

Canadian lithium footprint expanded with Abitibi projects

HIGHLIGHTS

- “Lac Rug” and “Lac Bignibi” Lithium Projects covering 271.2 km² “staked” in the Abitibi Greenstone Belt, Quebec, one of the largest mineral-rich areas worldwide¹
- Projects are 100%-owned², royalty-free and have had limited lithium exploration
- The Lac Rug Project comprises 205 claims for 116.5 km² and overlays over 10km strike of greenstone belt
- The Lac Bigniba Project comprises 282 claims for 154.7 km² and is adjacent to the Laberge Deformation Zone which is being targeted as an important setting for pegmatite mineralisation
- The Abitibi is recognised for its gold endowment and more recently for economic lithium deposits including Sayona Mining Ltd and Piedmont Lithium Inc’s North American Lithium (NAL) mines and processing operations
- Lac Rug contains multiple pegmatite outcrops along trend from a mapped spodumene outcrop³
- Projects readily accessible virtually year-round via well-maintained roads, being within 30 km of the regional town of Lebel-sur-Quévillon which is also serviced by a registered aerodrome and railway
- Satellite and radar imagery recent analysis designed to detect lithium-bearing minerals completed, providing numerous targets for follow-up
- Fieldwork to map and collect rock chips is planned to begin in November, to follow up multiple pegmatite occurrences⁴ and lithium targets generated from analysis

Pinnacle Minerals Limited (ASX: **PIM**) (“**Pinnacle**”, the “**Company**”) is pleased to announce that the Company has applied for two prospective lithium projects covering 271.2km² in the Abitibi Greenstone Belt, Quebec.

The Lac Rug Project consists of 205 claims covering 116.5 km² (Figure 1), is prospective for lithium, zinc and gold mineralisation. The Project is centred on a mainly east-west trending greenstone belt and straddles the Chicobi Deformation Zone (Figure 2). Multiple mapped pegmatites are located throughout the Lac Rug project area.

The Lac Bigniba Project consists of 282 claims covering 154.7 km² (Figure 4) and borders the Laberge Deformation Zone which hosts Osisko’s (TSX:OSK) Lac Windfall Gold Project (4.1Moz Gold @ 11.4 g/t)⁵.

The projects are both located with-in a 30km radius of Label-sur-Quévillon (450km NW from Montreal) the projects benefit from multiple road access points allowing for year-round exploration (Figure 3 & Figure 5).

With the addition of these Projects to the Company’s portfolio, Pinnacle now holds 344 km² of claims in two highly prospective lithium exploration regions of Quebec (James Bay and the Abitibi Province). James Bay is synonymous with Winsome’s (ASX:WR1) Adina Project (1.34% Li₂O over 107.6m)⁷ and Patriot Battery Metals (ASX:PMT) Corvette Project (109.2Mt at 1.42% Li₂O)⁸ whilst the Abitibi Province hosts Piedmont’s (ASX:PLL) and Sayona’s (ASX:SYA) North American Lithium (NAL) Hub (75.4Mt at 1.18% Li₂O)⁹.

1 – World Gold Council, 2 – Claims are held in trust by “The Claims Group” and are in the process of being transferred to “Pinnacle Abitibi Mining Limited a 100% Pinnacle-owned subsidiary, 3 & 4 – Sigeom Database – Ministère des Ressources naturelles et des Forêts, 5 – <https://www.osiskomining.com/projects/windfall/>, 6 – Winsome Resources Limited ASX Announcement 21st December 2021, 7 – Winsome Resources ASX Announcement 6th January 2023, 8 – Patriot Battery Metals Limited ASX Announcement 31st July 2023, 9 – Sayona Mining Limited ASX Announcement 9th May 2023

Pinnacle plans to advance the projects with field mapping and rock chip sampling in mid to late November. Pinnacle will conduct this exploration program with IOS Services Géoscientifiques a renowned Quebec based geological consulting and contracting service provider.

Pinnacle Minerals Managing Director, Nic Matich, commented:

"Pinnacle Minerals transition to a battery metals explorer is progressing rapidly. Pinnacle has added 271.2 km² of prospective lithium and gold claims, which notably cover 10km of fertile greenstones, and covering two deformation zones (known for their mineral endowment) plus contain pegmatite outcrops along trend from a known spodumene outcrop. The ability to stake these quality Projects in a tier 1 jurisdiction is in our opinion unparalleled anywhere else in the world."

