Loyal Lithium

ASX LLI

ASX Announcement | 05 December 2024

2024 Field Program widens Dyke #06 to 65m and discovers Dyke #08 at Trieste Lithium Project, Quebec, Canada.

Highlights

- **The 2024 field program has widened Dyke #06, discovered in late 2023 under heavy vegetation, to an impressive 65 metres wide at the Trieste Lithium Project.**
- **Rock chip assays from the 2024 summer field program have also confirmed the discovery of an eighth outcropping lithium pegmatite dyke (Dyke #08) at the Trieste Lithium Project.**
- **Concealed under heavy vegetation, the 115m prominent ridge of Dyke #08 is located on the META 3 Trend, 1,800m southwest along strike from Dyke #05.**
- **The eight outcropping lithium pegmatite dykes have a cumulative length of approximately 1.9 km within interrupted geophysical trends spanning 11.5 km.**
- **The 2024 field program has been a major success with:**
  - **The discovery of the first Greenstone hosted lithium pegmatite dykes (Dyke #7),**
  - **The discovery of Dyke #8 within the META 3 Trend,**
  - **Widening of Dyke #06 to 65m**
  - **Identification of anomalous soils and extensive lithium boulder trails that support META 1, META 2, and META 3 Trends, and**
  - **Identification of anomalous soils that support two new lithium discovery zones to the south and east.**
- **The 2024 field program has concluded, and subsequent drill program planning is being conducted in preparation 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 the Trieste Lithium 2024 field program has been a major success. The program has widened Dyke #06 to an impressive 65 metres and discovered two additional outcropping lithium pegmatite dykes – Dyke #07 and Dyke #08. The findings of the 2024 field program correlate with the recently completed innovative MobileMTm geophysics program[1] and the interpreted metasediment-hosted Lithium trends – META 1, META 2, and META 3. With the 2024 field program now complete, subsequent drill program planning is being conducted in preparation 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.

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Investor Centre

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

"An amazing effort by the team to conduct such a successful 2024 Field Program at the Trieste Lithium Project. The outcomes obtained validate the innovative geophysics survey and further elevates the prospectivity of the Trieste Lithium Project."

"The 65m wide surface exposure of Dyke #06 was truly unexpected. Located just 180m north of Dyke #01, Dyke #06 suggests a high likelihood of a significant spodumene pegmatite extension at depth. Combined with the discovery of Dyke #07 and Dyke #08, the 2024 Field Program has been a clear success."

"The comprehensive results from the innovative Mobile MTm geophysics, fieldwork, and drilling, along with the nearby discoveries by Winsome, Azimut, and Rio Tinto, position the Trieste Lithium Project as a potentially significant future source of lithium for North America."

Image 1: Trieste Lithium Project: Loyal Lithium Exploration Manager (CP) on Dyke #06 where spodumene mega crystals and an assay of 1.47% Li_2O was found to extend 65m in a north-south direction, which is the interpreted width.

The Dyke #06 outcrop, although discovered during the 2023 exploration program, was further exposed during the 2024 campaign to reveal a very large outcrop area containing spodumene mega crystals, with an interpreted width of up to 65m. Dyke #06 now represents the widest Dyke at the Trieste Lithium Project, yet to be drill tested, and is a high priority target for the 2025 drilling campaign.

Dyke #08 was discovered with a rock chip sample taken from a large pegmatite outcrop (Sample ID: F437555; 1.51% Li_2O 2023) along the western extent of the META 3 trend. The discovery of lithium within the sample extended the mineralisation potential of the interpreted META 3 trend by 1,800m westward of Dyke #05.

