Loyal Lithium

ASX LLI

ASX Announcement | 18 November 2024

Soil Assays Validate 3D Model and Reveal Two New Lithium Discovery Zones at the Trieste Lithium Project

Highlights

- **Anomalous lithium, caesium, and tantalum in soil assays validate 3D model resistivity trends and reveal two new lithium discovery zones at the Trieste Lithium Project.**
- **Mapped soil assays illustrate well-defined lithium accumulation zones down-ice of the 3D model resistivity trends (META 1, META 2, META 3), which contain known spodumene pegmatite dykes in the metasediment host zone.**
- **The lithium accumulation zones support the significant inferred lithium pegmatite extensions of META 1, META 2, and META 3, providing valuable insight to ensure subsequent cost-effective drilling programs.**
- **The two newly discovered lithium zones are situated to the south and east of the metasediment host zone, and down-ice from largely underexplored pegmatite outcrops.**
- **The anomalously high soil assays that define the new lithium discovery zones compare favourably to the lithium accumulation zones of META 1, META 2, and META 3.**
- **The 2024 field program has concluded, with upcoming rock chip assays being the final input for subsequent drilling programs, the first of which is planned for Q2 2025.**
- **With $6.0 million in funding, Loyal Lithium is strategically positioned to advance the Trieste Greenstone Belt into a leading lithium hub.**

Loyal Lithium Limited (ASX:LLI) (**Loyal Lithium**, **LLI**, or the **Company**) is pleased to announce that recent soil assays have validated the 3D model resistivity trends (META 1, META 2, META 3), confirming significant anomalies in lithium, caesium, and tantalum. These findings reveal two new lithium discovery zones at the Trieste Lithium Project and reinforce the inferred lithium pegmatite extensions of META 1, META 2, and META 3. The mapped soil assays illustrate well-defined lithium accumulation zones down-ice of the META 1, META 2, and META 3 which contain known spodumene pegmatite dykes in the metasediment host zone. These lithium accumulation zones provide valuable insights to ensure subsequent cost-effective drilling programs.

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Investor Centre

The two newly identified lithium discovery zones are situated to the south and east of the metasediment host zone, down-ice from largely underexplored pegmatite outcrops. The anomalously high soil assays that define these new discovery zones compare favourably to the lithium accumulation zones of META 1, META 2, and META 3. The 2024 field program has concluded, and the upcoming rock chip assays will serve as the final input for defining subsequent drilling programs, the first of which is planned for Q2 2025.

