



# PATAGONIA LITHIUM

ASX:PL3

Q2 2024 Investor  
Presentation

# Disclaimer



## **NATURE OF THIS DOCUMENT**

This presentation has been prepared by Patagonia Lithium Limited (ACN 654 004 403) (Company). The information is based on publicly available information, internally developed data and other sources. By receiving this presentation, you acknowledge and represent to the Company that you have read, understood and accepted the terms of this disclaimer. It is the responsibility of all recipients of this presentation to obtain all necessary approvals to receive this presentation and receipt of this presentation will be taken by the Company to constitute a representation and warranty that all relevant approvals have been obtained. This presentation is a visual aid and is not intended to be read as a stand alone document. The material contains selected and abbreviated summary information about the Company and its subsidiaries and their activities current as at the date of this presentation. The material is of general background and does not purport to be complete. The Company is not responsible for providing updated information and assumes no responsibility to do so. The information in this presentation remains subject to change without notice.

## **NOT AN OFFER**

This presentation is for information purposes only and does not purport to be all inclusive or to contain all information about the Company or any of the assets, current or future, of the Company. This presentation does not comprise a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with ASIC) or any other law. This presentation also does not constitute or form part of any invitation, offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities in any jurisdiction nor shall they or any part of them form the basis of or be relied upon in connection therewith or act as any inducement to enter into any contract or commitment with respect to securities. This presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any securities in the United States. This presentation and its contents must not be distributed, transmitted or viewed by any person in the United States or any jurisdiction where the distribution, transmission or viewing of this document would be unlawful under the securities or other laws of that or any other jurisdiction.

## **NOT INVESTMENT ADVICE**

To the maximum extent permitted by law, the information contained in this presentation is given without any liability whatsoever being accepted by the Company or any of its related bodies corporate or their respective directors, officers, partners, employees, advisors and agents. This presentation is not investment or financial product advice (nor tax, accounting or legal advice) and its contents are not intended to be used for the basis of making an investment decision. No representation or warranty, express or implied, is made as to the accuracy, completeness or thoroughness of the information, whether as to the past or future. Recipients of this presentation should carefully consider whether the company is an appropriate investment for them in light of their personal circumstances, including their financial and taxation position. This presentation does not take into account the individual investment objectives, financial situation and particular needs of each recipient of this presentation. Therefore recipients of this presentation may wish to seek independent financial and taxation advice before making any decision in respect of this presentation. Neither the Company nor any of its related bodies corporate is licensed to provide financial product advice in respect of the Company's securities or any other financial products.

## **FORWARD LOOKING STATEMENTS**

Statements and material contained in this presentation, particularly those regarding possible or assumed future performance, production levels or rates, commodity prices, resources or potential growth of the Company, industry growth or other trend projects are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties and are based on the assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management of the Company believes to be relevant. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Forward-looking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of commodities, the actual results of current exploration, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

## **DISCLAIMER**

No representation or warranty, express or implied, is made by the Company that the material contained in this presentation will be achieved or prove to be correct. Except for statutory liability which cannot be excluded, each of the Company, its directors, officers, employees, advisers and agents expressly disclaims any responsibility for the accuracy, fairness, sufficiency or completeness of the material contained in this presentation, or any opinions or beliefs contained in this presentation, and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error or omission there from. To the maximum extent permitted by the law, the Company disclaims any obligation to update or keep current the information contained in this presentation or to correct any inaccuracy or omission which may become apparent, or to furnish any person with any further information. Any opinions expressed in the presentation are subject to change without notice.

## **JORC DISCLOSURE**

This presentation includes exploration results as cross referenced in the presentation. Patagonia Lithium confirms that the Company is not aware of any new information or data that materially affects the cross referenced results.

## **MONETARY VALUES**

Unless otherwise stated, all dollar values are in Australian Dollars (A\$).

# Board of Directors



**Phil Thomas**  
Executive Chairman

- Phillip has more than 20 years' experience working in Argentina on Pocitos, Guayatayoc, Salinas Grandes, Pozuelos, Rincon, Incahuasi and now Pocitos and Cilon salars.
- He is COO of Recharge Resources, and past CEO of A.I.S. Resources Ltd and chairman and CEO of Admiralty Resources NL (ASX:ADY) where he and his team explored and developed a pilot plant at the Rincon Salar in 2003-2008. He is both QP for NI43-101 and CP for JORC in lithium brines. He is Non-Executive Chairman of copper producer, Austral Resources Australia Ltd (ASX:AR1).
- Phillip is President of Panopus Plc a Singapore based resources and banking consultancy that specialises in valuations and appraisals of mining projects, exploration programs for lithium, advisory, capital raising, and banking feasibility studies.



**Rick Athon**  
Non-Executive Director

- Rick Anthon is an independent Non-executive Director who joined the Board of Patagonia Lithium Limited from 19 February 2024. Rick has a BA LLB from Australian National University. He is a lawyer with over 30 years' experience in both corporate and commercial law practicing exclusively in the resource sector. Rick has worked both as a director and adviser to numerous resource companies and has extensive skills in project planning, acquisition and development, capital raising and corporate governance. Rick's most recent role was as head of Corporate Development for 8 years for Allkem Limited (formerly Orocobre Limited) where his responsibilities included capital raisings, the strategic partnership with Toyota Tsusho Corporation, Orocobre's 2021 merger with Galaxy Lithium and ultimately Allkem's recently completed \$10Billion merger with Livent Corporation to form Arcadium Lithium.



**Feiyu (Sam) Qi**  
Non-Executive Director

- Mr Feiyu (Sam) Qi has substantial experience in the lithium product and related battery and EV markets. He represents one of our largest shareholders Fuyang Mingjin New Energy Development Co., Ltd (Mingjin) which holds 17.08% of the Company's shares on issue.
- Sam graduated from Shanghai University with a major in project management and has more than 20 years' experience providing professional services. He is CEO of Mingjin and a non-executive director of Octava Minerals Limited (ASX:OCT), a lithium, gold and PGM explorer.
- Through his work at Mingjin he has developed strong relationships with several world class battery manufacturers cooperating to provide lithium carbonate and battery manufacturing equipment



## Formentera Project

- The Formentera Project is the Company's flagship project.
- 1,752 hectares (17.52 km<sup>2</sup>) and located in an area dominated by clastic and saline sedimentation.
- It is prospective for lithium and boron.
- Lilac Corp is drilling 6km away
- Nearby tenements include Allkem (ASX:AKE), Lake Resources (ASX:LKE) & Lithium Americas (NYSE:LAC)

## Cilon Project

- The Cilon Project is adjacent to the Formentera Project.
- 199 hectares (1.99 km<sup>2</sup>) and located in an area dominated by saline sedimentation.
- Historically operated as a Ulexite borate mine.
- Jujuy Province, northwest of the Argentina, being prospective for Borates and lithium.
- Close to town of Jama (12km away).

## Tomas III Project

- 571 hectares (5.71 km<sup>2</sup>) and is located in an area dominated by volcanics and sits about 300-600m above the surface of the salar.
- **Drill permit issued May 2023**
- Close to Power Minerals (ASX:PNN) – others on salar include Ganfeng (1772.HK), REMSA, Allkem (ASX:AKE).
- Tolar Grande town is 45km away.

## 4 Brazil projects REE Niobium Pegmatites

- 41,000 hectares over three states Minas Gerias, Gaois, Mato Grosso.
- **19/25 permits issued**
- Close to CMOC Niobium mine and Cataloa I REE carbonatite
- Significant satellite geophysics, completed, field trips for sampling in road cuttings and channels

Photo of Formentera (Paso Salar)



# Highlights – Exceptional Results



Picture of the drill hole 3 location and site geologists looking north west with salt on surface from evaporation

- **Geological team completed sampling in May 2023 at Formentera Salar with 1,122ppm highest Lithium assay\***
- MT geophysics shows **substantial conductive layers at 0.3-0.9  $\Omega$ .m**
- Drill hole one highest Li was 591ppm
- Drill hole two Highest Li was 582 ppm
- Porosity range for Well one 27-47% total porosity
- 48hr pumping test highly successful with only 9m cone of depression, 72,000 litres pumped
- Ekosolve system recovered 92.1% Lithium, 1000t plant being built USA
- Need 4 holes to do indicated resource estimate
- Project has excellent infrastructure – located 2km from sealed highway
- Staff available in Jama and Susques
- Strong relationship with Mr Vidal, the community leader

See ASX announcements: "Sampling at Formentera Assays 1,122ppm Lithium" on 2 June 2023, "92% Lithium Extraction from Formentera Brines" on 12 September 2023, "Outstanding Assay Results from First Drilling in Argentina" on 3 May 2024 and "Exceptional Results Achieved from Well Two at Formentera" on 18 June 2024.

