



EXPLORATION 2024
Securing the Clean Energy Transition

Forward Looking Statements

Information Contained in this Presentation

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appeal of alternate sources of energy to uranium-produced energy, that the Canadian dollar will strengthen against the U.S. dollar, that mineral resources and reserves are not as estimated, that actual costs or actual results of reclamation activities are greater than expected, that changes in project parameters and plans continue to be refined and may result in increased costs, of unexpected variations in mineral resources and reserves, grade or recovery rates or other risks generally associated with mining, unanticipated delays in obtaining governmental, regulatory or First Nations approvals, risks related to First Nations title and consultation, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, risks related to changes in laws, regulations, policy and public perception, as well as those factors or other risks as more fully described in NexGen's Annual Information Form dated February 24, 2023 filed with the securities commissions of all of the provinces of Canada except Quebec and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR at www.sedar.com and Edgar at www.sec.gov.

This presentation includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the Securities and Exchange Commission ("SEC") set the SEC's rules that are applicable to domestic United States reporting companies. Consequently, Mineral Reserves and Mineral Resources information included in this presentation is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

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 statements or implied by forward-looking information or statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Readers are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof. 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.



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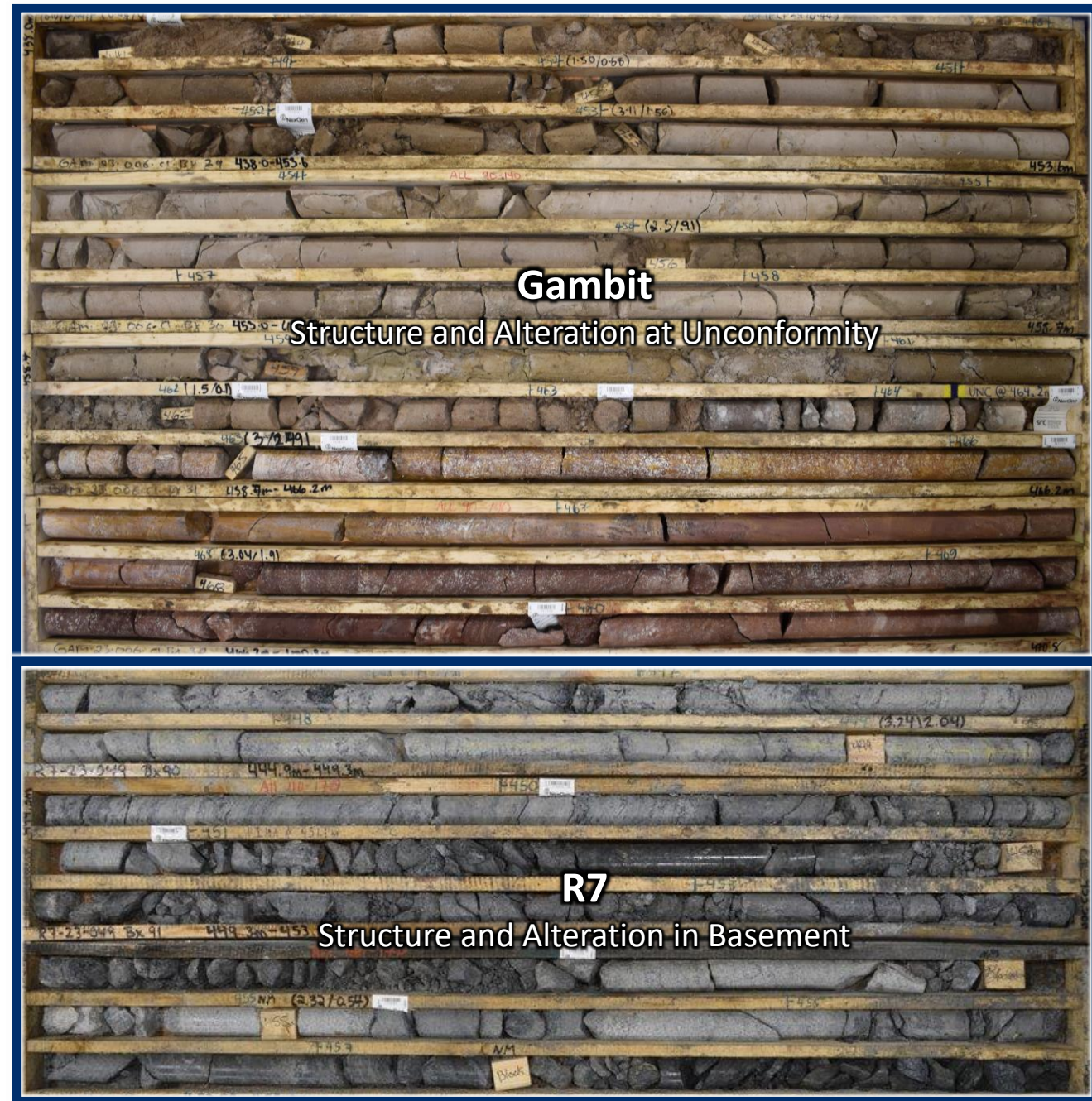
2023 RESULTS SUMMARY

