

# Disclaimer

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The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of exploration results and mineral resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement. The information associated with prior announcements is available to view at panterali.com.

The Company also notes references to an exploration target in this announcement and confirms the planned activities in the calendar year are:

- o 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.



# **Corporate Overview**



### **Capital Structure**

**Share Price** (1)

\$0.02

474m

**Shares On Issue** 

188m

**Options On Issue** 

\$2.3m

Cash (2)

\$9.0m Market Cap

### **Board & Management**

### **Barnaby Egerton-Warburton**

#### **Executive Chairman & CEO**

- 30+ years experience in resources and technology based 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 Non-Executive Director of Lord Resources, Diablo Resources and National Stock Exchange of Australia. Chairman of Enzide Technologies Limited.

#### 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.

#### **Cleve Thomas**

### **VP US Land and Operations**

- 4<sup>th</sup> generation oil and gas professional
- 20+ years of Oil and Gas experience including E&P Operations in both rural and major municipalities
- Extensive land development experience across New Mexico, Oklahoma, Texas, and Arkansas Manager of leasing and operations for Pantera

#### 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.<sup>4</sup>
- 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.

### Nick Payne

#### **Head of Exploration**

- 25+ years as a geologist with extensive exploration and mining experience in Australia, Canada and the USA.
- Experienced in hydrology and petroleum geology and reservoir analysis.
- 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.

#### John Bishop

### **Stakeholder Engagement Arkansas**

- 40 years with Arkansas State Police
- Lafayette County family for over 100 years
- Local land and ranch owner
- 10+ years in oil and gas surface development in AR, TX, and LA
- Manages stakeholder and local relations

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<sup>1.</sup> As of close of trade on 26/02/2025

<sup>2.</sup> As of Q4 2024 and reported in ASX Qtrly announcement on 21/01/2025

As of Q4 2024 and reported in ASX
 As of close of trade on 26/02/2025

# The Lithium Market



### The case for a lithium market recovery by 2027 is strong.

- Lithium oversupply forecast to dissipate in 2026-27 (1)
- EV market share forecast to grow from 22% share in 2025 to 30% share in 2030 driving 90% of total lithium demand from ~ 1 million metric tons to over 3 million metric tons by 2030. (2) Deloitte/IEA.
- Ramp up of AI Data centre lithium demand- Goldman Sachs Research forecasts that global power demand from data centres will rise by approximately 50% by 2027 and could surge up to 165% by 2030, compared to 2023 levels as the demand for "uninterrupted power supply" (UPS) drives further use of lithium-based batteries.(3)
- Outlier demand from Humanoid Robots (Tesla Optimus projected alone to be 1.5 million annual sales of in 2030). (4)
- Global energy storage capacity is forecast to grow by 20x between 2023 and 2030, heavily relying on lithium-based solutions BloombergNEF projects stationary storage will consume 500,000 tons of lithium per year by 2030, up from 70,000 tons in 2023. (5)
- Supply Deficit Due to Underinvestment in New Projects- Current oversupply is temporary Many lithium mining projects were initiated during the price boom, but as prices have fallen many are delayed or abandoned. Benchmark Mineral Intelligence forecasts a deficit of ~500,000 metric tons of lithium carbonate equivalent (LCE) by 2027 due to supply delays. Benchmark estimates 300 new mines needed by 2035 to meet demand. (6)
- Battery gigafactories are ramping up production, securing long-term lithium contracts at higher prices to prevent future shortages.
- Governments are mandating EV adoption (EU), with bans on internal combustion engine (ICE) vehicles beginning in 2030 in many regions.

