

Confirmation of Spodumene and Additional Strong Lithium Soil Sampling Results in Brazil Supports Drill Program for Q1 2025

ASX Announcement 17 January 2025

Lightning Minerals (L1M or the Company) is pleased to announce the confirmation of spodumene minerals discovered within pegmatites at the Esperança Project in Brazil's Lithium Valley region of Minas Gerais. Additionally, the highest tenor lithium assays to date from its soil sampling programs at the Caraíbas and Esperança projects, also located in the Lithium Valley have been received. Peak soil assays of up to 429ppm Lithium have been returned at Caraíbas and 320ppm Lithium at Canabrava.

The confirmation of spodumene as the lithium bearing mineral via Raman spectrographic analysis further demonstrates the significance of the recent discovery at Esperança (ASX Announcement 18th November 2024) and the upcoming 2,000m drill program. Drill contractor engagement is now being finalised.

HIGHLIGHTS

- Spodumene Minerals confirmed via Raman Spectroscopy at Esperança project
- Highest tenor lithium results to date returned from Caraíbas and Canabrava with results up to 429ppm Lithium and 320ppm Lithium respectively
- Procurement of drilling contractors and logistics progressing well for inaugural drilling campaign of up to 2,000m diamond drilling at Esperança due to begin during Q1 2025

Lightning Minerals Managing Director Alex Biggs said, "Further excellent results across our projects in Brazil provide even greater confidence in the potential prospectivity of both project areas and the region. The past 6-months have been significant for the Company in providing strong drill targets and allowing us to both develop an exploration thesis and drill target priorities. As we move towards our first drill campaign in Brazil at Esperança we look ahead to another busy and productive year that has the potential to deliver significant results and a step change for the Company. I have always believed in being aggressive in our exploration strategy and with the results and targets we have generated so far in Brazil believe in the potential this region holds for us.".

Spodumene Confirmation through Raman Spectroscopy at Esperança Project

During geological mapping fieldwork conducted in mid-November 2024 field geologists encountered a previously unknown historical artisanal mine within the Esperança project area. Pegmatitic lithologies were present in the walls of the excavations which displayed elongate crystals up to 50cm of suspected spodumene. Selective mineral specimen grab samples were collected and analysed via a SciAps Z-903 handheld LIBS (Laser-Induced Breakdown Spectroscopy) device which returned a qualitative lithium endowment of up to 4.04% Li₂O. While the lithium content analyses using the LIBS device was considered positive, the mineral species containing the lithium had not yet been confirmed.



Selectively sampled mineral specimens were sent to Perth for analyses using a Bruker BRAVO Raman spectrometer. The results confirm the presence of spodumene as the lithium bearing mineral with 5 samples returning positive spectral responses consistent with the mineral data library for spodumene (Table 1 and Figure 2).

Table 1: Raman analyses results for spodumene within selective sampling of mineral specimens at Esperança Project

Sample ID	Raman Spectroscopy Identified Minerals
LMBR0005	Kaolinite
LMBR0006	Albite + Kaolinite
LMBR0007	Kaolinite
LMBR0008	Kaolinite
LMBR0009	Spodumene + Kaolinite
LMBR0010	Albite + Kaolinite
LMBR0011	Albite + Kaolinite
LMBR0012	Muscovite + Albite
LMBR0013	Spodumene + Kaolinite
LMBR0014	Spodumene + Kaolinite
LMBR0015	Spodumene + Kaolinite
LMBR0016	Spodumene + Kaolinite + Wodginite

The Raman test work has also confirmed the high degree of weathering of the mineral specimens, with all but one sample returning spectral response consistent with kaolin for samples that retain a crystal habit. This result suggests the weathering profile of the sampled horizon is high, where precursor minerals have been substantially weathered.

Mineral specimen LMBR0016 contained an accessory opaque mineral which was not readily identified by field geologists. The Raman test work has returned a strong spectral response consistent with Wodginite, which is a Manganese-Tin-Tantalum oxide.

To avoid the highly weathered supergene profile present at the Esperança spodumene occurrence the upcoming proposed drill program will be targeting depths greater than 30m below surface which is the interpreted base of complete oxidation in the local area. Whole rock laboratory sample analysis supports the degree of weathering of the pegmatite samples with lithium content peaking at 0.38% Li₂O for sample VLM207. The full suite of analytical data and spatial locations for all whole rock samples is available within (Appendix 1, Table 2, and Figure 4).



Figure 1: (Left) Photograph of highly weathered spodumene sample LMBR0009, (Right) Photograph of highly weathered spodumene sample LMBR0016 showing accessory wodginite in left crystal face (dark mineral)

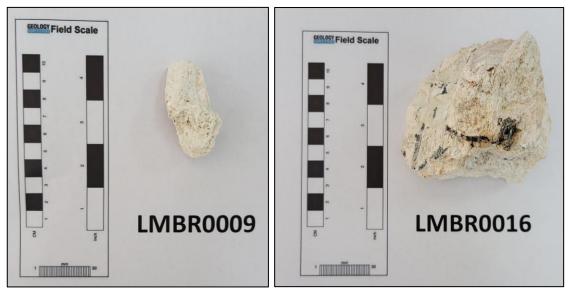
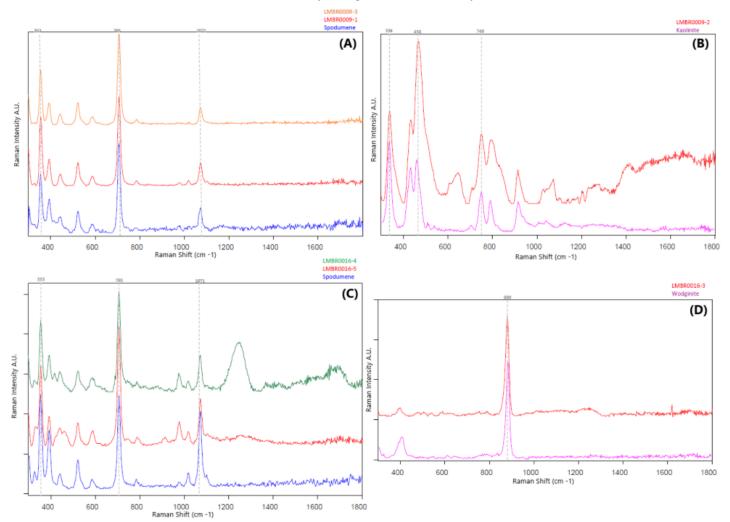


