

12 March 2025 ASX Announcement Lotus Resources Limited Level 20 140 St Georges Tce Perth, WA, 6000

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# Correction to ASX Announcement – Updated Letlhakane Scoping Study

**Lotus Resources Limited (ASX: LOT, OTCQX: LTSRF) (Lotus** or the **Company)** wishes to advise a correction to the "Updated Letlhakane Scoping Study" announced to the ASX on 12 March 2025.

The Announcement contained an error in Table 1 (Summary of production and cost data (estimated)) and Table 7 (Operating Cost Estimates). The errors have been corrected, and the updated Announcement is attached.

This release was authorised by the Managing Director, Greg Bittar.

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**ASX Announcement** 

# Updated Letlhakane Scoping Study highlights Lotus' potential to become a 5.5Mlbpa uranium producer

**Lotus Resources Limited (ASX: LOT, OTCQX: LTSRF) (Lotus** or the **Company)** is pleased to announce results of an updated Scoping Study (**Scoping Study** or **Study**) for its Letlhakane Uranium Project in Botswana (**Letlhakane** or the **Project**). The Study has confirmed the Project's potential to become a significant uranium operation and complements the Company's production at the Kayelekera Uranium Project in Malawi, which is on track to restart in Q3CY25. Lotus aims to become a globally significant U<sub>3</sub>O<sub>8</sub> producer when combining both assets.

#### **HIGHLIGHTS**

- Updated Scoping Study is based on December 2024 Mineral Resource Estimate<sup>1</sup> and supports the potential
  of Letlhakane in a stronger long-term uranium price environment
- Shows Letlhakane can support ~3Mlbpa of U<sub>3</sub>O<sub>8</sub> production with flexibility to align production with uranium price
  - Selected Case is a 10-year life of mine (LoM) producing 3Mlbpa for total LoM production of 29Mlb
  - Production schedule is based on 45Mlb (75% of which is Indicated Mineral Resource) in the mill feed, being ~40% of Letlhakane's global resource of 114Mlb<sup>2</sup>
- Optimisation of mining costs and acid consumption demonstrates an optimal cash cost of US\$35/lb compared to a non-optimised cost of US\$41/lb
  - Lotus aims to deliver optimised Opex and Capex structures in the next phase of study, with this work currently underway
- Lotus is advancing trade-off studies for Letlhakane, including:
  - A two-stage leach process that retains the original uranium extraction, but minimises acid consumption
  - A modified downstream process that aims to eliminate solvent extraction and better control impurities
  - Testing with potential mining contractors to determine the optimal mining approach and methodology
- Botswana is the highest ranked mining jurisdiction in Africa, with a global ranking of 4 (Policy Perceptions Index) in the 2023 Fraser Institute survey
- Lotus is well funded to continue development at Kayelekera and Letlhakane with \$133 million cash at bank as at 31 December 2024

**Lotus Managing Director Greg Bittar commented:** "Our updated Scoping Study validates Letlhakane's merits as our second uranium project that can meet the longer-term supply shortfall. In a strong long-term uranium price environment, which experts have forecast, Letlhakane has a potential production life of 10 years. Coupled with Kayelekera, where we aim to restart production in Q3CY25, this positions Lotus as a ~5.5Mlb per annum producer, potentially making it one of the largest uranium producers on the ASX.

Our optimisation programs have delivered promising results to potentially decrease the cash cost from US\$41/lb to US\$35/lb for this selected case. We also recognise there is further mineral resources not yet included in the production schedule that could be incorporated in the future, namely ~23Mlb uranium contained within Indicated Resources and 46Mlbs in Inferred Resources<sup>2</sup>."

<sup>&</sup>lt;sup>1</sup> See ASX announcement dated 6 December 2024

<sup>&</sup>lt;sup>2</sup> Refer to page 22 of this announcement for a breakdown of classification of the Letlhakane Mineral Resource



#### **CAUTIONARY STATEMENT**

The Scoping Study referred to in this announcement is a preliminary technical and costing study to establish the potential viability of the Letlhakane Uranium Project. The Scoping Study referred to in this announcement is based on lower-level technical and preliminary economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or certainty that the conclusions of the Scoping Study will be realised.

Approximately 75% of the Life-of-Mine production is in the Measured and Indicated Mineral Resource category and 25% is in the Inferred Mineral Resource category. The Company has concluded it has reasonable grounds for disclosing a preliminary production profile and cost information, but notes that as there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of additional Measured or Indicated Mineral Resources or that the production profile or preliminary economics will be realised.

The remaining Inferred portion of the Mineral Resource Estimate will be the subject of a future infill drill program that will target upgrading this material to Measured and Indicated. It is important to note that the extensive infill drilling program undertaken in mid-2024 was successful at converting the then known Inferred Resources into Indicated Resources (see announcements made to the market on the 25 June 2024, 25 July 2024, 15 August 2024, 10 September 2024 and 6 December 2024). These results showed that the continuation, extent and grade of these portions of the deposits conformed with those predicted by the original Inferred Mineral Resource Estimate. There is the possible potential for a similar conversion result for the remaining Inferred Resources when those have been infilled, however, there is no certainty.

The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To realise the potential mine development outcomes indicated in the Scoping Study, funding in the order of ~US\$465 million will likely be required for start-up capital. Investors should note that there is no certainty that the Company will be able to raise funding when needed; however, the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to fund the development of the Project in due course.

It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of, the Company's existing shares. It is also possible that the Company could pursue other strategies to provide alternative funding options including project finance, sale of a portion of the project and a joint venture arrangement, or strategic arrangements with offtakers.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

#### REFERENCE TO PREVIOUS ASX ANNOUNCEMENTS

The information in this announcement that relates to the Mineral Resource at Letlhakane was announced on 6 December 2024. Lotus confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 6 December 2024 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in that announcement continue to apply and have not materially changed.



#### FORWARD-LOOKING STATEMENTS

This Announcement includes "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond Lotus Resources Limited's control. These forward-looking statements include, but are not limited to, all statements other than statements of historical facts contained in this announcement, including, without limitation, those regarding Lotus Resources Limited's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause Lotus Resources Limited's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). These factors include, but are not limited to, the failure to complete and commission the mine facilities, processing plant and related infrastructure in the time frame and within estimated costs currently planned; variations in global demand and price for uranium; fluctuations in exchange rates between the U.S. Dollar and the Australian Dollar; uncertainty in the estimation of mineral resources and mineral reserves; the failure of Lotus Resources Limited's suppliers, service providers and partners to fulfil their obligations under construction, supply and other agreements; the inherent risks and dangers of mining exploration and operations in general; environmental risks; unforeseen geological, physical or meteorological conditions, natural disasters or cyclones; changes in government regulations, policies or legislation; foreign investment risks in Botswana; breach of any of the contracts through which the Company holds property rights; defects in or challenges to the Company's property interests; uninsured hazards; industrial disputes, labour shortages, political and other factors; the inability to obtain additional financing, if required, on commercially suitable terms; reliance on key personnel and the retention of key employees; the impact of the Covid-19 pandemic on the Company's business and operations; and global and regional economic conditions. Readers are cautioned not to place undue reliance on forward-looking statements. The information concerning possible production in this announcement is not intended to be a forecast. They are internally generated goals set by the board of directors of Lotus Resources Limited. The ability of the Company to achieve any targets will be largely determined by the Company's ability to secure adequate funding, implement mining plans, resolve logistical issues associated with mining and enter into any necessary off-take arrangements with reputable third parties. Although Lotus Resources Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.



#### **EXECUTIVE SUMMARY**

The Scoping Study supports the development potential of the Letlhakane uranium project in a stronger long-term uranium price environment. This updated Scoping Study has defined the presented scenario for the development of the Letlhakane that complies with the necessary reporting standards. This has considered a balanced approach to the combination of production rate, life-of-mine and operating costs, along with maintaining a predominantly (75%) Indicated Resource feed profile. The Study has primarily focused on the mining elements of the project using the latest Mineral Resource Estimate announced on 6 December 2024. The selected case pit shells were initially based on a uranium price of US\$80/lb  $U_3O_8$ , but with a subsequent revenue factor of 0.85 applied (i.e. equivalent to ~US\$68/lb).

