

## CORPORATE PROFILE

Shares on issue: 53,715,001

Listed options: 14,850,001

Unlisted options: 11,885,000

Cash: \$3.9M (31 March 2023)

Market Capitalisation: \$15.0M\*

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

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\* Based on a share price of \$0.28 as of 7 July 2023

# Carbonatite Intrusions Confirmed at Large-Scale Chalba Targets

## Parallel Exploration Work Targeting Lithium Underway

- Large-scale carbonatite intrusions confirmed at CH8 and the new CH11 targets.
- Rare earths mineralisation confirmed at CH8.
- Exploration targeting additional carbonatite intrusions interpreted as being the sources of the defined MW2, MW7 and MW8 mineralisation to continue along the Chalba target corridor, together with on-ground work at the high priority large-scale carbonatite target at LK1.
- Parallel strategy assessing the potential for lithium-bearing pegmatites is advancing, with mapping and lithium fertility sampling underway. Further updates on lithium exploration expected during July.
- The strike of the mineralised zone which hosts the high grade MW2, MW7 and MW8 rare earths discoveries at the CH1 intrusion doubled to more than 5km.
- New rock chip results include:
  - 18.84% Total Rare Earth Oxides (TREO) with 3.34% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2247)
  - 13.33% TREO with 2.06% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1866)
  - 9.30% TREO with 1.68% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2254)
  - 7.68% TREO with 1.36% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2207)

Kingfisher Mining Limited (ASX:KFM) ("Kingfisher" or the "Company") is pleased to announce the latest results from its ongoing exploration targeting large-scale carbonatite intrusions and high grade Rare Earth Elements (REE) mineralisation. A parallel strategy to assess the lithium potential is underway and focussed on the Thirty-Three Suite pegmatites, known to host lithium deposits in the Gascoyne.

Kingfisher's Executive Director and CEO James Farrell commented: "Our focus on advancing our large-scale carbonatite targets is bearing fruit, with the confirmation of new carbonatite intrusions at CH8 and CH11. Significantly, these targets appear to be the surface exposure of deeper intrusion systems and are highly prospective for large-scale intrusive hosted rare earths mineralisation and our ongoing exploration will continue to further define the targets for our next drill program.



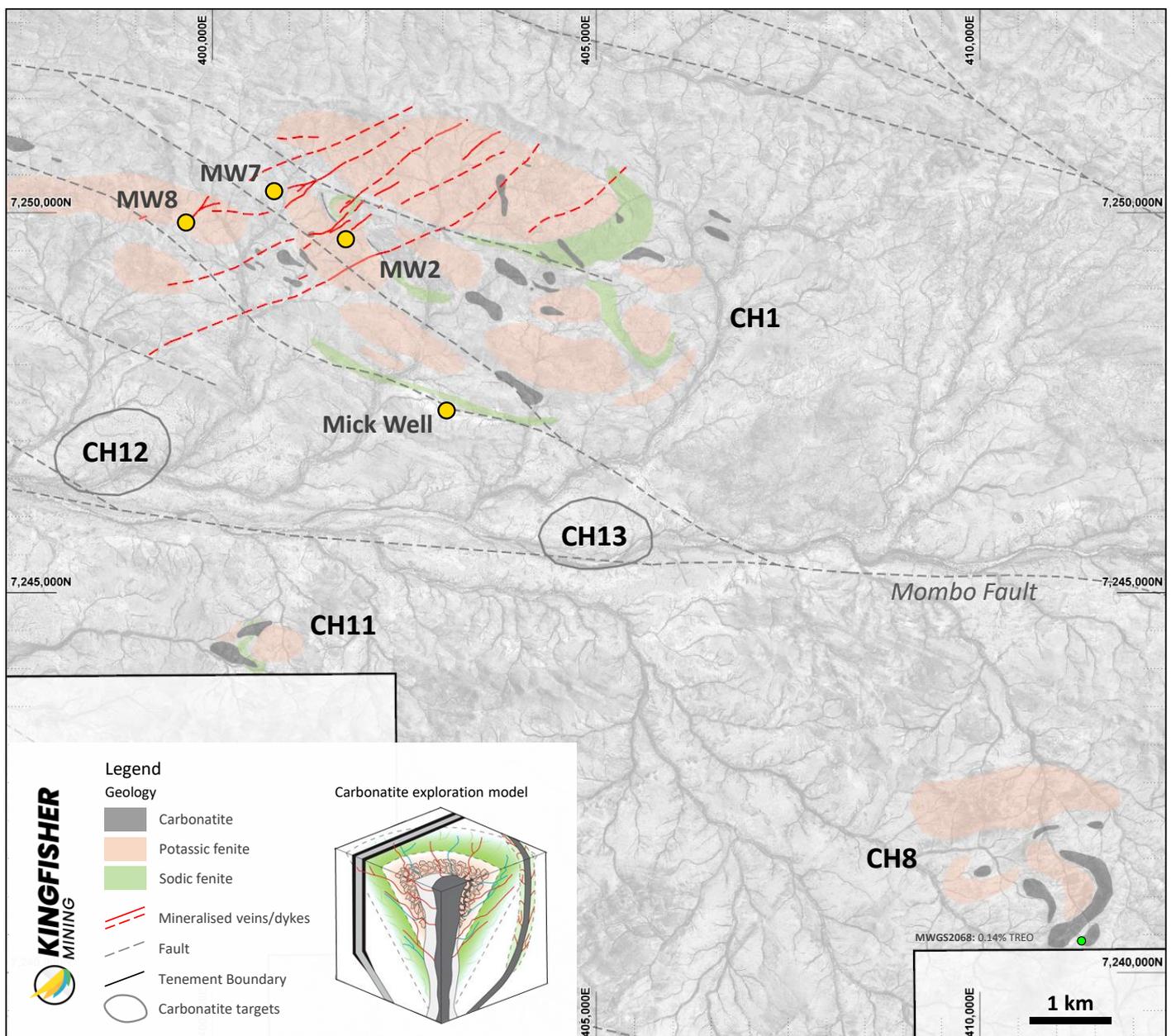
Ferrocarnatite outcrop at CH11

Exploration work targeting lithium-bearing pegmatites is also underway across several of our tenements. We will announce details of the target generation work in the Chalba and Chalba North areas which have mapped Thirty-Three Suite pegmatites, the host of Delta Lithium's Yinnetharra Project, in the coming weeks."

