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# **ASX Announcement**

10 August 2023

### Positive DMS Test Work Demonstrates Success at Pilot Plant Scale

# Dense Media Separation ("DMS") test work yields impressive 93.1% stage recovery to a high-quality spodumene concentrate grading 5.5% Li<sub>2</sub>O

*Results to provide valuable inputs for PEA and DFS studies* 

#### HIGHLIGHTS

- Dense Media Separation ("DMS") test work undertaken on Colina Deposit ore confirms ability to produce a high-grade, low impurity spodumene concentrate.
- A remarkable lithium stage recovery of 93.1% was achieved from the coarse sample to a spodumene concentrate grading 5.5% Li<sub>2</sub>O, utilising pilot scale DMS equipment.
- The successful operation of the DMS pilot plant demonstrates the potential to build a simple first stage "quick to market" DMS circuit.
- Results will form valuable inputs for the upcoming preliminary economic assessment ("PEA") and definitive feasibility study ("DFS").

#### Latin Resources' Vice President of Operations - Americas, Tony Greenaway, commented:

"These latest metallurgical test results very clearly demonstrate the amenability of the Colina spodumene pegmatite to simple DMS processing, validating assumptions drawn from the initial benchtop scale HLS test work. DMS processing is commonly used in the spodumene lithium sector and has been shown to have significant cost saving implication for both capital and operating costs. The company is currently in the final stages of completing a PEA based on the Colina Lithium Deposit, which will include estimates of both Capital and operating costs for the project.

A much larger DMS and other test work program will be undertaken in Q4 of this year utilising more than 2,000kg of spodumene pegmatite samples from Colina. The aim of this work is to build on these initial very encouraging results and fine tune the processing flowsheet for the Colina DFS. This work may include additional downstream processing as well as initial investigative work on lithium recovery from fines generated during normal run of mine operating conditions."

Latin Resources Limited (ASX: LRS) ("Latin" or "the Company") is pleased to provide an update on the metallurgical test work results performed on the Colina Deposit at the Company's 100% owned Salinas Lithium Project ("Salinas") in Brazil.



#### **Test Work Overview**

The Company engaged SGS Lakefield laboratories ("SGS"), Canada to conduct a bulk metallurgical test work program on ore from the Company's 45.2Mt Colina Deposit ("Colina Deposit")<sup>1</sup>. Results have been independently reviewed and interpreted by MinSol Engineering Pty Ltd ("MinSol"), whose key personnel have significant experience in lithium processing, metallurgy, and process plant design.

The purpose of this program was to assess the efficiency of DMS, a conventional and industry standard process that beneficiates spodumene from gangue minerals under a gravity-based separation technique. To compliment this, Heavy Liquid Separation ("HLS") test work was also carried out in parallel on the composite samples to assess the larger scale DMS process performance.

The Company is pleased to report that its first bulk DMS tests produced a high-quality concentrate grading **5.5%** Li<sub>2</sub>O at 93.1% stage<sup>2</sup> recovery from a representative sample with a head grade of 1.38% Li<sub>2</sub>O.

Due to the scale of the test, the results are considered a reliable indication of commercial DMS performance, and stage recoveries of greater than 90% to a 5.5%  $Li_2O$  sinks concentrate are anticipated. This will in turn have a positive impact on the project economics in the upcoming PEA.

Additionally, while simpler and more cost effective to produce, a coarse DMS product is more favourable for conversion into Lithium Chemicals (Lithium Hydroxide) due to its reduced fines content and as such will be attractive to end users.



Figure 1. Colina composite 1 indicating 6.3mm (+1mm) sink (left) and float (right) results produced from DMS test work on the Colina ore samples.

#### **Test work Program Details**

DMS is a commercial scale separation process utilising the conventional principals of density separation, whereby a slurry of ore and dense medium (typically FeSi or magnetite slurry) is pumped through a hydrocyclone to produce a higher density, sinks underflow product and a lower density, floats overflow product.

<sup>1</sup> Refer to LRS's ASX Announcement dated 20 June 2023, entitled "241% Increase for the Colina Mineral Resource".

