

9<sup>th</sup> May, 2023

ASX: MTM

## DRONE MAGNETIC SURVEY COMPLETED AT THE POMME REE-Nb PROJECT

### Highlights:

- High-resolution drone magnetic survey flown over Pomme carbonatite target area
- Detailed data now available for modelling of carbonatite intrusion and mineralisation
- Diamond drilling program set to commence in late May 2023

MTM Critical Metals Limited (ASX:MTM) (MTM or the **Company**) has recently completed a detailed drone magnetic survey at the Pomme REE-Nb project in Québec, Canada (**Pomme** or the **Project**). The survey has provided exceptionally high-quality magnetic data, which was achieved by flying tight line spacings (25 metres) at tree-top altitude (~22 metres above ground).



**Figure 1: Drone magnetic survey operations at the Pomme REE-Nb project in early April 2023 (courtesy Vision 4K).**

## POMME REE-Nb PROJECT

The Project is a known carbonatite intrusion with exceptional results from limited historical drilling, showing enrichment in rare earth elements (**REE**) and niobium (**Nb**) and is considered to be an extremely prospective exploration target. Pomme is located adjacent to the world-class Montviel REE-Nb deposit (owned by Geomega Resources Inc), that has a defined total indicated and inferred resource of **266 Mt @ 1.45% TREO & 0.14% Nb<sub>2</sub>O<sub>5</sub>**.

MTM has entered into a binding option agreement with Geomega Resources to acquire a 100% interest in the Pomme claims and is now advancing exploration at Pomme to discover a REE-Nb resource (see *MTM ASX announcement dated 23 February 2023*).



**Figure 2: Overview of the Pomme REE-Nb project area taken during April 2023. Note the extensive logging operations and existing access in the area that will facilitate access for further work in the Project area.**

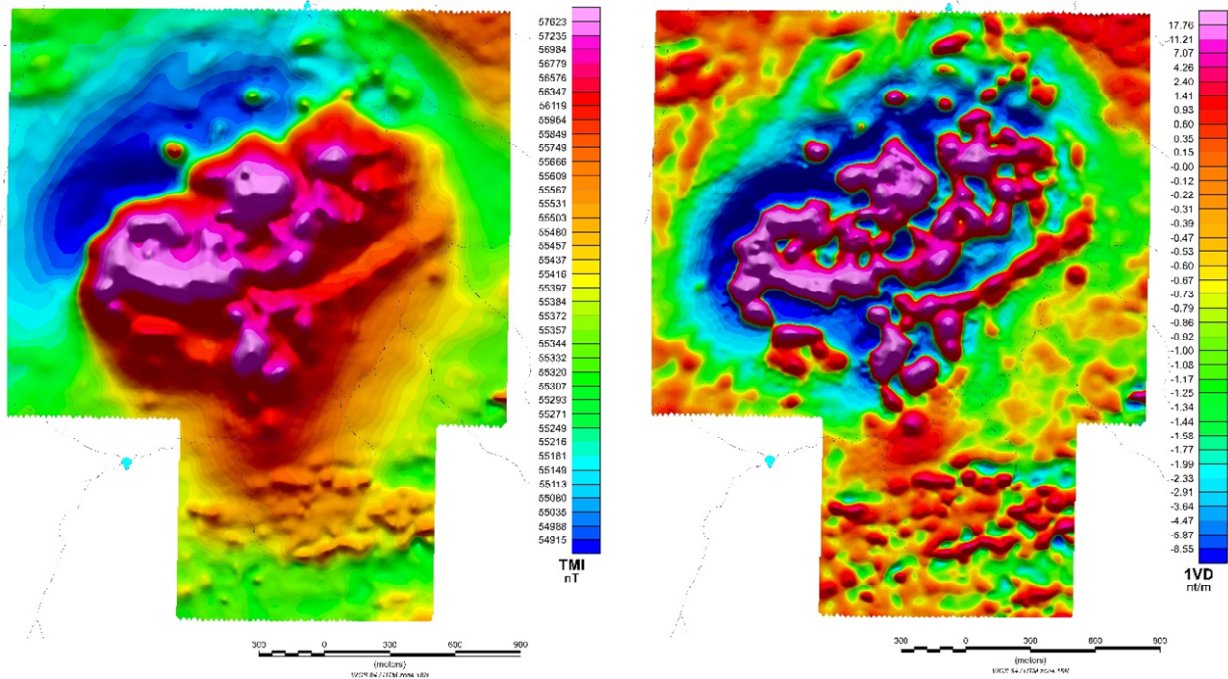
## MAGNETIC SURVEY

The high-resolution drone magnetic survey of the interpreted Pomme carbonatite was commissioned from geophysical contractor Vision 4K. The survey was completed in late March 2023 and comprised approximately 220 line kilometres, flown on 25 metre line spacing at a sensor height of approximately 22 metres (tree-top height).

