A Growing Position in America's New Lithium Capital

Corporate Presentation

July 2024

ASX:PFE

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Pantera Lithium Brine Project Highlights

100% owned Lithium Brine Project in the 'Smackover Formation' in Southwest Arkansas stands out as PFE the only listed junior in the play.
April $3.55 million cap raise funding first well and leasing expansion

A significant landholding of 25,998 acres
- Acreage rapidly increased from 5,325 to 25,998 acres in just 11 months (an increase of 388%) following Pantera's initial investment.

Material Exploration Target of 436,000 to 2,966,000 tonnes of contained LCE, within the project's 50,000-acre exclusive abstract agreement area, which houses the Pantera Lithium Brine Project, announced in January 2024[1]
- Estimate is based on lithium concentrations ranging between 225 – 450 mg/L, with a median value of 338 mg/L
- Showcasing the potential world-class scale of the project.
- *The Exploration Target figure is conceptual in nature as there has been insufficient exploration undertaken on the project to define a mineral resource for the Pantera Lithium Brine Project. It is uncertain that future exploration will result in a mineral resource.* *See Appendix A for additional information*

Drilling program expected in Q3 2024 to validate the Exploration Target – SLB contracted for sub surface geological modelling
- Well re-entry and sampling program in Q3 2024 to validate the Exploration Target along with sub-surface 3D geological modelling contracted to SLB's Critical Minerals Group in Houston Texas.

Bolstered Board with significant lithium brine experience
- Barnaby Egerton-Warburton – Non-Executive Chairman of Arizona Lithium (ASX:AZL), oversaw acquisition of Prairie Project.
- Tim Goldsmith - Former CEO of Rincon Mining Pty Limited until the asset was sold to Rio Tinto for US$825m in March 2023.[2]

Major players rapidly advancing lithium brine projects in the region
- Exxon Mobil (NYSE: XOM), Equinor ASA (NYSE: EQN) Standard Lithium (TSXV: SLI) and Albemarle Corporation (NYSE: ALB) holding projects in very close proximity.

Strategically located close to end users in the North American Lithium Industry including giga factories and car manufacturers
- GM, Ford and Stellantis have also recently committed >$50 billion to electrify their fleets.
- Lithium demand and supply shortage expected to drive long term lithium prices higher as electric vehicle adoption accelerates.

1 ASX Announcement: 'Material LCE Exploration Target For The Superbird Project', 28 January 2024.
2 Source: Rio Tinto completes acquisition of Rincon Lithium Project, 29 March 2022.

Corporate Overview

PANTERA MINERALS

Capital Structure

$0.033
Share Price[1]

379m
Shares On Issue[2]

150.4m
Options On Issue[2]

$2.5m
Cash[3]

$12.5m
Market Cap[1]

Board & Management

Barnaby Egerton-Warburton
Executive Chairman / CEO

- 30+ years of investment banking, international investment & market experience with positions at JP Morgan (New York, Sydney, Hong Kong), BNP Equities (New York) and Prudential Securities (New York).
- Chairman of Arizona Lithium and Executive Director of Lord Resources.

Tim Goldsmith
Non-Executive Director

- CEO of Rincon Mining Pty Limited until the asset was sold to Rio Tinto for US$825m in March 2022.[4]
- During his tenure, Rincon significantly increased its resource to over 11Mt of LCE, changed its DLE process, constructed & operated a DLC pilot plant on site, prepared a PFS study and concluded a sale process.
- Pantera will leverage his experience to assist in developing its lithium brine potential.

Matt Hansen
Non-Executive Director

- 12+ years' broad legal experience.
- Specialised in advising large & mid-cap companies on energy, resources and regulatory matters providing advice to resources companies, including Rio Tinto Exploration, Northern Star Resources, Billabong Gold, Western Areas and De Grey Mining.

