

Discovering Critical Metals for the Future

November 2023

“Alderan is very excited to have the opportunity to acquire Parabolic’s large and highly prospective granted tenement package in the established ‘Lithium Valley’ district in Minas Gerais state, Brazil. Brazil’s Eastern Lithium Belt is one of the world’s premier lithium provinces with operating lithium mines.”

Alderan Resources Managing Director Scott Caithness

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References to Previous ASX Announcements – The information in this presentation that relates to historical exploration results were first reported by the Company in accordance with listing rule 5.7 on 28 June 2017, 21 August 2017, 12 September 2017, 28 September 2017, 30 October 2017, 15 December 2017, 17 January 2018, 5 March 2018, 29 March 2018, 12 March 2019, 18 November 2019, 25 March 2020, 16 April, 2020, 20 May 2020, 19 August 2020, 28 August 2020, 22 September 2020, 22 February 2021, 8 March 2021, 11 March 2021, 11 May 2021, 9 June 2021, 11 June 2021, 24 August 2021, 30 September 2021, 18 November 2021, 30 December 2021, 25 February 2022, 22 March 2022, 5 April 2022, 11 May 2022, 25 May 2022, 6 June 2022, 27 June 2022, 3 August 2022, 28 September, 2022, 30 September 2022, 2 November 2022, 14 December 2022, 30 December 2022, 14 February 2023, 20 September 2023, 3 October 2023 and 26 October 2023. Alderan confirms it is not aware of any new information or data that materially affects the information included in the original market announcements.

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This presentation has been approved for release by the Board of Alderan Resources Limited.

Projects Overview

Focused on discovery of critical metals in Brazil and the USA

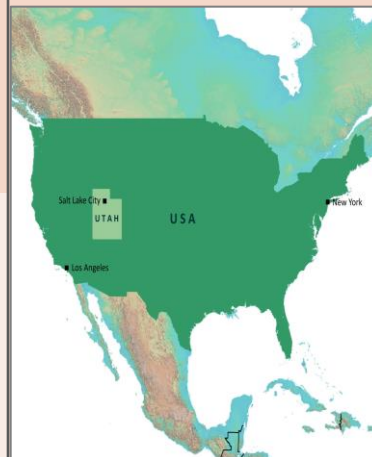
Brazil



Seven lithium exploration project areas covering 472km² in Brazil's 'Lithium Valley' in mineral rich Minas Gerais State

Targeting margins of lithium-caesium-tantalum (LCT) granites (G4) with pegmatites, indicator minerals & artisanal mining within and peripheral to project areas

USA



Frisco copper project in Utah, USA targeting Cactus Canyon high grade breccia deposits

Post mining (1957-) drill hole intersections at Cactus breccia include **22.9m @ 2.06% Cu, 41m @ 1.9% Cu, 0.62g/t Au, 22.9m @ 1.84% Cu**

Corporate

Highly experienced Board with +100 years of exploration experience

Utilising skilled in-country technical expertise

A\$1.75M capital raising completed

Exploration to commence Q4, 2023

Brazil Lithium Acquisition

Minas Gerais State – ‘home to lithium producers and 40 of Brazil’s top 100 mines’



Brazil Lithium Project Highlights

Projects

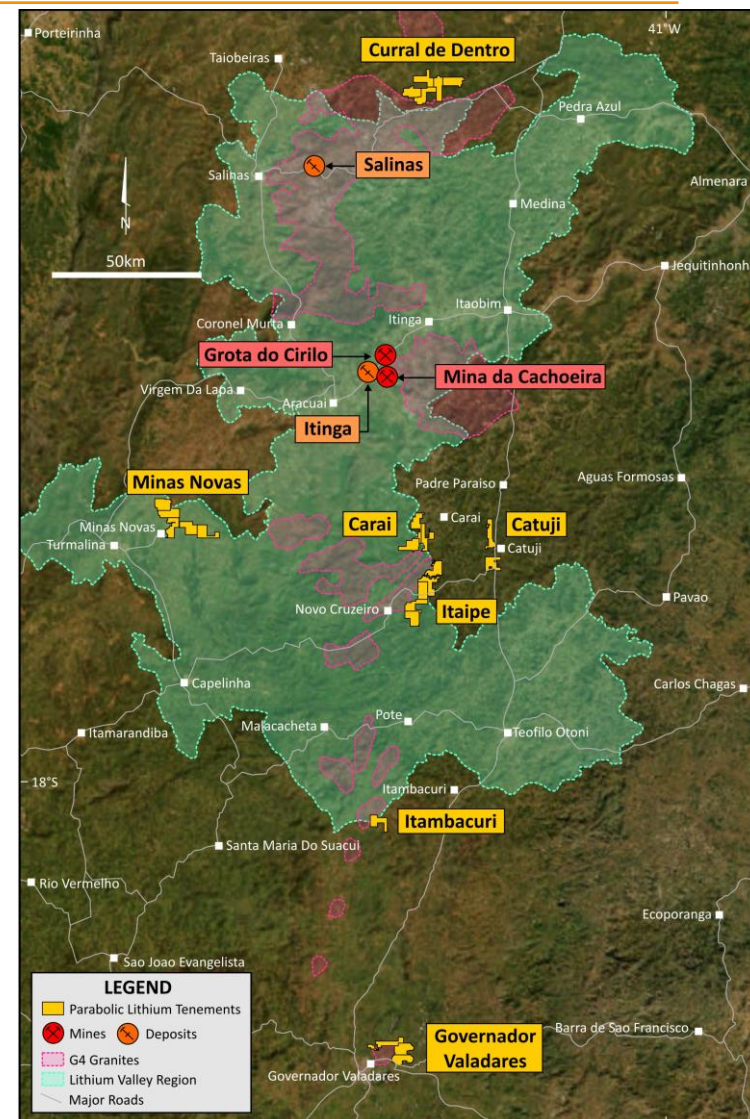
- Alderan has acquired 100% ownership of 7 lithium projects (472km²) - 24 granted exploration licences in Brazil's Eastern Lithium Belt
- Project areas target margins of LCT (G4) granites - pegmatites, indicator minerals & artisanal mining within and peripheral to licences
- Pegmatites, indicator minerals & garimpo mining activity in five projects – identified during Alderan's field reconnaissance