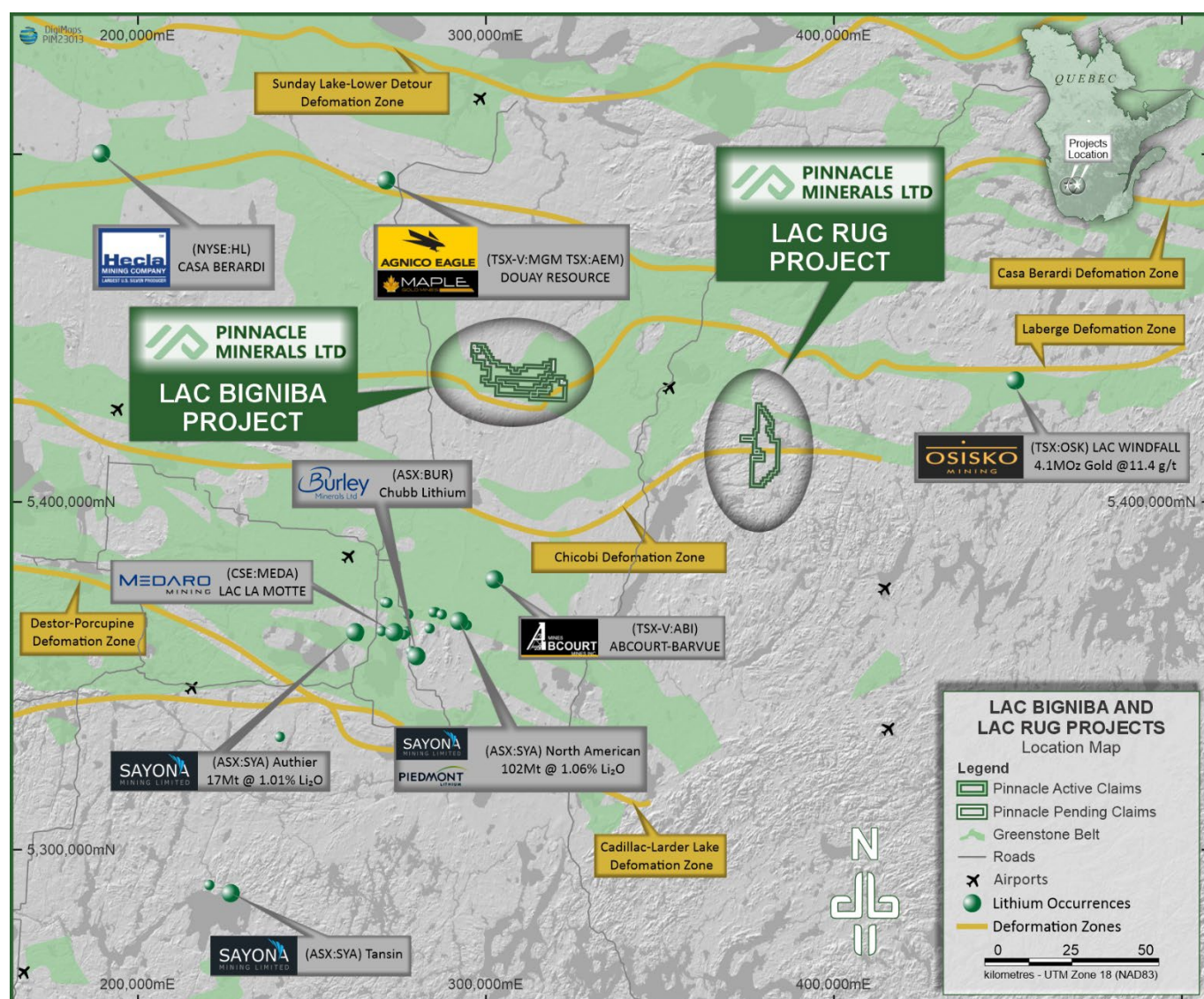


Figure 1: Abitibi Province highlighting Lac Rug and Lac Bigniba Project locations.

The Abitibi

The Abitibi Sub Province located between Québec and Ontario contains a one of the world's largest greenstone belts which, since 1906, has produced more than 90% of Canada's gold at over 190 million ounces. The epigenetic gold mineralisation is associated with regional scale shears zones and contacts between ultramafic and mafic volcanic units.

As with many greenstone belts worldwide there has been a shift in recent years to uncover the potential for lithium mineralisation. The most well-known lithium project in the Abitibi is the North American Lithium Hub which has a combined resource of 75.4Mt at 1.18% Li_2O ¹⁰

The Abitibi belt represents a more shallowly eroded, less mature, more magnesium silicate rich variant of the East Pilbara of Australia, that has been affected by stronger overprinting by regional shortening and transcurrent shearing events.

The Lac Rug Project

The Lac Rug Project is centred 26km south-east of Lebel sur Quevillon township, Abitibi, Quebec. The Property consists of 207 claims covering a surface area of approximately 116.5km², which are in the process of being transferred to the company's 100% subsidiary Pinnacle Abitibi Mining Limited. The geological area of the Property is favourable for primarily lithium and beryl, but also gold, zinc and base metals.

The Lac Rug Project is located in the Northern Volcanic Zone (NVZ) of the Abitibi Greenstone Belt of the Superior Province. The area is bisected by the east-west trending Chicobi Deformation Zone. The targeted country rocks consist of banded basaltic amphibolites which are adjacent to both synvolcanic intrusions and foliated intermediate to felsic intrusions and gneisses.

The geological lithium exploration model is to explore around the syn- to late-tectonic Archean Batholiths which consist of two (2) major phases: 1) a series of chloralkaline-granodiorite and 2) later monzogranites. Numerous pegmatites have been mapped in the area as evidenced on the SIGÉOM geomining information system.

