

# **CORPORATE PROFILE**

Shares on issue: 52,250,001 Unlisted options: 10,500,000 Cash: \$2.2M (30 June 2022) Market Capitalisation: \$23.8M\* 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

ADAM SCHOFIELD Non-Executive Director

SCOTT HUFFADINE Non-Executive Director

STEPHEN BROCKHURST Company Secretary

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\* Based on a share price of \$0.455 as of 21 October 2022

# New REE Discoveries along Kingfisher's 54km Target Corridor - MW7 and MW8

# **High Grade REE Results over 17.6% TREO**

- First step-out mapping from MW2 produces new high grade rare earth element (REE) discoveries at MW7 and MW8 within the defined 54km target mineralisation corridor. Rock chip assays from MW8 include:
  - 17.64% TREO (Total Rare Earth Oxides) with 3.82% Nd₂O₃ + Pr₀O╖ (MWGS1224)
  - $16.75\% \text{ TREO with } 3.66\% \text{ Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_1 \text{ (MWGS1232)}$
  - 13.80% TREO with 3.02% Nd₂O₃ + Pr<sub>6</sub>O<sub>11</sub> (MWGS1301)
  - 10.62% TREO with 2.34% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>1</sub> (MWGS1152)
- The new MW7 target has an interpreted strike length of at least 1km and has been confirmed with an initial rock chip result of 3.85% TREO with 0.65% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1023); additional mapping and sampling at MW7 is ongoing and is a high priority for the Company.
- Additional rock chips from MW2 extend the mineralised zone ahead of drilling scheduled to commence in the coming weeks. Results returned from new areas of high grade REE mineralisation include:
  - 7.34% TREO with 1.68% Nd₂O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1193)
  - 5.06% TREO with 1.13% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1177)
  - 3.91% TREO with 0.78% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1191)
  - 3.19% TREO with 0.64% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1179)
- Additional assays from mapping and surface sampling of the new targets along the 54km target corridor in the Mick Well area are expected in late November.

Kingfisher Mining Limited (**ASX:KFM**) ("**Kingfisher**" or the "**Company**") is pleased to announce that it has made further new high grade REE mineralisation discoveries from rock chips at its 100% owned projects in the Gascoyne Mineral Field in Western Australia.



MW8 monazite-rich sample MWGS1224, 17.64% TREO

Kingfisher's Executive Director and CEO James Farrell commented: **"We are ecstatic** with the latest discoveries at MW7 and MW8.

We are advancing along the target corridor, with these new high grade outcropping REE discoveries coming from the initial 3km of the 54km strike of the mineralised corridor.

The new discoveries now mean there are multiple cross cutting lodes over a 2km zone extending along the corridor from our initial discovery at the MW2 Prospect, where drilling is scheduled to commence in the coming weeks.

We are extremely encouraged by the results and the potential of our extensive tenement package as we continue our mapping and rock chipping programs."

ASX KFM



# **Mick Well REE Discoveries**

On-going mapping and sampling at the Company's Mick Well project has led to the discovery of new high grade mineralisation at the MW7 and MW8 (Figure 1). MW7 and MW8 are located 700m and 1900m northwest of the MW2 prospect, where drilling has returned high grade REE results of 5m at 3.45% TREO (see ASX:KFM 5 July 2022) and where rock chips sampling has returned results of over 40% TREO (see ASX:KFM 4 October 2022 and 30 August 2022). Drilling of these areas are part of a drill program commencing in the coming weeks. Significantly, the new MW7 and MW8 discoveries occur in NE-trending structures (like MW2) and crosscut the WNW-trending target corridor which extends for over 54km in the Company's tenure.

