

IsoEnergy Commences Athabasca Basin Summer 2025 Exploration Program

Toronto, ON, June 12, 2025 – IsoEnergy Ltd. ("IsoEnergy" or the "Company") (NYSE: ISOU; TSX: ISO) is pleased to announce the commencement of its summer exploration program across its eastern Athabasca Basin uranium properties. The program is expected to encompass a total of 24 diamond drill holes for 11,000 metres of drilling on the Larocque East and Hawk projects, following up on encouraging results from the winter 2025 program at Larocque East and winter 2024 program at Hawk. Geochemical results from the winter program at Larocque East remain pending and are planned to be released once available.

Highlights

• Larocque East Project (Figure 1)

- A total of 20 diamond drill holes totaling 7,600 metres are planned to follow-up up on encouraging results from the winter 2025 program, targeting both resource expansion and regional discovery.
- Hurricane Resource Expansion Drilling will continue to test the potential of the Hurricane Main and South trends, focusing on step-outs near the existing deposit (the "Deposit") (Figure 1).
- Greenfield Targets Along the Larocque Trend Drilling will test Target Area D, 2.8 kilometres east of the Deposit, where the Company intersected the strongest radioactivity to date outside of the main mineral resource area. Additional drilling is planned at Target E, where summer 2024 drilling intersected elevated radioactivity and hydrothermal alteration near the unconformity and, Target F. Target K, located approximately 800 metres north of the main Hurricane conductor, identified in a new geophysical interpretation will also be drill tested along the 2,500 metre trend.

Hawk Project

4 diamond drill holes totaling 3,400 metres are planned to target coincident electromagnetic conductors and Ambient Noise Tomography ("ANT") velocity anomalies along a sparsely drill-tested, 12-kilometre-long prospective corridor. Previous drilling intersected structural disruption, alteration, and elevated uranium geochemistry and radiometric responses, features consistent with a setting conducive to unconformity-style uranium mineralization (Figure 3).

• Saskatchewan Forest Fire Situation

Mobilization for the drill program has been impacted due to severe forest fire activity in Northern Saskatchewan. The program is initially operating with one drill based out of Points North. Once conditions improve, specifically when the fires near La Ronge and along Highway 102 subside and safe transport routes are restored, the Larocque East camp is expected to be opened, and a second drill is planned to be deployed to accelerate the program.

Advancing Exploration Pipeline Across the Eastern Athabasca Basin

 Additional work is planned this summer to advance a pipeline of exploration targets across the Company's earlier-stage projects. This includes a recently completed helicopter-borne MobileMT survey at the East Rim project, acquisition and processing of satellite hyperspectral data for the Bulyea River project, and potential prospecting, sampling, and mapping at the Bulyea River, East Rim and Evergreen projects (Figure 4).

Dan Brisbin, Vice President Exploration, commented, "Our summer 2024 and winter 2025 drilling returned encouraging results at both Hurricane and along the Larocque trend, with strong radioactivity having been intersected. As we await geochemistry results for recent drilling, we are excited to pick up where we left off and continue advancing the potential for resource expansion along the main and south trends and additional discoveries along the 6-kilometre segment of the Hurricane trend to the east, particularly in target areas D and E. We are also eager to test, for the first time, the 2,500-metre trend located 800 metres north of the main conductor, an area that shares key geophysical characteristics with the Deposit. Lastly, we look forward to returning to the relatively underexplored Hawk project, where planned ground electromagnetic ("EM") and ANT surveys will guide drilling later this summer."

Resource Expansion Drilling at Hurricane

Following the success of the 2025 winter drill program (see news release dated April 23, 2025), exploration drilling has been proposed to further test several target areas (Figure 2).

The Hurricane Main trend, where winter drill holes LE25-194 and 198 intersected strong radioactivity. LE25-194, located 80 metres east of Hurricane, returned an average RS-125 spectrometer ("RS-125") reading on core of 3,100 counts per second ("cps") over 0.5 metres with a corresponding downhole probe maximum reading of 30,829 cps. LE25-198 intersected up to 625 cps on core and 26,503 cps downhole probe 180 metres east of Hurricane.

The Hurricane South trend, where winter drill holes LE25-207 and LE25-210 intersected strong radioactivity. Hole LE25-207, located 240 m east of Hurricane, returned an average RS-125 reading on over 0.5 metres on core of 8,800 cps and a corresponding downhole probe maximum reading of 30,096 cps, while LE25-210, drilled 480 metres east of Hurricane, intersected up to 3,700 cps averaged over 0.5 m on core and a corresponding downhole probe maximum reading of 20,280 cps.

