

LIDAR Survey Generates Multiple Pegmatite Targets at Adina East

HIGHLIGHTS

- Multiple pegmatite targets have been identified from recent LIDAR and orthophoto survey at the Adina East Lithium Project in Québec, Canada
- Priority targets on the Western flank of the project are located within the same metasedimentary rock sequence as the Loyal Lithium Trieste discovery (31.8m at 2.2% Li₂O)¹
- Eastern targets are interpreted to be an extension of the Tilly Pegmatites associated with the Winsome Resources (WR1: ASX) Tilly discovery which yielded assays of 7m at 4.68% Li₂O²
- No prior sampling has been conducted on the outcrops which stand out as high-quality regional targets based on current data
- LIDAR combined with high resolution orthophotos has previously been successfully used in the discovery of spodumene bearing Pegmatites in the James Bay region of Quebec
- Pinnacle is currently devising a field program to map and sample these targets with a view to trenching and or drilling the targets should spodumene be identified

Pinnacle Minerals Ltd (**PIM**: ASX) ("**Pinnacle**", the "**Company**") is pleased to announce that multiple pegmatite targets have been generated from a recent LIDAR and orthophoto survey at the Adina East Lithium Project in Québec, Canada. These targets are to be followed up in a field campaign this quarter.

Several, high priority targets (6, 7 and 8) have been identified on the western flank of the project (Figure 1 and Figure 3). The targets are mapped as being in the same metasedimentary rock sequence as those found at the Loyal Lithium (LLI: ASX) Trieste lithium discovery (5kms west) which has yielded excellent intercepts including 31.8m at 2.2% Li₂O. Given the geological setting and whiteness of the outcrops, these targets are interpreted as having a high probability of being pegmatitic.



Figure 1: 3D render of digital terrain model (DTM) draped with LIDAR of priority targets (true elevation)

¹ Loyal Lithium (ASX: LLI) ASX announcement 21st of March 2024

² Winsome Resources (WR1: ASX) ASX announcement 19th of October 2023

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On the eastern boundaries of the project, targets 1 through 4 have been identified. These are interpreted to be a western extension of the Tilly Pegmatites (*Figure 2*), a discovery made by Winsome Resources (WR1: ASX), which yielded drill core assay results of 4.68% Li_2O over 7m. Further target zones on the northern and western edge of the project are all located in metasedimentary rocks proximal to the Joubert Suite granitoid body which exhibits elevated lithium content (140 ppm Li_2O)³.

The LIDAR and orthophoto survey technique has previously been successfully used in the discovery of Spodumene bearing Pegmatites in the James Bay region of Quebec (MRZ: ASX – Bohier Project)⁴. Given their relative hardness and typically white colour, the outcrops are more visible on the LIDAR / orthophoto mosaic as white elevated areas (*Figure 1*).

The Company is currently in discussions with a local Québec-based geologist to mobilise to the project and undertake mapping and rock chipping of the targets once a full review of the data has been completed.

Pinnacle Minerals Managing Director, Nic Matich, commented:

"The use of LIDAR coupled with the Orthophoto survey has enabled the Company to rapidly and cost-effectively identify the most prospective areas of the project. Our exploration team can now mobilise via helicopter directly to the target outcrops which increases our probability of discovery."

Exploration Timeline 2024 (subject to change and pending exploration success):

| | Q3 2024 | Q4 2024 | Q1 2025 |
|--|---------|---------|---------|
| CANADA (Lithium) | | | |
| Adina East – LIDAR results | | | |
| Adina East – Field mapping and rock chip sampling | | | |
| Adina East – Diamond drilling / trenching of lithium targets | | | |
| | | | |
| SOUTH AUSTRALIA (Uranium and Rare Earths) | | | |
| Wirrulla – Historical drill core XRF & assays | | | |
| Wirrulla – Drill program permitting (PEPR) | | | |
| Wirrulla – Drilling uranium targets | | | |
| WESTERN AUSTRALIA (Mineral Sands) | | | |
| Capel – Project review | | | |

³ Ministère des Ressources naturelles et des Forêts - Geofische Outcrop 2015061604 (Rare metal conversion factor of 2.1527) ⁴ Mont Royal Resources (MRX: ASX) ASX announcement 4th of September 2023 & 20th June 2023





Figure 2: Targets 1,2,3,4 and 5 on the eastern flank of the project



Figure 3: Targets 6, 7 and 8 on the western flank of the project



Background on the Adina East Project

The Adina East Project is located in Québec's James Bay region (Figure 4) with a total of 147 claims encompassing 72.7km² (7,274.47 ha) adjacent to an interpreted extension of the Trieste greenstone belt. Located within Category-III lands, the Adina East Project does not carry any restrictions relating to mining or exploration according to the James Bay Agreement with the Cree Nation.

The Project is adjacent to Loyal Lithium's (ASX: LLI) Trieste project where spodumene-bearing dykes with intercepts including 31.8m at 2.2% Li₂O have been drilled less than 6km from the boundary of the Project. Adina East is also adjacent to Winsome Resources' Tilly Project where swarming pegmatites have been mapped and are interpreted to extend into the Adina East Project. The claims are readily accessible throughout the year from Mirage Outfitters and the Renard diamond mine (75km to the northwest and 45km to the South of the Project respectively), with the proposed La Grande Alliance eastern road mapped to pass through the Project.



Figure 4: James Bay Province Highlighting Adina East Project Location.



