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Basin ENERGY

Noosa Mining Investor Conference

Exploring for High Grade Uranium in the Athabasca Basin

November 2023

ASX : BSN

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Disclaimer & Competent Persons Statement

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This presentation includes certain "Forward-looking Statements". The words "forecast", "estimate", "like", "anticipate", "project", "opinion", "should", "could", "may", "target" and other similar expressions are intended to identify forward looking statements. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding forecast cash flows and future expansion plans and development objectives of Basin Energy involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements, although such statements are considered by Basin Energy to have a reasonable basis as at the date of this presentation.

All figures in Australian Dollars unless stated otherwise.

Competent Persons Statement & Resource Figure Notes

The information in this announcement that relates to exploration results was first reported by the company in accordance with ASX listing rule 5.7 in the Company's prospectus dated 22nd August 2022 and announced on the ASX market platform on 30th September 2022. The Company confirms that it is not aware of any new information pr data that materially affects the information included in the prospectus.

All resource figures shown within this document of deposits within the Athabasca, unless stated are quoted from the International Atomic Energy Agency (IAEA) Tecdoc 1857. Resources are global and include mined resource and all classification of remaining resource. Resource Size (U_3O_8) is the amount of contained uranium (in Mlbs U_3O_8) and average grade (in % U_3O_8) of the deposit/system. This number is presented without a specific cut-off grade, as the cut-off value differs from deposit to deposit and is dependent on resource calculation specifications. Discrepancies between values in this field and other values in the public domain may be due to separate cut-off values used, or updated values since the writing of this document. For system entries, the values for the size were obtained by adding the individual deposits values whereas average grade values were derived using a weighted average of the individual deposits.

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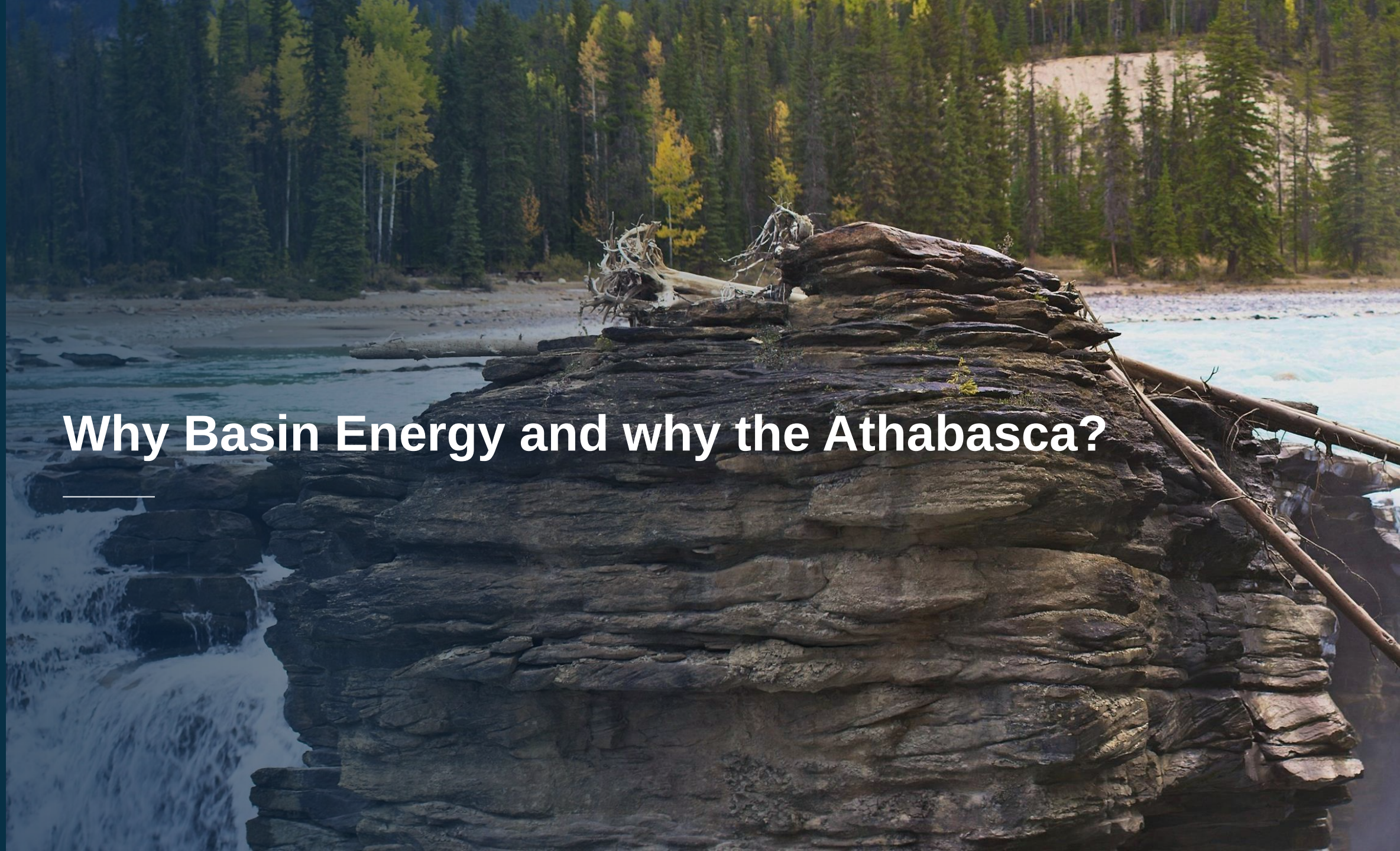

Why Basin Energy and why the Athabasca?

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Why invest in Basin Energy?

Pureplay Uranium Company Leveraged to the global low carbon economy megatrends, with a North American focus

Direct exposure to high grade uranium within the world class uranium mining district of the Athabasca Basin, Saskatchewan, Canada – a top three global uranium producer for over 45 years

Located in Saskatchewan, a globally attractive and proven mining jurisdiction – Ranked 2nd in Fraser Institute 2021 global mining investment attractiveness index

Leveraging an extensive high-quality geological database assembled over decades, with significant recent exploration success

Well funded – Cash in bank to complete ongoing work, and conduct follow up drilling at Geikie to advance initial success exploring for shallow high grade uranium

Strategically located near world-class high-grade uranium discoveries, mining and processing operations with a constant uranium mining industry for 65 years

Systematic exploration approach Clear exploration strategy allowing a gated approach to target generation and testing

Experienced and dedicated team with relevant uranium exploration and development track record