# Project Milestones

## Formentera/Cilon Project



- Jan 2023 – drill permits issued for Formentera
- Mar 2024 – drilling commenced, packer tests, brine assays, 48 hour pump tests, plan for 10 wells, 4 needed for resource
- April 2024 – First well completed
- May 2024 – Second well completed
- July 2024 – Third well to commence
- July 2024 – Cilon drill permit issued
- August 2024 – Fourth well to commence
- October 2024 – JORC resource estimate draft
- November 2024 – JORC resource estimate finalised
- November 2024 - Brine recharge tests completed, report submitted
- December 2024 – production plan EIA submitted

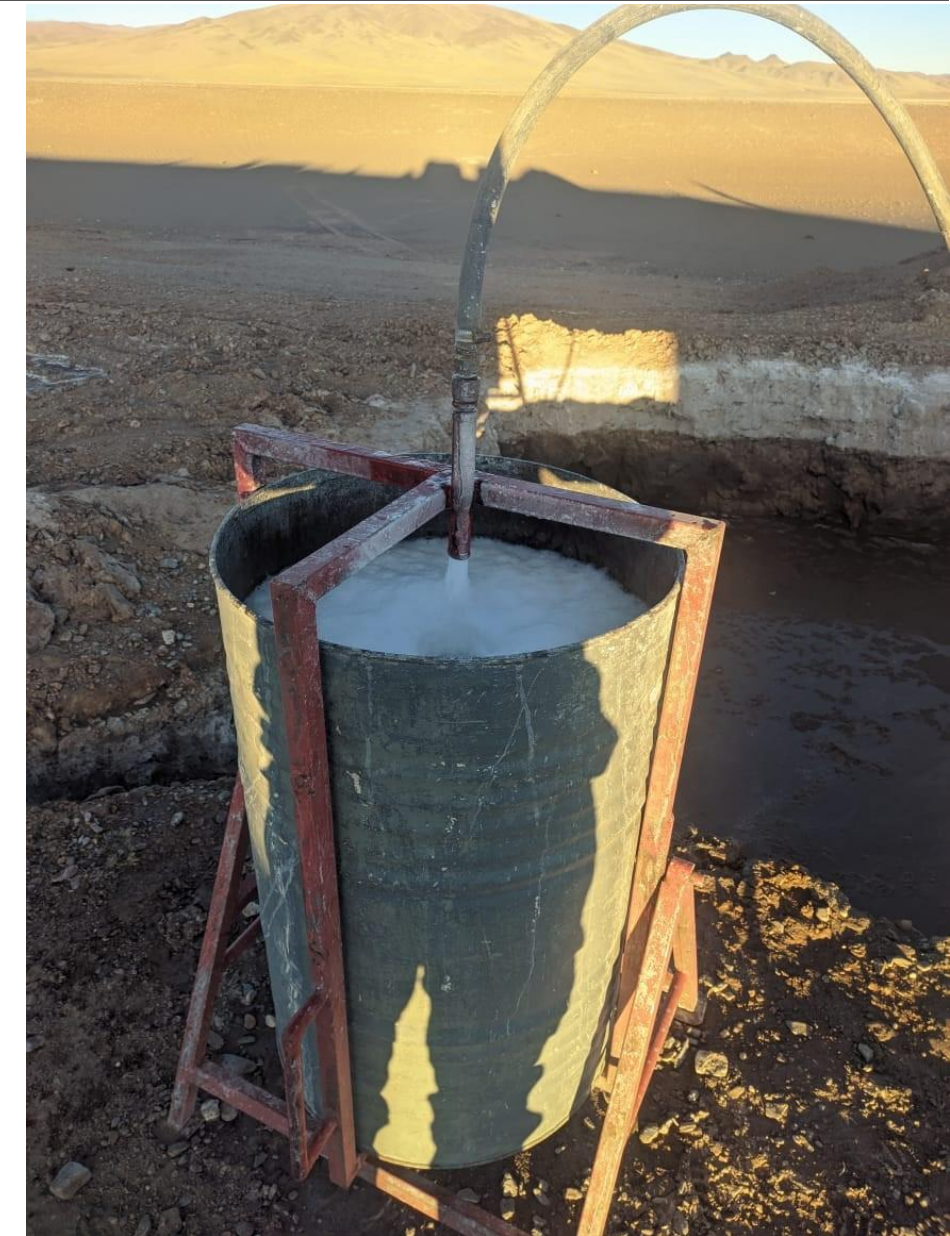


Photo of Formentera (Paso Salar)

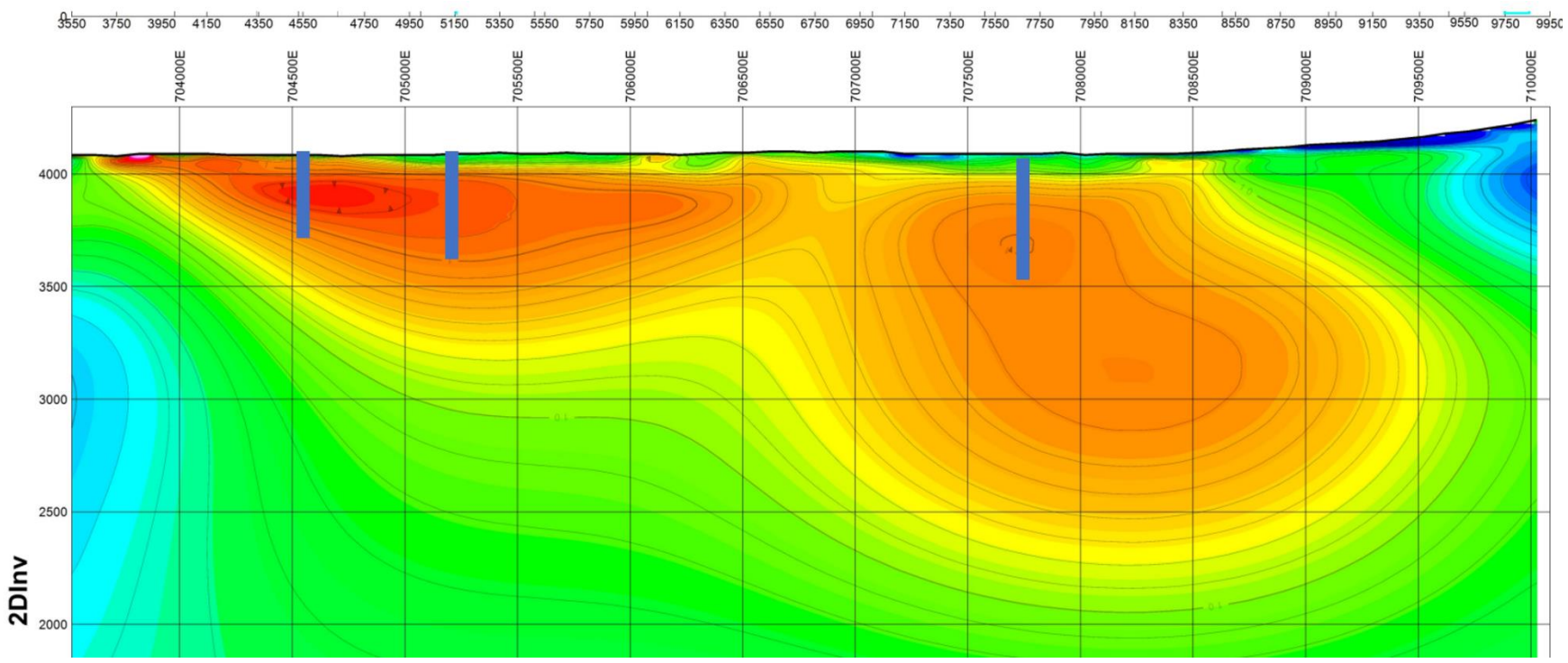
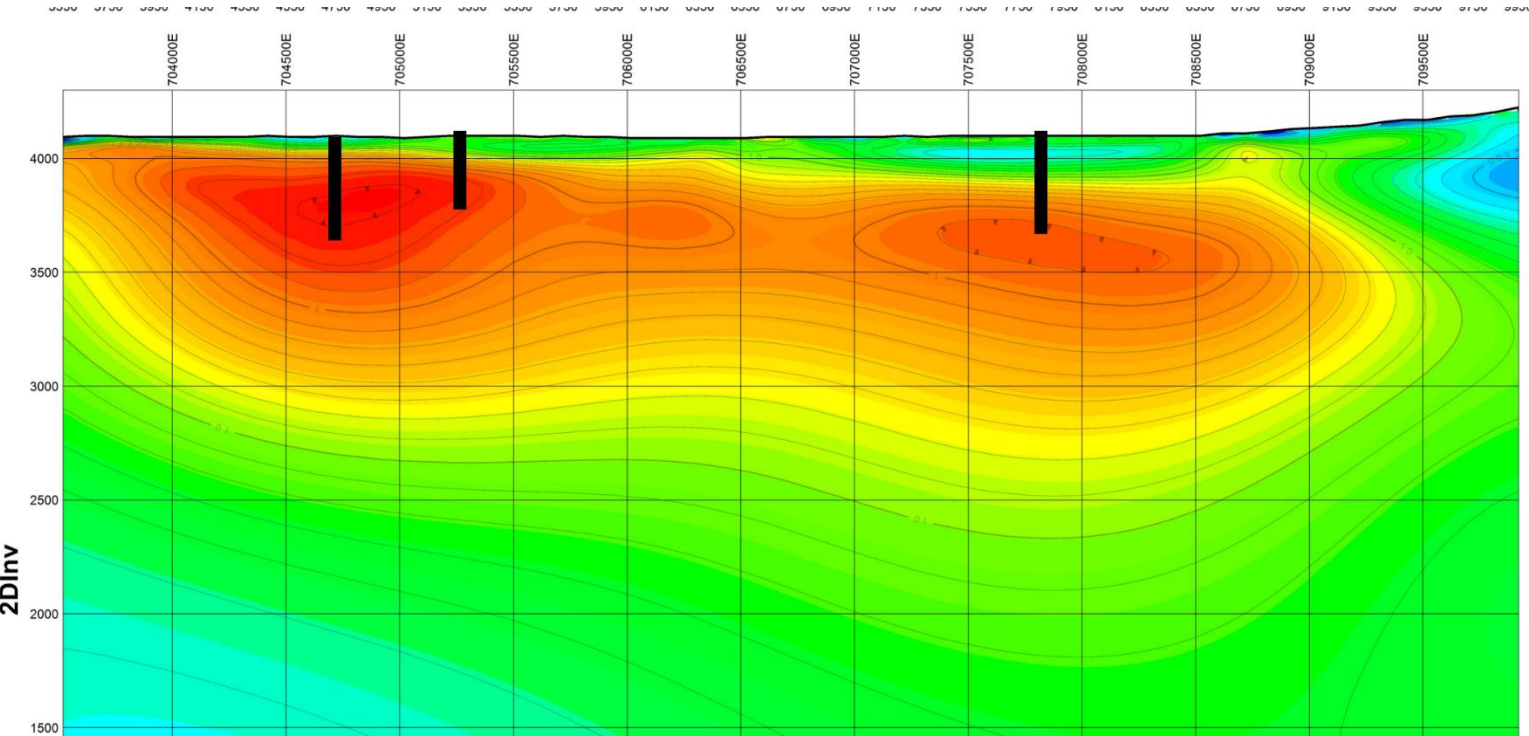




