

29 August 2024

Test Work Indicates Favourable Metallurgical Characteristics of High-grade Farrelly Mineral Sands Deposit

HIGHLIGHTS

- Preliminary metallurgical assessment confirms high-grade Farrelly Mineral Sands Deposit has favourable metallurgical characteristics with no notable processing issues:
 - Heavy mineral concentrate (HMC) produced using conventional processing methods
 - High recoveries of zircon, ilmenite, rutile and monazite in the test work HMC, with future testing planned to further refine processability and products
 - HMC has a coarser grain size relative to other Victorian deposits, with negligible HMC content in the 20 to 38 µm size fraction, indicating potential for simplified processing and higher recoveries
 - Slimes (<38 µm) were easily treated and demonstrated high settling rates with no issues expected using conventional technology and methods
- Planning for further drilling underway to determine the extent of the deposit - expected to commence in Q4 2024 subject to land access, cropping and ground conditions

Falcon Metals Limited (ASX: FAL) ("Falcon" or "the Company") advises that it has received results from the preliminary metallurgical assessment 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% THM, was composited from the existing aircore samples for a sighter test conducted by Allied Mineral Laboratories in Perth, Western Australia. The objective of the sighter test work was to identify any potential processing issues at the early exploration stage, in addition to providing data on the potential mineral products of the deposit including sizing, mineralogy and geochemistry.

The test work results are positive, with no notable processing issues identified. It also demonstrates the potential for high recoveries of minerals sands concentrates including zircon, ilmenite, rutile, leucoxene and monazite. Future work will focus on optimising the process flowsheet and recoveries, and refinement of product quality. Preliminary results on slimes (<38 µm size) confirmed typical flocculent addition and high settling rates can be achieved using conventional technology and methods.

Falcon Metals' Managing Director Tim Markwell said:

"It is still early days for the high-grade Farrelly discovery, however it is highly encouraging to see the sighter test confirming the deposit is amenable to conventional processing methods without any notable issues. It is also pleasing that the slimes are easily separated from the heavy minerals and settle well using conventional methods, and that the grain size is considered coarser than is often the case with other Victorian deposits, which should translate to a streamlined flow sheet. With no major material processing issues identified in the scope of the test work to date, Falcon's focus will return to continuing exploration to determine just how large this deposit is."

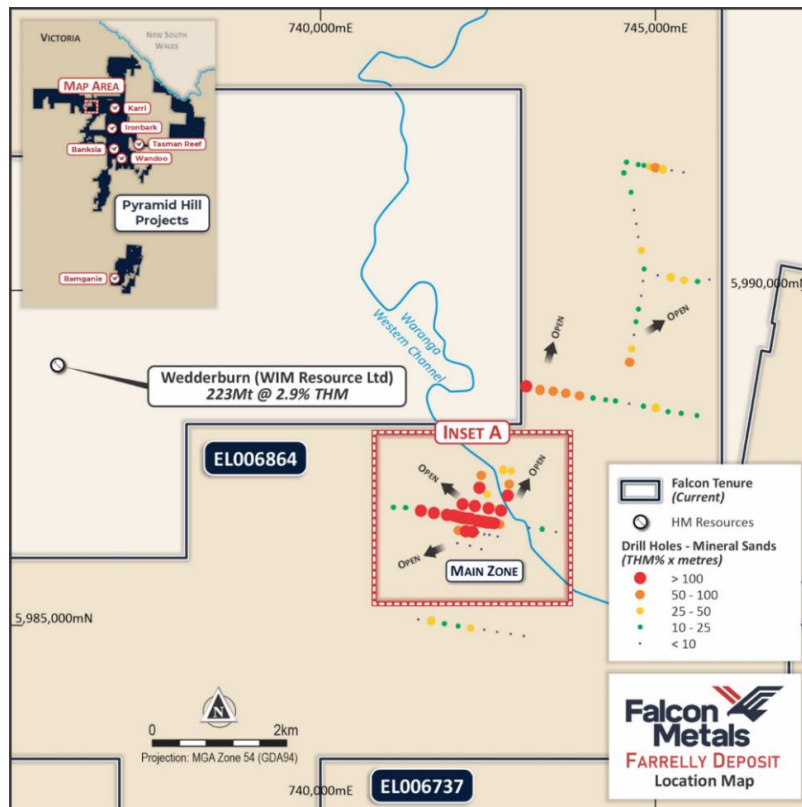


Figure 1 Location map of the Farrelly Mineral Sands Prospect

Sighter Test Results

The test work involved an initial multi-stage screening of selected samples from throughout the Main Zone of the Farrelly Deposit (See Appendix 1 for sample locations in plan view and cross section). The primary screening was designed to reject oversize and slimes, thus isolating a preferred fraction of between 38 µm and 1mm (the “sand fraction”). A simplified sighter test methodology is outlined in Figure 2.