Figure 2: (A) Example of Spodumene spectral response of sample LMBR0009, (B) Sample LMBR0009 also presents strong Kaolin spectral response which supports weathered interpretation, (C) Example of Spodumene response of sample LMBR0016, (D) Accessory Wodginite mineral in sample LMBR0016





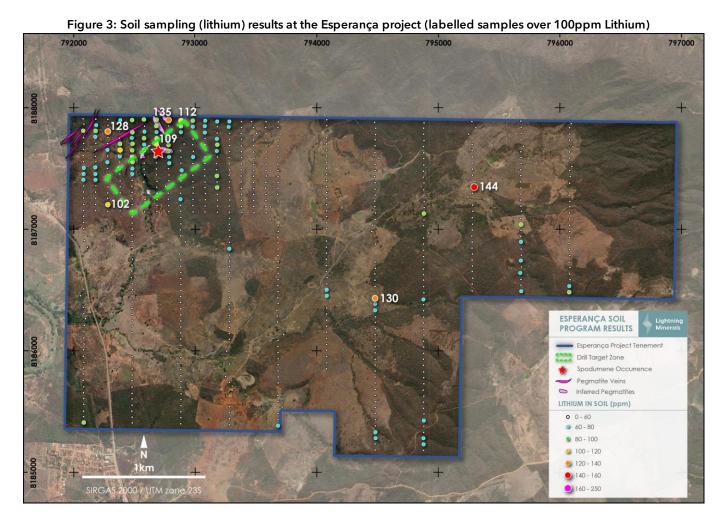
Phase 1 Soil Sampling Campaign Completion - All Projects

Final analytical results for the remaining 1,061 Soil Samples completed across the Caraíbas, Canabrava and Esperança projects are now available. Results are positive with the highest lithium tenor anomalism returned to date occurring at the Caraíbas and Canabrava project areas of 429ppm Lithium and 320ppm Lithium respectively.

Esperança Soil Results

The soil sampling program at Esperança was primarily designed to test for lithium at a tenement scale with collection of 465 samples planned along 400m spaced N-S orientated sample lines. The discovery of a spodumene bearing pegmatites in the northwest corner of the tenement during the beginning of the sampling program resulted in the addition of further 191 samples at a closer line spacing at 100m.

The results for the program are shown in Figure 3. The majority of anomalous results occur within the infilled area in the northwest, with results above 60ppm lithium clustered around the spodumene occurrence, and the target for the Company's inaugural drill program. An isolated peak result of 144ppm lithium is recorded in sample SOLM1315 which will receive follow up investigation.





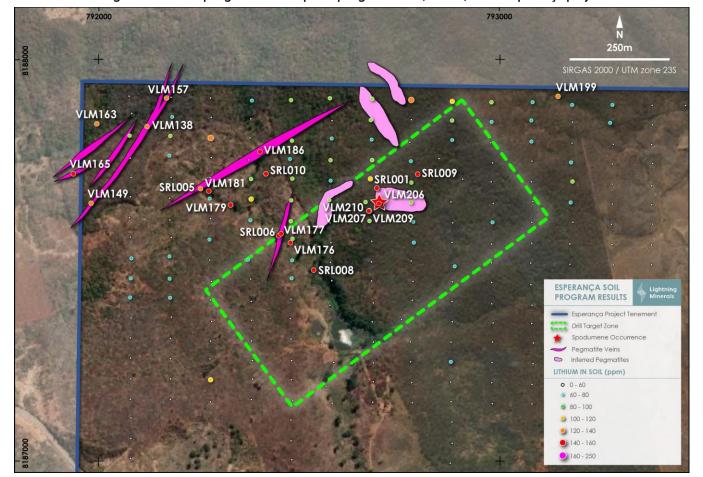


Figure 4: Soil sampling and rock chip sampling locations (lithium) at the Esperança project

Drill targeting will continue to focus on the spodumene occurrence at Esperança with the thesis that the spodumene bearing pegmatite dips toward to the southeast toward the centre of the tenement.

Caraíbas Soil Results

Soil results for the remaining 213 samples taken at the Caraíbas project show high tenor soil responses for lithium. Sampling proximal to an artisanal mine with known lithium mineral occurrences of lepidolite (ASX Announcement 22 April 2024) has returned elevations up to 429ppm Lithium, with several adjacent samples returning values over 200ppm Lithium which is considered a high response for residual soils of Salinas Formation in the region (Figure 5).

The results are currently being investigated with follow up site visits underway to ascertain if outcropping geology at the sites can explain the magnitude of the lithium response. The results of field investigations will feed into the ongoing drill targeting and prioritisation exercise with a view to potentially developing new high priority targets post completion of the Esperança drilling campaign. This will be targeted at the identified lithium in soil anomaly extending approximately 2km with peak results up to 239ppm Lithium (ASX Announcement 02 December 2024).