The regional metamorphism is generally at greenschist facies and amphibolite facies close to the late-tectonic intrusions.

The Lac Bigniba Project

The Lac Bigniba Project is centred 60kms NNE of Amos and 46km west of Lebel-sur-Quevillon township, Abitibi, Quebec. The Geant Dormant Gold Mine (421,600 Oz at 8.08g/t gold¹¹) is located 12kms to the west of the project area. The project consists of 282 claims covering a surface area of approximately 154.7km², which are in the process of being transferred to Pinnacle Abitibi Mining Limited.

The Lac Bigniba Project is located in a favourable location within the Northern Volcanic Zone (NVZ) of the Abitibi Greenstone Belt, Superior Province. The primary stratigraphy in the area are dominantly mafic and ultramafic rocks assigned to the Neo-Archaean Vanier-Dalet-Poirier Group.

The major structural fabric is dominated by the east-west trending Laberge Deformation Zone which is being targeted as an important setting for pegmatite and other metals mineralisation.

The area is virtually unexplored but has strong potential for Au, Ni-Cu-Co-PGE mineralisation and Li-rich pegmatite emplacement.

¹⁰ – Sayona Mining Limited ASX Announcement 9th May 2023

¹¹ – Inferred and indicated resources, <https://abcourt.ca/en/projects/geant-dormant/> and Pinnacle calculations

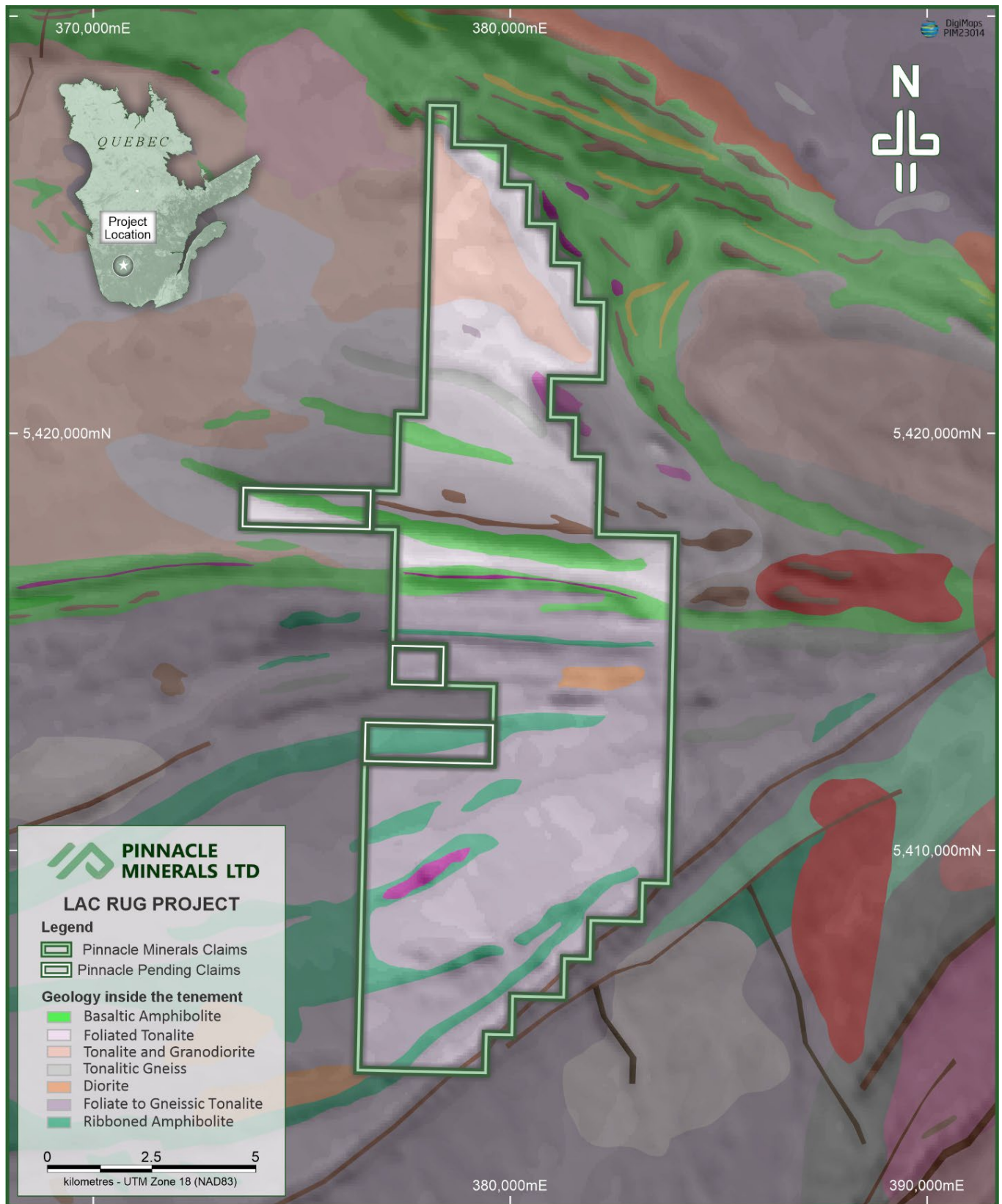


Figure 2: Lac Rug Project highlighting regional geology. Note the greenstone "bisecting" the claims.

