



28 October 2024

# La Grande Lithium Projects Field Exploration Update, James Bay – Quebec, Canada

## Highlights:

- Summer 2024 field program completed with an extensive sampling program undertaken.
- 193 samples taken across the project, including rock chips and channel samples.
- The field program targeted high-priority areas identified from previous aerial surveys and desktop studies.
- JBY team will continue to plan for future works on its La Grande Project, which is a highly prospective lithium property located along trend from Winsome Resources' (ASX: WR1) Canet Lithium Project and Patriot Battery Metals (ASX: PMT).

James Bay Minerals (ASX: JBY) (“James Bay Minerals” or “the Company”) is pleased to provide an operational update and report results from rock chip and channel sampling undertaken during its recently completed summer exploration program at the Company’s La Grande Lithium Projects in Canada.

Data generated from this programme has further enhanced the team’s understanding of the key geological features identified from aerial surveys completed in 2023.

The James Bay region, located in Quebec, Canada, is one of only very few Tier-1 jurisdictions globally which display all three key ingredients to host large-scale Lithium, Caesium, Tantalum (LCT) pegmatites. James Bay Minerals is in the fortunate position of holding one of the largest land positions of 41,572 hectares along the La Grande Greenstone belt and has the largest holding along the premium La Grande lithium trend of ~55km east to west.

In late May 2024, the Company’s exploration team mobilised back to the James Bay region to commence field exploration activities across the La Grande Projects. Fieldwork was completed across key LCT pegmatite, rare earths and uranium targets which were generated from LiDAR, high-resolution photography, Aeromagnetic and Spectro magnetic surveys. The Company completed low-cost field prospecting with the assistance of a helicopter to maximise the time available.

### James Bay Executive Director, Andrew Dornan, commented:

*“The productive summer field program yielded essential data that enhances our understanding of the La Grande properties and surrounding region. This information will be used to guide future activities across the Aqua, Joule and La Grande East Properties.”*

## La Grande Project – Rock Chip and Channel Sampling

The summer 2024 field program has provided the Company with a deeper insight into the La Grande Projects and is actively enhancing its geological knowledge of the prospects and their potential to contain lithium-bearing pegmatites.

A total of 162 rock chip samples and 31 channel samples were taken across the La Grande Projects.

All sampling locations and assay details are included within Appendix 1.

## Aqua Property

Sampling across the Aqua Property consisted of 85 rock chip samples and 31 channel samples were completed.

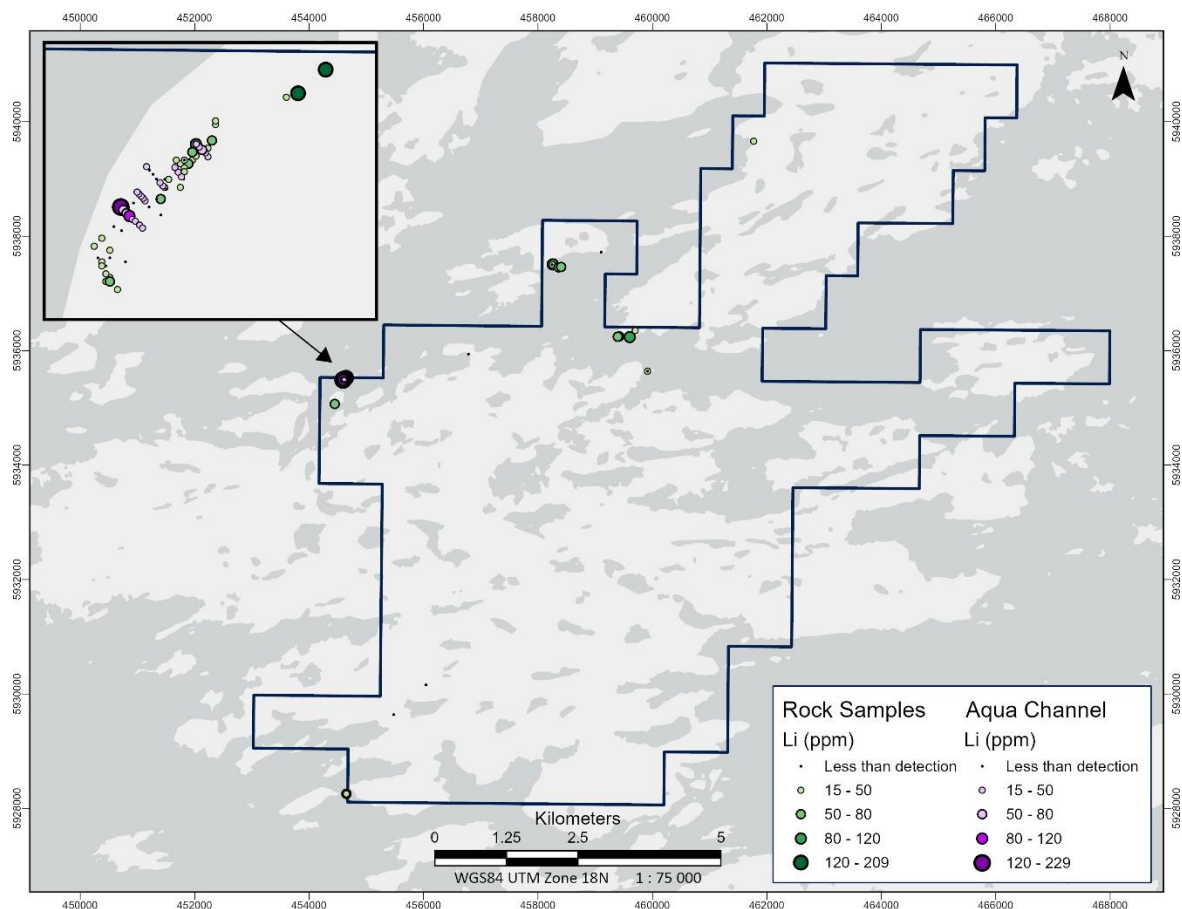


Figure 1 – Aqua rock chip and channel sampling Li assay results and locations.

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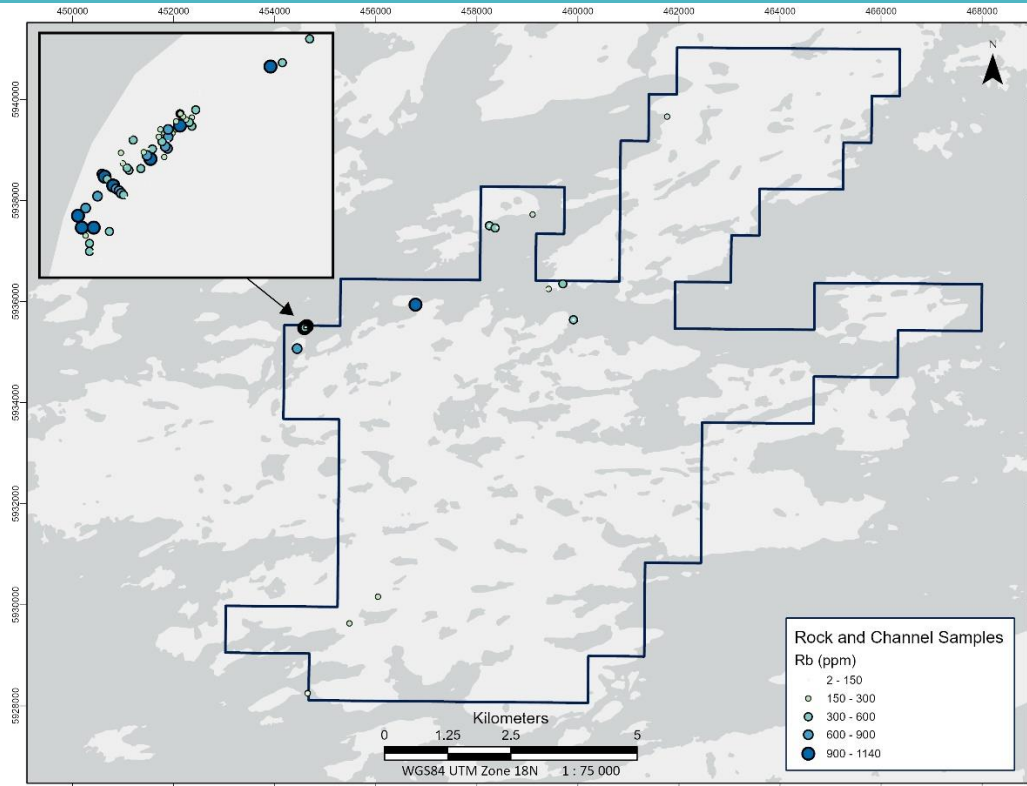


Figure 2 – Aqua rock chip and channel sampling Rb assay results and locations.