## Large-Scale Carbonatite Intrusions

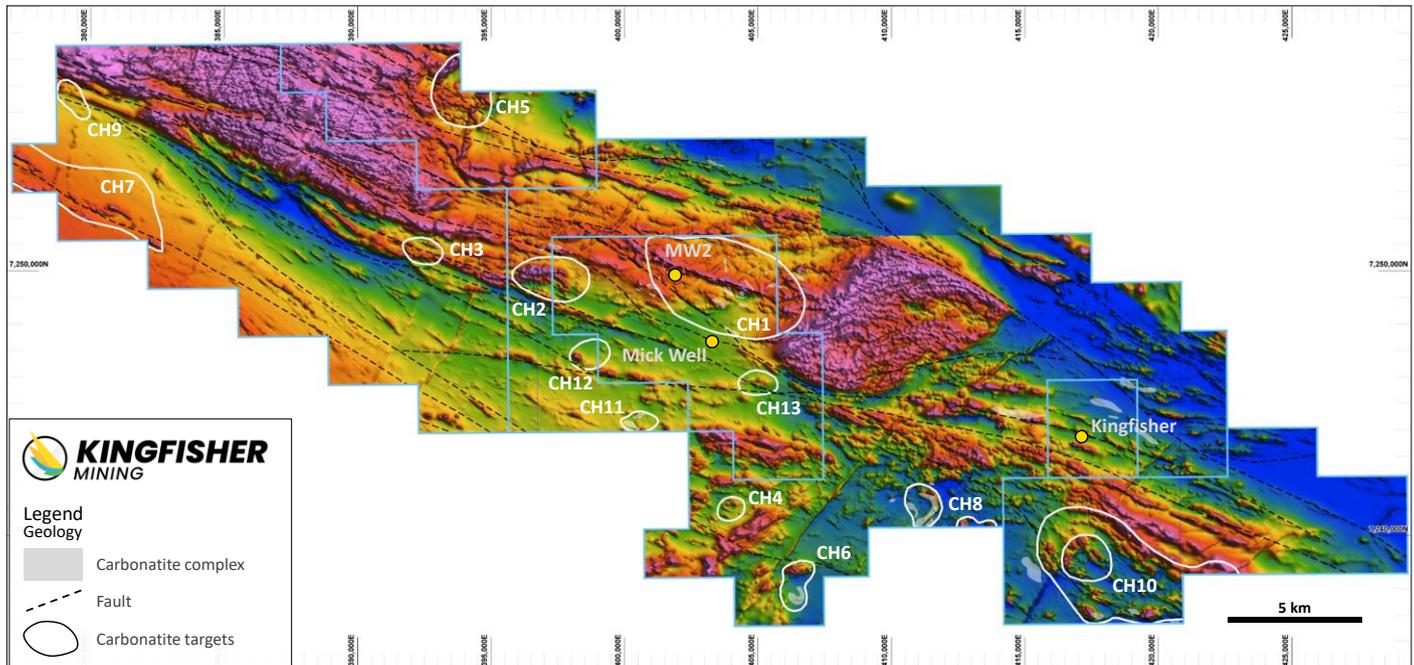
Kingfisher's large-scale carbonatite intrusions exploration is advancing along the extensive 54km Chalba and 30km long Lockier target corridors with the successful discovery of additional carbonatite intrusion centres at the CH8 target and the new CH11 target.

The CH8 carbonatite target was identified from the Company's airborne geophysical surveys (see ASX:KFM 3 April 2023) with mapping and sampling confirming ferrocarbonatite intrusions that are fertile for REE mineralisation, with rock chip sampling returning 0.14% TREO (Figure 1).



**Figure 1:** CH1, CH8 and CH11 carbonatite intrusion centres and associated REE mineralisation. The Momo Fault and newly identified CH12 and CH13 carbonatite targets are also shown. The carbonatite exploration model is explained on page 7 of this announcement.

New carbonatite targets have been identified at CH11, CH12 and CH13 (Figure 2), with geological mapping at CH11 identifying calcium, magnesium and iron-rich carbonatite intrusions. The mapping has also revealed that the CH11 target is potentially upthrown along the Mombo Fault relative to the CH1 intrusion centre, exposing a deeper intrusive complex at surface which is potentially more prospective for intrusion-hosted REE mineralisation (Figure 1). On-ground exploration targeting REE mineralisation at CH11, with rock chip sample results expected in the coming weeks.



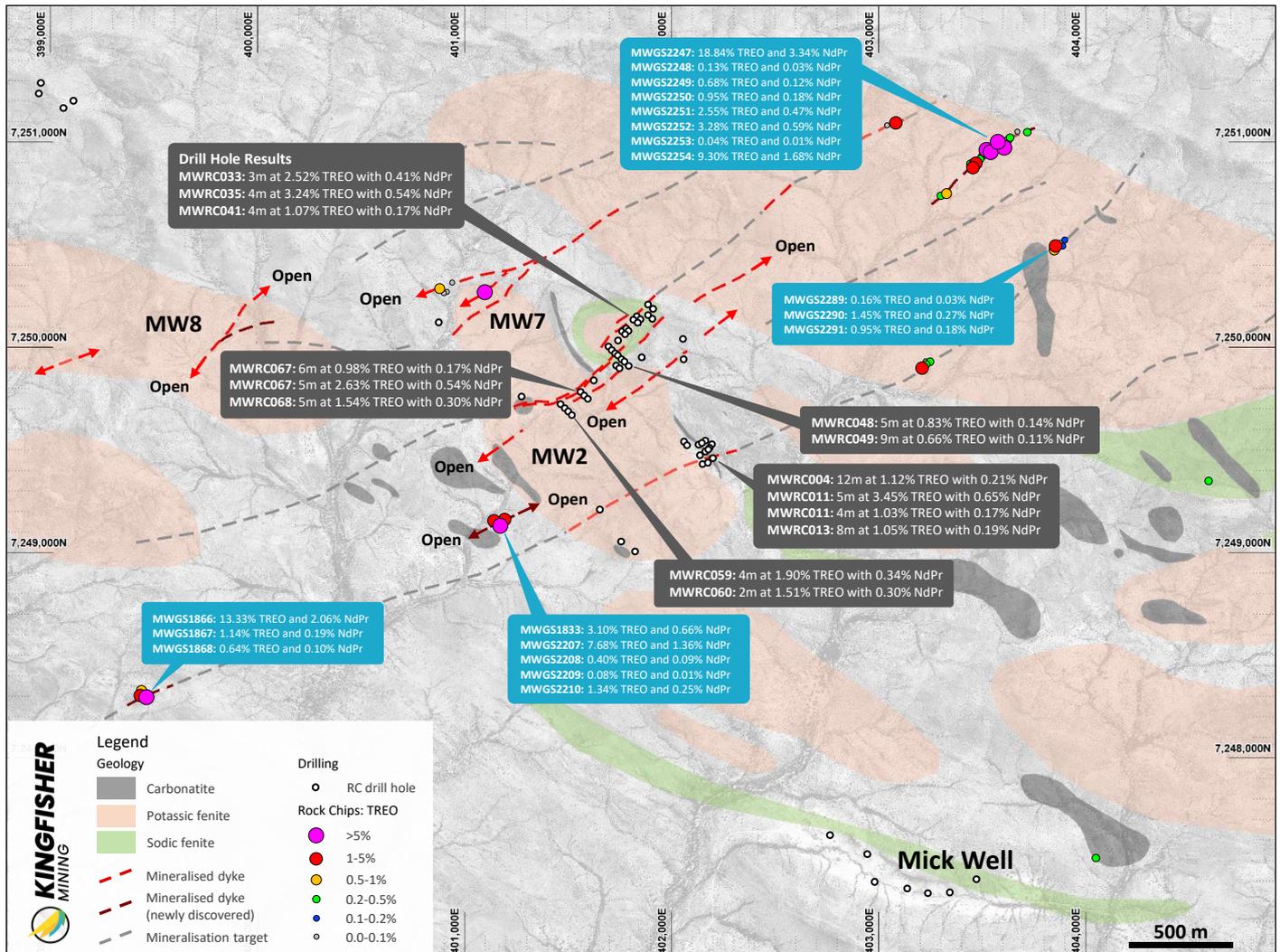
**Figure 2:** Total magnetic intensity for the 54km Chalba target corridor showing priority carbonatite targets and interpreted faults. Targets are labelled CH1 to CH10 and were selected based on the magnetic, thorium and potassium responses from the airborne geophysics surveys.