<sup>2</sup> "Stage" recovery is referring to the performance of the coarse DMS feed fraction, excluding the -1mm fraction that was not processed. It differentiates the DMS recovery from the global plant recovery.

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For the bulk DMS test work, approximately 137kg of HQ size core (half-core) samples from 35 drill holes (refer to Appendix 1 for more details), comprising selected mineralised and unmineralized zones from the Colina Deposit was prepared by SGS as a single representative sample grading 1.31% Li<sub>2</sub>O. The sample was crushed and screened to produce a -6.3mm +1.0mm DMS feed grading 1.38% Li<sub>2</sub>O, with the -1.0mm fraction being set aside for future testing. A subsample of the DMS feed fraction was submitted for HLS and the remaining 99kg was processed via DMS.

The equipment utilised for the bulk test program comprised a conventional DMS circuit including a 200mm diameter Multotec separation cyclone, as shown in Figure 2 below. In comparison, it is proposed that the fullscale production facility includes 420mm separation cyclones. The relative performance of the 200mm and 420mm cyclones are well understood and as such, the separation efficiency from this test can be directly compared to the full-scale production facility.



Figure 2. Dense Media Separation (DMS) Pilot Plant located at SGS' Lakefield, used for the Colina DMS testwork.

The 99kg sample was subjected to two test campaigns at differing Specific Gravity ("SG") cut points, with the resulting sink and float products from Test 1 being reconstituted as feedstock for Test 2. The key results from the DMS test work are provided in *Table 1* below.

#### Table 1: Key Results from DMS test work. Units Feed Sinks (Concentrate) Description Mass 99 kg

Grade % Li<sub>2</sub>O 1.38 5.5 0.1 Recovery (Stage) % Li<sub>2</sub>O 100.0 93.1 6.9

The Company had also completed previous sighter HLS test work on 11-off +0.5mm screen oversize samples from the Colina deposit, which simulates perfect separation at a nominated SG cut point.

Floats

76

23



The DMS test work demonstrated a strong correlation with the HLS grade / recovery curve as shown in the *Figure 2* below, indicating an ideal mineral assemblage for the processing technique. Of note, a DMS sinks concentrate grading 5.5% Li<sub>2</sub>O was produced at 93.1% stage recovery, in comparison to 95.4% HLS recovery (a difference of only 2.3% absolute).

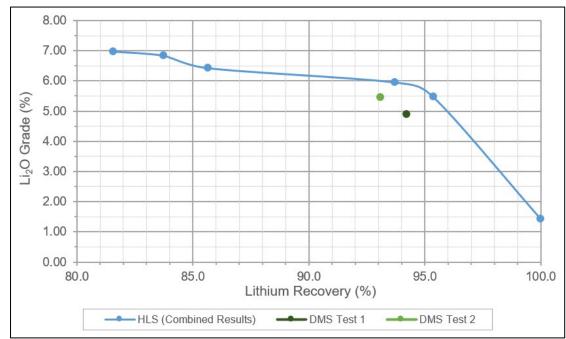


Figure 3: Comparison of DMS Test 1 and 2 with HLS Grade / Recovery Curve.

As such, the reported HLS results are considered a reliable indication of commercial DMS performance and stage recoveries of greater than 90% to a 5.5% Li<sub>2</sub>O DMS sinks concentrate are anticipated.

These very positive results indicate a high-grade concentrate can be produced with high overall recoveries from a DMS only flowsheet from the Colina Deposit ore.

#### **Future Work**

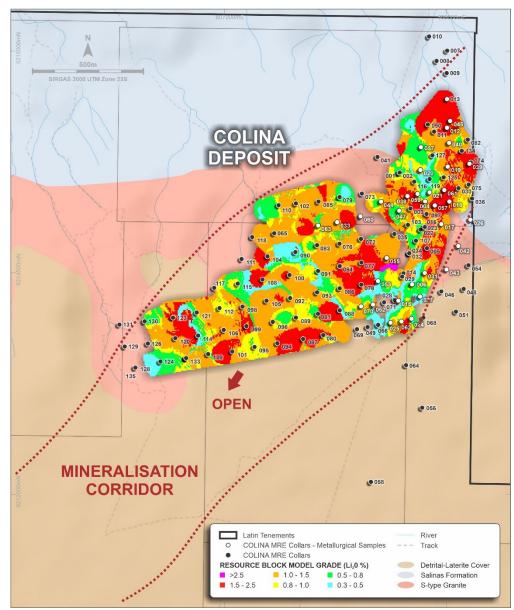
The Company is highly encouraged by the test work data received to date, reinforcing that a flowsheet utilising DMS will be the most efficient and cost-effective method for treating the Colina Deposit ore. It will also undertake further work to determine to most appropriate process route for the fine fraction that will not be treated by DMS.