**Joule Property**

Sampling across the Joule Property consisted of 62 rock chip samples.

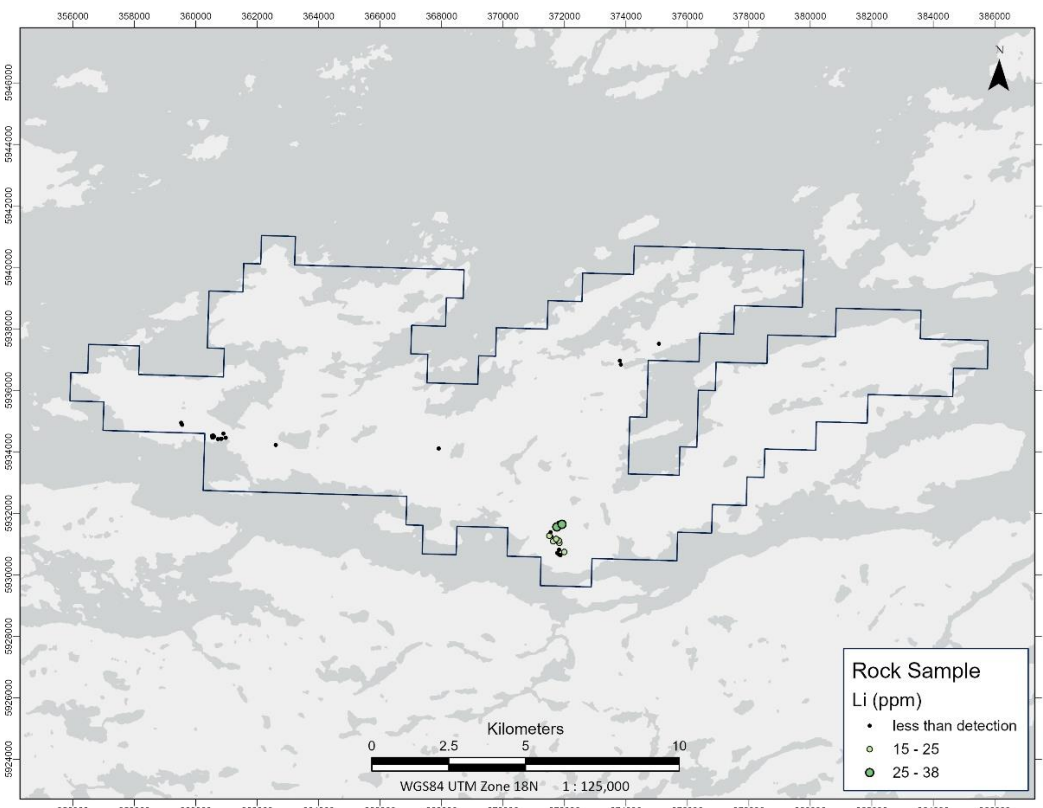


Figure 3 – Joule property rock chip sampling Li assay results and locations.

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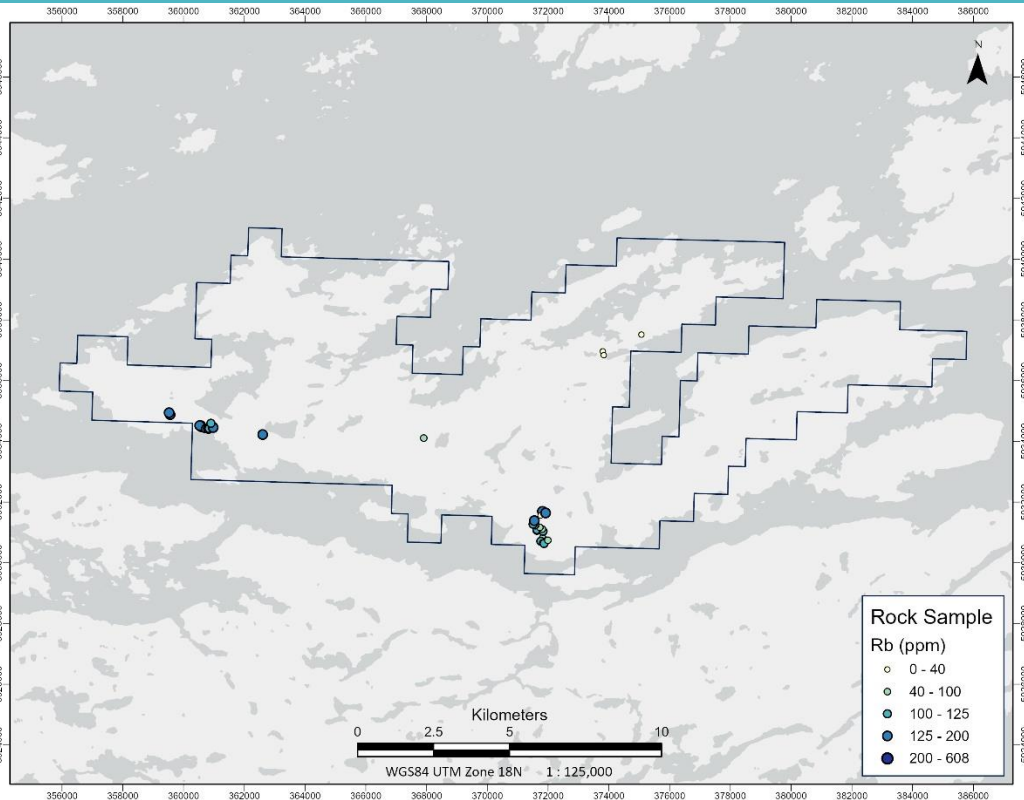


Figure 4 – Joule property rock chip sampling Rb assay results and locations.