Alex Stewart Assay - Zone	Sample No	from	to	Interval	SG	Lithium	Magnesium	Mg:Li ratio	Boron	Potassium	Conductivity	pH	Packer Flow rate
		M	M	M	g/ML	ppm	ppm		ppm	ppm	uS/cm		L/Min
upper aquifer	1	75.79	80.5	4.71	1.002	1	9	9.00	11	32	1.95	7.1	9.52
sands	2	102.79	107.5	4.71	1.001	<1	11	0.00	4	29	1.71	7.4	12.50
	3	141.79	145.1	3.31	1.055	132	739	5.60	276	1522	92.21	7.1	8.33
	4	157.29	161.5	4.21	1.05	121	653	5.40	260	1463	84.47	6.9	11.11
	5	177.29	182	4.71	1.096	254	897	3.53	342	2478	150.29	6.9	10.53
	6	222.79	227.5	4.71	1.096	256	902	3.52	345	2486	151.48	7	2.08
	7	239.5	245.5	6	1.113	327	991	3.03	354	2811	166.59	6.9	8.33
lower aquifer gravels, sands	8	260.5	269.5	9	1.161	474	979	2.07	447	3761	205.69	6.8	7.14
	9	281.5	296.5	15	1.174	506	969	1.92	471	3980	210.33	6.8	6.90
	10	302.5	314.5	12	1.182	510	1012	1.98	503	4250	214.01	6.7	8.00
	11	302.5	335.5	33	1.189	580	937	1.62	501	4008	217.89	6.7	8.00
		<b>EOH</b>	<b>347.00</b>										

SGS Assay - Zone	Sample No	from	to	Interval	SG	Lithium	Magnesium	Mg:Li ratio	Boron	Potassium	Conductivity	pH	Total Dissolved Solids	Packer Flow rate
		M	M	M	g/ML	ppm	ppm		ppm	ppm	uS/cm		ppm	L/Min
upper aquifer	1	76	81	4.71										9.52
sands	2	103	108	4.71										12.50
	3	142	145	3.31										8.33
	4	157	162	4.21										11.11
	5	177	182	4.71										10.53
	6	223	228	4.71										2.08
	QA/QC Standard	Li 400				1.2134	415.00	1425.00	2.49	459.00	3024	291400.0	1.00	
lower aquifer gravels, sands	9.00	281.50	296.50	15.00	1.1892	534.00	921.00	1.63	493.00	4143	216800.0	6.8	283650	7.14
	10.00	302.50	314.50	12.00	1.1740	572.00	970.00	1.70	507	4570.00	222700.0	6.7	265300	6.90
	Dup 10	302.50	314.50	12.00	1.1892	564.00	959.00	1.70	508	4587	215700.0	6.7	283800	8.00
	11.00	302.50	335.50	33.00	1.1892	582.00	985.00	1.69	503	4474	215700.0	6.7	283800	8.00
		<b>EOH</b>	<b>347.00</b>		Avg	<b>558</b>								