The results received from this series of metallurgical test work will feed directly into the upcoming PEA due for release in Q3 2023.

The Company intends to undertake further bulk sampling in the coming months to facilitate more extensive test work on the Colina Deposit ore, which are required inputs for the DFS anticipated for release in first half of 2024.

The Company will update the market as and when future test work results are received.





*Figure 4: Colina Deposit drill collar plan identifying collars used in the metallurgical test work.* 

ahle 2	Colina	Mineral	Resource	Estimate <sup>3</sup> .
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Deposit	Resource Category	Grade Cut-off	Tonnes (Mt)	Grade (Li₂O %)	Li <sub>2</sub> O (Kt)	Contained LCE (Kt)
	Measured	0.50	0.43	1.34	5.8	14.3
Colina	Indicated	0.50	29.74	1.37	408.1	1,009.3
	Measured + Indicated	0.50	30.17	1.37	413.9	1,023.6
	Inferred	0.50	15.02	1.22	183.5	453.7
Total			45.19	1.32	597.4	1,477.3

<sup>3</sup> Refer to LRS's ASX Announcement dated 20 June 2023, entitled "241% Increase for the Colina Mineral Resource".

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#### Ends

This Announcement has been authorised for release to ASX by the Board of Latin Resources.

For further information please contact:

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#### About Latin Resources

Latin Resources Limited (ASX: LRS) is an Australian-based mineral exploration company, with projects in South America and Australia, that is developing mineral projects in commodities that progress global efforts towards Net Zero emissions.

The Company is focused on its flagship Salinas Lithium Project in the pro-mining district of Minas Gerais Brazil, where the Company has defined a Maiden Mineral Resource Estimate of 13.3Mt @ 1.2% Li<sub>2</sub>O with an exploration target of 22Mt at its Colina Deposit\*. Latin has appointed leading mining consultant SGS Geological Services to undertake feasibility and metallurgical studies at the Salinas Lithium Project. Latin also holds the Catamarca Lithium Project in Argentina and through developing these assets, aims to become one of the key lithium players to feed the world's insatiable appetite for battery metals.

The Australian projects include the Cloud Nine Halloysite-Kaolin Deposit. Cloud Nine Halloysite is being tested by CRC CARE aimed at identifying and refining halloysite usage in emissions reduction, specifically for the reduction in methane emissions from cattle.

\*For full details of the Colina Deposit MRE and Exploration Target, please refer to ASX Announcement dated 8 December 2022.

#### **Forward-Looking Statement**

This ASX announcement may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Latin Resources Ltd.'s current expectations, estimates and assumptions about the industry in which Latin Resources Ltd operates, and beliefs and assumptions regarding Latin Resources Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Latin Resources Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this ASX announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Latin Resources Ltd does not undertake any obligation to update or revise any information or any of the forwardlooking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.



