Basin ENERGY

For personal use only

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 MARCH 2023

Key Highlights

- **Successful completion of Airborne Electromagnetic survey at the Geikie Uranium Project**
  - **Significant conductor demonstrating splays and offsets identified**
- **Historical Geikie data review provides confidence in the geological setting for the suitability of high-grade uranium mineralisation**
- **Work completed by Basin to date has identified multiple shallow targets ready for drill testing at Geikie**
- **Continued engagement and consultation with First Nations and stakeholder groups**
- **Strong cash balance of $7.3M ensures Basin is fully funded for an aggressive 2023 exploration campaign, including maiden diamond drilling programs**

Basin Energy Ltd (**ASX:BSN**) ('**Basin**', or the '**Company**') is pleased to provide the quarterly report for the period ending 31 March 2023 ("**Quarter**", "**Reporting Period**") to accompany the Appendix 5B.

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

Airborne Electromagnetic Survey at Geikie[1],[2],[3],[4]

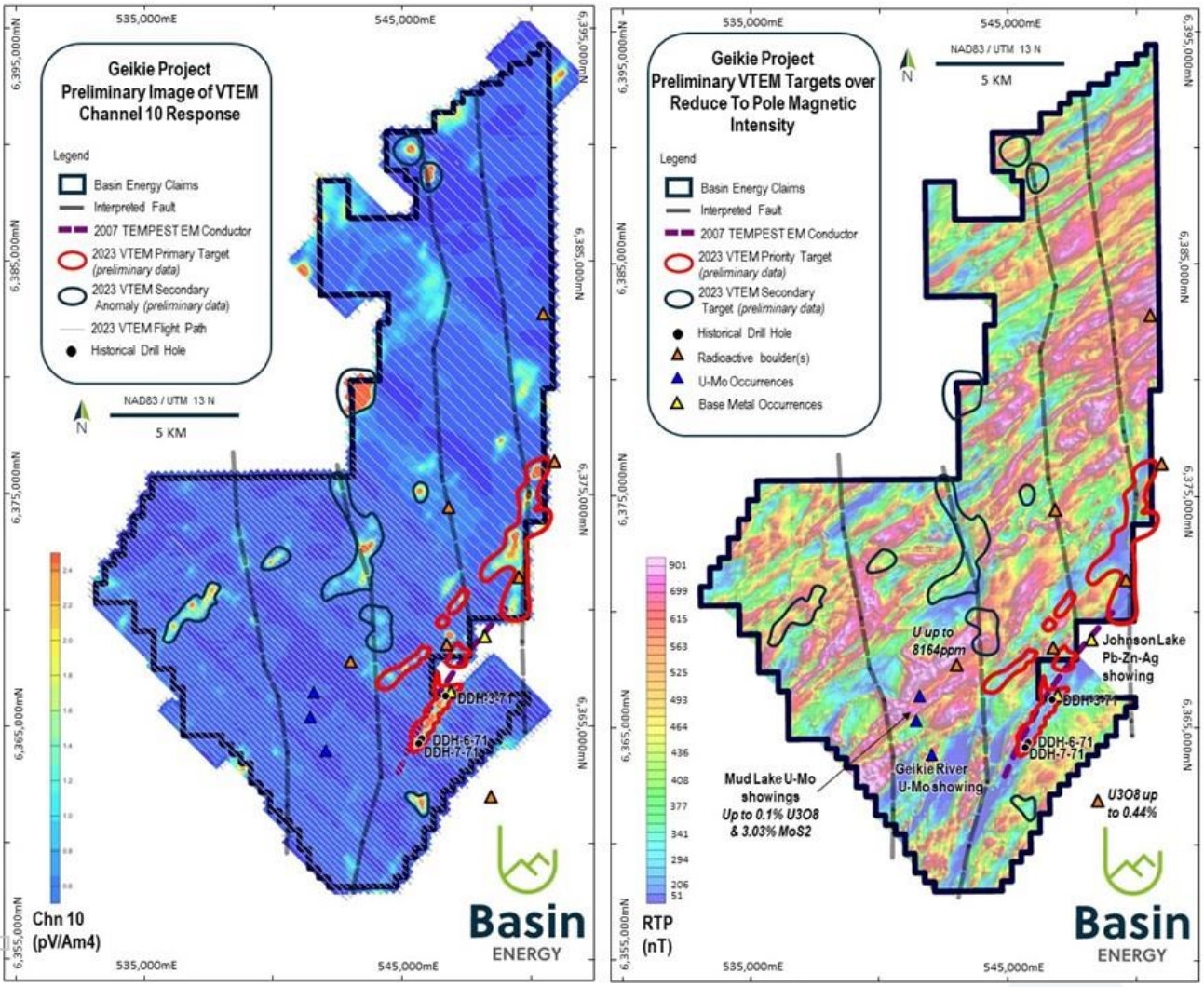
Basin commissioned the airborne electromagnetic ('**AEM**') survey in Q4 2022. A helicopter-borne Versatile Time-Domain Electromagnetic ('**VTEM**') survey method was selected as most appropriate to achieve the survey objectives.