Objective – Discover a Tier 1 Asset
2023 Meterage – 22,114.4 m

Drill Highlights

SW2 - R7 Corridor	brittle structure throughout corridor with local hydrothermal alteration
SW2 - Morrow Corridor	significant brittle reactivation along conductor trend for greater than 5 km
SW1 - Gartner Corridor	hydrothermal alteration associated with structure
SW1 - Gambit Corridor	on trend from JR Zone – hydrothermal alteration in sandstone and basement

Exploration team has developed understanding of previously unexplored corridors - results have informed priority targets for the 2024 Exploration program.



EXPLORATION: 2024 OVERVIEW

Southwest Athabasca

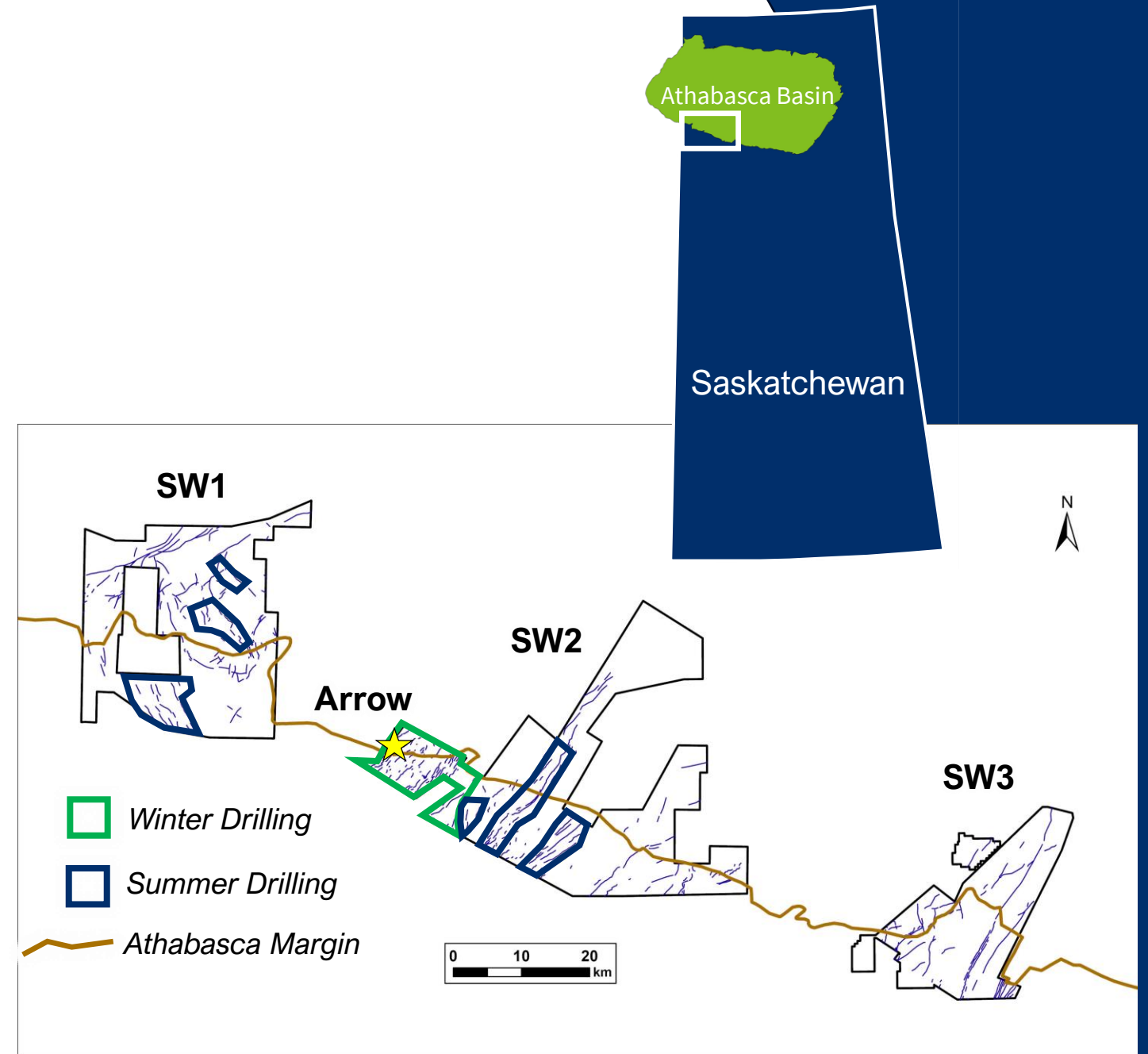
- Exploration will take place on NexGen's 100% owned land package (SW1, SW2, SW3) in the proven high-grade uranium district of the southwest Athabasca Basin, Saskatchewan where NexGen holds the most dominant land position.

