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Companies Announcement Office
Via Electronic Lodgement

MINE UNIT 3 MONITOR WELLS INSTALLED, NEXT STEPS FOR LANCE

KEY POINTS

- Completion of installation of the monitor well network for Mine Unit 3 at Lance
- Mine Unit 3 will be the first wellfield specifically designed for low-pH ISR at Lance
- Commencement of a delineation and resource upgrade drilling program
- Progressing assessment of time and investment requirements for the expanded Lance process facilities
- Peninsula is working towards announcing the details of a revised production strategy near the end of August 2023

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 achievement of an important wellfield development milestone at the Company’s flagship Lance Projects (“**Lance**” or “**The Project**”) in Wyoming, USA.

The Company has completed drilling and installation of the monitor and baseline water quality wells for future production area Mine Unit 3 (“**MU-3**”). With completion of the monitor well network, the Company is commencing a planned drilling program designed to upgrade a portion of the remaining Inferred Resource within the Kendrick Production Area (“**Kendrick**”) at Lance.

Peninsula’s Managing Director and CEO, Mr Wayne Heili said, “*Peninsula continues to advance significant milestones to bring Lance back into production, with the completion of the MU-3 monitor network being just one example. Additionally, we have diligently advanced our detailed planning for the revised production strategy at Lance, and we anticipate sharing more details around the end of August.*”

The exciting resource development work programs we are pursuing concurrently with the plant capacity expansion, resin processing and product drying circuit engineering work, demonstrate our dedication to delivering value for shareholders over the long term. These ongoing works mean that Peninsula will be poised for success in meeting the escalating demand for uranium in the United States and worldwide.

We thank our shareholders for their patience and support as we continue to make progress and we look forward to sharing updates and developments of these work programs as they unfold.”

Ross and Kendrick Work Program Updates

Completion of the installation of a 58-well monitor network for MU-3 marks a significant development milestone for Lance (see **Figure-1**). MU-3, which is located within the Ross Production Area (“**Ross**”), will be the first production wellfield at Lance specifically designed for operations using the low-pH in-situ recovery method. The monitor well network surrounds the planned production well patterns and defines the areal extent of the unit. With the monitor well network installed, the Company is proceeding with hydrology and water quality testing, which will complete the baseline data collection requirements for the MU-3 data package. Installation of the production pattern wells will commence following baseline data collection. It is anticipated that MU-3 will be available for operations at the time the plant expansion is completed.

