

#### **IsoEnergy Announces Summer Exploration Plans**

Saskatoon, SK, June 19, 2023 – IsoEnergy Ltd. ("IsoEnergy" or the "Company") (TSXV: ISO; OTCQX: ISENF) is pleased to announce its summer 2023 exploration plans for its eastern Athabasca Basin uranium properties (Figure 1).

# **Summer Program Highlights:**

- Diamond drilling totaling 1,100 metres will be conducted at the Hurricane deposit to test areas
  identified with potential for resource expansion. Additionally, the Company will utilize industry
  leading innovative technology to conduct an Ambient Noise Tomography (ANT) survey on the
  Hurricane deposit and surrounds. Further drilling may be conducted on areas potentially
  identified through the ANT survey.
- Diamond drilling at the Larocque East, Ranger and Hawk projects totalling 4,700 metres.
- Airborne geophysical surveying at the East Rim, Trident, Collins Bay Extension and Full Moon projects.

Tim Gabruch, President and Chief Executive Officer commented: "A review of the Hurricane resource drilling, guided by our recently appointed vice-president, exploration, Dr. Darryl Clark, has highlighted some areas for further drilling, including significant step out targets to the north and east of the main zone of mineralization, aimed at identifying additional mineralized areas for potential resource extension. In conjunction with this work, we are excited to apply an innovative geophysical technique using Ambient Noise Tomography to provide improved geological information. If this technique is successful, it is expected to result in fewer drill holes and less environmental impact. This is consistent with IsoEnergy objectives to limit our footprint as we undertake to help supply uranium required by the nuclear energy industry in its role as a key contributor to the green energy transition and as a secure source of energy globally."

Dr. Darryl Clark, Vice President, Exploration also commented: "In addition to the exciting work ahead on our flagship Hurricane project, the upcoming summer program is an important one for IsoEnergy as we start to systematically test excellent targets within our pipeline of discovery opportunities. At Hawk we have been able to integrate the results from our recent drilling with the magnetic, ZTEM and ground EM data sets to generate some very compelling targets, within a highly prospective regional corridor, that has clear potential to host a tier one uranium deposit. Additionally, reconnaissance drilling at our early-stage Ranger project will provide valuable geological information, and an extensive program of airborne surveying will move several of our projects toward drill-readiness. Lastly, a review of the previous exploration results at Kernaghan East has highlighted a yet untested target where we see a potential offset to the unconformity surface spatially associated with alteration, anomalous uranium geochemistry and a favourable pyrite-rich graphitic host all within 170 metres from surface. These key features combine to highlight the potential for Kernaghan East to host a near surface uranium deposit."

## **Summer Exploration Plans**

### Hurricane, Larocque East Project

A recent technical review of the Hurricane project has identified potential areas for resource expansion along the northern and eastern extents to the known mineralization (Figure 2). Additionally, IsoEnergy plans to conduct an ANT survey directly over the Hurricane deposit with further survey extensions north, south and east of the known uranium mineralization, using EXOSPHERE BY FLEET® (Figure 2). ExoSphere technology by Fleet Space consists of laying an array of 64 lightweight, battery-powered surface sensors called Geodes over a 2 km<sup>2</sup> survey grid to measure naturally occurring environmental seismic vibrations in the ground (caused by wave action, weather, and anthropogenic activities) over a six-day period. The Geodes collect and deliver information in near real-time to Fleet Space's satellite network. The subsurface ANT results will be integrated with information that has been gathered through previous exploration activities. With further processing and modelling, it may be possible to highlight mineralized zones associated with changes in seismic velocity. Success in correlating ANT responses with known uranium mineralization will validate the use of this innovative technique in defining additional drill targets at Hurricane and other projects. The summer drill program will comprise approximately 1,100 metres. The main objective of this drilling will be to extend the resource footprint and assess the potential of the ANT technology to highlight density contrasts associated with uranium mineralisation. Further information on the ANT survey method and examples of case histories can be found at https://fleetspace.com/mineralexploration.

