1 April 2025

SUBSURFACE ANALYSIS IDENTIFIES LITHIUM-RICH TARGETS, DRILL PROGRAM PLANNING COMMENCES

HIGHLIGHTS

- **A detailed independent assessment of the 3D subsurface model for Pantera's Smackover Lithium Brine Project in Southwest Arkansas has highlighted six areas for drill testing based on porosity, reservoir potential and seismic correlation (see Figure 1.)**
- **Results from drilling will be used with the current 3D subsurface model to deliver a JORC compliant resource model.**
- **Upcoming H2 2025 drill campaign will aim to cement the prospectivity of Pantera's acreage and validate the commercial value of the project.**
- **Recent drilling activity of energy supergiant ExxonMobil (NYSE: XOM) on the border of Pantera acreage reaffirms the Company's belief that the current acreage position holds significant potential for commercially valuable, extractable, lithium rich brines[1].**
- **Six high-priority drilling locations identified, strategically selected based on porosity, reservoir potential, and seismic correlation.**
- **Pantera is targeting lithium concentrations ranging from 225 to 450 mg/L, to validate the high-grade potential of the Pantera Lithium Project.**
- **Commercial activity in the Smackover has continued at a rapid pace, reinforcing the attractiveness of Pantera's lithium project as an important player in the region on a per-acreage basis.**
- **Pantera's project is in the state Arkansas which provides exceptional business-friendly conditions with access to all necessary local service providers.**
- **Recent U.S. government critical minerals initiatives to provide strong incentives for domestic U.S. lithium production[2].**

[1] See Figure 1.
[2] https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production

Pantera Lithium Limited (**ASX: PFE**) (**"Pantera"** or the **"Company"**) is pleased to announce the completion of an updated comprehensive subsurface geological model, which has successfully identified six high-priority drilling locations within its Smackover Lithium Brine Project in Southwest Arkansas. This marks a critical step forward in Pantera's transition from exploration to resource definition and development.

Pantera Executive Chairman and CEO, Barnaby Egerton-Warburton, commented:

"With six high-priority drill targets identified and plans in place for the first three wells following our subsurface work, we are increasingly confident that our upcoming drilling program in H2 2025 will provide the geological validation needed to confirm the commercial potential of the Smackover Lithium Brine Project.

As domestic lithium production becomes a key priority for the U.S. administration, this milestone reinforces Pantera's strategic position in one of North America's most promising lithium brine basins—the Southwest Arkansas Smackover play. Our detailed subsurface analysis has provided a clear, high-confidence roadmap for the next phase of exploration. The identification of six drill targets highlights the scale and commercial potential of our project, positioning Pantera to play a vital role in the future of U.S. lithium supply."

Strategic Development of Pantera's Lithium Brine Resource

Following the completion of an updated comprehensive subsurface geological model, Pantera has successfully identified six high-priority drilling locations within its Smackover Lithium Brine Project. This marks a critical step forward in Pantera's transition from exploration to resource definition and development.

The new sub-surface work has been combined with the SLB's (NYSE: SLB) 3D static geological model, integrating well data, seismic interpretations, and petrophysical analyses. This combination of this work is supported by Matrix Solutions and confirms the Smackover Formation as a highly prospective lithium brine reservoir[3].

[3] PFE ASX Announcement, "Material Exploration Target for Superbird Lithium Brine Smackover Project", 29 January 2024.