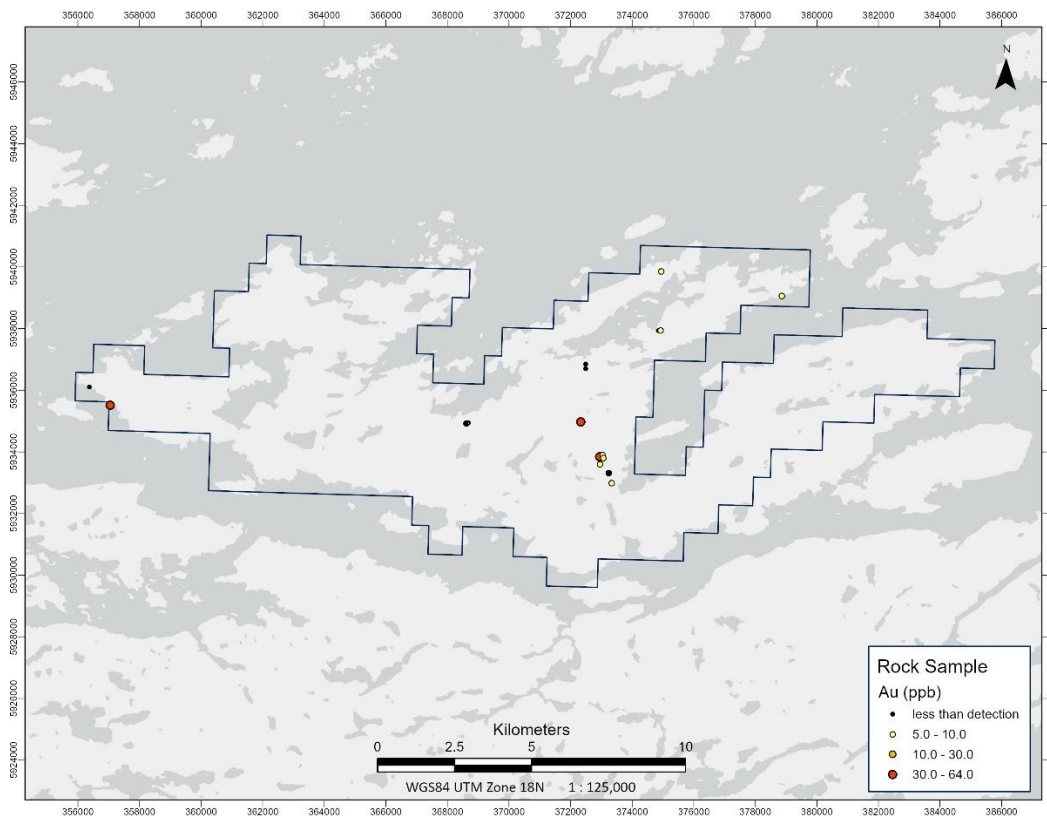


Figure 5 – Joule property rock chip sampling Au assay results and locations

## La Grande East Property

Sampling across the La Grande East consisted of 15 rock chip samples.

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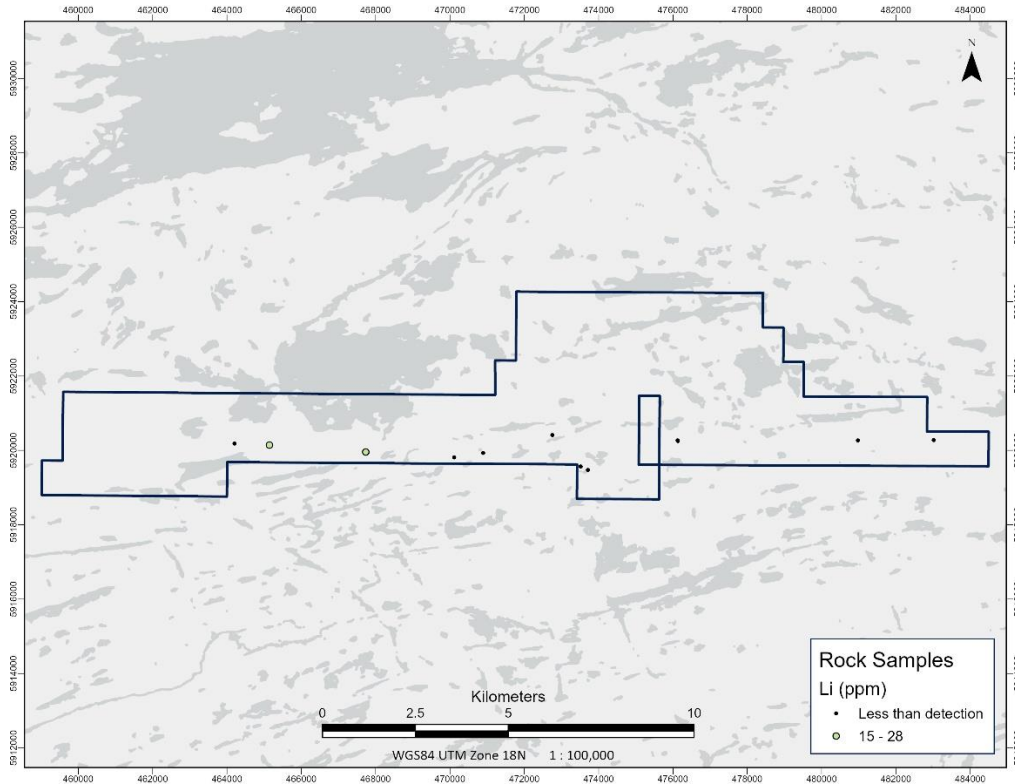


Figure 6 – La Grande East property rock chip sampling Li assay results and locations.

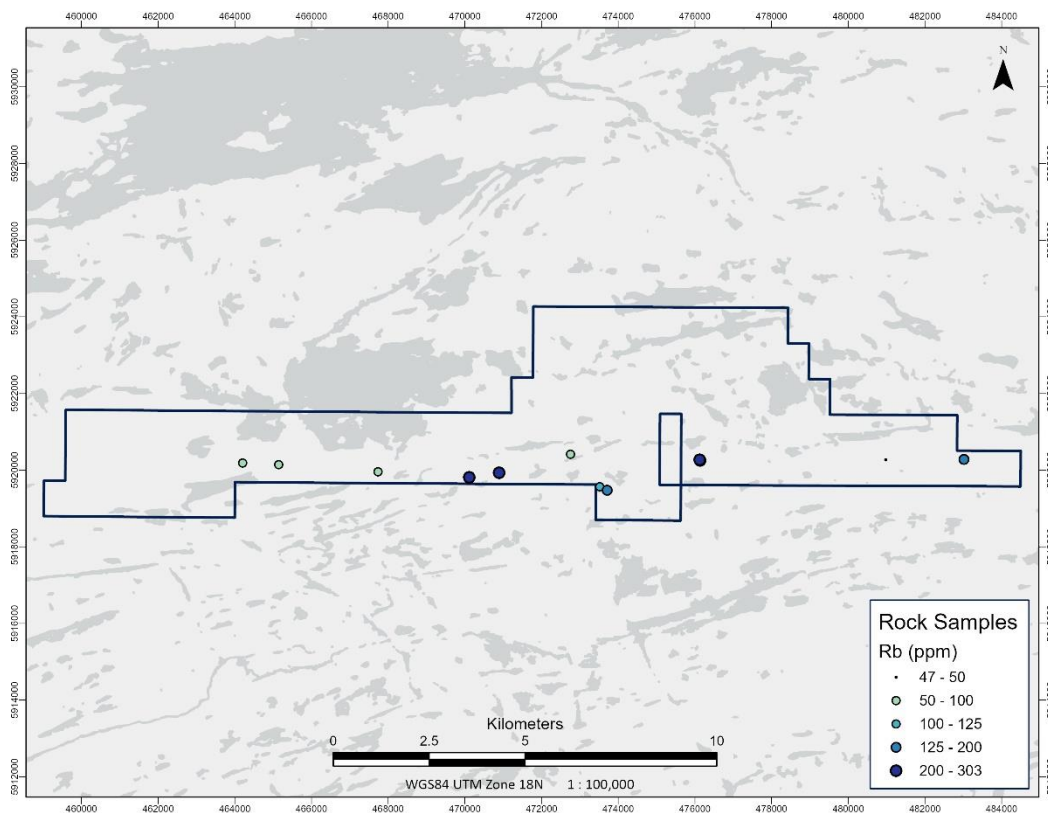


Figure 7 – La Grande East property rock chip sampling Rb assay results and locations

## Background on James Bay Minerals

### Quebec Lithium Assets

James Bay has 100% interest in one of the largest lithium exploration portfolios in the James Bay region, covering an area of 41,572Ha or 416km<sup>2</sup>. The Joule, Aero, Aqua and La Grande East Properties are located in the La Grande sub-province along-trend from the Shaakichiuwaanaan deposit, where Patriot Battery Metals (ASX: PMT) recently reported an updated Indicated and Inferred Mineral Resource Estimate<sup>1</sup> and completed a Preliminary Economic Assessment outlining the potential for a competitive and globally significant high-grade lithium project targeting production of up to ~800ktpa spodumene concentrate<sup>2</sup>.