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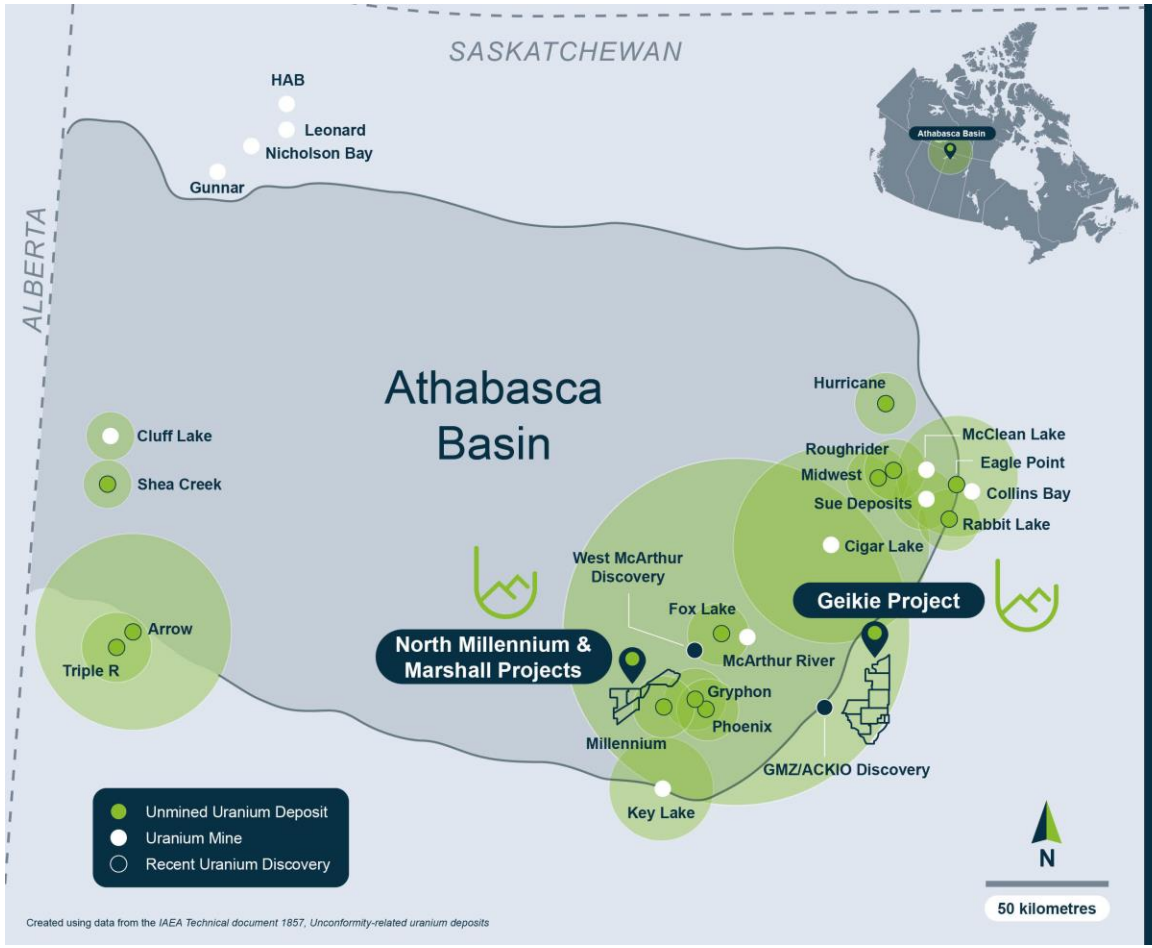
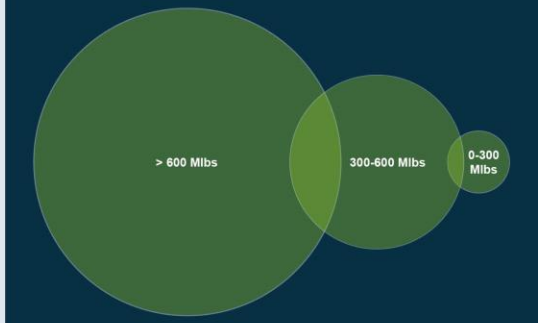
Pureplay Uranium in a proven neighborhood



Deposit	Resource Size (U_3O_8 Mlbs)	Resource Grade (%)
McArthur River	674.9	16.99
Cigar Lake	349.3	15.65
Arrow	306.1	4.62
Eagle Point	275.3	0.91
Key Lake	182.3	3.07
Triple R	135.1	1.80
Millennium	104.8	3.76
Shea Creek	95.9	1.47
Phoenix	70.9	19.23
Roughrider	70.8	4.75
Cluff Lake	70.0	1.48
Fox Lake	68.1	7.98
Midwest	49.2	3.55
Hurricane Deposit	48.6	34.5
Sue Deposits	45.9	3.75
Gryphon	43.0	2.30
Rabbit Lake	42.8	0.32



Pureplay uranium exploration company with interests in three projects. Ongoing active exploration

Direct exposure to high grade uranium within the world class uranium mining district of the Athabasca Basin, Saskatchewan, Canada – a top three global uranium producer for over 45 years

Sources: World Nuclear Performance Report 2021, World Nuclear Association, September 2021; The Nuclear Fuel Report Global Scenarios for Demand and Supply Availability 2021-2040, World Nuclear Association April 2022
Regional Resource figures taken from IAEA Technical document 1857, Unconformity-related uranium deposits, refer to disclaimer

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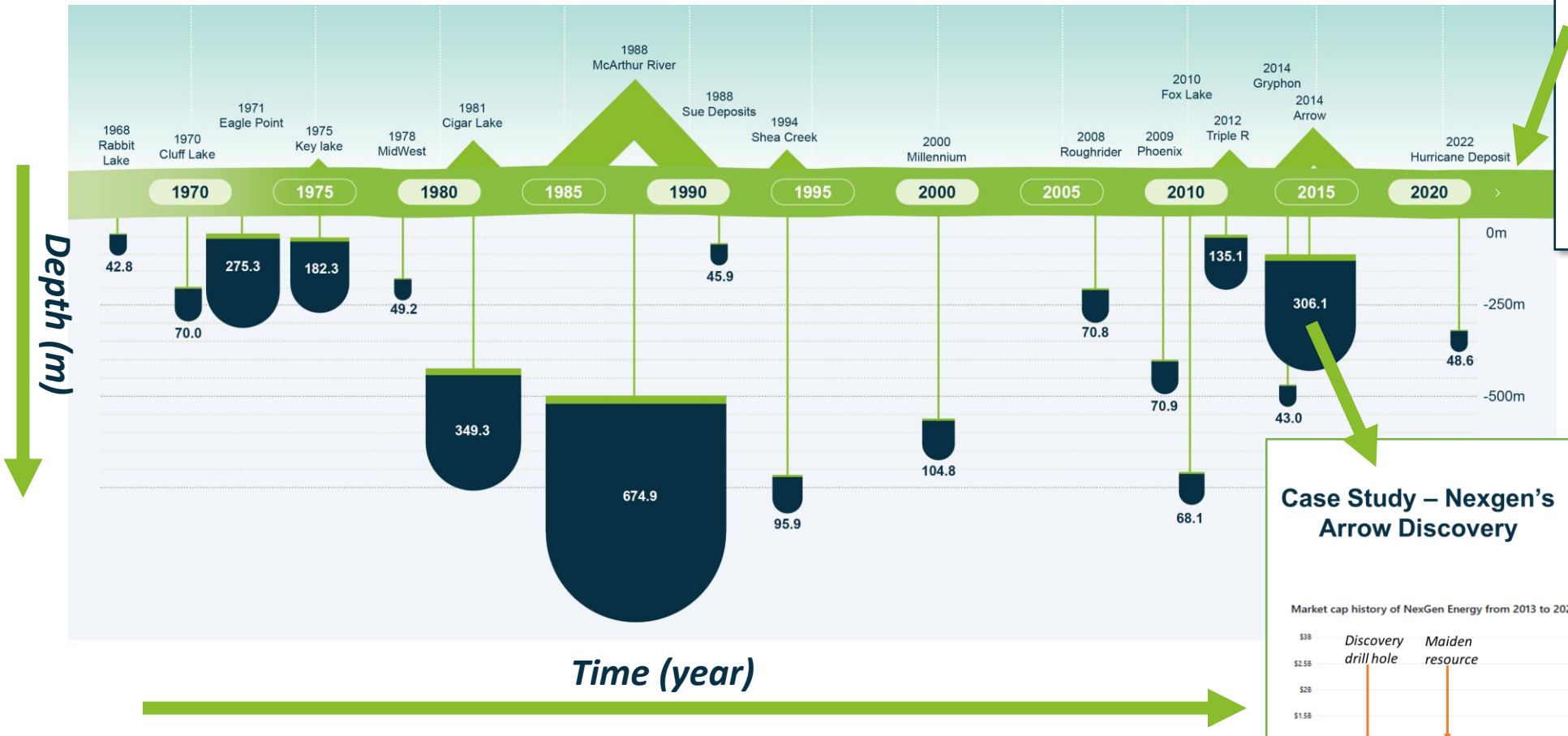
Athabasca Basin discovery success