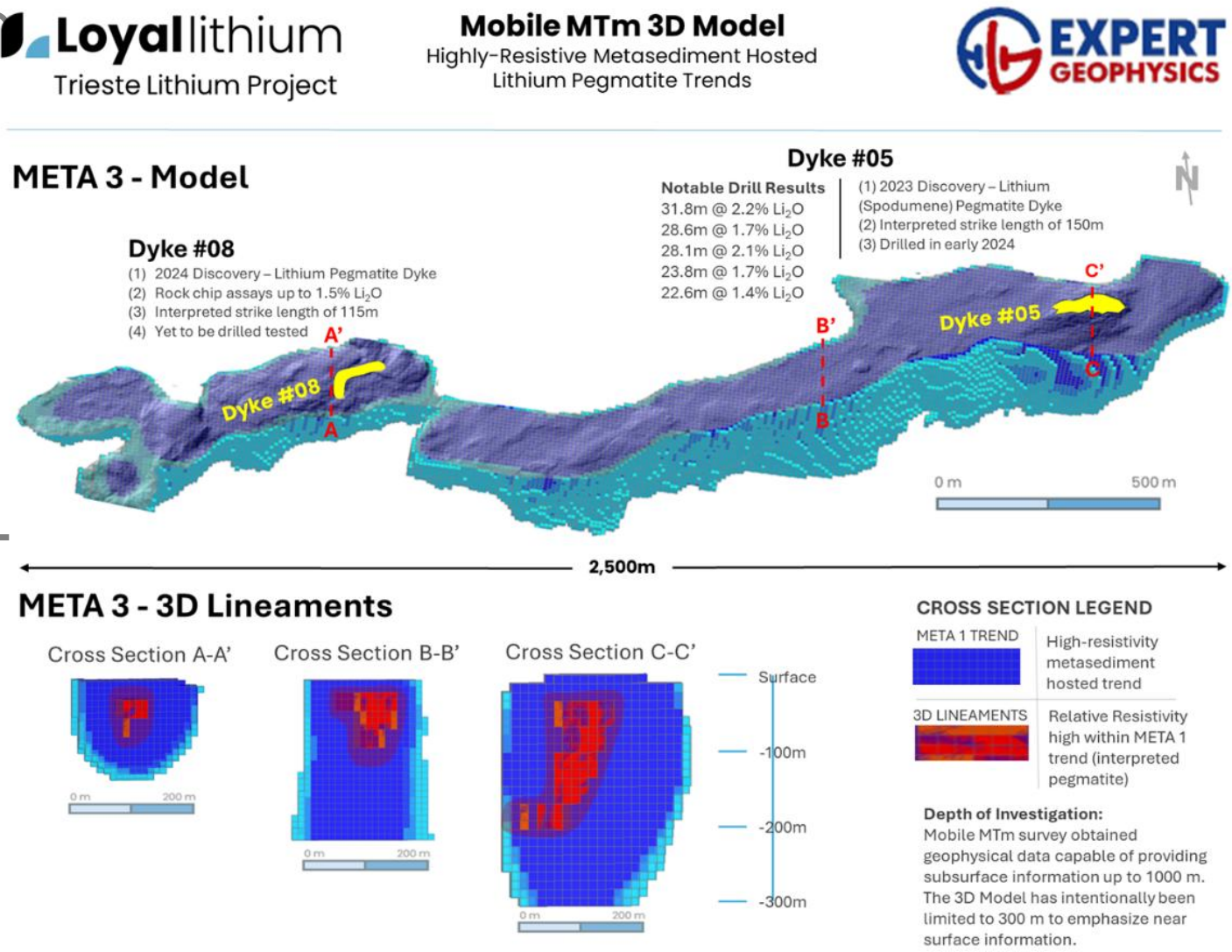

Figure 1: Trieste Lithium Project: Dyke #05 & Dyke #08 along META 3 Trend from Mobile MTm 3D model with superimposed 3D Lineaments.