The process plant and non-process infrastructure was based on the 2015 Technical Study completed by the previous owner A-Cap Energy Ltd³ i.e. two-stage high-acid heap leach with a sequential solvent extraction and ion exchange recovery circuit feeding a two-stage uranium precipitation circuit to produce a yellow cake product. The costs from this study (opex and capex) have been escalated and benchmarked to actual construction and installation cost data to generate an updated estimate which reflects the reduced tonnage throughput and production.

Lotus completed the Scoping Study with the support of independent consultants:

- Mineral Resources SnowdenOptiro
- Open Pit Optimisation and mining costs SnowdenOptiro
- Updated Plant and Infrastructure capex and opex Ashmet Pty Ltd.

The Scoping Study was completed to an overall +/-30% accuracy (AACE Class 5) with a base date of 3Q2024 using the key parameters and assumptions set out in Table 1. The material assumptions on which the production target is based and that underpin the Study are provided in Appendix 1.

Table 1: Summary of production and cost data (estimated)

	Selected Case (~US\$65/lb)  LOM total / Avg
Mine Life (Years)	10
Total Material Mined (Mt)	667
Strip Ratio	9.9
Total U <sub>3</sub> O <sub>8</sub> Mined (Mlbs)	44.7
Production Total	LOM total / Avg
Plant Feed (Mt)	62.4
Plant Feed Grade (ppm U <sub>3</sub> O <sub>8</sub> )	325
Indicated Material (%)	75%
Plant Recovery (%)	64%
Av. Annual U <sub>3</sub> O <sub>8</sub> Production (Mlbs)	2.9
Max Annual U₃O <sub>8</sub> Production (Mlbs)	3.0
LOM U <sub>3</sub> O <sub>8</sub> Production (Mlbs)	28.9
Operating Cost	LOM total / Avg
Mining Costs (US\$/t mined)	1.51
Mining Costs (US\$/t ore processed)	9.0
Processing Costs (US\$/t ore)	10.0
G&A Costs (US\$M pa)	7.0
Total Cash Costs (US\$/lb)	41.1
Capital Costs	LOM total / Avg.
Initial Capital (US\$M)	465
Pre-Production cost and inventory build (US\$M)	23.5

<sup>&</sup>lt;sup>3</sup> Letlhakane Technical Study announcement June 2015 by A-Cap Resources Ltd



The Scoping Study has provided Lotus with an understanding of Letlhakane's key cost and value drivers for the Project such that a detailed optimisation program can be established to drive further improvements for the Project.

Based on the original due diligence that was carried out on the Project as part of the acquisition process, the Company was already aware of the criticality of resource grade, acid consumption and mining methods. The results from this Study have confirmed this and provided additional areas to target for improvement. The first phases of a metallurgical testwork programme are well advanced, giving insight into acid consumption, uranium recovery and flowsheet modifications that should deliver a simpler, more cost-effective process.

Due to the large material movements associated with this Project, mining costs are a significant cost driver. The Study assumes that drill and blast with truck and shovel loading and hauling will be employed for waste mining and continuous miners used for ore mining. Any saving on mining unit rates would have a significant flow on effect for operating costs. Therefore, mining methodologies will form a crucial part of the optimisation process.

To demonstrate the impact these optimisation programs could have on operating costs, a simple sensitivity analysis was carried out to assess the impact of acid consumption in the leaching process and the quantity of drill and blast for waste mining. The results of this are shown below.

Table 2: Opex sensitivity to acid consumption and mining unit cost (estimated) - Approx. Base Case shaded

Leaching Acid	Mining Drill and Blast Requirements			
Consumption kg/t	0% D&B US\$1.25/t material	100% D&B US\$1.61/t material		
25	35.2	38.1	39.3	
35	36.5	39.4	40.6	
41	38.2	41.1	42.3	

#### **NEXT STEPS**

Lotus is focused on identifying further optimisation opportunities to improve the overall project, such as mining, processing, infrastructure, water, energy and environmental / social consideration, as well as further infill drilling to convert the remaining Inferred Resources into Measured and Indicated Resources.

Opportunities already identified that could reduce capex, operating costs, extend the LOM and/or optimise the production rates are listed below. These opportunities form the basis of a multi-stage process for the development of Letlhakane that will lead into the next stage of study and as such, Lotus will:

- Consider alternate mining methods that may be more efficient and cost effective for large-scale bulk material movement to reduce waste mining costs.
- Work to better understand the composition of the waste overburden so as to improve the accuracy of the estimate for the quantity of drill and blast required for waste mining.
- Undertake a metallurgical testwork program to optimise acid addition and acid consumption in the leach. This
  will also consider crush size and agglomeration to optimise the heap leach parameters including stack height
  and residence time.
- Consider downstream processing to optimise uranium recovery from the leach solution and produce a high-quality final product. The aim is to direct feed an ion-exchange process with the leach liquor and avoid the intermediate solvent extraction process. With ion-exchange the impurity removal step included in the current flowsheet could also be eliminated.
- Undertake a review of Project infrastructure including confirming the inclusion of an onsite acid plant for producing acid required for processing. This can also be a significant power generator for the project by making use of the waste heat generated in the acid plant. Water usage, source and management will also be considered.



- Incorporate initial results from the works described above into a revised base case for the Project.
- Consider an infill drill program to convert remaining Inferred Resources into Measured and Indicated and to
  follow up on the Marotobolo exploration target and the resource extensions defined in the 2024 infill drill
  program.
- Following the finalisation of the technical studies and further infill drilling, the Company will initiate a Pre-Feasibility Study to further derisk the Project, in parallel with an assessment and potential update to the Environmental and Social Impact Assessment (ESIA).



#### **INTRODUCTION**

Lotus has undertaken a Scoping Study to better define the opportunity for the commencement of uranium production at its Letlhakane Project in Botswana. This Study is also being used to define the key value drivers and cost drivers for the Project such that a detailed optimisation program can be undertaken to add further value to the Project. This Study has been prepared based on studies undertaken by the previous owners, A-Cap Energy Ltd (including their 2015 Technical Study), the latest updated pit-constrained Mineral Resource Estimate, preliminary results from the Company's own metallurgical testing, and past experience from optimising the Kayelekera uranium mine in Malawi. The Company has used a number of expert consultants to assist in developing the Study.

The Letlhakane Uranium Project in Botswana, Africa is one of the largest undeveloped uranium projects, with a resource base of 142Mt at 363ppm  $U_3O_8$  for 114Mlb contained uranium (RPEEE basis); 50% of which is Measured and Indicated (see Table 3). The project is located close to high quality infrastructure, with a sealed road, rail line and power line running past the Mining Licence area. Francistown, a major population centre, is located within 50km of the Project.

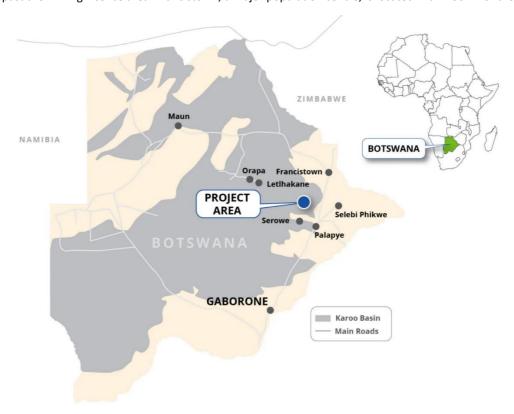


Figure 1: Project Location.

Botswana is the highest ranked mining jurisdiction in Africa, achieving a global ranking of 4 (Policy Perceptions Index) in the 2023 Fraser Institute global survey.