### Kernaghan, Larocque East Project

On the Kernaghan trend, where historical drilling identified over 40 metres of unconformity topography associated with anomalous geochemistry in the Athabasca sandstones, the summer drill program will comprise two drill holes totalling 600 metres. The main objective of the drilling is to test a 40-metre-thick pyrite-bearing graphitic unit at the unconformity. This target is proximal to hydrothermal clay and hematite alteration that is spatially associated with elevated uranium geochemistry previously intersected in exploration drilling. Figure 3 shows the general target areas for Larocque East drilling.

## Hawk Project

IsoEnergy recently completed the inversion of historic ZTEM data along with additional ground EM surveying over its Hawk property. The ZTEM inversion highlights the extent of the conductive trend within the property and correlates well with the ground EM data that has been collected over the past two years, as shown in Figure 4.

Drilling planned at Hawk comprises three drill holes totalling 2,500 metres. These drill holes will follow up targets identified from the integration of significant sandstone alteration in recent drilling (IsoEnergy Ltd. News Release April 21, 2023), ground EM, and the ZTEM inversion, where a highly prospective target area has been highlighted. Figure 4 shows the relative location of the drill target areas and the interpreted conductor traces hosted within the zone of low magnetic susceptibility. The primary objective of this drilling is to test for uranium mineralisation hosted at the unconformity. To accurately characterise the geochemical fingerprint of the altered rocks immediately above and below the unconformity, further sampling of the existing drill holes HK23-03 and HK23-05A will be conducted during the summer field season. This additional data will aid vectoring exploration efforts towards higher grade uranium mineralisation.

### Ranger Project

As at Hawk, electromagnetic surveying completed at Ranger during winter 2022 advanced the project to a drill-ready state. The winter survey work mapped weakly to moderately conductive trends in two areas. The northwestern conductive trends are associated with magnetic breaks and are completely untested by historic drilling within the project. The southern conductive trends are associated with a magnetic break and the projection of the Bird Lake Fault, a significant post-Athabasca structure which has a vertical offset of up to 80 metres. The depth to the unconformity in the survey area is expected to between 230 and 300 metres. Drilling planned at Ranger consists of four drill holes totalling 1,600 metres. Figure 4 shows the relative location of the drill target areas and the interpreted conductor traces. The primary objective of this drilling is to test for uranium mineralisation hosted at the unconformity.

### Airborne Geophysical Surveying

Xcalibur Multiphysics has been engaged to conduct multiparameter airborne geophysical surveying at IsoEnergy's early-stage Trident, Full Moon and Collins Bay Extension projects. The survey will employ Xcalibur's FALCON® Airborne Gravity Gradiometry system to acquire high-resolution gravity, magnetic, and radiometric (spectrometry) datasets. Gravity and magnetic data will improve the property-wide understanding of basement geology and assist in the identification of potential alteration zones, while gamma ray spectrometry aims to locate anomalous radioactivity related to near-surface showings and radioactive boulder trains such as those that led to the discovery of several notable uranium deposits including Triple R and Key Lake. Survey work is planned to commence in August and is expected to be completed in September. Project locations are shown on Figure 1.

Geotech Ltd has been engaged to conduct a helicopter-borne Versatile Time Domain Electromagnetic (VTEM™ Plus) and horizontal magnetic gradiometer geophysical survey at the East Rim project. The proposed survey is approximately 1,125 line-kilometres (refer Figure 1). The VTEM™ Plus system is excellent for locating discrete conductive anomalies as well as mapping lateral and vertical variations in resistivity. The results of this VTEM survey will be integrated with the magnetic and gravity surveys that were conducted in 2022 to generate basement hosted targets for initial reconnaissance drill testing in the winter 2024. Survey work is planned to commence in June and is expected last for 2 weeks. Importantly, the sandstone cover on the property is thin, ranging between 140 metres and 450 metres in previous drilling.

