Basin ENERGY

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 30 JUNE 2023

Key Highlights

- **Contractors and team secured for 2023 summer exploration program within the Athabasca Basin**
- **Commencement of maiden drilling at Geikie Uranium Project**
  - **2,000 metre program at Preston Creek, Aero Lake and Hourglass Lake prospects**
  - **Multiple shallow prospects deemed favourable for high grade uranium**
- **Additional mineral claims added to Geikie Uranium Project**
- **3D inversion of North Millenium ZTEM data commenced**
- **Continued engagement and consultation with First Nations and stakeholder groups**
- **Strong cash balance of $5.2M following maiden drilling program ensures Basin is fully funded for further exploration**

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Basin Energy Ltd (**ASX:BSN**) ('**Basin**', or the '**Company**') is pleased to provide an overview of activities for the period ending 30 June 2023 ("**Quarter**", "**Reporting Period**") and accompanying Appendix 5B.

Exploration for the Quarter was focused on progressing the Geikie Uranium Project **('Geikie',** or the **'Project')** cumulating in the commencement of maiden drill testing. Basin has been advancing drill targets deemed prospective for high grade uranium mineralisation, using analogies and models derived from neighbouring uranium deposits and discoveries of the Athabasca basin. Additionally, as part of the Company's broader exploration campaign within the Athabasca Basin, a continued focus has been placed on the engagement and consultation of First Nations and stakeholder groups within the exploration project areas.

Geikie Maiden Drilling [1],[2],[3],[4]

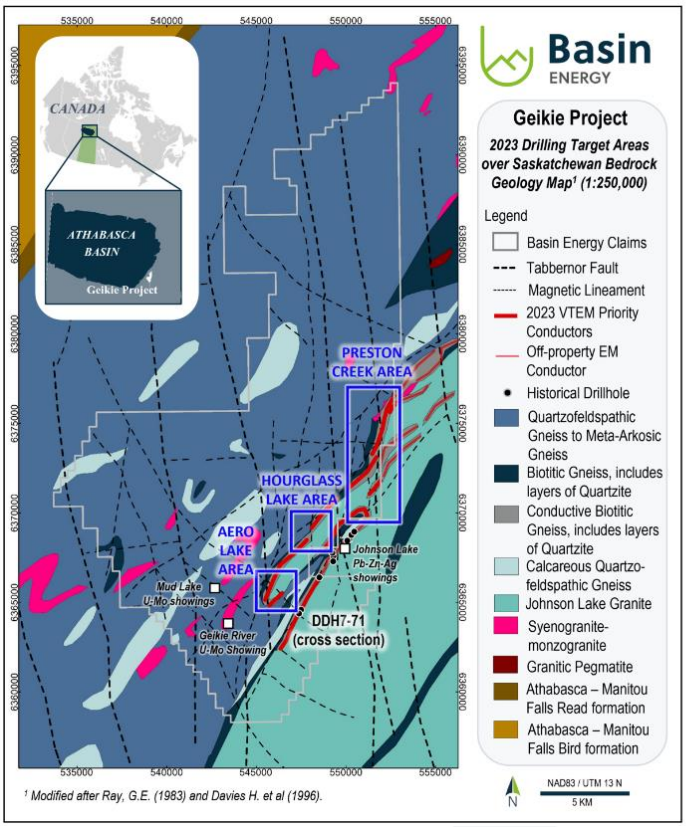
During the Quarter, the Company commenced a 2,000-metre diamond drilling program at Geikie. Basin's joint venture partner budgeted for the completion of this program, the total agreed budget estimate was pre-paid by Basin. This was Basin's maiden drilling campaign, which follows a series of modern, high-resolution geophysical surveys, and is the first drilling to occur within the Geikie Project area for over 50 years. Subsequent to this Reporting Period, drilling has now been completed and initial

[1] *Refer Basin Energy ASX release dated 13/06/2023 "Mobilises for Maiden Drilling at Geikie Uranium Project"*
[2] *Refer Basin Energy ASX release dated 31/05/2023 "Basin Prepares for Maiden Drilling Program at Geikie"*
[3] *Refer Basin Energy ASX release dated 22/03/2023 "Airborne Electromagnetic Survey Completed at Geikie"*
[4] *Refer Basin Energy ASX release dated 14/10/2022 "Maiden Geophysics Survey Defines Multiple Targets at Geikie"*

results are currently under compilation and will be reported imminently, with final geochemical results expected in late August.