# MW8

Mineralisation at MW8 has been mapped in two parallel lodes that outcrop over a strike length of more than 300m, with results that include:

- 17.64% TREO with 3.82% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1224)
- 16.75% TREO with 3.66% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1232)
- 13.80% TREO with 3.02% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1301)
- 10.62% TREO with 2.34% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1152)
- 4.88% TREO with 0.97% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1291)
- 4.49% TREO with 1.02% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1308)
- 2.62% TREO with 0.58% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1163)
- 2.39% TREO with 0.58% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1231)
- 2.01% TREO with 0.45% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1223)
- 1.75% TREO with 0.42% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1222)
- 1.74% TREO with 0.42% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1233)
- 1.21% TREO with 0.37% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1151)
- 1.16% TREO with 0.29% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1304)
- 1.11% TREO with 0.36% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1319)
- 1.08% TREO with 0.28% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1226)

New mineralisation has also been identified more than 1200m northeast of the MW8 outcrop and along the interpreted MW8 structure (Figure 1). Results from the potential extensions to MW8, which will be investigated as part of upcoming mapping programs, include 1.08% TREO with 0.18%  $Nd_2O_3 + Pr_6O_{11}$  (MWGS1187).

# MW7

Geological interpretation at MW7 has identified a potential strike length of at least 1000m (Figure 1), with mineralisation confirmed from an initial sample which returned 3.85% TREO with 0.65% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1023).

# MW2

Additional rock chip results from on-going work at MW2 have also further extended the mineralised zone (Figure 2). Results from the new extensions to high grade REE lodes include:

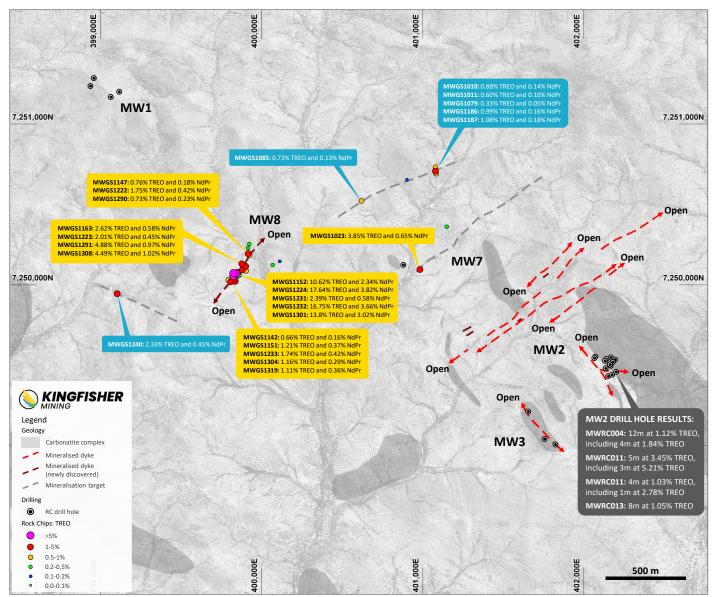
- 7.34% TREO with 1.68% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1193)
- 5.06% TREO with 1.13% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1177)
- 4.92% TREO with 0.84% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1128)
- 3.91% TREO with 0.78% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1191)
- 3.19% TREO with 0.64% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1179)
- 2.66% TREO with 0.56% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1205)
- 1.77% TREO with 0.36% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1200)



- 1.38% TREO with 0.28% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1209)
- 1.34% TREO with 0.27% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1190)
- 1.15% TREO with 0.25% Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> (MWGS1130)

# **Other Areas of New Mineralisation**

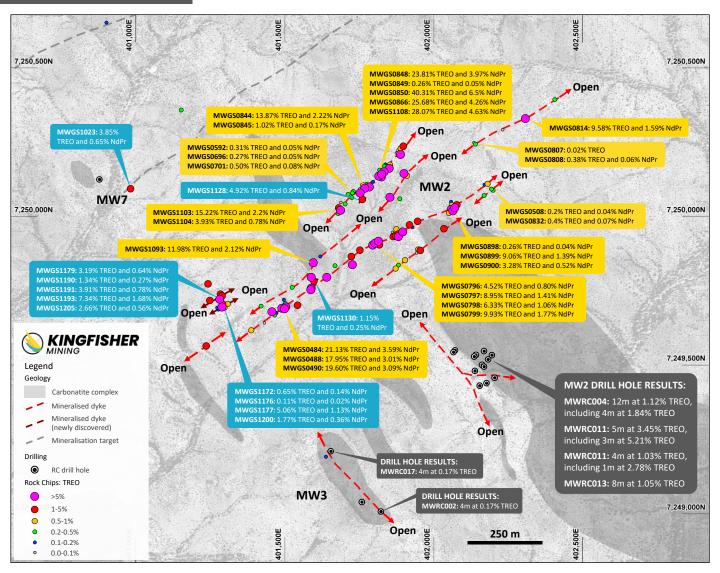
Mineralisation has also been identified in a laterally extensive WNW-trending lode which is parallel to the 54km target corridor (Figure 1, Figure 3). The results from the single mineralisation sample collected include 2.33% TREO with 0.45%  $Nd_2O_3 + Pr_6O_1$  (MWGS1240).



