

31 July 2023

Companies Announcement Office Via Electronic Lodgement

QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

POST QUARTER LANCE UPDATE

- Timing expectations for restart of Lance uranium production was postponed with the receipt of a resin processing agreement termination notice from Uranium Energy Corp's ("UEC") subsidiary UEC Wyoming Corp
- DFS Stage 2 plans for in-house plant expansion and resin processing to produce dry yellowcake to be accelerated to enable independent production
- The Company is undertaking a detailed evaluation of the capital and timing requirements of the revised plan and will advise the market once completed

QUARTERLY HIGHLIGHTS

- Pre-production wellfield construction progressed during the quarter with well patterns in Mine Units 1 and 2 (MU-1, MU-2) readied for production operations
- Pre-production operational activities (wellfield preconditioning) continued with patterns in MU-1
- Upgrades to the Lance process plant to accommodate low-pH in-Situ Recovery (ISR) progressed
- Inaugural Sustainability Report highlights no LTIs for 5 years; rollout of ISO 14001 & ISO 9001 certification processes for environmental and quality management; rehabilitation of historic trial mining areas at the Karoo Project
- Acquisition of strategic mineral rights in close proximity to Lance
- Cash balance at 30 June 2023 of <u>US\$21.5m</u> and strategic inventory of 210,000lbs valued at <u>US\$11.8m</u>

LANCE PROJECTS, WYOMING

Activities Subsequent to Quarter End

Delays in Production and Acceleration of In-House Resin Processing

On 19 July 2023, the Company announced it would delay the re-start of production at Lance whilst it accelerated development of in-house resin processing and yellowcake production capability. This late shift in strategy was necessitated by the unanticipated 270-day notice from UEC that they would be terminating the resin processing agreement (the "**Agreement**") in place between PEN and UEC (and its predecessors) since June of 2015.

Peninsula's Managing Director and CEO, Mr Wayne Heili explained, "It is necessary to delay the re-start of production at Lance as the Company evaluates all of its options and opportunities following receipt of the Agreement termination notice. Moving directly to becoming an end-to-end uranium yellowcake producer, should ultimately deliver a faster ramp-up to full capacity under a more efficient and capital-effective operation, with expanded production capacity and a lower operating cost profile."

"We are working quickly to adapt our Definitive Feasibility Study (DFS) plans and to re-assess the funding, timing and customer considerations of bringing Stage 2 forward as rapidly as possible. We anticipate

providing the market with regular updates on our progress and a high-level timeline and cost expectations by the end of August 2023."

A full evaluation of the capital and timing requirements of the revised business plan is underway and will be advised to the market once completed.

During the quarter, the Company received and installed key process equipment and continued the operation of wellfield pre-conditioning flows in MU-1. These pre-production activities will continue as the Company details the optimum path forward.

Mr Heili commented, "The growing interest in the uranium sector combined with the pre-production Lance project possessing significant exploration and development upside, generated a large amount of interest during a non-deal roadshow and investor meetings this quarter. Whilst these meetings were held prior to our recent strategy shift, the long-term value proposition for Peninsula remains fundamentally unchanged."

Lance Project Construction Activities

Activities during the quarter at the Lance Project focused on the previously planned imminent production restart with ongoing site construction and establishment of wellfield pre-conditioning flowrates. These activities are continuing in the current quarter during the re-calibration of the production strategy, as outlined in the ASX Announcement released on 19 July 2023 and referred to above.

Throughout the quarter, the project team continued preparing the existing production plant and wellfield facilities for low pH ISR operations. The conversion workstreams include modification to or replacement of pumps, piping, fittings and process systems to ensure chemical compatibility with the low-pH process streams, along with the addition of bulk chemical storage and distribution systems.

A construction firm worked on site to install the concrete foundation and pedestals for the high-capacity sulfuric acid and hydrogen peroxide storage and delivery systems. The first of two large volume acid storage tanks is now in place and ready to receive the first fill. The second acid tank has been delivered and will be installed during the current quarter. Delivery of a high-capacity peroxide storage tank was delayed by the fabrication facility. A pre-existing smaller capacity peroxide addition system can be used in the interim, as needed.