Athabasca Basin discoveries have delivered significant shareholder returns, even through downturns



Additional recent exploration success includes

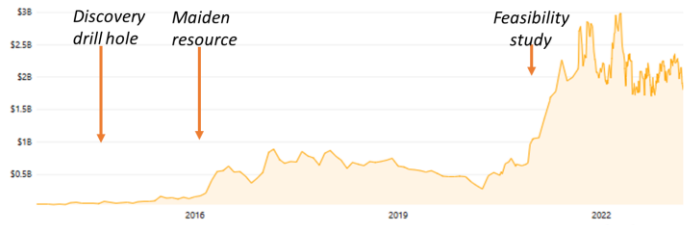
- 92 Energy's Gemini discovery[1] **43m @ 0.6% U_3O_8** (incl 6m @ 2.2% U_3O_8)
- Baselode Energy's ACKIO discovery[2] **31.0m @ 0.9% U_3O_8**
- Canalaska/Cameco McArthur West Discovery[3] **9m @ 2.6% U3O8**

Case Study – Nexgen's Arrow Discovery

NEXGEN Market Cap – 10 Years

Pre Discovery	~ C$30M
Post Discovery	~ C$60M
Initial resource	~ C$500M
Currently	~ C$4B

Market cap history of NexGen Energy from 2013 to 2023



Data in image from: *IAEA Technichal document 1857, Unconformity-related uranium deposits, refer to disclaimer*
IsoEnergy TSX announcement, 18/07/2022, Initial Mineral Resource Estimate, inferred and indicated.
92Energy ASX announcement, 25/08/2022, High-grade uranium confirmed at GMZ including 6.0m of 2.17% U_3O_8
Baselode Energy TSX announcement, 20/09/2022, Baselode Intersects Best Drill Hole To Date With 0.90% U3O8 Over 31.0 Metres Starting at 69.3 m True Vertical
CanAlaska TSX-V announcement, 22/10/2022, CanAlaska Confirms High-Grade Uranium Mineralization in New Uranium Zone at West McArthur

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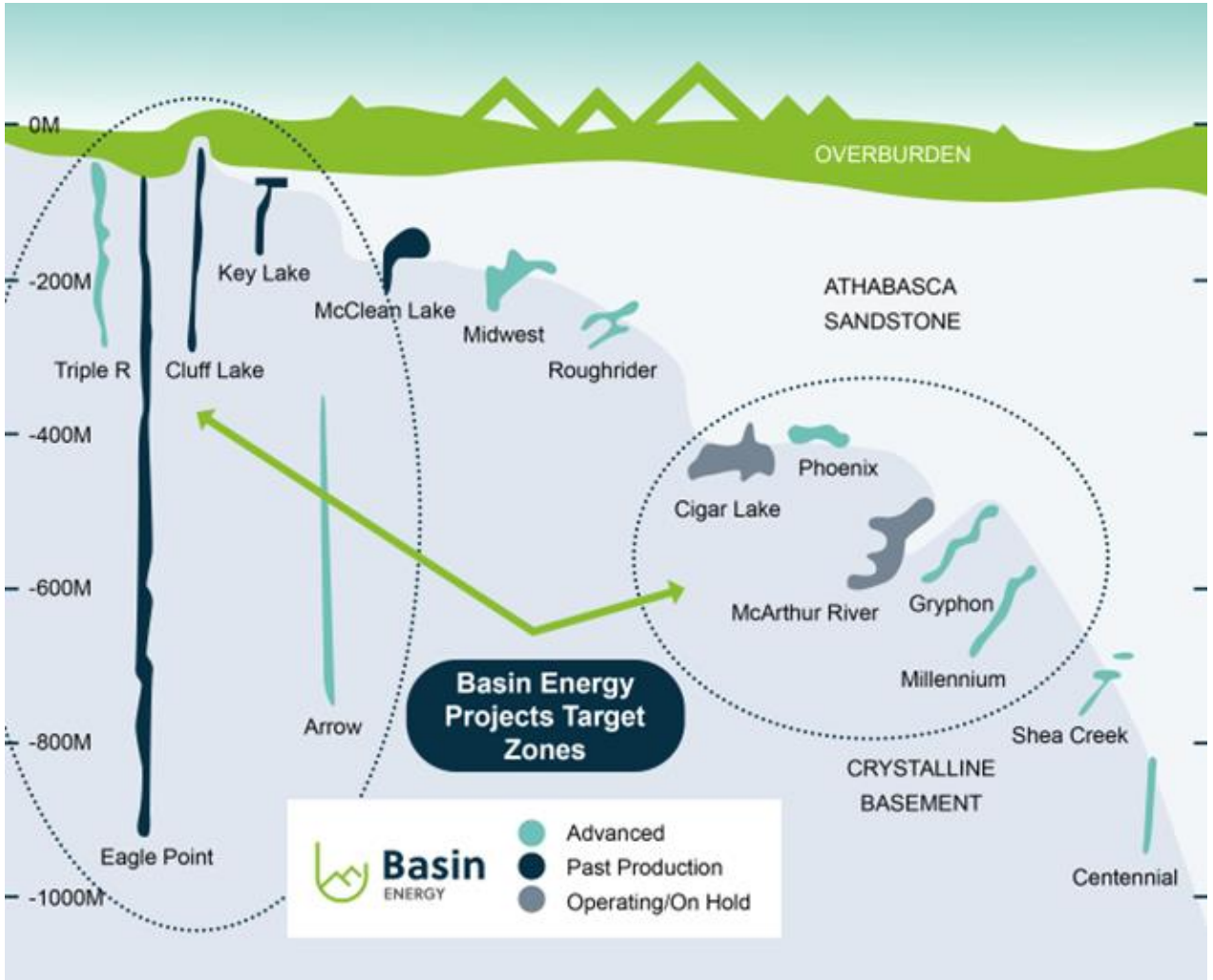
Exploring for Athabasca Basin uranium

Exploring for Athabasca uranium style mineralisation, with basement hosted *(Arrow style)* and unconformity hosted targets *(McArthur River style)*

Basin's projects share the same fundamentals;
Geological settings *(lithology, structure)*
Evidence of metals *(uranium, pathfinders)*
Explorable pathway *(depth, targets)*

Strategically located near world-class high-grade uranium discoveries, mining and processing operations with a constant uranium mining industry for 65 years

Experienced team – relevant uranium exploration and development track record, with joint venture partner providing invaluable project specific local knowledge



Data in diagram derived from
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2. *Sources: World Nuclear Performance Report 2021, World Nuclear Association, September 2021; The Nuclear Fuel Report Global Scenarios for Demand and Supply Availability 2021-2040, World Nuclear Association April 2022*

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Geikie

Shallow exploration strategically located in proximity to recent high-grade, shallow uranium discoveries