**Figure 1:** Rock chip results for MW7, MW8 and other newly discovered mineralisation. The results are stated as Total Rare Earth Oxides (TREO%) and total  $Nd_2O_3 + Pr_6O_1$  (%) content.

ASX Announcement:





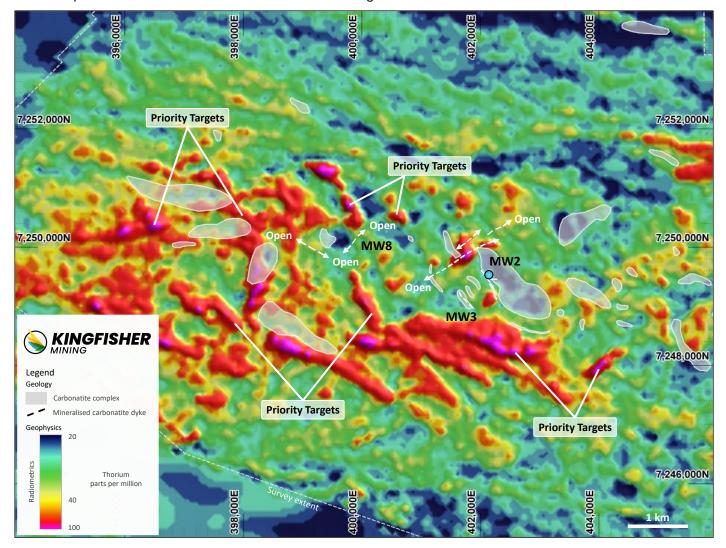
**Figure 2:** MW2 rock chip samples and mineralisation. New results are shown in blue and previously reported rock chips are shown in orange (see ASX:KFM 4 October 2022, 30 August 2022 and 20 June 2022). The outcropping mineralisation is located 500m northwest of Kingfisher's MW2 discovery drill holes which included 5m at 3.45% TREO, with 3m at 5.21% TREO (see ASX:KFM 5 July 2022) and 12m at 1.12% TREO, with 4m at 1.84% TREO (see ASX:KFM 24 March 2022). Rock chip results are stated as Total Rare Earth Oxides (TREO%) and total Nd<sub>2</sub>O<sub>3</sub> +  $Pr_6O_{11}$  (%) content.

