

# Sigma Lithium Significantly Increased Audited Mineral Resource By 27% To 109mt

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**Grota Do Cirilo In Brazil Becomes World's 4th Largest Operating Industrial Pre-Chemical Lithium Beneficiation & Mining Complex; Grota Do Cirilo Expected To Further Increase**

## INVESTOR VIDEO CONFERENCE CALL

February 1, 2023, at 1:00 PM (EST)  
Registration Link for Zoom video call below:  
<https://us06web.zoom.us/j/88211037256>  
Zoom Meeting ID: 882 1103 7256

## AUDITED NI 43-101 MINERAL RESOURCE UPDATE VALIDATES SIGNIFICANT SCALE

- Sigma Lithium announces a significant increase in its Audited NI 43-101 Mineral Resource to 109 million tonnes of measured, indicated and inferred mineral resource at its Sigma Brazil, 100% owned Grota do Cirilo operation at Vale do Jequitinhonha: composed of 94.3Mt of measured & indicated ("M&I") resource at an average grade of 1.40% Li<sub>2</sub>O, together with additional 14.6Mt of inferred resource at 1.37% Li<sub>2</sub>O.
  - Newly revised NI 43-101 Mineral Resource estimate represents an increase of 27% from the previous technical report dated January 2023.
  - Contained lithium carbonate equivalent tonnage also increased by 27% as Sigma Lithium maintained the high quality of its mineral resource while substantially increasing its scale.
- Grota do Cirilo now becomes world's 4<sup>th</sup> largest operating industrial pre-chemical lithium beneficiation complex, fully integrated with 100% wholly-owned spodumene mining operations.
  - Larger mineral resource demonstrates that Brazil can be an anchor supplier of significant scale of industrialized lithium materials for the global electric vehicle industry.
- Main objective of 2023 drill campaign fully achieved: results validate the "J-shaped" corridor of interrelated deposits extending from Barreiro (Phase 2) through NDC-Murial (Phase 3/4).
  - Geological model supports a continuous principal pegmatite at NDC-Murial and potential for a combined NDC-Murial open pit, representing approximately 60Mt of aggregate measured, indicated and inferred mineral resource, extending over a strike length of 3.2km, anchored by these two large spodumene pegmatites flanked by subordinated lenses.
- Expanded mineral resource expected to add tangible value for stakeholders, shareholders and potential strategic parties alike, supporting the integrated production growth of industrialized and beneficiated pre-chemical lithium in Brazil, as Sigma Lithium aims to triple production capacity of its "Quintuple Zero Green Lithium".

## UPGRADE OF MINERAL RESOURCES TO RESERVES

- Sigma Lithium believes the increased mineral resources can be seamlessly incorporated into its current open pit mineral reserves, validated by the Pre-Feasibility Study: A significant portion of the incremental resource is located within the vicinity of existing mining pits.
  - The Company is currently preparing a revised Pre-Feasibility Study with new NDC-Murial strike mining shells and sequencing.
  - Sigma Lithium plans to develop the NDC-Murial strike with the benefit from shared mine infrastructure.

**GROTA DO CIRILO MINERAL RESOURCE EXPECTED TO FURTHER INCREASE TO 150Mt**

- The Company is focusing its 2024 drill campaign to build on the "J-shaped" lithium corridor connecting the existing resources of Grota do Cirilo, as follows:
  - Drilling at the newly discovered Barreiro Extension pegmatite is expected to extend the Barreiro pit westward (Figures 5/6), potentially adding 20Mt of mineral resource estimates.
    - Drilled neighboring pegmatite outcrops support resource connectivity.
  - Significant resource growth potential remains along the NDC-Murial strike (Figure 3) as mapping of pegmatites remain open at depth, to the west, and to the east.
  - Phase 5 drilling in the southern extent of the lithium corridor has identified a new pegmatite discovery expected to support another 20Mt of potential mineral resources.

#### DRILLING OF ADDITIONAL 57 TARGETS LOCATED ON SIGMA MINING CONCESSIONS

- Company plans to drill additional 57 spodumene pegmatite targets within mining rights outside of core Grota do Cirilo, some of which were former artisanal spodumene mines.