# MINERAL RESOURCE AND GEOLOGY

#### Geology

The Letlhakane mineralisation occurs in the lower Ecca Group of the Karroo Supergroup. The mineralisation occurs within the upper parts of the Mea Arkose where it is in contact with the Tlapana Formation, as well as within the lower part of the Tlapana Formation. Parts of the deposit occur at surface within more recent pedogenic and valley calcretes and within the upper parts of the Tlapana Formation.

Three distinct styles of mineralogy related to weathering, have been identified in the main resource area and are closely related to the geological setting found in this area. The mineralisation is defined as Secondary, Oxide and Primary. Secondary mineralisation is dominated by the mineral carnotite and occurs in calcrete and the upper mudstones. Oxide and Primary mineralisation are dominated by orthobrannerite  $(U_4+U_6+Ti_4O_{12}(OH)_2)$  and uraninite  $(UO_2)$ . These minerals occur as discrete grains up to 250µm on quartz grain boundaries, partially or wholly



encapsulated in calcite, kaolinite and/or illite. Uranium anomalies associated with the organic bands in the sandstone show a strong correlation to titanium and this may imply orthobrannerite is present within the bands or that titanium is also incorporated into the humate along with uranium. The weathering defines the boundary between the oxide and the primary and due to the alteration of minerals in the oxide zone, they display differing metallurgical characteristics.

Mineralisation appears to closely follow basement topography and valleys can be traced following fluid flow paths and containing higher uranium grade areas. The Mea group sediments dip 1 degree to the west and mineralisation has been intersected further out to the west past the defined resource area. This mineralisation, although deeper and presently not defined, can be potential future resources for the Project.

#### **Mineral Resource**

The December 2024 Mineral Resource Estimate (MRE) for Letlhakane comprises six deposit areas Gorgon, Mokobaesi, Kraken, Marotoboloand Serule West and East. See resource domains and pit shells in Figure 2.

The estimation methodology used by SnowdenOptiro consisted of developing a model for the uranium mineralisation within a 200ppm grade envelope to reduce the amount of low-grade material being reported. SnowdenOptiro then applied reasonable economic parameters to generate pit shells which were used to constrain the resource, producing what is termed resources with 'reasonable prospects of eventual economic extraction' (RPEEE).

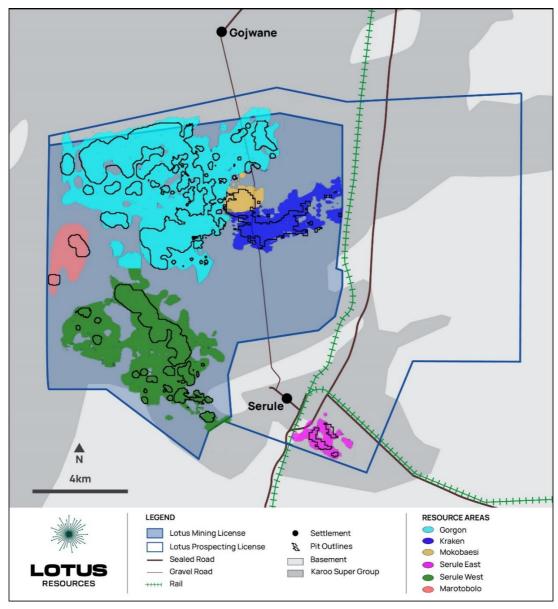


Figure 2: Letlhakane deposit and pit shells



The parameters used to develop the pit shells used for the MRE were:

- U<sub>3</sub>O<sub>8</sub> price assumptions base case is US\$100/lb U<sub>3</sub>O<sub>8</sub>
- Metallurgical Recovery 70% to 80%, depending on type of ore feed
- Mining parameters including mining dilution, pit slope angles were based on the use of continuous surface miners as the primary ore extraction method
- Mining cost US\$18/tonne ore. This cost is driven primarily by the relatively high strip ratio that has come
  out of the modelling
- Processing cost US\$23/lb of recovered U<sub>3</sub>O<sub>8</sub>
- General and Admin cost US\$0.6/tonne ore

Table 3 presents the Mineral Resources as at December 2024 $^4$  reported above a 200ppm  $U_3O_8$  lower cut-off and constrained by a US\$100/lb pit shell.

Table 3: Mineral Resource Estimate - December 2024

			Indicated			Inferred			Total	
Material type	Deposit	Mt	U₃O <sub>8</sub> ppm	U₃O <sub>8</sub> Mlb	Mt	U₃O <sub>8</sub> ppm	U₃O <sub>8</sub> Mlb	Mt	U₃O <sub>8</sub> ppm	U₃O <sub>8</sub> Mlb
Casandami	Mokobaesi	2.1	344	1.6	-	-	-	2.1	344	1.6
Secondary	Total Secondary	2.1	344	1.6	-	-	-	2.1	344	1.6
	Gorgon	8.6	353	6.7	7.0	303	4.7	15.6	330	11.4
	Mokobaesi	3.1	323	2.2	-	-	-	3.1	323	2.2
Oxide	Kraken	3.1	307	2.1	0.5	237	0.3	3.6	297	2.4
Oxide	Serule East	-	-	-	0.8	239	0.4	0.8	239	0.4
	Serule West	0.9	349	0.7	2.8	371	2.3	3.7	366	3.0
	Total Oxide	15.7	337	11.7	11.1	313	7.7	26.8	327	19.4
	Gorgon	42.8	355	33.4	33.2	321	23.5	76.0	340	56.9
	Mokobaesi	0.3	316	0.2	-	-	-	0.3	316	0.2
Primary	Kraken	5.3	384	4.5	0.5	289	0.3	5.8	376	4.8
Pilliary	Serule West	5.4	449	5.4	21.8	439	21.1	27.2	441	26.5
	Marotobolo	-	-	-	4.0	495	4.4	4.0	495	4.4
	Total Primary	53.8	367	43.5	59.5	376	49.3	113.3	372	92.8
Total		71.6	360	56.8	70.6	366	56.9	142.2	363	113.7

#### Notes:

- The preceding statement of Mineral Resources was prepared by a competent person in accordance with the JORC Code.
- All tonnages are dry metric reported.
- Open pit resources are constrained to a US\$100/lb pit shell and reported above a 200 ppm U308 cut-off and comprise classified resources
  only.
- Totals account for all five deposits (Gorgon, Kraken, Mokobaesi, Serule West and East).

Preliminary economic analysis conducted on the previous MRE (May 2024) indicated viable processable material in a grade range between 100 to 200 ppm  $U_3O_8$ . A model that comprised the high-grade domaining strategy with an incorporation of a modelled and estimated lower-grade halo of mineralisation above a 100 ppm  $U_3O_8$  cut-off, was adopted in this updated Scoping Study. Modelling of the low-grade haloes, external to the high-grade domains was completed using Leapfrog Geo. The output volumes for each deposit area were exported to Datamine Studio RM Pro to facilitate data coding, statistical review and estimation.

<sup>&</sup>lt;sup>4</sup> See ASX announcement 6 December 2024



#### **MINING**

Mining will be undertaken through a combination of conventional truck and shovel load and haul operations for waste removal and continuous miners for ore extraction. Bulk waste will be stripped in advance of ore mining with continuous miners targeting cuts of approximately 25cm.

Ore will be stockpiled in high, medium and low-grade stockpiles with high grade preferentially fed to the process plant. Direct tip into the process plant will be undertaken when possible.

Mining areas will be developed sequentially as far as possible with Indicated material targeted initially. The Serule West pit is mined first, followed by Gorgon. Pit optimisations were completed on individual deposits due to model size and minimal overlap between areas.

