



ASX ANNOUNCEMENT

20 August 2024

Highly Fractionated Pegmatites Confirmed at Black Mountain through K-feldspar Testing

HIGHLIGHTS:

- Analysis of the Rb content in K-feldspar crystals collected from outcropping pegmatites at Black Mountain confirms the moderately to highly fractionated state of the outcropping lithium-caesium-tantalum (LCT) pegmatites
- The K-feldspar potassium to rubidium (K:Rb) ratios of less than 30 are concentrated in the southern group of pegmatites, confirming that they remain the most prospective for lithium mineralization and, accordingly, are now the primary targets for future drilling
- The results of this work have demonstrated to the Company that K-feldspar testing can quickly and cost-effectively distinguish fractionated LCT pegmatites prospective for lithium mineralisation from unmineralised pegmatites and, accordingly, will be used at Chariot's other projects in the U.S.A.

Chariot Corporation Limited ("**Chariot**" or the "**Company**") is pleased to announce that it's K-feldspar testing program conducted at its Black Mountain hard rock lithium project ("**Black Mountain**") has confirmed the moderately to highly fractionated state of the outcropping LCT pegmatites at the project.

Chariot has identified a fractionation trend within the property, with fractionation increasing towards the south and the presence of moderate-to-highly fractionated LCT pegmatites in the central and southern pegmatite clusters at Black Mountain ("**Southern Target Area**").

A pXRF (portable X-ray fluorescence) device was used on 218 potassium-feldspar ("**K-feldspar**") samples collected from the outcropping pegmatites at Black Mountain.

Many of these samples also displayed anomalous caesium (Cs) and tantalum (Ta) values, further supporting the existence of LCT pegmatites in the area.

The Company will expand its drilling plans and drill test the Southern Target Area.

Chariot engaged Environmental Resources Management (ERM) to assist with an orientation sampling program at the Black Mountain project to:



- 1) determine fractionation states of pegmatites by sampling the K-feldspar minerals;
- 2) identify any fractionation trends (based on K/Rb ratios), in order to define and rank zones for further drill testing; and
- 3) test for LCT-pegmatite suite elements (Cs, Rb, Ta, and Sn), as further indication of LCT type pegmatites.

The results of this work demonstrate the effectiveness of using K-feldspar testing to distinguish prospective lithium mineralized LCT pegmatites from less fractionated pegmatites. K-feldspar testing has enabled the Company cost-effectively to sharpen the focus of its exploration activities at Black Mountain and will also be used to focus exploration at the Company's other projects. K-feldspar sampling is currently being conducted at the Copper Mountain and South Pass projects in Wyoming U.S.A.

