More Highly Anomalous Rare Earth and Lithium Assays in Brazil Itaipe Project

HIGHLIGHTS

- **Highly anomalous rare earth element and lithium stream sediment assays have been obtained for the Itaipe area**
- **Alderan now has three project areas in Brazil with highly anomalous rare earth element and lithium assays in stream sediment samples over a combined area of more than 30 km^2 - Itaipe, Carai and Itambacuri**
- **Itaipe neodymium and praseodymium rare earth assays grade up to 72ppm and 23ppm respectively – 6x their respective background grades in the area**
- **Itaipe lithium grades range up to 87ppm against a background grade of 5ppm Li**
- **Itaipe grade correlations are very strong between neodymium, praseodymium, samarium, terbium, gadolinium and dysprosium suggesting a favourable geological environment for rare earth elements**
- **Next steps in Q3 2024 at Itaipe, Carai and Itambacuri will include detailed stream sampling of anomaly areas to define the prospects for detailed soil sampling, geological mapping and drilling**
- **Update on Frisco Copper-Gold Project in Utah USA: rehabilitation bond for new drill sites paid to Utah Dept of Oil, Gas & Mines and Stage 1 drill site permits awaited; revised target for drill start is first half August**

Alderan Resources Limited (ASX: AL8) (**Alderan** or the **Company**) is pleased to advise that stream sediment samples collected from its Itaipe lithium project area in Minas Gerais, Brazil contain highly anomalous grades of neodymium (Nd) and praseodymium (Pr) rare earth elements (REE) and lithium (Li). Assays received to date highlight that three of Alderan's seven lithium exploration areas, Carai, Itambacuri and now Itaipe have lithium and rare earth anomalies requiring followup exploration.[1] Assay results for the final three areas are expected this month.

The highest neodymium and praseodymium assays in the Itaipe stream sediment samples grade up to 72.1ppm and 22.8ppm respectively. Neodymium background grades across all samples is less than 10.0ppm and the average grade is 20.8ppm while the background grade for praseodymium is less than 5.0ppm and average 6.3ppm across all samples. There are very strong positive correlations between neodymium and praseodymium, samarium, terbium, gadolinium and dysprosium suggesting a favourable geological environment for rare earth elements.

Lithium is anomalous in a number of drainages in the Itaipe area. The background lithium grade through the area is approximately 5ppm and the average grade for all samples is 9.9ppm. Anomalous samples with grades up to 87.5ppm, 43.6 and 41.3ppm occur in the southwest and central portions of the project area. There are strong

[1] *Refer Alderan ASX Announcements dated 30 May 2024, 3 July 2024*

positive correlations between lithium and caesium, beryllium, rubidium and niobium which also suggests a favourable geological environment for lithium mineralisation.

Managing Director of Alderan, Scott Caithness, commented:

"Alderan now has three project areas in Brazil, Itambacuri, Carai and Itaipe, with highly anomalous lithium and rare earth element assays in stream sediments samples for followup exploration. At Itaipe, the maximum lithium assay is well over ten times the background lithium grade and eight times the average grade for the area. The strong lithium-caesium-beryllium-rubidium-niobium correlation again suggests the right geological environment for lithium mineralisation.

"The anomalous neodymium and praseodymium rare earth element assays potentially highlight a northeast trending zone though the centre of the project area with grades 3-7 times background.

"Alderan's next steps at Itaipe will be infill stream sediment sampling to identify prospect scale lithium and rare earth areas for detailed geological mapping and soil sampling. Assays for the stream sediments collected over the remaining project areas in Minas Gerais are expected over the next month.

"At the Frisco project In Utah, USA, as instructed by the Utah Department of Oil, Gas and Mines, an additional reclamation bond for new drill sites at the New Years copper-gold prospect has been paid however drilling permits are yet to be received for Stage 1 drill sites. The programme is now targeted to commence in the first half of August."

Rare Earth Elements – Background

Rare earth elements (REE) are a set of seventeen metallic elements which include the fifteen lanthanides on the periodic table plus scandium and yttrium.[2] The REEs are typically divided into light rare earths (LREE) with low atomic numbers and heavy rare earths (HREE) with high atomic numbers. The most important REEs based on value are the light rare earths neodymium (Nd) and praseodymium (Pr) and the heavy rare earths dysprosium (Dy) and terbium (Tb).

Rare earth elements are critical in many high-tech consumer products such as mobile telephones, computer hard drives, electric and hybrid vehicles plus flat-screen monitors and televisions. In defence they are key components in electronic displays, guidance systems, lasers and radar and sonar systems. The amount of rare earths used in a product may not be significant in terms of weight, value or volume however the it can be essential for the device to function. For example, magnets made of rare earths often represent only a fraction of the total weight of desktops and laptops however without them there would be no spindle motors and voice coils. The increase in high-tech products and defence technologies throughout the world has led to growing demand for rare earths.