### Mick Well: High Grade REE Discoveries

Mapping and sampling in the Mick Well area targeting the source carbonatite intrusions of the high grade MW2, MW7 and MW8 mineralisation has produced six new REE discoveries around the CH1 intrusion centre (Figure 3). The discoveries all lie within a NE-trending mineralisation zone that cross-cuts the 54km target corridor. The Mick Well mineralised zone is comprised of multiple parallel monazite-dominant lodes and has more than doubled in length from the 2.4km announced on 3 April 2023 and now exceeds a strike length of over 5km. Further high-grade results from the Mick Well area include:

- 18.84% TREO with 3.34% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2247)
- 13.33% TREO with 2.06% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1866)
- 9.30% TREO with 1.68% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2254)
- 7.68% TREO with 1.36% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2207)
- 6.16% TREO with 1.12% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2239)
- 5.95% TREO with 0.91% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1828)
- 5.75% TREO with 1.06% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2240)
- 4.82% TREO with 0.81% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1846)
- 4.19% TREO with 0.76% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1883)
- 3.28% TREO with 0.59% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS2252)
- 3.10% TREO with 0.66% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1833)

The latest surface sample results further highlight the significance of the NE-trending magnetic features for discovery of additional high-grade REE mineralisation and the late-stage intrusion of ferrocarnatite dykes (see ASX:KFM 3 April 2023). Full sample results for rock chip samples from the target structures are included in Annexure 1.



**Figure 3:** Mick Well mineralisation and rock chip results (blue boxes). Drill results are shown in grey boxes (see ASX:KFM 7 February 2023, 5 July 2022 and 24 March 2022). Results are stated as Total Rare Earth Oxides (TREO%) and total Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (%) content.

## Lithium Exploration

Lithium exploration has commenced with collation of regional data, including aerial photography, review of the airborne magnetics and the identification of favourable host rocks and target locations close to the margins of known granites.

Geological mapping and fertility sampling has commenced, including sampling of the interpreted Thirty-Three Suite Pegmatites from the state government geological maps.

The Company is also reviewing various other imagery (multi-spectral) and geophysical techniques it believes will help in the expedited identification and confirmation of lithium-bearing pegmatites within its tenements.

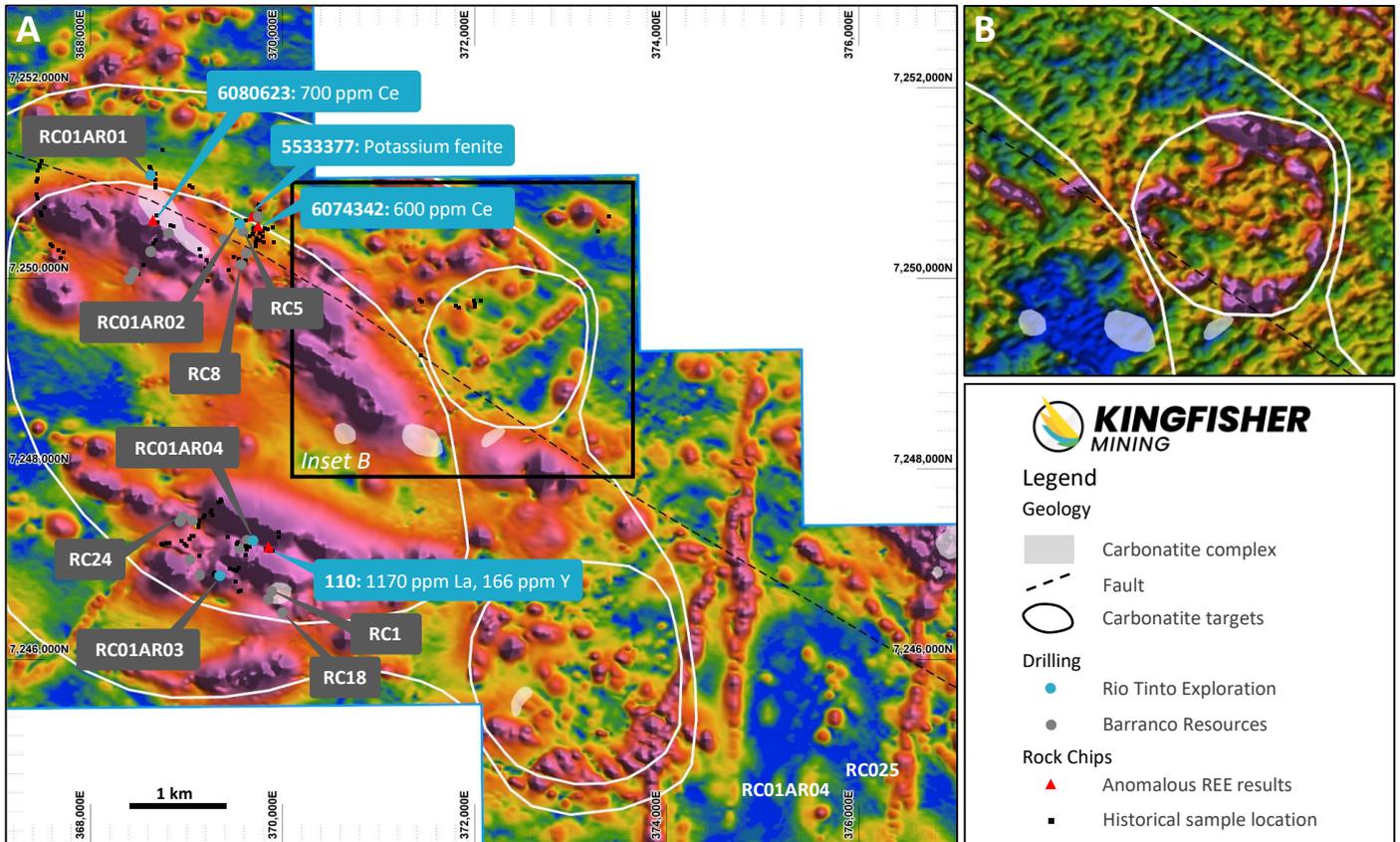
It is anticipated initial results will be available in the coming weeks.