The targeted wellfield facilities within the existing MU-1 & MU-2 areas have been converted for low pH and are operationally ready. Delineation drilling was completed in Mine Unit Three (**MU-3**) and the monitoring well system is projected to be fully installed in the current quarter.



Figure 1: Preparation of the MU-3 Monitor Well Network



Figure 2: Updated plumbing on Ion Exchange Column



Figure 3: Bulk Storage Acid Tank and Pumps

Operational Milestones

The targeted portions of MU-1 and MU-2 are now ready for low-pH production operations. The preconditioning of well patterns, which involves lowering the pH in advance of the uranium recovery operations, is ongoing in MU-1 with the preconditioning flowrate at the current design limit. Select areas within MU-1 are now preconditioned and available for production operations.

The installation of monitoring wells in MU-3 is on schedule for completion in the current quarter, which is a significant step in the process of preparing the new mine unit area for future production activities. Following the installation of the monitoring wells, water quality sampling and hydrology testing will take

place to collect the necessary data for regulatory approval of the new mine unit. While that work is underway, the drilling rigs will be reassigned to resource delineation activities within the Kendrick Project area.

Land and Mineral Rights Activities

During the quarter, the Company acquired a strategically located 640 acre mineral lease as part of an ongoing mineral rights and data acquisition strategy. The new lease which lies approximately 20 kilometers Northeast of the Lance Project facilities is the latest in a sequence of mineral rights and data acquisition transactions in the area spanning an eight-year period. To date, the Company has acquired approximately 4,140 acres of combined State and Federal Mineral rights covering a location with historically identified uranium mineralisation and located contiguous to past successful uranium mining sites. The Company possesses past drilling data and is currently preparing a JORC compliant initial Mineral Resource Estimate which is due for completion by the end of 2023.

SUSTAINABILITY

Inaugural Sustainability Report

During May, Peninsula released its inaugural annual Sustainability Report— 'Supplying the fuel to power a greener future'. The report provides a platform for the Company to deliver on its objectives to engage and deliver long term value to its shareholders and communities.

The Company has adopted four key pillars for its sustainability approach: Employees, Environment, Social and Governance ("EESG"). Fulfilling the actions outlined across the pillars and demonstrating the highest standards of stewardship are critical in allowing Peninsula to operate and grow in a way that aligns with the employees, shareholders and neighbouring communities that form a part of the Lance Projects.

Demand and the role that nuclear can play as a clean energy source continues to grow. This is highlighted by the European Commission, in July 2022, endorsing nuclear power as a green source due to its limited space requirements, minimal waste generation and absence of atmospheric pollution. This key development means that nuclear energy will be included in the European Union's sustainable finance taxonomy, which is a technical rulebook used to guide investors towards climate-conscious projects.

The Sustainability Report is available on the Company's website.

CORPORATE

Management Change Appointment - Vice President of Corporate Development

Mr. Willie Bezuidenhout was appointed as Vice President of Corporate Development. Mr. Bezuidenhout is a qualified Chartered Accountant (SA) and holds an MBA (with distinction) from the North-West University. Mr. Bezuidenhout has a strong strategic focus and international management experience extending beyond normal financial roles. He previously served Peninsula in the role of CEO of the Company's South African Operations and has a broad knowledge of international uranium recovery operations.

Investor Relations

During May, CEO Wayne Heili, presented at the CG Global Metals and Mining Conference in California, USA. This was followed by a non-deal Australian roadshow with the participation of Finance Director, Rachel Rees presenting over 30 briefings to a range of new, existing and prospective institutional funds, targeted brokers, investors and media.

Uranium Sales

2Q CY2023 receipts from customers was US \$11.1M which related to deliveries under the terms of our sales agreements that occurred late in 1Q CY2023, as disclosed in the March 2023 quarterly activities report.

At 30 June 2023 the Company's portfolio of uranium concentrate sale agreements was for volumes of 4.80 million pounds U₃O₈, of firmly committed sales through 2033. Table-1 summarizes the Company's Sale and Purchase obligations over the next five years.

