

20 February 2024

# Spodumene Confirmed at Ross Lake and MAC Lithium Project Update

## Key Points:

- Further work on mineralised samples from Ross Lake confirms that the dominant lithium bearing mineral in the pegmatites is spodumene.
- Spodumene confirmed in all five rock chip samples selected for analysis, with up to **37.3% spodumene** in sample D00179806.
- As expected, spodumene content correlates extremely well with Li<sub>2</sub>O grades.
- Further additional tenure staked at the MAC Project to lock up the remainder of available prospective ground. Official government certification expected within two weeks.

Trinex Minerals (ASX: **TX3**) (“Trinex” or “the Company”) is pleased to report that following further analysis of selected rock chip samples taken from Dyke 75 at the Ross Lake Project, spodumene has been confirmed as the dominant lithium bearing mineral in the pegmatites.

## Ross Lake Project

Five rock chip samples (listed in Table 1 with their locations shown in Figure 2) with elevated Li<sub>2</sub>O assay results from **1.07% to 3.31%** were selected for semi-quantitative X-Ray Diffraction (XRD) at SGS Laboratories in Lakefield, Ontario to confirm mineralogy of the samples and the presence of spodumene. The XRD results have confirmed that spodumene is the dominant lithium-bearing mineral in all five samples, with up to **37.3% spodumene** in sample D00179806. Spodumene percentage from XRD correlates strongly with Li<sub>2</sub>O assay grades as illustrated in Figure 3.

Other than spodumene, the pegmatite is dominated by quartz, albite (Na feldspar), microcline (K feldspar), with lesser muscovite and beryl. XRD cannot differentiate lithium-bearing mica from muscovite, but low levels of muscovite in the XRD results indicate it is not a significant source of lithium.

### Trinex Minerals’ Managing Director Will Dix said:

*“It is extremely pleasing to be able to confirm that the lithium mineral we are seeing at Ross Lake is spodumene. Even though we expected this result, it is reassuring to receive the hard data as confirmation. This indicates that should the scale of the mineralisation be significant, the main lithium bearing mineral at Ross Lake will be highly sought after by refiners and end users.*”

*“We are also very pleased that in a time of significant activity in staking new land for Lithium in the NWT, we have been able to secure this small but strategically important ground immediately to the south of our MAC Project. The area has been on our watchlist for some time due to its prospectivity, and having access to it from now enables us to adjust our Summer 2024 planned work program and follow the pegmatite fractionation vectors to thoroughly test this new area.”*

<sup>1</sup> ASX Announcement 8 January 2024 – High Grade Lithium Confirmed at Ross Lake

