ASX Announcement
13 June 2023

BASIN MOBILISES FOR MAIDEN DRILLING AT GEIKIE URANIUM PROJECT

Key Highlights

- **Exploration team and drilling crews have arrived on site to commence maiden drilling program at the Geikie Uranium Project**
- **Drilling to target shallow prospects, deemed favourable for high grade uranium**
- **First drilling to occur within the Geikie Project area for over 50 years**
- **Initial 2,000 metres drilling planned for 8 drill holes**
- **Global Uranium sentiment continues to grow with spot prices reaching a 52 week high**
- **Basin remains fully funded for a significant 2023 exploration program with $7.3m at 31 March 2023**

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 in Canada.

Drilling contractors and exploration crews are now on site to allow commencement of an initial 2,000 metre diamond drilling program, which has been designed to test features associated with a regionally significant conductor deemed favorable to host shallow, high grade uranium mineralisation. This initial proposed program will consist of eight drill holes, with proposed depths up to 250 metres.

Basin's Managing Director, Pete Moorhouse, commented:

"Basin has prioritised three prospect areas within the Geikie Project to focus this initial program on, each of which have the fundamental ingredients to potentially host a world class uranium deposit.

The commencement of the summer drilling program comes at the same time as a significant upturn in uranium prices, with recently reported uranium spot prices now nearing a 10-year high.

Basin provides an investment opportunity in a company focused on the discovery of high grade uranium in a world class jurisdiction. We are fully funded allowing us to systematically develop and test our projects, remaining highly leveraged to exploration success."

Drilling Scope

A 2,000 metre diamond drilling program, proposed to consist of eight drill holes has commenced at Geikie. This is 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.

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[1]. 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 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 will target three prospects along this 15-kilometre trend. These prospects are Preston Creek, Hourglass Lake and Aero Lake (Figure 1), and have been 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.

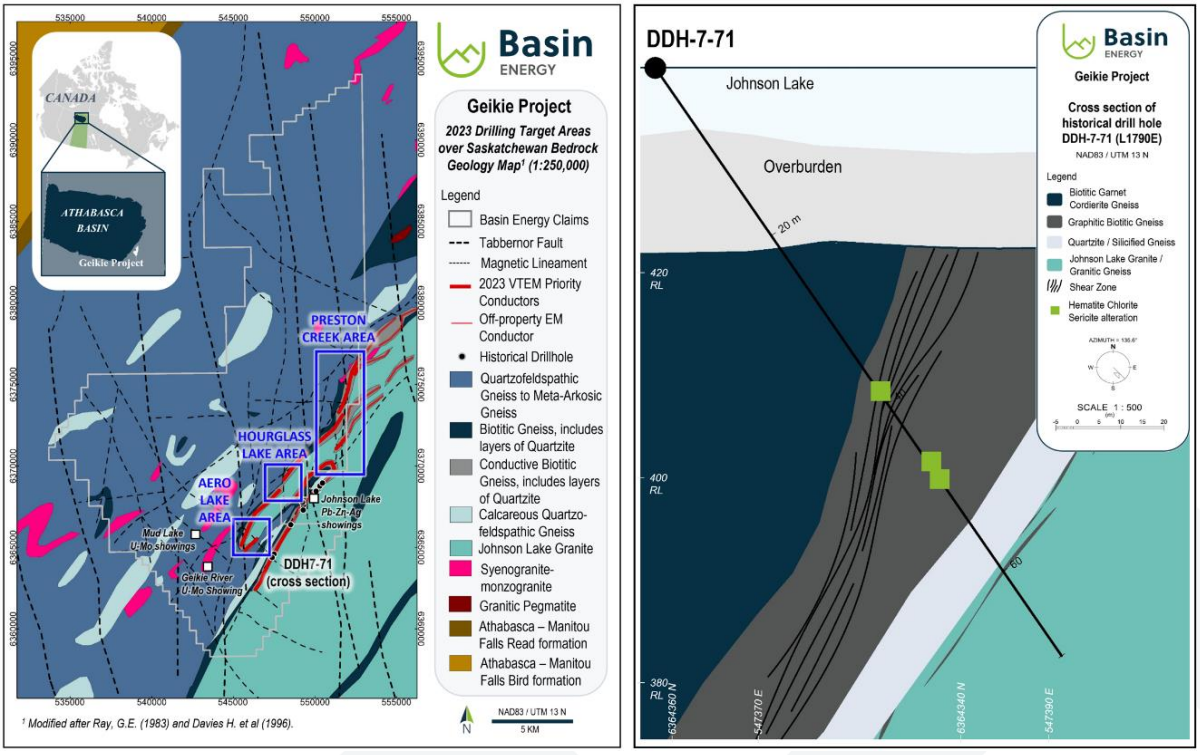


Figure 1 (left): *Geikie Project showing 2023 summer drilling prospects.*
Figure 2 (right): *Historic drilling showing targeted lithological package.*

[1] *Refer to ASX release dated 22 March 2023*

Preston Creek – 5 proposed drill holes

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 have been proposed for first pass testing of this prospect.

