Basin ENERGY

BASIN PREPARES FOR MAIDEN DRILL PROGRAM AT GEIKIE

Key Highlights

- **Contractors secured for maiden drilling program at Geikie with mobilisation set to commence in early June**
- **Initial 2,000 metres planned for a minimum of 8 drill holes**
- **Drilling to test shallow, high priority prospects deemed favourable for high grade uranium mineralisation**
- **Targets defined using high resolution airborne radiometric and electromagnetic surveys in combination with geochemical sampling, structural mapping & historical data review**
- **Basin remains fully funded for a significant 2023 exploration program with $7.3M at 31 March 2023**

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Basin Energy Limited (**ASX:BSN**) ('**Basin**' or the '**Company**') is pleased to provide an update on exploration activities at the Geikie Uranium Project ('**Geikie**' or the '**Project**'), located on the eastern margin of the world-class Athabasca Basin.

The Company has secured contractors and crews with mobilisation set to commence in the second week of June for an initial 2,000 metre diamond drilling program designed to test features associated with a regionally significant conductor deemed favorable to host shallow, high grade uranium mineralisation. This initial program will consist of a minimum of 8 drill holes, with proposed depths up to 250 metres.

Basin's Managing Director, Pete Moorhouse, commented:

"This is a significant milestone for Basin, being the initial phase of the first exploration drilling to be completed by the Company and representing the start of an exciting 2023 summer field season.

Our efforts to date have generated a compelling pipeline of regionally significant drill ready uranium targets at shallow depths. As this drilling commences, Basin continues to develop the secondary targets identified at Geikie, whilst bolstering is North Millennium and Marshall targeting criteria.

We are seeing a very positive sentiment in the uranium space emerging, and Basin is extremely well positioned to capitalise on this through the exploration of its projects in the world-class Athabasca Basin. We look forward to providing further updates as the season develops."

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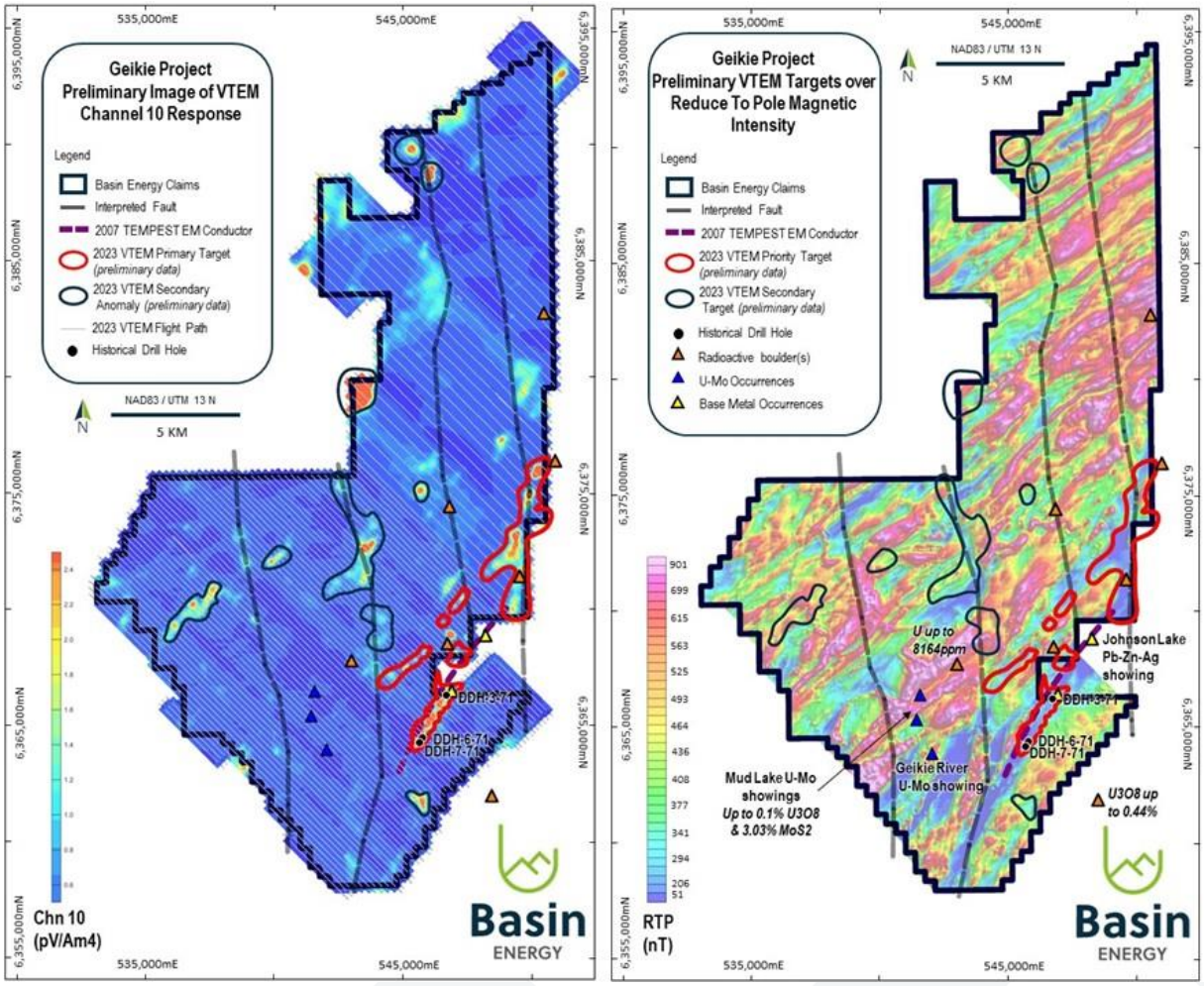
Drilling Scope

