

ASX Announcement

17 April 2024

Lotus implements work program to unlock Letlhakane value potential

Lotus Resources Limited (ASX: LOT, OTCQB: LTSRF) (Lotus or the Company) is pleased to provide details of a comprehensive works program to unlock the value of its Letlhakane Project (Letlhakane) in Botswana. Letlhakane is a large-scale undeveloped uranium resource that provides the growth optionality for the Company as its second asset.

HIGHLIGHTS

- Letlhakane is one of the world's largest undeveloped uranium resources, and is located in Botswana, one of the world's best mining jurisdictions.
 - Mineral Resources of 190Mlb $U_3 O_{8,}$ near high quality infrastructure and population centres.
 - Approvals significantly advanced, with Mining Licence in place since 2016, provisional Surface Rights granted, and water rights also in place.
- Lotus is leveraging proven uranium expertise to add value at Letlhakane as it aims to:
 - Increase the head grade of the feed material to the mill though a combination of updated mineral resource modelling and beneficiation test work on run-of-mine material.
 - Identify an alternate process flowsheet to increase the uranium recovery and reduce acid consumption, a significant contributor to plant operating costs.
 - Increase confidence in the Mineral Resource Estimate with an infill drill program to convert the Inferred material to a Measured and Indicated (M&I) level, allowing more accurate definition of higher grade zones within the Measured and Indicated resources.
 - Define a development pathway via a Scoping Study due for delivery during CY24.
- Experienced Study Manager appointed to deliver Scoping Study program.
 - Lotus has appointed John Baines, an experienced uranium metallurgist, ex-BHP and Toro Energy (amongst others), to lead the Technical Programs at LetIhakane.

Lotus Managing Director Keith Bowes commented:

"LetIhakane, located in the top ranked global mining jurisdiction of Botswana, has potential to be a long-life asset and is key to our long-term growth strategies.

Lotus has developed a detailed initial program of work that aims to leverage Lotus's proven uranium skills to maximise Letlhakane's potential, including updating the Letlhakane mineral





resource model and undertaking studies to determine potential of upgrading Letlhakane ore to target a more efficient processing route.

While Letlhakane is considered a key growth asset for the Company, Lotus remains firmly focused on restarting the Kayelekera Project as soon as practicable to benefit from the current strong and increasing uranium prices."

LETLHAKANE, A LARGE UNDEVELOPED URANIUM RESOURCE IN A TOP JURISDICTION

Letlhakane, a large-scale uranium resource, was acquired by Lotus in 2023¹ to enhance and extend its production project pipeline. Letlhakane has a large resource base of 269Mt at 321ppm U_3O_8 for 190Mlb contained uranium, of which 22% is Measured & Indicated. Soft material makes for easy and cost-effective mining, with free digging and no drill and blast required.

Tenure and Approvals are well advanced, with a Mining Licence (ML) in place since 2016 and a Prospecting Licence granted in April 2023 for prospective areas to the east of the ML. Provisional Surface Rights have also been granted over the ML, with water abstraction rights and rights to install boreholes also in place.

The Project is located close to high quality infrastructure, with a sealed road, rail line and power line running past the ML. Francistown, a major population centre, is within 50km and will be an important source of skilled labour during development and operations.

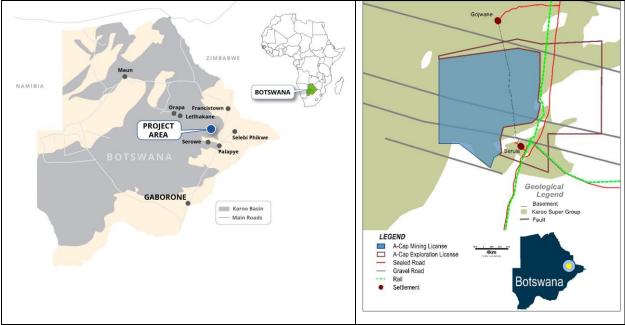


Figure 1 – Letlhakane's location in Botswana, Southern Africa

¹ See ASX announcement 13 July 2023

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Botswana is the top mining jurisdiction in Africa, achieving a global ranking of 2 (Policy Perceptions Index) in the 2022 Fraser Institute global survey².