The Troilus Project is located further to the south sitting only 5km to the north of Sayona's Moblan Lithium Project and in close proximity to Winsome Resources' Sirmac-Clappier Project.

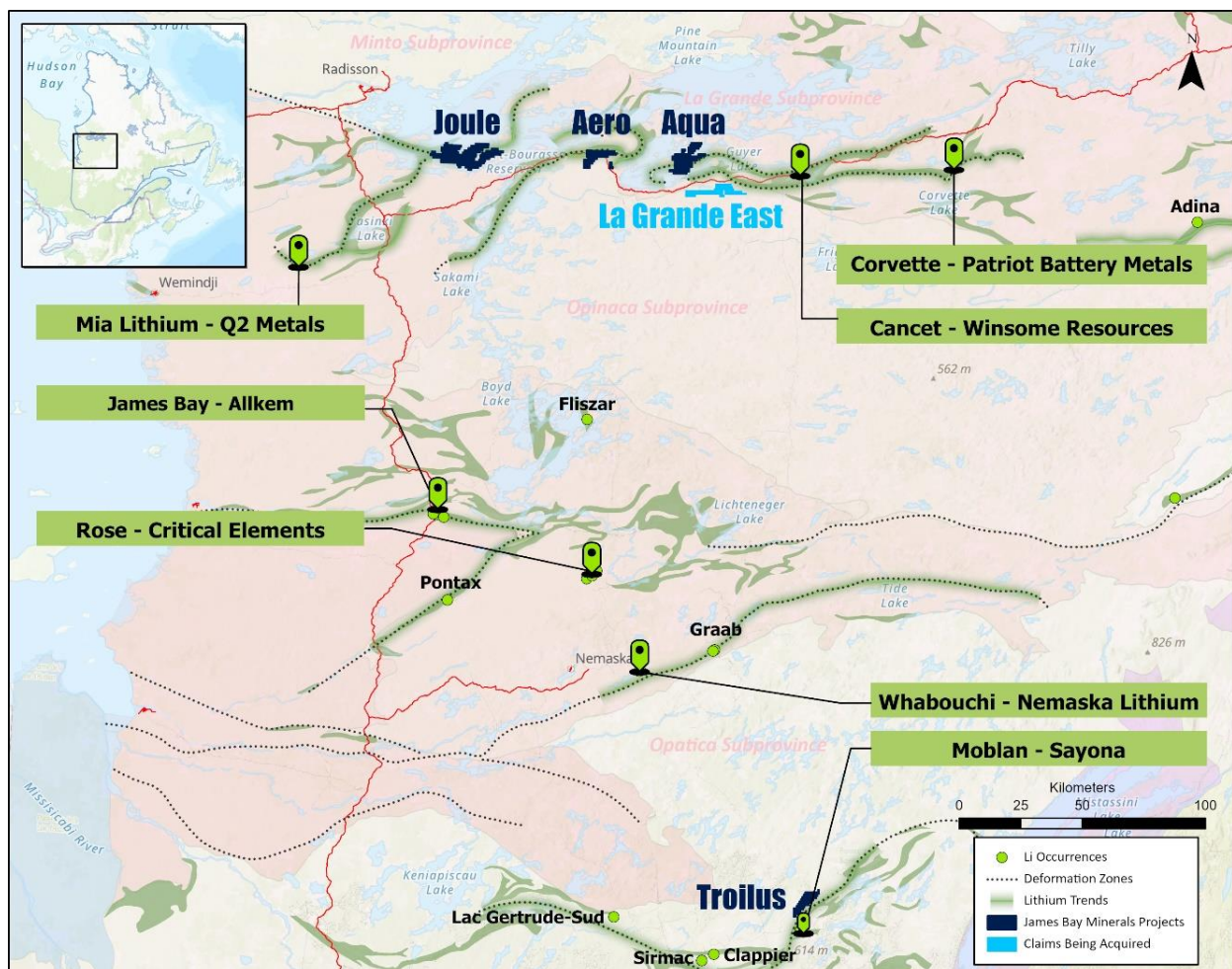


Figure 8 – James Bay Minerals' key lithium project locations in Quebec, Canada.

The flagship Joule Property encompasses a ~24km long prospective deformation zone along a regional fault which has been subject to minimal historical exploration<sup>3</sup>. The eastern segment of the deformation zone extends for 14km and fan tails to reach a width up to 1.5km.

1 See PMT ASX Announcement dated 8 August 2024

2 See PMT ASX Announcement dated 22 August 2024

3 See JBY Prospectus dated 19 July 2023

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The Aero Property contains approximately 12km of deformation zones which are considered highly prospective for LCT pegmatites<sup>4</sup>. Of note, the nearby Cancet (Winsome Resources Ltd) and Corvette (Patriot Battery Metals) properties both exhibit deformation zones upon which significant exploration success has occurred.

The Aqua Property contains a deformation zone running east to west through the property of approximately 6km, this zone is considered prospective for LCT Pegmatites<sup>4</sup>. Of note, FIN Resources has uncovered a significant lithium showing approximately 200m from the north-western border of the Property<sup>5</sup>.

The La Grande East Project was acquired in Q1 2024 due to several key attributes – namely, two magnetic lows which are interpreted to trend into Patriot Battery Metals' Project, multiple large white dyke-like features identified from satellite imagery and the fact that the Project sits less than 1km from the Transtaiga Highway, allowing all year walk-up access<sup>6</sup>.

All the properties have the three key ingredients required to host massive lithium-caesium-tantalum (LCT) pegmatites, namely:

- Neo Archaean rocks;
- Placement along major regional faults; and
- Located on greenstone belts in proximity to granites.

The Company has conducted a comprehensive summer exploration program across its La Grande Projects. Exploration activities for 2025 will be guided by data from the recently completed field program.

### ***Independence Gold Project – Nevada***

The Company announced the proposed acquisition of the Independence Project on 14 October 2024 which remains subject to shareholder approval at the annual general meeting scheduled for 29 November 2024.

The Independence Project is owned by Independence Mining LLC (“**IML**”), an incorporated joint venture between Battle Mountain Resources Pty Ltd (“**BMR**”) (51.54%, the “**BMR Interest**”) and Americas Gold Exploration Inc (“**AGEI**”) (48.46%, the “**AGEI Interest**”). Subject to obtaining shareholder approval, the Company has agreed to acquire 100% of the issued capital of BMR and, in turn, will acquire the BMR Interest and the right to earn the AGEI Interest over a period of two years. If the Company completes the earn-in, it will hold a 100% interest in IML and the Independence Project.

The transformational acquisition ensures that the Company is now underpinned by an advanced exploration asset, with significant resource growth potential and future low-cost development opportunities in a Tier-1 global mining jurisdiction.

### **Project Overview**

The Independence Project consists of 14 unpatented mining claims and 84 unpatented mill sites, situated in Lander County, Nevada, and spans approximately 627 acres of Bureau of Land Management (BLM) administered lands. It is adjacent to the Nevada Gold Mine's Phoenix Project and about 16km south of Battle Mountain. In addition, the Project encompasses Section 17,470 acres of private fee surface land in the Battle

<sup>4</sup> See JBY Prospectus dated 19 July 2023

<sup>5</sup> See FIN ASX Announcement dated 9 October 2023

<sup>6</sup> See JBY ASX Announcement dated 28 March 2024

Mountain Mining District where the company holds the exclusive water rights and where it will locate any future production water wells.

