

9 May 2023

## Investor Presentation

Terra Uranium Limited **ASX: T92** (the **Company**), a mineral exploration company strategically positioned in the Athabasca Basin, Canada, a premium uranium province hosting the world's largest and highest-grade uranium deposits provides the following investor presentation.

In regards to the historical exploration results contained within this presentation, the Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and all material assumptions and technical parameters underpinning them continue to apply and have not materially changed.

### Announcement Ends

*This announcement has been authorised by Andrew J. Vigar, Chairman, on behalf of the Board of Directors*

### Competent Person's Statement

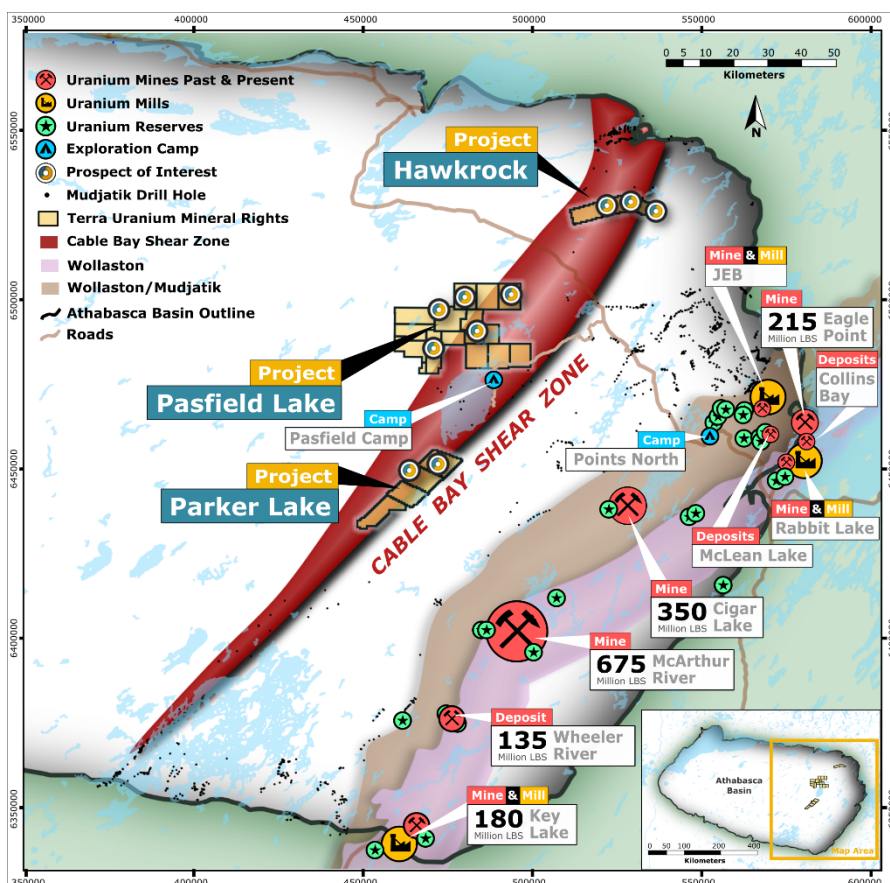
Information in this report is based on current and historic Exploration Results compiled by Mr Andrew Vigar who is a Fellow of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Vigar is a executive director of Terra Uranium Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Vigar consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

### Forward Looking Statements

Statements in this release regarding the Terra Uranium business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties. These include Mineral Resource Estimates, commodity prices, capital and operating costs, changes in project parameters as plans continue to be evaluated, the continued availability of capital, general economic, market or business conditions, and statements that describe the future plans, objectives or goals of Terra Uranium, including words to the effect that Terra Uranium or its management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by Terra Uranium, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements.

## About Terra Uranium

Terra Uranium Limited is a mineral exploration company strategically positioned in the Athabasca Basin, Canada, a premium uranium province hosting the world's largest and highest-grade uranium deposits. Canada is a politically stable jurisdiction with established access to global markets. Using the very best people available and leveraging our in-depth knowledge of the Basin's structures and deposits we are targeting major discoveries under cover that are close to existing production infrastructure. We have a philosophy of doing as much as possible internally and working closely with the local communities. The Company is led by a Board and Management with considerable experience in Uranium. Our dedicated exploration team is based locally in Saskatoon, Canada.



The Company holds a 100% interest in 22 Claims covering a total of 1,008 sq km forming the HawkRock, Pasfield Lake and Parker Lake Projects (together, the Projects), located in the Cable Bay Shear Zone (CBSZ) on the eastern side of the Athabasca Basin, north-eastern Saskatchewan, Canada. The Projects are approximately 80 km to the west/northwest of multiple operating large uranium mills, mines and known deposits.

The CBSZ is a major reactivated structural zone with known uranium mineralisation but limited exploration as the basin sediment cover is thicker than for the known deposits immediately to the east. Methods used to explore include airborne and ground geophysics that can penetrate to this depth and outcrop and

reverse circulation geochemical profiling to provide the best targets before undertaking costly core drilling.

There is good access and logistics support in this very active uranium exploration and production province. A main road passing between the HawkRock and Pasfield Lake Projects with minor road access to Pasfield Lake and the T92 operational base there. The regional prime logistics base is Points North located about 50km east of the Projects.

### For more information:

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# T92 TERRA URANIUM

High-Quality Uranium Assets in the Athabasca Basin

Exploration Update 2 May 2023

ASX: **T92**

TERRA URANIUM PASFIELD LAKE CAMP

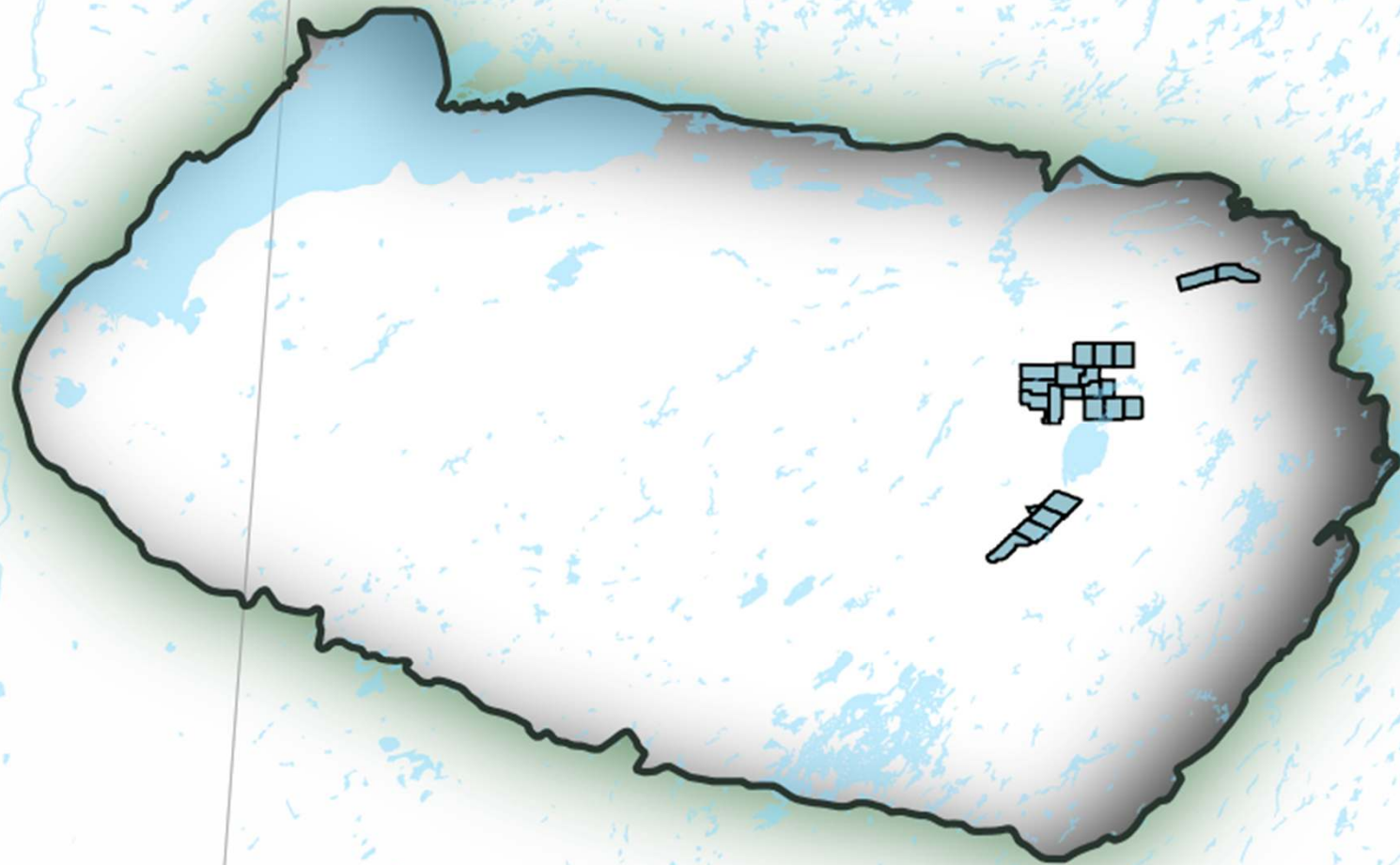


# STRATEGICALLY POSITIONED IN THE ATHABASCA BASIN

**World's largest and highest-grade  
uranium deposits**

**Experienced team, in-depth  
knowledge, modern tools and  
techniques**

**Targeting major discoveries under  
cover near existing production  
infrastructure**





DECADES OF  
SUCCESS  
EXPLORING FOR  
WORLD CLASS  
DEPOSITS

The Company is led by a Board and Management with considerable experience in Uranium exploration, development and production.

Past success are used to guide and build the company with our dedicated exploration team based locally in Saskatoon, Canada.

BOARD



Andrew J Vigar  
Executive Chairman



Troy Boisjoli  
Non-Executive Director



Doug Engdahl  
Non-Executive Director



Dr. Kylie Prendergast  
Non-Executive Director

MANAGEMENT



Mike McClelland  
President Terra Canada



Nova Taylor  
Company Secretary



Jules Grove  
Chief Financial Officer



Jennifer Burgess  
Exploration Manager



Kyle Patterson  
Geophysics Manager



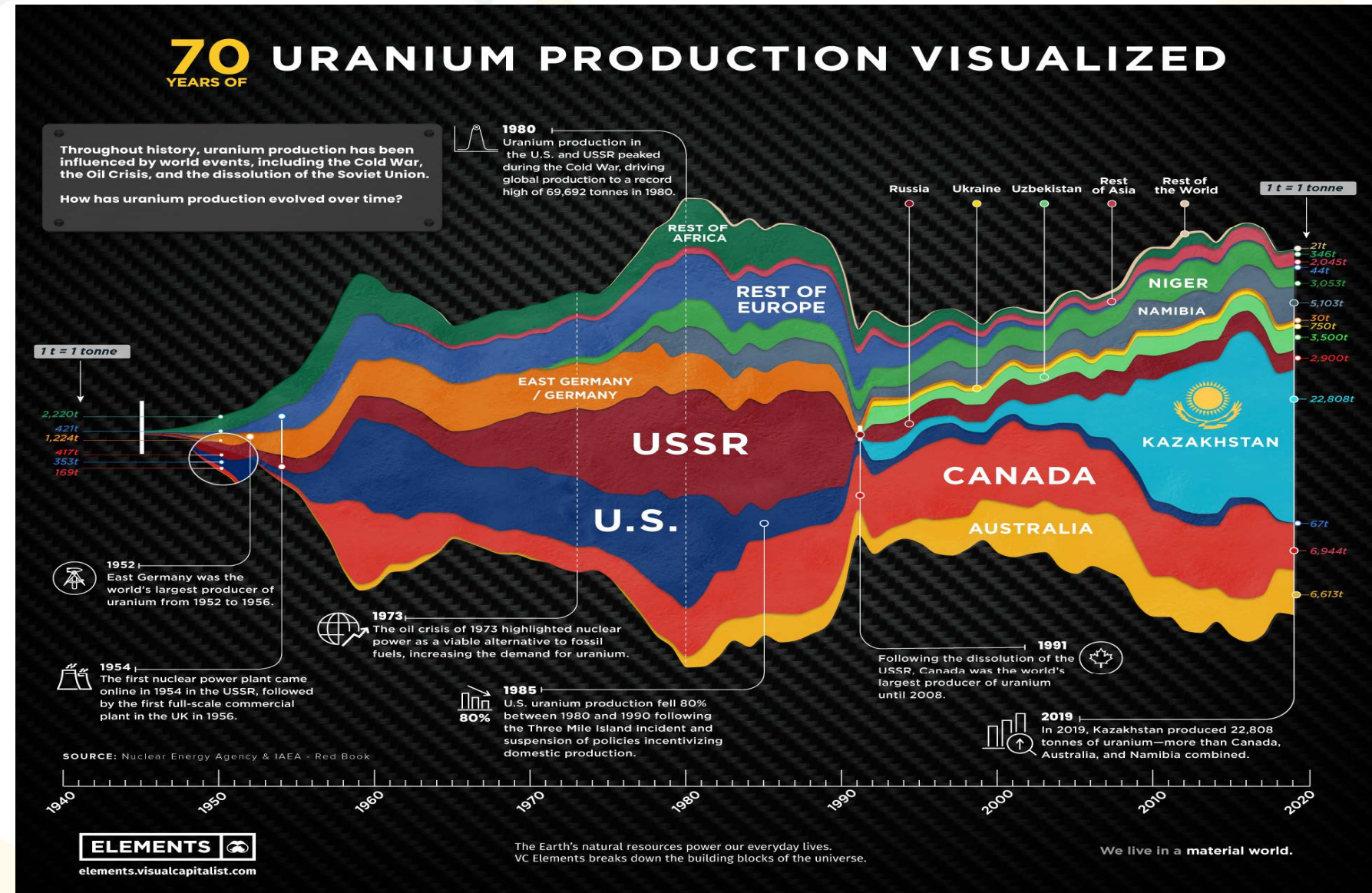
Dr. Tom Kotzer  
Geochemistry Manager



# 70 YEARS OF GLOBAL URANIUM PRODUCTION BY COUNTRY

Canada is the world's second-largest producer of uranium, putting Terra Uranium in a favourable macro environment