Previous owners completed a Feasibility Study in 2015, as well as various other targeted follow-up programs. Following a detailed review of these previous studies by Lotus management, it has identified key areas of value enhancement, utilising its expertise and knowledge gained during the Re-Start Feasibility Study³ performed at the Company's Kayelekera Uranium Mine in Malawi.

LETLHAKANE DEVELOPMENT

Lotus has completed an initial technical assessment of the project that has considered the historical test work completed, including the 2015 Feasibility Study, along with additional work programs that were undertaken by the previous owners subsequently.

Letlhakane is located within a wider regional geology known as the Karoo Sandstones. Lotus' Kayelekera project sits in the same broad geological zone and Lotus' work at Kayelekera that considered beneficiation and acid consumption was also considered in this preliminary assessment.

The key cost and value drivers that will drive project economics include:

- 1. Head grade of the mill feed material
- 2. Acid consumption and acid management
- 3. Uranium process plant recoveries
- 4. Mining techniques that minimise unit costs
- 5. Final product quality

Lotus aims to determine a more effective processing route to improve upon the 2015 Feasibility Study project economics, which had envisaged a two-stage heap leach process.

To achieve this, Lotus is planning the following work programs:

Preliminary Work (Q2 2024)

- An updated Mineral Resource based on remodelling the existing resource incorporating tighter modelling constraints and shorter search parameters, aiming to reduce the amount of 'smoothing' that has occurred within the higher grade zones of the model.
- Preparation of a preliminary geometallurgical model to help optimise the mine plan based on acid consumption and uranium mineralogy/extraction.
- Preliminary mining study focused on pit optimisation work on the updated resource model to define the most economic pits within the project area.

Optimisation Work (Q2 - Q3 2024)

- Ore beneficiation test work program to determine the potential for upgrading the ore prior to feeding to the main processing plant.
- Preliminary metallurgical test work program including leaching and downstream processing

³ ASX Announcement 11 August 2022







² 2022 Fraser Institute Survey, Policy Perceptions Index ranking



• Definition of the preferred processing flowsheet based on the beneficiation results, metallurgical test work and overall grade / tonnage parameters.

Infill Drilling (Q2 - Q4 2024)

- Use the updated mineral resource model and optimised pit shells to design an infill drill program to target the most economic parts of the resource and convert these to M&I status.
- Undertake the proposed infill drill program and produce a new Mineral Resource Estimate with increased M&I resources.

Technical Studies (Q3 to Q4 2024)

• Prepare a Scoping Study, or Preliminary Economic Assessment (PEA), based on the mine planning and beneficiation/metallurgical test results and a selected processing route, identifying a suitable production rate and a defined development pathway.

EXPERIENCED STUDY MANAGER APPOINTED TO DELVIER SCOPING STUDY

Lotus has appointed John Baines, an experienced uranium metallurgist who has worked on a range of uranium projects since starting his uranium career at Olympic Dam (BHP). John was Process Manager for Toro Energy (Wiluna Project) for four years and consulted on the development of Honeymoon, Mulga Rocks and Etango projects during six years in consulting and engineering.

John will focus on delivering the Letlhakane technical study works program.

This announcement has been authorised for release by the Company's board of directors.

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ABOUT LOTUS

Lotus is a leading Africa-focused advanced uranium player with significant scale and resources. Lotus is focused on creating value for its shareholders, its customers and the communities in which it operates, working with local communities to provide meaningful, lasting impact. Lotus is **focused on our future**. Lotus owns an 85% interest in the Kayelekera Uranium Project in Malawi, and 100% of the Letlhakane Uranium Project in Botswana.

The Kayelekera Project hosts a current resource of 51.1Mlbs U_3O_8 , and historically produced ~11Mlb of uranium between 2009 and 2014. The Company completed a positive Restart Study⁴ which has determined an Ore Reserve of 23Mlbs U_3O_8 and demonstrated that Kayelekera can support a viable operation. The Letlhakane Project hosts a current resource of 190.4Mlbs U_3O_8 .