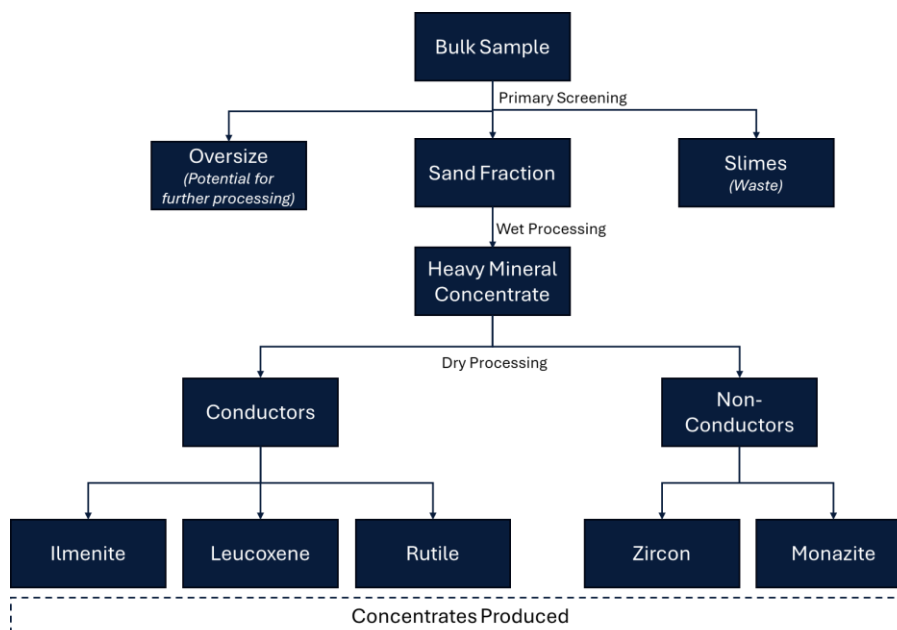


Figure 2 Simplified sighter test methodology

The sand fraction component comprised 47.5% of the composite sample mass, with the oversize and slimes comprising 21.7% and 30.8% respectively of the bulk sample (see Table 1).

Table 1 Composite screening results with size distribution

		Oversize	Sand Fraction	Slimes	
Stream		>1mm	<1mm >38µm	Total <38µm	<20µm >20µm
% Mass	%	21.7	47.5	30.8	2.3 28.5
TiO ₂	%	17.5	69.1	13.4	1.0 12.4
Fe ₂ O ₃	%	38.5	30.5	31.1	2.3 28.8
ZrO ₂ +HfO ₂	%	18.3	77.9	3.7	0.3 3.4
Al ₂ O ₃	%	16.8	15.0	68.2	4.9 63.2
SiO ₂	%	14.6	63.4	22.0	1.7 20.3

The <38 µm slimes fraction was split into sub samples with one sent for settling tests, flocculant screening and dynamic thickening test work, the results of which were positive with the slimes separating and settling quickly, with no issues identified. The other sample was further screened into a 20-38 µm size fraction for further analysis, which showed negligible heavy mineral sands content in this finer fraction. It should be noted that several peer companies in Victoria are targeting HMC recovery from this finer size fraction, which will not be required for Farrelly and future work will focus on the >38 µm material. This is a significant positive for Farrelly as it has the potential to translate into higher recoveries and a simplified flowsheet likely to require fewer stages of processing relative to other projects in the region.

A portion of the estimated heavy mineral sands, including ilmenite and zircon, reports to the oversize due to agglomeration with iron oxides, and future work will examine the opportunity to recover product from the oversize portion, as well as agglomerated particles within the sand fraction that report to the tails.

The key **sand fraction** was then subject to wet gravity separation on shaker tables to produce a HMC for dry processing (see Figure 3). This process is indicative only as the shaker tables were not optimised for recovery. The purpose was to produce a concentrate from the small sample size for mineralogical and geochemical test work (see Figure 4). The HMC concentrate returned a P80 of 105 µm (the size of the material at the 80th percentile) and a d50 of 80 µm (the median particle size).

The resultant HMC was then dry processed using electrostatic separation to separate the conductive TiO₂ rich minerals (ilmenite and rutile) from the non-conductive minerals (zircon and monazite), and then electromagnetic processing to further separate both the conductive and non-conductive concentrates into specific mineral concentrates.

Electromagnetic belt separation of the **ilmenite**, which makes up approximately 44% of the HMC, indicated most of the product had grades in excess of 50% TiO₂ with Fe levels as expected for the relative TiO₂ grade.

The **rutile** product had a TiO₂ value of approximately 93% and formed approximately 5% of the HMC, and there are likely to be further incremental increases in TiO₂ with flow sheet optimisation. **Leucoxene** content of approximately 5-6% reported to the conductive HMC and this will be further assessed in future test work.

The non-conductive concentrate containing zircon and monazite was processed through two-stage magnetic separation to concentrate the zircon into a non-magnetic stream and the monazite into a magnetic stream. The **zircon** concentrate formed approximately 26% of the HMC and had a P80 of 85 µm and a d50 of 65 µm.

A **monazite** concentrate was produced with a grade of approximately 2-3% of the HMC. It is yet to be further refined to allow assaying of the Rare Earth Element (**REE**) content.

Further mineralogical assessment will be considered including QEMSCAN analysis (quantitative analysis of minerals using a scanning electron microscope) on the concentrates produced to provide more information on the mineral compositions, including any deleterious minerals and elements, which are important in determining saleability of potential products. This will include assessment of impurities like chrome and vanadium in the ilmenite, and thorium and uranium in zircon. The QEMSCAN analysis will also test for the presence of **xenotime**, a mineral containing high levels of heavy REE, in the monazite concentrate.

A more comprehensive bulk test work program will be undertaken following the next phase of drilling.