Largest producer Kazakhstan impacted by Russian sanctions



Source – <https://elements.visualcapitalist.com/70-years-of-global-uranium-production-by-country/>



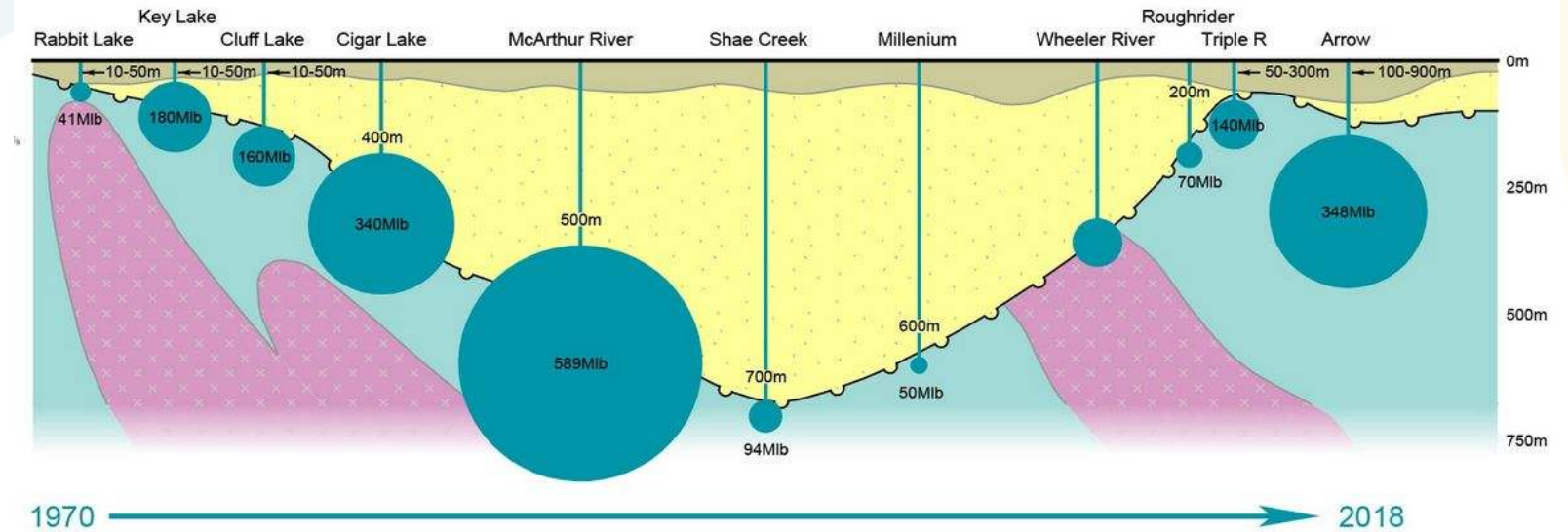
# DEPOSITS

## ATHABASCA BASIN URANIUM

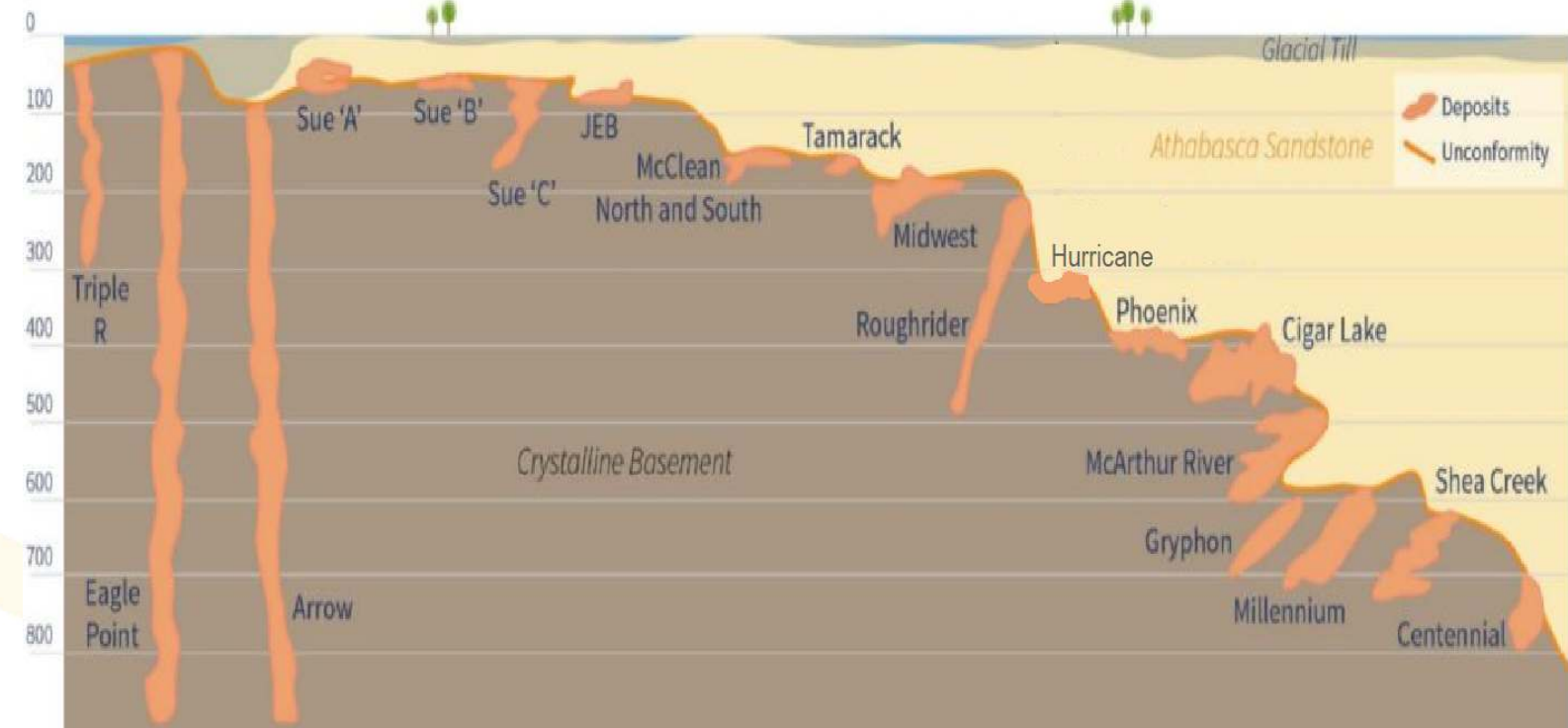
# BIG THINGS HAPPEN AT DEPTH WITHIN STRUCTURAL DOMAINS

The largest and highest grade uranium deposits in the world are at the Athabasca Basin unconformity.

These deposits have distinctive geochemical and mineralogical signatures extending vertically hundreds of metres to surface.



Source – Alligator Energy



Source – Isoenergy

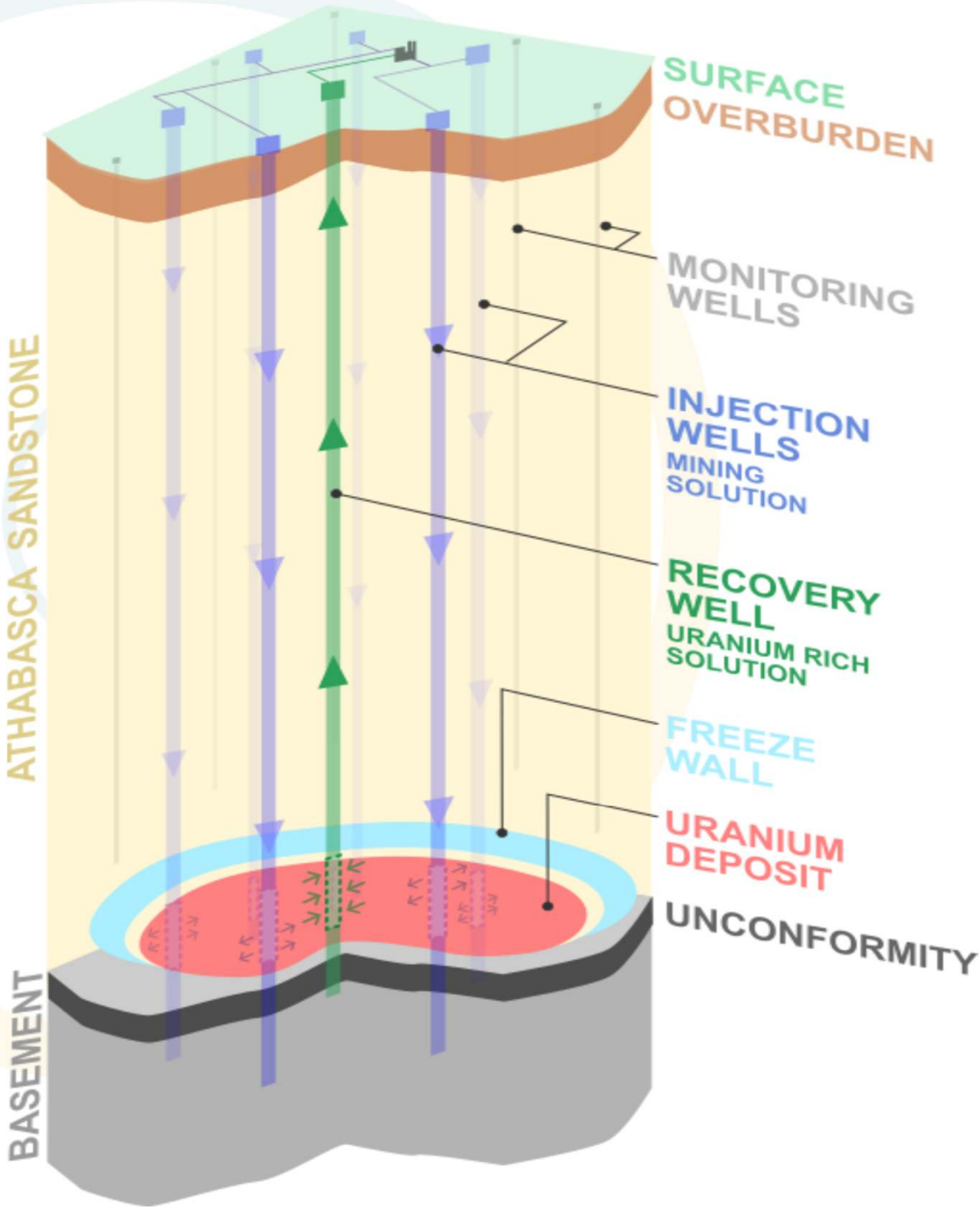


# IN SITU RECOVERY CHANGES THE GAME

ISR makes high grade deposits at depth  
economically viable  
ISR meets the highest standards for  
environmental and social impact