## LK1 Exploration Target

The large-scale LK1 target is more than 9km long and more than 6.5km wide and is comprised of multiple circular features which are defined by the magnetics and thorium, with a ring-shaped thorium feature having a diameter of 1.7km (see ASX:KFM 18 January 2023). The combination of magnetic, thorium and potassium responses of the target appear similar to the architecture of the carbonatite intrusion model, with potential for carbonatite plugs and the associated vein and dyke mineralisation (Figure 4).

Past exploration in the Arthur River area has established the potential for carbonatite intrusion-related REE mineralisation at the LK1 target, with previous drilling and surface sampling establishing the presence of siderite and potassic alteration, numerous anomalous REEs as well as pathfinder elements. Previous exploration results include:

- Broad zones of ironstone and siderite intersected in multiple drill holes completed by Barranco Resources (Wamex report A78338). Siderite-rich ironstones host the REE mineralisation within the Gifford Creek Carbonatite complex, including at Dreadnought Resources' Yin discovery<sup>^</sup>.
- Significant areas of ironstone have been mapped at surface, with limited surface sample results confirming the presence of highly anomalous rare earth elements, including 1170 ppm La and 166 ppm Y (Figure 4, Wamex report A57341) as well as other samples with 700 ppm Ce and 600 ppm Ce (Wamex report A65851). Results from samples similar La and Ce values with analysis of the full suite of REE element from Kingfisher's Mick Well are typically in the order of 0.5% and 0.3% TREO (see ASX:KFM 30 August 2022).
- Kingfisher's work in the Mick Well area has established a relationship between REEs and various pathfinder elements, including Ba, Sr, P, Co, Ni and Zn. Drilling in the LK1 area completed by Rio Tinto Exploration (four holes) was only analysed for Ce, La and Y as well as a number of pathfinder elements. Assays from the Rio Tinto Exploration drilling returned anomalous REEs and key pathfinder elements, including 340 ppm Ce, 195 ppm La, 125 ppm Y, 1100 ppm Ba and 8900 ppm P (Table 1, Wamex report A65851) supporting the potential for carbonatite-related REE mineralisation.
- Drilling by Barranco Resources targeted base metal-bearing ironstones and the 25 RC holes drilled by Baranco were not analysed for REEs. However, the drilling did return highly anomalous results for the pathfinder element Zn (Table 1), with results from ironstones which included 25m at 0.29% Zn from surface (RC5, Wamex report A78338) and 22m at 0.29% Zn from 1m (RC25, Wamex report A82640).
- Fenite alteration has been intersected in drilling and has been recorded from petrographic analysis of surface samples close to the ironstone outcrops (Wamex report A65851).
- Moderate to weak conductors coincident with the ironstones have been identified from ground-based Transient Electromagnetic (TEM) surveys in the LK1 area (Wamex report A75273). The REE mineralisation at Mick Well is also conductive, with the high grade REE mineralisation at MW2 identified from drilling a conductor target from Kingfisher's airborne electromagnetic survey (see ASX:KFM 10 January 2022).



**Figure 4:** Total magnetic intensity (A) and thorium responses (B) showing compelling carbonatite targets. Drill hole locations (grey boxes) described in Table 1 and surface sample (blue boxes) are also shown.

**Table 1:** Previous drilling results from the LK1 target area

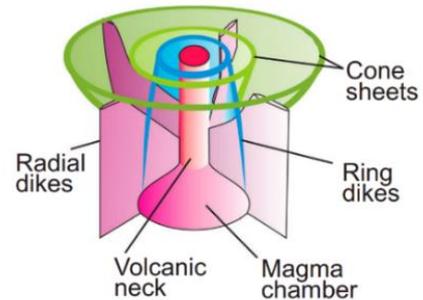
Rio Tinto Drill Hole	Pathfinder elements: highest from 2m samples <sup>1</sup>
ARC01AR01	340 ppm Ce, 195 ppm La, 1100 ppm Ba and 1150 ppm P
ARC01AR02	280 ppm Ce, 165 ppm La, 125 ppm Y, 2600 ppm Ba and 3100 ppm P
ARC01AR03	8900 ppm P
ARC01AR04	1250 ppm Ba and 1400 ppm P
Barranco Drill Hole	Geology and elevated metals <sup>2</sup>
RC1	Ironstone with 7m at 0.25% Zn from 20m
RC5	Ironstone with 25m at 0.29% Zn from surface
RC8	Ironstone with 5m at 0.17% Zn from 20m
RC18	Ironstone with 30m at 0.13% Zn from 10m
RC24	Ironstone with 22m at 0.29% Zn from 1m

<sup>1</sup> Pathfinder elements in the reporting range are associated with REE mineralisation at MW2.

<sup>2</sup> Zinc is associated with the REE mineralisation at MW2. Drill holes not analysed for REEs.

## The Carbonatite Exploration Model

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 5). 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 which often hosts the REE mineralisation (Figure 6).