Geotech Ltd were engaged to conduct the survey, which covered the entire project area, at a combination of 400 m line spacing in the northern part of the property and 200 m line spacing in the

[1] *Refer Basin Energy ASX release dated 14/10/2022 "Maiden Geophysical Survey".*
[2] *Refer Basin Energy ASX release dated 14/12/2022 "Airborne EM Commences at Geikie".*
[3] *Refer Basin Energy ASX release dated 08/03/2023 "Geophysical Targets Identified at Geikie".*
[4] *Refer Basin Energy ASX release dated 22/03/2023 "Airborne Electromagnetic Survey Completed at Geikie".*

south. A total of 1,399-line kilometres of data was acquired. Final survey specifications are outlined in ASX release dated 22 March 2023.

Upon receipt of preliminary data, a series of anomalies were categorised into primary and secondary targets, with the next steps for primary targets being the modelling of final AEM data followed by drill testing. The secondary anomalies are potentially significant considering the correlation with regional faults, however further assessment will be conducted as modelling of final data is completed.



***Figures 1 and 2**: Locations of AEM primary and secondary targets over (left) Channel 10 VTEM data and (right) 2022 magnetic data. Note: potential AEM target zones are based on preliminary data. Final levelled data is yet to be received.*

A strong coherent northeast trending conductor, classified as a primary target, striking through the southern half of the Project is clearly defined. 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').**

For personal use only

Furthermore, a series of AEM anomalies have been identified associated with 3 of the prominent regional north south Tabbernor faults, delineated in the airborne magnetic and radiometric survey completed in 2022.

