Strong Lithium Targets Defined at Caraíbas with Soil Sampling Assays up to 239ppm Li

ASX Announcement
2nd December 2024

Lightning Minerals (L1M or the Company) is pleased to announce the return of strong assays from the first phase of soil sampling at the Caraíbas project in the prolific Lithium Valley region of Minas Gerais, Brazil.

Elevated assays of up to 239ppm lithium have been returned from the priority target area, many contiguous results >100pmm lithium have also been returned which is a compelling soil response in the regional geological context. Multiple pegmatites and pegmatite float material have been identified during ground reconnaissance works, further supporting the exploration thesis. These results provide drilling opportunities for early 2025 and rank as the Company's second priority target for drilling following the recent discovery of lithium bearing spodumene grading up to 4.04% Li_2O (ASX Announcement 18 November 2024).

HIGHLIGHTS

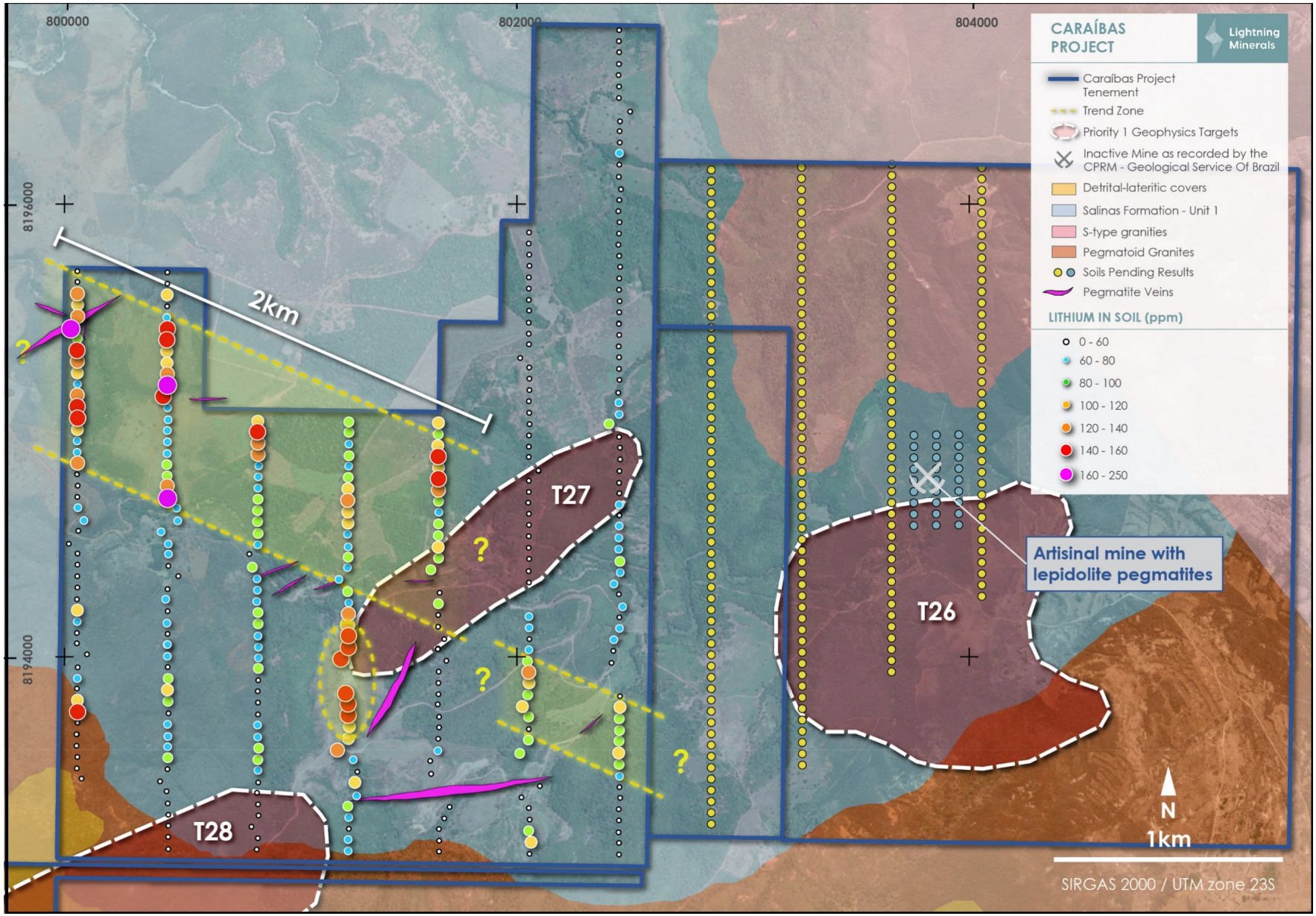
- **Peak assay result of 239ppm lithium signifies strong response within schists of the Salinas Formation geological unit**
- **Large ~2km x 700m soil anomalism trend identified from phase 1 soil sampling campaign, a smaller 800m x 300m anomaly lies adjacent to the south east**
- **Results provide anticipated additional drill targets for early 2025 drilling program**

Soil sampling, ground reconnaissance and geophysics interpretation works are ongoing with further results to come over the next few weeks from the Canabrava, Esperança, and Caraíbas projects. These results will include the remainder of the soil program covering the eastern Caraíbas project, which includes the previously identified historic workings (ASX Announcement 22 April 2024) that has yielded results grading up to 0.53% Li_2O (lepidolite), tantalum (1,245ppm), rubidium (1,175ppm) and caesium (1,455ppm).