Basin has identified over 15 kilometres of strike-length deemed prospective for uranium mineralisation, which focuses on a strong coherent, regionally significant, northeast trending conductor. The conductor was identified through versatile time-domain electromagnetics ('**VTEM**') and trends through the southern half of the Project. The conductive trend was subject to minimal drilling in 1971 which revealed a tightly folded stratigraphic package of metasediments, discontinuous quartzite lenses and granitic rocks deemed to form a suitable rheological contrast for potential uranium mineralisation (Figures 1 and 2). This area is largely covered by glacial deposits, masking any surface radiometric responses, however providing shallow sub 200 metre target depths.

This initial drilling campaign targeted three prospects along this 15 kilometre trend. The prospects being Preston Creek, Hourglass Lake and Aero Lake (Figure 1), and were prioritised by the identification of a series of splays and offsets of the conductor visible in the VTEM and magnetic data. Often these splays and offsets correlate with intersections of regionally significant deep-seated north-south trending faults, which form part of the Tabbernor Fault System ('**Tabbernor'**, or '**TFS'**) as interpreted through airborne magnetic data and historic mapping.



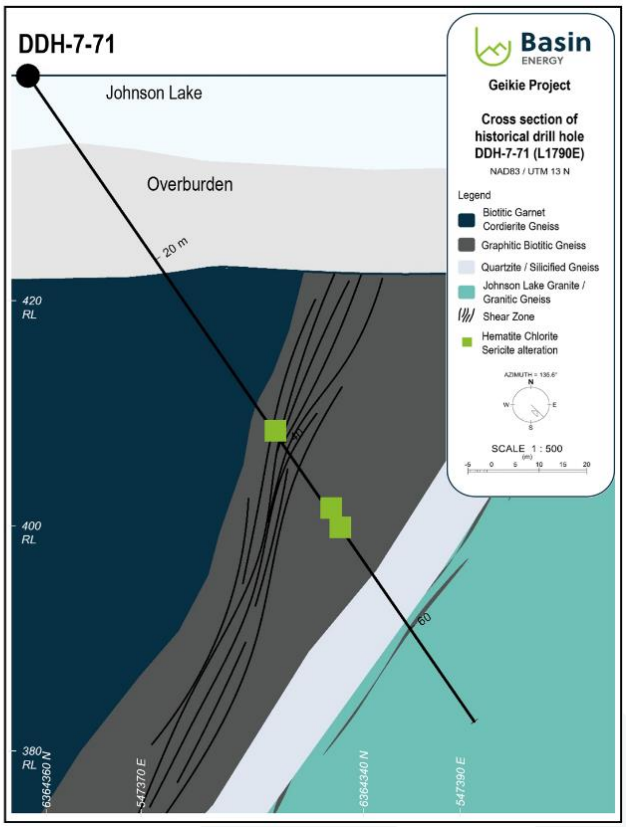


Figure 1 (left): *Geikie Project showing 2023 summer drilling prospects.*
Figure 2 (right): *Historic drilling showing targeted lithological package.*

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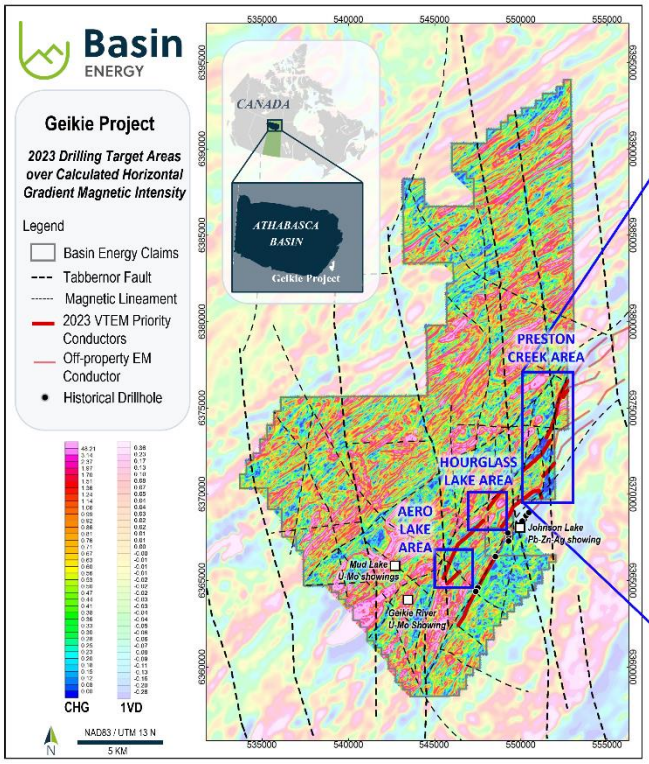
Preston Creek

This prospect is located at the eastern end of the 15 kilometre prospective zone. Basin interprets a series of structures converging within this prospect area, and the complexity of the structural setting is considered a suitable conduit for uranium bearing fluids.

