

228 Pegmatites Identified in Image Analysis at the Castor Lithium Project

Highlights

- **228 potential pegmatite outcrops identified via interpretation of Sentinel-2 multispectral imagery**
- **Multiple interpreted pegmatite dykes in the eastern half of the Castor property demand immediate attention**
- **High-resolution LiDAR survey complete with results due soon**

Summit Minerals Limited (Summit or the Company) is pleased to announce the results of the recent interpretation of Sentinel-2 Multispectral Imagery for identification of outcropping potential lithium (Li)-pegmatite within the Castor Project of James Bay area, Quebec. For Castor, **228 potential pegmatite outcrops** were located within the claim boundaries.

Summit engaged GeoCloud Analytics (GeoCloud) to source, process, and interpret Sentinel-2 Multispectral Imagery for identification of outcropping potential Li-pegmatite within the Castor Project. This work located potential outcrops for field reconnaissance, mapping, and sampling in the early exploration phase. Figure 1 below illustrates the Castor claim boundaries, which total 125km², and the potential outcropping pegmatite.

Multiband satellite imagery is widely recognised for its application in mineral exploration. The Quebec Geological Survey (SIGEOM) provided public-domain geology and mineral occurrence data. The data then underwent filtering for lithium-mineral and pegmatite occurrences. Imagery analysis included using Principal Component Analysis (PCA) and Band Combinations (COMBO) to exploit particular bands known for their sensitivity to lithium-bearing minerals and using the spectral signatures from previously identified pegmatite and Li-bearing rocks to drive the interpretation. Two hundred and twenty-eight (228) potential pegmatite outcrops were located within the Project, with the capture of outcrop noted as being conservative. Multiple interpreted pegmatite dykes in the eastern half of the Castor property demand immediate attention. The orientation of some dykes contrasts with the north-northeast structural trend visible across the property, while others align in direction, reflecting known spodumene-bearing pegmatite dykes found elsewhere in the James Bay area.

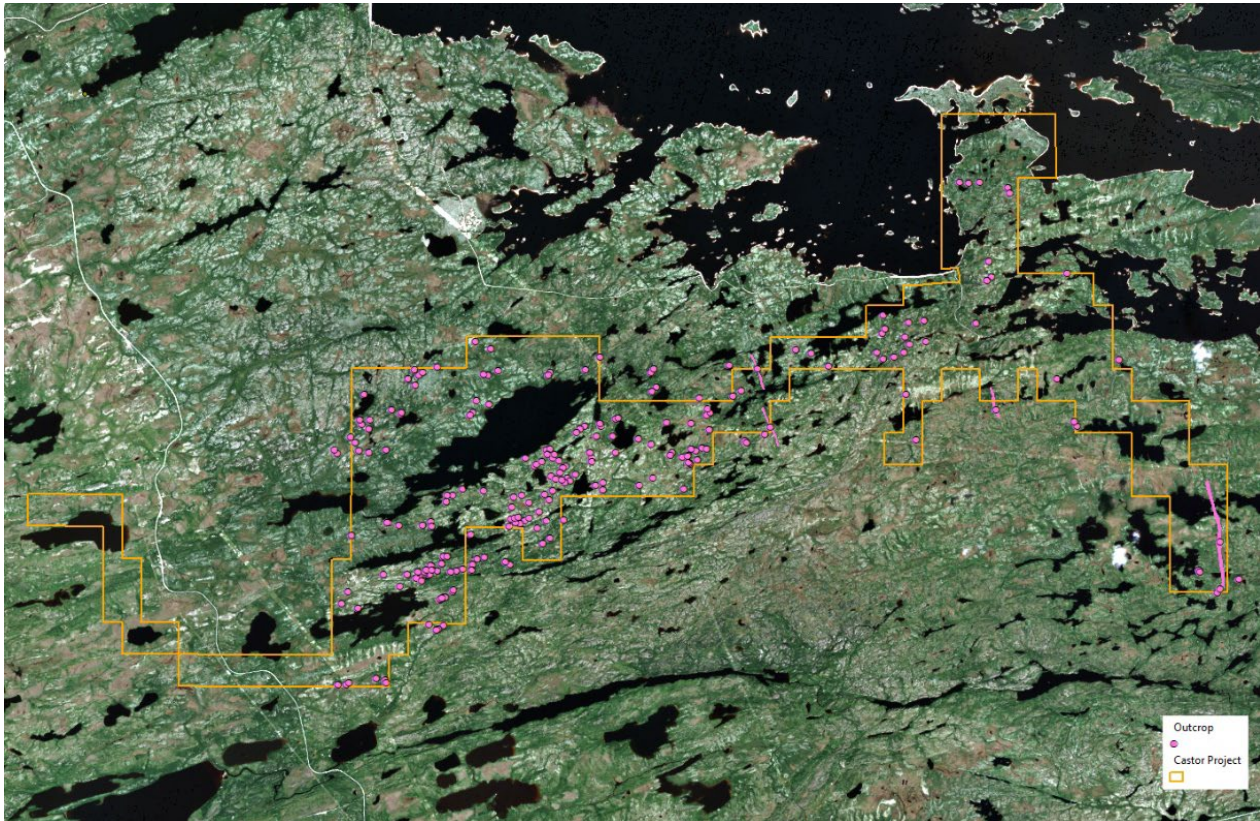
Summit will shortly undertake fieldwork to investigate potential Li-bearing pegmatite outcrops and update shareholders as the exploration progresses at Castor.