#### **Competent Person Statement – Salinas Lithium Project**

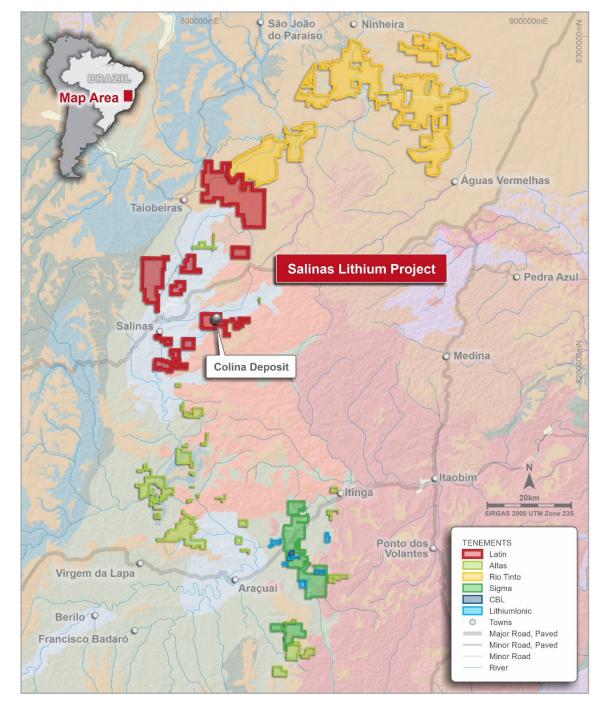
The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Robert Simmons, MAusIMM, B. Eng. (Chemical Engineering). Mr Simmons is not an employee of the company, but is employed as a contract consultant. Mr Simmons is a Member of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Simmons consents to the inclusion in this report of the contained technical information in the form and context as it appears. The information in this report that relates to Geological Data and Exploration Results for the Salinas Lithium Project is based on information compiled by Mr Anthony Greenaway, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Greenaway sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Greenaway consents to the inclusion in this report of the matters based on his information, and information presented to him, in the form and context in which it appears.

The information in this report that relates the Mineral Resource Estimate and exploration targets for the Salinas Lithium Project are based on the information compiled by Mr Marc-Antoine Laporte M.Sc., P.Geo, who is an employee of SGS Canada Ltd and a member of the L'Ordre des Géologues du Québec. He is a Senior Geologist for the SGS Geological Services Group and as more than 15 years of experience in industrial mineral, base and precious metals exploration as well as Mineral Resource evaluation and reporting. Mr Laporte sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to quality as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.



