

Successful LSC-3a well test de-risks and strengthens confidence in the Lionheart Field Development Plan

Key highlights

- Successful completion of the seventh well (LSC-3a) in the planned 28 well Field Development Plan represents an important execution de-risking milestone for Project Lionheart (Lionheart)
- Completed by Vulcan's in-house drilling company, Vercana, LSC-3a is Vulcan's first well to re-inject brine back into the matrix of the sandstone reservoir
- Reinjection of lithium-depleted brine back into the reservoir matrix provides direct field validation of matrix-injection, key evidence supporting the base case production scenario
- The Lionheart Field Development Plan is being delivered at or above expectations which supports the key subsurface assumptions, reduces uncertainty and allows additional optimisation opportunities which are being investigated to further enhance Lionheart value.

Vulcan Energy (ASX: VUL, FSE: VUL) (Vulcan or the Company) is pleased to announce positive drilling and well testing results as part of its Lionheart execution program. The Company's most recent well, LSC-3a, is the first well to test subsurface reinjection into the reservoir matrix, not the fault zone, where Vulcan's historical production and reinjection has occurred.

Located in the Upper Rhine Valley Brine Field between Germany and France, Lionheart - Vulcan's first phase of production - is a lighthouse project for Europe's energy and critical raw material resilience. Lionheart involves the construction of an integrated lithium and renewable energy project targeting production capacity of 24,000 tonnes of lithium hydroxide monohydrate (LHM), enough for ca. 500,000 electric vehicle batteries per annum, with a co-product of 275 GWh of renewable power for internal consumption and 560 GWh of heat per annum for local consumers, over an estimated 30-year project life¹.

Lionheart's base case Field Development Plan comprises a combination of producers (extracting hot lithium-rich brine) and injectors (returning the lithium-depleted, cooled liquid back to the subsurface) across seven well sites proximal to Lionheart processing infrastructure. Both production and reinjection well test results across the three new wells (to complement the four existing wells for a total of seven wells drilled to date), have thus far met or exceeded the assumptions underpinning the Field Development Plan.

The Company expects some variance across the program, however successful reinjection back into the reservoir matrix provides direct field evidence that supports the base case production scenario outlined in the 2023 Bridging Study². The Bridging Study assumes a combined matrix and fault reinjection program. Reinjection back into the matrix of the sandstone reservoir is significant and validates the potential to use lithium-depleted brine to push and actively sweep larger portions of the underground formation to increase lithium recovery.

¹ Based on the Phase One Lionheart production target capacity of 24kt p.a. from Bridging Engineering Study ASX announcement 16 November 2023 and Vulcan internal estimated average EV battery size and chemistry in Europe; refer to the Competent Person Statement within this announcement. Refer to the Key Risks in Appendix 3 of the Investor Presentation dated 3 December 2025 regarding the risks associated with resource exploration and development projects.

² Refer to Vulcan Energy ASX Announcement dated 16 November 2023 titled "Bridging Engineering Study Results - Presentation".

Vulcan's Managing Director and CEO, Cris Moreno, commented:

"This is another strong result for Lionheart. The successful reinjection into the reservoir matrix at LSC-3a represents an important de-risking milestone as this is a key assumption underpinning our base case Field Development Plan. Results from our production and re-injection wells to date have shown we are meeting or exceeding our subsurface expectations, and this further reinforces our confidence as we progress Lionheart towards commercial production."

"Just as importantly, the data provides further opportunities to optimise the Lionheart Field Development Plan and drive even greater efficiency through execution."

"Every milestone we deliver reduces risk and moves us closer to first commercial production. We remain firmly focused on execution and on delivering a new local, low-cost, battery-grade lithium supply chain from Europe, for Europe."

Technical information

- Representing Vulcan's seventh well within the Lionheart Field Development Plan (including four historical operational wells), LSC-3a was drilled during September 2026 and tested in early October 2026
- An initial pilot hole, LSC-3, was successfully drilled to confirm the location and quality of a higher-permeability reservoir interval previously encountered in LSC-1 and LSC-2
- Based on these results, a geo-steered horizontal well, LSC-3a, was drilled to a total measured depth of 3,743m to maximise exposure to the higher-permeability reservoir interval
- Injection testing was subsequently completed in accordance with Vulcan's approved test program. During testing, LSC-3a achieved a measured surface injection rate of approximately 35 standard litres per second at 69 barg wellhead pressure and 18°C temperature
- Interpretation of the test data, incorporating downhole pressure and temperature measurements and wellbore modelling, indicates an injection capacity of approximately 64 standard litres per second under planned operating conditions of 70 barg wellhead pressure and 65°C wellhead temperature
- The demonstrated injection capacity exceeds the injection rate of ~40 standard litres per second assumed for the matrix injectors in the Lionheart Field Development Plan.