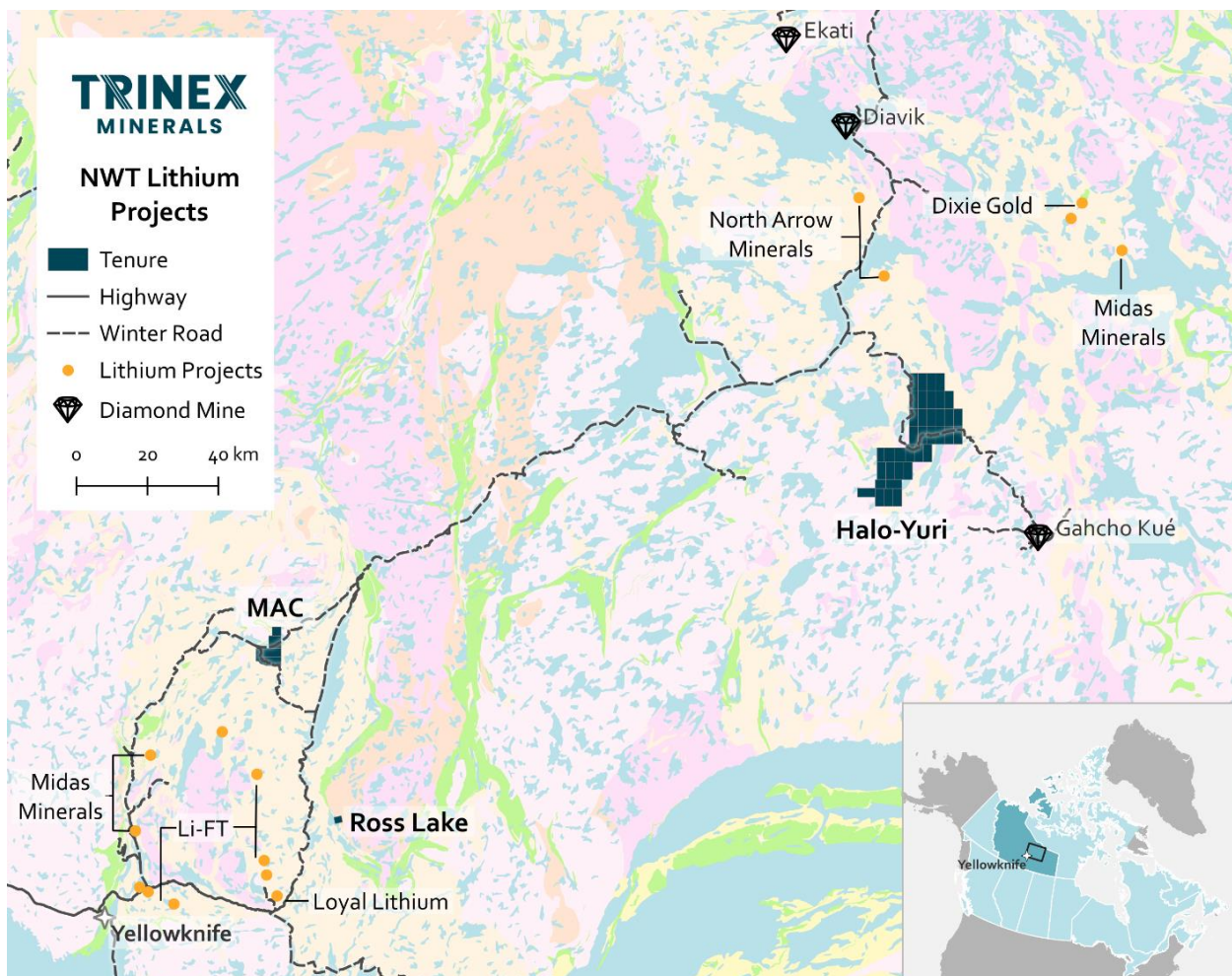


Figure 1: Canadian Projects, Northwest Territories, Canada.

Table 1: XRD mineralogy results with Li<sub>2</sub>O % grade from sodium fusion ICP-MS/AES

Sample ID	Li <sub>2</sub> O %	Spodumene %	Quartz %	Albite %	Microcline %	Muscovite %	Beryl %
D00179804	2.27	25.9	23.3	36.2	10	3.4	1.1
D00179805	1.07	9	29.5	46.4	13.3	1.7	-
D00179806	3.31	37.3	45.2	9.6	0.9	7	-
D00179902	1.13	13.7	23.6	45.7	12.1	4.7	0.3
D00179903	1.84	19.4	39.1	25.7	11.5	4.3	0.2