The full survey report and finalised magnetic data has now been received by the Company from Vision 4K. Initial images (see Figure 3) indicate that the survey has provided detailed and high-quality information which improves on the available airborne magnetic survey data.

The drone survey was designed to cover the extent of the carbonatite and will allow the Company to model both the geological and the REE mineralisation magnetic responses.

Furthermore, it may potentially provide an exploration vector as the magnetics can be progressively correlated with the underlying geology.



**Figure 3: Preliminary drone magnetic survey images. Left - Total Magnetic Intensity (TMI); Right - TMI 1<sup>st</sup> Vertical Derivative**

## DRILLING PROGRAM

A program of 10 diamond drill holes to provide a first-pass test of the Pomme carbonatite complex is planned to commence in late May 2023 to evaluate the overall geology of the carbonatite intrusion and define the grade and continuity of the REE-Nb mineralisation that it contains (see *MTM ASX announcement dated 29 March 2023*).

The Company has received approval for the drilling from the Québec Ministère des Ressources naturelles et des Forêts (MRNF, Ministry of Natural Resources and Forests) (see *MTM ASX announcement dated 17 April 2023*); secured a diamond drilling rig for the program (see *MTM ASX announcement dated 24 April 2023*); and is liaising with the local Cree First Nation of Waswanipi regarding the timing of drill rig mobilisation.

Assembly of a field camp and associated equipment has commenced and preparation of the drilling access tracks and sites is expected to be completed in coming weeks.

This announcement has been authorised for release by the Board of Directors.

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## About MTM Critical Metals Limited

MTM Critical Metals Limited is an exploration company which is focused on searching for rare earth elements (REE), gold, lithium, nickel, and base metals in the Goldfields and Ravensthorpe districts of Western Australia and in the Abitibi region of the Province of Québec. The Company holds over 4,500km<sup>2</sup> of tenements in three prolific and highly prospective mineral regions in Western Australia and has an option to acquire, through an earn-in arrangement, a 100% interest in 2,400 ha of exploration rights in Québec, Canada. The East Laverton Projects is made up of a regionally extensive package of underexplored tenements prospective for REE, gold and base metals. 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 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 REE, lithium, nickel and graphite. The Pomme project in Québec is a known carbonatite intrusion that is enriched in REE and niobium and is considered to be an extremely prospective exploration target adjacent to a world class REE resource (Montviel deposit). 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.

## Previous Disclosure

The information in this announcement is based on the following MTM Critical Metals Limited (formerly Mt Monger Resources Limited) ASX announcements, which are all available from the MTM Critical Metals Limited website [www.mtmcriticalmetals.com.au](http://www.mtmcriticalmetals.com.au) and the ASX website [www.asx.com.au](http://www.asx.com.au).


- 23 February 2023 “Mt Monger to Acquire Advanced Carbonatite REE-Nb Project in Canada”
- 29 March 2023 “Countdown to Diamond Drilling Program at Pomme REE-Nb Project”
- 17 April 2023 “Permit for Diamond Drilling Approved at the Pomme REE-Nb Project, Quebec”
- 24 April 2023 “Diamond Drilling Contractor Secured for the Pomme REE-Nb Project, Quebec”

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original ASX announcements and that all material assumptions and technical parameters underpinning the 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