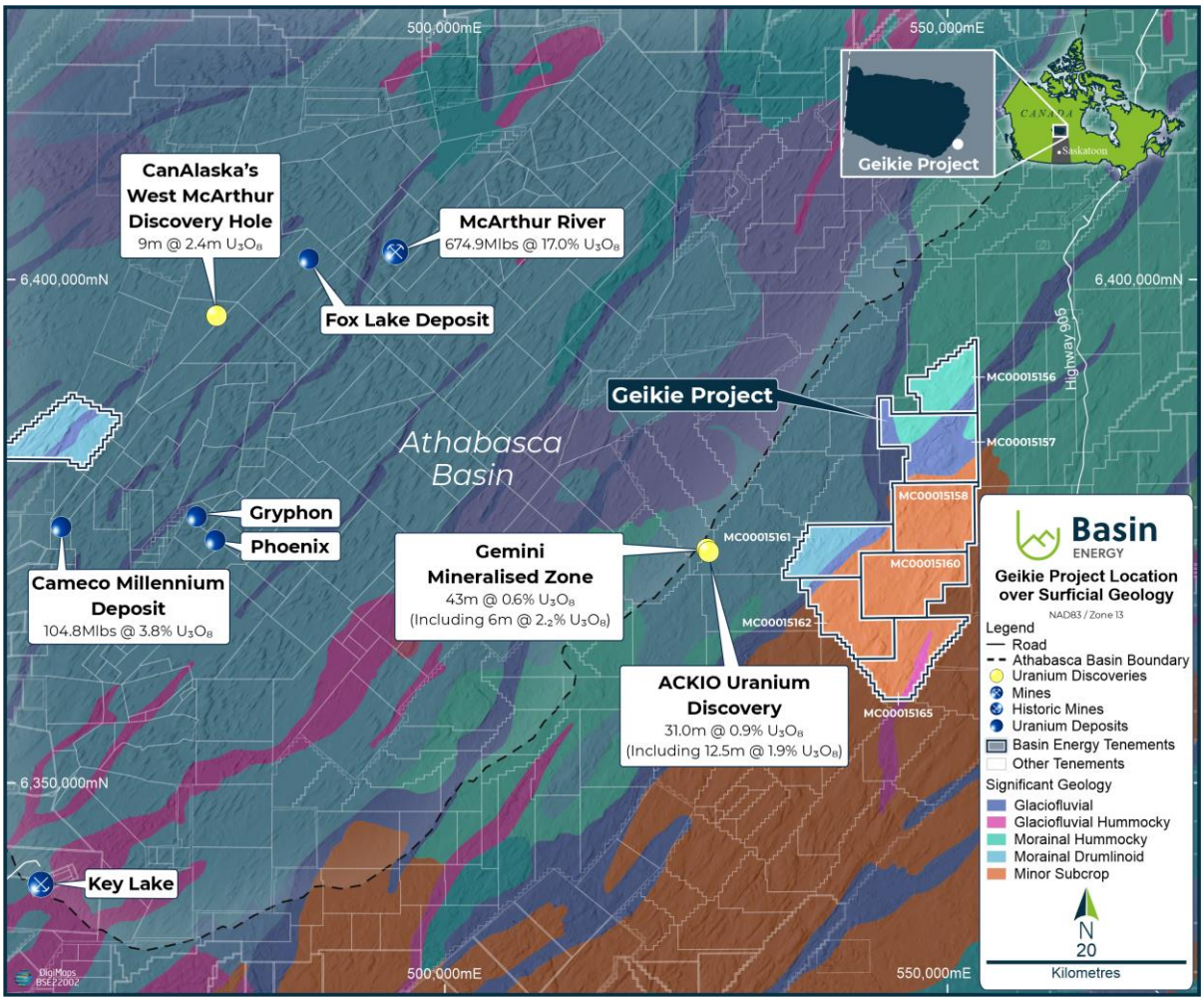


Figure 2[5]*: Geikie Project in relation to nearby significant uranium occurrences*

Historical Data Review[6]

During the Quarter, Basin has been collating and reviewing historic records both within, proximal and along strike of existing project areas.

Information sourced and reviewed as part of this analysis included the significant historical data set held by the Saskatchewan Ministry of Energy and Resources, along with data available through Basin's joint venture partner CanAlaska. Over 200 documents are being reviewed, collated and georeferenced proximal to the Geikie project alone. This information has never been systematically reviewed at this scale, as part of the continued effort in enhancing the exploration potential within Geikie. The review provides invaluable information to be used in conjunction with the advanced high-resolution geophysical

5 Refer to ASX Prospectus dated 22/08/2022 for quoted mineralisation
6 Refer Basin Energy ASX release dated 08/03/2023 "Geophysical targets Identified at Geikie"

For personal use only

surveys being undertaken by Basin. Based on this review it is evident that the Geikie Project has been largely overlooked for uranium exploration since the initial phase of work which concluded in the early 1980's.

Logs and data were recovered for 3 drill holes that reached bedrock within the Geikie Project which were previously not available to Basin. The drilling was conducted in 1971 and is the only drilling recorded at Geikie to date. Critically, factual geological information can be used to provide known data points for interpreting and extrapolating the new geophysical datasets.

Historical geological logging of this drilling highlights strong similarities to nearby mineralised zones, including the correct lithological package, consisting of:

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

Drill logs from hole DDH-7-71 within the property reported the above lithological package with the addition of a 4-meter-wide graphitic shear zone in Wollaston group metasediments. Zones of hematite-chlorite-sericite alteration were reported within and at the fault footwall leading up to the quartzite interval. Figure 3 shows a cross section of drill hole DDH-7-71. 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 0.14% U_3O_8 [7] suggesting uranium is present in the local mineralising system. Basin notes that this is historical drilling data and is publicly available through the GeoAtlas website, hosted by the Government of Saskatchewan.