CARAÍBAS SOIL PROGRAM RESULTS Caraíbas Project Drill Target Zone Lepidolite Occurre Pegmatite Veins LITHIUM IN SOIL (ppm) 277 60 - 80 9 80 - 100 9 100 - 120 9 120 - 140 **Previously Reported** 9 140 - 160 202 160 - 250 429 227 396

Figure 5: Soil sampling (lithium) results at the Caraíbas project. Previously reported soil results within western most tenement 831424/2013 are shaded

Canabrava Soil Results

Soil results for 59 infill samples, and 78 new primary samples are now available for the Canabrava project. The infill soil sampling program was designed to follow up previous results where samples on 400m spaced sample lines returned results up to 113ppm Lithium (ASX Announcement 03 October 2024). The infill samples have been collected on a reduced line spacing of 100m and show consistent lithium anomalism >80ppm which coincides with mapped pegmatites over a 700m strike length (Figure 6). The ability to sample further east into the tenement is truncated by the transition from residual sediments of the Salinas Formation into tertiary depositional sediments which are considered a poor proxy for targeting lithium.

A small 78 sample program was also completed in the south-eastern areas of the Canabrava project in residual Salinas Formation sediments. Results are shown in Figure 7. The two easternmost sample lines have consistent lithium values above 200ppm with a peak result of 320ppm. Infill sampling at this location is being considered as part of the drill targeting and prioritisation exercise.



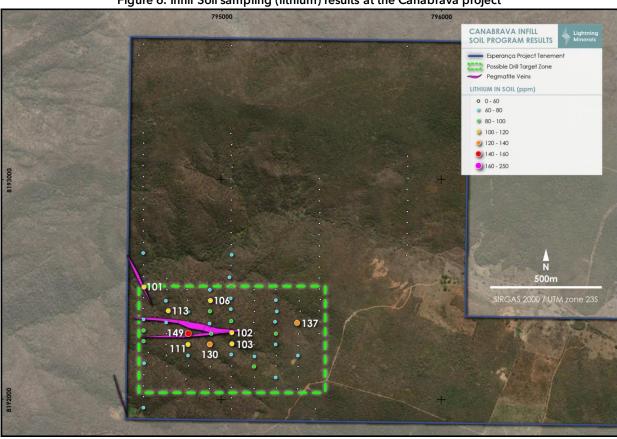
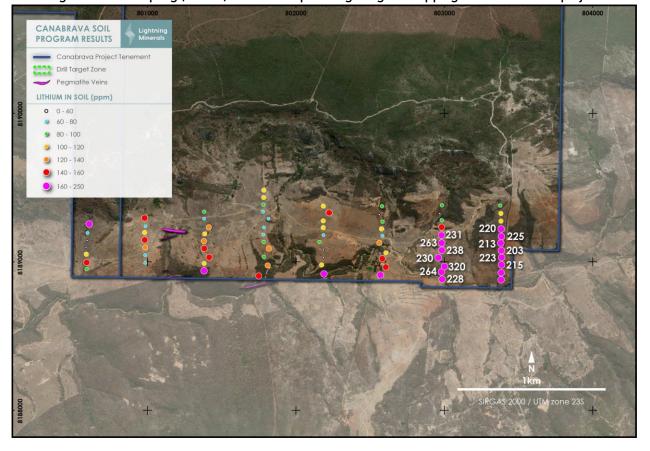


