

15 July 2022

# **Update on Athabasca Exploration Program**

# **Program Highlights:**

- Surface Exploration has started at the Newnham Lake & Perch Uranium Projects
- Focused on uranium mineralisation potential hosted within Archean Basement rocks
- The aim of the exploration program is to prioritise drill targets for testing in the Athabasca Basin Winter of 2023

**Okapi Resources Limited** (ASX: OKR, OTCQB: OKPRF) (**Okapi** or the **Company**) is pleased to announce that it has started its extensive field exploration program at the Newnham Lake and Perch Uranium Projects in the Athabasca Basin. The exploration program will consist of prospecting, outcrop, and boulder sampling with potential soil and vegetation sampling to help identify favorable structural scenarios suitable for hosting uranium mineralisation and will utilise the results from the satellite analysis and compilation work received from Axiom Exploration Group to assist exploration efforts in specific areas of interest.

# Okapi's Managing Director, Mr Andrew Ferrier said:

"We are excited about our maiden field exploration program in the Athabasca basin. Our properties at Newnham Lake and Perch remain our highest priority, with historical drilling showing anomalous radioactivity within multiple drillholes, favourable lithologies and untested basement hosted potential at a relatively shallow depth. The field program is mainly helicopter supported and plenty of pre-planning work was required to allow us to commence our exploration program. I thank our team and consultants in getting everything organised on time and on schedule."



Figure 1: Exploration geologists in the field at Newnham Lake



# **Project Overview - Newnham Lake & Perch Projects**

Okapi's 100% owned Newnham Lake and Perth Projects which straddle the north-eastern margin of the Athabasca Basin. Both Projects consist of 15 mining claims totalling close to 18,500 hectares. The properties are located at the northeast margin of the Athabasca Basin approximately 75 km east-southeast of the hamlet of Stony Rapids and 60 km east of the community of Black Lake, Saskatchewan.

## **Summer Exploration Program**

The initial phase of the Company's exploration programs involved recently completed satellite image data analysis over the entire Newnham Lake and Perch Projects; the company also completed an extensive data review and summary of all the historical exploration work carried out on the two projects.

The analysis of satellite image data included synthetic aperture radar data (SAR), multispectral Sentinel and Aster data. The data collected was processed, analysed, and interpreted and has generated several target areas that concentrate across east-west structural corridors, and the intersection of those with north-south and northeast-southwest trending faults.

Surface exploration investigations focusing on the relatively under-explored areas that make up the northeastern Priority 1 and Priority 2 areas at Newnham Lake (Figure 2), and the areas north of the unconformity contact in exposed Archean rocks at Perch, has now begun. These areas have been identified as Archean Basement rocks at, or near, the surface that exhibit alteration and oxidation characteristics consistent with potential to host Uranium mineralisation.

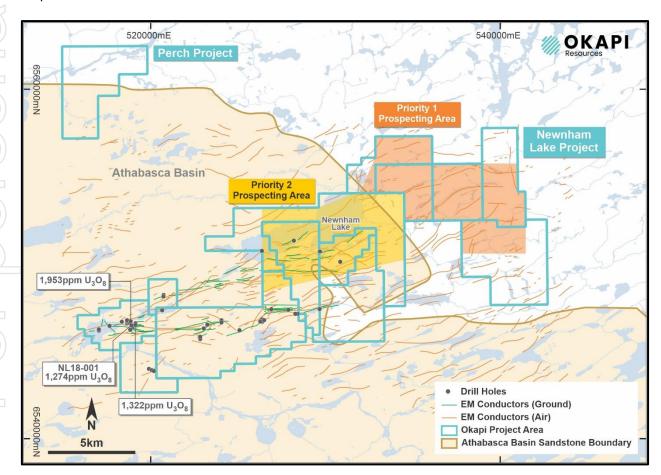


Figure 2: Newnham Lake & Perch Projects - Prospecting Areas



## **Newnham Lake Project**

At the Newnham Lake project, there are four areas of interest, not in order of priority, A through D, for the surface exploration program underway a shown in Figure 3. The program is focusing on the edge of the Athabasca Basin, with the goal of identifying areas that may cover basement fault extension and areas with multiple intersecting faults. These target areas are deemed prospective for basement-hosted uranium mineralization:

Zone A is focused on the historically recognized Karen Lake area, containing the Karen Lake Seeps uranium showing. In addition to the multiple intersecting fault zones, there are historical radioactive pegmatitic (more than 10,000 counts per second) and granitic boulders (more than 1000 cps) in the area.

