

# Exploration Commences at Jasper Wedge Uranium Project in Canada

*Geophysical survey commences followed by ground geochemical sampling at the Jasper Wedge Uranium Project*

## Highlights

- **Codrus identifies multiple exploration targets at the Jasper Wedge Uranium Project, situated within the highly prolific, world-class Athabasca Basin, Saskatchewan, Canada.**
- **Jasper Wedge is ideally positioned in a high-grade uranium belt, between multiple operational uranium mines, and only 45km SE of the high-grade Cigar Lake Uranium Mine.**
- **Review of historical data is now complete, revealing multiple, coincident anomalies from airborne AeroTEM, and magnetics data.**
- **Codrus is initiating a program of target-specific, on-ground exploration commencing with a UAV magnetics survey and a follow-up ground geochemical soil survey, which will further define the new exploration areas.**
- **Review of historical data at the Nanuk Uranium Project is continuing, with targets already identified for future exploration.**

Codrus Minerals (ASX: **CDR, Codrus** or **the Company**) is pleased to advise that the review of historical information for the Jasper Wedge Uranium Project is now complete. Multiple exciting exploration targets have been identified within the area, which is itself situated within a known uranium belt in the Athabasca Basin, northern Saskatchewan, Canada, a highly prolific and world-class uranium jurisdiction.

The Jasper Wedge Uranium Project (**Jasper Wedge**, or **the Project**) is surrounded by tightly held tenure owned by global uranium mining giants, such as Cameco Corporation (**Cameco**), and is well positioned between Cameco's former Rabbit Lake Uranium Mine and currently operational McArthur River / Key Lake Uranium Mine. This ideal geographic and geological location makes Jasper Wedge highly prospective.

Codrus plans to commence a program of target-specific, close-spaced ground exploration to further define the targets identified through review of the historical data. It is anticipated that this work will allow smarter, more focused design of any follow-up drilling, consequently allowing efficient use of shareholder funds.



## ASX Announcement

24 July 2024

### Directors

**Greg Bandy**

Executive Chairman

**Keith Coughlan**

Non Executive Director

**Shannan Bamforth**

Managing Director

**Jamie Byrde**

Non-Executive Director &  
Company Secretary

### Investment Highlights

|                |             |
|----------------|-------------|
| ASX Code       | CDR         |
| Issued Capital | 165,387,504 |
| Share Price    | \$0.033     |
| Market Cap.    | \$5.45M     |

### Contact

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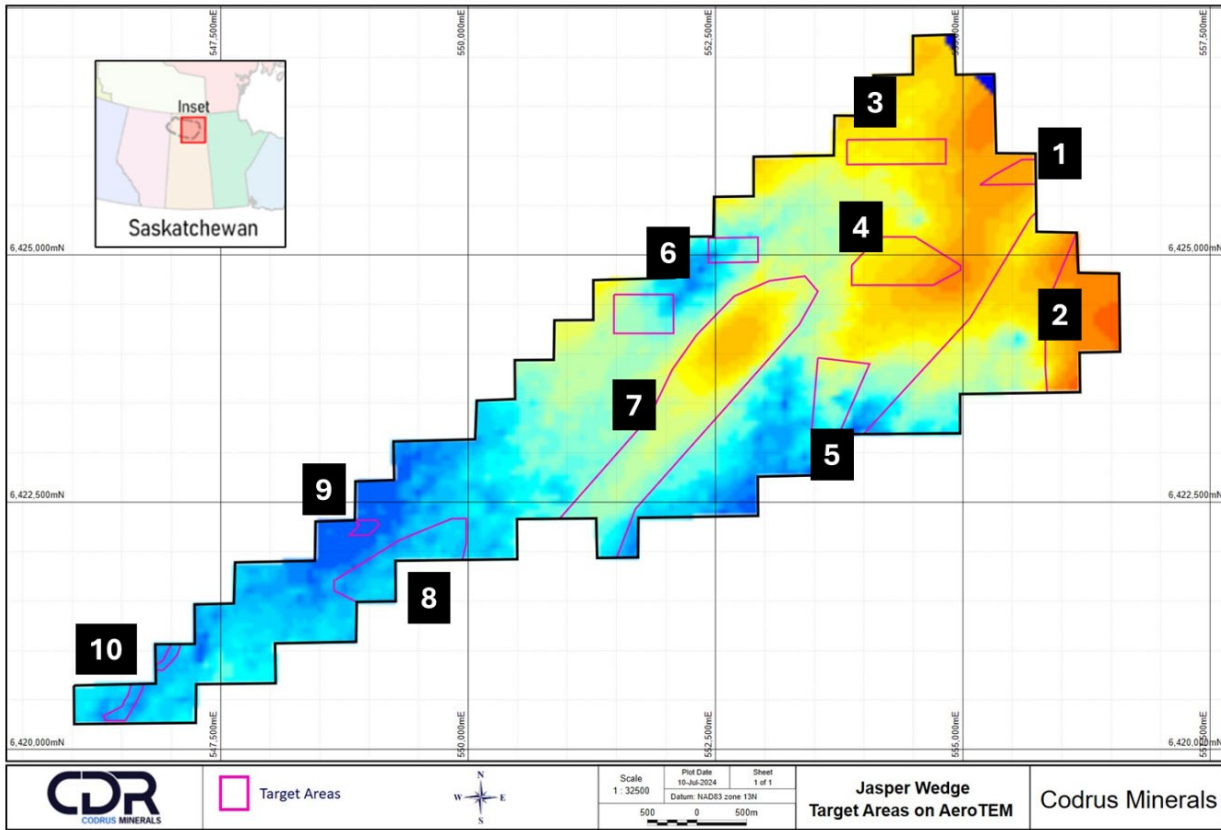