SAO PAULO, Jan. 31, 2024 - [Sigma Lithium Corp.](#) ("Sigma Lithium" or the "Company") (NASDAQ: SGML, BVMF: S2GM34, TSXV: SGML), a leading global lithium producer dedicated to powering the next generation of electric vehicles with carbon neutral, responsibly sourced lithium materials, is pleased to announce a significant increase of its mineral resource estimate to 109 million tonnes at its Sigma Brazil, 100% owned Grota do Cirilo operation at Vale do Jequitinhonha: composed of 94.3Mt of measured & indicated ("M&I") mineral resource at an average grade of 1.40% Li<sub>2</sub>O, together with additional 14.6Mt of inferred mineral resource at 1.37% Li<sub>2</sub>O.

#### AUDITED NI 43-101 MINERAL RESOURCE UPDATE VALIDATES SIGNIFICANT SCALE

The revised audited mineral resource estimate represents a 27% increase when compared to the last technical report, dated January 2023. The new estimate maintains the high average lithium oxide grade of the Company's measured and indicated mineral resources at 1.40% Li<sub>2</sub>O, above global peer average as per Figure 1.

Figure 1: Grota do Cirilo is the world's 4th largest lithium industrial beneficiation & mining complex currently in operation

Ana Cabral-Gardner, Co-Chairperson and CEO commented: "We are delighted to announce that Grota do Cirilo became the world's 4th largest operating industrial pre-chemical lithium beneficiation complex by mineral resource scale, transforming Sigma Lithium into one of the largest operating integrated producers in the global lithium industry. None of this would be possible without the relentless dedication of our multi-disciplinary team over the years to firmly place Brazil as a sustainability leader in the global lithium supply chain. Sigma Lithium is the only remaining fully integrated producer of significant scale wholly owned by financial sponsors, which represents tangible synergistic value for our potential strategic partners. Over the course of the last year, we managed to fully integrate and operate a state of the art Greentech lithium industrial beneficiation plant with our Grota do Cirilo mining operation while validating a sizable 109Mt of mineral resources. Our competitive advantage is now well established, as we have been delivering the most sustainable lithium concentrate in the world, the "Quintuple Zero Green Lithium", while maintaining low production costs. Together, this supports resilience in our business model, especially at the current point in the lithium cycle."

She added, "The sheer scale of the mineral resource revisions increases Sigma's strategic flexibility to consider a fourth Greentech industrial pre-chemical beneficiation line, while also contemplating additional industrial integration further downstream into the production of low-cost lithium sulphate chemicals. The potential expansion of our current operations will benefit from significant economies of scale, including existing infrastructure and cost sharing, as compared to our initial phase 1 development at Grota do Cirilo. All together, the conclusion of this year-long drill campaign represents tangible value creation for Brazil, for our communities at Vale do Jequitinhonha and our global shareholders."

Iran Zan, MAIG, co-Head of Geology and co-General Manager, stated: "Once again, our team of veteran Sigma geoscientists delivered to stakeholders. We believe we have proved our long-held belief in the existence of a sizable lithium corridor at the Sigma mineral concessions. In a little over seven years, Grota

do Cirilo went from drill core samples to one of the largest lithium mineral resources in the world, with some of the highest grades and a growth potential to 150Mt. This is thanks to the relentless work of our outstanding geology, mineralogists, and geoscientists teams. With today's Mineral Resource update, we are just beginning to demonstrate the sizeable potential of our lithium corridor, and will be targeting some of the 57 high priority (of 200 mapped) pegmatites in the 2024 campaign."

Dyonne Hage, co-Head of Geology commented: "We demonstrated the interconnectivity of Grota do Cirilo's "J-shaped" strike anchored by the 3 large ore bodies at Barreiro and NDC-Murial. As drilling advances, we look forward to delivering on our exploration target of reaching 150Mt in Grota do Cirilo by extending Barreiro westwards and developing Phase 5." He added, "We are also very optimistic about the NDC-Murial strike, which remains open to the east and is accessible through open pit mining. The deposits show consistent grades and coarse spodumene crystal quality throughout intercepts."

Figure 2: Sigma Lithium mineral concessions and the Grota do Cirilo "J-shaped" lithium corridor.

The results of the 2023 drill campaign helped prove the interconnectivity of the Phase 3 and 4 NDC-Murial mineral resources and its subordinated mineralized pegmatites, which had been only partially delineated in previous drilling campaigns (mainly focused on the anchor ore body of NDC).