3D modelling of VTEM anomalies in the Preston Creek area shows a succession of subparallel EM plates indicating a likely structural thickening of the prospective horizon. Furthermore, the superposition of a disrupted VTEM conductor within a significant magnetic low corridor along a Tabbernor Fault makes a compelling drill target for potential uranium mineralisation.

Accordingly, five drill holes were proposed, and completed subsequent to this Reporting Period.



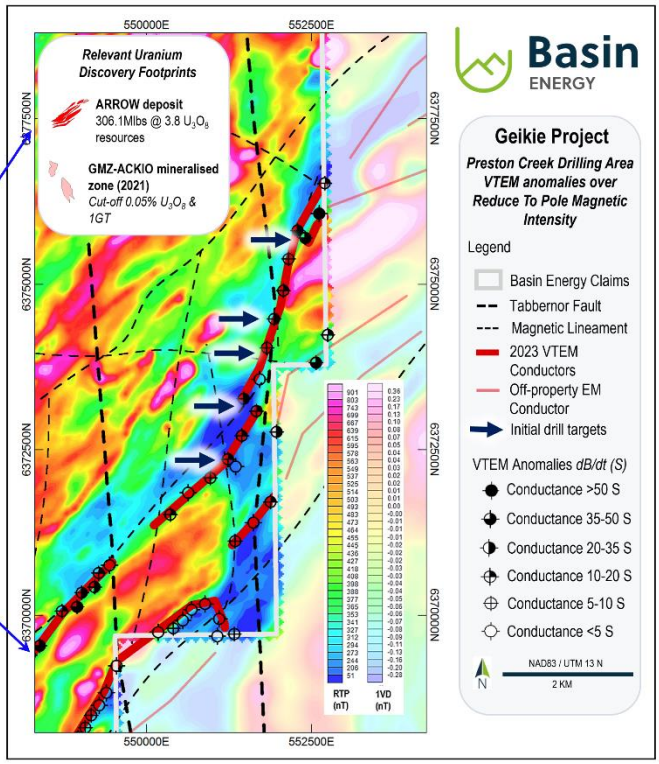


***Figure 3 (left)**: 2023 Geikie Summer Drilling over areas on high-resolution magnetics.*
***Figure 4 (right)**: Preston Creek Prospect proposed 2023 drilling to scale with discovery footprints of the Arrow Uranium Deposit and the GMZ-ACKIO mineralised zone.*

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Hourglass Lake and Aero Lake

The Hourglass Lake prospect is located midway along the 15 kilometre prospective zone. Drilling was designed to test an interpreted disruption of the VTEM conductor, where an apparent 500 metre offset is observed in conjunction with a discreet north-south trending magnetic structural lineament deemed suitable as a mineralising fluid conduit. A weakening of the modelled response from the VTEM conductor is observed adjacent to this offset, which can be interpreted as an alteration effect from potential mineralising fluids.

At Aero Lake, a series of geological and geophysical anomalies are observed. Unlike Hourglass and Preston Creek where the VTEM is modelled steeply dipping, the Aero Lake EM anomalies are modelled as shallow to flat lying. This occurs near an interpreted Tabbernor Fault flexure, adjacent to a fold hinge which is part of a broader system of intercalated folds of the Johnson River Inlier. Airborne magnetic data suggests intersection of several subtle lineaments in this area adding to the structural complexity. The uranium-molybdenum Mud Lake showing is located three kilometres to the west.

Accordingly, three drill holes were proposed, and completed subsequent to this Reporting Period.