4



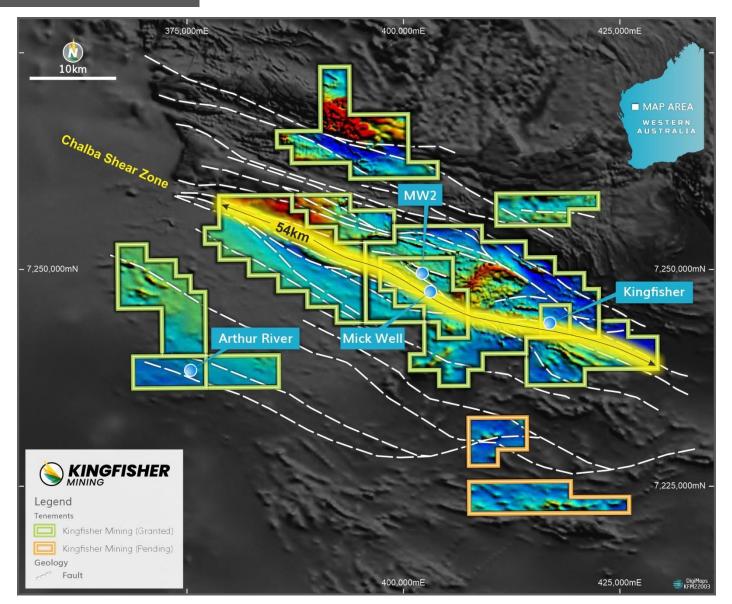
The current mapping and rock chipping work is targeting a large number of laterally-extensive high priority targets in a broad area that extends 10km west-northwest from MW2 (Figure 3). The targets in this area are also associated with carbonatite complexes as well as high thorium and magnetic responses – similar to what is seen from the newly identified outcropping mineralisation at MW2. Significantly, all of these targets within this 10km long area also lie within Kingfisher's target corridor, the Chalba Shear Zone, which extends for 54km across the Company's Gascoyne tenure (Figure 4).

The Chalba Shear Zone is a broad WNW-trending crustal-scale structure that has played an important role in providing a conduit for the intrusion of the carbonatites, as well as the associated alteration and late-stage mineralised veins and carbonatite dykes. Fenites (carbonatite-associated alteration) and potassium fenites, are well-developed in the Mick Well area and are an important host of the REE mineralisation. The carbonatite intrusion-related exploration and mineralisation model is shown in Figure 5.



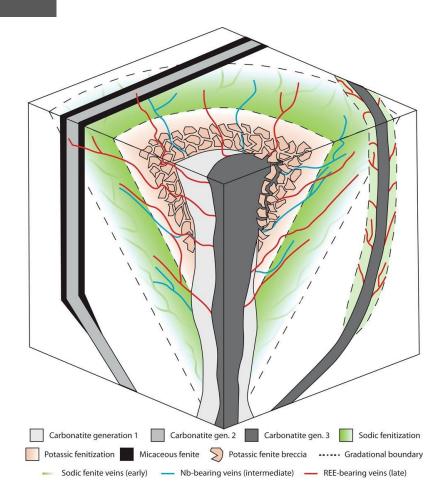
**Figure 3:** Extensive thorium anomalies which extend 10km west-northwest of the MW2 discovery and are within the 54km target corridor within Kingfisher's tenure. Priority targets, the outcropping mineralisation and the coincident thorium anomaly at the recently discovered REE-bearing carbonatite dykes are also shown.





*Figure 4:* Total Magnetic Intensity for the Kingfisher, Mick Well and Arthur River Projects. Kingfisher is targeting REE mineralisation associated carbonatite intrusions which intrude along faults and shear zones which extend for 54km within the Company's tenure.





**Figure 5:** 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 at the Mick Well project.

# 2022 Gascoyne Exploration Program

Kingfisher is carrying out extensive and targeted exploration programs for its Gascoyne projects during 2022. The planned exploration is cost-effective and aims to develop and test drill targets from ground-based mapping and rock sampling. The Company also plans to simultaneously develop a pipeline of exploration opportunities through integrating current and scheduled tenement-scale airborne geophysical surveys with geological knowledge from the Company's breakthrough REE discovery at Mick Well.



Planned and completed activities for 2022 for Kingfisher's Gascoyne projects are shown below.

	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Mick Well	'	1	I	n
RC Drilling				
Magnetic and radiometric survey				
Mapping and drill target definition				
Ground-based radiometrics				
Kingfisher				
RC Drilling				
Magnetic and radiometric survey				
Arthur River				
Magnetic and radiometric survey				
Boolaloo				
Magnetic and radiometric survey				

# **Upcoming News**

- November 2022: Results from airborne geophysics surveys.
- November 2022: Drilling and additional results from MW2.
- November 2022: Results from ongoing surface mapping and rock chip sampling in the Mick Well area.