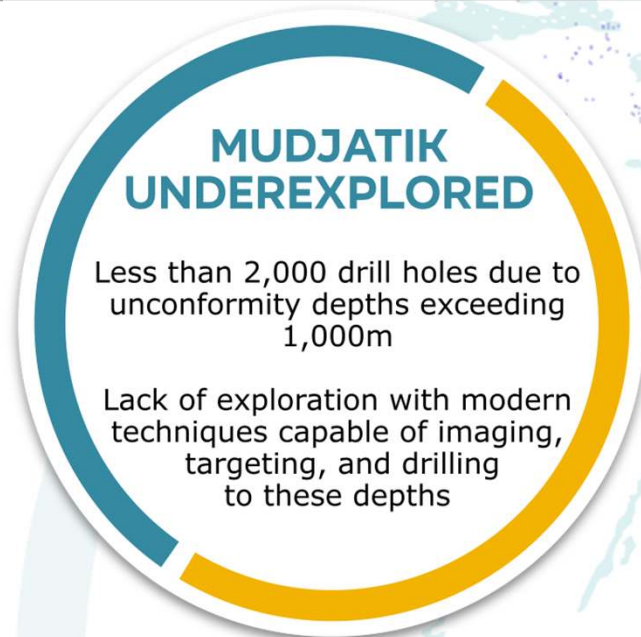
Phoenix PFS Financial Results (100% Basis)	
Mine life	10 years (6.0 million lbs U <sub>3</sub> O <sub>8</sub> per year on average)
Probable reserves <sup>(1)</sup>	59.7 million lbs U <sub>3</sub> O <sub>8</sub> (141,000 tonnes at 19.1% U <sub>3</sub> O <sub>8</sub> )
Average cash operating costs	\$4.33 (US\$3.33) per lb U <sub>3</sub> O <sub>8</sub>
Initial capital costs	\$322.5 million
Base case pre-tax IRR <sup>(2)</sup>	43.3%
Base case pre-tax NPV <sub>8%</sub> <sup>(2)</sup>	\$930.4 million
Base case price assumption	UxC spot price <sup>(3)</sup> (from ~US\$29 to US\$45/lb U <sub>3</sub> O <sub>8</sub> )
Operating profit margin <sup>(4)</sup>	89.0% at US\$29/lb U <sub>3</sub> O <sub>8</sub>
All-in cost <sup>(5)</sup>	\$11.57 (US\$8.90) per lb U <sub>3</sub> O <sub>8</sub>

Source Dennison Mines PFS 24 September 2018





# BIG TARGETS EXPLORATION STRATEGY

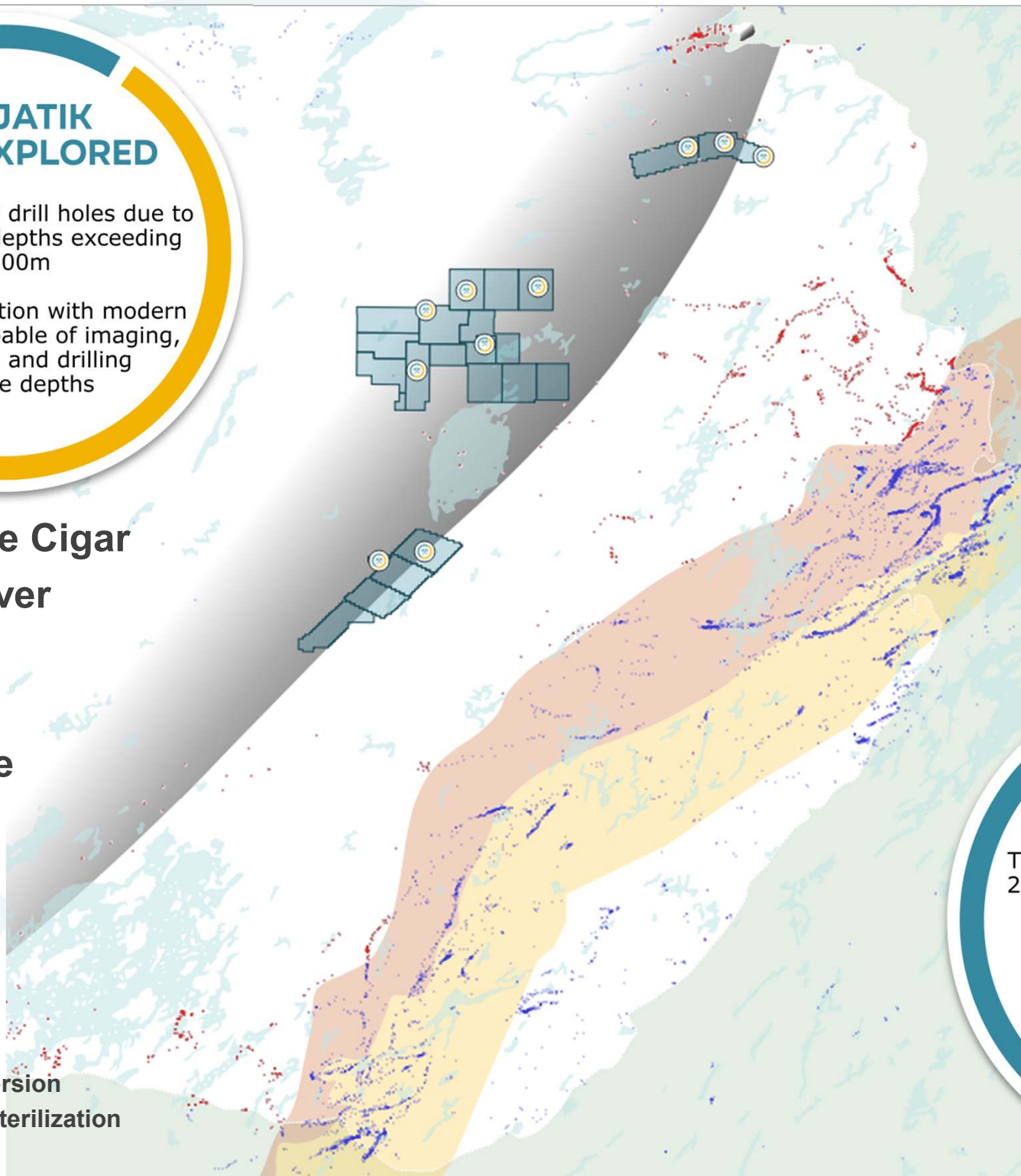


There have been no major discoveries of the Cigar Lake or McArthur River type deep under cover since the 1980's

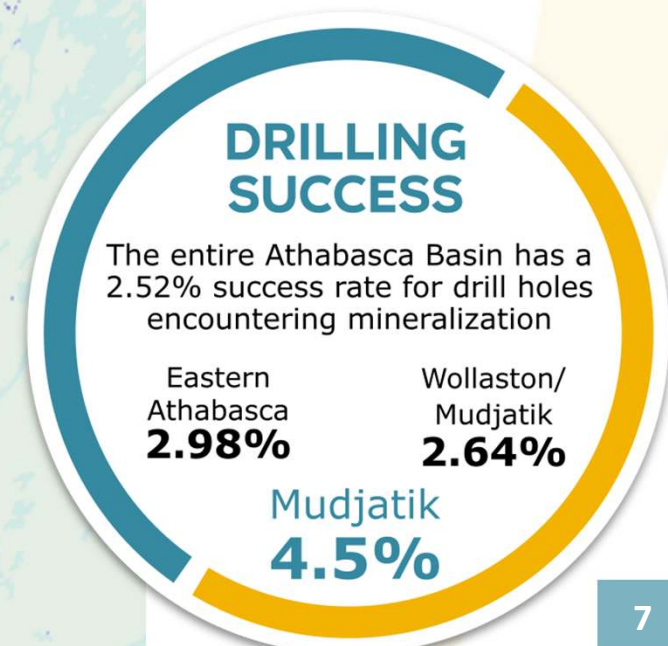
Explore for Tier 1 (140+ M lb) deposits in the Athabasca Basin

### Focus on the unexplored Mudjatik

- Mudjatik Cable Bay Shear Zone target
- 250 – 950m sandstone cover
- Higher perspectivity
- Less exploration due to depth, technical limits, and risk aversion
- Super-deposit opportunity due to exploration density and sterilization



- URANIUM MINES PAST AND PRESENT
- URANIUM MILL
- URANIUM RESERVES
- MUDJATIK DRILL HOLE
- NON-MUDJATIK DRILL HOLE
- CABLE BAY SHEAR ZONE
- WOLLASTON
- WOLLASTON / MUDJATIK
- ATHABASCA BASIN OUTLINE
- TERRA URANIUM CLAIMS





# PROJECTS

## TIER ONE TARGETS

### TECHNICAL FRAMEWORK

When exploring at these depths your technical framework must be modern, tactical, successive and strategically results driven to ensure the highest probability of encountering uranium

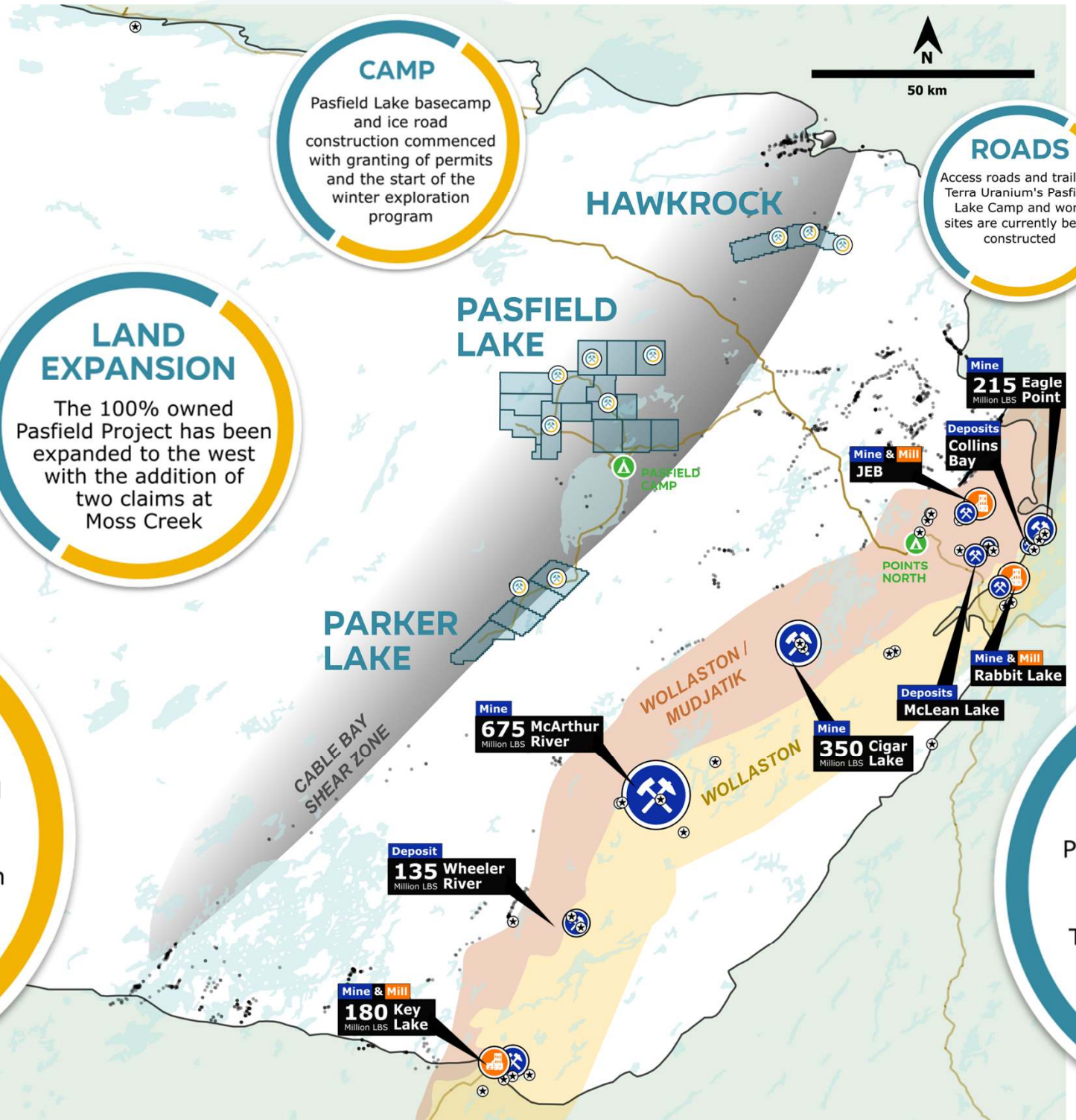
Confident valuable resources are expending on programs that advance targeting toward defining diamond drill core drilling

### LAND EXPANSION

The 100% owned Pasfield Project has been expanded to the west with the addition of two claims at Moss Creek

### CABLE BAY SHEAR ZONE

The CBSZ is a major structural zone with known uranium mineralisation but has seen limited exploration as the basin sediment cover is thicker than for known deposits immediately to east



### ROADS

Access roads and trails to Terra Uranium's Pasfield Lake Camp and work sites are currently being constructed