In the 2023 campaign, the Company intercepted additional spodumene bearing pegmatite zones at NDC, including a new deposit of substantial width and lithium oxide grading. Neighboring subordinated resources have also grown in scale, such that Sigma Lithium is changing its mine plan as the optimized structure for Phase 3 will now encompass these neighboring pegmatites through a singular open pit. As a result, the Company believes the increased mineral resources can be seamlessly incorporated into its mineral reserves by extending the current NDC mining open pit shell, validated by the current Pre-Feasibility Study.

#### UPGRADE OF MINERAL RESOURCES TO RESERVES.

This "New NDC" pit contains a total of approximately 40Mt of mineral resource, comprised of 37.8Mt of M&I resource at 1.42% Li<sub>2</sub>O and an additional 2.3Mt Inferred at 1.26%. Given geological consistencies and proximity of the resources, a singular pit is the most efficient design. Additionally, this plan is expected to save on stripping costs and enable the NDC pit to access the new pegmatite mineralization while sharing mining infrastructure.

The 2023 drill campaign also increased the scale of the Murial deposit, which sits just 330 meters north of the newly enlarged NDC resource. The Murial deposit is increasing in size to approximately 16Mt, comprised of 13.5Mt of estimated M&I resource at 1.25% Li<sub>2</sub>O with an additional 2.6Mt inferred at 1.29%.

Confidence in the additional scale of Murial, as well as the location of the pegmatite and proximity to NDC, validates the following geological elements:

- (i) Presence of a structural, "J-shaped" lithium corridor that runs through Grota do Cirilo.
- (ii) NDC and Murial are likely one continuous principal pegmatite.

Figure 3: Optimized open pit structures for NDC - Murial

Figure 4: The NDC-Murial strike extends 3.2 kilometer North-South.

Drilling confirms that the Murial pegmatite (as well as the new NDC) remain open at depth, to the west and to the east, leaving room for resource expansion over time. The Company's 2024 drill campaign will include step-out drilling to help prove a link between NDC and Murial and build resource density along the 3.2km NDC-Murial strike.

Figure 5: Density of executed drilling at NDC - Murial, demonstrating potential interconnectivity of 3.2 km strike and flanking pegmatites.

## BARREIRO EXTENSION TARGET ZONE IS A CONTINUATION OF THE "J-SHAPED" LITHIUM CORRIDOR

The Company is also focusing the current 2024 drill campaign on demonstrating that the Barreiro mine extends westwards ("Barreiro Extension"), in a continuation of the existing "J-shaped" lithium corridor. Additional neighboring outcrops and the ongoing drilling west of Barreiro support potential connectivity between the Extension outcrop and Barreiro, akin to NDC-Murial. The Company estimates these Barreiro Extension initiatives may have up to 20Mt of potential additional resource.

Figure 6: Barreiro Extension initiatives extend the "J-Shaped" Grota do Cirilo lithium corridor further west

Figure 7: Barreiro Extension discovery runs parallel to Barreiro, extending the Phase 2 Mine Westwards

The Barreiro Extension site is located just west of Barreiro (Phase 2) and represents a continuation of the spodumene mineralization corridor that moves up through Murial. Two additional spodumene outcrops discovered between Barreiro and its Extension inform geology of a target area for further exploration drilling. Prior drilling intercepts from Barreiro also support the thesis of possible connectivity of these resources. Barreiro Extension results to date include the following drilling intercepts:

DH - PRO - 01 - 1.70% Li<sub>2</sub>O over 15.70m, including 1.66% Li<sub>2</sub>O over 14.53m  
DH - PRO - 02 - 1.49% Li<sub>2</sub>O over 14.84m, including 1.86% Li<sub>2</sub>O over 10.93

## SIGMA'S ESTIMATED MINERAL RESOURCE MAINTAIN HIGH GRADE, EVEN AS CUTOFF GRADE INCREASES

The sensitivity analysis for Sigma Lithium's cumulative Grota do Cirilo resource estimate is presented below. At a 0% cutoff grade, the cumulative resource totals 110mn tonnes at 1.386% Li<sub>2</sub>O. Alternatively, at a high cutoff grade of 1% the cumulative resource totals 92mn tonnes at 1.511%, a reduction of only 16% to total resource over the cutoff window. The exercise displays the consistent, high quality, nature of the Company's pegmatite resources, and compares favorably to current resource estimates of many peers.