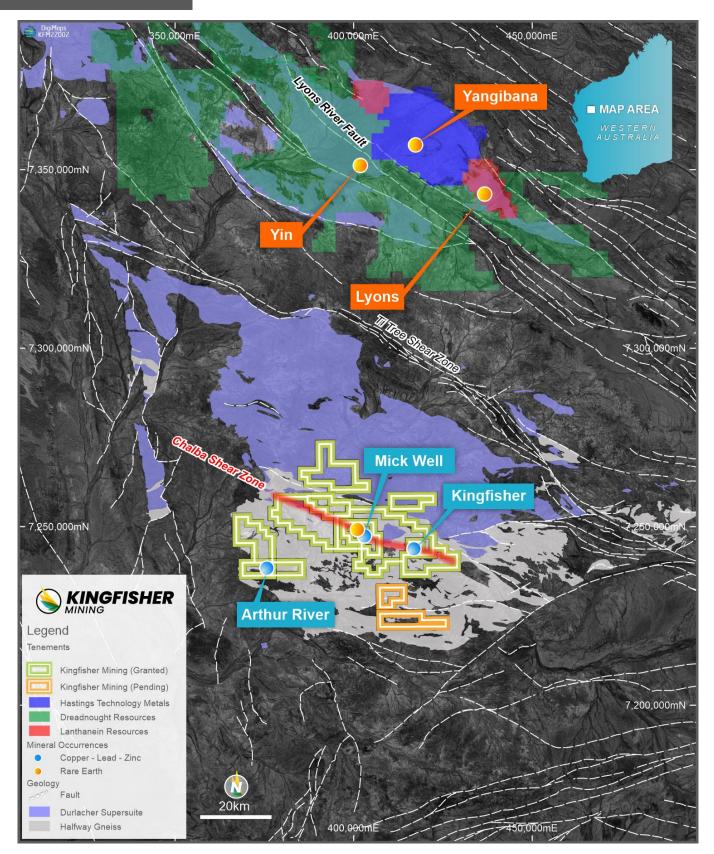
# About the Kingfisher and Mick Well Projects

The Kingfisher and Mick Well 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 6). The tenure includes rocks of the Proterozoic Durlacher Suite that hosts the world-class Yangibana Deposit which includes 29.93Mt @ 0.93% TREO<sup>#</sup> as well as the Archaean Halfway Gneiss.

The recently discovered REE mineralisation at Mick Well is associated with carbonatite intrusions discovered by Kingfisher. Historic exploration in the area had focused on outcrops of quartz reef and gossanous ironstones which are up to 10m in width. Past exploration returned rock chip sample results of up to 10.6% Cu over a strike length of 1km within a laterally extensive geological horizon. Four historical drill holes were completed in the Mick Well area, with the best result being 11m @ 0.25% Cu from 118 m (MWDD001)^.

Historical exploration also identified copper at the Kingfisher Project, with mineralisation exposed in a series of shallow historical mining pits over a strike length of 2km. Previous exploration at the project has included geophysical surveys, surface geochemical sampling and limited reverse circulation drilling, with drilling intercepts including 3m @ 0.6% Cu (KFRC10) and rock chip results of 15.3% Cu, 6.3% Cu, 6.2% Cu, 5.9% Cu and 3.4% Cu<sup>^</sup>.





*Figure 6:* 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 breakthrough high grade rare earth elements discovery in the Gascoyne region where it holds a target strike length of more than 50km along the mineralised corridor and has 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: 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.

- \* 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.

<sup>^</sup> Kingfisher Mining Limited Prospectus, 9 November 2020.



