ASX Announcement | 4 December 2023

New Discovery of 6th Spodumene Bearing Pegmatite Dyke at the Trieste Lithium Project, James Bay, Quebec, Canada

Highlights:

- **Rock chip assay results from the summer field program have confirmed the discovery of a sixth spodumene bearing pegmatite dyke (Dyke #06) at the Trieste Lithium Project.**
- **Dyke #06 is near the five previously discovered spodumene bearing dykes that have reported strong lithium mineralisation with assay results up to 7.60% Li_2O.**
- **Concealed under heavy vegetation the prominent east-west lying ridge of Dyke #06 illustrates the potential for more mineralised discoveries across the large scale project.**
- **The impressive visual spodumene crystals (up to 1.4m) observed across the Trieste Lithium Project have been verified with the following notable high-grade assay results:**
    - **7.60% Li_2O Dyke #04**
    - **7.44% Li_2O Dyke #03**
    - **4.56% Li_2O Dyke #05**
    - **1.75% Li_2O Dyke #01**
    - **1.47% Li_2O Dyke #06**
    - **1.43% Li_2O Dyke #02**
- **The rock chip assay results will now be integrated with LiDAR and Aeromagnetic data to further understand the full potential of the fertile metasediment host zone located between the Trieste Greenstone Belt and the southern Tilly Granitoid intrusion.**
- **Loyal Lithium is well capitalised with $9.6m[(1)] in cash to conduct future drilling programs at all known spodumene bearing pegmatite dykes during the upcoming Canadian winter.**

Loyal Lithium Limited (ASX:LLI) (**Loyal Lithium**, **LLI**, or the **Company**) is delighted to announce the discovery of a sixth spodumene bearing pegmatite dyke (Dyke #06) following the receipt of high-grade rock chip assay results from the summer field program at the Trieste Lithium Project. Dyke #06 is positioned amongst the previously discovered five spodumene-bearing pegmatite dykes which have returned robust lithium mineralisation, with assay values up to 7.60% Li_2O. Concealed under heavy vegetation the prominent weathering resistive east-west lying ridge of Dyke #06 illustrates the potential for more mineralised discoveries across the large-scale project. These results will be integrated with LiDAR and Aeromagnetic data to enhance the understanding of the fertile metasediment host zone between the Trieste Greenstone Belt and the northern contact of the Tilly Granitoid intrusion.

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

"Over the last four months, our team has successfully transitioned the Trieste Lithium Project from a highly prospective greenfield initiative to a project characterised by a significant abundance of confirmed lithium mineralisation, both at surface and at depth."

"The discovery of Dyke #06 illustrates the scale of this metasediment zone and the potential for further concealed discoveries. While our initial focus is the six prominent spodumene-bearing pegmatite dykes, our overarching goal is to efficiently locate the main feeder zones responsible for the uniquely large and abundant spodumene crystals observed at surface."

"We have gathered an extensive amount of data over the summer – airborne, surface and subsurface – and this information provides us with an opportunity to take a more holistic view of this exciting project, guiding our drilling program this upcoming Canadian winter."