30,000 metres of drilling

- Systematically targeting priority prospective trends with the objective of discovering more "Arrow-type" discoveries.
- Builds upon favourable results from the 2023 drill program.
- Expanded program relative to the 2023 drilling reflects the highly encouraging results from the 2023 exploration program as well as NexGen's focus to meet urgent global clean energy needs with sustainably sourced Saskatchewan uranium.

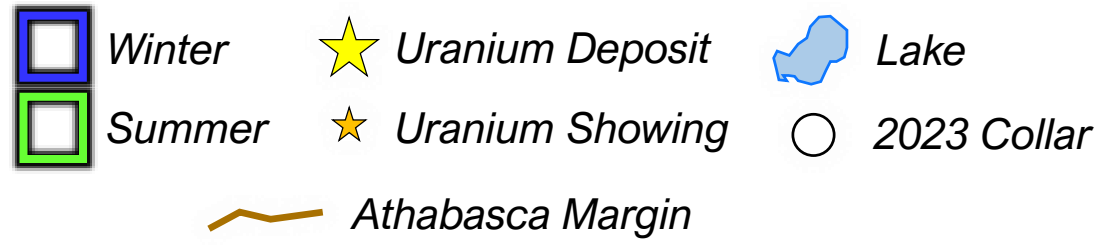
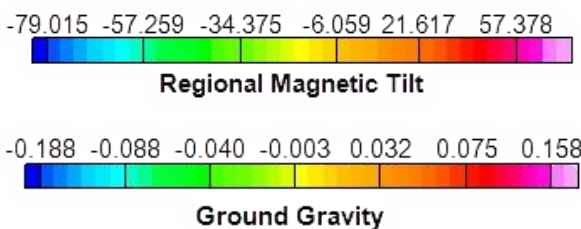
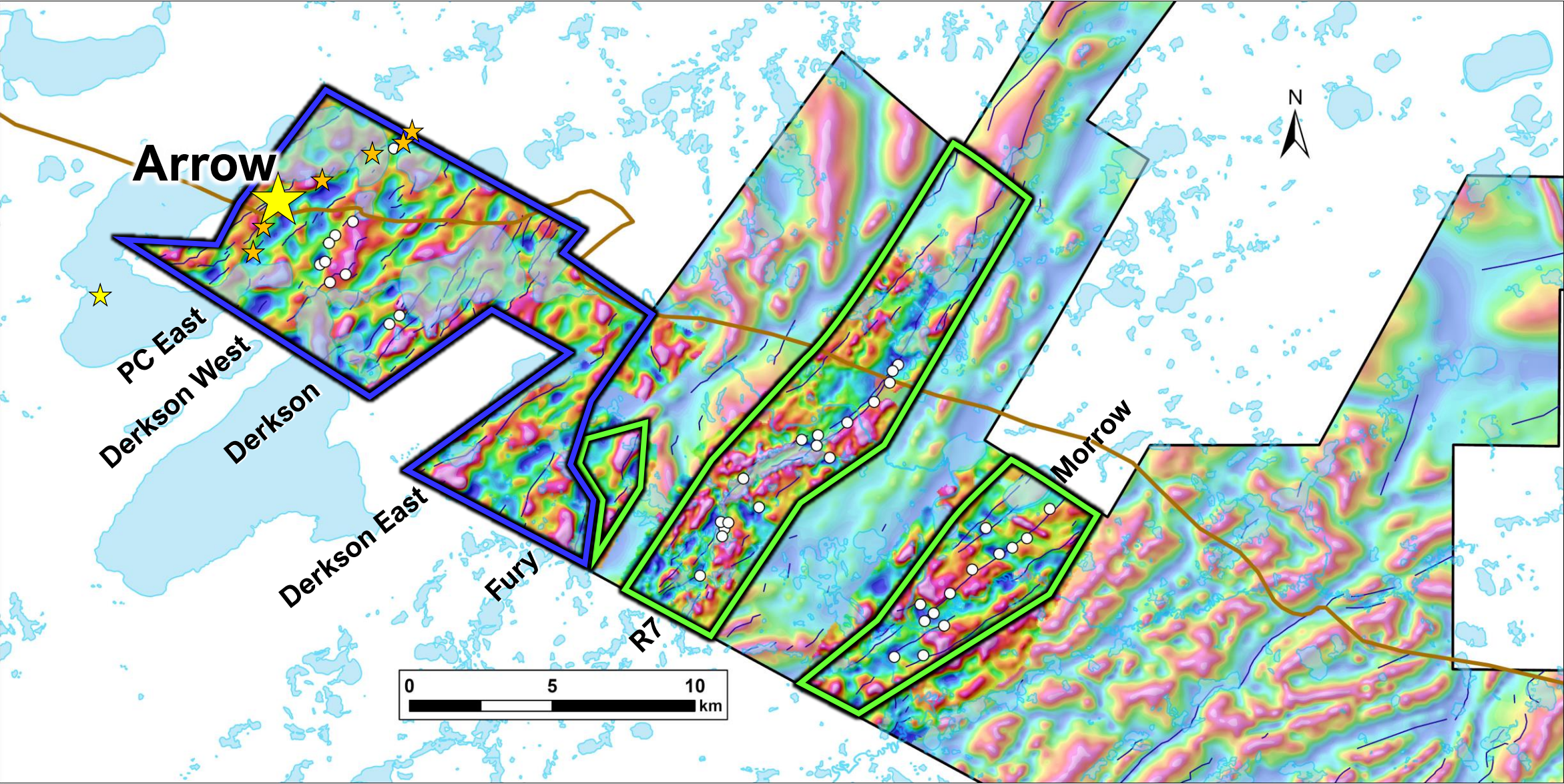
Geophysics

- Surveys across all three land packages for drill target generation and refinement.



