ASX Announcement

ASX:MTM 17 January 2023

SOIL SAMPLING RESULTS HIGHLIGHT ADDITIONAL RARE EARTH POTENTIAL

Highlights:

- **Further encouraging rare earth element (REE) results from surface geochemical sampling program at the Pt Kidman prospect**
- **Several large REE anomalous zones identified over area in excess of 100 square kilometres**
- **Next phase of aircore drilling scheduled to commence in January 2023**

Mt Monger Resources Limited (ASX:**MTM**, **Mt Monger** or the **Company**) has received further soil geochemical sampling results from an ongoing surface geochemical sampling program at the East Laverton Project located in the north Eastern Goldfields of Western Australia. The soil sampling has identified several new broad rare earth element (REE) anomalies in the Pt Kidman area.

Regarding the latest results, Managing Director Lachlan Reynolds commented:

"As anticipated, soil sampling results from Pt Kidman have shown that several very large areas are prospective for rare earth element mineralisation. This bolsters our confidence that Pt Kidman has the potential for district-scale development of clay-hosted REE mineralisation.

Previous aircore drilling of anomalous areas have indicated the presence of significant thicknesses and grades of clay-hosted REE within the weathered basement rocks. On this basis, our exploration team are confident that further drilling will reveal additional zones of similar mineralisation.

We are very keen to get a drilling rig mobilised to the area and expect to begin testing these newly defined anomalies in coming weeks."

SOIL SAMPLING RESULTS

The assay results are from a program of surface geochemical sampling which was completed in September to October 2022, mainly within the Pt Kidman prospect area (tenement E38/3466, E38/3499 and E38/3462) (Figure 1) and extending to the south to the central part of the East Laverton Project (tenement E38/3510) (Figure 2).

The sampling program greatly expands the geochemical sampling coverage in the area, which was previously restricted to a small area in the southwest corner of the Pt Kidman area (*refer to Mt Monger ASX announcement dated 4 March 2022*).

Subsequent aircore drilling of these anomalies identified significant areas of flat-lying, shallow REE mineralisation hosted within the weathered rocks (*see Mt Monger ASX announcements dated 19 August and 17 November 2022*).

