

## AIRBORNE EM SURVEY COMMENCES AT GEIKIE

### Key Highlights

- Airborne electromagnetic specialist Geotech Ltd have commenced surveying at the Geikie Project
- The survey is designed to advance the recently identified high-priority uranium exploration targets<sup>1</sup>
- Initial ground reconnaissance sampling completed confirms the presence of primary uranium rich source granites with grab samples returning up to 2,300 ppmU<sub>3</sub>O<sub>8</sub>, adjacent to favourable host lithologies for basement style mineralisation
- Results are seen as highly encouraging and continues to support the fast tracking of Basin's maiden drilling program to commence Q1 2023
- Basin Energy is well funded for the 2023 exploration campaign

Basin Energy Limited (ASX:BSN) ('Basin', or 'the Company') is pleased to provide an update on the exploration progress at its Geikie Project ('Geikie', or 'the Project'), located on the eastern margin of the Athabasca Basin. Mobilisation of an airborne electromagnetic survey ('AEM', or 'the Survey') has now commenced, with final results due in Q1 2023.

Additionally, Basin's maiden field reconnaissance and sampling program that was completed before the onset of the winter season successfully confirmed initial geological interpretations of the project area along with identifying the presence of uranium and critical pathfinder elements consistent with the Company's exploration model. These initial field works, along with the two high resolution geophysical surveys will provide Basin with the tools required to target our maiden drill program planned to commence in Q1 2023.

### Basin Energy's Managing Director, Pete Moorhouse, commented:

*"We are excited to be able to commence the AEM survey, which is the critical next step in exploring the outstanding opportunity being presented at Geikie. This will be the second significant airborne geophysical dataset to be acquired by Basin since IPO in October 2022.*

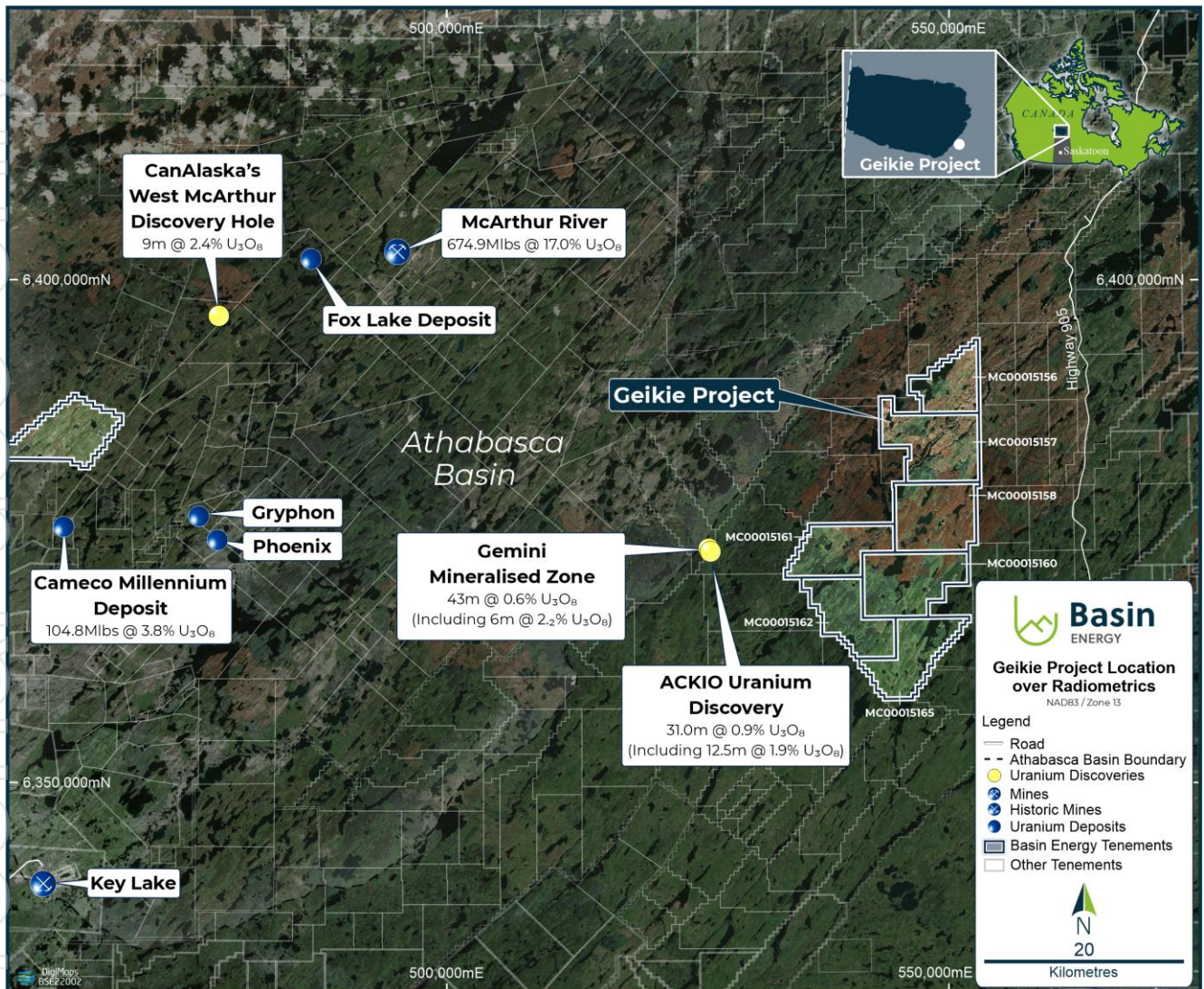
*We are also pleased with the results of our initial reconnaissance program, which confirmed the suitable uranium mineralisation geological characteristics of the GK1 and GK2 targets. The initial reconnaissance, that was completed prior to the onset of winter has enhanced the geological understanding and provided confidence in the exploration rationale for the Geikie project.*

