

Bannerman Resources Limited (ASX:BMN, OTCQB:BNNLF, NSX:BMN) (“Bannerman” or “the Company”) is pleased to report on a productive quarter in which Bannerman has further advanced key optimisation opportunities at its Etango Uranium Project in Namibia, whilst the uranium market has experienced extensive supply disruption.

## HIGHLIGHTS

- **Etango Project Membrane Study Testwork successfully completed**
  - Confirms substantial economic and operational advantages, including over 80% acid recovery from the concentrated eluate stream of the IX plant
  - Excellent results confirm optimised flowsheet consists of Ion Exchange (“IX”) followed by iron (“Fe”) reduction before nano-filtration (“NF”)
  - Design of nano-filtration plant now complete to definitive level
- **Project optimisation continues**
  - Etango Project optimisation continues to focus on the evaluation of project scaling and scope opportunities under various development parameters and market conditions
- **Uranium market driven by extensive production disruption from COVID-19**
  - World’s largest producer, Kazatomprom, advised that all Kazakh production disrupted for expected three month period
  - World’s largest uranium mine, Cigar Lake, placed into care and maintenance for an “indeterminate period” by Cameco
  - Production disruption at Husab and Rossing mines in Namibia
  - U<sub>3</sub>O<sub>8</sub> spot price has risen more than 35% in 6 weeks to be best performing mineral commodity in 2020
- **Strong cash balance of A\$4.6m at quarter end**
  - Management and Board pay reductions implemented from 1 April 2020

Bannerman’s Chief Executive Officer, Mr Brandon Munro, said, “Uranium supply and demand dynamics have been highlighted by COVID-19 driven supply disruption in the largest four uranium producing nations globally. This has widened the 2020 forecast structural deficit and launched the U<sub>3</sub>O<sub>8</sub> spot price into a commodity sector-leading trajectory. Bannerman has focused on fiscal discipline and project improvement, ensuring that our large-scale, advanced Etango uranium project is ideally positioned as the market continues to improve.”

## **ETANGO PROJECT (Bannerman 95%)**

### **Membrane Study completed**

In 2017 Bannerman commenced the Membrane Study, a process to test the potential application of nano-filtration in combination with an IX recovery circuit, as part of its value improvement work. The preliminary results of this testwork were positive, as announced to the ASX on 11 April 2018.

In late 2019 Bannerman recommissioned the Etango Heap Leach Demonstration Plant to prepare pregnant liquor solution to use in follow up testwork to advance the Membrane Study Testwork to a definitive level, in conjunction with the Company's specialist technical advisers. The results of this testwork were released to the ASX on 9 April 2020.

Two aspects of the Membrane Study Testwork required further analysis to advance the findings to a definitive level:

- The preferred process for removing iron from the finished uranium product (converter specifications for U<sub>3</sub>O<sub>8</sub> have very low tolerances for Fe); and
- Selection of the preferred type of membrane units and definitive-level design work to incorporate nano-filtration into the process circuit.

### **Iron removal testwork completed**

Confirmatory testwork regarding the iron removal process was completed post the quarter end. Two alternative processes for iron removal were considered and tested:

1. **Precipitation after the nano-filtration process.** Following the IX process the Concentrated Eluate ("CE") solution passes through the nano-filtration plant upgrading the uranium and recovering the acid. Iron is then preferentially precipitated prior to the precipitation of uranium.
2. **Rinsing prior to elution in the IX process.** Prior to the elution during the IX process, the resin is rinsed with a weak acid solution to remove any excess iron.

The confirmatory testwork successfully demonstrated and confirmed that the second iron removal process is the most favourable of the two methods being considered and the preferred process route. Rinsing the loaded IX column prior to elution demonstrated that over 99% of the iron can be removed using a weak acid solution. The iron removed can also be re-used in the leaching circuit, reducing reagent costs.

The elution process can then present the CE solution with minimal iron content to the nano-filtration plant, where the uranium solution upgrades by almost ten-fold while 80% of the sulphuric acid is recovered for the processing circuit. It is considered that the IX/NF process route is likely to provide both economic and operational advantages, the final quantum of which are to be confirmed in the Etango Definitive Feasibility Study ("DFS") Update.

The results of the testwork were released to the ASX on 9 April 2020. Bannerman is not aware of any new information or data that materially affects the information included in this ASX release, and Bannerman confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.

### **Membrane selection and definitive-level design**

Bannerman also completed a review of the most suitable membrane for the Etango Project. It is considered that acid resistant membranes are generally cheaper and available in a wider variation of rejection and operating pressure ranges. The alternative, acid proof membranes, are generally more expensive, have lower uranium rejections and require higher operating pressures

Each membrane type has different key advantages and requires different plant designs to produce the desired output stream requirements. These different plant designs can result in significantly different capital cost ("CAPEX") and operating cost ("OPEX") outcomes. Only once all membrane parameters for a particular

feed stream are known can an economic assessment be undertaken to identify the recommended membrane. Based on the estimated CAPEX and OPEX for the different membrane types, Bannerman has now determined the most suitable membrane.