### EXPLORATION PERMITS

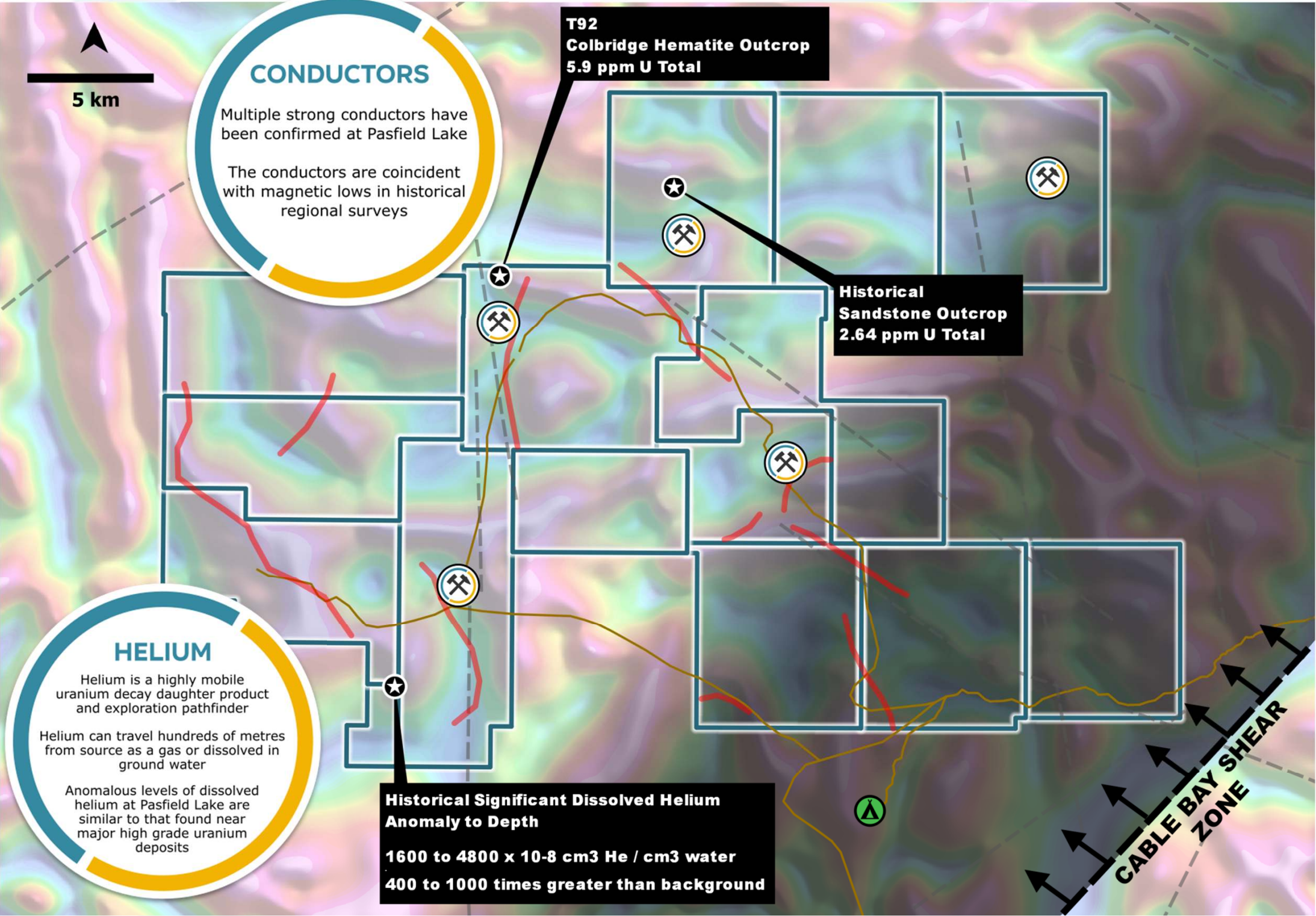
Permits on all projects have been granted for 3 years

This includes trail building, base camp construction, ground geophysics, and drilling



# PROJECTS – PASFIELD LAKE

## ATHABASCA BASIN



### LOCATION



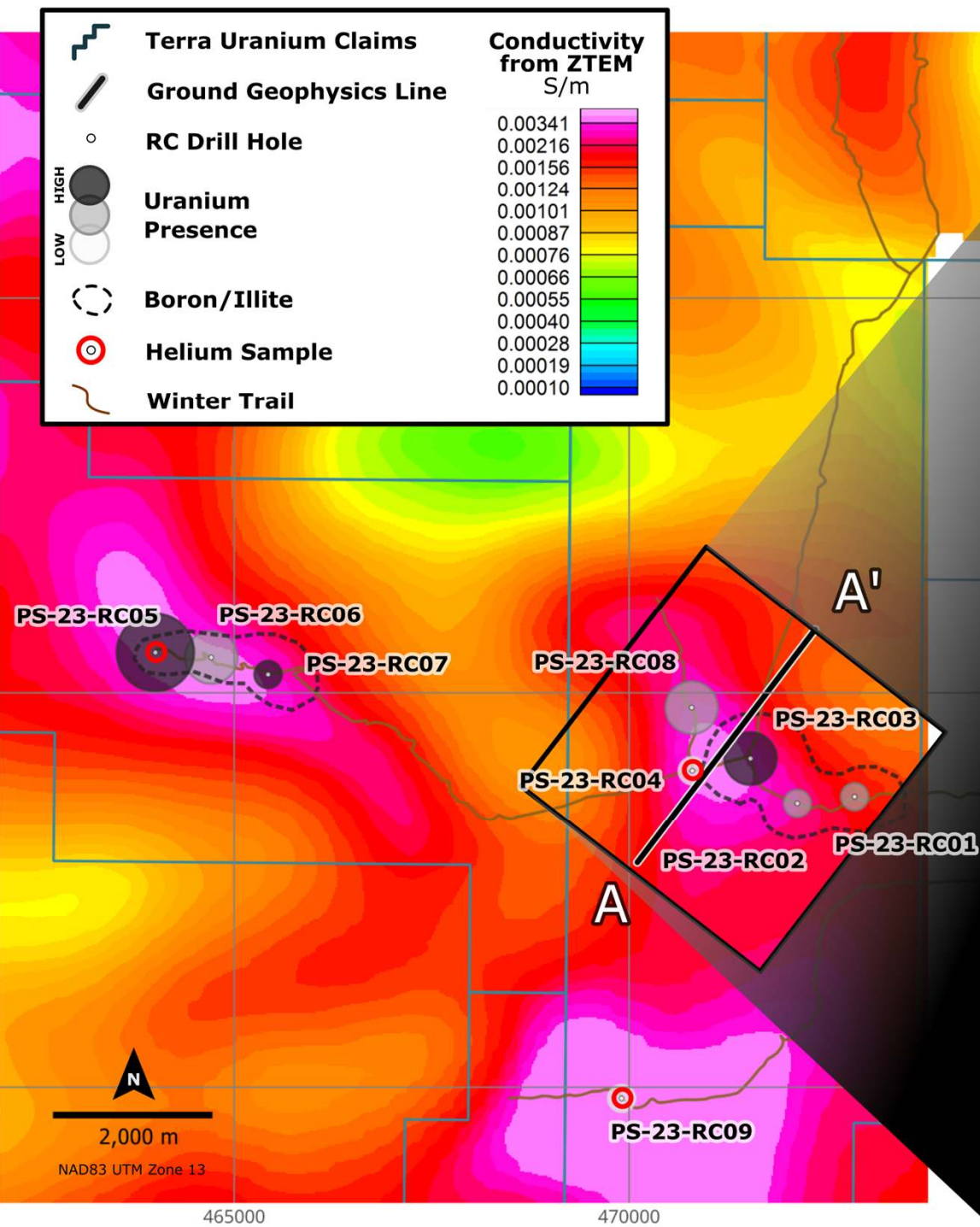
### MAP LEGEND

- TERRA CLAIMS
- PRIORITY GEOSCIENCE TARGET AREA
- GEOCHEMICAL ANOMALY
- CABLE BAY SHEAR ZONE
- CONDUCTORS
- RESIDUAL TOTAL FIELD TILT
- FAULTS
- ROADS AND TRAILS



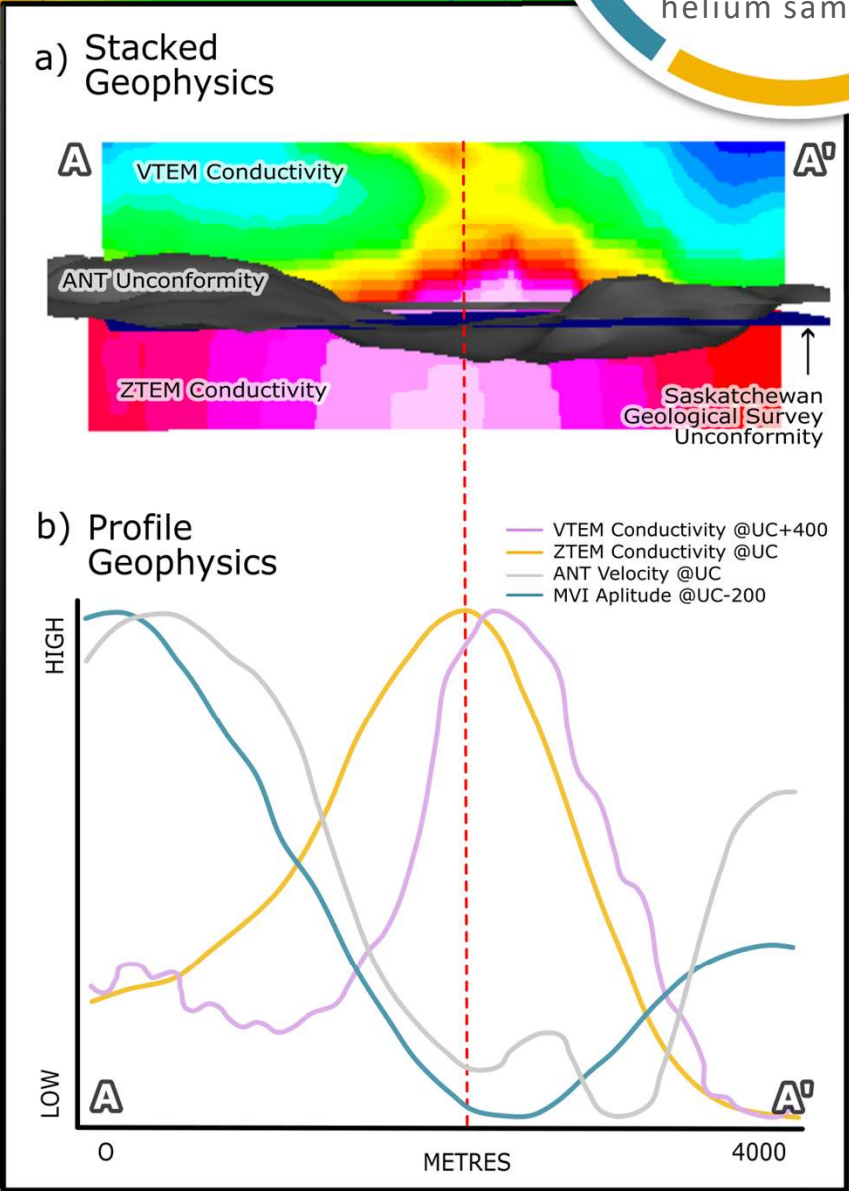
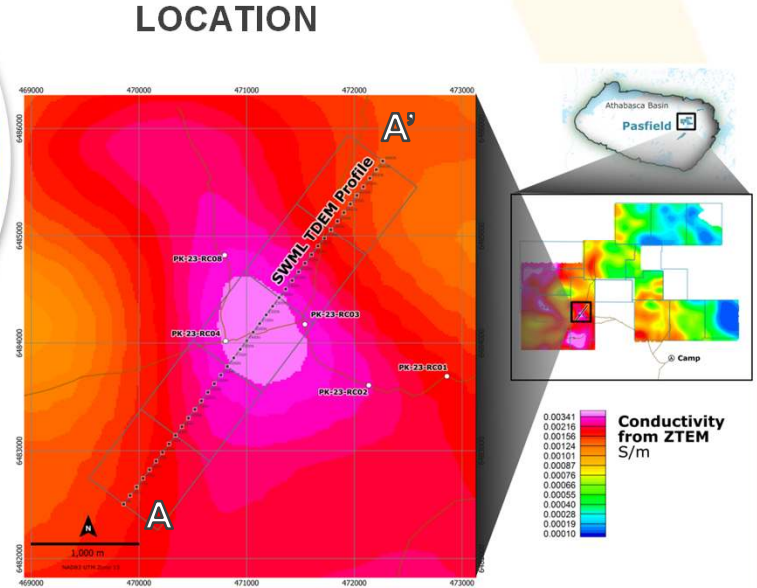
# PROJECTS – PASFIELD LAKE – TARGETING

ATHABASCA BASIN



**RC DRILLING**

RC drill holes and associated uranium values (ppm, 50<sup>th</sup> percentile), anomalous boron and illite clay alteration haloes and helium samples.



