

# MAPPING CONFIRMS NEW HIGH-PRIORITY TARGET ZONE AT ANDOVER SOUTH LITHIUM PROJECT

#### **Highlights**

- Target Zone 7 (Refer Figure 2) pegmatites extended 650m along a north-west strike extent
- Zone 7 may represent a dislocated strike extent of highpriority Target Area1
- Work to date has defined seven target zones on the Andover South project - key priority target areas will be drill tested during maiden drilling program
- Target zone 7 is characterised by a high degree of fractionation (potassium/rubidium (K/Rb) ratio) of the pegmatites, indicating potential for Lithium-Caesium-Tantalum ("LCT") mineralisation
- Potential 4.2km strike of the key target zones (1 to 7) across the entire Andover South pegmatite field
- **Next steps:** detailed mapping and potentially including target zone 7 in maiden drilling program

Raiden Resources Limited (ASX: RDN DAX: YM4) ("Raiden" or "the Company") is pleased to announce the latest results from mapping and pegmatite analysis conducted by Raiden and CSA Global geologists across the Andover South Lithium Project tenements.

**Mr Dusko Ljubojevic, Managing Director of Raiden commented:** "One of the key objectives of the follow up mapping program was to determine the

extent of target area 1 along the western strike extent. Target area 1 is the key target for the Company in the upcoming maiden drill program, where pegmatites are characterised by high fractionation and high grade  $\text{Li}_2\text{O}$  mineralisation. As a result, we have determined that the highly fractionated pegmatites on the western periphery of Target Area 1 may have been structurally offset, resulting in a north-

ASX CODE: RDN DAX CODE: YM4

## BOARD & MANAGEMENT

Non-Executive Chairman Mr Michael Davy

Managing Director Mr Dusko Ljubojevic

Non-Executive Director
Mr Dale Ginn

Non-Executive Director & Company Secretary Ms Kyla Garic

**Chief Operating Officer** Mr Sean Halpin

#### **ASSET PORTFOLIO**

SERBIA Cu & Au

BULGARIA Cu, Au & Ag

**AUSTRALIA** Li, Au, Cu, Ni & PGE



western strike extent. This work has defined further high-priority targets which the Company will evaluate in the near future."

#### **Andover South Field Program**

The Company re-engaged CSA Global (now renamed ERM) to assist in a further field sampling program at the Andover South pegmatite project in the Pilbara. This most recent field program included mapping of previously undefined pegmatites and analysis of the outcrop minerology with the objective of:

- 1) Sampling and analysis of Potassium-Feldspar ("K-Feldspar") minerals collected from pegmatites, to determine fractionation states (Highly fractionated pegmatites are more likely to host lithium-caesium-tantalum (LCT) mineralisation)
- 2) Extending previously defined fractionation trends into unmapped/unsampled areas of the Andover South pegmatite field
- 3) Analysis of the fractionation trends (potassium/rubidium ratio (K/Rb), as a guide to define additional potential zones of interest in areas with pegmatites for drill planning, and
- 4) Re-evaluate in the field pegmatites which returned low Li<sub>2</sub>O values, to determine their degree of fractionation and potential for LCT mineralisation, not confirmed by sampling to date



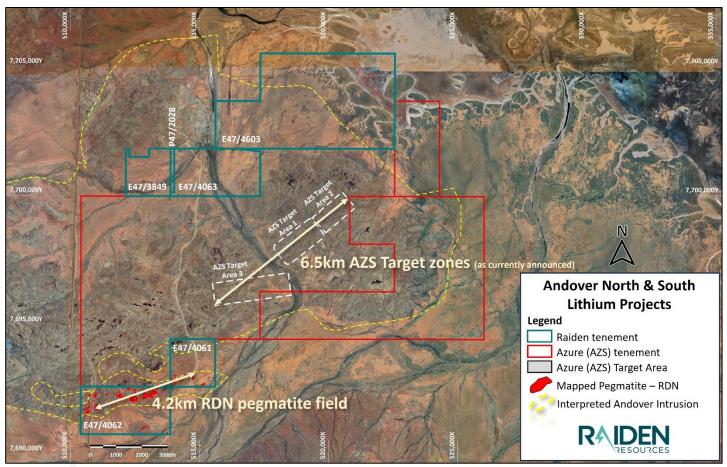


Figure 1: Raiden's Andover South Project and adjacent Azure Minerals Ltd.'s Andover Lithium project<sup>1</sup>

The following are the key observations of the recent field work:

