

22,000 ACRES MILESTONE ACHIEVED IN THE ARKANSAS SMACKOVER LITHIUM BRINE PLAY

Pantera continues to muscle its way into America's lithium heartland, now the largest acreage holder outside the five established players including Exxon, Albemarle, Tetra, Equinor and Standard Lithium.

HIGHLIGHTS

- **3,700 new acres leased (a 20% increase on last reporting) within the core Pantera Smackover Brine Project area, with Pantera's total net leased acres now 22,270 and the project rapidly approaching 25,000 acres.**
- **Acres leased from several major mineral owners located in the core of the Pantera target area.**
- **The increased acreage continues to drive PFE towards a scalable project with the Company's conceptual estimate of one DLE production pad for every 6,500 acres based on projects in development elsewhere, indicating the Company's conceptual production profile of up to four modules each producing 2,000-4,000 tpa of Lithium Carbonate.**
- **Sub-Surface program fully underway with SLB with first expected results due in four weeks to identify optimal initial re-entry well. 2D Seismic data has been acquired.**
- **Negotiations with rig company advanced for first re-entry well planned early Q3 2024.**
- **Norway's \$A125 billion state-owned energy company Equinor (EQNR.NYSE) recently entered the Smackover with an investment of up to \$160 million in Standard Lithium's Brine projects across the Smackover.¹**
- **Surrounding PFE acreage to the east, north and northwest and contiguous with the Project, Exxon Mobil (US\$419 billion market cap) continues to conduct drilling operations on their leased acres. Their strategic plan includes the construction of a sizable lithium brine processing facility, aimed at advancing their project into full-scale production.²**

¹ <https://www.equinor.com/news/20240508-partnership-standard-lithium>
² Exxon Mobil 'Our First Lithium Well - But 'Not Our First Rodeo, 18 January 2024.

Commenting on the new leased acres, Executive Chairman Barnaby Egerton-Warburton said:

*“This is an outstanding result as we continue to lease in the **United States New Lithium Heartland**, the Smackover Play Arkansas. Our exclusive abstract agreement continues to allow us to lease with little to no competition as our focus moves towards drilling, exploration and resource definition. I also note the further validation of the Smackover Lithium Brine Play with the entry of Norway’s Equinor, a world class leading energy company”.*