**LINE A-A'**

Section line on inset images showing

(a) stacked VTEM/ZTEM inversions, with ANT map of UC surface

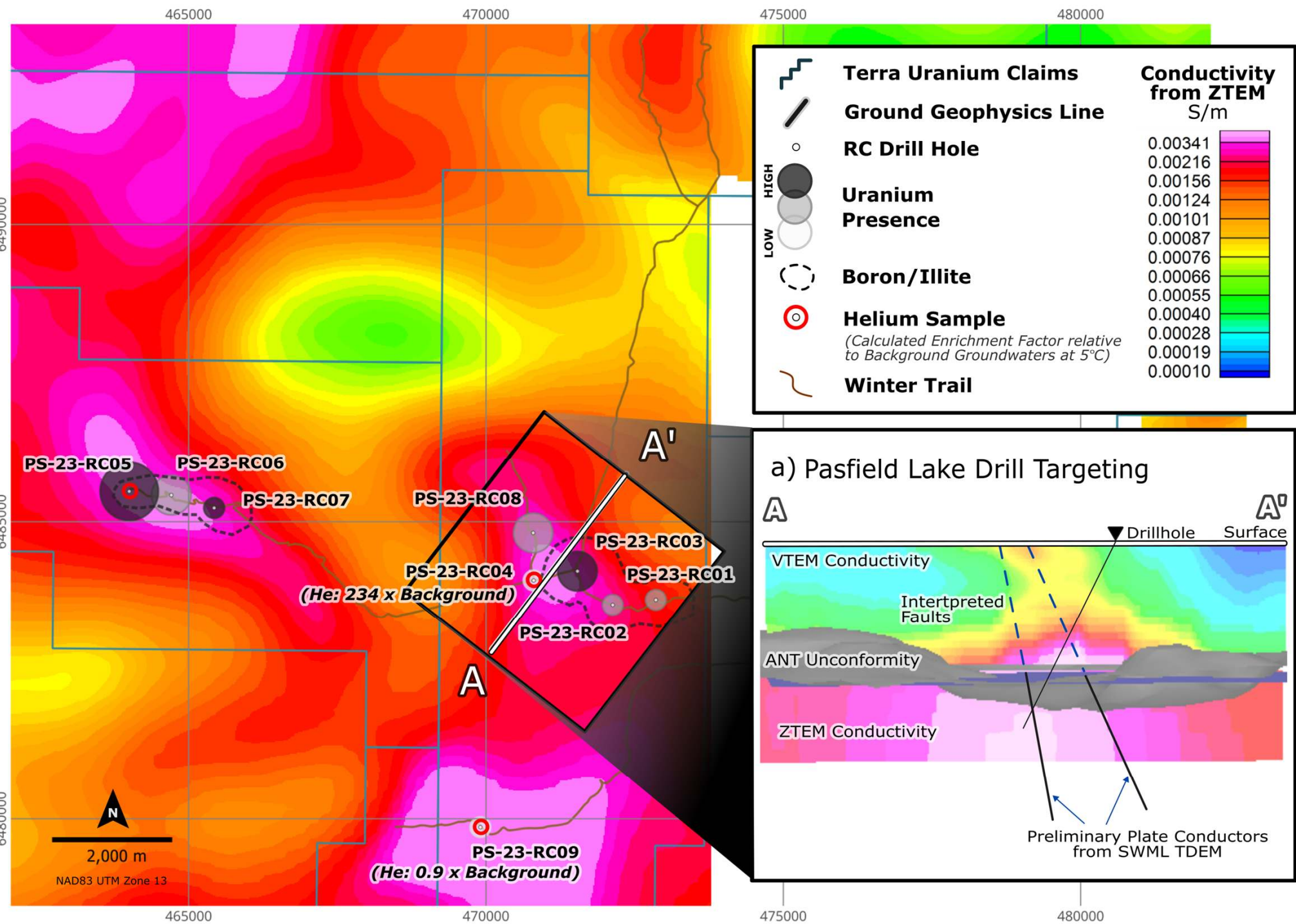
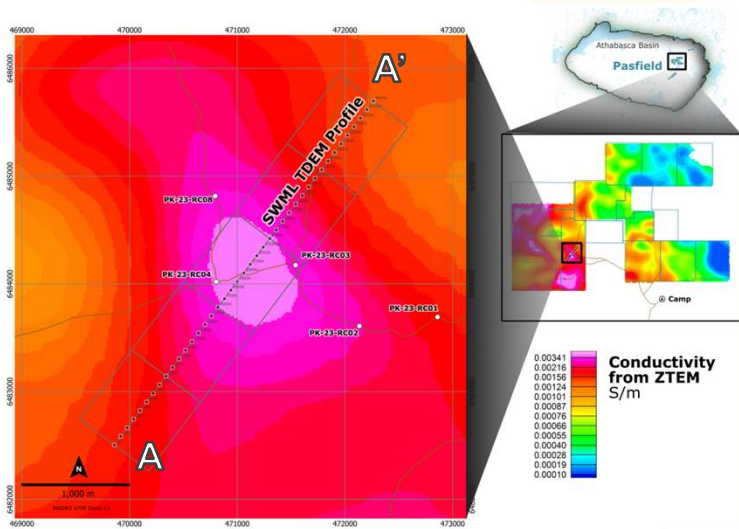
(b) Profiles of VTEM/ZTEM inversion data, magnetic vector amplitude below UC, and ANT velocity at UC



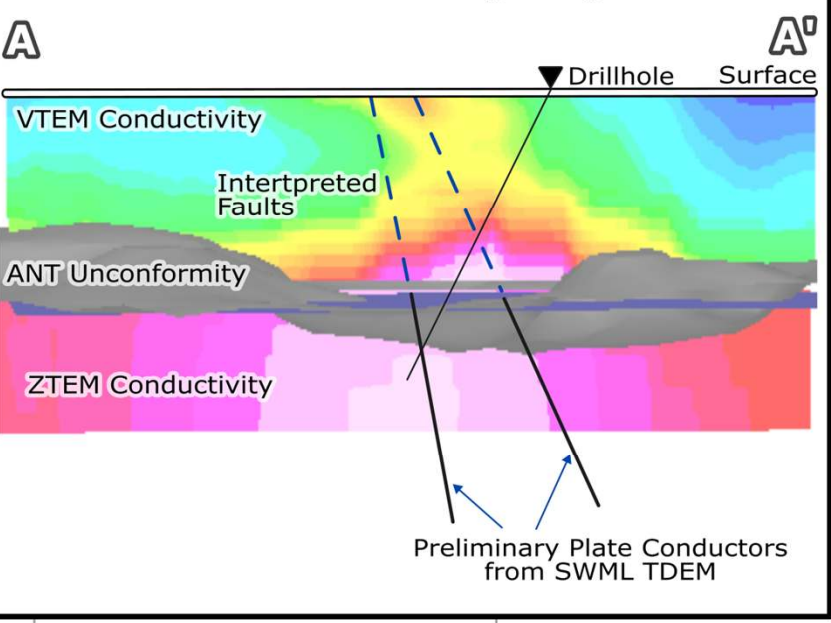
# PROJECTS – PASFIELD LAKE – TARGETING

## ATHABASCA BASIN

### LOCATION



### a) Pasfield Lake Drill Targeting



### RC DRILLING

RC drill holes and associated uranium values (ppm, 50<sup>th</sup> percentile), anomalous boron and illite clay alteration haloes and helium samples.

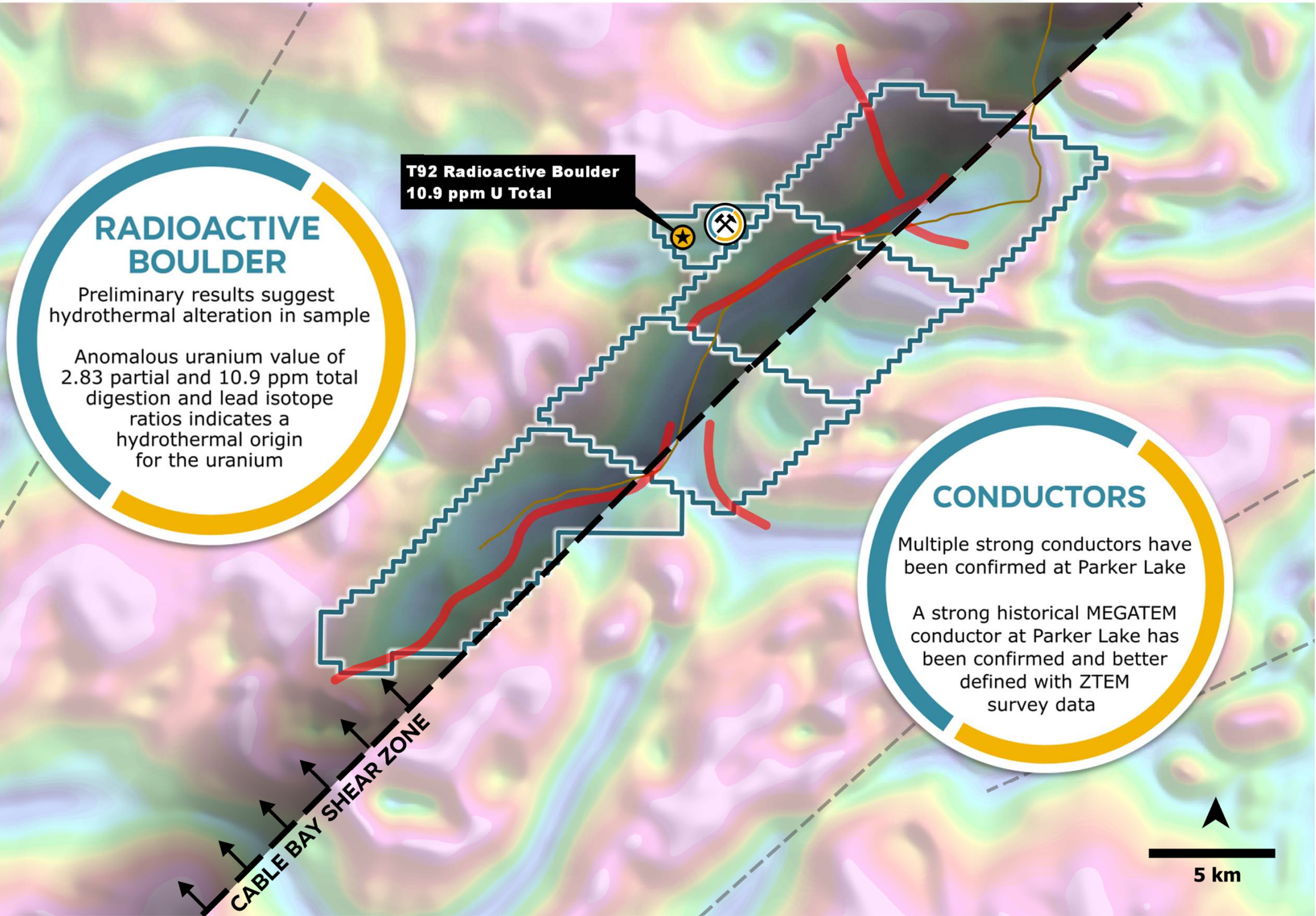
### LINE A-A'

Section line on inset images showing  
(a) stacked VTEM/ZTEM inversions, with ANT map of UC surface