The principal uses of neodymium, praseodymium, dysprosium and terbium are in magnets and lasers used in high tech products and defence.[3] The Shanghai Metals Market (SMM) prices for these metals is in Table 1.[4]

The principal economic sources of rare earths are the minerals bastnasite, monazite, and loparite and the lateritic ion-adsorption clays.[5] Global rare earth element production in 2023 totalled 350,000t with China the dominant global miner producing 240,000t followed by the USA with production of 43,000t and Burma 38,000t (see Table 2). Brazil's 2023 production of REE was 80t however it has a number of emerging hard rock and ion-adsorption clay projects which will see its production increase significantly in coming years.

A key advantage of iron-adsorption clay rare earth element projects is that they are typically at or very close to surface and the metals can be extracted using simple leaching technology resulting in low production costs.

[2] *What are rare earth elements, and why are they important? | American Geosciences Institute*
[3] *Rare-earth element - Wikipedia*
[4] *Daily Rare Earth Metals price, Lme Comex Shfe Price of Rare Earth Metals live | SMM - Metal Market*
[5] *Rare Earths Statistics and Information | U.S. Geological Survey (usgs.gov)*

Table 1: Shanghai Metal Market Prices for Key Rare Earth Element Metals on 22/07/2024[6]

Rare Earth Element Metal	SMM Price (CNY; 22/07/2024)	Exchange Rate (22/07/2024)	US$ Price (22/07/2024)
Neodymium	502,500/t	1 CNY = 0.1375 USD	69,091/t
Praseodymium	452,500/t		62,217/t
Dysprosium	2,200/kg		302/kg
Terbium	6,100/kg		838/kg

Table 2: World Mine Production and Reserves of Rare Earth Elements[7]

	Mine production (tons)		Reserves (tons)
	2022	2023	
Australia*	18,000	18,000	5,700,000
Brazil	80	80	21,000,000
Burma	12,000	38,000	NA
Canada	—	—	830,000
China#	210,000	240,000	44,000,000
Greenland	—	—	1,500,000
India	2,900	2,900	6,900,000
Madagascar	960	960	NA
Malaysia	80	80	NA
Russia	2,600	2,600	10,000,000
South Africa	—	—	790,000
Tanzania	—	—	890,000
Thailand	7,100	7,100	4,500
United States	42,000	43,000	1,800,000
Vietnam	1,200	600	22,000,000
World total (rounded)	**300,000**	**350,000**	**110,000,000**

*For Australia: Joint Ore Reserves Committee-compliant or equivalent Reserves were 3.3 million tons.
#For China: Production quota; does not include undocumented production.

Itaipe Stream Sediment Programme Results

The Itaipe stream sediment samples contain highly anomalous rare earth element and lithium grades. The anomalous lithium occurs in the southwest and central portions of the project area while anomalous neodymium and praseodymium rare earth elements potentially outline a northeast-southwest zone running through the centre of the area.

[6] *Daily Rare Earth Metals price, Lme Comex Shfe Price of Rare Earth Metals live | SMM - Metal Market*
[7] *Rare Earths Statistics and Information | U.S. Geological Survey (usgs.gov)*

Rare earth element analyses were carried out on stream sediment samples in the northern half of the Itaipe project area based on geological observations during the sampling programme. Anomalous neodymium and praseodymium rare earth elements define a northeast-southwest zone running through the centre of the area (see Figure 1). The Neodymium grades range from 2.8ppm to 72.1ppm and average 20.8ppm for all assayed samples. The background grade is less than 10ppm with the maximum grade more than seven times background and three times the average for the sample set. Praseodymium grades range from 0.87ppm to 22.8ppm and average 6.3ppm across all samples. The background level in the area is less than 5ppm. The correlation between neodymium and praseodymium is 1.00 and between neodymium and other rare earths such as samarium, terbium and dysprosium is 1.00, 0.96 and 0.92 respectively (a correlation coefficient value of 1.00 is the maximum possible).

The grade of lithium in the samples ranges from a low of 1.0ppm to a high of 87.5ppm with the average grade across all samples being 9.9ppm lithium (see Figure 2). Background lithium grades are estimated to be approximately 5.0ppm. There are also strong associations between lithium and caesium, beryllium, rubidium and niobium assays with correlation coefficients of 0.91, 0.78, 0.80 and 0.65 respectively. These elements are all key indicators of a favourable geological environment for lithium bearing pegmatites. Strong associations also exist between lithium and magnesium, potassium and zinc which will be further investigated. The anomalous samples are concentrated in the southwestern and central portions of the project area with samples grading greater than 40ppm Li which are more than 8 times background for the area.

Regional one million scale mapping by the Brazil Geological Survey indicates that Itaipe geology consists dominantly of Neoproterozoic S-type granitoids (G3) of the late Aracuai orogen with metasediments and metamafics of the Neoproterozoic Ribeirão da Folha Formation in the south, southwestern and central portions of the licences and the northeast trending Nova Cruziero Granite (G3) lying along the western margin of the licences (see Figure 3). Recent geological interpretations have re-classified the Novo Cruziero Granite as a potential Cambrian age G4 granite. Cambrian G4 granites are considered to be the favourable source rock of lithium bearing pegmatites in Minas Gerais. The anomalous areas lie primarily within the mapped G3 granite and metasediments and metamafics of the Ribeirão da Folha formation within 4km of the contact with the Novo Cruziero Granite.