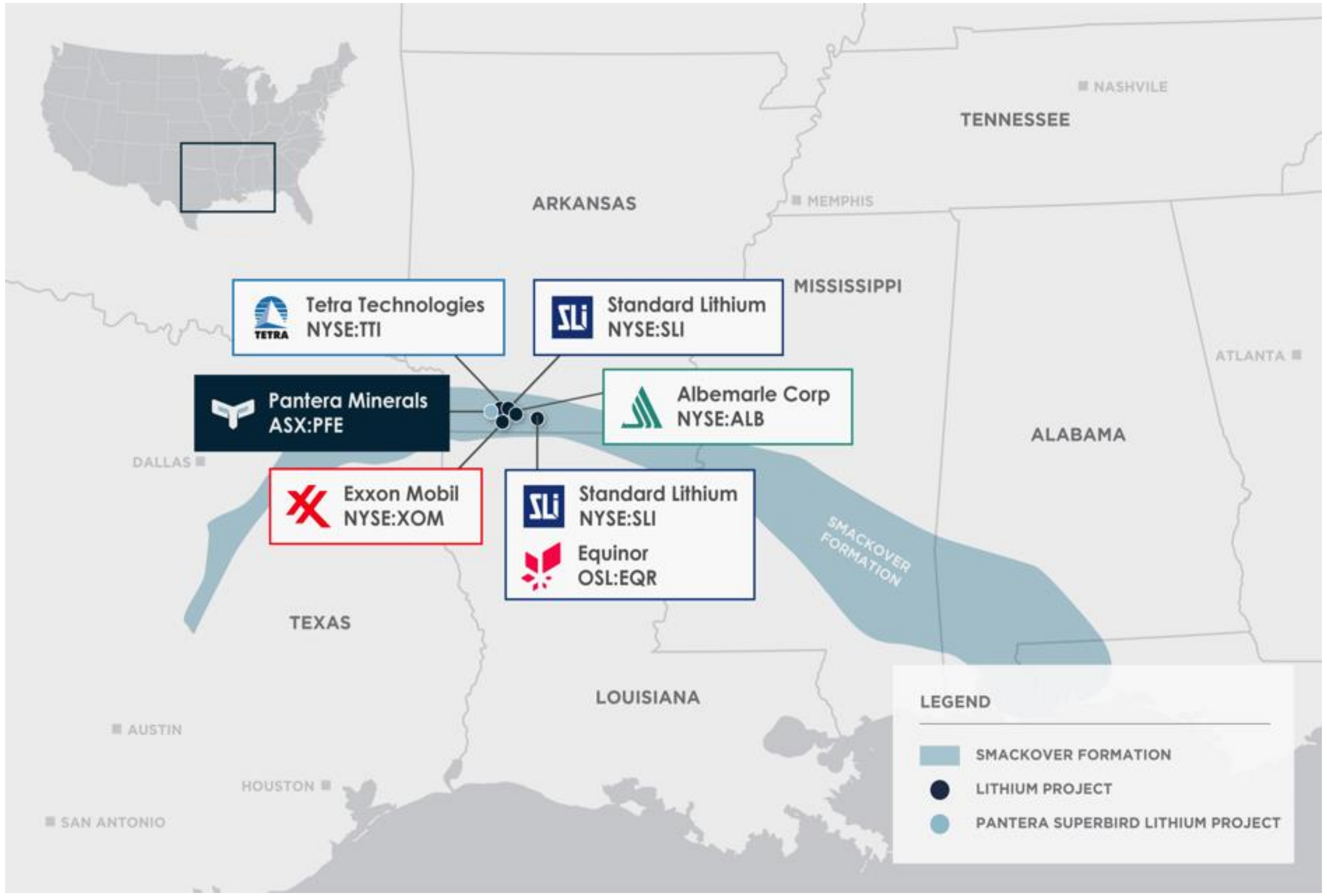
Nick Payne
Head of Exploration

- 25+ years as a geologist with extensive exploration and mining experience in Australia, Canada and the USA.
- Experienced in drilling technology, downhole sensor technology and geological software development.
- Member of the AICD, Australasian Institute of Mining and Metallurgy and a Member of the Society of Economic Geologists.