#### **APPENDIX 1**

#### FIGURE 5 SALINAS LITHIUM PROJECT REGIONAL GEOLOGY AND TENURE



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 TABLE 2

 COLINA DEPOSIT DIAMOND DRILL COLLAR DETAILS - METALLURGICAL TESTWORK

Hole ID		Easting (m)	Northing (m)	RL (m)	Azi (deg)	Dip (deg)	EOH Depth (m)	Samples	Sample Weight (kg)	Sample Selection Depth (m)
SADDO		807902.59	8214821.7	766.12	240	-65	170	1	1.30	100 - 150
SADDO	006	807844.29	8214447.7	812.99	240	-84	265.85	4	5.41	150 - 250
SADDO	012	808001.3	8215154	688.79	230	-80	134.5	1	0.98	100 - 150
SADDO	013	808001.46	8215283.4	627.64	230	-65	131.45	2	3.02	50 - 100
SADDO	015	807782.28	8214374	801.54	320	-65	216.3	1	1.23	150 - 200
SADDO	017	807975.77	8214719.7	781.89	260	-70	229.05	1	1.36	150 - 200
SADDO	018	808012.04	8214821.1	778.37	260	-70	271.65	4	5.13	150 - 250
SADDO	019	808004.6	8214978.6	767.38	260	-70	275.6	4	5.06	200 - 250
SADDO	020	807881.89	8214963.6	738.93	260	-80	261.1	4	5.47	50 - 100; 200 - 250
SADDO	021	807922.82	8214862.5	753.88	260	-65	267.6	1	1.27	150 - 200
SADDO	024	807841.85	8214292.5	827.69	260	-70	331.9	2	2.86	150 - 200; 250 - 300
SADDO	025	807747.28	8214274.9	827.26	260	-67	283.95	1	1.40	150 - 200
SADDO	026	808106.56	8214739.4	789.37	260	-70	360.35	4	5.38	300 - 350
SADDO	027	807880.33	8214392.7	821.99	260	-70	325.9	2	2.58	150 - 250
SADDO	031	807901.06	8214499.4	794.26	260	-70	321.9	2	2.75	200 -250
SADD	033	807506.77	8214728.2	806.73	260	-70	429.2	4	5.23	200 - 350
SADD	037	807883.97	8215066.5	715.47	260	-75	255.15	3	2.89	150 - 200
SADD	038	807823.35	8214845.6	759.23	260	-70	183.2	1	1.26	50 - 100
SADD	039	808102.49	8214991.6	750.42	260	-70	306.4	16	22.23	100 - 300
SADDO	040	808010.69	8215085.8	731.88	260	-70	305.25	6	7.96	150 - 250
SADDO	042	808052.03	8214620.6	791.61	260	-70	400.85	2	2.74	300 - 350
SADDO	043	807999.09	8214515	799.58	260	-70	351.4	4	5.58	200 - 300
SADDO	044	807704.29	8214820.9	760.3	260	-70	147.4	1	1.47	50 - 100
SADDO	045	808015.65	8215184.9	678.18	260	-70	300.75	2	2.79	50 - 150
SADDO	047	807786.03	8214780.1	755.4	260	-68	104	2	2.55	50 - 100
SADDO	052	807668.17	8214357	797.38	260	-70	450.4	3	4.47	50 - 100; 200 - 250
SADDO	053	807690.88	8214462.6	782.31	260	-75	321.3	5	6.75	150 - 200; 250 - 300
SADDO	055	807730	8214567	769.01	260	-65	499.1	10	12.72	200 - 250; 300 - 400
SADDO	057	807946.3	8214803.6	760.9	260	-74	270.4	5	6.49	150 - 200
SADDO	059	807868.86	8214856	765.78	260	-74	265.85	12	16.93	50 - 200
SADD	060	807612.1	8214755	789.68	260	-72	460.9	2	2.66	200 - 250; 350 - 400
SADD	061	807989.27	8214873.2	767.41	262	-70	280.7	7	9.29	150 - 250
SADD	062	807795.91	8214280.5	828.09	260	-73	281.35	1	1.38	150 - 200
SADD	063	807421.09	8214713	786.42	260	-66	450.2	1	0.91	150 - 200
SADD	070	807614.59	8214348.5	815.58	260	-62	454.7	2	2.94	300 - 350



#### APPENDIX 2

#### JORC CODE, 2012 EDITION - TABLE 1

#### SECTION 1 SAMPLING TECHNIQUES AND DATA

#### (CRITERIA IN THIS SECTION APPLY TO ALL SUCCEEDING SECTIONS)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Metallurgical testwork results reported in this announcement relate to material sourced from Diamond Drill Holes (DDH) drilled by Latin Resources Limited at the Colina Deposit.</li> <li>Spodumene concentrate testwork was completed on two composite samples of Colina ore namely Composite Sample 1 and Composite Sample 2.</li> <li>The samples comprising the composites were taken from ½ HQ core from selected mineralized and unmineralized zones as part of the 65,000m drilling program.</li> <li>Drill hole IDs, intervals and weights which comprise each of the composite samples are disclosed in Appendix 1.</li> <li>All samples were shipped to SGS Lakefield laboratories ("SGS"), Lakefield Canada.</li> <li>Latin Resources Diamond Drilling:         <ul> <li>Diamond core has been sampled in intervals of ~ 1 m (up to 1.18 m) where possible, otherwise intervals less than 1 m have been selected based on geological boundaries. Geological boundaries have not been crossed by sample intervals.</li> <li>½ core samples have been collected and submitted for analysis, with regular field duplicate samples collected and submitted for QA/QC analysis.</li> </ul> </li> </ul>
	and details (e.g. 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).	<ul> <li>HQ size coring equipment.</li> <li>Drilling techniques used at Salinas Project comprise: <ul> <li>NTW Diamond Core (64.2mm diameter), standard tube to a depth of ~200- 250 m.</li> <li>BTW diamond core utilized for hole SADD031 from a depth of 309.10 m.</li> <li>Diamond core holes drilled directly from surface.</li> <li>Initial drill rig alignment is carried out using Reflex TN14 alignment tool.</li> <li>Down hole survey was carried out by Reflex EZ-TRAC tool.</li> <li>Core orientation was provided by an ACT Reflex (ACT III) tool.</li> </ul> </li> <li>All drill collars are surveyed using RTK DGPS.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Latin Resources core is depth marked and orientated to check against the driller's blocks, ensuring that all core loss is taken into account. Diamond core recovery is logged and captured into the database.</li> <li>Zones of significant core loss may have resulted in grade dilution due to the loss of fine material.</li> </ul>
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.	<ul> <li>All drill cores have been geologically logged.</li> <li>Sampling is by sawing core in half and then sampling core on nominal 1m intervals.</li> <li>All core sample intervals have been photographed before and after sawing.</li> </ul>