- A total of 91 sample locations were visited, including revisiting known pegmatites and their extensions, and an assessment of recently defined pegmatite outcrops.
   The collected K/Rb fractionation data from K-Feldspars were added to the existing database
- In the northwestern part of E47/4062 tenement, several new pegmatite outcrops were identified and mapped. They appear to be consistently striking in a NW-SE direction (Figure 2). On average, the noted pegmatite outcrops are up to 2m in width and extend across an approximate strike length of 650m. At this time the dip direction could not be determined from the surface outcrops.
- Key field observations are:
  - K-Feldspar K/Rb data from these pegmatites indicate they are all highly fractionated (<20), with a significant portion being <10, which is consistent with the mineralised pegmatites to the east (main target zone 1). On the basis of these observations, the target 7 pegmatites are



considered as priority targets and management plan to evaluate the zone in further detail, in order to make a decision on whether they will be drill tested during the maiden drill campaign.

As stated in the previous announcement relating to the K-feldspar fractionation at Andover South<sup>2</sup>, and in reference to a global dataset of K-feldspar K/Rb fractionation data (provided by CSA Global), which indicates that pegmatites globally, with a K/Rb value of <30, have the highest potential to host lithium mineralisation, it was determined that:

 The K-feldspar fractionation data from the Andover South pegmatites specifically indicate that the high-grade lithium mineralisation is associated with K/Rb values of <10.</li>

The most fractionated pegmatites in the Project area have K/Rb values of <10 and have coincident anomalous Cs and Ta. These very highly fractionated pegmatites correspond to rock chip samples with significantly elevated  $\text{Li}_2\text{O}$  (up to 3.80%  $\text{Li}_2\text{O}^3$ ) and observed spodumene mineralisation. Within the Andover South pegmatite system a K/Rb of <10 is indicative of a potentially mineralised pegmatite. Therefore, where additional pegmatites with  $\text{Li}_2\text{O}$  rock chip assay results were low or were not sampled for assay, they still have the potential to host lithium mineralisation.



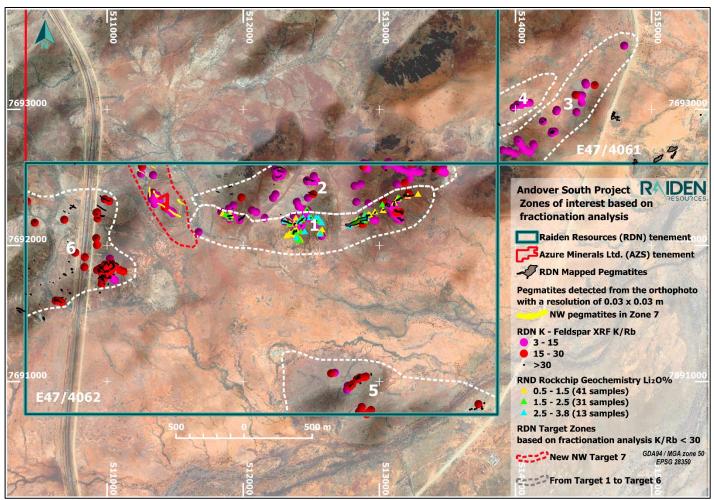


Figure 2: Andover South Project – zones of interest based on fractionation analysis of pegmatites, with recently defined zone 7 highlighted in red<sup>2</sup>

#### Summary of previously defined target zones & target zone 7:

- <u>Target zone 1</u> has been extended across an approximate **2.5km** strike extent within tenement E47/4062, with defined pegmatites which correlate to high-grade Li<sub>2</sub>O mineralisation. The K/Rb ratio data also indicates that the pegmatites in this zone are highly fractionated.
- <u>Target zone 2</u> is defined on the northern extent, and subparallel, to Target area 1. Multiple pegmatites have been mapped, but the initial sampling results did not indicate economic mineralisation. The K/Rb data analysis of these pegmatites indicates that the pegmatites are highly fractionated.
- <u>Target zone 3</u> is located on the eastern strike extent of Target zone 1, within tenement E47/4061 and is characterised by outcropping pegmatites, low lithium mineralisation rock samples, but indicated as highly fractionated by the K/Rb ratio analysis.