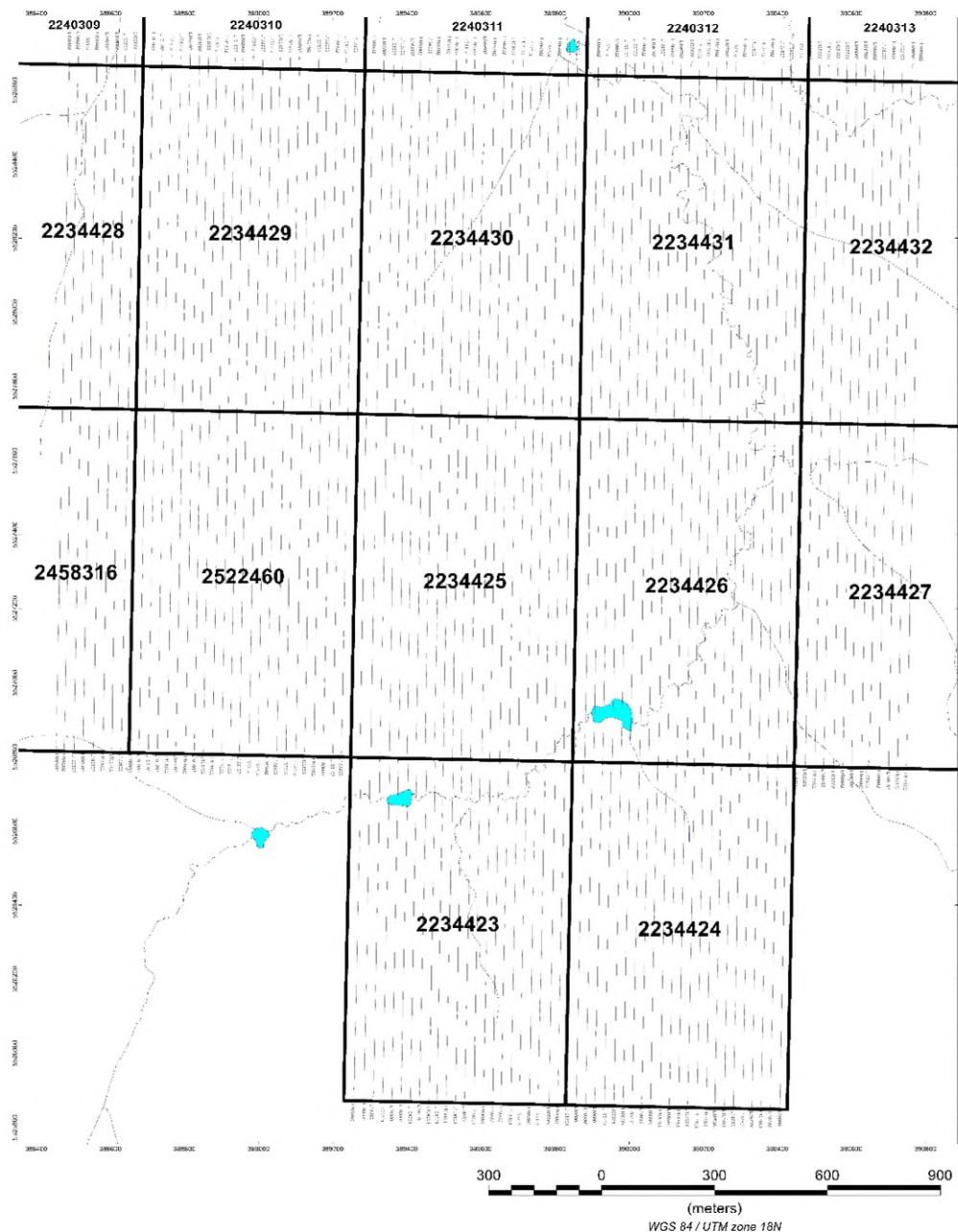
The figures, valuations, forecasts, estimates, opinions and projections contained herein involve elements of subjective judgment and analysis and assumption. MTM Critical Metals does not accept any liability in relation to any such matters, or to inform the Recipient of any matter arising or coming to 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. MTM Critical Metals 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 MTM Critical Metals 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. MTM Critical Metals, 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 - Drone Magnetic Survey

<b>Drone</b>	DJI Matrice 600
<b>Navigation</b>	Two ZED-F9P dual frequency GPS receivers (base and aircraft). Real-Time Kinematics (RTK) position corrections. Reprocessed using Post-Processed Kinematics (PPK) to validate accuracy.
<b>Magnetometer</b>	<p>Scintrex CS-VL caesium vapour device powered by an independent battery. The CS-VL has a measurement range between 15,000 nT and 105,000 nT with a sensitivity of 0.0006nT/<math>\sqrt{\text{Hz}}</math>.</p> <p>The magnetometer is installed in a custom-built plastic bird shell allowing a controlled orientation of the magnetometer during flights. The bird shell is towed at five (5) metres below the drone.</p>  <p style="text-align: right;"><i>Figure 4: Drone and magnetometer</i></p>
<b>Acquisition System</b>	<p>The acquisition system was built by Devbrio Geophysics, partner with Vision4K. The system is linked with the magnetometer to obtain easurements using counting circuit at a frequency of 10 Hz. The navigation software used a GPS system installed on the drone.</p> <p>The system is also equipped with an active real-time altitude control and collision avoidance called AIM LOW <sup>TM</sup> and developed by Devbrio Geophysics. The AIM LOW <sup>TM</sup> allows data acquisition as close as 3m from the treetops, much lower than any competing technology in similar conditions.</p>
<b>Flight Specifications</b>	<p>Line spacing: 25m          Line orientation: N002 degrees          Line km: 218.9km          Mean altitude: 27m          Tie lines: Not required          Date: 30-31 March 2023</p>