Multiple mine plan scenarios were evaluated in detail, with the selected scenario summarised in Table 4. The schedule variations were produced based on the following key inputs:

- Total material movement
  - o 55 Mt/a to 120 Mt/a
- Process feed tonnage
  - o 7.0 Mt/a to 9.0 Mt/a
- U<sub>3</sub>O<sub>8</sub> production
- 3.0 Mlbs/a to 4.0 Mlbs/a
- · High grade bins
  - $\circ$  175 to 300 ppm U<sub>3</sub>O<sub>8</sub>
- Medium grade bins
  - $\circ$  125 to 200 ppm U<sub>3</sub>O<sub>8</sub>
- Low grade bins
  - $\circ$  Economic cut-off to 150 ppm U<sub>3</sub>O<sub>8</sub>
- Pit size
  - o Revenue factor 0.85 to 1.00
- Mining sequence
  - o Serule W before Gorgon
  - o Gorgon before Serule W

**Table 4: Selected Mining Scenario** 

Item	Units	Selected Case (~US\$65/lb)
Description		7Mtpa plant throughput, reduced total material movement focusing on the lowest cost areas
Ore tonnes	Mt	62.4
Waste tonnes	Mt	616
Total mined tonnes	Mt	667
Mined grade	ppm U₃O <sub>8</sub>	325
Strip Ratio	w:o	9.9
LOM plant feed tonnes	Mt	62.4
Plant feed avg grade	ppm U₃O <sub>8</sub>	325
Process Recovery	%	64%
Total Product	Mlbs U <sub>3</sub> O <sub>8</sub>	28.9

The Selected Case was chosen as it produced a consistent production profile, minimised material movement and stockpile requirements by targeting lower cost portions of the deposit whilst also ensuring a minimum of 75% of the plant feed was sourced from Indicated Resources.

Uranium production profiles for the selected case are shown overleaf.



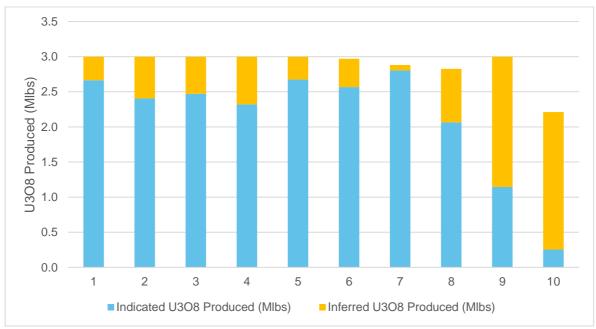


Figure 3: Uranium production profile

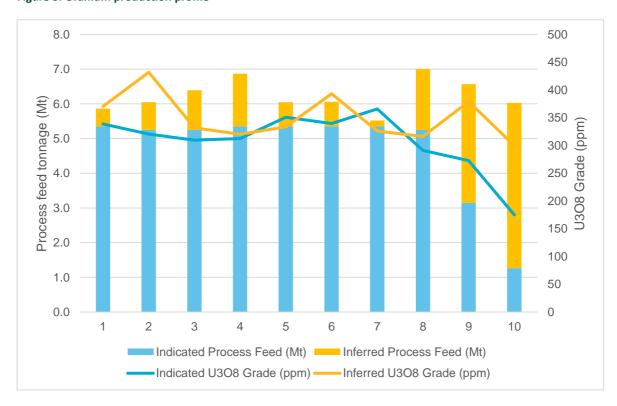


Figure 4: Mill feed and grade profiles

Further work aimed at improving the efficiency and cost effectiveness of the waste mining method employed on the project will be completed during the next phase of project optimisation. Any reduction in the cost of waste mining will translate into substantial savings in the overall operating cost of the project. The optimisation work planned will include the following:

Investigate the use of draglines to handle the waste overburden. Draglines are routinely employed as a high
productivity and low cost means of overburden removal on coal mines in various locations around the globe.
They are particularly effective when deployed on flat dipping tabular orebodies of up to 50m in depth. The



large mining pits planned for Serule West and Gorgon West have mining parameters that are well suited for dragline mining, and it may be possible to employ draglines in these areas to improve waste stripping productivity and reduce operating costs.

- Investigate the viability of using in pit crushing and conveying as an alternative to conventional truck and shovel hauling for the handling of ore and waste.
- Conduct a study to improve the understanding of the geotechnical characteristics of the waste overburden across the project area. This improved understanding will inform the development of a more accurate estimate for the proportion of the waste overburden that will require drilling and blasting. The cost for drilling and blasting has been estimated to be US\$0.35/t in this study and if drilling and blasting is not required, an equivalent reduction in mining unit cost can be realised (estimated at US\$2.95/lb U₃O₂ produced).

#### **PROCESSING**

#### **Flowsheet**

The Study has used the processing plant flowsheet developed by A-Cap Energy in its 2015 Technical Study as the basis for this assessment and the associated estimates generated. Lotus has identified improvement opportunities for the process and process plant, but sufficient work has not been completed yet to allow them to be incorporated into this Study.

A brief description of the process is as follows; the primary and oxide ores from the Serule West, Gorgon Main, Gorgon West, Gorgon South and Kraken deposits, together with the Lower Mudstone ores from the Mokobaesi area, will be treated in a sulphuric acid heap leach operation at the nominal rate of 7.0 Mtpa.

The uranium will be recovered from the acidic leach solution from a combined solvent extraction and ion exchange (SX/IX) circuit, which will reject impurity elements to generate a concentrated uranium-bearing solution. The solution will then be treated via a sodium diuranate precipitation and redissolution circuit for further impurity rejection before a final precipitation step to generate a uranium oxide concentrate product for subsequent centrifugation, washing, drying and packaging. See Figure 5.



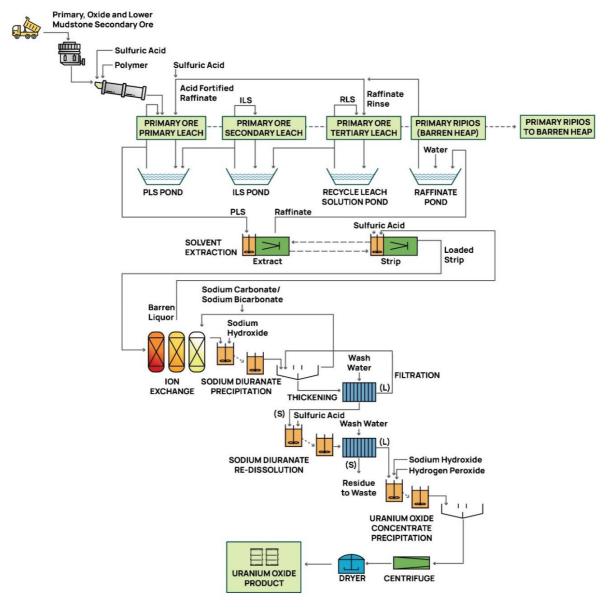


Figure 5: Letlhakane Process Plant Flowsheet (to be optimised further)

#### **Ore Beneficiation**

The inclusion of ore beneficiation techniques in the Letlhakane uranium flowsheet to upgrade the valuable minerals and reduce the mass of ore required for processing, has previously been considered by Lotus. Ore upgrade methods which exploit ore physical properties such as specific gravity (dense media separation, gravity tables, spirals, jigs, etc.), and particle size (screens, cyclones) were considered, as well as sensor-based ore sorting methods (XRT, XRF, laser, colour camera) to exploit other mineral properties.

However, mineralogical analysis has shown that there are no mineral assemblages directly associated with uranium mineralisation in the Lethakane uranium bearing material and it is impossible to visually distinguish ore from waste. In addition to the uranium being associated with multiple different rock types, it is also fine-grained, and thus any upgrade potential is probably only likely if the uranium minerals are suitably liberated. A sighter testwork programme conducted in 2024 on various Lethakane ore samples using a number of different beneficiation techniques failed to show any significant ore upgrade benefits. On this basis it was recommended to exclude any beneficiation techniques from the current flowsheet and focus instead on alternative hydrometallurgical means of enhancing the Project economics.



#### **Metallurgical Recoveries**

The uranium extraction estimates applied in the 2015 Technical Study have been updated following a programme of acid soluble uranium (ASU) tests. ASU tests were performed on relatively small samples to determine both uranium extraction and acid consumption. The results of the ASU tests performed on 396 samples from the Gorgon, Kraken, and Serule West ore deposits have subsequently been used to predict the metallurgical response of the ore across the resource. Allocation of samples into discrete  $U_3O_8$  head grade bands, each of 50 ppm  $U_3O_8$  intervals, yielded an approximate linear relationship between uranium extraction and the various head grade intervals, as shown in Figure 6.