- <u>Target zone 4</u> is located adjacent to Target zone 3 on E47/4061 and is characterised by outcropping pegmatites, low lithium mineralisation from samples collected to date, however it is defined a potentially permissive zone for LCT mineralisation, as per the K/Rb ratio analysis.
- <u>Target zone 5</u> is located on the southern extent of E47/4062 and characterised as potentially permissive for LCT mineralisation, as per the K/Rb ratio analysis.
- <u>Target zone 6</u> is located on the western extent of E47/4062, and is also characterised by outcropping pegmatites, which are potentially permissive for LCT mineralisation, as per the K/Rb ratio analysis.
- Target zone 7 is located on the north-western part of E47/4062 tenement. The zone is characterised by a swarm of North-West trending pegmatites over an approximate strike extent of 650m. According to K/Rb ratio analysis, the pegmatites are highly fractionated and considered to be highly prospective for LCT mineralisation.

It should also be noted that a significant portion of the Andover South project is obscured by a thin sedimentary cover. These areas continue to be evaluated with the objective of defining new potential target zones. This work will be undertaken in parallel with the maiden diamond drilling program on the key target areas due to commence during September 2024.

## This ASX announcement has been authorised for release by the Board of Raiden Resources Limited.

FOR FURTHER INFORMATION PLEASE CONTACT

#### **DUSKO LJUBOJEVIC**

**Managing Director** 

#### RAIDEN RESOURCES LIMITED

info@raidenresources.com.au www.raidenresources.com.au

#### **ASX Announcements referenced to directly in this release**

<sup>1</sup>ASX:AZS 18 September 2023 Andover Delivers More Outstanding Lithium Results

<sup>2</sup>ASX:RDN 22 December 2023 Independent analysis confirms five new zones at Andover

<sup>3</sup>ASX:RDN 09 November 2023 Exceptional lithium results & additional spodumene XRD



The information referenced in announcements footnoted at 2 to 3 above that relate to exploration results have previously been released on the ASX. The Company confirms that it is not aware of any information or data that materially affects the information included in the market announcements, and that all material assumptions and technical parameters continue to apply. The Company confirm that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### **Competent Person's Statement**

The information in this announcement that relates to exploration results, is based on and fairly represents information and supporting documentation, and has been reviewed and approved by Mr Sean Halpin, a competent person who is a member of the Australian Institute of Geoscientists (AIG). Mr Sean Halpin is employed by Raiden Resources Limited. Mr Sean Halpin has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Sean Halpin has provided his prior written consent as to the form and context in which the exploration results and the supporting information are presented in this announcement.

## Appendix

<b>Table</b>	1:	<b>Tenement</b>	<b>Schedule</b>
IUNIC		I CIICIIICIIC	Scilcadic

Tenement	Holder	Grant Date	Expiry	Area	RDN %
E47/4061		06/08/2019	05/08/2029	1BI	80%
E47/4062		30/08/2024	29/08/2029	2BI	80%
E47/4063	Pilbara Gold Corporation Pty Ltd (Raiden Resources Ltd.'s 100% owned subsidiary)	04/04/2019	03/04/2029	2BI	80%
E47/3849		16/07/2018	15/07/2028	1BI	80%
P47/2028		Appli	cation	23.5 Ha.	80%
E47/4603		Appli	cation	7BI	100%

#### **Disclaimer:**

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)", "potential(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals

#### ASX RELEASE | 23 September 2024



or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Investors are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and the Company does not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

#### **About Raiden Resources**

Raiden Resources Limited (ASX:RDN / DAX:YM4) is a dual listed lithium, base metal—gold exploration Company focused on the Andover North-South; Mt Sholl and Arrow lithium projects. The Company also holds the rights to the advanced Mt Sholl nickel-copper-cobalt- PGE project in the Pilbara region of Western Australia. In addition, the Company holds the rights , as well as the emerging and prolific Western Tethyan metallogenic belt in Eastern Europe, where it has established a significant exploration footprint in Serbia and Bulgaria.

The Directors believe the Company is well positioned to unlock value from this exploration portfolio and deliver a significant mineral discovery.



#### 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	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Rock chip sampling taken opportunistically from pegmatite outcrop during a dedicated mapping and sampling program.</li> <li>Pegmatite was identified in outcrop.</li> <li>The rock chip samples were restricted to outcrop of potential pegmatitic rocks.</li> <li>K-feldspar sampling was undertaken by collecting these suitable K-feldspar crystals in the field using a cold chisel and hammer, numbering them, and recording their location for later analysis by pXRF in an office environment.</li> </ul>
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).	In relation to this announcement no drilling has been conducted as yet and no drill assays are being reported
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> </ul>	In relation to this announcement no drilling sampling has been conducted as yet and no drill assays are being reported