Loyal lithium
Trieste Lithium Project

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

EXPERT GEOPHYSICS

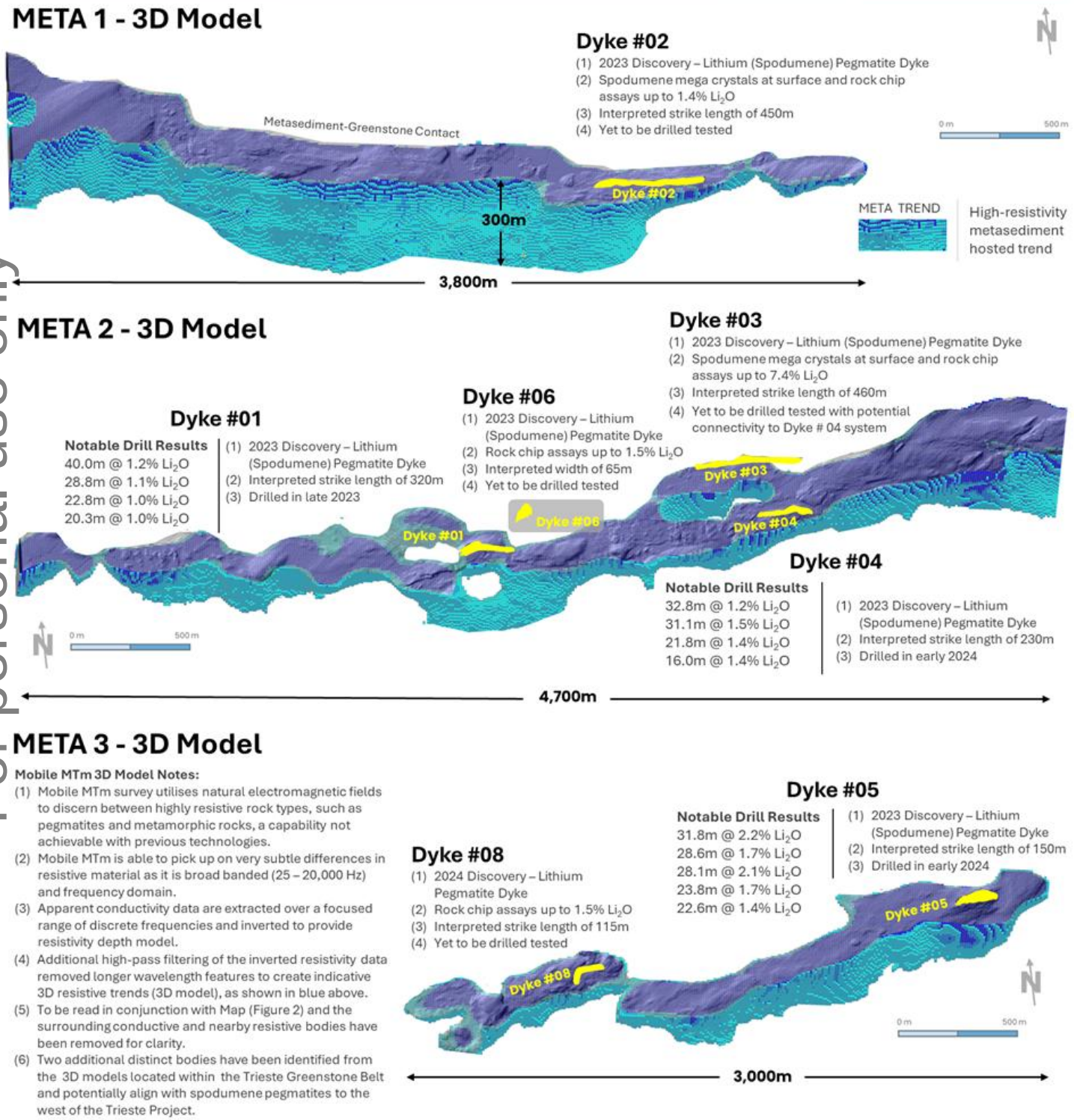

Figure 2: Trieste Lithium Project - Mobile MTm 3D model illustrating the three-metasediment hosted resistive trends.

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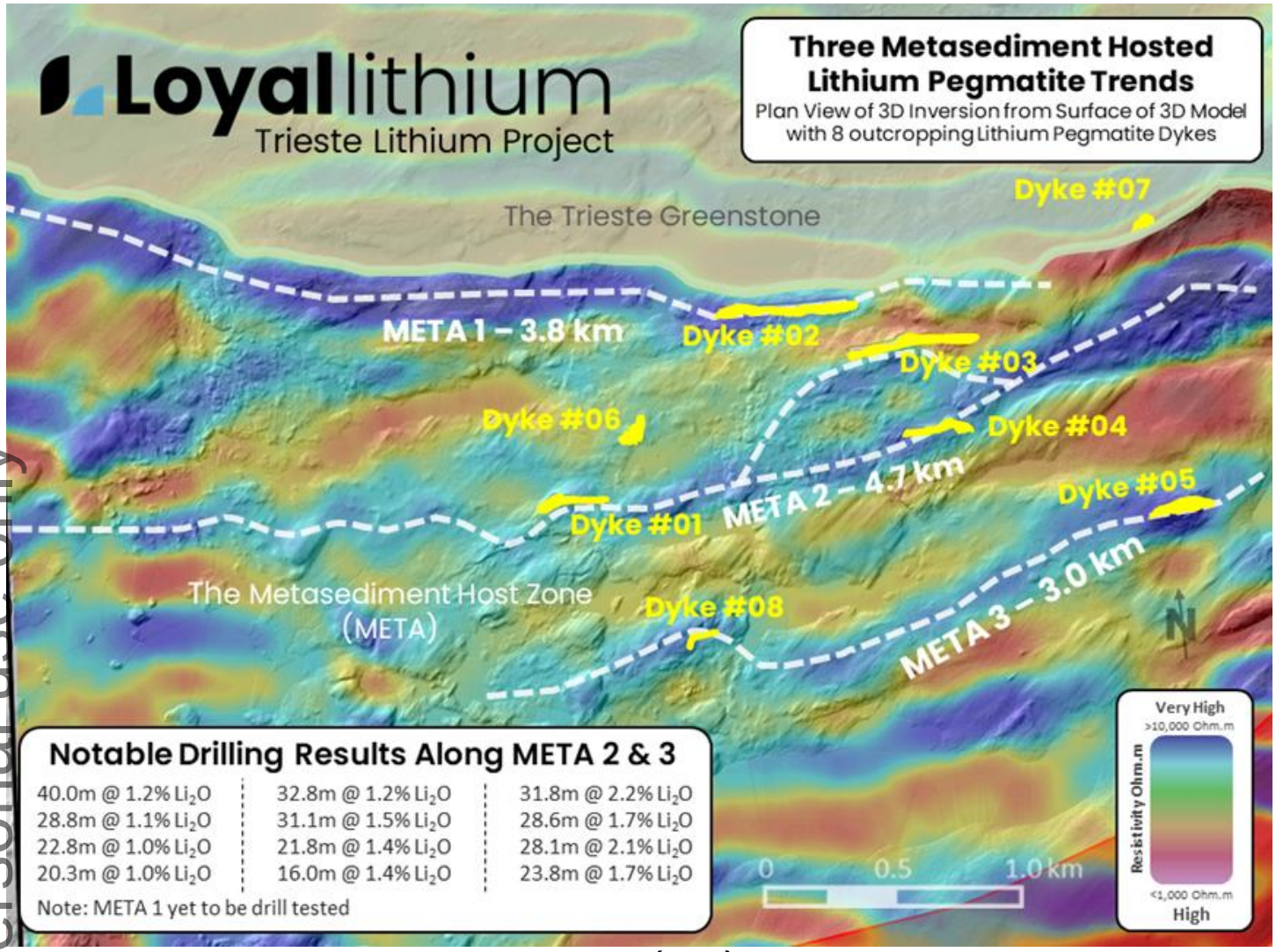

Figure 3: Trieste Lithium Project: All eight lithium pegmatite dykes (yellow) and the META 1, META 2, and META 3 resistivity trends (dashed white lines) represented against Apparent Conductivity survey (8550 Hz).