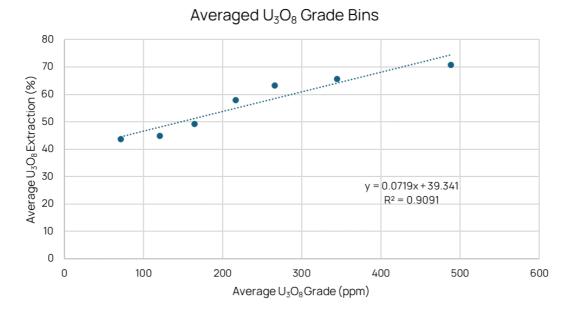


Figure 6: Letlhakane uranium extraction vs mill feed grade

### **Acid Consumption**

The same programme of ASU testwork used to establish the uranium head grade / extraction relationship has been used to predict sulphuric acid consumption. Although the results indicated a strong correlation between acid consumption and calcium head grade, no calcium assay data is currently available across the resource and thus the correlation has not been applied to the resource modelling. Consequently, the sulphuric acid consumption data applied to this Scoping Study is the same as that used for the 2015 Technical Study.

Sulphuric acid consumption for the Letlhakane uranium heap leach project is by far the single largest contributor to the overall operating cost of the plant. Based on an assumed sulphuric acid cost of USD\$150/t, and acid consumption rates of 45.1 kg/t, 36.0 kg/t, and 64.5 kg/t for oxide, primary, and secondary ore respectively, it is expected that sulphuric acid consumption alone will account for more than 50% of the plant operating costs.

There is considerable incentive, therefore, to reduce the impact of sulphuric acid cost and/or consumption to improve the overall project economics. Lotus is currently testing an alternative heap leaching flowsheet that will reduce acid consumption by operating in a lower acidity environment in the first stage of leaching. This flowsheet option still retains flexibility to increase acidity in the latter stages of the leaching process to balance acid consumption with uranium extraction. A secondary benefit of this flowsheet is that lower acidity in the initial leaching stage allows consideration of a simplified pregnant leach solution (PLS) processing facility that could remove solvent extraction and directly process the PLS with ion exchange, thereby removing a stage of processing and reducing capex.

#### **INFRASTRUCTURE**

The main components of the Letlhakane operation will include:

- Open Cut Mine Pit
- Run of Mine (ROM) Pad with crusher and agglomerator
- Waste Rock Dumps (WRD)
- Low Grade Ore Stockpiles



- Heap leach pads and associated ponds
- Process Plant and Facilities

#### Power

It is assumed that reliable grid power will be available from the Serule switching yard, which is located within the mining licence boundary, with back-up generating capacity to be installed for emergency supply only. A new 220 kV power line will run from there parallel to the railway line to a new switchyard and sub-station at the plant site. From here, power will be distributed to the plant at 11 kV, to the mine services, crushing and agglomeration areas at 33 kV and to the wellfield at 66 kV.

Electric power consumption has been calculated based on the installed power from the mechanical equipment list, with drive efficiency factors and equipment utilisation applied as appropriate. Electrical power unit costs, as supplied by the Botswana Power Corporation (BPC), have been used to calculate the process plant and infrastructure power costs.

#### **Acid Plant**

The potential to generate sulphuric acid on site from imported sulphur in a sulphur-burning acid plant is a key means of reducing the impact of sulphuric acid on the overall operating cost. The factored estimate from a recent budget proposal for a sulphur-burning acid plant, generating 960 t/day of 98%w/w sulphuric acid, results in an installed capital expenditure cost of ~US\$71 million. Based on the sulphur delivered cost to site of US\$350/t, and the additional power, labour, and maintenance requirements of an on-site acid plant, a unit sulphuric acid price of ~US\$130 to US\$150/t is predicted. The option to install a sulphur-burning acid plant has subsequently been adopted for this Scoping Study. In addition to the acid plant the installation of a nano-filtration (NF) process to recover acid from the elution circuit will also be considered.

#### Water

The heap leach process has relatively high evaporation losses of water which need to be replenished, and the process will also require water for reagents preparation, general process use, and for potable water supplies to the offices and other buildings.

Any rainfall onto the heap leach pads, ponds and process plant areas will be captured and used in the process. Contact water (e.g. runoff from waste dumps, roads, etc.) will be classified as 'dirty' and used in the process. Diversion bunds and channels will be established to keep clean water away from the mining operations and to ensure that contact water is directed into sediment control structures before being pumped into the process system.

Development of the open pits will result in groundwater inflows to the pits. The volume and quality of this water will vary considerably, from small flows of relatively good quality water in the northeast of the operations to large flows of saline water in the southwest. Wherever possible, this water will be used in the process, otherwise it will be used for dust suppression on haul roads, etc. Any excess water will be treated to a standard that it is either suitable for use in the process or discharge.

If there is still insufficient water from other sources of suitable quality, then make-up water for the operations will be sourced from a wellfield to be established about 30 to 40 km to the west of the operations. Early estimates of the water volume required for make-up and process use were revised so that the wellfield has been sized to deliver about 1.52 Mm<sup>3</sup>/a (about 60 L/s). This is the likely demand in the early years of operation before the pits have developed to the extent that appreciable quantities of run-off or groundwater become available.

# **Laboratory**

It has been assumed that the onsite laboratory will be operated and managed by Lotus Resources, and will be used for all plant, mine and exploration samples. Laboratory costs have been calculated based on standard estimates for various assay procedures and allowances for operating consumables, utilities and equipment maintenance costs items.

# <u>Access</u>

Access to the mine site is already well established with the main A1 highway connecting Gaborone with Francistown running directly past the mining licence boundary. A new access road to the plant site will be constructed from the A1 Highway, with an intersection on the highway designed to cater for the expected traffic loads. The road will also service the construction camps area and extend to the mining services area. Additional site roads and tracks will provide access to the wellfield, waste dump ponds and dewatering facilities.



The rail siding off the main Gaborone to Bulawayo railway line that runs adjacent to the mine boundary and parallel to the highway will be used for delivery of bulk materials such as sulphur for the future acid plant if trucking is not practical. Other consumables / reagents can also be delivered by rail if feasible.

#### Accommodation

Construction contractors, including the mining contractor engaged in pre-stripping operations to develop the open pits, will be required to provide their own accommodation for their workforce. A separate camp will be established for the EPCM engineer's and Owner's teams during construction.

Operations personnel will be drawn from the surrounding towns and villages wherever practical and so most staff will live locally and travel to site each day via contracted bus services. Up to 50 houses will be established in a housing estate in Serule for middle managers and their families, while senior management will reside in Francistown.

# **CAPITAL COST ESTIMATES**

The capital cost estimate (CCE) for the revised 7.0 Mtpa heap leach operation has been derived from the 2015 Technical Study CCE. Standard estimating factors and procedures, together with annual inflation percentages, benchmarked to actual construction and installation cost data, have been applied to the 2015 CCE to generate an updated estimate which reflects the reduced tonnage throughput and production. The revised CCE is deemed to have an accuracy level of ±30% as at 3Q2024.

**Table 5: Capital Cost Estimates** 

Item	Capital Cost Estimates (US\$M)
Construction Indirects	30.7
Treatment Plant Costs	181.6
Reagents & Plant Services	30.8
Acid Plant	71.5
Infrastructure	34.9
Mining	13.3
EPCM Costs	32.2
Owners Team Costs	3.6
Mobile Equipment	6.0
Contingency	60.7
Total	465.4

The Pre-production Cost summary is presented below in Table 6.

