

CORPORATE PROFILE

Shares on issue: 52,650,001 Listed options: 10,450,000 Unlisted options: 10,500,000 Cash: \$5.4M (30 September 2022) Market Capitalisation: \$23.2M* Debt: Nil

PROJECTS

MICK WELL AND KINGFISHER

Breakthrough high grade rare earth elements discovery in the Gascoyne region of Western Australia

BOOLALOO

Exciting copper and gold potential in the Ashburton region of Western Australia

CORPORATE DIRECTORY

WARREN HALLAM Non-Executive Chairman

JAMES FARRELL Executive Director and CEO

SCOTT HUFFADINE Non-Executive Director

STEPHEN BROCKHURST Company Secretary

MEDIA & INVESTOR ENQUIRIES

Peter Taylor, NWR Communications P: +61 412 036 231 E: peter@nwrcommunications.com.au

ABN: 96 629 675 216

P: +61 8 9481 0389 E: info@kingfishermining.com.au

Unit 2, 106 Robinson Avenue Belmont WA 6104 AUSTRALIA

* Based on a share price of \$0.44 as of 9 January 2023

Exciting New Carbonatite REE Targets Identified Along 54km Target Corridor

Significant New Targets Identified at Kingfisher South

- Numerous potential carbonatite intrusion locations across the entire length of the Company's 54km Chalba target corridor identified from tenement-scale airborne geophysics survey.
- Significant new large-scale target confirmed at Kingfisher South, where geological mapping has already confirmed the presence of ferrocarbonatite intrusions. The target includes a central area defined by a distinct circular magnetic feature with a diameter of 2km; a geophysical signature like other known carbonatite intrusions globally and within the region.
- New targets show geophysical responses similar to the Mick Well area, where geological mapping has delineated strike lengths of more than 5km of outcropping high grade Rare Earth Elements (REE) mineralisation and where drilling has returned results of 5m at 3.45% TREO (Total Rare Earth Oxides), including 3m at 5.21% TREO (see ASX:KFM 5 July 2022).
- New targets to be ranked and included in the Company's exploration activities for 2023.

Kingfisher Mining Limited (**ASX:KFM**) ("**Kingfisher**" or the "**Company**") is pleased to announce that it has received the results from its recent tenement-scale magnetics and radiometrics airborne geophysics surveys at its 100% owned projects in the Gascoyne Mineral Field in Western Australia. Numerous high-quality targets have been revealed across the survey area, which covered the Company's 54km target corridor.

Kingfisher's Executive Director and CEO James Farrell commented: **"The results from the airborne geophysics at our Gascoyne REE projects continue to highlight the significant potential of our belt-scale tenement holding in this globally important REE region.**

The survey adds another leg in our discovery journey which has led to the identification of numerous additional potential carbonatite intrusions along the 54km Chalba mineralised corridor. This is an enormously encouraging early development in the project generation, expanding our footprint beyond the Mick Well area, where we made our first breakthrough high grade REE discovery only 12 months ago.

All of the selected targets have geophysical responses similar to Mick Well, where we have so far identified more than 5km of outcropping high grade REE mineralisation strike, delineated by surface samples and drill results which includes 5m at 3.45% TREO.

We are extremely excited and are looking forward to following up these dominate targets which will hopefully confirms that our Chalba mineralised corridor is world class."

Airborne geophysics are highly effective tools for the identification of carbonatite intrusions and associated mineralisation. The carbonatite intrusion model has a central carbonatite pipe which is comprised of multiple phases of carbonatite intrusion that is surrounded by ring dykes which form around and radial dykes which radiate out from the central intrusion (Figure 1). The carbonatite exploration model envisages alteration of the host country rock into which the carbonatites intrude, with development of Sodic (Na) and Potassic (K) fenites around the intrusions



Figure 1: 3D schematic of a carbonatite intrusion⁺



which often hosts the REE mineralisation (Figure 2). Each part of the carbonatite system has characteristics which can be detected by geophysics, such as high iron content in ferrocarbonatites which is apparent in the magnetics or potassium fenite alteration and thorium associated with the mineralisation which are apparent in the radiometrics. The combination of these geophysical responses to the carbonatite geology make it a very powerful tool for early stage targeting and project generation.