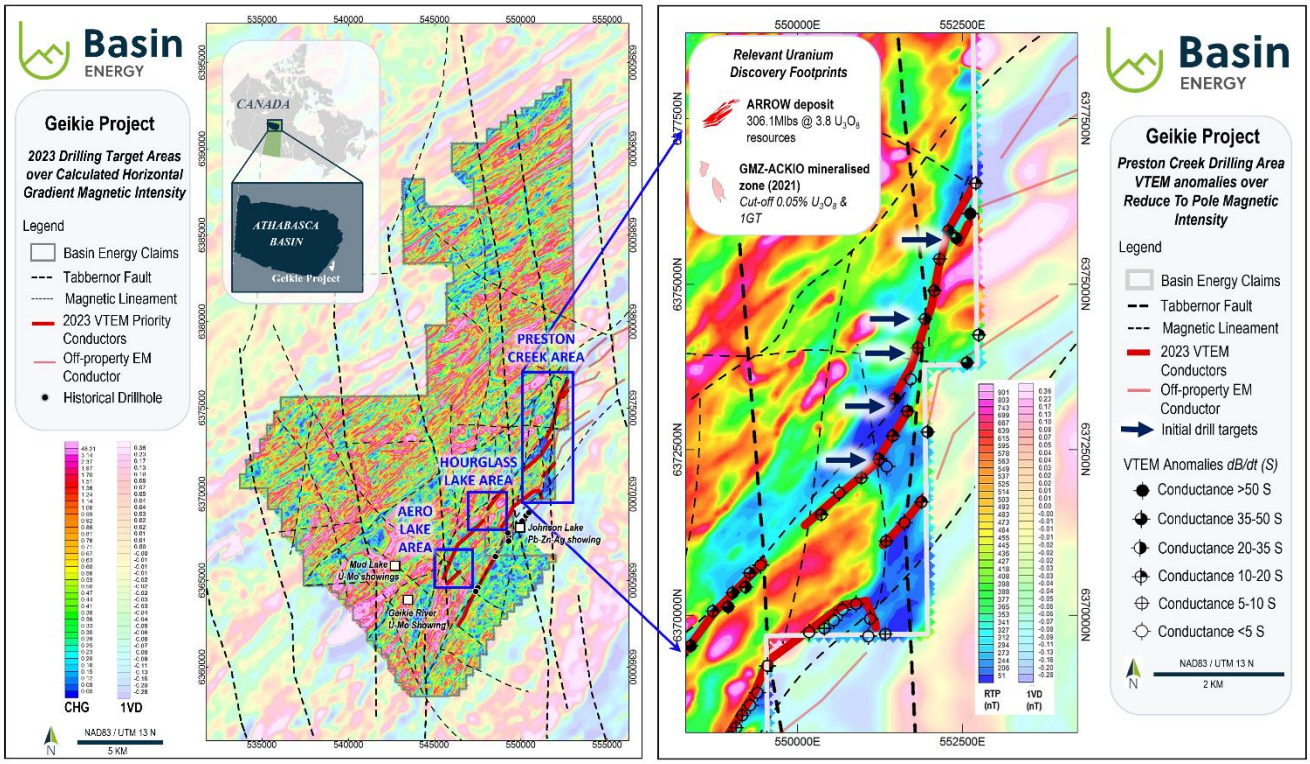


***Figure 3 (left)**: 2023 Geikie Summer Drilling over areas on high resolution magnetics.*
***Figure 4 (right)**[2]: Preston Creek Prospect proposed 2023 drilling to scale with discovery footprints of the Arrow Uranium Deposit and the GMZ-ACKIO mineralised zone.*

[2] *Refer to ASX Prospectus dated 22 August 2022 for resource and mineralisation figures*

Hourglass Lake and Aero Lake – 3 proposed drill holes

The Hourglass Lake prospect is located midway along the 15 kilometre prospective zone. Drilling has been 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 (Figure 1).

