were done to gain more detail on the quality and sizing of the concentrates, and the heavy minerals they contain. QEMSCAN provides bulk mineralogy, particle grain size and shape, mineral associations and mineral liberation data. It is the standard analytical method for providing quantitative evaluation of minerals.

The test work results are positive, with the valuable heavy minerals shown to be clean with negligible iron staining or clay content. It also further confirmed the Farrelly high-grade zone can produce a concentrate from conventional processing methods without any notable issues. Additional work is recommended including refinement of the ilmenite streams to remove minor accessory minerals such as chromite, and for additional quantitative analysis to better understand the Rare Earth Element (REE) content of the monazite stream, which was also confirmed to contain xenotime. Further drilling is required to provide sufficient sample to complete the recommended test program. The timing of this test work is uncertain and dependent on securing land access for this follow-up drilling, which would not only provide more material for metallurgical test work but is also needed to test the size extent of the high-grade Main Zone at Farrelly.

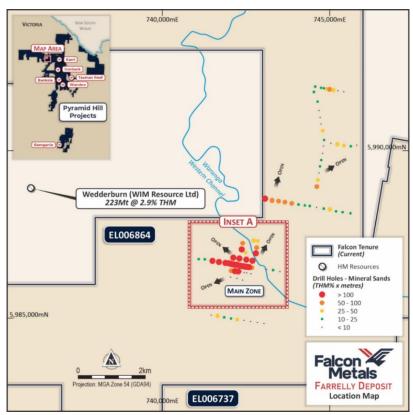


Figure 1 Location map of the Farrelly Mineral Sands Prospect

Summary of QEMSCAN Results

Eight products from the sighter test were selected for the QEMSCAN review. These products ranged from the primary HMS (Heavy Media Separation) sinks (FM01), to the Heavy Mineral Concentrate (HMC) produced from the wet tables from the sighter test (FM02), through to all magnetic and non-magnetic product streams (FM03-08). See Appendix 2 for images from the QEMSCAN test work.

Key findings from the QEMSCAN test work include:

- The two ilmenite streams (separated by higher and lower levels of magnetism) showed a clean ilmenite product, with ilmenites showing varying levels of alteration from a primary ulvospinel (25-45% TiO₂) to altered ilmenite (60-65% TiO₂). The more magnetic ilmenite stream (FM03) was dominated by ulvospinel and ilmenite (45-50% TiO₂), and the less magnetic ilmenite stream (FM04) was dominated by altered ilmenite (55-65% TiO₂).
- Leucoxene (65-90% TiO₂) comprised 35.1% of the assigned leucoxene stream (FM05), with rutile also forming a significant portion of the sample (25.5%).
- Chromite was present in the ilmenite and leucoxene streams as distinct grains with minor levels of coating by iron oxides or clays on these grains. Test work can be planned to determine the capacity to reduce the percentage of chromite in the product streams by simple physical processes.
- The rutile stream (FM06) was 74.4% rutile and 18.4% high-titanium leucoxene, with only minor accessory minerals.
- The zircon stream (FM07) was 85.9% zircon and 11.1% quartz, with minor levels of accessory minerals. Zircon appeared to be clean with negligible intergrowths or staining (<2% of the zircons scanned showed the presence of any coating by clays and iron oxides)

 The monazite stream (FM08) captured >99% of the monazite and xenotime present within the HMC. Limited refinement of this concentrate was completed due to the small volume of sample available. Further quantitative analysis of the monazite and xenotime, and the REE content of these minerals, is planned once more sample becomes available from future drilling programs.