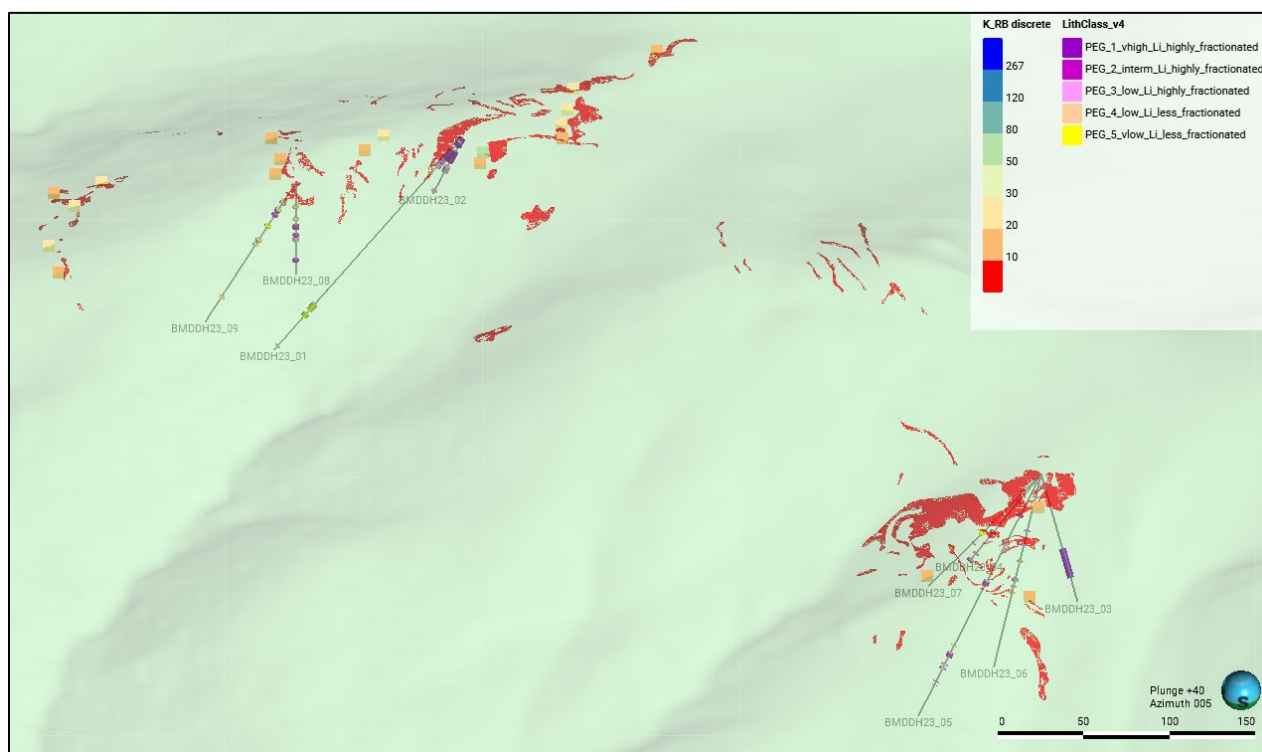


Figure 1: Black Mountain Leapfrog model showing the mapped pegmatites over the DEM, downhole pegmatite intersections and outcrop K/Rb fractionation data. Oblique view looking northeast.

Fractionation State of the Pegmatites

ERM's experience and global dataset of K-feldspar K/Rb fractionation data indicates that pegmatites with a K/Rb value of less than 30, have the highest potential to host lithium mineralization (see also



Chariot's ASX announcement dated 19 June 2024¹). It was determined that the K-feldspar fractionation data from the Black Mountain pegmatites (see Table 1) are consistent with moderately to highly fractionated pegmatites with significant potential for LCT mineralization.

The pXRF analyses of K-feldspar (see Table 1) show elevated content of LCT-pegmatite suite elements (Cs, Rb, Ta, and Sn) and moderate to high fractionation states.

	Min	Max	Average
Cs	<LOD	3438	1242
Rb	1220	11782	6701
Ta	32	148	84
Nb	<LOD	<LOD	<LOD
Sn	0	97	1
K/Rb	11	118	24

Table 1 Summary results of pXRF data from K-feldspar from the Southern Target Area

	Min	Max	Average
Cs	<LOD	3438	844
Rb	863	12298	5060
Ta	32	425	85
Nb	<LOD	78	0.5
Sn	0	97	1
K/Rb	11	139	47

Table 2 Summary results of pXRF data from K-feldspar from the Northern Area

The Black Mountain pegmatites located in the project's Southern Target Area exhibited K/Rb ratios averaging 24 and are associated with high-grade lithium mineralization encountered at surface and in drill holes. This drill data was provided by the Company in its ASX announcement dated 3 May 2024². The data indicates that the sampled pegmatites are all LCT-type.

¹ Chariot Corporation Ltd ASX announcement dated 19 June 2024 - [Wyoming-Summer-Exploration-Programs.pdf \(chariotcorporation.com\)](#)

² Chariot Corporation Ltd ASX announcement dated 3 May 2024 - [Black-Mountain-Drilling-Results.pdf \(chariotcorporation.com\)](#)

For personal use only



Fractionation Trends

Figure 2 illustrates that a significant portion of our samples fall within the high to very highly fractionated fields along the K vs K/Rb fractionation trend for K-feldspar.

