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28 September 2026

Lance Project, Wyoming, USA

Peninsula Reports Encouraging Operational Progress at its Lance Project

Header Houses 15 and 17 achieve combined flow rates in line with original design parameters. Newly drilled wells in HH14, HH16 and HH12 deliver strong flow rates and high uranium concentrations.

Highlights

- **Header House (HH) 15 commenced production on 2 September 2026** and is currently operating at ~350 gallons per minute (GPM), with average operating well flow rates broadly consistent with original design expectations.
    - Hydrogen peroxide addition commenced in HH15 in early September, with **no gassing issues** observed since its introduction.
- **Header House 17 (HH17) commenced acidification on 10 September 2026,** following a technical review and implementation of operational learnings from earlier header houses, and is currently operating at approximately 500GPM, exceeding the Company's previously disclosed target of 450GPM. Average operating well flow rates are approximately 15.6GPM per operating well, compared with approximately 14GPM in the design basis.
    - HH17 is the first header house to start up using our "soft start" procedure i.e. an initial lower acid addition rate, ramping up over time. This is being done to better control calcite dissolution and acid consumptions.
- **Encouraging performance has also been achieved from the newly drilled wells across Header Houses HH14, HH16 and HH12**
    - Newly drilled wells in HH14 have demonstrated strong flow rates, well above the average of the current wells and the original design basis, with **uranium grades exceeding 100 mg/L**.
    - Similar encouraging results have been achieved from new wells drilled in HH16 and HH12, with the new wells in HH12 achieving **flow rates above 14GPM per operating well**, exceeding the historical operating averages of ~6GPM per operating well for that area.
    - Results from the newly drilled wells provide encouraging evidence that formation permeability and mineralisation remain intact in the areas tested, assisting the Company in better understanding the causes of historical wellfield performance variability and providing further data to support the ongoing optimisation of the wellfields.
- **Cost optimisation initiatives have been implemented across MU-1**, including the temporary suspension of lower-grade wells to focus reagent consumption and operating resources on higher-return production areas.
- **Further optimisation work is also planned for MU-3,** where wider spaced patterns and multi-horizon screening have proven ineffective.
- **Technical Committee established to support ongoing operational improvement initiatives**.
- **Brian Pile appointed Interim Senior Vice President** following recent site leadership change.
- **FY2027 development sequencing has been refined to incorporate operational learnings, prioritise optimisation of existing production areas and preserve capital while continuing to advance the long-term development pathway for Lance.**

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Further to its operational update released on 22 July 2026, Peninsula Energy Limited (**"Peninsula"** or the **"Company"**) (**ASX: PEN, OTCQB: PENMF**) is pleased to provide an update on recent development and operational activities at its Lance Project in Wyoming, USA ("**Lance**" or the "**Project**").

Modified wellfield operating strategies, along with recent drilling and wellfield development activities, have delivered encouraging results across several header houses, providing additional data on wellfield performance and with initial indications that the issues previously encountered were transitional and operational in nature rather than fundamental issues with the orebody or recovery processes.

In the past 2 months we have drilled additional recovery wells within HH12, HH14 and HH16. Highlights include the flowrate in the additional recovery wells in HH12 (MU-3), which is up to 3 times the flowrate previously seen in MU-3, and the head grade in the additional recovery wells in HH14 above the average for the header house.

Management's assessment of these wells is that the issues experienced to date in these header houses i.e. low flow rates and low grades, are not associated with the broader mining zone characteristics, including formation permeability and mineralisation (which both remain intact), but rather are challenges associated with wellfield design, localised well completion conditions, operating strategies and the applied method of acidification and oxidisation. Ongoing drilling, wellfield development and operating data will be required to further test and refine this assessment.

Further investigation is underway to determine what additional actions can be taken within these header houses and what can potentially be applied to the other header houses.

HH15 commenced production on 2 September 2026 and is currently operating at ~350GPM, with average operating well flow rates of ~12.5GPM. This is lower than the design basis for this header house of 400GPM (based on airlift values generated during construction) but remains at an acceptable level for effective operations. Hydrogen peroxide addition commenced when acidification of the HH was completed and flow was turned to production. Since commencement of peroxide addition, no gassing issues as been observed. HH15 was also the first header house to have the modified lixiviant filtration system applied.

HH17 commenced acidification on 10 September 2026 and is currently operating at ~500GPM, with average operating well flow rates of approximately 15.6GPM. This is above the design basis for this header house of 450GPM (based on airlift values generated during construction). Flow rates have actually been limited to 500GPM from the natural flowrate of~550GPM due to current capacity constraints within the dissolved air flotation (DAF) process which is being utilised to manage solids within the lixiviant stream during the acidification phase. HH17 remains in the early stages of acidification and is the first header house to follow the "soft acidification" start procedure whereby the acid tenor is ramped-up during the acidification process to help minimise calcite dissolution and better control acid consumption.

Production Optimisation

As part of ongoing cost optimisation initiatives, wells within MU-1 producing uranium concentrations below 30 mg/L have been temporarily taken offline. This decision reflects current sulfuric acid pricing and the process plant's tail grades and is designed to maximise wellfield economics by focusing operating resources and reagent consumption on higher-return production areas.

Further optimisation work is also planned for MU-3, where the construction of the wellfields have proven ineffective due to wider spaced patterns and well screening across multiple horizons. A modification to the design of these wellfields may be warranted.

Measured Development Approach

The operational experience gained through CPP commissioning, the commencement of production from HH15, acidification of HH17 and recent drilling has enabled the Company to refine its FY2027 development plan. The resulting plan represents a measured evolution of the development pathway outlined as part of

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the 2026 capital raising, with a greater emphasis on operational reliability, wellfield optimisation and capital efficiency.