Figure 6: Infill Soil sampling (lithium) results at the Canabrava project







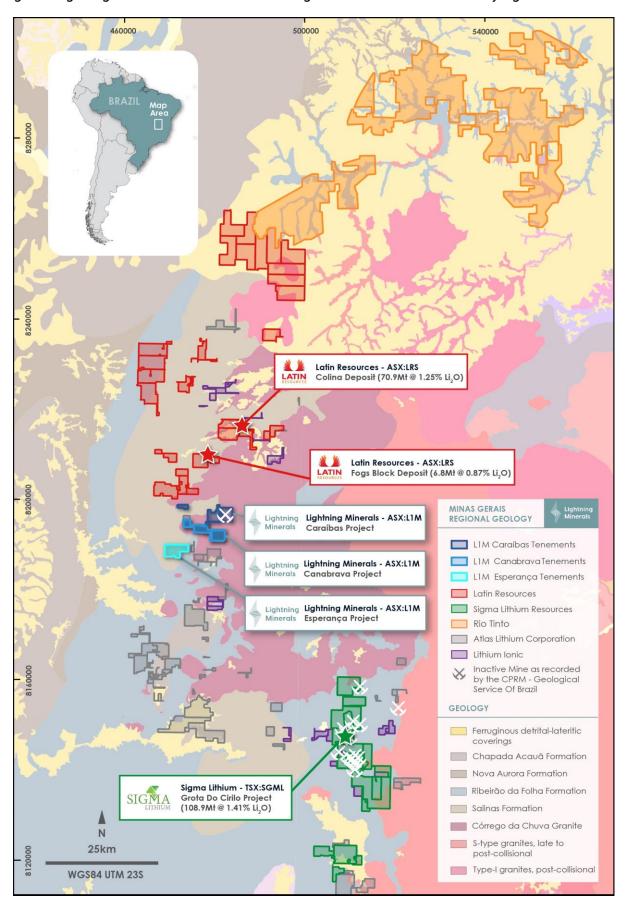
Ongoing Works in Brazil

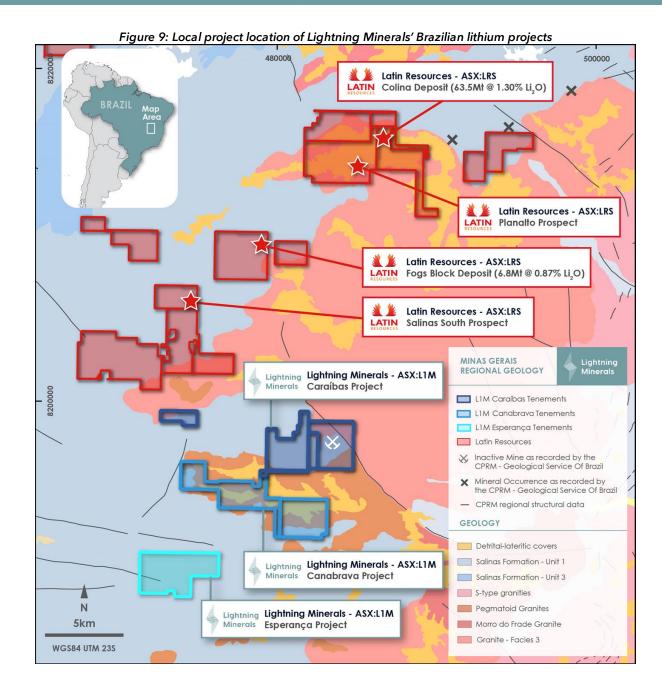
Drill contractor engagement is now underway for the Company's inaugural 2,000m drill campaign at Esperança due to begin in Q1 2025. Plans are also underway for drilling at Caraíbas which will be targeted at the identified lithium in soil anomaly extending approximately 2km with peak results up to 239ppm Lithium (ASX Announcement 02 December 2024).

Results for the Phase 1 soil sampling campaign have now been returned in full. Further target generation is now underway. Further infill soil programs may be considered where results require further definition prior to moving to drill testing. Prioritisation of the current suite of targets is now being undertaken to ensure the most robust targets and tested via drilling in the first pass.



Figure 8: Lightning Minerals' Brazilian tenements in regional context of the Lithium Valley region of Minas Gerais





Approved for release by the Board of Directors

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More information at www.lightningminerals.com.au



ABOUT LIGHTNING MINERALS

Lightning Minerals is a mineral exploration company, listed on the Australian Securities Exchange (ASX:L1M) and focused on the exploration of critical minerals and lithium at its tenements across Western Australia. The acquisition of the Caraíbas, Canabrava and Esperança lithium projects in Minas Gerais, Brazil are potentially transformational to the Company's success in the lithium sector. The Company also owns the Dundas project in the prolific Dundas region of Western Australia, the Dalmas and Hiver lithium projects in Quebec, Canada, another significant and evolving lithium region globally. The Company also holds other projects in Western Australia which include Mt Bartle and Mailman Hill which are prospective for base metals and critical minerals.

FORWARD LOOKING STATEMENTS

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

COMPETENT PERSONS STATEMENT

The information contained herein that relates to exploration results is based on information compiled or reviewed by Mr Jarra d Woodland, who is a Competent Person and a member of the Australasian Institute of Mining and Metallurgy. Mr Woodland is a full-time employee of the Company. Mr Woodland has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Woodland consents to the inclusion of his name in the matters based on the information in the form and context in which it appears. Mr Woodland holds options in Lightning Minerals.

REFERENCES TO PREVIOUS ANNOUNCEMENTS

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and that all material assumptions and technical parameters have not materially changed. The Company also confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Appendix 1: Brazilian Projects - JORC Code 2012 Table 1 Criteria

The Table below summarises the assessment and reporting criteria used for exploration results for the Exploration Projects and reflects the guidelines in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC 2012 Code).

Section 1 - Sampling Techniques and Data

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.	 Data in this document relates to Raman Spectroscopy, geochemical soil and rock chip sampling, field visual identification of minerals, and SciAps Z-903 Handheld LIBS (Laser-Induced Breakdown Spectroscopy) Mineral samples for VLM207 were collected at the discretion of field geologists targeting spodumene minerals to confirm the mineral species. The LIB's test work on these samples relates only to a fraction of the mineral and does not represent the whole rock lithium content, which is now available and contained within Appendix 1, Table 2 below. Raman Spectroscopyis a chemical analysis technique which involves illuminating a substance with a laser and analysing the light that is scattered off the surface of the substance. The scattered light can provide a lot of information about the substance and its structure, and can be used to identify, characterize, and quantify many chemical components. Soil sampling is a reconnaissance stage exploration technique which may indicates the geochemical parameters of the underlying or nearby bedrock geology. Mineralised lithologies of the target commodity may elevate elemental proportions in the soil and provide vectors toward location the mineralised body. Soil samples were collected using pick and shovel from depths of approximately 30cm below the surface. Rockchip samples were collected at the discretion of the field geologist, this method is appropriate given the early stage of exploration at the Caraíbas Project Approximately 200g of material from the deepest sample horizon is passed through a 2mm sieve, with the -2mm retained for assay. All samples were submitted to SGS Geosol Laboratórios Ltd' of Belo Horizonte. Sampling was carried out using Lightning Minerals procedures and QAQC processes as per current industry standard practice. Sample site locations are recorded using a Garmin Map 62s handheld device and are reported in projection SIRGAS
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 is being reported
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 is being reported
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.	No drilling is being reported