Figure 1 – IsoEnergy Athabasca Projects and the target areas for the summer airborne geophysical programs



Figure 2 – Hurricane deposit, Larocque East highlighting the outline of the Ambient Noise Tomography Survey Area against the backdrop of resistivity 100 metres above the unconformity.

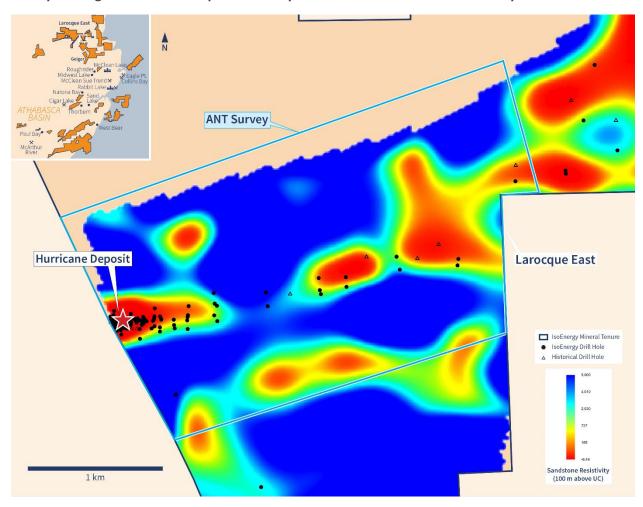


Figure 3 – Kernaghan Trend, Larocque East Drilling Targets illustrating the coincident location of the alteration zone, anomalous uranium and the contact of the granite with the pyrite-rich graphitic gneiss

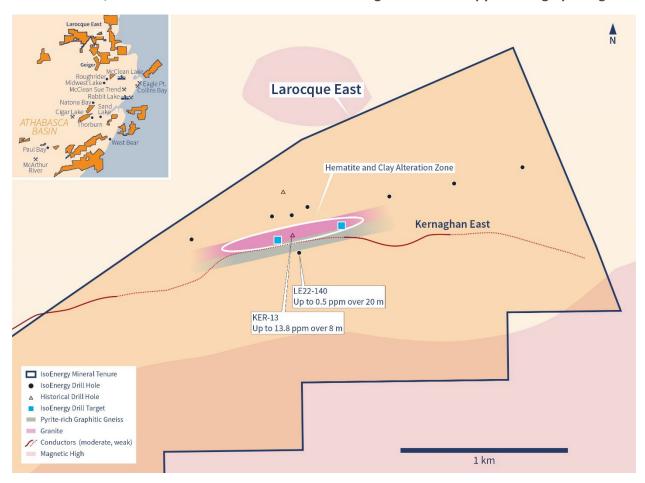


Figure 4 – Hawk winter ground EM survey results and the results of the 3D inversion of the historic ZTEM data from 100 metres below the unconformity with the proposed summer drill targets

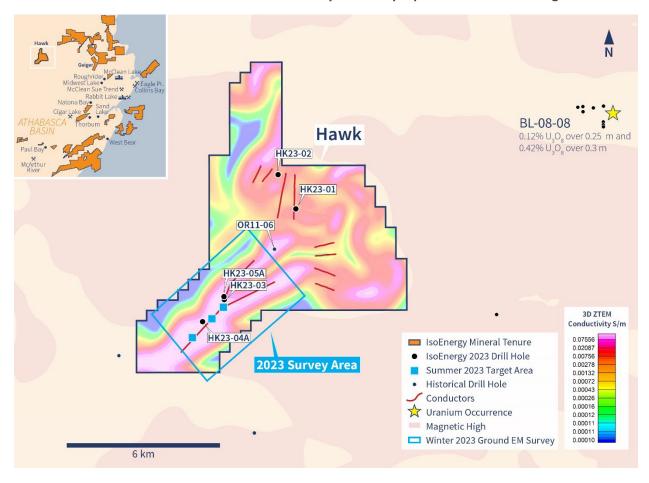
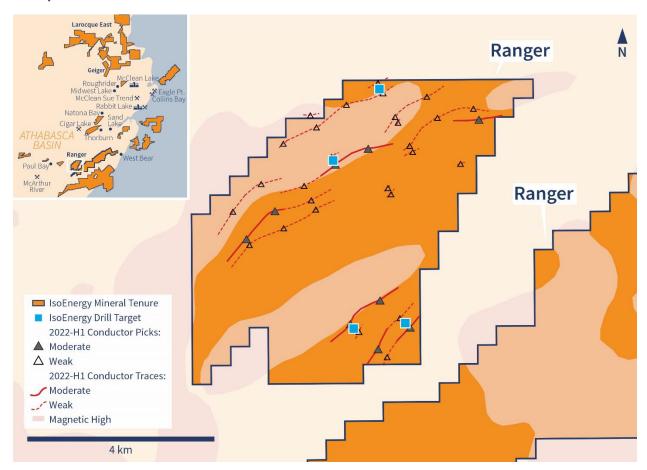