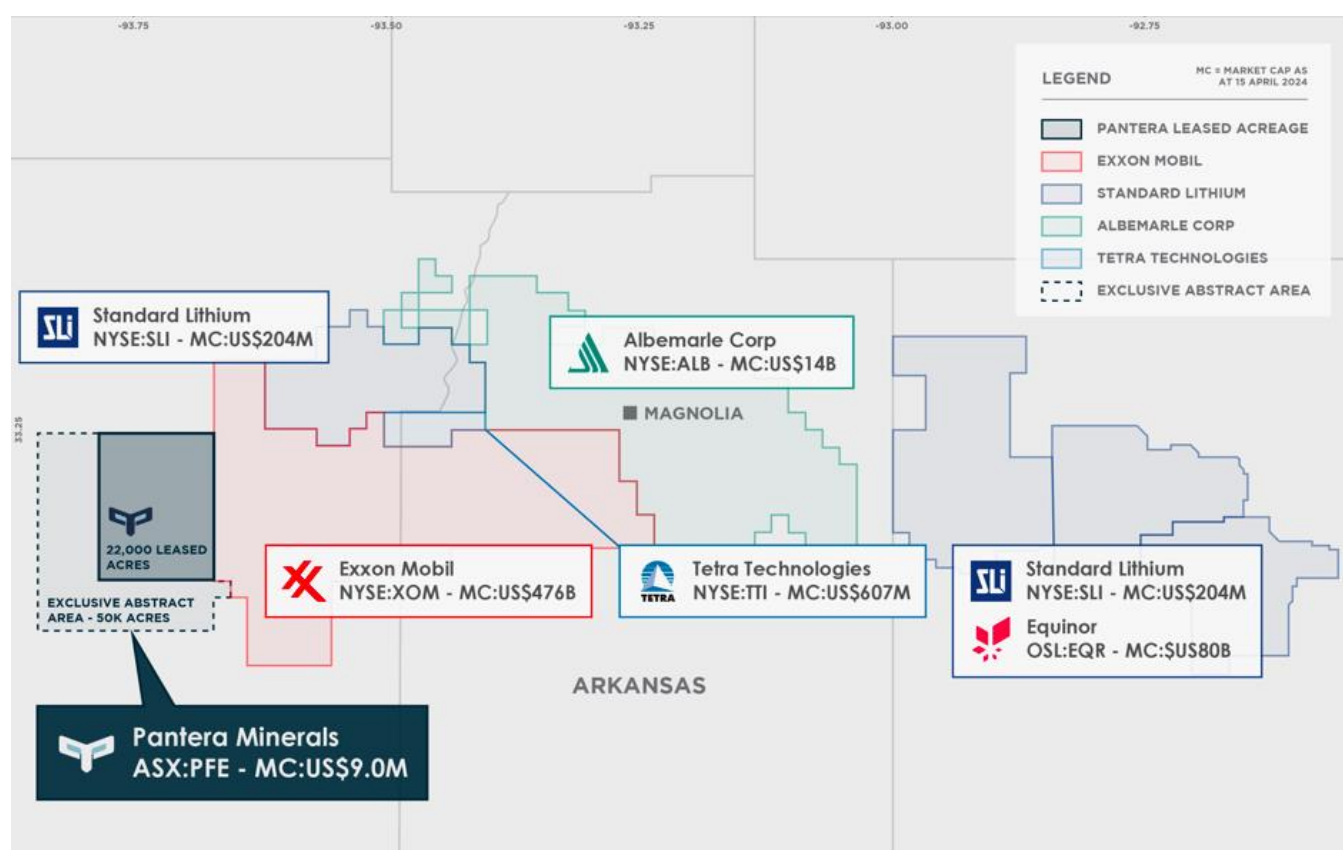


Figure 1- Pantera Arkansas Lithium Brine Project location showing increase in acreage size and proximity to adjacent lithium brine projects.

Next Steps

- **Completion of initial sub-surface study by SLB - this modelling will provide Pantera with clear drilling locations for the first re-entry and resource definition wells.**
- **Re-entry of an identified well, located within the Project’s leased position, to test brine grade, permeability, and porosity from the Smackover Formation.**
- **DLE (Direct Lithium Extraction) test of re-entry well samples by multiple DLE technology providers.**
- **Continued Smackover Project growth through the acquisition of additional acreage.**

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Pantera Minerals Limited (ASX: PFE) ("Pantera" or the "Company") is pleased to announce the successful addition of an additional 3,700 acres. This expansion continues to bolster Pantera's Lithium Brine Project, elevating its total acreage to an impressive +22,270 net acres, an increase of approximately 20%. Negotiations continue for significant additional acres.³

About The Pantera Lithium Brine Project

The Project now covers a land position of +22,270 net leased acres of lithium brine prospective ground in the Smackover Formation Arkansas, a known high grade lithium brine formation.

Exploration Target

The Project has established a conceptual Exploration Target⁴ ranging from 436,000 to 2,966,000 tonnes of contained LCE within the project's 50,000-acre Exclusive Abstract Area,⁵ which houses the Project. The estimate is based on lithium concentrations ranging between 225 mg/L and 450 mg/L with a median value of 338mg/L, showcasing the potential world-class scale of the Project.

The Exploration Target's potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a JORC compliant Mineral Resource, and it is uncertain if further exploration will result in the estimation of a such a resource.

Exclusive Abstract Agreement

Project benefits from a crucial partnership with a commercial abstract company, underpinned by a 50,000-acre Exclusive Abstract Agreement. This agreement, formed with the sole commercial provider of mineral ownership abstract information for the project area, holds immense strategic significance. Understanding mineral ownership is paramount in securing lithium brine leases, offering a substantial commercial edge to the Project.