1 As at 15 July 2024.
2 Various exercise prices & expiry dates as at 17 June 2024.
3 Post Capital raise April 2024.
4 Source: Rio Tinto completes acquisition of Rincon Lithium Project, 29 March 2022.

Pantera Lithium Brine Project – 100% Ownership

A significant project in America's new lithium super-highway



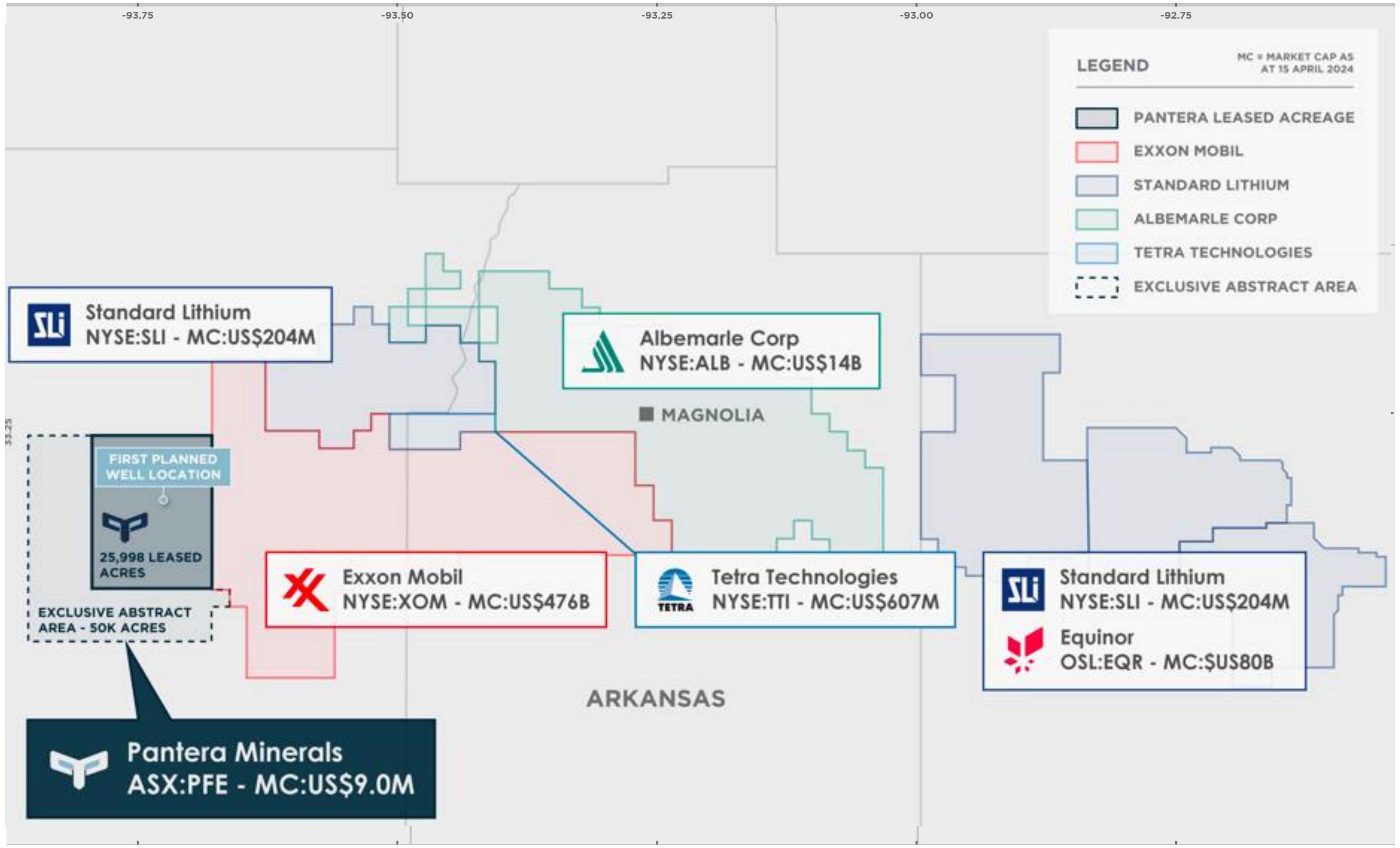
- In December 2023, Pantera entered a Binding Implementation Agreement to acquire 100% of the Lithium Brine Project[1] in the 'Smackover Formation' in Southwest Arkansas.
- Directly abuts Exxon Mobil's (NYSE: XOM) Lithium Brine Project.
- Other major lithium brine players in the region include Equinor ASA (NYSE: EQNR) Standard Lithium (TSXV: SLI) & Albemarle Corporation (NYSE: ALB) holding projects adjacent to Pantera.
- Supported by 100 years of energy production, expertise, and infrastructure in Arkansas.
- Direct Lithium Extraction (DLE) Project with Arkansas Smackover Brine containing elevated lithium concentrations (225 - 450mg/L) [2].
- Close proximity to end users including major Gigafactories.