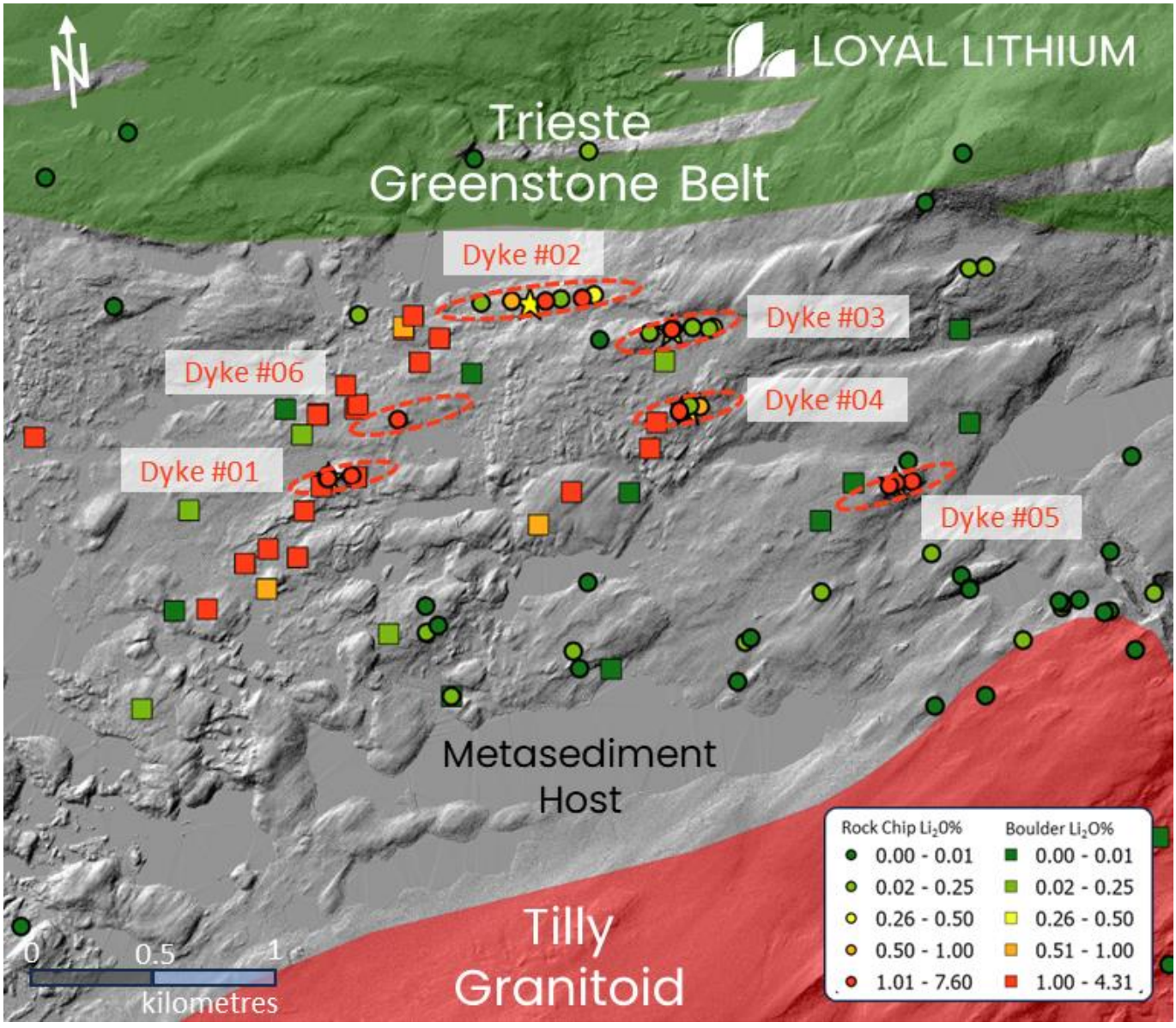

Figure 1 – Trieste Lithium Project - Six spodumene bearing pegmatite dykes with outcrop and boulder rock chip samples assay results represented on a digital elevation model.

New Discovery of a 6th Spodumene Bearing Pegmatite Dyke - Dyke #06

Dyke #06 forms a prominent weathering restive east-west lying ridge situated just 250 meters northeast of Dyke #01 and 500 meters southwest of Dyke #02 within the Trieste Lithium Project.

Image 1 – Trieste Lithium Project Dyke #06 Outcrop photo (Sample ID C00428662).

The Trieste Lithium Project has avoided bushfires in recent years to result in heavy ground cover throughout. The ground cover on Dyke #06 is particularly thick (+300mm), limiting access to exposed rock and the collection of a representative rock chip sample. Consequently, the mineralisation of Dyke #06 could not confidently be confirmed upon initial inspection. The rock chip recent assay result collected from Dyke #06 (ID C00428662) has now returned a strong result of 1.47% Li_2O, confirming the presence of spodumene in the sample (Image 2).

The discovery of Dyke #06 and the results from the recent Dyke #01 drilling affirm the potential for additional concealed mineralised dykes at the Trieste Lithium Project. Loyal Lithium plans to revisit Dyke #06 during the 2024 summer field season to conduct more detailed mapping and better understand the extents of this substantial dyke at the surface.