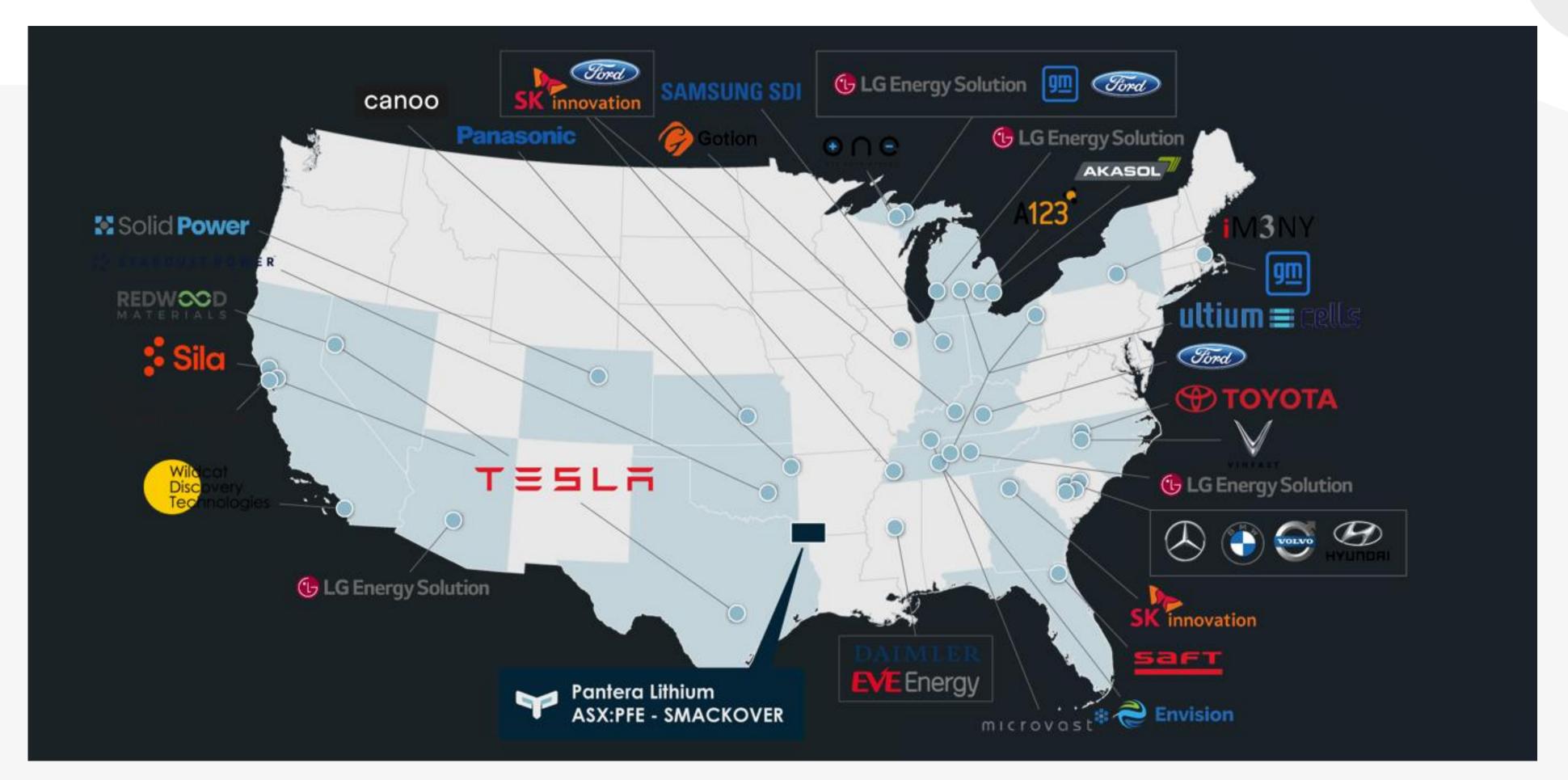
<sup>6.</sup> https://source.benchmarkminerals.com/article/more-than-300-new-mines-required-to-meet-battery-demand-by-2035

<sup>8.</sup> https://www.iiea.org/reports/global-ev-outlook-2021/policies-to-promote-electric-vehicle-deployments

### The US Lithium & Battery Sector: A Fast-Growing Powerhouse



Private & US federal government combined investment exceeding \$350 billion in the U.S. lithium and battery sectors(1)(2)



# The Lithium Market and Oil Majors

### Why are the big oil players getting into lithium?

The International Energy Agency (IEA) projects that the widespread adoption of EVs could displace approximately 11 million barrels per day (mb/d) of oil demand by 2035 representing a reduction of over 10% of global demand (1)

The top 20 global oil producers would see a decline in oil-based revenue of up to \$280 billion USD with the United States top 20 (20% of global supply) losing \$140 million in revenue –a strong incentive to invest in and participate in a sector that these companies understand – producing large volumes of water from oil field style projects.

The major global oil and gas players have entered the sector with Exxon, Oxy, Equinor, Saudi Aramco, Petro China and others all having made moves into the lithium and battery metals sector.