Managing Director, Alex Biggs is currently completing a site visit in Brazil developing strategy for 2025 and will return to Perth in mid-December.

Lightning Minerals Managing Director Alex Biggs said, "The Caraíbas project is beginning to yield some very impressive results that further support our exploration thesis and belief in the region. The western half of the Caraíbas project was a priority area for us due to its location east of the granite lithologies and the findings of the initial ground reconnaissance works. We're starting to get a strong impression of what the Lithium Valley region can offer since we began our on-ground works in July. We are aiming to have our phase 1 soil sampling completed across all tenements by Christmas to allow us to start preparations for drilling in Q1 2025 at our Esperança project. These results now provide the secondary target area for drilling which is very exciting for the Company. These results are exceptional and once again demonstrate the potential this region holds".

Figure 1: Soil sampling (lithium) and mapping results for 343 samples taken from tenement 831424/2013 at the Caraíbas project. The interpreted trend zones for immediate follow up field works are shown in yellow (UTM Z23S)



Elevated Lithium Results Continue at the Caraíbas Project

Following the successful identification of lithium anomalism at the Canabrava project, analytical results from the first 343 soil samples taken from the Caraíbas project demonstrate significant lithium in soil anomalism (Figure 1).

The samples at Caraíbas have been collected along 400m spaced sample lines orientated in a north south direction, the sample spacing along these sample lines is 50m. The lithium values returned from analyses at SGS of Belo Horizonte are considered exceptional, with three areas highlighting contiguous elevated responses. Both the scale and consistency of the elevated zones provide the company with targets for immediate follow up works which will focus on further ground reconnaissance to map all outcrops and structures along the trend.

Three main areas have returned elevated lithium; the largest of these is where results highlight a zone approximately 2km long and 700m wide that sits in the north-western quadrant of tenement 831424/2013. The underlying geology at this location comprises schists of the Salinas Formation where background lithium values are expected to be at or below 60ppm. The peak result of up to 239ppm lithium is therefore considered very strong for the region and increases confidence in drill targeting at the Caraíbas project.

The second of the three priority targets is approximately 800m x 300m and remains open to the south east (Figure 1). The pending results of the remainder of the soil program will inform the company about a potential continuation of this anomaly, it is considered important as this target displays a similar North-Westerly strike (115°) and has noteworthy lithium elevations.

The third zone of interest includes a ~450m long zone where eight contiguous samples along the North-south orientated sample line have returned results over 120ppm lithium.

The correlation between the lithium anomalism, previously mapped outcropping pegmatites, and the recently developed priority one geophysics target (T27) is now under review. The recently completed geophysics targeting exercise identified the T27 target zone central to the 831424/2013 tenement, where a combination of low amplitude magnetic features, Salinas Fm. Lithologies, various intersecting aeromagnetic interpreted structures, and the presence of an outcropping pegmatite forms now lies adjacent to considerable lithium elevations within the soil profile.

The T27 target has been generated via Magnetization Vector 3D Inversions (MVI) and the outline of the target in Figure 1 represents a horizontal depth slice of the above conditions at 100m below surface. A nearby mapped pegmatite that intersects the T27 target (VLR1362 and VLR1363) has a similar N-W trend to the T27 target where the outcrop strikes at 035°. While there are no reported lithium minerals in this pegmatite the size of the outcrop is considerable at over 20m width, sufficient to support a nearby ornamental stone quarry. The theses here is that this pegmatite may form part of a suite/swarm of pegmatites of which a mineralised constituent is present.

Next Stages of Work at Caraíbas Project and Ongoing Works in Brazil

Exploration field soil sampling works have now been completed for the Canabrava and Caraíbas projects, exploration results remain pending for both areas. Exploration at Esperança remains ongoing with infill soil sampling surrounding the spodumene discovery now underway.

Further ground reconnaissance and mapping works are ongoing at the Canabrava, Esperança, and Caraíbas projects particularly focused around identified areas of interest and trends of which multiple have been identified across all three project areas. These works are aimed at better constraining pegmatite outcrops and orientations. Preparations are now underway for drilling in Q1 2025.