Figure 2: Carbonatite associated rare earth element mineralisation model*. The model shows carbonatite intrusions and dykes, areas of potassic fenitisation as well as the late stage REE-bearing dykes and veins – which have been discovered by the Company.

Ten high priority target areas have been identified from the interpretation of the geophysics surveys, with each target selected from a combination of magnetic, potassium and thorium features (Figure 3 and Figure 4). The target areas are spaced along the entire length of the 54km Chalba target corridor and are large scale, ranging in size from 0.7km² to 18km².

A significant new large-scale target has been delineated at Kingfisher South (CH10), where geological mapping has already confirmed the presence of ferrocarbonatite intrusions (see ASX:KFM 21 December 2021). The target includes a central area defined by a distinct circular magnetic feature with a diameter of approximately 2km which is surrounded by an area of high thorium and potassium which extends over a length of more than 6km along the Chalba target corridor.

High priority targets CH2, CH5, CH6 and CH8 have already been selected for immediate surface mapping and sampling due to the presence of interpreted carbonates and circular or oval-shaped features which are indicative of intrusion pipes. The identification of the targets from geophysics is an important early part of the discovery process, with all of the targets to be ranked and included in the Company's project generation activities in 2023 and beyond.





Figure 3: Total magnetic intensity for the 54km Chalba target corridor showing priority carbonatite targets and interpreted faults. Targets are labelled CH1 to CH10 and were selected based on the magnetic, thorium and potassium responses from the airborne geophysics surveys.



Figure 4: Thorium response from the airborne geophysics survey showing priority carbonatite targets and interpreted faults. High thorium responses are typically associated with carbonatite-related REE mineralisation.



Gascoyne Exploration Program

Kingfisher carried out extensive and targeted exploration programs for its Gascoyne projects during 2022. The Company's exploration work is cost-effective and is aiming to develop and test drill targets from ground-based mapping and rock sampling. The Company is also simultaneously developing a pipeline of exploration opportunities through integrating tenement-scale airborne geophysical surveys with geological knowledge from the Company's breakthrough REE discovery at Mick Well. The geophysical survey from the 54km Chalba corridor is an important part of this generative work.

Planning is well advanced for the Company's exploration activities for 2023 at its Gascoyne projects. It is envisaged the 2023 exploration activities will include drilling at MW2, MW7, MW8 as well as substantial project generation work across the 54km target corridor, including the CH1 to CH 10 targets as well as the Arthur River and Mooloo projects. The 2023 exploration activities are also likely to include airborne geophysics across the Mooloo project. The Company's exploration plans for 2023 will be announced shortly.

Upcoming News

- January 2023: Results from airborne geophysics surveys at Arthur River.
- January 2023: Exploration activities for 2023.
- January 2023: Results from ongoing surface mapping and rock chip sampling in the Mick Well area.
- January 2023: First assay results from MW2 drilling.
- February 2023: Additional assay results from MW2 drilling.

About the Kingfisher and Mick Well Projects

The Mick Well and Kingfisher Projects are located approximately 230km east of Carnarvon, in the Gascoyne region of Western Australia. The Company holds exploration licences covering 969km² and has recently increased its interests in the Gascoyne Mineral Field by nearly 40% through the targeted pegging of additional tenure interpreted to be prospective for rare earth elements (Figure 5). The tenure includes rocks of the Proterozoic Durlacher Suite that hosts the world-class Yangibana Deposit which includes 29.93Mt @ 0.93% TREO[#] as well as the Archaean Halfway Gneiss.

The Company recently made discoveries of hard rock and clay rare earth elements mineralisation at Mick Well. Both styles of mineralisation are associated with carbonatites that intruded along a crustal-scale structural corridor, the Chalba Shear, which extends over a strike length of 54km within the Company's tenure. The Company has also identified a second structural corridor along the Lockier Shear which extends for 18km across the Company's Mooloo Project.

