**ASX Announcement: 27 July 2021** 



# STRONG CONDUCTORS IDENTIFIED FROM AIRBORNE ELECTROMAGNETIC SURVEY AT KINGFISHER AND MICK WELL

- Five new bedrock conductors identified at Kingfisher and Mick Well. The conductors are within the range of possible responses expected for volcanogenic massive sulphide base metal mineralisation.
- A significant conductor has been identified along strike from the outcropping mineralisation and historic workings at the Kingfisher project.
- Geophysical models have been produced for the high-quality targets allowing the targets to be progressed straight to drilling.
- Targets will be drilled as part of the Mick Well and Kingfisher RC program scheduled for Q3 this year.

Kingfisher Mining Limited (**ASX:KFM**) ("**Kingfisher**" or the "**Company**") is pleased to provide an update of its on-going exploration in the under-explored Gascoyne Mineral Field of Western Australia where the Company is currently exploring for volcanogenic massive sulphide (VMS) mineralisation at its 100% owned and Kingfisher and Mick Well Projects.

The Kingfisher and Mick Well helicopter-borne electromagnetic survey preliminary results have been received by the Company and reviewed in conjunction with the Company's geophysics consultant, Mira Geoscience Asia Pacific Pty Ltd (Mira).

Five new significant and strong conductors have been identified (Figure 1). Each of the bedrock conductors is within the range of possible responses expected for VMS base metal mineralisation and is derived from geology in the immediate area of the anomaly.

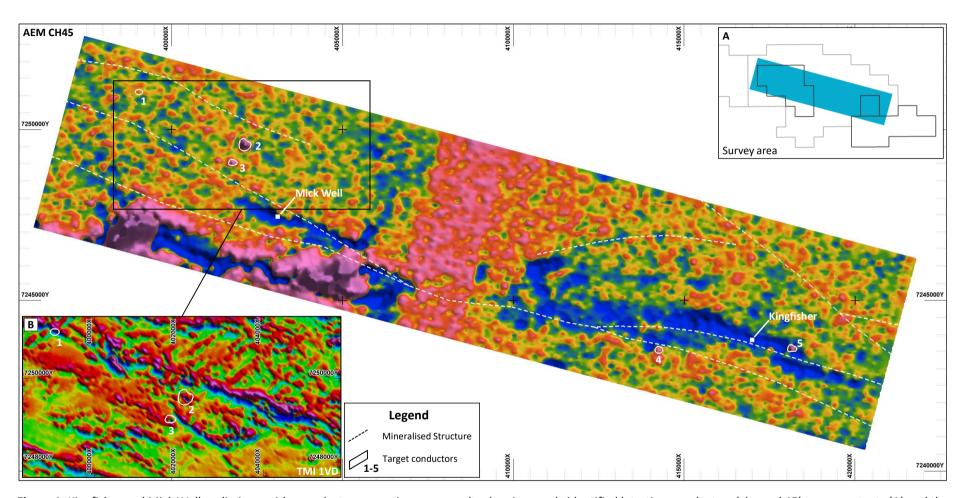
A plate model has been produced for the western-most anomaly (conductor 1, Figure 1) which captures the strike, dip and position below the surface of the conductor allowing confidence in the position for drill testing. Conductors two and three are associated with discrete magnetic lows, which provide further support for the veracity of the targets. Further modelling of the conductors by the Company's geophysicists to improve the target positions is currently underway and will be completed prior to drilling.

Conductors four and five (Figure 1) lie on interpreted structures close to the Kingfisher project. Significantly, conductor five is immediately along strike from outcropping copper mineralisation and historic Kingfisher workings.

Kingfisher's Executive Director and CEO James Farrell commented: "This is a fantastic result for the Company. The airborne electromagnetic survey has delivered several high-quality targets in this under-explored area. When we received the preliminary survey results we knew we were looking at some interesting conductors and immediately mobilised to site to confirm that the responses were geological and not due to anything else at surface, such as large metallic objects.

The newly identified targets will now be prioritised for drilling as part of the Kingfisher and Mick Well RC program scheduled for Q3 this year".





**Figure 1:** Kingfisher and Mick Well preliminary airborne electromagnetic survey results showing newly identified late-time conductors (channel 45), survey extents (A) and the total magnetic intensity first vertical derivative (B) with the discrete magnetic lows associated with the conductors, particularly conductors 2 and 3.



#### **Survey Details**

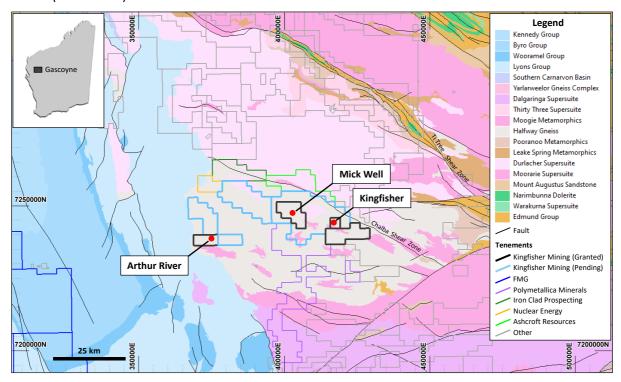
The survey was flown by UTS Geophysics Pty Ltd using the industry leading Versatile Time Domain Electromagnetic (VTEM<sup>TM</sup> Max) system. It covered more than 25km of strike of the Company's target geological unit and structures and included more than 820 flight line kilometres and covered an area of 145km<sup>2</sup>.