Figure 2: Lightning Minerals' Brazilian tenements in regional context of the Lithium Valley region of Minas Gerais

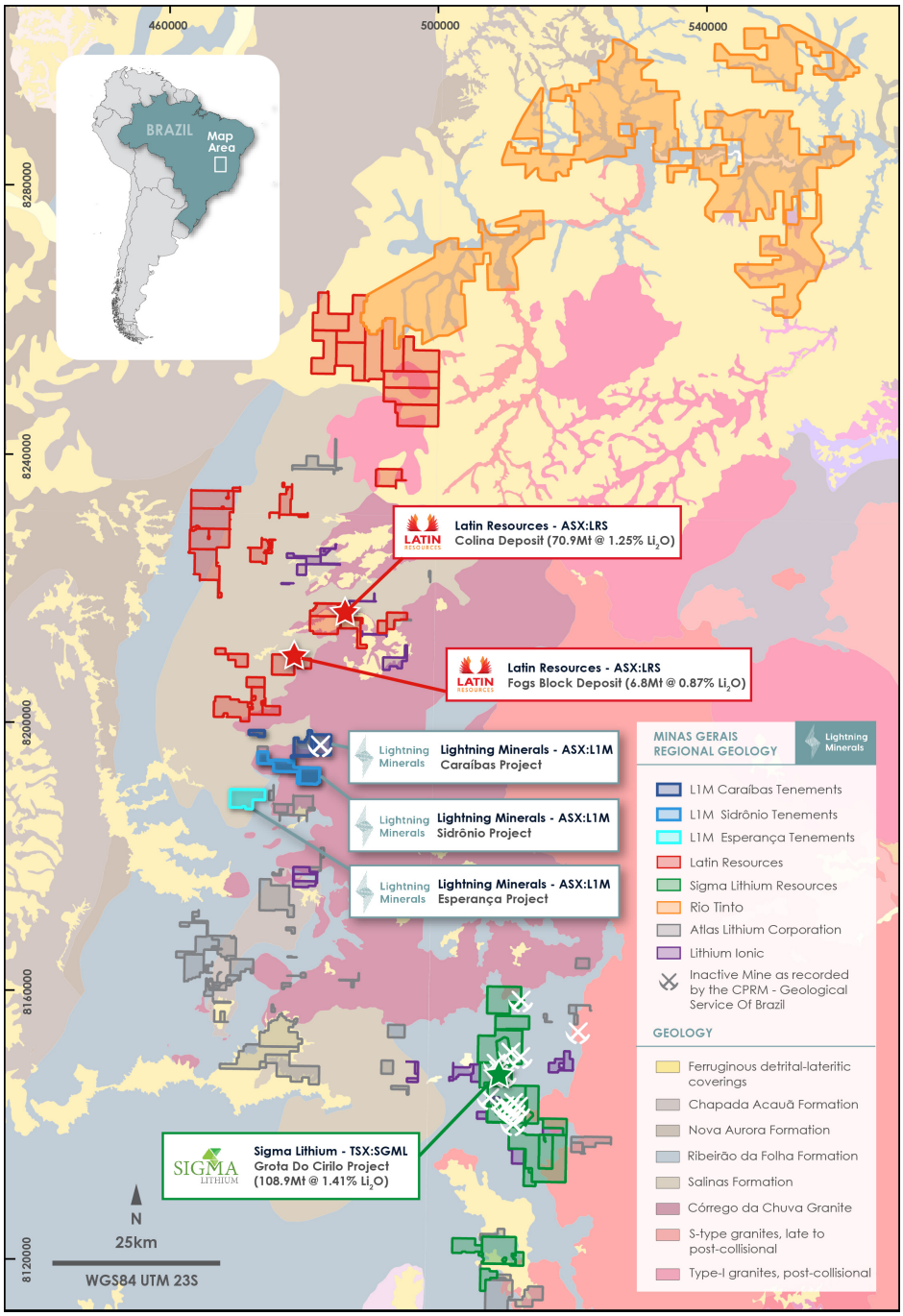
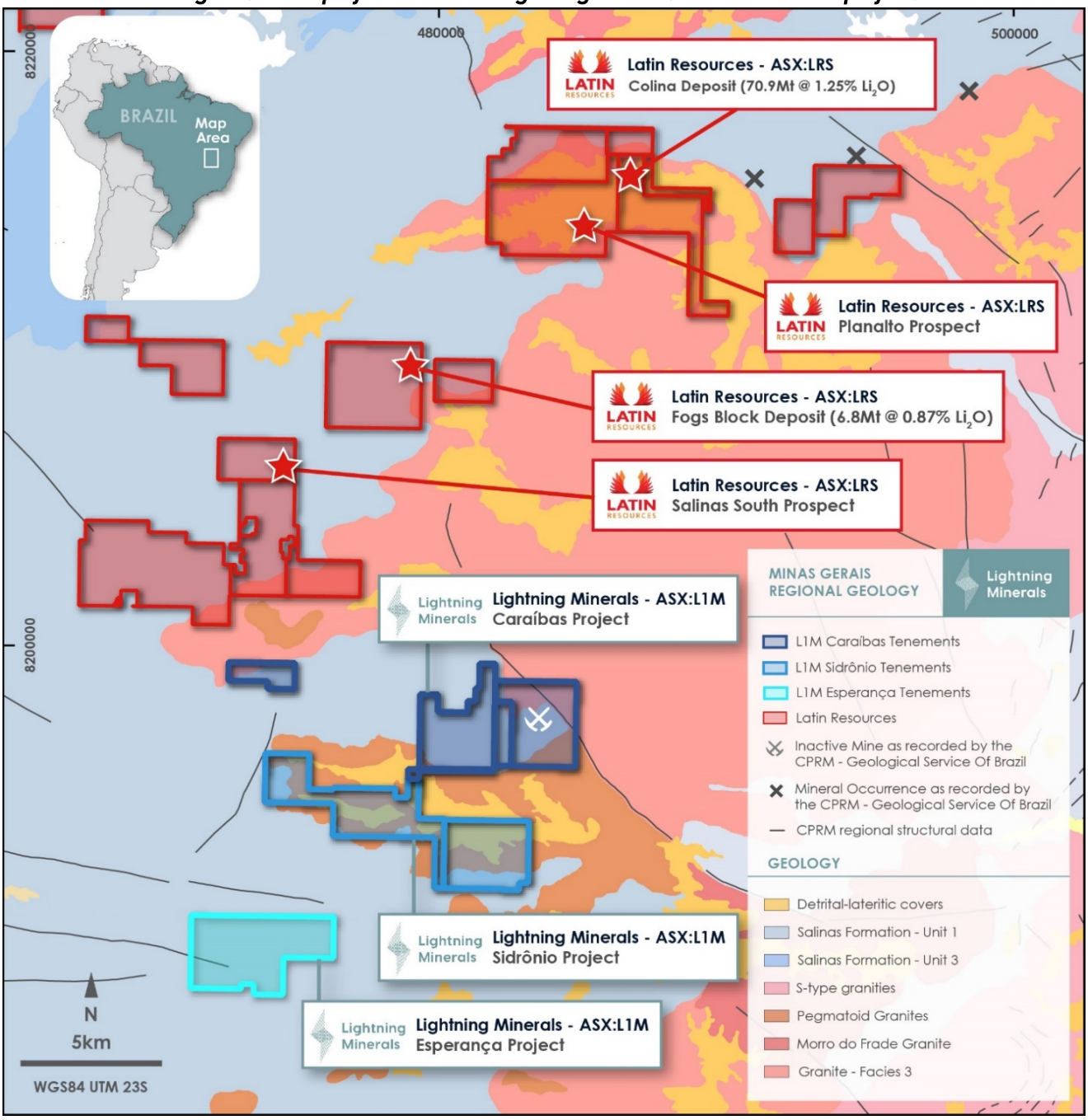