Figure 8: Sensitivity Analysis of Sigma's estimated mineral resource potential increase at various Lithium Cut Off Grades.

## DETAILS ON THE INTERRELATED NDC-MURIAL PEGMATITES (PHASE 3 AND PHASE 4)

Sigma Lithium's Phase 3 and 4 pegmatite strike runs parallel to the mine validated at Phase 2 (Barreiro) and are in close proximity to each other.

The 2023 drill campaign was completed as part of a strategy to initially increase the scale of NDC, and demonstrate connectivity to certain other ancillary pegmatites (Maxixe, Tamboril and LDM). The Company believes it has validated the potential connectivity of NDC and said Phase 4 pegmatites given intersecting high quality spodumene crystals and persistent spodumene-rich zones. The new Phase 3 and 4 strike extends 3.2 km along a north-south path (Figure 3) from the bottom of the NDC deposit through Murial. Drilling confirms that the deposits remain open to the west and east.

As prior stated, the campaign has also identified a new pegmatite running underneath the existing mapped NDC deposit. These discoveries support the Company's belief that the newly published resource estimate is likely to increase with additional drilling.

Below are some of the recent drill results at NDC, with "new pegmatite discovery" denoting the new pegmatite structure below NDC:

DH - NDC - 126 - 1.48% Li<sub>2</sub>O over 67.33m, including 1.57% Li<sub>2</sub>O over 63.09m

DH - NDC - 127 - 1.16% Li<sub>2</sub>O over 15.15 m, including 1.89% Li<sub>2</sub>O over 7.21m  
DH - NDC - 127 - 1.47% Li<sub>2</sub>O over 50.06 m, including 1.55% Li<sub>2</sub>O over 47.54m - New pegmatite discovery  
DH - NDC - 129 - 1.15% Li<sub>2</sub>O over 21.20 m, including 1.54% Li<sub>2</sub>O over 14.46m - New pegmatite discovery

Figure 9: New enlarged Phase 3 NDC optimized pit shell (L) and resource block model (R)

The newly optimized Phase 3 strategy would leave the Murial deposit (330 meters north of the enlarged Phase 3), to be mined through its own pit. At 16.1Mt of total estimated mineral resource at 1.26% Li<sub>2</sub>O, and opportunities to expand this number over time, Murial can support this individual pit strategy. In its current form, the Murial resource extends 1,160m long by 830m wide, has a true mineralized width ranging from 5 to 50m and an average depth of 275m. This is the first update to the resource estimate for Murial since the January 2019 maiden report. The prior mineral resource estimate was 5.6Mt at 1.14% Li<sub>2</sub>O M&I with an additional 0.7Mt Inferred. Highlights from the 2023 Murial drill campaign include:

DH - MUR - 126 - 1.19% Li<sub>2</sub>O over 76.41m  
DH - MUR - 034 - 1.47% Li<sub>2</sub>O over 42.46m  
DH - MUR - 021 - 1.39% Li<sub>2</sub>O over 35.12m  
DH - MUR - 112 - 1.62% Li<sub>2</sub>O over 33.88m  
DH - MUR - 027 - 1.78% Li<sub>2</sub>O over 26.09m  
DH - MUR - 031 - 1.57% Li<sub>2</sub>O over 28.75m

Figure 10: Standalone Murial optimized pit shell (L) and resource block model (R)

#### GROTA DO CIRILO MINERAL RESOURCE EXPECTED TO FURTHER INCREASE TO 150Mt

The Company is currently operating a total of 8 core diamond drills in its leaseholds. Exploration initiatives will continue into 2024 with drill work targeting additional structures between NDC and Murial as well as resource expansion across the Barreiro Extension pegmatite as top priorities.

The 2024 drill campaign will commit resources to establish a link between Murial and NDC. The geological modeling and density of known pegmatites supports a structural trend and potentially continuous principal pegmatite body, consolidating NDC and Murial. As is, the current NDC-Murial strike contains nearly 60Mt of resource, ranging in true thickness from ~5m to upwards of ~50m, extending over a length of 3.2km and a width of 1.3km. Improving the resource density along this corridor allows for fewer, larger, pits, enabling joint infrastructure development akin to leading spodumene projects globally.

