

31 October 2024

SEPTEMBER QUARTERLY ACTIVITIES REPORT

KEY POINTS

LANCE PROJECT HIGHLIGHTS

- Ongoing site preparations and construction activities at the flagship Lance Uranium Projects (“**Lance**”), located in Wyoming, USA, with Peninsula on track to restart operations in December 2024
- Phase II plant expansion progress expedited with between 70 and 100 contract workers at site working on a 24-hour construction roster
- Twelve contracted drill rigs working on-site at the end of the quarter
- Wellfield development activities at Mine Unit 3 (“**MU-3**”) well advanced with drilling activities transitioning into Mine Unit 4 (“**MU-4**”)
- Preparation of Header House 11 (“**HH-11**”) completed with Header House 12 (“**HH-12**”) and 13 (“**HH-13**”) development significantly progressed
- Commencement of low pH pre-conditioning flows in Mine Unit 1 (“**MU-1**”)
- MU-3, HH-11 pre-conditioning flows commenced subsequent to end of quarter
- Laboratory and pilot plant scale process optimization tests were conducted with the objective to further improve uranium recoveries and to ensure a high-quality finished product

CORPORATE

- 2024 Sustainability Report released
- Available cash of US\$78.3 million as of 30 September 2024

Peninsula Energy Limited and its wholly owned subsidiary, Strata Energy Inc. (together “**Peninsula**” or the “**Company**”) (ASX:PEN, OTCQB:PENMF) are pleased to announce the release of their September 2024 Quarterly Activities Report.

LANCE PROJECTS, WYOMING

The Company’s flagship Lance Projects, located in the tier-1 mining jurisdiction of Wyoming, USA, comprise of the Ross Production Project Area, Kendrick Development Project Area and Barber Exploration Area. The August 2023 revised production strategy and LOM model for the Ross and Kendrick areas, (now collectively boasting a resource base of 26.2 Mlbs U₃O₈, equating to at least 10 years of production ready uranium resources), outlines resumption of production in December 2024.

On completion of construction, Lance Projects will be home to a 5,000 gallon per minute (“**GPM**”) uranium In Situ Recovery (“**ISR**”) process plant with capacity to produce up to 2.0 Mlbs p.a. of dry yellowcake (U₃O₈) product.

The LOM model presently excludes the contiguous Barber Resource Area, setting the total cost of the plant and infrastructure against Ross & Kendrick production. The expanded plant functionality will be available to process future output from the 31.9 Mlbs U₃O₈ resource base at Barber, highlighting the opportunity for significant future growth at the Lance Projects.



Figure 1: Peninsula's Lance Uranium ISR Process Facilities in Wyoming, USA

Lance Project Process Plant Construction Activities

Site construction and preparation activities have advanced significantly, demonstrating steady progress toward the anticipated operational restart in late Q4 2024. Phase II plant expansion efforts maintained a high level of activity, with between 70 and 100 contract workers on site daily. The construction schedule transitioned to a 24-hour operation, ensuring continuous work at the site. During the quarter, approximately US\$19.5 million was incurred on the process plant expansion activities.

Key achievements in the plant expansion construction during the quarter included:

- Completion of concrete pours for both the plant foundation and plant floor slabs.
- Erection of the building structure, roofing, insulation and sidewalls, with the exterior finished in October.
- Placement of key process equipment, including the IX and Elution vessels, pipe racks, steel structures, and eluant and chemical storage tanks.



Figure 2: Expansion construction at the Lance Central Processing Plant



Figure 3: Concrete slabs being poured at the Lance process plant expansion



Figure 4: Ion exchange columns and pipe racks in new section of plant

Construction of a new auxiliary process facility, designed to remove fine solids from wellfield preconditioning process streams, that can handle flows of up to 1,000 GPM is close to completion. Until completion, the existing pond settlement system with a 500 GPM flow limitation is being utilised.

Process Design Optimisation

Laboratory and pilot plant scale process optimization tests were conducted with the objective to further improve uranium recoveries and to achieve a high-quality finished product and lower processing costs. The elution process chemistry has been modified to substantially reduce iron concentrations contained in the rich eluate which is advanced to the uranium precipitation system.

Wellfield Development

In parallel with processing plant construction activities, the Company's drilling and construction teams made good progress in developing new wellfield production areas, specifically Mine Unit 3 ("MU-3") and Mine Unit 4 ("MU-4"). Twelve drill rigs were on-site by the end of the quarter with five of these focused on resource delineation and monitoring well installation for MU-4. Drilling and casing of MU-4 monitoring wells began in August.