Figure 3: Local project location of Lightning Minerals' Brazilian lithium projects



Approved for release by the Board of Directors

-END-

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 recent acquisition of the Caraíbas, Sidrônio (now 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 Jarrad 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: Caraíbas Project – JORC Code 2012 Table 1 Criteria

The Table below summarises the assessment and reporting criteria used for exploration results for the Caraíbas Exploration Project 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 geochemical soil sampling. • 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. • Approximately 200g of material from the deepest sample horizon is passed through a 2mm sieve, with the -2mm retained for assay. • 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 2000 / UTM 23S
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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	• No drilling is being reported
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.*	• Soil Samples are collected in the field into small kraft cardboard bags and are 200gm per unit. • 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 1:40 samples.

	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.*	
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 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 SGS technique PRS80J and are analysed via optical emission spectroscopy analysis using code ICP90A. Determination by Fusion with Sodium Peroxide - ICP OES. • Elements analysed at ppm limits for soil samples included 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 • Laboratory CRM material has been utilised at this early stage of exploration works.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• 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.* *Quality and adequacy of topographic control.*	• 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 soil sampling. • All samples were collected in the SIRGAS 2000 / UTM zone 23S
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 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 Caraíbas Project is located approximately 18km south-south east of the town of Salinas, Minas Gerais, Brazil. • The Caraíbas Project area totals ~17.3km2 and comprises 5 granted exploration licences 831.514/2018, 832.041/2011, 831.424/2013, 832.763/2014, and 830.313/2014 • The Tenements are considered in good standing at the time of this report.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• The Caraíbas Project is at a very early stage 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. • The Caraíbas 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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *down hole length and interception depth,* ○ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No drillhole information is reported. • No material information has been excluded from this report, laboratory analytical results have been adequately communicated and described within the body of this report.
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.*	• 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*	• 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.

	include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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 geochemical results within the Caraíbas Project 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 works including drill testing and potential intermediary infill soil sampling is currently being considered for the area included in the above report. Exploration information from other Brazilian lithium projects remain outstanding and only upon receival of this data can the targets be ranked enabling final decisions for drill testing in Q1 2025.