The stream sediment samples were collected from 165 sites in drainages throughout the 96.8km^2 Itaipe licence area.[8] The sample sites were at approximately one kilometre intervals from the headwaters of drainages, at stream junctions and at the tenement boundary where drainages exited the licence areas.

The samples consist of fine sediment aggregated from multiple collection sites typically within 25 metre intervals along the active stream bed at each site. All samples have GPS co-ordinates, site descriptions, sample logs and geology noted. The samples were submitted to the ALS laboratory in Belo Horizontale for sample preparation and ICP analysis for 53 elements. The samples were prepared with drying and ultra-fine sieving to -75 microns prior to analysis.

Next Steps

The Itaipe project stream sediment assay results follow the release of the results from the Itambacuri, Carai and Catuji areas in Alderan's seven project areas which have undergone sampling for lithium and rare earth mineralisation.[9] Assays for the remaining three areas are expected in July, 2024.

Alderan's next step at Itaipe in Q3, 2024 will entail infill stream sampling and preliminary geological mapping to narrow down the anomalous area to prospect scale. Once a prospect has been delineated, the area will be soil sampled and geologically mapped in detail to define targets for drill testing.

[8] *Refer Alderan ASX Announcements dated 5 December 2023, 23 January 2024*
[9] *Refer Alderan ASX Announcements dated 30 May 2024, 3 July 2024*

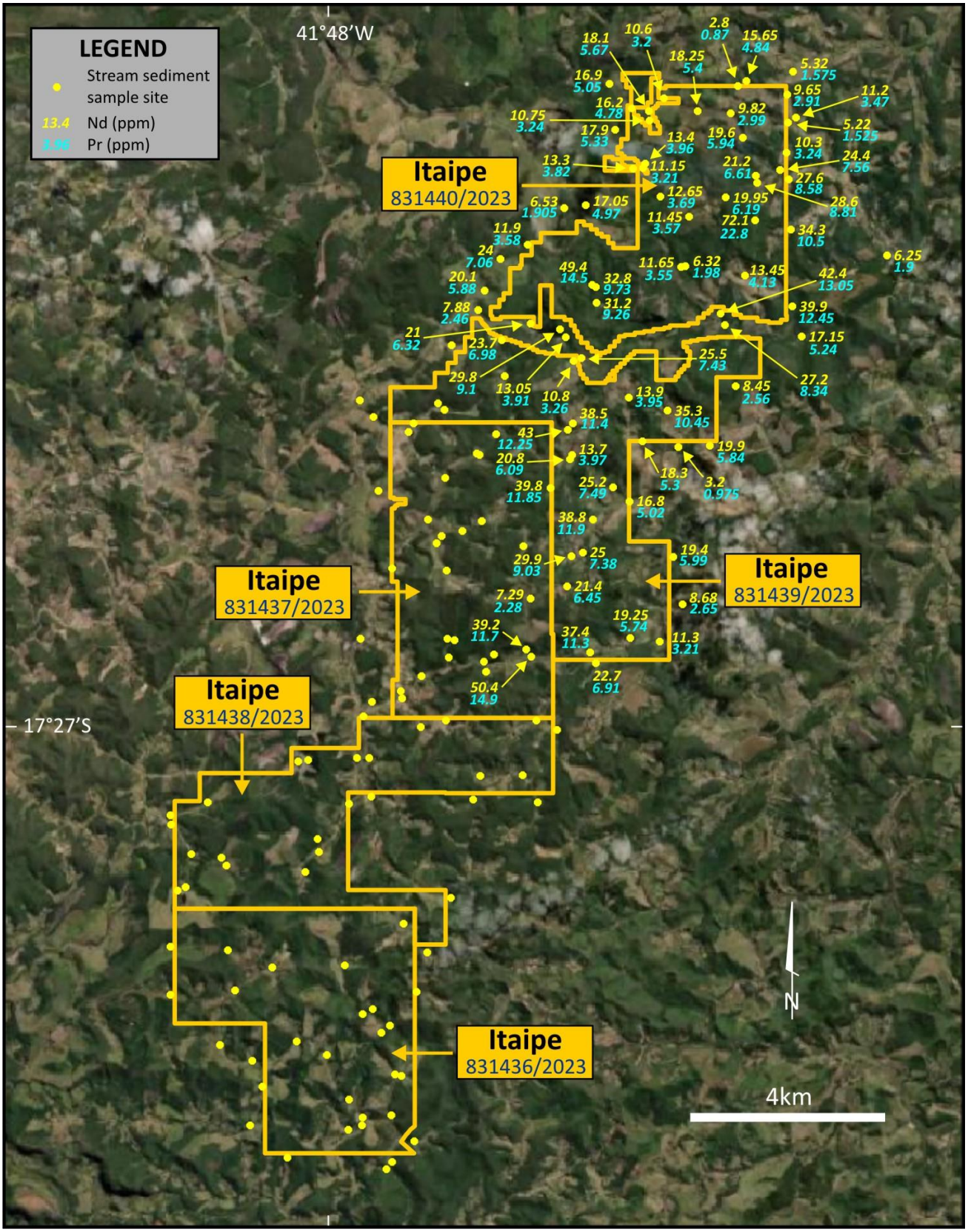

Figure 1: *Itaipe neodymium and praseodymium rare earth element assays in stream sediment samples. Anomalous assays up to 72.1ppm Nd and 22.8ppm Pr occur in the central east portion of licence 831440/2023. An anomalous REE zone appears to trend from this sample southwest to the southeast margin of licence 831437/2023. The extent of REE sample analysis will be extended to cover the southern portion of the project.*