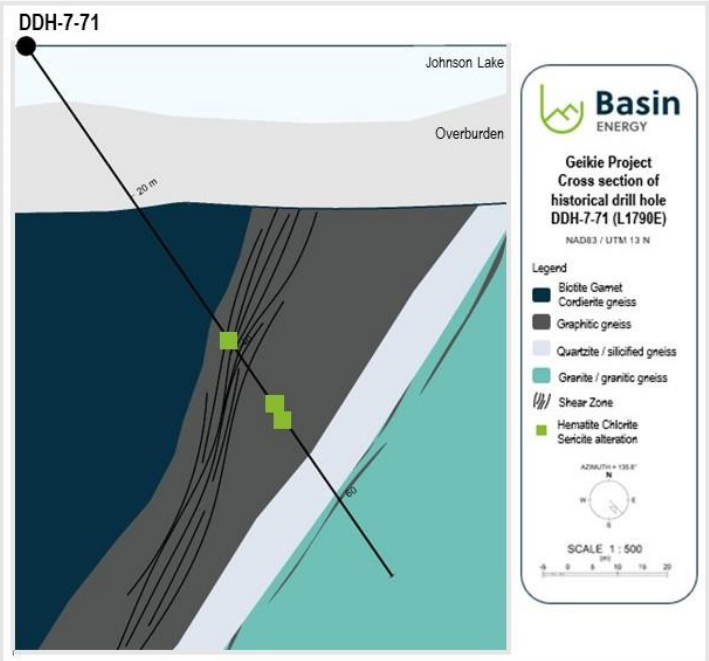


Figure 3: *Cross Section of target geology as identified in historical drill hole DDH-7-71*

[7] *Refer to ASX Prospectus dated 22/08/2022*

For personal use only

For personal use only

Based on recent and historic discoveries neighbouring the Geikie Project (including 92 Energy's Gemini Mineralised zone and Baseload Energy's ACKIO), this lithological package is considered to be a prime host for uranium mineralisation. Basin interprets that the post processed AEM will allow mapping of this lithological sequence and where it intercepts the potentially uranium bearing regional structures, which are well mapped in the magnetics.

North Millennium & Marshall Project Updates[8]

Whilst field work for the reporting period focused on Geikie, Basin continues its exploration strategy to advance its North Millennium and Marshall Uranium Projects through initial community and stakeholder engagement, along with data collation and target refinement.