# **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 1: 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>	$Gd_2O_3$	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	$Nd_2O_3$	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>2</sub> O <sub>3</sub>	Tm₂O₃	$Y_2O_3$	Yb <sub>2</sub> O <sub>3</sub>	TREO
MWGS1010	401078	7250703	4275	26.9	8.0	25.5	58.7	3.9	2736	0.57	1040	369	110.51	6.33	0.91	100.5	4.90	8766
MWGS1011	401083	7250694	2890	23.8	6.9	20.4	49.0	3.4	1862	0.45	748	260	86.62	5.41	0.69	83.3	3.42	6043
MWGS1023	400982	7250093	18348	79.8	17.3	123.9	244.0	10.1	12351	1.02	4893	1656	546.52	21.64	1.83	239.0	8.65	38542
MWGS1079	401084	7250695	1598	9.3	3.0	9.0	20.6	1.4	1053	0.34	398	139	41.28	2.07	0.34	35.4	2.16	3313
MWGS1085	400620	7250518	3529	17.0	5.0	23.9	52.3	2.4	2213	0.45	960	316	111.09	4.60	0.57	65.5	3.07	7303
MWGS1128	401762	7250056	23657	123.3	30.9	153.4	327.0	15.9	15322	2.16	6287	2130	690.66	31.54	3.31	382.1	17.08	49173
MWGS1130	401599	7249780	4514	210.6	63.8	131.3	379.8	31.4	2361	4.09	2007	528	444.71	45.46	6.85	776.9	34.73	11539
MWGS1142	399816	7250027	2801	95.3	40.5	55.2	146.4	16.8	1105	4.09	1239	336	201.31	18.88	5.14	475.8	30.74	6570
MWGS1147	399923	7250186	3553	40.6	13.5	39.1	85.6	6.1	1692	1.02	1410	415	167.80	9.09	1.48	160.4	8.31	7603
MWGS1151	399833	7250039	4762	195.8	66.3	143.2	363.5	30.8	1398	3.98	3002	718	556.15	42.93	7.08	816.3	35.07	12141
MWGS1152	399832	7250058	51841	425.8	125.9	419.1	899.8	63.1	25430	6.48	17869	5517	1909.87	95.65	12.91	1561.4	58.30	106235
MWGS1153	399800	7250021	2704	137.4	50.9	88.5	243.1	22.5	896	3.75	1548	377	312.63	29.01	5.82	591.5	30.74	7041
MWGS1163	399900	7250112	12683	122.3	40.5	115.4	258.6	18.9	6131	3.30	4442	1377	503.97	27.39	4.80	484.0	25.96	26237
MWGS1165	399926	7250255	2080	24.4	7.4	19.9	47.6	3.7	1034	0.57	699	211	83.49	5.41	0.80	95.1	3.99	4317
MWGS1172	401308	7249703	3186	13.0	3.3	19.8	37.2	1.8	1654	0.23	1074	330	99.38	3.22	0.34	45.5	2.16	6470
MWGS1173	401276	7249687	591	21.8	7.5	14.8	35.7	3.4	240	0.57	298	76	53.81	4.49	0.91	90.4	4.44	1442
MWGS1176	401286	7249693	465	14.6	6.1	8.1	22.9	2.6	234	0.68	186	53	30.50	2.88	0.80	72.1	4.44	1104
MWGS1177	401286	7249691	25171	68.3	15.1	134.2	272.5	8.5	12616	1.14	8607	2654	787.72	20.83	1.60	213.5	7.86	50580
MWGS1179	401285	7249731	15263	75.5	18.0	117.1	246.0	9.7	8915	1.25	4888	1533	562.29	21.52	1.94	238.2	10.25	31900
MWGS1185	400902	7250652	640	27.2	8.5	15.9	46.0	4.1	378	0.57	304	84	56.36	5.64	0.91	111.8	5.01	1688
MWGS1186	401080	7250730	4779	27.0	8.5	27.7	59.9	4.1	3101	0.68	1195	427	123.27	6.56	0.91	102.7	5.12	9868
MWGS1187	401079	7250702	5217	30.8	8.9	31.4	68.5	4.5	3323	0.68	1357	474	141.47	7.25	1.03	109.6	5.01	10782
MWGS1190	401285	7249729	6292	44.2	13.0	56.7	113.6	6.4	3760	1.02	2065	661	248.27	10.93	1.48	155.3	8.08	13437
MWGS1191	401285	7249729	18666	85.6	19.3	137.8	281.8	10.7	11111	1.25	5966	1833	662.60	23.83	2.06	265.3	10.59	39076
MWGS1193	401283	7249719	35993	148.5	34.9	252.7	558.4	18.9	17699	2.39	12864	3887	1392.11	44.66	3.54	451.3	17.99	73368
MWGS1200	401290	7249703	8571	34.9	8.0	59.7	120.6	4.6	4816	0.45	2781	861	298.02	9.78	0.80	107.3	3.53	17677
MWGS1201	401275	7249690	799	18.2	6.9	11.1	34.3	2.9	430	0.57	287	85	46.85	3.91	0.80	80.3	4.67	1812
MWGS1203	401295	7249693	3173	16.9	5.4	19.9	42.4	2.5	1810	0.34	961	316	94.39	4.03	0.57	62.0	2.96	6512
MWGS1205	401250	7249716	12850	68.1	18.8	100.5	212.8	9.5	6935	1.36	4296	1344	492.37	18.65	2.06	235.4	11.16	26596
MWGS1209	401243	7249772	6505	48.7	13.0	58.1	130.1	6.6	3760	0.91	2138	670	267.52	12.32	1.48	173.9	7.29	13794
MWGS1213	401152	7250358	835	220.6	84.2	72.4	235.2	37.2	389	5.57	495	108	194.47	39.13	9.59	916.8	49.99	3691
MWGS1222	399922	7250189	8345	87.9	30.9	85.7	186.3	13.6	3767	2.39	3194	959	380.58	19.91	3.54	361.4	19.24	17456
MWGS1223	399882	7250125	9468	146.2	44.3	117.3	292.9	22.3	4422	2.39	3472	1036	473.58	32.92	4.57	535.9	22.20	20093
MWGS1224	399839	7250060	88447	263.2	61.6	485.8	911.1	34.5	44483	3.53	28999	9152	2616.88	71.48	5.82	828.5	27.90	176391
MWGS1225	399837	7250029	3035	93.1	32.6	62.5	160.0	14.7	1103	2.27	1443	386	231.34	19.22	3.77	385.3	19.81	6991
MWGS1226	399837	7250029	4827	129.1	47.3	87.5	215.2	20.6	1772	3.41	2184	606	333.27	26.70	5.37	549.1	28.13	10835
MWGS1227	399848	7250036	218	5.6	1.9	1.9	12.0	0.8	102	0.23	82	24	15.31	1.27	0.23	24.9	1.37	493
MWGS1228	399857	7250052	176	28.1	10.1	13.9	37.5	4.4	54	1.25	139	28	45.80	5.52	1.14	118.5	7.74	672
MWGS1229	399857	7250053	1086	45.4	15.2	28.7	78.6	7.1	399	1.48	577	141	113.64	9.55	1.71	186.0	9.79	2700
MWGS1230	399861	7250056	982	15.8	5.1	12.9	29.4	2.4	486	0.45	350	104	48.24	3.45	0.57	64.1	3.30	2107
MWGS1231	399849	7250074	10013	360.9	126.0	213.2	553.3	58.8	4296	6.71	4584	1215	792.94	72.28	13.36	1531.0	62.63	23898
MWGS1232	399832	7250057	84004	230.1	49.6	450.2	813.2	28.6	42082	2.39	27690	8908	2433.78	64.46	4.57	678.4	20.61	167459
MWGS1233	399807	7250020	7622	207.5	71.4	146.1	381.9	32.5	3215	5.00	3321	925	545.13	43.62	8.11	858.5	41.90	17425

