# Castor Lithium Project Update – Amended

Summit Minerals Limited (ASX: SUM, "Summit" or the "Company") provides an amendment to the announcement "Castor Lithium Project Update" dated 9 November 2023. This amended announcement includes a JORC table in Appendix 1.

**Jay Stephenson**
**Company Secretary**

# Castor Lithium Project Update

## Highlights

- **Field reconnaissance program has been completed, over 150 samples have been collected with all assay results due by the end of the year.**
- **Field program confirms the presence of multiple pegmatites and also identified copper-gold sulphide-bearing host rocks**
- **Comprehensive LiDAR and high-resolution aerial imagery survey completed**
- **The survey identified additional pegmatite outcrops and provided an accurate picture of pegmatite distribution, which will aid with further targeted exploration activities**
- **The Castor Lithium Project hosts several mapped pegmatite occurrences over a 33km strike length of the Yasinski Lake Greenstone Belt, with known spodumene-bearing pegmatites hosted within the belt along-strike to the southwest**

Summit Minerals Limited (ASX: SUM, "Summit" or the "Company") is pleased to provide an activity update regarding the completion of the Field reconnaissance program as well as the Light Detection and Ranging (LiDAR) and high-resolution aerial imagery survey on its Castor Lithium Project in the prolific James Bay Region of Québec, Canada. The field program performed by Critical Discoveries (CDC) was completed earlier this month, with assay results expected by the end of the year.

While the LiDAR survey was completed in late August, the bare earth ground model, source point cloud data, and colour aerial photography were only delivered in mid-October. LiDAR processing and interpretation specialists, GeoCloud Analytics, have been contracted to interpret key geological features to improve geological understanding and map potential pegmatite outcrops and dykes for further assessment.

Chief Executive Officer, Mr Gower He, states,

> *"The conclusion of the field program and the LiDAR results have confirmed and further identified multiple outcropping pegmatites and potential pegmatite-bearing structures. Specifically, the LiDAR revealed unknown pegmatite targets for evaluation and validated those we have already identified. Once the assays from the summer field program come back from the labs, the company will be able to map out the next development steps for the project. It will be an exciting Christmas period for all our loyal Summit shareholders."*

## Field reconnaissance

Experienced technical consultants, Critical Discoveries (CDC), confirmed the presence of multiple interpreted pegmatites during the Field reconnaissance program. These interpreted pegmatites were deliberately targeted, examined with rock chip samples collected for assaying. A total of one hundred and fifty-three (153) samples were collected from the program. One hundred and twenty-five (125) from pegmatites and sixteen (16) petrographic samples were collected, they have been submitted in batches during the program to Actlabs in Ontario for a comprehensive multi-element analysis. Assay results are expected to be received by the end of the year.

In addition to the presence of pegmatites, CDC also identified several copper-gold targets featuring sulphide-bearing laminated quartz veins within significantly altered (basalt-ultramafic) host rock. Notably, some of these newly identified quartz veins are located near historical drilling. As a result, twelve (12) rock chip samples were collected from these zones and submitted for analysis.

Figure 1 – CDC geologists collecting pegmatite samples

## LiDAR results

Highly experienced LiDAR contractor, KBM of Ontario, were engaged for the LiDAR fly over and data collection. The survey was flown with a point density of ~20 points per square metre and at an altitude facilitating high-resolution 10cm aerial photographs. These acquisition parameters have delivered Summit highly detailed ground data and imagery suited for geological interpretation and pegmatite identification.

Geocloud Analytics was contracted to undertake a detailed interpretation of the data, documenting evidence of pegmatite occurrence, historic mining and prospecting activity and mapping of observed geological

structures and features. Some of the discovered historical mining activity, which was not recorded, presents new opportunities for the company.

Reprocessing and interpretation revealed details previously unknown to Summit in Castor. In additional to multiple new pegmatite discoveries, numerous trenches were observed across the project area. The trenches are approximately 30m long, 8m wide, and 1.5 to 2m deep. Identifying these features has driven the geology team to interrogate historical SIGEOM records and provide precise GPS locations for our field teams to follow up.