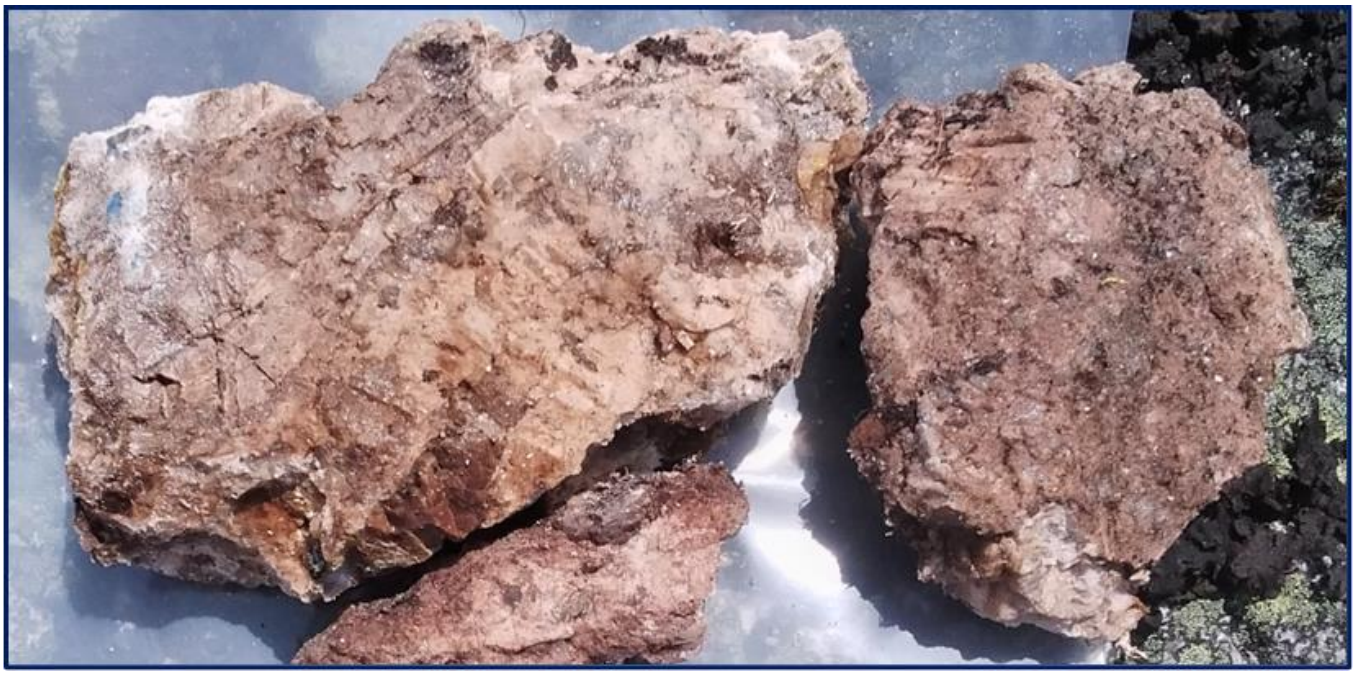

Image 2 – Trieste Lithium Project - Dyke #06 outcrop sample ID C00428662

Notable Rock Chip Assay Results

The Trieste Lithium Project summer field program collected 155 outcrop and 80 boulder samples to confirm strong mineralisation from the six spodumene bearing pegmatite dykes.

Trieste Lithium Project Dyke Outcrop Assay Results (NAD83z18)				
Dyke ID	**Sample ID**	**Easting**	**Northing**	**Li2O %**
Dyke #01	C00428065	683,096	5,906,098	**1.02**
Dyke #01	C00428066	683,095	5,906,086	**1.75**
Dyke #01	C00428067	683,097	5,906,087	**1.43**
Dyke #01	C00428068	683,189	5,906,096	**1.20**
Dyke #02	C00428631	684,092	5,906,791	**1.43**
Dyke #02	C00428632	683,950	5,906,780	**1.43**
Dyke #02	C00428633	683,817	5,906,780	**0.93**
Dyke #03	C00428682	684,356	5,906,656	**7.44**
Dyke #04	C00428617	684,480	5,906,343	**7.60**
Dyke #05	C00428707	685,381	5,906,075	**4.25**
Dyke #05	C00428708	685,321	5,906,071	**4.56**
Dyke #05	C00428709	685,292	5,906,060	**1.97**
Dyke #06	C00428662	683,373	5,906,316	**1.47**

Table 1 – Notable assay results from the six spodumene bearing pegmatite dykes at the Trieste Project.