At 30 June 2023, pricing for the committed sales is subject to a blend of base-escalated price structures and uranium market based pricing metrics, including both floor and ceiling price limits. The sales subject to a base-escalated price structure have a projected sales price average of US\$60 per pound. The remaining sales are structured with market-based prices which could range between a floor of US\$45 and a ceiling of US\$80 per pound U_3O_8 .

30 June 2023 5 Year Summary of Committed Sale and Purchase Agreements (2023-2027)						
Calendar Year	Committed Sale Pounds U₃O ₈	Committed Purchase Pounds U₃O ₈				
2023 (remaining)	200,000	-				
2024	650,000	-				
2025	700,000	-				
2026	700,000	-				
2027	450,000	-				

Table 1: Five Year Committed Sale and Purchase Agreements

Of the 4.80 million pounds of firmly committed sales, 0.85 million pounds can be satisfied with market sourced material ("**open origin**"). The balance of 3.95 million pounds is to be supplied from Company produced uranium, with deliveries starting in the second half of CY2023.

Due to the change in strategy and the consequent deferral of the planned re-start of production at Lance, post the end of the quarter, the Company is in discussions with customers regarding upcoming delivery commitments that may be impacted. As a recent producer and long-term supplier to the market, Peninsula maintains strong relationships with our customer base, who have proven to be open, flexible and supportive of US based uranium supply.

Uranium Inventory

The Company has a balance of 210,000 pounds U₃O₈ strategic inventory valued at **US\$11.8m** at June 2023 quarter end. (UxC 30JUN2023 price of US\$56/lb)

Cash Position

The Company's available cash as at 30 June 2023 was **US\$21.5m**. Combined with uranium inventory (US\$11.8m), Peninsula has liquid assets of **US\$33.3m** and no long-term debt.

ASX Listing Rule 5.4.5 Disclosure

Payments to related parties during the quarter as outlined in Sections 6.1 and 6.2 of the Appendix 5B consisted of US\$270k in directors' fees and payments to executive directors under respective service agreements.

FOR FURTHER INFORMATION, PLEASE CONTACT:

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This release has been approved by the Board.

ABOUT PENINSULA ENERGY LIMITED

Peninsula Energy Limited (PEN) is an ASX listed uranium mining company which commenced in-situ recovery operations in 2015 at its 100% owned Lance Projects in Wyoming, USA. Peninsula is embarking on a project transformation initiative at the Lance Projects to change from an alkaline ISR operation to a low-pH ISR operation with the aim of aligning the operating performance and cost profile of the project with industry leading global uranium production projects.

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

Resource Classification	Tonnes Ore (M)	U₃O ₈ kg (M)	U₃O ₈ lbs (M)	Grade (ppm U₃O 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'.

Schedule of Interests in Mining Tenements at 30 June 2023

Location / Project Name	Tenement	Percentage
Private Land (FEE) – Surface Access Agreement	Approx. 4,241 acres	100%
Private Land (FEE) – Mineral Rights	Approx. 10,361 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 (km²)	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 25 PR	Tasman Lukisa JV	17/10/2007	Closure Certificate for Environmental Closure issued by Department of Mineral Resources and Energy	7	12/11/2014	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 34 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	34	01/08/2015	U, Mo	Expired
WC 35 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	34	01/08/2015	U, Mo	Expired
WC 47 PR	Tasman Lukisa JV	04/09/2008	MR Application lapsed - Environmental Closure Application Submitted	36	04/07/2015	U, Mo	Expired
WC 59 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	40	01/08/2015	U, Mo	Expired
WC 60 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	56	01/08/2015	U, Mo	Expired
WC 61 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	69	01/08/2015	U, Mo	Expired

WC 95 PR	Tasman- Lukisa JV	17/04/2007	Closure Certificate for Environmental Closure issued by Department of Mineral Resources and Energ	5	23/03/2013	U, Mo	Expired
WC 152 PR	Tasman- Lukisa JV	01/12/2006	MR Application lapsed - Rehabilitation Completed - Environmental Closure Application being prepared	189	04/07/2016	U, Mo	Expired
WC 156 PR	Tasman Lukisa JV	30/11/2006	Closure Certificate for Environmental Closure issued by Department of Mineral Resources and Energy	69	04/07/2014	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