Under this approach, Peninsula will focus near-term expenditure on activities that support production from existing and recently developed header houses, including improved start-up procedures, filtration, acid management, hydrogen peroxide control and targeted wellfield work. Non-essential capital expenditure will be deferred, and the sequencing of selected infrastructure and future mining-unit development will be aligned with demonstrated operating performance and the availability of further technical data.

The Company will continue to progress the development pathway for MU-5 and MU-6 while preserving financial flexibility. This sequencing is intended to reduce execution risk, improve the quality of future investment decisions and establish a stronger foundation for sustainable production growth. A Final Investment Decision on the full-scale development of the next mine unit is now expected to be made during the first half of CY2027.

Under this measured development approach, Peninsula expects CY2027 uranium production to be within the previously announced guidance of 500,000 to 600,000 pounds U_3O_8. The Company's focus is on operational reliability, wellfield optimisation and the incorporation of key learnings from recent commissioning, acidification and production activities. The long-term development opportunity at Lance remains unchanged.

Operational Capability

The Company continues to strengthen its technical and operational capability through the recently established Technical Committee and ongoing support from the expanded technical leadership team. In addition, Brian Pile has been appointed Acting Senior Vice President following recent site organisational changes.

Management Comment

Peninsula Managing Director and CEO, George Bauk, said:

"Our modified operating strategy and leach chemistry management is starting to pay dividends. The commissioning and initial operation of HH15 have been successful. To date we have not seen the drop off in flow rates experienced during the start-up of previous header houses in MU-4 and the absence so far of any gassing issues with the introduction of hydrogen peroxide has also shown we have an improved understanding of our leaching chemistry.

"HH17 has now commenced acidification activities, with multiple modified operating strategies incorporated including improved filtration techniques, improved acid management and better hydrogen peroxide control.

"The results from the recently drilled additional wells across HH14, HH16 and HH12 are also encouraging and represent an important development in our ongoing operational improvement program at Lance. Importantly, these new wells are outperforming historical operations for those areas and provide further evidence that the underlying formation continues to respond positively to the correct development and optimisation activities.

"These learnings are also shaping our FY2027 plan. We are taking a measured approach to the next phase of development, focusing capital on the areas that can best support reliable production and deferring non-essential expenditure while further operating data is gathered. This is not a change in our long-term ambition for Lance; it is a disciplined approach to reducing execution risk and building a stronger platform for sustainable growth."

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"While further work remains, these initial results from HH15 and HH17, and the new wells in HH14, HH16 and HH12 support our new operating strategies which are starting to show improved wellfield performance and will lead into optimised operating economics and improved operational initiatives that are required to support the long-term development of the Lance Project."

This announcement has been authorised for release by the Board of Peninsula Energy Limited.

– ENDS –

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ABOUT PENINSULA ENERGY LIMITED

Peninsula Energy Limited (ASX: PEN) is the only ASX-listed uranium company providing US production and direct market exposure. Its 100% owned Lance Project in Wyoming re-commenced uranium production on resin in December 2024 and in September 2025 commenced the production of dried yellowcake at the complete central processing plant.

Lance is one of the largest, independent near-term uranium development projects in the US. Once back in full production, Lance will establish Peninsula as a fully independent end-to-end producer of yellowcake, well-placed to become a key supplier of uranium and play an important role in a clean energy future.

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Forward Looking Statements

This announcement contains forward-looking statements concerning the Company, including statements regarding the Company's production guidance, estimates of resources and timing of MU-5 development.

Forward-looking statements can generally be identified by the use of words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "target", "forecast", "project", "potential", "continue", "should", "seek", and similar expressions.

These statements are based on information available to the Company as at the date of this announcement and on assumptions and expectations that the Company considers to be reasonable as at that date. Forward-looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the Company's control. Such risks

include, but are not limited to, uranium price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. Actual results, performance or achievements may differ materially from those expressed or implied by the forward-looking statements. Investors should not place undue reliance on forward-looking statements.

Except as required by the ASX Listing Rules, the *Corporations Act 2001* (Cth) and applicable law, the Company does not undertake any obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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APPENDIX 1

[1]Lance Project Classified Mineral Resource Estimate (U_3O_8) as at 31 December 2025

Classification	Tonnes (Mt)	U_3O_8 (Kt)	U_3O_8 (Mlbs)	Average Grade (% U_3O_8)	Location
Measured	3.8	2.0	4.3	0.052	Wyoming, USA
Indicated	11.7	5.9	12.9	0.051	Wyoming, USA
Inferred	38.5	18.9	41.7	0.049	Wyoming, USA
Total	**53.9**	**26.7**	**59.0**	**0.050**	

(i) Due to rounding, total values may not appear to equal the sum of estimated resource. The above tables are provided by an independent consultant outlined in the competent person statement below.

[2] Dagger Project Classified Mineral Resource Estimate (U_3O_8) as at 23 October 2023

Classification	Tonnes (M)	U_3O_8 (Kt)	U_3O_8 (Mlbs)	Average Grade (% U_3O_8)	Location
Inferred	3.0	3.1	6.9	0.104	Wyoming, USA
Total	**3.0**	**3.1**	**6.9**	**0.104**	

** Reported above a 0.02% eU_3O_8 grade and a 0.2 GT cut-off*

[1]JORC Table 1 included in an announcement to the ASX released on 25 September 2026: "Mineral Resource Increases to 59.0Mlbs U3O8 at the Lance Project". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the original market announcements 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 announcements.

[2]JORC Table 2 included in an announcement to the ASX released on 23 October 2023: "Peninsula Establishes Significant New Uranium Development Project". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the original 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.