Tenure

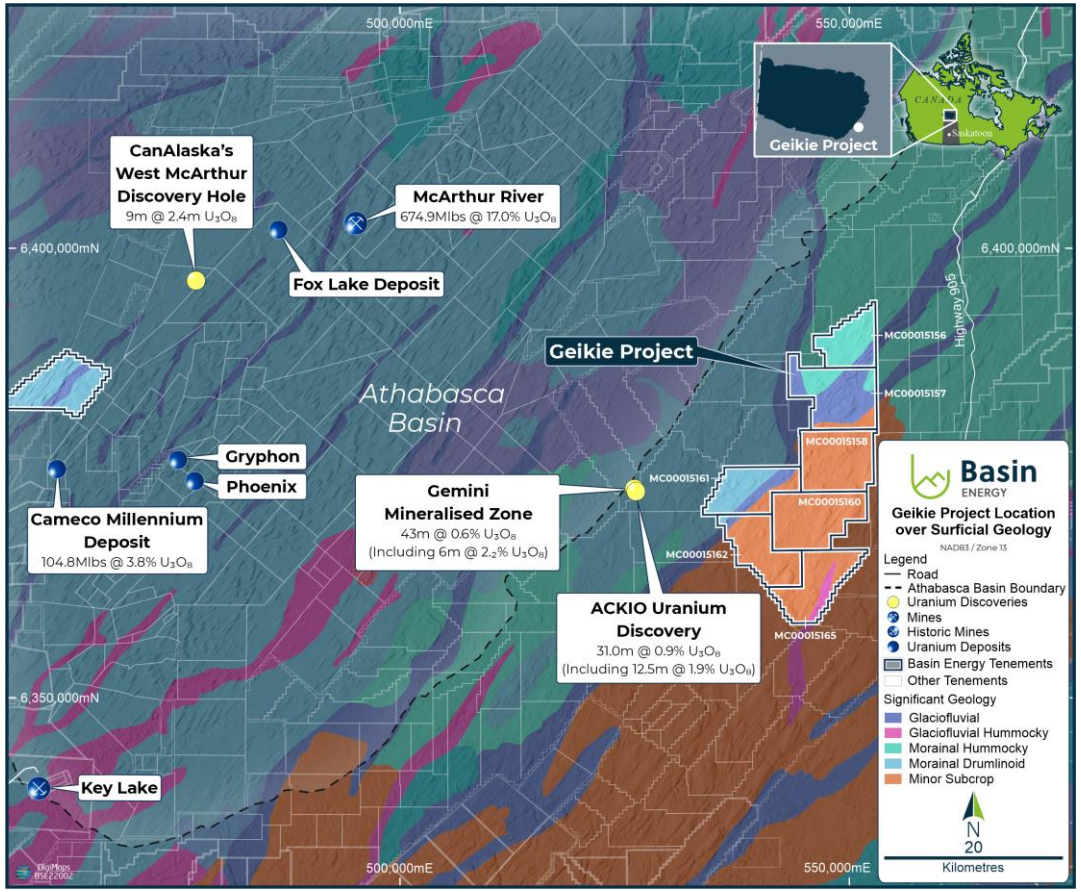
- 339km^2 landholding located 7km southeast of the present edge of the Athabasca Basin and 10km west of highway 905
- Adjacent to 92 Energy's Gemini discovery **43m @ 0.6% U_3O_8** (incl 6m @ 2.2% U_30_8) & Baselode Energy's ACKIO discovery **31.0m @ 0.9% U_3O_8**

Target

- Shallow "Basement hosted" uranium deposits
  - i. Identify key geology and structure
  - ii. Presence of pathfinders
  - iii. Explorable depths

Basin work completed since IPO

- High resolution geophysics
  - i. Magnetics and radiometric data to map major **structures**
  - ii. Airborne electromagnetics to map **lithology** and **structure**
- Boots on ground Mapping and geochemistry to identify **pathfinders** and **lithology**
- Maiden drilling to confirm interpretation, potential **scale** and establish **fertility** of system
- Airborne gravity to map where the system is most active



1. *IAEA Technical document 1857 Unconformity-related uranium deposits (refer to disclaimer) & www.cameco.com*
   1. *Millennium resource 75.9Mlb measured and indicated, 28.9Mlb inferred.*
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4. *CanAlaska TSX-V announcement, 22/10/2022, CanAlaska Confirms High-Grade Uranium Mineralization in New Uranium Zone at West McArthur*

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Geikie – Summary Status

- Anomalous uranium was intersected in **4 of the 8 holes** drilled
  - Highest grade was **0.27%** U3O8 over 0.5 metres at Aero Lake
  - 263 ppm over 9 metres at Preston Creek
- **Pathfinder** elements for uranium mineralisation, specifically lead isotope anomalies were observed in **5 of the 8 holes** drilled
- S**cale** of structures and associated alteration hit
  - Big structures capable of moving a lot of fluid around and host a lot of mineral
  - Extensive alteration present to demonstrate that fluid has been active
  - Uranium in the system demonstrated in assay results
- Gravity used to maximise effectiveness of drilling expenditure
  - Most cost-effective way to map alteration styles of this scale (***it's a big project***, *look at the footprints of the deposits shown on the map)*
  - This is an effective targeting technique that has mapped similar basement-hosted uranium alteration systems on the outer edge of the Athabasca Basin

Figure 3*: Photographs of alteration and deformation style intersected in a major faulted interval (shear zone) in drillhole GKI-006. A. Close-up of a hematised clast-supported crackle breccia with dark chlorite and hematite matrix. B. Close-up of strongly hematised fractured host rock with elevated CT-007-M scintillometer radiometry. Note the 3 cm-thick matrix-supported breccia exhibiting corroded clasts within a friable fine grained hematitic clay matrix. C. Close-up of a strongly altered cataclastic interval consisting of an incohesive gouge with dark grey to light grey clay matrix (left), an incohesive brick-red protobreccia (middle), and an indurated ultracataclasite zone with a sage green chloritic matrix (right). D. Close-up of continued strongly altered brecciated interval with brick red hematite noted overprinting the middle section of the photographed core and a later reactivation stage marked by a pale green-yellow clay matrix supporting chlorite-altered clasts.*

Source data see :
Refer Basin Energy ASX release dated 20/09/2023 "Basin Energy Intersects Uranium Mineralisation up to 0.27% in Maiden Drilling at Geikie"
Refer Basin Energy ASX release dated 10/08/2023 "Elevated Radioactivity and Significant Hydrothermal Alteration Identified at Geikie"