# Geophysics – outstanding low resistivity provides bullseye drill targets



500m depth

1,122 ppm  
Lithium  
sample

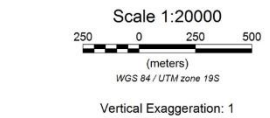
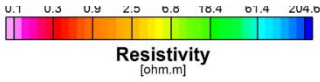
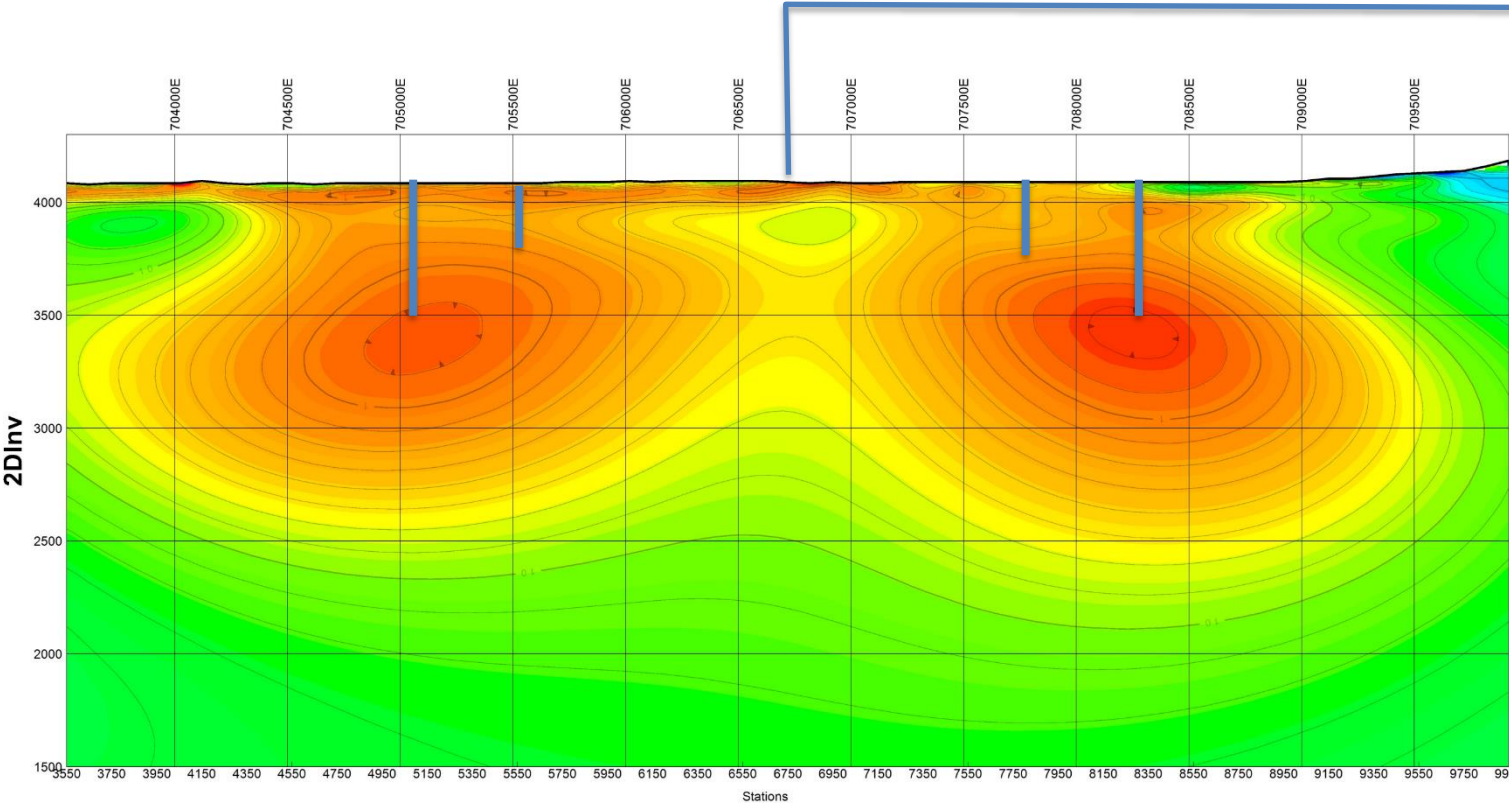


**CORE LABORATORIES AUSTRALIA PTY LTD**

Company : Patagonia Lithium  
Well: JAM2 4-01

**PRELIMINARY POROSITY, PERMEABILITY, EFFECTIVE POROSITY and GRAIN DENSITY**

SAMPLE NUMBER	CLIENT SAMPLE ID	SAMPLE		PERMEABILITY		TOTAL POROSITY (%)	EFFECTIVE POROSITY (%)	GRAIN DENSITY (g/cc)
		TOP DEPTH (m)	BOTTOM DEPTH (m)	CONFINING STRESS (800psi)				
				Kinf (md)	Kair (md)			
1	-	44.35	44.50	266	283	41.9	40.8	2.359
2	-	64.34	64.48	3.30	4.61	35.5	9.6	2.727
3	-	107.28	107.45	128	145	42.9	41.7	2.410
4	-	123.66	123.84	41.8	48.3	12.7	9.3	2.588
5	-	171.12	171.29	10.9	15.2	34.7	24.0	2.553
6	-	219.37	219.55	67.0	75.1	33.9	33.2	2.483
7	-	236.04	236.23	5170	5200	47.3	37.3	2.445
8	-	281.86	282.02	304	334	28.8	23.7	2.647
9	-	357.30	357.50	546	583	25.3	23.6	2.704



PATAGONIA LITHIUM FORMENTERA MAGNETO-TELLURIC SURVEY LINE L7410300

Effective porosity range 9.3%-41.7%

The geophysics show two hot spot zones with a resistivity below 0.5 Ohm-m on each surveyed line where lithium brines are likely to concentrate

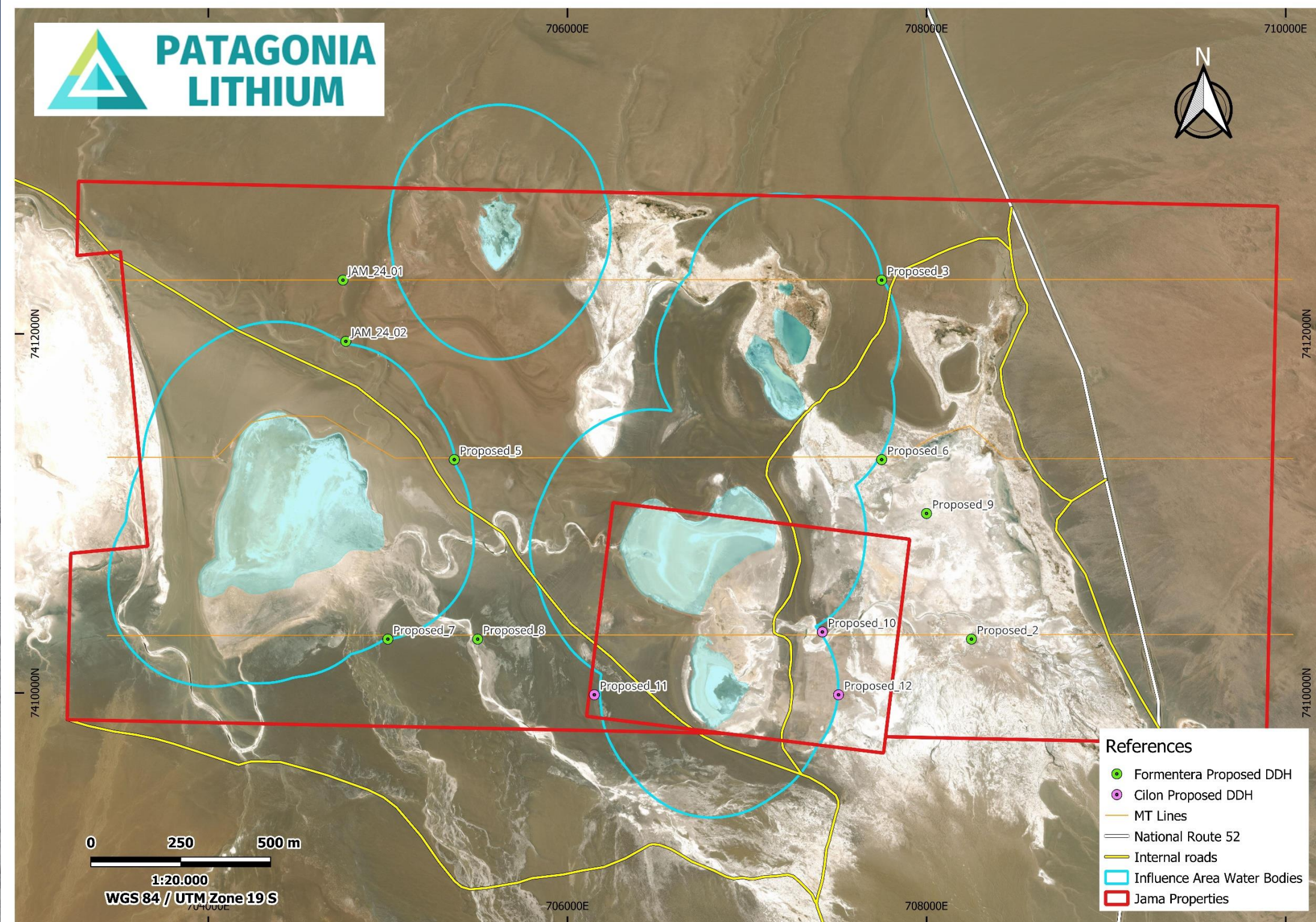
See ASX announcement "Survey Results Identify Excellent Drill Targets" on 13 June 2023.



# Formentera/Cilon Projects



- The Cilon concession area is located on the **southern boundary of Formentera. 199** hectares and located in an area dominated by clastic and saline sedimentation.
- The Cilon Project includes an **exploration application** lodged in the Susques department, Jujuy Province, northwest of the Argentina, being highly prospective for borates and lithium.
- Historically operated as a **Ulexite borate mine.**



Aqua lines are no drill areas western lagoon is available to discharge brine

# Ekosolve Processing Results



## Lithium Carbonate Production at Pilot Plant

**Table 5** Compositions of white crystals from crystallization process from Patagonia brine strip liquor

Sample name	Number of hot washing	Unit in mg/L						
		[B]	[Ca]	[Fe]	[K]	[Li]	[Mg]	[Na]
Patagonia strip liquor – 1W	1	0.0345	0.30	0.09	<b>8.33</b>	2035	0.07	<b>3.13</b>
Patagonia strip liquor – 2W	2	0.0352	0.37	0.11	<b>0.72</b>	2090	0.09	<b>0.26</b>
Patagonia strip liquor – 3W	3	0.0363	0.41	0.11	<b>0.40</b>	2136	0.08	<b>0.20</b>

The purity of all cations is calculated in mg cation/g crystal based on mass and in % cation/total cations based on concentration. The results are presented in **Table 6**.