The 2,000 metre drill program is scheduled to commence in the second week of June and expected to take 6 weeks to complete. The drilling services have been contracted to Athabasca Catering Limited Partnership, a 100% First Nations-owned company, who are partnered with ITL Diamond Drilling Ltd. Basin will update the market on target specifics at the time of contractor mobilisation.

The initial drilling campaign will focus on features associated with the strong coherent regionally significant northeast trending conductor, classified as a primary target, striking through the southern half of the Project. A series of splays and offsets of this conductor are visible, often in correlation with intersections of regionally significant deep-seated north-south trending faults, part of the Tabbernor Fault System ('Tabbernor', or 'TFS')1. The conductive trend is part of a tightly folded stratigraphic package comprising metasediments, discontinuous quartzite lenses and granitic rocks deemed to form a suitable rheological contrast for potential mineralisation.



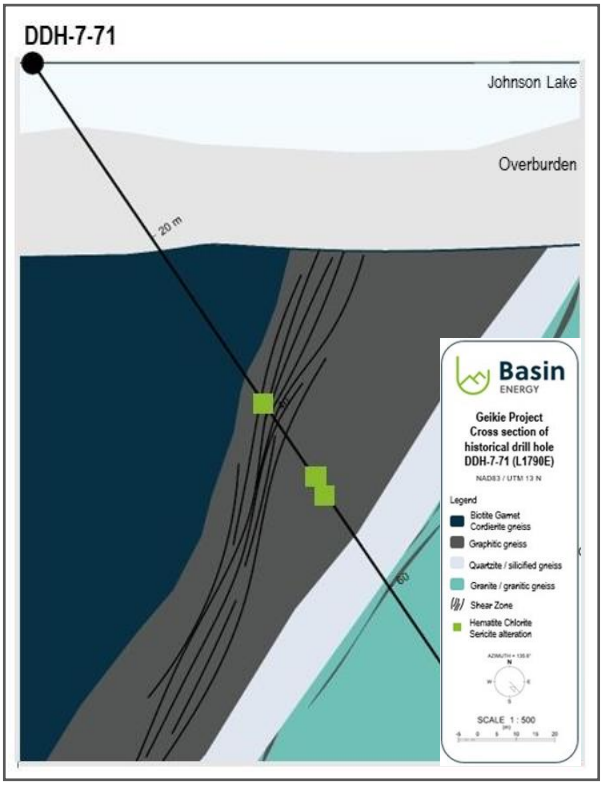
Figures 1 and 2[2]*: Locations of AEM primary and secondary targets over (left) Channel 10 VTEM data and (right) 2022 magnetic data. Phase 1 drilling set to test primary targets whilst work continues to refine a series of secondary targets.*

[1] *Refer ASX release dated 22 March 2023*
[2] *Refer ASX release dated 14 October 2022*

Historic drilling from 1971 *(refer ASX release dated 8 March 2023*) successfully identified a typical uranium lithological host package associated with this conductor consisting of:

- Wollaston Group biotitic gneiss including graphitic interlayers,
- quartzite or siliceous zones up to several meters in thickness and
- granite and granitic gneiss.

In addition to this package, a 4-meter-wide graphitic shear zone in Wollaston group metasediments has been recorded in drill holes adjacent to the newly identified conductor. Zones of hematite-chlorite-sericite alteration were reported within and at the fault footwall leading up to the quartzite interval. Figure 3 below shows a cross section of drill hole DDH-7-71, which also recorded narrow intervals of quartzite-hosted base metal anomalism. This historic drilling was only assayed for base metals, as uranium was not of interest to the explorer at the time. Subsequent surface sampling identified radioactive granitic boulders within the area, with up to 0.44% U_3O_8[3] suggesting uranium is present in the local mineralising system.