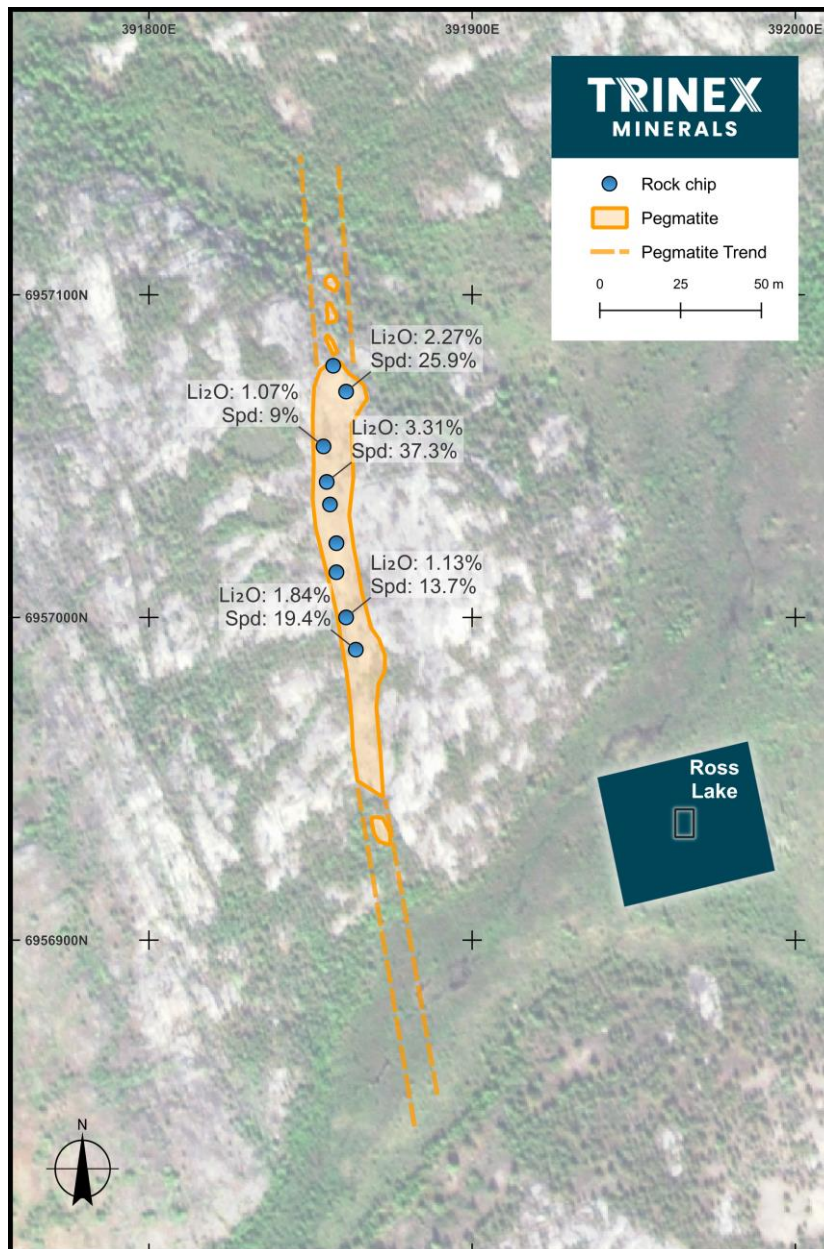


Figure 2: Ross Lake Lithium Project showing the location of the samples selected for XRD analysis and their spodumene content as a percentage.