1 ASX Announcement: 'Pantera Acquires 100% of Daytona Lithium', 11 December 2023.

2 ASX Announcement: 'Material LCE Exploration Target For the Superbird Lithium Brine Smackover Project', 29 January 2024.

The Australians Are Here

A rapidly growing land position in America's most sought after lithium address



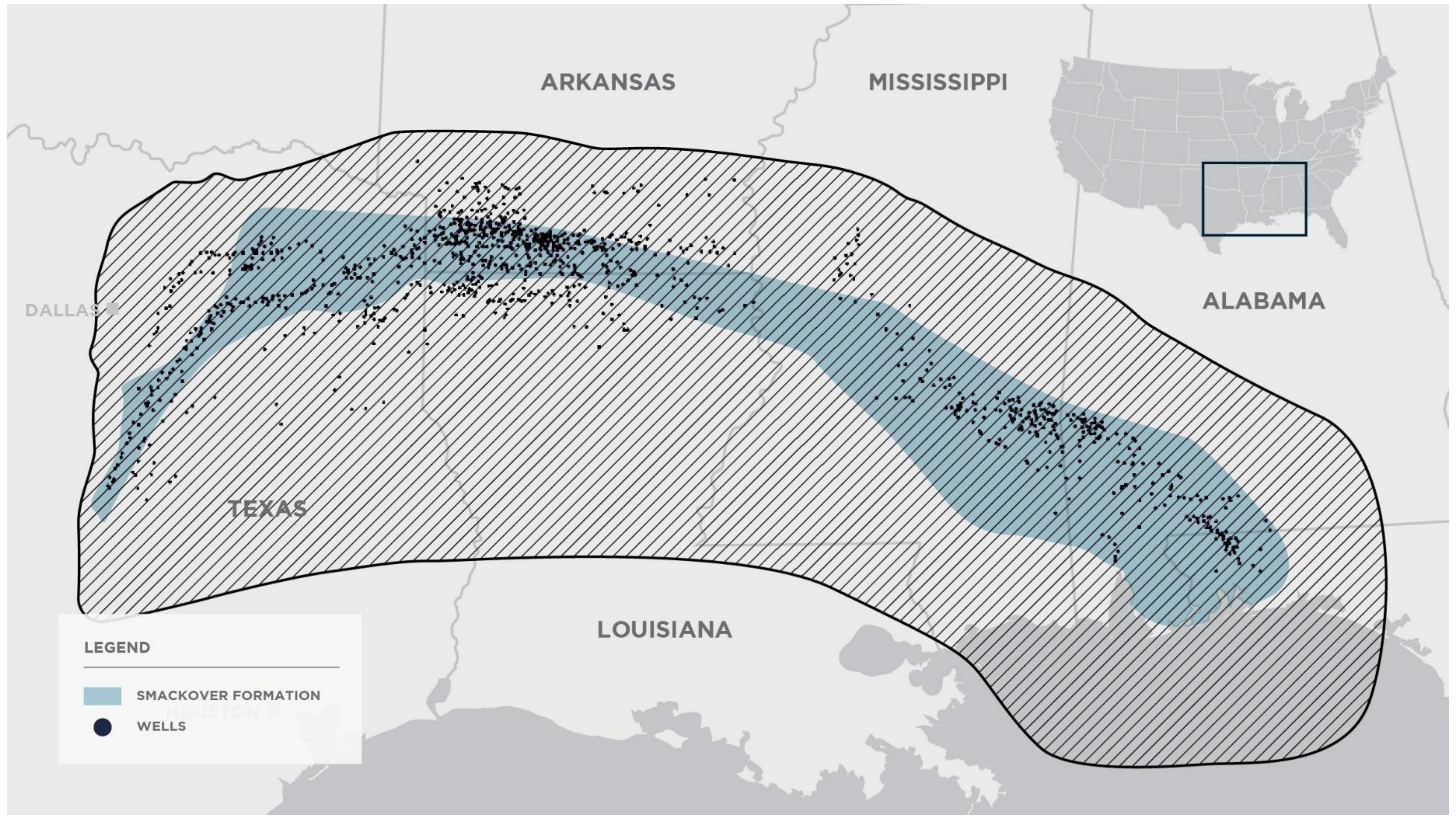
Sharp elbows in "Shale 2.0"