Sub-sampling techniques and sample preparation	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 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.	 Soil Samples are collected in the field into small kraft cardboard bags and are 200gm per unit. Rock chip samples are approximately 1-3kg and are collected into pre numbered calico bags. Industry standard QAQC practices of field duplicates and the appropriate use of laboratory provided Certified Reference Material for low level lithium are used for all laboratory sample submissions. Field Duplicates are utilised by the company at a rate of 1:50 samples.
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.	 All samples were submitted to SGS Geosol Laboratórios Ltd' of Belo Horizonte Minas Gerais Brazil. Analysis procedures are considered appropriate for Lithium and Multi element analysis. Samples are prepared and analysed using SGStechnique PRS80J and are analysed via optical emission spectroscopy analysis using code ICP90A. Determination by Fusion with Sodium Peroxide - ICP OES. Soil samples - Elements analysed at ppm limits for include Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, Sb, Sc, Sn, Sr, Ta, Ti, V, W, Y, Zn Rock Chip - Elements analysed at ppm limits include Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Nb, Nd, Ni, P, Pb, Pr, Rb, Sb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr Laboratory CRM material has been utilised at this early stage of exploration works. A SciAps Z-903 LIBS device was been used for spot sample readings of minerals of interest within sample VLM207. The device is calibrated each day, and before analysis is begun. QAQC standards are used every 10-15 readings as consistency checks. Readings times are approximately 3 to 5 seconds and are standard for the device. The device is calibrated to a lithium profile supplied by SciAps prior to use. Handheld LIBS is expected to differ from laboratory assay results and can read above theoretical maximum values. They should not be used to replace assays or indicate whole rock grade which are now available in Appendix 1, Table 2 below.
Verification of sampling and assaying	alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	 No verification will be undertaken for these initial samples as they will not be used in any resource estimate. The samples are to determine the levels of Li and other valuable elements in soil samples.
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.	 Handheld Garmin GPS instruments were used to geo locate each sample location, these instruments are understood to be accurate within a ±5m in the horizontal and vertical planes. The level of topographic control offered by a handheld GPS is considered sufficient for early exploration activities. All samples were collected in the SIRGAS 2000 / UTM zone 23S



	Quality and adequacy of topographic control.	
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.	 The soil and rock chip sample spacing is considered appropriate for the reporting of the exploration results. No Mineral Resource or Ore Reserve Estimates have been completed.
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 collection of soil and rock chip sampling data was targeted as best possible at this early stage of exploration activities.
Sample security	The measures taken to ensure sample security.	The chain of custody for sampling procedures and sample analysis was managed by the contract geological consultants during collection
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques have been conducted to date.

Section 2 - Reporting of Exploration Results

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 Esperança Project area totals ~11.1km² and comprises one exploration licence 301033/2013 The Care the Project area totals ~17.3km² and comprises 5 greated exploration licence 821.514/2018, 823.041/0111
Exploration done by othe parties	Acknowledgment and appraisal of exploration by other parties.	 The Projects are at a very early stage of exploration and little to no recorded work has been completed by prior explorers. Recent exploration has included a small reconnaissance exploration program by project vendor Bengal Mining.
Geology	Deposit type, geological setting and style of mineralisation.	 No known mineral deposits occur within project tenure. Project geology comprises Neoproterozoic age sedimentary rocks of Araçuaí Orogen intruded by pegmatites interpreted to originate from the fractionation of magmatic fluids from the peraluminous S-type post tectonic granitoids of Araçuaí Orogen. The target commodity is hardrock lithium within lithium-caesium-tantalum pegmatites.
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: oeasting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above second level in metres) of the drill hole collar odown hole length and interception depth, hole length.	ommunicated and described within the body of this report.



	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-ofg 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.	•	No levelling of the raw geochemical data was undertaken. Plan images have been generated using QGIS software. No metal equivalent values are reported.
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').	•	No drillhole information is reported. There is insufficient data provided by the mapping and geochemical results contained within this report for a relationship between pegmatite and mineral resources to be reported.
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.	•	Appropriate reporting of results has been included in the body of this announcement; the plans, or lack thereof suitably represent the nature of the results.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	•	Comprehensive reporting of soil and rock chip geochemical results within the Projects has been included in Appendix 1.
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.	•	All meaningful data and relevant information have been included in the body of the report.
Further work	The nature and scale of planned further work (e.g., 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.	•	Follow up infill soil sampling is currently being planned and is expected to begin imminently, however at the time of reporting the program has not yet begun.



Appendix 1 - Table 1: Soil Sampling Assays >150ppm lithium

Sample ID	Project	Easting (UTM 23S)	Northing (UTM 23S)	Be (ppm)	Li (ppm)	Nb (ppm)	Sn (ppm)	Ta (ppm)	W (ppm)	Y (ppm)
SOLM0143	Caraíbas	800022	8195453	2.5	173	22	25	23	25	33
SOLM0150	Caraíbas	800050	8195109	6	160	20	25	12	25	29
SOLM0178	Caraíbas	800052	8193758	12	154	20	25	12	25	21
SOLM0191	Caraíbas	800450	8195453	2.5	153	41	25	21	25	41
SOLM0196	Caraíbas	800450	8195204	10	239	45	25	5	25	37
SOLM0197	Caraíbas	800432	8195154	9	157	41	25	12	25	30
SOLM0207	Caraíbas	800451	8194703	9	181	49	25	5	25	33
SOLM0279	Caraíbas	800849	8194997	7	160	30	25	5	25	42
SOLM0299	Caraíbas	801252	8194095	7	155	14	25	5	25	12
SOLM0612	Caraíbas	803247	8196163	16	208	12	25	20	25	37
SOLM0613	Caraíbas	803249	8196118	25	277	16	25	26	25	59
SOLM0615	Caraíbas	803254	8196017	11	183	18	25	16	25	95
SOLM0616	Caraíbas	803253	8195966	7	168	5	25	18	25	80
SOLM0618	Caraíbas	803250	8195868	10	156	11	25	17	25	94
SOLM0677	Caraíbas	803687	8195535	12	226	5	25	23	25	45
SOLM0680	Caraíbas	803657	8195379	12	216	5	25	15	25	36
SOLM0688	Caraíbas	803650	8195031	9	159	13	25	27	25	41
SOLM0724	Caraíbas	804053	8195110	9	186	5	25	5	25	45
SOLM0725	Caraíbas	804052	8195165	10	188	5	25	16	25	50
SOLM0726	Caraíbas	804052	8195211	11	229	5	25	5	25	39
SOLM0727	Caraíbas	804051	8195257	13	396	5	25	5	25	36
SOLM0728	Caraíbas	804053	8195308	13	429	5	25	5	25	34
SOLM0729	Caraíbas	804051	8195363	11	227	5	25	13	25	42
SOLM0730	Caraíbas	804047	8195412	17	254	12	25	22	25	71
SOLM0731	Caraíbas	804054	8195464	12	189	10	25	5	25	37
SOLM0732	Caraíbas	804054	8195514	8	202	5	25	10	25	36
SOLM0733	Caraíbas	804056	8195566	12	192	5	25	5	25	32
SOLM0734	Caraíbas	804054	8195612	14	265	12	25	5	25	33
SOLM0735	Caraíbas	804051	8195662	14	286	11	25	5	25	41