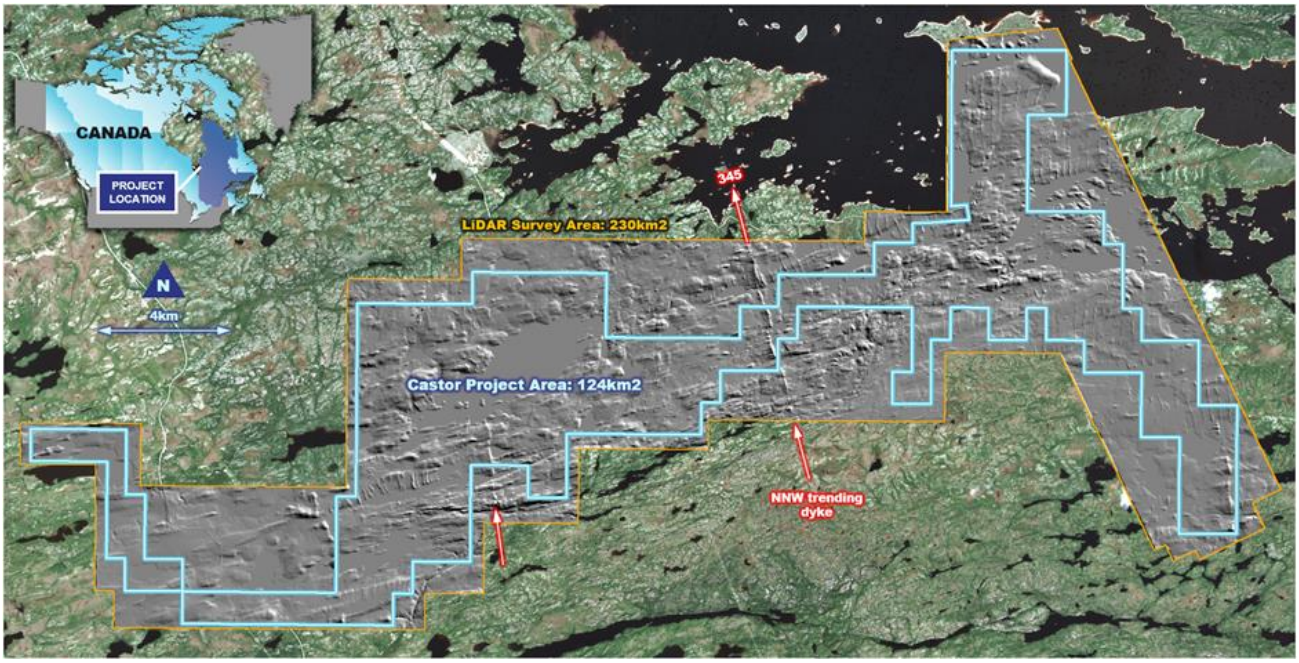


**Figure 2 – illustrates the coverage of the LiDAR survey, with the hillshaded bare earth digital terrain model (DTM) clearly showing the East-North-East structural grain throughout the project. Note the clarity of mafic NNW-trending dykes cutting through the project – with fault-derived offsetting of the central dyke trending 345.**

## Potential pegmatite outcrop mapping

Potential pegmatite targets first identified via multispectral imagery analysis are further refined using high-resolution aerial photography and LiDAR (Figure 3). The potential pegmatite outcrop, first identified as a hot spot in the Sentinel-2 PCA image, is now priority ranked based on the new information. In addition, its prioritisation is further enhanced by the smooth texture and morphology in the LiDAR image. The outcrop is 86m long and 32m wide and sits 5m proud of the local terrain.

The survey revealed additional pegmatite outcrops, offering a precise insight into their distribution. This information will support focused exploration efforts, streamlining the prospecting process for greater efficiency.