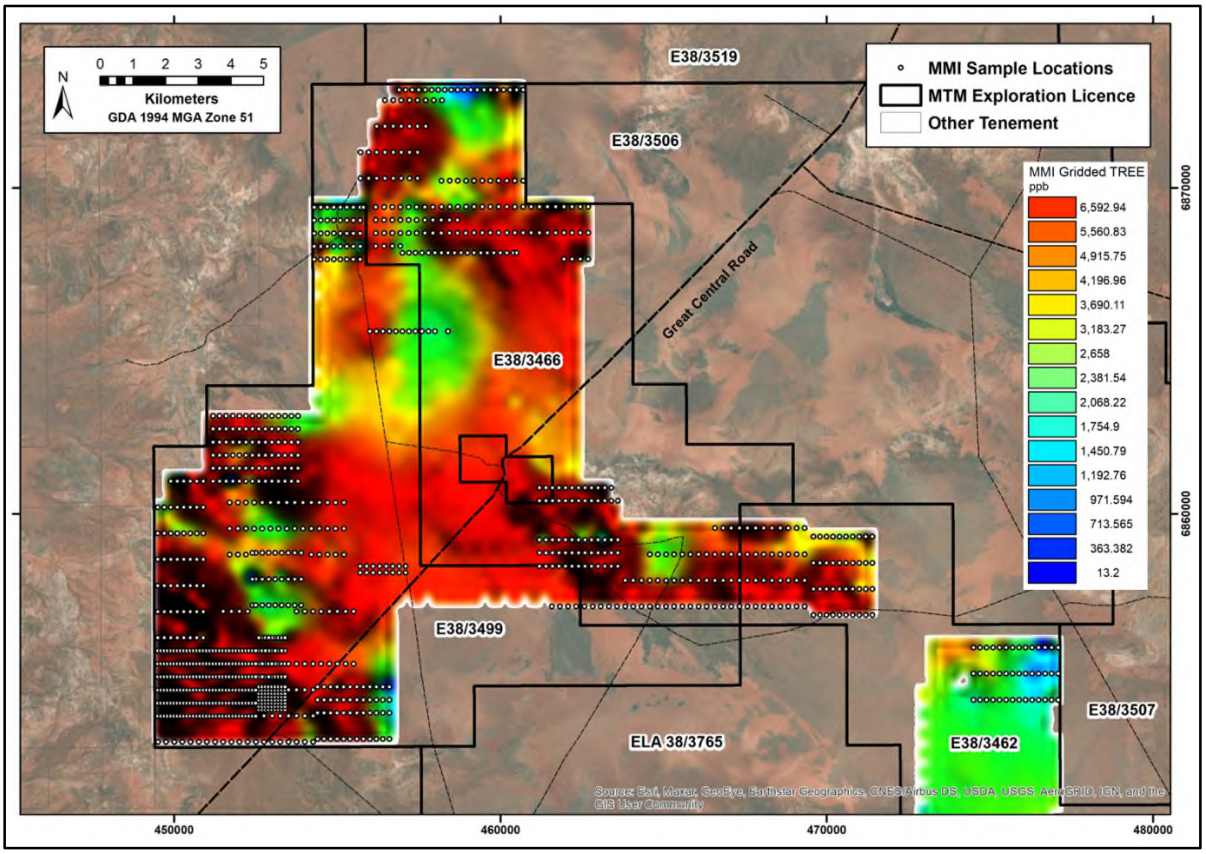

Figure 1: Gridded image of TREE surface geochemistry showing the location of MMI soil samples at the Pt Kidman Prospect.

Results show that the Pt Kidman area is significantly enriched in Total REE (TREE) compared with other areas that have been sampled to-date (Figure 2). Within the Pt Kidman prospect itself, 5 large, coherent TREE anomalies have been defined, covering a total area in excess of approximately 100 square kilometres (Figure 1). These anomalous areas are open further to the east, south and north, where no sampling has been completed.

Absolute values of the assay results are low due to the partial leach nature of the MMI technique but peak values are well defined above background values. Anomalous areas are interpreted to be related to fertile basement granite and granite-gneiss that have a preserved weathering profile.

Surface anomalies were also noted for nickel (Figure 3). The nickel anomalies do not show the same extent as the REE anomalies as they are interpreted to be associated with remnant inliers of mafic to ultramafic rocks entrained within granite-gneiss.

In the Pt Kidman area, the area of highest nickel values in the soil sampling corresponds with the location of a possible nickel gossan that was identified from rock chip sampling in the area (*see Mt Monger ASX announcement dated 28 November 2022*). This confirms the effectiveness of the sampling to identify basement mineralisation.

SOIL SAMPLING PROGRAM

The soil geochemistry program comprised a total of 5,800 samples, collected locally on variable sample grids including 800m x 200m, 400m x 200m, 400m x 100m and 100m x 100m sample spacing. Samples were assayed using the proprietary SGS Laboratories mobile metal ion (MMI) technique to obtain a multi-element assay suite (refer to Appendix I for full details).

The soil sampling program is continuing at the East Laverton area as the first-pass evaluation of the Company's tenements. The Company is currently waiting on additional assay results. Further evaluation and analysis of the whole geochemical sampling program will be completed and reported when these data become available.