Figure 1. AeroTEM (airborne AEM) Image over the Jasper Wedge Uranium Project, showing identified exploration target areas.

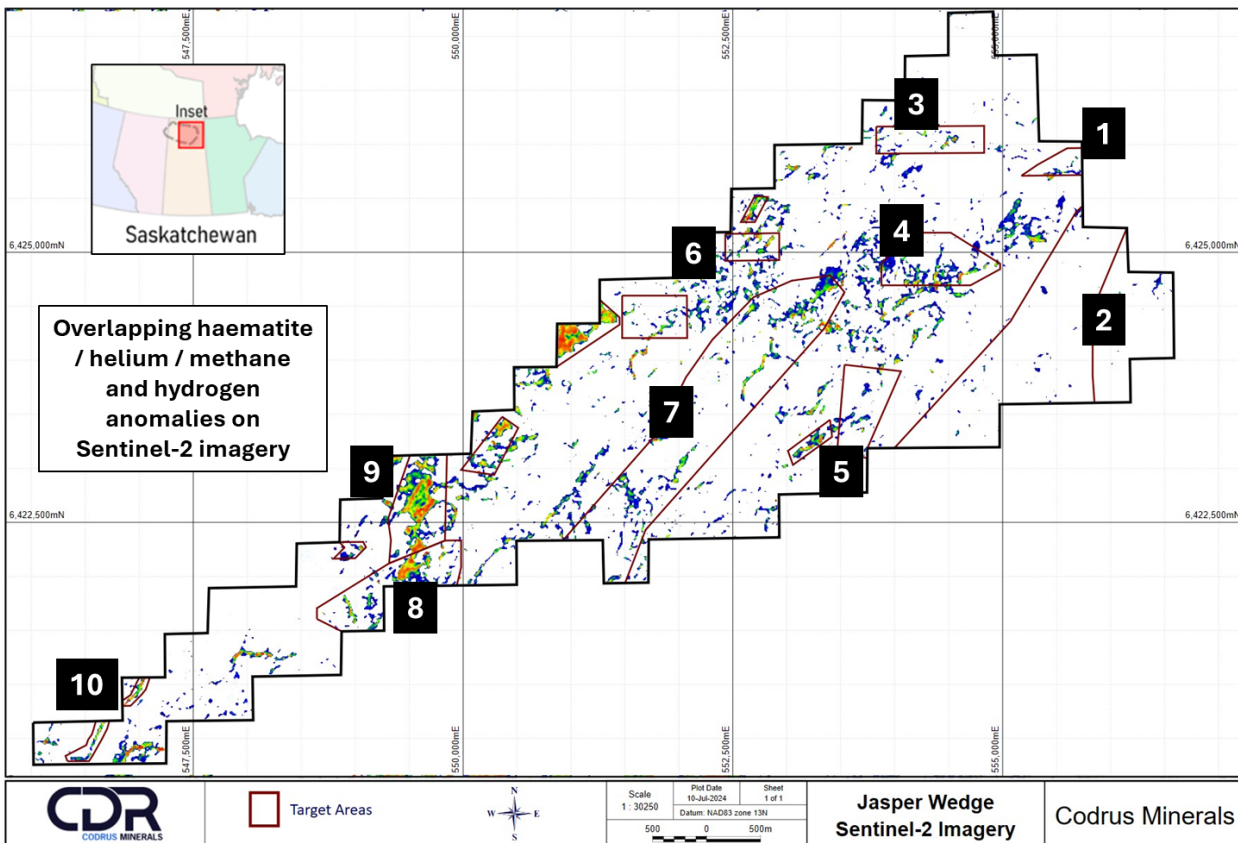


Figure 2. Sentinel-2 Imagery over the Jasper Wedge Uranium Project, showing identified exploration target areas.

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## Jasper Wedge – Historical Data Review

The main uranium deposits in the area have mineralisation occurring at or near the unconformity located between the Manitou Falls Formation (conglomeratic sandstone; part of the larger Mudjatik Domain) and the Wollaston metamorphic sequence. The unconformable boundary between the two Domains is known geologically as the Wollaston-Mudjatik Transition Zone (**WMTZ**). The predominant structural orientation in the eastern part of the Athabasca Basin is northeast-southwest (NE-SW)<sup>1</sup>.

Logged geology of the Gulf Oil diamond drillholes<sup>2</sup> confirmed the presence of the same maroon to dark green basement lithologies as known elsewhere in the eastern Athabasca Basin. The change in colour represents the same hydrothermal haematite to chlorite alteration that is characteristic of the unconformity-style uranium deposits in the region. Similarly, the reported strong oxidation, localised shearing and faulting, and localised pyrite abundances are also typically characteristic of the Basin, particularly in the Rabbit Lake/McArthur River/Key Lake uranium belt.

Detailed review of the historical geophysics supported earlier observations of a predominant NE-SW basement fabric. Additional structural interpretations, based on both the airborne magnetics and AeroTEM data (see **Figure 1**), revealed multiple northwest-southeast (NW-SE) structures that crosscut the underlying NE-SW trending basement. These faults are instrumental in allowing reducing fluids to travel into and through the unconformity, enabling a mixing zone between oxidised brines and groundwaters from the upper stratigraphy, and reductants from the basement, thereby producing a redox zone. Fault intersections create pockets of dilation into which uranium-rich fluids will then precipitate should there also be a reductant present, such as graphite in the fault gouge. Areas of high conductivity correlate well with high magnetics<sup>3</sup>, strongly suggestive of graphitic structures, whereas other anomalies have been identified of correlating high conductivity with low magnetic responses, indicative of conductive basin metasediments. The positive correlation of these chemical and structural factors thereby produce prospective targets worthy of further investigation.