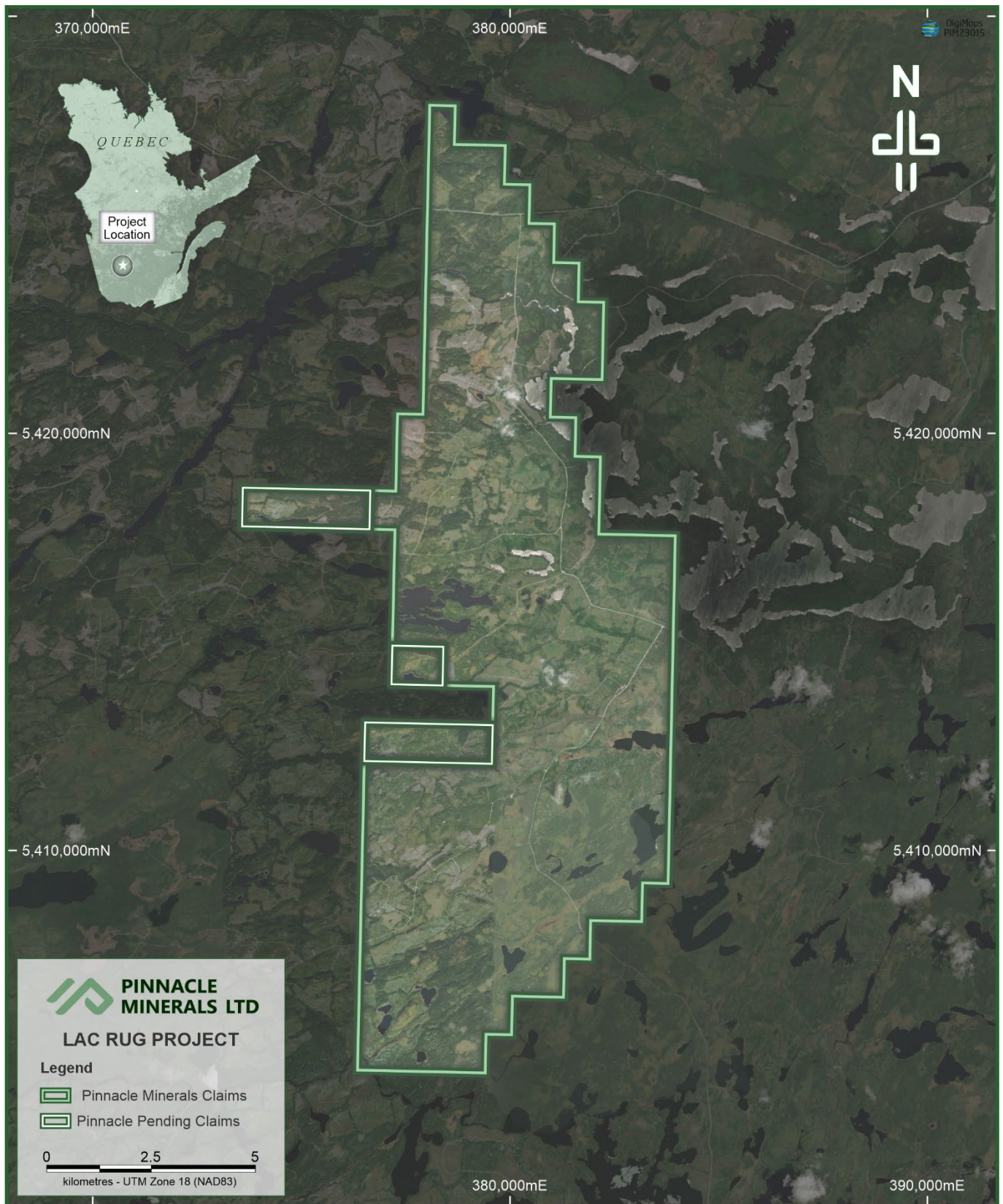


Figure 3: Lac Rug Project with satellite imagery highlighting road access.