Land package: Over 190,000 hectares straddling the Athabasca Basin margin

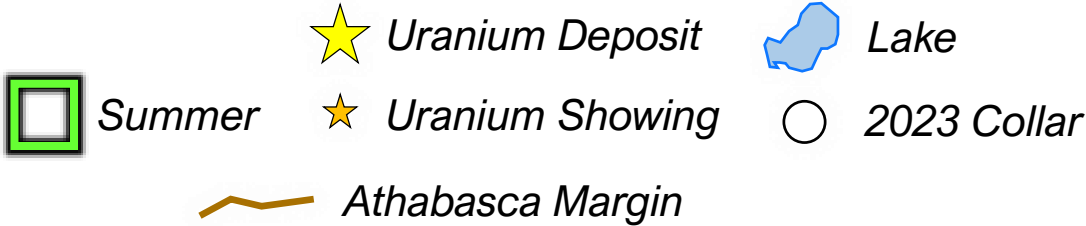
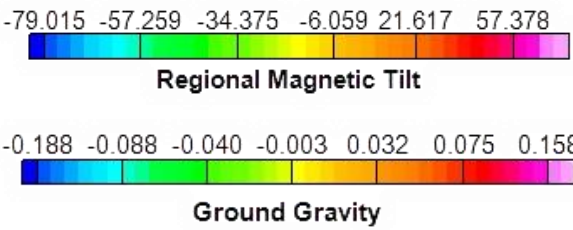
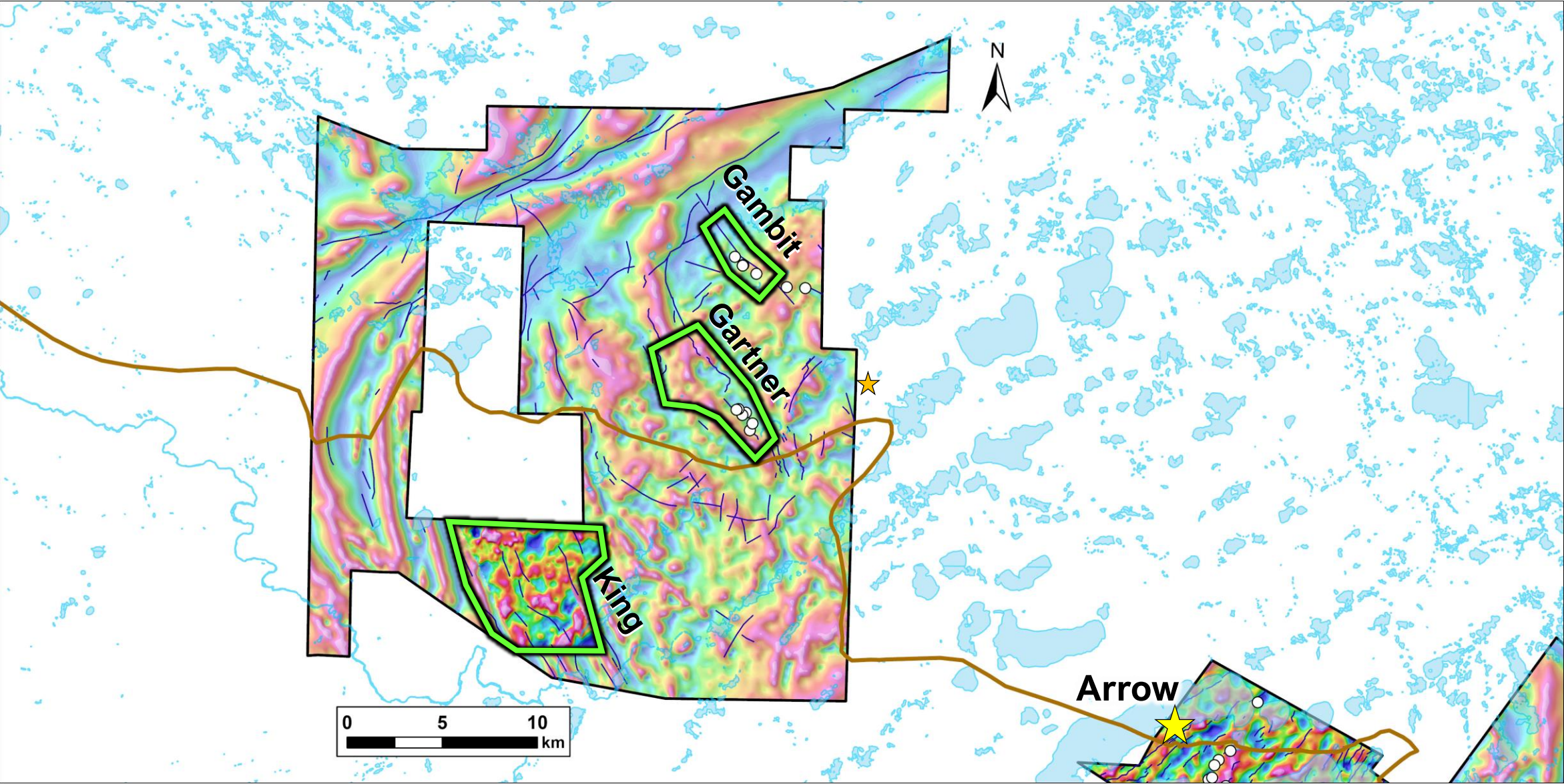
SW2: 2024 DRILLING (15,700 m)