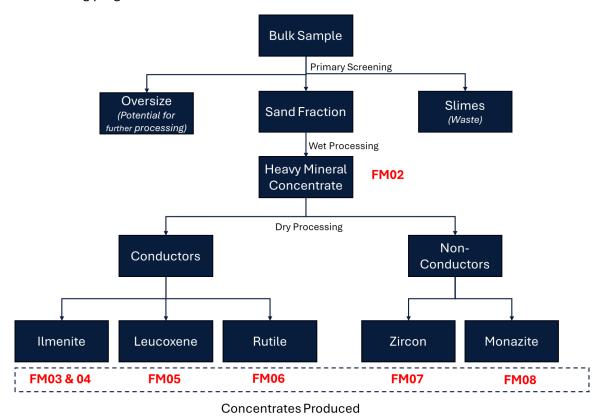


Figure 2 Simplified sighter test methodology with QEMSCAN samples noted

Regional Mineral Sands Drilling

Falcon completed its planned regional reconnaissance aircore drilling on roadsides on tenements EL006864 and EL007120, focused on the discovery of Farrelly-style mineral sands deposits. This drilling was completed in December 2024 with 57 holes drilled for 2,166m (see Figure 3). All assay and grain counting results have now been received and did not identify any material mineralisation. No follow up regional mineral sands drilling is planned at this stage.

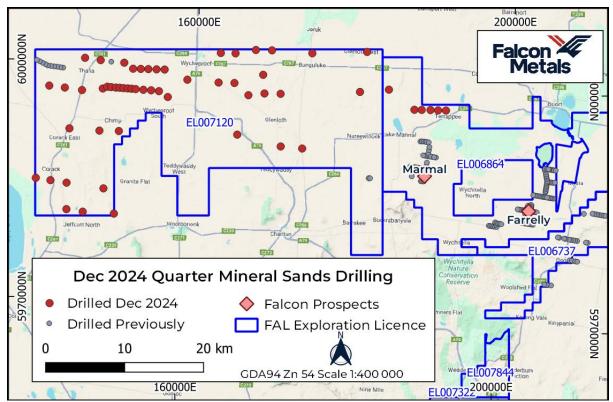


Figure 3 Location map of the regional reconnaissance mineral sands drilling on EL006864 and EL007120

This announcement has been approved for release by the Board of Falcon Metals.

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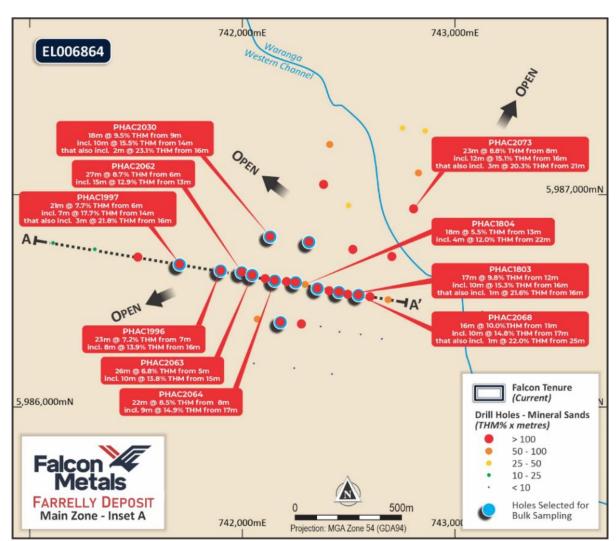
COMPETENT PERSON STATEMENT:

The information contained within this announcement relates to exploration results based on and fairly represents information compiled and reviewed by Mr Mark Gifford, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM). Mr Mark Gifford is an independent consultant for Falcon Metals Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Gifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

FORWARD LOOKING STATEMENT:

This announcement may contain certain forward-looking statements, guidance, forecasts, estimates, prospects, projections or statements in relation to future matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate (Forward Statements). Forward Statements can generally be identified by the use of forward looking words such as "anticipate", "estimates", "will", "should", "could", "may", "expects", "plans", "forecast", "target" or similar expressions and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also forward looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance.