*Geikie demonstrates multiple classic characteristics of high-grade uranium deposits of the Athabasca Basin including the right lithological and structural setting, and historical geochemistry with anomalous surface uranium and pathfinders. Coupled with the extremely shallow target depths of less than 200 metres, the credentials of Geikie as an outstanding exploration opportunity continue to grow.*

*We look forward to being able to provide the market with results from this next pivotal survey in early 2023."*

<sup>1</sup> Refer Basin Energy ASX announcement 14/10/2022





**Figure 1: Location of the Geikie Project in relation to key uranium occurrences<sup>2,3,4,5</sup>**

## VTEM Plus Survey Commenced

Initial exploration conducted by Basin at Geikie consisted of the acquisition of high resolution airborne radiometric and magnetic survey data. This data, in conjunction with limited historic prospecting information identified four additional high priority target areas to the original six targets detailed in the Basin IPO prospectus, that are deemed highly prospective for uranium mineralisation. The data also identified two previously unrecognised structural corridors, further enhancing the prospectivity of the Project area. The recommendations following this initial phase of work was to conduct a high resolution airborne electromagnetic survey (AEM) along with initial reconnaissance groundwork to identify lithological setting before drill testing in 2023.

<sup>2</sup> Refer to ASX Prospectus dated 22 August 2022

<sup>3</sup> Refer 92Energy ASX announcement, 25/08/2022

<sup>4</sup> Refer Baselode Energy TSX announcement, 20/09/2022

<sup>5</sup> Refer CanAlaska TSX announcement, 22/08/2022



This AEM survey has now commenced at Geikie, designed to identify basement conductors, lithological variations and refine structural understanding of the area. The data is seen as a critical next step prior to finalising targets for the Q1 2023 drilling program. A helicopter-borne Versatile Time-Domain Electromagnetic ('VTEM') survey method was selected as most appropriate to achieve the survey objectives. The VTEM system is proven in this style of exploration for uranium within the Athabasca Basin and is excellent for locating discrete conductive anomalies as well as mapping lateral and vertical variations in resistivity.

