

Structural Analysis Reinforces Potential for Lithium Bearing Pegmatites at Cyclone Lithium Project – James Bay Region, Quebec

HIGHLIGHTS

- Detailed structural analysis using high-resolution satellite imagery and topography data has identified 272 potential pegmatite occurrences within the Cyclone Project area.
- This analysis is distinct from and will complement the results from the recently released spectral analysis¹.
- Both datasets (structural and spectral) will now be combined with all available information to produce targets that will inform the Company's upcoming fieldwork.
- Significant potential remains for massive nickel sulphides and orogenic style gold deposits in addition to lithium within the belt.

Megado Minerals Limited (ASX: MEG) (**Megado** or the **Company**) is pleased to release the results of a structural analysis over its Cyclone Lithium Project that has indicated the potential for numerous pegmatite bodies (see Figure 1).

Megado recently engaged independent geological remote sensing consulting group, Geosense, to conduct a detailed interpretation of high-resolution satellite imagery over its Cyclone Lithium Project (Figures 2 & 3). The dataset and methodology adopted by Geosense is distinct from the multi-band spectral analysis undertaken by Terra Resources that identified possible lithium bearing rocks (refer ASX:MEG announcement [17 April 2023¹](#)).

Megado Minerals CEO & MD, Ben Pearson commented:

"Our remote sensing work continues to provide particularly valuable targeting information. A high level of confidence during targeting improves our operational efficiency and maximises our chances of success on the ground with the potential to see a significant number of these locations convert to drill targets ready for testing later this year."

The work conducted by Geosense has yielded 272 distinct outcrop targets that indicate the possible presence of pegmatites. These locations are presented in Figure 1 and have been ranked according to levels of certainty – Highly Probable (30), Probable (100) and Possible (142). The linear extent of the interpreted features is only that which is visible in the available imagery, the targets may be longer than indicated but not visible.

¹ ASX:MEG announcement [17 April 2023 – Potential Lithium Bearing Pegmatite Targets Identified](#)

The interpretation by Geosense utilised a combination of Pleiades and Kompsat-3 satellite imagery (ca. 50cm resolution) in conjunction with multiband Sentinel-2 satellite imagery. Detailed topography was sourced from ALOS World 3D at 2.5m resolution. A number of false colour and topography datasets were produced that enabled the detailed mapping of various aspects of the geology in the area, focusing on pegmatites, faults/structures, and glaciation.

There is a clear NW-SE trend to the identified pegmatites that correlates with previous government mapping within the belt. The interpreted pegmatites appear to have the same orientation as the greenstone belt and, as with the previously reported spectral work, occur in clusters. A number of the pegmatites interpreted by Geosense overlap with the spectral targets previously identified by Terra Resources, thus providing high level of confidence that there are lithium bearing pegmatites in the project area.