First mover Exxon has left the other majors in a catch-up scenario with their aggressive acquisition of Smackover acreage (paying > \$US100 million for 89,000 Net acres) and subsequent aggressive drilling program. (2)



"widespread adoption of EVs could displace ~11 Million Barrels per day of oil demand by 2035 representing a reduction of over 10% of global demand"



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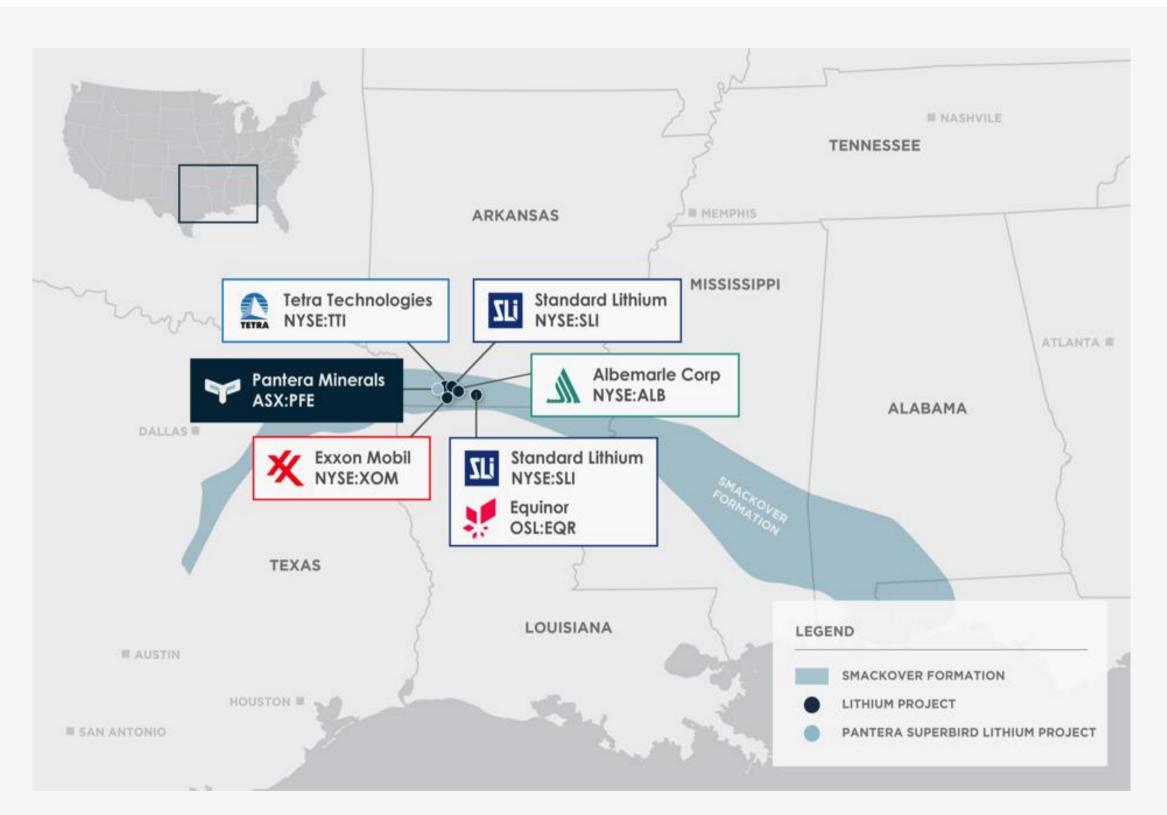
<sup>1.</sup> https://www.iea.org/reports/global-ev-outlook-2024/outlook-for-battery-and-energy-demand

<sup>2.</sup> https://corporate.exxonmobil.com/news/news-releases/2023/1113\_exxonmobil-drilling-first-lithium-well-in-arkansas?utm