Industry leaders Geotech Ltd have been engaged to conduct the survey, with the survey expected to take around 2 weeks. Final data will likely be available in early Q1 2023. The survey will cover 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 south.

## Ground Truthing and Sampling

On ground follow-up reconnaissance mapping and sampling high priority targets delineated after the summer airborne survey was completed during the fall. Lithological and/or structural data was collected from 73 locations over 9 days along with outcrop and float samples. The prospecting group carried scintillometers or spectrometers, collecting spatial survey data in order to help identify elevated uranium levels throughout the Geikie property. 39 rock chip grab samples were collected on a non-systematic, opportunistic basis from outcrops and float. Samples were sent for multielement geochemistry at an internationally accredited laboratory, full details of which are provided in appendix 1. The majority of these samples were taken from the GK1 and GK2 prospects, with 16 samples taken at GK1 and 18 samples collected at GK2.



### **GK1**

The GK1 prospect area is a large cluster of radiometric anomalies within a 9km by 3km area with a north-easterly trend, located in the northern quarter of the license package. A historic electromagnetic survey exists for the western portion of the identified target which appears to show a strong conductor running parallel with the anomalous cluster. Two significant northerly trending Tabbernor fault corridor intersects this target area.

Prospecting results confirmed favourable potential source geological conditions being the presence of uranium rich granites and pegmatites, with uranium partial values up to 268 ppm  $U_3O_8$  located adjacent to metasedimentary rocks suitable for hosting mineralisation. Within these metasedimentary units, reconnaissance rock chip samples show elevated pathfinders element concentrations locally (Ni, V, Zn, Co) as well as localised enrichments in REE. A weakly foliated radioactive psammite outcrop returned slightly elevated  $U_3O_8$  (39 ppm), molybdenum (47 ppm) and strongly anomalous lead isotope ratios ( $^{207}Pb/^{206}Pb=0.14$ ).

Additionally, a strong correlation between metasediment outcrops and magnetic low anomalies from the initial airborne magnetics survey provide a high level of confidence both in the data obtained from the earlier magnetics survey, and the regional perspective interpretations of the project area.

### **GK2 – Mud Lake**

The GK2 prospect area is one of the few localities on the license with historical prospecting information, with grab samples recorded up to 2,250 ppm  $U_3O_8$  and 1,800ppm  $U_3O_8$ ,<sup>6</sup> within mapped Wollaston calcsilicate rocks. The radiometric data showed a north-easterly trend of anomalies being crosscut by two regional north north-westerly trending Tabbernor faults, that appear coincident with the historic anomalous rock chips.

These works are highly encouraging given the prospect area is located approximately 10km along strike from drilling completed by Baselode Energy Corp (FIND:TSXV) that identified basement hosted mineralisation at Beckett in first pass drilling, and within a fertile corridor of biotite gneiss which hosts the high grade (58.0%  $U_3O_8$ ) Agip-S uranium prospect<sup>7</sup>.

The reconnaissance prospecting results confirmed the presence of metasediment rocks including calcsilicates with rock samples demonstrating localised elevated select pathfinder elements such as Co, Cu, Ba, Ni and V. One sample collected from a radioactive fractured zone in a psammitic outcrop returned  $U_3O_8$  value of 140.3 ppm, molybdenum value of 2,500 ppm and strongly anomalous lead isotope ratios ( $^{207}Pb/^{206}Pb=0.12$ ). This sample was collected in close vicinity of the Mud Lake showing. Additionally, a sample collected from a granitic outcrop located approximately 700 m to the north of the Mud Lake showing returned assays of 2,299.5 ppm  $U_3O_8$ .

<sup>6</sup> Refer to ASX Prospectus dated 22 August 2022

<sup>7</sup> Refer to ASX Prospectus dated 22 August 2022



### **GK3 and GK4**

GK3 has a discrete coherent radiometric anomaly, located at an interpreted structural confluence. Geology appears disrupted by a north-westerly trending structure that is coincident with the anomalous uranium grab samples from GK2 to the south.