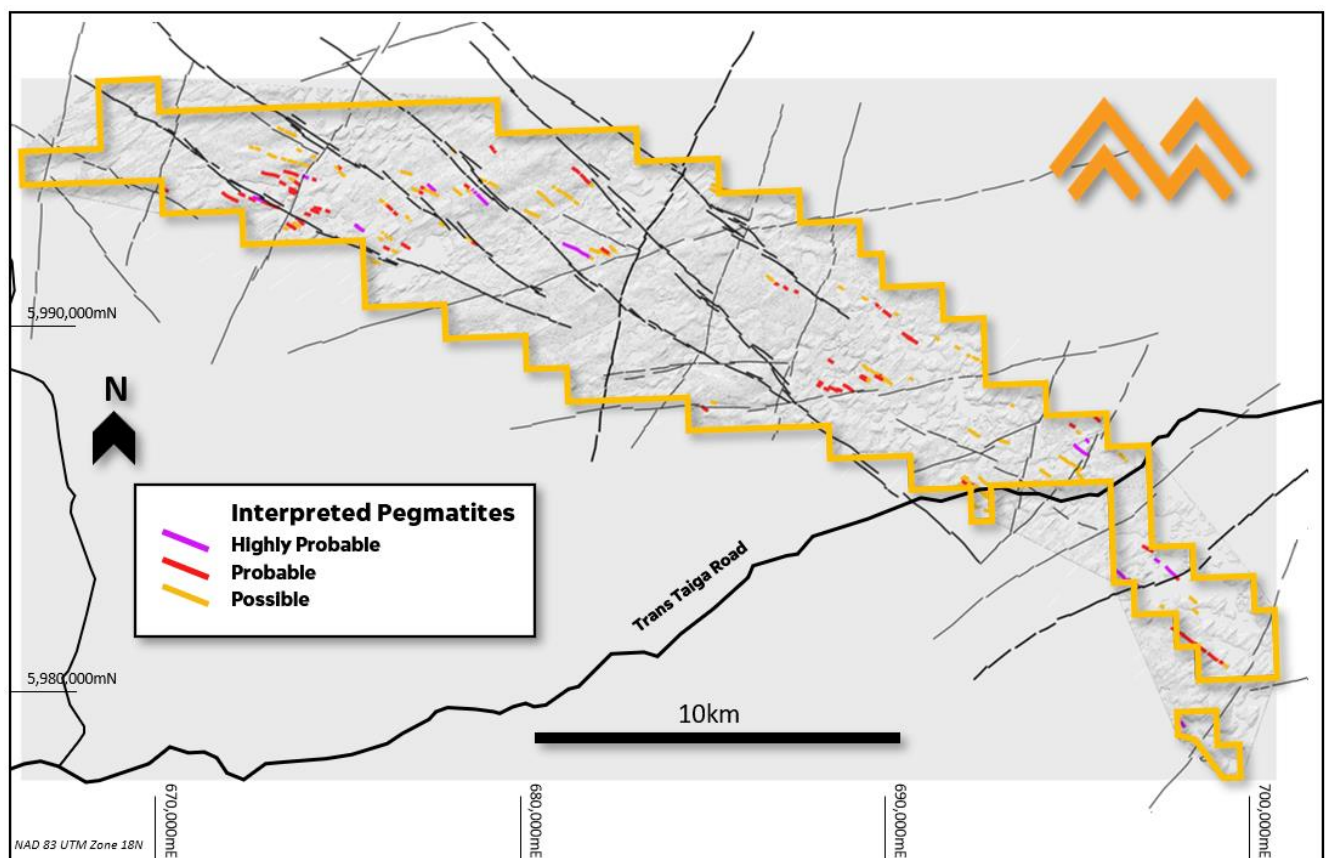


Figure 1: Cyclone Project: newly interpreted imagery by Geosense has yielded targets that have been ranked according to levels of pegmatite probability classified as: Highly Probable, Probable, Possible.