# PROJECTS – PARKER LAKE

ATHABASCA BASIN



## LOCATION



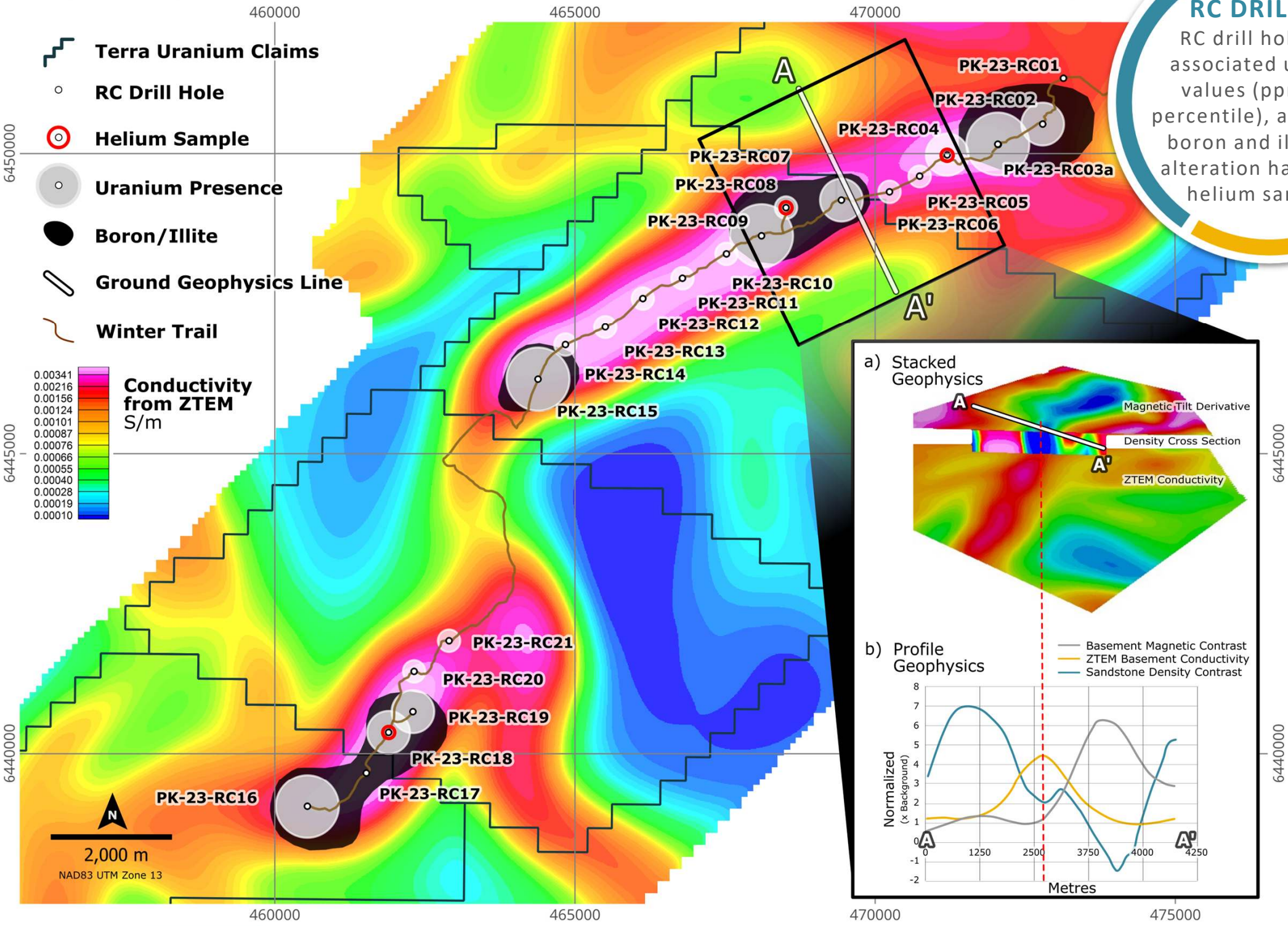
## MAP LEGEND

- TERRA CLAIMS**
- PIORITY GEOSCIENCE TARGET AREA**
- GEOCHEMICAL ANOMALY**
- CABLE BAY SHEAR ZONE**
- CONDUCTORS**
- RESIDUAL TOTAL FIELD TILT**
- FAULTS**
- ROADS AND TRAILS**



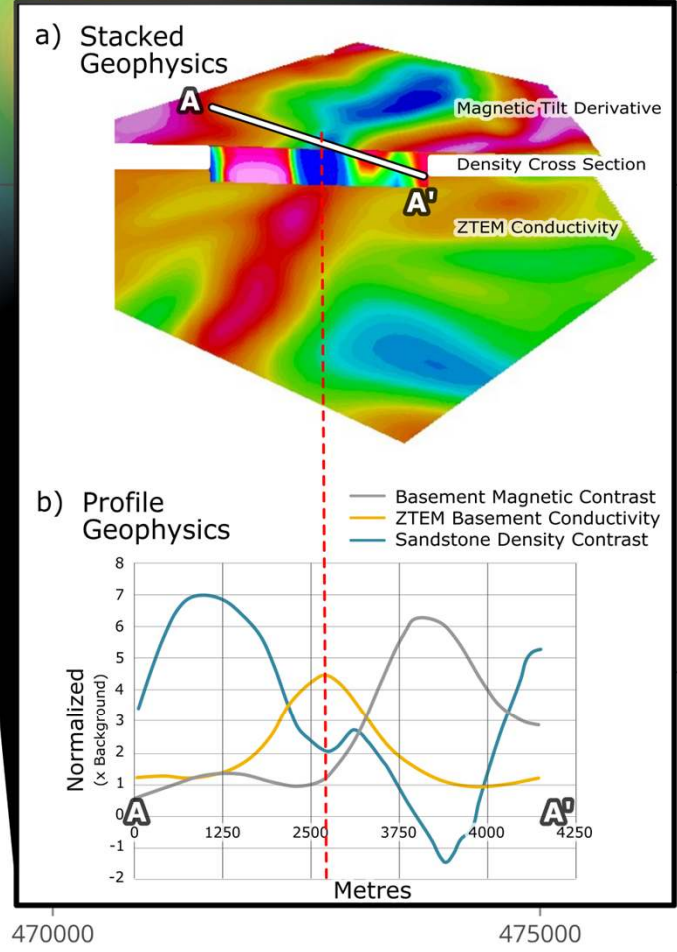
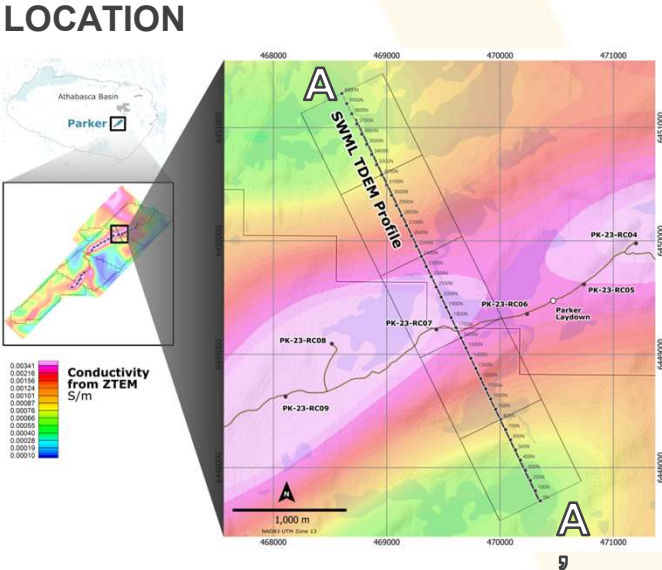
# PROJECTS – PARKER LAKE – TARGETING

## ATHABASCA BASIN



**RC DRILLING**

RC drill holes and associated uranium values (ppm, 50<sup>th</sup> percentile), anomalous boron and illite clay alteration haloes and helium samples.



**LINE A-A'**

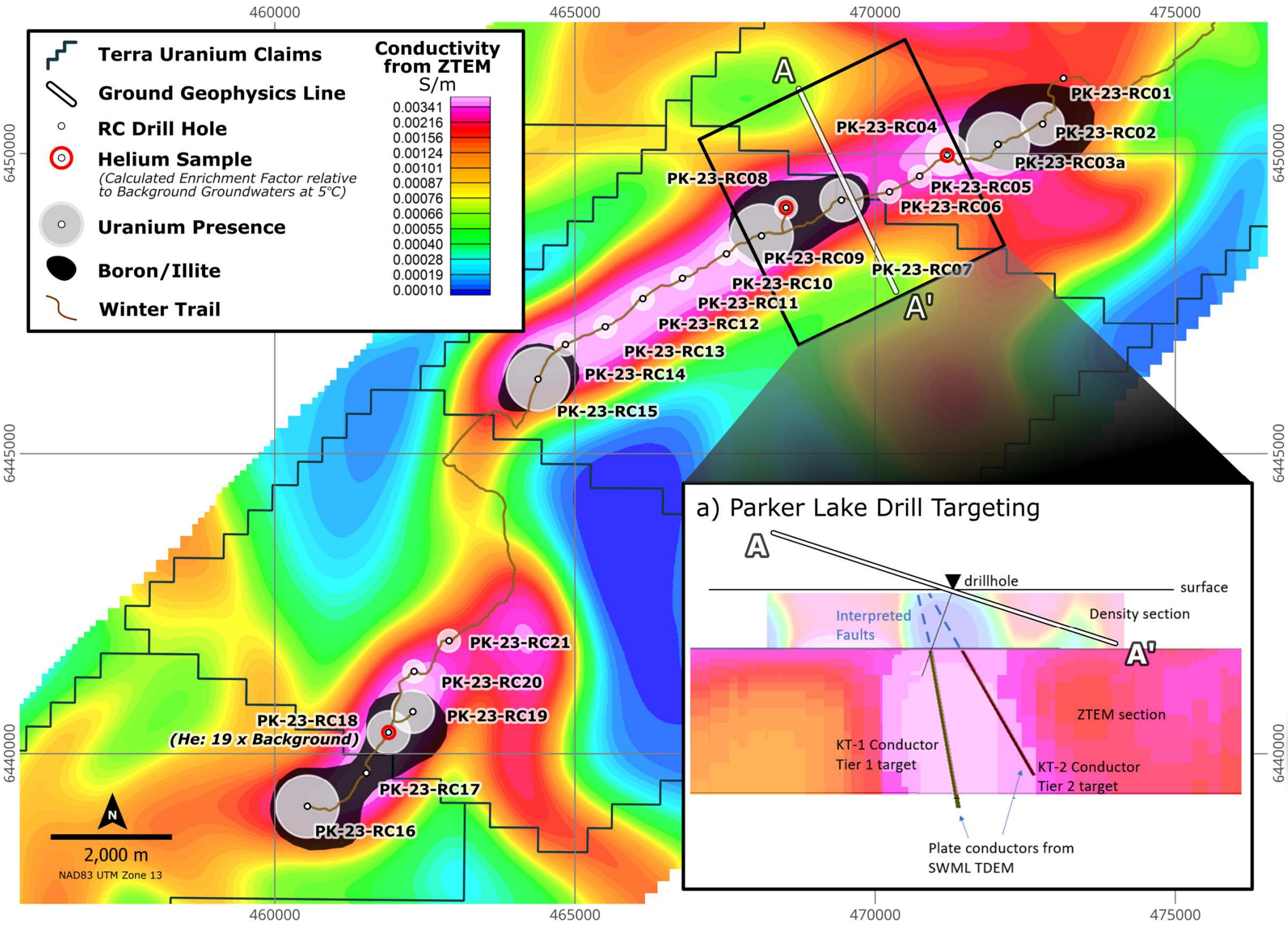
Section line on inset images showing

- (a) Stacked ZTEM inversions and magnetics, with density profile
- (b) Profiles of ZTEM inversion data at 100m below UC, magnetic vector amplitude at UC, and density at UC +150m

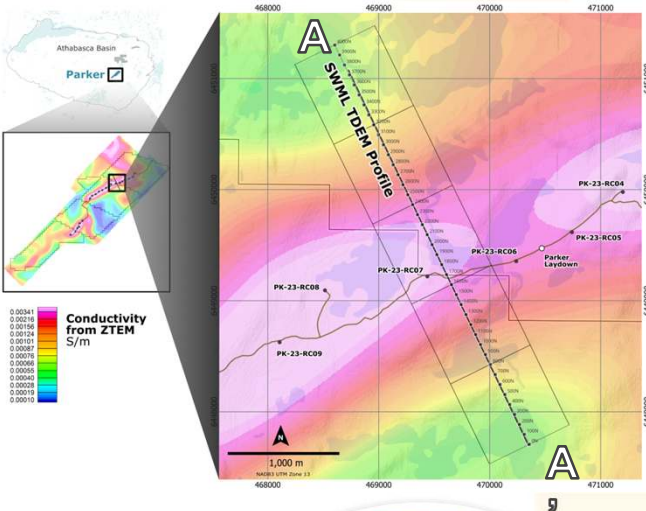


# PROJECTS – PARKER LAKE – TARGETING

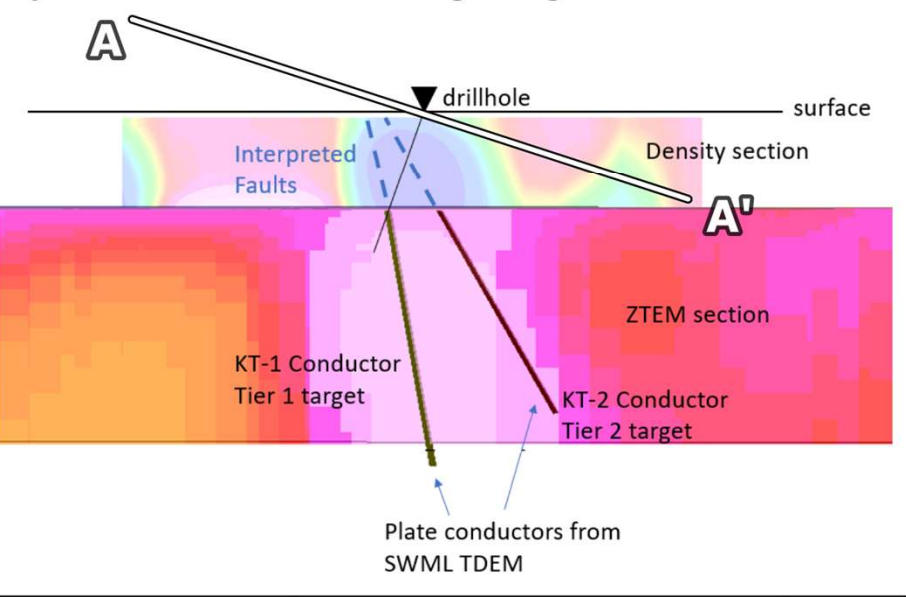
ATHABASCA BASIN



## LOCATION



## a) Parker Lake Drill Targeting



## RC DRILLING

RC drill holes and associated uranium values (ppm, 50<sup>th</sup> percentile), anomalous boron and illite clay alteration haloes and helium samples.