Location

- Projects in 'Lithium Valley' district of Minas Gerais state – 'home to 40 of Brazil's top 100 largest mines'
- 'Lithium Valley' lithium mines - Mina da Cachoeira and Grota do Cirilo mines
- Lithium feasibility/resource delineation stage projects in 'Lithium Valley' - Salinas and Itinga projects

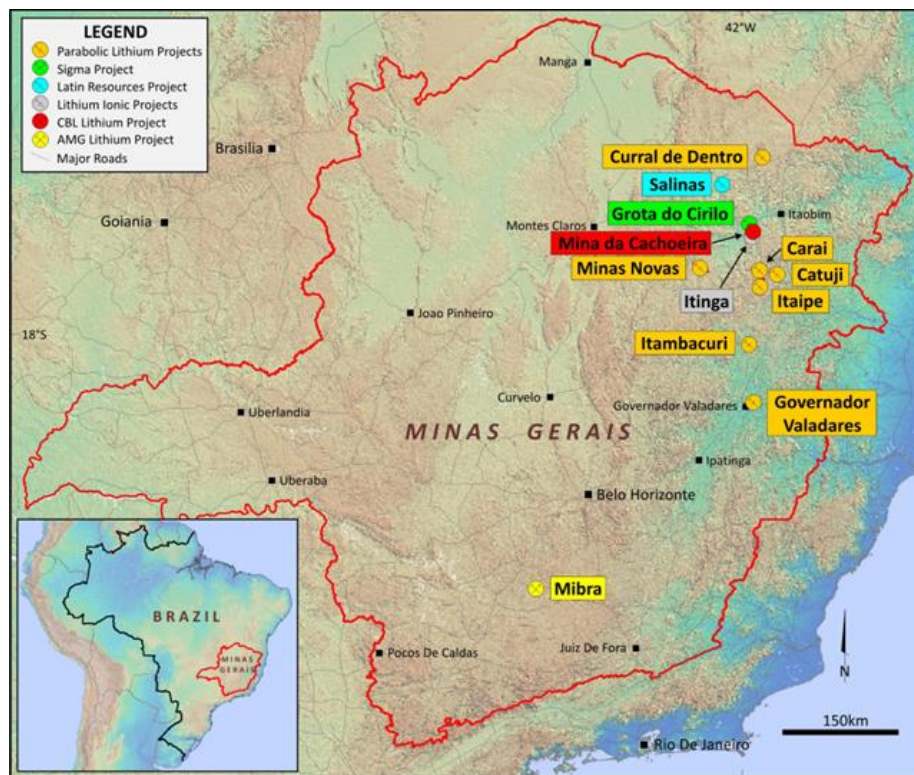
Capital

- A\$1.75M (before costs) raised for initial exploration



The Case for Lithium Exploration in Minas Gerais State, Brazil

Minas Gerais launched the 'Lithium Valley Brazil' initiative in May 2023 to attract investors and accelerate development of lithium projects. Provides expedited permits, a stable legal and simpler regulatory environment plus government support for the supply of infrastructure, energy and labour



- **Resource rich state** - produces 75% of world niobium, 53% of Brazilian iron ore and is also a large producer of gold, zinc and phosphate
- **+300 operational mines** and 40 of Brazil's largest 100 mines
- **Hosts 'Lithium Valley'** in Brazil's Eastern Lithium Belt with lithium mines and recent discoveries
- **Operating lithium mines:**
 - CBL's Mina da Cachoeira (42Ktpa 5.5% Li₂O production capacity)
 - AMG's Mibra (130Ktpa Li₂O concentrate)
 - Sigma Lithium Corporation's Grotto do Cirilo which is ramping Stage 1 production to 270Ktpa of 5.5% Li₂O concentrate
- **Recent lithium discoveries:**
 - Latin Resources' Salinas project: MI&I Resources 45.2Mt @ 1.32% Li₂O
 - Lithium Ionic's Itinga project: MI&I Resources 32.9Mt @ 1.37% Li₂O

Sources: [Mineral-metallurgical - \(investminas.mg.gov.br\)](https://investminas.mg.gov.br/); [Mining Unit – CBL Companhia Brasileira de Lítio \(cblitio.com.br\)](https://cblitio.com.br/); [Resources \(amglithium.com\)](https://resources.amglithium.com/); [Sigma-Lithium-Amended-and-Restated-Technical-Report-June-2023-JUNE-12-FINAL-pre-market.pdf \(sigmalithiumresources.com\)](https://www.sigma-lithium.com/~/media/Sigma-Lithium/Amended-and-Restated-Technical-Report-June-2023-JUNE-12-FINAL-pre-market.pdf); <https://www.investi.com.au/api/announcements/lrs/deefd35a-3b8.pdf>; [Lithium Ionic – News](https://www.lithium-ionic.com/news); [Lithium Ionic - News](https://www.lithium-ionic.com/news)