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
MWGS1240	399104	7249943	11240	91.9	29.4	86.0	196.9	13.6	6393	2.16	3419	1070	387.54	20.60	3.43	349.9	17.31	23321
MWGS1259	400113	7250144	463	16.4	5.6	11.6	29.7	2.6	171	0.45	246	62	43.37	3.57	0.57	65.4	3.30	1125
MWGS1260	400069	7250122	529	144.3	48.6	74.6	179.2	22.2	87	2.96	663	122	224.04	27.74	5.82	567.5	30.18	2728
MWGS1290	399920	7250184	2832	124.6	39.6	92.6	225.1	19.1	771	2.27	1890	430	355.65	26.93	4.23	504.3	20.72	7338
MWGS1291	399884	7250127	23709	202.9	58.7	177.4	414.1	29.2	12856	3.30	7391	2309	802.10	46.39	6.05	769.8	27.33	48802
MWGS1301	399837	7250058	68449	226.9	55.7	379.0	697.9	30.2	34995	3.07	22988	7243	2058.19	58.24	5.60	751.4	25.62	137968
MWGS1302	399815	7250029	3289	94.2	33.7	62.8	153.3	15.2	1279	2.50	1535	410	240.50	19.80	4.00	393.8	19.70	7552
MWGS1304	399822	7250031	4694	174.1	61.2	106.6	278.1	27.0	2106	4.09	2305	612	395.31	35.80	6.74	722.6	34.27	11563
MWGS1305	399916	7250226	1015	26.2	9.8	14.0	44.6	4.2	622	0.80	476	137	68.30	5.41	1.14	110.9	6.04	2540
MWGS1306	399889	7250134	955	14.2	4.8	11.8	27.3	2.2	478	0.45	376	110	49.52	3.11	0.57	57.5	3.19	2093
MWGS1308	399879	7250090	21002	356.0	121.4	242.5	596.6	56.7	9731	7.28	7848	2304	1002.25	74.35	13.02	1500.8	62.40	44918
MWGS1310	399863	7250056	1004	30.5	8.9	24.8	50.8	4.2	452	0.57	442	118	80.24	6.56	1.03	103.5	4.90	2332
MWGS1314	399904	7250085	3096	143.8	52.0	88.5	228.1	23.6	890	3.41	1947	464	349.16	29.01	5.94	646.9	29.72	7998
MWGS1317	399847	7250049	1493	42.5	12.7	27.7	75.0	6.4	724	0.80	643	175	105.18	9.09	1.37	162.8	6.60	3484
MWGS1318	399839	7250044	835	62.3	18.0	36.2	105.5	9.0	306	0.91	532	119	125.24	13.47	1.83	227.1	8.43	2400
MWGS1319	399833	7250041	4307	174.6	56.5	136.1	333.3	26.2	1119	3.18	2957	691	538.41	37.87	6.17	692.2	28.58	11107