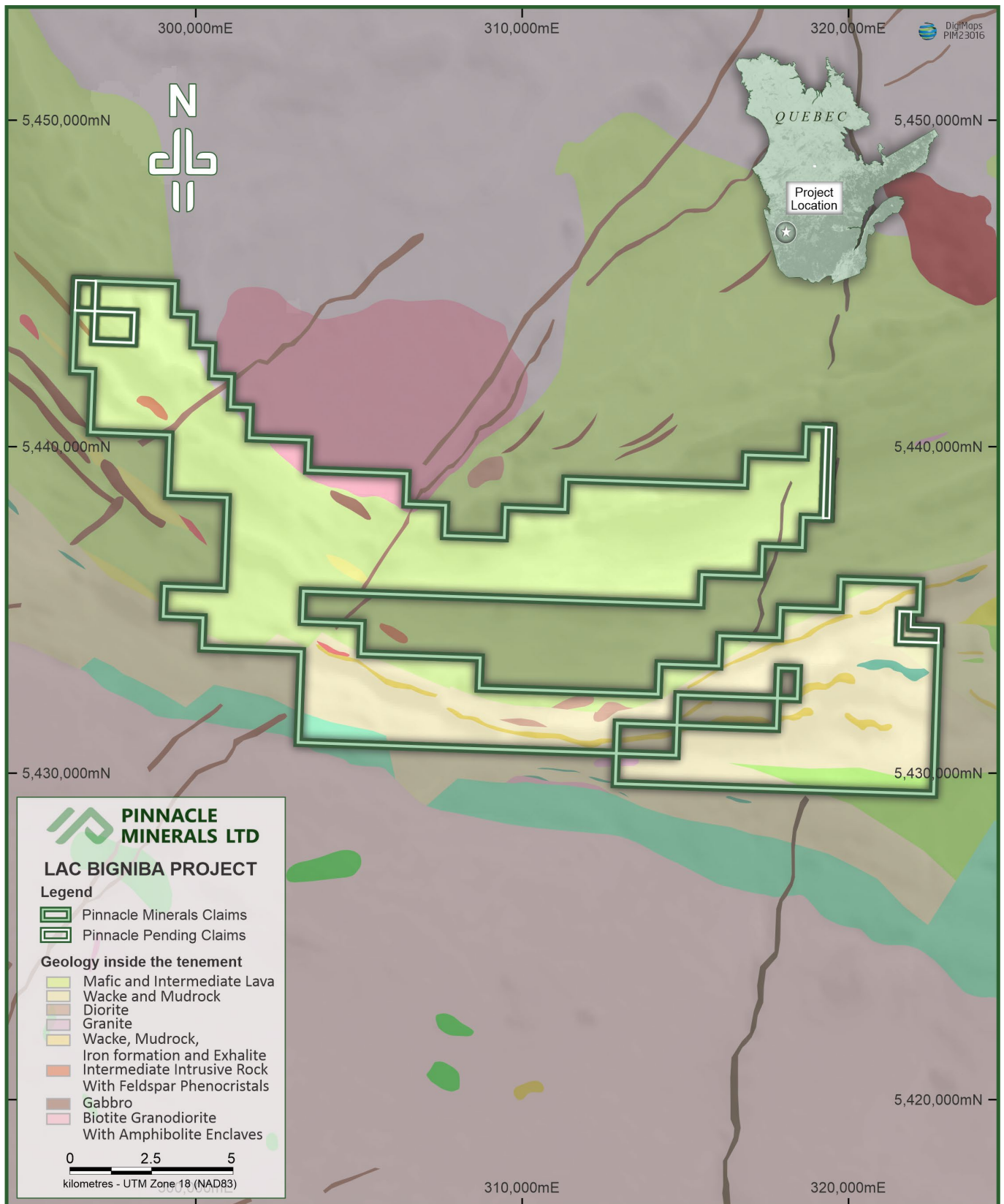


Figure 4: Lac Bigniba Project highlighting regional geology.

