

# AIRBORNE GRAVITY SURVEY COMMENCES AT GEIKIE URANIUM PROJECT

## Key Highlights

- Falcon Airborne Gravity survey has been designed to follow up on recent drilling success, and support further target generation and refinement at Geikie
- Alteration patterns observed in drilling support airborne gravity as the optimum survey tool for the next phase of exploration; this technique has mapped similar basement-hosted uranium alteration systems within the Athabasca Basin
- Maiden drilling assays, gravity survey results and interpretation expected in mid-September
- Basin remains fully funded to complete follow-up work at Geikie with \$5.2M in cash reserves as at 30 June 2023

Basin Energy Limited (ASX:BSN) ('Basin' or the 'Company') is pleased to advise that it has commenced a detailed fixed-wing Falcon Airborne Gravity Gradiometer (AGG) survey at its Geikie Uranium Project ('Geikie' or the 'Project'), located on the eastern margin of the world-class Athabasca Basin in Canada.

The purpose of the AGG survey is aimed to target areas of enhanced basement alteration associated with previously interpreted and drill defined structural corridors. The exploration potential of the current targets and broader project area is highlighted through the styles and significance of alteration observed in drilling at the Preston Creek and Aero Lake Prospects<sup>1</sup>. Specifically, the AGG survey is designed to identify potential areas where alteration intensifies adjacent to these structures and is a demonstrated successful technique in identifying uranium alteration systems in the Athabasca Basin. The survey will be completed by Xcalibur Multiphysics Group and will consist of 1,838-line kilometres on 200 metre line spacing, refer Figure 1.

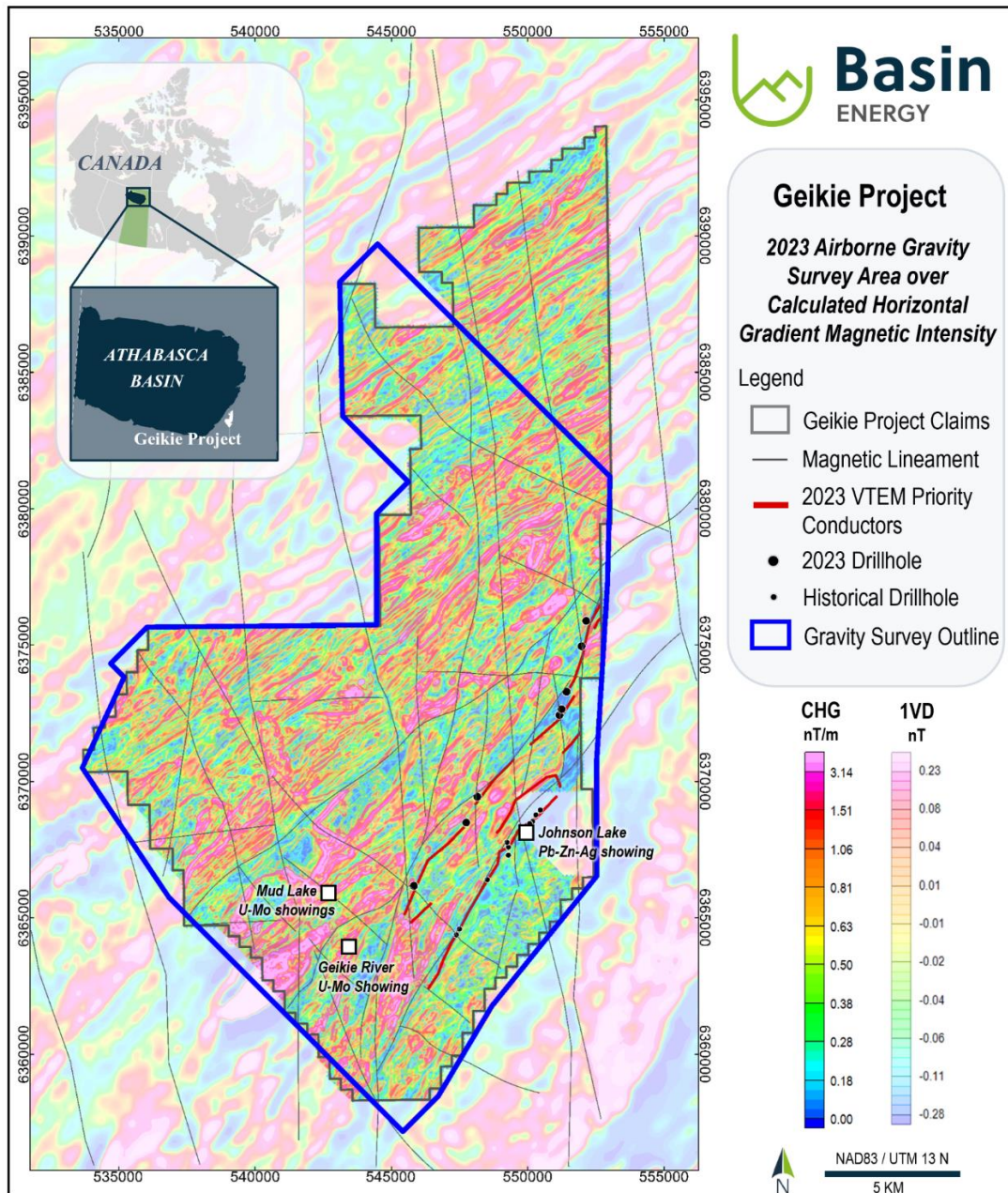
**Basin's Managing Director, Pete Moorhouse, commented:**