The GK4 target is a strong coherent radiometric anomaly striking north-easterly and mapped as Wollaston calcsilicate rocks.

Reconnaissance prospecting at GK3 identified a large esker ridge with no anomalous radioactivity. The prospecting teams at GK4 identified granite and metasediment. Both prospects were commonly covered by boulder fields, likely masking the potential prospective lithologies.

## **Geikie Project Overview**

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%  $Cu^8$  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  $Ag^9$ .

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 including 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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<sup>8</sup> Refer to ASX Prospectus dated 22 August 2022

<sup>9</sup> Refer to ASX Prospectus dated 22 August 2022

## Next steps – Geikie

The Company is developing a systematic exploration strategy for Geikie, with the expected pathway and timeline as follows:

- On ground follow up reconnaissance mapping and sampling of the high priority targets – **Completed**
- Complete high resolution airborne electromagnetics, critical to the refinement of drill targets. **Commenced**
- Search, review and capture of any additional relevant historical data that has been completed in the Geikie region – **Ongoing**.
- Prospect scale gravity survey - Dependent **upon results of AEM, Proposed Q1 2023**
- Diamond drilling – **Proposed to commence Q1 2023**

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

### Enquiries

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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 14<sup>th</sup> October 2022 relating to results of the high resolution magnetic and radiometric. Additional information included within this release but not previously announced relates solely to the reconnaissance prospecting data and is based on and fairly represents 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.



