

# Adina East James Bay lithium exploration update

# HIGHLIGHTS

- First-pass ground reconnaissance program successfully completed at the Adina East Project
- Multiple peraluminous pegmatite outcrops identified and sampled<sup>1</sup>
- Aluminous minerals (tourmaline, beryl, garnet and muscovite), commonly found along with spodumene, identified in multiple pegmatite outcrops and boulders<sup>2</sup>
- XRF analysis of pegmatite samples to determine mineralogy and identify presence of spodumene underway with results due in early December 2023
- Historic reports of pegmatite outcrops confirmed during the field program with the pegmatites being broadly coincident with targets identified during recent multispectral analysis<sup>3</sup>
- Follow up exploration program is being developed with a focus on reviewing existing geophysical data across the project and defining target areas for further exploration

Pinnacle Minerals Limited (ASX: **PIM**) ("**Pinnacle**", the "**Company**") is pleased to announce that following the execution of a conditional agreement to acquire the Adina East Project<sup>4</sup> ("The Project"), located in the fertile LaGrande belt of the James Bay area, Northern Québec, the Company has moved rapidly and successfully completed its initial on-ground reconnaissance exploration program.

Satellite and radar analysis identified numerous lithium targets over the company's Adina East Project. The reconnaissance field program focussed on these areas and successfully identified multiple instances of aluminous pegmatite outcrops and boulders at surface.

Mineral analysis of samples to be undertaken to determine the mineralogy (including the presence of spodumene) with results due early December 2023.

Fourteen (14) samples have been sent to the laboratory for assays with results expected in 5-6 weeks (early January 2024).

Pinnacle plans to follow up this initial round of reconnaissance exploration with further field mapping and sampling in Q2 2024 with thorough traverses across the project area.



*Figure 1: Pegmatite outcrop 160090007* 

## Pinnacle Minerals Managing Director, Nic Matich, commented:

"The identification of fractionated pegmatite outcrops in the Adina East claims is a significant step forward in the company's Canadian exploration endeavours. These results, coupled with the lithium exploration success by our neighbours Winsome Resources, Loyal Lithium, and Rio Tinto in the Trieste Greenstone belt, further support the Company to return in early 2024 and expand upon the exploration conducted to date. The time spent on site was limited by the onset of the Canadian winter and the bulk of the project remains unexplored, providing substantial opportunity for the Company."

1 & 2 – Appendix 1, 3 & 4 – Pinnacle Minerals Limited ASX announcement 17th October 2023

**Pinnacle Minerals Ltd** ACN: 655 033 677 ASX: **PIM**  **Issued Capital** 36,375,200 Shares 33,037,634 Options

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#### Directors

WILLIAM WITHAM – Executive Chairman NIC MATICH – Managing Director LINCOLN LIU – Non-Executive Director STEPHEN ROSS – Non-Executive Director

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#### Reconnaissance work program

The Adina East Project in Quebec's James Bay region (Figure 3) totals 147 claims encompassing 72.7km<sup>2</sup> (7,274.47 ha) adjacent to an interpreted extension of the Trieste greenstone belt. The Project is located 24km from Winsome Resources' (ASX.WR1) Adina Project which recorded 1.34% Li<sub>2</sub>O over 107.6m<sup>5</sup> and grades up to up to 4.89% Li<sub>2</sub>O<sup>6</sup>. The Project is also adjacent to the Loyal Lithium (LLI.ASX) Trieste Project and the Winsome Resources (WR1.ASX) Tilly Project.

Dirt Exploration acquired, processed and analysed Sentinel Multispectral data (Sentinel) and Synthetic Aperture Radar (SAR) data over the Adina East Project prior to the field program. The analysis identified multiple areas of interest with 60 discrete targets identified.

A reconnaissance mapping and rock sampling program was developed and conducted during late October. The program was managed and conducted by the experienced Quebec-based company IOS Geosciences (IOS). Preliminary indications from the field have confirmed the presence of multiple pegmatite occurrences within the Adina East Project. Field locations where both pegmatitic outcrop and pegmatite boulders are highlighted in Figure 2.

Initial visual assessment by field geologists suggests the mineral assemblages contain a mineral assemblage that may be indicative of a spodumene differentiation trend, including tourmaline, beryl, garnet and muscovite (Figure 3 and Figure 4). Details of each sample location are included in Appendix 1. The geochemistry of these pegmatite samples is yet to be quantified via laboratory analysis. Assay results are expected to be returned within 5-6 weeks, by early January 2024.