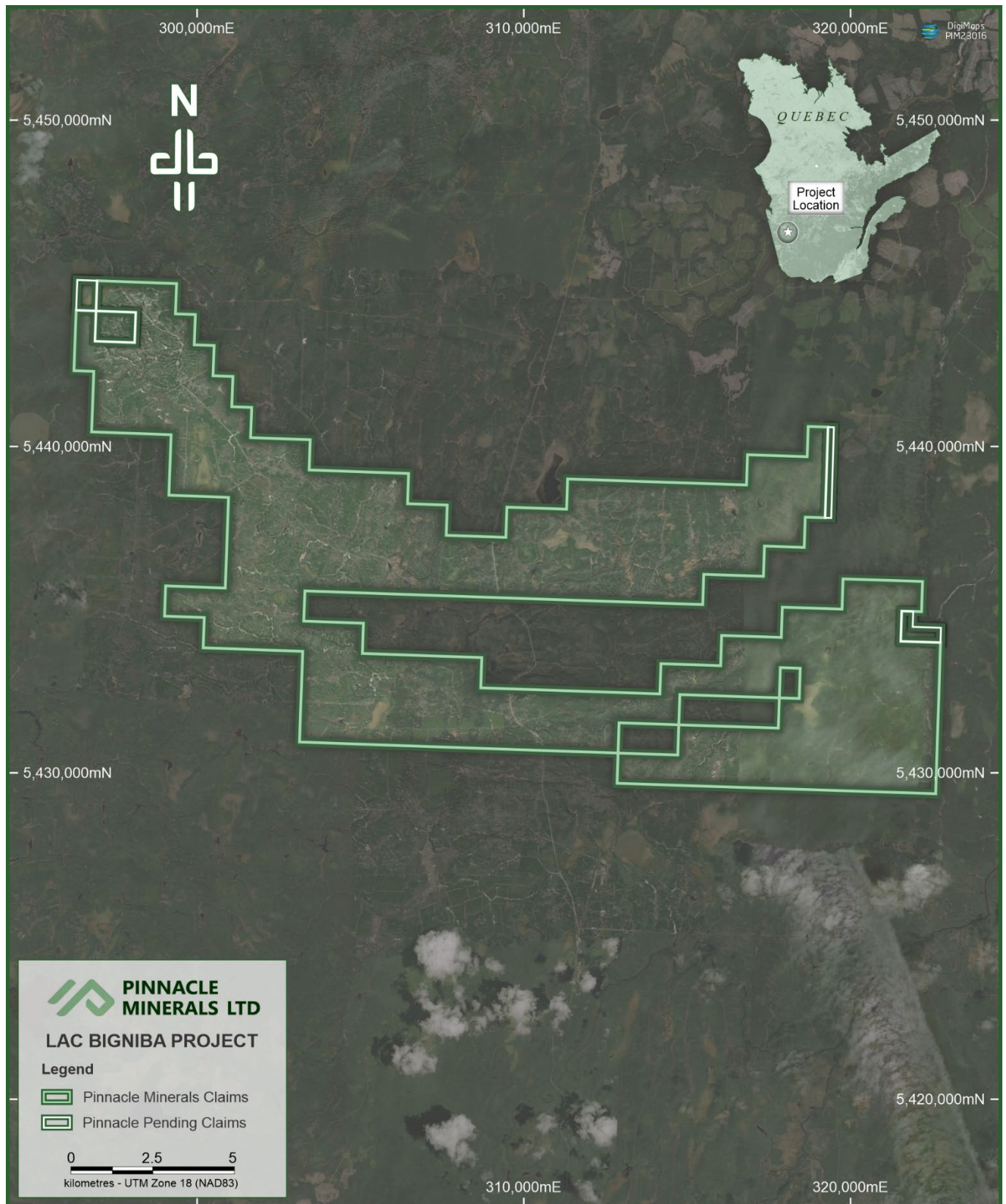


Figure 5: Lac Bigniba Project with satellite imagery highlighting road access

Satellite and radar analysis

To rapidly progress target identification at the project the Company engaged remote imagery processing specialist, Dirt Exploration (and its principal, Dr Neil Pendock) to acquire, process and analyse Sentinel Multispectral data (Sentinel) and Synthetic Aperture Radar (SAR) data over both projects. The analysis identified multiple areas of interest with numerous discrete targets for follow-up field investigation.

Of particular interest is the trend of pegmatite outcrops (extracted from the Quebec Government database SIGEOM) running southwest / northeast across the lower half of the project area (Figure 6). This trend also contains multiple SAR targets with-in it and is the priority area for follow up in November.