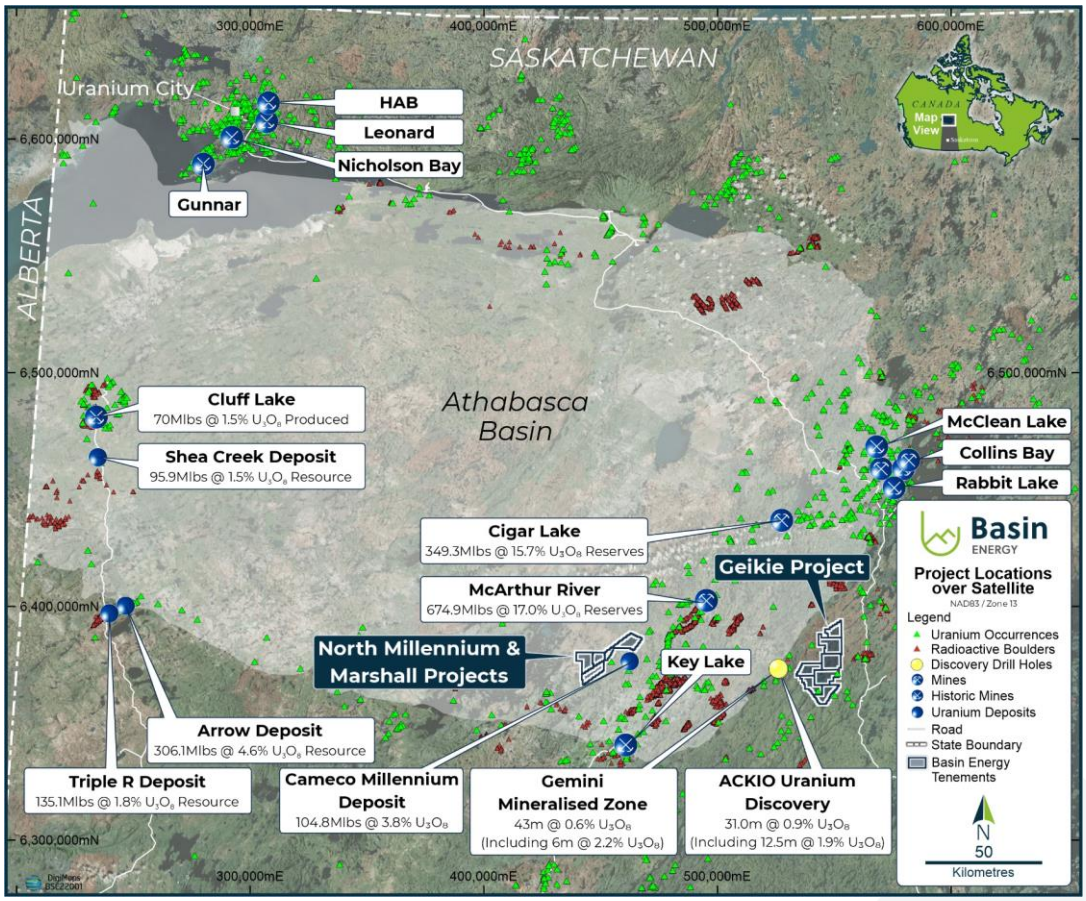


Figure 4[8]*: Project locations in relation to the Athabasca Basin*

The North Millennium Project is located 7km north of Cameco Corporation's Millennium uranium deposit. Basin's exploration is focused on the interpreted extension of the Millennium Mother fault. Whilst no drilling data is known to exist within the North Millennium Project area, the review of historic

[8] *Refer to ASX Prospectus dated 22/08/2022 for quoted mineralisation and background information.*

Z tipper axis electromagnetic **('ZTEM'),** VTEM and MEGATEM data which partially cover the project area, as well as lake sediment and sandstone geochemistry, is underway and expected for completion in 1H 2023.

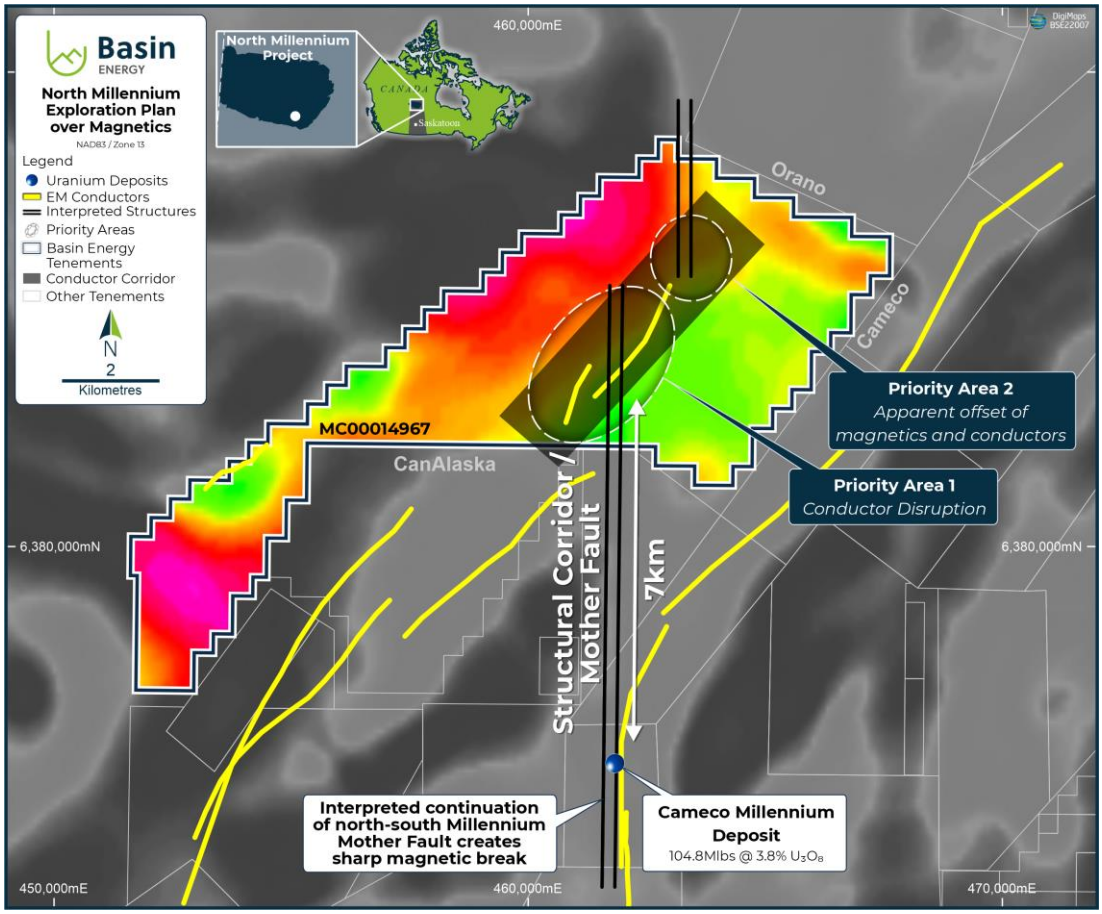


Figure 5 – Priority targets at the North Millennium project in relation to the Millennium uranium deposit

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. Whilst no drilling data is known to exist within the Marshall Project area, the review of historic ZTEM and VTEM data which partially cover the Project area, as well as lake sediment and sandstone geochemistry is underway and expected for completion in 1H 2023.