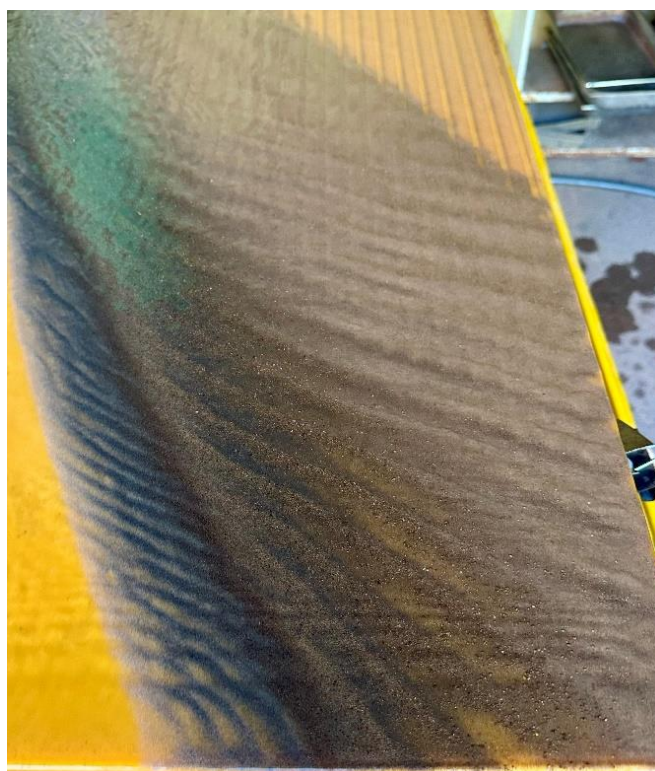


Figure 3 Shaker table for wet gravity processing of the Farrelly sand fraction

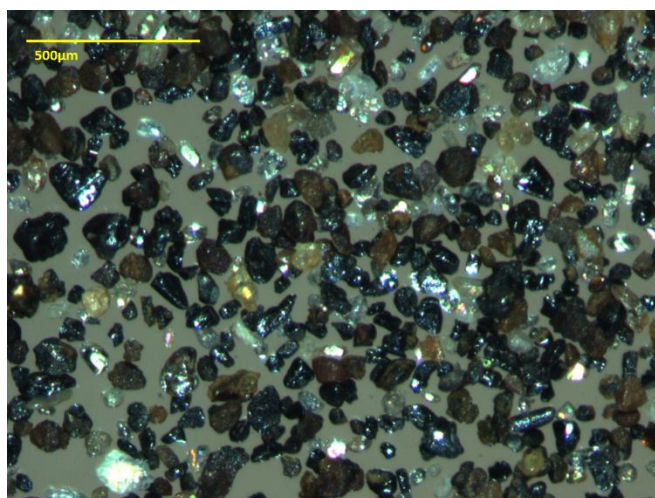


Figure 4 Farrelly heavy mineral concentrate prior to dry processing



Mineral Sands Drilling

The results from additional sampling of the aircore drilling completed in Q1 2024 have been received. These samples were testing select intervals previously logged as low-grade or unmineralised but were found to be adjacent to high-grade zones. As such, it was decided to increase the amount of sampling to better define the high-grade boundaries.

This resulted in minor changes with lower grade zones becoming wider and the high-grade Main Zone being closed off to the west, with holes PHAC1999 and PHAC2000 returning low-grade mineralisation (see cross-section in Appendix 1), and the southeastern boundary has now been defined. It remains open to the northeast, northwest and southwest where some of the best holes from the Main Zone are located on the edges of the currently defined high-grade mineralised envelope. These areas will be the focus of the next phase of drilling that is designed to test for extensions to the Main Zone.

Falcon is currently at an advanced stage of planning for the extensional drilling program, which is expected to commence in Q4 2024, subject to land access, cropping and ground conditions.

An updated significant intercept table is provided in Appendix 2, with the rows shaded containing results that have changed or been added since the previous results were announced on 28 May 2024.

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

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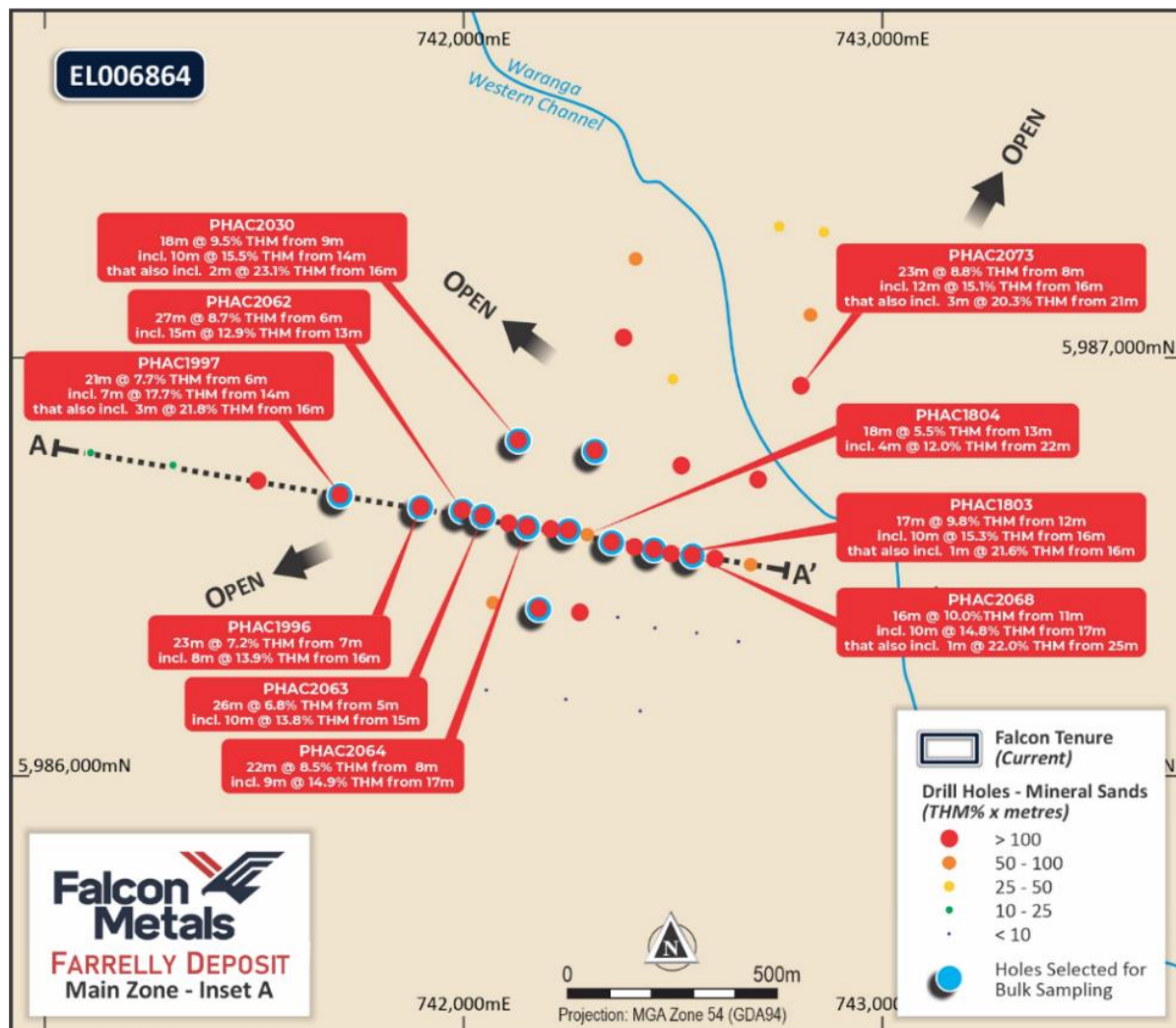
COMPETENT PERSON STATEMENT:

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.

