

Alderan Commences Exploration on Minas Gerais Lithium Projects, Brazil

HIGHLIGHTS

- Exploration commences on Alderan's Minas Gerais lithium projects in Brazil with stream sediment sampling underway over the Itambacuri project
- Outcropping pegmatite and potential lithium indicator minerals were identified at Itambacuri during Alderan's due diligence field visit carried out in late October, 2023
- Stream sediment sampling over the Carai, Catuji and Itaípe project areas ready to commence on completion of the Itambacuri programme
- Rock sampling of pegmatites identified in project areas during Alderan's due diligence field visit will also be carried out

Alderan Resources Limited (ASX: AL8) (Alderan or the Company) is pleased to announce the commencement of exploration on its Minas Gerais lithium projects in Brazil. Work has commenced on stream sediment and rock sampling over the Itambacuri project area where an outcropping pegmatite dyke with potential lithium indicator minerals was identified during the due diligence field visit in the second half of October, 2023 (see Figure 1).¹

The commencement of exploration activities follows shareholder approval for the acquisition of 100% of the issued capital in Parabolic Lithium Pty Ltd (Parabolic) which has the right to acquire a 100% interest in seven lithium exploration projects (together, the Projects) in the mineral resource rich state of Minas Gerais, Brazil (Acquisition) on 8th November 2023.²

Managing Director of Alderan, Scott Caithness, commented:

"It is very exciting to get exploration underway on Alderan's newly acquired lithium projects in the Lithium Valley district of Minas Gerais, Brazil. In less than three months the Company has gone from identifying the acquisition opportunity to completing the purchase and commencing exploration which is a great result."

"The stream sediment sampling is aimed at identifying lithium anomalies which will be followed up with soil and rock sampling plus geological mapping to narrow down the prospects for drilling. This phase of sampling is expected to extend into Q1, 2024 with the Carai, Catuji and Itaípe project areas to follow on from Itambacuri which in turn will be followed by Governador Valadares, Minas Novas and Curral de Dentro."

"Projects have been prioritised for sampling based on the occurrence of pegmatites and potential lithium indicator minerals identified during the due diligence field visit in October, 2024. At Itambacuri, an eight metre wide pegmatite dyke was identified with coarse feldspar and quartz plus tourmaline and red garnets."

¹ Refer AL8 ASX announcement dated 26 October, 2023

² Refer AL8 ASX announcement dated 13 November, 2023



Figure 1: Pegmatite outcrop identified in the Itambacuri project area. The coarse textured dyke (centre of picture) is approximately 8m wide and occurs within fine grained metasediments (bottom of picture). Associated minerals include coarse white feldspar, quartz, black tourmaline and red garnet. Narrow (10-20cm) pegmatite veins occur in a second creek approximately 250m along trend.

Exploration

The clay fraction stream sediment samples at Itambacuri will be collected at approximately 1km intervals along major drainages and at stream junctions to ensure that the entire project area is covered. They will be analysed at the ALS laboratory in Belo Horizonte, Minas Gerais for a suite of 48 elements which includes lithium and key lithium indicators.

The assay results will be reviewed with drainages containing anomalous lithium to be followed up with soil and rock chip sampling plus geological mapping. Drilling will follow the soil and rock sampling on priority targets.

Brazil Projects Background

The Projects consist of 24 granted exploration licences (472km²) in seven project areas - Curral de Dentro, Minas Novas, Carai, Catuji, Itaípe, Itambacuri and Governador Valadares (see Figure 2). The Projects are all located in and immediately to the south of the district known as '**Lithium Valley**' in the Eastern Lithium Belt of Eastern Brazil.

Lithium deposits currently being mined in Minas Gerais include Companhia Brasileira De Lítio's (CBL) Mina da Cachoeira underground mine which has stated production capacity of 42,000t per annum of 5.5% Li₂O spodumene concentrate, AMG Brazil's Mibra lithium-tantalum-niobium-tin mine which has capacity to produce 130,000t lithium concentrate per annum and Sigma Lithium Corporation's recently commissioned Grota do Cirilo operation, which is ramping up 270,000t per annum of lithium concentrate.^{3,4}

³ [Mining Unit – CBL Companhia Brasileira de Lítio \(cblitio.com.br\)](http://Mining Unit – CBL Companhia Brasileira de Lítio (cblitio.com.br))

⁴ [Resources \(amqlithium.com\)](http://Resources (amqlithium.com))

Recent lithium discoveries in Lithium Valley include Sigma Lithium Corporation's (NASDAQ: SGML; TSX: SGML) Grota do Cirilo project, Latin Resources Ltd's (ASX: LRS) Salinas Project and Lithium Ionic Corporation's Itinga Project (see Figure 2). Resources and exploration results are outlined in Table 1 below. Other companies actively exploring in the district include Atlas Lithium Corporation⁵ (NASDAQ: AT LX) which has the Neves project and OzAurum Resources Ltd⁶ (ASX: OZM) which is exploring the Linopolis Jaime project.