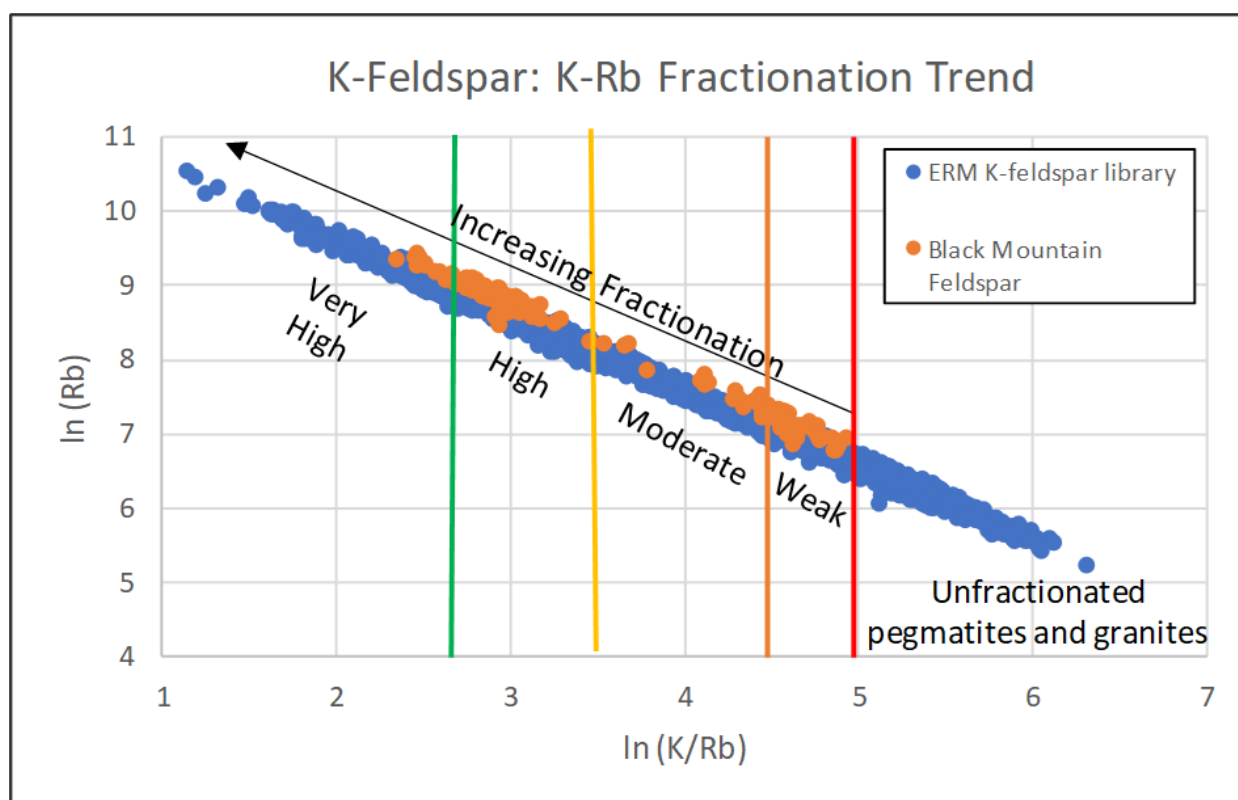


Figure 2: K/Rb fractionation trend of pXRF analyses (Provided by ERM)

The distribution of K/Rb values indicates that the most highly fractionated pegmatites occur in the areas of known lithium mineralisation. The northern group of east-west trending pegmatites are more weakly fractionated and this indicates they are less prospective for lithium mineralization.

The data show a general increase in fractionation to the south, but more data would be needed to confirm this trend. Samples from the pegmatites within the southern areas predominantly exhibit low K/Rb ratios, as expected from lithium mineralized pegmatites.