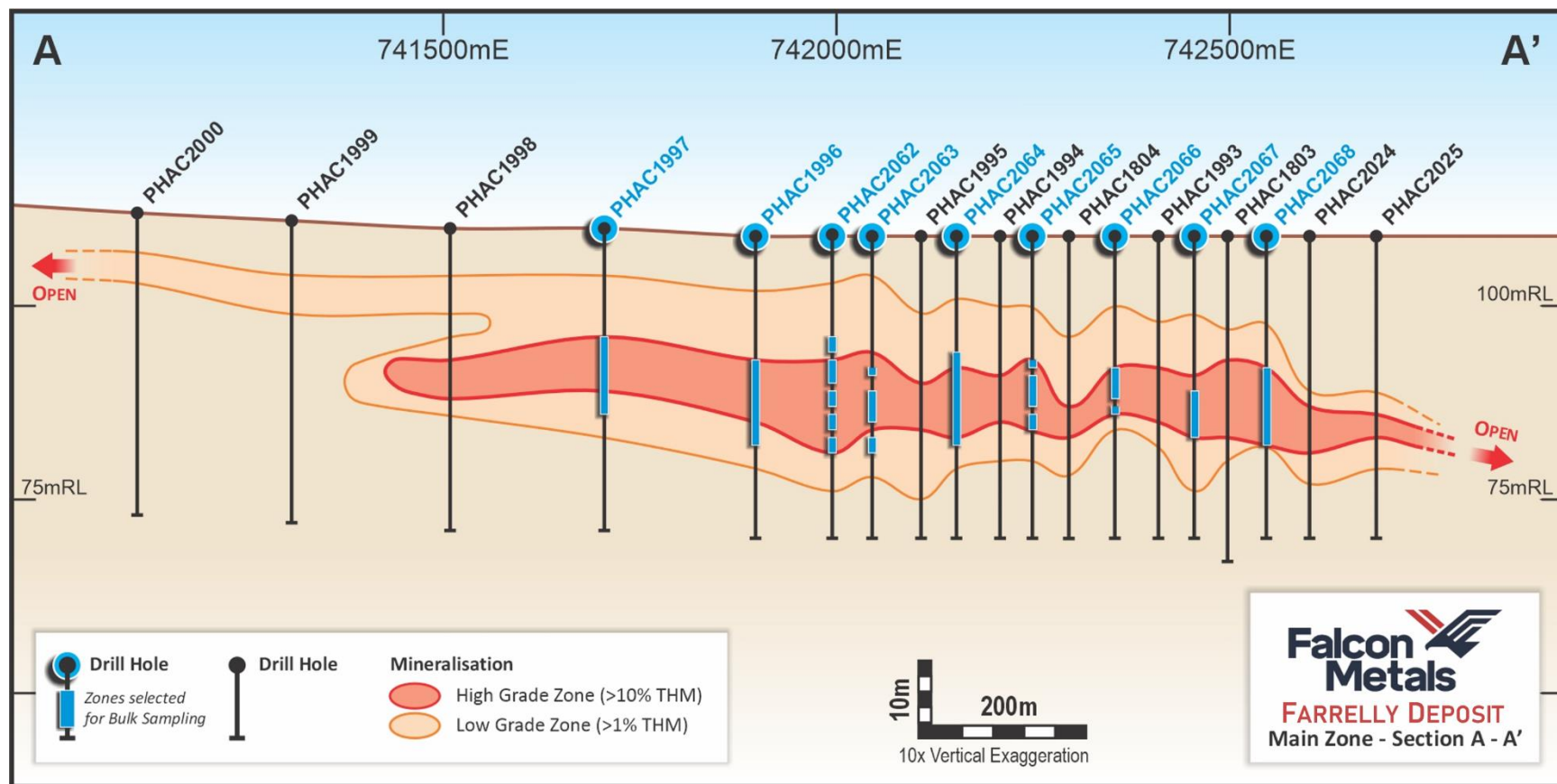
FORWARD LOOKING STATEMENT:

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: Details for aircore drill holes with results available in this announcement

