



## June 2019 Quarterly Activities Report

MetalsTech Limited (ASX: MTC) is pleased to report its activities for the quarter ended 30 June 2019.

### Highlights

- Compelling spodumene-bearing pegmatite targets identified at Cancet Lithium Project
- Gold and copper potential evaluated at the Cancet project with a number of prospective targets identified on trend and along strike from Midland Exploration Inc. within the identified greenstone belt
- Follow up exploration program to target the spodumene-bearing pegmatite areas identified together with the newly identified gold and copper targets
- Appointment of Dr Qingtao Zeng and Mr Noel O'Brien as Non-Executive Directors (Technical)

### OVERVIEW

During the June quarter, MetalsTech conducted a review of the geological, geotechnical, geophysical and geochemical data in relation to the Cancet Lithium project. The review was focused on evaluating exploration targets that had been previously identified during field mapping but were not yet followed up.

In addition, a project-scale evaluation was completed to identify additional prospective spodumene pegmatite zones, which was expanded further to evaluate the Cancet project for potential gold and copper mineralisation, following recent discoveries by Midland Exploration Inc. (TSX.V: MD) at the Mythrill project, which is located along strike of the Cancet project (*refer to Midland Exploration Inc.'s TSX announcement dated 16 May 2019*).

The Company also completed a detailed remote sensing spectral survey over the Cancet project, initially focused on the spodumene bearing pegmatite potential of the project, which was later expanded to identify gold and copper targets.

It is the intention of the Company to follow up both the spodumene pegmatite targets that have been identified as well as the gold and copper targets that have been generated through the expansion of the remote sensing spectral survey.

The Company continues to evaluate a number of other acquisition opportunities outside of North America, including potential acquisition of gold projects, copper projects and other advanced exploration assets.

During the June quarter, the Company appointed Dr Qingtao Zeng and Mr Noel O'Brien as Non-Executive Technical Directors. Dr Quinton Hills subsequently resigned from his position as Non-Executive Technical Director.

### REMOTE SENSING SPECTRAL SURVEY – CANCET LITHIUM PROJECT

#### Spodumene-bearing Pegmatite Potential

During the June quarter, the Company completed a detailed remote sensing study at its Cancet Lithium Project, in Quebec, Canada. The results were encouraging with multiple spodumene (lithium bearing mineral) anomalous targets identified as shown in Figure 1.

At the Cancet Prospect, the spodumene anomalism observed in the spectral data can be directly correlated to the spodumene-bearing pegmatite that has been drilled by MTC and has been defined by a current Exploration Target of 15-25Mt @ 1-2% Li<sub>2</sub>O + 100-250ppm Ta<sub>2</sub>O<sub>5</sub> (*refer to ASX Announcement dated 9 November 2017*).



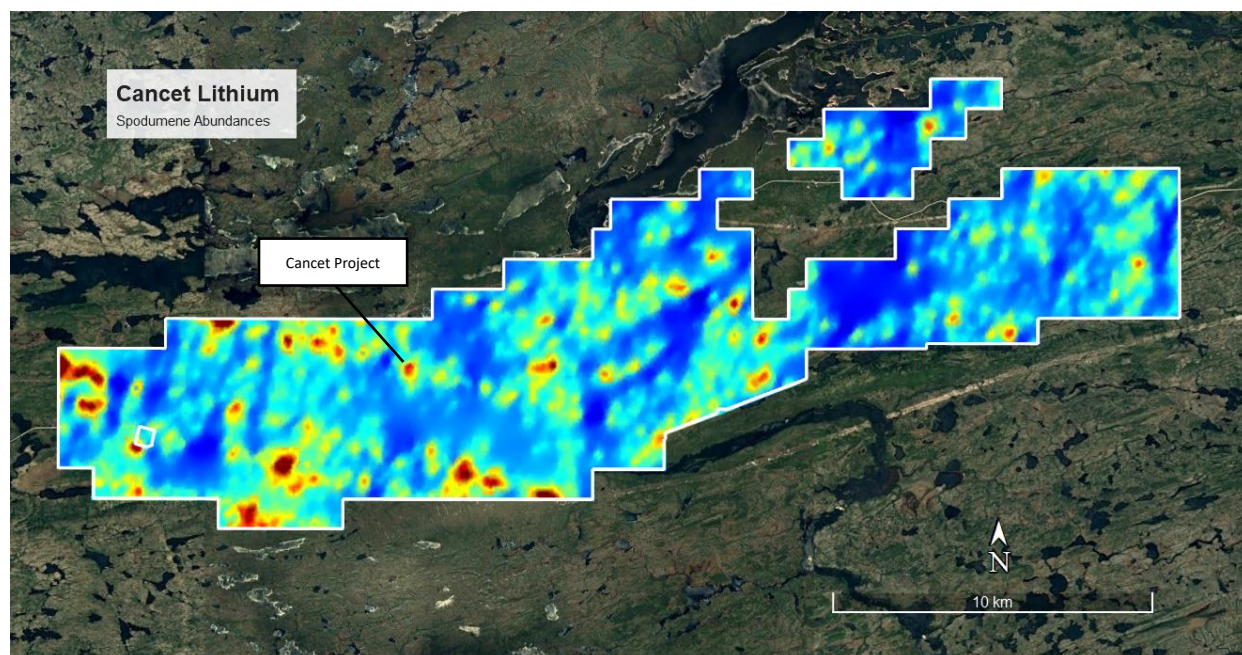
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**Board of Directors**  
Non-Executive Chairman - Russell Moran  
Non-Executive Director - Gino D'Anna  
Technical Director - Quinton Hills  
Company Secretary - Paul Fromson