Seven Lithium Projects with Granted Tenement

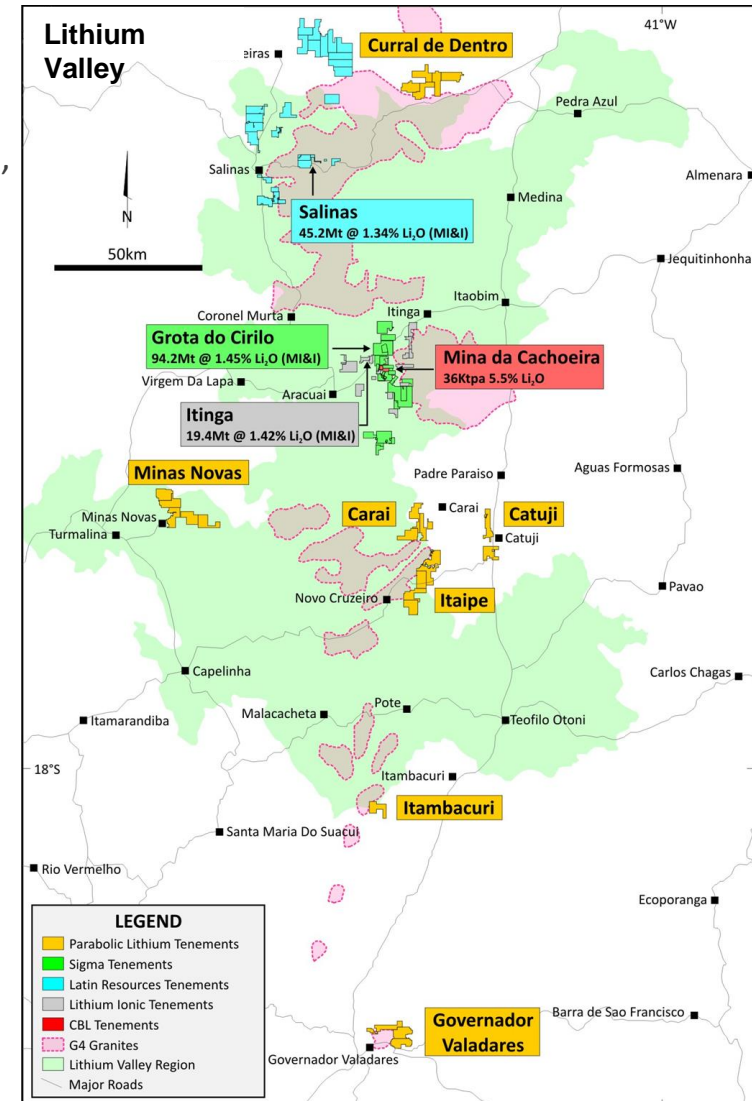
- **Seven 100% owned projects** (472km²) consisting of 24 granted exploration licences in Minas Gerais
- **Generated by experienced technical team** integrating geology, structure, mineral occurrences and geophysics

Project Generation Criteria

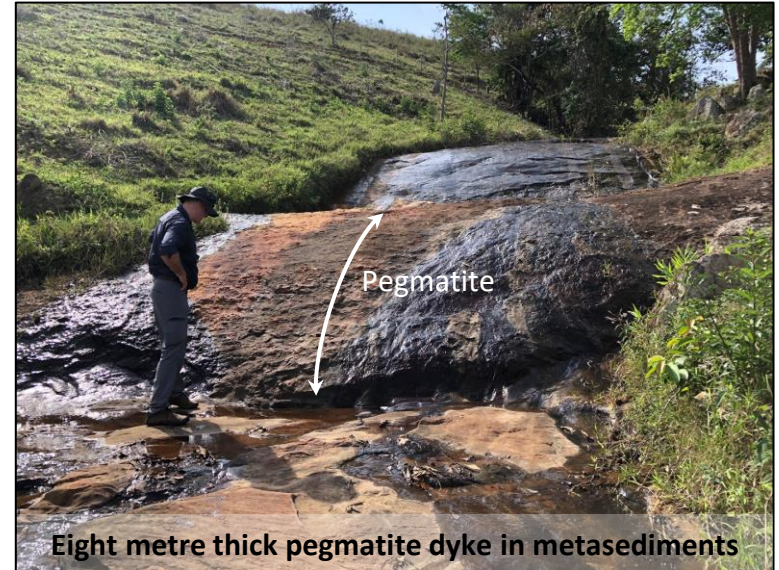
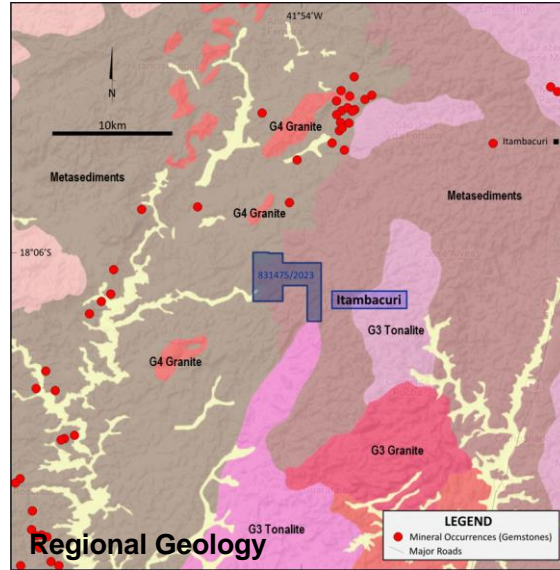
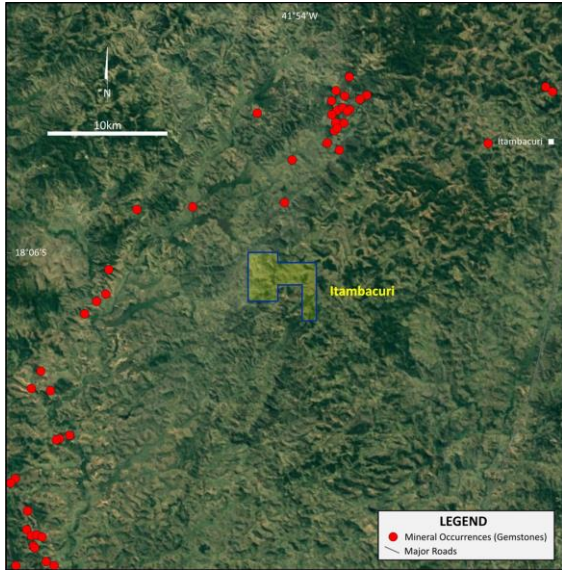
- **Projects located in 'Lithium Valley' district** and extensions to south
- **Right geological setting** - margins of Cambrian G4 granites with major faults trending through project areas
- **Project areas have associated pegmatites** and potential pegmatite indicators such as gemstones (beryl, tourmaline, aquamarine, emerald) plus coarse quartz, muscovite and feldspar
- **Possible garimpo mining activity** in areas