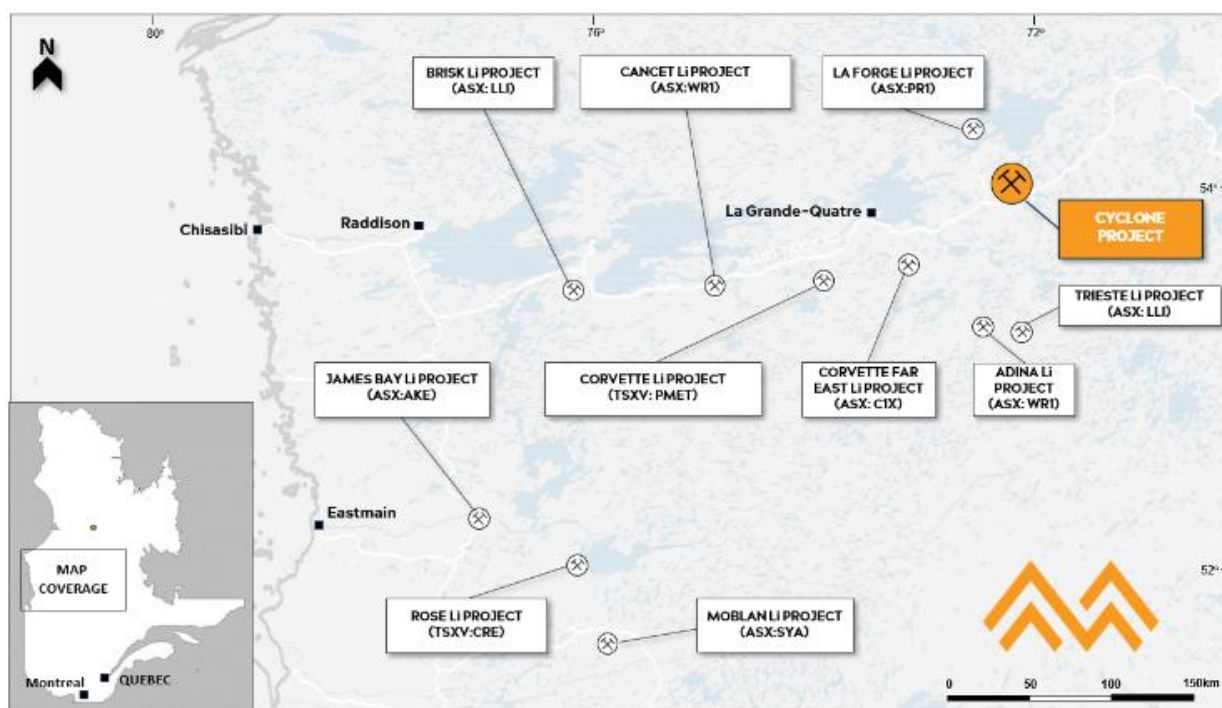


Figure 2: Location of the Cyclone Lithium Project in the James Bay region, Quebec

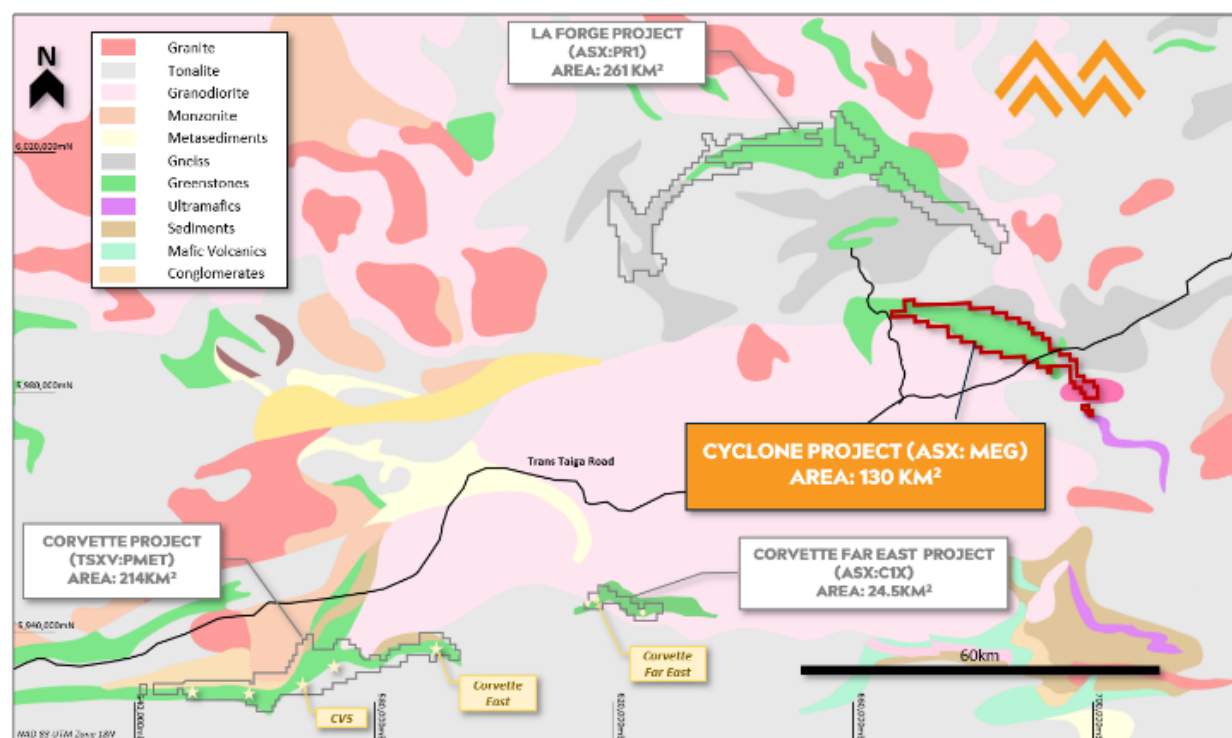


Figure 3: The large and previously unexplored for lithium, Cyclone Project, James Bay region, Quebec.

Future Work Programs at Cyclone

The Company will now merge the two newly acquired targeting datasets with all other available information and develop specific and ranked targets to be evaluated in the upcoming field season.

Logistics planning is ongoing, field work is expected to commence once the snow has cleared with drilling anticipated later in the season.