**Table 6** The purity of all cations in white crystals from Patagonia brine strip liquor after 3 hot washings

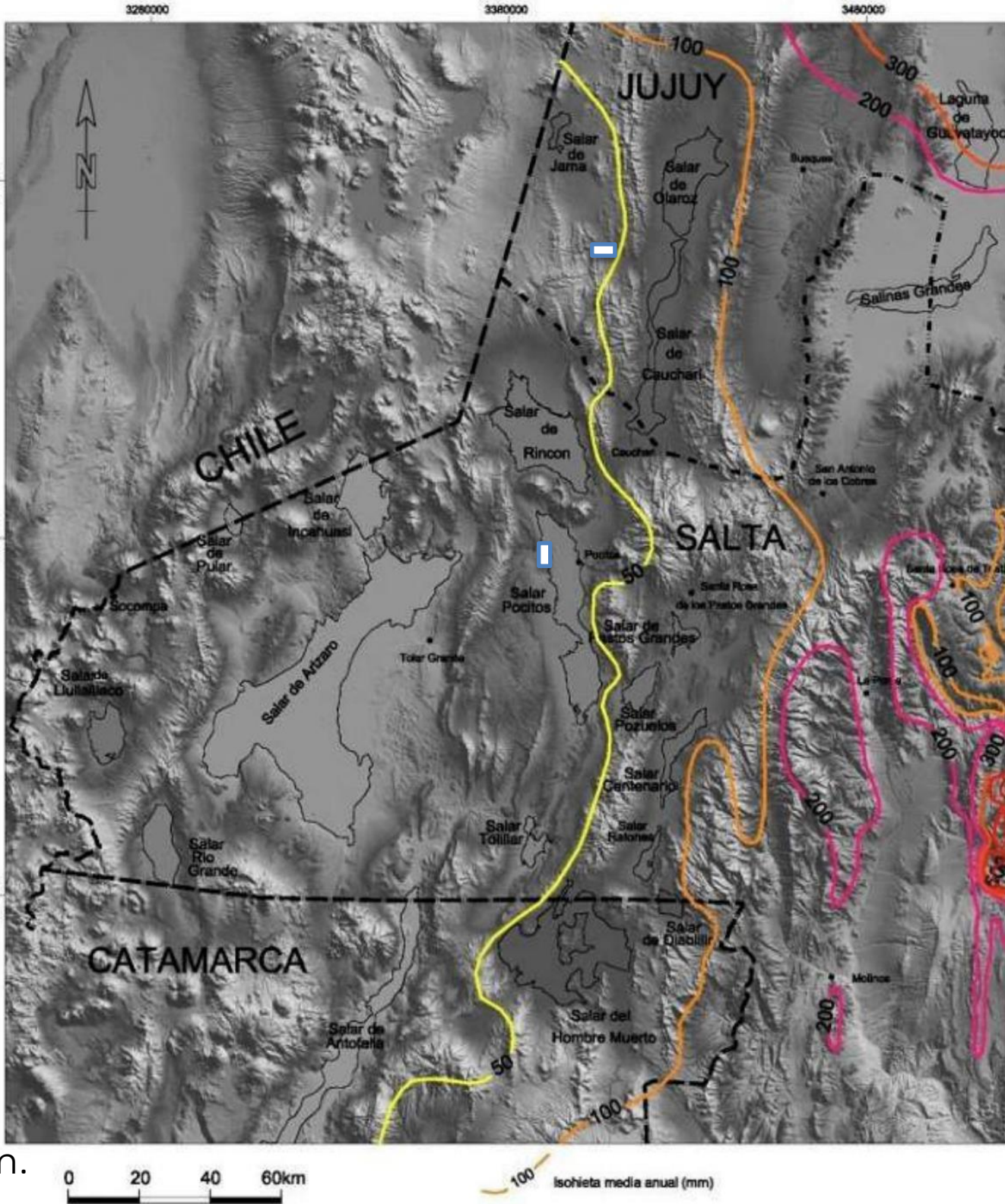
Sample name	Based on mass, unit in mg cation/g crystal							Lithium Grade	Lithium%
	B	Ca	Fe	K	Li	Mg	Na		
Patagonia strip liquor – 1W	0.003	0.028	0.009	0.769	187.8	0.007	0.289	99.890%	99.415%
Patagonia strip liquor – 2W	0.003	0.033	0.010	0.065	187.8	0.008	0.023	99.986%	99.925%
Patagonia strip liquor – 3W	0.003	0.036	0.009	0.036	187.8	0.007	0.018	99.989%	99.942%

\*Lithium Grade =  $\frac{(Mass_{Li_2CO_3} - Mass_{impurities})}{Mass_{Li_2CO_3}}$ , Lithium% =  $\frac{Mass_{Li}}{Mass_{Li+impurities}}$


## Lithium Extraction Efficiency

- Ekosolve™ Direct Lithium Extraction (DLE) technology pilot plant test work at University of Melbourne achieves **92.1%** lithium extraction efficiency from brines with average lithium concentration of 267 ppm lithium.
- Lithium recovered from 267ppm Li in brine was 246 ppm Lithium.

# Formentera and Cilon Projects (Paso Salar)



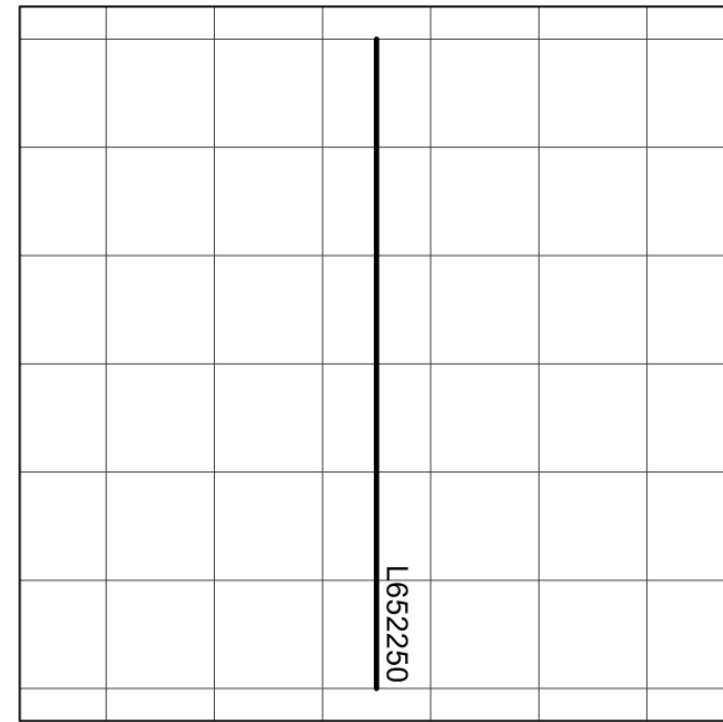
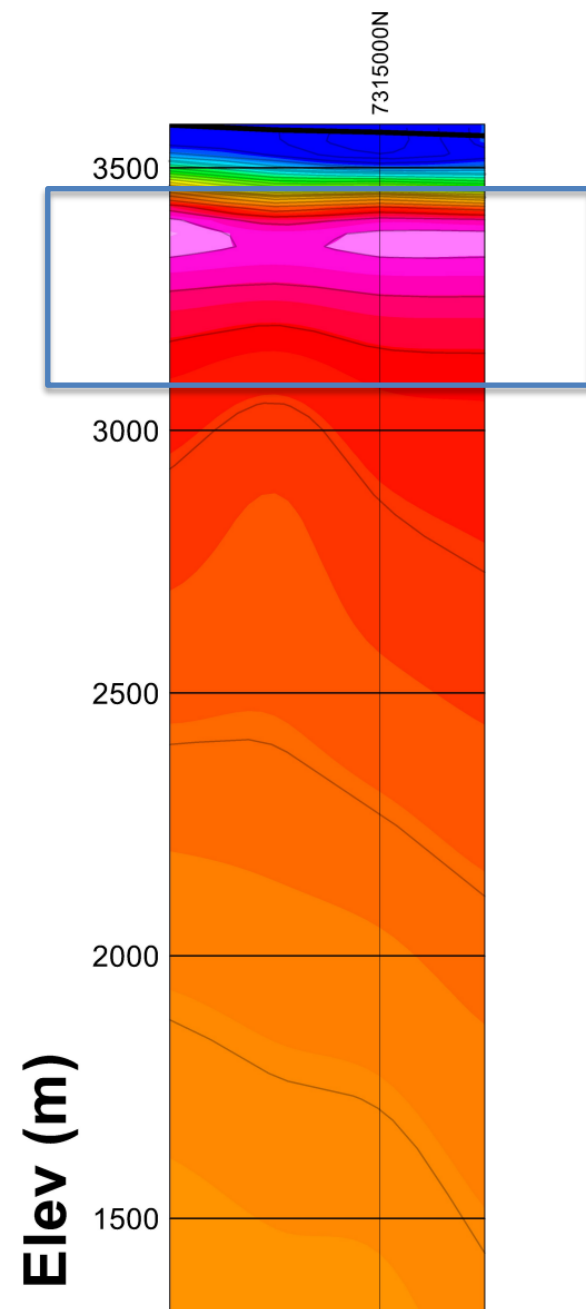
Picture of Formentera and Cilon looking west