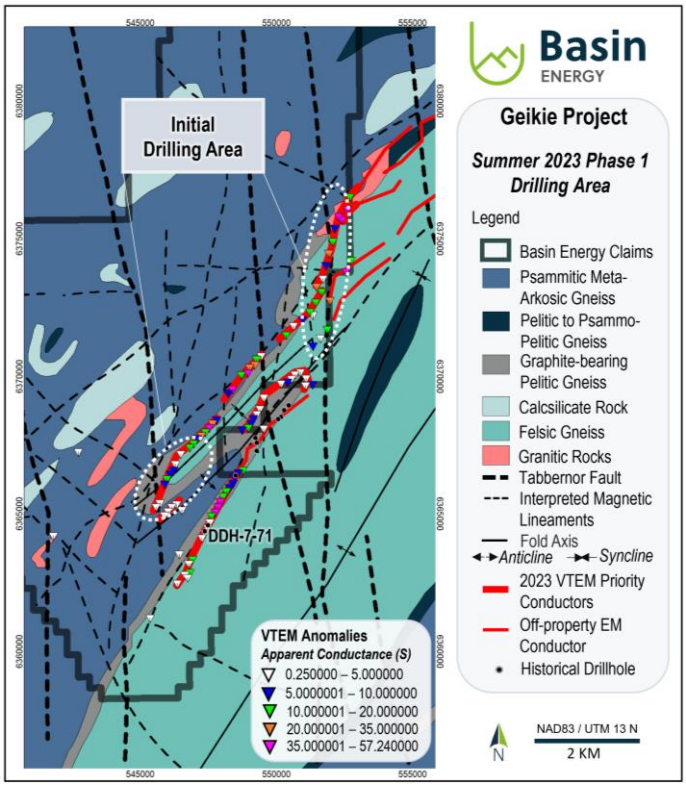


***Figure 3 (Left)**: Cross Section of target geology and alteration as identified in historical drill hole DDH-7-71[4].*
***Figure 4 (Right)**: AEM conductor over geology which will form the focus for phase 1 exploration drilling. The "Priority Drilling Area" shows the location of first drill holes.*

[3] *Refer ASX Prospectus dated 22 August 2022*
[4] *refer ASX release dated 8 March 2023*

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Based on recent and historic discoveries neighbouring the Geikie Project (including 92 Energy's Gemini Mineralised Zone and Baselode's ACKIO), this lithological package is considered to be a prime host for uranium mineralisation. Basin interprets that where this lithological sequence intercepts the potentially uranium bearing regional structures, which are well mapped in the magnetic data, to be a prime location for uranium mineralisation.

Background to Geikie

Basin's Geikie Project is located a few kilometres outside the eastern edge of the Athabasca Basin within the Wollaston Domain. The Project area has been subject to minimal exploration for uranium, with most work targeting base metals within a 3km zone of the Geikie River between 1967 and 1980. During this regional work, a series of mineralised showings were discovered in the Mud Lake and Marina areas. The Mud Lake uranium-molybdenum showing recorded a series of anomalous boulders and outcrops with grades of up to 0.23% U_3O_8, 5.2% Mo, and 1.4% Cu[5] contained in northeast-trending fractures associated with up to 10% pyrite, pyrrhotite, chalcopyrite, and arsenopyrite in quartzitic meta-arkoses; the Marina lead-zinc prospect recorded anomalous mineralisation in outcrop of up to 2.03% Pb, 7.2% Zn and 0.93 oz/t Ag[5].

Basement rocks of the Wollaston Domain are part of a distinct northeast-trending fold-thrust belt composed of Paleoproterozoic Wollaston Group metasediments overlying Archean granitoid gneisses. The primary target is for basement hosted uranium mineralisation where uranium bearing structures intersect favourable intercalated pelitic to psammitic gneisses and calc-silicate host rocks. Recent discoveries of basement-hosted uranium mineralisation at the Gemini Mineralised Zone, ACKIO and Beckett, along with known mineralisation at Agip-S and West Way prospects, all underscore the prospectivity of this portion of the Wollaston Belt.