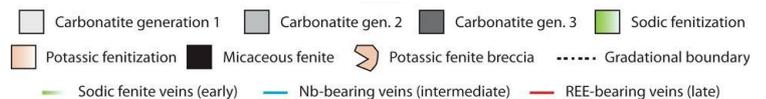
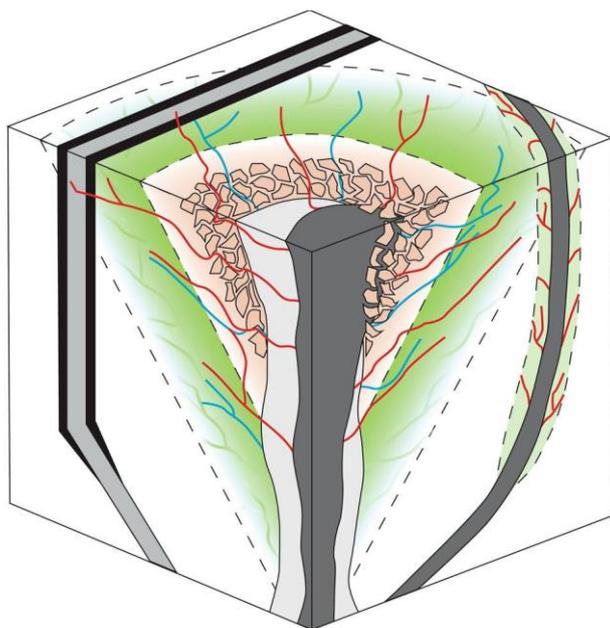


**Figure 5:** 3D schematic of a carbonatite intrusion\*

Each part of the carbonatite system has characteristics which can be detected by modern exploration techniques, for example:

- Thorium associated with the REE mineralisation is apparent in the radiometrics.
- Potassium fenites, the alteration which forms around carbonatites intrusions, is also apparent in the radiometrics.
- Ferrocarnatites have high iron content and can appear as magnetic highs in the geophysics.
- ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) remote sensing can detect various minerals and elements, including carbonates, ferrous and ferric iron as well as alumina and magnesium and can assist with of carbonatites and associated alteration.

The combination of these geophysical responses to the carbonatite geology provide a very powerful combination of exploration tools for early stage targeting and project generation.



**Figure 6:** 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.

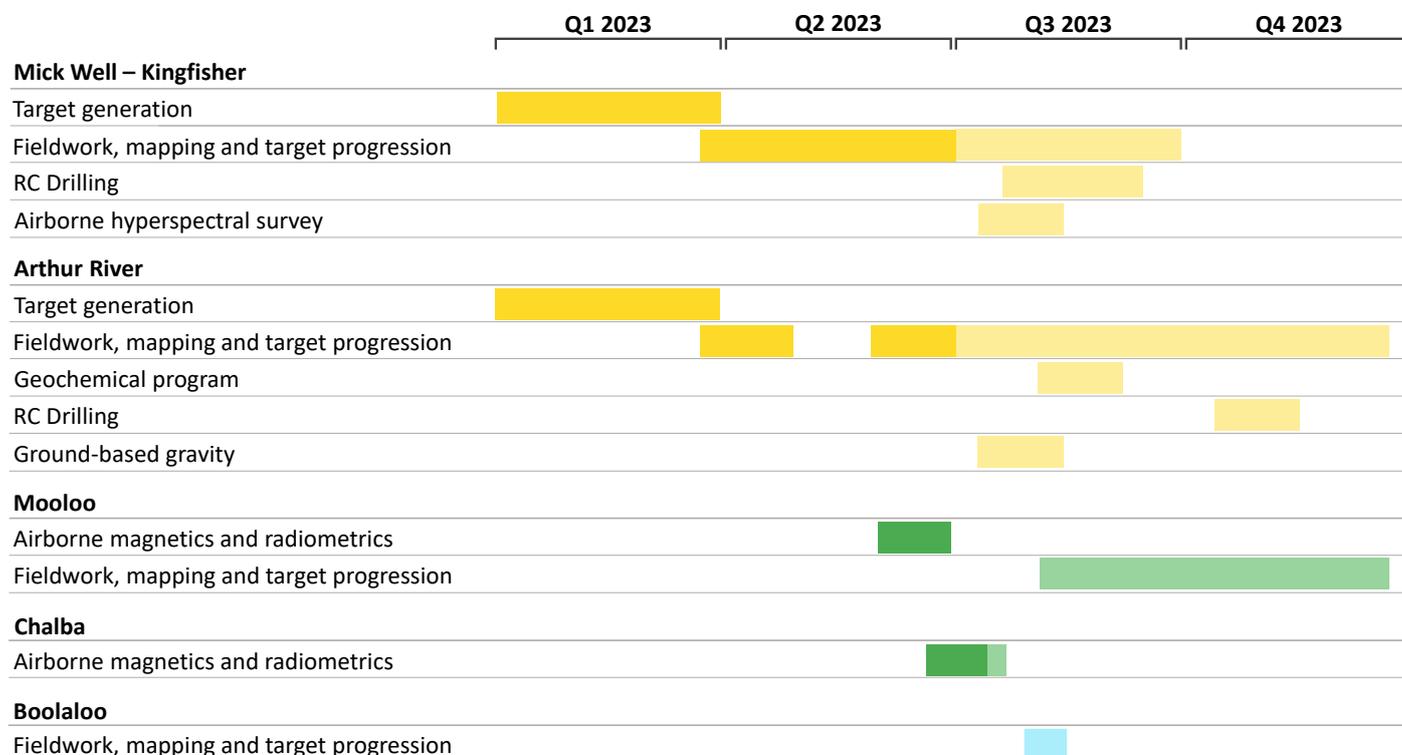
## Gascoyne Exploration Program

Kingfisher is undertaking high impact and value building exploration programs targeting large-scale carbonatite targets along its 54km Chalba target corridor and its 30km long Lockier target corridor. The program will test high priority carbonatite targets across the Company’s belt-scale tenement holding, building upon the significant carbonatite discoveries, which confirmed the presence of high grade REE mineralisation along the Chalba target corridor.

The exploration work planned for the 2023 field season will include:

- Significant on-ground mapping and sampling targeting interpreted “Mt Weld style” carbonatite plugs as well as dyke mineralisation and alteration which can be used to vector towards the large-scale source of intrusions. The results will be used for drill planning of the high priority targets.
- RC drilling to test carbonatite targets at Mick Well, Kingfisher and Arthur River.
- Surface geochemical survey over the large-scale high priority LK1 target at Arthur River, where mapping is restricted by deep weathering associated with the highly altered rocks and cover.
- Ground-based gravity at LK1. The gravity survey will be used to model higher density rocks (potential mineralised carbonatites) at depth.
- Further airborne geophysics to incorporate Mooloo and North Chalba Projects to our early-stage target generation. Magnetics and radiometrics are highly effective for identifying carbonatite mineralisation.

The timeline for the planned and completed activities for 2023 for Kingfisher’s projects are shown below.