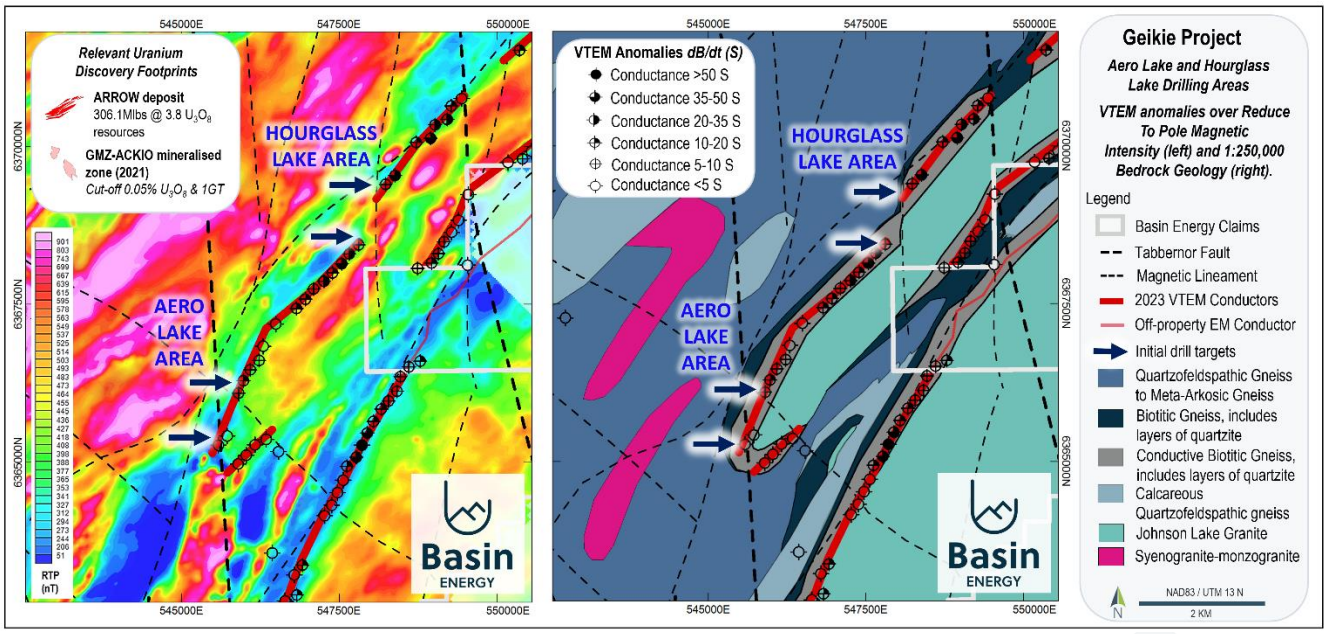

***Figure 5 (left)**: Hourglass Lake and Aero Lake prospects showing 2023 proposed drilling over high resolution magnetics.*
***Figure 6 (right)**: Hourglass Lake and Aero Lake prospects showing 2023 proposed drilling over geology interpretation.*

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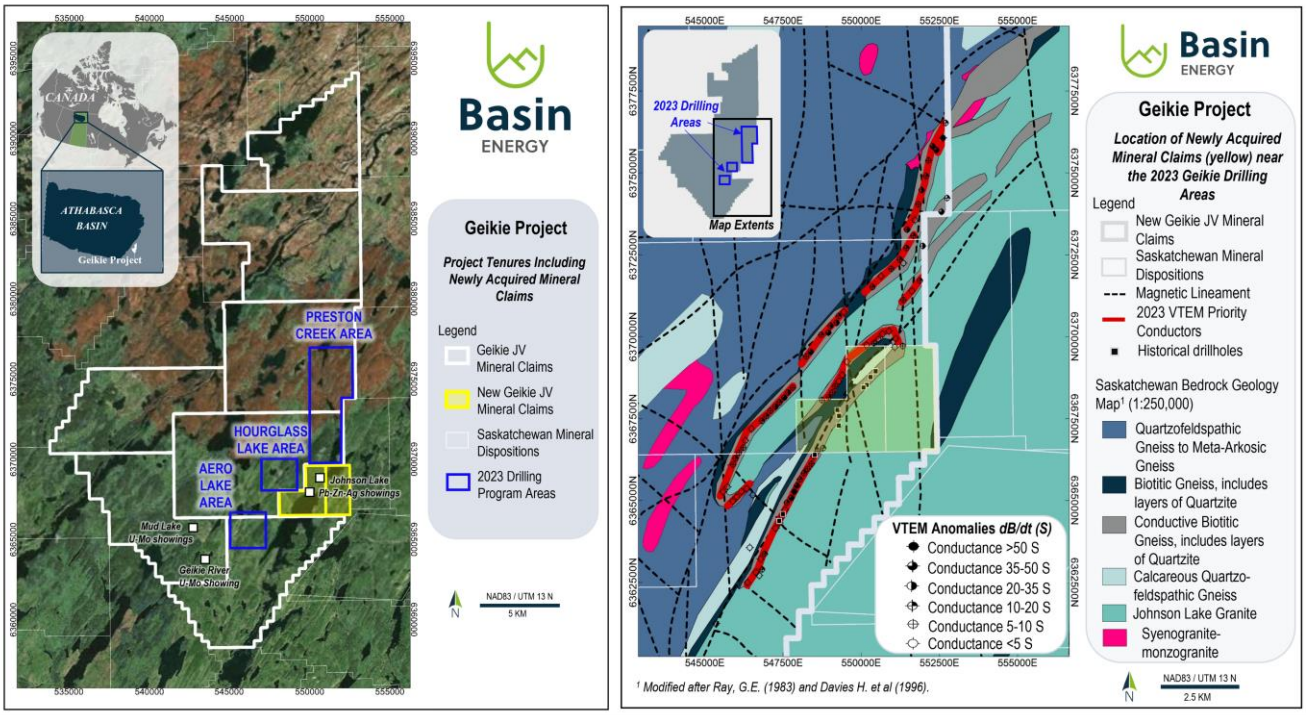
Geikie Uranium Project Expanded [5,6]