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

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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.

3 LLI ASX Announcement: 4 December 2023: New Discovery of 6th Pegmatite Dyke at the Trieste Lithium Project, James Bay, Quebec, Canada

Appendix: Rockchip sample assays

Sample Number	Est	Nor	Li2O%	Lithology
F437561	-72.25612	53.27100	3.64	PEGMATITE
F437014	-72.24432	53.27829	3.29	PEGMATITE
F437012	-72.24842	53.27810	2.35	PEGMATITE
F437559	-72.25330	53.27146	2.07	PEGMATITE
F437555	-72.24698	53.26754	1.51	PEGMATITE
F437042	-72.24968	53.27423	0.99	PEGMATITE
F437515	-72.22439	53.27918	0.99	PEGMATITE
F437032	-72.22194	53.28063	0.53	PEGMATITE
F437504	-72.27254	53.27443	0.50	PEGMATITE
F437043	-72.24872	53.27482	0.20	M4
F437022	-72.21290	53.27051	0.18	M4
F437502	-72.25359	53.27800	0.13	PEGMATITE
F437004	-72.26252	53.27929	0.12	PEGMATITE
F437557	-72.24587	53.26794	0.12	M4
F436014	-72.24482	53.27829	0.09	PEGMATITE
F437518	-72.21886	53.27996	0.06	PEGMATITE
F437527	-72.18311	53.28072	0.05	M4
F437002	-72.26212	53.27871	0.04	I1B
F437010	-72.25126	53.27838	0.04	PEGMATITE
F437024	-72.21091	53.26954	0.04	PEGMATITE
F437509	-72.27402	53.27175	0.04	PEGMATITE
F437563	-72.23883	53.26553	0.04	M4
F436007	-72.25775	53.27668	0.03	PEGMATITE
F436816	-72.22174	53.27098	0.03	M4
F437003	-72.26270	53.27872	0.03	PEGMATITE
F437030	-72.22184	53.28072	0.03	M16
F437513	-72.23092	53.27546	0.03	PEGMATITE
F437514	-72.22462	53.27885	0.03	I1
F437521	-72.22007	53.27927	0.03	PEGMATITE
F437536	-72.18690	53.27544	0.03	PEGMATITE
F437556	-72.24639	53.26783	0.03	PEGMATITE
F437558	-72.24565	53.26791	0.03	PEGMATITE
F436011	-72.20554	53.27552	0.02	PEGMATITE
F436012	-72.20803	53.28075	0.02	I1L
F436821	-72.22643	53.27395	0.02	PEGMATITE
F437005	-72.26330	53.27889	0.02	PEGMATITE
F437013	-72.24717	53.27739	0.02	PEGMATITE
F437015	-72.21829	53.27891	0.02	M4
F437025	-72.20720	53.27205	0.02	PEGMATITE
F437028	-72.22976	53.28078	0.02	M16

Sample Number	Est	Nor	Li2O%	Lithology
F437031	-72.22210	53.28057	0.02	PEGMATITE
F437037	-72.18720	53.28113	0.02	M4
F437503	-72.25416	53.27805	0.02	PEGMATITE
F437516	-72.22255	53.28000	0.02	PEGMATITE
F437545	-72.16081	53.28026	0.02	PEGMATITE
F437548	-72.15686	53.27882	0.02	PEGMATITE
F437568	-72.22251	53.26807	0.02	PEGMATITE
F436001	-72.27531	53.28409	0.01	I1I
F436003	-72.27770	53.28194	0.01	I1B
F436004	-72.27774	53.28285	0.01	I1B
F436006	-72.25943	53.27815	0.01	I1M
F436008	-72.25588	53.27691	0.01	PEGMATITE
F436010	-72.21253	53.27839	0.01	I1L
F436013	-72.20618	53.28060	0.01	PEGMATITE
F436015	-72.25391	53.26918	0.01	PEGMATITE
F436016	-72.25352	53.26763	0.01	M4
F436023	-72.17436	53.27414	0.01	PEGMATITE
F436024	-72.18100	53.29698	0.01	PEGMATITE
F436802	-72.22931	53.28329	0.01	M22
F436804	-72.22707	53.28951	0.01	PEGMATITE
F436805	-72.22298	53.28071	0.01	PEGMATITE
F436808	-72.19937	53.27530	0.01	PEGMATITE
F436809	-72.19991	53.28546	0.01	R1
F436810	-72.24845	53.26782	0.01	PEGMATITE
F436811	-72.25188	53.26645	0.01	PEGMATITE
F436812	-72.24845	53.28587	0.01	M16
F436815	-72.25111	53.28351	0.01	M16
F436817	-72.22470	53.26946	0.01	M4
F436819	-72.22255	53.27272	0.01	I1
F436825	-72.17897	53.27391	0.01	PEGMATITE
F436828	-72.13851	53.21082	0.01	PEGMATITE
F436829	-72.13892	53.20767	0.01	PEGMATITE
F436831	-72.16711	53.20486	0.01	PEGMATITE
F437001	-72.26091	53.27913	0.01	I1B
F437006	-72.26705	53.27969	0.01	M4
F437007	-72.26565	53.27848	0.01	PEGMATITE
F437011	-72.25055	53.27819	0.01	PEGMATITE
F437017	-72.21694	53.27802	0.01	M4
F437019	-72.22283	53.27699	0.01	PEGMATITE
F437021	-72.21416	53.26986	0.01	M4
F437027	-72.22675	53.27192	0.01	PEGMATITE