Following completion of the membrane selection process and utilising trial performance data obtained from the Etango Heap Leach Demonstration Plant, Bannerman completed a preliminary design to a definitive level for the nano filtration plant for the Etango project.

### Further optimisation work continues

The Bannerman team will continue to work through prioritised enhancement studies that have the potential to be NPV accretive through reducing anticipated capital expenditure and operating costs. Once the optimisation phase is completed, and Bannerman observes the market signals suggesting clear opportunity to develop the Etango Project, the Company plans to conclude the DFS Update by undertaking definitive level engineering to incorporate identified project enhancements – including the Membrane Study – and update the procurement process.

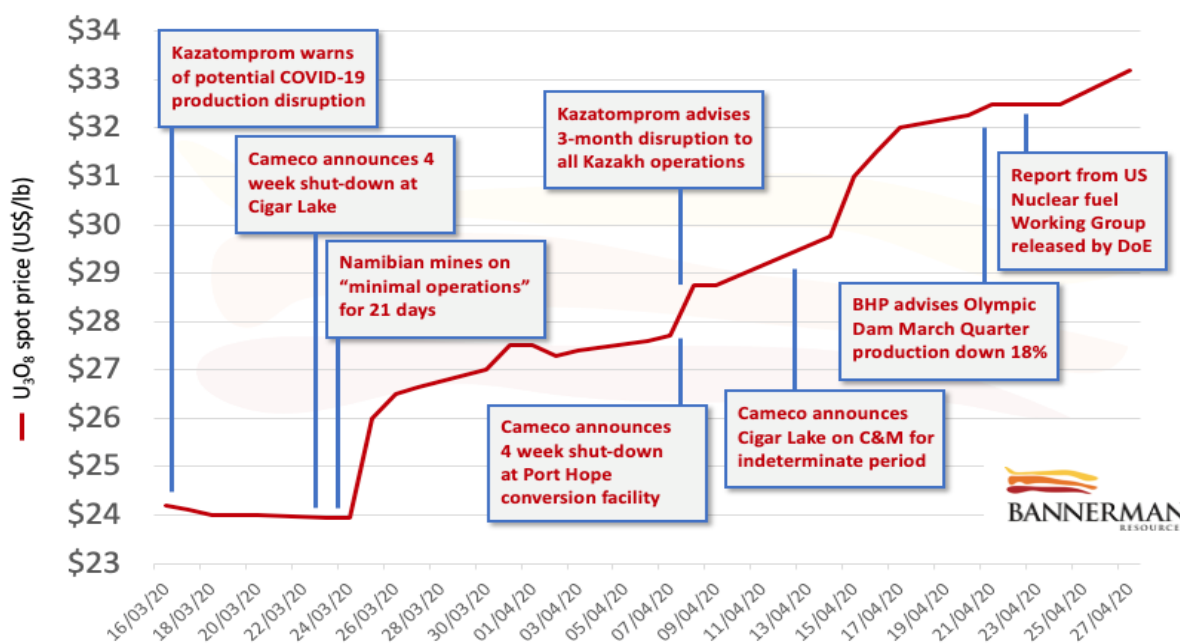
In addition, Bannerman has continued to undertake an evaluation of project scaling and scope opportunities that might exist under various development parameters and market conditions. A viable alternative to the plant throughput identified in the DFS undertaken on the Etango Project in 2012 (ASX announcements dated 10 April 2012 and 15 November 2015), with a corresponding reduction in CAPEX, would provide Bannerman with enhanced flexibility to respond to uranium market conditions or changes in the availability of finance without compromising the optionality to construct the world-class scale Etango mine studied in the DFS.

## URANIUM MARKET

### Uranium market news

For most of the March quarter the U<sub>3</sub>O<sub>8</sub> spot price traded in a range of US\$24-25/lb. However, from mid-March a series of COVID-19 related supply disruptions generated sharp spot price appreciation that saw the spot price finish the quarter at US\$27.50/lb. The spot price then passed through US\$33/lb in late April 2020.

Key uranium sector announcements and U<sub>3</sub>O<sub>8</sub> spot price



Source: Various company and government announcements, UxC

Commo announced on 23 March that the Cigar Lake uranium mine would be placed into temporary care and maintenance, which was extended on 8 April for an “indeterminate period”. With production of 18

million pounds U<sub>3</sub>O<sub>8</sub> per annum, Cigar Lake is the world's largest operating uranium mine. Cameco has also placed its Port Hope conversion facility into temporary shut-down. Kazatomprom, the world's largest uranium producer, announced on 8 April that all Kazakh uranium mines would be impacted by reduced production levels for an expected period of three months. The company estimated that the impact on total 2020 Kazakh uranium production would be up to 10.4 million pounds U<sub>3</sub>O<sub>8</sub>. Additional production disruption has been experienced at the Husab and Rossing uranium mines in Namibia, which were both placed into "minimal mining operations" for 21 days as a result of a COVID-19 lock-down. Australia's largest producer of uranium, BHP's Olympic Dam, further reduced its 2020 guidance after operational issues unrelated to COVID-19 reduced March quarter production by 18% (relative to prior quarter). The above reductions should be considered in the context of pre-COVID-19 global forecast 2020 mine supply of approximately 135 million pounds U<sub>3</sub>O<sub>8</sub>.