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<p><b>Data Processing</b></p>	<p>Preliminary data processing was carried out by Devbrio Geophysics, using proprietary software. Final data processing was carried out using Geosoft OASIS Montaj.</p> <p>The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the WGS84 Datum, UTM Zone 18N.</p> <p>Data processing included:</p> <ul style="list-style-type: none"> <li>• Diurnal corrections</li> <li>• Lag correction</li> <li>• Levelling</li> </ul>
<p><b>Data Products</b></p>	<ul style="list-style-type: none"> <li>• Total magnetic intensity (TMI)</li> <li>• First and second vertical derivatives (1VD, 2VD)</li> <li>• Magnetic total gradient or Analytic signal (ASIG)</li> <li>• Magnetic tilt derivative (TDR)</li> </ul>



**Figure 5: Claims and flight lines**

## APPENDIX II - JORC Compliance Tables

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<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>Not applicable, no sampling completed.</li> </ul>
Drilling techniques	<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>Not applicable, no drilling completed.</li> </ul>
Drill sample recovery	<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>Not applicable, no drilling completed</li> </ul>
Logging	<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>Not applicable, no drilling completed.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	<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> <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>	<ul style="list-style-type: none"> <li>• Not applicable, no sampling completed.</li> </ul>
Quality of assay data and laboratory tests	<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>• Not applicable, no assays completed.</li> </ul>
Verification of sampling and assaying	<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>• Not applicable, no sampling or assaying completed.</li> </ul>
Location of data points	<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>• Not applicable, no drilling or sampling completed.</li> <li>• The grid system used for is North American Datum 1983 (NAD 83), UTM Zone 18.</li> </ul>
Data spacing and distribution	<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>• Not applicable, no drilling or sampling completed.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<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>• Not applicable, no sampling completed.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no sampling completed.</li> </ul>
<i>Audits or reviews</i>	<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>• Not applicable, no sampling completed.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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 tenements relevant to this announcement are 17 claims 2240309-313, 2234423-32, 2458316 and 2522460 located in Québec, Canada.</li> <li>• The claims are held 100% by Geomega Resources Inc.</li> <li>• A net smelter royalty of 2% is payable to Niogold Mining Corp.</li> <li>• MTM Critical Metals Ltd has executed an option agreement to acquire a 100% interest in the claims subject to cash and share based payments and exploration expenditure requirements.</li> <li>• The tenements are located on Category II Lands of the Cree First Nation of Waswanipi. Mining, exploration and geoscientific works must be carried out in such a manner as to avoid unreasonable conflict with the rights of the First Nation people.</li> <li>• 16 claims are located wholly or in part within restricted areas associated with government hydro-electric schemes but this is not considered to be an impediment to exploration or future development.</li> <li>• The tenements are secure and there are no known impediments to obtaining a licence to operate in the area.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration of the project area is limited.</li> <li>• In the early 1990's airborne magnetic surveys identified a circular magnetic anomaly that was considered as a potential kimberlite-hosted diamond target. No drilling was completed.</li> <li>• Detailed geological mapping of the area was undertaken in 2005 but carbonatite was not identified, probably due to limited bedrock exposures.</li> <li>• Geomega Resources Inc. completed a reconnaissance exploration program for REE mineralisation comprising surface geochemical sampling (MMI) and airborne geophysics (magnetics-radiometrics) in 2011. The program culminated in the drilling of 2 diamond drill holes in 2012 to test geochemical</li> </ul>

Criteria	JORC Code Explanation	Commentary
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>and geophysical anomalies. Drilling confirmed the presence of a REE-Nb mineralised carbonatite.</p> <ul style="list-style-type: none"> <li>• The Pomme project is centred on a carbonatite intrusive complex containing REE-Nb mineralisation. The carbonatite is interpreted to be Paleoproterozoic in age and has intruded a metamorphosed sequence of basalts within the Abitibi Province of the Canadian Shield.</li> <li>• The carbonatite is characterised by a prominent, ellipsoidal, km-scale magnetic anomaly that is similar in character and magnitude to the nearby Montviel carbonatite intrusive located 7km to the south.</li> <li>• Two general types of REE mineralisation are recognised in the current drill holes. The first is present as interstitial, relatively coarse fluoro-carbonate mineralisation in a late ferro-carbonatite present as discordant cm-scale dikes. The second type of mineralisation occurs as pervasive phosphate mineralisation (alteration-replacement) within later silico-carbonatite dikes or as injections along foliation in all type of carbonatites.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• <i>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 metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no drilling completed.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no drilling intersections reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no drilling intersections reported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <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>	
Diagrams	<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>Refer to Figures included in the body of the announcement.</li> </ul>
Balanced reporting	<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>Not applicable,</li> </ul>
Other substantive exploration data	<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>Geophysical survey details are provided in Appendix I.</li> </ul>
Further work	<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>Further drilling may be undertaken for infill and extension of the known exploration prospects.</li> <li>Geological, geochemical and other exploration data can be integrated with the results of the geophysical survey reported in this announcement.</li> </ul>