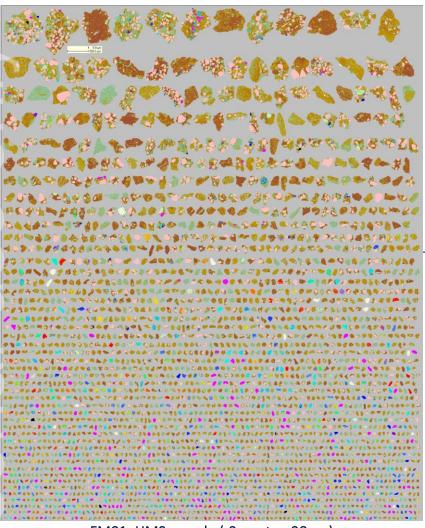
APPENDIX 1: Locations of samples used for preliminary metallurgical assessment in plan map and cross section



Main Zone Inset A showing the samples used for the bulk test work and the location of the cross section

Cross section A-A', an east-west line showing the 1,200m long high-grade Main Zone at 10 x vertical exaggeration with the location of the samples used in the bulk test work program

APPENDIX 2: **QEMSCAN Images**



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FM01: HMS sample (-2mm to +38µm)

FM02: HMC from wet tables

Background Zircon

Quartz

Staurolite

Chromite

Xenotime Monazite Cassiterite

Other minerals

Other silicates

Rutile/anatase (TiO2 > 90%) VHG leucoxene (TiO2 85-90%) HG leucoxene (TiO2 70-85%) LG leucoxene (TiO2 65-70%) Altered ilmenite (TiO2 60-65%) Altered ilmenite (TiO2 55-60%)

Ilmenite (TiO2 50-55%) Ilmenite (TiO2 45-50%)

Ulvospinel (TiO2 25-45%)

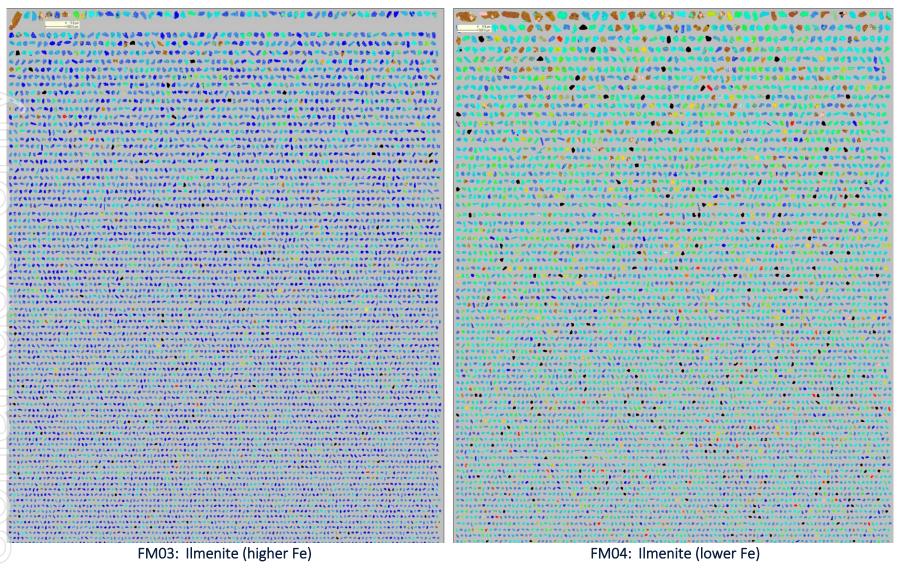
Kyanite/andalusite/sillimanite

Combined clays/tourmaline/similar

Goethite/limonite (lower Al/Si)

Goethite/limonite (higher Al/Si)

Ti-Fe-oxide - silica intergrowths/rims



FM03: Ilmenite (higher Fe)

FM04: Ilmenite (lower Fe)

Background 7ircon

Quartz

Staurolite

Xenotime Monazite Cassiterite Pyrite Other minerals

Other silicates Chromite

Rutile/anatase (TiO2 > 90%)