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Crite	ria	JORC Code explanation	Commentary
		<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Latin's geological logging is completed for all holes, and it is representative. The lithology, alteration, and structural characteristics of drill samples are logged following standard procedures and using standardised geological codes.</li> <li>Logging is both qualitative and quantitative depending on field being logged.</li> <li>All drill-holes are logged in full.</li> <li>Geological structures are collected using Reflex IQ Logger.</li> <li>All cores are digitally photographed and stored.</li> </ul>
Sub-sample techniques sample preparatio	s and	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For metallurgical samples:         <ul> <li>Metallurgical testwork results relate to material sourced from Diamond Drill Holes (DDH) drilled by Latin Resources Limited at the Colina Deposit.</li> <li>Spodumene concentrate testwork was completed on composite samples of Colina ore namely Composite Sample 1 and Composite Sample 2.</li> <li>The samples comprising the composites were taken from ½ HQ core from selected mineralized and unmineralized zones as part of the 65,000m drilling program.</li> <li>Drill hole IDs, intervals and weights which comprise each of the composite samples are disclosed in Appendix 1.</li> <li>All samples were shipped to SGS Lakefield laboratories ("SGS"), Lakefield Canada.</li> </ul> </li> <li>For the 2023 diamond drilling program:         <ul> <li>Samples were crushed in a hammer mill to 75% passing -3mm followed by splitting off 250g using a Jones splitter and pulverizing to better than 95% passing 75 microns.</li> <li>Duplicate sampling is carried out routinely throughout the drilling campaign. The laboratory will carry out routine internal repeat assays on crushed</li> </ul> </li> </ul>
			samples. • The selected sample mass is considered appropriate for the grain size of the material being sampled.
Quality of data laboratory	and	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>For metallurgical testwork:         <ul> <li>All test work analysis has been indertaken by SGS Canada Natural Resources Lakefield, which conforms to the requirements of ISO/IEC 17025 and is accredited by the Standards Council of Canada. Representative subsamples were submitted for Li assay and whole rock analysis (XRF/ICP), for suite which includes SiO2, Al2O3, Fe2O3, MgO, CaO, Na2O, K2O, TiO2, P2O5, MnO, Cr2O3, V2O5, and loss on ignition (LOI), as well as semi-quantitative XRD analysis.</li> </ul> </li> <li>For the 2023 diamond drilling program:         <ul> <li>Core samples are assayed via ICM90A (fusion by sodium peroxide and finish with ICP-MS/ICP-OES) for a 56-element suite at the SGS Geosol Laboratorios located at Vespasiano/Minas Gerais, Brazil.</li> </ul> </li> </ul>
			<ul> <li>If lithium results are above 15,000ppm, the Lab analyze the pulp samples just for lithium through ICP90Q (fusion by sodium peroxide and finish with ICP/OES).</li> </ul>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Technical representatives from Latin and SGS have visually inspected and verified the metallurgical test work results.</li> <li>Selected sample results which are considered to be significant will be subjected to resampling by the Company. This can be achieved by either reassaying of sample pulps, resplitting of coarse reject samples, or resplitting of core and reassaying.</li> <li>All Latin Resources data is verified by the Competent person. All data is stored in an electronic Access Database.         <ul> <li>Assay data and results is reported, unadjusted.</li> <li>Li<sub>2</sub>O results used in the market are converted from Li results multiplying it by the industry factor 2.153.</li> </ul> </li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drill collars are captured using a handheld GPS.</li> <li>Drill collars are located using a handheld GPS.</li> <li>All GPS data points were later visualized using ESRI ArcGIS Software to ensure they were recorded in the correct position.</li> <li>The grid system used was UTM SIRGAS 2000 zone 23 South.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Due to the preliminary nature of the initial drilling campaign, drill holes are designed to test specific targets, with no set drill spacing.</li> <li>Holes selected for the metallurgical testing are designed to represent the potential run of mine grade from the Colina ore body with samples taken across mineralized and non-mineralized zones.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Sampling is preferentially across the strike or trend of mineralised outcrops.</li> <li>Drilling has been designed to intersect the mapped stratigraphy as close to normal as possible.</li> </ul>
Sample security	• The measures taken to ensure sample security.	• At all times samples were in the custody and control of the Company's representatives until delivery to the laboratory where samples were held in a secure enclosure pending processing.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• The Competent Person for Exploration Results reported here has reviewed the field procedures used for sampling program at field and has compiled results from the original sampling and laboratory data.