In June 2024, the Company engaged Dirt Exploration (South Africa) to acquire Sentinel-2 imagery from the European Space Agency (ESA), covering the Jasper Wedge Mineral Claim. The Sentinel-2 satellite system (or Copernicus Sentinel-2) is based on two separate satellite that each carry high-resolution, wide ranging, multi-spectral imaging instrumentation. Each tool consists of 13 spectral imaging bands and allows detailed mapping of vegetation distribution on the Earth's surface<sup>4</sup>. Sentinel-2 provides the mineral exploration sector with another form of fast, desktop-based assessment of element distribution patterns with a combination of Visible and Near-Infrared Wavelength (VNIR) and Short Wavelength InfraRed (SWIR) spectral analysis. Imagery collected for Jasper Wedge was based on a 10-metre (VNIR) and 20-metre (SWIR) spatial resolution.

<sup>1</sup> [The Cigar Lake uranium deposit: discovery and general characteristics. Uranium deposits of Canada \(1986\), Canadian Institute of Mining and Metallurgy, edited by E. L. Evans.](#)

<sup>2</sup> [Codrus Minerals ASX Announcement dated 5 April 2024](#)

<sup>3</sup> [Interpretation Report on a Helicopter-Borne AeroTEM System Electromagnetic & Magnetic Survey – Blocks Hidden Bay, Jasper Wedge, Moore and Patterson for Denison Mines by Aeroquest April 2008](#)

<sup>4</sup> [https://www.esa.int/Applications/Observing\\_the\\_Earth/Copernicus/Sentinel-2](https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-2)

The Sentinel-2 imagery identified anomalous distributions in helium, hydrogen, methane, haematite, magnetite, and a variety of iron sulphides and alteration products (see **Figure 2**). Helium is one of the daughter products from the  $U^{238}$  decay chain and is therefore a good vector for potential uranium mineralisation. Similarly, the haematite and iron sulphide anomalies identify areas of possible alteration similar to the alteration patterns known from other uranium mines in the region. Hydrogen and methane represent reductants in the system that could be responsible for uranium precipitation. These geochemical associations provide an excellent vectoring tool for uranium exploration in the area, particularly when viewed in conjunction with the structural interpretations from the geophysical data.