APPENDIX 2 - TABLE 1 – Outcrop Mapping results for Caraíbas project

Field Name	Project Area	Easting (UTM 23S)	Northing (UTM 23S)	Point Type	Geologic Description	Be ppm	Cs ppm	K ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	Li % ppm	Li2O%	K/Rb
BLR059	Caraíbas	801358	8194279	Outcrop	Valley. Peg (Qz+Felds). Coarse tourmaline(indicolite) hosted by fine-grained CST(?)/Bt-schist. PEG 112/58. Sn 136/36	8	19.6	23621	41	5	195	2.5	5	0.00	0.01	121.13
BLR062	Caraíbas	800223	8194625	Subcrop	In situ PEG.	78	17.5	30073	20	19	287	70	5	0.00	0.00	104.78
BLR066	Caraíbas	800589	8194533	Outcrop	Floor of road. Qtz-Spods?/Felds	9	3.1	12065	93	5	44	2.5	5	0.01	0.02	274.20
BLR237	Caraíbas	803812	8194766	Outcrop	Contact SCH-GPE. LB-43 - Presence of rubelite and lepidolite. Zoned lepidolite (external halo with Li).	48	1455.6	28983	2457	64	1175	103	196	0.25	0.53	24.67
BLR238	Caraíbas	803813	8194761	Outcrop	Gpe (pegmatite) whitish with >>schorlite + lepidolite.	12	704.6	19693	1281	801	665	272	1245	0.13	0.28	29.61
VLR1269	Caraíbas	803808	8194765	Digging	Pegmatite rich in lepidolite (Li) and light green tourmaline (?)	20	124.6	36937	97	5	574	2.5	5	0.01	0.02	64.35
BLR233	Caraíbas	800277	8194702	Outcrop	Pegmatite low angle. 40cm thickness. Green mica (Litiophilite)+quartz	16	15	29528	5	23	309	188	5	0.00	0.00	95.56

					(petalite?). Presence of hyaline quartz vein.											
BLR064	Caraíbas	800237	8194676	Outcrop	Stopped road crossed by drainage. Schist with large blocks of PEG (Musc+Qtz+Felds). Spod replaced by musc(?). Sn 148/64	48	14.3	27711	5	19	282	184	5	0.00	0.00	98.27
BLR232	Caraíbas	800283	8194700	Float	Float (insitu?) Probable spodumene silicified pseudomorph.	9	3.8	10211	148	5	47	2.5	5	0.01	0.03	217.26
BLR234	Caraíbas	802238	8195505	Outcrop	Localidade Riachinho. Milk quartz vein with fractures filled by oxide Fe-Mn. Regional shear zone. Blank source.	2.5	0.5	500	5	5	4	2.5	5	0.00	0.00	125.00
VLR1298	Caraíbas	800192	8195040	Subcrop	Pegmatite blocks chip. Presence tourmaline, feldspar, quartz and muscovite.	46	29	30050	12	23	336	25	13	0.00	0.00	89.43
VLR1297	Caraíbas	800121	8194970	Subcrop	Floats of coarse feldspar, quartz, tourmaline and garnet	14	14.1	23857	27	21	297	51	5	0.00	0.01	80.33
VLR1313	Caraíbas	801684	8193412	Digging	Mining ornamental rocks. Large Pegmatite barren. Contact schist discordant. Quartz, tourmaline, albite and muscovite.	10	16.6	24195	83	12	176	16	5	0.01	0.02	137.47
VLR1304	Caraíbas	800037	8195488	Outcrop	Pegmatite in river. Large outcrop. Composition shorlite, quartz, muscovite and albite. Exposure at 12 meters.	63	48.3	38204	101	19	575	49	5	0.01	0.02	66.44
VLR1301	Caraíbas	800201	8195302	Subcrop	Pegmatite blocks. No presence tourmaline. Crystal feldspar, quartz and muscovite	93	42.7	26639	27	31	427	92	17	0.00	0.01	62.39
VLR1296	Caraíbas	800104	8194927	Float	Presence light green mica (Li) in pegmatite. Quartz and albite.	137	29.7	30096	5	5	283	45	5	0.00	0.00	106.35