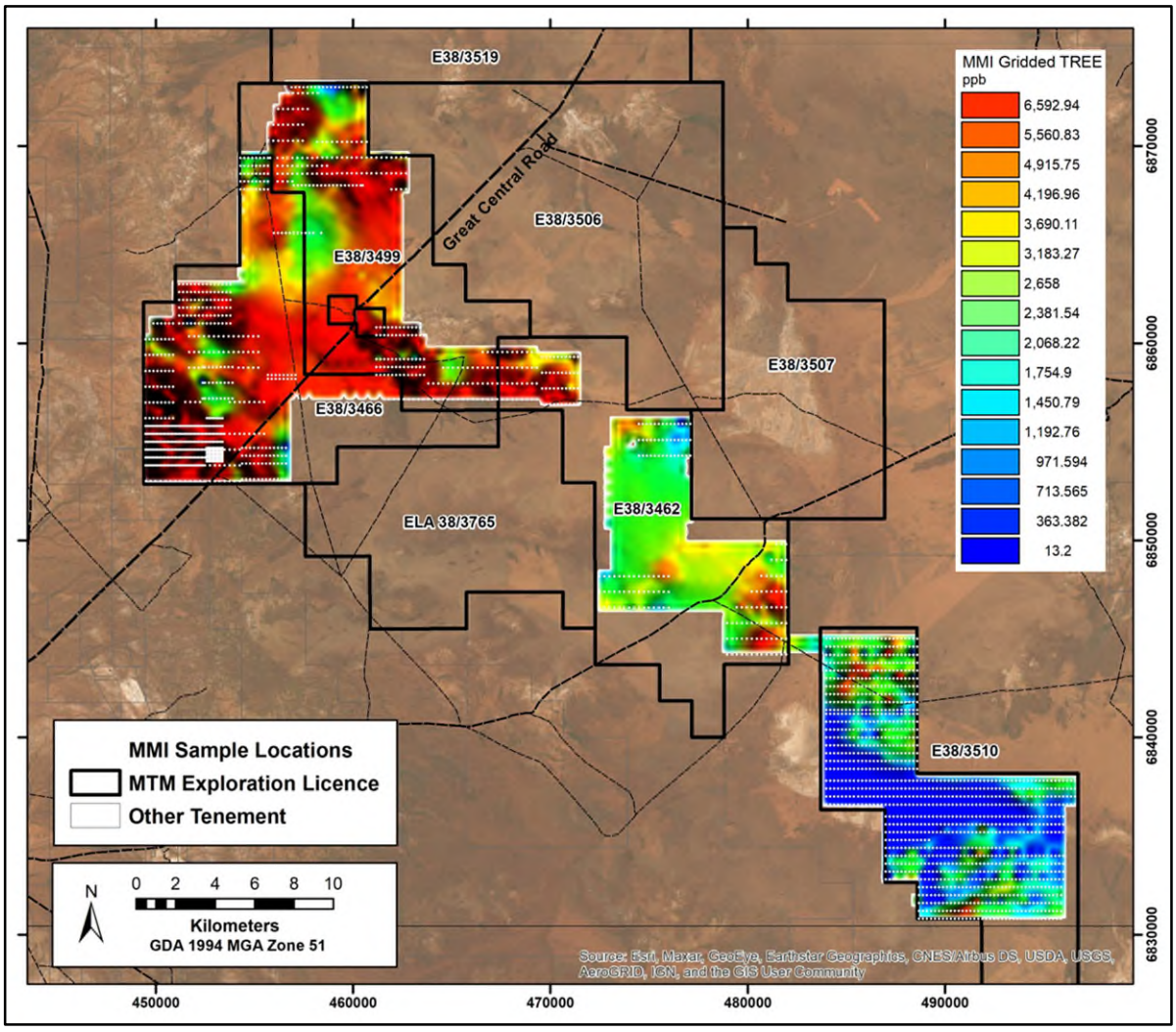

Figure 2: Soil sampling locations at East Laverton and gridded MMI soil geochemical results for TREE.

FURTHER WORK

An aircore drilling rig has been contracted to undertake a program of drilling across the Pt Kidman area to test the REE anomalies for both extensions of known mineralisation and for new occurrences of REE. The rig is expected to mobilise to the Pt Kidman area in the coming week.

All regulatory work program approvals and heritage clearances have been obtained for the drilling program (*see Mt Monger ASX announcement dated 22 December 2022*).

Further soil sampling is proposed to evaluate the tenement areas further east and north of the extents of the current program in Q2 2023. These areas are also considered to have prospectivity for REE but have not been previously explored.