**Table 6: Pre-production Cost Estimates** 

Item	Pre-production Cost Estimates (US\$M)
Pre-production Labour	5.4
Opening Stocks	2.0
First Fills	6.6
Training	0.2
Commissioning Spares	6.3
Resettlement Costs	1.1
Contingency	2.2
Total	23.8

A CCE for the incremental cost to increase the plant size to 9Mtpa in the second decade of the LoM was also developed. This estimate was factored from the base case scenario and indicated incremental capex of US\$57.9M.



# **OPERATING COST ESTIMATES**

Operating costs were escalated and/or requoted from values in the 2015 Technical Study and are considered to be a Class 5 estimate with an accuracy of ±30%. The operating costs are presented in United States dollars (USD) based on prices obtained during the third quarter of 2024 (3Q2024). No contingency has been included in the estimate.

Each estimate has been prepared by major category (i.e. power, labour, consumables, product transportation, maintenance materials, laboratory, and general and administration costs), and has been compiled using data from a variety of sources including:

- Metallurgical testwork
- Mass balance information (adjusted for the revised ore throughput and grade)
- Metallurgical consultants and typical industry values
- Supplier quotations
- Assumed rates of exchange, unit energy costs, delivered reagent costs
- · First principal estimates

Exchange rates used to develop the costs are as follows:

•	Australian Dollar	1.00 AUD	= USD 0.650
•	Botswana Pula	1.00 BWP	= USD 0.075
•	Euro	1.00 EUR	= USD 1.100
•	South African Rand	1.00 ZAR	= USD 0.055
•	Namibian Dollar	1.00 NAD	= USD 0.055

All supplier pricing used to support this estimate has been quoted in one of these listed currencies.

The operating cash costs have been defined as direct costs at mine site inclusive of all mining, processing and general & administration costs. Cash costs exclude:

- Exchange rate variation and escalation from date of estimate
- · Project financing costs and interest charges
- Corporate overheads
- GST / VAT and withholding taxes
- Uranium marketing costs

Using the input data, the basis of the operating cash costs is shown below.

**Table 7: Operating Cost Estimates** 

Item	Base Case Operating Cash Costs				
item	US\$M LOM	US\$/t ore	US\$/lb U₃O <sub>8</sub>		
Mining					
Ore mining costs	94	1.51	3.25		
Waste mining costs <sup>5</sup>	465	7.45	16.09		
Stockpile reclaim	3	0.05	0.10		
Subtotal	562	9.01	19.45		
Processing <sup>6</sup>					
Consumables	390	6.25	13.49		
Transport	10	0.16	0.35		
Power	90	1.44	3.11		
Maintenance	83	1.33	2.87		
Laboratory	9	0.14	0.31		
Labour	43	0.69	1.49		
Subtotal	625	10.02	21.63		
Grand Total	1,187	19.02	41.07		

<sup>&</sup>lt;sup>5</sup> This only includes the operating cost component of the waste mining. Some waste mining costs have been capitalised

<sup>&</sup>lt;sup>6</sup> Includes General and Administration costs



Mining unit costs are largely driven by the cost of waste mining. The base case assumes that 60% of the waste mining volume will require drilling and blasting. There is, however, a significant possibility that a lower percentage of the waste volumes will require drilling and blasting and, if this can be demonstrated to be the case, a reduction in the unit waste mining cost can be realised.

Sulphuric acid consumption for the heap leach is by far the single largest contributor to the overall operating cost of the plant. Based on the sulphuric acid cost of US\$150/t adopted for this current Scoping Study, and the acid consumption rates of 45.1 kg/t, 36.0 kg/t, and 64.5 kg/t for oxide, primary, and secondary ore respectively, it is expected that sulphuric acid consumption alone will account for more than 50% of the plant operating costs.

There is considerable incentive, therefore, to reduce the impact of sulphuric acid cost and/or consumption to improve the overall project economics.

Column leach testwork results from historical testwork programmes would suggest that the acid consumption values currently adopted for this flowsheet and study are appropriate. However, there may be an opportunity to reduce the heap leach acid consumption following the outcomes of an additional testwork programme and/or the ability to successfully exclude ore containing elevated concentrations of carbonaceous material reporting to the heap leach pads. This is a follow up study that the Company is now undertaking.

Assuming success with specific mining rates and reduced drill and blast requirements along with the potential to reduce acid consumption in the process. Table 8 was generated to determine the potential cost benefits of these improvements.

Table 8: Opex sensitivity to acid consumption and mining unit cost (estimated)

	Mining Drill and Blast Requirements				
Acid Consumption kg/t	0% D&B       60% D&B       100% D&         US\$1.25/t       US\$1.51/t       US\$1.61/         material       material       material				
25	35.2	38.1	39.3		
35	36.5	39.4	40.6		
41	38.2	41.1	42.3		

# **ENVIRONMENTAL AND PERMITTING**

Lotus aims to minimise the impact of operations on the environment through effective environmental management across all aspects of the Project.

An ESIA was conducted by the previous owners to determine how the Project could impact on the biophysical, social, cultural and economic environment. The ESIA comprised a screening phase conducted in early 2009, a scoping phase between March 2009 and September 2011 and the detailed assessment phase culminating in submission of the ESIA report in April 2015. This ESIA work will be reviewed in the context of the updated operating plan and if necessary updated as required by the regulators.

Environmental Management Plans (EMPs) will be updated for the Construction and Operational phases. The Letlhakane Radiation Management System (RMS) will be updated and will form part on the EMP in compliance with international safety management systems.

The key licences and permits currently in place include the following:

- Mining Licence
- Environmental Licence
- Exploration Licence
- Radiation Licence

#### **MARKETING**



The current status and outlook of the uranium term market is relevant for the Project's offtake and contracting plans. As a result of the planned start-up of the Kayelekera Uranium Mine, the Company has entered some offtake arrangements with North American utilities<sup>7</sup> and continues discussions with utilities in North America, Asia and Europe.

#### **Nuclear generating capacity**

As of February 2025, according to the International Atomic Energy Association<sup>8</sup>, there are 440 operable units with nearly 397 GWe in net generating capacity in 31 countries around the world. The average age of the current fleet of operating reactors is roughly 33 years. Many of these plants are expected to remain online for the next 15–20 years or longer. In addition, there are 65 units with 70 GWe in active construction in 15 different countries, including three countries building their first nuclear power plants<sup>9</sup>. The largest current markets for nuclear power are the U.S., France, China, Russia, South Korea and Japan. Combined, these six countries account for roughly 75% of the total world installed nuclear power capacity.

There continues to be positive sentiment in the nuclear sector, underpinning demand for uranium going forward. At COP28, the United Nations Climate Change Conference held in December 2023, nuclear was included in the Global Stocktake on decarbonization on the back of 22 countries signing up to support a tripling of nuclear energy by 2050 to meet climate goals. By COP29 in November 2024, this increased to 31 countries signing up. US President Joe Biden signed a bipartisan bill aimed at bolstering the nation's nuclear power, expected to speed up the timeline for licensing new nuclear reactors.

#### **Uranium term market**

Nuclear utilities cover their fuelling needs through long-term contracts, which tend to last between three and ten years or more in duration. On average, no more than ten percent of utility requirements are left open to spot purchasing.

A decline in utility contract coverage rates is observed by the market in North America, Asia and Europe, despite increased term contracting over the last two years. United States and European Union utility contract coverage rates published by the U.S. Energy Administration and Euratom agencies report decreasing rates over the mid-term in their respective markets. Contract coverage rates are reported at 13% and 30% for U.S. and EU utilities in 2031, respectively.

There is, therefore, an expectation that utilities will increase term contracting cycle in coming years, following the lack of term contracting since 2013. This is similar to what occurred prior to the contracting peak cycle between 2005-2012. According to UxC, over 1.5 billion lbs  $U_3O_8$  were procured in term contracting by utilities worldwide in the 2005-2012 period with average annual purchases of 194Mlbs  $U_3O_8$  versus 73Mlbs  $U_3O_8$  in the out-of-peak cycle period from the last two decades.