# Pantera Lithium Brine Project – 100% Ownership



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



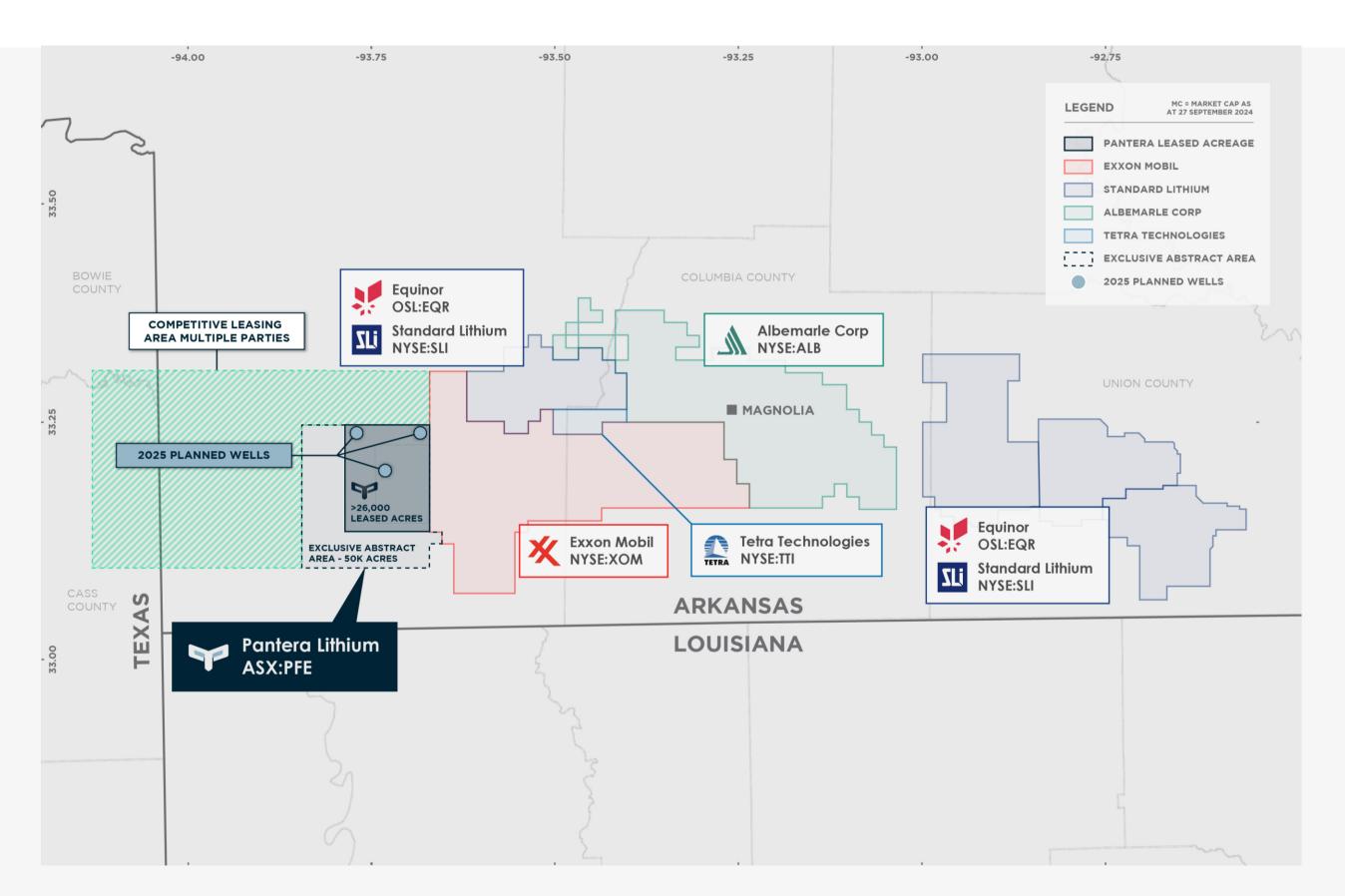
- In December 2023, Pantera began leasing and developing its SW Arkansas Smackover Lithium Brine Project. The project abuts and is surrounded by Exxon Mobil's (NYSE:XOM) Lithium Brine Project
- Other major lithium brine players in the region include Equinor ASA (NYSE:EQNR), Standard Lithium (TSXV:SLI)
   & Albemarle Corporation (NYSE:ALB) holding projects adjacent to Pantera
- Supported by 100 years of energy production, expertise, and infrastructure in Arkansas
- A Direct Lithium Extraction (DLE) Project with Arkansas Smackover Brine containing elevated lithium concentrations (200-600+mg/L)
- Close proximity to end users including giga-factories and refiners.

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

# America's fastest growing lithium region

# PANTERA LITHIUM

### The Smackover Formation



- Since Pantera's investment,
  the Project has expanded by 390%
  and now comprises over 26,000 acres
- Effective brine leasing growth strategy:
  - Led by Country Manager, Cleve Thomas
  - Driven by a proprietary data base
  - Exclusive agreement with the only commercial leasing abstract company in Lafayette county to deliver 50,000 acres of lease abstract, exclusively to Pantera Lithium Brine Project
  - Continuing with ongoing negotiations for material increases in landholding

# **Project Highlights**



- 100% owned Lithium Brine Project in the 'Smackover Formation' in Southwest Arkansas
- A significant landholding now >26,000 net acres (34,900 gross surface acres) with an additional 24,000 acres of exclusive abstract acres.
- 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 20241.