In addition to the robust outcrop sample assay results, the boulder assay results are very encouraging to infer the potential strike length extension, under cover, for several of the spodumene bearing pegmatite dykes. These results will be integrated with LiDAR and Aeromagnetic data to enhance the understanding of the fertile metasediment host zone between the Trieste Greenstone Belt and the northern contact of the Tilly Granitoid intrusion.

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 Statement

The information in this announcement that relates to Exploration Results and Targets, is based, and fairly reflects, information compiled 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.

References

[1] ASX Announcement LLI: 31 October 2023 Quarterly Activities Report – 30 September 2023

APPENDIX 1: Outcrop and Boulder Sample Assay Details

Table 1: Rock sample details

Trieste Lithium Project Boulder and Outcrop Assay Results (NAD83z18)					
Sample Type	Sample ID	Easting	Northing	Li ppm	Li2O %
Outcrop	C00428617	684,480	5,906,343	35294	7.60
Outcrop	C00428682	684,356	5,906,656	34553	7.44
Outcrop	C00428708	685,321	5,906,071	21157	4.56
Boulder	C00428612	684,357	5,906,204	20012	4.31
Outcrop	C00428707	685,381	5,906,075	19722	4.25
Boulder	C00428613	684,383	5,906,305	18308	3.94
Boulder	C00428098	683,456	5,906,540	16305	3.51
Boulder	C00428096	683,431	5,906,722	13238	2.85
Boulder	C00428090	683,167	5,906,449	12077	2.60
Boulder	C00428094	683,395	5,906,668	11260	2.42
Boulder	C00428671	683,005	5,905,959	10576	2.28
Boulder	C00428754	681,950	5,906,247	10131	2.18
Boulder	C00428091	683,204	5,906,359	10010	2.16
Boulder	C00428672	682,625	5,905,576	9949	2.14
Boulder	C00428092	683,215	5,906,375	9592	2.07
Boulder	C00428737	682,864	5,905,811	9193	1.98
Outcrop	C00428709	685,292	5,906,060	9155	1.97
Boulder	C00428097	683,534	5,906,634	9011	1.94
Boulder	C00428083	683,057	5,906,334	8705	1.87
Boulder	C00428618	682,773	5,905,754	8173	1.76
Outcrop	C00428066	683,095	5,906,086	8137	1.75
Boulder	C00428736	683,072	5,906,055	7408	1.59
Boulder	C00428628	682,979	5,905,778	7079	1.52
Boulder	C00428082	683,060	5,906,340	6995	1.51
Boulder	C00428069	684,050	5,906,034	6970	1.50
Outcrop	C00428662	683,373	5,906,316	6830	1.47
Outcrop	C00428632	683,950	5,906,780	6647	1.43
Outcrop	C00428067	683,097	5,906,087	6635	1.43
Outcrop	C00428631	684,092	5,906,791	6632	1.43
Boulder	C00428079	683,209	5,906,092	6156	1.33
Outcrop	C00428068	683,189	5,906,096	5573	1.20
Outcrop	C00428065	683,096	5,906,098	4748	1.02
Outcrop	C00428633	683,817	5,906,780	4305	0.93
Boulder	C00428619	682,858	5,905,655	3672	0.79
Boulder	C00428670	683,921	5,905,905	3133	0.67
Outcrop	C00428614	684,553	5,906,367	2928	0.63
Boulder	C00428095	683,393	5,906,678	2558	0.55
Outcrop	C00428731	684,596	5,906,671	2391	0.51
Outcrop	C00428630	684,139	5,906,803	2171	0.47
Outcrop	C00428732	684,605	5,906,676	1191	0.26
Outcrop	C00428086	685,669	5,906,914	1049	0.23
Outcrop	C00428615	684,507	5,906,381	848	0.18
Outcrop	C00428625	683,483	5,905,485	722	0.16
Outcrop	C00428030	684,008	5,906,787	646	0.14
Outcrop	C00428641	687,602	5,907,148	639	0.14