Prospect	Hole ID	Easting (m)	Northing (m)	RL (m)	Zone	Grid	Azimuth UTM (°)	Dip (°)	Depth (m)
Farrelly	PHAC1993	742409	5986550	109	54	GDA94	0	-90	39
Farrelly	PHAC1994	742209	5986593	109	54	GDA94	0	-90	39
Farrelly	PHAC1995	742108	5986607	109	54	GDA94	0	-90	39
Farrelly	PHAC1996	741898	5986646	109	54	GDA94	0	-90	39
Farrelly	PHAC1997	741705	5986675	110	54	GDA94	0	-90	39
Farrelly	PHAC1998	741509	5986709	110	54	GDA94	0	-90	39
Farrelly	PHAC1999	741308	5986747	111	54	GDA94	0	-90	39
Farrelly	PHAC2000	741110	5986771	112	54	GDA94	0	-90	39
Farrelly	PHAC2001	744627	5988928	101	54	GDA94	0	-90	39
Farrelly	PHAC2002	744657	5989124	101	54	GDA94	0	-90	39
Farrelly	PHAC2003	744691	5989328	100	54	GDA94	0	-90	39
Farrelly	PHAC2004	744722	5989525	100	54	GDA94	0	-90	39
Farrelly	PHAC2005	744757	5989712	100	54	GDA94	0	-90	39
Farrelly	PHAC2006	744799	5989911	99	54	GDA94	0	-90	39
Farrelly	PHAC2007	744827	5990132	99	54	GDA94	0	-90	39
Farrelly	PHAC2008	745047	5990218	99	54	GDA94	0	-90	39
Farrelly	PHAC2009	745241	5990184	98	54	GDA94	0	-90	39
Farrelly	PHAC2010	745438	5990151	98	54	GDA94	0	-90	39
Farrelly	PHAC2011	745636	5990123	98	54	GDA94	0	-90	39
Farrelly	PHAC2012	745816	5990154	98	54	GDA94	0	-90	39
Farrelly	PHAC2013	744842	5990310	99	54	GDA94	0	-90	39
Farrelly	PHAC2014	744802	5990594	98	54	GDA94	0	-90	39
Farrelly	PHAC2015	744756	5990790	98	54	GDA94	0	-90	39
Farrelly	PHAC2016	744727	5990985	98	54	GDA94	0	-90	39
Farrelly	PHAC2017	744692	5991190	97	54	GDA94	0	-90	39
Farrelly	PHAC2018	744649	5991456	97	54	GDA94	0	-90	39
Farrelly	PHAC2019	744536	5991748	97	54	GDA94	0	-90	39
Farrelly	PHAC2020	744580	5991901	97	54	GDA94	0	-90	39
Farrelly	PHAC2021	745255	5991784	97	54	GDA94	0	-90	39
Farrelly	PHAC2022	745430	5991755	96	54	GDA94	0	-90	39
Farrelly	PHAC2023	745616	5991724	96	54	GDA94	0	-90	39
Farrelly	PHAC2024	742602	5986522	109	54	GDA94	0	-90	39
Farrelly	PHAC2025	742687	5986508	109	54	GDA94	0	-90	39
Farrelly	PHAC2026	742459	5986354	110	54	GDA94	0	-90	39
Farrelly	PHAC2027	742658	5986321	109	54	GDA94	0	-90	39



Prospect	Hole ID	Easting (m)	Northing (m)	RL (m)	Zone	Grid	Azimuth UTM (°)	Dip (°)	Depth (m)
Farrelly	PHAC2028	742279	5986394	109	54	GDA94	0	-90	39
Farrelly	PHAC2029	742071	5986417	110	54	GDA94	0	-90	39
Farrelly	PHAC2030	742131	5986806	109	54	GDA94	0	-90	39
Farrelly	PHAC2031	742314	5986781	108	54	GDA94	0	-90	39
Farrelly	PHAC2032	742704	5986712	107	54	GDA94	0	-90	39
Farrelly	PHAC2033	742521	5986745	108	54	GDA94	0	-90	39
Farrelly	PHAC2034	743130	5986449	106	54	GDA94	0	-90	39
Farrelly	PHAC2035	743333	5986426	106	54	GDA94	0	-90	39
Farrelly	PHAC2036	743527	5986388	106	54	GDA94	0	-90	39
Farrelly	PHAC2037	742383	5987051	108	54	GDA94	0	-90	39
Farrelly	PHAC2038	742412	5987239	108	54	GDA94	0	-90	39
Farrelly	PHAC2039	744422	5988332	102	54	GDA94	0	-90	39
Farrelly	PHAC2040	744268	5988359	102	54	GDA94	0	-90	39
Farrelly	PHAC2041	744073	5988394	103	54	GDA94	0	-90	39
Farrelly	PHAC2042	743878	5988426	103	54	GDA94	0	-90	39
Farrelly	PHAC2043	743674	5988464	103	54	GDA94	0	-90	39
Farrelly	PHAC2044	743485	5988495	102	54	GDA94	0	-90	39
Farrelly	PHAC2045	743283	5988530	102	54	GDA94	0	-90	39
Farrelly	PHAC2046	743081	5988565	102	54	GDA94	0	-90	39
Farrelly	PHAC2047	744619	5988302	102	54	GDA94	0	-90	39
Farrelly	PHAC2048	745630	5988126	103	54	GDA94	0	-90	39
Farrelly	PHAC2049	745405	5988166	102	54	GDA94	0	-90	39
Farrelly	PHAC2050	745210	5988198	102	54	GDA94	0	-90	39
Farrelly	PHAC2051	745019	5988230	102	54	GDA94	0	-90	39
Farrelly	PHAC2052	744818	5988268	102	54	GDA94	0	-90	39
Farrelly	PHAC2053	743048	5984836	113	54	GDA94	0	-90	39
Farrelly	PHAC2054	742851	5984867	113	54	GDA94	0	-90	39
Farrelly	PHAC2055	742648	5984897	113	54	GDA94	0	-90	39
Farrelly	PHAC2056	742456	5984931	113	54	GDA94	0	-90	39
Farrelly	PHAC2057	742255	5984958	115	54	GDA94	0	-90	39
Farrelly	PHAC2058	742067	5984984	115	54	GDA94	0	-90	39
Farrelly	PHAC2059	741864	5985021	116	54	GDA94	0	-90	39
Farrelly	PHAC2060	741671	5985055	116	54	GDA94	0	-90	39
Farrelly	PHAC2061	741475	5985082	116	54	GDA94	0	-90	39
Farrelly	PHAC2062	741997	5986638	109	54	GDA94	0	-90	39
Farrelly	PHAC2063	742047	5986625	109	54	GDA94	0	-90	39
Farrelly	PHAC2064	742153	5986599	109	54	GDA94	0	-90	39