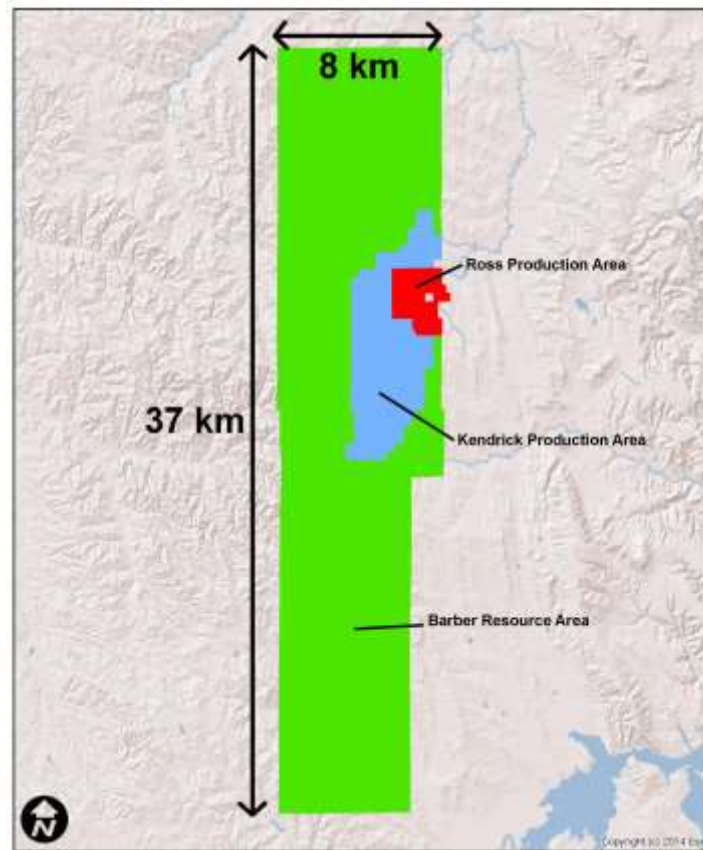


Figure-1: The Lance Projects, Wyoming USA

As noted in Peninsula’s announcement released on the 19 July 2023, the Company is continuing with its ongoing wellfield development programs at Lance. Drilling operations have been shifted to the Kendrick Production Area to complete a resource delineation and upgrade program, while baseline data collection work is ongoing at Ross MU-3. Production activities at Kendrick are planned to sequentially follow production at Ross. In December 2022, the Company submitted the required applications to amend the Ross mine permits and licenses to include Kendrick.

The Kendrick drill program is focussed on an area containing JORC compliant resources in the Inferred Resource classification. Kendrick currently holds 8.27 Mlbs U₃O₈ of JORC (2012) compliant Measured and Indicated Resources and 7.66 Mlbs U₃O₈ of Inferred Resources (see Table-1). Additional infill drilling is required to upgrade the Inferred Resources to Measured and Indicated classifications. Following assessment of the drill results, the Company expects to release an updated Mineral Resource Estimate for the Project.

Table-1: Kendrick Area Total Resources Summary (as of December 31, 2021)¹

Kendrick Area	Grade (ppm U₃O₈)	eU₃O₈ lbs (x 1,000)	Average Thickness (ft)	Average GT
Measured (M)	535	1,411	10.3	0.55
Indicated (I)	583	6,860	10.0	0.58
Inferred	510	7,659	10.8	0.55
Total		15,930		

In addition to the uranium resource upgrade drilling, the Company will be collecting core samples to further evaluate the Kendrick area uranium mineralogy and carbonate content, two key technical parameters which aid in the estimation of future operational costs and uranium recovery.

Lance Project Update

The Company's technical team is rapidly progressing an evaluation of the time and capital investment necessary to construct resin processing and product drying circuits at the Ross Process Plant. A revised Lance production schedule and mine plan is being prepared in conjunction with this.

As soon as definitive information becomes available, it will be shared with the markets and as noted in the June quarterly release, the Company is working towards announcing the revised production schedule and mine plan around the end of August 2023.

Yours Sincerely,



Wayne Heili
Managing Director / CEO

This release has been approved by Peninsula's Board of Directors.

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ABOUT PENINSULA ENERGY LIMITED

Peninsula Energy Limited (PEN) is an ASX-listed uranium mining company which has made the decision to restart its 100% owned Lance Projects in Wyoming, USA. The existing process facilities at Lance will be expanded to include in-house resin processing and product drying circuits. This is the final step in a project transformation initiative at Lance to transition from an alkaline ISR operation to a low pH ISR operation. Lance is one of the largest uranium development projects in the United States and once in production, Peninsula will be in strong position to supply a growing market, as the importance of nuclear power continues to gain momentum and support, as a critical part of the green energy mix.

[Uranium extraction for a green energy future](#)

NOTES

¹ Lance Projects Classified JORC-Compliant Resource Estimate (U₃O₈) as at 31 December 2021

Resource Classification	Tonnes Ore (M)	U ₃ O ₈ kg (M)	U ₃ O ₈ lbs (M)	Grade (ppm U ₃ O ₈)	Location
Measured	3.4	1.7	3.7	491	Wyoming, USA
Indicated	11.1	5.5	12.1	496	Wyoming, USA
Inferred	36.2	17.2	37.8	474	Wyoming, USA
Total	50.7	24.3	53.7	480	

JORC Table 1 included in an announcement to the ASX released on 14 November 2018: "Revised Lance Projects Resource Tables". 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 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'.