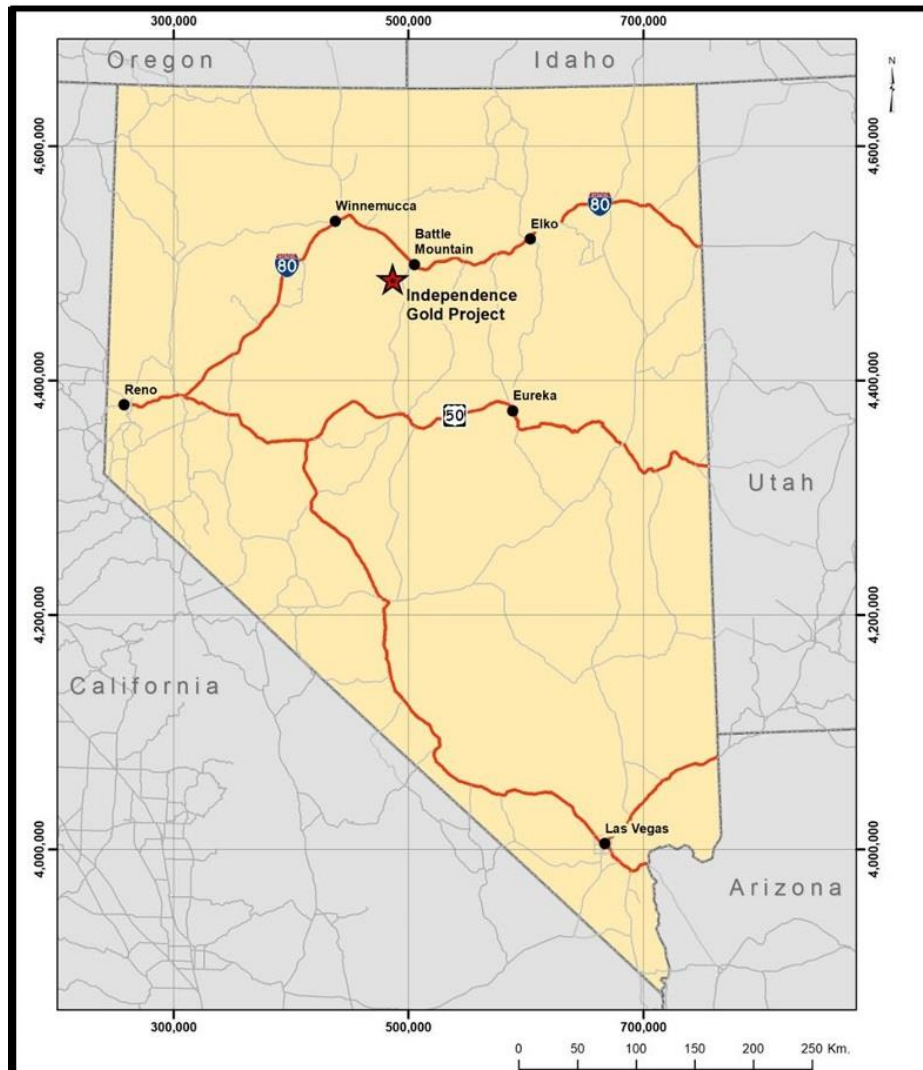


Figure 9 – Independence Gold Project, located in Nevada, United States of America.

## Nevada – Tier 1 Jurisdiction

Nevada is widely regarded as one of the premier mining jurisdictions in the world, known for its rich mineral resources and supportive regulatory environment. Nevada consistently ranks within the top countries of the Fraser Institutes best mining jurisdictions. Key features include:

1. **Rich Mineral Deposits:** Nevada is a leading producer of gold and silver, with numerous active mines and significant exploration potential.
2. **Stable Regulatory Framework:** The state offers a predictable and transparent regulatory process, which fosters investor confidence and encourages mining activities.
3. **Infrastructure:** Well-developed infrastructure, including roads, power, and water supply, supports mining operations and logistics.



4. **Skilled Workforce:** A robust labour market with experienced professionals in the mining sector enhances operational efficiency.
5. **Proximity to Markets:** Its location in the western United States provides easy access to major markets and transportation networks.
6. **Pro-mining Policies:** State policies generally favour mining development, with efforts to streamline permitting and reduce bureaucratic hurdles.

These factors collectively make Nevada a highly attractive destination for mining investment and exploration.

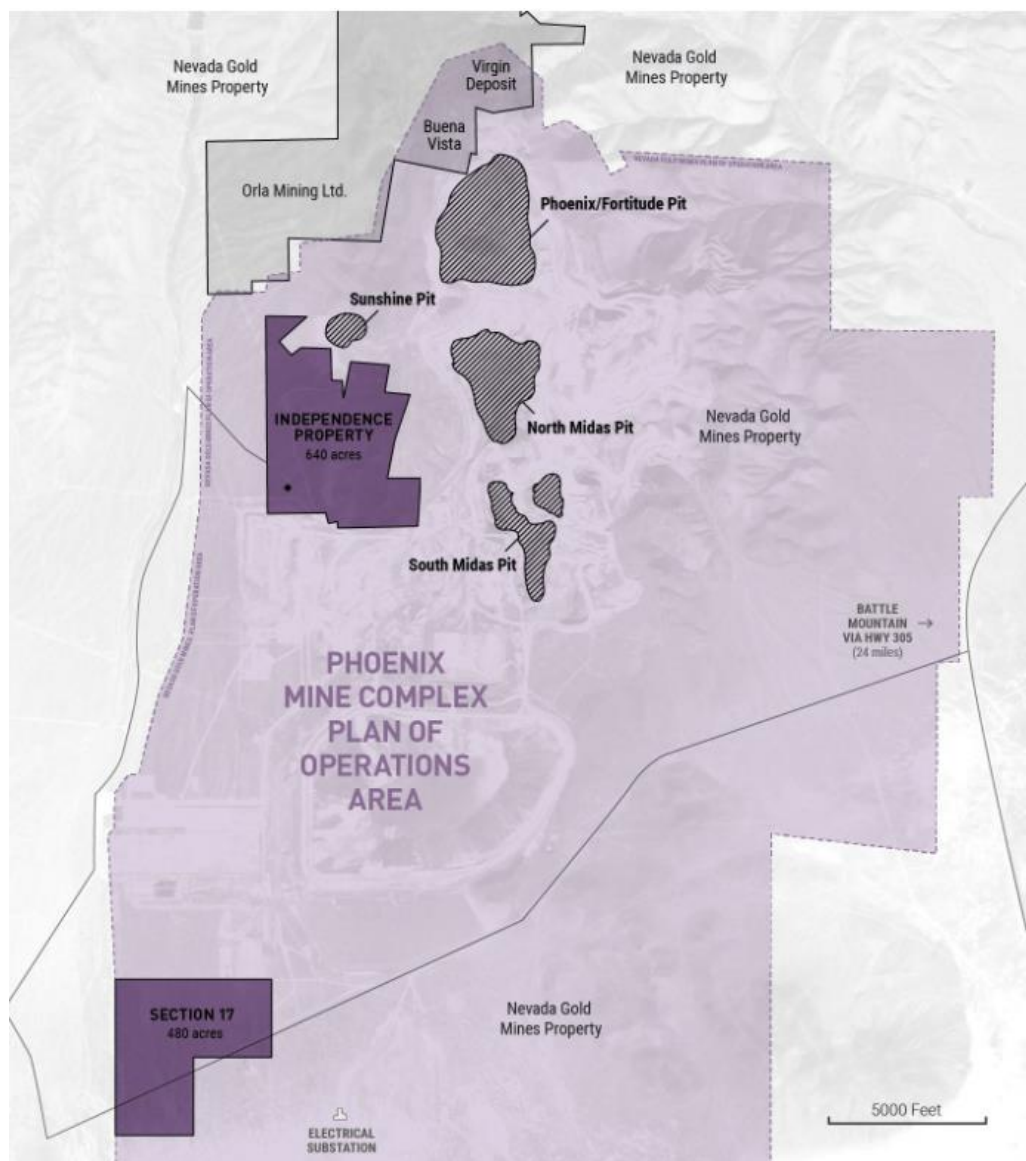


Figure 10 – Independence Property overlaid with active Nevada Gold Mines (Newmont Barrick JV) Phoenix Mine Complex, Plan of Operations.