Sample Number	Est	Nor	Li2O%	Lithology
F437033	-72.18656	53.27946	0.01	M4
F437035	-72.18960	53.28087	0.01	PEGMATITE
F437038	-72.24947	53.27436	0.01	PEGMATITE
F437039	-72.24935	53.27451	0.01	PEGMATITE
F437041	-72.24924	53.27467	0.01	PEGMATITE
F437044	-72.27175	53.29746	0.01	I1D
F437045	-72.27160	53.29575	0.01	I1C
F437505	-72.27178	53.27541	0.01	PEGMATITE
F437506	-72.26913	53.27474	0.01	PEGMATITE
F437507	-72.27163	53.27693	0.01	PEGMATITE
F437511	-72.23116	53.27790	0.01	PEGMATITE
F437512	-72.22995	53.27776	0.01	PEGMATITE
F437519	-72.21908	53.27989	0.01	PEGMATITE
F437522	-72.21799	53.27996	0.01	PEGMATITE
F437524	-72.18524	53.28016	0.01	PEGMATITE
F437525	-72.18584	53.28005	0.01	PEGMATITE
F437530	-72.18066	53.27840	0.01	PEGMATITE
F437534	-72.18503	53.27430	0.01	I1
F437539	-72.18337	53.27783	0.01	I1
F437543	-72.18044	53.27352	0.01	I1
F437546	-72.15950	53.28046	0.01	PEGMATITE
F437550	-72.16247	53.28132	0.01	S4D
F437551	-72.16317	53.27901	0.01	I1
F437552	-72.16893	53.27959	0.01	M16
F437554	-72.24694	53.26766	0.01	PEGMATITE
F437562	-72.23751	53.26788	0.01	PEGMATITE
F437564	-72.23518	53.26732	0.01	PEGMATITE
F437565	-72.23372	53.26440	0.01	PEGMATITE
F437566	-72.22908	53.26694	0.01	M4
F437569	-72.22130	53.26788	0.01	PEGMATITE
F437570	-72.18982	53.26919	0.01	PEGMATITE
F437571	-72.21319	53.26425	0.01	PEGMATITE
F437575	-72.18551	53.27188	0.01	PEGMATITE
F436002	-72.28252	53.28382	0.00	I1B
F436005	-72.27116	53.28096	0.00	I1L
F436009	-72.25695	53.27704	0.00	PEGMATITE
F436017	-72.24426	53.26485	0.00	PEGMATITE
F436018	-72.24379	53.26670	0.00	PEGMATITE
F436019	-72.22171	53.28232	0.00	V3B
F436021	-72.19342	53.26406	0.00	PEGMATITE
F436022	-72.18523	53.27300	0.00	PEGMATITE

Sample Number	Est	Nor	Li2O%	Lithology
F436025	-72.10730	53.29662	0.00	PEGMATITE
F436026	-72.10549	53.29618	0.00	PEGMATITE
F436801	-72.23063	53.28413	0.00	PEGMATITE
F436803	-72.22765	53.28809	0.00	PEGMATITE
F436806	-72.22676	53.28071	0.00	M4
F436807	-72.22637	53.28188	0.00	M1
F436813	-72.25449	53.28420	0.00	M16
F436814	-72.25554	53.28438	0.00	M16
F436818	-72.22423	53.26952	0.00	M4
F436822	-72.23254	53.28718	0.00	M1
F436823	-72.23431	53.28756	0.00	M1
F436824	-72.24721	53.28986	0.00	M16
F436826	-72.17403	53.27500	0.00	M4
F436827	-72.13706	53.20548	0.00	PEGMATITE
F436830	-72.13947	53.20573	0.00	PEGMATITE
F437008	-72.26224	53.27691	0.00	PEGMATITE
F437009	-72.24822	53.27895	0.00	XXXX
F437016	-72.21856	53.27745	0.00	PEGMATITE
F437018	-72.21300	53.27907	0.00	PEGMATITE
F437023	-72.21294	53.27055	0.00	PEGMATITE
F437026	-72.21140	53.27142	0.00	PEGMATITE
F437029	-72.22146	53.28069	0.00	I1B
F437034	-72.18961	53.28041	0.00	M4
F437036	-72.18730	53.28325	0.00	PEGMATITE
F437046	-72.26727	53.29476	0.00	M16
F437047	-72.26088	53.27449	0.00	PEGMATITE
F437048	-72.21084	53.25879	0.00	PEGMATITE
F437501	-72.26165	53.28188	0.00	M16
F437508	-72.26753	53.27827	0.00	PEGMATITE
F437510	-72.23407	53.27909	0.00	S4D
F437517	-72.21902	53.28132	0.00	PEGMATITE
F437523	-72.21740	53.28005	0.00	PEGMATITE
F437526	-72.18550	53.28077	0.00	R1
F437528	-72.18305	53.27817	0.00	I1
F437529	-72.18180	53.27824	0.00	PEGMATITE
F437531	-72.17952	53.27876	0.00	PEGMATITE
F437532	-72.18086	53.27476	0.00	I1
F437533	-72.18177	53.27446	0.00	I1
F437535	-72.18527	53.27484	0.00	I1
F437537	-72.18585	53.27683	0.00	PEGMATITE
F437538	-72.18288	53.27524	0.00	I1