## 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



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



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



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



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



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



**Committed to sustainable resource development** and minimising environmental impact



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

# 1 APPENDIX ONE – RECONNAISSANCE SAMPLING DETAILS

Location			ICP MS Partial Digestion											ICP MS Total Digestion									
Sample ID	Easting	Northing	As (ppm)	Co (ppm)	Cu (ppm)	Mo (ppm)	Ni (ppm)	PbSUM (ppm)	U (ppm)	U <sub>3</sub> O <sub>8</sub> (ppm)	V (ppm)	Zn (ppm)	Co (ppm)	Cu (ppm)	Mo (ppm)	Ni (ppm)	PbSUM (ppm)	U (ppm)	U <sub>3</sub> O <sub>8</sub> (ppm)	V (ppm)	Zn (ppm)		
CKGKR001	549064	6389079	11.80	13.10	9.67	47.30	6.38	31.40	33.10	39.03	16.70	3.40	15.70	11.50	53.40	8.30	33.40	34.60	40.80	22.50	4.00		
CKGKR002	548636	6389492	0.44	14.00	0.41	0.87	41.90	3.62	1.07	1.26	60.00	57.10	16.00	3.20	0.90	45.70	6.35	1.54	1.82	93.50	60.00		
CKGKR003	542589	6365221	0.88	1.90	0.32	0.47	5.90	1.53	0.83	0.98	9.90	7.70	2.96	2.00	0.51	8.90	3.26	1.72	2.03	27.90	10.00		
CKGKR004	542536	6365493	1.40	9.90	18.00	0.96	5.56	5.95	1.53	1.80	16.30	6.70	10.10	20.20	1.10	5.90	7.06	3.10	3.66	23.00	10.00		
CKGKR005	542440	6363927	2.39	4.08	0.58	0.41	9.28	1.71	1.60	1.89	16.20	12.90	12.20	2.80	0.51	26.30	3.62	3.70	4.36	71.20	23.00		
CKGKR006	542358	6363873	2.07	3.49	0.52	0.67	9.78	3.29	2.41	2.84	18.80	8.00	9.83	2.50	0.78	24.30	5.60	3.88	4.58	69.90	16.00		
JVGKR001	549610	6387696	0.63	8.68	0.70	31.40	9.94	2.47	2.23	2.63	26.90	5.10	10.70	2.40	33.40	11.50	3.91	3.06	3.61	34.40	11.00		
JVGKR002	546388	6385371	0.28	0.71	0.66	10.00	0.72	6.30	11.60	13.68	7.40	4.30	0.83	1.70	10.80	0.80	8.46	15.70	18.51	10.20	8.00		
JVGKR003	543789	6366784	1.13	11.60	0.02	4.22	28.90	2.45	0.79	0.93	37.00	22.40	13.80	2.10	5.22	33.20	5.63	1.62	1.91	80.90	29.00		
JVGKR004	543512	6366579	0.13	6.52	0.06	2.38	17.40	2.41	1.26	1.49	30.30	42.40	8.01	2.30	2.97	21.20	11.90	3.20	3.77	51.00	51.00		
JVGKR005	542532	6366352	1.00	0.36	0.28	1.98	2.21	1.84	0.90	1.06	8.90	5.20	3.70	3.90	2.20	20.20	2.42	1.67	1.97	60.20	6.00		
JVGKR006	543454	6364055	0.39	2.66	2.46	1.22	3.08	11.90	5.43	6.40	13.10	32.10	3.04	4.50	1.30	3.60	18.20	7.19	8.48	18.60	41.00		
JVGKR007	548077	6366173	4.16	0.13	1.03	0.86	1.16	7.81	2.72	3.21	6.20	9.50	3.84	2.00	1.12	9.30	29.20	4.57	5.39	35.00	48.00		
JVGKR008	551123	6389102	0.92	1.00	0.45	1.95	1.09	84.10	168.00	198.11	7.30	5.10	1.50	1.80	2.10	1.90	86.70	174.00	205.19	14.00	6.00		
JVGKR009	551123	6389099	0.61	0.34	0.43	0.50	0.66	25.60	30.60	36.08	2.80	3.30	0.48	1.80	0.54	1.10	29.20	36.80	43.40	4.60	4.00		
JVGKR010	551070	6389133	0.29	0.42	1.06	0.61	0.64	20.80	17.30	20.40	1.30	2.50	0.50	1.70	0.68	0.70	22.80	20.40	24.06	1.10	3.00		
JVGKR011	551071	6390085	0.34	12.00	5.70	0.40	5.75	7.27	0.91	1.07	15.40	3.90	13.80	7.70	0.45	7.20	12.00	1.89	2.23	19.90	4.00		
JVGKR012	550860	6380136	0.13	12.20	5.77	0.91	27.00	1.88	1.71	2.02	67.40	28.40	15.00	8.10	1.05	32.70	3.29	2.62	3.09	77.60	35.00		