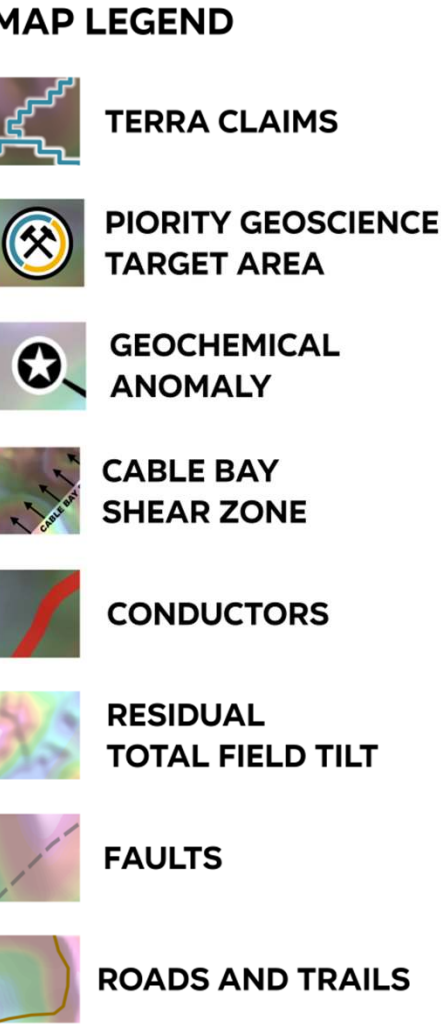
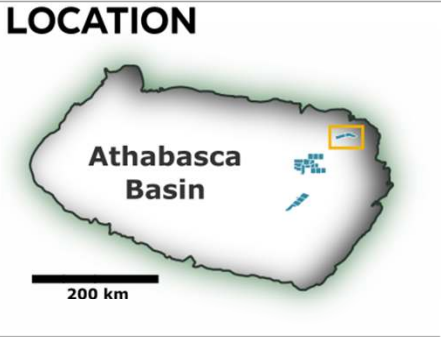
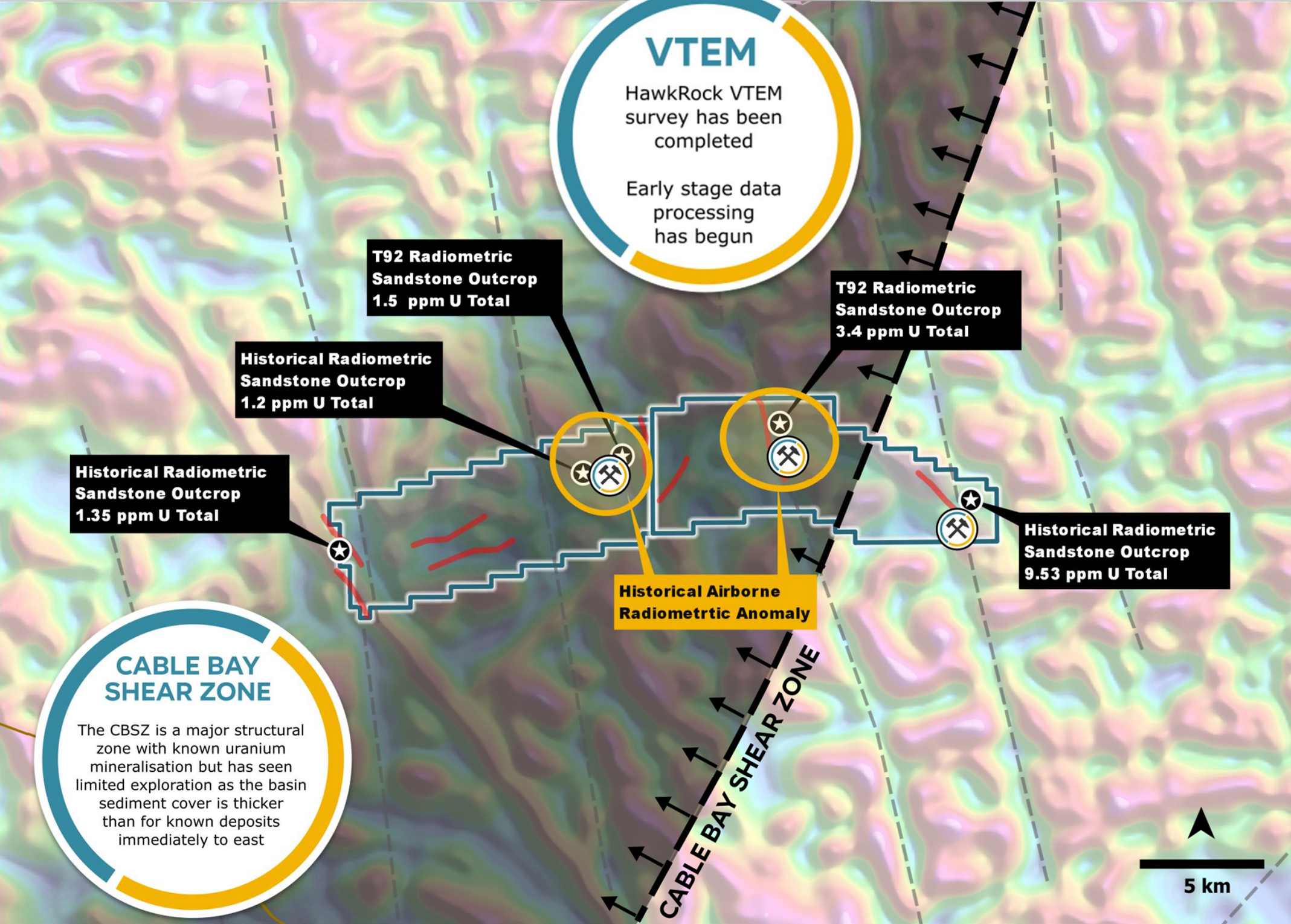
## LINE A-A'

Section line on inset images showing (a) Stacked ZTEM inversions and density section, with conductor targets, interpreted faults, and drillhole trace



# PROJECTS - HAWKROCK

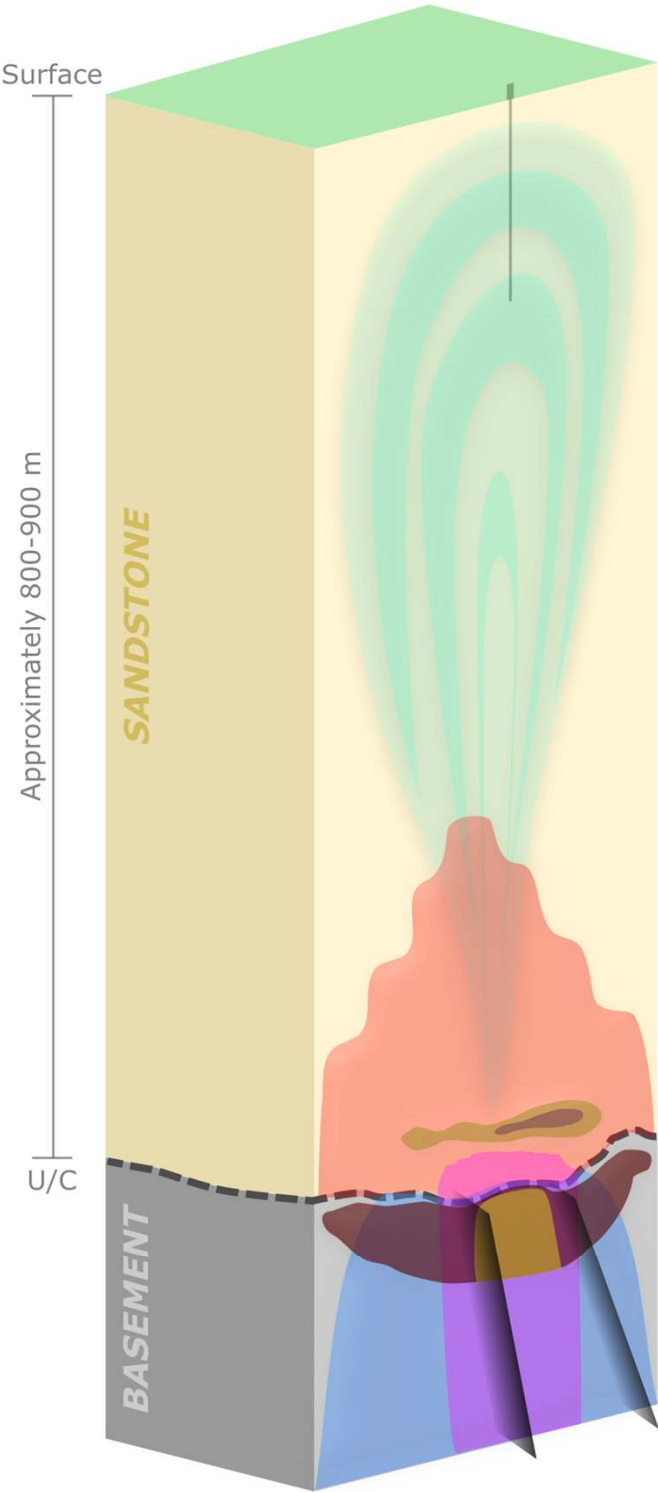
## ATHABASCA BASIN



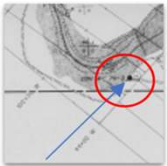


# THE DATA

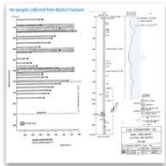
## HISTORICAL, MODERN, AND NEWLY COLLECTED DATA



### GEOCHEMISTRY



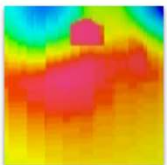
Significant Helium Anomaly



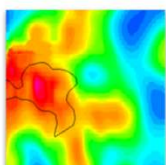
Historical Drilling Data

- Significant Uranium at Surface
  - Tier one unconformity uranium deposits have primary and pathfinder surface expressions
  - Uranium geochemistry at surface exceeds background of 0.8 ppm
- Historical Significant Dissolved Helium Anomaly to Depth
  - Location is coincident with Pasfield geophysical anomalies
- Anomalous helium levels similar to values found near major high grade uranium deposits
  - 1000 to 4800 x 10<sup>-8</sup> cm<sup>3</sup> He/cm<sup>3</sup> water
  - 250 to 1000 times greater than background

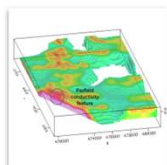
### VTEM



Presense of strong conductors



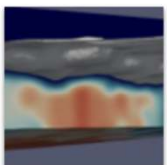
Conductivity in the sandstone



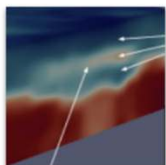
Pasfield conductivity feature

- Identify and confirm sandstone/basement conductivity structures
- Graphitic basement faults
  - Transport/trap
- Conductive hydrothermal clay alteration
  - Fluid-rock interaction

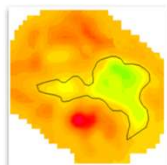
### ANT



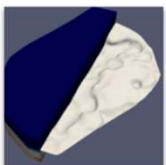
Undulations in cover layers



Cover has at least 3 layers

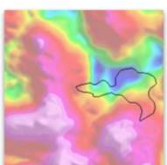


Velocity low at unconformity

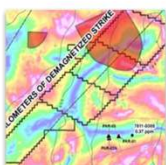


- Sandstone and basement architecture
- Basement-sandstone unconformity is key to deep play exploration
- Able to detect altered and weathered structures

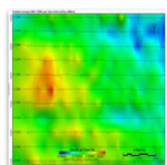
### HISTORICAL GEOPHYSICS



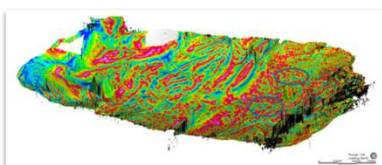
Low magnetic susceptibility



Historical Magnetics and MEGATEM



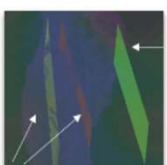
TMI with interpreted fault & alteration low