Field Development Plan implications: reduced uncertainty and increased confidence

- The LSC-3a results provide the first direct field validation of matrix-injection within the Lionheart Field Development Plan and confirm a key assumption underpinning the project's base-case development concept
- Successful matrix injection supports the planned combination of matrix and fault-zone injectors across the future wellfield, reducing uncertainty associated with long-term reservoir pressure support and lithium brine sweep efficiency
- Updated seismic imaging, calibrated through drilling and logging results from the Lionheart campaign, has improved reservoir prediction capability and increased well placement confidence
- Integrated analysis of drilling, core and logging data has confirmed the presence of a laterally persistent, higher-permeability reservoir interval across multiple wells and continues to increase confidence in reservoir quality and supports the role of matrix injection within the current Field Development Plan
- The higher than expected matrix injection capacity of 64 standard litres per second, compared to the assumed ~40 standard litres per second, supports the assumptions underpinning Vulcan's current Lionheart base-case Field Development Plan and provides additional flexibility for ongoing optimisation of the field
- Collectively, the results from seismic reprocessing, drilling, logging, core analysis and injector testing have reduced subsurface uncertainty and increased confidence in the current Lionheart base case Field Development Plan.

Next steps: potential to further enhance project value during execution

- The LSC-3a results will be incorporated into the integrated geological and dynamic reservoir interpretation and will guide the design and execution of the subsequent LSC-4 and LSC-5 reinjection wells as part of the overall Lionheart construction program
- The incorporation of LSC-3a test results into the integrated reservoir interpretation is expected to support further optimisation of the Lionheart Field Development Plan, with the objective of enhancing project value through improved well placement, reduced subsurface uncertainty and refinement of the future development strategy.



<ENDS>

For and on behalf of the Board

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About Vulcan Energy

INTRODUCING VULCAN

Integrated lithium chemicals and renewable energy

Vulcan Energy (ASX: VUL, FSE: VUL) is building the world's first integrated lithium and geothermal renewable energy business to decarbonise battery production. Located in the Upper Rhine Valley Brine Field between Germany and France, Vulcan's first phase of production, the Lionheart Project (Lionheart), is a lighthouse project for Europe's energy and critical raw material resilience.

Lithium is to be extracted from low impurity geothermal sub-surface brines using Vulcan's industry-leading VULSORB® technology. Naturally heated, the brine powers production and conversion of lithium to battery-quality material by creating a renewable energy co-product for use in operations, with surplus sold into the local energy market. This integration, technology and favourable brine chemistry collectively enables one of the lowest cost lithium operations globally.

Extraction is only the starting point for Vulcan. Vulcan has reimagined mining using innovation to integrate and capture more of the value chain. A positive final investment decision has been made on Lionheart, construction is underway, offtake contracted and further phases of production, including Project Ludwig, are in planning.



Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Vulcan operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Vulcan's control.

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Competent Person Statement

Any information in this announcement that relates to: (i) Mineral Resources and Ore Reserves and Resources in relation to Project Lionheart and the Future Phases projects is extracted from the "Bridging Engineering Study Results" announcement on 16 November 2023 (Bridging Engineering Study Announcement) and the "Future Phase Pipeline - Mannheim Resources Growth" announcement on 9 July 2025 (Mannheim Resources Growth Announcement); (ii) Mineral Resources and Geothermal Resources in relation to Project Ludwig is extracted from the "Positive Preliminary Feasibility Study (PFS) outlines Vulcan's second German project showcasing repeatable development growth strategy" announcement on 3 September 2026 (Project Ludwig PFS Announcement); and (iii) Exploration Results is extracted from the "Successful production test results from first new Lionheart well" announcement dated 21 January 2026, and the "Positive start to Phase One Lionheart Project field development" announcement on 19 November 2025, all of which are available to view on Vulcan's website at <https://v-er.eu>.

Vulcan confirms that, in respect of: (i) Mineral Resources and Ore Reserves in relation to Project Lionheart and the Future Phases projects; (ii) Mineral Resources and Geothermal Resources in relation to Project Ludwig; and (iii) Exploration Results, included in this document:

- a) it is not aware of any new information or data that materially affects the information included in the original market announcement;
- b) all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed; and
- c) the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement.

Production Targets

Any information in this announcement that relates to production targets for: (i) Project Lionheart is extracted from the Bridging Engineering Study Announcement; and (ii) Project Ludwig is extracted from the Project Ludwig PFS Announcement. These announcements are available to view on Vulcan's website at <https://v-er.eu>. Vulcan confirms that all material assumptions underpinning the production targets included in these announcements continue to apply and have not materially changed.

Forecast Financial Information

This announcement may contain forecast financial information, including forecast financial information derived from the Company's production targets. Any forecast financial information is based on the material assumptions set out, or referred to: (i) in the case of Project Lionheart - the Independent Expert Report included as section 17 to the "Information Memorandum" announcement on 11 December 2024 and the "Financing and FID presentation" announcement on 3 December 2025; and (ii) in the case of Project Ludwig - the Project Ludwig PFS Announcement. These announcements are available to view on Vulcan's website at <https://v-er.eu>. Vulcan confirms that the assumptions set out in these announcements continue to apply and have not materially changed. The Company believes that it has a reasonable basis for making the forward-looking statements in this announcement (including with respect to forecast financial information).