Next Steps

Alderan plans to complete the stream sampling programme over all of its Brazil lithium project areas in the first quarter of 2024. Following receipt of assay results, the work programme will entail narrowing down to prospect areas for drilling. This will entail soil and rock sampling plus geological mapping over anomalous areas identified from the stream sediment sampling in Q2, 2024.

If lithium rich pegmatites are identified during the stream sediment sampling programme, it may be possible to fast track drilling on these prospects.

Table 1: Lithium deposits and significant exploration projects in Lithium Valley, Minas Gerais.

Company	Discovery	Tenement Holding
Sigma Lithium Corp ⁷ (NASDAQ: SGML; TSX: SGML)	Grota do Cirilo Resource (NI43-101): M&I 77.0Mt @ 1.43% Li ₂ O plus Inf 8.5Mt @ 1.43% Li ₂ O Ramping up Phase 1 production to 270Ktpa	~200km ²
Latin Resources Limited ⁸ (ASX: LRS)	Salinas Resource (JORC): MI&I 45.2Mt @ 1.32% Li ₂ O Preliminary economic assessment underway	~380km ²
Lithium Ionic Corp ⁹ (TSX.V: LTH)	Itinga Resource (NI43-101): M&I 16.69Mt @ 1.41% Li ₂ O plus Inf 16.21Mt @ 1.34% Li ₂ O Expansion and definition drilling underway	~142km ²
Atlas Lithium Corp ¹⁰ (NASDAQ: AT LX)	20 pegmatite outcrops identified Neves project drill intersections include: <ul style="list-style-type: none"> • 21.75m @ 2.12% Li₂O from 7.0m depth (DHAB-185) • 25.0m @ 1.82% Li₂O from 7.0m depth (DHAB-160) • 95.2m @ 1.46% Li₂O from 97.9m depth (DHAB-104) 	~240km ²
OzAurum Resources Limited ¹¹ (ASX: OZM)	Binding term sheet to acquire Linopolis Jaime Li project which contains over 20 LCT bearing pegmatites mined intermittently for tantalite, beryl, tourmaline, brasilianite & feldspar Spodumene grades of up to 7.36% Li ₂ O in rocks with an average spodumene grade of 6.94% Li ₂ O confirmed within a +7m wide spodumene zone	Linopolis 2.4km ² plus exploration permit applications ~197km ²

⁵ [Atlas Lithium Corporation - Lithium & Other Battery Metals in Brazil \(atlas-lithium.com\)](https://atlas-lithium.com)

⁶ [efa74fcb6c50367e79786bfc8e2a273a \(sharelinktechnologies.com\)](https://sharelinktechnologies.com/efa74fcb6c50367e79786bfc8e2a273a)

⁷ Refer to NI43-101 technical report on page 47, dated 12 June 2023 ([Sigma-Lithium-Amended-and-Restated-Technical-Report-June-2023-JUNE-12-FINAL-pre-market.pdf \(sigmalithiumresources.com\)](https://sigmalithiumresources.com/Sigma-Lithium-Amended-and-Restated-Technical-Report-June-2023-JUNE-12-FINAL-pre-market.pdf))

⁸ Refer ASX announcement dated 20 June 2023 at <https://www.investi.com.au/api/announcements/lrs/deefd35a-3b8.pdf>

⁹ Refer to Lithium Ionic announcement dated 27 June 2023 ([Lithium Ionic - News](https://lithiumionic.com/news/lithium-ionic-news)) and 19 October 2023 ([Lithium Ionic - News](https://lithiumionic.com/news/lithium-ionic-news))