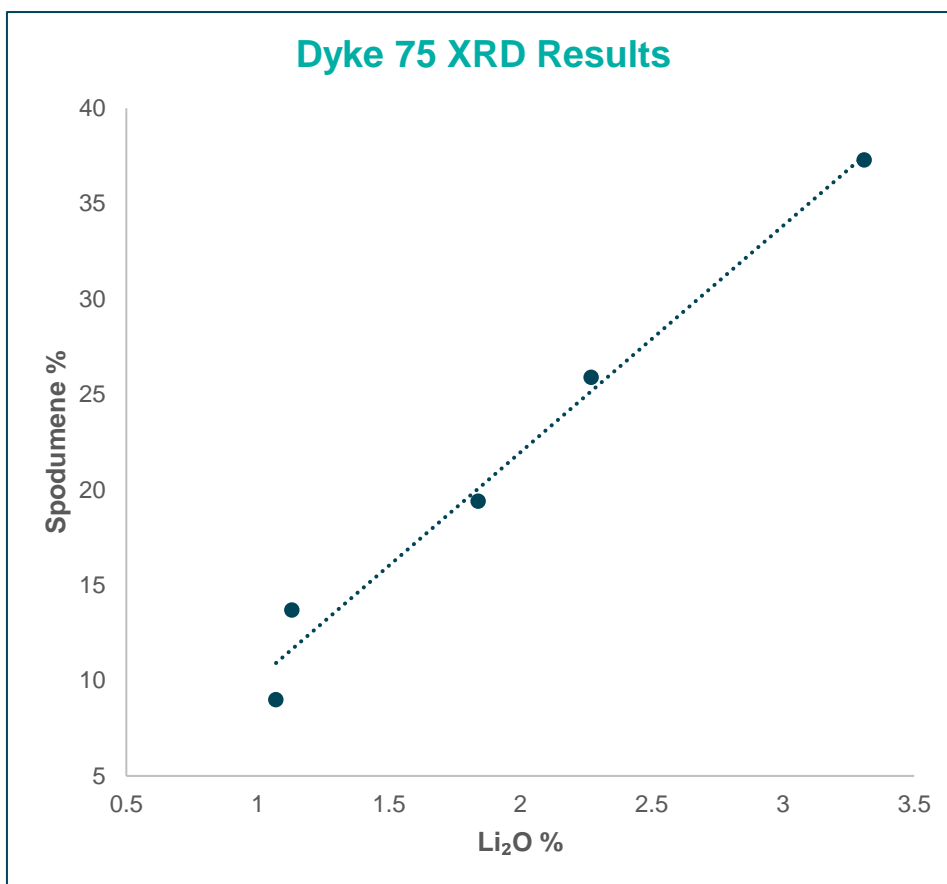


Figure 3: Ross Lake Lithium Project XRD spodumene results vs Li<sub>2</sub>O rock chip grades

## MAC Project

Following the receipt of rock chip assay results in early 2024, the Company recognised that the area immediately south of the MAC Project held considerable prospectivity for lithium. This lithium prospectivity observed by Trinex is best illustrated by analysing the K/Rb ratio across the project.

The K/Rb ratio is a valuable exploration tool as it indicates degree of fractionation of the pegmatite, with a decreasing ratio (increasing Rb vs K) showing increasing fractionation. Lithium/spodumene bearing pegmatites are typically in the most fractionated part of the system. The pegmatites at Ross Lake and southern area of MAC are also relatively enriched in rare elements (Be, Ta, Cs, Sn) further indicating increasing fractionation.

In the south of the project, coarse grained pegmatites contain beryl and have associated decreasing K/Rb ratio trends that vector to the south, indicating that the most prospective areas were held by a competitor. During December 2023 the ground became available and as soon as practicable Trinex was able to arrange for the additional ground to be staked on the Company's behalf.

The staked land gives Trinex strategic access to the balance of the remaining prospective ground in the area surrounding MAC. The tenure abuts an area of withdrawn land, where interests are protected by the Government of the Northwest Territories on behalf of the First Nations.

Figure 4 shows the new claim area containing numerous pegmatites interpreted from satellite imagery, the withdrawal area, and previous sampling with K/Rb ratios and trends. The additional area that will become part of the MAC Project is expected to be ratified by the NWT Government in the next 2-3 weeks.

Elsewhere, adjacent to the north of the MAC Project, Fortescue Canada has staked a significant holding for lithium exploration (approximately 110 square kilometres, Figure 5), further validating the prospectivity of the region.