Related Announcements:

28 April 2023	Canadian Project Acquisition Completes
17 April 2023	Potential Lithium Bearing Pegmatite Targets Identified
29 March 2023	Detailed Geophysics Identifies Exciting New Carbonatite Targets
14 March 2023	Silver King Prospect at North Fork returns up to 15.85% TREE
27 February 2023	North Fork REE Project Additional Claims Secured
17 February 2023:	Canadian Lithium Project Acquisition
17 January 2023:	Newly Acquired Historical Data North Fork REE Project
15 September 2022:	Rock Samples at new REE Prospect at North Fork Project with up to 2.41% TREO, including 0.58% Nd-Pr
29 August 2022:	Megado Initiates Strategic Review at USA Rare Earths Project
21 June 2022:	Felix Strategic Minerals Acquisition Completes
15 June 2022:	Carbonatites located at Surface at North Fork Project, Idaho
7 June 2022:	MEG Raises A\$2.4m to Fund Initial Exploration at North Fork
14 April 2022:	MEG to Acquire US High-Grade Rare Earth Element Project

-ENDS-

Authorised for release by the Board of Megado Minerals Limited.

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About Megado Minerals

Megado Minerals Ltd (ASX: MEG) (the Company or Megado) is an ASX-listed mining exploration company. The company's assets include the North Fork Rare Earth Project in Idaho, USA and the Cyclone Lithium Project in the James Bay region in Quebec, Canada.

In June 2022, Megado completed the acquisition 100% of the rights, title, and interest in the North Fork Rare Earth Project ('North Fork'), located in the mining-friendly Idaho Cobalt Belt region of Idaho, USA. Subsequently, Megado has acquired new lode claims in the project area. North Fork now consists of 526 (granted and in application), covering approximately 45km² with outcropping, high-grade, rare-earth element (REE) mineralised rock. It contains multiple carbonatite-hosted, high-grade, REE mineralised veins that have been observed at surface across numerous prospects over 10km along strike. Previous exploration has returned exceptional grades in channel samples. REE mineralisation displayed at North Fork is high-grade and enriched in critical rare earths (CREO), (typically Y, Nd, Tb, Dy, Eu). Idaho, where North Fork is located, is ranked the best mining policy jurisdiction in the world in 2020 by Fraser Institute.

In February 2023, Megado announced the acquisition of the Cyclone Lithium Project. The Project is in Quebec's James Bay region and centred on the Aquilon Greenstone Belt. The Project encompasses 130km² and includes 304 claims. Located within Category-III lands, the Cyclone Project does not carry any restrictions relating to mining or exploration according to the James Bay Agreement. The Project area is easily accessible year-round via the Trans Taiga Road, which transects the southern part of the Project area.

Forward Looking Statements

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information.

Competent Persons Statement

Information in this "ASX Announcement" relating to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves has been compiled by Dr Chris Bowden who is a Fellow & Chartered Professional of the Australian Institute of Mining and Metallurgy and is Chief Geologist of Megado Minerals Ltd.

He has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition). Dr Bowden has consented to the release of the announcement.

Appendix A: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g., 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.</i>	The nature of results in the body of this ASX Release relate to a high resolution satellite imagery analysis carried out over the Cyclone Project. Pleadies, Kompsat-3, and Sentinel-2 satellite imagery was used, along with ALOS World 3D topography at 2.5m resolution over the project area.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Not applicable for this release, no sampling works done.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Not applicable for this release, no sampling works done.
	<i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized 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 (e.g., submarine nodules) may warrant disclosure of detailed information.</i>	Not applicable for this release, no sampling works done.
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</i>	Not applicable for this release, no drilling works done.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable for this release, no drilling works done.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Not applicable for this release, no drilling works done.
	<i>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.</i>	Not applicable for this release, no drilling works done.
Logging	<i>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.</i>	Not applicable for this release, no drilling works done.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Not applicable for this release, no drilling works done.
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable for this release, no drilling works done.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable for this release, no drilling works done.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Not applicable for this release, no drilling works done.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Not applicable for this release, no drilling works done.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of</i>	Not applicable for this release, no drilling works done.