Regional Targets on the Larocque Trend

Target Area D, 2.8 kilometres east of Hurricane, where winter drill hole LE25-202 intersected an average RS-125 reading on over 0.5 metres on core of 6,200 cps and up to 28,782 cps downhole probe within that interval – the highest radioactivity intersected on the project to date outside of the immediate Hurricane area. The LE25-202 intersection is on the western margin Target Area D at edge of an ANT seismic velocity anomaly where a new geophysical model generated earlier this year by Computational Geosciences Inc. and Convolutions Geoscience shows a potential splay in the Hurricane trend EM conductor package.

Target Area E is centred on a 1 kilometre by 2 kilometre ANT anomaly located 8 kilometre east of Hurricane at the eastern edge of the property where the 2025 conductivity model suggests an east-closing fold of the Hurricane host graphitic-pyritic pelite basement gneisses have been breached by east-northeast striking faults. Drill hole LE24-192, drilled in 2024, intersected 2.0 metres at 495 ppm U-p straddling the unconformity including 0.5 metres at 1,110 ppm U-p immediately below the unconformity. Drill hole LE24-180 returned 462 ppm U-p over 0.5 m. Unconformity depth in that hole was only 175 metres compared to 325 metres at the Hurricane deposit.

Target Area F, located in the northeast, is centered on the conductor corridor and aligns with roughly coincident resistivity and ANT velocity anomalies. Disruption of these geophysical patterns at the east end of Target Area F is inferred to reflect prospective structural complexity.

The new geophysical model generated earlier this year by Computational Geosciences Inc. and Convolutions Geoscience from joint inversion of historic EM and resistivity survey data highlighted a previously unexplored 2,500 metres long conductive trend 800 metres north of the main Hurricane conductor trend. This is

interpreted as the eastern extension of the Hurricane conductor trend northern splay that originates near drill hole LE25-202. This target, referred to herein as Target Area K, exhibits two geophysical features like those at Hurricane: a flexure from a northeast trend to and east trend, and a conductivity decrease on the southwest end potentially due to the effects of alteration on the conductive host rocks.

The drilling program will be results driven, with drilling being reallocated among these target areas in response to mineralized intercepts. Drilling planned to begin at the Hawk project in August may also be reallocated to the Larocque East project if results warrant.

Figure 1– Location of winter 2025 drill holes with respect to the Hurricane resource footprint (blue) and the ANT seismic low velocity zone in which the Deposit occurs, and projected Hurricane mineralization-controlling fault zones. RS-125 values are highest averages over 0.5 metre intervals.

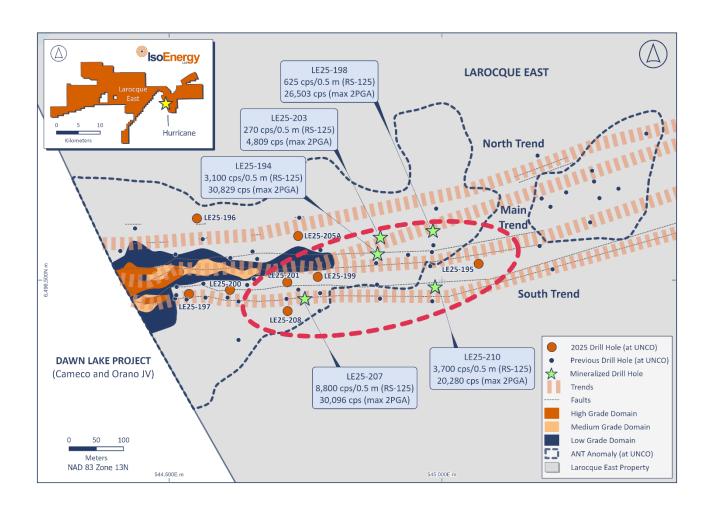
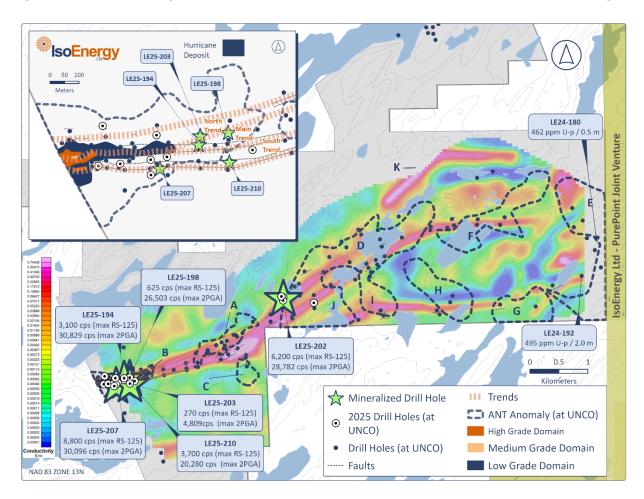