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## SECTION 2 REPORTING OF EXPLORATION RESULTS (CRITERIA LISTED IN THE PRECEDING SECTION ALSO APPLY TO THIS SECTION.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Exploration Licences: 830.578/2019, 830.579/2019, 830.580/2019, 30.581/2019, 830.582/2019, 830.691/2017, 832.515/2021 and the western portion of 831.799/2005 are 100% fully owned by Latin Resources Limited.</li> <li>Latin has lodged new applications for the following areas: 832.601/2022, 832.602/2022, 832.604/2022, 832.605/2022, 832.606/2022, 832.607/2022, 832.608/2022, 832.609/2022, 832.611/2022, 832.612/2022, 832.603/2022, 832.614/2022, 832.616/2022, 832.801/2022, 832.802/2022 &amp; 832.804/2022.</li> <li>Latin has entered in separate exclusive option agreement to acquire 100% interest in the areas: 830.080/2022, 830.581/2019, 831.118/2008, 831.219/2017, 831.798/2015, 831.799/2005 (Second Part &amp; Third Part), 833.881/2010 &amp; 834.282/2007.</li> </ul>
		• The Company is not aware of any impediments to obtaining a licence to operate, subject to carrying out appropriate environmental and clearance surveys.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historic exploration was carried out on the area 830.080/2022 (Monte Alto) with extraction of gems (tourmaline and lepidolite), amblygonite, columbite and feldspar.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Salinas Lithium Project geology comprises Neoproterozoic age sedimentary rocks of Araçuaí Orogen intruded by fertile Li-bearing pegmatites originated by fractionation of magmatic fluids from the peraluminous S-type post- tectonic granitoids of Araçuaí Orogen. Lithium mineralisation is related to discordant swarms of spodumene-bearing tabular pegmatites hosted by biotite- quartz schists.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>All drill hole summary location data is provided in Appendix 1 to this report and is accurately represented in appropriate location maps and drill sections where required.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high-grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such</li> </ul>	<ul> <li>Sample length weighted averaging techniques have been applied to the sample assay results.</li> <li>Where duplicate core samples have been collected in the field, results for duplicate pairs have been averaged.</li> <li>A nominal minimum Li<sub>2</sub>O grade of 0.4% Li<sub>2</sub>O has been used to define a 'significant intersection'.</li> <li>No grade top cuts have been applied.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Drilling is carried out at right angles to targeted structures and mineralised zones where possible.</li> <li>Drill core orientation is of a high quality, with clear contact of pegmatite bodies, enabling the calculation of true width intersections.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• The Company has released various maps and figures showing the sample results in the geological context.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high-grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	• All analytical results for lithium have been reported.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>All information that is considered material has been reported, including stream sediment sampling results, Drilling results geological context, etc.</li> <li>Test work included crushing, size fraction analysis and HLS separation to ascertain the amenability of the Colina Project spodumene pegmatite material to DMS treatment routes.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Latin plans to undertake additional reconnaissance mapping, infill stream sediment and soil sampling at Salinas South Prospect.</li> <li>Follow-up infill and step-out drilling will be undertaken based on results.</li> <li>Additional metallurgical processing test work on drill core form the Colina Prospect.</li> </ul>