VHG leucoxene (TiO2 85-90%) HG leucoxene (TiO2 70-85%)

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Ilmenite (TiO2 45-50%)

Ulvospinel (TiO2 25-45%)

Kvanite/andalusite/sillimanite

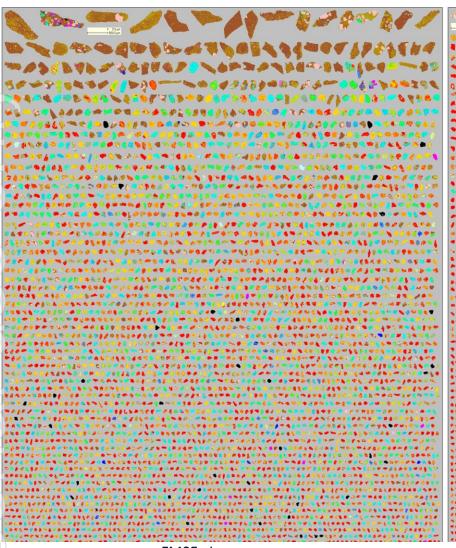
Goethite/limonite (lower Al/Si) Goethite/limonite (higher Al/Si)

Combined clays/tourmaline/similar

Altered ilmenite (TiO2 60-65%)

Altered ilmenite (TiO2 55-60%) Ilmenite (TiO2 50-55%)

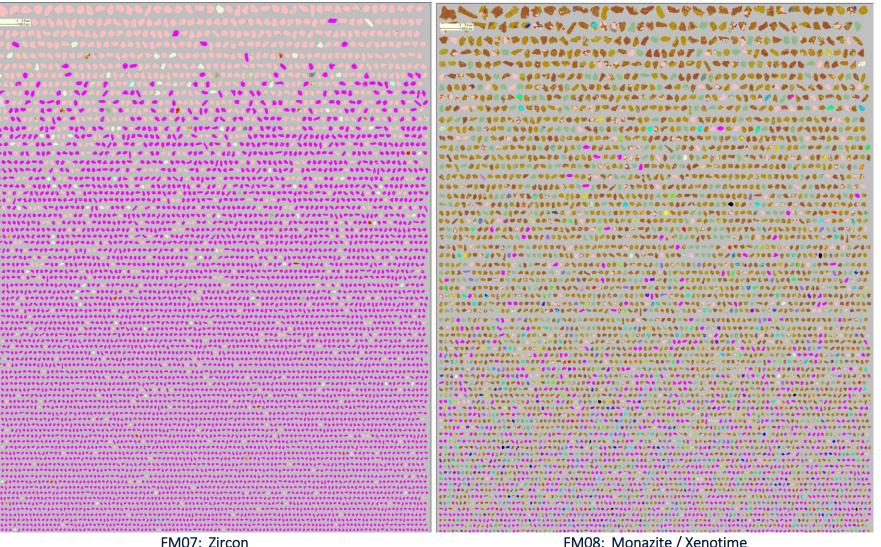
Ti-Fe-oxide - silica intergrowths/rims



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FM05: Leucoxene FM06: Rutile



FM08: Monazite / Xenotime

FM07: Zircon

Background 7 ircon

Quartz

Staurolite

Chromite

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Goethite/limonite (lower Al/Si)

Goethite/limonite (higher Al/Si)