Prospect	Hole ID	Easting (m)	Northing (m)	RL (m)	Zone	Grid	Azimuth UTM (°)	Dip (°)	Depth (m)
Farrelly	PHAC2065	742251	5986591	109	54	GDA94	0	-90	39
Farrelly	PHAC2066	742354	5986562	109	54	GDA94	0	-90	39
Farrelly	PHAC2067	742455	5986545	109	54	GDA94	0	-90	39
Farrelly	PHAC2068	742547	5986531	109	54	GDA94	0	-90	39
Farrelly	PHAC2069	742501	5986951	108	54	GDA94	0	-90	39
Farrelly	PHAC2070	742756	5987320	107	54	GDA94	0	-90	39
Farrelly	PHAC2071	742862	5987302	107	54	GDA94	0	-90	39
Farrelly	PHAC2072	742830	5987105	107	54	GDA94	0	-90	39
Farrelly	PHAC2073	742806	5986936	107	54	GDA94	0	-90	39
Farrelly	PHAC2074	744838	5991856	97	54	GDA94	0	-90	39
Farrelly	PHAC2075	745009	5991829	96	54	GDA94	0	-90	39
Farrelly	PHAC2076	745704	5991707	96	54	GDA94	0	-90	39
Farrelly	PHAC2077	745926	5991672	96	54	GDA94	0	-90	39
Farrelly	PHAC2078	742245	5986183	110	54	GDA94	0	-90	39
Farrelly	PHAC2079	742370	5986380	110	54	GDA94	0	-90	39
Farrelly	PHAC2080	742563	5986338	110	54	GDA94	0	-90	39
Farrelly	PHAC2081	742428	5986153	110	54	GDA94	0	-90	39
Farrelly	PHAC2082	742180	5986403	109	54	GDA94	0	-90	39
Farrelly	PHAC2083	742039	5986217	110	54	GDA94	0	-90	39



APPENDIX 3: Farrelly Prospect significant aircore drill intersections (>1% THM)

(shaded rows contain results that have changed or been added since the previous results were announced on 28 May 2024)

HoleID	From (m)	To (m)	Interval (m)	THM	>1mm	<38um
PHAC1993	11	27	16	7.9%	14.9%	34.2%
incl.	17	24	7	16.2%	21.7%	33.4%
that also incl.	19	20	1	20.6%	20.2%	32.6%
PHAC1994	5	6	1	1.3%	29.4%	22.5%
and	9	12	3	1.5%	10.3%	33.1%
and	15	29	14	8.6%	9.7%	43.1%
incl.	17	25	8	13.2%	14.0%	37.7%
that also incl.	18	24	6	15.1%	14.6%	36.5%
PHAC1995	10	34	24	5.6%	11.1%	40.9%
incl.	17	28	11	10.5%	14.3%	38.5%
that also incl.	19	25	6	14.6%	15.8%	40.0%
PHAC1996	7	30	23	7.2%	9.7%	37.5%
incl.	15	28	13	11.5%	11.9%	39.5%
that also incl.	16	24	8	13.9%	16.2%	37.9%
PHAC1997	6	27	21	7.7%	11.5%	34.7%
incl.	14	25	11	13.5%	16.4%	34.6%
that also incl.	14	21	7	17.7%	25.0%	32.1%
containing	16	19	3	21.8%	31.8%	28.5%
PHAC1998	6	9	3	2.1%	7.0%	19.1%
and	10	11	1	12.3%	29.0%	24.1%
and	14	24	10	9.2%	8.7%	47.9%
incl.	17	23	6	13.6%	8.3%	39.4%
that also incl.	17	22	5	15.1%	9.4%	39.1%
PHAC1999	7	12	5	1.3%	12.0%	18.5%
PHAC2000	5	9	4	1.6%	5.2%	19.3%
and	12	13	1	1.0%	14.3%	25.5%
PHAC2001	10	19	9	10.4%	19.0%	31.1%
incl.	12	19	7	12.6%	21.3%	32.1%
that also incl.	13	17	4	16.9%	23.0%	31.4%
containing	14	15	1	23.8%	17.5%	33.7%
PHAC2002	10	20	10	3.2%	20.6%	31.5%
incl.	12	13	1	6.8%	43.3%	22.0%
PHAC2003	13	14	1	1.0%	4.1%	54.8%
PHAC2004	12	15	3	1.3%	14.7%	28.3%
and	16	18	2	4.7%	18.5%	30.2%
PHAC2005	14	19	5	2.4%	19.7%	37.7%
PHAC2006	12	14	2	1.6%	13.3%	32.4%
PHAC2008	11	13	2	1.1%	0.8%	38.9%
PHAC2009	14	24	10	2.3%	11.5%	39.9%
PHAC2010	12	16	4	6.9%	24.0%	36.7%



HoleID	From (m)	To (m)	Interval (m)	THM	>1mm	<38um
incl.	12	15	3	8.5%	31.8%	30.5%
that also incl.	12	13	1	10.1%	46.3%	23.8%
PHAC2011	15	20	5	1.9%	12.4%	39.0%
PHAC2012	12	13	1	1.3%	12.0%	43.9%
PHAC2013	4	8	4	4.7%	19.3%	37.7%
incl.	5	7	2	8.2%	31.9%	32.5%
that also incl.	5	6	1	10.5%	38.4%	27.3%
PHAC2014	5	9	4	3.8%	22.8%	41.2%
incl.	6	7	1	5.4%	30.5%	39.3%
and	13	21	8	2.9%	8.9%	36.7%
incl.	16	18	2	5.1%	9.1%	36.1%
PHAC2016	12	14	2	1.8%	0.3%	37.4%
PHAC2017	7	10	3	1.3%	9.8%	44.8%
PHAC2018	9	17	8	2.1%	7.2%	43.3%
PHAC2019	8	13	5	1.7%	4.8%	37.3%
PHAC2020	3	5	2	1.3%	2.2%	23.9%
and	11	15	4	1.4%	5.4%	38.1%
PHAC2021	10	12	2	2.7%	18.4%	30.4%
PHAC2022	15	17	2	1.1%	0.5%	37.9%
PHAC2024	20	32	12	11.1%	7.2%	44.9%
incl.	21	30	9	13.8%	9.2%	40.3%
that also incl.	22	28	6	17.2%	12.8%	40.5%
containing	27	28	1	22.1%	6.3%	45.5%
PHAC2025	20	30	10	8.2%	7.5%	45.5%
incl.	21	28	7	10.6%	9.0%	43.0%
that also incl.	23	26	3	14.5%	13.0%	39.4%
PHAC2028	15	16	1	1.1%	4.1%	26.0%
and	21	29	8	12.4%	11.7%	41.3%
incl.	21	27	6	15.9%	15.2%	36.7%
that also incl.	25	26	1	20.8%	12.2%	41.1%
PHAC2029	11	12	1	1.3%	9.4%	22.7%
and	15	16	1	1.4%	16.2%	22.5%
and	21	29	8	9.9%	11.7%	46.8%
incl.	21	25	4	17.8%	21.4%	34.6%
that also incl.	22	23	1	25.0%	21.3%	35.1%
PHAC2030	9	27	18	9.5%	15.0%	34.1%
incl.	13	24	11	14.8%	20.7%	34.5%
that also incl.	14	24	10	15.5%	21.1%	34.3%
containing	16	18	2	23.1%	30.2%	28.9%
PHAC2031	8	13	5	1.5%	9.2%	28.3%
and	16	28	12	8.2%	13.7%	37.8%
incl.	18	24	6	14.2%	23.5%	30.2%