 Rainfall per year isohyet contour showing 50mm in yellow covers Formentera and Jama salars where it only rains in Jan Feb about 3mm.

# MT Geophysics at Tomas III – low resistivity unit means conductor layer – lithium brines may be present in the aquifer – drilling is next step

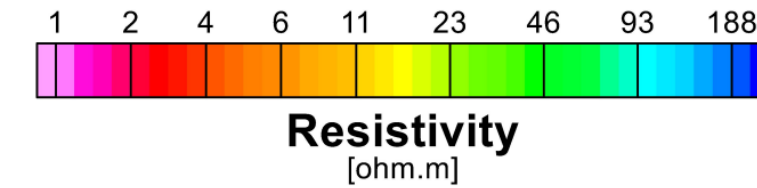
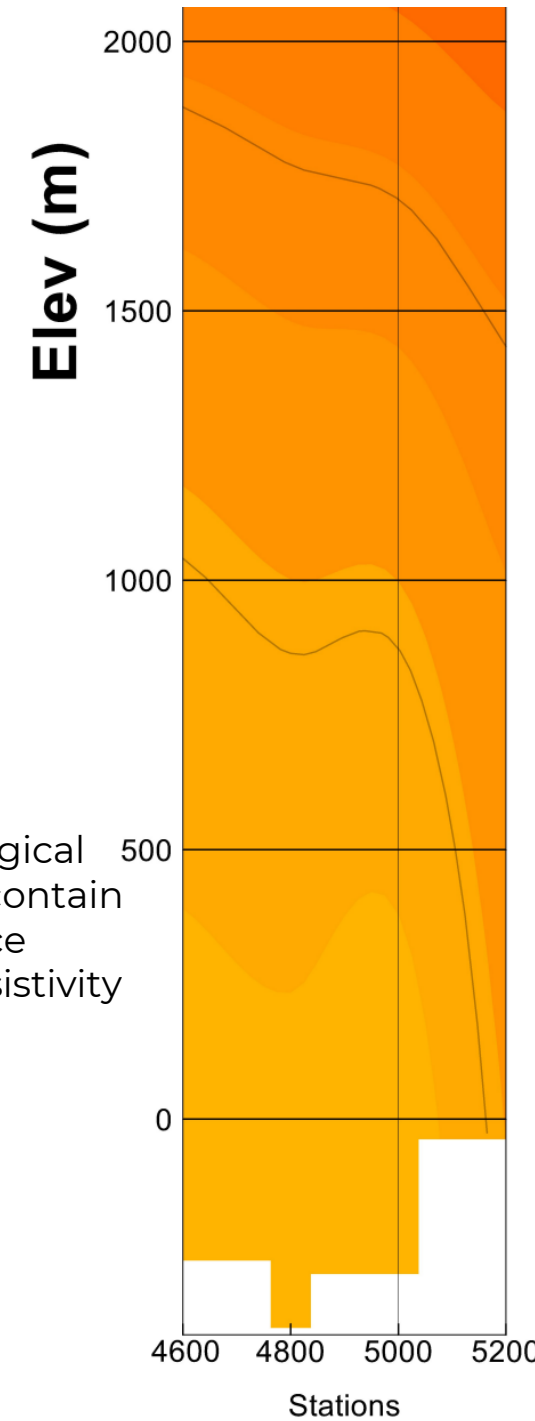
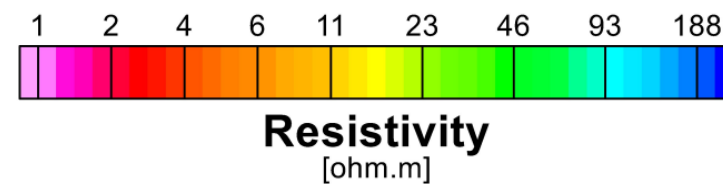


**Tomas III - MT Survey  
1D Inv. Model Resistivity Section  
Line L652250**



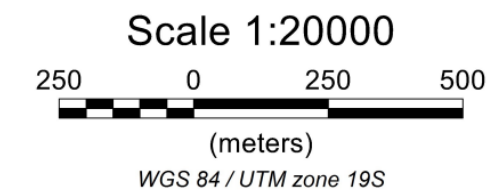
Section Trace Plan View

Blue square highlights highly conductive geological units where we expect to find brines that may contain Lithium – drilling will confirm this. The sequence is approximately 400m thick with a very low resistivity Unit 150m thick.



The MT survey was able to penetrate down to 4000m And shows an anticline unit about 500m below the Surface, which has impacted the detrital layers above it.