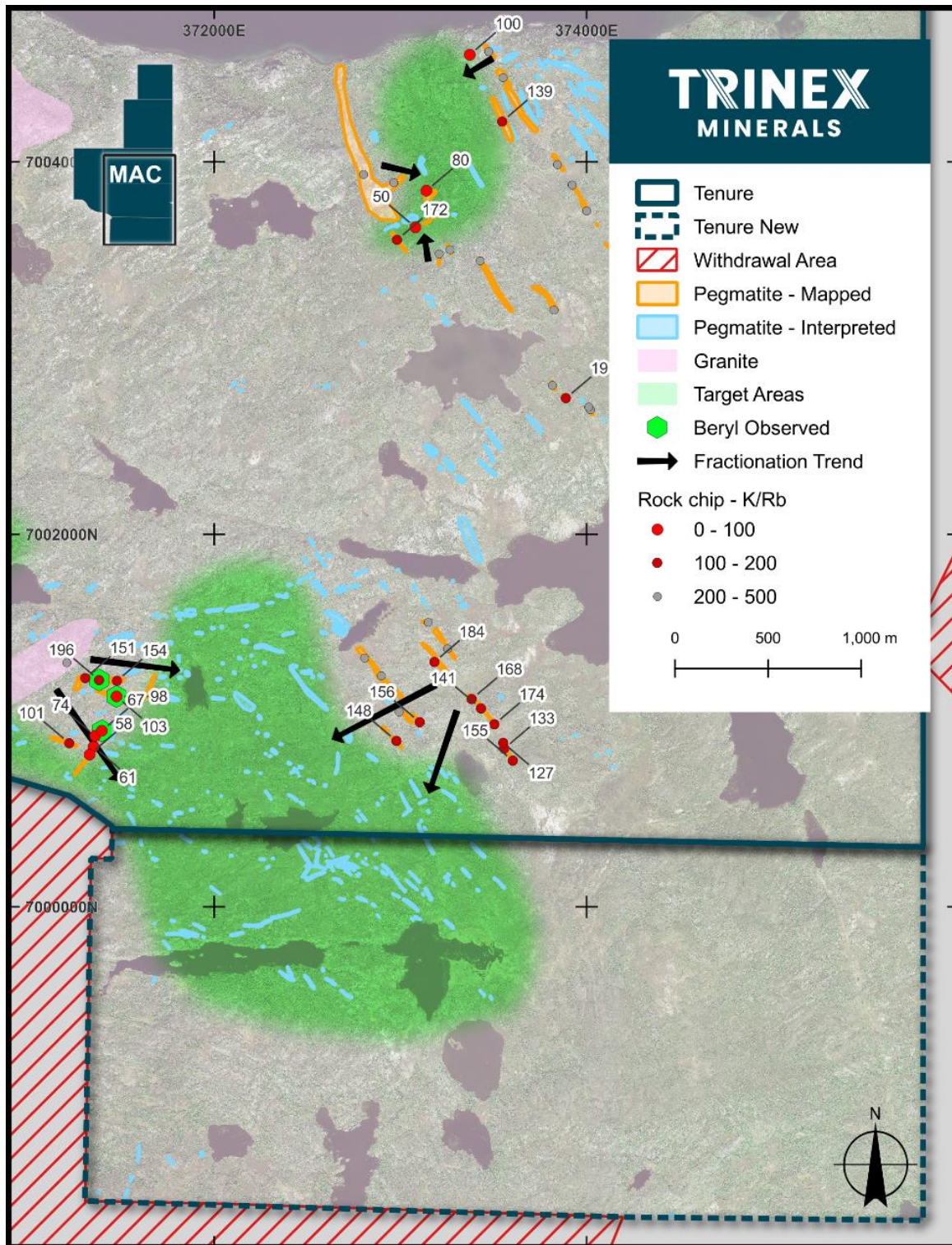


Figure 4: MAC Lithium Project with 2023 sample locations over pegmatite outcrops and tenure under application.