Figure 2 – Compilation map of Larocque East project showing the Hurricane deposit, winter 2025 and summer 2024 drill hole locations and ANT seismic velocity anomalies (A though J) on a plan view of the 2025 conductivity model 50 metres below the unconformity. 20 drill holes planned for the summer will test targets at Hurricane, in target areas D, E and F, and at the untested northern conductive trend (Target K)



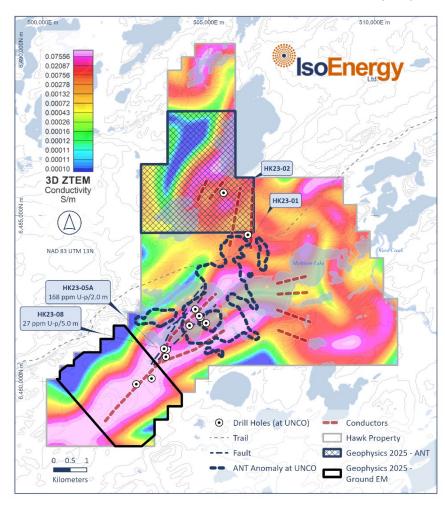
Hawk Project

Winter 2024 drill holes at the Hawk project intersected structure, alteration, and broad zones of elevated radioactivity typical of unconformity-related uranium deposits (see news release dated April 25, 2024). These holes were drilled to test EM conductors along a regional high conductivity trend mapped by Z-Axis Tipper Electromagnetic ("ZTEM") surveys and within a prominent ANT seismic velocity low interpreted to be due to structural disruption and alteration. The holes were drilled along trend to the north of 2023 drill holes HK23-03 and HK23-05A (Figure 3) that intersected structural disruption, desilicification, clay alteration, and "grey" zone sulphide mineralization with anomalous radioactivity and U-p geochemistry at the unconformity. Drill hole HK23-05A returned 168 ppm U-p over 2.0 metres in the basal sandstone including 511 ppm U-p over 0.5 metres immediately above the unconformity. HK23-08, which intersected the unconformity about 90 metres to the east, intersected 27 ppm U-p over 5.0 metres in the basal sandstone, including 99 ppm U-p over 0.5 m.

Exploration work planned for summer 2025 includes:

- Stepwise moving loop EM surveying to more accurately locate conductors than the existing fixed loop EM surveys do. It is anticipated that this will improve drill hole targeting.
- ANT surveys over the northern portion of the project to test for the extension of the existing ANT velocity anomaly along the conductivity corridor in an area where there is 35 metres of unconformity elevation change between 2023 drill holes HK23-01 and HK23-02.
- Drill up to 3,400 metres in four holes to test targets along the Hawk conductivity corridor that

Figure 3 – Hawk project map showing the locations of the planned summer 2025 geophysical surveys. The locations of four drill holes planned for late in the summer will be finalized after interpretation of the geophysical survey results. Locations of past drill holes, interpreted ground EM conductors, and drill intersected faults are shown on a colour ZTEM conductivity map.

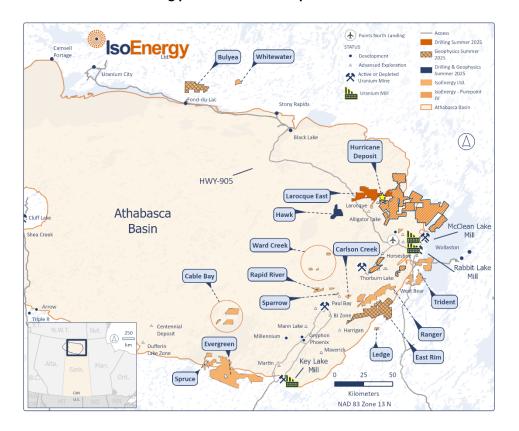


Developing Drill Targets on Additional Highly Ranked Projects

Additional work is being planned for the summer of 2025 to develop a pipeline of exploration targets on the Company's earlier stage projects. An airborne MobileMT conductivity and magnetic survey was recently completed over the East Rim project. Data processing and interpretation are in progress.