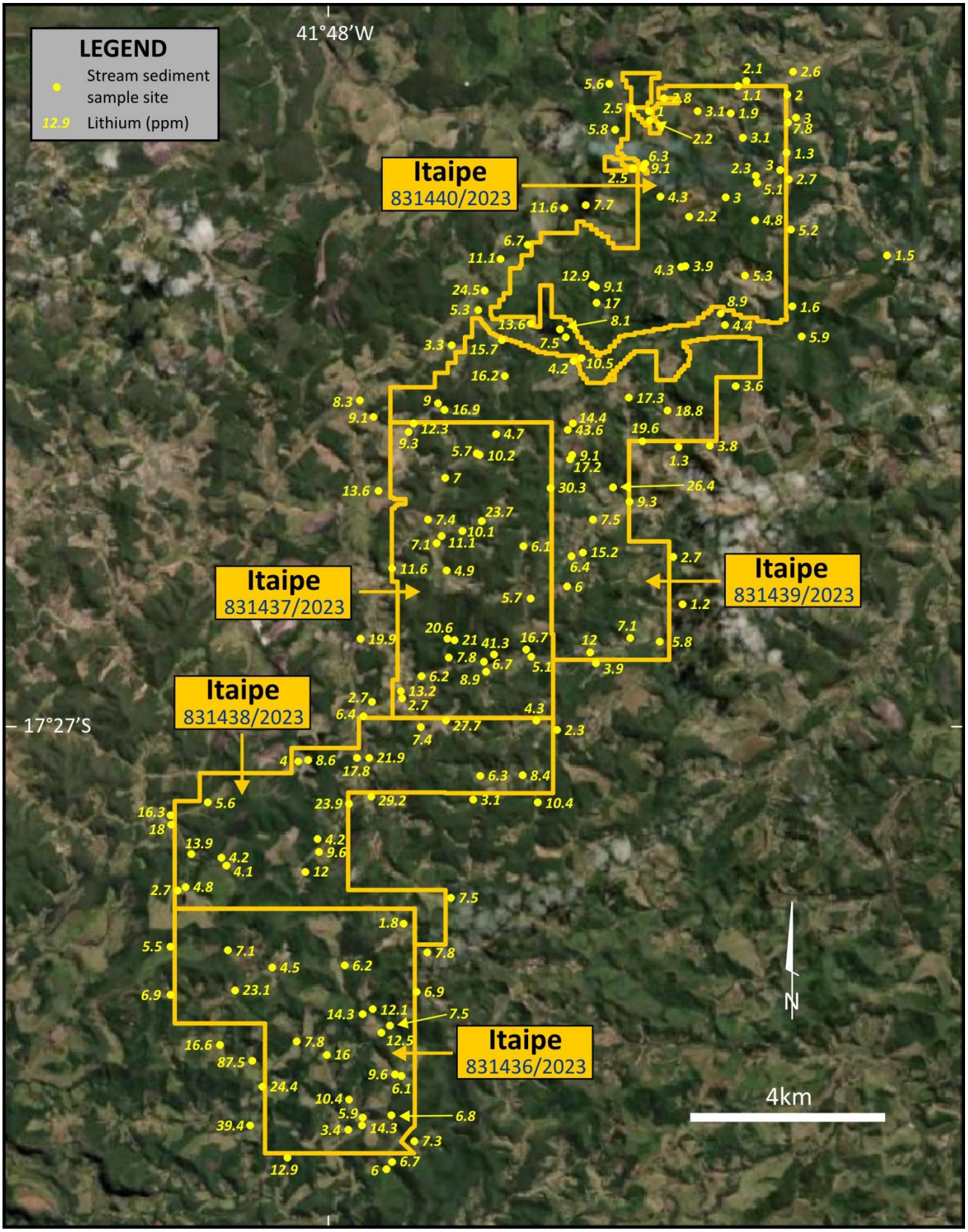

Figure 2: *Itaipe stream sediment sample lithium assays highlighting anomalous grades up to 87.5ppm Li in streams draining the southwestern portion of licence 831436/2023. Assays grading 43.6ppm Li and 41.3ppm Li, more than 8 times background, occur in licences 831437/2023 and 831439/2023.*