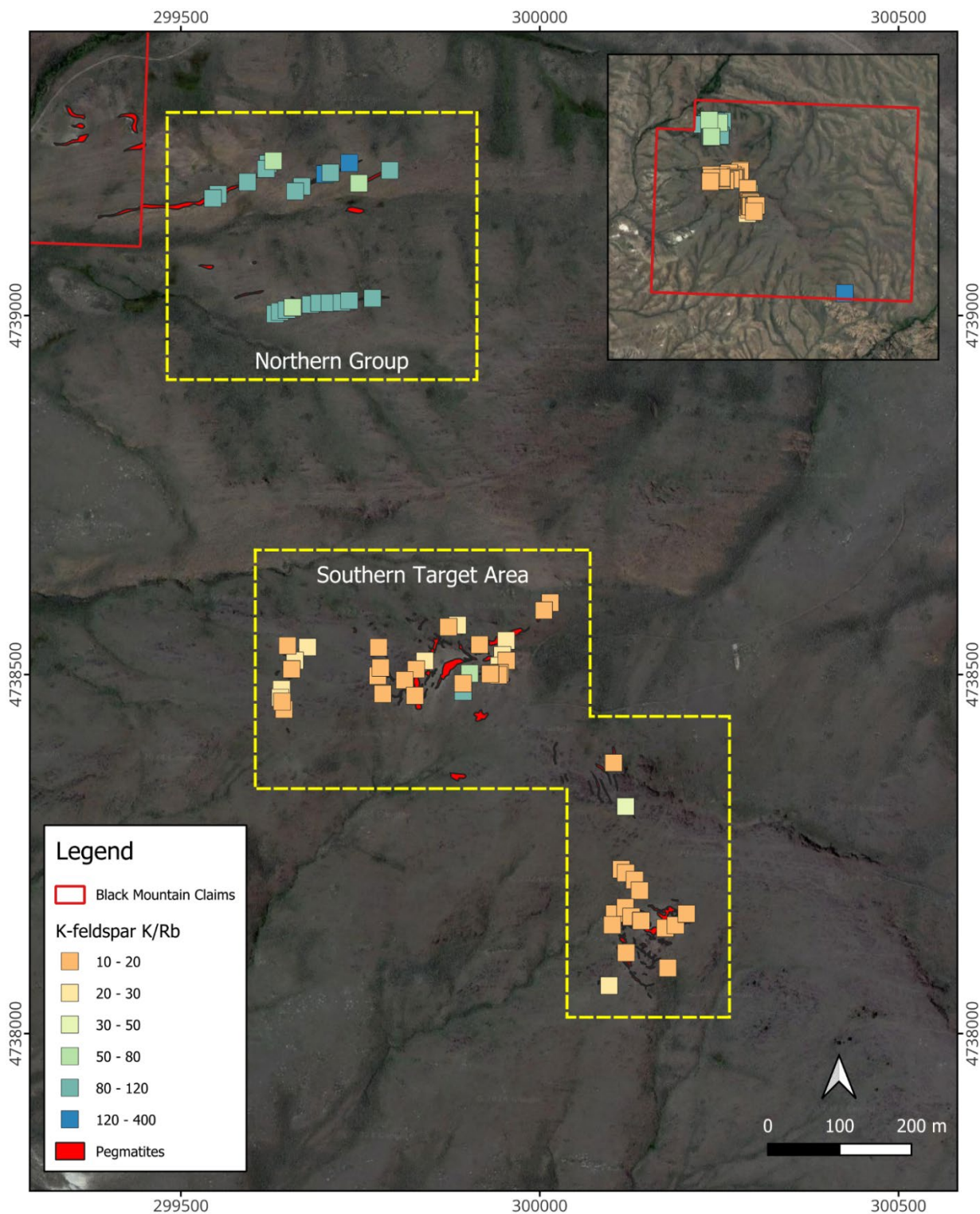


Figure 3: Black Mountain K-feldspar pXRF K/Rb Ratios showing the less fractionated northern group of pegmatites and more fractionated, and prospective to host lithium mineralization, Southern Target Area



The K-feldspar testing has confirmed that the LCT pegmatites in the north are not considered sufficiently fractionated to host significant lithium mineralisation and the focus of the exploration going forward will be the Southern Target area.

K-feldspar Testing Procedure

In July 2024, Chariot's geologists completed the analysis using a pXRF (portable X-ray fluorescence) device on 218 potassium-feldspar/ K-feldspar samples collected from pegmatites exposed at surface at the Company's flagship Black Mountain project.

The sampling of K-feldspar to determine the level of fractionation in pegmatites based on the substitution of K by Rb is a well-established technique used in assessing the prospectivity of LCT pegmatites to host lithium mineralisation.

Chariot used a SciAps X-505 pXRF analyser to test K-feldspar.

The data is consistent with ERM's global library of K-feldspar K/Rb fractionation results, which indicates that pegmatites globally with a K/Rb value of <30 have the highest potential to host lithium mineralization.

Authorised on behalf of the Board of Directors.

Shanthar Pathmanathan
Managing Director
Chariot Corporation Ltd



Competent Persons Statement

The technical information in the document that relates to the Exploration Results is based on information compiled and conclusions derived by Mr. Michael Cronwright, who is a geologist with 24 years' experience in exploration, is a fellow of The Geological Society of South Africa (GSSA) and Pr. Sci. Nat. (Geological Sciences) registered with the South African Council for Natural Professions (SACNASP). Mr. Cronwright is a Principal Consultant with ERM Ltd (UK) (an independent consulting company and previously CSA Global). Mr. Cronwright has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Cronwright consents to the inclusion in this report of matters based on his information in the form and context in which they appear.