*"The first phase of drilling at Geikie identified a series of radiometric anomalies and has delineated significant alteration associated with regional structures – key ingredients for exploring Athabasca basement-hosted high-grade uranium."*

*The Geikie Project is a geographically large area within an emerging uranium district, results from airborne gravity, coupled with the exciting results from our recent drill program, will allow the rapid and cost-effective assessment of the Project over a broader scale."*

<sup>1</sup> Refer ASX release dated 10 August 2023





**Figure 1: August 2023 Gravity Survey Outline.**

The Company recently announced results from the 2023 maiden Geikie drill program<sup>2</sup>, refer Figure 2. The drill program was focused on a 15-kilometre-long conductive structural corridor with three main target areas. Results from the program confirmed the presence of hydrothermal alteration systems hosted within a complex structural framework at Geikie which is important in the formation of basement-hosted high-grade uranium deposits. Drillholes intersected graphitic host rocks, showing evidence of multiple post-Athabasca structural reactivation events along north-south and northwest trending faults, hydrothermal alteration, and elevated radioactivity.

<sup>2</sup> Refer ASX release dated 10 August 2023

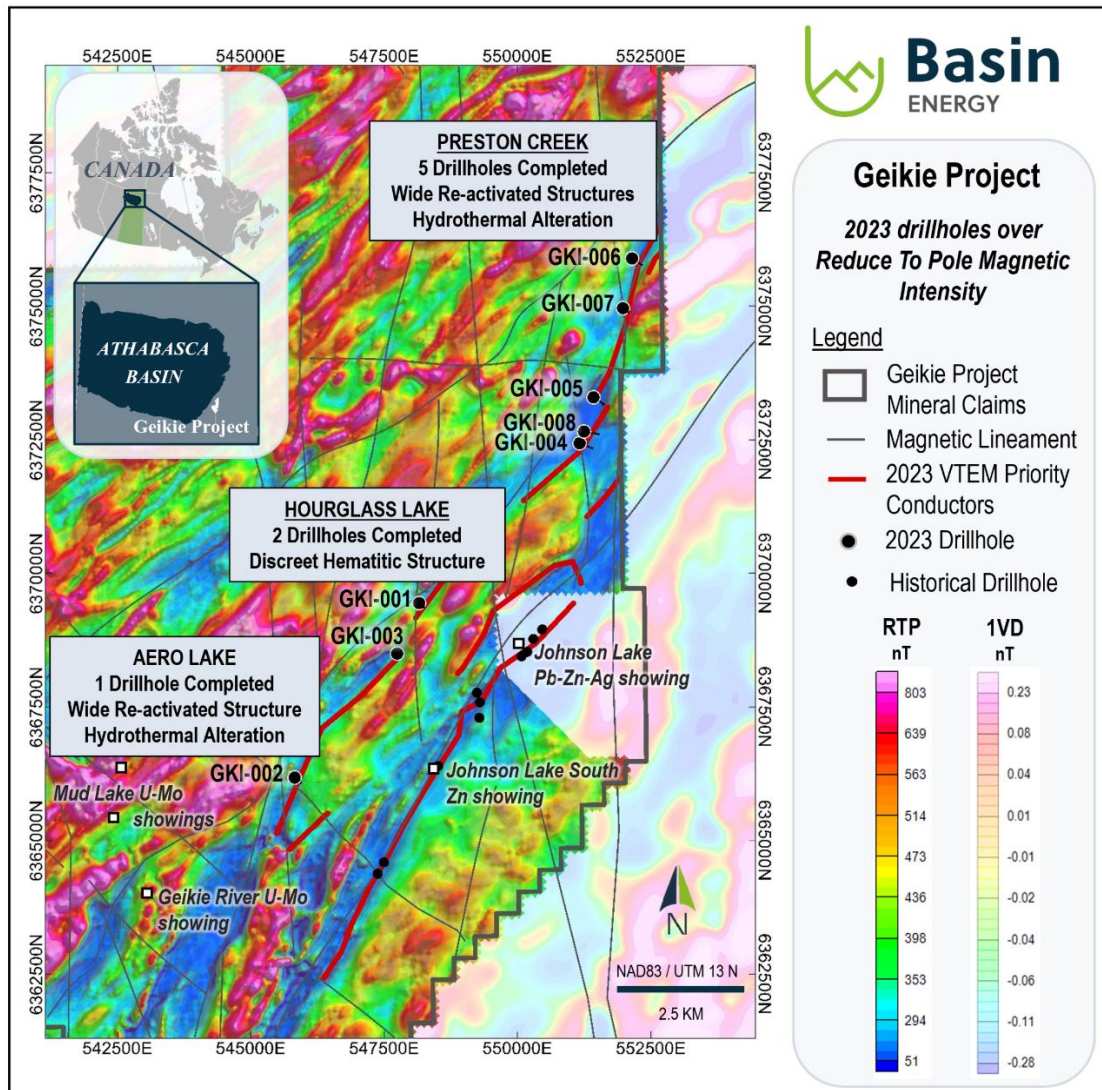


Figure 2: 2023 Maiden drilling recently completed at Geikie.