This may be salt water aquifer unit containing lithium or other conductors



Vertical Exaggeration: 1

**PATAGONIA LITHIUM  
TOMAS III PROJECT AREA  
MAGNETO-TELLURIC SURVEY  
LINE L652250**

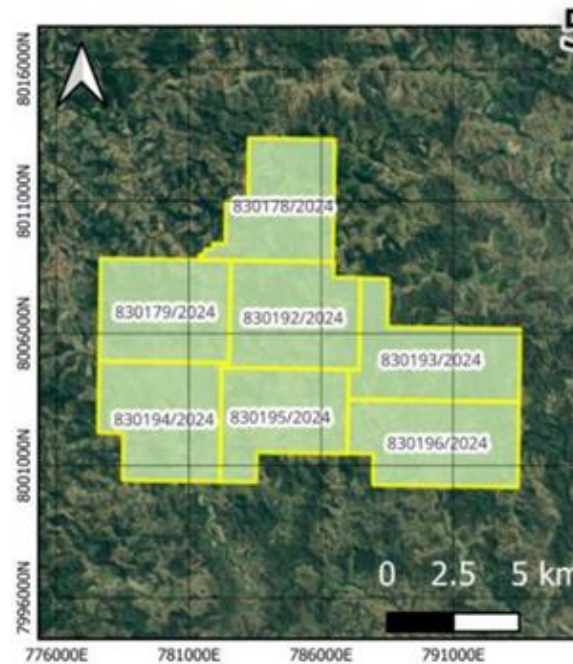
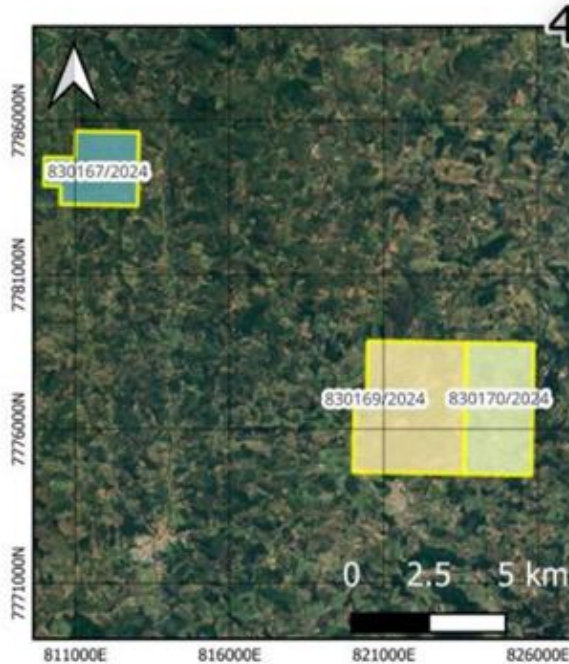
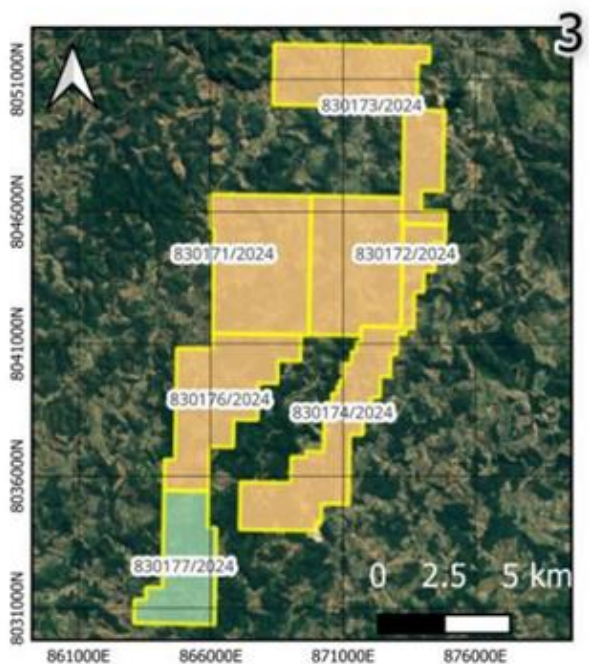
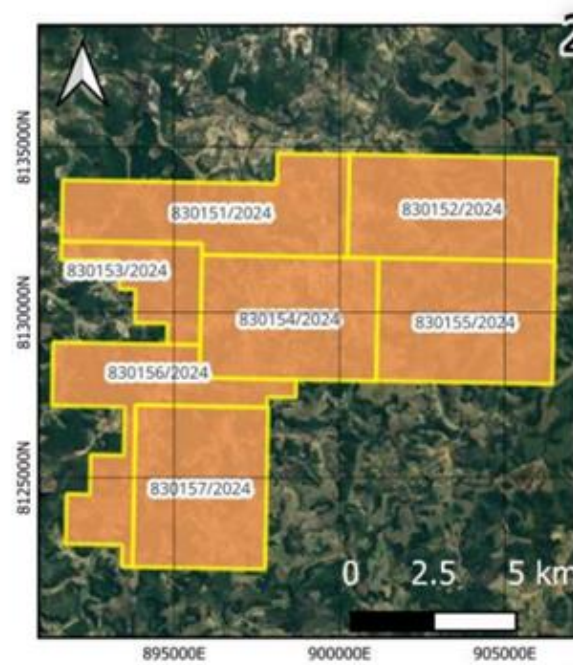
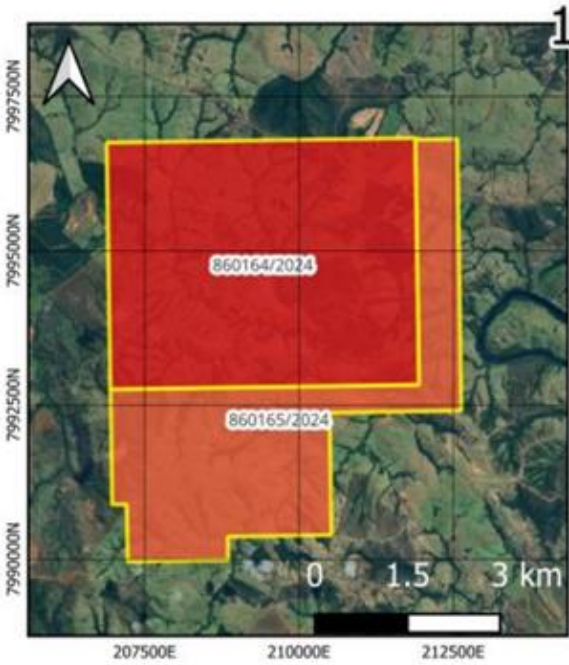
Logarithmic contours: 7 intervals  
Instrumentation: gDAS32 / ANT-4 / LEMI 152  
Survey date: May 2023 | Survey Identifier: CHJ # 2306  
SOUTHERNROCK GEOPHYSICS S.A.

See ASX announcement "Patagonia Lithium completes geophysics survey on Tomas III" on 29 May 2023.

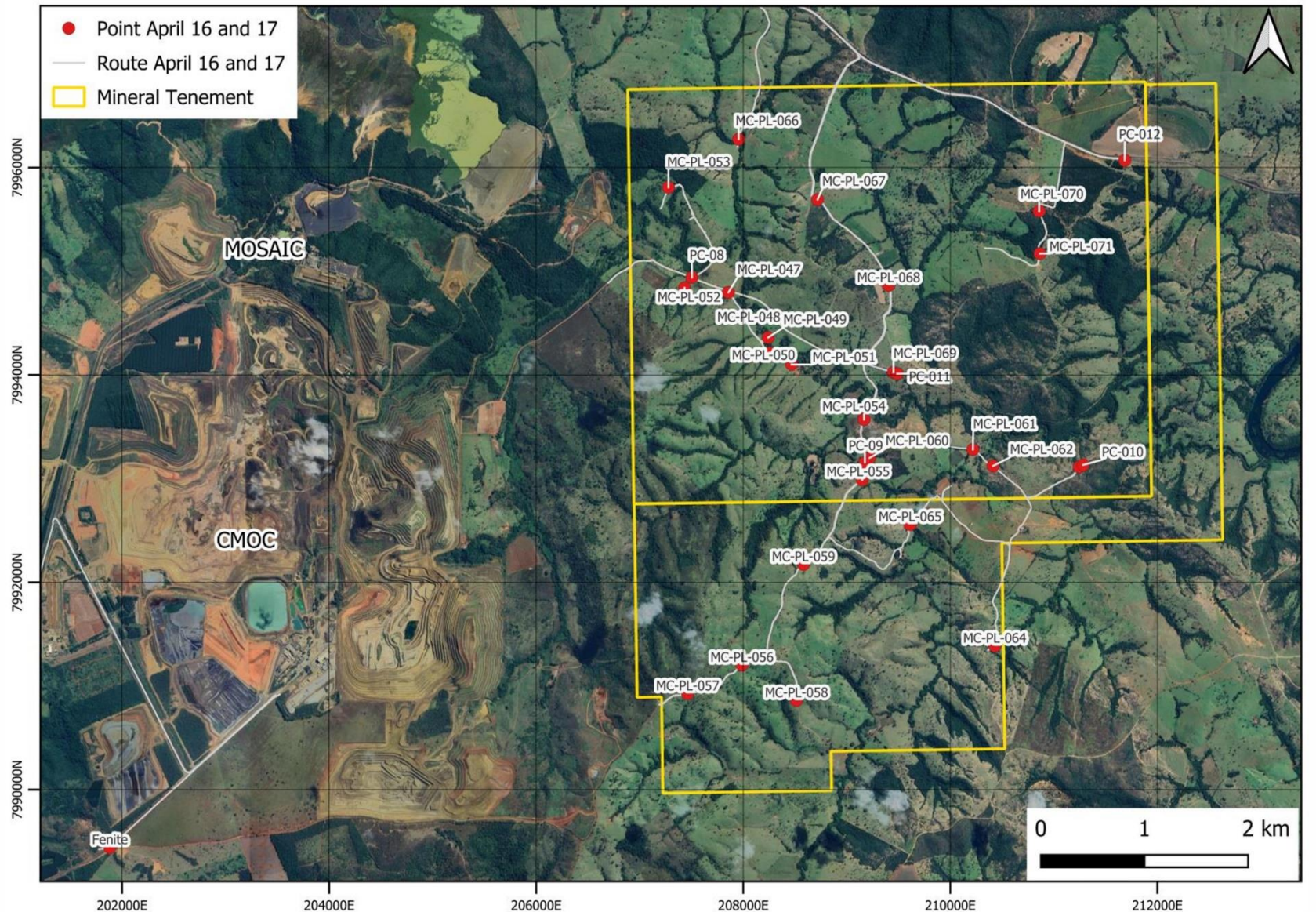
# Brazil Projects – Lithium, REE and Niobium – 41,746Has



