ASX Announcement
17 July 2024

PFE FURTHER EXPANDS ACRES IN THE SMACKOVER LITHIUM BRINE PLAY

25,998 ACRES LEASED IN THE ARKANSAS SMACKOVER LITHIUM BRINE PLAY ~ FIRST RE-ENTRY TEST WELL IMMINENT

HIGHLIGHTS

- **25,998 net acres now leased, increase of 16.7% increase on last reporting.**
- **3,728 new core acres leased since last reporting.**
- **Pantera largest acreage holder outside of the majors (Exxon, Albemarle, Tetra, Standard Lithium, Equinor ASA).**
- **SLB (NYSE: SLB) sub-surface 3D static model expected imminently inclusive of both Lithium and Bromine potential.[1]**
- **Well location in final decision phase – first test well imminent.**
- **Norway's AU$125 billion state-owned energy company Equinor (NYSE: EQNR) recently entered the Smackover with an investment of up to AU$160 million in Standard Lithium's Brine projects across the Smackover.[2]**
- **Exxon Mobil (US$450 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.[3]**

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

"Our exclusive abstract agreement has continued to deliver for the Company with over 25,998 acres now under lease in America's new "Lithium Capital "as other groups in the play now surround us to the east, north, northwest and west of our acreage position"

"The significant investments by leading companies such as Exxon Mobil, Equinor, and Standard Lithium in the Smackover region highlight the immense potential in this area. This, alongside the strategic advancements in the area and the future construction of a large-scale processing facility by Exxon underscores the potential of the Smackover Formation."

1 ASX Announcement 14 May 2024, First lithium well in the Arkansas Smackover to commence with engagement of SLB
[2] https://www.equinor.com/news/20240508-partnership-standard-lithium
[3]Exxon Mobil 'Our First Lithium Well – But "Not Our First Rodeo, 18 January 2024.

"Our partnership with global technology company, SLB (NYSE: SLB) and the imminent arrival of the advanced subsurface modelling will accelerate Pantera's progress as we prepare for the first re-entry test well."

"We look forward to updating the market with further updates in the coming weeks."

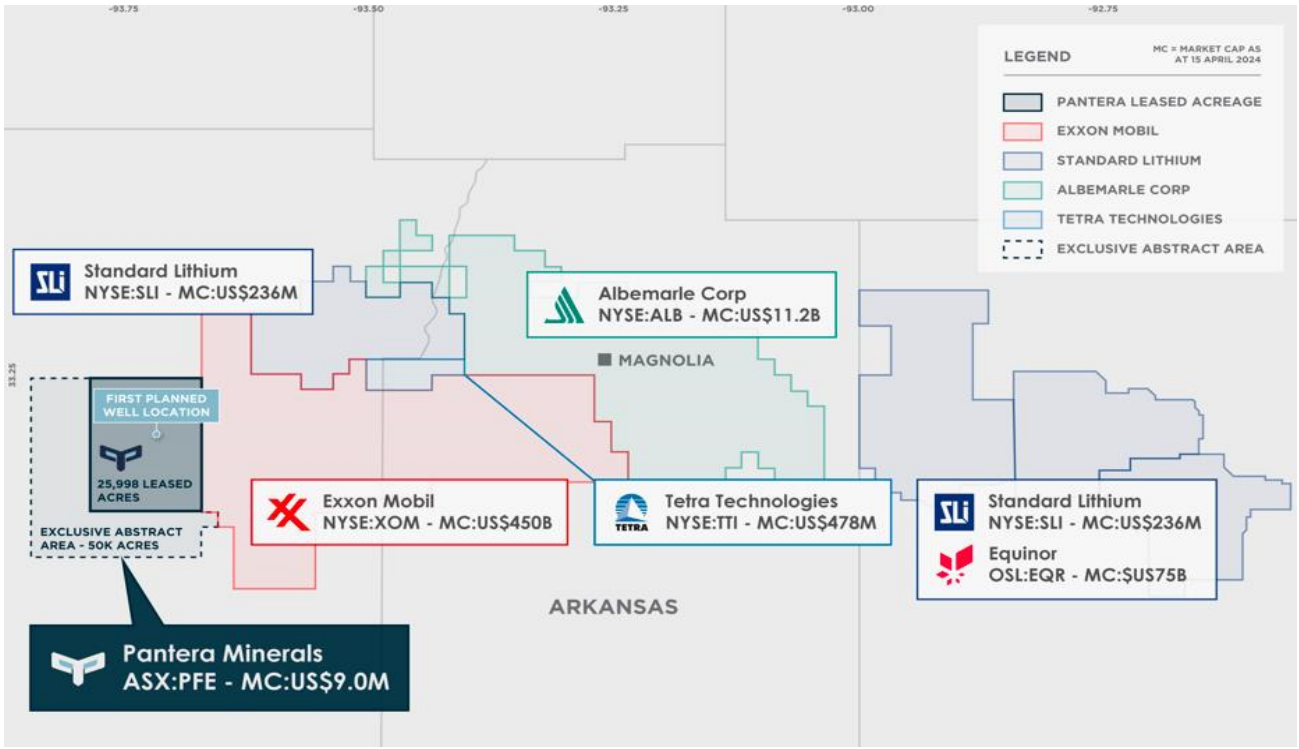

Figure 1- Pantera Arkansas Lithium Brine Project location showing increase in acreage size and proximity to adjacent lithium brine projects. Map indicates approximate outlines of Pantera and other acreage positions in the play which are constantly changing and as such may not be 100% accurate. Once leasing by the Company is complete it will publish a detailed acreage map.