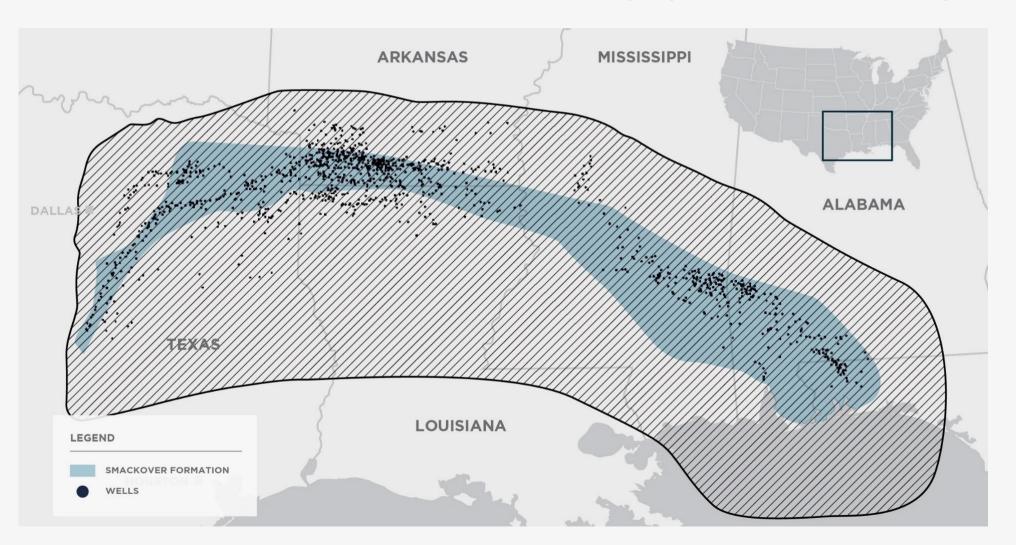
- Sub surface work for identification completes imminently for a three well program to collect formation data and generate JORC resource.
- Strategically located close to end users in the North American Lithium Industry including giga factories, cathode plants and refiners.
- Major players rapidly advancing lithium brine projects in the region with aggressive leasing by Exxon Mobil (NYSE:XOM) around the Pantera acreage position and the Equinor/Standard Lithium joint venture receiving final approval for a DOE grant of \$US225 million to build out their Smackover DLE project.

# The Smackover Formation



### Ideal concentrations with significant brine capacity

- For 100+ years, the Smackover Formation in Arkansas, 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 200 600+ mg/L

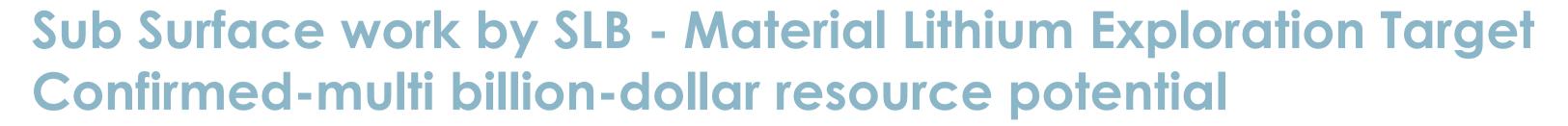


### Hugh McDonald, Arkansas Secretary of Commerce

"We've had oil and gas business for a hundred years down there. The communities and the state are wellversed and organized and support the industry."

Under Darren Wood, ExxonMobil's CEO, the company has acquired over 100,000 gross acres in southern Arkansas's Smackover Formation. The company aims to commence lithium production by 2026, positioning itself as a significant supplier in the U.S. market.

Darren Woods, CEO Exxon Mobil





- Pantera contracted SLB to perform a detailed 3D Static Geological Model of the Upper Smackover Formation within the Pantera Area of Interest (AOI) covering all the leased acres driving Pantera into its drilling and resource definition phase.
- The 3D Static Geological Model used data from 38 wells that penetrate the Upper Smackover Formation, 13.34-line miles of 2D seismic and 481 gravity stations.
- The model confirms that the Company's Project has the potential to host a large and world-class lithium brine resource, analogous to neighbouring Arkansas super majors Exxon Mobil and Equinor/Standard Lithium.
- The Company's belief in the multi billion-dollar potential of the area that sits within the project's 50,000-acre exclusive abstract agreement area is supported by an Independently derived Exploration Target of 436,000 to 2,966,000 tonnes of contained LCE (1)