#### NEWLY CONFIRMED PHASE 5 INFERRED RESOURCE WITH POTENTIAL UP TO 20MT

Finally, the updated technical report also confirms the presence of a Phase 5 resource located within Grota do Cirilo, with a maiden Inferred estimate of 2.1Mt at an average grading of 1.16% Li<sub>2</sub>O. The geology team has conducted infield drilling of this deposit and has mapped neighboring pegmatites, with exploration to date supporting an estimated resource potential of approximately 20Mt.

As the Company reported on November 1, 2023, further updates of this mineral resource shall continue as drilling evolves over time. The new Phase 5 discovery is a high value prospect for the Company. Significant results to date include the following highlight drilling intercepts:

DH - ELV - 08 - 0.98% Li<sub>2</sub>O over 68.06m, including 1.81% Li<sub>2</sub>O over 20.46m  
DH - ELV - 11 - 1.08% Li<sub>2</sub>O over 28.46m, including 1.49% Li<sub>2</sub>O over 15.25m  
DH - ELV - 03 - 1.29% Li<sub>2</sub>O over 22.29m, including 1.42% Li<sub>2</sub>O over 20.03m  
DH - ELV - 05 - 1.24% Li<sub>2</sub>O over 17.82m, including 1.37% Li<sub>2</sub>O over 15.86m  
DH - ELV - 07 - 0.77% Li<sub>2</sub>O over 22.2m, including 1.54% Li<sub>2</sub>O over 7.54m  
DH - ELV - 12 - 0.72% Li<sub>2</sub>O over 14.54m, including 1.52% Li<sub>2</sub>O over 4.38m  
DH - ELV - 04 - 0.79% Li<sub>2</sub>O over 13.08m, including 1.47% Li<sub>2</sub>O over 5.85

Figure 11: Phase 5 early block model with resource extension opportunities

**DRILLING OF ADDITIONAL 57 TARGETS LOCATED AT MINING RIGHTS OUTSIDE GROTA DO CIRILO**

Sigma Lithium is conducting exploration RC drilling, trench work and sampling, in 57 mineralized pegmatites (out of the 200 pegmatites mapped within the Company's mineral concessions). The Exploration team has prior defined the surface area and the weathered mineralogy of these 57 targets.

**CURRENT MINERAL RESOURCE AND PHASE 1-5 RESULTS**

The Amended and Restated Technical Report from January 18, 2024 shows a Consolidated Mineral Resource on the Grota do Cirilo property of 94.3Mt of Measured and Indicated Resources at a grade of 1.40% Li<sub>2</sub>O and Inferred Resources of 14.6Mt also at a grade of 1.37% Li<sub>2</sub>O (Table 1). Table 2 shows the Consolidated Resource from Phases 1, 2, 3, 4 and 5, which are displayed in Tables 3-7.

Please refer to the Company's National Instrument 43-101 technical report titled "Grota do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" issued June 9, 2023, for further information on the Mineral Resource statements.

Table 1: Grota do Cirilo Consolidated Mineral Resource January 2024 (a-g)

**CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)**  
**(%Li<sub>2</sub>O)**

0.3 %	Measured	45.2	1.41
0.3 %	Indicated	49.1	1.39
0.3 %	M & I	94.3	1.40
0.3 %	Inferred	14.6	1.37

Table 2: Phase 1 (Xuxa) Mineral Resource Estimate

**CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)**  
**(%Li<sub>2</sub>O)**

0.3 %	Measured	10.2	1.59
0.3 %	Indicated	7.2	1.49
0.3 %	M & I	17.4	1.55
0.3 %	Inferred	3.8	1.58

Table 3: Phase 2 (Barreiro) Mineral Resource Estimate

CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)  
(%Li<sub>2</sub>O)

0.3 %	Measured	19.5	1.38
0.3 %	Indicated	6.1	1.29
0.3 %	M & I	25.6	1.36
0.3 %	Inferred	3.8	1.38

Table 4: Phase 3 (Nezinho do Chicão) Mineral Resource Estimate

CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)  
(%Li<sub>2</sub>O)

0.3 %	Measured	5.4	1.35
0.3 %	Indicated	32.4	1.42
0.3 %	M & I	37.8	1.42
0.3 %	Inferred	2.3	1.26

Table 5: Phase 4 (Murial) Mineral Resource Estimate

CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)  
(%Li<sub>2</sub>O)