Criteria	JORC Code explanation	Commentary
	<i>samples.</i>	
	<i>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.</i>	Not applicable for this release, no drilling works done.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Not applicable for this release, no drilling works done.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Not applicable for this release, no assay or laboratory procedures have been used.
	<i>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.</i>	Not applicable for this release, no drilling works done.
	<i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Not applicable for this release, no samples generated thus no QAQC procedures have been adopted.
Verification of sampling data and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable for this release, no assays conducted thus no significant intercepts reported.
	<i>The use of twinned holes.</i>	Not applicable for this release, no drilling works done.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Digital copy of the mapping survey, report, maps, and GIS data are stored on the company cloud server.
	<i>Discuss any adjustment to assay data.</i>	Not applicable for this release, no assay data generated thus no adjustments to assay data made.
Location of data points	<i>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.</i>	Not applicable for this release, no drilling works done thus no downhole surveys conducted.
	<i>Specification of the grid system used.</i>	NAD83 UTM Zone 18N
	<i>Quality and adequacy of topographic control.</i>	Not applicable for this release, no sampling works done.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Not applicable for this release, no Exploration Results are reported.
	<i>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.</i>	Not applicable for this release, no Exploration Results are reported, nor Mineral Resource or Ore Reserve estimations done.
	<i>Whether sample compositing has been applied.</i>	Not applicable for this release, no sampling works done thus no compositing has been applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Not applicable for this release, no sampling works done.
	<i>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.</i>	Not applicable for this release, no drilling works done.
Sample security	<i>The measures taken to ensure sample security.</i>	Not applicable for this release, no sampling works done thus no sample security required.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Not applicable for this release, no sampling works done thus no audits or reviews required.

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.	Information regarding tenure is included in the body of this release, and more specifically, within earlier releases outlining the Cyclone acquisition.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The Concessions are believed to be in good standing with the governing authority and there is no known impediment to operating in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Limited historical work has been completed in relation to lithium. Historical work has been undertaken in relation to nickel and gold, however, none of these results have been independently verified. A geophysical survey was conducted by DGRM in 2022 which incorporated Heliborne Magnetics and TDEM acquisition. The survey was flown with traverse lines at 150m spacing and 1000m tie lines at an average receiver height of 61m and transmitter height of 36m. The magnetometer used was a Geometrics G-822A and the TDEM system was ProspectorTEM. Location data was collected using Omnistar DGPS. Although various magnetic and TDEM anomalies have been indicated by this survey, their materiality is yet to be determined until ground truthing can be carried out.
Geology	Deposit type, geological setting and style of mineralisation.	The Cyclone Project is within the La Grande Sub province, a subdivision of the Superior Province. Within the Project area are two folded Greenstone belts. These include: the northern La Forge Greenstone Belt which consists of paragneisses with minor conglomerates and felsic tuffs; and the southern Aquilon Greenstone Belt which consist of metabasalts, komatiites, metasediments and calc alkaline felsic rocks. The Aquilon Belt (Cyclone Project) varies in width from 2 to 5 km and is over 50 km long. Lithologies include tholeiitic metabasalts, ultramafic lavas, iron formation, metasediments and felsic volcanics. Plutonic rock of varying composition along with quartz veins, diabase and pegmatitic dykes crosscut rocks of the volcano sedimentary basin. Lithologies have undergone considerable deformation, faulting, and folding.
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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Not applicable for this release, no drilling works done.
	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.	Not applicable for this release, no drilling works done.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and	Not applicable for this release, no drilling works done thus no reporting of Exploration Results.

Criteria	JORC Code explanation	Commentary
	<i>cut-off grades are usually Material and should be stated.</i>	
	<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>	Not applicable for this release, no drilling works done thus no data aggregation methods were used.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable for this release, no drilling works done thus no metal equivalent values have been calculated.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Not applicable for this release, no drilling works done.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Not applicable for this release, no drilling works done.
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	Not applicable for this release, no drilling works done.
<i>Diagrams</i>	<i>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.</i>	Appropriate maps have been included in this ASX Release.
<i>Balanced reporting</i>	<i>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.</i>	Not applicable for this release, no Exploration Results are being reported.
<i>Other substantive exploration data</i>	<i>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.</i>	To the best of our knowledge, no meaningful and material exploration data have been omitted from this ASX Release.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Megado Minerals is reviewing the data to determine the best way to advance the projects and will notify such plans once confirmed.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in the main body of this ASX Release that shows where works have been conducted, and highlight possible extensions and where future exploration campaigns may focus.