During the Quarter, two additional claims were added to the Geikie Uranium Project consisting of 11.87km^2 of land, bringing the total Geikie Project area to 350.87km^2. The newly staked claims are adjacent to the Preston Creek and Hourglass Lake prospects. The claims were acquired through staking via the Saskatchewan Government mineral claim process.

Basin has also commissioned Geotech Limited to provide helicopter-borne VTEM data over the new claim areas. This data will provide consistent coverage to the existing data set acquired in Q1 2023. The VTEM results are expected in Q3 2023.

The additional claims were added to the existing earn-in agreement between Basin Energy and CanAlaska. The Company entered into the earn-in agreement with CanAlaska dated 22 April 2022 pursuant to which CanAlaska granted the Company the exclusive right and option to acquire an 80% interest in mineral claims MC00015156, MC00015157, MC00015158, MC00015160, MC00015161, MC00015162 and MC00015165 (Geikie Uranium Project) over a three-staged earn-in, subject to the terms and conditions contained within the Geikie Agreement. Mineral claims MC00019372 and MC00019373 are now included in this agreement and subject to the same terms. Basin currently holds a 40% interest in the Geikie Project. The material terms and conditions of the Geikie Agreement are set out in the Basin Prospectus, refer to section 6.1 of ASX Prospectus dated 22 August 2022.



Figures 7 and 8: *Locations of new Geikie Project claims in relation to current targets (left) and location of new Geikie Project claim over interpreted geology (right).*

[5] *Refer Basin Energy ASX release dated 06/07/2023 "Geikie Uranium Project Expansion"*

[6] *Refer Basin Energy ASX release dated 22/03/2023 "Airborne Electromagnetic Survey Completed at Geikie"*

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North Millennium & Marshall Project Updates[7]

Whilst field work for the Reporting Period focused on Geikie, Basin continued its exploration strategy to advance its North Millennium and Marshall Uranium Projects. Work during the Quarter has focused on the acquisition of historic data and continued community and stakeholder engagement. A 3D inversion has commenced of historic Z-axis tipper electromagnetic **('ZTEM')** data that was collected in 2012. Review of the ZTEM data found it to be of good quality, with the inversion targeted at identifying basement structure to assist with target refinement. Results are expected in Q3 2023.