- Since Pantera's investment, the Project has expanded by 388% and now comprises 25,998 acres.
- Effective brine leasing growth strategy:
  - ✓ Led by Country Manager, Cleve Thomas
  - ✓ Driven by a proprietary data base
  - ✓ Supported by exclusive agreement with prominent commercial leasing abstract company to deliver 50,000 acres of lease abstract, exclusively to Pantera Lithium Brine Project
  - ✓ Continuing with ongoing negotiations for material increases in landholding

The Smackover Formation

Ideal concentrations with significant brine capacity

- For 100+ years, the Smackover Formation in southern USA has played a central role in America's conventional energy economy.
- High confidence geological model based on 1000's of wells, demonstrates uniform thickness and continuity.
- Smackover has ideal concentrations, ranging from 150 – 600+ mg/L.



Source: Arkansas Oil & Gas Commission data USGS, 2006.

If Direct Lithium Extraction (DLE) is going to work at scale "it is going to be in the Smackover".

– Joe Lowry, Lithium Expert

"Exxon Mobil can produce lithium at much lower cost"

– Darren Woods, CEO Exxon Mobil

Pantera Lithium Brine Project – Rapid Progress to Date

Significant increases in landholding

August 2023
Pantera Acquires 35% Interest
Acquired by Pantera through a $2m convertible note

September 2023
58% Increase in Landholding
Total landholding of 8,416 acres in under four weeks after the initial investment

October 2023
12% Increase in Landholding
Total landholding of 9,440 acres

December 2023
100% Ownership
Binding Agreement entered strengthening Pantera's dominant acreage across Arkansas Smackover Formation

January 2024
17% Increase in Landholding
Total landholding of 13,457 acres, with 9,400 acres under negotiation[1]

February 2024
Exploration Target[1]
Target of 436,000 to 2,966,000 tonnes of contained LCE 225 – 450 mg/L

May 2024
SLB contracted for all sub-surface work
SLB to build 3d sub surface model and identify optimum re-entry well

July 2024
Significant Increase in Landholding
Total landholding of 25,998 acres

Landholding increased by 388% since Pantera's initial investment
Total landholding of 25,998 acres!

The Exploration Target figure is conceptual in nature as there has been insufficient exploration undertaken on the project to define a mineral resource for the Pantera Lithium Brine Project. It is uncertain that future exploration will result in a mineral resource.