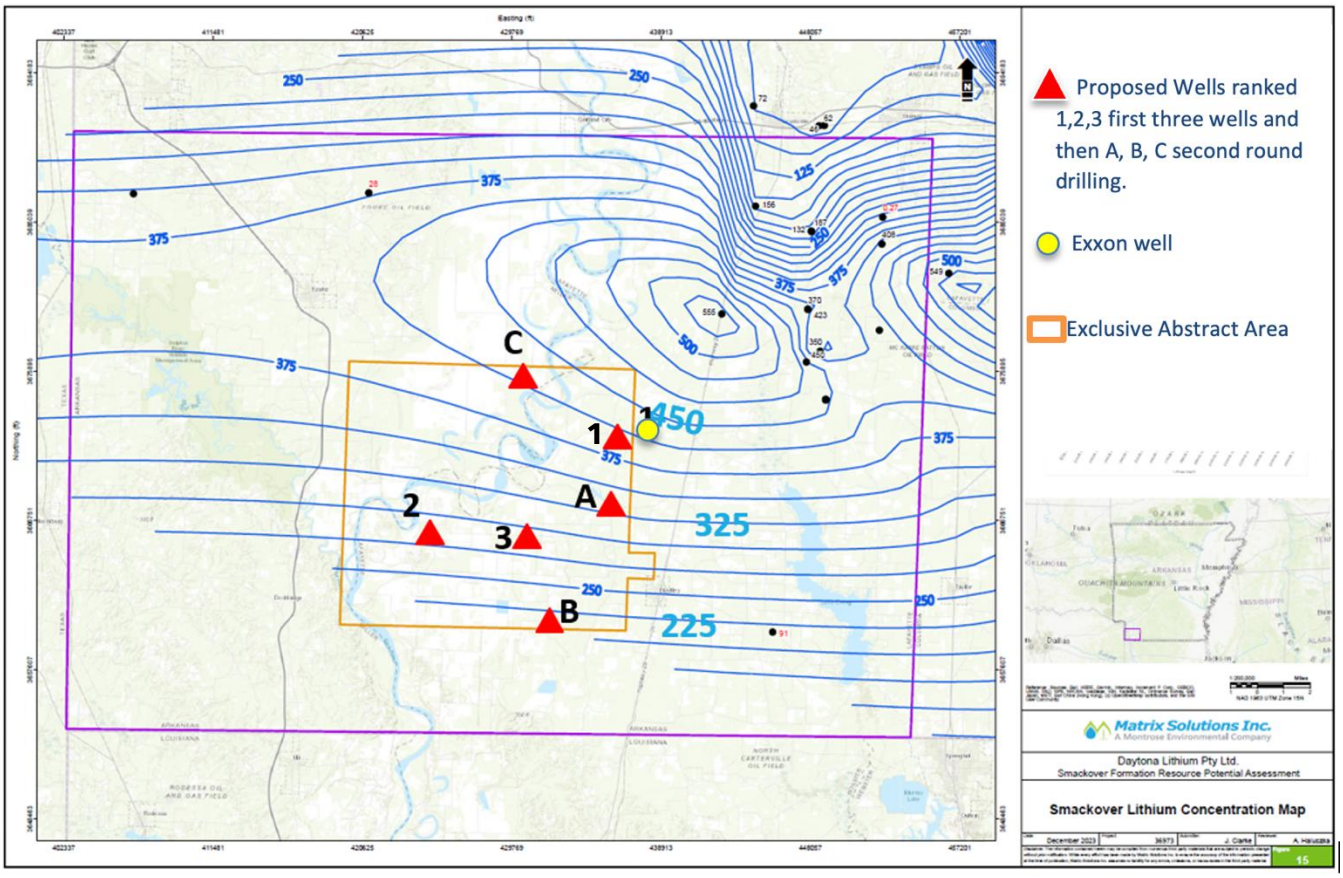

Figure 1 – Proposed well locations overlayed onto Matrix Solutions estimated brine grades[4]. Matrix Solutions (Jan 2024) The USGS PWGD database (2019) contains 1,179 entries for the Smackover Formation, with 14 records from the wider project area. It includes lithium concentration data for 211 wells, 7 of which are in the project area. Additionally, Matrix incorporated 7 lithium concentration samples from a Standard Lithium Ltd. corporate presentation. **Figure1.** indicates approximate outlines of Pantera and other acreage positions or areas of interest 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.

Key Findings From Subsurface Modelling

- 169 wells with Smackover Formation penetrations from the area of interest and surrounding townships analysed to refine geological interpretations and optimise well locations.
- 38 wells analysed containing depth, gamma ray, bulk density, neutron density and resistivity data processed for advanced petrophysical modelling, enhancing the accuracy of reservoir characterisation.
- Two seismic lines processed (13.34 miles), providing crucial insights into structural features and brine accumulation zones.
- 3D porosity and pore volume mapping, confirming thick and laterally extensive lithium-rich zones.
- Seismic-well correlation demonstrating high predictability, validating the model's accuracy.

Top Three High-Impact Drilling Locations

- Location 1 – Positioned one mile from a 2D seismic line, with the thickest Upper Smackover pore volume, indicating strong lithium brine potential.
- Location 2 – Surrounded by five Smackover control points within one mile, offering excellent subsurface data support and in a high range lithium potential zone.
- Location 3 – Located directly on a 2D seismic line, ensuring optimal reservoir targeting with four control wells nearby and providing the third well required to triangulate for a JORC resource and within the projected high grade lithium content zone.

Next Steps

Pantera Lithium Brine Project

With a validated geological model and six strategic drilling locations identified, Pantera is poised to commence:

- Discussions with potential strategic partners.
- Well surface location negotiations.
- Finalising all drill permitting approvals.
- Rig contracting for up to three initial wells.
- High-impact drilling program to commence.

– ENDS –

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

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ABOUT PANTERA MINERALS

Pantera Lithium Limited (ASX:**PFE**) is a forward-looking lithium exploration company focused on developing high-grade lithium brine resources in the Smackover Formation, Southwest Arkansas. The Company is dedicated to leveraging advanced subsurface modelling and strategic partnerships to establish a leading position in the U.S. lithium supply chain.

COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to geology and exploration results and planning was compiled by Jenni Kessler , a Competent Person with twenty six years of experience in sub-surface geology. Ms. Kessler holds a Master of Science, Geology from the University of Oklahoma and is a licensed Professional Geologist. She is a member of the American Association of Petroleum Geologist and Tulsa Geology Society and is a consulting geologist for Pantera Lithium. Ms Kessler 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" ("**2012 JORC Code**"). Ms Kessler 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.

Well Location	Latitude	Longitude	Depth to Upper Smackover (ft)
1	33.187	-93.681	9805
2	33.135	-93.808	10585
3	33.130	-93.738	10540
A	33.142	-93.723	10360
B	33.074	-93.719	10880
C	33.219	-93.753	9575

Table 1. Planned well location details. Coordinates are in WGS 84 Lat/Long format.

APPENDIX 1: JORC CODE TABLE 1 – ARKANSAS LITHIUM BRINE PROJECT

Section 1 Sampling Techniques and Data

Criteria in this section apply to all succeeding sections

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	*No geochemical results are discussed in this report.* *The following geophysical tool data was available from historical well data for use in development of the 3D geological model:* - *Gamma Ray logs* - *Resistivity logs* - *Neutron logs* - *Density logs* - *Bulk Density logs* - *P-Sonic logs* - *Spontaneous Potential logs* *Not all wells had the full complement of geophysical logs. Details of the logs available for each well used are detailed in the report.* *In addition to the geophysical logs a calliper log for most wells was available. The calliper log measures the rugosity or roughness of the well.* *2D Seismic data was used in the model development* *To create a 3D inversion of the 2D seismic data the well data was correlated to the seismic data. The nearest well (Taylor Rose 4-7-1) to seismic line 5517-5 was used to conduct a well tie analysis with the measured seismic line data compared to the synthetic seismic data as predicted by the available well data. A good correlation between measured and synthetic seismic data was observed and a 3D inversion conducted over the model extent using the 2D seismic data and the predicted synthetic seismic data from well logs.* *481 Gravity and Magnetic stations were used to map the location of faults and depth to basement through the model extent. The gravity and magnetic data was analysed through a series of qualitative enhancements of the Bourger gravity and total magnetic intensity data across the model area. This process detailed a number of interpreted faults which were integrated into the 3D static geological model as well as mapped the depth to basement.*

Criteria	JORC Code explanation	Commentary
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	*Details of the calibration methods for each geophysical tool are not available. All data used from the geophysical tools was put through a QAQC process by a qualified petrophysicist to ensure that the data was fit for use.*
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Details of the sampling procedure and laboratory techniques are not reported. This report does not detail any mineralisation.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Drilling has not been undertaken by the project proponent and the exploration target relied on data collected from drill holes completed by others. The drilling method used for these existing, predominantly oil and gas exploration wells, is unknown.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	No core or chip samples were analysed.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Details of the measures taken to maximise sample recovery and ensure sample representivity are not reported.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Brine resources do not rely on rock sample recovery to evaluate grade. No geochemical results are discussed in this report.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	No core or chip samples were analysed.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	No core or chip samples were analysed.
	The total length and percentage of the relevant intersections logged.	No core or chip samples were analysed.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No core samples were analysed.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No geochemical sample results are discussed in this report.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No geochemical sample results are discussed in this report.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No geochemical sample results are discussed in this report.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	No geochemical sample results are discussed in this report.

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	No geochemical sample results are discussed in this report.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	No geochemical sample results are discussed in this report.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	*Downhole geophysical logging was conducted in the existing historical oil and gas exploration wells. Logs included spontaneous potential, natural gamma, resistivity, sonic, density and bulk density measurements. Geophysical logging conducted in the oilfield is typically conducted using equipment that has been calibrated to a standard, but this has not been verified in the historical logs by the CP.*
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	No geochemical sample results are discussed in this report.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No geochemical sample results are discussed in this report.
	The use of twinned holes.	No geochemical sample results are discussed in this report.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	No geochemical sample results are discussed in this report. *Geophysical well logs range in vintage from 1960's era to 1980's era. Log file types are mostly raster .tif images with occasional .las digital curves. The data is available from the Arkansas Oil and Gas Commission which has a digital repository for all available data for each well in Arkansas.*
	Discuss any adjustment to assay data.	No geochemical sample results are discussed in this report.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The accuracy of drill hole locations is unknown.
	Specification of the grid system used.	*Locations of well locations used in mapping are all given in AMG84 Latitude and Longitude coordinates.*
	Quality and adequacy of topographic control.	The quality and adequacy of topographic control is unknown.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	*Data spacing is dense in portions of the model area, and sparse in other areas, but is suitable for geological modelling as geological continuity of the Upper Smackover Formation could be established between all wells in the model area.*
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied	*Data spacing is not appropriate for the Mineral Resource and Ore Reserve estimation procedure but is suitable to establish an early-stage Exploration Target and define a Geological Model.*
	Whether sample compositing has been applied.	No geochemical sample results are discussed in this report.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	*All wells drilled are vertical and all geophysical data is obtained from vertical wells. The Upper Smackover Formation within the model area is flat lying and all wells penetrate the formation perpendicular to the strike. The geophysical data is optimally oriented to give unbiased data on the formation.*
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	*The brine resources hosted in the Smackover Formation are not interpreted tobe influenced by structural trends in the reservoir and therefore standard vertical drill holes are deemed appropriate to evaluate the resource.*
Sample security	*The measures taken to ensure sample security.*	No geochemical sample results are discussed in this report.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Details of any audits or reviews of sample techniques are not reported. Sampling techniques are not reported so no new audits could be performed.