HoleID	From (m)	To (m)	Interval (m)	THM	>1mm	<38um
that also incl.	18	23	5	15.1%	26.5%	29.4%
PHAC2032	8	12	4	1.3%	6.3%	23.2%
and	15	32	17	6.9%	11.2%	42.9%
incl.	20	28	8	11.8%	13.2%	39.5%
that also incl.	22	27	5	14.4%	13.4%	38.1%
PHAC2033	8	9	1	1.1%	1.0%	18.7%
and	16	31	15	9.5%	8.5%	46.9%
incl.	17	27	10	13.2%	12.5%	37.6%
that also incl.	18	24	6	16.7%	13.7%	37.6%
PHAC2035	7	8	1	1.2%	0.2%	25.0%
and	22	26	4	1.7%	0.2%	38.2%
PHAC2036	17	18	1	1.8%	1.8%	34.5%
PHAC2037	8	31	23	4.6%	12.8%	40.8%
incl.	18	25	7	10.4%	16.4%	40.5%
that also incl.	21	25	4	12.3%	16.5%	40.1%
PHAC2038	7	8	1	1.0%	2.2%	21.2%
and	11	15	4	1.7%	8.4%	19.8%
and	18	32	14	3.7%	11.5%	37.5%
incl.	22	28	6	5.0%	15.4%	34.5%
PHAC2039	9	10	1	1.0%	0.6%	30.2%
and	14	19	5	1.4%	2.3%	20.9%
PHAC2040	12	19	7	2.6%	22.9%	26.5%
PHAC2041	10	11	1	2.4%	0.7%	28.8%
PHAC2042	12	22	10	5.9%	10.7%	36.1%
incl.	17	21	4	12.7%	21.1%	31.2%
that also incl.	17	20	3	14.9%	25.9%	30.3%
PHAC2043	9	10	1	1.9%	2.4%	28.4%
and	14	26	12	5.5%	11.4%	38.6%
incl.	15	16	1	5.5%	39.4%	21.6%
incl.	19	24	5	10.7%	15.1%	41.8%
PHAC2044	8	10	2	1.6%	10.2%	30.0%
and	13	25	12	4.5%	12.9%	38.6%
incl.	18	22	4	8.6%	21.0%	37.0%
that also incl.	20	21	1	10.2%	20.0%	40.4%
PHAC2045	6	14	8	2.0%	1.2%	28.7%
and	18	25	7	4.1%	12.6%	41.3%
incl.	21	22	1	5.1%	9.8%	47.3%
PHAC2046	5	6	1	4.4%	1.0%	30.3%
and	11	27	16	10.6%	18.9%	39.1%
incl.	13	26	13	12.4%	20.4%	36.6%
that also incl.	13	21	8	18.3%	24.3%	37.1%
containing	14	18	4	20.2%	26.4%	36.7%



HoleID	From (m)	To (m)	Interval (m)	THM	>1mm	<38um
PHAC2047	14	18	4	1.5%	4.6%	28.8%
PHAC2048	22	28	6	2.1%	1.5%	27.7%
incl.	26	27	1	5.4%	0.3%	22.7%
PHAC2049	12	13	1	1.3%	33.5%	18.4%
and	17	20	3	2.0%	2.3%	39.4%
PHAC2050	15	16	1	2.0%	4.5%	27.8%
and	19	21	2	1.4%	5.2%	28.3%
PHAC2051	12	25	13	1.6%	14.2%	28.0%
incl.	16	17	1	5.8%	32.9%	24.3%
PHAC2052	7	12	5	1.4%	16.0%	23.5%
and	15	16	1	1.3%	5.4%	33.7%
PHAC2054	14	15	1	1.2%	21.1%	58.6%
PHAC2056	24	27	3	1.6%	2.1%	30.6%
PHAC2057	21	34	13	2.6%	5.7%	40.2%
incl.	28	29	1	8.4%	70.0%	16.2%
PHAC2058	22	27	5	3.7%	5.3%	36.1%
incl.	23	24	1	5.7%	11.5%	29.8%
PHAC2059	26	27	1	1.5%	0.5%	40.7%
and	31	33	2	1.3%	0.8%	22.4%
PHAC2060	25	27	2	1.2%	1.7%	13.7%
and	30	36	6	3.1%	2.1%	37.7%
incl.	32	35	3	4.6%	1.4%	36.1%
PHAC2061	24	26	2	1.4%	1.8%	23.7%
and	33	34	1	1.0%	0.5%	24.1%
PHAC2062	6	33	27	8.7%	10.9%	39.3%
incl.	12	32	20	11.2%	12.8%	42.1%
that also incl.	13	28	15	12.9%	16.2%	34.5%
PHAC2063	5	31	26	6.8%	11.0%	37.3%
incl.	15	28	13	11.7%	12.4%	35.9%
that also incl.	15	25	10	13.8%	15.4%	37.1%
PHAC2064	8	30	22	8.5%	12.7%	39.5%
incl.	9	10	1	5.4%	24.7%	35.1%
and	15	28	13	12.6%	14.2%	41.4%
that also incl.	17	26	9	14.9%	16.3%	38.2%
and	34	36	2	1.4%	50.0%	49.8%
PHAC2065	5	6	1	1.1%	60.0%	28.6%
and	9	10	1	1.1%	0.8%	26.9%
and	12	13	1	1.2%	18.7%	24.0%
and	16	29	13	9.8%	11.9%	38.3%
incl.	16	25	9	12.9%	16.6%	35.1%
PHAC2066	9	25	16	6.7%	12.6%	34.3%
incl.	17	23	6	15.0%	16.4%	36.0%