### Proposed Exploration Program

Utilising this wealth of geophysical and geochemical data, Codrus has identified a total of 10 target areas throughout the Jasper Wedge Project (see **Figures 1 to 2**), varying in size from 200m to 3km in strike length and covering zones of coincident low magnetic / high conductivity, geochemical anomalism and structural intersections. Proposed exploration will be undertaken in a two-phase approach, commencing first with a target-specific, on-ground program of UAV magnetics which will be flown at a line spacing of 50m and a height of 40 – 100m, terrain dependent. This will be followed by a program of geochemical surveying involving a mixture of soil and outcrop sampling. (Phase 1). The geochemical survey will allow better mapping of anomalies identified by the Sentinel-2 imagery, while the UAV magnetics will provide better resolution on structural features, particularly cross-cutting faults and dilation zones. Together, these data will enable smarter targeting and design of any follow-up drilling, which is currently planned as Phase 2 and will depend on the results of the Phase 1 activities.

The Company will provide further updates on the progression of its exploration in due course.

### Project Location

The Jasper Wedge Uranium Project (see **Figure 3**), MC0016116, covers an area of 2,099 hectares and is located within the world-class Athabasca Basin uranium province in northern Saskatchewan, Canada, approximately 45km south-east of the high-grade Cigar Lake uranium mine, operated by Cameco<sup>5</sup>.

The eastern margin of the Athabasca Basin is tightly held, and the project is bordered by significant uranium mining and exploration companies including Cameco (TSX: CCO; NYSE: CCJ), Denison Mines Corp (TSX: DML; NYSE: DNN), Uranium Energy Corp (NYSE: UEC) and IsoEnergy Ltd (TSV: ISO). Jasper Wedge is located between Cameco's Rabbit Lake<sup>6</sup> and McArthur River / Key Lake<sup>7</sup> uranium mines, making the Project highly prospective for unconformity-style uranium mineralisation that is typical of the Athabasca Basin (or the "**Basin**"). Access to Jasper Wedge is good, being situated approximately 30km from the eastern margin of the Basin and in close proximity to regional highways and infrastructure (see **Figure 3**).