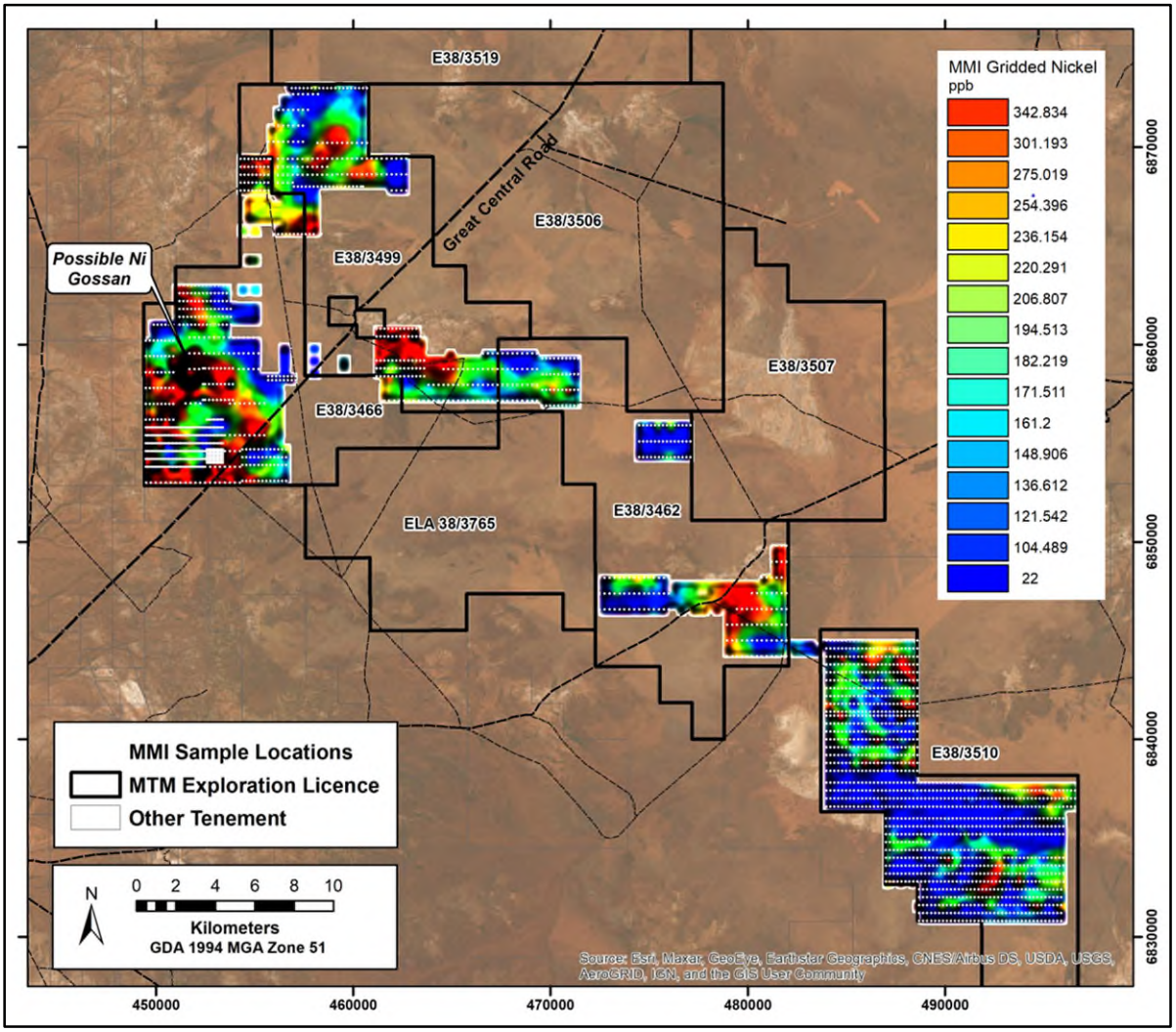

Figure 3: Soil sampling locations at East Laverton and gridded MMI soil geochemical results for nickel.

This announcement is authorised for release on behalf the Board by Mr Lachlan Reynolds, Managing Director.

For further information, please contact:

Lachlan Reynolds
Managing Director
Mt Monger Resources Limited
Tel: +61 (0)8 6391 0112
Email: lachlan@mtmongerresources.com.au

Simon Adams
Company Secretary
Mt Monger Resources Limited
Tel: +61 (0)8 6391 0112
Email: simon@mtmongerresources.com.au