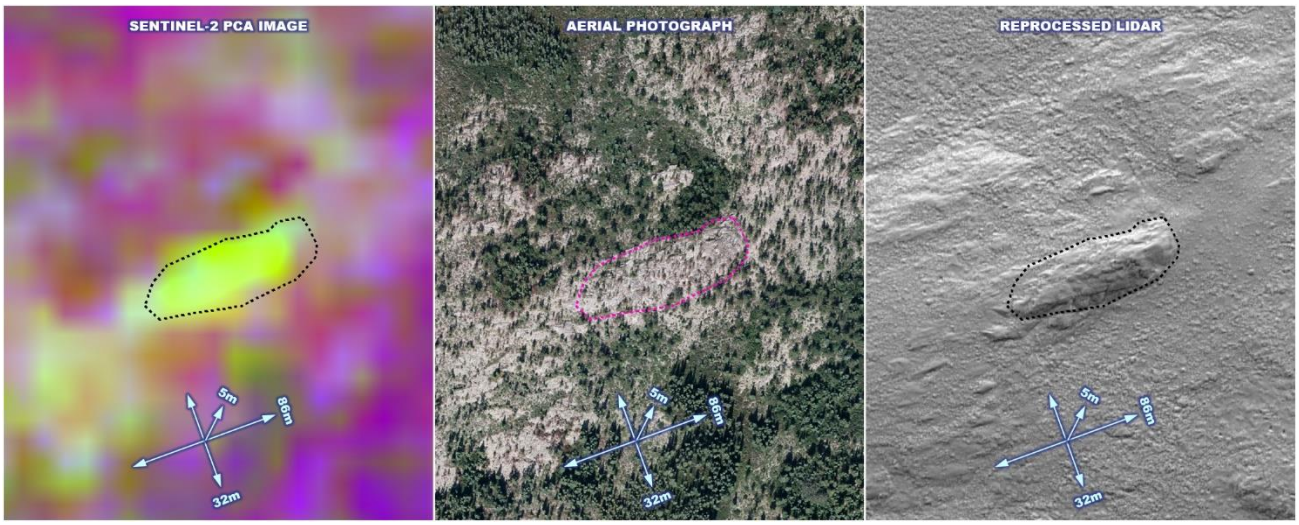


**Figure 3 – Potential pegmatite outcrop in Sentinel-2, air photo and LiDAR, Castor Lithium Project**

*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.*

Approved for release by the Board of Summit Minerals Limited.

– ENDS –

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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 Castor Lithium Project in the prolific James Bay District, Quebec, Canada; The Ahmed Antimony Project in central Morocco; 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 Geoimpact 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.

# 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** | • 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. | Summit Minerals undertook a LiDAR and Aerial Photographic survey during August (2023) covering an area of 124 km2. At the Castor Lithium Project<br>Ten (10) cm colour RGB aerial photography was collected along with the LiDAR.<br>The LiDAR was processed to yield a high-resolution 50cm ground DTM.<br>A high-end RIEGL VQ-780ii Sensor was used for the survey.<br>Project datum is NAD83 (UTM Zone 18 – North).<br>No sampling by Summit Minerals is included.<br>GeoCloud Analytics interpreted pegmatitic rocks and trends from the Sentinel-2 data.<br>Summit will complete reconnaissance work to verify the interpretation presented in this release. |
| | • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. | Data classification was manually checked and edited against georeferenced digital orthophotography and/or intensity imagery acquired as part of this project. |
| | • 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. | The LiDAR was flown with and minimum average twenty (20) points per square metre with flying height of ~1000 metres to ensure 10 centimetre vertical accuracy. |
| **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 performed |
| **Drill sample recovery** | • Method of recording and assessing core and chip sample recoveries and results assessed. | No drilling performed |
| | • Measures taken to maximise sample recovery and ensure representative nature of the samples. | No drilling performed |
| | • 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** | • 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 |
| | • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. | No drilling performed |
| | • The total length and percentage of the relevant intersections logged. | No drilling performed |

| Criteria | JORC Code explanation | Comment |
|---|---|---|
| **Sub-sampling techniques and sample preparation** | • If core, whether cut or sawn and whether quarter, half or all cores taken. | No drilling performed |
| | • 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 drilling performed |
| | • 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<br>No drilling performed |
| **Verification of sampling and assaying** | • The verification of significant intersections by either independent or alternative company personnel. | No verification was undertaken<br>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. | The LiDAR and Aerial Photographic survey covered the entire Castor Lithium Project, an area of 124km$^2$.<br>Ten (10) cm colour RGB aerial photography was collected along with the LiDAR.<br>The LiDAR was processed to yield a high-resolution 50cm ground DTM.<br>A high end RIEGL VQ-780ii Sensor was used for the survey.<br>The LiDAR was flown with a minimum average twenty (20) points per square metre with flying height of ~1000 metres to ensure 10-centimetre vertical accuracy.<br>Elevation data will be gathered as WGS ellipsoidal heights and adjusted to orthometric heights by correcting every data point using the relevant geoid model. |
| | • 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. | Elevation data will be gathered as WGS ellipsoidal heights and adjusted to orthometric heights by correcting every data point using the relevant geoid model. |
| | • Data spacing for reporting of Exploration Results. | Processing of LIDAR to derive a 50cm resolution DEM |