Early results from the Preston Creek and Aero target areas, specifically the hydrothermal alteration associated with structures, suggest that AGG surveying is an optimal geophysical tool to refine future drill targets. The AGG survey is designed to identify potential target areas where basement alteration intensifies adjacent to and within drill confirmed and regional interpreted structures. AGG surveys are focused on identifying gravity lows which are interpreted to be caused by hydrothermal fluids altering basement rocks to clay. The survey method is a proven effective tool in the exploration for basement-hosted high-grade uranium deposits in the Athabasca Basin, specifically in areas where no Athabasca sandstone cover is present. Gravity surveys have been successfully used 10 kilometres west of the Geikie Project on the 92 Energy (ASX: 92E) GMZ discovery and the Baselode Energy Corporation (TSXV: FIND) ACKIO discovery (Figure 3), which is associated with a well-defined gravity low anomaly.

Once completed, the AGG survey results will be combined with the structural knowledge gained from the recent drilling, along with the high-resolution airborne geophysical data sets previously collected, including electromagnetics, radiometric, and magnetic to validate existing targets and generate additional targets for future drill programs.

The Geikie Project is currently being sole-funded by Basin under an option earn-in agreement with CanAlaska Uranium Limited (TSX:CVV) whereby Basin has the right to earn up to an 80% interest in three defined earn-in stages on the Project<sup>3</sup>.