Section 2 Reporting of Exploration Results

Criteria in this section apply to all succeeding sections

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including* **agreements** *or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Arkansas Lithium Project is located approx. 48km west of Magnolia, Arkansas within Lafayette and Miller Counties. The land position consists of +26,000 acres of mineral claims for brine. The mineral claims sit within a 50,000 acre Exclusive Abstract Area in which Pantera Lithium Ltd. has sole rights to negotiate acquisition of brine mineral claims. Surface land rights are still held by the land-owners.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Previous exploration in the project area was mostly for oil and gas. Exploration started in May 1957 by J W Operating Company Gas and has continued until recently in 2011. There are three active oil/condensate producers in the northwest and southwest corners of the map area operated by Days Creek Operating Company, Lorentz Oil and Gas, and Sabre Operating. ExxonMobil/Saltwerx LLC and Standard Lithium Ltd. have lithium brine lease areas just to the east and northeast of the Pantera Minerals Ltd. Exclusive Abstract Area. Exxon/Saltwerx recently drilled 3 lithium brine wells on their lease and intend to build a large lithium brine processing facility to put these wells on production. Standard Lithium has seven lithium brine tested wells on their leases and just completed a Preliminary Feasibility Study in the third quarter of 2023. They intend to begin construction in 2025 and start production in 2027.
Geology	*Deposit type, geological setting and style of mineralisation.*	The carbonate dominated Smackover Formation was deposited in the Late Jurassic period within incipient rift structures of the Gulf of Mexico Basin. The varied subsidence history of the basin along with halokinetic deformation of the underlying Louann Salt Formation has produced a variety of structural reservoir traps historically exploited for oil and gas resources. Brine saturation in the reservoir is not interpreted to be sensitive to structural variability in the reservoir, unlike oil and gas. The depositional history of the Smackover Formation in East Texas involved the accumulation of sediments in a carbonate ramp wedge within shallow marine environment with varying degrees of energy conditions. Historically, oil and gas reservoirs have been targeted out of the Upper Smackover Formation within ooid grainstones of the higher energy ramp shoal facies particularly where pervasive dolomitization has enhanced

Criteria	JORC Code explanation	Commentary
		porosity and permeabilities in these units. The mineralisation is a lithium rich brine contained within the porous Smackover Formation ooid grainstones.
Drillhole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* *easting and northing of the drillhole collar* *elevation or RL (elevation above sea level in metres) of the drillhole collar* *dip and azimuth of the hole* *down hole length and interception depth hole length.*	The document is only intended to provide a summary of past exploration activity and identify principal targets. Locations and details of Smackover Formation penetration and completion wells come from the online Well Finder | Well Database and the Arkansas Oil and Gas Commission public database.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	No geochemical sample results are discussed in this report.
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	The Smackover Formation gently dips southward in the project area at 1.8 degrees. The historical wells intersecting the formation are predominantly vertical which is deemed appropriate for a deposit of this nature.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Diagrams are supplied in the main report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	This report relied on historical data collected by others. All data provided and available to the CP's for this work is reported in the main report.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Daytona Lithium Ltd. has not completed any on-ground exploration work on the Exclusive Abstract Area and is relying on exploration data completed by previous lease holders within the area. Exploration work done to date has largely been of a preliminary or reconnaissance nature. Further work to define the reservoir and brine concentration on the lease area is suggested to establish a Mineral Resource estimate.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The near-term exploration plans are to conduct a well re-entry within the Pantera leased area to obtain brine samples for lithium, bromine and other geochemical analysis. Down hole pressure testing and pump testing for permeability estimation will be conducted at this time. The results of this work will determine future exploration plans.