Combined clays/tourmaline/similar

APPENDIX 3: JORC Table 1 - Pyramid Hill - Mineral Sands

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques		 The aircore samples were collected every metre. A rotary splitter attached to the cyclone was used to collect a representative sample of each interval drilled into a calico bag with the remainder of the sample collected in a green plastic bag and retained. A handful of sample from each interval was panned to estimate THM% and SLIMES% by the rig geologist. Based on the results of the panning sample intervals were selected. The Bulk Sample test work was completed by a fully qualified metallurgical laboratory (Allied Minerals Laboratory), with standards as determined by processing norms and protocols.
Drilling techniques	Drill type (eg. core, reverse circulation, openhole 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,	 The Aircore drilling was completed by Bostech Drilling Australia using face sampling blade bits with a diameter of 85mm NQ diameter drill rods were used All holes drilled vertically Aircore is considered a standard industry technique for heavy mineral sand exploration.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Aircore samples were recorded as wet or dry, and samples with low recovery were recorded. Geologists were checking for any signs of downhole
Logging		 The aircore chips were logged and sampled from the field base The samples were qualitatively logged via digital entry into a Microsoft Excel spreadsheet. The logging consisted of lithology, colour, grainsize, sorting, hardness, sample condition, washability, estimated THM% and SLIMES%. A mineral sands consultant was present during some of the logging of mineral sands.

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relevant intersections logged.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Field duplicates were collected every 40th sample for the mineral sands aircore drilling. The use of sub-samples from the primary assay remnants was undertaken to generate a Bulk Sample for a "Sighter Study" by Allied Minerals Laboratory. The samples were split to a set weight and then combined ensuring that each sample was represented equally within the final combined bulk sample.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopte (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established. 	 Field duplicates were collected every 40th sample for the mineral sands aircore drilling. Field standards were collected every 40th sample for the mineral sands drilling. Samples were submitted to Diamantina Samples were transported to Diamantina laboratory for assaying. Diamantina is considered to be a mineral sands industry

individual meter samples were weighted equally into the

Falcon Metals Limited ASX: FAL This is considered to be an industry standard technique. Field duplicates and the HM standards are inserted into the sample string at a frequency rate of 1 per 40 primary

Diamantina also completed their own internal QA/QC checks by inserting laboratory repeats at a rate of 1 in 40 and the insertion of Standard Certified Reference Material

A selection of high grade samples were defined for a "Sighter Study" upon the ore quality and products from the project area, with the samples combined from the unused portion of the total sample submitted to the Diamantina

The samples were collected at a weight that meant all

at a rate of 1 in 40.

laboratory.

Criteria	JORC Code explanation	Commentary
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primary sample, and this combined sample of ~70kg was forwarded to Allied Mineral Laboratories (AML).

- The sample was received and sub-sampled for a primary grade estimation before being washed and sized into the major sizing fractions of Oversize (>1mm), Sand (1mm-38μm), and Slimes (-38μm). All fractions were XRF analysed so as to define the mass balance of the major elements (Ti, Zr, Ce) and to aid in defining product recoveries from a theoretical total of 100% mineral availability.
- The sand fraction was then washed and passed over a shaker table to generate a series of products containing varying levels of Heavy Mineral Concentrate (HMC). The separation of the sand fractions containing dominant HMC through to tails with minimal HMC was defined by qualified technicians. Each fraction post separation was analysed by XRF so as to determine the mass balance of the major elements (Ti, Zr, Ce) and to aid in defining product recoveries from a theoretical total of 100% mineral availability at this point of the sampling stream.
- The AML test work in regards to the generation of the HMC product was not completed so as to determine total recoveries within a plant setting, but rather to obtain a sample that can provide sighter information on the HMC mineralogy and its possible quality.
- The HMC was dried and then passed through a series of electrostatic separation rollers to generate three products, A conducting fraction, a middlings fraction and a non-conductors fraction. Only the Conductors and Non-Conductors were forwarded for further analysis. Each of the three product components were assayed by XRF so as to determine the mass balance of the major elements (Ti, Zr, Ce) and to aid in defining product recoveries from a theoretical total of 100% mineral availability at this point of the sampling stream.
- The Conductors and Non-Conductors were independently
 magnetically separated into various mineral products. Each
 mineral product was assayed by XRF to provide a mass
 balance of the major elements (Ti, Zr, Ce) and to aid in
 defining product recoveries from a theoretical total of 100%
 mineral availability as well as to determine product issues
 and gangue mineral definition at this point of the sampling
 stream.
- Mineral products were reported by AML and discussion of the HMC product sizing was also made available.
- The Bulk Sample test work completed by AML is a partial analysis of the products that are present within the HMC generated from the project. It is considered a "Sighter Study" giving confidence to the company in the presence of valuable HMC and an approximation of the quality and volume of the products to be derived from the HMC.
- Sub-samples of all of the major HM components defined by the "Sighter Study" were submitted by AML to ALS for analysis by a scanning electron microscope – referred to as a QEMSCAN. [NB: QEMSCAN is a standard analytical method for providing quantitative analysis of minerals submitted for analysis. QEMSCAN is an abbreviation of Quantitative Evaluation of Minerals by SCANning electron microscopy.) QEMSCAN generates mineral assemblage