# What is Direct Lithium Extraction (DLE)



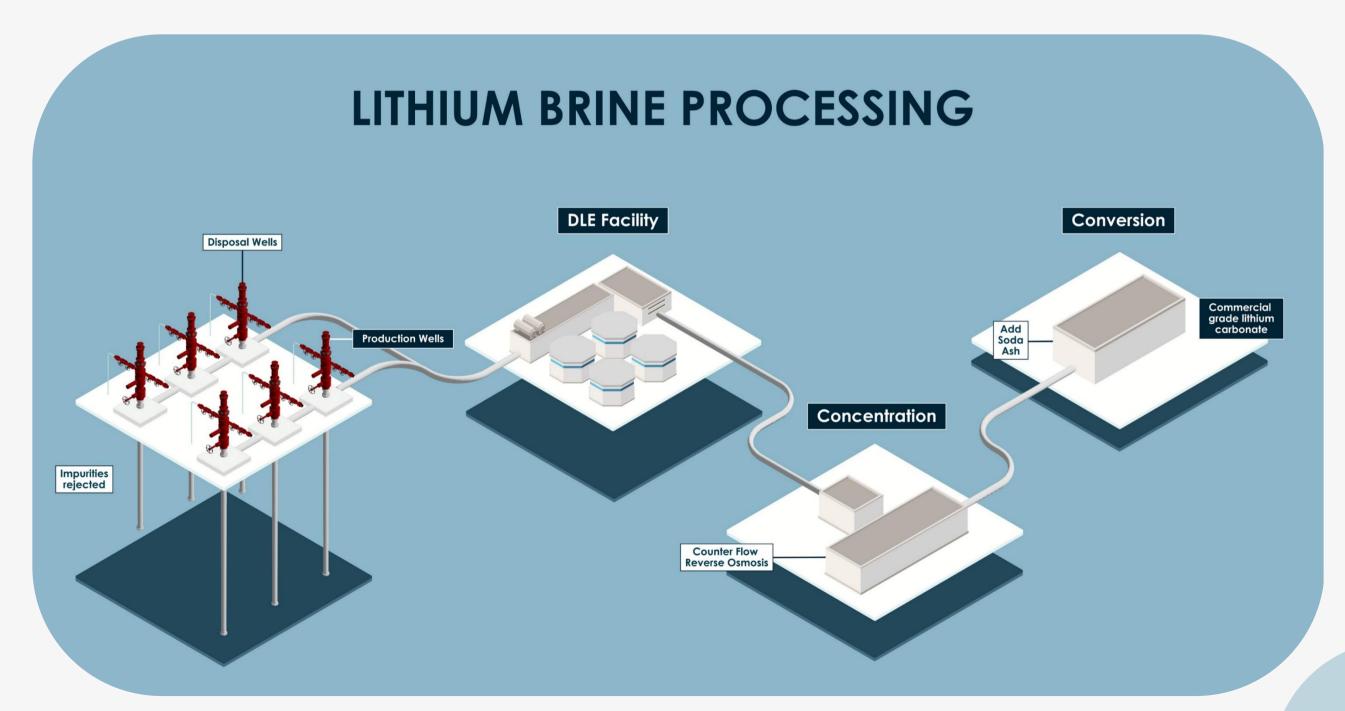
### DLE offers significant potential to improve recoveries and lift project economics

Wells for a DLE project are drilled in the same manner as oil and gas wells. They are drilled to target depth, logged, cased and perforated for production. Once this is complete an electric submersible pump is lowered and secured in the well to pump the brine volumes required.

At the back-end the DLE process selectively separates lithium from brine using various technologies such as adsorption, ion exchange, membranes, or solvent extraction.

The DLE process along with the back-end concertation can be designed to produce a battery spec grade lithium for specific customers or a high-grade chloride that can be sent to lithium refineries.

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



# Next Steps and Milestones for 2025



Q1 - Q2 2025

### Finalisation of three well locations

Sub surface and geological studies complete to identify three independent wells

# Continued acquisition of additional project acreage

Continue to build on the current 26,000 leased acreage position and acquire more abstract mineral ownership data across our exclusive abstract area.

Q3 - Q4 2025

# Drilling initial stand-alone well/s

Drilling of standalone resource definition well

# Testing and publication of lithium grades

Brine samples tested by multiple verified labs

# Direct Lithium Extraction (DLE) Testing

Testing of brine samples by multiple DLE providers

# Preparation of well pad for DLE pilot plant

## **Announcement of JORC Resource**

Maiden JORC Resource