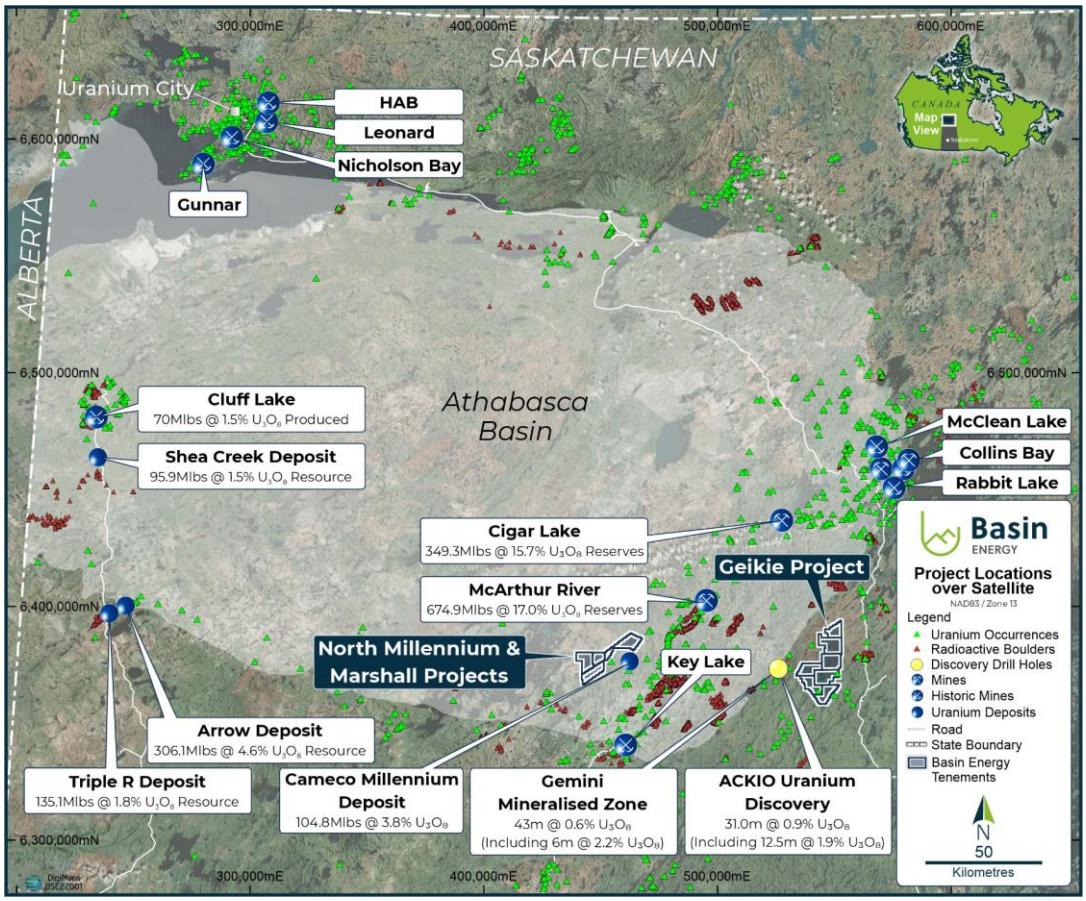

***Figure 9**: Project locations in relation to the Athabasca Basin*

The North Millennium Project is located 7km north of Cameco Corporation's Millennium deposit (104.8Mlb at 3.8% U3O8). Basin's exploration is focused on the interpreted extension of the Millennium Mother fault. No drilling data is known to exist within the North Millennium Project area.

[7] *Refer to ASX Prospectus dated 22 August 2022 for quoted mineralisation and background information.*

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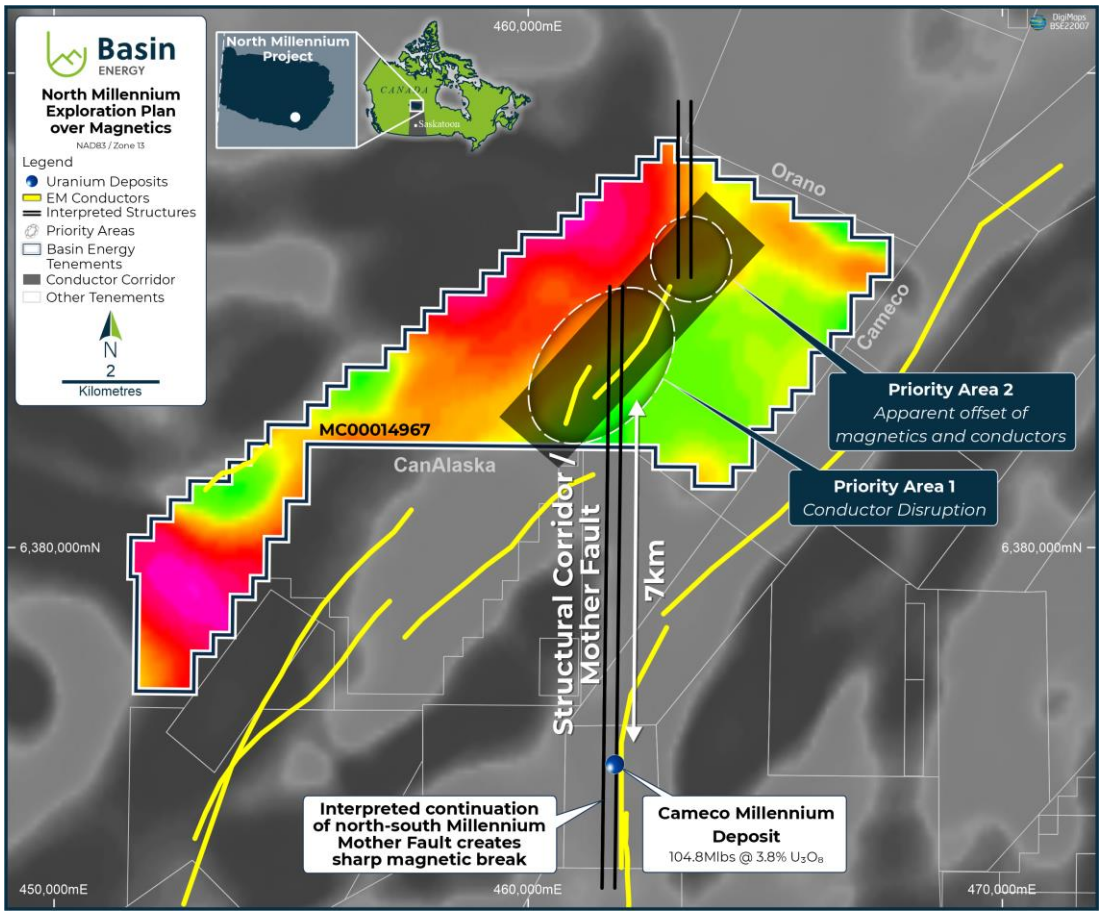