1 ASX Announcement: 'Material LCE Exploration Target For The Superbird Project', 28 January 2024.

Material Lithium Exploration Target Confirmed

- **Exploration Target of 436,000 to 2,966,000 tonnes of contained LCE, within the project's 50,000 acre exclusive abstract agreement area, which houses the Pantera Lithium Brine Project.**
- **The Exploration Target figure is conceptual in nature as there has been insufficient exploration undertaken on the project to define a mineral resource for the Pantera Lithium Brine Project. It is uncertain that future exploration will result in a mineral resource.**
- **Estimate is based on lithium concentrations ranging between 225 – 450 mg/L, with a median value of 338 mg/L**
- Showcasing the potential world-class scale of the project.
- Multiple re-entry wells identified within project footprint , allowing for a well re-entry & sampling program to commence to validate the Exploration Target and assist in the generation of a maiden JORC resource.

"With 25,998 acres now leased and our first test well imminent we are pushing hard with the aim of generating an initial JORC resource." **Barnaby Egerton-Warburton (Chairman and CEO)**

1 ASX Announcement: 'Material LCE Exploration Target For The Superbird Project', 28 January 2024.

What is Direct Lithium Extraction (DLE)

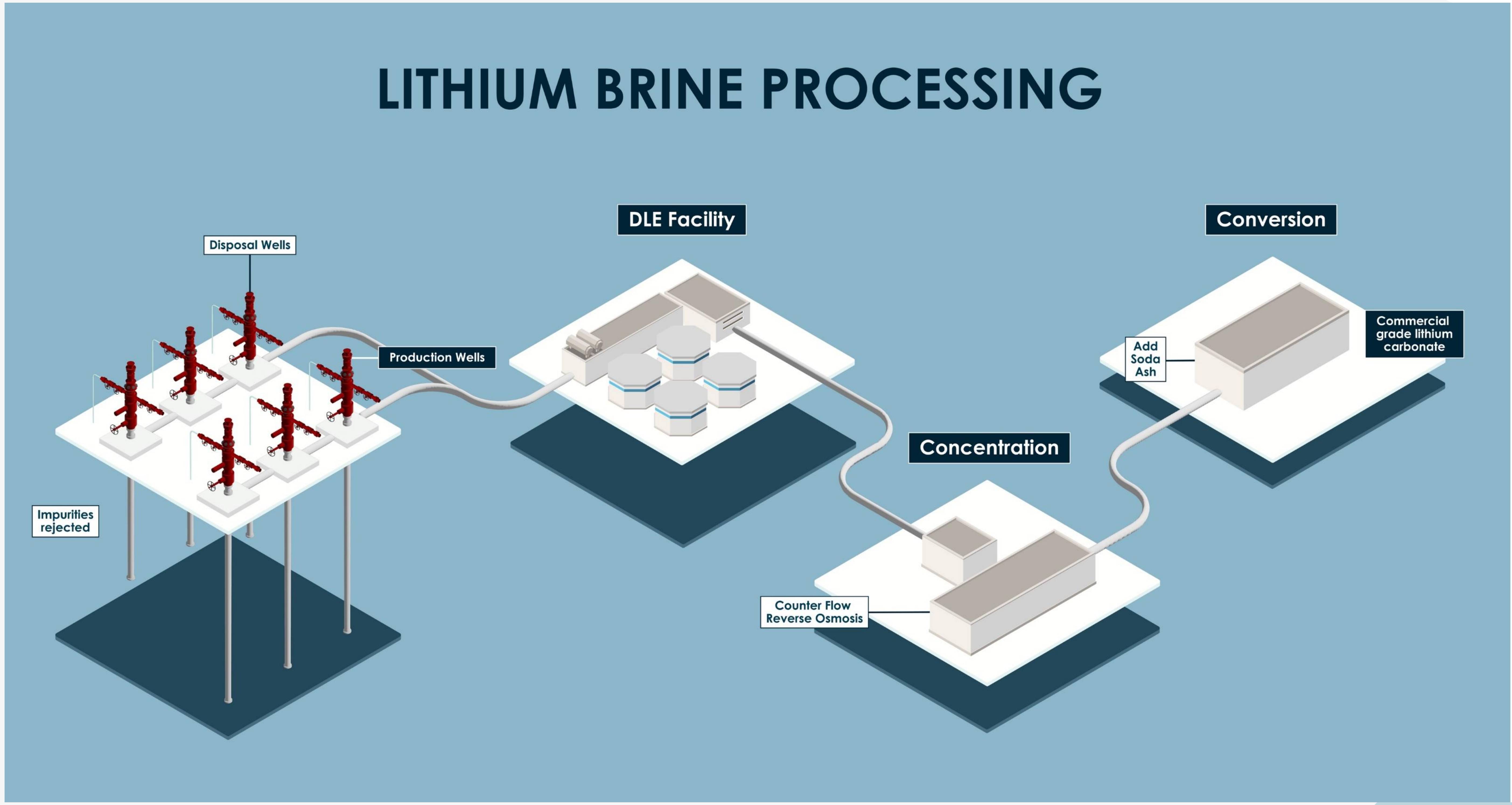
DLE offers significant potential to improve recoveries and lift project economics