0.3 %	Measured	10.1	1.31
0.3 %	Indicated	3.4	1.07
0.3 %	M & I	13.5	1.25
0.3 %	Inferred	2.6	1.29

Table 6: Phase 5 (Elvira) Mineral Resource Estimate

CUT-OFF GRADE CATEGORY TONNES (MT) (%Li<sub>2</sub>O)  
(%Li<sub>2</sub>O)

0.3 %	Measured	0.0	0.00
0.3 %	Indicated	0.0	0.00
0.3 %	M & I	0.0	0.00
0.3 %	Inferred	2.1	1.16

#### Disclosures to Resource Estimate:

- a) The effective date of the Grota Do Cirilo Mineral Resource Estimate is January 18, 2024
  - b) The Mineral Resource Estimate was estimated by Marc-Antoine Laporte, M.Sc., P. Geo. of SGS Geological Services and is an independent Qualified Persons as defined by NI 43-101. Mr. Laporte conducted a site visit to the Grota Do Cirilo Property on November 23-24, 2023.
  - c) Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
  - d) Sigma Lithium is moving to a 0.3% cutoff grade from a 0.5% to align resources with process capability, as the Company's Greentech beneficiation plant can process ore concentrations down to 0.3%. Across Xuxa, Barreiro and Nezinho do Chicao the move to 0.3% from 0.5% adds 575,852 tonnes to resource.
  - e) Mineral Resources are reported assuming open pit mining methods, and the following assumptions: lithium concentrate (5.3% Li<sub>2</sub>O) price of US\$1,300/t, mining costs of US\$2.20/t for mineralization and waste, crushing and processing costs of US\$10.70/t, general and administrative (G&A) costs of US\$4.00/t, metallurgical DMS recovery of 60%, 2% royalty payment, pit slope angles of 55°, and an overall cut-off grade of 0.3% Li<sub>2</sub>O.
  - f) All Resources are presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction.
  - g) All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- Conference Call

The Company will a conference call to discuss the resource update at 1:00 p.m. EST on Thursday, February 1, 2023. Participating on the call will be Co-Chairperson and Chief Executive Officer, Ana Cabral and Directors of Geology, Iran Zan and Dyonn Hage. To participate in the call, please proceed through the following link <https://us06web.zoom.us/j/88211037256> . Or dial:

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Webinar ID: 882 1103 7256

#### QUALITY ASSURANCE AND CONTROL AND DATA VERIFICATION

Sigma Lithium maintains a comprehensive chain of custody and QA/QC program on assays from its Grota do Cirilo Project. Mr Laporte has reviewed the sample chain-of-custody, quality-assurance, and quality control (QA/QC) procedures, and the accreditations of analytical laboratories used by Sigma Lithium.

The QP is of the opinion that the procedures and QA/QC are acceptable to support Mineral Resource estimation. Mr. Laporte also audited the assay database, core logging and geological interpretations and found no material issues with the data as a result of these audits.

In the opinion of the QP, the data verification programs undertaken on the geological and assay data collected from the Grota do Cirilo Project support the geological interpretations and the analytical and database quality, and the data collected can support Mineral Resource estimation.

Half-sawn core is processed at the on-site preparation laboratory and prepared samples then are shipped by secure courier to SGS Geosol Laboratories in Brazil, an [ISO17025-accredited] facility. All check samples were dispatched to a second laboratory analysis and sent to ALS in Vancouver. The ALS results were compared with the SGS-Geosol results to verify the reliability of the primary laboratory results. The results of the check assays suggested a strong correlation and a high similarity between the two sets of samples.



All diamond drilling core samples submitted for assay were saw cut with one-half supplied for assay and one-half archived for reference. The physical preparation follows the steps: drying, crushing of 75% to 3mm, homogenization, splitting of Jones, and pulverization of 100g in a Tungsten carbide pan until 150 meshes with 95% of passing pulp. In 5% of the samples, the control of particle size and loss of mass is carried out in the crushing and pulverization stages (QCgranul and QCloss of mass). The analytical method adopted was ICP90A, carrying out the sodium peroxide (Na<sub>2</sub>O<sub>2</sub>) fusion and ICP AES. Samples with the content of Li<sub>2</sub>O% > 3.225 (over-limit for ICP90A) were reanalyzed by ICP90Q, consisting of sodium peroxide (Na<sub>2</sub>O<sub>2</sub>) fusion in concentrates (ICP AES).