Exploration Manager, Mr Jonathan King, stated,

“The work of GeoCloud expands upon earlier work completed by Dirt Exploration, resulting in several distinctive mineral occurrence clusters on the Project’s western limb that potentially reflect pegmatite and lithium-bearing minerals. Several targets from the two work programs overlap within the Project’s

central hinge, providing confidence to the targets as each consultant's approach was independent and, yet, derived the same interpreted target.”

Figure 1 – Summary map of the Castor Property on the Combo RGB 04-03-02 Sentinel-2 imagery with potential pegmatite outcrop locations and interpreted dykes in pink.



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.

Next steps

Summit will shortly conduct helicopter-supported property traverses to map and collect rock chips from the pegmatite occurrences and the interpreted Sentinel and SAR targets with this work expected to be completed this Quarter.

Approved for release by the Board of Summit Minerals Limited.

– ENDS –

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5 September 2023

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About Summit Minerals Limited

Summit Minerals Limited is an Australian-focused ASX-listed battery mineral exploration Company with a portfolio of projects in demand-driven commodities. It is focused on systematically exploring and developing its projects to delineate multiple JORC-compliant resources.

Summit's projects include the Windfall and Magwood Antimony Projects in the antimony-gold province of the southern New England Fold Belt region in NSW, the Stallion REE Project in Ponton River WA, the Phillips River Lithium Project in Ravensthorpe WA, and the Bridgetown Lithium Project in Bridgetown WA, strategically located along strike of Talison's Greenbushes Mine. Through focus, diligence and execution, the board of Summit Minerals is determined to unlock previously unrealised value in our projects.

Competent Person Statement

The information related to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on data compiled by Jonathan King, a Competent Person and Member of The Australian Institute of Geoscientists. Jonathan King is a director of Collective Prosperity Pty Ltd. Jonathan King 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 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Jonathan King consents to the inclusion in presenting the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This announcement contains 'forward-looking information based on the Company's expectations, estimates and projections as of the date the statements were made. This forward-looking information includes, among other things, statements concerning 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 using 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 results or performance may differ materially. 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 materially differ from those expressed or implied by such forward-looking information.

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Appendix 1: JORC Code, 2012 Edition- Section 1 – Castor Lithium Project
Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Comment
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 downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	No sampling has been completed by Summit Minerals. GeoCloud Analytics interpreted pegmatitic rocks and trends from the Sentinel-2 data. Eight spectral bands of Sentinel-2 VNIR imagery have 10 m spatial resolution, and two bands of SWIR have 20 m resolution. The Sentinel-2 scene was collected on September 2022. 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. Summit will complete reconnaissance work to verify the interpretation presented in this release.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	Not relevant
	<ul style="list-style-type: none"> 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 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 (e.g., submarine nodules) may warrant disclosure of detailed information. 	Not relevant
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). 	No drilling performed
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	No drilling performed
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	No drilling performed
	<ul style="list-style-type: none"> 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. 	No drilling performed
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. 	No drilling performed
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	No drilling performed
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	No drilling performed
Sub-sampling	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all cores taken. 	No drilling performed