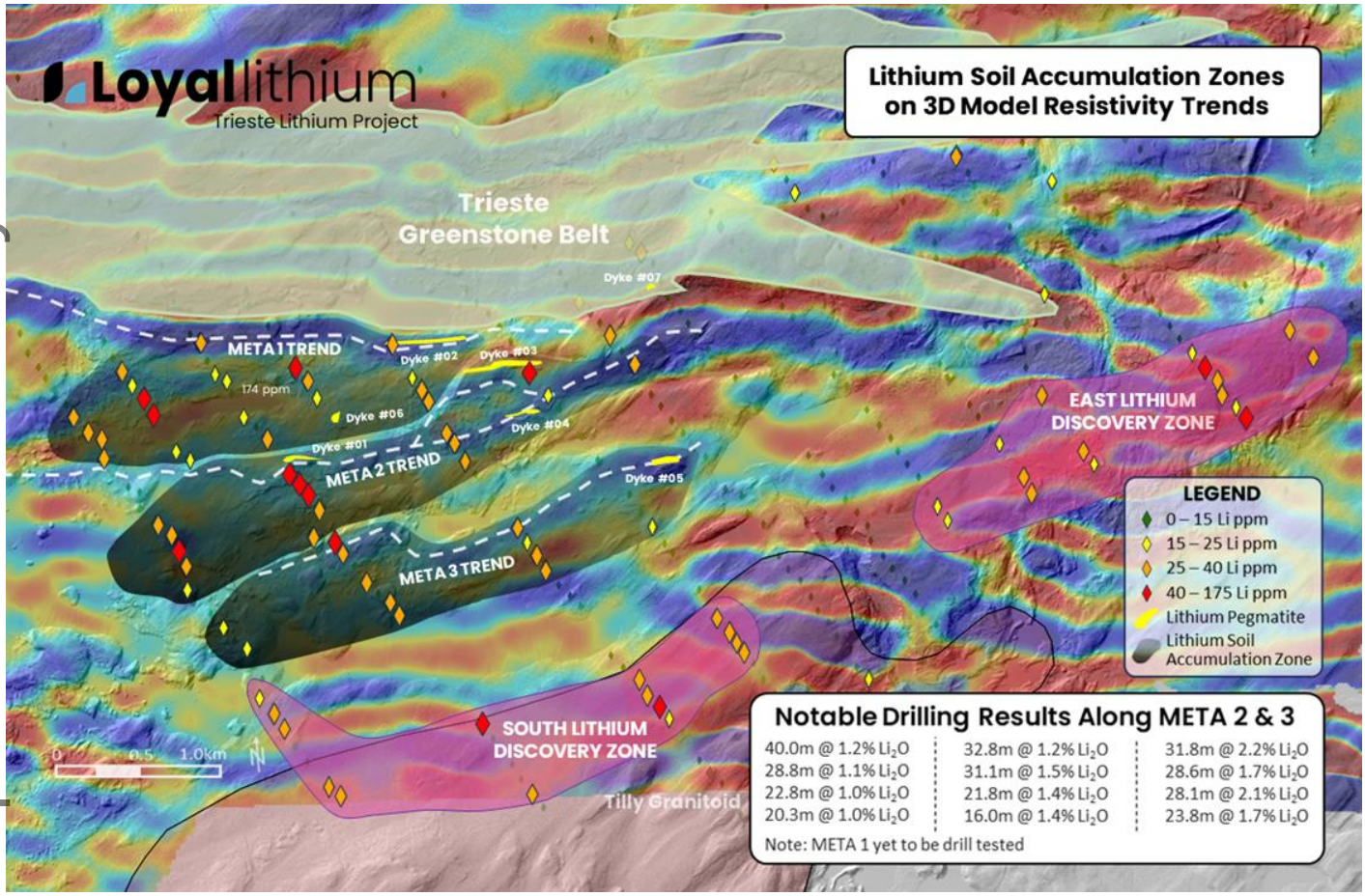


Figure 1: Trieste Lithium Project – Soil assays define Lithium Soil Accumulation Zones and two new Lithium Discovery Zones.

Loyal Lithium's Managing Director, Mr. Adam Ritchie, commented:

"We are thrilled to announce the successful completion of our recent soil program at the Trieste Lithium Project. The validation of our 3D model resistivity trends and the identification of two new lithium discovery zones highlight the dedication and expertise of our team at Loyal Lithium, in collaboration with Dahrouge Geological Consulting."

"Our innovative Mobile MTm geophysics program has provided unprecedented insights into our highly prospective trends. This, coupled with the validation from the soil program, which also contain impressive caesium and tantalum values, will refine and ensure cost-effective exploration moving forward."

Loyal Lithium collected 458 geochemical soil samples across the highly prospective metasediment host zone at the Trieste Lithium Project. The soil traverse lines were spaced between approximately 400m and 1,000m, with around 100m between samples along the traverse lines. These traverses are oriented in a northwest direction, perpendicular to the previous southwesterly glacial ice movement trend. The southwesterly glacial down-ice trend is evident in the mineralised spodumene boulder trails associated with several known lithium (spodumene) pegmatite dyke outcrops.

Lithium enrichment within the soil assays strongly correlates, down-ice, with the 3D model resistivity trends, which contain six of the seven known lithium (spodumene) pegmatite dykes. The distinct lithium soil accumulation zones demonstrate the potential for the concealment of additional lithium pegmatite dykes and the significant inferred extensions of known lithium pegmatite dykes within META 1, META 2, and META 3 as revealed by the 3D model.

META 1 Trend Validation - Lithium Soils Accumulation Zone

A discrete, continuous lithium soil accumulation zone spanning 2.7km has been mapped parallel to and south (down-ice) of the META 1 Trend. This trend contains the spodumene-bearing pegmatite Dyke #02. The northern boundary of this lithium soil accumulation zone is parallel and proximal to the unique META 1 greenstone-metasediment contact, indicating that lithium minerals are shedding from a large portion of the inferred META 1 structure. With peak lithium soil assays in the west, the META 1 lithium soil accumulation zone supports a significant westward inferred extension of the known 450m long outcropping lithium spodumene pegmatite Dyke #02. This extension was revealed by the innovative Mobile MTm geophysics program and resultant 3D model.

META 2 Trend Validation - Lithium Soils Accumulation Zone

A discrete, continuous lithium soil accumulation zone spanning 3.4km has been mapped parallel to and south (down-ice) of the META 2 Trend. This trend contains the spodumene-bearing pegmatites Dyke #01, Dyke #03, and Dyke #04. The northern boundary of this lithium soil accumulation zone runs parallel and close to the META 2 Trend, indicating that lithium minerals are shedding from a large portion of the inferred META 2 structure. With 1,000m of known outcropping spodumene-bearing pegmatites within the META 2 Trend and consistently high lithium soil assays, significant inferred extensions of these known dykes can be made between and to the east and west. These extensions were revealed by the innovative Mobile MTm geophysics program and resultant 3D model. The high lithium values observed in the west of this lithium accumulation zone are particularly encouraging for continuing to follow Dyke #01 westward with additional drilling activities.

META 3 Trend Validation - Lithium Soils Accumulation Zone

The META 3 trend also exhibits a lithium soil accumulation zone parallel to and south (down-ice), similar to the META 1 and META 2 trends. This lithium soil accumulation zone spans 3.2km in a southwesterly direction from Dyke #05. Within the western portion of the META 3 trend, several pegmatite dykes were identified during the 2023 field program. This area was revisited in 2024, revealing many new outcrops (rock chip assays pending) with adjacent soil values very high in lithium, caesium, tantalum, gallium, tin, tungsten, and beryllium. Combined, the results and observations to date infer significant extension between Dyke #05 and beyond the western outcropping pegmatite activity, as revealed by the innovative Mobile MTm geophysics program and the resultant 3D model.

The Two New Lithium Discovery Zones

Two new lithium discovery zones have been identified outside the primary metasediment host zone, where intensified exploration efforts have previously been focused. These two highly prospective lithium discovery zones, South and East, were identified by elevated lithium soil assays that compare favorably to the lithium accumulation zones of META 1, META 2, and META 3. The identification of these new zones demonstrates the effectiveness of the soil program and the highly prospective nature of the Trieste Lithium Project.