Sample ID	Caraíbas	Easting (UTM 23S)	Northing (UTM 23S)	Be (ppm)	Li (ppm)	Nb (ppm)	Sn (ppm)	Ta (ppm)	W (ppm)	Y (ppm)
SOLM0736	Caraíbas	804052	8195717	15	268	10	25	11	25	35
SOLM0737	Canabrava	804051	8195759	11	182	5	25	12	25	28
SOLM1129	Canabrava	800590	8188995	7	160	13	25	5	25	44
SOLM1134	Canabrava	800606	8189255	10	164	18	25	20	25	20
SOLM1149	Canabrava	801382	8189090	8	155	11	25	12	25	38
SOLM1152	Canabrava	801380	8188939	14	175	5	25	23	25	43
SOLM1175	Canabrava	802189	8188919	12	187	5	25	11	25	64
SOLM1186	Canabrava	802568	8188911	10	170	19	25	19	25	54
SOLM1187	Canabrava	802984	8188883	18	228	20	25	17	25	73
SOLM1188	Canabrava	802981	8188932	11	264	11	25	13	25	39
SOLM1189	Canabrava	803000	8188969	13	320	26	25	21	25	62
SOLM1190	Canabrava	802958	8189027	15	238	23	25	17	25	72
SOLM1191	Canabrava	802983	8189078	11	230	5	25	10	25	71
SOLM1192	Canabrava	802982	8189126	8	263	11	25	5	25	47
SOLM1193	Canabrava	802981	8189179	9	231	5	25	13	25	43
SOLM1202	Canabrava	803383	8189221	8	220	5	25	5	25	30
SOLM1203	Canabrava	803384	8189171	14	225	5	25	5	25	42
SOLM1204	Canabrava	803380	8189126	9	213	5	25	5	25	47
SOLM1205	Canabrava	803385	8189076	10	203	11	25	5	25	40
SOLM1206	Canabrava	803386	8189029	15	181	5	25	5	25	41
SOLM1207	Canabrava	803385	8188979	16	223	5	25	5	25	34
SOLM1208	Canabrava	803383	8188927	9	215	5	25	5	25	38
SOLM1209	Caraíbas	803383	8188879	14	168	5	25	5	25	35
SOLM1214	Caraíbas	803748	8194777	11	160	5	25	5	25	37
SOLM1224	Caraíbas	803856	8194770	14	381	5	25	5	25	27



Appendix 1 - Table 2: Rock Chip Sampling Assays

Sample ID	Project	Easting (UTM 23S)	Northing (UTM 23S)	Be (ppm)	Li (ppm)	Nb (ppm)	Sn (ppm)	Ta (ppm)	W (ppm)	Y (ppm)
VLM009	Caraíbas	803852	8194803	13	36	5	11	5	50	5.61
VLM022	Caraíbas	803896	8194826	8	44	12	23	5	50	2.99
VLM029	Caraíbas	803255	8194579	7	15	5	7	5	50	2.41
VLM030	Caraíbas	803234	8194603	8	33	5	2.5	5	50	4.9
VLM032	Caraíbas	803185	8194636	7	11	5	2.5	5	50	11.35
VLM039	Caraíbas	803451	8195112	10	50	5	2.5	5	50	1.27
VLM055	Caraíbas	803227	8195722	31	28	5	2.5	5	50	1.04
VLM072	Caraíbas	794984	8192062	218	5	84	43	88	50	20.79
VLM080	Caraíbas	794614	8192526	227	5	122	15	57	50	2.96
VLM107	Caraíbas	795258	8193586	187	28	97	28	40	50	3.24
VLM122	Canabrava	794653	8192722	161	27	109	47	40	50	1.68
VLM138	Esperança	792121	8187833	51	23	43	11	15	50	7.52
VLM149	Esperança	791982	8187642	12	15	17	7	5	50	2.55
VLM157	Esperança	792170	8187904	29	15	47	2.5	14	50	7.1
VLM163	Esperança	791996	8187840	70	13	89	32	55	50	7.64
VLM165	Esperança	791937	8187715	11	49	29	13	5	50	2.96
VLM176	Esperança	792478	8187543	2.5	39	10	6	5	50	1.83
VLM177	Esperança	792455	8187566	8	233	21	19	5	50	3.5
VLM179	Esperança	792329	8187637	24	49	49	30	18	50	6.57
VLM181	Esperança	792275	8187672	6	34	14	6	5	50	3.14
VLM186	Esperança	792402	8187770	20	38	34	11	12	50	4.65
VLM199	Esperança	793145	8187908	10	30	35	70	5	50	55.42
VLM206	Esperança	792704	8187639	21	434	14	551	23	50	5.58
VLM207	Esperança	792674	8187621	26	1775	43	944	55	50	8.45
VLM208	Esperança	792674	8187624	8	39	18	20	5	50	2.16
VLM209	Esperança	792676	8187623	2.5	37	5	19	5	50	1.91
VLM210	Esperança	792673	8187622	24	265	233	539	46	50	1.47
VLM211	Esperança	792675	8187622	53	29	38	11	5	283	49.46
SRL001	Esperança	792693	8187679	7	153	52	18	5	50	10.47