HoleID	From (m)	To (m)	Interval (m)	THM	>1mm	<38um
PHAC2067	10	33	23	6.5%	11.0%	35.7%
incl.	17	26	9	13.4%	20.4%	34.4%
that also incl.	18	26	8	14.1%	20.8%	34.6%
containing	19	20	1	21.3%	25.7%	30.1%
PHAC2068	11	27	16	10.0%	23.2%	31.7%
incl.	17	27	10	14.8%	28.6%	32.1%
that also incl.	25	26	1	22.0%	11.0%	40.5%
and	30	36	6	1.8%	2.3%	50.6%
PHAC2069	9	14	5	1.3%	6.2%	27.2%
and	17	30	13	2.5%	8.8%	43.2%
incl.	21	24	3	5.8%	15.7%	34.5%
PHAC2070	9	10	1	1.0%	0.7%	22.6%
and	14	26	12	2.9%	7.0%	33.3%
PHAC2071	13	27	14	2.6%	5.1%	38.9%
PHAC2072	7	26	19	4.0%	12.0%	32.4%
incl.	16	23	7	7.9%	19.1%	37.5%
that also incl.	22	23	1	10.3%	14.8%	36.2%
PHAC2073	8	31	23	8.8%	12.3%	41.1%
incl.	15	29	14	13.9%	18.9%	37.3%
that also incl.	16	28	12	15.1%	17.5%	36.9%
containing	21	23	2	20.5%	12.2%	38.6%
PHAC2074	10	13	3	4.7%	1.8%	31.9%
incl.	10	12	2	5.7%	1.2%	29.2%
PHAC2075	5	17	12	4.9%	22.4%	38.3%
incl.	9	13	4	10.6%	31.8%	29.5%
that also incl.	9	12	3	11.6%	38.2%	27.7%
PHAC2078	24	25	1	1.2%	0.6%	37.0%
PHAC2079	16	17	1	1.1%	9.4%	26.1%
and	23	25	2	1.1%	0.5%	51.8%
PHAC2082	19	32	13	8.0%	11.4%	43.6%
incl.	21	30	9	10.5%	13.6%	40.8%
that also incl.	23	26	3	14.5%	19.7%	33.7%

APPENDIX 4: JORC Table 1 – Pyramid Hill – Mineral Sands

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	- 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. - 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.	- 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, 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).	- 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 contamination, and this was noted.
Logging	- 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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	- 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.



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 adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.	• For the aircore drilling 1m samples were routinely collected of all the zones with mineral sands identified from panning. • 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 leading laboratory. • Samples were weighed by Diamantina laboratory on arrival. The laboratory sample was dried for up to 24 hours @ 105 – 110 degrees Celsius. • The sample was loosened until friable and passed through a rotary splitter to take 250 g sub-sample. • This sub-sample is then wet screened on a Sweco vibrating screen deck at a top aperture of 1 mm (oversize ‘OS’) and a bottom screen of 38 µm (SLIMES fraction). • The sand fraction containing the THM (-1 mm and +38 µm) is then dried and a sub-split of approximately 100 g is taken using a micro riffle splitter and used for heavy liquid separation using funnels and a heavy liquid, Tetrabromoethane (TBE), with a density of between 2.92 and 2.96 gcm-3 to determine total heavy mineral (THM) content. • 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 samples. • 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 at a rate of 1 in 40. • 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 laboratory. • The samples were collected at a weight that meant all individual meter samples were weighted equally into the



Criteria	JORC Code explanation	Commentary
		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.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Significant intersections are checked by the Exploration Manager. Significant intersections are cross-checked with the geology logged after assays are received. - No twin holes have been drilled for comparative purposes. Drilling at 50m spacing along one line was conducted to aid in assessing drill spacing requirements for resource drilling. - Primary data was digitally collected and entered via a field Toughbook computer using in house logging codes. The



Criteria	JORC Code explanation	Commentary
		data is sent to the database manager where the data is validated and loaded into the master database. No adjustments have been made to the assay data received.
Location of data points	- 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.	- Hole collar locations have been picked up by Falcon employees using a handheld GPS with a +/- 3m error. - The grid system used for the location of the drill holes is MGA_GDA94 (Zone 54). - RL data have been assigned from 10m DEM satellite data.
Data spacing and distribution	- 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.	- Spacing of the aircore drilling varies. This was generally 200m spacing. In some case some holes were tightened to 100m spacing if additional geological data was required from certain locations. Along a particular high grade zone the drill spacing was tightened to 50m spacing so that this can be assessed to determine an appropriate spacing for resource drilling in the future. - The current spacing is not considered sufficient to assume any geological or grade continuity of the results intersected. No sample compositing has been applied.
Orientation of data in relation to geological structure	- 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.	- Drilling was all vertical and is not considered to introduce any sampling bias. - Drilling was conducted along existing roads and in paddocks.
Sample security	The measures taken to ensure 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 receipt 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	Acknowledgment and appraisal of exploration 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 a 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	- 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.	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 minimum 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.	• Only THM% is reported in this announcement. Additional test work is planned and will be reported once available.
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. • Zones where mineralisation is open are shown on the maps and sections provided. • Mineralogical analysis and metallurgical test work is ongoing.