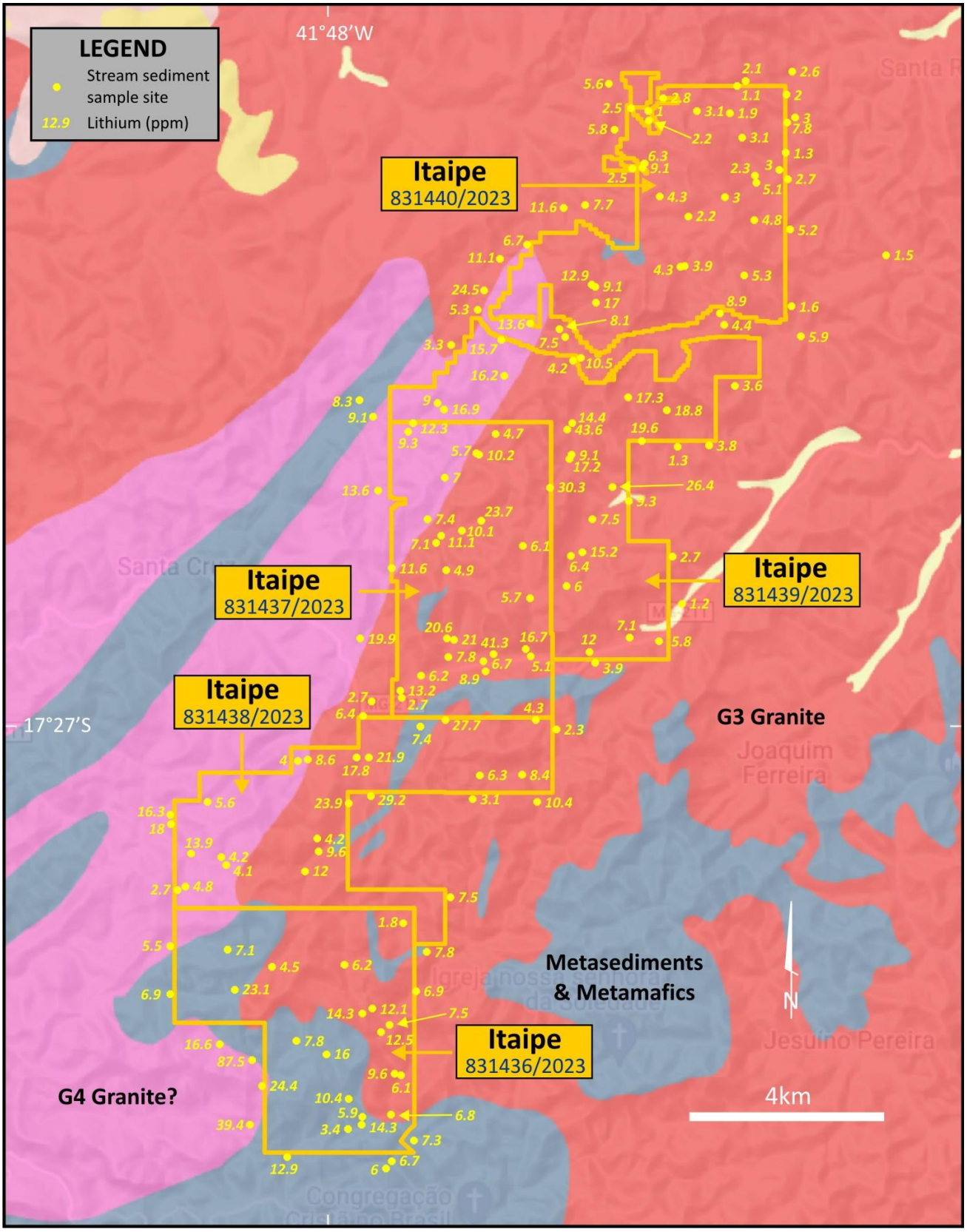

Figure 3: *Itaipe geology and stream sediment sample lithium assays.*

Frisco Copper-Gold Project Update, Utah, USA

Alderan is awaiting permits to drill the New Years copper gold prospect at its Frisco project in Utah, USA.[10] All documentation for permitting the drill sites has been with the Utah Department of Oil, Gas and Mining (DOGM) since late May and as instructed by DOGM, Alderan has paid an additional bond amount for new drill site reclamation - a standard procedure when permitting drill sites. DOGM has also advised that an archaeological inspection is required for new drill sites in the programme hence Alderan is seeking approval for Stage 1 sites which have been drilled in the past while the inspections of the new sites takes place. The revised target to commence the programme is now the first half of August.

New Years has historical high grade copper intersections including **13.7m @ 2.32% Cu** within **19.8m @ 1.67% Cu** from 22.9m downhole (NY-6), **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** from surface (NY-2) and in hole NYM-1 which lies midway between New Years and the historically mined Cactus deposit, **10.7m @ 1.60% Cu** and **4.6m @ 1.3% Cu** within **42.7m @ 0.80% Cu** which was the entire length of the hole. The historical NYM-1 log indicates that the mineralisation was all oxide.