Sample ID	Project	Easting (UTM 23S)	Northing (UTM 23S)	Be (ppm)	Li (ppm)	Nb (ppm)	Sn (ppm)	Ta (ppm)	W (ppm)	Y (ppm)
SRL002	Esperança	792693	8187679	2.5	39	5	6	5	50	3.55
SRL003	Esperança	792699	8187641	154	1130	69	1141	117	50	9.12
SRL004	Esperança	792699	8187641	22	76	85	88	120	50	12.81
SRL005	Esperança	792254	8187678	22	26	39	16	15	50	10.85
SRL006	Esperança	792449	8187561	166	43	75	25	36	50	25.74
SRL007	Canabrava	794748	8192381	2.5	19	5	7	5	50	4.1
SRL008	Esperança	792536	8187475	31	1325	169	373	30	50	5.67
SRL009	Esperança	792795	8187714	11	34	32	17	5	50	1.48
SRL010	Esperança	792417	8187715	6	51	36	19	5	50	1.51

Appendix 2 - Table 1: Reporting Visual Estimates of Mineralisation

Project	Sample ID	Geology/Comments
Esperança	VLM207	Spodumene mineral species are confirmed for sample VLM207 through laboratory use of a Bruker BRAVO Raman spectrometer. The proportion of spodumene minerals are reported as visual estimates only and mineral percentages are shown in Appendix 2 Table 2 below.
		Whole Rock lithium content is shown in Appendix 1 Table 2 above.

Appendix 2 - Table 2: All Pegmatite Field Descriptions Within the Esperança Project

Sample ID	Easting (UTM 23S)	Northing (UTM 23S)	Lithology	Campaign	Primary Minerals (Major >30%)	Secondary Minerals (Minor >5% and <30%)	Accessory Minerals (Trace <5%)	Boulder /In-Situ	Comments
VLM009	803852	8194803	Pegmatite	2024	Feldspar	Muscovite, Quartz		Outcrop	Large pegmatite, rich muscovite, albite, and quartz
VLM022	803896	8194826	Pegmatite	2024	Muscovite, Feldspar	Schlorite		Outcrop	Pegmatite with very rich muscovite, schorlite and feldspar
VLM029	803255	8194579	Pegmatite	2024	Feldspar	Muscovite, Quartz		Outcrop	Artisanal digging, composed quartz, albite and muscovite, small tunnel
VLM030	803234	8194603	Pegmatite	2024	Feldspar	Muscovite, Quartz		Outcrop	Old artisanal digging, pegmatite composed by albite, quartz and muscovite



Sample ID	Easting (UTM 23S)	Northing (UTM 23S)	Lithology	Campaign	Primary Minerals (Major >30%)	Secondary Minerals (Minor >5% and <30%)	Accessory Minerals (Trace <5%)	Boulder /In-Situ	Comments
VLM032	803185	8194636	Pegmatite	2024	Quartz	Feldspar		Outcrop	Old Artisanal digging, composed by core quartz and edge feldspar
VLM039	803451	8195112	Pegmatite	2024	Quartz	Feldspar		Outcrop	Pegmatite with quartz core and edge feldspar, Old digging
VLM055	803227	8195722	Pegmatite	2024	Feldspar	Muscovite, Quartz		Outcrop	Large block pegmatite with feldspar, muscovite, and quartz
VLM072	794984	8192062	Pegmatite	2024	Muscovite, Quartz	Feldspar, Tourmaline		Float	Pegmatite fine, with light green muscovite, quartz, feldspar and tourmaline
VLM080	794614	8192526	Pegmatite	2024	Feldspar			Outcrop	Pegmatite, coarse feldspar
VLM107	795258	8193586	Pegmatite	2024	Feldspar, Quartz	Tourmaline		Float	Block rolled pegmatite with tourmaline, coarse and fine
VLM122	794653	8192722	Pegmatite	2024	Quartz, Tourmaline	Muscovite, Feldspar		Outcrop	In drainage subcrop pegmatite fine, composed by quartz, tourmaline, muscovite, and albite
VLM138	792121	8187833	Pegmatite	2024	Quartz, Tourmaline	Muscovite, Feldspar		Outcrop	Pegmatite rich tourmaline, quartz, muscovite, and feldspar
VLM149	791982	8187642	Pegmatite	2024	Feldspar, Quartz	Tourmaline		Outcrop	In drainage subcrop pegmatite coarse tourmaline rich and muscovite
VLM157	792170	8187904	Pegmatite	2024	Feldspar, Quartz	Tourmaline, Muscovite		Outcrop	Large outcrop pegmatite, composed by tourmaline, feldspar, quartz and muscovite,
VLM163	791996	8187840	Pegmatite	2024	Feldspar, Quartz	Muscovite		Float	Pegmatite composed quartz, albite, and light green muscovite
VLM165	791937	8187715	Pegmatite	2024	Feldspar	Quartz		Outcrop	Large pegmatite, concordant with foliation
VLM176	792478	8187543	Pegmatite	2024	Quartz, Tourmaline	Muscovite, Feldspar		Outcrop	Subcrop pegmatite, texture graphic, composed by quartz, tourmaline, feldspar, and muscovite
VLM177	792455	8187566	Pegmatite	2024	Quartz, Muscovite	Feldspar		Outcrop	Old digging in pegmatite, rich quartz, muscovite, and feldspar.
VLM179	792329	8187637	Pegmatite	2024	Feldspar, Tourmaline	Quartz, Muscovite		Outcrop	Large outcrop pegmatite, composed by tourmaline, feldspar, quartz, and muscovite
VLM181	792275	8187672	Pegmatite	2024	Muscovite, Quartz	Feldspar, Tourmaline		Outcrop	Large coarse and fine pegmatite outcrop, width 5 meters, composed by quartz, muscovite, feldspar, and tourmaline schorlite