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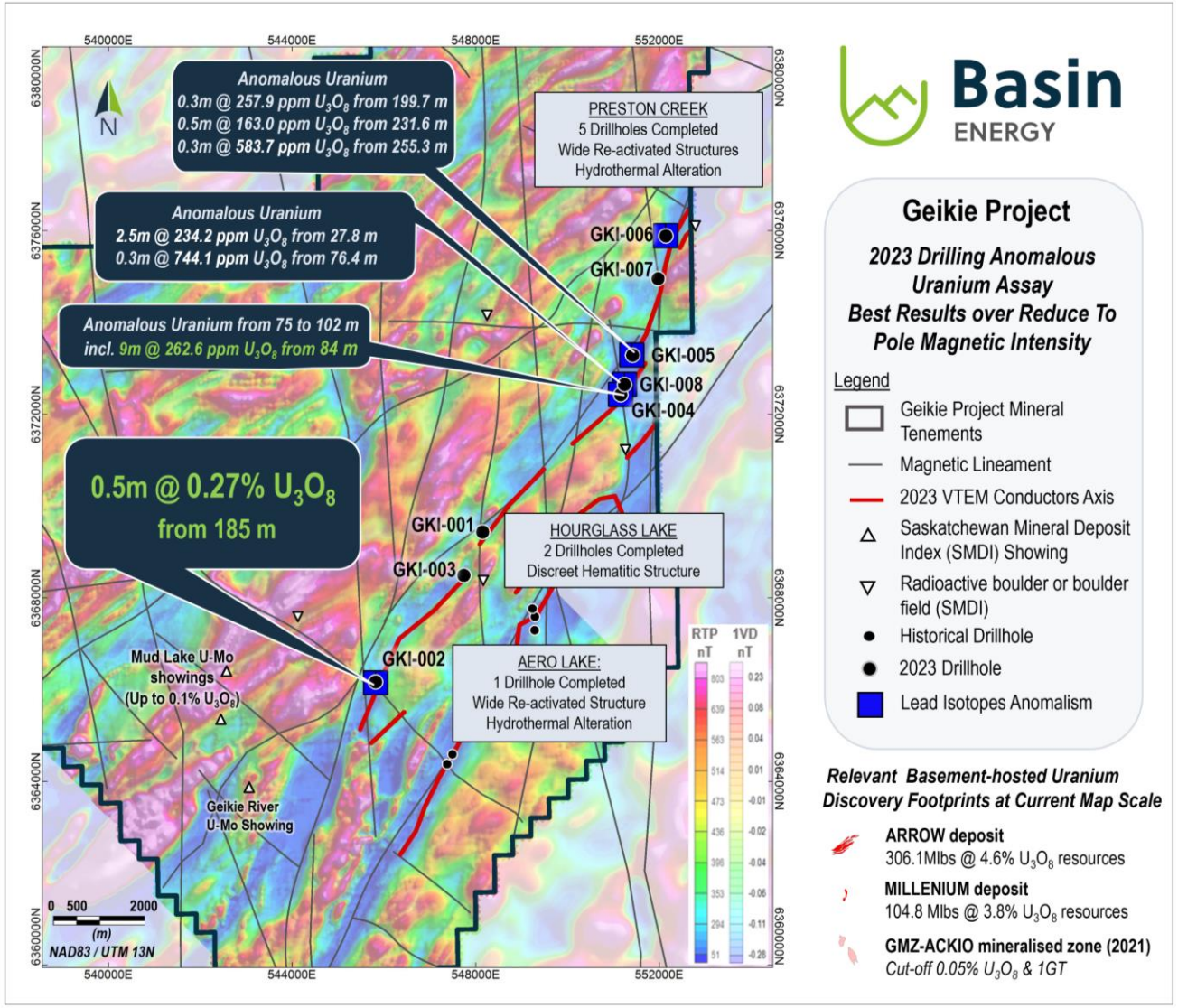

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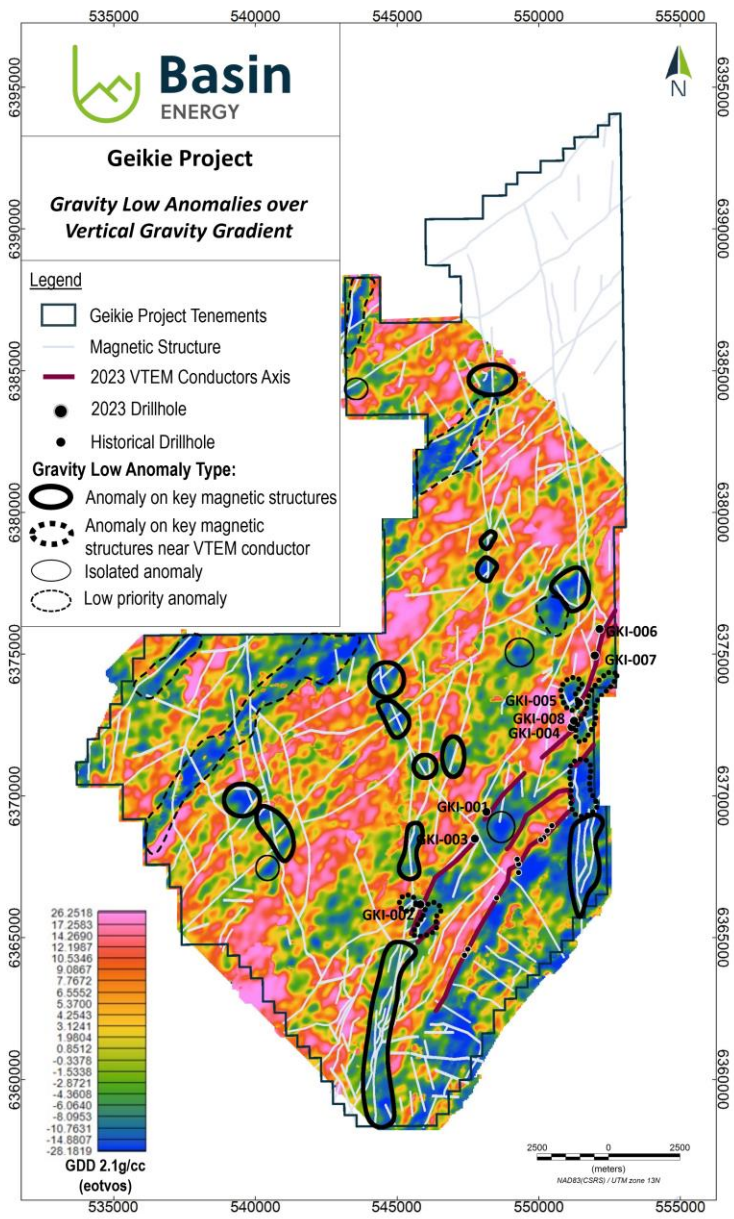
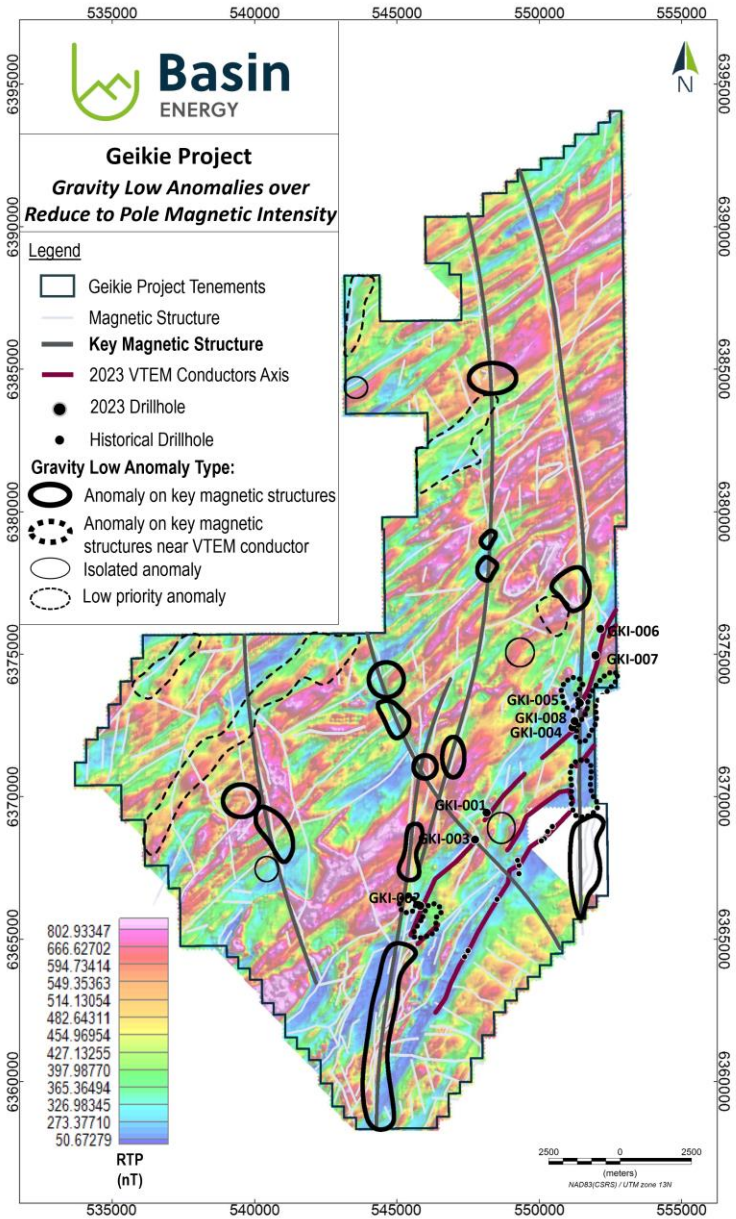
Gravity Results

- Multiple well defined and strong large **targets identified** coincident with key regional structures within the Geikie Uranium Project.
- Drilling, Electromagnetic and magnetic data demonstrates multiple anomalies are coincident with **key north south faults.**
- Priority ranking of regional gravity targets subject to on-going modelling of anomalies.
- Basin now holds multilayer high quality geophysical data for phase 2 drill targeting

We have identified a regionally significant system which requires careful systematic drill testing.