#### **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 area is prospective for volcanogenic massive sulphide style mineralisation.

Copper mineralisation at the Kingfisher Project is 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>1</sup>.

Mineralisation at Mick Well outcrops as quartz reefs and gossanous ironstones which are up to 10m in width. Past exploration in the area is limited, with previous rock chip sampling showing results up to 10.6% Cu over a strike length of 1km within a laterally extensive geological horizon. Only four drill historical holes have been completed at Mick Well, with the best result being 11m @ 0.25% Cu from 118 m (MWDD001)<sup>1</sup>.



**Figure 2:** Location of the Kingfisher and Mick Well Projects in the Gascoyne Mineral Field showing the 1:2,500,000 geology map of Western Australia. The Company's tenements and tenements held by other companies active in the Gascoyne region 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: peter@nwrcommunications.com.au

#### **About Kingfisher Mining Limited**

Kingfisher Mining Limited (ASX:KFM) is a mineral exploration company committed to increasing shareholder wealth through the acquisition, exploration and development of mineral resource projects throughout Western Australia. The Company's tenements and tenement applications cover 1,375km² in the underexplored Ashburton and Gascoyne Mineral Fields.

The Company 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 in the Ashburton Basin and more than 50km of strike across the target geological unit that covers the Kingfisher and Mick Well Projects in the Gascoyne region.

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

#### **Previous ASX Announcements**

<sup>1</sup> Kingfisher Mining Limited Prospectus, 9 November 2020.

#### **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.



## 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>The VTEM<sup>™</sup> Max survey was flown by UTS Geophysics Pty Ltd.</li> <li>The survey included 821 line km.</li> <li>Nominal flight line spacings were 200m, with infill lines at 100m spacings in areas of interest identified during the survey.</li> <li>The nominal flight height was approximately 80m, with the loop at 35m.</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> </ul>	No new drilling results are included in this report.



Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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> <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/secondhalf sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The VTEM™ Max system is innovative airborne EM system with a low base frequency (25Hz) and high-spatial resolution of two to three metres.</li> <li>Data processing was undertaken during the survey by UTS Geophysics Pty Ltd and by the Company's geophysics consultant, Mira Geoscience Asia Pacific Pty Ltd.</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>The VTEM<sup>™</sup> Max system an industry-leading high-powered airborne EM system.</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>	Mira Geoscience Asia Pacific Pty Ltd.  • No issues were identified with the data.
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> </ul>	<ul> <li>Flight paths were logged with a Novatel GPS receiver, enabling the helicopter position to be recorded in three dimensions with ±5% altitude accuracy.</li> <li>The flight paths were supplied in the UTM coordinate system</li> </ul>



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	(MGA94 Zone 50)
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>	<ul> <li>Nominal flight line spacings were 200m, with infill lines at 100m spacings in areas of interest identified during the survey.</li> <li>The nominal flight height was approximately 80m, with the loop at 35m.</li> <li>Flight lines were generally perpendicular to the strike of the target geology.</li> </ul>
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>	Flight lines were generally perpendicular to the strike of the target geology.
Sample security	The measures taken to ensure sample security.	<ul><li>Digital data was transferred using secured file transfer sites.</li><li>No physical samples were collected.</li></ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Independent data verification was completed daily during the survey by Mira Geoscience Asia Pacific Pty Ltd.</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 235km east of Carnarvon.</li> <li>The project includes three granted Exploration Licences, E09/2242, E09/2349 and E09/2320 as well as two Exploration Licence applications, E09/2481 and E09/2495.</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>



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The majority of the material work at Kingfisher undertaken was by Pasminco Ltd in 1994, Mt Phillips Exploration Pty Ltd in 2006 and WCP Resources in 2007.</li> <li>The majority of the material work 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.	<ul> <li>The Company's tenements in the Gascoyne Mineral Field are prospective for volcanogenic massive sulphide (VMS) style mineralisation and base metals associated with hydrothermal systems. The area is also prospective for rare earth elements and uranium.</li> </ul>
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 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.</li> </ul>	No new drilling results are included in this report.
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</li> </ul>	No new drilling results are included in this report.



Criteria	JORC Code explanation	Commentary
	be clearly stated.	
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>	No new drilling results are included in this report.
Diagrams	<ul> <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> <li>A map showing the VTEM<sup>TM</sup> Max survey data has been included in the report along with documentation.</li> </ul>
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>	All of the geophysical survey results are included in this report.
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 geophysical survey results are included in this report.</li> <li>All historic exploration results have been reported by Kingfisher.</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>	The company has planned follow-up mapping and rock chip sampling as well as RC drilling to test priority targets.