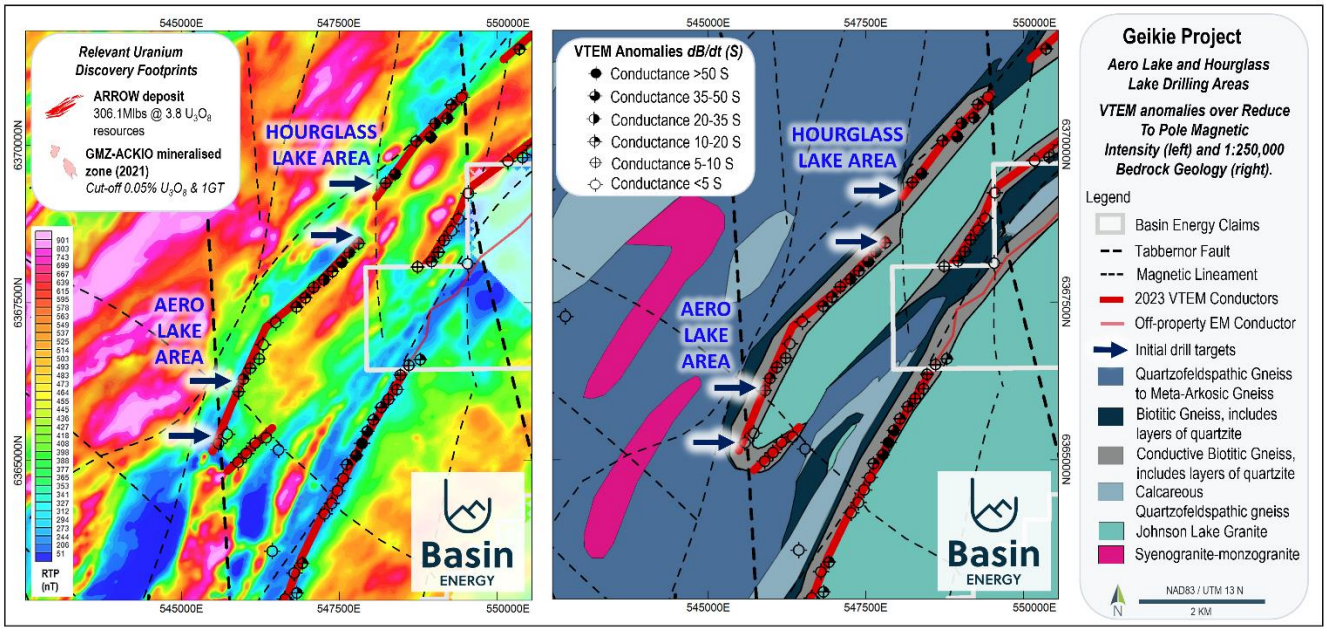


Figure 5 (left)[3]*: Hourglass Lake and Aero Lake prospects showing 2023 proposed drilling over high resolution magnetics.*
Figure 6 (right)*: Hourglass Lake and Aero Lake prospects showing 2023 proposed drilling over geology interpretation.*

[3] *Refer to ASX Prospectus dated 22 August 2022 for resource and mineralisation figures*

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 three kilometre 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[4] contained in northeast-trending fractures associated with up to 10% pyrite, pyrrhotite, chalcopyrite, and arsenopyrite in quartz-rich meta-arkose; 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[4].