¹⁰ Refer to Atlas Lithium announcements dated 13 July 2023 ([1689249600-173391.pdf \(atlas-lithium.com\)](https://atlas-lithium.com/1689249600-173391.pdf)), 13 May 2023 ([Atlas Lithium Intersects 1.47% Li₂O over 95.2 Meters - Atlas Lithium Corporation \(atlas-lithium.com\)](https://atlas-lithium.com/atlas-lithium-intersects-1.47%li2o-over-95.2-meters-at-its-neves-project-in-brazils-lithium-valley)) & 10 Jul 2023 ([Atlas Lithium Intersects 3.34% Li₂O over 7 Meters and 1.82% Li₂O over 25 Meters at Its Neves Project in Brazil's Lithium Valley - Atlas Lithium Corporation \(atlas-lithium.com\)](https://atlas-lithium.com/atlas-lithium-intersects-3.34%li2o-over-7-meters-and-1.82%li2o-over-25-meters-at-its-neves-project-in-brazils-lithium-valley))

¹¹ Refer to OzAurum announcements dated 15 September 2023 ([efa74fcb6c50367e79786bfc8e2a273a \(sharelinktechnologies.com\)](https://sharelinktechnologies.com/efa74fcb6c50367e79786bfc8e2a273a)) & 27 September 2023 ([eb213a9bc6e4138657a058b5e2f131ed \(sharelinktechnologies.com\)](https://sharelinktechnologies.com/eb213a9bc6e4138657a058b5e2f131ed))

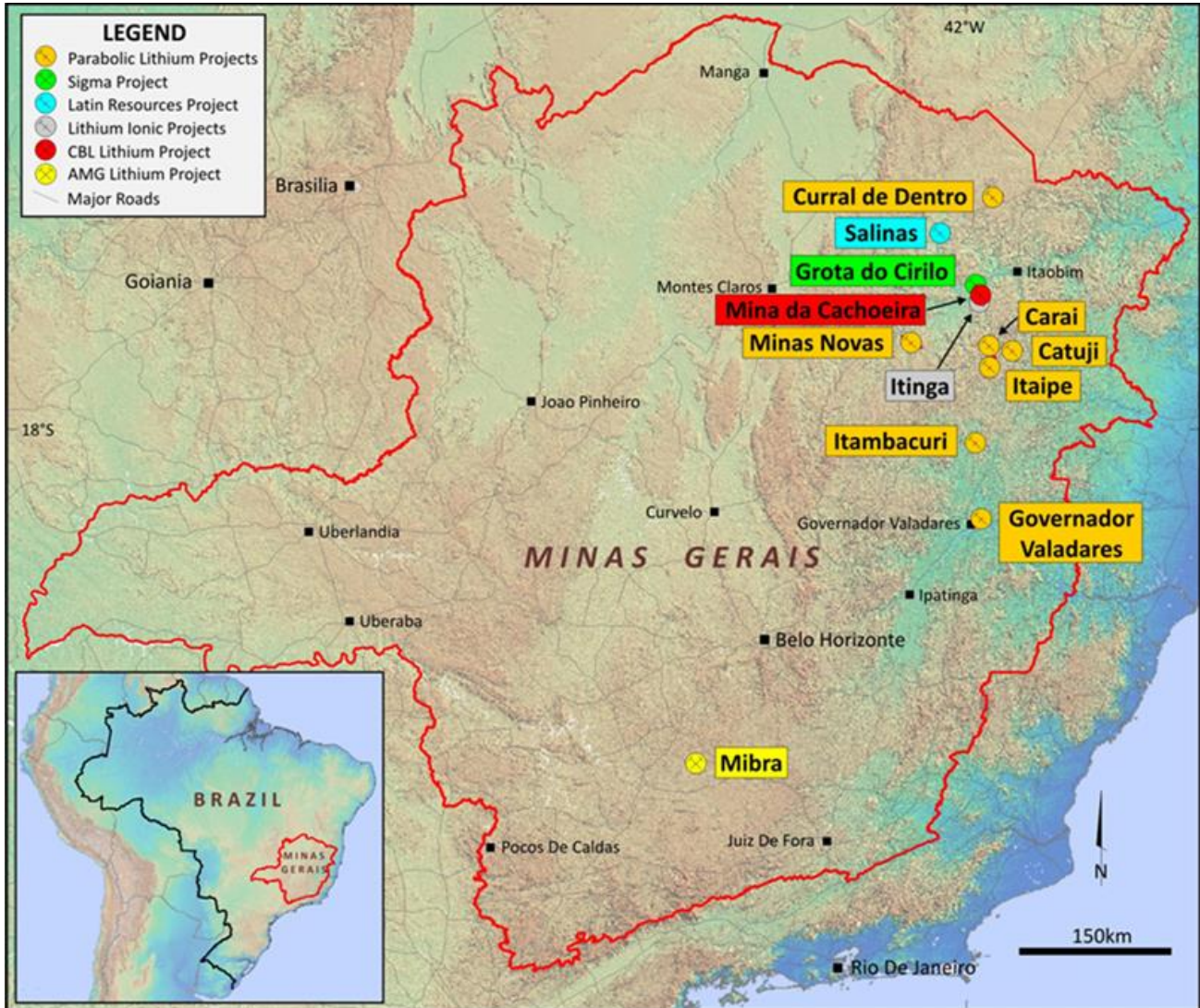


Figure 2: Parabolic Lithium’s project locations in Minas Gerais State plus lithium mines and deposits within Brazil’s Eastern Lithium Belt.