The South Lithium Discovery Zone is within the Tilly Formation and spans 2.9km, suggesting that the northeastern Tilly area is prospective for lithium. This is further supported by notable pegmatite activity mapped in the area during the 2023 Field Program, with anomalous rock chip geochemistry reported.

The East Lithium Discovery Zone is prominent and spans 2.7km, containing the second highest lithium soil assay of the program at 80ppm. This discovery zone was unexpected but aligns with the potential eastward extension of the META 2 and META 3 resistivity trends.

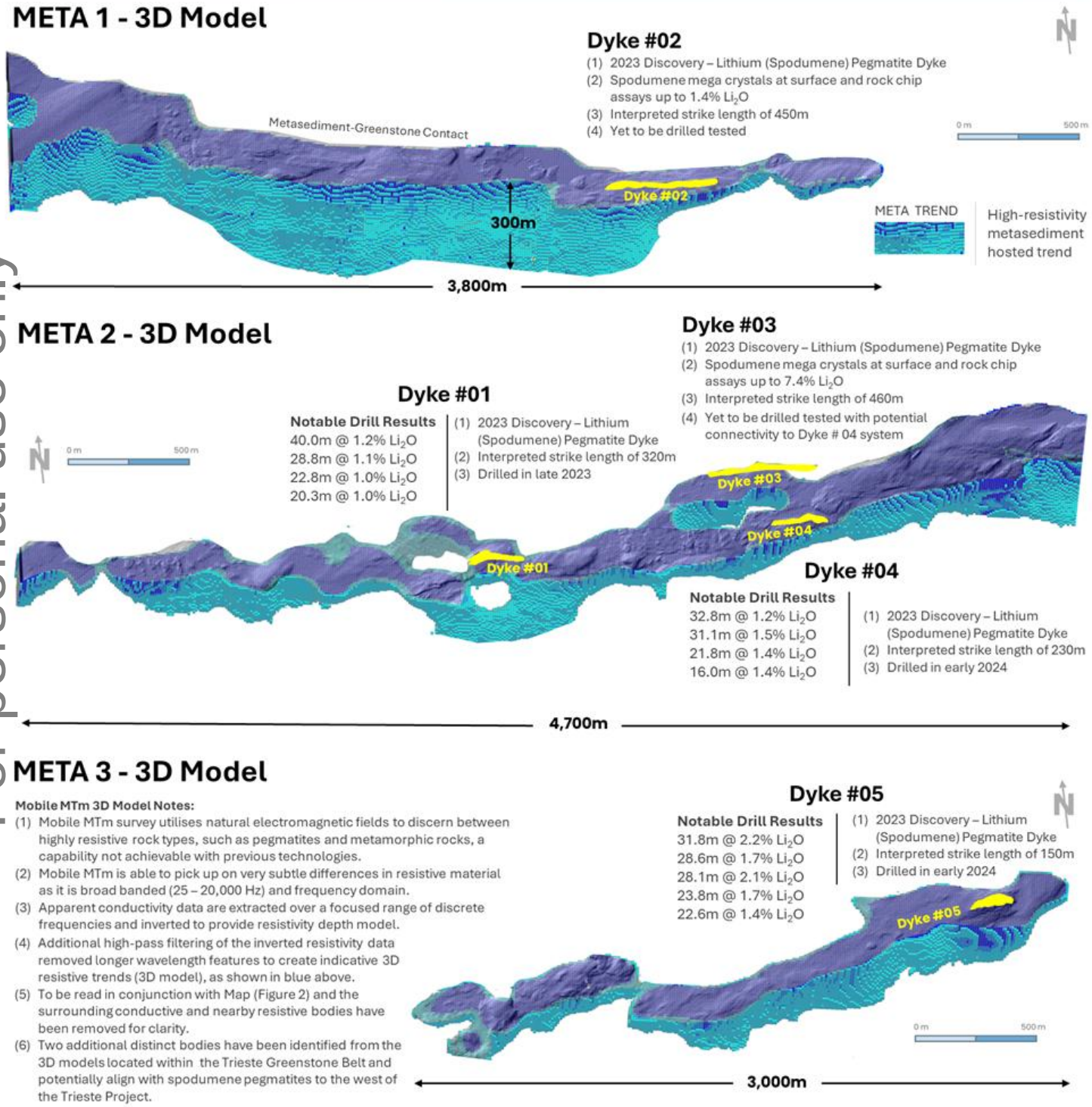
Other Notable Soil Anomalies

1. Anomalously high lithium-caesium soil assays were noted down ice of Dyke #07.
2. Anomalously high lithium-caesium soil assays were noted to the north and northeast of Dyke #07 in the Trieste Greenstone Belt within thick vegetation and rugged topography.
3. Anomalously high Copper soil assays were noted with potential up ice greenstone sources to be investigated.