Saskatchewan Geological Survey 3D model of the Athabasca Basin

- Open Data
  - Historical data sets provide valuable inputs to all stages of exploration planning and project modelling

### STRUCTURES



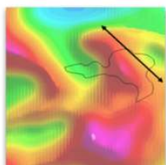
Identify conductor drill targets

- TDEM: Time Domain Electromagnetics
- SWML: Stepwise Moving Loop Transient electromagnetics survey
- Used to locate, or better define, deep seated graphitic conductors for drill testing
- Depth, dip, and strike can be calculated from this survey

### ZTEM



ZTEM Anomaly



4 km conductor strike length

- Resolve basement conductivity structures
- Greater than 1000m depth of investigation
- ZTEM Airborne Geophysics Results/Update
  - Historic MEGATEM conductive anomaly confirmed at Parker
  - Multiple strong conductors confirmed at Parker and Pasfield



# Anomalous Helium

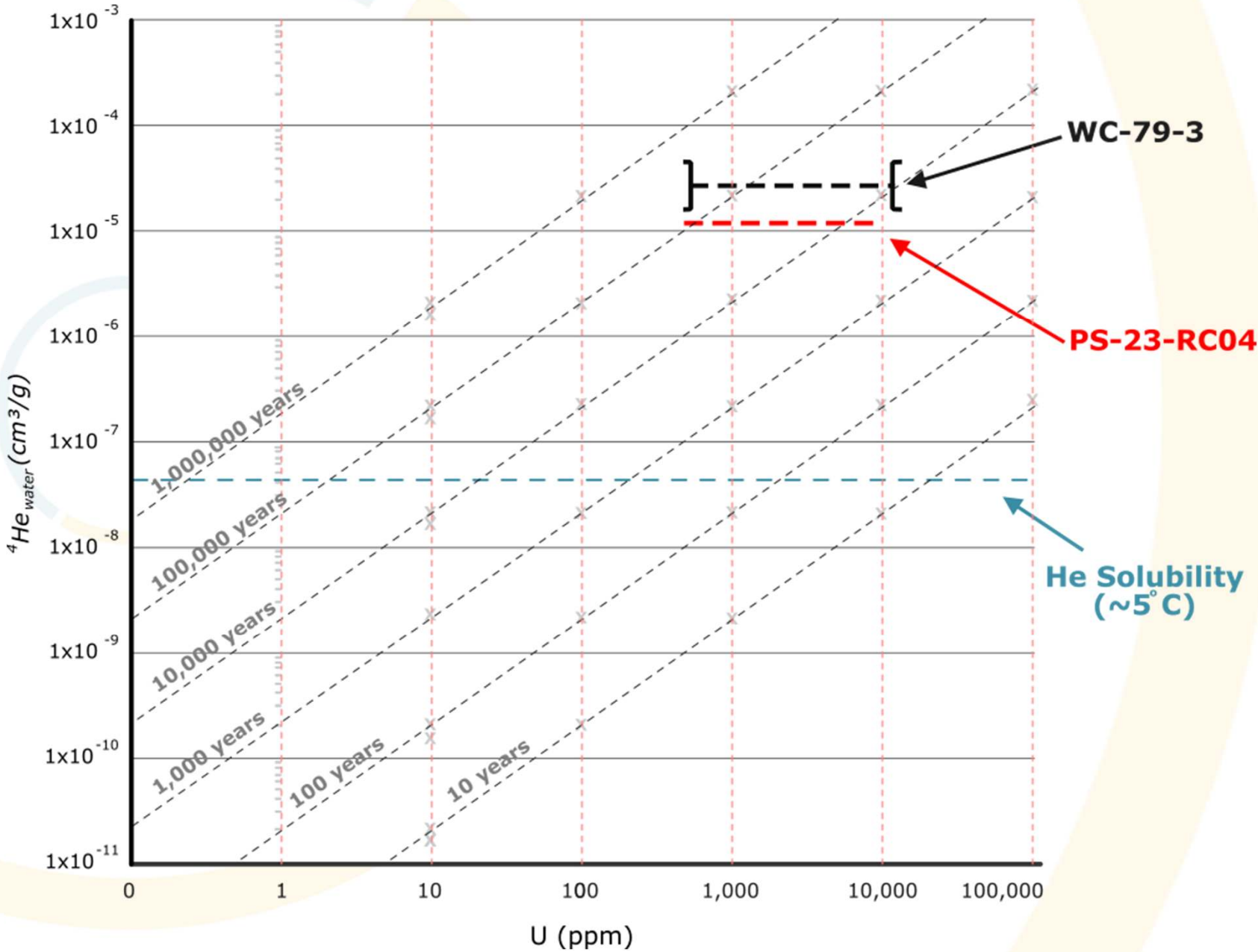
## TIME CONSTRAINED MODEL OF RADIOGENIC HELIUM ACCUMULATION

Several RC holes were sampled for dissolved helium concentrations

Radiogenic helium concentrations for PS-23-RC04 are approximately 234 times greater than background

These levels are comparable with helium data collected over known uranium deposits elsewhere in the Athabasca Basin

Corresponds with a prospective exploration target based on recent geophysical and geochemical data from the 2023 RC winter drill program



\* 'Helium and Geophysics Indicate Uranium Mineralisation' dated 3 May 2023

Dissolved He results from 2023 Terra Uranium RC Drilling program		
Sample ID	Final Radiogenic Helium Concentrations (cm³ He/cm³ water)	Calculated Enrichment Factor relative to Background Groundwaters at 5°C
PK-23-RC18	9.14x10-7	19
PS-23-RC04	1.2 x10-5	234
PS-23-RC09	4.78x10-8	0.9 (no enrichment)



# THE TIMELINE

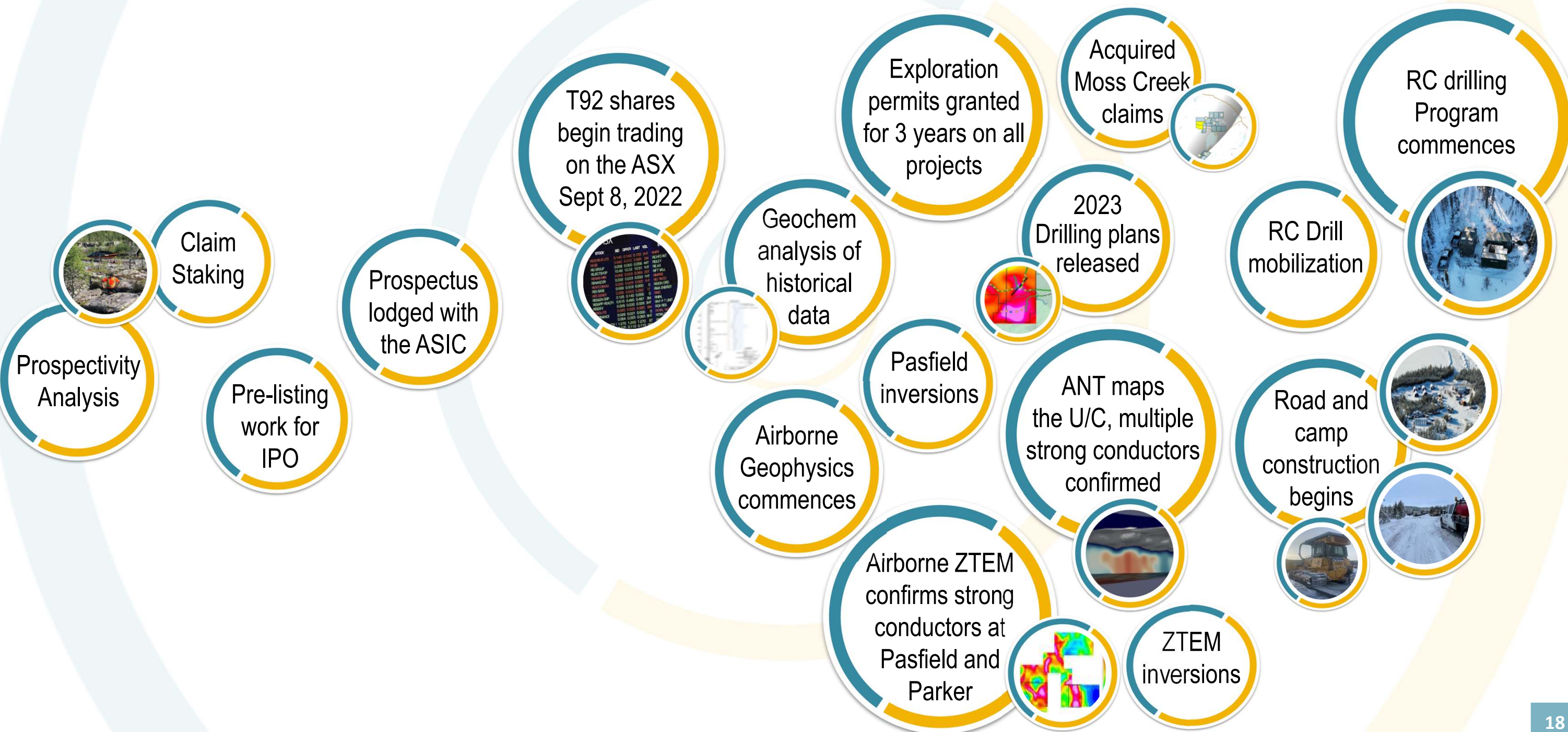
## A STEADY STREAM OF NEWS AND ACTIVITY

Pre-Listing

Q3 2022

Q4 2022

Q1 2023





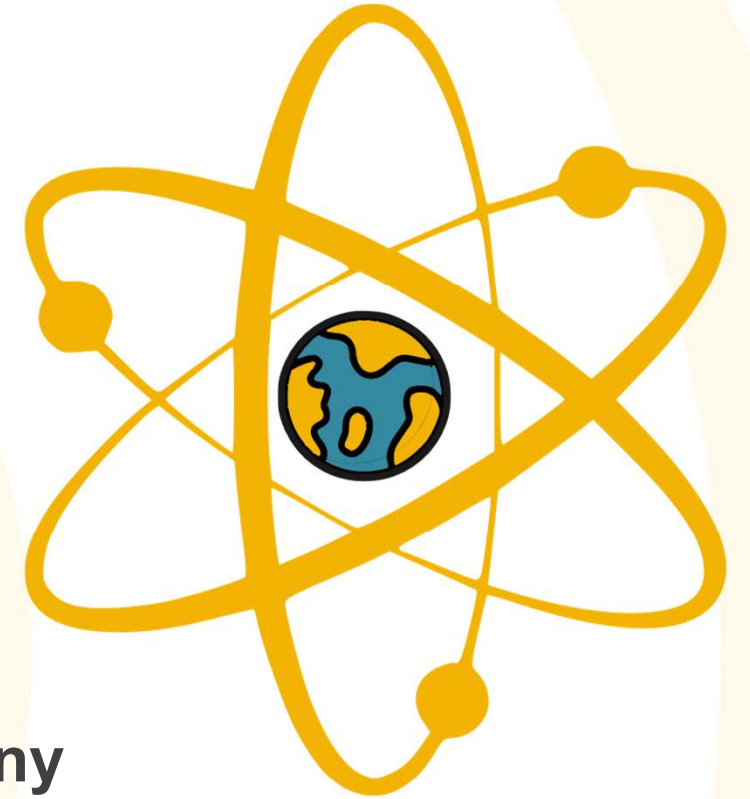
## NUCLEAR POWER FOR CLEAN ENERGY AND DECARBONIZATION

**We believe that nuclear has a major role to play in clean energy and the decarbonization of the world electrical power system.**

**The Board is responsible for the corporate governance of the Company and protecting the rights and interests of Shareholders to whom it is accountable.**

**In developing its approach to corporate governance, the Company has considered the ASX Corporate Governance Council's 10 principles of good corporate governance and best practice recommendations.**

**The company will achieve its objectives with minimal environmental and social impact.**





## ON THE GROUND, WE WORK CLOSELY WITH THOSE WHO HAVE TRADITIONAL RIGHTS

Terra Uranium Canada Limited projects are situated on Treaty 10 Territory and the Homeland of the Métis. We honor the terms of Treaty 10, and the ongoing legal and socioeconomic impacts on Indigenous communities. We respect indigenous history, and the First Nations and Métis ancestors of this place and reaffirm our respectful relationship with one another.

Terra Uranium will take steps to ensure Indigenous communities and businesses participate fruitfully in our business and pursue a participation model that reflects our ideals as partners.





# THANK YOU

## **Andrew J Vigar**

Executive Chairman

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