There has been no drilling at New Years since the early 1960s despite it being only 400m along the same structural trend as the Cactus and Comet deposits. Historical production at Cactus is reported at **1.27Mt at a grade of 2.07% Cu, 0.33g/t Au** and neighbouring Comet was small +1g/t gold mine with a copper credit. There are multiple post-mining high grade drill intersections into the Cactus and Comet deposits which suggest that a significant volume of copper-gold mineralisation remains in-ground and that the deposit remains open at depth.

Alderan grid soil sampling over the New Years magnetic anomaly has confirmed a copper soil anomaly with pXRF grades up to 0.33% Cu and has highlighted at least three additional copper anomalies associated with magnetic low zones similar to the lows that occur at Cactus and Comet.[11]

END

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

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[10] Refer Alderan ASX Announcements dated 22 February 2024, 13 March 2024, 29 April 2024
[11] Refer Alderan ASX Announcements dated 25 June 2024, 8 July 2024

About Alderan Resources Limited

Alderan Resources specialises in critical and precious metal exploration.[12] The Company has eight (8) lithium projects in Minas Gerais and Bahia, Brazil (AL8 ASX announcements dated 20th October, 2023 and 18th June 2024) plus copper and gold 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 Figures 4-6). 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 exploration results 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.

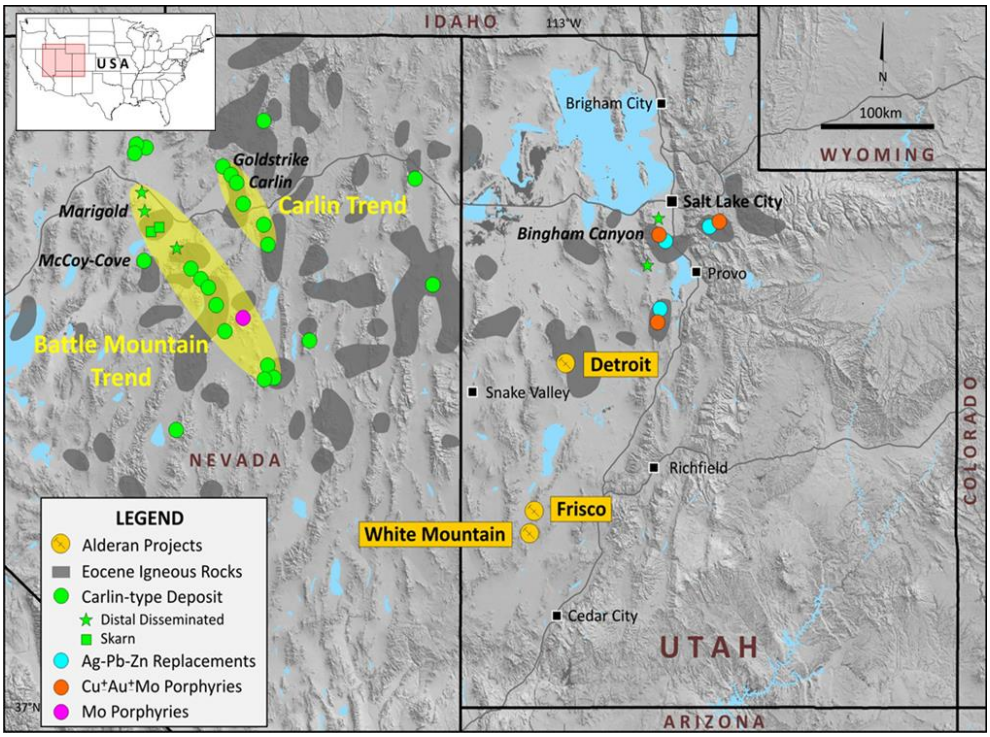

***Figure 4**: Alderan Resources project locations in Utah, USA.*

[12] https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals

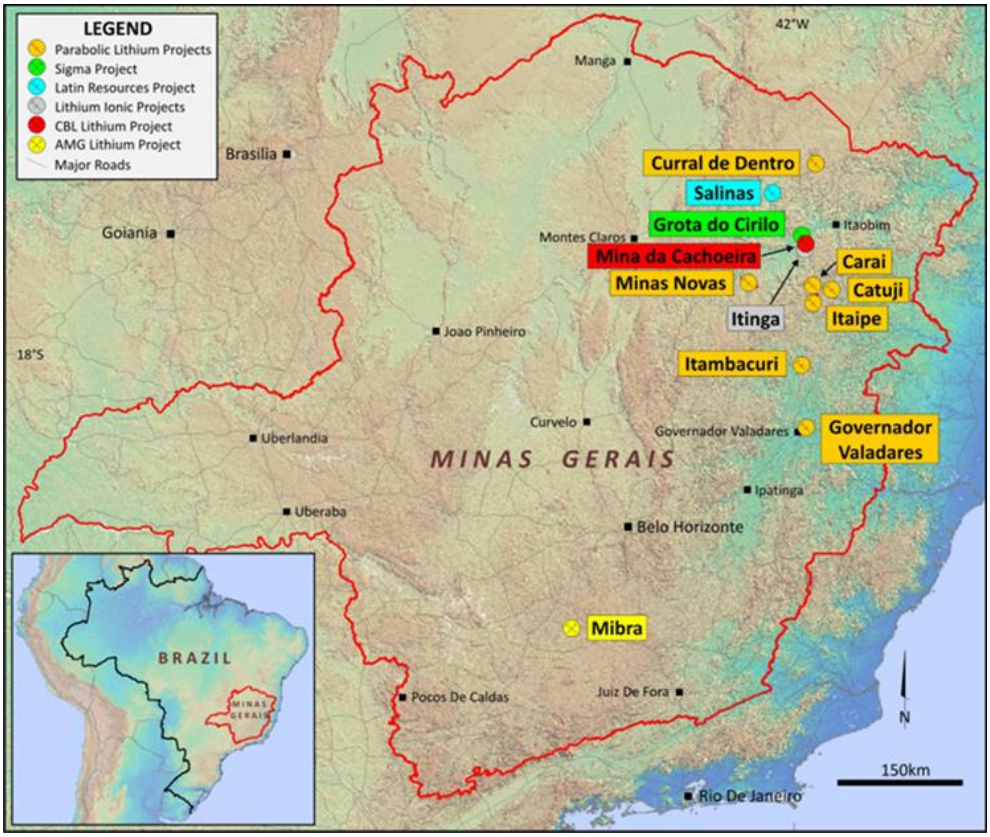

Figure 5: *Alderan Resources project locations in Minas Gerais, Brazil.*

Figure 6: *Alderan Resources Salitre Lithium project locations in Bahia, Brazil.*

Appendix 1: JORC Code, 2012 Edition – Table 1 Report in relation to stream sediment sampling at the Itaipe project, Minas Gerais, Brazil.

Section 1 - Sampling Techniques and Data

(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	***JORC Code (2012) explanation***	**Details of the Reported Project**
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.*	Stream sediment samples sieved to -75 microns and analysed by ICP-MS for 53 elements is an effective first pass technique to identify areas with anomalous metal content for followup exploration. The samples were collected from sites at approximately one kilometre intervals along drainages to provide full coverage of entire licence area. The approximately 1kg samples were collected from 2-3 locations in the stream beds at each site over a 25m interval to ensure that they are representative of the sediment in the stream. Sample sites are described and photographed, their co-ordinates recorded and geology noted. The samples were sent to the ALS laboratory in Belo Horizontale for analysis.
	Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.	Stream sediment samples were routinely collected from 2-3 locations over a 25m interval at each sample site to ensure they were representative of the sediment in the streams.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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	The regional geology of the Itaipe area has over recent times been re-interpreted with some authors re-classifying the Novo Cruziero Granite from Neoproterozoic G3 to Cambrian age G4. G4 granites are regarded as the key sources of lithium bearing pegmatites in Minas Gerais. The strong Li-Cs-Be-Rb and Nb-Pr-Sm-Tb-Dy associations in the stream assays suggests that the samples are from a favourable geological environments for lithium and rare earth mineralisation.

	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.	