Loyal lithium
Trieste Lithium Project

Mobile MTm 3D Model
Three Highly-Resistive Metasediment Hosted Lithium Pegmatite Trends

EXPERT GEOPHYSICS



META 3 - 3D Model

Mobile MTm 3D Model Notes:

(1) Mobile MTm survey utilises natural electromagnetic fields to discern between highly resistive rock types, such as pegmatites and metamorphic rocks, a capability not achievable with previous technologies.
(2) Mobile MTm is able to pick up on very subtle differences in resistive material as it is broad banded (25 – 20,000 Hz) and frequency domain.
(3) Apparent conductivity data are extracted over a focused range of discrete frequencies and inverted to provide resistivity depth model.
(4) Additional high-pass filtering of the inverted resistivity data removed longer wavelength features to create indicative 3D resistive trends (3D model), as shown in blue above.
(5) To be read in conjunction with Map (Figure 2) and the surrounding conductive and nearby resistive bodies have been removed for clarity.
(6) Two additional distinct bodies have been identified from the 3D models located within the Trieste Greenstone Belt and potentially align with spodumene pegmatites to the west of the Trieste Project.

Figure 2: Trieste Lithium Project - Mobile MTm 3D model illustrating the three-metasediment hosted resistive trends.

The discovery of major geochemical soils anomalies, suggesting new lithium pegmatite dykes and extensions are possible, marking a major milestone for the Trieste Lithium Project, as the project now aligns closely with the typical strike lengths of known spodumene pegmatite dykes found within the Trieste Greenstone Belt to the west, including world-class spodumene pegmatite mineralisation demonstrated within Winsome's Adina Project, Azimut/SOQUEM's Galinée Project and Rio Tinto/Midland Exploration's Galinée Project.

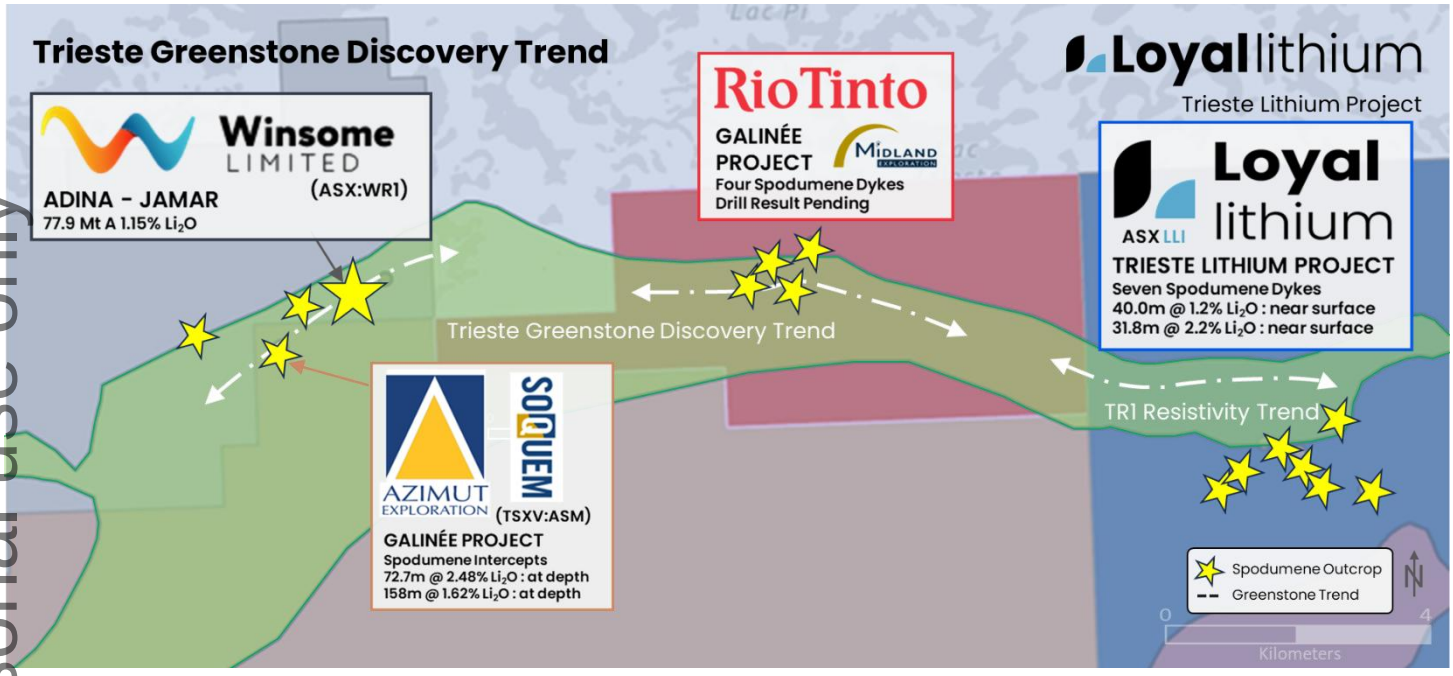


Figure 3: Trieste Greenstone Discovery Trend: Spodumene pegmatite discoveries across the Trieste Greenstone in relation to Loyal lithium's TR1 Trend and Dyke #07 discovered at the Trieste Lithium Project.

With the 2024 field program now complete pending rock chip assay results, the Loyal Lithium team are poised to analyse the 2024 field results in conjunction with historical data and the geophysical 3D model to guide future drilling programs. The 2024 field program is poised to successfully ground-truth results from the innovative Mobile MTm geophysics survey, extended known pegmatite outcrop trends, exposed concealed pegmatite outcrops, and determined trends of lithium, caesium, and other pathfinder elements within the glacial till and soil.

With $6.0M in funding, Loyal Lithium is strategically positioned to collaboratively advance the Trieste Greenstone Belt into a premier lithium hub, setting a new standard in the industry and paving the way for future exploration endeavours.