Projects	
Cancet (Li)	100% owned
Adina (Li)	100% owned
Terre Des Montagnes (Li)	100% owned
Wells-Lacourciere (Li)	100% owned
Kapiwak (Li)	100% owned
Sirmac-Clapier (Li)	100% owned
Bay Lake (Co)	100% owned
Bay Lake North (Co)	100% owned
Rusty Lake (Co)	100% owned

The likely correlation between the spodumene anomalism from the Remote Sensing data and the spodumene-bearing pegmatites at the Cancet Prospect is interpreted to provide a reliable “signature” supporting the outcome of the Remote Spectral Analysis.

The objective of this remote sensing study was to delineate spodumene anomalies that may represent additional spodumene-bearing pegmatites, which host lithium mineralisation. The remote spectral imagery results provide for the delineated areas to be rapidly assessed in the field to determine if any spodumene-bearing pegmatites are present, and if so, to plan and implement exploration programs to define the extent and grade of the lithium mineralisation.



**Figure 1: Cancet Project Area with Spodumene Abundances Shown using a Pseudo-colour Spectrum. High Spodumene abundances are displayed by Red – Yellow**

Figure 1 (*above*) indicates that there are multiple spodumene anomalous targets within the project area – including many with a larger footprint than the Cancet Prospect.

Given the likely correlation between the spodumene anomalism from the Remote Sensing data and spodumene-bearing pegmatites at Cancet, the Company believes that significant potential exists to increase the mineral resources on the Cancet Project through increased exploration and further resource definition drilling.

The Cancet Project Area, rich with newly identified spodumene anomalous targets, is the Company’s highest priority property, and the Company plans to deploy an on-ground geological team as soon as weather permits to geologically map and sample each target systematically ahead of an exploration drill program if justified.

Various techniques will be considered for the next steps of exploration along trend, including trenching, soil surveys, ground mag surveys and till sampling geochemical surveys.

### Gold and Copper Potential

On 16 May 2019, Midland Exploration Inc. announced the discovery of the Mythrill project, a high-grade copper-gold-molybdenum-silver mineralised zone with over 2 km strike length on surface (E-W), open in both directions. The local geology of this area consists of a volcano-sedimentary belt striking ENE, present within a tonalite, quartz monzodiorite and granite intrusive domain. Quartz-feldspar porphyry dykes are also present within the tonalite and granodiorite intrusions.

The volcano-sedimentary belt consists of a horizon of amphibolitized basalt interlayered with ultramafic rocks, banded iron formations and wackes. Sulphides present include pyrite, pyrrhotite, arsenopyrite and chalcopyrite. These have distinct longwave infrared (LWIR) spectral signatures which are mappable by satellite.



A remote sensing spectral survey completed by the Company which was expanded to include gold and copper potential modelled the signature and response produced by the nearby Mythril project, with a view to evaluate whether the same spectral signature and response could be duplicated at the Cancet project.