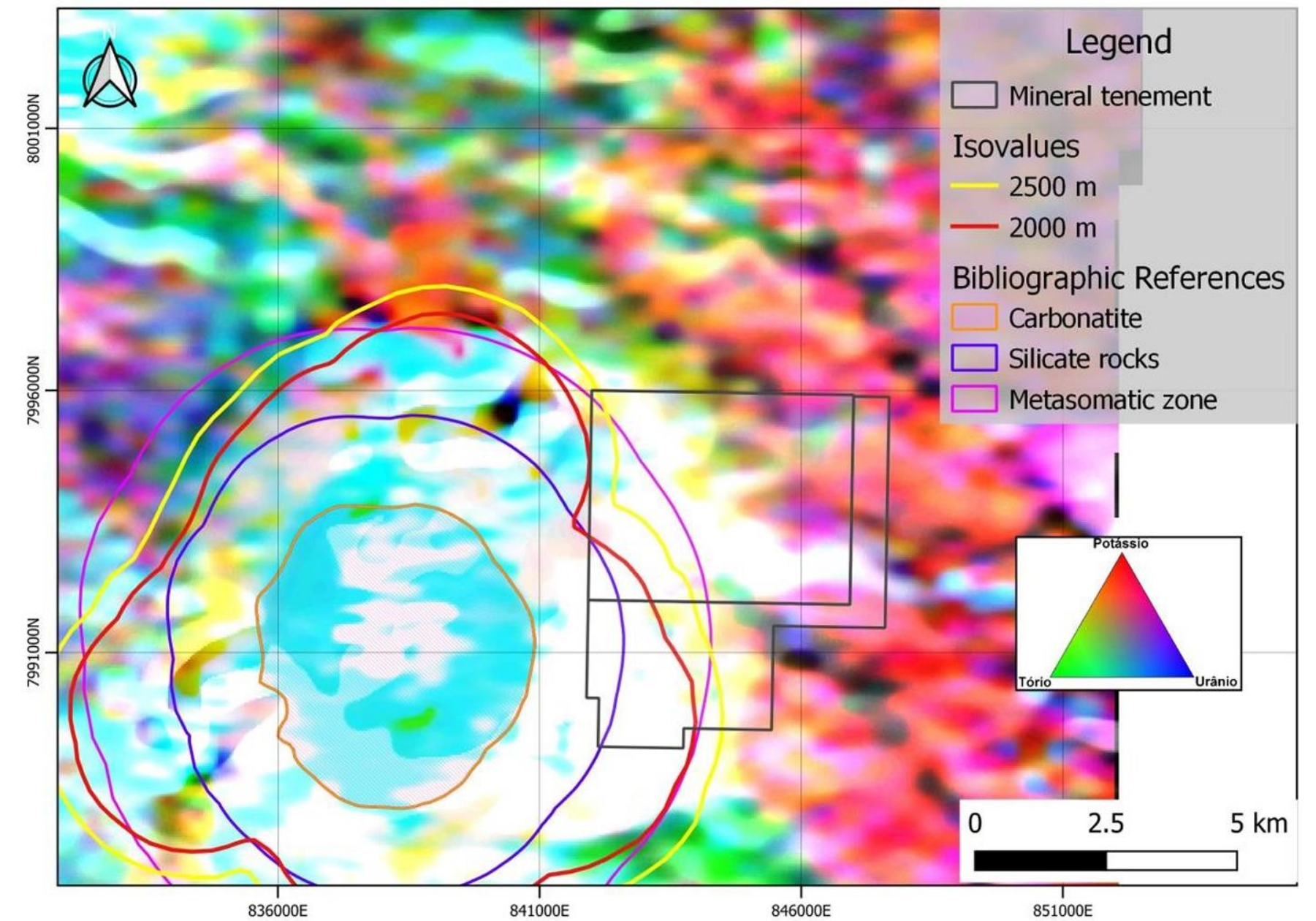
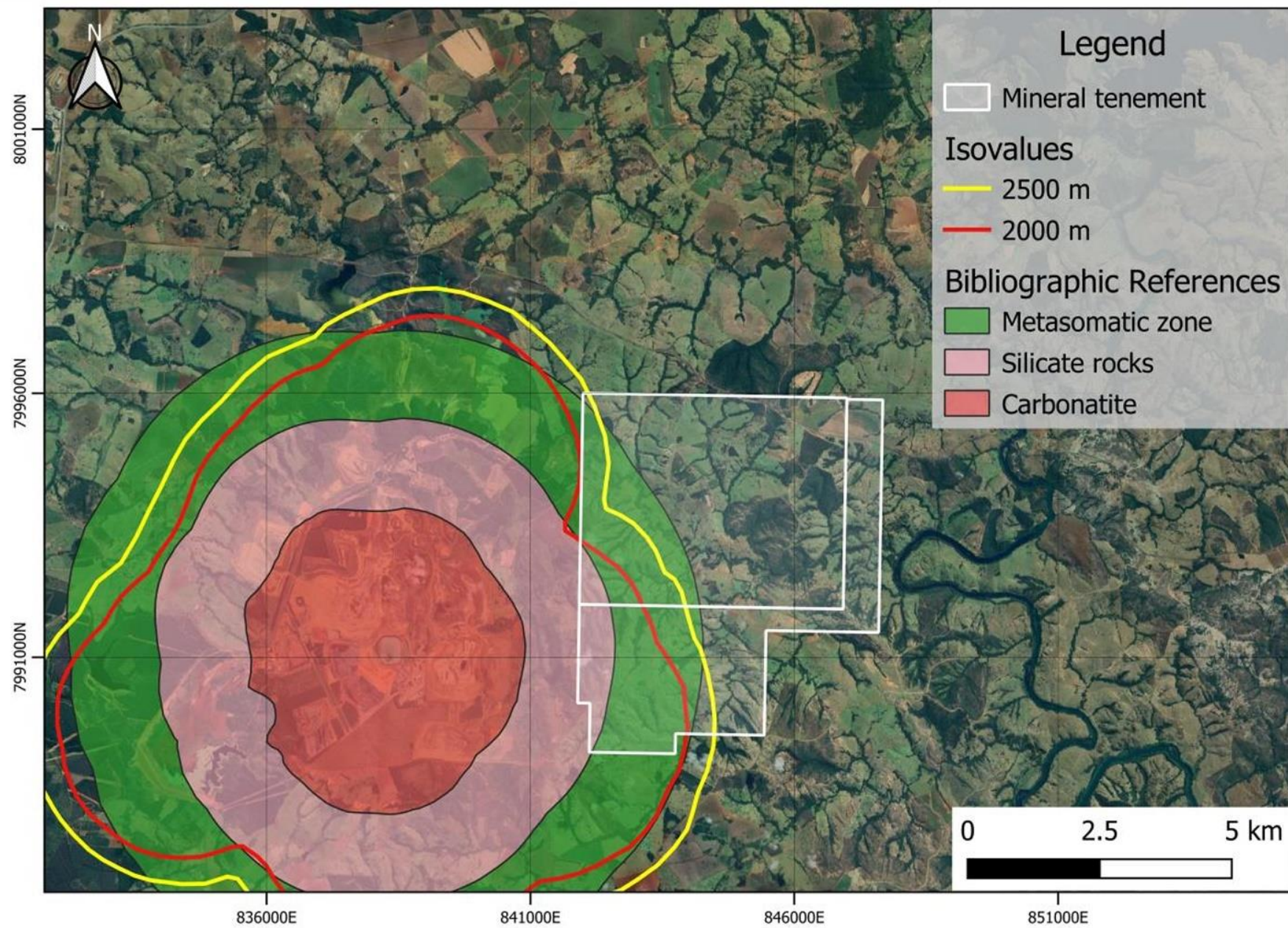
## REE Ranking



- Concessions covering 19,515.86 Has have been granted for three years in the Minas Gerais state.
- The three key areas are a high priority target for rare earth elements (REE) in ionic clays or pegmatites (lithium).
- Rockchip, soils and stream sampling program has commenced.



# Brazil Projects – REE and Niobium carbonatite deposit



The white areas on the figure on the left are the most probable to have been fenitized and concentrated rare earths

See ASX announcement "Initial Exploration Completed in Brazil" on 13 May 2024.



# PATAGONIA LITHIUM

[www.patagonialithium.com.au](http://www.patagonialithium.com.au)

**For further information please contact the authorising officer:**

Phillip Thomas

Executive Chairman

Patagonia Lithium Ltd

M: +61 433 747 380

**E: [phil@patagonialithium.com.au](mailto:phil@patagonialithium.com.au)**

Patagonia Lithium Ltd

ACN 654 004 403

Level 6, 505 Little Collins Street

Melbourne VIC 3000