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Criteria J	ORC Code explanation	Commentary
		maps of the surface of all the particles being analysed. The information gained includes (but not limited to), grain and bulk mineralogy, particle grain size, particle shape, and particle composition in the case of agglomerated minerals. • The QEMSCAN completed upon the sub-samples from the "Sighter Study" were analysed by service provider ALS
		Limited, Perth Australia.
Verification of sampling and assaying	either independent or alternative company personnel. The use of twinned holes.	
Location of data points	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.	MGA_GDA94 (Zone 54). • RL data have been assigned from 10m DEM satellite data.
	 Data spacing for reporting of Exploration Results. 	 Spacing of the aircore drilling varies. This was generally 200m spacing. In some case some holes were tightened to
Orientation of data in relation to geological structure	achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	 Drilling was all vertical and is not considered to introduce any sampling bias. Drilling was conducted along existing roads and in paddocks.
Sample security		 Samples are stored on site and were shipped to Diamantina by a freight agent. Samples collated by Diamantina were forwarded to AML by a freight agent with receival confirmed to FAL.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No review has been carried out to date.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 	 Drilling was carried out within EL006864. This licence is wholly owned by Falcon Gold Resources Pty Ltd, a wholly owned subsidiary of Falcon Metals Limited with no known encumbrances.
Exploration done by other parties		 Mineral Sands exploration over the areas investigated by Falcon was completed by several companies: Reef Oil in 1973 defined the Gredgwin Prospect in the area to the south of Woolshed swamp in EL006864 to the north west of Farrelly Prospect Aberfoyle Resources Limited identified mineral sands in an area to the southwest of Terrappee Swamp in the late 1980's centred on Wrights Rd. CRA drilled the area around the Farrelly Prospect on coarse spacing targeting a very large WIM style deposit and results were not considered worthy of follow up.
Geology	 Deposit type, geological setting and style of mineralisation. 	The mineralisation being explored for is either strand deposits or WIM style within the globally significant Murray Basin Perilla and Loxton sands.
Drill hole Information	 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: 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. 	Refer Appendices All mineralisation >1%THM is reported in the Appendices.
Data aggregation methods		 A length-weighted averaging technique has been applied where necessary to produce all displayed and tabulated drill intersections. In Appendix tables and figures, results are calculated using either a minimun 1%THM with higher grade zones defined by a minimum 5%, 10% and 20% and max 2m internal dilution.

Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. 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').	The relationship between mineral sands vertical drilling and true width is close because these deposits are generally horizontal in nature. Downhole lengths are reported.
Diagrams •	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.	The results of the AC drilling are displayed in the figures in the announcement.
Balanced reporting •	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.	Only results above 1% THM have been tabulated in this announcement. The results are considered representative with no intended bias.
Other substantive • exploration data	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.	Metallurgical test work has been reported within this announcement, which has been derived from a "Sighter Study" on the HMC quality from a single bulk sample completed by a qualified laboratory (AML).
Further work •	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.	Additional AC drilling is required to define the size and grade of the Farrelly Prospect. Further mineralogical analysis and metallurgical test work is ongoing.

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