Figure 10: *Priority targets at the North Millennium Project in relation to the Millennium uranium deposit*

The Marshall Project is located 11km west of the Millennium deposit. Basin's exploration is focused on a significant basement conductor identified in historic ZTEM and VTEM data, corresponding to a magnetic low.

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Corporate and Other Business

The Company was successfully admitted to the ASX on 30 September 2022 and commenced trading on 4 October 2022.

- As of 30 June 2023, the Company held A$5.2 million in cash. Full details of the Company's cash movements during the Quarter are detailed in the attached Appendix 5B.
- As per ASX Listing Rule 5.3.1, incurred exploration expenditures were primarily related to geophysical surveys and technical studies at the Geikie and North Millennium Projects, and drilling at the Geikie Project. Exploration expenditures incurred during the Quarter are reported at A$1,911,000.
- As per ASX Listing Rule 5.3.2, there were no substantive mining production and development activities undertaken during the Quarter.
- In accordance with Listing Rule 5.3.5, the Company advises that payments made to related parties as disclosed in the Appendix 5B for the Quarter were A$129,000 for Director fees and Managing Director salary.
- In accordance with Listing Rule 5.3.4, below is a comparison of the Company's actual expenditure to 30 June 2023 against the estimated expenditure in the 'use of funds' statement:

Use of Funds	Per IPO Prospectus - 2-year period	Total to date - 30 June 2023
Direct Exploration Costs	$7,176,321	$2,909,694
Working Capital	$1,489,960	$912,844
Costs of the IPO	$958,367	$834,995
TOTAL	**$9,624,648**	$4,657,533

Table 1: Use of funds

The Company confirms that the use of funds is consistent with statements made in the prospectus.

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Mining Tenement Status

The Company holds interests in three projects located within or adjacent to the Athabasca Basin in Northern Saskatchewan, Canada. The following information is provided pursuant of Rule 5.3.3 for the current Reporting Period:

Project	Permit Number	Basin Ownership[1] at 1 April 2023	Basin Ownership[1] at 30 June 2023	Area, ha
Geikie	*MC00015156*	*40%*	*40%*	*3,312*
	MC00015157	*40%*	*40%*	*5,998*
	MC00015158	*40%*	*40%*	*5,548*
	MC00015160	*40%*	*40%*	*5,788*
	MC00015161	*40%*	*40%*	*4,308*
	MC00015162	*40%*	*40%*	*4,468*
	MC00015165	*40%*	*40%*	*4,475*
	MC00017352	*0%*	*40%*	*661*
	MC00017353	*0%*	*40%*	*526*
Marshall	*MC00015073*	*100%*	*100%*	*4,232*
	MC00015074	*100%*	*100%*	*2,417*
	MC00015075	*100%*	*100%*	*4,576*
North Millennium	*MC00014967*	*40%*	*40%*	*5,873*

Table 2: Basin Energy mining tenement / mineral claim status

[1]Basin entered a property option agreement for 100% of the Marshall Project, and a joint venture agreement to earn up to 80% of the Geikie and North Millennium Projects on the 22 April 2022.

This announcement has been approved for release by the Board of Basin Energy.

Enquiries

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Company Overview

About Basin Energy

Basin Energy (ASX: **BSN**) is a uranium exploration and development company with an interest in three highly prospective projects positioned in the southeast corner and margins of the world-renowned Athabasca Basin in Canada.