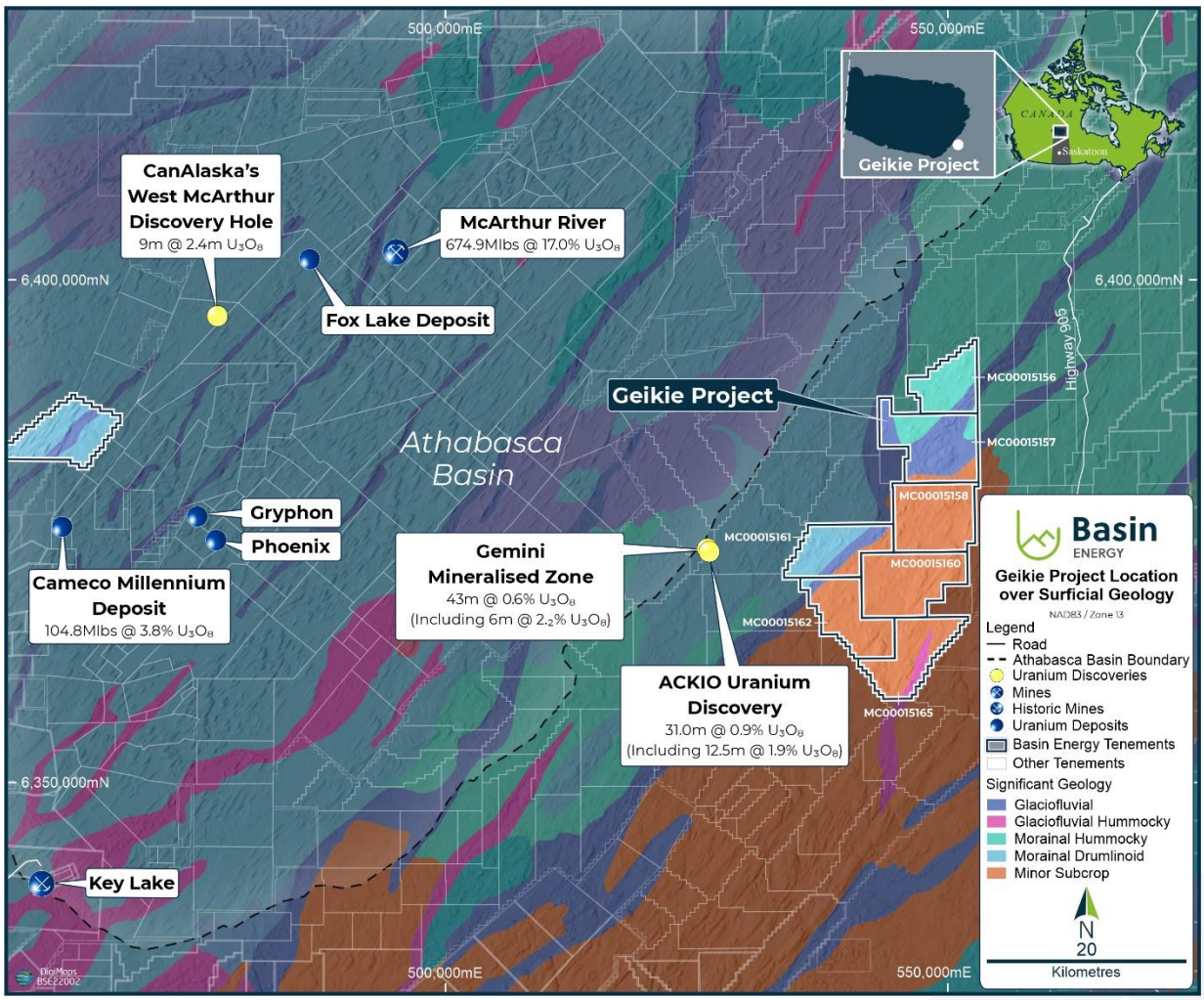


***Figure 7[4]**: Geikie Project in relation to nearby significant uranium occurrences.*

[4] *Refer to ASX Prospectus dated 22 August 2022 for quoted results and referenced resource figures*

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

Pete Moorhouse
Managing Director
pete.m@basinenergy.com.au
+61 7 3667 7449

Chloe Hayes
Investor & Media Relations
chloe@janemorganmanagement.com.au
+61 458 619 317

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**

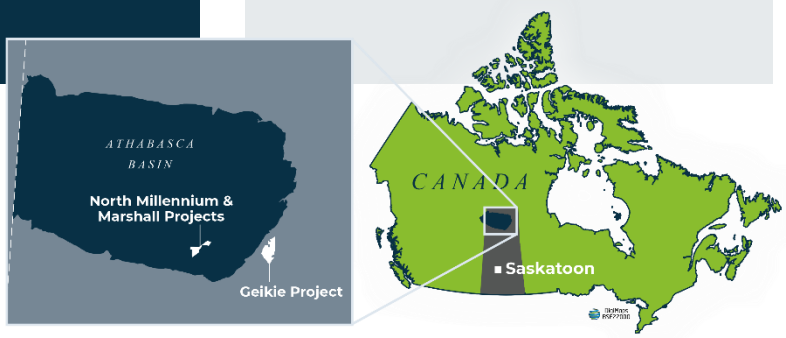
Basin Energy
ACN 655 515 110

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

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.