#### **Uranium term price**

The term price tends to reflect transactions between nuclear utilities and primary uranium producers rather than spot price which reflects transactions involving non-producers such as trading companies or financial intermediaries. The indicator shows the uranium market conditions 2-3 years in the future as nuclear utilities pursue multi-year supply agreements well before actual needs. The widely used term price index is the UxC Long-Term  $U_3O_8$  Price, which includes conditions for escalation, a delivery timeframe greater than or equal to 36 months and quantity flexibility (up to  $\pm 10\%$ ) considerations.

Since 2020, the Ux Long-Term U<sub>3</sub>O<sub>8</sub> Price reported by UxC has increased steadily from ~US\$30/lb, to ~US\$80/lb.

#### **Demand status and outlook**

The 2023 Nuclear Fuel Report by the World Nuclear Association (**WNA**) provided three scenarios for world nuclear generating capacity and reactor uranium requirements up to 2040, referred to as the Reference, Upper and Lower Scenarios.

Nuclear generation capacity is expected to grow by 3.6% annually, reaching 686GWe by 2040 in the WNA Reference Scenario, and is underpinned by three major trends:

- Reactor life extension beyond 60 years,
- New builds
- Small Modular Reactor (SMR) development.

 $<sup>^{7}</sup>$  See ASX announcements 3 September 2024 and 29 January 2025

<sup>&</sup>lt;sup>8</sup> https://pris.iaea.org/PRIS/WorldStatistics/OperationalReactorsByRegion.aspx, Accessed 7 March 2025

<sup>9</sup> https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today accessed 7 March 2025.



Markets have structurally changed with the reduction of secondary supplies, depletion of inventories and reactions to geopolitical events.

World reactor requirements for uranium in 2022 are estimated at about 169Mlbs  $U_3O_8$ . In the Reference Scenario, these are expected to rise to approximately 218Mlbs  $U_3O_8$  in 2030 and 335Mlbs  $U_3O_8$  in 2040. In the Upper Scenario, uranium requirements are expected to increase to 234Mlbs  $U_3O_8$  in 2030 and 455Mlbs  $U_3O_8$  in 2040.

In 2022, only 76% of the reactor requirements were covered by primary uranium supply. Existing mine supply is forecast to cover ~60% by 2030F, and less than 20% by 2040F, in the reference scenario.

Since this WNA forecast, several Big Tech companies including Microsoft, Meta, Google and Amazon, have signed agreements with utilities and nuclear technology providers to secure uninterrupted carbon-free power for data centres. These agreements included restarting idled reactors, as well as development of new reactor fleets comprising SMRs, with time frames from the late 2020s to the mid-2040s.

Even if all restarts and mines under development come on stream as forecast by WNA, and minimal additional demand due to data centres manifests in the near term, there is a considerable supply / demand gap opening up from 2030 onwards, coinciding with a potential development of Letlhakane.

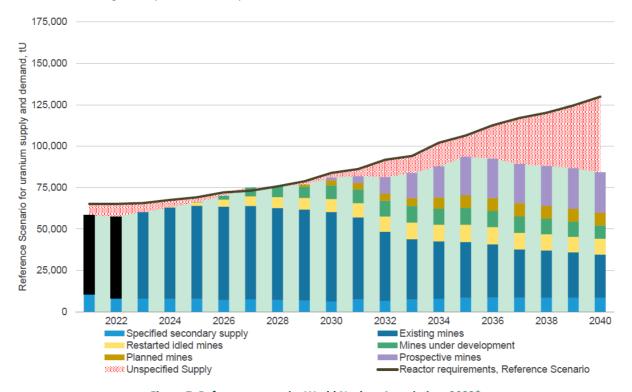


Figure 7: Reference scenario, World Nuclear Association, 2023\*

#### **FUTURE WORK**

The Company is now progressing various trade-off studies and other assessment to further optimise the Project. These studies will focus on:

- Consider alternate mining methods that may be more efficient and cost effective for large scale bulk material movement with the aim of reducing the waste mining costs associated with the Project.
- Work to better understand the composition of the waste overburden to improve the accuracy of the estimate for the quantity of drill and blast required for waste mining.
- Metallurgical testwork program to optimise acid addition and acid consumption in the leach. This will also
  consider crush size and agglomeration to optimise the heap leach parameters including stack height and
  residence time.

<sup>\*</sup>Conversion factor from tU to Mlb  $U_3O_8$  is 2,600



- Downstream processing to optimise uranium recovery from the leach solution and produce a high-quality final
  product. The aim here is to direct feed an ion-exchange process with the leach liquor and avoid the
  intermediate step of solvent extraction. With ion-exchange the impurity removal step included in the current
  flowsheet could also be eliminated.
- A review of the Project infrastructure including confirming the inclusion of an onsite acid plant for producing
  the necessary acid for the process, which can also be a significant power generator for the project by making
  use of the waste heat generated in the acid plant. Water usage, source and management will also be key
  consideration for the Project's development.
- Initial results from the works described above will be incorporated into a revised base case for the Project.
- Infill drilling to convert remaining Inferred Resources into Measured and Indicated and to follow up on the Marotobolo exploration target and the resource extensions defined in the 2024 infill drill program.
- Following the finalisation of the technical studies and further infill drilling, the Company will initiate a Pre-Feasibility Study to further derisk the Project, in parallel with an assessment and potential update to the Environmental and Social Impact Assessment (ESIA).

This announcement has been authorised for release by the Lotus Board of Directors.

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#### **ABOUT LOTUS**

Lotus is a leading Africa-focused advanced uranium player with significant scale and Mineral 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 Mineral Resource as set out in the table below and historically produced ~11Mlb of uranium between 2009 and 2014. The Company completed a positive Restart Study<sup>10</sup> 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 Mineral Resource also as set out in the table below.

# LOTUS MINERAL RESOURCE INVENTORY - DECEMBER 2024<sup>11,12,13,14,15</sup>

Project	Category	Mt	Grade	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub>
_i roject	Category	IVIC	(U₃O <sub>8</sub> ppm)	(M kg)	(M lbs)
Kayelekera	Measured	0.9	830	0.7	1.6
Kayelekera	Measured – RoM Stockpile <sup>16</sup>	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 <sup>17</sup>	2.4	290	0.7	1.5
Kayelekera	Total – Kayelekera	42.5	500	21.1	46.3
Letlhakane	Indicated	71.6	360	25.9	56.8
Letlhakane	Inferred	70.6	366	25.9	56.9
Letlhakane	Total – Letihakane	142.2	363	51.8	113.7
Livingstonia	Inferred	6.9	320	2.2	4.8
Livingstonia	Total – Livingstonia	6.9	320	2.2	4.8
Total	All Uranium Mineral Resources	191.6	392	75.1	164.8

#### **LOTUS ORE RESERVE INVENTORY – JULY 2022<sup>18</sup>**

Project Category	Mt	Grade	U₃O <sub>8</sub>	U₃O <sub>8</sub>	
_1 10,000	Sutegory	1010	(U₃O <sub>8</sub> ppm)	(M kg)	(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

<sup>&</sup>lt;sup>10</sup> See ASX announcement dated 11 August 2022 for information on the Definitive Feasibility Study and ASX announcement dated 8 October 2024 in relation to the Accelerated Restart Plan.

<sup>&</sup>lt;sup>11</sup> See ASX announcement dated 15 February 2022 entitled "Kayelekera mineral resource increases by 23%" for information on the Kayelekera Mineral Resource Estimate. The competent person for that announcement was David Princep.

 $<sup>^{12}</sup>$  The Kayelekera Mineral Resource Estimate is inclusive of the Kayelekera Ore Reserves.

<sup>&</sup>lt;sup>13</sup> See ASX announcement dated 9 June 2022 entitled "Uranium Resource Increases to 51.1Mlbs" for information on the Livingstonia Mineral Resource Estimate. The competent person for that announcement was David Princep.

 $<sup>^{14}</sup>$  See ASX Announcement dated 6 December 2024 for information on the Letlhakane Mineral Resource Estimate.