Project	Category	Mt	Grade	U ₃ O ₈	U ₃ O ₈
			(U₃Oଃ ppm)	(M kg)	(M lbs)
Kayelekera	Measured	0.9	830	0.7	1.6
Kayelekera	Measured – RoM Stockpile ⁹	1.6	760	1.2	2.6
Kayelekera	Indicated	29.3	510	15.1	33.2
Kayelekera	Inferred	8.3	410	3.4	7.4
Kayelekera	Total	40.1	510	20.4	44.8
Kayelekera	Inferred – LG Stockpiles ¹⁰	2.24	290	0.7	1.5
Kayelekera	Total – Kayelekera	42.5	500	21.1	46.3
Letlhakane	Indicated	59.2	323	19.1	42.2
Letlhakane	Inferred	209.7	321	67.2	148.1
Letlhakane	Total – Letlhakane	268.9	321	86.3	190.4
Livingstonia	Inferred	6.9	320	2.2	4.8
Livingstonia	Total – Livingstonia	6.9	320	2.2	4.8
Total	All Uranium Resources	318.3	344	109.6	241.5

Lotus Mineral Resource Inventory – June 2022^{5,6,7,8}

⁴ See ASX announcement dated 11 August 2022 for information on the Definitive Feasibility Study.

⁵ See ASX announcement dated 15 February 2022 for information on the Kayelekera mineral resource estimate.

⁶ Letlhakane Mineral Resources reported at 200ppm cut-off grade; See ASX announcement dated 13 July 2023 for information on the Letlhakane mineral resource estimate.

⁷See ASX announcement dated 6 June 2022 for information on the Livingstonia mineral resource estimate.

⁸Lotus confirms that it is not aware of any new information or data that materially affects the information included in the respective resource announcements of 15 February 2022, 6 June 2022, and 13 July 2023 and that all material assumptions and technical parameters underpinning the Mineral Resource Estimates in those announcements continue to apply and have not materially changed. ⁹ RoM stockpile has been mined and is located near mill facility

¹⁰ Low-grade stockpiles have been mined and placed on the medium-grade stockpile and are considered potentially feasible for blending or beneficiation, with initial studies to assess this optionality already completed.



Lotus Ore Reserve Inventory – July 2022¹¹

Project	Category	Mt	Grade (U₃Oଃ ppm)	U₃O₅ (M kg)	U ₃ O ₈ (M lbs)
Kayelekera	Open Pit - Proved	0.6	902	0.5	1.2
Kayelekera	Open Pit - Probable	13.7	637	8.7	19.2
Kayelekera	RoM Stockpile – Proved	1.6	760	1.2	2.6
Kayelekera	Total	15.9	660	10.4	23.0

In addition to its uranium assets, Lotus through its acquisition of A-Cap Energy has also acquired a 55% ownership in the Wilconi Nickel-Cobalt Project located near Wiluna in Western Australia. The Wilconi Project has a Mineral Resource Estimate of 73 million tonnes at 0.79% Nickel for 570,000 tonnes contained nickel metal (also 0.04% cobalt for 29,500 tonnes contained cobalt metal).

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Category	Tonnes (M)	Ni %	Co %	Nickel metal (tonnes)	Cobalt metal (tonnes)			
Measured	19	0.88	0.06	160,000	11,200			
Indicated	21	0.82	0.03	170,000	8,300			
Inferred	33	0.73	0.04	240,000	10,000			
Total ¹³	73	0.79	0.04	570,000	29,500			

Wilconi Nickel Cobalt Mineral Resource Estimate – May 2023 (cut-off grade 0.5% Ni and 0.04% Co within RPEEE pit)¹²







¹¹ Ore Reserves are reported based on a dry basis. Proved Ore Reserves are inclusive of RoM stockpiles and are based on a 200ppm cutoff grade for arkose and a 390ppm cut-off grade for mudstone. Ore Reserves are based on a 100% ownership basis of which Lotus has an 85% interest. Lotus confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 11 August 2022 and that all material assumptions and technical parameters underpinning the Ore Reserve Estimate in that announcement continue to apply and have not materially changed.

¹² Wilconi Mineral Resources are extracted from the report entitled "Wilconi Nickel-Cobalt Project Mineral Resource upgraded" dated 5 June 2023, which is available to view on www.asx.com.au under A-Cap Energy.

¹³ The Company 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 Mineral Resources estimates in the original market announcement continue to apply and have not been materially changed.