Zones B and C are focused on testing east-west trending fault intersections with north-south to northeast-southwest trending faults that coincide with magnetic lows and local interpreted electromagnetic conductors, testing for surficial expression of those features.

Zone C is also testing the Camp Lake and Cyprian Fault extents on the southern portion of the Newnham Lake property.

Zone D is testing the northern extent of the Cyprian Fault on the property, where it is coincident with magnetic lows, historic radioactive boulders, gravity low anomalies as well as coincident with east-west trending fault intersections. All four zones also show areas of elevated hydrothermal alteration and gossan, interpreted from recent satellite image analysis.

The satellite image analysis will be combined with 3-dimensional geologic modelling of the historic surface and drill data that comprises approximately 200 drill holes with a goal of defining drill targets for the North American winter 2023 season.

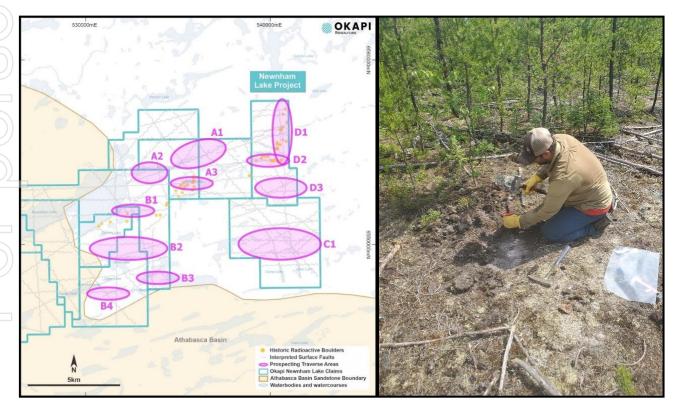


Figure 3: Newnham Lake - Prospecting Areas (left), Field work underway at Newnham Lake (right)



## **Perch Project**

At the Perch Project a strong east-west structural fabric intersecting northeast-southwest structures has been identified in the exposed or near surface Archean Basement rocks that lie north of the Athabasca Group sediment unconformity contact - these intersections appear to be coincident with historically identified anomalous Uranium occurrences and require follow-up.

There are 4 major target areas, A through D, and exploration is focused outside the Athabasca Basin with the goal of delineating areas that may cover basement fault extension and areas with multiple intersecting faults and focusing on the east-west trending fault trends (Figure 4).

Zone A is focused on an area with high hydrothermal alteration and gossan, interpreted from satellite imagery analysis, as well as coincident historical ground radiometric anomalies and granitic outcrop with anomalous uranium.

Zone B is focused on an area with multiple intersecting faults and elevated hydrothermal alteration, coincident with the regional Brink Fault and magnetic breaks and lows from historical surveys.

Zone C is focused on local fault intersections with associated interpreted hydrothermal alteration and gossan, with the goal of locating surface expression of the features.

Zone D is focused on the testing the Brink Fault, north and south of Zone B with the southern zone(D2) also coincident with a fork in the magnetic low and located in the Athabasca Basin sandstone.

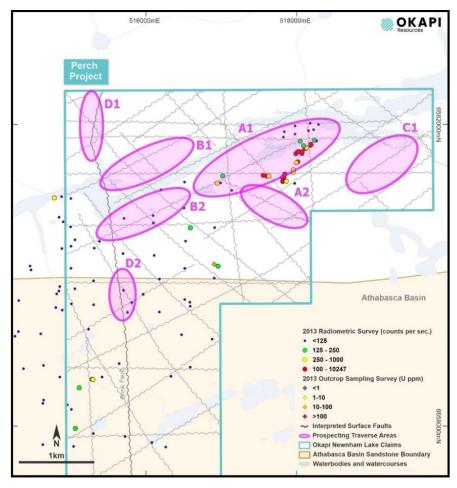


Figure 4: Perch Project - Prospecting Areas



## **Athabasca Uranium Projects**

The Athabasca Uranium Projects includes 75 granted mineral claims covering over 55,000 hectares. Importantly, all the projects are located along the margin of the Athabasca Basin or in the Carswell Impact Structure where depth to the unconformity is relatively shallow being 300 metres or less and typically closer to 100 metres, making them ideal for targeting shallow high-grade unconformity-related uranium deposits.