SW2: TARGET AREAS

- **PC East** – Parallel trend proximal to Arrow that will see follow up of identified reactivated structure and alteration in gravity lows.
- **Derkson West** – Focused follow up of hydrothermal alteration and structural disruption from 2023 drilling. Similar geometry to the PLC with a northeast-southwest trending conductor along magnetic gradient, coincident with local gravity lows.
- **Derkson** – Drilling in 2023 confirmed structural disruption. Follow up will focus along strike within gravity lows coincident with discrete, strong conductive responses.
- **Derkson East** – Targeting a significant flexure of an underexplored conductor within a gravity low interpreted as localized structural disruption. Opportunity remains along strike as well.
- **Fury** – Targeting gravity lows coincident with pronounced conductors. Regional kinematics indicate opportunity for significant dilation to focus uranium bearing fluids on these trends.
- **R7** – High resolution magnetics in 2023 illuminated this structurally complex corridor and provided a necessary framework in conjunction with past EM coverage. Drilling in 2023 completed an initial test of ~10 km of strike length across multiple conductive trends situated immediately outside the margin of the Athabasca sandstone. Follow up of those results and continued testing northward into the Athabasca Basin are the focus of this program at R7.
- **Morrow** – Completely unexplored before 2023, ~7.5 km of this 11 km corridor was tested last year. Reactivated structure coincident with, or adjacent to gravity lows, highlighted this early endeavour. Follow up of drill results will be supplemented by new high resolution magnetics.

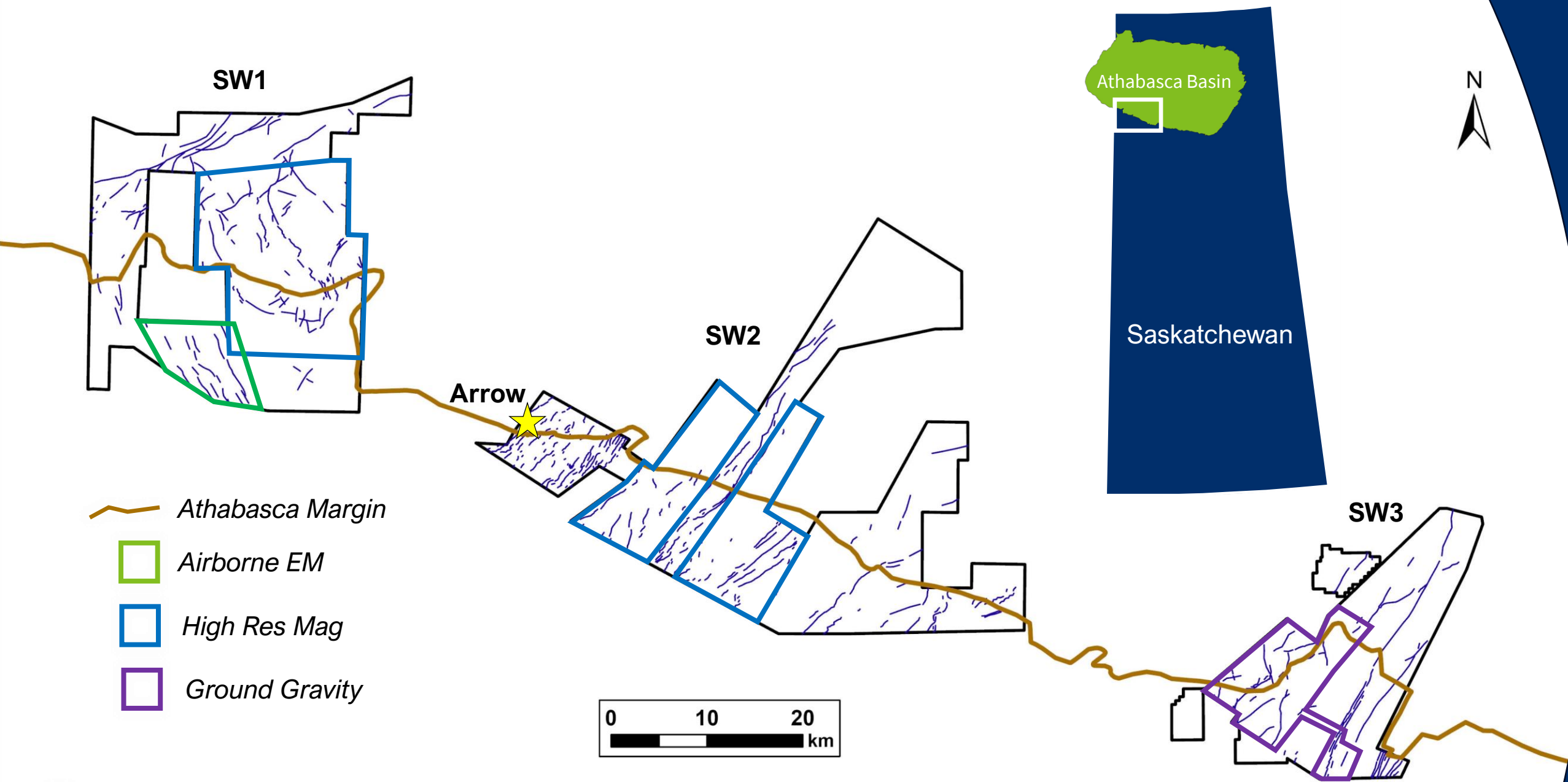
SW1: 2024 DRILLING (14,300 m)