Geology mapping and sampling of the REE mineralisation at MW2 has returned rock chip results of over 40% TREO and resulted in the delineation of five parallel lodes of outcropping mineralisation within a 300m wide mineralised zone. Kingfisher's discovery drilling in the MW2 area has returned high grade monazite mineralisation with 5m at 3.45% TREO, including 3m at 5.21% TREO as well as 12m at 1.12% TREO, with 4m at 1.84% TREO. The mineralisation is associated with broad zones of potassium, sodic and mafic fenite, which are alteration styles that are associated with the intrusion of carbonatites.





Figure 5: Location of the Mick Well Project in the Gascoyne Mineral Field showing the extents of the Durlacher Suite and Halfway Gneiss. The location of the Yangibana Deposit and Yin and Lyons Projects 100km north of Kingfisher's projects are also shown.



This announcement has been authorised by the Board of Directors of the Company.

Ends

For further information, please contact:

Kingfisher Mining Limited James Farrell, Executive Director Ph: +61 (08) 9481 0389 E: info@kingfishermining.com.au

Media & Investor Enquiries

Peter Taylor, NWR Communications Ph: +61 412 036 231 E: <u>peter@nwrcommunications.com.au</u>

About Kingfisher Mining Limited

Kingfisher Mining Limited (**ASX:KFM**) is a mineral exploration company committed to increasing value for shareholders through the acquisition, exploration and development of mineral resource projects throughout Western Australia. The Company's tenements cover 1,676km² in the underexplored Ashburton and Gascoyne Mineral Fields.

The Company has made a breakthrough high grade rare earth elements discovery in the Gascoyne region where it holds a target strike lengths of more than 54km along the Chalba mineralised corridor and more than 18km along the Lockier mineralised corridor. The Company has also secured significant landholdings across the interpreted extensions to its advanced copper-gold exploration targets giving it more than 30km of strike across the Boolaloo Project target geology.

To learn more please visit: www.kingfishermining.com.au

Previous ASX Announcements

ASX:KFM: Assays from MW7 Confirm Another High Grade REE Discovery 29 November 2022.

ASX:KFM: Further Exceptional REE Results Extends MW2 Strike Length to 3km 4 October 2022.

ASX:KFM: 40% REE Returned from Mick Well 30 August 2022.

ASX:KFM: Latest Drilling Returns High Grade REEs with 5m at 3.45% TREO, including 3m at 5.21% TREO 5 July 2022.

ASX:KFM: Surface Assays up to 21% TREO Define a Further 800m of Outcropping Mineralisation 20 June 2022.

ASX:KFM: High Grade Rare Earths Returned from Discovery Drill Hole: 4m at 1.84% TREO, including 1m at 3.87% TREO 24 March 2022.

ASX:KFM: Significant Rare Earths Discovery: 12m at 1.12% TREO 10 January 2022.

ASX:KFM: Kingfisher Confirms Rare Earths Potential at Gascoyne Projects 21 December 2021.

- ⁺ Simandl, G. J. & Paradis, S. 2008. Carbonatites: related ore deposits, resources, footprint, and exploration methods. Applied Earth Science , 127:4, 123–152.
- * Elliott, H.A.L., Wall, F., Chakhmouradian, A.R., P.R.Siegfried, Dahlgrend, S., Weatherley, S., Finch, A.A., Marks, M.A.W., Dowman, E. and Deady, F. 2018. Fenites associated with carbonatite complexes: A review. Ore Geology Reviews , Volume 93, February 2018, Pages 38–59.
- # ASX Announcement 'Drilling along 8km long Bald Hill Fraser's trend Increases Indicated Mineral Resources by 50%'. Hastings Technology Metals Limited (ASX:HAS), 11 October 2022.



Total Rare Earth Oxide Calculation

Total Rare Earths Oxides (TREO) is the sum of the oxides of the light rare earth elements lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm) and the heavy rare earth elements europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

Forward-Looking Statements

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

Competent Persons Statements

The information in this report that relates to Exploration Results is based on information compiled by Mr James Farrell, a geologist and Executive Director / CEO employed by Kingfisher Mining Limited. Mr Farrell is a Member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralisation and type of deposit under consideration and to the activity that is being reported on 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 Farrell consents to the inclusion in the report of the matters in the form and context in which it appears.