### Upcoming News

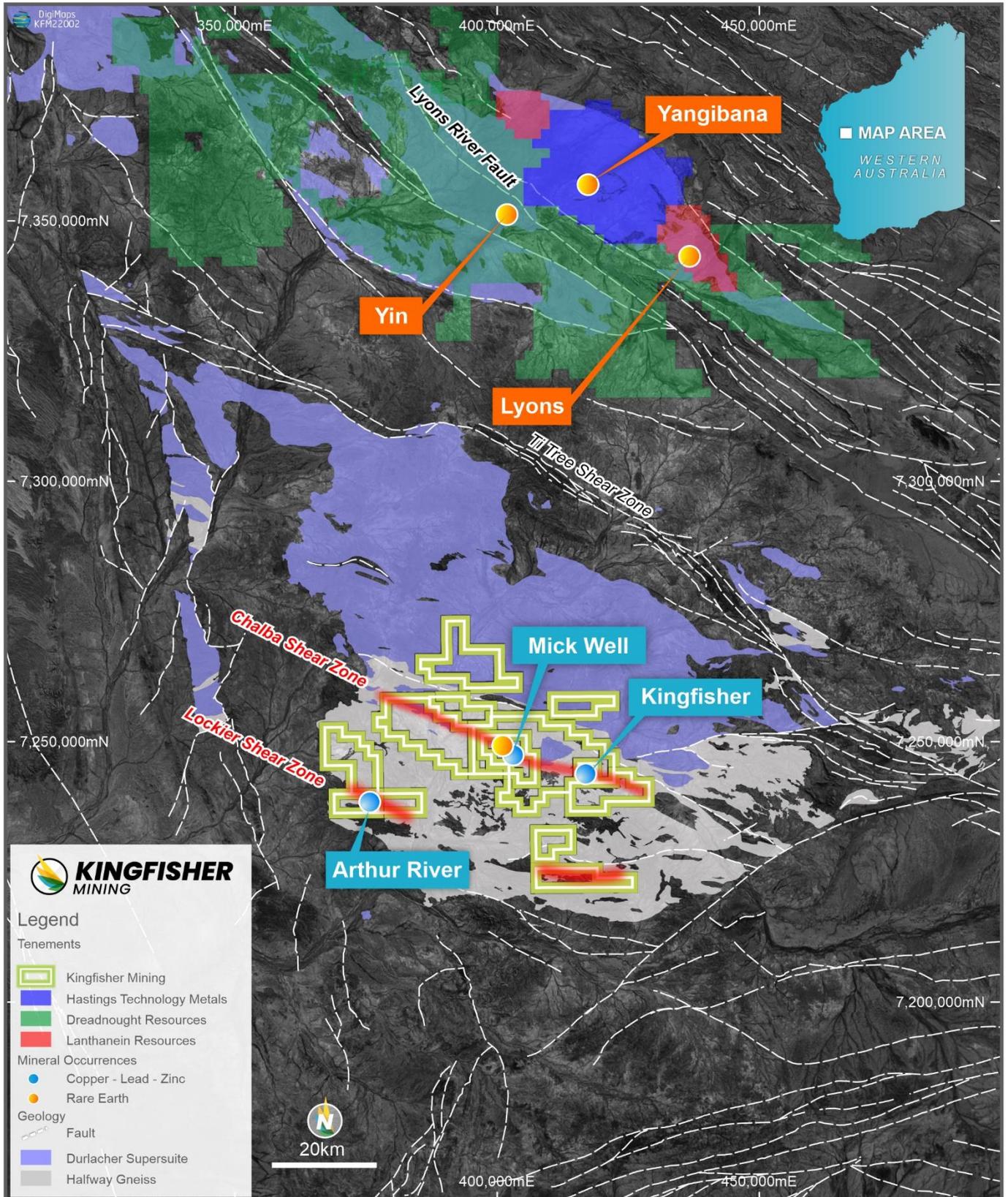
- **July 2023:** Presentation at the Peak Asset Management Microcap Conference, Melbourne 13 July 2023.
- **July 2023:** Exploration update: target generation for lithium.
- **July 2023:** Quarterly Activity Report for the period ending 30 June 2023.
- **August 2023:** Results from airborne geophysical surveys.

### About the Kingfisher's Gascoyne Rare Earths 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 969km<sup>2</sup> 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 7). The geological setting of the tenure is similar to Hastings Technology Metals' world-class Yangibana Deposit which includes 29.93Mt at 0.93% TREO<sup>#</sup> as well as the recent Yin discovery of Dreadnought Resources which includes maiden mineral resources of 20.06Mt @at 1.03% TREO<sup>^</sup>.

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 and 12km across the Arthur River Project.

Drilling at the MW2 prospect has intersected five parallel ferrocarbonatite lodes and associated monazite mineralisation within a 300m wide zone and has returned high-grade REE results with 5m at 2.63% TREO with 0.54% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>, 4m at 3.24% TREO with 0.54% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>, 5m at 1.54% TREO with 0.30% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>, 4m at 1.90% TREO with 0.34% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> and 3m at 2.52% TREO with 0.41% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>. The results from the ferrocarbonatite mineralisation is 500m northwest of Kingfisher's breakthrough REE discovery where maiden drilling returned 5m at 3.45% TREO with 0.65% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> as well as 12m at 1.12% TREO with 0.21% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> from a separate mineralised lode.



**Figure 7:** 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:**

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**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 and tenement applications cover 1,676km<sup>2</sup> in the underexplored Ashburton and Gascoyne Mineral Fields.

The Company has made a number of breakthrough high grade rare earth elements discoveries in the Gascoyne region where it holds a target strike lengths of more than 54km along the Chalba mineralised corridor and more than 30km 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](http://www.kingfishermining.com.au)

**Previous ASX Announcements**

**ASX:KFM:** Significant Exploration Program Targets Large-Scale Carbonatites 4 April 2023.

**ASX:KFM:** High Grade Drilling Results Confirm New MW2 REE Discovery 7 February 2023.

**ASX:KFM:** MW2 and MW7 Continue to Expand on Latest Surface Sample Results 23 January 2023.

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

**ASX:KFM:** New REE Discoveries along Kingfisher's 54km Target Corridor – MW7 and MW8 24 October 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.

<sup>^</sup> ASX Announcement '40% Increase in Resource Tonnage at Yin – Mangaroon (100%)'. Dreadnought Resources Limited (ASX:DRE), 5 July 2023.

# 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.

#### **Technical Exploration Papers**

+ Simandl, G.J. and Paradis, S. 2018. 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.