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[5] *Refer to ASX Prospectus dated 22 August 2022*

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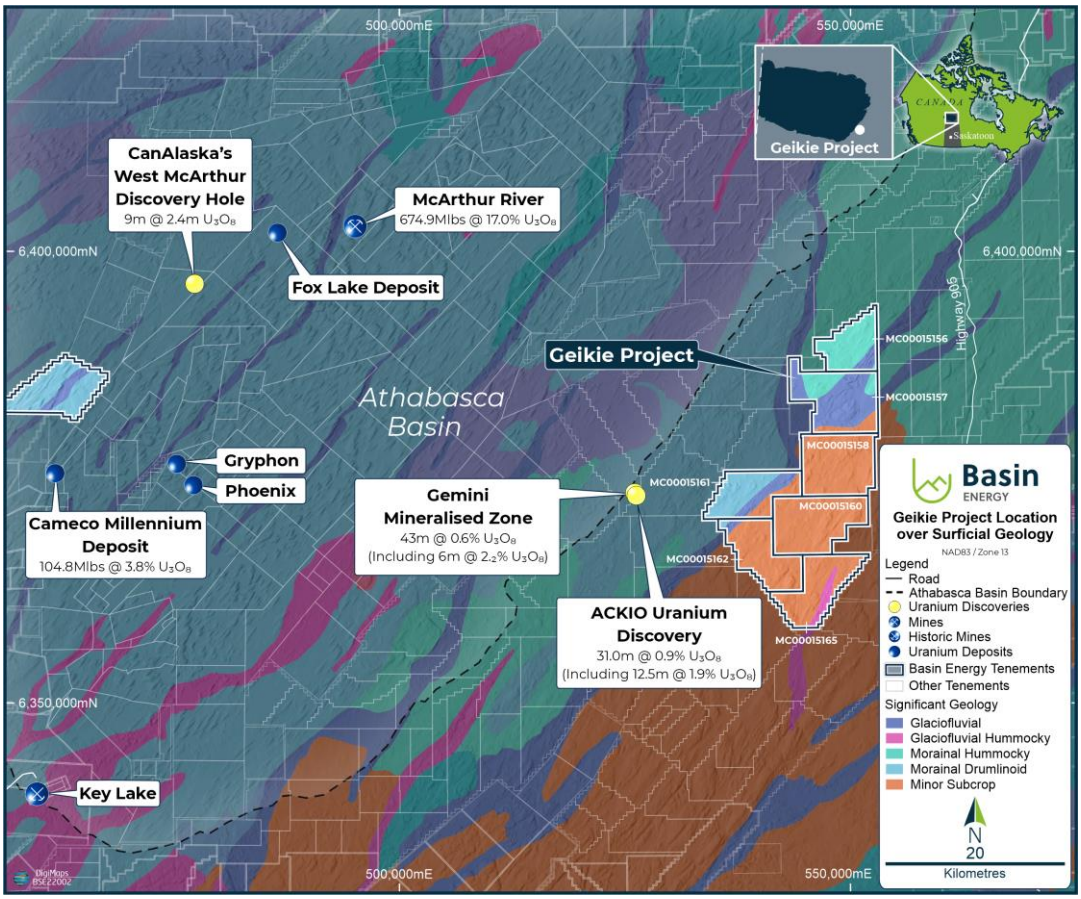

Figure 5[5]*: Geikie Project in relation to nearby significant uranium occurrences*

Other News

The Company will be presenting at the 2023 Melbourne Mines and Money Conference between the 14th and 15th June 2023 and Basin Energy representatives will be available to discuss the Company's exciting progress.

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**

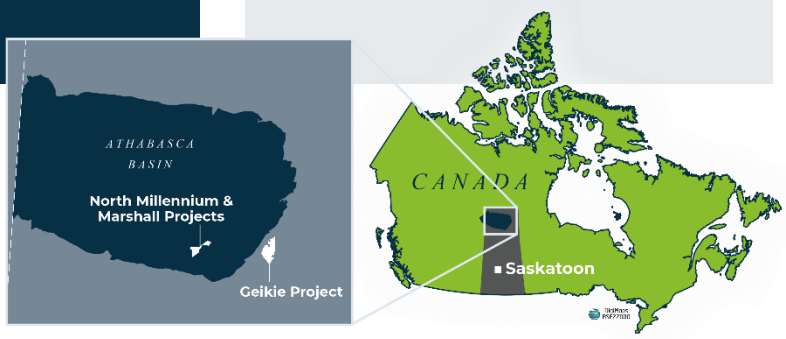
Basin Energy
ACN 655 515 110

Projects
North Millennium
Geikie
Marshall

Shares on Issue
81,229,697

Options
13,300,000

ASX Code
BSN



Investment Highlights

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

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

Walk-up exploration targets with permitting in place to commence exploration concurrently with IPO and to be drilling within 6 months

Uranium is a re-emerging clean energy source, leveraged to the global low carbon economy megatrends

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

Committed to sustainable resource development and minimising environmental impact

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

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

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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 (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.

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.