Attachment 1: JORC Code, 2012 Edition – Table 1 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 survey was flown by MagSpec Airborne Surveys and included 11,875 line km for the Kingfisher, Mick Well and Arthur River areas. Nominal flight line spacings were 50m, with tie lines at 500m spacings. The nominal sensor height was approximately 30m. Magnetics data was acquired with a G-823A caesium vapour magnetometer, with a 20Hz sample rate (approximately 3.5m). The radiometrics survey used a G-823A caesium vapour magnetometer with a 2Hz sample rate (approximately 35m).
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). 	No new drilling results are included in this report.
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. 	• No new drilling results are included in this report.
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. 	• No new drilling results are included in this report.
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. 	Data processing was undertaken MagSpec Airborne Surveys and by the Company's geophysics consultant, Mira Geoscience Asia Pacific Pty Ltd.

Criteria	JORC Code explanation	Commentary
	 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. 	
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. 	 During flight, the pilot monitored system health from prompts on the navigation screen. The diurnal base stations were monitored by ground crew. Upon completion of each flight all survey data were transferred from the acquisition system to the infield data processing computer. Using customised techniques, the data were checked for any errors and compliance with specifications.
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. 	 Independent verification of the data was completed by Mira Geoscience Asia Pacific Pty Ltd. No issues were identified with the data.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Flight paths were logged with an Integrated Novatel OEM719 DGPS receiver. Navigation information supplied to the pilot via an LCD steering indicator. All data were synchronised to a one pulse per second triggered by the GPS time.
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. 	 The survey included 11,875 line km. Nominal flight line spacings were 50m, with tie lines at 500m spacings. The nominal sensor height was approximately 30m.
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. 	Flight lines were generally perpendicular to the strike of the target geology.
Sample security	The measures taken to ensure sample security.	Digital data was transferred using secured file transfer sites.No physical samples were collected.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Independent data verification was completed daily during the survey by Mira Geoscience Asia Pacific Pty Ltd.

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. 	 The project area is located 80km northeast of the Gascoyne Junction and 230km east of Carnarvon. The project includes twelve granted Exploration Licences, E09/2242, E09/2349, E09/2319, E09/2320, E09/2481, E09/2494, E09/2495, E09/2653, E09/2654 and E09/2655, E09/2660 and E09/2661. The tenements are held by Kingfisher Mining Ltd. The tenements lie within Native Title Determined Areas of the Wajarri Yamatji People and Gnulli People. All the tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 No previous systematic exploration for carbonatite-associated mineralisation had been previously completed. Exploration for base metals at Kingfisher undertaken was by Pasminco Ltd in 1994, Mt Phillips Exploration Pty Ltd in 2006 and WCP Resources in 2007. Exploration for base metals at Mick Well was completed by Helix Resources Ltd in 1994, WA Exploration Services Pty Ltd in 1996, Mt Phillips Exploration Pty Ltd in 2006 and WCP Resources in 2007.
Geology	Deposit type, geological setting and style of mineralisation.	• The Company's tenements in the Gascoyne Mineral Field are prospective for rare earth mineralisation associated with carbonatite intrusions and associated fenitic alteration.
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. 	 No new drilling results are included in this report.

Criteria	JORC Code explanation	Commentary
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. 	 No new drilling results are included in this report and no data aggregation has been applied.
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'). 	No new drilling results are included in this report.
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. 	• A map showing relevant data has been included in the report.
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.	All of the geophysical survey results are included in this report.
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. 	 All of the relevant historical exploration data has been included in this report. All historical exploration information is available via WAMEX.
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. 	 On-going exploration in the area is a high priority for the Company. Exploration to include tenement-scale acquisition of geophysics data to define the extents of carbonatites, mapping and rock chip sampling as well as additional RC drilling.