This Exclusive Abstract Agreement facilitates access to comprehensive mineral ownership records, ensuring precise identification of owners and facilitating accurate execution of leases with the rightful mineral rights holders. In the United States, the separation of mineral rights from

³ Formal mineral lease offers have been sent to landholders or have signed commitments by landowners to deliver owned acres.

⁴ PFE Announcement: 'Material LCE Exploration Target For The Superbird Lithium Brine Smackover Project', 29 January 2024.

⁵ The Exclusive Abstract Area covers 50,000 acres with the Exploration Target being calculated as being contained within this area.

surface rights underscore the importance of examining records dating back to the 1800s for precise ownership confirmation.

The Exclusive Abstract Agreement confers a pivotal advantage, enabling the Project to efficiently obtain accurate mineral ownership information for the project area, setting it apart from competitors. While such information is theoretically accessible from public records, the process is undeniably time-consuming and labor-intensive.

Encompassing an extensive area of 50,000 acres, the Exploration Target identified pertains specifically to these 50,000 acres, reinforcing the project's focus and potential within this defined scope.

Strategically Positioned

The strategically positioned Project is situated in the Smackover Formation in South-West Arkansas, a renowned high-grade lithium brine formation. This area is home to various lithium brine explorers and producers, including industry leaders such as Exxon Mobil (NYSE: XOM), Standard Lithium (NYSE: SLI), Equinor (NYSE:EQNR) Tetra Technologies' (NYSE: TTI) and Albemarle Corporation (NYSE: ALB).

Arkansas offers an ideal jurisdiction for the development of brine projects, situated strategically in the heart of the United States. With exceptional logistics and transportation links, a skilled labor force, and a proactive and supportive state government, it provides all the necessary ingredients for successful project development.