This announcement has been authorised for release by Loyal Lithium's Board of Directors

Loyal Lithium

ASX LLI

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About Loyal Lithium

Loyal Lithium Limited (ASX: LLI) is a well-structured listed resource exploration company with projects in Tier 1 North American mining jurisdictions in the Northwest Territories, Canada, James Bay Lithium District in Quebec, Canada and Nevada, USA. Through the systematic exploration of its projects, the Company aims to delineate JORC compliant resources, creating value for its shareholders.

Future Performance

This announcement may contain certain forward-looking statements and opinion Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties, assumptions, contingencies and other important factors, many of which are outside the control of the Company and which are subject to change without notice and could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Loyal Lithium Limited.

Competent Person's Statement

The information in this announcement that relates to Exploration Results, is based, and fairly reflects, information reviewed by Mr Darren Allingham, who is the Company's geologist. Mr Allingham is a Fellow of the Australian Institute of Geoscientists. Mr Allingham has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results and Mineral Resources (JORC Code). Mr Allingham consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

List of References for Further Shareholder and Investor Reading:

[1] LLI ASX Announcement: 19 August 2024: Industry First: Pioneering Geophysical Survey Reveals Extensive Lithium Trends at the Trieste Lithium Project, James Bay, Quebec

[2] LLI ASX Announcement: 31 July 2024: Quarterly Activities Report – For the Quarter Ending 30 June 2024.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

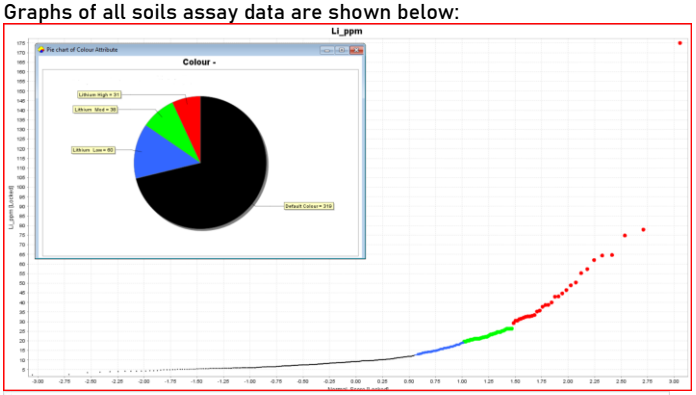
Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). 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.*	• At each predetermined location, approximately 1 kg of tillite soil was manually excavated from the pedologic C-horizon, or the lower B-horizon when the C-horizon was unavailable, using a shovel or auger. Sampling sites were strategically positioned along transects perpendicular to the ice-flow direction of the most recent glaciation. Geological characteristics of the tillite soils were recorded on field tablets using ESRI Fieldmaps software. Documented data included clast abundance, primary lithology, dominant granulometry of the matrix, and environmental observations—specifically the shapes and lithologies of visible boulders, as well as the presence of outcrops either near the sampling site or within the sampling hole. • 200012 Dry, Screen Soils or Stream Sediments - 63um, < 1 kg • AGAT Laboratory (201-071) 4 Acid Digest - Metals Package, ICP-OES/ICP-MS finish (CGY)
Drilling techniques	• *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).*	• No drilling reported in this announcement.
Drill sample recovery	• *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.*	• No drilling reported in this announcement. Soil sample recovery was 100%.

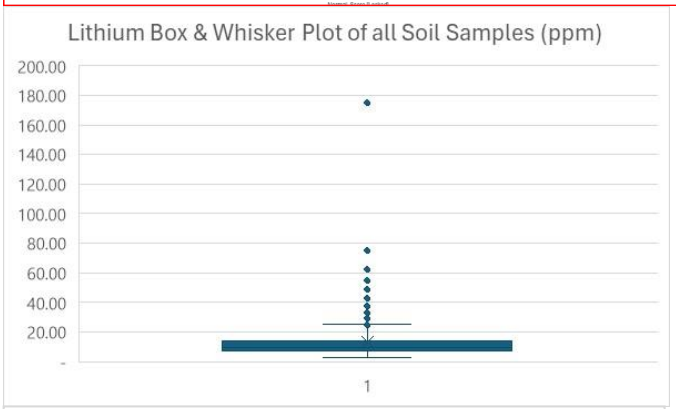
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No drilling reported in this announcement. Details recorded of each sample including Sample Number, Sample Type, x, y, Geo Name, Environment, Horizon Sampled, Horizon mixed in the Sample, Clasts Main Lithology, Clasts %, Matrix dominant granulometry, Fine Particle presence, Color, Bedrock Reached, Outcrops presence (<15m).
Sub-sampling techniques and sample preparation	• *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.*	• No drilling reported in this announcement.
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.* • *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,*	• Geochemical soils sampling procedures are considered Standard Industry Practice. Analysis completed at AGAT 2620 Calgary. Certified reference material for lithium, caesium and tantalum were inserted into the sample stream every 20 samples. AGAT Laboratory inserted laboratory standards. 4 Acid Digest - Metals Package, ICP-OES/ICP-MS finish (CGY) for 48 elements. • SOP Steps: • (201-071) 4 Acid Digest - Metals Package, ICP-OES/ICP-MS finish (CGY) • (200-) Sample Login Weight • (200-012) Fraction plus/moins du sol 10.2.2.3 Place sample racks filled with Teflon tubes (weighed samples) in the fumehood. 10.2.2.3 To each sample, add 2.00mL of HNO3, HF and HCl respectively. Swirl to ensure sample is coated. NOTE: After adding HNO3, vigorous reaction and brown fumes may occur. Wait until reaction and fumes stop before next acid additions. It may take 2 minutes or longer and varies between samples. 10.2.2.4 Add 0.5mL of HClO4 to each sample and wash down the sides of the Teflon tube with approximately 10mL of DI