Source data see :

1. *Refer to Basin Energy ASX Prospectus dated 22/08/2022 for background information.*
2. *Refer Basin Energy ASX release dated 20/09/2023 "Basin Energy Intersects Uranium Mineralisation up to 0.27% in Maiden Drilling at Geikie"*
3. *Refer Basin Energy ASX release dated 15/11/2023 "Basin Energy Intersects Uranium Mineralisation up to 0.27% in Maiden Drilling at Geikie"*

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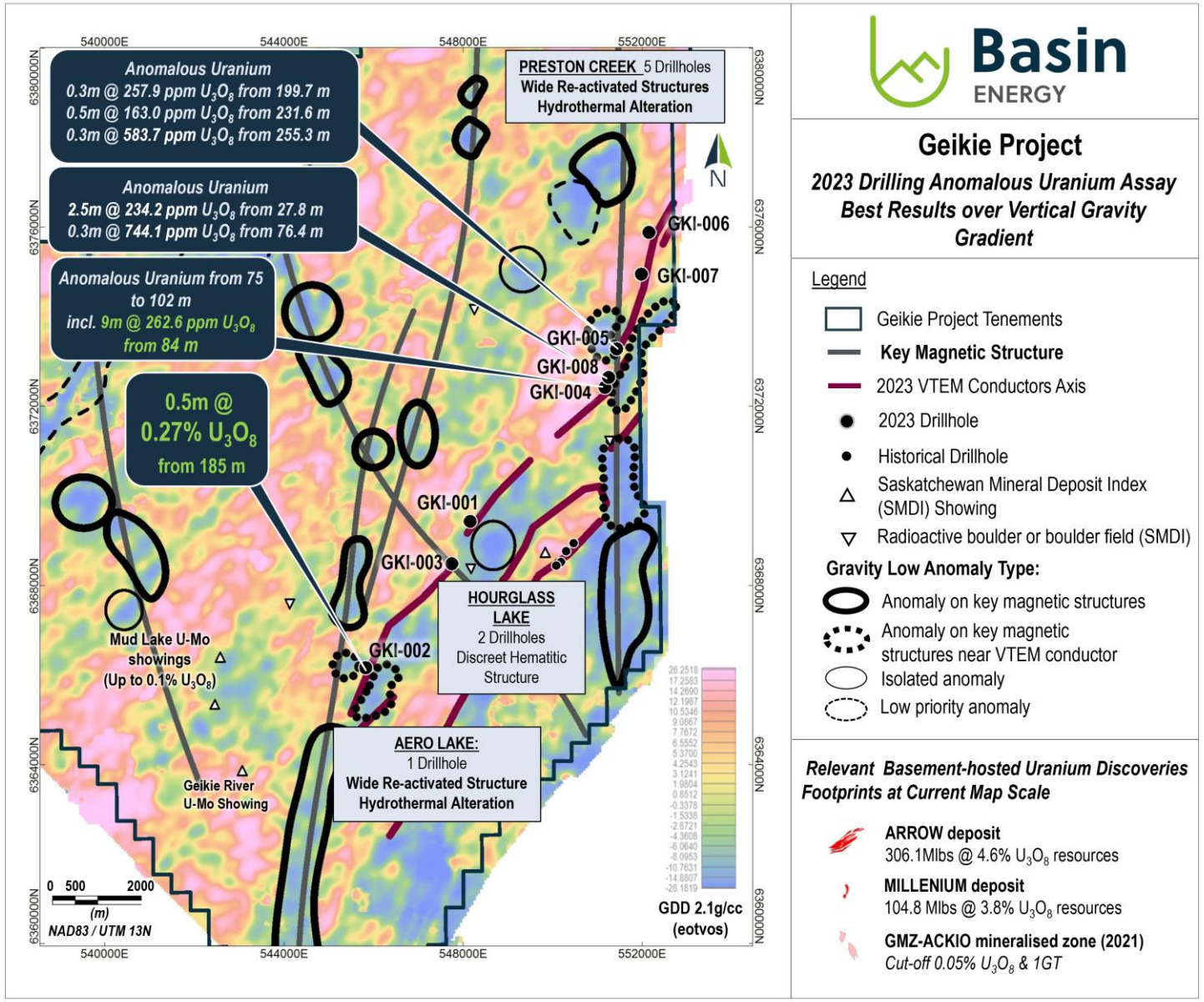
Gravity Results

- Series of strong well defined **gravity anomalies** identified near drill hole GKI-002 which intersected **0.27% U_3O_8**
- Observations in drilling support the interpretation that these gravity anomalies reflect the presence of a **significant alteration**
- Survey results support the interpretation that a **large hydrothermal system is active adjacent to the Preston Creek** prospect.
- Basin remains **funded** to conduct phase 2 drilling of **shallow** high grade targets within this historically overlooked portion of the Athabasca

We have identified large strong anomalies directly adjacent to extremely encouraging phase 1 drilling results.