At the Mythril project, a thermal response identified as chalcopyrite correlates with mineralised outcrops and boulders. This response is duplicated at Cancet, which is located approximately 50km to the southwest in a similar geological setting.

This response suggests that the Cancet project has the potential to host copper mineralisation.

Electrical conductivity estimates made from satellite synthetic aperture radar (SAR) confirm the Mythril project outcrops and boulders as anomalously conductive. A similar response is also observed when this methodology is applied to the Cancet project.

Minerals associated with gold mineralisation typically have high dielectric constants. A conductivity survey completed at the Cancet project suggests that the conductivities associated with chalcopyrite and bornite (where the dielectric constant is greater than 81) provide a similar response and signature to those identified at the Mythril project, being a high-grade copper-gold-molybdenum-silver mineralised zone, thereby presenting attractive targets for follow up.

The outcome of the SAR has confirmed that the Cancet project has the potential to host gold mineralisation.

As part of the ongoing exploration work to be undertaken at the Cancet project, the Company will now expand its focus to include gold and copper potential, similar to that which has been identified at the Mythril project, owned by Midland Exploration Inc.

## UPDATE ON CANADIAN TAX REFUNDS AND TIMING

During the June quarter, the Company completed the audit process with Revenue Quebec (RQ) in relation to the Mineral Exploration Tax Refunds.

The Company is now awaiting receipt of the funds and is expecting to receive approximately A\$1.9 million in refunds. The Directors see no reason why the refunds will not be paid.

## CORPORATE

### New Project Opportunities

The Board is currently assessing and evaluating new project acquisition opportunities in the exploration and development sector, both within North America and globally, as well as across the commodity spectrum. We look forward to updating shareholders on the progress in due course.

It is important to acknowledge that the Company has a very tight share holder register with no debt and we are advantaged by a significant sum of pending Quebec Government cash refunds. The Board is currently evaluating a number of greenfield and brownfield opportunities.

### Technical Director Appointments

During the June quarter, the Company announced the appointment of Dr Qingtao Zeng and Mr Noel O'Brien as Non-Executive Directors (Technical). Both individuals have deep lithium markets experience and their appointments are aimed at bolstering the Company's battery minerals experience.

Dr Zeng is an experienced geologist with a PhD (Geology) from the University of Western Australia. He has linked several Australian companies with Chinese counterparties and has negotiated lithium offtake agreements between several Western Australian spodumene concentrate producers and Chinese lithium carbonate and lithium hydroxide chemical manufacturers. He is a Director of Zinciferous Limited, which has interests in the Tianyuan lithium carbonate facility in China.

Mr O'Brien is a metallurgist and lithium processing expert, who has advised Alliance Mineral Assets (Bald Hill Mine, WA) (ASX: A40), Kidman Resources (Mt Holland Mine) (ASX: KDR), Galaxy Resources (Mt Caitlin Mine) (ASX: GXY) and Zinciferous Limited on its technical due diligence of the Tianyuan lithium carbonate facility in China. He has a deep understanding of the lithium market, processing expertise in smelting, gravity separation, flotation, leaching and solvent extraction.

Subsequent to the appointments of Dr Zeng and Mr O'Brien, Dr Quinton Hills resigned from his position as a Technical Director of the Company.





## Cobalt Projects, Ontario – Update

Given the prolonged softening in the cobalt market and the difficult geological environment in the cobalt region of Ontario, Canada, the Company has decided to no longer invest funds in exploration at the Bay Lake Cobalt Project and the Rusty Lake Cobalt Project.

In addition, the Company has terminated its agreement with Tri Origin Exploration Ltd in relation to the Bay Lake North Cobalt Project.

## Other

The Company has previously reported (*refer to the June 2018 Quarterly Report lodged 27 July 2018*) that it has received notification of a civil action (“Claim”) lodged in the courts in British Columbia regarding certain claims at Cancet, located in Quebec.

It has now been more than a year since notification of that Claim and the Company has not received any further correspondence nor has any action been taken by the persons that lodged the Claim.

The Company reiterates its position that the Claim is considered meritless, verily denied and will be vigorously defended by the Company, if necessary. The Company does not intend to report further on this matter given the above explanation.