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

# Attachment 1: JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <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>
Drilling techniques	<ul> <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>	No new drilling results are included in this report.
Drill sample recovery	<ul> <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>	• No new drilling results are included in this report.
Logging	<ul> <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>	• No new drilling results are included in this report.
Sub-sampling techniques and sample preparation	<ul> <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>	• The entire sample received by the laboratory was crushed and pulverised to 85% passing 75 micron.

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
Quality of assay data and laboratory tests	<ul> <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> <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>
Verification of sampling and assaying	<ul> <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>	Independent checks or field duplicates were not conducted for rock chips and are not considered necessary for that type of sample.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Rock chip sample locations were surveyed using a handheld GPS using the UTM coordinate system, with an accuracy of +/-5m.</li> </ul>
Data spacing and distribution	<ul> <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>	No new drilling results are included in this report.
Orientation of data in relation to geological structure	<ul> <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>	• 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 6 and 7m (MWRC004).
Sample security	• The measures taken to ensure sample security.	<ul> <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.							
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <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
Mineral tenement and land tenure status	<ul> <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> <li>The project area is located 80km northeast of the Gascoyne Junction and 230km east of Carnarvon.</li> <li>The project includes ten granted Exploration Licences, E09/2242, E09/2349, E09/2319, E09/2320, E09/2481, E09/2494, E09/2495, E09/2653, E09/2654 and E09/2655 as well as two EL applications, 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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>No previous systematic exploration for carbonatite-associated mineralisation had been previously completed.</li> <li>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.</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>
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	<ul> <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> <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>	• No new drilling results are included in this report.

Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation methods	<ul> <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> <li>No new drilling results are included in this report and no data aggregation has been applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <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> <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, 6 to 7m.</li> </ul>
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	<ul> <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> <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>
Other substantive exploration data	<ul> <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> <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>
Further work	<ul> <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> <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>