Trieste Lithium Project Boulder and Outcrop Assay Results (NAD83z18)					
Sample Type	Sample ID	Easting	Northing	Li ppm	Li2O %
Boulder	C00428673	682,370	5,905,186	519	0.11
Outcrop	C00428722	685,967	5,905,583	431	0.09
Outcrop	C00428704	689,891	5,909,708	374	0.08
Outcrop	C00428623	683,579	5,905,235	345	0.07
Outcrop	C00428093	683,218	5,906,727	283	0.06
Boulder	C00428666	684,414	5,906,544	280	0.06
Outcrop	C00428668	684,444	5,906,672	227	0.05
Outcrop	C00428664	683,698	5,906,773	221	0.05
Outcrop	C00428075	684,730	5,905,447	185	0.04
Outcrop	C00428054	689,772	5,909,548	171	0.04
Boulder	C00428078	682,996	5,906,257	152	0.03
Outcrop	C00428667	684,356	5,906,656	143	0.03
Outcrop	C00428028	684,851	5,908,040	139	0.03
Boulder	C00430501	681,670	5,905,008	118	0.03
Outcrop	C00428088	685,604	5,906,907	115	0.02
Outcrop	C00428711	685,605	5,905,655	111	0.02
Boulder	C00428021	310,939	5,901,830	108	0.02
Outcrop	C00428733	684,588	5,906,671	108	0.02
Outcrop	C00428699	686,918	5,909,019	100	0.02
Outcrop	C00428616	684,513	5,906,371	96	0.02
Boulder	C00428675	682,554	5,905,962	96	0.02
Outcrop	C00428077	685,026	5,905,643	86	0.02
Outcrop	C00428084	685,667	5,906,916	86	0.02
Outcrop	C00428669	684,522	5,906,677	86	0.02
Outcrop	C00428715	685,457	5,905,794	86	0.02
Outcrop	C00428710	685,607	5,905,657	84	0.02
Outcrop	C00428696	311,411	5,905,099	79	0.02
Outcrop	C00428085	684,117	5,907,364	77	0.02
Outcrop	C00428072	684,058	5,905,413	76	0.02
Outcrop	C00428609	689,212	5,909,755	76	0.02
Boulder	C00428621	683,335	5,905,479	72	0.02
Outcrop	C00428653	690,247	5,909,438	71	0.02
Outcrop	C00428684	686,328	5,905,639	70	0.02
Outcrop	C00428721	685,816	5,905,454	70	0.02
Boulder	C00428401	688,659	5,908,426	69	0.01
Outcrop	C00428728	686,133	5,905,564	69	0.01
Boulder	C00428404	688,593	5,908,229	68	0.01
Outcrop	C00428352	304,701	5,901,459	67	0.01
Outcrop	C00428712	685,606	5,905,653	67	0.01
Boulder	C00428611	684,276	5,906,031	65	0.01
Outcrop	C00428051	689,814	5,909,445	64	0.01
Outcrop	C00428665	684,159	5,906,628	64	0.01
Outcrop	C00428025	311,384	5,901,719	59	0.01
Boulder	C00428674	682,497	5,905,569	58	0.01
Outcrop	C00428070	684,114	5,905,679	56	0.01
Outcrop	C00428627	683,480	5,905,588	56	0.01
Outcrop	C00428655	690,322	5,909,424	55	0.01
Outcrop	C00428706	685,365	5,906,153	55	0.01
Outcrop	C00428624	683,483	5,905,482	53	0.01
Outcrop	C00428076	684,750	5,905,464	52	0.01
Outcrop	C00428405	686,929	5,900,870	51	0.01