KTGKR001	547937	6368813	0.91	2.02	1.21	0.69	0.70	13.50	0.96	1.13	4.10	63.60	2.54	2.80	1.25	0.80	35.20	4.29	5.06	4.10	72.00		
MBGKR001	548856	6389148	0.56	1.36	1.26	0.17	2.18	10.50	14.10	16.63	6.10	7.40	1.84	2.70	0.67	2.60	23.40	18.50	21.82	7.80	12.00		
MBGKR002	542998	6363878	0.45	0.62	0.36	0.20	2.28	2.36	0.74	0.87	9.40	8.00	3.60	2.20	0.87	9.80	3.94	1.50	1.77	25.30	18.00		
MGGKR001	551360	6392464	0.20	0.88	2.36	0.23	0.55	22.90	169.00	199.29	12.10	4.80	1.26	4.00	0.50	0.60	31.50	186.00	219.34	22.70	8.00		
MGGKR002	550550	6391161	0.25	15.30	2.28	0.21	41.00	5.38	2.15	2.54	58.50	70.70	20.30	5.00	0.64	52.40	13.10	2.96	3.49	98.60	86.00		
MGGKR003	544178	6367610	0.24	0.60	0.57	0.22	1.57	1.97	1.12	1.32	3.20	4.70	0.92	2.90	0.56	2.50	5.39	2.11	2.49	6.70	13.00		
MGGKR004	544070	6367536	0.26	0.28	0.61	1.04	0.87	3.56	0.72	0.85	1.20	6.40	0.41	2.00	1.57	1.00	9.19	1.43	1.69	1.60	11.00		
MGGKR005	543375	6366780	0.16	0.31	0.75	0.35	1.38	4.36	1.63	1.92	1.60	7.20	0.54	2.60	0.61	1.70	6.65	2.39	2.82	5.80	14.00		
MGGKR006	542642	6366274	0.19	1.09	0.59	0.46	3.34	6.82	13.20	15.57	3.80	8.30	1.41	2.60	0.67	3.90	10.30	17.20	20.28	7.30	12.00		
MGGKR008	542597	6365535	0.92	28.00	24.80	1120.00	11.50	13.90	29.10	34.32	9.50	4.50	33.70	29.20	1620.00	13.80	15.30	30.20	35.61	<0.1	11.00		
MGGKR009	541479	6363620	0.73	3.24	1.40	8.70	8.10	4.33	2.89	3.41	21.60	16.10	11.30	3.30	8.93	26.00	9.41	4.77	5.62	69.50	43.00		
MGGKR010	540759	6362991	1.03	9.56	12.40	2.12	33.60	1.80	1.42	1.67	32.70	20.80	25.00	16.60	2.65	77.50	3.51	2.93	3.46	125.00	52.00		
MGGKR011	547887	6373329	0.89	12.20	293.00	2.57	1.51	1.42	0.62	0.73	6.50	2.20	17.90	392.00	3.11	1.60	2.24	1.55	1.83	10.30	7.00		
MGGKR012	551561	6371828	1.66	1.10	6.24	0.46	3.21	4.49	0.84	0.99	14.50	15.30	4.30	7.20	0.52	11.60	7.02	1.73	2.04	33.80	29.00		
MKGKR001	551409	6392541	0.12	1.03	1.62	0.35	0.68	7.24	6.19	7.30	18.80	5.00	1.26	3.20	0.40	0.70	11.50	6.69	7.89	21.00	10.00		
MKGKR002	552133	6390512	0.21	0.21	1.18	0.20	0.56	6.55	16.90	19.93	2.10	3.90	0.32	2.50	0.22	0.60	20.50	25.60	30.19	4.60	10.00		
MKGKR003	552020	6389370	0.46	0.38	1.05	0.22	1.33	8.22	13.80	16.27	4.90	5.20	0.60	3.00	0.27	1.80	16.20	22.70	26.77	9.30	11.00		
MKGKR004	551156	6389130	1.76	1.56	0.46	0.34	0.90	161.00	227.00	267.69	10.90	7.70	1.91	1.90	0.39	1.00	182.00	297.00	350.23	13.60	15.00		
MKGKR005	551138	6389127	0.78	1.61	4.44	0.60	1.14	73.60	197.00	232.31	8.90	6.60	1.73	5.70	0.68	1.20	80.50	230.00	271.23	11.00	10.00		
MKGKR006	542543	6365461	0.85	1.47	1.56	2500.00	1.70	84.80	119.00	140.33	5.70	3.30	1.62	4.40	3250.00	2.10	86.00	122.00	143.87	<0.1	10.00		
Location			ICP1 Partial Digestion											ICP1 Total Digestion									
Sample ID	Easting	Northing	As (ppm)	Co (ppm)	Cu (ppm)	Mo (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	U <sub>3</sub> O <sub>8</sub> (ppm)	V (ppm)	Zn (ppm)	Co (ppm)	Cu (ppm)	Mo (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	U <sub>3</sub> O <sub>8</sub> (ppm)	V (ppm)	Zn (ppm)		
MGGKR007	542688	6366211	3.00	2.00	1.00	<1	5.00	198.00	1950.00	2299.52	11.00	10.00	3.00	5.00	1.00	5.00	236.00	2120.00	2499.99	17.00	17.00		