Important Notice

Statements in this announcement are made only as of the date of this announcement unless otherwise stated and the information in this announcement remains subject to change without notice.

To the maximum extent permitted by law, neither Chariot nor any of its affiliates, related bodies corporate, their respective officers, directors, employees, advisors and agents or any other person accepts any liability as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this announcement or any omission from this announcement or of any other written or oral information or opinions provided now or in the future to any person.

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and projected outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved.



About Chariot

Chariot Corporation Limited is a mineral exploration company focused on discovering and developing high-grade and near surface lithium opportunities in the United States. Chariot has twelve (12) lithium projects, including two core projects (the “**Core Projects**”) and a number of exploration pipeline projects which Chariot majority owns and operates.

The Core Projects include Chariot’s flagship Black Mountain Project (which is prospective for hard rock lithium) in Wyoming, USA and the Resurgent Project (which is prospective for claystone lithium) in Nevada and Oregon, USA. Initial survey results from the Core Projects indicate high-grade lithium mineralisation at surface.

Chariot holds an interest in six exploration pipeline projects located in Wyoming, USA, including, the Copper Mountain Project, the South Pass Project and four other hard rock lithium projects.

Chariot holds an interest in the Lida and Amargosa projects in Nevada, USA which are prospective for claystone hosted lithium.

Chariot holds an interest in a hard rock lithium project in Zimbabwe which is prospective for spodumene bearing pegmatites and an early-stage hard rock lithium exploration project in Western Australia.

Appendix: JORC Table 1

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> 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. 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 (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. 	<ul style="list-style-type: none"> Rock sampling of pegmatites at the Black Mountain project was performed to gather samples of K-feldspar (and where possible muscovite) found in outcropping pegmatites with the purpose of determining K/Rb ratios within the samples. The samples were taken from outcrop based on availability. Results presented in this document relate to readings obtained with hand-held portable X-ray fluorescence spectrometer (pXRF). Readings were taken from potassium feldspar (K-feldspar) and where possible muscovite crystals within the rock samples. The coarse-grained, heterogeneous nature of pegmatite bodies makes representative sampling on a small scale impractical. The objectives of the current sampling program were to gain qualitative insights of the degree of pegmatite fractionation as a proxy of the potential of the sampled pegmatites to host lithium mineralization. Mineralization was not determined using the pXRF measurements. These were taken to gain an indication of potential lithium fertility to guide future exploration. The pXRF instrument used for this work does not produce element determinations equal to a commercial assay lab, but the accuracy is sufficient for the purpose of determining approximate elemental ratios for the purposes described above.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Not Applicable

personal use only

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<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"> Not Applicable Not Applicable Not Applicable
<i>Logging</i>	<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"> Descriptions of the rock chip samples documenting the nature of the outcrop, observed mineralogy, alteration etc were recorded. The results of this sampling will not be used for Mineral Resource estimation purposes but serves to guide Chariot Corporation's ongoing exploration programme. Not Applicable
<i>Sub-sampling techniques and sample preparation</i>	<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 whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

Criteria	JORC Code explanation	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> No assay results are being reported. The elemental abundance estimates were made using a pXRF and readings taken on a small area on the surface of individual crystals, not on a homogenized whole rock sample. They results are thus not representative of the overall composition of each rock sample. The instrument is calibrated according to manufacture specifications. Note results from a handheld pXRF are not as accurate or reliable as laboratory test results but the results are considered suitably reliable for the purposes described above. Chariot used a SciAps X-505 pXRF analyser to test K-feldspar and where possible muscovite crystals.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Not Applicable Not Applicable All data related to this sampling program has been stored on a Company database The data has not been adjusted
<i>Location of data points</i>	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Sample location and elevations are determined from the handheld Garmin GPS and are suitable for the reporting of exploration results (approximately 2.5m horizontal and 5m vertical). Elevations were checked against the available USGS DTM with 3m resolution. All coordinates are reported in UTM NAD83 Zone 13N.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation 	<ul style="list-style-type: none"> This sampling was not done on a regular grid and rock samples were taken where pegmatite is exposed in outcrop and suitable sample material could be broken off by hammer. Not Applicable Not Applicable