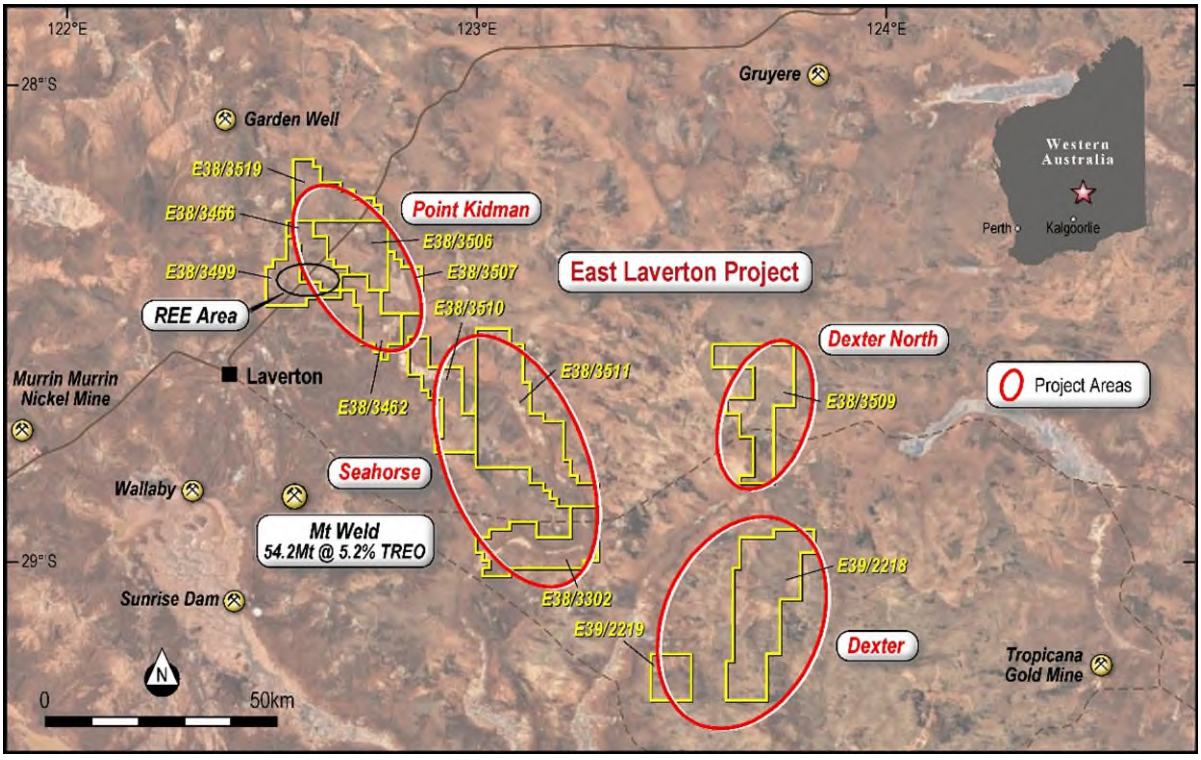

Figure 4: Location map of prospects at the East Laverton Project.

About Mt Monger Resources Limited

Mt Monger Resources Limited is an exploration company searching for gold, lithium, nickel, rare earth elements (REE) and base metals in the Goldfields and Ravensthorpe districts of Western Australia. The Company holds over 4,500km^2 of tenements in three prolific and highly prospective mineral regions. The Mt Monger Gold Project comprises an area containing known gold deposits and occurrences in the Mt Monger area, located ~70km SE of Kalgoorlie and immediately adjacent to the Randalls gold mill operated by Silver Lake Resources Limited. The East Laverton Gold Project is a regionally extensive package of underexplored tenements prospective for gold, base metals and REE. The Ravensthorpe Project contains a package of tenements in the southern part of Western Australia between Esperance and Bremer Bay which are prospective for a range of minerals including lithium, nickel, graphite and REE. Priority drilling targets have been identified in all project areas and the Company is well funded to undertake effective exploration programs. The Company has an experienced Board and management team which is focused on discovery to increase value for Shareholders.

Competent Person's Statement

The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Mr Lachlan Reynolds. Mr Reynolds is the Managing Director of Mt Monger Resources Limited and is a member of both the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. Mr Reynolds has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Reynolds consents to the inclusion in this report of the matters based on information in the form and context in which they appear.

Previous Disclosure

The information in this announcement is based on the Mt Monger Resources Limited Prospectus dated 21 May 2021 and the following ASX announcements, which are all available from the Mt Monger Resources website www.mtmongerresources.com.au and the ASX website www.asx.com.au.