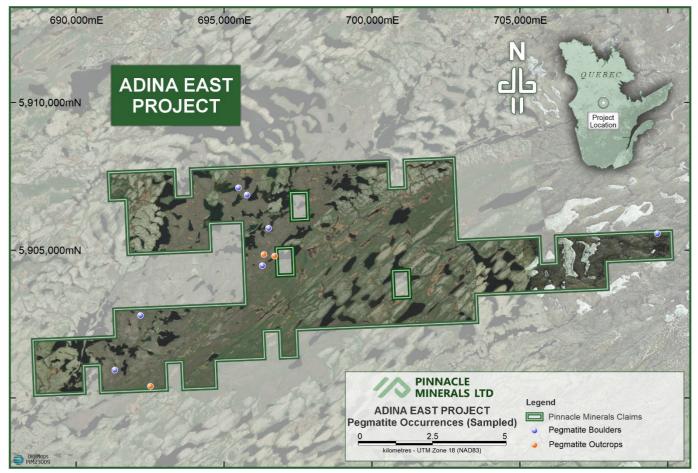


Figure 2: Sample locations (pegmatite lithologies)

5 - Winsome Resources (ASX:WR1) ASX Announcement: "Strong lithium mineralisation from first Adina assays" – 6 January 2023 6 - Winsome Resources (ASX:WR1) ASX Announcement: "Exceptional High Grade Lithium Assays from Adina" - 1 September 2022





*Figure 3: Pegmatite boulder 16009008* 

Figure 4: Closeup of pegmatite outcrop highlighting abundant tourmaline 160090007

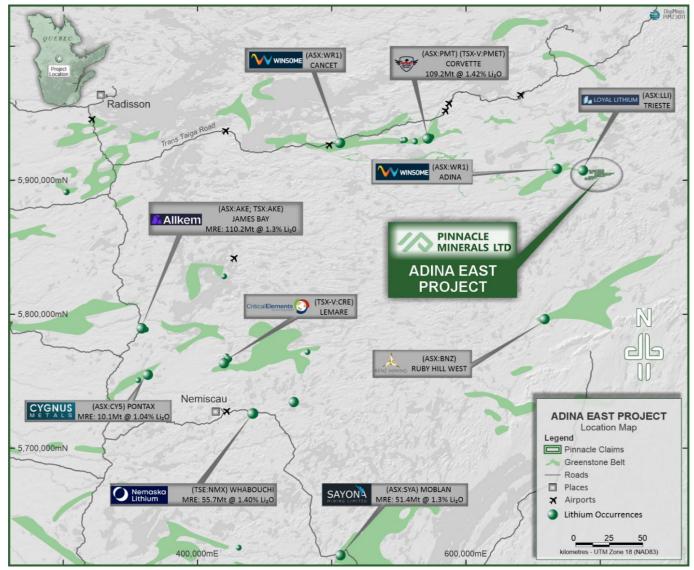


Figure 5: James Bay Province Highlighting Adina East Project Location.



#### **Cautionary note:**

The geochemical nature of the pegmatitic geological outcrops are currently unknown and the presence of pegmatitic lithologies does not necessarily indicate the presence of lithium, tantalum or caesium mineralisation. Only laboratory chemical assays can determine the presence and grade of any mineralisation.

This announcement has been authorised for release by the Board of Pinnacle Minerals Ltd.

#### For further information, please contact:

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#### **About Pinnacle Minerals**

Pinnacle Minerals Ltd (ASX: PIM) is an ASX listed technology minerals company focused on delivering shareholder value via the systematic exploration and development of its portfolio of battery and technology metals projects in Canada, Western Australia and South Australia. Pinnacle aims to deliver exploration success via systematic and geologically rigorous techniques. The Company's focus is the "Adina East Project" in James Bay, Quebec which is proximal to the world class Adina Lithium Project (Winsome Resources: WR1.ASX) and adjacent to the Trieste Lithium Project (Loyal Lithium: LLI.ASX) and the Tilly Lithium Project (WR1.ASX). The Company's Australian exploration assets are prospective for Rare Earth Elements, Mineral Sands and Kaolin.