ABN 45 600 308 398

128 Churchill Ave, Subiaco WA 6008 | PO Box 1205 Osborne Park WA 6916

T +61 8 61660255 | E corporate@trinexminerals.com.au

www.trinexminerals.com.au

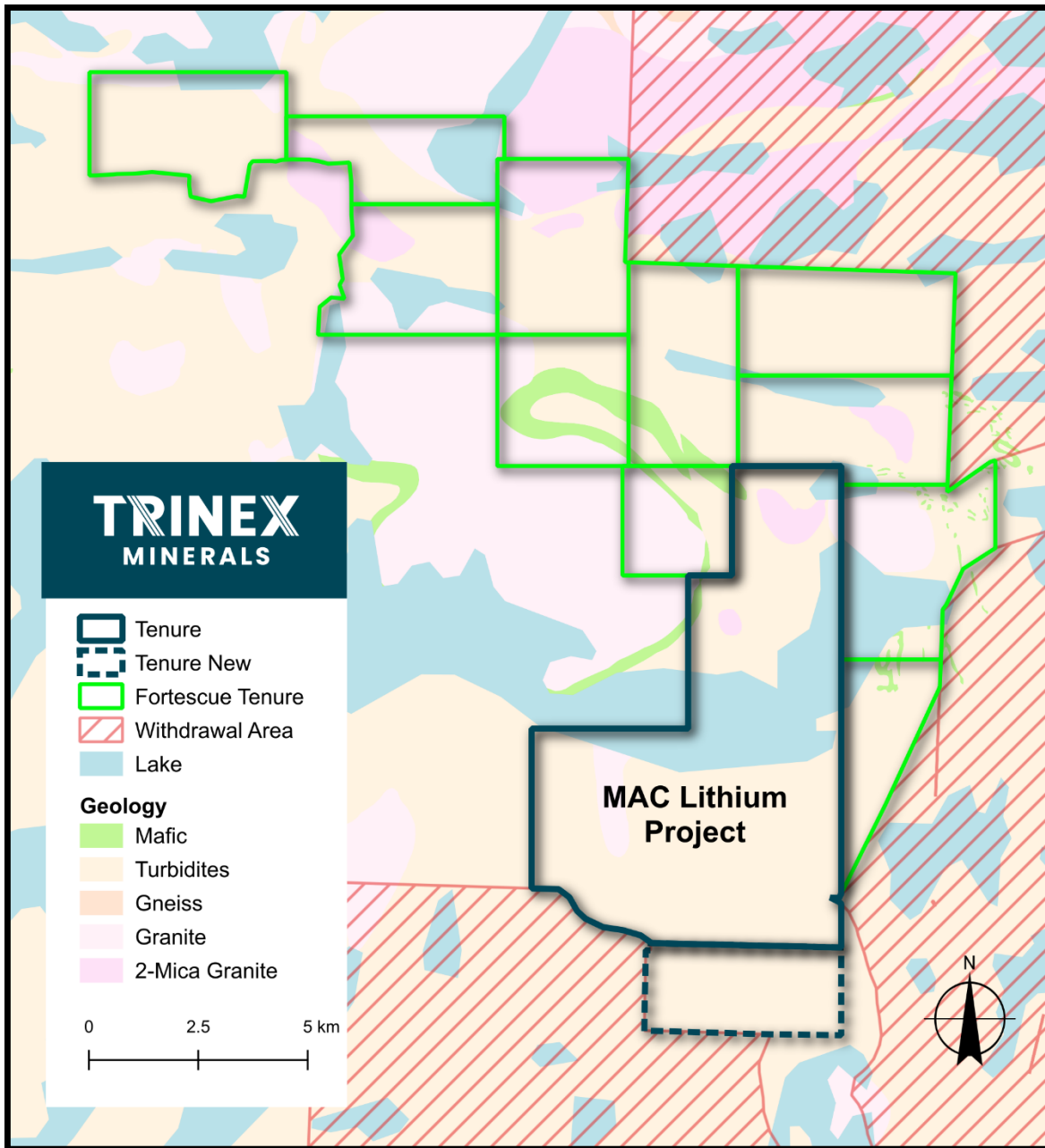


Figure 5: MAC Lithium Project with newly staked area to the south and new area recently staked by Fortescue Canada.



Release authorised by the Board of Directors of Trinex Minerals.

**For further information please contact:**

Will Dix, Managing Director

Trinex Minerals

Tel: +61 (0) 8 6166 0255

Email: [wdix@trinexminerals.com.au](mailto:wdix@trinexminerals.com.au)