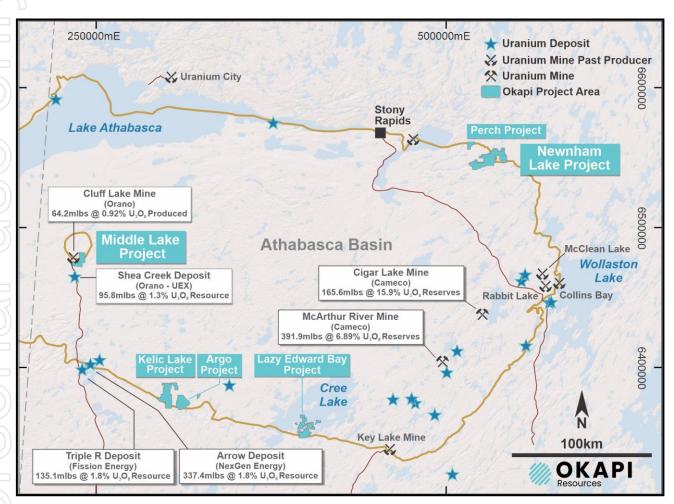


Figure 5: Okapi's Athabasca Uranium Projects

This announcement has been authorised for release by the Board of Okapi Resources Limited.

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# **About Okapi Resources**

Okapi Resources Limited recently acquired a portfolio of advanced, high grade uranium assets located in the United States of America and in the Athabasca Basin, Canada.

Assets include a strategic position in one of the most prolific uranium districts in the USA - the Tallahassee Creek Uranium District in Colorado. The Tallahassee Uranium Project contains a JORC 2012 Mineral Resource estimate of **49.8 million pounds of U\_3O\_8 at a grade of 540ppm U\_3O\_8** with significant exploration upside. The greater Tallahassee Creek Uranium District hosts more than 100 million pounds of  $U_3O_8$  with considerable opportunity to expand the existing resource base by acquiring additional complementary assets in the district.

The portfolio of assets also includes an option to acquire 100% of the high-grade Rattler Uranium Project in Utah, which includes the historical Rattlesnake open pit mine. The Rattler Uranium Project is located 85km from the White Mesa Uranium Mill, the only operating conventional uranium mill in the USA hence provides a near term, low-capital development opportunity.

In January 2022, Okapi acquired a portfolio of high-grade exploration assets in the world's premier uranium district, the Athabasca Basin. The Athabasca Basin is home to the world's largest and highest-grade uranium mines.

Okapi's clear strategy is to become a new leader in North American carbon-free nuclear energy by assembling a portfolio of high-quality uranium assets through accretive acquisitions and exploration.

JORC 2012 Mineral Resource Estimate for the Tallahassee Uranium Project												
Property	Measured			Indicated			Inferred			Total		
	Tonnes (000)	Grade U₃O <sub>8</sub> (ppm)	Lbs U₃O <sub>8</sub> (000)									
Hansen/ Picnic Tree**	-	-	-	7,309	640	10,360	9,277	580	11,874	16,586	610	22,234
Taylor and Boyer	1	-	-	7,641	520	8,705	14,869	460	15,172	22,513	480	23,877
High Park	2,451	550	2,960	24	590	30	434	770	734	2,907	580	3,724
Total	2,451	550	2,960	14,976	580	19,095	24,580	510	27,780	42,007	540	49,835

Notes: Calculated applying a cut-off grade of 250ppm  $U_3O_8$ . Numbers may not sum due to rounding. Grade rounded to nearest 10ppm. \*\*Numbers reported are 51% of the Hansen/Picnic Tree due to ownership agreements.

## **Competent Persons Statement**

Information on the Mineral Resources presented, together with JORC Table 1 information, is contained in the ASX announcement titled "Okapi to acquire Hansen Deposit – Resource increased by 81%" which was released as an announcement on 7 April 2022. The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original announcements.

Where the Company refers to Mineral Resources in this announcement (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.