#### **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 person statement**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by William Witham, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG). William Witham is a director of Pinnacle Minerals Ltd. William Witham has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. William Witham consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.



Pinnacle Minerals engaged IOS Geosciences (IOS) to execute the prospecting and exploration work described in this release. IOS has an experienced team of explorers based in Saguenay and is managing several projects in the James Bay region. This report contains information related to exploration results and is based on preliminary information and data compiled or reviewed by IOS under the supervision of Mr. Réjean Girard, who is classified as a Professional Geoscientist (P. Geo) with the respective professional regulatory body, the Order of Geologists of Quebec. Mr. Girard has also reviewed this news release.

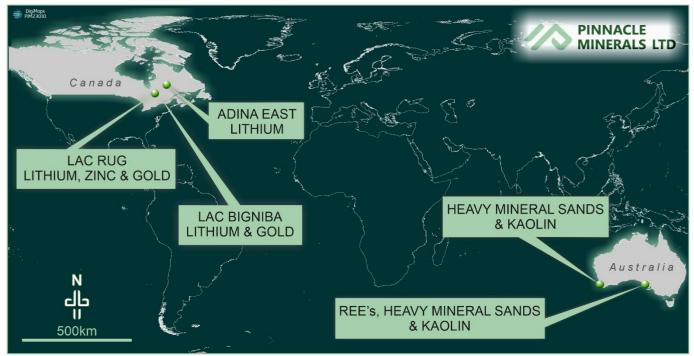


Figure 6: Pinnacle Minerals Project Location Map



#### Appendix 1 Table 1: Outcrop and Boulder Lithology (Sample locations)

No lithium mineralisation is directly reported within samples taken from the Adina East Project. At this stage of exploration, all samples retrieved represent early stage exploration sampling to understand the background geochemistry of reported pegmatites.

Commissio	Easting	Northing	Outcrop	l ith a large	
Sample ID	(NAD83 Z18)	(NAD83 Z18)	Boulder	Lithology	Description
160090001	700260.4	5903092.3	Boulder	Granitoid rich in quartz	Granite with two micas (biotite and muscovite) and potentially beryl or apatite
160090002	700314.8	5907463.1	Boulder	Granitoid rich in quartz	White granitoid with very low to no mica content. Contains mm-sized non-magnetic oxides
160090003	700477.9	5907275.5	Boulder	Granite with feldspar (Alkaline)	Low mica content (biotite) pegmatitic granite. Contains clusters of magnetite.
160090004	696350.6	5904850.3	Outcrop	Pegmatite (granitic)	Outcrop of gneiss with injection of white biotite bearing pegmatite.
160090005	696293.7	5904472.6	Boulder	Pegmatite (granitic)	Cluster of pluri-metric angular boulders of white biotite and tourmaline-bearing pegmatite with aplite and shreds of gneiss.
160090007	696708.9	5904796.6	Outcrop	Pegmatite (granitic)	Outcrop of pegmatite with tourmaline, muscovite and biotite. Contains a white tabular mineral Query: feldspar
160090008	696506.1	5905739.5	Boulder	Pegmatite (granitic)	Pegmatite containing biotite and garnet.
160090009	692176.3	5902786.4	Boulder	Pegmatite (granitic)	Pink and white biotite-bearing pegmatite associated with an orthogneiss.
160090051	695775.3	5906864.8	Boulder	Pegmatite (granitic)	Pegmatite containing quartz, feldspar, tourmaline and blue-greenish crystals. Query: beryl.
160090052	709647.6	5905559.3	Boulder	Pegmatite (granitic)	Quartz, feldspar, muscovite and biotite bearing pegmatite.
160090053	699939.6	5907409.9	Boulder	Iron Formation	Query: iron formation
160090055	695483.6	5907108.0	Boulder	Pegmatite (granitic)	Pegmatite boulders containing quartz, feldspar, muscovite, garnet and potential beryl
160090057	691306.7	5900939.0	Boulder	Pegmatite (granitic)	Boulder of quartz, feldspar and biotite pegmatite.
160090058	692514.0	5900388.8	Outcrop	Pegmatite (granitic)	Dyke of quartz, feldspar, biotite and magnetite pegmatite.