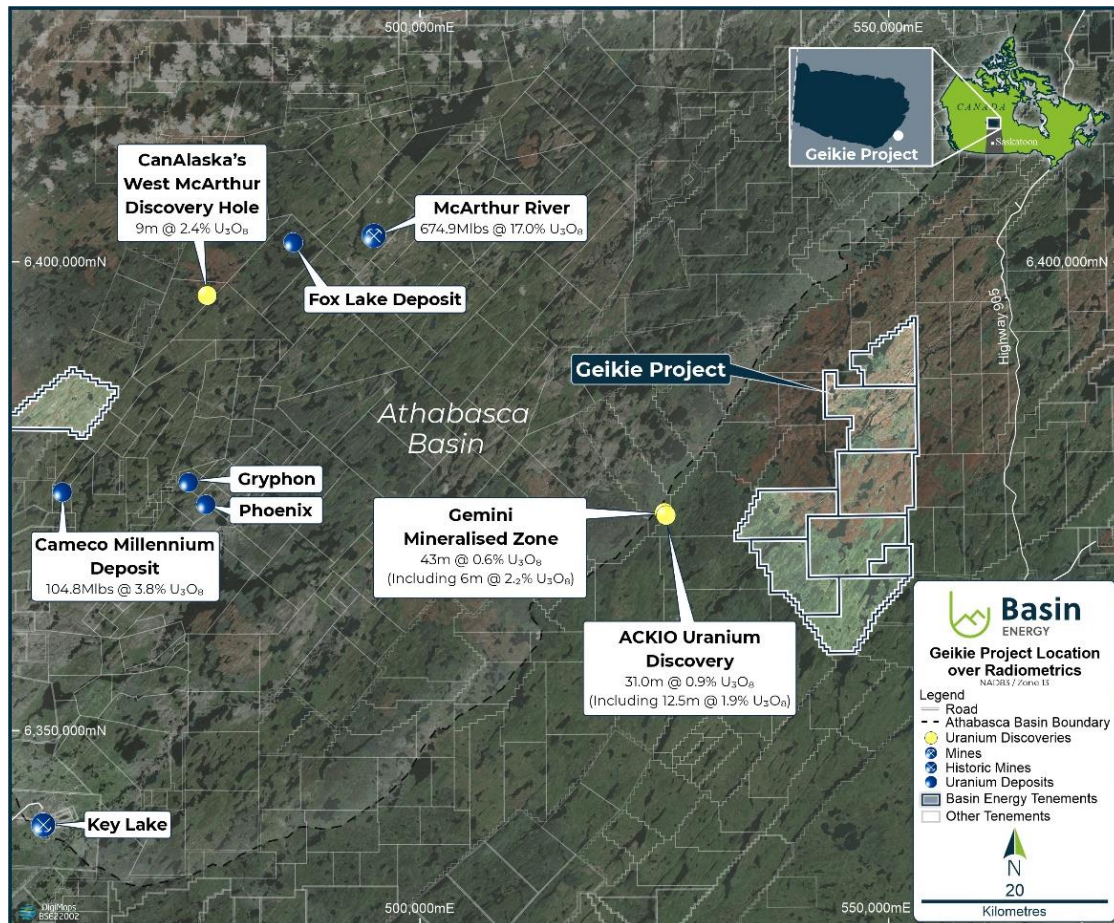


Figure 3<sup>4</sup>: Location of Geikie uranium project.

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

## Enquiries

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<sup>3</sup> Refer ASX Prospectus dated 22 August 2022

<sup>4</sup> Refer ASX Prospectus dated 22 August 2022

## 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

<b>Pete Moorhouse</b>	<b>Managing Director</b>
<b>Blake Steele</b>	<b>Non-executive Chairman</b>
<b>Cory Belyk</b>	<b>Non-executive Director</b>
<b>Jeremy Clark</b>	<b>Non-executive Director</b>
<b>Peter Bird</b>	<b>Non-executive Director</b>
<b>Ben Donovan</b>	<b>NED &amp; Company Secretary</b>
<b>Odile Maufrais</b>	<b>Exploration Manager</b>

### 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 2<sup>nd</sup> in Fraser Institute 2021 global mining investment attractiveness index

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## Appendix 1

### 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 22<sup>nd</sup> August 2022 and announced on the ASX market platform on 30<sup>th</sup> 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 Mining and Metallurgy. 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.