- 4 March 2022 "Positive Geochemical Results from East Laverton REE Target"
- 19 August 2022 "Aircore Drilling Confirms Widespread REE Mineralisation at East Laverton"
- 17 November 2022 "Assays Confirm Rare Earth Element Mineralisation and District-Scale Potential at East Laverton"
- 28 November 2022 "High Grade Rock Chip Samples of 1.1% Nickel and 1.57% Cobalt Within 2.5km x 2.5km Nickel-Copper-Cobalt Soil Geochemical Anomaly at Seahorse Prospect, East Laverton Project.

- 22 December 2022 “Heritage Survey Successfully Completed Over Key REE and Gold Targets at the East Laverton Project”

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus or the original ASX announcements and that all material assumptions and technical parameters underpinning the Prospectus and relevant ASX announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are represented have not been materially modified from the original ASX announcements.

Cautionary Statement Regarding Values & Forward-Looking Information

The figures, valuations, forecasts, estimates, opinions and projections contained herein involve elements of subjective judgment and analysis and assumption. Mt Monger Resources does not accept any liability in relation to any such matters, or to inform the Recipient of any matter arising or coming to the company’s notice after the date of this document which may affect any matter referred to herein. Any opinions expressed in this material are subject to change without notice, including as a result of using different assumptions and criteria. This document may contain forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as “seek”, “anticipate”, “believe”, “plan”, “expect”, and “intend” and statements than an event or result “may”, “will”, “should”, “could”, or “might” occur or be achieved and other similar expressions. Forward-looking information is subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Such factors include, among other things, risks relating to property interests, the global economic climate, commodity prices, sovereign and legal risks, and environmental risks. Forward-looking statements are based upon estimates and opinions at the date the statements are made. Mt Monger Resources undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such dates or to update or keep current any of the information contained herein. The Recipient should not place undue reliance upon forward-looking statements. Any estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are based upon the best judgment of Mt Monger Resources from information available as of the date of this document. There is no guarantee that any of these estimates or projections will be achieved. Actual results will vary from the projections and such variations may be material. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future. Mt Monger Resources, its affiliates, directors, employees and/or agents expressly disclaim any and all liability relating or resulting from the use of all or any part of this document or any of the information contained herein.

APPENDIX I – JORC Compliance Table

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Soil samples weighing approximately 250 grams were taken by hand from a depth of about 15-20cm below surface. • Each sample was sieved on site using a plastic sieve to remove coarse particles and placed in plastic snap seal bags. • Standard field collection procedures for soil samples were used.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable, no drilling completed.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Not applicable, no drilling completed.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Not applicable, no drilling completed.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample preparation of soil samples involves collection of a 50g sub-sample for assay. • No sample preparation or drying is required for the MMI assay technique. • No field duplicates were taken as this is not warranted at the current stage of exploration. • The sample size and distribution of the soil samples is appropriate for the current stage of exploration.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Soil samples were submitted to SGS Australia Ltd in Perth for analysis by the proprietary mobile metal ion (MMI) technique. • MMI utilised proprietary extractants with element measurement by ICP-MS and ICP-MS Dynamic Reaction Cell™. • Elements assayed included: Ag, Al, As, Au, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hg, In, K, La, Li, Mg, Mn, Mo, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Sb, Sc, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, U, W, Y, Yb, Zn, Zr. • The MMI method is a partial leach and does not dissolve the majority of the minerals in the sample. • Laboratory QC procedures for soil samples involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The assay results have not been verified by independent or alternative company personnel. This is not required at the current stage of exploration. • Primary assay data has been entered into the Company's digital database, which is maintained by an external consultant. • There are no adjustments to the assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sample locations were recorded with a handheld GPS instrument with an estimated accuracy of ±3m. • The grid system used for location of the samples and shown in all tables and figures is MGA Zone 51, GDA94. • Topographic control is not applicable.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• The soil samples were collected on east-west lines locally using 800m x 200m, 400m x 200m, 400m x 100m and 100m x 100m grid spacing.