<sup>&</sup>lt;sup>15</sup> Lotus confirms that it is not aware of any new information or data that materially affects the information included in the respective Mineral Resource announcements of 15 February 2022, 6 June 2022 and 6 December 2024 and that all material assumptions and technical parameters underpinning the Mineral Resource Estimates in those announcements continue to apply and have not materially changed. Lotus confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from those market announcements.

<sup>&</sup>lt;sup>16</sup> RoM stockpile has been mined and is located near mill facility.

<sup>17</sup> 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.

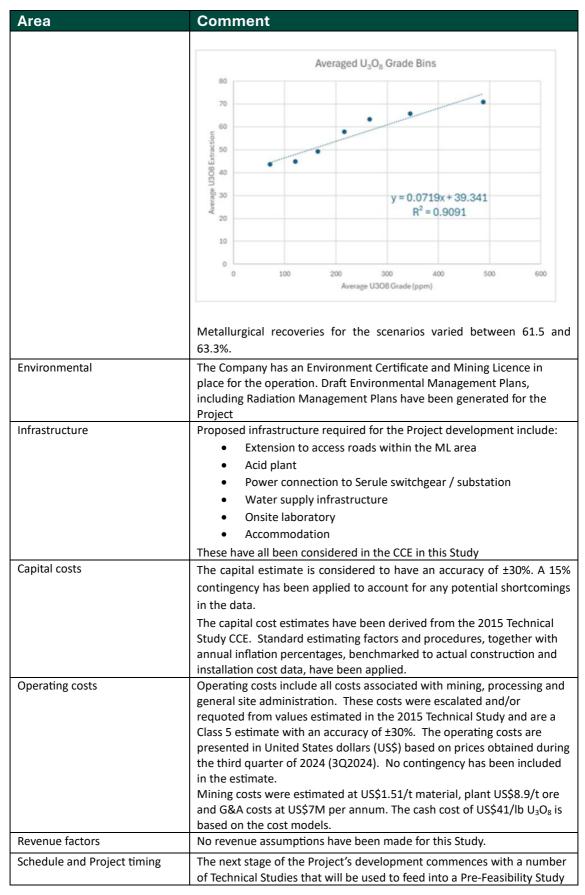
<sup>&</sup>lt;sup>18</sup> Ore Reserves are reported based on a dry basis. Proved Ore Reserves are inclusive of RoM stockpiles and are based on a 200ppm cut-off grade for arkose and a 390ppm cut-off grade for mudstone. Ore Reserves are based on a 100% ownership basis of which Lotus has an 85% interest. Except for information in the Accelerated Restart Plan announced on the ASX on 8 October 2024, 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. Lotus confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the 11 August 2022 announcement.



# Appendix 1 – Material Assumptions

Area	Comment			
Study Status	The Scoping Study has been prepared with accuracy of +/- 30%. There is			
Stady Status	no certainty that the conclusions of the Study will be realised.			
Ore Reserves and Mineral	The Mineral Resource estimate that underpins this Scoping Study was			
Resources underpinning the	released by Lotus on 6th December 2024 ('Letlhakane's Revised Mineral			
study	Resource Estimate'). It was prepared by a competent person in			
,	accordance with the JORC Code 2012. There is no Ore Reserve at thi			
	date.			
	The Scoping Study is based on a combination of Measured, Indicated and			
	Inferred Resources. Approximately 75% of the Life-of-Mine (LOM)			
	production is in the Measured and Indicated Mineral Resource category			
	and 25% is in the Inferred Mineral Resource category.			
	There is a low level of geological confidence associated with Inferred			
	Mineral Resources and there is no certainty that further exploration work			
	will result in the conversion of Inferred Mineral Resources to Indicated or			
	Measured Mineral Resources or that the production targets reported in			
	this announcement will be realised.			
Mining factors or assumptions	Mining is proposed to be completed by conventional open pit mining			
	practices.			
	The parameters associated with the pit optimisations and open-cut mine			
	operation are as follows			
	Contractor mining			
	o Dilution has been accounted for through the geological			
	model. No additional mining dilution or recovery were			
	applied in the optimisation			
	<ul> <li>The pit optimisation was constrained to Measured, Indicated</li> </ul>			
	and Inferred Resources only. Material with grade above the			
	cut-off grade not within the classified resource was treated as			
	waste.			
	Measured and Indicated Resources were prioritised as production			
	feed material			
	Pit slopes with overall slope angle of 45.7deg			
	o Bench height 10m			
	Berm width 8m			
	Face angle 80deg			
	Reference mining cost of US\$1.51/ tonne material			
	No exclusion zones or boundaries were applied to the resource			
	model as all material is contained within the mining lease.			
Metallurgical factors or				
assumptions	Recovery numbers were based on the 2015 Technical Study undertaken			
3334117413113	by the previous owners and an updated suite of 396 acid soluble uranium			
	tests to generate the following graph:			







Area	Comment		
	(PFS). While the Technical Studies are being completed, further exploration work and drilling may be undertaken to convert the remaining Inferred Resources to Measured and Indicated Status. The results of these initiatives will be included in future studies.		
	Following completion of the Pre-Feasibility Study, the Company will undertake a more in-depth and detailed analysis on the preferred development scenario via a Feasibility Study.		
	The timing of the studies will be dependent on the outcomes of each study, with positive studies progressing quicker. It is expected at least 2 years will be required to be progress the Pre-Feasibility and Feasibility Studies. Any adverse change in the uranium market, or government, licensing, permitting, community or social aspects, will likely delay the progress of the studies.		
	Final Investment Decision (FID) of Following FID, the Company antitake approximately 2 years befor production.	sibility Study, the Company will make a on whether to proceed with the Project. cipates development of the Project to re the Company reaches first uranium	
Marketing	Production from the Project is expected to be contracted through term arrangements with utility and nuclear fuel buyers worldwide. The Company has initiated contact with previous offtakers of the Kayelekera product as well as potential new off-takers and intends to continue on that path to build a supply order book required to support a decision to mine.		
Economic parameters	The Study has been completed with a +/-30% accuracy for all cost information. No financial analysis has been reported as part of this study. A cost model has been run as a LOM model.		
Exchange rates	Estimates in this announcement are presented in US\$. Exchange rates used in this Study are:		
	Australian Dollar	1.00 AUD = USD 0.650	
	Botswana Pula	1.00 BWP = USD 0.075	
	• Euro	1.00 EUR = USD 1.100	
	South African Rand	1.00 ZAR = USD 0.055	
	Namibian Dollar	1.00 NAD = USD 0.055	
Community and Social	Consultation with the local communities, the general public, non-		
	governmental organisations and private interests are ongoing and will		
	continue.		
	No significant environmental or stakeholder issues have been at this stage with strong support for the Project received from stakeholders.		
Government, Licencing and	_	(granted in 2016) and a Prospecting	
Permitting	Licence (granted in April 2023); water abstraction rights and provisional		
surface rights are also granted.		velonment outcomes indicated in the	
Funding	To realise the potential mine development outcomes indicated in the Scoping Study, funding in the order of ~US\$465 million will likely be required for start-up capital.		
	The availability for funding is assumed to come from a mix of sources,		
	including cash flow generated from the Company's Kayelekera Uranium		
	Project, equity markets and debt markets. The Company will progress availability for debt funding following the completion of a Pre-Feasibility		



Area	Comment	
	Study and a decision on the preferred mix of funding will be assessed at or around completion of a Feasibility Study.	
	Investors should note that there is no certainty that the Company will be able to raise funding when needed; however, the Company has concluded it has a reasonable basis to expect it will be able to fund the development of the Project in due course.	
	It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of, the Company's existing shares. It is also possible that the Company could pursue other strategies to provide alternative funding options including joint ventures or strategic arrangements with offtakers.	
Other	Other risks to the Project relate to uranium price, social licence, and other risks as are customary for similar projects.	
Audit and Reviews	Internally reviewed by Company personnel.	