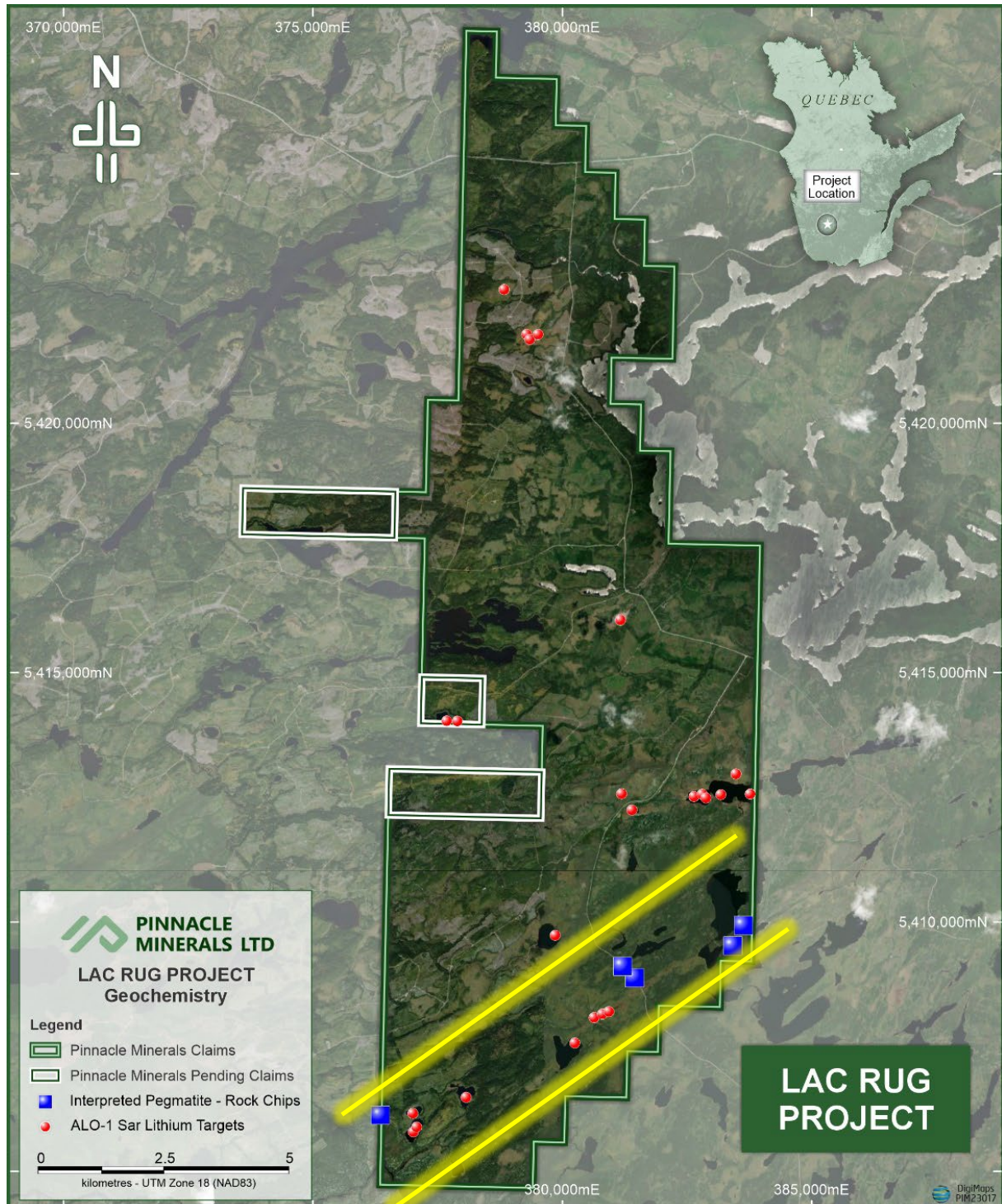


Figure 6: Lac Rug Project with identified pegmatite and lithium targets

Cautionary note:

The presence of pegmatite, pegmatite granite or visual spodumene does not equate to economic lithium mineralisation. The Company is encouraged by the geology and the remotely sensed data, but no quantitative or qualitative mineralisation assessment is possible at this stage. The Company will undertake fieldwork to test for potential lithium mineralisation, and laboratory analysis of rock chip samples is required to determine if the mapped pegmatites and pegmatite granites have the potential to host mineralisation.

Exploration Plan – Lac Rug and Lac Bigniba

Pinnacle plans to advance the projects with field mapping and rock chip sampling in November using Quebec Registered geologists for IOS. Identified pegmatite outcrops and satellite targets generated by Dr. Neil Pendock from Dirt Exploration will be prioritised.

Pinnacle will conduct the exploration program with the aid of IOS Services Géoscientifiques a renowned Quebec based geological consulting and contracting service provider.

Pinnacle's executive team will be travelling to Quebec in November to oversee the exploration and will use this opportunity to meet with key stakeholders in Quebec.

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

For further information, please contact:**Executive Chairman**

William Witham
Pinnacle Minerals Limited
T: + 61 (0) 8 9426 0666
E: admin@pinnacleminerals.com.au

Managing Director

Nic Matich
Pinnacle Minerals Limited
T: + 61 (0) 8 9426 0666
E: admin@pinnacleminerals.com.au

Media and Investor Inquiries

Jane Morgan
Jane Morgan Management
+61(0) 405 555 618
E: jm@janemorganmanagement.com.au

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.