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Criteria	JORC Code explanation	Comment
techniques and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling performed
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No assay data being reported
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No assay data being reported
	• 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.	No assay data being reported
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	No samples taken
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.	No assay data being reported
	• 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.	No new geophysical or geological data has been collected by Summit
	• 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 data being reported No drilling performed
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	No verification was undertaken No drilling performed
	• The use of twinned holes.	No drilling undertaken
	• Discuss any adjustment to assay data.	No sampling identified
Location of data points	• Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	No drilling performed
	• Specification of the grid system used.	The grid system used at the Castor Lithium Project is UTM NAD83 (Zone 18)
	• Quality and adequacy of topographic control.	No topographic control used
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	No drilling performed
	• 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.	No drilling performed
	• Whether sample compositing has been applied.	No drilling performed
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.	Not relevant
	• 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.	No drilling performed
Sample security	• The measures taken to ensure sample security.	No drilling performed
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits were conducted

Section 2 Reporting of Exploration Results – Castor Lithium Project

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

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Criteria	JORC Code explanation	Comment
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. 	<p>Complete mineral claim information can be found appended to the ASX announcement dated 13 July 2023.</p> <p>The claims are believed to be in good standing with the relevant government authorities, and there are no known impediments to operating in the project area</p> <p>Summit, post-approval via EGM, will control 80%: 20% is retained by the project vendors - mining entrepreneur, Kal Malhi of Bullrun Capital, and Jody Dahrouge of DG Resource Management Ltd (DGRM).</p>
	<ul style="list-style-type: none"> 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. 	<p>Kal Malhi and DGRM retain the licenses on Summit's behalf until approval is received from shareholders via EGM in September.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Limited historical work has been completed within some claims, with no exploration targeting lithium mineralisation.</p> <p>Historically, greenstone sequences overlain by the claims were explored for base metals, gold and nickel-copper-PGEs.</p> <p>Publicly available geological and geophysical datasets were sourced from MERN via SIGEOM.</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The Castor Lithium Project is in the Archean-aged Superior Province of the Canadian Shield, which is host to some of the most significant lithium resources in the world. The project encompasses the northern continuation of the Yasinski Lake Greenstone Belt, which occurs as a relative magnetic low in regional magnetic datasets.</p> <p>Outcrop is reportedly relatively abundant, though swampy depressions are lacking in outcrop. Much of the project is underlain by rocks of the Yasinski Lake Greenstone Belt, including amphibolite, biotite-paragneiss and gneiss, tonalite and granodiorites, and in places, banded iron formations, metagabbro, metabasalt, anorthosite and pink (or white) leucocratic granite.</p> <p>Several bodies of pegmatite are located on the Project, according to the provincial SIGEOM database. The area captured by the project needs more modern systematic exploration, and lithium exploration has yet to be undertaken.</p> <p>The Project has the potential for lithium-bearing pegmatite, orogenic gold, Ni, Cu, Cr, and PGEs.</p>
Drillhole 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 drillholes: <ul style="list-style-type: none"> easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole downhole length and interception depth hole length 	<p>No drilling performed</p>
	<ul style="list-style-type: none"> 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 	<p>Not applicable as no drilling performed</p>

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Criteria	JORC Code explanation	Comment
	the report, the Competent Person should clearly explain why this is the case.	
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 cutoff grades are usually Material and should be stated. 	No assay data being reported
	<ul style="list-style-type: none"> 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. 	No assay data being reported
	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No assay data being reported
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. 	No drilling being reported
	<ul style="list-style-type: none"> If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. 	No drilling performed
	<ul style="list-style-type: none"> If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known'). 	No drilling performed
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 drillhole collar locations and appropriate sectional views. 	Appropriate plans are included in this 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 avoiding misleading reporting of Exploration Results. 	The reporting level is balanced and appropriate for early-stage exploration. The results obtained justify further work on the project.
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. 	<p>To the Company's knowledge, no material exploration data or information has been omitted from this Release.</p> <p>The Company continues to complete a thorough geological review of all available data as part of the Company's due diligence.</p>
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). 	<p>Summit re-affirms its commitment to exploration across its project portfolio in Australia, Morocco and Canada.</p> <p>Upcoming activities for the Castor Lithium Project will commence once relevant authorities have determined that wildfire no longer poses a risk to the health and safety of Summit staff and contractors.</p> <p>Summit's initial exploration program will include acquiring high-resolution LiDAR imagery to support target definition and planned field mapping and sampling once conditions are appropriate to re-enter the property.</p> <p>Drilling will subsequently be completed on any key targets identified from the mapping and sampling.</p>
	<ul style="list-style-type: none"> Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Suitable diagrams are provided. All information in the announcement will be updated as the information is finalised by Summit before releasing to the market.

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