Sample Number	Est	Nor	Li2O%	Lithology
F437541	-72.18094	53.27720	0.00	PEGMATITE
F437542	-72.18042	53.27587	0.00	I1
F437544	-72.16018	53.28029	0.00	PEGMATITE
F437547	-72.15721	53.27882	0.00	PEGMATITE
F437549	-72.15610	53.27901	0.00	PEGMATITE
F437553	-72.16872	53.27841	0.00	I1
F437567	-72.22123	53.26569	0.00	PEGMATITE
F437572	-72.18543	53.27007	0.00	PEGMATITE
F437573	-72.18517	53.26919	0.00	PEGMATITE
F437574	-72.18505	53.27084	0.00	PEGMATITE

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.*	• Grab samples were selected and extracted using manual geopick methods by field mapping geologists. Sample size was targeted at between 1 to 2 kg of rock. The outcrops or boulders were mapped and described including minerals and mineral abundance estimates.
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.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No drilling reported in this announcement.

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.*	• MX Deposit was used to record geological and sampling data. These data are backed up to a cloud source. • Samples are photographed in the field and processed for delivery to the laboratory at the Renard mine base camp site.
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.*	• All samples (the total sample) collected were shipped by enclosed truck to AGAT Val d Or.
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, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples collected by Loyal in 2024 were analysed by (201-380) Sodium Peroxide Fusion with ICP OES/MS Finish and Glassy Carbon Crucibles and (201-070) 4 Acid Digest - Metals Package, ICP-OES finish. • Certified Reference Materials were inserted into the sample stream as part of the QA-QC program every 20 samples. • Laboratory CRMs are inserted across the sample stream, as part of the Laboratory internal quality control procedures. • Analytical procedures are considered Standard Industry Practice. • The Competent Person considers the sample and analytical procedures acceptable for field exploration hard rock grab hand specimen sampling and assaying.
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)*	• A LIBS instrument was used to positively identify spodumene in samples, at the site camp, after samples were returned from the field. No LIBS values are reported in this announcement as they are considered relative and representative of only small point sources within samples. Note that spodumene can sometimes be replaced by

	protocols. • *Discuss any adjustment to assay data.*	other minerals (e.g. albite, sericite) so that further laboratory work is required to identify this type of spodumene. • All the original geological and assay data is stored in an MX Deposit database in an as-received basis with no adjustment to reported geological data.
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.*	• 2024 field sample points were recorded using a Garmin GPS 66S on electronic base maps in MX Deposit database on tablets with underlying satellite imagery in the visible spectrum and a 2023 LIDAR DEM. • Data is stored in latitude and longitude projection format.
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.*	• Data spacing is clustered dependant on mapping traverses undertaken by field geologists. Where possible, geologists complete approximately 100m to 200m spaced traverses in a north south aligned direction, sub-perpendicular to the strike of all known spodumene pegmatites, the dominant regional geological contacts of greenstone and metasediment and structural metamorphic fabric.
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.*	• The strike of dykes is interpreted from a series of outcrops, or the host rock contacts of an outcrop but geological contacts are rarely exposed enough to determine the subsurface orientation due to glacial erosion. Observations in the other seven lithium dykes illustrate that the geological contacts vary considerably locally compared to the overall orientation of the pegmatite intrusive bodies.
Sample security	• *The measures taken to ensure sample security.*	• The area is remote and only DGC contractors and Loyal Lithium field staff have access to the samples at the restricted and security-controlled Renard mine base camp. Samples are transported from the field after cataloguing by helicopter daily back to the base camp and then transferred to secure mine site offices. Samples are given a unique sample number on a weather resistant ticket that was provided by AGAT labs for sample analysis. Each sample tag lists the project name and unique sample number. • Once field samples are logged the entire sample is sent for assay, transferred to a transport truck specifically for samples, dropped off directly to AGAT laboratory by geological contractors. AGAT Laboratory provides a reconciliation sheet from the sample submission versus the samples received. • Laboratory services are in secure compounds. • Both sample pulps and rejects are stored for later reference.
Audits or	• *The results of any audits or reviews of sampling*	• No audits or reviews of sampling techniques or data have been

reviews	*techniques and data.*	completed on this field sampling program. The Loyal CP examined geological contractor operating in the field and at the base camp.