VLR1278	Caraíbas	801382	8194268	Outcrop	Contact schist and pegmatite with thickness 20 cm. Tourmaline, quartz, feldspar and muscovite.	38	25.1	47210	5	5	333	5	5	0.00	0.00	141.77
VLR1302	Caraíbas	800077	8195454	Outcrop	Pegmatite with presence tourmaline, quartz, albite and muscovite. In drainage.	295	35.3	18736	16	16	256	37	5	0.00	0.00	73.19
VLR1314	Caraíbas	801698	8193365	Digging	Presence green mica, tourmaline, feldspar, quartz.. Borders are fine grained.	2.5	7.3	20015	10	5	148	2.5	5	0.00	0.00	135.24
VLR1309	Caraíbas	800157	8195477	Subcrop	Pegmatite rich muscovite. No occurrence tourmaline. Composition: quartz and albite.	68	83.2	39885	23	27	481	103	14	0.00	0.00	82.92
VLR1319	Caraíbas	802135	8193553	Outcrop	Presence light green mica (Li), tourmaline, quartz, albite. Low angle pegmatite system.	12	52.4	35478	27	14	289	9	5	0.00	0.01	122.76
VLR1275	Caraíbas	801176	8194300	Subcrop	Subcrop pegmatite with tourmaline, feldspar and muscovite	24	7.1	36061	46	5	185	6	5	0.00	0.01	194.92
VLR1320	Caraíbas	802284	8193680	Subcrop	Presence green mica, tourmaline, feldspar, quartz.. Borders are fine grained.	7	8.2	30804	33	21	188	26	5	0.00	0.01	163.85
VLR1270	Caraíbas	800433	8194506	Digging	Pegmatite	25	12.6	26540	5	19	306	119	5	0.00	0.00	86.73
VLR1316	Caraíbas	801580	8193362	Digging	Mining ornamental rocks. Large Pegmatite barren. Contact schist discordant. Quartz, tourmaline, feldspar and muscovite. Graphic texture. Two sampling points.	9	29.4	37173	102	5	255	9	5	0.01	0.02	145.78
VLR1318	Caraíbas	801953	8193475	Outcrop	Presence light green mica (Li), tourmaline, quartz, albite. Low angle pegmatite system.	10	12.6	34568	23	5	192	17	5	0.00	0.00	180.04
VLR1312	Caraíbas	800252	8195177	Outcrop	Pegmatite. Tourmaline, feldspar, quartz and muscovite.	111	25.1	23224	24	13	276	32	5	0.00	0.01	84.14

VLR1294	Caraíbas	802416	8194251	Outcrop	Presence tourmaline feldspar, muscovite. Low angle system pegmatite.	2.5	10.3	65970	18	5	315	5	5	0.00	0.00	209.43
VLR1289	Caraíbas	804010	8194282	Outcrop	Composite lepidolite (?), quartz, feldspar and tourmaline. Low angle	6	2.4	22759	5	5	78	2.5	5	0.00	0.00	291.78
VLR1288	Caraíbas	803803	8194324	Digging	Pegmatite barren. Composition quartz, feldspar, tourmaline and lepidolite (possible?) Two sampling points. Mica with possible halo with Li	68	69.8	26615	80	5	266	2.5	5	0.01	0.02	100.06
VLR1279	Caraíbas	801561	8194338	Outcrop	Great exposure on the pegmatite river. Composition tourmaline, feldspar, albite, quartz and muscovite.	123	46.7	39492	11	22	375	7	5	0.00	0.00	105.31
VLR1277	Caraíbas	801352	8194277	Outcrop	Pegmatite rich tourmaline and muscovite, moderate weathered.	7	12.6	16147	5	5	118	2.5	5	0.00	0.00	136.84
VLR1323	Caraíbas	793813	8196363	Float	Floats Quartz hyaline	2.5	0.2	500	5	5	1.5	2.5	5	0.00	0.00	333.33
VLR1281	Caraíbas	801972	8194244	Outcrop	Presence of schorlite bearing pegmatite. Small crystal	28	20.9	33497	5	12	300	2.5	5	0.00	0.00	111.66
VLR1272	Caraíbas	800886	8194378	Outcrop	Pegmatite with quartz, muscovite and albite. Rich in muscovite	12	13.3	32648	5	5	294	82	5	0.00	0.00	111.05
VLR1273	Caraíbas	800927	8194390	Outcrop	Pegmatite in river. Composition quartz+ muscovite+ albite+ tourmaline (light green and shorlite). 45 cm thickness. Low angle	10	16.3	34268	5	16	293	100	5	0.00	0.00	116.96
VLR1287	Caraíbas	803758	8194345	Digging	Pegmatite barren. Composition quartz, feldspar, tourmaline and lepidolite (possible?)	7	54.3	52038	125	5	477	2.5	5	0.01	0.03	109.09
VLR1276	Caraíbas	801157	8194325	Outcrop	Pegmatite composite quartz + feldspar + tourmaline and muscovite. Large outcrop in drainage. Pegmatite system low angle.	35	25.6	29474	15	11	288	38	5	0.00	0.00	102.34