Assay results from rock chip samples from the Adina East returned lithium enrichment. However, significant rubidium enrichment, up to 658 ppm was obtained on a granitic pegmatite, indicative of magmatic fractionation which is a precursor to lithium saturation. Importantly, at Adina East, key "fractionation ratios" of K/Rb below 100 suggest the potential for a spodumene-bearing pegmatite to have been generated, trending northwest into the project's metasedimentary rocks (Figure 5).



Figure 5: K/Rb Ratios increasing to the northwest- Adina East



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

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About Pinnacle Minerals

Pinnacle Minerals Ltd (PIM: ASX) 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: ASX:LLI) and the Tilly Lithium Project (WR1: ASX). The Company's Australian exploration assets are prospective for Uranium, Rare Earth Elements and Heavy Mineral Sands.

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.

Managing Director

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Figure 6: Pinnacle Minerals Projects' Location Map



Appendix 1: Targets referenced in this announcement:

| Takgat ID | Easting | Northing | |
|------------|------------------|------------------|--|
| l arget iD | (NAD83 Zone 18N) | (NAD83 Zone 18N) | |
| Target 1 | 703319 | 5904178 | |
| Target 2 | 703342 | 5904562 | |
| Target 3 | 703357 | 5904681 | |
| Target 4 | 702883 | 5905076 | |
| Target 5 | 701414 | 5906108 | |
| Target 6 | 693362 | 5904715 | |
| Target 7 | 693623 | 5904900 | |
| Target 8 | 693690 | 5904937 | |



Appendix 2 JORC Tables

Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|------------------------|---|--|
| Sampling techniques | 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. | No sampling undertaken for LIDAR survey. |
| Drilling | • Drill type (e.g., core, reverse circulation, open-hole hammer, | • No drilling results reported. |
| techniques | 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.). | |
| Drill sample | Method of recording and assessing core and chip sample recovarias and results assessed | No drilling results reported. |
| recovery | Measures taken to maximise sample recovery and ensure | |
| | representative nature of the samples. | |
| | Whether a relationship exists between sample recovery and and whether arreads him area between sample recovery and | |
| | grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | |
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. | • No logging of samples undertaken. |
| Sub-sampling | • If core, whether cut or sawn and whether quarter, half or all | No sampling results reported. |
| techniques and | core taken. If non-core, whether riffled, tube sampled, rotany split, etc. | |
| preparation | <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, | |
| | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-balf sampling. | |



| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| | • Whether sample sizes are appropriate to the grain size of the material being sampled. | |
| Quality of assay data and laboratory tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. | • No assay results reported. |
| Verification of sampling and assaying | The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. | No assay results reported. |
| Location of data points | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. | LIDAR survey was done using Projection: MTM Horizontal Datum: NAD83-SCRS Vertical Datum: CGVD28 Geoid undulation model used HTv2.0 No ground control station Target datum NAD83 Zone 18N |
| Data spacing and distribution | Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. | Density points for LIDAR: 6-8 pts/m² Photo resolution: 5cm/pixel |
| Orientation of data in relation to geological structure | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | LIDAR is not orientated with respect to the geological structures. |
| Sample security | The measures taken to ensure sample security. | No samples taken. |
| Audits or reviews | • The results of any audits or reviews of sampling techniques and data. | No independent audits or reviews of the LIDAR data was undertaken |



Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| Mineral tenement and land tenure status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | The Adina East is located in the James Bay Region of Quebec, Canada. The Adina East Project is 100% owned by ED Spod 1 Corp. Pinnacle Minerals Ltd signed a binding term sheet on 16th October 2023 to acquire 75% of the Adina East Project. The Adina East Project is comprised of 147 claims encompassing 72.7km² (7,274.47 ha) Lithium Royalty Corp retains a 2.0% Gross Revenue Royalty Noranda Royalties Inc retains a 2.0% Gross Revenue Royalty, of which 1.0% may be bought back by the Company at any time for C\$3.0 million. All claims are in good standing and are presented in this announcement. |
| Exploration done by other parties | • Acknowledgment and appraisal of exploration by other parties. | Geological datasets were sourced from Ministère des Resources Naturelles et des Forêts (MERN), the Quebec geological survey. No other data by prior explorers is known to the company. |
| Geology | Deposit type, geological setting and style of mineralisation. | The Adina East claims are located within the La Grande sub-Province, in the east-central Archaean Superior Craton, Canada. The Superior Craton is a stable crustal block covering Quebec, Ontario, and southeast Manitoba in Canada. Locally the stratigraphy consists of the Salomon River Formation which is Neoarchean in age and is described as a Centimetric porphyroblastic wacke paragneiss ± cordierite ± staurolite ± garnet + sillimanite. |
| 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 metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | No drillholes have been reported. No relevant material data has been excluded from this report. |



| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| Data aggregation methods | 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. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. | There have been no data aggregation methods applied as no intervals were reported. |
| Relationship between mineralisation widths and intercept lengths | These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). | No mineralisation widths have been reported. |
| Diagrams | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | • 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 assay 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. | All information has been provided as available Interpretation of potential pegmatite occurrences was made using the LIDAR (Digital Elevation Model) and airphotos based on the following criteria: White / light colour Positive topographic feature Located within mapped metasediments |
| 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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | A mapping and sampling program is planned to confirm the LiDAR interpretation. Maps show the target areas for follow-up work. These are based on potential pegmatite density. |