Reconnaissance Due Diligence Visit Outcomes

- Pegmatite identified** in five project areas
- Garimpo mining activity is present** in two projects
- Geology confirmed** in project areas
- Community supportive** of exploration



Itambacuri – Outcropping Pegmatite Dyke



Eight metre thick pegmatite dyke in metasediments

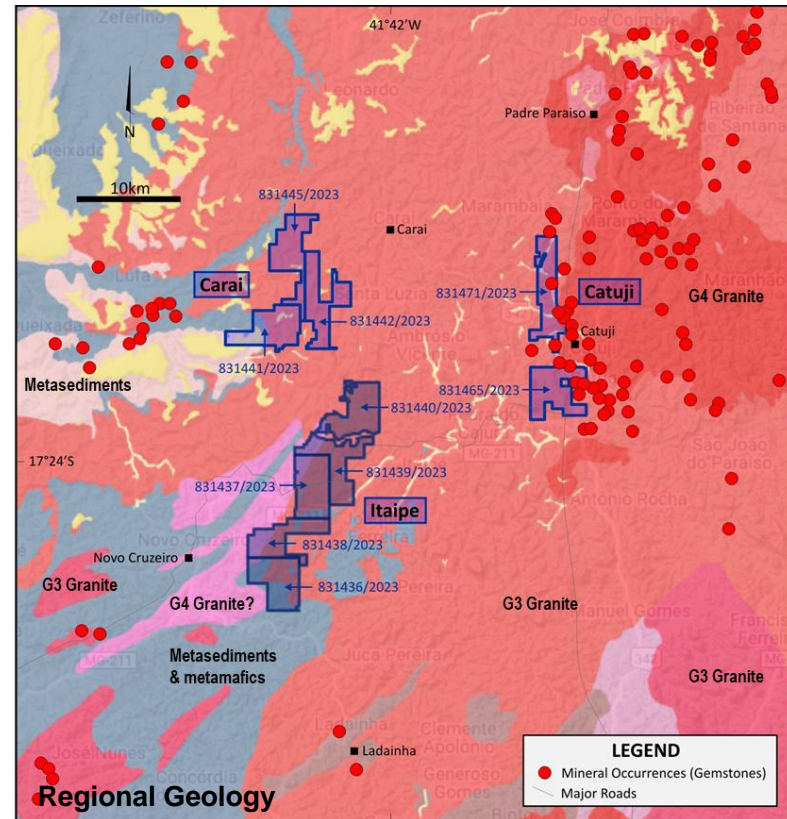
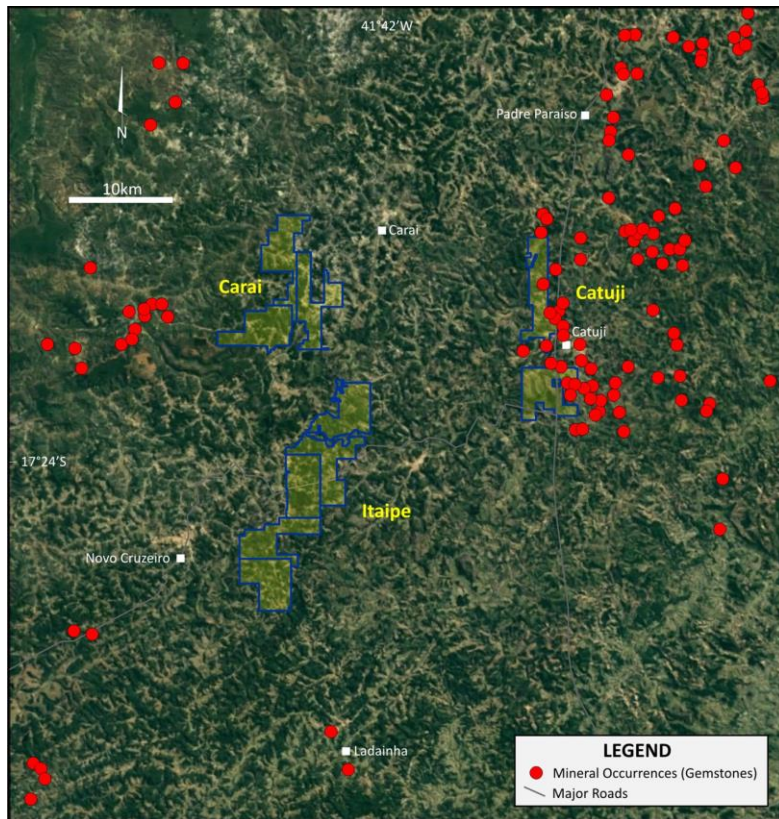
- One 19.6km² licence – geology dominated by metasediments between two Cambrian G4 granites
- Multiple beryl, niobium and tourmaline occurrences plus mapped pegmatites to north and west of licence
- Regional northeast-southwest structural trend through licence