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) 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.).*	Not applicable.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Not applicable.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
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.*	Not applicable.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	

<table>
<tr><td></td><td>The total length and percentage of the relevant intersections logged.</td><td></td></tr>
<tr><td rowspan="6">Sub-sampling techniques and sample preparation</td><td>If core, whether cut or sawn and whether quarter, half or all core taken</td><td>Not applicable</td></tr>
<tr><td>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</td><td>Not applicable</td></tr>
<tr><td>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</td><td>The samples were sent to the ALS laboratory in Belo Horizontale for sample preparation as per the table below.
<table><tr><th colspan="2">SAMPLE PREPARATION</th></tr><tr><th>ALS CODE</th><th>DESCRIPTION</th></tr><tr><td>WEI-21</td><td>Received Sample Weight</td></tr><tr><td>LOG-22</td><td>Sample login - Rcd w/o BarCode</td></tr><tr><td>SCR-41f</td><td>Screen to -75um, save both</td></tr></table></td></tr>
<tr><td>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</td><td>ALS quality control procedures for the industry standard sample preparation have been adopted for this early stage of sampling.</td></tr>
<tr><td>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.</td><td>The stream sediment samples weigh approximately 1kg and are collected from ultra-fine material at 2-3 separate locations in the stream bed at each sample site. These separate locations may be 25 metres apart. This ensures that the samples are representative of the sediment within the stream at that location. All sample locations are recorded using a GPS hence locations can be revisited and resampled if required.</td></tr>
<tr><td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Sample sizes for ultra-fine stream sediment samples is approximately 1kg</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td><td>All samples have been submitted to the ALS laboratory in Belo Horizontale, the capital of Minas Gerais state in Brazil for analysis using ICP-MS (ME-MS41L method of ALS) which is used for low detection level of 53 elements. Samples were also analysed for rare earth elements using the REE add on MS41L-REE.</td></tr>
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		ANALYTICAL PROCEDURES ALS CODE — DESCRIPTION — INSTRUMENT ME-MS41L — Super Trace Lowest DL AR by ICP-MS MS41L-REE — REE Add-on to ME-MS41L
	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.	Not Applicable
	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.	No standards duplicates or blanks accompany these initial samples as they will only be used to indicate anomalous lithium and LCT pegmatite pathfinder element contents which will be followed up with more detailed sampling. Checks will be carried out on the analytical values of certified reference material (CRM's) used by the laboratory against the CRM specification sheets to assess whether analyses are within acceptable limits.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Not applicable.
	The use of twinned holes.	Not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All sample and sample sites are located, logged and photographed and this data is stored electronically on the Company's server which is routinely backed up.
	Discuss any adjustment to assay data.	Not applicable
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	All sample sites are located using handheld Garmin GPS Model 62S or 65 multiband in WGS84 and UTM coordinates. Reported accuracy of the instrument is approximately +/- 3m in horizontal dimensions.
	Specification of the grid system used.	All data are recorded in WGS84 and UTM coordinates.