Criteria	JORC Code explanation	Commentary
	<p>procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> Whether sample compositing has been applied. 	
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> These samples are selective by nature as they targeted K-feldspar bearing pegmatite material in order to obtain K:Rb ratios of K-feldspar crystals, Where possible samples of muscovite bearing pegmatite was also collected. This is a method commonly used to determine fractionation level and a proxy to potentially host Li mineralization potential and used to inform the ongoing exploration programme. Not Applicable
<i>Sample security</i>	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were collected, labelled and bagged in the field by Chariot's geologists. Samples were not handed over to any third parties couriers or other service providers. Not Applicable.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> ERM Sustainable Mining Services (previously CSA Global) ("ERM"), have provided technical guidance for the development of the Black Mountain exploration plan and completed an independent review of the data, geological interpretations and exploration results pertaining to this announcement. ERM are satisfied these scientific and technical disclosures were appropriate to support the reporting of these Exploration Results.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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"> The Black Mountain project area comprises 352 unpatented lode mining claims covering an area of 2,686 ha in Natrona Country, Wyoming. Chariot currently holds a 93.9% interest in Wyoming Lithium Pty Ltd which holds a 100% interest in Panther Lithium Corporation ("PLC"). PLC holds 100% interest in the Black Mountain Project. There are no known impediments to the company tenure nor related issues which affect our ability to conduct exploration.

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Black Mountain pegmatite deposit was first described by Love (1942). A single spodumene dyke striking ENE with a dip of 30° to 60° to SSE. The dyke is described as 250 feet (75 m) in strike length and up to 10 feet (3 m) in thickness. The dyke is obscured by alluvium on its south-western end and is folded and irregular. The pegmatite contains spodumene with coarse K-feldspar, white quartz, mica and tourmaline. At this time development consisted of two small prospecting pits. A number of other exploration pits thought to date back to this period have also been identified from satellite imagery but is possibly related to some undocumented exploration. A comprehensive description of pegmatite occurrences in Wyoming and Colorado was compiled by the USGS and is provided by Hanley et al. (1950). This study describes 114 pegmatite occurrences in these states with an emphasis on beryl bearing pegmatites as the main commodity of economic interest at that time. Other commodities considered in this study were beryllium, lithia (Li₂O), muscovite, columbium-tantalum, potash feldspar and rare earth pegmatites. Two types of lithium-bearing pegmatite are known in Colorado and Wyoming. In one variety, the lithia is predominantly in the mineral lepidolite, a lithium mica, and in the other it is in the minerals spodumene and amblygonite.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Black Mountain is a typical LCT-type Pegmatite dike swarm with coarse grained spodumene outcropping at surface. The Pegmatite dikes are hosted within Archean Greenstones and are assumed to be associated with Late-Archean to Lower Proterozoic dated between 2.6 Ga and 2.5 Ga. The LCT-type pegmatite dike swarm is located within the Granite Mountains of Central Wyoming, USA, comprising part of the Archean-Neoproterozoic supracrustal belt of North America.
<i>Drill hole Information</i>	<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"> eastings and northing of the drill hole collar 	<ul style="list-style-type: none"> Not Applicable Not Applicable

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ elevation or RL (Reduced Level – elevation above sea level in meters) 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. 	
<p><i>Data aggregation methods</i></p>	<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"> ● Not Applicable ● Not Applicable ● Not Applicable
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<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 should be a clear statement to this effect (e.g. ‘down hole length, true width not known’). 	<ul style="list-style-type: none"> ● Not Applicable ● Not Applicable ● Not Applicable

Criteria	JORC Code explanation	Commentary
<i>Diagrams</i>	<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"> Refer to the body of the announcement for the appropriate maps.
<i>Balanced reporting</i>	<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"> All exploration results applicable to the Black Mountain Project have been reported.
<i>Other substantive exploration data</i>	<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 relevant data is reported in the body of this announcement
<i>Further work</i>	<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"> The Company is planning to embark on a limited drill program to further test these pegmatites and determine their extent and geometry K-feldspar sampling to determine K:Rb ratios will also be done on the Company's other properties in order to inform and focus the future exploration programmes.

Section 3 (Estimation and Reporting of Mineral Resources) has been excluded as no Mineral Resources have been estimated for the Black Mountain Project to date.

personal use only