Trieste Lithium Project Boulder and Outcrop Assay Results (NAD83z18)					
Sample Type	Sample ID	Easting	Northing	Li ppm	Li2O %
Outcrop	C00428638	687,607	5,907,148	51	0.01
Boulder	C00428014	687,694	5,905,560	50	0.01
Outcrop	C00428702	689,700	5,909,525	47	0.01
Outcrop	C00430505	683,428	5,908,562	45	0.01
Outcrop	C00428654	690,184	5,909,378	44	0.01
Outcrop	C00428409	685,625	5,901,209	42	0.01
Boulder	C00428608	689,639	5,909,078	41	0.01
Boulder	C00428656	690,301	5,909,570	38	0.01
Outcrop	C00428351	304,838	5,900,984	37	0.01
Outcrop	C00428729	686,255	5,905,417	37	0.01
Outcrop	C00428738	687,771	5,906,669	37	0.01
Outcrop	C00428739	687,633	5,906,619	36	0.01
Outcrop	C00428073	684,082	5,905,344	34	0.01
Boulder	C00428029	684,575	5,907,974	33	0.01
Boulder	C00428622	683,581	5,905,236	33	0.01
Boulder	C00428663	683,660	5,906,497	33	0.01
Outcrop	C00428691	684,390	5,902,243	31	0.01
Outcrop	C00428746	305,740	5,907,526	31	0.01
Outcrop	C00428061	687,266	5,905,087	30	0.01
Outcrop	C00428411	685,257	5,901,815	30	0.01
Outcrop	C00428718	681,993	5,907,263	30	0.01
Boulder	C00428756	688,266	5,905,796	30	0.01
Boulder	C00428408	685,617	5,901,190	29	0.01
Outcrop	C00428629	683,016	5,908,015	29	0.01
Boulder	C00428637	687,476	5,907,131	28	0.01
Outcrop	C00428644	689,584	5,907,072	28	0.01
Outcrop	C00428742	687,630	5,906,346	28	0.01
Boulder	C00428016	688,074	5,905,645	27	0.01
Outcrop	C00428355	684,698	5,905,293	27	0.01
Boulder	C00428403	688,357	5,908,177	27	0.01
Outcrop	C00428703	689,819	5,909,800	27	0.01
Outcrop	C00428727	686,154	5,905,568	27	0.01
Outcrop	C00428755	682,261	5,906,758	27	0.01
Outcrop	C00428024	311,410	5,901,715	26	0.01
Outcrop	C00428056	689,929	5,909,470	26	0.01
Outcrop	C00428745	305,859	5,907,456	26	0.01
Outcrop	C00428055	689,824	5,909,498	25	0.01
Outcrop	C00428686	684,043	5,902,755	25	0.01
Outcrop	C00428687	684,300	5,902,641	25	0.01
Outcrop	C00428692	684,456	5,901,992	25	0.01
Outcrop	C00428723	685,969	5,905,599	25	0.01
Outcrop	C00428735	685,580	5,907,357	25	0.01
Outcrop	C00428744	304,921	5,907,359	24	0.01
Boulder	C00428647	309,697	5,904,870	22	0.00
Boulder	C00428649	306,802	5,907,310	22	0.00
Boulder	C00428650	689,343	5,908,575	22	0.00
Boulder	C00428717	681,834	5,908,551	22	0.00
Outcrop	C00428724	685,957	5,905,606	22	0.00
Boulder	C00428751	685,153	5,906,069	22	0.00
Boulder	C00428302	689,599	5,908,024	21	0.00
Boulder	C00428402	688,419	5,908,271	21	0.00

Trieste Lithium Project Boulder and Outcrop Assay Results (NAD83z18)					
Sample Type	Sample ID	Easting	Northing	Li ppm	Li2O %
Boulder	C00428646	309,707	5,904,873	21	0.00
Boulder	C00428743	304,828	5,908,247	21	0.00
Boulder	C00428018	310,935	5,901,560	20	0.00
Outcrop	C00428053	689,772	5,909,548	20	0.00
Outcrop	C00428058	687,084	5,904,596	20	0.00
Boulder	C00428642	688,267	5,908,037	20	0.00
Outcrop	C00428695	312,253	5,904,791	20	0.00
Outcrop	C00428741	687,521	5,906,566	20	0.00
Outcrop	C00428749	305,315	5,901,529	20	0.00
Boulder	C00428303	689,130	5,908,029	19	0.00
Outcrop	C00428693	312,552	5,904,966	19	0.00
Outcrop	C00428719	682,315	5,907,439	19	0.00
Boulder	C00428019	310,976	5,901,721	18	0.00
Boulder	C00428301	689,764	5,907,683	18	0.00
Outcrop	C00428762	686,387	5,904,188	18	0.00
Outcrop	C00428026	311,398	5,901,708	17	0.00
Outcrop	C00428052	689,828	5,909,464	17	0.00
Outcrop	C00428626	683,530	5,905,512	17	0.00
Outcrop	C00428658	689,998	5,909,357	17	0.00
Outcrop	C00428676	685,669	5,905,237	17	0.00
Outcrop	C00428022	311,114	5,901,931	16	0.00
Boulder	C00428406	686,069	5,901,306	16	0.00
Outcrop	C00428645	689,332	5,907,221	16	0.00
Outcrop	C00428657	690,381	5,909,648	16	0.00
Outcrop	C00428705	689,720	5,909,551	16	0.00
Outcrop	C00428027	305,537	5,901,527	15	0.00
Outcrop	C00428652	690,080	5,909,389	15	0.00
Outcrop	C00428688	684,863	5,902,417	15	0.00
Outcrop	C00428354	687,168	5,909,646	14	0.00
Boulder	C00428635	687,259	5,906,722	14	0.00
Outcrop	C00428689	684,998	5,902,312	14	0.00
Outcrop	C00428690	684,653	5,902,315	14	0.00
Boulder	C00428747	305,126	5,901,388	14	0.00
Outcrop	C00430504	681,897	5,904,335	14	0.00
Outcrop	C00430507	686,653	5,908,456	14	0.00
Boulder	C00428648	309,572	5,905,516	13	0.00
Boulder	C00428752	685,024	5,905,921	13	0.00
Boulder	C00428757	686,055	5,903,372	13	0.00
Outcrop	C00428761	685,880	5,903,793	13	0.00
Outcrop	C00428353	304,842	5,901,406	12	0.00
Boulder	C00428610	689,443	5,909,667	12	0.00
Outcrop	C00428714	685,575	5,905,708	12	0.00
Boulder	C00428716	681,407	5,908,555	12	0.00
Outcrop	C00428758	685,957	5,903,529	12	0.00
Outcrop	C00428759	685,947	5,903,552	12	0.00
Outcrop	C00428023	311,389	5,901,717	11	0.00
Outcrop	C00428356	686,690	5,903,472	11	0.00
Outcrop	C00428410	685,464	5,901,546	11	0.00
Outcrop	C00428750	305,483	5,901,498	11	0.00
Outcrop	C00428748	305,181	5,901,454	10	0.00
Boulder	C00428015	687,644	5,905,641	5	0.00