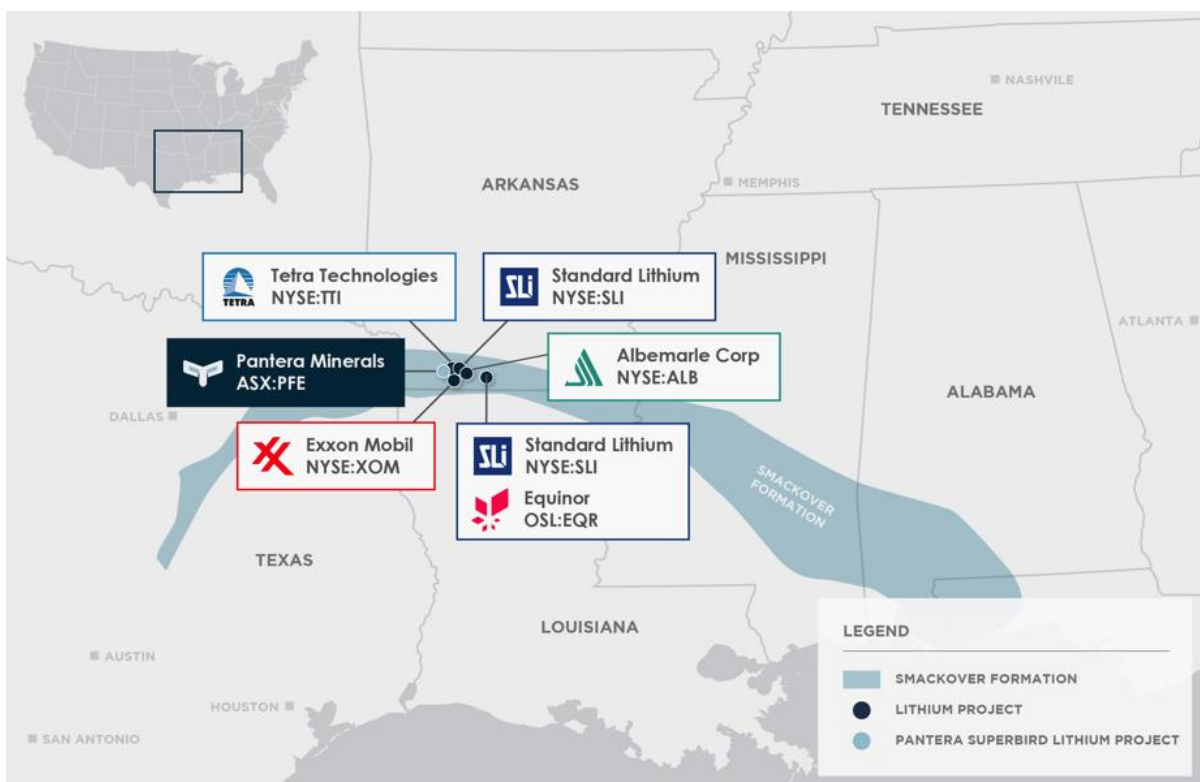


Figure 2 - Pantera Lithium Brine Project location within the Smackover Formation.

The Smackover Formation is host to several lithium brine explorers and producers, with the Pantera Project in proximity to the following lithium projects:

EXXON LITHIUM BRINE PROJECT (NYSE: XOM- Market Cap \$US 444 billion)

- Project (120k acres) acquired in May 2023 reportedly for >US\$100m⁶
- Targeting Production of 75,000 -100,000 tonnes per annum (“tpa”) of LCE⁷ by 2027⁸

STANDARD LITHIUM (TSXV: SLI- Market Cap \$US 291 million)

- Lanxess (Southern Arkansas) Project - 150k acres across southern Arkansas. A recently released Definitive Feasibility Study⁹ has first production expected in 2026 with an initial average annual production of 5,700 tonnes, and an average annual production of 5,400 tonnes over a 25-year minimum operating life.
- Lanxess has proven and probable Reserves of 208 Kt LCE at an average concentration of 217 mg/L support up to 40 years of operations
- Strong project economics. After-tax NPV US\$550 million and IRR of 24% assuming discount rate of 8% and a long-term price of US\$30,000/t for battery-quality Li₂CO₃
- Operating costs reflect first step to commercial production. Average annual operating costs of US\$6,810/t over the 25-year operating life, with a CAPEX of US\$365 million including a 15% contingency
- SLI also has its South-West Arkansas Project, 36k acres across southern Arkansas
- Exercised Option Agreement for lithium rights over 27,000 net acres of brin leases with Tetra Technologies¹⁰

TETRA TECHNOLOGIES’ (NYSE: TTI- Market Cap \$US 453 million)

- 5,100 acres
- Option Agreement (now exercised) with SLI for lithium rights within Standard Lithium’s South-West Arkansas Project

ALBERMARLE CORPORATION (NYSE: ALB- Market Cap \$US 13.9 billion)

- Magnolia Project, US\$540m investment to build a DLE test facility in Magnolia, Arkansas¹¹
- Produces Bromine currently from Smackover brines at its Magnolia Arkansas Bromine facility

⁶ Source: Wall Street Journal ‘Exxon Joins Hunt for Lithium in Bet on EV Boom’ 21 May 2023.

⁷ Source: Wall Street Journal ‘This Arkansas Town Could Become the Epicentre of a U.S. Lithium Boom’, 20 July 2023.

⁸ Source: Exxon Mobil Drilling First Lithium Well in Arkansas, Aims to be a Leasing Supplier for Electric Vehicles by 2030, November 2023.

⁹ Source: Standard Lithium Files Definitive Study for its First Commercial Lithium Extraction Plant - Phase 1A, 18 October 2023.

¹⁰ Source: Standard Lithium Exercises Option Agreement on South West Arkansas Project, Solidifying Path Forward Following Positive Feasibility Study and Rising Regional Interest, 31 October 2023.

¹¹ Source: Reuters ‘Albemarle jumps into global race reinvent lithium products’, 3 August 2023.



EQUINOR ASA (NYSE: EQN - Market Cap \$US 80 billion)

Equinor (listed on both the Oslo Stock Exchange/Euronext and the New York Stock Exchanges) is an international energy company committed to long-term value creation in a low-carbon future. Equinor's portfolio of projects encompasses oil and gas, renewables and low-carbon solutions, with an ambition of becoming a net-zero energy company by 2050. Headquartered in Stavanger (Norway) Equinor has a presence in 30 countries world-wide.

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This release is authorised by the Board of Directors of Pantera Minerals Limited.