Key field visit outcomes:

- a) Outcropping 8m thick pegmatite dyke with associated tourmaline and garnet
- b) Pegmatite in road cutting with fist sized tourmaline crystal clusters



Carai, Itaipe & Catuji – Garimpo Activity & Pegmatites



- Three projects consisting of ten licences covering 196.4km²
- Geology consists predominantly of Neoproterozoic G3 granite with minor metasediment and Cambrian G4 granite to east of Catuji
- Multiple pegmatite, beryl & niobium occurrences primarily to west of Carai and east of Catuji
- Strong NE-SW structural trend through projects

Carai – Garimpo Activity for Gemstones

- Three licences covering 59.4km² - geology dominated by Neoproterozoic G3 granite with minor metasediments

Key field visit outcomes:

- 80m long zone of possible pegmatite in weathered road cut below garimpo workings
- Garimpo workings for emerald and green tourmaline with associated pegmatite, black tourmaline, muscovite and rose quartz scree



Itaípe – Garimpo Activity in Pegmatite



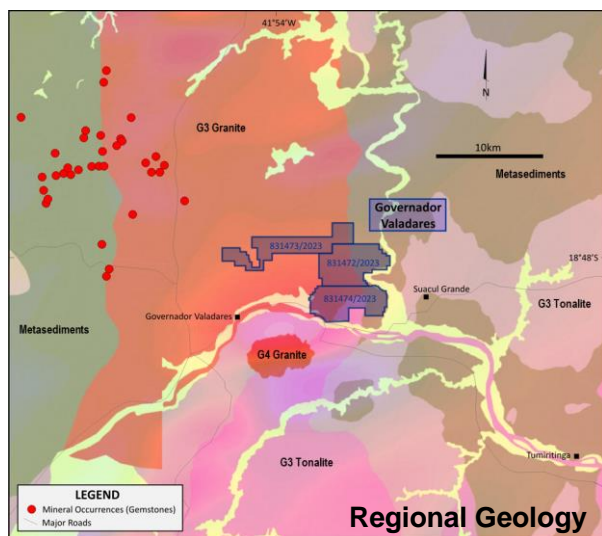
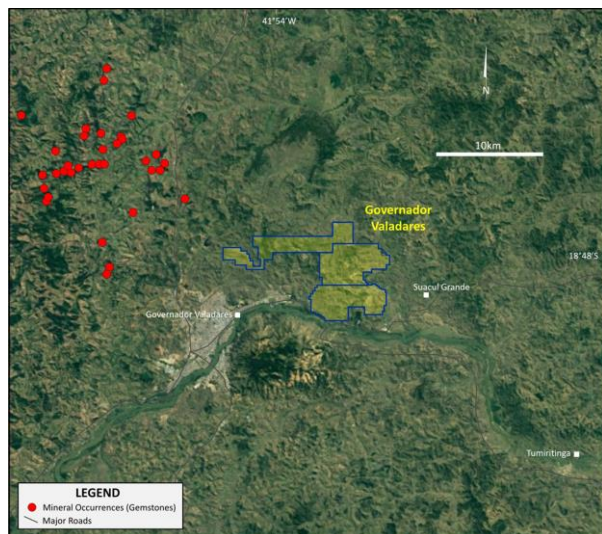
- Five licences covering 96.8km² – geology dominated by Neoproterozoic G3 granite with minor metasediments and G4(?) tonalite intrusive
- Regional northeast-southwest structural trend through licence

Key field visit outcomes:

- a) Garimpo activity at two locations
- b) One garimpo adit in 50m zone of highly weathered pegmatite in road cut



Governador Valadares – Weathered Pegmatite



- Three licences covering 58.4km² – geology dominated by Cambrian G3 granite plus metasediments in east; Neoproterozoic G4 granite to south
- Pegmatites plus beryl and niobium mineral occurrences along structural trend to northwest and southeast