**Broker & Media Enquiries:**

Fiona Marshall

White Noise Communications

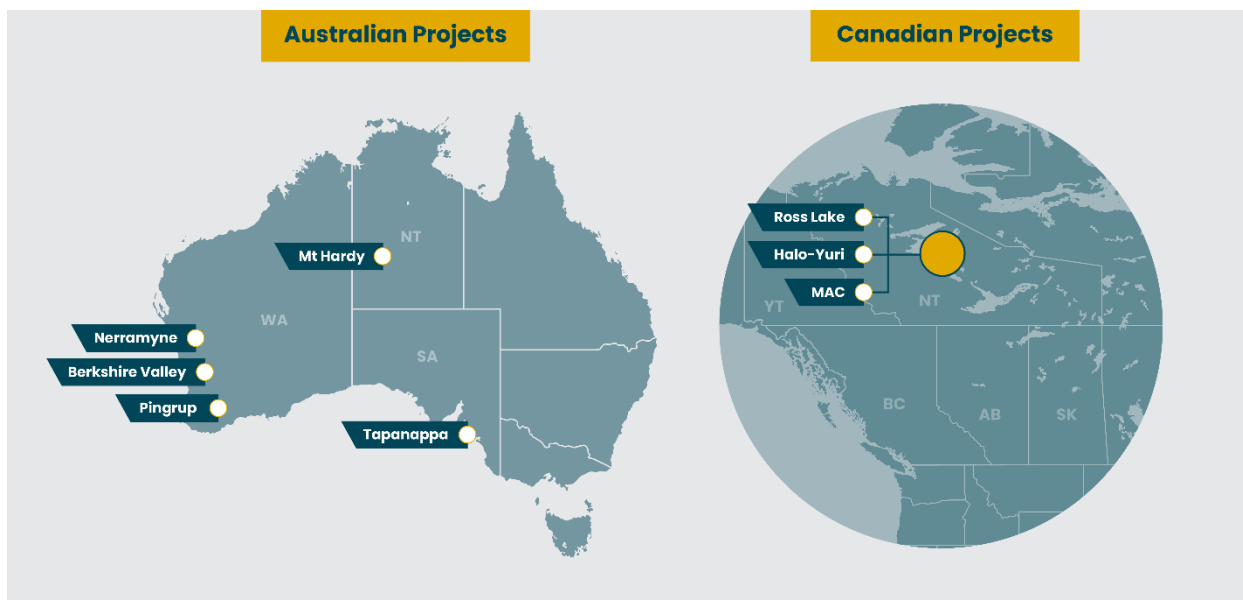
Tel: +61 (0) 400 512 109

Email: [fiona@whitenoisecomms.com](mailto:fiona@whitenoisecomms.com)

## About Trinex Minerals

Trinex Minerals (ASX: TX3) [formerly Todd River Resources (ASX: TRT)] is an Australian-based resources company exploring for critical minerals, which are essential for the future.

The Company holds several lithium focused projects in Canada; a base metals resource at its Mt Hardy Project in the Northern Territory; and several exciting Ni-Cu-PGE and base metals projects in Western Australia.



ABN 45 600 308 398

128 Churchill Ave, Subiaco WA 6008 | PO Box 1205 Osborne Park WA 6916

T +61 8 61660255 | E [corporate@trinexminerals.com.au](mailto:corporate@trinexminerals.com.au)

[www.trinexminerals.com.au](http://www.trinexminerals.com.au)

## Forward Looking Statements

This announcement includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same.

The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person, gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or results or otherwise.

## Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by William Dix, who is a full time employee of Trinex Minerals Limited and share and option holder in the Company. Mr Dix is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Dix has sufficient experience of relevance to the style of mineralisation and the types of deposits under consideration, and to the activities undertaken, 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 Dix consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original announcements.



## Appendix A JORC Tables

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

### JORC Table One – Sampling Techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p>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.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p>	<p>Rock chip samples were collected from outcrop and analysed for lithium and other elements using a sodium fusion method. Selected XRD analysis was completed on high-grade samples to confirm the presence of spodumene visually identified in the field. Samples were representative of pegmatite outcrop.</p>
Drilling techniques	<p>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).</p>	<p>No drilling has been completed on the projects</p>
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>No drilling has been completed on the projects</p>
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>Samples collected in the field are logged for mineralogy and form.</p>
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p>	<p>Representative rock chip samples were collected from relatively fresh pegmatite outcrop, with 1-2kg taken per sample.</p>