#### **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.*

## Annexure I: Rock Chip Sample Information

Sample ID	Easting	Northing	CeO <sub>2</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	TREO
MWGS1823	7250285	400882	2605	85.6	37.8	36.7	105.6	15.0	1633	3.98	793	254	129	15.54	4.80	449	28.81	1048
MWGS1824	7250270	400894	73	1.7	0.9	0.7	3.0	0.3	36	-	25	8	4	0.35	0.11	11	0.91	32
MWGS1825	7250270	400909	181	4.6	1.9	1.6	7.8	0.8	92	0.34	64	19	11	0.92	0.23	24	1.59	84
MWGS1828	7250279	401106	27863	239.9	81.0	171.8	414.2	36.9	19805	4.43	6671	2448	693	49.38	8.22	987	38.72	9118
MWGS1829	7250316	400945	74	3.1	1.6	0.6	3.7	0.5	28	0.23	24	8	5	0.58	0.23	16	1.48	31
MWGS1833	7249145	401154	14532	166.1	49.3	145.9	355.4	24.1	7797	3.30	5064	1582	634	38.21	5.37	618	27.67	6647
MWGS1845	7251077	403043	75	3.2	1.9	1.0	3.9	0.7	38	0.34	29	8	6	0.58	0.23	22	1.82	37
MWGS1846	7251089	403087	22559	168.1	55.9	162.6	377.3	24.9	15257	4.78	6027	2069	691	39.13	6.17	686	34.84	8096
MWGS1866	7248296	399445	66435	90.3	23.2	171.3	360.2	11.7	44115	1.59	14944	5672	1095	26.47	2.40	332	13.21	20616
MWGS1867	7248301	399436	5463	32.0	11.5	27.9	68.5	4.8	3620	1.25	1387	489	132	7.02	1.37	137	7.97	1876
MWGS1868	7248325	399441	3111	10.2	3.3	9.4	27.7	1.4	2047	0.34	759	283	67	2.53	0.34	43	2.16	1042
MWGS1883	7249903	403219	19539	83.4	22.4	135.6	272.2	11.1	13305	1.82	5730	1867	642	22.56	2.51	293	13.66	7597
MWGS1938	7249908	403229	960	13.0	5.0	11.2	26.6	2.2	604	0.57	315	99	46	2.99	0.57	57	3.99	415
MWGS1939	7249919	403234	99	3.1	1.7	1.2	4.0	0.6	56	0.23	34	11	6	0.58	0.23	18	1.48	45
MWGS1940	7249928	403243	125	5.4	2.7	1.2	6.3	1.1	61	0.23	47	15	9	0.92	0.34	34	1.94	62
MWGS1941	7249932	403252	2150	9.9	2.9	16.6	33.0	1.4	1295	0.23	698	217	80	2.65	0.34	33	1.82	916
MWGS1947	7250085	403506	922	16.9	5.9	13.1	33.9	2.6	570	0.45	326	98	52	3.91	0.69	74	3.87	424
MWGS1948	7250077	403495	905	16.0	4.6	13.0	31.7	2.3	550	0.34	318	96	49	3.68	0.46	57	2.51	414
MWGS1949	7250095	403516	83	3.3	1.6	1.5	5.2	0.6	43	0.23	31	9	6	0.69	0.23	18	1.37	41
MWGS1950	7250077	403495	174	6.5	2.6	3.5	10.7	1.0	104	0.23	66	19	12	1.38	0.34	32	1.82	85
MWGS1959	7250747	403322	2459	33.7	9.0	29.3	74.0	4.7	1574	0.45	769	243	112	8.06	0.91	117	4.44	1013
MWGS1960	7250742	403308	1078	8.0	2.4	8.1	18.6	1.1	648	0.23	329	102	37	1.84	0.23	30	1.71	431
MWGS1964	7250895	403470	4831	52.2	12.7	47.2	112.8	7.0	3175	0.68	1348	449	191	12.20	1.26	170	5.35	1797
MWGS2068	7240428	411324	316	59.2	71.2	3.4	25.0	18.2	133	14.10	122	34	23	5.53	12.33	460	89.96	156
MWGS2137	7247507	404051	13	0.5	0.3	-	0.6	-	7	-	5	1	1	-	-	4	0.23	6
MWGS2138	7247507	404051	23	1.1	0.6	0.3	1.4	0.2	17	-	11	3	2	0.23	-	8	0.57	14
MWGS2139	7247507	404051	1334	13.1	5.9	7.2	24.8	2.3	685	0.68	403	132	49	2.65	0.80	67	4.78	535
MWGS2175	7249353	404595	1227	31.6	11.2	3.0	68.0	4.8	557	0.91	482	134	93	7.37	1.37	154	7.17	616
MWGS2207	7249138	401157	37893	127.5	35.9	174.6	387.9	17.5	23098	2.73	10219	3420	837	33.72	4.00	491	21.41	13639
MWGS2208	7249141	401163	1688	56.5	23.6	28.6	83.9	9.6	774	2.27	689	192	105	11.28	2.97	290	17.65	881
MWGS2209	7249142	401156	371	4.1	1.7	2.4	6.7	0.7	218	0.23	108	35	11	0.92	0.23	23	1.59	144
MWGS2210	7249149	401175	6445	56.1	22.0	41.7	109.5	9.0	3759	2.16	1895	601	187	12.20	2.74	284	16.40	2496
MWGS2232	7250891	403465	1837	40.3	10.2	25.5	68.6	5.4	1195	0.45	583	187	96	8.98	0.91	138	4.21	770
MWGS2233	7250883	403453	1769	36.7	8.9	23.2	63.7	4.8	1124	0.34	550	177	87	7.94	0.80	120	3.30	727
MWGS2234	7250880	403449	5258	37.4	7.8	44.8	98.3	4.5	3471	0.34	1542	517	198	9.78	0.69	122	3.19	2060
MWGS2235	7250909	403483	969	19.4	4.9	14.0	37.1	2.5	640	0.34	327	105	54	4.37	0.46	67	2.16	431
MWGS2236	7250925	403495	857	20.0	5.6	14.1	35.2	2.7	533	0.34	301	93	52	4.72	0.57	72	2.39	394
MWGS2237	7250929	403498	889	38.3	9.7	22.6	64.1	5.0	575	0.34	382	110	80	8.17	0.91	132	4.10	493
MWGS2238	7250934	403508	242	40.9	13.6	15.4	48.4	6.2	102	1.02	149	35	48	7.60	1.60	184	7.97	184
MWGS2239	7250946	403546	28240	263.3	61.3	264.5	616.0	33.1	18801	2.84	8416	2749	1141	64.92	5.82	879	25.39	11165
MWGS2240	7250945	403539	26111	201.4	45.4	223.8	492.5	25.1	18106	2.05	7973	2590	996	51.56	4.34	663	18.90	10564
MWGS2242	7250962	403569	1353	12.3	3.2	12.0	26.7	1.7	911	0.23	392	130	52	2.99	0.34	44	1.82	522
MWGS2243	7250964	403565	801	24.7	7.7	15.9	44.8	3.6	374	0.57	302	89	57	5.41	0.80	92	4.33	391