Construction of the wellfield infrastructure for MU-3 (pipelines, powerlines, fences, and roads) reached approximately 85% completion. Preparation of HH-11, the first of three production areas in MU-3, consisting of 50 production well patterns, was completed. Subsequent to the quarter end, regulatory approval of the MU-3 wellfield data package was received and pre-conditioning operations commenced in HH-11. During the quarter, approximately US\$4.8 million was incurred on wellfield development activities.

Key wellfield activities completed or in progress include:

- Completion of pattern well installation for HH-11.
- Completion of surface facilities for HH-11.
- Ongoing installation of production and injection pattern wells for MU-3, 76% complete at the end of September.
- Commencement of monitoring well installation in MU-4, 38% complete at the end of September.



Figure 5: Connecting HH-11 wells to the header house building



Figure 6: HH-11 interior, production well meter runs

Production Guidance

On 31 July 2024¹ the Company announced that it was expecting a lower initial production ramp-up in CY2025 of between 0.7M lbs and 0.9M lbs compared to the August 2023 Life of Mine (LOM) plan projection of 1.1M lbs for CY2025².

DAGGER PROJECT, WYOMING

The Dagger Project (“**Dagger**”) is a high-grade, satellite uranium development introduced in October 2023. Located in Crook County, Wyoming within the Black Hills district in the Northeast corner of the State, it lies approximately 20km Northeast of the Company’s Ross Processing Plant at the Lance Project facilities (see Figure 1).

With a JORC (2012) Inferred Resources of 6.9 Mlbs U₃O₈ (refer Appendix 1) at an average grade of 1,037ppm, over twice the grade of U₃O₈ compared to Lance, Dagger provides the Company with the opportunity to extend the Lance project life through a Satellite ISR operation.

Subject to finalising the required surface access agreements with the relevant landowners, a confirmation drilling program is planned to commence at Dagger no later than Q1CY2025 to assist with the preparation and publication of an updated JORC (2012) compliant resource estimate.

SUSTAINABILITY, SAFETY & OPERATIONAL

2024 Sustainability Report

The Company released its third annual Sustainability Report for the 30 June 2024 financial year in September. Sustainably highlights reported for the 2024 financial year include the establishment of a sustainability committee, no reportable incidents, no exceedances of regulatory limits or non-compliance to permitting obligations, receipt of the Wyoming Governor’s Safety Award for the third consecutive year and a decade of ongoing contributions to community scholarships.

The 2024 Sustainability Report is available on the Company’s website and can be accessed through the following link - <https://www.pel.net.au/investor-centre/sustainability-reports/>.

Safety

No Lost Time Injuries (“LTI’s”) were recorded on site from either employees or contractors during the quarter. A total of 97,673 hours by staff and contractors were worked at the Lance Projects during the quarter.

Operational Readiness

Seven new employees were recruited at Lance as the Company continues to source individuals with the required skills and experience to support its transitioning to an operating mine. The total employee count was near 60 persons at the end of the quarter.

¹ Refer to announcement released on 31 July 2024 titled “Lance Project Update”.

² Refer to announcement released on 31 August 2023 titled “Lance Production to Restart in late 2024 under revised Ross and Kendrick Life of Mine Plan”. The Company confirms that the material assumptions used in the estimation of production targets continue to apply and have not materially changed from this announcement.

CORPORATE

Funding

Peninsula has appointed a financial adviser (BurnVoir Corporate Finance) to assist with the arrangement of debt facilities to support working capital to achieve steady state production and balance sheet flexibility. The Company is in ongoing discussions with US Government funding agencies and other providers of working capital finance.

Uranium Sales

There were no uranium sales during the quarter. The next planned product delivery is scheduled for late Q2 CY2025.

The Company's total contractual sales obligation over the upcoming 10-year period is approximately 6.0 Mlbs.

Uranium Inventory

The Company holds an in-process inventory of 15,182 lbs of dry yellowcake.

Cash and Surety Positions

The Company's available cash at the end of the quarter was US\$78.3 million. In addition to the Company's available cash, the Company has US\$3.2 million placed on deposit with a third party as security for environmental surety bonds with a face value of US\$13.9 million. Cash deposits of US\$3.3 million are held by the Wyoming Department of Environmental Quality as security for environmental liabilities.

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For further information, please contact:

Wayne Heili
Managing Director & Chief Executive Officer
Peninsula Energy
+61 8 9380 9920
info@pel.net.au

SODALI & CO.

Cameron Gilenko - +61 466 984 953
Michael Weir - +61 402 347 032

This release has been approved by the Board.