Criteria	JORC Code explanation	Commentary
	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.	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	In relation to this announcement no drilling has been conducted as yet.
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/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Rock chip sample results have not yet been received from this latest sampling program</li> <li>K-feldspar samples were identified in the field by experienced geologists and analysed by pXRF analysis using an Olympus Vanta M-series pXRF analyser. The analyser was calibrated to detect for LCT-pegmatite-suite elements (including K, Cs, Rb, Sn, Ta, and Nb). K-feldspar and mica books collected from pegmatites and pegmatoidal granites were analysed by directly pointing the detector at the specimen and using the targeting camera to centre the detection over clean areas of the mineral, free from obvious inclusions, artefacts, and fractures. Where feldspar crystals were small and perthitic, repeat analyses were collected to get the highest concentration of K-feldspar and most reliable indication of degree of fractionation</li> <li>Summary results of pXRF analyses of K-feldspar from Andover South pegmatites (n=220)</li> </ul>



Criteria	JORC Code explanation	C	ommentary			
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>	•	Rb Cs Sn Nb Ta Rock chip sam from this lates			10414 135 4 4 79 ot yet been received
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>	•	verified against Perth by two e All primary company's da protocols check company perso K-feldspar pX	st the resu xperience data has ta storage eked and onnel. RF result ogist and	alts reported compare been with severified less have been some controller.	uploaded into the standard data entry by two experienced een verified by one insultant from CSA
Location of data points	<ul> <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> </ul>	•	which is reconnaissance	considere nature of	d appr the sam	by hand held GPS copriate for the pling. Geocentric Datum of



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	Australia (GDA94) 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>Not applicable due to the reconnaissance nature of the sampling.</li> <li>No attempt has been made to demonstrate geological or grade continuity between sample points.</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>	Not applicable
Sample security	The measures taken to ensure sample security.	• For the current sampling program the sample chain of custody is managed by Raiden. All samples were collected in the field at the project site in number-coded calico bags/secure labelled polyweave sacks by Raiden's geological and field personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review of the sampling techniques has been undertaken.

### **Section 2 Reporting of Exploration Results**

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	<ul> <li>Raiden Resources Ltd tenements are located in the City of Karratha, within the Pilbara region of Western Australia.</li> <li>Refer to Appendix 1, Tenement Schedule</li> </ul>

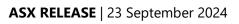




Criteria	JORC Code explanation	Commentary
	<ul> <li>settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Tenements E47/4062, E47/4061, E47/4063, and E47/3849 are granted tenure while P47/2028 is in the application stage.</li> <li>Tenements are located on the Mt Welcome pastoral lease.</li> <li>Raiden is not aware of any existing impediments nor of any potential impediments which may impact ongoing exploration and development activities at the project sites.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>A search and compilation of historic exploration has been completed.</li> <li>Work included stream sediment, soil and rock sampling, geological mapping, and geophysical surveys.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Potential for lithium-caesium-tantalum bearing pegmatite mineralisation.</li> <li>Andover Project geological setting – previous explorers considered the area to be part of the Ruth Well Formation (Mafic and ultramafic volcanic and intrusive rocks; minor chert; metamorphosed), however a recent interpretation by the company shows that the rocks of the Andover Intrusion/Complex (Archean-age mafic-ultramafic intrusion) extend under cover further to the north than previously suggested.</li> <li>It is further interpretated that the source of mineralising fluids for the lithium pegmatites are sourced from nearby felsic intrusive bodies, these being the Black Hill Well Monzogranite for the Andover Project area.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill hole Information  Data aggregation methods	<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> <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</li> </ul>	<ul> <li>Not applicable</li> <li>Not applicable</li> </ul>
	<ul> <li>and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
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>	Not applicable
Diagrams	Appropriate maps and sections (with scales) and tabulations of	Maps are included in the body of the announcement.





Criteria	JORC Code explanation	Commentary
	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.	
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.	<ul> <li>All reported results from other companies are as they have been released to the ASX and are referenced at the end of this announcement.</li> <li>This announcement discusses the findings of recent reconnaissance sampling and associated assays.</li> </ul>
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.	<ul> <li>The underlying aeromagnetic data that forms the basis for reinterpretation of the Andover Complex rocks, as described in the body of previous announcements by Raiden, was sourced from open file GSWA data available through the MAGIX system at:</li> <li><a href="https://geodownloads.dmp.wa.gov.au/downloads/geo-physics/72204/WA-Magnetics_40m/">https://geodownloads.dmp.wa.gov.au/downloads/geo-physics/72204/WA-Magnetics_40m/</a></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>	Raiden are currently planning drilling to further assess the potential for lithium-bearing pegmatites over its Andover Project