	Quality and adequacy of topographic control.	The elevation data recorded by the Garmin GPS models used in the sampling programme is considered adequate for this initial phase of sampling.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Stream sediment samples at Itaipe were collected at approximately 1km intervals from the headwaters of drainages, at major drainage intersections and along the licences boundaries. This announcement also includes a summary of the compilation and review of historical exploration data on the Frisco project area which was released in Alderan's ASX announcements on 22 February 2024, 13 March 2024 and 29 April 2024 plus the results of a recent soil sampling programme released on 25 June 2024 and 8 July 2024. No new data on Frisco is reported in this announcement.
	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.	Not applicable.
	Whether sample compositing has been applied.	No applicable.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	No applicable.
	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.	Not applicable.
Sample security	*The measures taken to ensure sample security*	Samples were submitted to the ALS lab by Company personnel and only authorised personnel have attended the samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Not Applicable

Section 2 – Reporting of Exploration Results
(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Alderan Resources Limited announced shareholder approval on 13 October 2023 to acquire 100% of the issued capital in Parabolic Lithium Pty Ltd which has the right to acquire a 100% interest in seven lithium exploration projects in the mineral resource rich state of Minas Gerais, Brazil. The legal holder of the projects is Mars Mines Brasil Ltda and pursuant to the terms of the acquisition agreement, Alderan and Parabolic have agreed that Mars Mines Ltd, a shareholder of Parabolic and the parent company of Mars Mines Brasil Ltda, will procure the transfer of the Projects by Mars Mines Brasil Ltda to Alderan. The projects stream sediment and rock sampled cover 472km^2 and consist of 24 granted exploration licences in seven (7) project areas, Curral de Dentro, Minas Novas, Carai, Catuji, Itaipe, Itambacuri and Governador Valadares. The Projects are all located in and immediately to the south of the area known as 'Lithium Valley' in the Eastern Lithium Belt of Eastern Brazil. The Projects have not undergone historical exploration for lithium. This announcement covers the assay results for stream sediments samples collected over the Itaipe project area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The Itaipe licences are granted and the process of transferring it to Alderan is underway.
Exploration done by other parties (2.2)	*Acknowledgment and appraisal of exploration by other parties.*	Alderan is not aware of any historical exploration for lithium within the project area.
Geology	*Deposit type, geological setting, and style of mineralisation.*	Regional 1:1 million scale geological mapping by the Geological Survey of Brazil indicates that the lithium deposits of the East Brazil Lithium Belt lie primarily within the Neoproterozic Aracuai Fold Belt. This belt consists largely of metamorphosed sediments and volcanics which have been intruded by younger Neoproterozoic I-type granites and Neoproterozoic to Cambrian age peraluminous S-type granites commonly referred to as G1 to G5. The lithium deposits throughout the belt are typically associated with pegmatite intrusions in close proximity to G4 granites S-type granites. Mineral occurrences associated with the deposits include spodumene, beryl, niobium, tantalum, tin and tourmaline, many of which have been identified by the Geological Survey of Brazil. The geology of the Itaipe project consists dominantly of Neoproterozoic S-type granitoids (G3) of the late Aracuai orogen with metasediments and metamafics of the Neoproterozoic Ribeirão da Folha Formation. The G3 Novo Cruziero granite

		which lies on the western margin of the project area has recently been re-classified as a potential G4 in some academic studies.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*	Not applicable
	Easting and Northing of the drill hole collar. Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.	
	Dip and azimuth of the hole.	
	Down hole length and interception depth and *hole length.*	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*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.*	Not applicable.

	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	No applicable
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No applicable
	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').	No applicable
Diagrams	*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.*	Maps are presented in the text of this ASX release.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	This announcement covers all available data on the Itaipe stream sediment samples

Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Not applicable
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	1. Detailed stream sediment sampling in the anomalous catchments at Itaipe with preliminary geological mapping to delineate prospects 2. Prospect soil and rock sampling, detailed geological mapping, geophysical surveying 3. Drill testing 4. Assessing the assay results for the three remaining lithium project areas in Minas Gerais
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Maps showing anomalous stream sediment results are presented in the text of this ASX release.