Sampling was carried out following strict QA/QC procedures. Certified reference materials (standards) were inserted into the sample stream. Blanks AMIS0577, AMIS0484, and AMIS0865 were submitted at a rate of 1 per 29 samples and introduced preferentially at upper or lower contacts of the main pegmatitic intercepts. Standards AMIS0341, AMIS0342, AMIS0565, and AMIS0408 were inserted at the same rate as blanks, mostly within the pegmatite intervals.

In addition, QC controls were added preferably in pegmatite samples with a satisfactory content of Li<sub>2</sub>O%, enough to make a fair comparison between the original samples and controls. Coarse and pulp duplicates were injected at a rate of 1 per 40 samples, while the check samples were at a rate of 1 per 20 samples.

## QUALIFIED PERSONS

The independent qualified person (QP) for the Grota do Cirilo mineral resource estimates is Marc-Antoine Laporte P.Geo., M.Sc., of SGS Group in Quebec, Canada. Mr. Laporte is a Qualified Person as defined by Canadian National Instrument 43-101.

The technical and scientific information related to Mineral Resource Estimates in this news release has been reviewed and approved by Marc-Antoine Laporte.

Other disclosures in this news release of a scientific or technical nature at the Grota do Cirilo Project have been reviewed and approved by Iran Zan MAIG (Membership number 7566), who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Zan is not considered independent under NI 43-101 as he is Sigma Lithium co-Head of Geology and co-General Manager of Sigma Lithium.

Mr. Zan has verified the technical data disclosed in this news release not related to the current Mineral Resource estimate disclosed herein.

## ABOUT SIGMA LITHIUM

Sigma Lithium (NASDAQ: SGML, TSXV: SGML, BVMF: S2GM34) is a leading global lithium producer dedicated to powering the next generation of electric vehicle batteries with carbon neutral, socially and environmentally sustainable chemical-grade lithium concentrate.

Sigma Lithium has been at the forefront of environmental and social sustainability in the EV battery materials supply chain for six years and it is currently producing Quintuple Zero Green Lithium from its Grota do Cirilo Project in Brazil. Phase 1 of the project is expected to produce 270,000 tonnes of Quintuple Zero Green Lithium annually (36,700 LCE annually). If it is determined to proceed after completion of an ongoing feasibility study, Phase 2 & 3 of the project are expected to increase production to 766,000 tonnes annually (or 104,200 LCE annually). The project produces Quintuple Zero Green Lithium in its state-of-the-art Greentech lithium plant that uses 100% renewable energy, 100% recycled water and 100% dry-stacked tailings.

Please refer to the Company's National Instrument 43-101 technical report titled "Grota do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" issued June 12, 2023, which was prepared for Sigma Lithium by Homero Delboni Jr., MAusIMM, Promon Engenharia; Marc-Antoine Laporte, P.Geo, SGS Canada Inc; Jarrett Quinn, P.Eng., Primero Group Americas; Porfirio Cabaleiro Rodriguez, (MEng), FAIG, GE21 Consultoria Mineral; and Noel O'Brien, B.E.,

MBA, F AusIMM (the "Updated Technical Report"). The Updated Technical Report is filed on SEDAR and is also available on the Company's website.

For more information about Sigma Lithium, visit <https://www.sigmalithiumresources.com/>

Sigma Lithium

LinkedIn: Sigma Lithium  
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## FORWARD-LOOKING STATEMENTS