Criteria	JORC Code Explanation	Commentary
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Soil sampling data is not appropriate to establish geological and grade continuity. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Orientation of sampling and sampling bias is not relevant to rock chip or soil sample results.
Sample security	• *The measures taken to ensure sample security.*	• Sampling was completed by MTM employees and samples were delivered by them directly to the assay laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit or review has been completed by an external party and is not warranted at the current stage of exploration.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The mineral tenements relevant to this announcement are granted exploration licences, and E38/3511. • Exploration licences E38/3462, E38/3466, E38/3499 are held 100% by Tevel Pty Ltd (Tevel). • Mt Monger Resources Ltd has executed an earn-in and joint venture agreement with Tevel that entitles the Company to earn up to a 75% interest in the tenements. • Exploration licence E38/3511 is held by Tigers Paw Prospecting Pty Ltd, a wholly owned subsidiary of Mt Monger Resources Ltd. • The tenements are secure and there are no known impediments to obtaining a licence to operate in the area. • The tenements are covered by the Nyalpa Pirniku native title claim WAD91/2019. Mt Monger Resources Ltd and Tevel have completed a Heritage Protection Agreement to allow access for exploration activities. • The tenements are located on the Laverton Downs and White Cliffs pastoral stations.

Criteria	JORC Code Explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The tenements contain extensive sedimentary cover and there has been minimal exploration in the area either by exploration companies or government geological surveys. Earliest exploration within the region was for diamonds, nickel and uranium, with only a limited number of drill holes targeting gold mineralisation. • Reconnaissance exploration activities including geophysical data interpretation and surface geochemical sampling, have identified a number of gold and rare earth element anomalies requiring further follow up work. A number of early-stage exploration programs including shallow RAB and aircore drilling have been completed in the Pt Kidman, Seahorse and Dexter prospect areas.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The tenement area is located within the poorly understood Burtville Terrane on the eastern edge of the Eastern Goldfields Superterrane. Interpreted geology comprises predominantly Archaean granite gneiss with relatively narrow remnant greenstone units. The area contains limited outcrop, with the bedrock geology predominantly concealed by younger transported cover. • The area is on the eastern fringe of the Yilgarn Craton, surrounded by existing and emerging world class gold camps. To the west, the +25 Moz Au Laverton Greenstone Belt is home to Sunrise Dam (10 Moz Au), Wallaby (8 Moz Au) and Granny Smith (2.5 Moz Au) and a suite of other nearby deposits. Gold production from the belt is estimated to be in excess of 28 Moz Au. Lying to the east of the area is the Yamarna Greenstone Belt, hosting the 6 Moz Au granitoid-host ed Gruyere deposit, whilst the 7.5 Moz Au granite gneiss-hosted Tropicana deposit is located in the Albany-Fraser Province to the southeast. • Limited previous exploration within the Point Kidman project area has identified light rare earths (LREE) mineralisation hosted by laterite clays and strongly weathered granites associated with Archaean granitoid terrane. Aircore drilling intersected anomalous LREE mineralisation (Ce, La, Nd, Pr and Sm) in reconnaissance aircore drill holes (see Section 5.3 of the IGR) over a wide area that remain to be followed up with additional exploration. Very widely spaced Geological Survey of Western Australia (GSWA) rock chip samples in the area have returned anomalous REEs and indicates the size of the anomalous REE fingerprint in the region is much larger than the area drilled to date.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including Easting and northing of the drill hole collar, Elevation or RL (Reduced Level – elevation above sea level in*	• Not applicable, no drilling completed.

Criteria	JORC Code Explanation	Commentary
	metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length. • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No weighted averages, grade truncations or cut-off grades have been applied. • No drilling intersections are reported. • Total rare earth element (TREE) values were derived by the simple addition of grades for lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), erbium (Er), ytterbium (Yb), yttrium (Y) and scandium (Sc). • No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No mineralisation widths or intercept lengths are reported. • The relationship between the surface geochemical results and geometry of mineralisation is not known.
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.*	• Appropriate maps are provided in the body of the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Comprehensive reporting of results is not practicable. • Gridded results showing the distribution of grades for selected elements is presented in the announcement.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Material geological and geophysical observations are detailed in the body of the announcement.

Criteria	JORC Code Explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further work may include additional soil sampling to extend and infill the existing grids. Drilling may be subsequently undertaken to test geochemical and geophysical anomalies.