VLR1274	Caraíbas	800983	8194323	Outcrop	Pegmatite in river. Composition quartz+ muscovite+ feldspar + tourmaline (shorlite). 62 cm thickness.	20	14.2	31208	10	5	254	34	5	0.00	0.00	122.87
VLR1321	Caraíbas	802323	8193707	Outcrop	Presence green mica, tourmaline, feldspar, quartz. Borders are fine grained.	5	11.7	50146	5	5	271	16	5	0.00	0.00	185.04
VLR1352	Caraíbas	801187	8193608	Digging	Pegmatite rich in tourmaline. Quartz, feldspar and muscovite. Old mining.	2.5	28.3	75569	124	5	458	2.5	5	0.01	0.03	165.00
VLR1353	Caraíbas	801222	8193589	Digging	Pegmatite rich in tourmaline. Quartz, feldspar and muscovite. Old mining. Two sampling points.	5	36.3	51024	153	5	346	12	5	0.02	0.03	147.47
VLR1362	Caraíbas	801443	8193851	Digging	Mining ornamental rocks. Pegmatite barren. Presence quartz geode and pockets Muscovites.	52	17.8	13342	51	5	135	15	5	0.01	0.01	98.83
VLR1358	Caraíbas	801263	8193911	Digging	Mining ornamental rocks. Large Pegmatite barren. Rich oriented tourmaline, Lm N100. Quartz, garnet, muscovite and quartz.	11	4.9	12426	115	5	86	7	5	0.01	0.02	144.49
VLR1357	Caraíbas	800800	8193046	Outcrop	Presence green mica, tourmaline, feldspar, quartz and garnet. 5m wide.	8	9.7	31192	23	5	188	11	5	0.00	0.00	165.91
VLR1359	Caraíbas	801261	8193929	Digging	Mining ornamental rocks. Large Pegmatite barren. Rich oriented tourmaline, Lm N100. Quartz, garnet, muscovite and quartz. Two sampling points.	14	9	13908	117	10	131	14	5	0.01	0.03	106.17
VLR1363	Caraíbas	801435	8193851	Digging	Presence green mineral, Pockets rich muscovite	12	35.5	26793	60	19	296	46	5	0.01	0.01	90.52
VLR1355	Caraíbas	800969	8193254	Subcrop	Pegmatite barren. Feldspar, muscovite, tourmaline and muscovite.	55	20.3	33075	12	10	274	13	5	0.00	0.00	120.71

VLR1351	Caraíbas	802248	8194058	Outcrop	Pegmatite barren. Tourmaline, felspar and little muscovite. Graphic texture	2.5	28.9	62816	16	16	304	15	5	0.00	0.00	206.63
VLR1332	Caraíbas	802231	8195730	Float	Floats pegmatite. Rich muscovite. Quartz and albite.	38	17.5	29828	20	45	353	5	15	0.00	0.00	84.50
VLR1328	Caraíbas	802357	8195977	Float	Block big quartz milky in drainage	2.5	0.05	500	5	5	1.5	2.5	5	0.00	0.00	333.33
VLR1342	Caraíbas	802458	8195200	Float	Block big quartz milky in drainage	2.5	0.2	500	5	5	1.5	2.5	5	0.00	0.00	333.33
VLR1325	Caraíbas	800630	8195146	Outcrop	Outcrop pegmatite in drainage. Green mica, quartz, albite.	82	45.8	25223	13	14	296	88	5	0.00	0.00	85.21

Appendix 2 - Table 1: Caraíbas Soil Sampling Assays >80ppm Li

Sample ID	Easting (UTM 23S)	Northing (UTM 23S)	Li (ppm)	Be (ppm)	Nb (ppm)	Ta (ppm)	Y (ppm)
SOLM0196	800,451	8,195,204	239	10	45	<5	37
SOLM0207	800,452	8,194,703	181	9	49	<5	33
SOLM0143	800,023	8,195,453	173	3	22	23	33
SOLM0150	800,051	8,195,109	160	6	20	12	29
SOLM0279	800,850	8,194,997	160	7	30	<5	42
SOLM0197	800,432	8,195,154	157	9	41	12	30
SOLM0299	801,253	8,194,095	155	7	14	<5	12
SOLM0178	800,053	8,193,758	154	12	20	12	21
SOLM0191	800,450	8,195,453	153	3	41	21	41
SOLM0324	801,650	8,194,888	148	3	11	14	41
SOLM0192	800,448	8,195,405	147	6	47	12	41
SOLM0298	801,252	8,194,043	147	11	25	<5	20
SOLM0326	801,651	8,194,789	147	5	11	10	41
SOLM0151	800,053	8,195,058	144	7	25	<5	29
SOLM0294	801,251	8,193,743	144	8	25	12	16
SOLM0297	801,219	8,193,991	144	7	24	17	13