For personal use only

For personal use only

Corporate

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

- As of 31 March 2023, the Company held A$7.304 million in cash. Full details of the Company's cash movements during the Quarter are detailed in the attached Appendix 5B. The Company confirms that the use of funds is in line with prospectus disclosures.

- As per ASX Listing Rule 5.3.1, incurred exploration expenditures were primarily related to technical studies at the Geikie and North Millennium Projects. Exploration expenditures incurred during the period is reported at A$99,674

- 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$145,000 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 31 March 2023 against the estimated expenditure in the 'use of funds' statement. The Company considers that there are no material variances with the use of funds table in the Prospectus and the expenditure of funds to date other than the use of consultants to complete technical work on both Projects. Most funds continue to be spent on exploration:

Use of Funds	Per IPO Prospectus - 2-year period	Total to date - 31 March 2023
Direct Exploration Costs	$7,176,321	$998,674
Working Capital	$1,489,960	$642,153
Costs of the IPO	$958,367	$834,995
TOTAL	$9,624,648	$2,475,821

Table 1 – Use of funds

For personal use only

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] October 1st, 2022	Basin Ownership[1] December 31st, 2022	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*
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 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 22 April 2022.

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

For personal use only

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

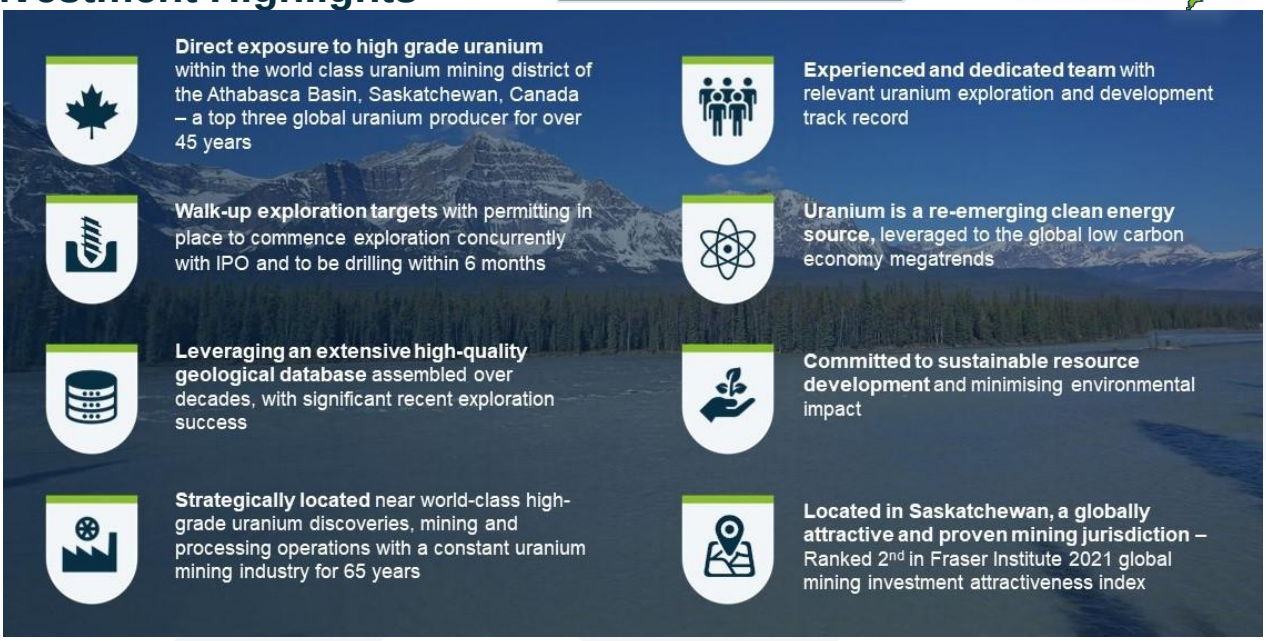
Projects
North Millennium
Geikie
Marshall

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.

For personal use only