## ENDS

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## Caution Regarding Forward-Looking Information

This document contains forward-looking statements concerning MetalsTech. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of MetalsTech as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

## Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Dr. Qingtao Zeng Ph.D (Geology). Dr Zeng is the technical director of MetalsTech Limited and is a member of the Australasian Institute of Mining and Metallurgy. Dr. Zeng 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'. Dr. Zeng consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## ASX Listing Rules Compliance

In preparing this announcement dated 31 July 2019, the Company has relied on the announcements previously made by the Company and disclosed below. The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement dated 31 July 2019.

### Cancel Lithium Project

Pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the announcement dated 9 May 2017, 30 June 2017, 18 July 2017, 30 August 2017, 20 October 2017, 14 November 2017, 19 December 2017, 8 August 2018, 16 August 2018, 28 August 2018 and 8 October 2018.





# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	This announcement references results from a remote sensing study of the Cancet Project tenure. The data was obtained from Aster satellite imagery downloaded from the United States Geological Survey website.
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	Not Applicable.
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Not Applicable.
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Not Applicable.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance</li> </ul>	Not Applicable.





	<ul style="list-style-type: none"> <li>results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Not Applicable.
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Not Applicable.
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p>The remote sensing data discussed in this announcement has an accuracy of 90m in the X and Y axes (horizontal plane).</p> <p>This data only relates to the immediate surface of the project area and there is limited signal from subsurface extensions of spodumene thanks to the emissivity property of minerals. These data are only useful for mineral exploration purposes, not Mineral Resource estimation. The grid system used is UTM Zone 18U (spheroid WGS84): Topographic control is interpreted to be of sufficient quality and adequacy to be used for further mineral exploration.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>The remote sensing data discussed in this announcement has a resolution of 90m x 90m in northing and easting.</p> <p>This data only relates to the immediate surface of the project area and there is limited signal from subsurface extensions of spodumene thanks to the emissivity property of minerals. This data is only useful for mineral exploration purposes, not Mineral Resource estimation.</p> <p>Electromagnetic spectral data from longwave infrared imagery have been combined in order to generate a surficial spodumene abundance map.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	The orientation of the remote sensing data is considered unbiased as it is collected on a symmetrical grid.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	Not applicable.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	This data was obtained by external parties that have no connection to MTC.





## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>MetalsTech owns 100% of the Cancet Lithium Project, subject to a royalty.</p> <p>There are no other material issues affecting the tenements.</p> <p>All tenements are in good standing and have been legally validated by a Quebec lawyer specialising in the field.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>No modern exploration for lithium has been conducted outside of the drilling and sampling done by MTC.</p> <p>Government mapping records multiple lithium bearing pegmatites within the project areas with only regional data available beyond this.</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The mineralization encountered at the Cancet Project is typical of a Lithium-Cesium-Tantalum (LCT) type of pegmatite. The pegmatite body defined at the Cancet Prospect is oriented sub-parallel to the general strike of the host rocks. The host rocks are composed of Archean Lac Guyer greenstone rocks, which include mafic and ultramafic rocks interlayered with horizons of metasedimentary and felsic volcanic rocks.</p>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Not Applicable.
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>In order to produce a spodumene abundance map, Longwave Infrared spectral data (thermal infrared) was obtained from the Aster satellite. The data was downloaded from the United States Geological Survey website. Then an algorithm was applied to this data that was designed to recognise the spectral signature of spodumene.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not Applicable.
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a</li> </ul>	See diagrams (if any) attached to this report.







<i>plan view of drill hole collar locations and appropriate sectional views.</i>		
<i>Balanced reporting</i>	<ul style="list-style-type: none"><li>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.</li></ul>	Not Applicable.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"><li>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.</li></ul>	<p>Preliminary surface mapping of the main pegmatite exposures has been carried out, with further surface mapping to continue in the coming weeks.</p> <p>All meaningful and material exploration data has been reported.</p>
<i>Further work</i>	<ul style="list-style-type: none"><li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li><li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li></ul>	<p>Further drilling (Phase III) will be conducted to test step-out and depth extensions to the currently known mineralised pegmatites, and to infill some areas of the known body to increase the confidence in support of a planned resource estimate.</p> <p>Detailed geochemistry to determine trends of known mineralised zones and to delineate high grade trends within the mineralized pegmatite.</p> <p>Further detailed surface mapping to uncover possible strike extensions.</p> <p>Property-scale mapping and prospecting will also be completed in order to uncover any mineralized pegmatites in a parallel structure or much further along strike.</p>