Trieste Lithium Project Boulder and Outcrop Assay Results (NAD83z18)					
Sample Type	Sample ID	Easting	Northing	Li ppm	Li2O %
Boulder	C00428017	687,828	5,904,979	5	0.00
Outcrop	C00428057	690,059	5,909,589	5	0.00
Outcrop	C00428059	687,266	5,905,087	5	0.00
Outcrop	C00428063	687,223	5,905,174	5	0.00
Outcrop	C00428071	684,968	5,899,699	5	0.00
Boulder	C00428074	684,205	5,905,342	5	0.00
Boulder	C00428081	682,931	5,906,357	5	0.00
Boulder	C00428087	685,567	5,906,669	5	0.00
Boulder	C00428089	685,607	5,906,303	5	0.00
Outcrop	C00428099	683,669	5,907,336	5	0.00
Boulder	C00428407	686,021	5,901,325	5	0.00
Outcrop	C00428607	689,812	5,909,187	5	0.00
Boulder	C00428634	687,084	5,906,665	5	0.00
Boulder	C00428636	687,498	5,906,918	5	0.00
Boulder	C00428639	687,585	5,907,159	5	0.00
Boulder	C00428643	689,880	5,907,073	5	0.00
Outcrop	C00428659	687,297	5,904,703	5	0.00
Outcrop	C00428661	687,573	5,905,504	5	0.00
Outcrop	C00428677	686,024	5,904,692	5	0.00
Outcrop	C00428678	685,990	5,904,616	5	0.00
Boulder	C00428679	686,345	5,904,685	5	0.00
Outcrop	C00428681	686,577	5,904,834	5	0.00
Outcrop	C00428683	686,507	5,906,945	5	0.00
Outcrop	C00428685	686,242	5,906,173	5	0.00
Outcrop	C00428694	312,367	5,904,765	5	0.00
Outcrop	C00428701	689,715	5,909,334	5	0.00
Outcrop	C00428713	685,606	5,905,652	5	0.00
Outcrop	C00428725	686,035	5,905,611	5	0.00
Outcrop	C00428726	686,158	5,905,803	5	0.00
Outcrop	C00428730	685,471	5,905,197	5	0.00
Outcrop	C00428734	685,434	5,907,165	5	0.00
Boulder	C00428753	687,064	5,906,669	5	0.00
Outcrop	C00430502	681,528	5,904,437	5	0.00
Outcrop	C00430503	681,532	5,904,434	5	0.00
Outcrop	C00430506	685,596	5,908,305	5	0.00
Outcrop	C00482062	687,256	5,905,126	5	0.00
Outcrop	C00482064	687,159	5,905,081	5	0.00