Sample ID	Easting (UTM 23S)	Northing (UTM 23S)	Lithology	Campaign	Primary Minerals (Major >30%)	Secondary Minerals (Minor >5% and <30%)	Accessory Minerals (Trace <5%)	Boulder /In-Situ	Comments
VLM186	792402	8187770	Pegmatite	2024	Feldspar, Tourmaline	Quartz, Muscovite		Outcrop	Large coarse and fine pegmatite outcrop rich tourmaline, feldspar, quartz and muscovite. Width 20 meters
VLM199	793145	8187908	Pegmatite	2024	Muscovite, Quartz	Feldspar, Tourmaline		Outcrop	Subcrop pegmatite rich muscovite light green and small tourmaline
VLM206	792704	8187639	Pegmatite - Spodumene	2024	Feldspar	Quartz, Muscovite	Spodumene	Outcrop	Digging, large pegmatite containing crystals of highly altered spodumene
VLM207	792674	8187621	Pegmatite - Spodumene	2024	Quartz, Spodumene	Feldspar, Muscovite		Outcrop	Selective mineral sample selection for analysis from Artisanal mine in zoned pegmatite. Spodumene sampled zone (55% quartz and 35% spodumene)
VLM208	792674	8187624	Pegmatite	2024	Feldspar	Quartz, Muscovite, Tourmaline	Garnet, Spodumene, Tantalite and beryl	Outcrop	Artisanal mine in zoned pegmatite. Gallery with quartz plus spodumene zone (55% quartz and 5% spodumene)
VLM209	792676	8187623	Pegmatite	2024	Feldspar		Quartz	Float	Feldspar - concentrated, minor quartz
VLM210	792673	8187622	Pegmatite	2024	Muscovite	Feldspar		Float	Large light green muscovite concentrate
VLM211	792675	8187622	Pegmatite	2024	Feldspar		Columbite, Tantalite?	Float	Dark mineral, possible columbite or tantalite
SRL001	792693	8187679	Pegmatite	2024	Feldspar, Muscovite	Quartz, Schorlite		Outcrop	Trench in pegmatite that ended in schist. Kf, radial white mica, qtz, Ox. Mn, schorlite.
SRL002	792693	8187679	Pegmatite	2024	Feldspar, Muscovite	Quartz, Schorlite		Outcrop	Trench in pegmatite that ended in schist. Kf, radial white mica, qtz, Ox. Mn, schorlite.
SRL003	792699	8187641	Pegmatite - Spodumene	2024	Feldspar, Quartz	Muscovite	Spodumene	Outcrop	Highly weathered spodumene within Feld+Qtz+Musc, two samples taken
SRL004	792699	8187641	Pegmatite - Spodumene	2024	Feldspar, Quartz	Muscovite	Spodumene	Outcrop	Highly weathered spodumene within Feld+Qtz+Musc, two samples taken
SRL005	792254	8187678	Pegmatite	2024	Feldspar, Quartz	Tourmaline, Muscovite	Garnet	Outcrop	Outcrop of pegmatite in the drainage. kf, ab, qtz, schorlite, green mus and garnet. Very similar to Luciano's peg.



Sample ID	Easting (UTM 23S)	Northing (UTM 23S)	Lithology	Campaign	Primary Minerals (Major >30%)	Secondary Minerals (Minor >5% and <30%)	Accessory Minerals (Trace <5%)	Boulder /In-Situ	Comments
SRL006	792449	8187561	Pegmatite	2024	Feldspar, Quartz	Tourmaline, Muscovite	Garnet	Outcrop	Old trench that intercepted a robust peg with kf, ab, qtz, green mus, schorlite and garnet.
SRL007	794748	8192381	Pegmatite	2024	Feldspar, Quartz	Muscovite, Schorlite	Pyrolusite?	Float	Large peg boulder, with ab, qtz, mus, schorlite, Mn oxide. Moderately weathered.
SRL008	792536	8187475	Pegmatite	2024	Feldspar, Quartz	Muscovite, Schorlite		Outcrop	Peg outcrop in drainage with ab, kf, qtz, green mica, shorlite. Thickness 1m and indefinite length.
SRL009	792795	8187714	Pegmatite	2024	Feldspar, Quartz	Muscovite, Schorlite	Pyrolusite?	Float	Attempted artisanal mine that took floats of peg. Kf, qtz, green mica and Mn oxide.
SRL010	792417	8187715	Pegmatite	2024	Feldspar, Quartz	Muscovite, Schorlite		Outcrop	Decimeter scale blocks of peg. Kf, ab, qtz, green mica and schorlite. Coarse and fine texture.