Directors & Management

Pete Moorhouse	**Managing Director**
Blake Steele	**Non-executive Chairman**
Cory Belyk	**Non-executive Director**
Jeremy Clark	**Non-executive Director**
Peter Bird	**Non-executive Director**
Ben Donovan	**NED & Company Secretary**
Odile Maufrais	**Exploration Manager**

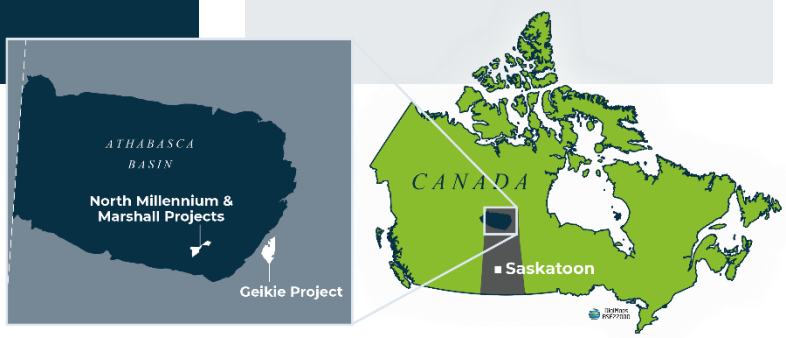
Basin Energy
ACN 655 515 110

Projects
North Millennium
Geikie
Marshall

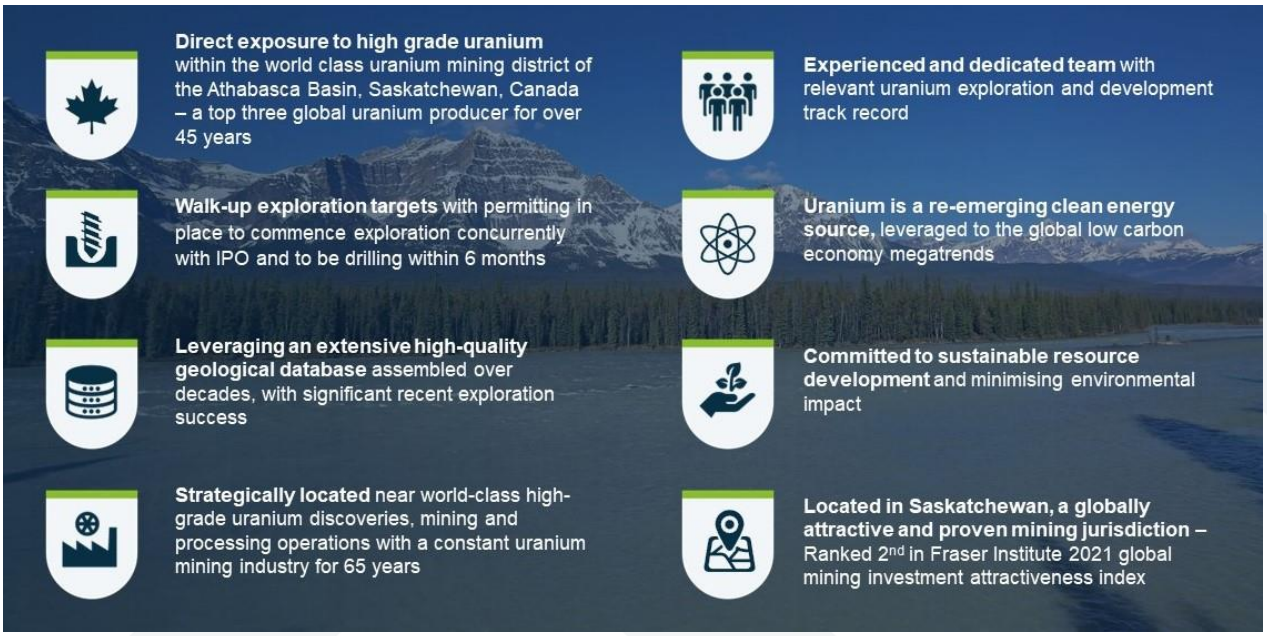
Shares on Issue
81,229,697

Options
13,300,000

ASX Code
BSN



Investment Highlights



Competent Persons Statement, Resource Figure Notes and Forward-Looking Statement

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, and data announced in subsequent ASX press releases by Basin Energy relating to exploration activities. The information included within this release is a fair representation of available information compiled by Odile Maufrais, a competent person who is a Member of the Australian Institute of Geoscientists. Odile Maufrais is employed by Basin Energy Ltd as Exploration Manager. Odile Maufrais has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Odile Maufrais consents to the inclusion in this presentation of the matters based on his work in the form and context in which it appears.

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 (U3O8) is the amount of contained uranium (in Mlbs U3O8) and average grade (in % U3O8) 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.

This announcement 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.

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