END

This announcement was authorised for release by the Board of Alderan Resources Limited.

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About Alderan Resources Limited

Alderan Resources specialises in critical and precious metal exploration.¹² In addition to the acquisition of seven lithium projects in Minas Gerais, Brazil the Company has projects in Utah, USA (Frisco, Detroit, White Mountain), with tenements held either directly or through option agreements via Alderan’s USA subsidiaries, Volantis Resources Corp and Valyrian Resources Corp (see Figure 3). Alderan’s objective is to rapidly discover, delineate and develop critical metal and gold deposits for mining. The Company’s project portfolio has high potential for discovery as it lies in under-explored geological belts with similar geology to neighbouring mining districts. Our exploration plans also include reviewing new opportunities to secure and upgrade our pipeline of projects.

For more information please visit: <https://alderanresources.com.au/>

Competent Persons Statement

The information contained in this announcement that relates to geology is based on, and fairly reflects, information compiled by Mr Scott Caithness, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Caithness is the Managing Director of Alderan and has 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 Caithness consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Mr Caithness holds securities in the Company.

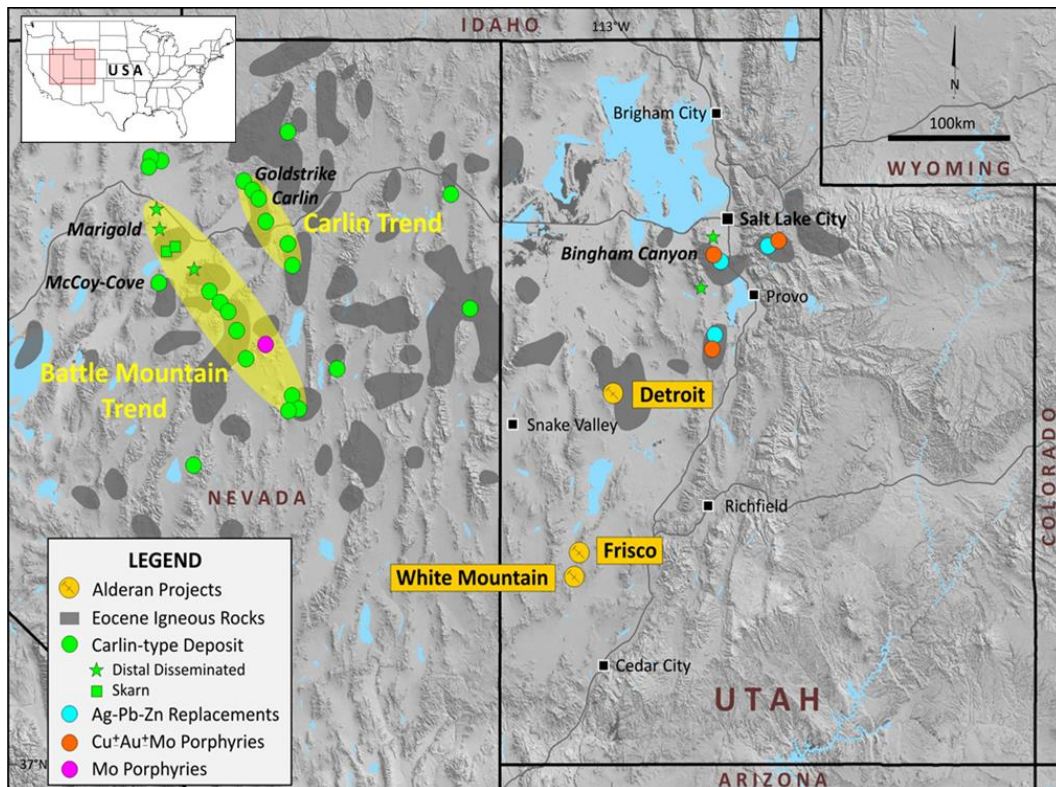


Figure 3: Alderan Resources project locations in Utah, USA.

¹² <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-metals>