## 2 JORC CODE, 2012 EDITION – TABLE 1 REPORT

### 2.1 Section 1 Sampling Techniques and Data

New data within this release relates to airborne magnetic and radiometric data only. All other information referenced was disclosed within the Basin Energy prospectus lodged with the ASX 22/08/2022.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Rocks were collected from outcrops or boulders with a rock hammer or geopick as grab samples for assay. Samples were recorded as a rock sample with an assigned geostation using both an app developed by Terralogic Exploration Inc. on ruggedized Android phones and a field notebook with spatial locations. A variety of attributes were noted including major rock type, minor rock type, colour-fresh, colour-weathered, texture, grain size, mineralization, structure, and alteration. Photos were also taken of each rock sample. Once back in camp, the sample notes were entered into a database using Microsoft Access. The samples were then laid out and compared to the entries in the Access database to avoid any mistakes or discrepancies.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Not Applicable – No drilling was undertaken
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Not Applicable – No drilling was undertaken
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically</li> </ul>	<ul style="list-style-type: none"> <li>Outcrops, boulders and historical costeans were qualitatively logged by</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>Terralogics Exploration Inc. geologists when applicable.</p> <ul style="list-style-type: none"> <li>• A variety of attributes were noted including major rock type, minor rock type, colour-fresh, colour-weathered, texture, grain size, mineralization, structure, and alteration.</li> <li>• Each sample were catalogued and photographed.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Not Applicable – No drilling was undertaken</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample analysis for rock samples were undertaken at the Geoanalytical Laboratory facilities of the Saskatchewan Research Council (SRC) in Saskatoon, SK, Canada. SRC is an SCC ISO/IEC 17025: 2005 Accredited Facility</li> <li>• Multi-element ICP-MS package was used on non-radioactive samples. This package consists of three separate analyses: <ul style="list-style-type: none"> <li>• One ICP-MS analysis on the partial digestion. Partial digestions are performed on an aliquot of sample pulp. The aliquot is digested in a mixture of concentrated nitric: hydrochloric acid (HNO<sub>3</sub>:HCl) in a test tube in a hot water bath, then diluted using deionized water.</li> <li>• One ICP-OES analysis for major and minor elements on the total digestion. Total digestions are performed on an aliquot of sample pulp for the analysis of the requested elements by ICP-OES. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated HF:HNO<sub>3</sub>:HClO<sub>4</sub>. The residue is dissolved in dilute HNO<sub>3</sub></li> <li>• One ICP-MS analysis for trace</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>elements on the total digestion. Total digestions are performed on an aliquot of sample pulp. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated HF:HNO<sub>3</sub>:HClO<sub>4</sub>. The residue is dissolved in dilute HNO<sub>3</sub>.</p> <ul style="list-style-type: none"> <li>ICP-MS detection limits for total analysis will include all elements except Al<sub>2</sub>O<sub>3</sub>, CaO, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, Ba, Ce, Cr, La, Li, Sr, S, V, and Zr. These elements will be analysed only by ICP-OES on the total digestion</li> <li>As, Ge, Hg, Sb, Se, and Te will be done on the partial digestion only; these elements are not suited to the total digestion analysis.</li> <li>The package also includes extra elements analysed by ICP-MS on both the partial and total digestions: Lead isotopes (204Pb, 206Pb, 207Pb, and 208Pb), Cs, and Rb.</li> </ul> <p>Uranium multi-element ICP1 package was used on radioactive samples. This package consists of two separate analyses:</p> <ul style="list-style-type: none"> <li>One ICP-OES analysis for major and minor elements on the total digestion. Total digestions are performed on an aliquot of sample pulp for the analysis of the requested elements by ICP-OES. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated HF:HNO<sub>3</sub>:HClO<sub>4</sub>. The residue is dissolved in dilute HNO<sub>3</sub></li> <li>One ICP-OES analysis on the partial digestion for requested elements (Ag, As, Bi, Co, CU, Ge, Hg, Mo, Ni, Pb, Sb, Se, Te, U, V, Zn, B). Partial digestions are performed on an aliquot of sample for the analysis of the requested elements by ICP-OES. An aliquot of pulp is digested in a test tube in a mixture of HNO<sub>3</sub>:HCl, in a hot water bath and then diluted using deionized water</li> </ul> <p>QAQC of assay data</p> <ul style="list-style-type: none"> <li>Processes at SRC's facilities ensure various QC measures are applied on sample batches to assure the quality of the results generated. These measures include: sample preparation QC checks, analysis of CRM and/or in-house</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>reference materials, preparation and analysis of pulp duplicates/blanks/replicates, traceable calibration standards for instrumentation, sample spiking to monitor process recoveries, and QC monitoring.</p> <ul style="list-style-type: none"> <li>• No internal QAQC of data has been performed by BSN at this stage</li> <li>• Technical details of the handheld spectrometers and scintillometers used by Terralogics personnel was not communicated by the contractor.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was undertaken</li> <li>• No adjustments have been made to any of the assay data other than converting uranium partial and total values in ppm to uranium oxide values using a standard factor of 1.17924</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Locational data was collected using Garmin Glo Bluetooth GPS</li> <li>• Geodetic system used was NAD83, UTM zone 13N</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable – VTEM survey in progress</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable – VTEM survey in progress</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were stored in tamper proof pails at the Contractors camp until ready for shipment. The pails were then delivered directly to the SRC Geoanalytical Laboratory in Saskatoon, Saskatchewan.</li> <li>• Should samples be radioactive, a strict chain of custody is in place when transporting samples to the laboratory.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits were performed</li> </ul>