ABOUT PENINSULA ENERGY LIMITED

Peninsula Energy Limited (ASX:PEN) is one of the only ASX-listed uranium companies providing US production and direct market exposure. Its' 100% owned Lance Projects in Wyoming is due to re-commence production in December 2024 following a central processing plant capacity expansion construction project.

Lance is one of the largest, independent near-term uranium development projects in the US. With a track record of meeting delivery requirements since 2016, Peninsula has 10 years of sales contracts in place with major utilities in both the US and Europe. Once back in 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.

Appendix 1

¹ Lance Projects Classified JORC-Compliant Resource Estimate (U₃O₈) as at 31 December 2023

Classification	Tonnes (M)	U ₃ O ₈ (Mkg)	U ₃ O ₈ (Mlbs)	Grade (% U ₃ O ₈)	Location
Measured	3.3	1.7	3.8	0.051	Wyoming, USA
Indicated	11.0	5.5	12.4	0.051	Wyoming, USA
Inferred	38.3	18.9	41.7	0.049	Wyoming, USA
Total	52.6	26.3	58.0	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.

¹ Dagger Project Classified JORC-Compliant Resource Estimate (U₃O₈) as at 23 October 2023

Classification	Tonnes (M)	U ₃ O ₈ (KTonnes)	U ₃ O ₈ (Mlbs)	Grade (ppm U ₃ O ₈)	Location
Inferred	3.0	3.1	6.9	1,037	Wyoming, USA
Total	3.0	3.1	6.9	1,037	

* Reported above a 0.02 % eU₃O₈ grade and a 0.2 GT cut-off

¹JORC Table 1 included in an announcement to the ASX released on 14 November 2018: “Revised Lance Projects Resource Tables”, updated in the “Annual Report to Shareholders” released on 29 September 2023 and ASX Announcement released on 23 October 2023: “Peninsula Establishes Significant New Uranium Development Project” and ASX Announcement released on 13 May 2024: “Mineral Resource Increases 19.6% within current Lance Life of Mine Area”. Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates 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.

Competent Persons Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves at the Lance and Dagger Projects is based on information compiled by Mr Benjamin Schiffer. Mr Schiffer is a Registered Professional Member of the Society of Mining, Metallurgy and Exploration (Member ID #04170811). Mr Schiffer is a professional geologist employed by independent consultant WWC Engineering. Mr Schiffer has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’.

Appendix 2

Schedule of Interests in Mining Tenements as at 30 September 2024

Lance Projects, Wyoming, USA

Location / Project Name	Tenement	Percentage
Private Land (FEE) – Surface Access Agreement	Approx. 10,273 acres	100%
Private Land (FEE) – Mineral Rights	Approx. 10,568 acres	100%
Federal Mining Claims – Mineral Rights	Approx. 18,789 acres	100%
Federal Surface – Grazing Lease	Approx. 40 acres	100%
State Leases – Mineral Rights	Approx. 12,184 acres	100%
State Leases – Surface Access	Approx. 314 acres	100%
Strata Owned – Surface Access	Approx. 315 acres	100%

Karoo Projects, South Africa

Permit Number/ Name	Holding Entity	Initial Rights Date	Renewed/ Signed/ Validity (e.g. Valid, Under PR Application, Under Mining Right Application, Closure Submitted/Issued)	Area (km ²)	Current Expiry	Commodity Group	Original PR Status
EC 07 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected – Environmental Closure Application Submitted	48	10/06/2015	U, Mo	Expired
EC 08 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	47	10/06/2015	U, Mo	Expired
EC 12 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	36	10/06/2015	U, Mo	Expired
EC 13 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	69	10/06/2015	U, Mo	Expired
WC 33 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed – Environmental Closure Application Submitted	68	04/07/2016	U, Mo	Expired
WC 152 PR	Tasman-Lukisa JV	01/12/2006	MR Application lapsed – Rehabilitation Completed Environmental Closure Application submitted	189	04/07/2016	U, Mo	Expired
WC 187 PR	Tasman Lukisa JV	01/12/2006	Closure Submitted	24	01/08/2014	U, Mo	Expired
WC 168 PR	Tasman Pacific Minerals	13/12/2006	Closure Submitted	332	05/05/2014	U, Mo	Expired
WC 170 PR	Tasman Pacific Minerals	13/12/2006	Closure Submitted	108	05/05/2014	U, Mo	Expired
EC 28 PR	Tasman Pacific Minerals	15/11/2006	Closure Submitted	225	26/03/2015	U, Mo	Expired
NC 330 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	481	19/04/2019	U, Mo	Relinquished

NC 331 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	205	17/11/2018	U, Mo	Relinquished
NC 347 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	634	17/11/2018	U, Mo	Relinquished