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.*
		• The Trieste Lithium Project is in the James Bay Region, Quebec, Canada and is centred on 53°18'00"N, 72°02'00"W, within NTS sheets 33H08, 33H01, 23E05 and 23E04.
		• The Project comprises 466 mining claims totalling 24,033.94 ha and is divided into three (3) discontinuous claim blocks extending over 38 km in an east-west direction. 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 have been obtained via a Binding Letter of Intent agreement with Osisko Development Corporation.
		  ○ 12 claims were acquired from Noranda Royalties
		  ○ 226 claims were acquired through online map staking by Monger Gold in October 2022 (with 126 of these claims entered a NSR agreement with Jody Dahrouge and Loyal Lithium Ltd.)
		• The claims are currently registered under two different company names: 228 claims under Osisko Baie-James SENC 25% and Loyal Lithium 75%, and 238 under Trieste Lithium Limited (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.
		• The work expenditure required to satisfy the current term for all 466 claims that comprise the Project is $602,130, $2500 per claim for 228 claims and $135 per claim for 238 claims. The combined excess expenditure currently attributed to the Project is $343,406.00.
		• The combined renewal fee for the Project required to satisfy the current term for all 467 claims, due prior to claim expiry (i.e., the Anniversary Date), is $79,220 ($170 per claim). As of the Effective Date of this report, the Anniversary Dates for the Project claims vary between April, 2023, and October, 2025.

Exploration	• *Acknowledgment and appraisal of exploration*	• The first known acquisition of mineral claims within the area of the current

done by other parties	*by other parties.*	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 totalling 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, totalling 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 characterised 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 is 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 several recorded occurrences of both I1A and I1G rock types

		available from online data sources from SIGEOM that likely relate to the Tilly Pegmatite unit and are potential hosts for spodumene. In total, 37 occurrences of rock-type I1A and 86 occurrences of I1G were reported in the Project area. Field mapping in 2023 and 2024 confirmed pegmatites and has discovered many more pegmatites. • 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). 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 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.*
		• No drill hole results are reported in this announcement

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*	• No grade aggregation methods have been utilised.

	typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
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 (eg 'down hole length, true width not known').*	• Grab samples only. Spodumene pegmatite Dyke #07 has one surface geological contact that appears to be dipping steeply to the northeast. • Grab samples only. Spodumene pegmatite Dyke #06 has one surface geological contact that appears to be dipping steeply. Although irregular in shape the width appears to be 65m in an approximate north-south orientation. •
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.*	• Photos and are included in this announcement.
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 current exploration field mapping results are presented in this announcement.
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 a Loyal Lithium mapping and sampling program discovered a group of six spodumene pegmatites dykes on surface. • 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, subsequently found to be spodumene bearing pegmatites. The spectral imagery interpretations appeared to correlate with the general area of the later field mapped spodumene pegmatite dykes.

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 favourable geologic setting for lithium pegmatite occurrences, the Trieste Project is considered to have sufficient geological merit to warrant further intensive exploration. The Project measures approximately 38 km in the east-west direction and has never been subject to systematic exploration for lithium-bearing pegmatites until the exploration programs of Loyal Lithium. • Initial work focused on detailed data compilation to ensure that all historical work completed on the Property was digitised and incorporated into the current database. Airborne geophysical and LIDAR surveys, with high resolution orthophotos flown to aid in target delineation across the Project area. • An aggressive 14-day mapping and sampling program in August 2023 discovered a cluster of spodumene pegmatite outcrops, that were interpreted to form part of six distinct dykes. In 2024 a further two lithium pegmatite dykes were discovered, with Dyke #07 in the mafic amphibolite and Dyke #08 to the south of Dyke #01 in metasediment, containing the purpurite mineral, an interpreted weathering product of potentially a lithium phosphate mineral. Purpurite has been identified in dykes with spodumene including Dyke #02 and Dyke #04. There are many more instances of purpurite found in other pegmatite dykes where rockchip samples returned no significant lithium. But rockchip sample lithium values are not representative of entire outcrops. • META 1 Trend: The pegmatite outcrops on the western extent of the META 1 trend, to the west of Dyke #02, now span >60% of the total trend strike length. The META 1 trend to the west of Dyke #02 is adjacent to and parallels the greenstone-metasediment contact and appears as an area with a high continuity of an aligned series of lithium pegmatite outcrops with similar textures and minerals to Dyke #02, including the lithium minerals lithiophilite-purpurite, spodumene replaced by albite and also found in spodumene pegmatite Dykes #02 and #04. This META 1 trend is located where a rheological contrast occurs between greenstone and metasediment that has the potential for more structural weakness and therefore higher porosity zones for pegmatite intrusions. Remarkably a pegmatite outcrop with lithiophilite-purpurite found 100m south of Dyke #02 where two spodumene boulders are located to the south of the outcrop, suggests that this pegmatite outcrop may be the source of these spodumene boulders. A series of spodumene boulders were found on the edge of the lake, (Sample number F437012), 2.35% Li2O 240m directly west of Dyke #02. This suggests that Dyke #02 extends west into the area beneath the lake. The next outcrops observed are on the edge and trend out of the lake with minerals including purpurite

and a large spodumene crystal that was observed to be replaced by albite (0.13% Li2O).