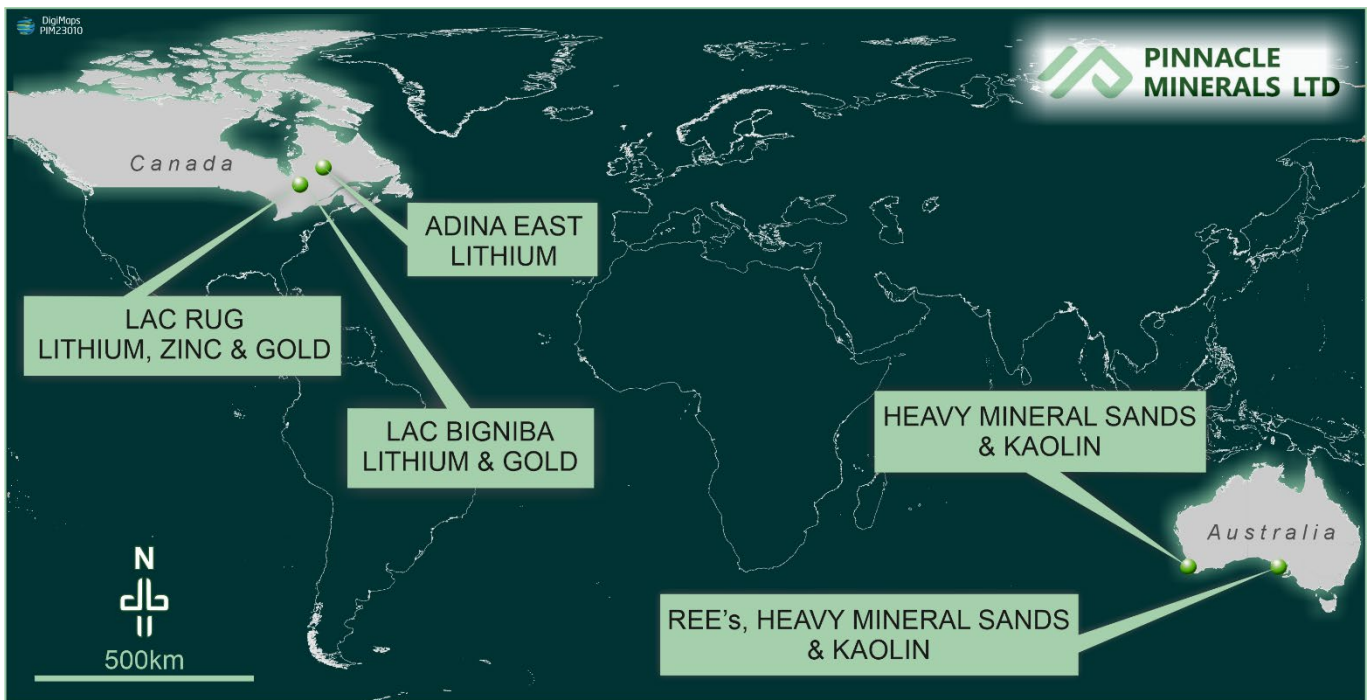


Figure 7: Pinnacle Minerals Project Location Map

Appendix 1 JORC Tables

Section 1 Historical Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No sampling has been completed by Pinnacle Minerals. Dirt Exploration interpreted pegmatitic rocks and trends from the Sentinel-2 and Also-1 SAR data products. Eight spectral bands of Sentinel-2 VNIR imagery have 10 m spatial resolution, and two bands of SWIR have 20 m resolution. The two Sentinel-2 scenes were collected during October 2023 Rock assay data referred to in the release is available on the Sigeom website. Note, the rocks represent reconnaissance geochemistry samples and are not part of considered lithium exploration. Pinnacle will complete reconnaissance work to verify the interpretation presented in this release.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> No drilling completed
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> No drilling completed
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling completed
Sub-sampling techniques and	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc., and 	<ul style="list-style-type: none"> No drilling completed

Criteria	JORC Code explanation	Commentary
<i>sample preparation</i>	<p><i>whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of 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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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> 	<ul style="list-style-type: none"> No assay or drilling data being reported No new geophysical or geological data has been collected by Pinnacle
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> All results were reviewed by the Competent Person
<i>Location of data points</i>	<ul style="list-style-type: none"> <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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The grid system used at the Lac Rug Project is UTM NAD83 (Zone 18) The grid system used at the Lac Bigniba Project is UTM NAD83 (Zone 17 & 18)
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <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> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> No drilling completed
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <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> <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> 	<ul style="list-style-type: none"> No drilling completed
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> No drilling completed
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audits conducted

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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> At the time of reporting all claims were secure and any administrative costs or fees were fully paid up.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Limited historical work has been completed within some claims, with no exploration targeting lithium mineralisation. Publicly available geological and geophysical datasets were sourced from MERN via SIGEOM
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Lac Rug Project is located in the Northern Volcanic Zone (NVZ) of the Abitibi Greenstone Belt of the Superior Province. The area is bisected by the east-west trending Chicobi Deformation Zone. The targeted country rocks consist of banded basaltic amphibolites which are adjacent to both synvolcanic intrusions and foliated intermediate to felsic intrusions and gneisses. The geological lithium exploration model is to explore around the syn- to late-tectonic Archean Batholiths which consist of two (2) major phases: 1) a series of calco-alkaline diorite-granodiorite and 2) later monzogranites. Numerous pegmatites have been mapped in the area as evidenced on the SIGÉOM geomining information system. The Lac Bigniba Project is located in a favourable

Criteria	JORC Code explanation	Commentary
		location within the Northern Volcanic Zone (NVZ) of the Abitibi Greenstone Belt, Superior Province. The primary stratigraphy in the area are dominantly mafic and ultramafic rocks assigned to the Neo-Archaean Vanier-Dalet-Poirier Group. Important nearby intrusions include the Marest Intrusive Suite which consists of Granodiorite containing amphibolite enclaves. The major structural fabric is dominated by the east-west trending Laberge Deformation Zone which is being targeted as an important setting for pegmatite and other metals mineralisation.
Drill hole Information	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling completed
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling completed
Relationship between mineralisation widths and	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No mineralised widths and intercept lengths have been reported.

Criteria	JORC Code explanation	Commentary
intercept lengths	<i>should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i>	
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Figures and plans are displayed in the main text of the Release
Balanced reporting	<ul style="list-style-type: none"> 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 style="list-style-type: none"> No assay data being reported
Other substantive exploration data	<ul style="list-style-type: none"> 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 style="list-style-type: none"> All information has been provided as available To the Company's knowledge, no material exploration data or information has been omitted from this release The Company continues to complete a thorough desktop review of the projects
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Pinnacle's initial exploration program will include target definition and planned field mapping and sampling Drilling will subsequently be completed on any key targets identified from the mapping and sampling Refer to the main body of the release for further information regarding diagrams