Acquisition of satellite hyperspectral survey data for the Bulyea River project is planned for June. This data will be used for remote mineral mapping to help guide initial geological mapping, prospecting and sampling planned for late summer to follow up on historic highly anomalous uranium lake sediment geochemistry and radiometric anomalies detected by both historic and 2024 surveys completed for IsoEnergy by RAMP Geological Services Inc.

Figure 4 – Location map of the Hurricane deposit and exploration projects in the eastern Athabasca Basin showing planned summer exploration work.



Qualified Person Statement

The scientific and technical information contained in this news release was reviewed and approved by Dr. Dan Brisbin, P.Geo., IsoEnergy's Vice President, Exploration, who is a "Qualified Person" (as defined in NI 43-101 – Standards of Disclosure for Mineral Projects). See the press releases referred to above for additional information, including data verification and quality assurance/quality control procedures, as well as the complete exploration results from the previous programs disclosed herein.

For additional information regarding the Company's Larocque East Project, including the current mineral resource estimate for IsoEnergy's Hurricane Deposit, please see the technical report entitled "Technical Report on the Larocque East Project, Northern Saskatchewan, Canada" dated August 4, 2022, available on the Company's profile at www.sedarplus.ca

About IsoEnergy Ltd.

IsoEnergy (NYSE American: ISOU and TSX: ISO) is a leading, globally diversified uranium company with substantial current and historical mineral resources in top uranium mining jurisdictions of Canada, the U.S. and Australia at varying stages of development, providing near-, medium- and long-term leverage to rising uranium prices. IsoEnergy is currently advancing its Larocque East project in Canada's Athabasca basin, which is home to the Hurricane deposit, boasting the world's highest-grade indicated uranium mineral resource.

IsoEnergy also holds a portfolio of permitted past-producing, conventional uranium and vanadium mines in Utah with a toll milling arrangement in place with Energy Fuels. These mines are currently on standby, ready for rapid restart as market conditions permit, positioning IsoEnergy as a near-term uranium producer.

For More Information, Please Contact:

Philip Williams CEO and Director info@isoenergy.ca 1-833-572-2333 X: @IsoEnergyLtd www.isoenergy.ca

Cautionary Statement Regarding Forward-Looking Information

This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of U.S. securities laws (collectively, "forward-looking statements"). Generally, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". These forward-looking statements may relate to the Company's properties, planned exploration activities for summer 2025 and the anticipated results thereof; and any other activities, events or developments that the Company expects or anticipates will or may occur in the future.

Forward-looking statements are necessarily based upon a number of assumptions that, while considered reasonable by management at the time, are inherently subject to business, market and economic risks, uncertainties and contingencies that may cause actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. Such assumptions include, but are not limited to, assumptions that the results of planned exploration activities are as anticipated and will be reported when anticipated; the anticipated mineralization of IsoEnergy's projects being consistent with expectations; the price of uranium; the anticipated cost of planned exploration activities; that general business and economic conditions will not change in a materially adverse manner; that financing will be available if and when needed and on reasonable terms; and that third party contractors, equipment and supplies and governmental and other approvals required to conduct the Company's planned activities will be available on reasonable terms and in a timely manner. Although IsoEnergy has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Such statements represent the current views of IsoEnergy with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by IsoEnergy, are inherently subject to significant business, economic, competitive, political and social risks, contingencies and uncertainties. Risks and uncertainties include, but are not limited to the following: negative operating cash flow and dependence on third party financing; uncertainty of additional financing; no known mineral reserves; aboriginal title and consultation issues; reliance on key management and other personnel; actual results of technical work programs and technical and economic assessments being different than anticipated; changes in development and production plans based upon results; availability of third party contractors; availability of equipment and supplies; failure of equipment to operate as anticipated; accidents, effects of weather and other natural phenomena; other environmental risks; changes in laws and regulations; regulatory determinations and delays; stock market conditions generally; demand, supply and pricing for uranium; other risks associated with the mineral exploration industry; and general economic and political conditions in Canada, the United States and other jurisdictions where the Company conducts business. Other factors which could materially affect such forward-looking statements are described in the risk factors in IsoEnergy's most

recent annual management's discussion and analysis and annual information form and IsoEnergy's other filings with securities regulators which are available under the Company's profile on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov. IsoEnergy does not undertake to update any forward-looking statements, except in accordance with applicable securities laws.