## Geology & Mineralisation

The Independence Project lies in the Battle Mountain Mining District, located on the west side of Pumpernickel Ridge in north-central Nevada. The regional geology of north-central Nevada is defined by

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episodic tensional deformation, rifting, sedimentation and erosion, followed by widespread thrusting resulting from compressional deformation. Episodic tensional events followed by compressional events include the Robert Mountains Allochthon emplaced during the Antler orogeny. The Antler sequence hosts the Golconda Allochthon which was emplaced during the Sonoma orogeny and contains the Havallah Sequence of Mississippian to Permian age rocks, including the Pumpnickel Formation, host for near-surface mineralisation at the Independence property. Rocks of the Roberts Mountain Allochthon hosted the adjacent Fortitude deposit and are the principal host for the Phoenix deposit and the Independence Skarn Target. These rocks are structurally overlain by the Mississippian, Pennsylvanian, and Permian Havallah sequence of the Golconda allochthon.

The near-surface mineralisation at Independence is best characterised as a high-level epithermal system formed as a leakage halo above the Independence gold skarn, both related to emplacement of Eocene age granodiorite porphyries. The Independence gold skarn target is a high-grade, gold-rich skarn system developed in the carbonate rich portions of the Battle Mountain, Antler Peak and Edna Mountain formations of Roberts Antler Sequence in the lower portion of the Roberts Mountain Allochthon.

**The Project contains an NI 43-101 Mineral Resource as outlined below:**

Description	Tonnes	Gold (Au) g/t	Gold (Au) g/t Equivalent	Gold (Au) Oz	Gold (Au) Equivalent Oz <sup>7</sup>
<b>Skarn – Mineral Resource</b>					
Inferred	3,794,000	6.53	6.53	796,200	796,200
<b>Near-Surface – Mineral Resource</b>					
Measured	8,713,000	0.39	0.45	109,800	125,900
Indicated	19,284,000	0.36	0.40	224,500	249,600
Inferred	5,218,000	0.30	0.33	50,800	55,100

*The Mineral Resource Estimate at the Independence Gold Project is a foreign estimate prepared in accordance with Canadian National Instrument 43-101 and have not been reported in accordance with the JORC Code 2012. A competent person has not done sufficient work to classify the foreign estimate as a Mineral Resource in accordance with the JORC Code 2012, and it is uncertain whether further evaluation and exploration will result in an estimate reportable under the JORC Code 2012.*

This announcement is authorised for release by the Board of Directors of James Bay Minerals Ltd.

**ENDS**

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<sup>7</sup> Gold Equivalent of the near-surface estimate has been calculated per block in resource estimation and is a function of metal prices, based on a Gold Price of US\$1,800/oz and Silver Price of US\$24/oz, and metal recoveries for both gold and silver. The recovery of gold is stated as 79% in the oxide, 50% in transitional and 22% in fresh (**AU Recovery**). Silver averages 27% across all material. Resultantly, the AuEq calculation is = g Au/t + (g Ag/t / ((1,800 x Au Recovery) / (24 x 0.27)). The Company believes that all metals included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

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### **Forward-looking statements**

*This announcement may contain certain forward-looking statements, guidance, forecasts, estimates or projections in relation to future matters (Forward Statements) that involve risks and uncertainties, and which are provided as a general guide only. Forward Statements can generally be identified by the use of forward-looking words such as “anticipate”, “estimate”, “will”, “should”, “could”, “may”, “expects”, “plans”, “forecast”, “target” or similar expressions and include, but are not limited to, indications of, or guidance or outlook on, future earnings or financial position or performance of the Company. The Company can give no assurance that these expectations will prove to be correct. You are cautioned not to place undue reliance on any forward-looking statements. None of the Company, its directors, employees, agents or advisers represent or warrant that such Forward Statements will be achieved or prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this announcement. Actual results may differ materially from those anticipated in these forward-looking statements due to many important factors, risks and uncertainties. The Company does not undertake any obligation to release publicly any revisions to any “forward- looking statement” to reflect events or circumstances after the date of this announcement, except as may be required under applicable laws.*

### **Competent Person Statement**

*The Exploration Results reported in this announcement in relation to the La Grande Projects are based on, and fairly represent, information and supporting documentation reviewed, and approved by Mr Ben Pollard, MAIuSIMM Mr Pollard is a geologist and has adequate professional experience with the exploration and geology of the style of mineralisation and types of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Pollard consents to the form and context in which the Exploration Results are presented in this announcement.*

*The information in this announcement that relates to previously reported Exploration Results at the La Grande, La Grande East and Troilus Projects is extracted from the Company’s Prospectus dated 19 July 2023 (**Prospectus**) and the ASX announcements dated 4 December 2023 and 28 March 2024 (Original Announcements), as referenced. The Company confirms that it is not aware of any new information or data that materially affects the information contained in the Prospectus and Original Announcements.*

*The Company first announced the foreign estimate of mineralisation for the Independence Gold Project on 14 October 2024. The Company confirms that the supporting information included in the announcement of 14 October 2024 continues to apply and has not materially changed. The Company confirms that it is not aware of any new information or data that materially impacts the reliability of the estimates or the Company’s ability to verify the foreign estimates as mineral resources under the JORC Code. Further, the form and context in which the Competent Persons’ findings are presented have not been materially modified from the original market announcement.*

## Appendix 1 Rock Chip & Channel Sampling Results

### Aqua Rock Samples

Sample Number	GPS_X	GPS_Y	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
136003	455480	5929637	5.4	15	253	0.8
136004	456045	5930161	4.6	15	175	1.7
136005	454604	5935491	308	66	47.4	48
136010	454446	5935068	51	60	880	20.3
136014	459420	5936252	16.4	64	278	10
136015	459394	5936244	4.1	56	45.7	2.6
136016	459607	5936238	17	98	134	5.1
136017	459701	5936351	19.7	19	324	6.3
136018	461767	5939660	6.6	18	176	0.6
136019	456788	5935938	76.7	15	904	19.7
136022	454598	5935495	1920	241	168	51.3
136030	454609	5935494	19.2	30	173	104
136031	454609	5935500	48.4	38	212	91.1
136032	454604	5935487	13.3	15	95	206
136033	454597	5935490	36	15	47.5	107
136034	454594	5935483	18.6	15	48.6	134
136035	454601	5935489	32	15	85.9	246
136036	454590	5935470	99.4	30	331	116
136037	454646	5935524	224	151	460	224
136038	454639	5935518	402	209	577	146
136039	454636	5935517	91	16	1140	76.4
136040	454618	5935510	12.8	31	131	54.8
136041	454618	5935511	10.9	45	122	72
136042	454617	5935506	41.4	64	382	353
136043	454616	5935504	28.1	20	211	77.9
136044	454613	5935505	150	87	371	47
136045	454613	5935505	43.9	36	154	41.5
136046	454612	5935501	51.3	40	183	79
136047	454613	5935502	144	36	904	44.4
136048	454611	5935500	91	53	245	86.5
136049	454612	5935503	112	70	209	54.2
136050	454610	5935501	12.5	20	87.9	69.4
136051	454610	5935499	77	21	610	80.6
136052	454610	5935501	84.7	15	863	92.8
136053	454610	5935498	11.9	20	114	102
136054	454605	5935494	8.9	34	54.1	135
136055	454608	5935501	46.1	18	282	78.6
136056	454606	5935496	57.2	37	548	279
136057	454605	5935496	4.6	15	30.8	81.4
136058	454603	5935491	83.6	15	452	76.8
136059	454591	5935478	16.7	17	51.7	59.5