This news release includes certain "forward-looking information" under applicable Canadian and U.S. securities legislation, including but not limited to statements relating to timing and costs related to the general business and operational outlook of the Company, the environmental footprint of tailings and positive ecosystem impact relating thereto, donation and upcycling of tailings, timing and quantities relating to tailings and Green Lithium, achievements and projections relating to the Zero Tailings strategy, achievement of ramp-up volumes, production estimates and the operational status of the Grota do Cirilo Project, and other forward-looking information. All statements that address future plans, activities, events, estimates, expectations or developments that the Company believes, expects or anticipates will or may occur is forward-looking information, including statements regarding the potential development of mineral resources and mineral reserves which may or may not occur. Forward-looking information contained herein is based on certain assumptions regarding, among other things: general economic and political conditions; the stable and supportive legislative, regulatory and community environment in Brazil; demand for lithium, including that such demand is supported by growth in the electric vehicle market; the Company's market position and future financial and operating performance; the Company's estimates of mineral resources and mineral reserves, including whether mineral resources will ever be developed into mineral reserves; and the Company's ability to operate its mineral projects including that the Company will not experience any materials or equipment shortages, any labour or service provider outages or delays or any technical issues. Although management believes that the assumptions and expectations reflected in the forward-looking information are reasonable, there can be no assurance that these assumptions and expectations will prove to be correct. Forward-looking information inherently involves and is subject to risks and uncertainties, including but not limited to that the market prices for lithium may not remain at current levels; and the market for electric vehicles and other large format batteries currently has limited market share and no assurances can be given for the rate at which this market will develop, if at all, which could affect the success of the Company and its ability to develop lithium operations. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether because of new information, future events or otherwise, except as required by law. For more information on the risks, uncertainties and assumptions that could cause our actual results to differ from current expectations, please refer to the current annual information form of the Company and other public filings available under the Company's profile at [www.sedar.com](http://www.sedar.com).

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

## APPENDIX 1: MINERAL RESOURCE DETAILS FOR DEPOSITS/PROJECTS NOTED IN FIGURE 1

Note 1: Resource as displayed in Figure 1 is qualified on a measured and indicated basis only

Company	Mine	M&I (k MT)	M&I Grade (Li <sub>2</sub> O%)	M&I (Mt LCE)	Source:
Critical Elements	Rose	30.5	1.03 %	0.8	Investor Presentation - Aug-23
Frontier	PAK	26.0	1.60 %	1.0	Investor Presentation - Jun-23
Latin Resources	Salinas	41.0	1.36 %	1.4	Company Presentation - Jun-23
Lithium Ionic	Itinga	16.7	1.38 %	0.6	Company Presentation - Sep-23
Leo Lithium	Goulamina	102.3	1.45 %	3.7	Press Release Update - Jun-23
AMG Lithium	Mibra	20.3	1.35 %	0.7	Company's Website
Mineral Resources/Ganfeng	Mt Marion	42.4	1.43 %	1.5	Press Release Update - Sep-23
Mineral Resources	Wodgina	182.1	1.15 %	5.2	Press Release Update - Sep-23
Allkem	James Bay	54.3	1.30 %	1.7	Press Release Update - Sep-23
Allkem	Mt Cattlin	9.0	1.40 %	0.3	Press Release Update - Sep-23
Core Lithium	Finniss	19.4	1.37 %	0.7	Press Release Update - Apr-23
Piedmont	Carolina	28.2	1.12 %	0.8	Company Presentation - Feb-23
Piedmont/Sayona	NAL	73.7	1.06 %	1.9	Company Presentation - Feb-23
Piedmont	Ewoyaa	28.0	1.27 %	0.9	Company Presentation - Feb-23
Sayona	Moblan	49.9	1.20 %	1.5	Investor Presentation - May-23
Liontown	Buldanía	14.9	1.00 %	0.4	Corporate Presentation - Aug-23
Liontown	Kathleen Valley	129.0	1.38 %	4.4	Corporate Presentation - Aug-23
CBL	Mina da Cachoeira	4.0	1.40 %	0.1	Company's Website
Pilbara Minerals	Pilgangoora	337.0	1.15 %	9.6	Corporate Presentation
SQM	Mt Holland	178.0	1.54 %	6.8	Project's DFS - Apr-22
Patriot Battery Metals	Corvette	0.0	-		Company Presentation - Aug-23
Savannah	Barroso	18.4	1.04 %	0.5	Company Presentation - Sep-23
Kodal Minerals	Bougouni	11.6	1.13 %	0.3	Company's Website
Rock Tech Lithium	Georgia Lake	10.6	0.88 %	0.2	Company Presentation - Sep-23
Sigma Lithium	Grota do Cirilo	94.3	1.40 %	3.3	Corporate Presentation - Sep-23
IGO, Tianqi, Albemarle	Greenbushes	239.4	1.80 %	10.7	FY 23 Resources Statement
AVZ Minerals	Manono	269.0	1.65 %	11.0	Company's Website

Disclaimer: the list of projects is not comprehensive, and Sigma Lithium does not assume any responsibility as to the accuracy of the reported data and/or any updates related to them.

SOURCE Sigma Lithium

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