Forward Focus

- **Sub-surface study by SLB - this modelling will provide Pantera with an updated model of the Lithium and Bromine Brine potential and optimal locations for future 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 3,728 acres. This expansion continues to bolster Pantera's Lithium Brine Project, elevating its total acreage to an impressive +25,998 net acres, an increase of approximately 16.7%. Negotiations continue for additional acres.[4]

About The Pantera Lithium Brine Project

The Project now covers a land position of +25,998 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 Target[5] ranging from 436,000 to 2,966,000 tonnes of contained LCE within the project's 50,000-acre Exclusive Abstract Area,[6] 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

The 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

[4] Formal mineral lease offers have been sent to landholders or have signed commitments by landowners to deliver owned acres.
[5] PFE Announcement: 'Material LCE Exploration Target For The Superbird Lithium Brine Smackover Project', 29 January 2024.
[6] The Exclusive Abstract Area covers 50,000 acres with the Exploration Target being calculated as being contained within this area.

mineral rights holders. In the United States, the separation of mineral rights from surface rights underscores 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 labour-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.

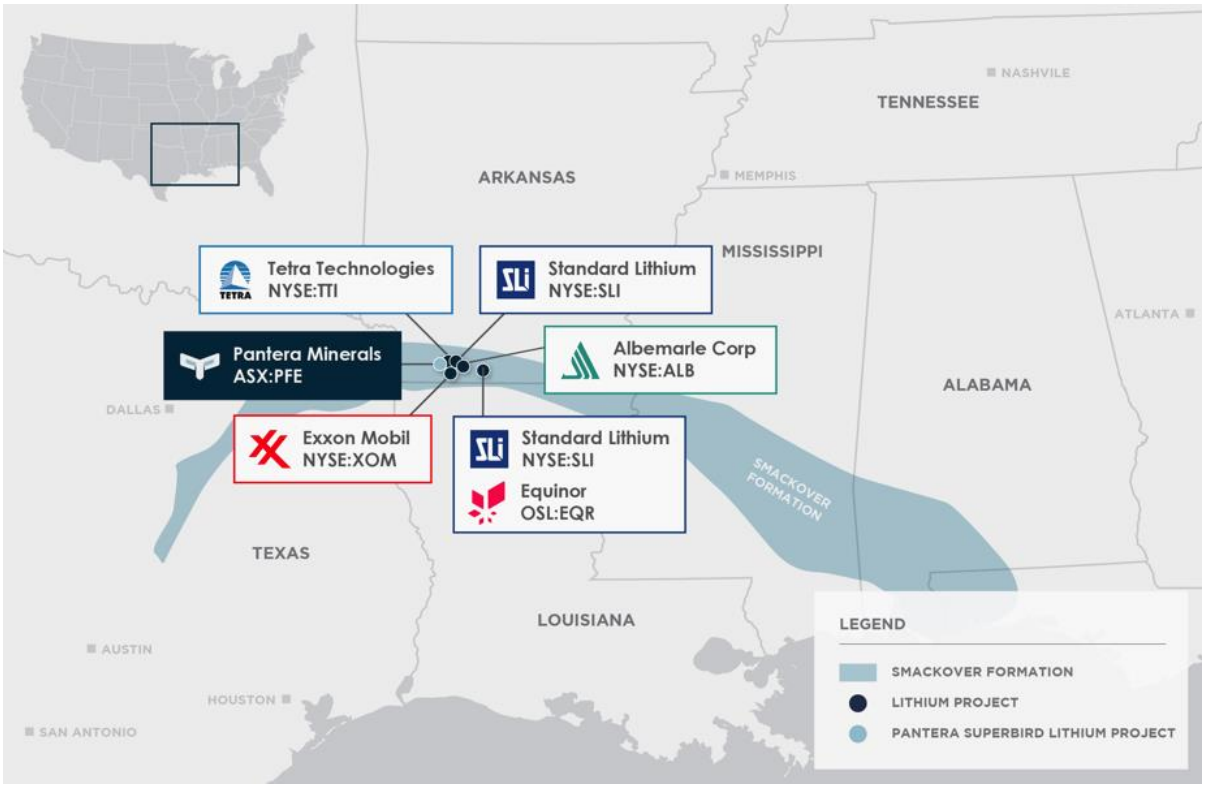

Figure 2 – Pantera Lithium Brine Project location within the Smackover Formation.

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 450 billion)

- Project (120k acres) acquired in May 2023 reportedly for >US$100m[7]
- Targeting Production of 75,000 -100,000 tonnes per annum ("tpa") of LCE[8] by 2027[9]

STANDARD LITHIUM (TSXV: SLI- Market Cap $US 236 million)

- Lanxess (Southern Arkansas) Project - 150k acres across southern Arkansas. A recently released Definitive Feasibility Study[10] 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 supporting 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 Li_2CO_3
- 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 brine leases with Tetra Technologies'[11].

TETRA TECHNOLOGIES' (NYSE: TTI- Market Cap $US 478 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 11.2 billion)

- Magnolia Project, building a DLE test facility in Magnolia, Arkansas[12]
- Produces Bromine currently from Smackover brines at its Magnolia Arkansas Bromine facility

[7] Source: Wall Street Journal 'Exxon Joins Hunt for Lithium in Bet on EV Boom' 21 May 2023.
[8] Source: Wall Street Journal 'This Arkansas Town Could Become the Epicentre of a U.S. Lithium Boom', 20 July 2023.
[9] Source: Exxon Mobil Drilling First Lithium Well in Arkansas, Aims to be a Leasing Supplier for Electric Vehicles by 2030, November 2023.
[10] Source: Standard Lithium Files Definitive Study for its First Commercial Lithium Extraction Plant – Phase 1A, 18 October 2023.
[11] 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.
[12] Source: Reuters 'Albemarle jumps into global race reinvent lithium products', 3 August 2023.

EQUINOR ASA (NYSE: EQN – Market Cap $US 75 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.

END –

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

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.