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Sample Number	GPS_X	GPS_Y	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
136060	454587	5935479	159	26	994	207
136061	454589	5935481	149	33	861	282
136062	454589	5935475	95.2	33	54.6	242
136063	454588	5935476	111	15	1050	111
136065	454644	5928248	1.5	32	130	7.1
136066	454651	5928253	5	54	178	1.9
136067	454657	5928250	1.4	40	131	4.1
136069	454652	5928249	1.4	37	148	6.4
136070	454652	5928248	2.4	24	173	8
136071	454652	5928248	1.1	15	51.1	2
136072	454646	5928243	1.3	15	57.3	1.4
136073	454644	5928241	0.9	15	70.1	1.3
136074	454636	5928240	0.4	15	4.3	0.3
136075	454642	5928242	1.8	37	150	6.4
136076	454640	5928241	2.2	37	128	2.2
136077	454644	5928250	1.6	36	114	1.7
136078	454645	5928251	1.5	21	96.8	1.5
136079	454646	5928252	1	15	34.2	0.8
136080	454646	5928251	2	28	99	2.2
136081	454651	5928252	0.4	15	3	0.9
136082	454653	5928252	2.1	31	93.1	2.5
136083	454591	5935476	109	15	1040	160
136084	454591	5935471	61.5	31	63.5	122
136085	454590	5935474	9.8	15	25.3	129
136086	454589	5935474	102	40	220	114
136087	454595	5935475	57.7	15	530	284
136088	454592	5935484	96.1	15	609	180
136089	459914	5935640	16.4	45	226	20.6
136090	459914	5935641	20.6	50	317	12.6
136091	458263	5937506	45.8	40	49.8	7.4
136092	458261	5937508	14	20	22.8	1.8
136093	458261	5937502	20.8	21	160	5.5
136094	458258	5937504	105	98	196	24
136095	458251	5937502	73	39	424	23.8
136096	458248	5937501	52.4	15	380	5
136097	458246	5937501	22.5	15	148	3.2
136098	458248	5937500	16.2	15	137	1.4
136099	459103	5937725	9.4	15	209	1.4
136100	458361	5937459	44.9	54	312	7
136101	458402	5937464	30.9	63	85.6	4
136102	459914	5935643	3.5	15	44.9	12.3
136103	454591	5935470	176	59	132	221
136104	454590	5935472	288	46	456	13.9
136105	454593	5935468	122	30	80.7	94.2

### Aero Channel Samples

Sample Number	GPS_X	GPS_Y	Length	Channel Number	azimuth	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
138350	454616	5935502	1	CS24_001	320	43.8	27	308	64.7
138351	454615	5935503	1	CS24_001	320	52.5	17	487	34.5
138352	454615	5935504	1	CS24_001	320	83.3	53	220	57.4
138353	454614	5935504	1	CS24_001	320	43.4	33	168	145
138354	454613	5935505	1	CS24_001	320	41	27	233	40.9
138355	454610	5935496	1	CS24_002	320	97.7	15	873	124
138356	454609	5935497	1	CS24_002	320	85.7	20	787	166
138357	454608	5935498	1	CS24_002	320	96.1	39	411	94.2
138358	454608	5935499	1	CS24_002	320	44.6	39	167	80.8
138359	454606	5935494	1	CS24_003	320	98.5	15	1050	42.5
138360	454605	5935494	1	CS24_003	320	76.6	16	890	102
138361	454604	5935495	1	CS24_003	320	28.3	20	224	57
138362	454603	5935496	1	CS24_003	320	11.4	15	87	133
138363	454602	5935497	1	CS24_003	320	14.1	15	125	108
138364	454601	5935498	1	CS24_003	320	27.9	15	314	76.8
138365	454600	5935499	1	CS24_003	320	16.5	16	71.8	151
138366	454600	5935491	1	CS24_004	320	58.1	22	510	96.5
138367	454600	5935491	1	CS24_004	320	44.9	21	414	91.7
138368	454599	5935492	1	CS24_004	320	55.2	32	108	104
138369	454598	5935492	1	CS24_004	320	46.9	21	171	52
138370	454598	5935493	1	CS24_004	320	30.6	21	89.1	97.5
138371	454593	5935490	1	CS24_005	320	125	15	856	125
138372	454594	5935489	1	CS24_005	320	923	229	1020	88.3
138373	454594	5935488	1	CS24_005	320	353	72	564	83.9
138374	454595	5935487	1	CS24_005	320	222	56	299	118
138375	454596	5935487	1	CS24_005	320	564	103	921	289
138376	454597	5935486	1	CS24_005	320	178	29	621	121
138377	454598	5935485	1	CS24_005	320	137	16	825	163
138378	454598	5935485	1	CS24_005	320	126	15	793	86.9
138379	454599	5935484	1	CS24_005	320	107	20	405	78
138380	454599	5935484	1	CS24_005	320	121	34	140	105

### Joule Rock Chip Samples

Sample Number	GPS_X	GPS_Y	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
147806	373805	5936967	2.2	15	28.9	0.2
147807	373836	5936841	1.9	15	37.9	0.2
147808	371819	5930812	3.1	15	88	1
147809	371974	5930742	2.7	15	88.8	0.6
147810	371632	5931069	2.9	15	117	0.6
147811	371636	5931089	4.1	16	122	1.1
147812	371810	5931696	1.8	15	152	1.4
147813	375069	5937510	0.5	15	9.1	0.2
147814	360544	5934468	1.7	15	83.1	1.2
147815	360586	5934481	1.9	15	143	2

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Sample Number	GPS_X	GPS_Y	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
147816	360599	5934500	1.2	15	70.6	1
147817	360573	5934531	2.5	15	113	3.3
147818	360566	5934522	2.6	15	151	1.3
147819	360532	5934522	1	15	148	1.2
147821	359560	5934884	1.8	15	126	0.9
147822	359520	5934939	4.6	15	157	3.3
147823	359523	5934946	1.9	15	159	1.6
147824	360717	5934411	1.6	15	109	0.6
147825	360819	5934422	1.8	15	126	1.4
147826	360834	5934421	1.4	15	106	1.4
147827	360975	5934460	34.2	15	150	2.4
147828	360900	5934596	3.2	15	113	3.5
147829	362610	5934222	2.8	15	170	3.4
147830	367904	5934111	0.8	15	84.4	0.5
147837	371760	5930714	2	15	108	1.3
147838	371825	5930659	3	15	96.9	1
147839	371868	5930631	2.4	15	108	1.4
147841	371988	5930746	4.4	21	95.1	1.8
147842	371831	5931033	1.1	16	116	0.6
147843	371810	5931108	1.9	21	97.4	1.1
147844	371727	5931162	4.3	19	96	12.5
147845	371570	5931254	3.6	15	117	1
147846	371505	5931275	4.2	21	121	1.8
147847	371551	5931384	2.6	15	186	1.8
147848	371748	5931556	2.4	38	36.8	2.1
147849	371918	5931641	5.2	35	127	1.6

Sample Number	GPS_X	GPS_Y	Au_ppb	Co_ppm	Ni_ppm	Cu_ppm	Zn_ppm
147831	356371	5936109	5	0.6	2.5	2.2	2.6
147832	357045	5935510	61	2.8	12.3	9.7	15.3
147833	372494	5936844	5	1	2.5	3.6	12.5
147834	372485	5936701	5	0.2	1	1	4.4
147835	372331	5934977	64	3.2	4.4	8.9	8.1
147836	373033	5933890	6	1.5	2.4	17.7	6.8
147850	373017	5933884	5	4	10.4	5.1	25.2
147851	373343	5932975	5	2.1	5.2	6.2	11.7
147852	373333	5932985	6	1.8	2.8	21.3	9.4
147853	373239	5933315	6	2.5	8.4	4.3	16.5
147854	372958	5933604	7	1.9	0.6	15.5	7.5
147855	373244	5933313	5	2.3	9.5	2.5	9.6
147860	372924	5933856	6	2.7	8	6.6	15.9
147861	372909	5933821	6	6	21.8	8.4	18.3
147862	372949	5933841	56	51.6	171	923	65.7
147863	373040	5933895	7	10.9	11.6	158	44.1
147865	374946	5939851	6	0.3	1.4	2.9	1.5
147866	378864	5939059	6	1.9	18.7	2.3	9.7
147867	374853	5937939	5	0.5	1.6	12.6	4
147868	374927	5937939	10	5.4	8.8	13.6	28.9
147870	373063	5933799	7	2.8	12.6	1.9	6.9
147875	368675	5934948	5	2.4	13	1.2	23.4
147876	368620	5934922	5	1	4.2	1.9	7.8
147877	368621	5934921	6	3	10.5	1.1	17.9
147878	368620	5934920	6	2.1	9.2	1.8	17.1