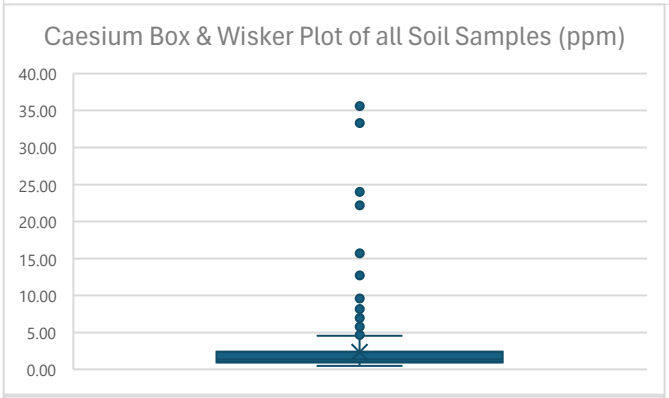
external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.

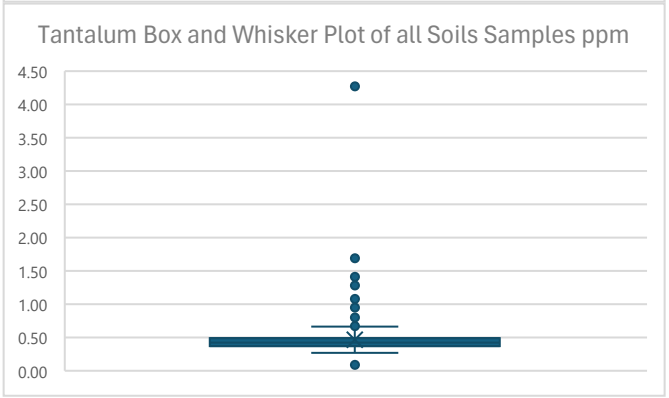
water. 10.2.2.5 Place sample racks in the hot block and digest at 170 C for 60 minutes until dryness is reached.

- Detection limits for Lithium. Cesium and Tantalum were, 0.1, 0.01, 0.05ppm respectively.
- Graphs of all soils assay data are shown below:









Verification of sampling and assaying	• *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.*	• Geochemical data is stored on a secure server by DGC and Loyal Lithium AGAT Lab job numbers were 240184787, 240184794, 240184800, 240184807, 240184818 and 240184825. Data was documented by electronic tablet using MX Deposit. Samples were photographed.
Location of data points	• *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.*	Latitude Longitude WGS84 spheroid.
Data spacing and distribution	• *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 procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• 500m to 1km spaced traverses with 100m spaced samples along traverses. Some samples could not be taken because of lakes and samples were moved in the field to ensure consistent coverage.
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.* • *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.*	• Traverses were aligned NW-SE approximately perpendicular to the prevalent strike of the last glacial movement of surface material which is in a SW direction.
Sample security	• *The measures taken to ensure sample security.*	• Geochemical samples were transferred from site to the restricted Trenard mine site for cataloging and packaging. Samples were transferred by the geological contractor at the end of the program to Val; d Or by truck.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews of geochemical sampling techniques or data have been completed. Registered Geologists and Qualified Persons for the purposes of NI43-101 completed the geochemical survey. Interpretations of geochemical datasets were completed in house by the Loyal Lithium staff with input from the geological contractor. • Sampling whilst undertaken was examined for the full period by the JORC CP.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
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.* • *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.*	• Prospectus on 5th June 2023 describes all LLI mineral tenure: https://announcements.asx.com.au/asxpdf/20230605/pdf/05qc58xt74d9nm.pdf. • The Trieste Lithium Project is in the James Bay Region, Quebec, Canada and is centered on 53°18'00"N, 72°02'00"W, within NTS sheets 33H08, 33H01, 23E05 and 23E04. • The Project comprises 466 mining claims with Trieste 238 claims for 12,269ha (LLI 100%) and the Osisko/Trieste JV - 228 claims (LLI 75%, Osisko 25%) - 11,765ha totaling 24,034 ha and is divided into three (3) continuous claim blocks extending over 38 km east-west direction width and 15.7km north-south. The Trieste Lithium Project was originally acquired by Loyal Lithium Ltd (previously Monger Gold) in October 2022 through both online map staking and agreements: ○ 228 claims in the west from the mid north to the south, 75% owned by Loyal Lithium (fully owned subsidiary Trieste Lithium Ltd) and 25% with Osisko Development Corporation. ○ 12 claims were acquired from Noranda Royalties ○ 238 claims were acquired through online map staking and an NSR agreement for 12 claims in October 2022. • The claims are currently registered under Trieste Lithium Ltd, a 100% subsidiary of Loyal Lithium Ltd. • All 466 claims that comprise the Project are in good standing as of the Effective Date of this announcement. A consultant Quebec Claims Manager is employed by Loyal Lithium to ensure regulatory compliance.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The first known acquisition of mineral claims within the area of the current Trieste Lithium Project was in 1998 with a joint venture between Virginia Gold Mines and Cambior called the Caniapiscau Property. The Caniapiscau Property consisted of three different areas; the Bloc Est and Bloc Ouest areas fall within the current Project boundary and the Noella area is north of the current Project. Numerous field programs were executed from 1998 to 2001 including prospecting, mapping, geophysical surveys and channel sampling targeting precious metals (GM 57170, GM 58442, GM 59201). No drilling on the Project area was recorded during that time. • Virginia Mines Inc. increased their land holding in the area in 2007 and signed a joint venture agreement with Breakwater Resources on the Trieste Property, which encompassed the historical Caniapiscau Property and makes up the western portion of the current Trieste Lithium Project. An intensive prospecting and mapping program was executed in the summer of 2007 resulting in the discovery of several Au mineralized outcrops and boulders. A total of 326 outcrops were described from which 94 outcrop samples and 95 boulder samples were collected from within the current Trieste Lithium Project boundary (GM63378). • In 2009, Virginia Mines followed up anomalous values the 2007 exploration work with prospecting and till sampling that resulted in the collection of 235 rock samples and 155 till samples from the Trieste Property (GM65024). In 2011, additional prospecting and mapping took place on the Trieste Property with 169 outcrops and 114 boulders described and 203 rock samples collected (GM 66254). Another significant ground exploration program was completed in 2012, with 155 outcrops and 52 boulders described with 104 rock samples collected. An additional 25 trenches were excavated using a Heli-portable excavator to test various geophysical and geochemical anomalies (GM67952). All samples collected from 2009 to 2012 fall within the current Trieste Project area. • Numerous geophysical surveys were completed by Virginia Mines from 2008 to 2012 including a 2009 IP survey (40 line-km) (GM64304), 2009 EMH Survey (49.5 line-km) (GM64304), 2011 Heliborne HD magnetic survey (3,320 line-km) (GM65712), and a 2012 IP survey and line cutting (108.25 line-km) (GM66977). • In 2015, Virginia Mines changed its name to Exploration Osisko Baie James Inc. and continued to advance the historical Trieste Property with minimal prospecting work (5 outcrop and 3 boulder samples) and a ninety-one (91) sample till survey. Additionally, 10 NQ diamond drillholes totaling 1,559 m were completed on the southern portion of historical Trieste Property. The drillholes were designed to test Au-As anomalies in till and corresponding IP anomalies and resulted in 231 samples sent for analysis (GM 69682). All 2015 drillholes fall within the current Trieste Lithium Project boundary. • In 2017, Abitibi Geophysics on behalf of Osisko Mining Inc. (formerly Osisko Baie James), executed an 11.25 km OreVisionTM survey along 200 m spaced lines

			which resulted in several anomalies (GM70438). Osisko Mining followed up the geophysical survey with three (3) NQ diamond drillholes, totaling 636 m, to test out the identified anomalies (GM70437). A total of 226 drill core samples were sent for analysis. • In 2018 the Government of Quebec continued with regional mapping in the Lac Dalmas region (33H08, 33H09, 23E05 and 23E12) at scale of 1:85,000 (RG-2018-02). This area convers the northern portion of the Property. Another mapping project, covering the southern portion of the claims, was completed in the Lac Joubert area (33H08, 33H09, 23E05 and 23E12) at a scale of 1:130,000 (RG-2018-04).
Geology	•	*Deposit type, geological setting and style of mineralisation.*	• The Trieste Project is situated in the Archean Superior Province of the Canadian Shield in the James Bay area of northern Quebec. The James Bay region consists of alternating east-west trending metavolcanic-rich and metasediment-rich domains. These domains comprise the La Grande volcano-plutonic sub-province and the Opatica, Nemiscau River, and Opinaca metasedimentary sub-provinces (Card & Ciesielski, 1986). The Trieste claims are located within the La Grande Sub-province just north of the contact with the Opinaca Sub-province. • The La Grande Sub-province in the Project area is characterized by Archean domes and basins with the remains of volcanic sequences and sedimentary basins wrapping around large syntectonic to post-tectonic felsic to intermediate intrusions. Volcanic sequences consist of altered mafic-dominant rocks and silicate- and oxide-facies iron formation. The abundance of strongly altered volcanic rocks sets this region of the La Grande Sub-province apart from other sectors of the Sub-province (Burniaux, Guemache, & Goutier, 2018 - RG 2018-02; Hammouche & Burniaux, 2018 - RG 2018-04). • The Tilly Pegmatite appears to be post tectonic and post-metamorphic and cuts the regional fabric in the area. This unit is characterized by small intrusions in the scale of hundreds of meters to kms in length and decametric thicknesses that form whiteish "whaleback" ridges. The unit consists of pegmatitic granite with medium-grained biotite, coarse to very coarse muscovite and accessory tourmaline, garnet, beryl, magnetite, and/or apatite. Titanite and epidote have also been observed locally. Micrographic and perthitic textures are common. It often contains mafic enclaves of deformed metasediments (Burniaux, Guemache, & Goutier, 2018 - RG 2018-02; Hammouche & Burniaux, 2018 - RG 2018-04). • There were multiple recorded occurrences of both I1A and I1G rock types available from public online data sources (SIGEOM) that related to the Tilly Pegmatite unit but were also potential hosts for spodumene. In total, 37 occurrences of rock-type I1A and 86 occurrences of I1G were reported in the Project area. • The La Grande Sub-province is prospective for various commodities including gold, silver, base metals, platinum group elements, and lithium over several different deposit styles including orogenic gold (Au), volcanogenic massive sulphide (Cu, Au, Ag), komatiite-ultramafic (Au, Ag, PGE, Ni, Cu, Co), and lithium pegmatite (Li, Ta, Cs). The focus of the Company is on the potential for lithium pegmatite occurrences in the Project area (Burniaux, Guemache, & Goutier, 2018 - RG 2018-02; Hammouche & Burniaux, 2018 - RG 2018-04).
Drill hole Information	•	*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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in*	• Geochemical data was reported in the coordinates system Latitude Longitude WGS84.