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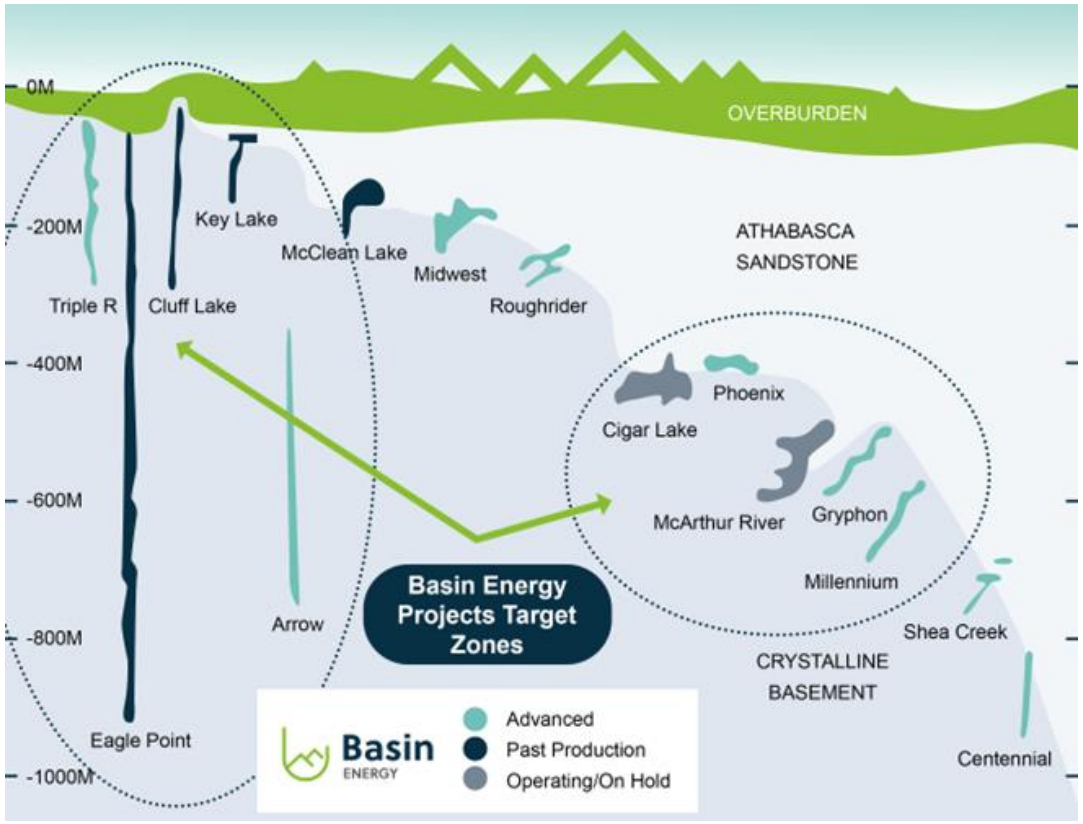
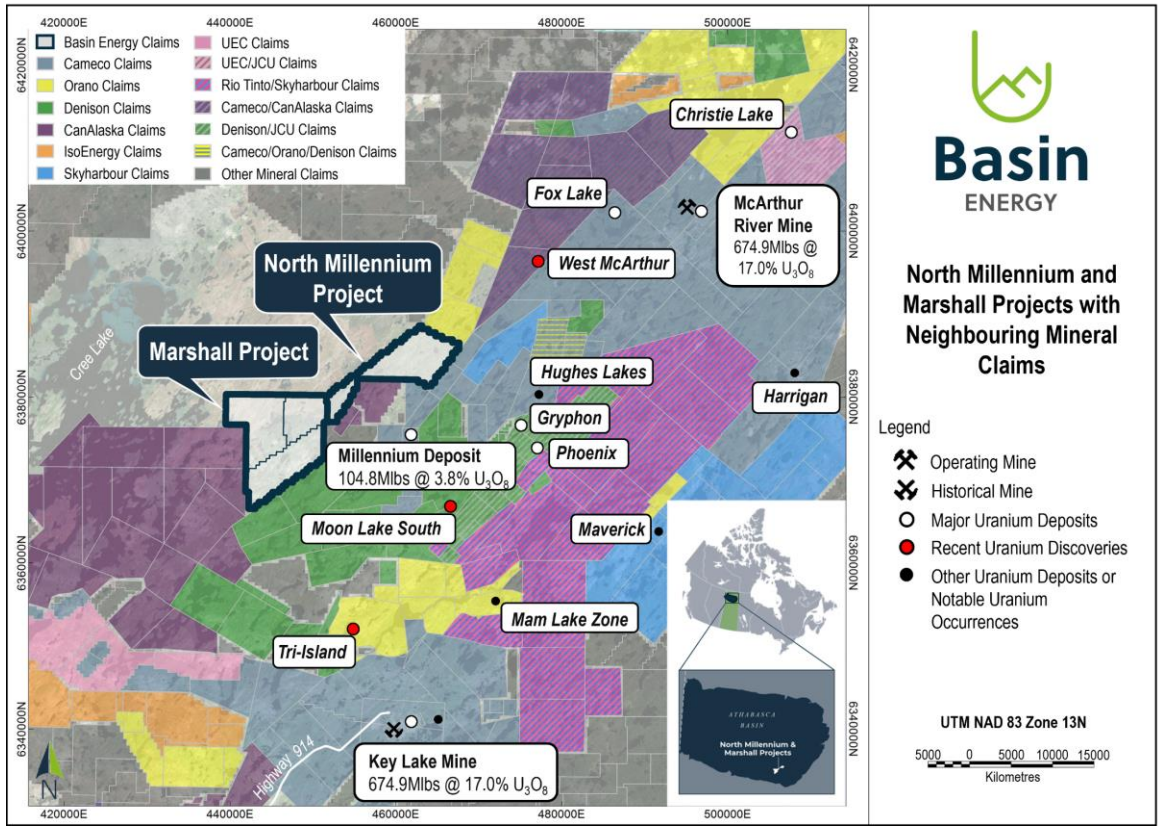
Basin Energy in the Athabasca – North Millenium and Marshall

Two projects located in proximity to world-class high-grade uranium discoveries and mining operations, targeting repeats of traditional unconformity mineralisation





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North Millennium

Basement conductor trend is an interpreted extension of the Mother fault hosting the Millennium Deposit

Tenure

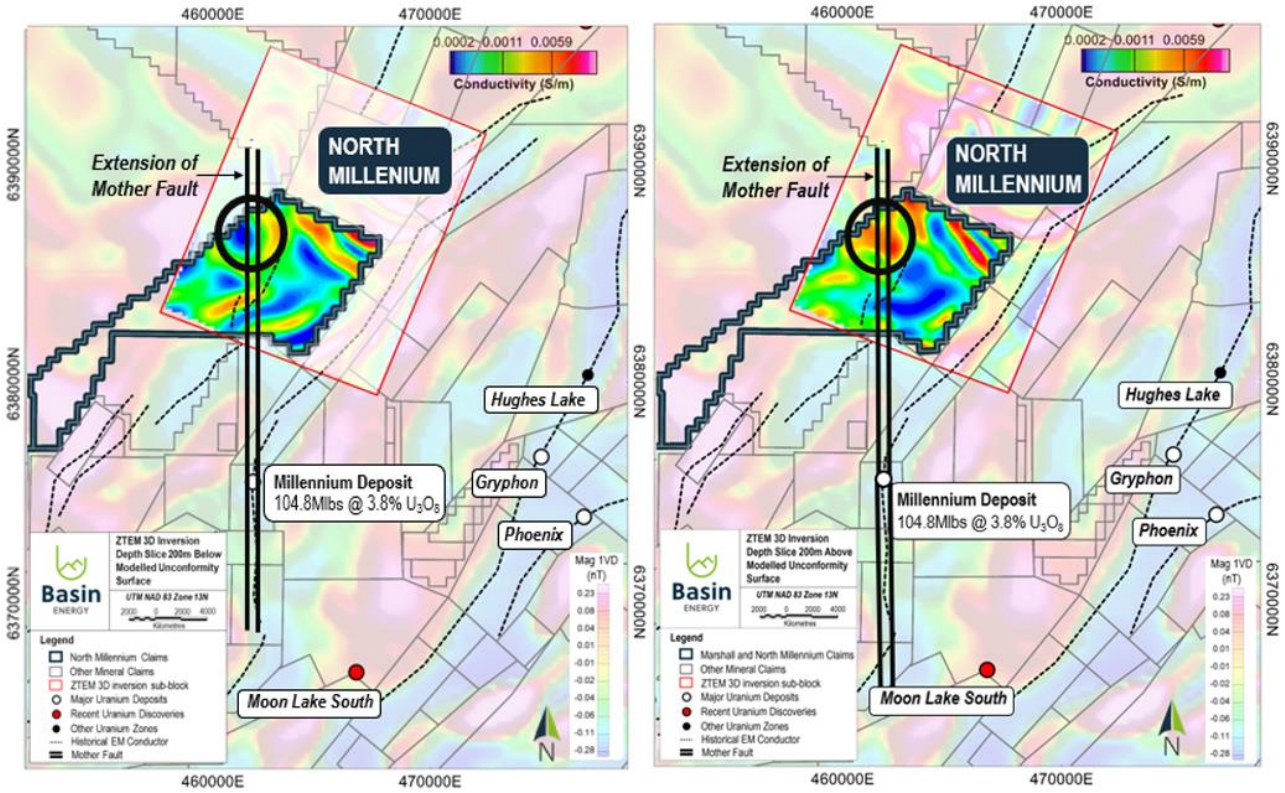
- Located 40km southwest of Cameco's flagship McArthur River Mine (**674.9 Mlbs U_3O_8 @ 16.9%**)[1] and 7km immediately north of the Cameco's Millennium deposit (**104.8 Mlbs U_3O_8 @ 3.76%**)[1]
- Along strike from CanAlaska / Cameco JV 2022 exploration success that drilled **9 metres @ 2.4% U_3O_8** in the same basement conductor