Sample Number	GPS_X	GPS_Y	Au_ppb	Co_ppm	Ni_ppm	Cu_ppm	Zn_ppm
147879	368604	5934920	5	1.4	5.9	1.7	12.4

### La Grande East Rock Chip Samples

Sample Number	GPS_X	GPS_Y	Cs_ppm	Li_ppm	Rb_ppm	Ta_ppm
136106	470115	5919815	12.6	15	250	24.7
136107	467738	5919955	1.8	18	78.3	1.7
136108	465146	5920145	1.7	23	67	0.9
136109	464200	5920189	1.6	15	92.4	1.6
136110	476131	5920252	6.6	15	303	2.3
136111	476131	5920253	3.7	15	269	0.8
136112	476134	5920258	1.9	15	104	2.3
136113	476134	5920255	3.4	15	184	1.2
136114	470890	5919932	7.7	15	201	1.7
136115	473520	5919571	1.4	15	113	1.3
136116	473709	5919472	2.1	15	126	0.7
136117	476124	5920274	9.7	15	235	2.4
136118	483017	5920277	2.2	15	180	0.8
136119	480974	5920268	3.3	15	47.3	1.2
136130	472759	5920417	13.1	15	89.6	4

All coordinates listed in NAD 1983 UTM Zone 18N

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## JORC Code, 2012 – Table 1

**Section 1 Sampling Techniques and Data – La Grande Project, Joule, Aqua and La Grande East Property**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Rock Chip samples were taken utilising a hammer and metal chisel to break away fresh rock from outcrops. Sampling was random across pegmatite structure. All samples collected were sent to Actlabs located in Ancaster, Ontario.</li> <li>Channel samples were undertaken in 25metre intervals across the widths of the outcropping pegmatites identified across the property. Channels would typically have a width of 1-2inches and run for the entire width of the outcrop sampled. A petrol-powered rock saw was utilized for channel sampling. Channels were then removed utilizing a hammer and metal chiseled, placed in tagged sample bags for each one-meter interval. All samples were submitted to Actlabs for analysis.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>In connection to this announcement no drilling has been conducted and no drill assays are being reported.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>In connection to this announcement no drilling has been conducted and no drill assays are being reported.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All rock grab samples have been logged with data stored digitally within QField where data was imported from QGIS and ArcGIS.</li> <li>All channel samples have been logged in 1m intervals with all data stored digitally within QField where data was imported from QGIS and ArcGIS.</li> </ul>
Subsampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>In connection with this announcement no drilling has been conducted and no drill assays are being reported.</li> <li>Grab sample sizes are approximately 2-5kg, being an appropriate size for field prospecting rock sampling of pegmatites.</li> <li>All grab samples were random and opportunistic across pegmatite outcrops.</li> <li>Channel Samples across 1m intervals averaged 5kg which are applicable and aim to produce a more representative sample by cross-cutting the structure width.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All field samples were sent to Actlabs located in Ancaster, Ontario for QOP Sodium Peroxide (Sodium Peroxide Fusion ICPOES +ICPMS). The laboratory utilizes its own in-house quality control checks.</li> <li>At this stage of exploration, no field blanks, standards or duplicates have been inserted into the sample stream.</li> <li>In connection to this announcement no drilling has been conducted and no drill assays are being reported.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification of sampling and assaying have been completed to date.</li> <li>Field data stored digitally in files and on instruments has been downloaded and stored on a central database.</li> <li>No adjustments have been made to assay data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling or resource estimation has been undertaken. All surface sample coordinate positions (ie Figures 1-7) and Appendix 1 have been located utilising a handheld GPS.</li> <li>The grid datum is NAD 1983 UTM Zone 18N</li> <li>In connection to this announcement no drilling has been conducted and no location or data points of drill holes reported.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Rock grab sample spacing has been determined solely by geological mapping and no grade continuity has been applied.</li> <li>Where access and water was available channel samples have been undertaken in 25m spacings along the pegmatites.</li> <li>In connection to this announcement no drilling has been conducted and no sample compositing has occurred.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>In connection with this announcement no systematic sampling of structures or drilling has been conducted, therefore no orientation data is generated in relation to geological structures.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All survey data is held by the company within its access restricted exploration folders.</li> <li>At all times samples were in custody and control of the Company's exploration representative until delivered to laboratory where samples are held in a secure enclosure pending processing.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or review have been undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results – La Grande Project, Joule, Aqua and La Grande East Property

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The La Grande Project consists of 593 continuous claims covering an area of 30,168 hectares</li> <li>The Joule, Aero and Aqua Properties which forms part of La Grande Project is 100% owned by James Bay Minerals Ltd.</li> <li>The <b>Joule Property</b> consists of 320 continuous claims covering an area of 16,385 hectares. The Project is located in the La Grande, Greenstone belt.</li> <li>The <b>Aero Property</b> consists of 101 continuous claims covering an area of 4,980 hectares. The Project is located in the La Grande, Greenstone belt.</li> <li>The <b>Aqua Property</b> consists of 172 continuous claims covering an area of 8,803 hectares. The Project is located in the La Grande, Greenstone belt.</li> <li>The <b>La Grande East Property</b> consists of 136 continuous claims covering an area of 7,000 hectares. The Project is located in the La Grande, Greenstone belt.</li> <li>All claims are in good standing and have been legally validated by a Quebec lawyer specialising in the field.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The La Grande Project is a greenfield project with limited historical exploration.</li> <li>All data obtained on the properties has been generated by Quebec Government Stratigraphic surveys.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The geology of the Project is relatively unexplored. The primary type of mineralization suggested by the data and mineralization on the adjacent properties is lithium-bearing spodumene which occurs in granite pegmatite and aplite dykes.</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The property sits within three key geological ingredients which make it prospective to large LCT pegmatites. These are:               <ul style="list-style-type: none"> <li>Right Archean Rock Age</li> <li>Large deformation zones</li> <li>Proximity to Greenstone Belts</li> </ul> </li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>No drilling activities have been undertaken or reported to date.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated</li> </ul>	<ul style="list-style-type: none"> <li>Low-cut of 15ppm Li has been applied to Appendix 1 and Figures 1 to 7.</li> <li>No drilling activities have been undertaken or reported to date.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>No drilling activities have been undertaken or reported to date.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps and figures have been included in this announcement.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results</li> </ul>	<ul style="list-style-type: none"> <li>Results greater than Li 15ppm, and where Rb is greater than 500ppm, have been reported.</li> <li>Portable XRF produces a multi-element data set but only select elements relevant to lithium exploration have been included.</li> <li>The laboratory assayed Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Ga, Gd, Ge, Ho, Hf, In, K, La, Li, Mg, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, S, Sb, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Au. The four elements that have been reported are seen as appropriate for JBY's exploration targets.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>All relevant and material exploration data for the target areas discussed, have been reported or referenced.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work will include but not limited to systematic geological mapping, rock chip sampling, soil sampling, pXRF measurements, structural interpretation and drilling to identify suitable host rock geology and structural architecture for late state evolved and fertile LCT Pegmatites.</li> </ul>