Figure 5 – Ranger proposed drill hole locations and the conductor traces as defined from the 2022 EM survey



## **Qualified Person Statement**

The scientific and technical information contained in this news release was prepared by Darryl Clark, P.Geo., IsoEnergy's Vice President, Exploration, who is a "Qualified Person" (as defined in NI 43-101 – Standards of Disclosure for Mineral Projects). Dr. Clark has verified the data disclosed. All radioactivity measurements reported herein are total gamma from an RS-125 hand-held spectrometer. As mineralized drill holes at the Hurricane zone are oriented very steeply (-70 to -90 degrees) into a zone of mineralization that is interpreted to be horizontal, the true thickness of the intersections is expected to be greater than or equal to 90% of the core lengths. This news release refers to properties other than those in which the Company has an interest. Mineralization on those other properties is not necessarily indicative of mineralization on the Company's properties. All chemical analyses are completed for the Company by SRC Geoanalytical Laboratories in Saskatoon, SK. For additional information regarding the Company's Larocque East Project, including its quality assurance and quality control procedures, please see the Technical Report dated effective May 15, 2019, on the Company's profile at <a href="https://www.sedar.com">www.sedar.com</a>.

### **About IsoEnergy**

IsoEnergy is a well-funded uranium exploration and development company with a portfolio of prospective projects in the eastern Athabasca Basin in Saskatchewan, Canada. In 2018, the Company discovered the high-grade Hurricane Deposit on its 100% owned Larocque East property in the Eastern Athabasca Basin. The Hurricane Deposit has Indicated Mineral Resources of 48.61 Million Ib U<sub>3</sub>O<sub>8</sub> based on 63,800 tonnes grading 34.5% U<sub>3</sub>O<sub>8</sub> and Inferred Mineral Resources of 2.66 Million Ib U<sub>3</sub>O<sub>8</sub> based on 54,300 tonnes grading 2.2% U<sub>3</sub>O<sub>8</sub> (July 8, 2022). The Hurricane Deposit is 100% owned by IsoEnergy and is unencumbered from any royalties. IsoEnergy is led by a Board and Management team with a track record of success in uranium exploration, development, and operations. The Company was founded and is supported by the team at its major shareholder, NexGen Energy Ltd.

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The information contained herein contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to the activities, events or developments that the Company expects or anticipates will or may occur in the future, including, without limitation, planned exploration activities. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof 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" or the negative connotation thereof.

Such forward-looking information and statements are based on numerous assumptions, including among others, that the results of planned exploration activities are as anticipated, the price of uranium, the

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Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual events or results in future periods to differ materially from any projections of future events or results expressed or implied by such forward-looking information or statements, including, among others: negative operating cash flow and dependence on third party financing, uncertainty of additional financing, no known mineral reserves or resources, the limited operating history of the Company, the influence of a large shareholder, alternative sources of energy and uranium prices, aboriginal title and consultation issues, reliance on key management and other personnel, actual results of exploration activities being different than anticipated, changes in exploration programs 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 and other risks associated with the mineral exploration industry, environmental risks, changes in laws and regulations, community relations and delays in obtaining governmental or other approvals.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.