History

- Conductors mapped with UTEM, modelled and reprocessed by BSN
- Drilling at the adjacent McTavish property historically intersected 0.13% U_3O_8[2] in drilling associated with Ni, Co, Cu, and Zn

Main Features

- Presence of a basement conductor trend disrupted by the interpreted extension of the Millennium deposit Mother Fault
- Drill hole on neighboring property intersected uranium mineralisation
- Two high priority uranium targets along a 5km conductor corridor outlined by coincident magnetic breaks and electromagnetic conductor disruption



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2. *See https://canalaska.com/project/mctavish-2/*
3. *CanAlaska TSX-V announcement, 22/10/2022, CanAlaska Confirms High-Grade Uranium Mineralization in New Uranium Zone at West McArthur*
4. *Refer to Basin Energy ASX Prospectus dated 22/08/2022 for quoted mineralisation, resources figures and background information.*
5. *Refer to Basin Energy ASX release dated 28/09/2023 "Priority Targets identified at Marshall Uranium Project"*

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Marshall

Strong anomalies identified above and below the Athabasca unconformity in both sandstone and basement stratigraphy

Tenure

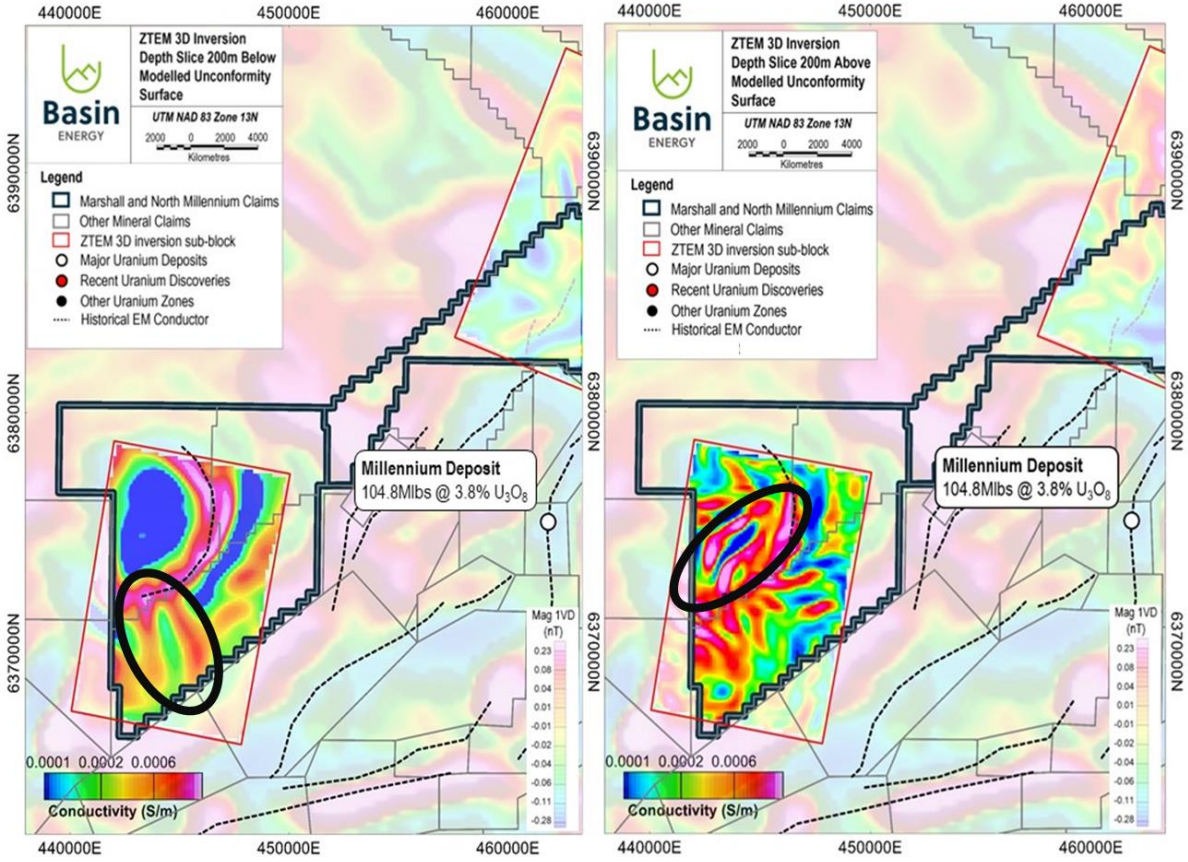
- 112km^2 landholding located 11km west of the Millennium Deposit in the southeast corner of the Athabasca Basin

History

- Between 1979 and 2009 soil geochemistry, airborne mag, EM surveys, and ground geophysics surveys have been completed
- Centred on a magnetic basin-like feature outlined by historical airborne and ground geophysics

Main Features

- The magnetic basin is interpreted as metasedimentary basin with a graphitic conductor at its base
- A NE-SW magnetic and conductive structure crosses the centre of the basin and presents the main target for the property



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Board and Management

Blake Steele - Non-Executive Chairman

Blake Steele is an experienced metals and mining industry executive and director with extensive knowledge across public companies and capital markets. He was formerly President and Chief Executive Officer of Azarga Uranium Corp (Azarga), a US-focused integrated uranium exploration and development company and led Azarga into an advanced stage multi- asset business, which was ultimately acquired by enCore Energy Corp (TSX.V:EU) for C$200M in February 2022.

Pete Moorhouse - Managing Director

Pete Moorhouse has 17 years of mining and exploration geology experience with extensive experience in the junior uranium sector, having spent over 10 years with ASX-listed uranium explorer and developer Alligator Energy (ASX:AGE). He holds significant competencies in the evaluation, exploration, resource drilling and feasibility studies across many global uranium and resource projects.

Odile Maufrais – Exploration Manager

Odile Maufrais has over 13 years experience in the uranium exploration and mining industry in France, Niger, Canada, and Australia. She spent 10 years exploring in the eastern and western Athabasca Basin on over 15 greenfield and brownfield uranium exploration projects with ORANO, one of the largest global uranium producers. Her most recent activities comprise working as a Senior Geological Consultant for ASX and TSX.V listed uranium and lithium junior explorers.

Jeremy Clark	Cory Belyk	Peter Bird	Ben Donovan
Non-executive Director	**Non-executive Director**	**Non-executive Director**	**NED/ Company Secretary**
Geologist	*Geologist / CanAlaska Rep*	*Corporate*	*Corporate / Legal*
Jeremy Clark has over 18 years of mining and exploration geology experience, and previously held technical and management roles at the recognised consultancy firm RPM Global.	Cory holds 30 years' experience in exploration and mining with extensive global uranium experience most recently employed by Cameco in the Athabasca Basin.	Peter is an investment banking professional with experience leading and managing a variety of global transactions including IPOs, Capital Raises and M&A	Ben has over 21 years of experience in the provision of corporate advisory and company secretary services.

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Pete Moorhouse

M: +61 (0) 7 3667 7449

E: pete.m@basinenergy.com.au

Chloe Hayes

M: +61 (0) 458 619 317

E: chloe@janemorganmanagement.com.au

This presentation has been authorised for release by the Basin Energy Board