## 2.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Geikie Project consists of 7 permit numbers (MC00015156-MC00015158 and MC00015160-MC00015162 and MC00015165, located in Northern Saskatchewan, Canada.</li> <li>All permits are understood to be in good standing and subject to the standard and transparent renewal processes.</li> <li>The project is currently held 40% by Basin Energy and 60% by TSX-V listed CanAlaska <ul style="list-style-type: none"> <li>Basin has an Earn in agreement up to 80%</li> <li>Upon Basin reaching 80% ownership, CVV will hold a 2.75% nsr with a by back option of 0.5%</li> </ul> </li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The property has had limited uranium exploration, and some base metal exploration work. Work includes</li> <li>1967-1980 Great Plains and Marline Oil focussed on base metals and conducted rock chips and minor trenching</li> <li>1990's Saskatchewan geological survey conducted mapping</li> <li>2000's the project was owned by Northwind Resources and CanAm Uranium Corp, who completed a electromagnetic survey over the western portion of the project area, and reconnaissance mapping</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The project is deemed prospective for unconformity and basement hosted uranium mineralisation</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Little historical drilling has been completed. None of these drillholes are considered to have tested the area that is the subject of this announcement</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Not Applicable– No data aggregation of assay results was undertaken
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not Applicable – No mineralisation is being reported
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Not Applicable – No significant discoveries are being reported
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	It is the company's opinion that A balanced representation of the early-stage exploration data is being presented
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	Not Applicable – No other substantive exploration data is available
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or</li> </ul>	<ul style="list-style-type: none"> <li>On ground follow up reconnaissance mapping and</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>depth extensions or large-scale step-out drilling).</i></p> <ul style="list-style-type: none"> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>sampling of the initial targets - <b>completed.</b></p> <ul style="list-style-type: none"> <li>Search, review and capture of any additional relevant historical data that has been completed in the Geikie region – <b>ongoing.</b></li> <li>Complete high resolution airborne electromagnetics. A contract has now been entered into to complete this survey. This next level of data is seen as critical to the refinement of drill targets – <b>ongoing</b></li> <li>Consider the need for targeted ground or airborne geophysics – Q1 2023</li> <li>Diamond drilling – <b>Proposed to commence Q1 2023</b></li> </ul>