- META 2 Trend: At Dyke #06 on the TR3 Trend, a 65-metre wide (north-south) pegmatite dyke has been found on surface with spodumene mega-crystals during the 2024 Field Program. Dyke #06 was uncovered in the 2023 Field Program with only 5 metres of outcrop exposed. A lithium assay of the outcrop sample (1.47% Li2O) prompted Loyal to look more closely at the area. Dyke #06 sits only 180m NNE of Dyke #01 and has the potential to interact with Dyke #01 subsurface and therefore may suggest that there is significantly more pegmatite subsurface. Dyke #01 has a large, long boulder field, with Dyke #06 interpreted to have contributed to this large spodumene boulder field. To the north 38m of Dyke #06, the metasediment host rock was uncovered and has a very similar fabric with biotite minerals to the host rock that is often more proximal and adjacent to known spodumene dykes (0.20% Li2O). This suggests that Dyke #06 may be even larger than the pegmatite outcrop suggests and/or extends further north under vegetation and glacial till cover.eDyke #02 is located where META 1 Trend has a continuous east-west strike with significant pegmatite activity. The east-west strike of the trend correlates with multiple pegmatite dyke intrusives now mapped in 2024. Lepidiolite and purpurite (an alteration product of lithium phosphates) was logged by Dahrouge Field Geologists in the western-most outcrop of Dyke #02 with spodumene (sample F437014). The mineral purpurite with lithium phosphate minerals has also been found in the 2024 Field Program during re-examination of Dyke #04 outcrop, directly adjacent to large spodumene crystals, so this is a lithium mineral marker directly associated with spodumene pegmatites.

  Dyke #02 with the new interpreted westerly extensions, in the further west along strike is Dyke #08, that has significant pegmatite boulder fields where pegmatite has shed off outcrop and has been moved by glaciers towards the southwest. Dyke #08 is a 370m long strike (max. 25m wide) outcrop group found a further 450m west of the Dyke #02 interpreted outcrop group extension. It has the potential to connect to Dyke #02, although boulders do not suggest on surface, subsurface may be more likely. Certainly, pegmatite boulders appear to be located further to the east than anticipated and may be sourced from concealed extensions to the east. So, this suggests it may extend another 100m approximately to the east near surface. In the 2023 Field Program a pegmatite boulder was found 600m down ice that returned a rockchip sample assay of 2.18% Li2O. Further mapping of the area in the 2024 Field Program has discovered many more pegmatite boulders and eight

pegmatite outcrops, by following the pegmatite boulders up ice (to the northeast).

The Dyke #03 furthest western outcrop found a lithium rockchip sample assay of 64ppm in the 2023 Field Program. This outcrop is located 180m west of a very large group of outcrops that contain the most concentrated spodumene mega-crystals at Trieste. Re-examination of this western outcrop in the 2024 Field Program found spodumene minerals. This illustrates the concentrated and uneven distribution of spodumene that can occur in outcrops, so care must be taken when viewing single rockchip sample assays, as in this case, spodumene was very close to a low lithium sample assay. The "Absence of Evidence is not Evidence of Absence", so other factors must be considered when assessing pegmatite outcrops including.

If the pegmatite outcrop is located directly along strike of spodumene pegmatites and

Has similar minerals and textures to known spodumene pegmatite outcrops

And high assay elements associated with lithium in multi-element sample assays (specially caesium and tantalum).

The Dyke #03 outcrops have a maximum of 39m width in the widest location and strike in an east-west direction for 460m to this western-most spodumene pegmatite outcrop.

- All pegmatite Dykes #01 to #08 exhibit similar textures, containing minerals including albite (± cleavelandite), quartz, muscovite, apatite, and ± tourmaline.
- Two pegmatite boulders discovered down ice of Dyke #02, adjacent to a pegmatite outcrop with no visible spodumene (Purpurite- Heterosite), but which is interpreted to have potentially been the source of the spodumene boulders. None of these dykes have been drilled.
- With pegmatite outcrops identified containing significant lithium-bearing minerals in outcrop (spodumene) in the first phase of work, the first drilling program targeted Dyke #01 and then a stage two drill program targeted Dykes #04 and #05. Dykes #02, #03, #06, #07, #08.
- Close spaced aeromagnetics and Mobile MTm geophysics survey was completed in 2024 and 3D inversion modelling high pass filtered 3D models were completed. Already the data show connections between dykes found from the resistivity and conductivity data. This appears to be more suitable for pegmatites in metasedimentary than mafic host rocks.