	metres) 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.*	
Data aggregation methods	• *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.* • *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.*	• Geochemical data is presented as plans with data contained in ranges.
Relationship between mineralisation widths and intercept lengths	• *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*	• No drill results reported.

		(eg 'down hole length, true width not known').	
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 drill hole collar locations and appropriate sectional views.*	• Colour coded plans presented.
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.*	• All soils data is reported as summary representations of the data in graphical format.
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.*	• In August 2023 an intensive Loyal Lithium mapping and sampling program discovered a group of five spodumene bearing pegmatites on surface. Assay results, outcrop photos and LiDAR survey confirmed the presence of a 6th spodumene dyke. • In January 2023, Loyal Lithium purchased archived high resolution satellite imagery of priority target areas of the Trieste Project. The object was to utilise the imagery as a trial to correlate mapped pegmatites to the imagery. Loyal Lithium engaged Geospatial Intelligence Ltd. to conduct more complex derivations of the satellite imagery (multispectral) to help in refining targets for the inaugural exploration campaign. Terra Resources then completed reprocessing of Sentinel 2 and Aster image data and found in the Lithium Band Combination, large anomalies on and to the south of the amphibolite (greenstone belt), subsequently found to be spodumene bearing pegmatites. The spectral imagery interpretations appeared to correlate with the general areas of the mapped spodumene pegmatite dykes. • In October/November/December 2023 a Stage I diamond core drill program tested Dyke #01 using NQ sized core. In January/February 2024 a Stage II core drill program (BTW sized core) tested Dykes #04 and #05, Four known spodumene bearing pegmatite dykes remain untested, Dykes #02, #03, #06 and #07. These pegmatite dykes are interpreted from a series of proximal and aligned outcrops.

Further work	• *The nature and scale of planned further work (eg 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.*	• Based on a favourable geologic setting in both metasedimentary and meta-volcanic host rocks, the group of relatively closed-spaced lithium pegmatite dyke occurrences at the Trieste Lithium Project is considered to have sufficient geological merit to warrant continued intensive exploration, both more surface mapping/sampling undertaken in the summers of 2023/2024, geophysical surveys (as reported in this announcement), and drilling. The Project measures approximately 38 km in the east-west direction and had never been subject to systematic exploration for lithium pegmatites until Loyal Lithium's exploration programs started in 2023. • Initial work focused on detailed data compilation to ensure that all historical work completed on the Property was digitized and incorporated into the current database. A small aeromagnetic survey was flown across the mid amphibolite area in the northwest in early 2023. LIDAR surveys, with high resolution orthophotos were flown in late 2023 to aid in target delineation across the Project. • In 2023, with pegmatite outcrops identified in mapping and sampling, containing significant spodumene and tantalum oxide minerals in outcrop, a maiden drilling program targeted Dyke #01 and then targeted Dykes #04 and #05. Active geological modelling was supplemented by MobileMTm and aeromagnetic survey results, with MTm derivatives reported in this announcement. Due to the nature of pegmatite emplacement, and rheology of the metasedimentary host rocks, dykes commonly form irregular expanding and contracting bodies. It is proposed that there will be many blind pegmatite bodies due to the amount of pegmatite activity if they have been emplaced via a porosity wave mechanism. Proximal to the contacts between the metasediments and mafic amphibolite, longer pegmatite dykes occur (Dykes #02 and #03) and therefore may be more prospective targets to encounter larger volumes of pegmatite subsurface. MTm data infers larger continuous areas of flattening in the metasediments represented by resistivity highs closer to the amphibolite contacts, that are prospective for pegmatite emplacement, Pegmatite outcrops are associated with these zones of increased strain due to the rheological and anisotropic contrast between rock types. • Research work is being undertaken by McGill University to understand the magmatic and hydrothermal components of lithium pegmatite formation at Trieste, including studying the mineral assemblages, zonation trends and paragenesis to ultimately infer both the processes that have led to the sources and sink. Analysis of tourmalines by Dr Crotty may also assist in characterising fractionation process in the variation in the large clusters of pegmatites found at Trieste. Loyal Lithium has developed partnerships with McGill University and studies have been initiated that may led to practical applications in exploration. Early metallurgical characterisation of pegmatite spodumene mineralisation is being undertaken to clarify processing issues. • Finl results have been announced for the Mobile MTm geophysics survey and along with 2023 and initial 2024 Field Program results that have discovered a seventh dyke. These results are being used to search for and constrain structural, alteration and multielement geochemistry patterns (both hard rock basement and glacial till/soils sample geochemistry).