SOLM0295	801,251	8,193,793	143	9	26	19	17
SOLM0296	801,240	8,193,839	143	7	22	12	19
SOLM0145	800,050	8,195,357	141	6	25	<5	28
SOLM0277	800,853	8,194,898	140	7	34	<5	47
SOLM0149	800,051	8,195,160	138	6	26	<5	23
SOLM0397	802,051	8,193,933	136	6	5	14	39
SOLM0146	800,052	8,195,309	135	5	18	<5	27
SOLM0278	800,852	8,194,948	135	6	33	<5	43
SOLM0195	800,450	8,195,254	134	13	47	14	27
SOLM0142	800,054	8,195,508	133	10	21	<5	40
SOLM0312	801,249	8,194,694	132	6	11	<5	45
SOLM0302	801,253	8,194,191	131	7	5	<5	24
SOLM0206	800,450	8,194,758	130	7	46	<5	35
SOLM0291	801,204	8,193,589	128	7	30	11	22
SOLM0155	800,053	8,194,859	127	6	25	<5	26
SOLM0139	800,052	8,195,608	122	3	23	13	31
SOLM0327	801,651	8,194,739	122	6	5	<5	41
SOLM0300	801,252	8,194,144	121	6	5	<5	21
SOLM0193	800,448	8,195,354	119	3	46	<5	31
SOLM0194	800,449	8,195,302	118	10	44	<5	33
SOLM0292	801,252	8,193,640	118	10	31	<5	37
SOLM0152	800,052	8,195,007	117	5	21	<5	24
SOLM0323	801,648	8,194,936	116	3	12	<5	54
SOLM0400	802,023	8,193,781	116	5	5	26	32
SOLM0280	800,851	8,195,044	115	7	34	<5	43
SOLM0288	801,281	8,193,446	115	10	37	23	16
SOLM0225	800,451	8,193,855	111	7	42	<5	24
SOLM0411	802,062	8,193,181	111	6	5	14	29
SOLM0423	802,450	8,193,576	111	6	5	19	33
SOLM0325	801,652	8,194,838	110	6	10	<5	31
SOLM0293	801,257	8,193,693	109	7	28	1<5	24

SOLM0311	801,250	8,194,642	108	8	5	13	34
SOLM0147	800,052	8,195,258	107	5	17	<5	22
SOLM0188	800,450	8,195,604	107	3	23	17	34
SOLM0310	801,251	8,194,593	107	5	5	<5	44
SOLM0169	800,052	8,194,207	105	3	25	<5	26
SOLM0140	800,052	8,195,559	103	3	18	<5	41
SOLM0177	800,052	8,193,809	103	11	19	14	20
SOLM0320	801,652	8,195,037	103	5	12	<5	45
SOLM0398	802,053	8,193,886	103	3	5	30	25
SOLM0427	802,456	8,193,779	103	8	5	12	38
SOLM0313	801,250	8,194,745	101	3	14	<5	49
SOLM0332	801,650	8,194,487	101	3	5	<5	23
SOLM0231	800,453	8,193,555	99	6	40	13	26
SOLM0334	801,618	8,194,387	99	5	5	<5	19
SOLM0144	800,052	8,195,409	98	6	23	<5	25
SOLM0399	802,047	8,193,833	97	3	5	14	24
SOLM0410	802,051	8,193,231	96	6	5	26	32
SOLM0426	802,452	8,193,727	96	6	5	<5	46
SOLM0270	800,852	8,194,547	95	5	35	<5	30
SOLM0319	801,255	8,195,041	95	3	5	<5	40
SOLM0205	800,450	8,194,802	94	8	45	<5	35
SOLM0314	801,252	8,194,795	94	3	13	<5	52
SOLM0330	801,652	8,194,590	94	3	5	<5	38
SOLM0204	800,448	8,194,852	93	6	36	<5	33
SOLM0271	800,850	8,194,600	92	5	32	24	41
SOLM0286	801,250	8,193,340	92	6	32	20	34
SOLM0336	801,651	8,194,237	92	3	5	1<5	35
SOLM0396	802,046	8,193,981	91	6	5	23	15
SOLM0424	802,451	8,193,628	90	7	5	17	36
SOLM0331	801,651	8,194,538	89	3	16	1<5	23
SOLM0224	800,454	8,193,905	88	3	44	12	41

SOLM0272	800,850	8,194,649	88	3	33	<5	40
SOLM0333	801,652	8,194,438	88	3	5	<5	34
SOLM0304	801,249	8,194,290	87	3	5	<5	31
SOLM0328	801,652	8,194,689	87	3	11	<5	30
SOLM0404	802,050	8,193,633	87	6	5	21	31
SOLM0263	800,852	8,194,197	86	6	31	10	25
SOLM0307	801,251	8,194,442	86	3	5	<5	37
SOLM0425	802,453	8,193,675	86	8	5	<5	42
SOLM0226	800,453	8,193,804	85	9	41	29	21
SOLM0249	800,851	8,193,546	85	5	31	<5	34
SOLM0402	802,051	8,193,735	84	3	5	23	39
SOLM0422	802,452	8,193,525	84	5	5	17	35
SOLM0257	800,853	8,193,950	83	5	30	11	33
SOLM0267	800,827	8,194,398	83	3	25	<5	32