| Criteria | JORC Code explanation | Comment |
|---|---|---|
| **Data spacing and distribution** | | Reprocessing of LiDAR to enhance and extract ground model detail<br>Mosaiced products on a project area basis:<br>- ground model (DEM) at 50cm resolution in GeoTiff format<br>- ground model hillshade at 50cm resolution in GeoTiff format<br>- reprocessed enhanced hillshade at 50cm resolution in GeoTiff format |
| | • 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. | Spacing was sufficient |
| | • Whether sample compositing has been applied. | No sample compositing was carried out on-site |
| **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. | LiDAR data represents the surface area of the region surveyed, with X, Y and Z data reported across the topography of a predefined area.<br>LiDAR survey areas are entirely independent of mineralisation or structural style and are therefore considered unbiased. |
| | • 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. | LiDAR data is confidential and only accessed by Summit Minerals representatives, GeoCloud Analytics Ltd and Critical Discoveries Corporation. |
| **Audits or reviews** | • The results of any audits or reviews of sampling techniques and data. | Airborne LiDAR survey included field test points of survey areas located in accessible areas.<br>LiDAR test points were used to test and validate the accuracy achieved by the LiDAR.<br>Results of test point comparisons and achieved accuracy reported in the project metadata.<br>LiDAR data was georeferenced using local survey station data. |

## Section 2 Reporting of Exploration Results – Castor Lithium Project

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

| Criteria | JORC Code explanation | Comment |
|---|---|---|
| **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. | Complete mineral claim information can be found appended to the ASX announcement dated 13 July 2023.<br>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.<br>Summit is the operator and controls 80% of the claim group: 20% is retained by the project vendors - mining entrepreneur Kal Malhi of Bullrun Capital and Jody Dahrouge of DG Resource Management Ltd (DGRM). |
| | • 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. | Kal Malhi and DGRM retain the licenses on Summit's behalf and are in the process of being transferred to Summit. |
| **Exploration done by other parties** | • Acknowledgment and appraisal of exploration by other parties. | Limited historical work has been completed within some claims, with no exploration targeting lithium mineralisation.<br>Historically, greenstone sequences overlain by the claims were explored for base metals, gold and nickel-copper-PGEs.<br>Publicly available geological and geophysical datasets were sourced from MERN via SIGEOM. |
| **Geology** | • Deposit type, geological setting and style of mineralisation. | 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.<br>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.<br>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.<br>The Project has the potential for lithium-bearing pegmatite, orogenic gold, Ni, Cu, Cr, and PGEs. |
| **Drillhole Information** | • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:<br>– easting and northing of the drillhole collar<br>– elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar<br>– dip and azimuth of the hole<br>– downhole length and interception depth<br>– hole length | No drilling performed |

| Criteria | JORC Code explanation | Comment |
|---|---|---|
| | • 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. | Not applicable as no drilling performed |
| **Data aggregation methods** | • 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 |
| | • 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 |
| | • 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** | • These relationships are particularly important in the reporting of Exploration Results. | No drilling being reported |
| | • If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. | No drilling performed |
| | • 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** | • 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 figures are included in this 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 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** | • 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. | To the Company's knowledge, no material exploration data or information has been omitted from this Release. |
| **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). | Summit re-affirms its commitment to exploration across its project portfolio in Australia, Morocco and Canada.<br>Upon completion of the LiDAR interpretation, Summit's field team will receive the data and evaluate and priority rank targets for prospecting and potential sampling.<br>Drilling will subsequently be completed on any key targets identified from the mapping and sampling. |
| | • 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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