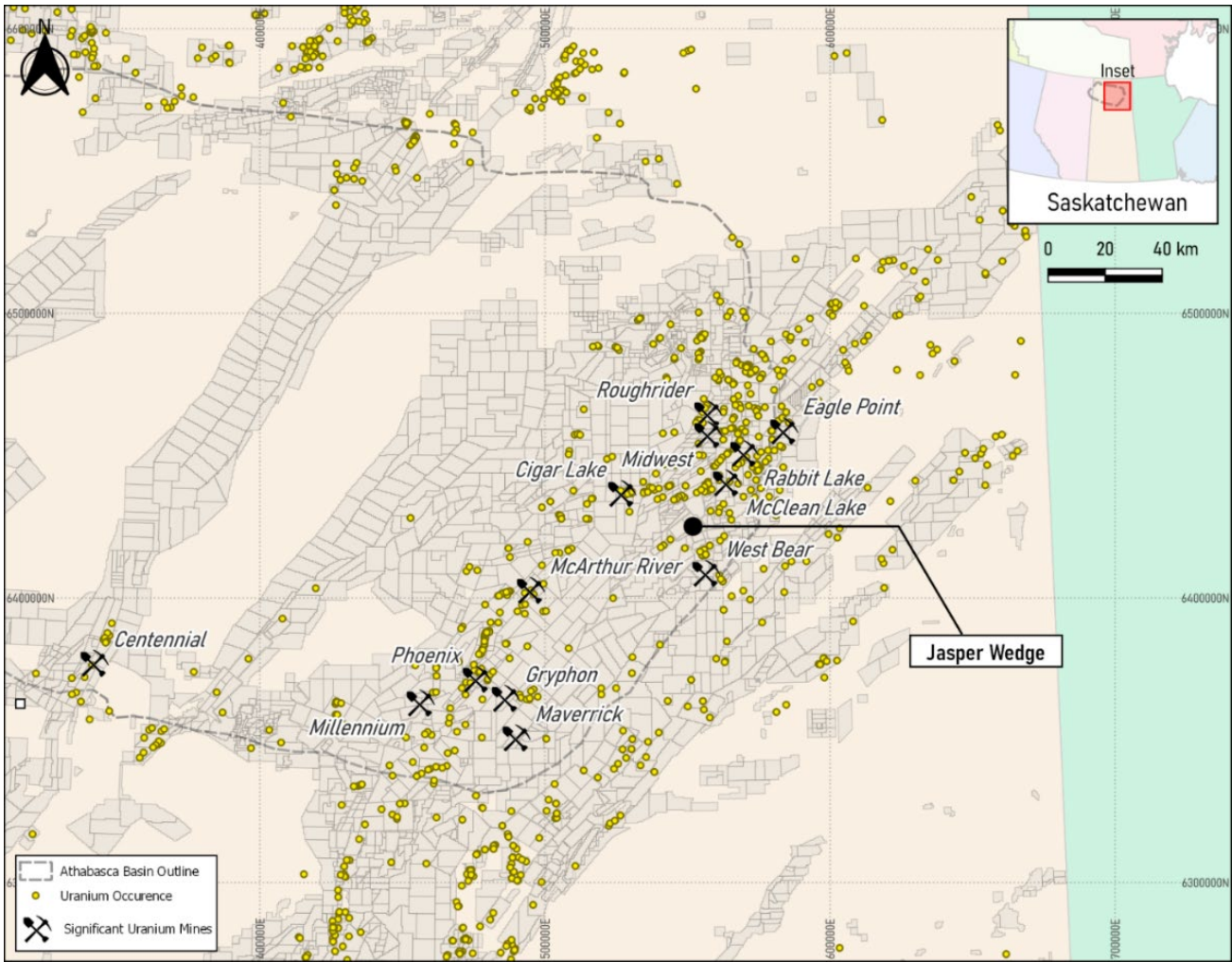
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<sup>5</sup> <https://www.cameco.com/businesses/uranium-operations/canada/cigar-lake>

<sup>6</sup> <https://www.cameco.com/businesses/uranium-operations/suspended/rabbit-lake>

<sup>7</sup> <https://www.cameco.com/businesses/uranium-operations/canada/mcarthur-river-key-lake>

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**Figure 3.** Jasper Wedge Project Location within eastern Athabasca Basin

**This announcement was authorised for release by the Board of Codrus Minerals.**

**ENDS**

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**Competent Persons Statement**

The information in this Report, as it relates to exploration results, interpretations and conclusions, is based on information reviewed by Ms Asha Rao who is a Consultant to Codrus Minerals Limited and is a Member of both the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australasian Institute of Geoscientists (AIG). Ms Rao has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the overseeing of activities being undertaken to qualify as a Competent Person (as defined in the JORC 2012 edition of the “Australasian Code for Reporting of Mineral Resources and Ore Reserves”.

Ms Rao consents to the inclusion of this information in the form and context in which it appears.

**Forward-Looking Statements**

Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Codrus. There is continuing uncertainty as to the full impact of COVID-19 on Codrus’ business, the Australian economy, share markets and the economies in which Codrus conducts business. Given the high degree of uncertainty surrounding the extent and duration of the COVID-19 pandemic, it is not currently possible to assess the full impact of COVID-19 on Codrus’ business or the price of Codrus securities. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements. Any forward- looking statements in this presentation speak only at the date of issue of this presentation. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Codrus does not undertake any obligation to update or revise any information or any of the forward-looking statements in this presentation or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

**Historical Reporting of Results**

COMMENTS REGARDING THE REPORTING OF OTHER ENTITIES EXPLORATION RESULTS

- The exploration results reported herein have been sourced from public reports as listed in the References.
- The information in this announcement is considered to be as accurate a representation of the available data sourced to date. Limitations on the data were observed in compiling of the publicly held records due to their age and the conversion into electronic means, that has meant that some data records are unable to be transcribed accurately due to poor resolution
- The historical exploration results were not reported in accordance with the JORC Code or other accepted codes and are considered to be used as a guide to further exploration

**Gulf Drilling Drill Hole Location**