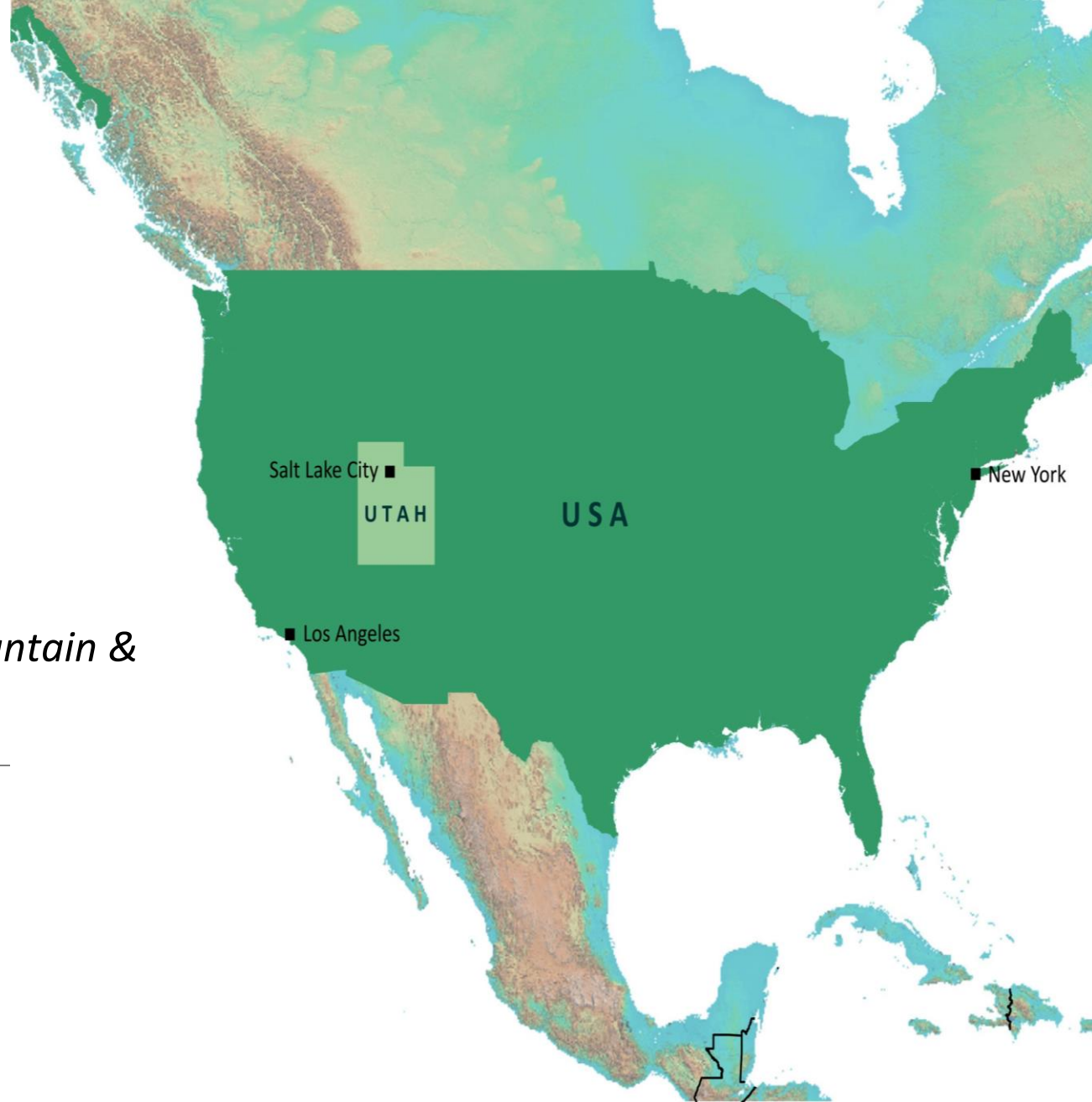
Key field visit outcomes:

- a) 50m zone of weathered pegmatite in road cut

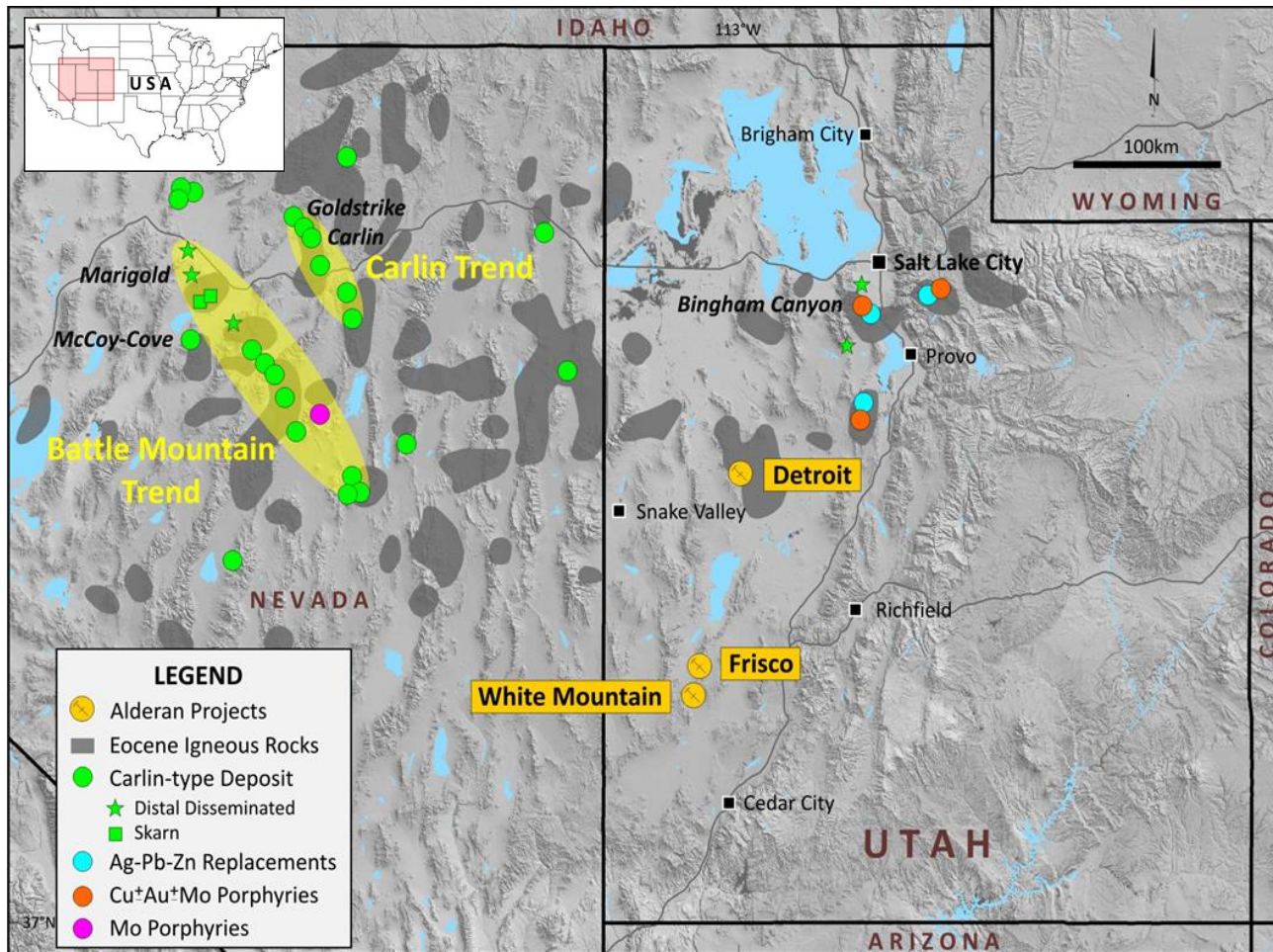


USA Projects

*Frisco copper and White Mountain &
Detroit gold projects*



USA Project Locations



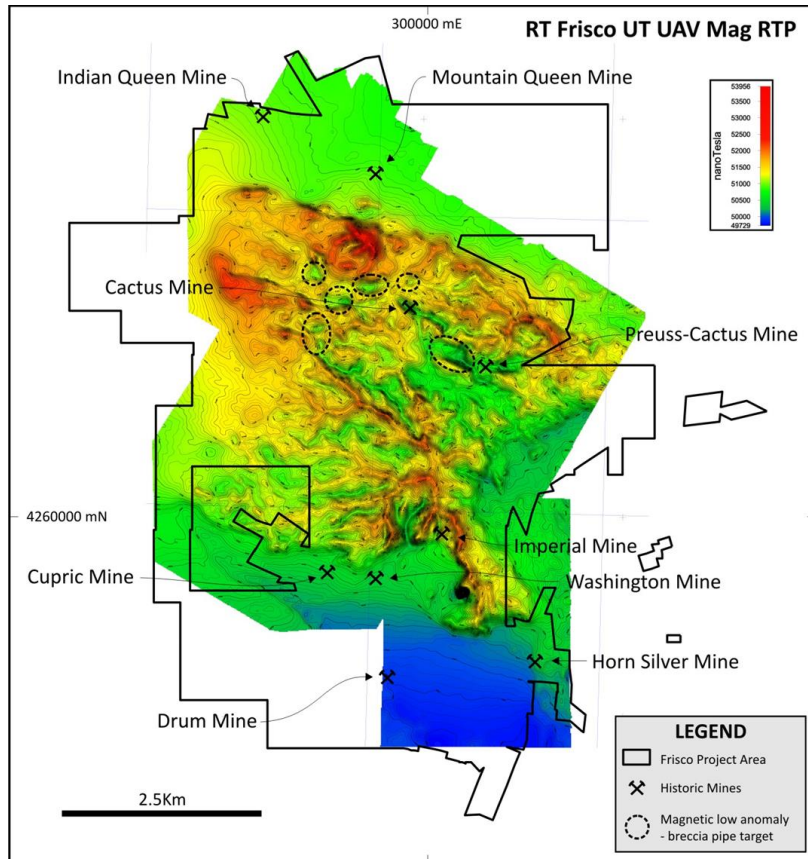
Modified from: Johnson, C.L et al; Toward a Global Carlin-Type Exploration Model: The Relationship between Eocene Magmatism and Diverse Gold Rich deposits in the Great Basin, USA; Nov 2020

- Utah - a Tier 1 mining jurisdiction
- 17th on Fraser Institute 2022 ranking of investment attractiveness*
- Excellent access to infrastructure – road, rail & power
- World ranked copper and gold mining districts in Utah and neighbouring Nevada
- High grade copper-gold intersections in post-mining drill holes at Frisco
- Alderan drilling has confirmed oxide gold from surface at Detroit
- Epithermal gold indicators identified at White Mountain

* Fraser Institute Annual Survey of Mining Companies 2022; [Fraser Institute Annual Survey of Mining Companies 2022](#)

Frisko – High Grade Copper-Gold Breccias

- Potential for high grade breccia hosted copper-gold deposits
- Drone magnetics highlights multiple un-explored magnetic responses similar to Cactus



Post closure (1957) Cactus mine drill intersections include:

- **4.9m @ 6.72% Cu** within **43.6m @ 1.69% Au** from 207.9m downhole (DDH8; no Au assays)
- **12.2m @ 3.31% Cu** within **22.9m @ 2.06% Cu** from 1.5m downhole (R14; no Au assays)
- **8.0m @ 3.11% Cu, 0.98g/t Au** within **32.5m @ 1.24% Cu, 0.31g/t Au** from 61m downhole (ALCA010)
- **12.2m @ 2.77% Cu** within **25.9m @ 1.62% Cu** from 42.7m downhole (R13B; no Au assays)
- **41m @ 1.9% Cu, 0.62g/t Au** within **74m @ 1.1% Cu, 0.35g/t Au** from 252m downhole (SAWM0001)
- **22.9m @ 1.84% Cu** from 39.6m downhole (R12; no Au assays)
- **17.5m @ 1.41% Cu, 0.41g/t Au** within **150.8m @ 0.36% Cu, 0.08g/t Au** from 147m downhole (ALCA002)
- **38.4m @ 1.40% Cu** from 218.2m downhole (DDH8B; no Au assays)

Detroit & White Mountain Gold Projects

Detroit

Potential for oxide and structure controlled primary gold deposits

- Four prospects – Drum Mine, Mizpah, Midway and Basin Main along 4km strike of host horizon
- AL8 exploration verified and extended historical drill results at Drum and Mizpah
- Drum mineralisation thicker and higher grade were associated with structures
- Mizpah mineralisation from surface with primary mineralisation below oxide
- Mineralisation at Drum and Mizpah remains open down dip to southwest
- Basin Main and Midway highlighted in soil samples and have not been drilled
- Preliminary cyanide leach gold recovery testwork on Drum and Mizpah drill samples suggests +90% for Drum and +65% for Mizpah