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.*	• Sample assays from spot grab samples selected by field mapping geologists are reported in this announcement. • Field mapping was more concentrated in the area found with a cluster of spodumene bearing pegmatite dykes. • Sample sites are highly clustered and do not represent the average lithium grades of the outcrops. • Samples of between 0.22 to 4.64 kg, with an average of 1.28 kg were taken using a hammer and Geo pick • A LIBS Analyser was used to confirm high lithium values from spodumene identified in sample hand specimens. • Samples were stored in a locked shipping container and placed in larger sample bags marked with sample numbers and bag sequence then transferred to a pallet and wrapped with plastic shipping then shipped by road transport to SGS Sudbury preparation and analysis for multielement analysis and sodium peroxide digest lithium analysis. • Certified Reference Materials were inserted once in every twenty samples across the sample stream as part of the QA-QC program.
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*	• MX Deposit was used to record geological and sampling data. These data are backed up instantly to a cloud source.

	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.*	• Samples were photographed in the field and at the 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.*	• Dry, crush, pulverise. • All samples collected were shipped by enclosed truck to SGS Ontario laboratory for standard sample preparation (code PRP89) which includes drying at 105°C, crushed to 75% passing 2 mm, riffle split 250g, and pulverized 85% passing 75 microns. The pulps are homogenized and subsequently analysed for multi-elements using sodium peroxide fusion with ICP-AES/MS finish. This is considered a total digestion method.
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 Lithium in 2023 were analysed using 50g dissolution in sodium peroxide (total Lithium digestion) coupled with ICP-AES+MS 57 (57 elements), SGS internal code GE_ICM91A50 which is appropriate for lithium. • Laboratory CRMs are inserted once in every twenty samples across the sample stream, as part of the internal quality control procedures. • Analytical procedures are considered Standard Industry Practice. • SGS Canada are ISO 17025 certified and implement routine Quality Assurance and Quality Control (QA/QC) protocols during the analytical process. The procedures include using pulp duplicates and internally certified reference materials. • The Competent Person considers the sample and analytical procedures acceptable for field exploration hard rock grab 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*	• A LIBS was used to positively identify spodumene in samples, from the lithium values at the site camp, after samples were returned from the field. • All original geological and assay data stored in an MX Deposit

	verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	database in an as-received basis with no adjustment to 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.*	• 2023 sample points were picked up using a Garmin GPS 66S on electronic base maps with underlying satellite imagery in the visible spectrum. • Data is stored in UTM NAD 83 Zone 18N 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 traverses undertaken by field geologists
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.*	• Spot surface grab samples may produce bias as samples were collected of all pegmatites but may be skewed towards samples that contain spodumene in pegmatite.
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 core at a base camp. Samples are transported from the field, after cataloguing, by helicopter daily back to the base camp and then transferred to a locked sea container, then transferred to a transport truck specifically for samples, dropped off directly to SGS laboratory. SGS provides a reconciliation sheet from the sample submission versus the samples received. • Samples are given a unique sample number on a weather resistant ticket that was provided by SGS for sample analysis. Each sample tag lists the project name and unique sample number. • Laboratory services are in secure compounds. • Once field samples were logged the entire sample was sent for assay. Sample pulps are stored for later reference by SGS laboratory.

Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques or data have been completed on this filed sampling program. The Loyal Lithium CP examined geological contractor in the field and 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, and 238 under Project Trieste Lithium Inc. (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 report. 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 vary between March 13, 2023, and October 19, 2025.
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 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 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 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 have been 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 are 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). 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.*	• No drill hole results are reported in this announcement

	• *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.*	• No grade aggregation methods have been utilised. • .
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').*	•
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 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 cluster of five spodumene bearing pegmatites on surface that were sampled and assay presented in this announcement • 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 mapped 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, more 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 five spodumene bearing pegmatite outcrops, that were interpreted to form part of five distinct dykes. • With pegmatite outcrops identified containing significant lithium-bearing minerals in outcrop (spodumene) in the first phase of work, a first drilling program targeted Dyke #01. A systematic drill hole approach was adopted when drilling following from the central portion of the dyke following the extent outwards along strike to understand the orientation and extent of the dyke. Active geological modelling is being completed and assays are to be received to understand the spodumene distribution within the pegmatite. Due to the nature of pegmatite emplacement, which may commonly form irregular bodies and/or develop sharp changes in orientation along trend further drilling on Dyke #01 is required along strike to the east and to the west, where no outcrop occurs. In the east, pegmatite drill hole intercepts are found beneath areas with no readily discernible surface outcrop.