Sample ID	Easting	Northing	CeO <sub>2</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	TREO
MWGS2244	7250962	403559	595	31.6	8.8	18.5	53.3	4.5	298	0.45	250	66	60	6.79	0.91	107	4.33	316
MWGS2245	7250965	403573	1795	48.4	13.0	32.0	84.4	7.0	1034	0.57	581	177	108	10.47	1.26	172	5.69	758
MWGS2246	7250974	403584	111	10.4	2.9	5.4	17.1	1.5	51	0.11	55	13	17	2.19	0.23	36	1.14	68
MWGS2247	7250980	403591	90014	433.9	79.9	714.1	1459.8	49.8	57663	3.30	25042	8389	3074	126.15	7.31	1285	30.18	33430
MWGS2248	7250986	403596	557	19.7	5.5	11.5	35.4	2.7	333	0.34	202	58	41	4.49	0.57	66	2.73	260
MWGS2249	7250990	403595	3196	38.0	9.9	34.2	84.3	5.2	1988	0.45	915	301	133	9.21	0.91	125	3.99	1216
MWGS2250	7250989	403600	4513	32.7	7.4	39.9	89.8	4.1	2740	0.45	1331	436	174	8.52	0.69	104	3.64	1766
MWGS2251	7250988	403601	11926	138.1	34.3	135.6	332.0	18.3	7146	1.48	3601	1135	537	33.84	3.08	452	14.12	4737
MWGS2252	7250988	403603	15931	51.0	8.7	113.0	222.1	5.5	9936	0.45	4413	1498	516	16.69	0.91	132	3.64	5911
MWGS2253	7251007	403622	170	2.6	0.9	2.3	5.3	0.3	98	-	50	16	8	0.69	-	11	0.80	66
MWGS2254	7250986	403601	44253	284.5	64.7	382.2	833.6	36.0	27703	3.18	12699	4106	1633	76.08	6.51	899	28.92	16805
MWGS2255	7251018	403631	1686	10.0	2.9	12.2	26.3	1.5	1018	0.23	452	157	53	2.53	0.34	32	2.05	609
MWGS2256	7251022	403638	970	5.3	1.9	7.1	15.1	0.7	596	0.23	269	90	33	1.38	0.23	19	1.37	359
MWGS2259	7251054	403674	68	7.6	3.9	1.6	7.7	1.4	33	0.45	31	9	8	1.38	0.57	37	3.07	40
MWGS2260	7251051	403718	2050	24.9	9.6	19.8	47.6	4.0	1323	0.80	617	205	82	5.29	1.14	111	6.04	823
MWGS2288	7250514	403886	78	4.4	2.3	0.9	4.7	0.8	44	0.34	33	10	7	0.69	0.34	26	1.94	42
MWGS2289	7250491	403881	708	12.7	4.8	6.8	17.3	2.1	450	0.45	215	71	29	2.30	0.57	53	3.42	285
MWGS2290	7250490	403872	6773	53.1	13.5	53.0	118.6	6.9	4416	0.80	2007	658	239	12.32	1.37	183	6.26	2664
MWGS2291	7250474	403860	4366	36.2	9.5	34.4	78.8	4.7	2899	0.57	1315	436	157	8.29	1.03	118	4.78	1751
MWGS2292	7250525	403897	437	11.5	3.8	6.8	17.2	1.6	268	0.23	148	45	25	2.30	0.46	39	2.05	192
MWGS2293	7250521	403900	744	22.0	6.4	14.5	36.5	3.1	447	0.45	267	78	51	4.60	0.69	77	3.64	345

All sample information is parts per million (ppm). 100,000 ppm is equal to 10%.

## Attachment I: JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples were taken as individual rocks representing an outcrop to give an indication of possible grades and widths that can be expected from drilling. Individual rock samples can be biased towards higher grade mineralisation.</li> <li>Rock chip samples were typically between 1 and 2 kg. The entire sample received by the laboratory was crushed and pulverised to 85% passing 75 micron.</li> <li>A duplicate sample of between 0.1 and 0.2 kg was retained by the Company for some of samples reported.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>The entire sample received by the laboratory was crushed and pulverised to 85% passing 75 micron.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were analysed by Intertek Genalysis in Perth. The sample analysis uses a sodium peroxide fusion with an Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma (ICP) Mass Spectrometry (MS) and Optical Emission Spectrometry (OES) finish.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Independent checks or field duplicates were not conducted for rock chips and are not considered necessary for that type of sample.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip sample locations were surveyed using a handheld GPS using the UTM coordinate system, with an accuracy of +/-5m.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The nature of the surface outcrops of mineralisation appears to be similar to the mineralisation intersected in drilling, where the interpreted orientation indicates a true width for the mineralised zone of between 3m and 5m.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were given individual samples numbers for tracking.</li> <li>The sample chain of custody was overseen by the Company's geologists.</li> </ul>

Criteria	JORC Code explanation	Commentary
		Samples were transported to the laboratory in Perth sealed bulka bags.
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The sampling techniques and analytical data are monitored by the Company's geologists.</li> <li>External audits of the data have not been completed.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The project area is located 80km northeast of the Gascoyne Junction and 230km east of Carnarvon.</li> <li>The project includes 12 granted Exploration Licences, E09/2242, E09/2349, E09/2319, E09/2320, E09/2481, E09/2494, E09/2495, E09/2653, E09/2654, E09/2655, E09/2660 and E09/2661.</li> <li>The tenements are held by Kingfisher Mining Ltd.</li> <li>The tenements lie within Native Title Determined Areas of the Wajarri Yamatji People and Gnulli People.</li> <li>All the tenements are in good standing with no known impediments.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>No previous systematic exploration for carbonatite-associated mineralisation had been previously completed.</li> <li>Exploration for base metals at Kingfisher undertaken was by Pasmenco Ltd in 1994, Mt Phillips Exploration Pty Ltd in 2006 and WCP Resources in 2007.</li> <li>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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Company's tenements in the Gascoyne Mineral Field are prospective for rare earth mineralisation associated with carbonatite intrusions and associated fenitic alteration.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>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.</p>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report and no data aggregation has been applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling results are included in this report.</li> <li>True width is obscured by thin cover and appears to be similar to intervals intersected in drilling, 4 to 6m.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A map showing relevant data has been included in the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All rock chip samples of REE mineralisation have been reported. The reported sample batches also included some samples collected as part of ongoing evaluation of the geology of the area.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All of the relevant historical exploration data has been included in this report.</li> <li>All historical exploration information is available via WAMEX.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>On-going exploration in the area is a high priority for the Company.</li> <li>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.</li> </ul>