Wells are drilled to the brine formation depth in the exact same way a normal oil well would be drilled.

The DLE process selectively separates lithium from brine using various technologies such as adsorption, ion exchange, membranes, or solvent extraction.

Battery grade lithium can then be produced from the lithium chloride or sulphate solution produced.

Once the lithium has been extracted the waste brine is disposed of via re-injection into the same or a different formation.



Next Steps and Milestones

PANTERA
MINERALS

Exciting upcoming milestones for the company

Q3 2024	Q4 2024	Q1 2025

Continued acquisition of additional project acreage →

Q3 2024	Q4 2024	Q1 2025
Re-entry of an identified well To test brine grade, permeability, and porosity from the Smackover Formation	**Testing of Lithium Grade** From the re-entry well subsequent to successful re-entry	**Drilling stand alone well** Drilling of stand alone resource definition well
Completion of the SLB sub-surface modelling Delivery of the SLB sub-surface modelling for clear definitive drilling locations and resource model	**Direct Lithium Extraction Testing** Of re-entry well sample by multiple highly regarded DLE technology providers	**Announcement of JORC Resource** Maiden JORC Resource

Contact Information

ASX:PFE

Barnaby Egerton-Warburton
Executive Chairman & CEO
+61 (0) 437 291 155
bew@panteraminerals.com

Jane Morgan
Investor & Media Relations
+61 (0) 405 555 618
jm@janemorganmanagement.com.au

Appendix A

Consistent with the announcement lodged with ASX on 29 January 2024, the Company confirms:

- That multiple re-entry wells have been identified within project footprint and negotiations with various well owners have commenced, potentially allowing for a well re-entry & sampling program to commence Q2 2024, to validate the Exploration Target and assist in the generation of a maiden JORC resource
- The planned activities in the calendar year are:
    - Acquisition of 2D seismic data to refine and model Upper Smackover Formation Member thickness and continuity within the Exclusive Abstract Area
    - Well re-entry and brine sampling program to obtain brine lithium grade and water chemistry as well as core samples for porosity assessment
    - New well drilling and brine sampling to assist in defining a JORC compliant resource

The information in this announcement that relates to geology and exploration results and target was compiled by Mr. Eric Pelletier , a Competent Person whom holds an M.Sc in Geology specialising in Carbonate Sedimentology and is a Registered Professional Geologist (Alberta) and a consulting geologist to Matrix Solutions Inc. Mr Pelletier has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Pelletier consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

All parties have consented to the inclusion of their work for the purposes of this announcement. The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the author at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this presentation will therefore carry an element of risk.