White Mountain

Potential for high grade epithermal gold-silver deposit

- Preserved epithermal system with 5km zone of argillic, phyllic and silica alteration
- Sinter terraces, alunite cap, chalcedony blanket
- Historical sulphur mining
- AL8 has completed ground magnetics and limited reconnaissance rock sampling
- Anomalous gold, silver & mercury in rock samples

Initial Exploration Programme & Budget

Brazil lithium projects

1. Reconnaissance stream and rock sampling to identify and prioritise lithium target areas (Q4, 2023 - Q1, 2024)
2. Geological mapping, soil sampling and geophysical surveying (Q1-2, 2024)
3. Initial drilling of priority targets (Q3, 2024)
4. Reviewing and securing new project opportunities (ongoing)

USA copper & gold projects

Frisco copper

1. 3D modelling of historical drill hole data at Cactus mine (Q4, 2023)
2. Modelling and interpreting magnetic geophysical data to identify new breccia targets (Q1, 2024) to be followed up with drilling

White Mountain gold

1. Initial soil sampling to identify and prioritise areas for followup (Q1, 2024)

Activities Q4 2023 – Q2, 2024	Estimated Expenditure (A\$)
Brazil Lithium Projects	
Geological mapping plus geochemical sampling across all projects	A\$300,000
Geophysical surveying	A\$100,000
Drilling	A\$250,000
USA Copper & Gold Projects	
Geochemical sampling at White Mountain	A\$50,000
Geophysical modelling, 3D modelling and interpretation at Frisco	A\$100,000
Total	A\$800,000

Investment Highlights

Brazil Lithium

- **Large fully owned tenement package acquired** - seven lithium projects covering 472km²
- **Projects located in 'Lithium Valley'** district of Minas Gerais state which hosts lithium mines, recent resources and has instigated the 'Lithium Valley Brazil' initiative to encourage investment
- **Right geological setting confirmed** - Projects lie at the margins of known and interpreted Cambrian G4 granites with pegmatites, lithium indicators and garimpo activity observed
- **Stream and rock sampling** planned to commence in Q4, 2023

USA Copper

- **Cactus high grade copper mineralisation open** at Frisco with potential for additional targets
- **Frisco geophysics and Cactus 3D deposit modelling** to commence Q4, 2023

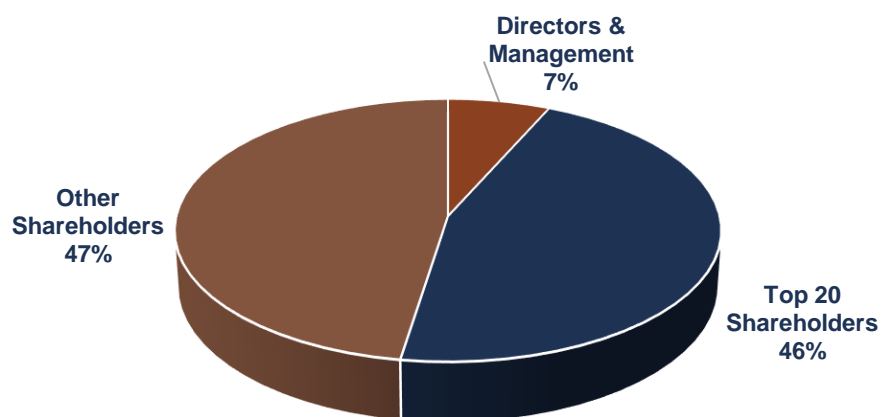
Corporate

- **Capital raise completed** to commence exploration in Q4, 2023



Corporate & Capital Structure

Capital Structure	
Share price (13 Nov 2023)	\$0.008
Shares on issue	1,106,861,306
Market capitalisation (1 Nov 2023)	A\$8.85 million
Listed Options (\$0.016, 9 Sept 2025)	730,872,025
Management & Directors holding	6.7%
Top 20 shareholders	52.5%
Cash balance	A\$1.80 million



Tom Eadie – Non-executive Chair

Geologist & geophysicist with +40yrs experience. Founding chair of Syrah Resources, Copper Strike & Discovery Nickel. Former Executive GM Exploration & Technology, Pasminco Limited. BSc (Hons) Geology/ Geophysics - University of British Columbia; MSC Geophysics – University of Toronto; Grad Diploma in Applied Finance & Investment

Scott Caithness - Managing Director

Geologist with 40yrs experience in mineral exploration in Australia, Asia, Africa and the Pacific. Former roles include Director Exploration for the Vedanta group, co-founder and MD of Indian Pacific Resources (now Akora Resources (ASX: AKO)), Austrade Senior Trade Commissioner to Malaysia & Brunei and GM Exploration, Rio Tinto Exploration. BSc (Applied Geology) – RMIT University; GAICD

Peter Williams – Non-executive Director

Former Managing Director of Alderan Resources and Chief Geophysicist & Manager of Geoscience Technology at WMC Resources. Founding member of Independence Group & founding Director of Ampella Mining. MSc Geophysics Engineering – Colorado School of Mines; Adjunct Professor, Centre for Exploration Targeting – University of Western Australia

Mat O'Hara – Company Secretary & CFO

Has been employed by and acted as an independent director, company secretary and CFO for numerous resource companies in Australia, Africa, Canada and the USA. B.Com. – University of Western Australia; Chartered Accountant (CA ANZ)

For further information please contact:

Scott Caithness, Managing Director

Alderan Resources Limited

M: +61 8 6143 6711

E: scott@alderanresources.com.au

Rod North, Managing Director

Bourse Communications Pty Ltd

M: +61 408 670 706

E: rod@boursecommunications.com.au

For more information please visit:

www.alderanresources.com.au

[ASX: AL8](#)