SW1: TARGET AREAS

- **Gambit** – Drilling in 2023 identified a fault and alteration associated with a subtle EM signature on an interpreted trend with F3 Uranium Corp's PLN discovery. The NexGen portion of the trend has an approximate potential strike length of 12 km that will see more testing in 2024.
- **Gartner Corridor** – 2023 work confirmed hydrothermal alteration associated with broad intervals of structural disruption. DC resistivity highlighted more prospectivity to be followed up. This 13 km long, northwest-southeast striking conductive trend continues to be a high priority.
- **King** – Unexplored since 2009, this corridor offers stacked geophysical anomalies across over 9 km of parallel conductive trends. Located wholly outside the Athabasca Basin, basement mineralization is the primary target.

EXPLORATION: 2024 GEOPHYSICS



GEOPHYSICS: 2024 ACTIVITY

Work will build on the momentum of targets generated from 2022 and 2023 geophysical activity. The 2024 Exploration program will continue to investigate and evaluate NexGen's dominant and under explored land package. An integral piece is better understanding the subsurface geology and how it relates to prospectivity. The Company's strategy is to optimally assess tens of thousands of hectares annually in a systematic and objective process which has led to the numerous discoveries to date – most notably the tier 1 Arrow discovery made by NexGen in 2014. The program in 2024 is set to do the same.

- **SW1** – Targeting at King will be aided by airborne EM flown in the winter. Refinement of these targets will allow for maximum precision when drilling. Due to the benefits reaped from high resolution magnetics at R7, a large survey of similar specifications is planned across much of the eastern portion of SW1. A lineament analysis and interpretation of kinematics will be completed by NexGen to efficiently target across several high priority conductive corridors, including Gartner and Gambit.
- **SW2** – Airborne EM is planned for the central portion of R7 and its flanks to provide refined data that can precisely target under shallow sandstone cover. High resolution magnetics are planned to add light to the central portion of SW2 and advance our interpretations in conjunction with all available datasets.
- **SW3** – A ground gravity survey in the southwestern portion of SW3 will be used to identify and prioritize targets for future drilling. The area spans the Athabasca Basin margin and varies magnetically from the rest of the property due to relative removal from the strain gradient associated with the Snowbird Tectonic Zone. Magnetics indicate a basement framework with multiple intersecting lineaments capable of creating dilation to act as a host of uranium mineralization.



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