Criteria	JORC Code explanation	Commentary
	<p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>Samples were crushed and pulverised by SGS. No field duplicates were collected.</p>
Quality of assay data and laboratory tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<p>Samples were analysed by SGS in Vancouver using a sodium peroxide fusion with ICP MS and OES finish (GE_IMS91A50 &amp; GE_ICP91A50), which is a complete digestion method for refractory minerals encountered in LCT pegmatites.</p> <p>Two standards and two blanks were inserted every 50 samples.</p> <p>Selected high-grade Li<sub>2</sub>O samples were analysed by SGS in Lakefield using semi-quantitative X-Ray Diffraction (XRD) by Rietveld Refinement. XRD mineralogy results were reported as weight percent totalling to 100%.</p>
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<p>Li<sub>2</sub>O values were converted using oxide factor of 2.153.</p>
Locations of data points	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>Map figures and sample locations in the release are in NAD83 / UTM zone 12N (EPSG:26912).</p> <p>Accuracy of reported LCT pegmatite occurrence locations are measured using GPS technology and accurate to ± 5 m.</p>
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<p>No drilling has been completed and surface sampling is not sufficient for Mineral Resource or Ore Reserve purposes.</p> <p>No compositing has been applied.</p>
Orientation of data in relation	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the</p>	<p>Only surface rock chip samples were collected. No sample widths are reported. Where possible,</p>

Criteria	JORC Code explanation	Commentary
to geological structure	<p>extent to which this is known, considering the deposit type.</p> <p>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.</p>	the dip and strike of pegmatite dykes were recorded.
Sample security	The measures taken to ensure sample security.	Samples were bagged on site and sent to the laboratory via a 3 <sup>rd</sup> party transport company.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<p>No audits or reviews have been completed.</p> <p>Publicly available historical work has been reviewed by the Competent Person.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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> <p>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>	There are a number of claims that make up the Projects – all due diligence has been completed and the claims are all in good standing are not subject to any joint ventures
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p><b>Ross Lake:</b></p> <p>Government mapping is detailed in the following reports:</p> <p>Fortier, Y. O. (1947). Ross Lake Map-Area Descriptive Notes, Northwest Territories. <i>Geological Survey of Canada</i>, Paper 47-16.</p> <p>Hutchinson, R. W. (1955). Regional zonation of pegmatites near Ross Lake, District of Mackenzie, Northwest Territories. <i>Geological Survey of Canada</i>, Bulletin 34.</p> <p><b>MAC Claims:</b></p> <p>Government mapping is detailed in the following report:</p>



Criteria	JORC Code explanation	Commentary
		Jolliffe, A. W. (1944). Rare-element minerals in pegmatites, Yellowknife-Beaulieu area, Northwest Territories. <i>Geological Survey of Canada</i> , Paper 44-12.
Geology	Deposit type, geological setting and style of mineralisation.	<p>The projects are hosted in the Archean Slave Province. The pegmatites as described in the report are spatially associated with 2-mica granites and show classic regional zonation proximal to the granites. At Ross Lake, the pegmatites are hosted in felsic to mafic gneiss. At MAC the pegmatites are hosted in meta-turbidites.</p> <p>Mineralisation style sought is typical rare-element Li-Cs-Ta (LCT) pegmatite mineralisation that forms proximal to a cogenetic peraluminous fractionated granite.</p>
Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> <li>○ Easting and northing of the drill collar</li> <li>○ Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>○ Dip and azimuth of the hole</li> <li>○ Down hole length and interception depth</li> <li>○ Hole length</li> </ul>	No drilling has been completed on the projects.
Data aggregation methods	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No data aggregation methods have been used as each sample collected is a point sample
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	No drilling has been completed on the projects.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any	See Figures in the document for mapping locations.

Criteria	JORC Code explanation	Commentary
	significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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 to avoid misleading reporting of Exploration Results.	All rock chip sample results were reported in Appendix A.
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.	No substantial new information is available other than that reported above.
Further work	<p>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	Further mapping and sampling is planned with initial drilling planned for mid-2024.