#### Table 1: Field Samples, locations, and descriptions



### Appendix 2 JORC Tables

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</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 (e.g., 'reverse circulation drilling was used to obtain 1m 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 (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Rock chip sampling is associated with the reconnaissance mapping and sampling program which aimed to confirm historical pegmatite reports, by both locating both previous and sampling pegmatite outcrops or boulders.</li> <li>Work described in the release has involved review of the publicly available datasets which are available through the 'Geomining Information System of Quebec' - sigeom.mines.gouv.qc.ca</li> <li>Ministère des Resources Naturelles et des Forêts (MERN), the Quebec geological survey (QGS), documents historical mapping over the Adina East Project areas; and surrounding region with rock descriptions publicly available.</li> <li>No assay data is available for MERN samples/mapping points.</li> </ul>
Drilling techniques	• 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.).	No drilling is 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> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No drill samples have been taken.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate	<ul> <li>No drilling completed.</li> <li>Geological observations are both preliminary and qualitative. The information contained</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>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> <li>within describes only dominant outcrop lithologies at discreet locations, and minerals of interest.</li> <li>All data is stored in digital format for use in GIS software packages.</li> <li>The final field report which remains pending will contain more accurate geological descriptions including geochemical assay data.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>Sampling is at the discretion of field geologists undertaking the geological reconnaissance activities.</li> <li>At this early stage of exploration discretionary grab samples are considered appropriate.</li> <li>No QAQC processes have been utilised at this early stage of exploration.</li> </ul>
	<ul> <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>	
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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	• No assay data or laboratory test work is reported.
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>	<ul> <li>No data verification has occurred.</li> <li>The company has verified the presence of historically reported outcrop lithologies during the reconnaissance phase of exploration works.</li> </ul>



Criteria	JORC Code explanation	Commentary
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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All geological maps utilising NAD83 / UTM zone 18N are sufficiently annotated.</li> <li>All reported locations are assumed to have a +/- 10m accuracy via use of handheld GPS instruments.</li> </ul>
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>Data points are guided by field outcrops instead of regular spacing.</li> <li>Exploration data contained within is not appropriate for calculating Mineral Resources. Insufficient exploration has been completed at this stage to warrant such calculations.</li> <li>No compositing of results has been reported in this announcement.</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>	<ul> <li>Field observation points are guided by outcrop location instead of specific orientation.</li> <li>No relationship between outcrop mapping sites is known.</li> </ul>
Sample security	The measures taken to ensure sample security.	• Field samples have been collected and stored by IOS Geosciences, under the supervision of Mr. Réjean Girard P.Geo QP and a Member of the Ordre des geologues du Quebec.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No independent audits or reviews of sampling techniques and data has been conducted.</li> <li>Internal reviews undertaken</li> </ul>



## 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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Adina East Project is 100% owned by ED Spod 1 Corp.</li> <li>Pinnacle Minerals Ltd signed a binding term sheet on 16<sup>th</sup> October 2023 to acquire 75% of the Adina East Project.</li> <li>The Adina East Project is comprised of 147 claims encompassing 72.7km<sup>2</sup> (7,274.47 ha)</li> <li>Lithium Royalty Corp retains a 2.0% Gross Revenue Royalty</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Geological datasets were sourced from Ministère des Resources Naturelles et des Forêts (MERN), the Quebec geological survey.</li> <li>No other data by prior explorers is known to the company.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	• The mineralisation style sought at the Adina East Project is Lithium bearing pegmatites.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	No relevant material data has been excluded from this report.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-</li> </ul>	



Criteria	JORC Code explanation	Commentary
	<ul> <li>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	<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> </ul>	No drill results are reported.
lengths	• 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').	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• Figures and plans are displayed in the main text of the release
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.	No exploration results have been reported.
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>Pinnacle Minerals Ltd engaged IOS Geosciences during October 2023.</li> <li>IOS Geosciences have completed field reconnaissance as planned and reported preliminary results as contained herein.</li> <li>All pegmatite lithologies mapped within the project areas require geochemical analysis to ascertain if a relationship to relevant mineralisation processes are present. The presence of pegmatites in outcrop and boulders alone is not sufficient to assume the presence of mineralisation.</li> </ul>
Further work	• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>Refer to the main body of the release for further information regarding diagrams.</li> <li>Exploration efforts will continue with a consolidation and review of all previous geological and geophysical data available for the project areas.</li> </ul>
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	