On 23 April 2020 the US Department of Energy released a report entitled "*Restoring America's Competitive Nuclear Advantage: A strategy to assure U.S. national security*", which set out the long-anticipated recommendations of the Nuclear Fuel Working Group. The Working Group was appointed by President Trump to conduct a review of the US domestic nuclear supply chain (uranium production, conversion, enrichment and fabrication) following completion of the section 232 trade investigation into uranium imports. The report detailed US government policy objectives to acquire 17-19 million pounds of US-produced U<sub>3</sub>O<sub>8</sub> over a ten year period, as well as several measures to support the US nuclear reactor fleet and nuclear fuel cycle. Further, strong policy measures were outlined to enable the US to compete with Russia and China in the international nuclear technology export market. The publication of the report is supportive of medium-term long uranium demand and ends a prolonged period of s232 uncertainty that commenced in January 2018.

As a result of the high-profile COVID-19 uranium supply disruptions and the conclusion of the Nuclear Fuel Working Group, the initial recovery of the uranium price has received widespread attention in both industry news and mainstream financial press. With commercial inventory levels reduced to historical norms and the existing 2020 production deficit set to widen, the uranium sector is likely to experience further tightening throughout the year. Any new supply disruption has the potential to exacerbate upward price tension, with the market already under increased demand pressure as producers resort to market purchases to meet contractual delivery commitments.

## **CORPORATE**

### **Strong cash balance enhanced by remuneration and cost reductions**

Bannerman's cash balance at 31 March 2020 was A\$4.56 million (31 Dec 2019: A\$5.27 million), evidencing a strong balance sheet given that the Company has no debt (other than typical creditor balances) or convertible notes on issue. Total exploration and development expenditure for the quarter was \$240,000, which included the Membrane Study Testwork. Aggregate payments during the March quarter to related parties (\$148,000) were comprised of directors' fees and salary.

In response to COVID-19 and increased uncertainty, the Company's Board and management have agreed to reductions and restructuring of remuneration and board fees. This will reduce their cash remuneration by between 20-50%. The situation will be reviewed at 30 June 2020. This will reduce the Company's already low cost base in the June quarter, in addition to suspending travel and associated costs.

### **No disruption to Bannerman operations from COVID-19**

The Namibian government implemented an initial 21-day lock down in the Erongo Region, where Bannerman's Etango Project and office is situated. This was then extended to 4 May 2020. This decision, together with other decisive measures and border controls, are designed to pre-empt the transmission of COVID-19 within Namibia.

However, the Company does not anticipate any significant disruption to its business or operations as a result of measures taken to date in either Namibia or Australia in response to the COVID-19 pandemic. Bannerman has taken various measures to protect Bannerman employees, their families and the broader community from transmission of the COVID-19 virus. All site testwork and operations were completed in February 2020 and the Heap Leach Demonstration Plant has been safely decommissioned.

### Issued securities

At the date of this report, the Company has on issue 1,058,781,696 ordinary shares, 41,475,130 performance and share rights and 26,667,400 unlisted share options. The share rights and share options are subject to various performance targets and continuous employment periods.

Brandon Munro  
**Chief Executive Officer**  
30 April 2020

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*This announcement was authorised to be issued by the Board of Directors  
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**About Bannerman** - Bannerman Resources Limited is an ASX and NSX listed exploration and development company with uranium interests in Namibia, a southern African country which is a premier uranium mining jurisdiction. Bannerman's principal asset is its 95%-owned Etango Project situated near CNNC's Rössing uranium mine, Paladin's Langer Heinrich uranium mine and CGNPC's Husab uranium mine. A definitive feasibility study has confirmed the viability of a large open pit and heap leach operation at one of the world's largest undeveloped uranium deposits. From 2015 to 2017, Bannerman conducted a large scale heap leach demonstration program to provide further assurance to financing parties, generate process information for the detailed engineering design phase and build and enhance internal capability. More information is available on Bannerman's website at [www.bannermanresources.com](http://www.bannermanresources.com).

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### Forward Looking Statements

The information in this announcement is not intended to guide any investment decisions in Bannerman Resources Limited. This material contains certain forecasts and forward-looking information, including possible or assumed future performance, costs, production levels or rates, reserves and resources, prices and valuations and industry growth and other trends. Such forecasts and information are not a guarantee of future performance and involve many risks and uncertainties, as well as other factors. Actual results and developments may differ materially from those implied or expressed by these statements and are dependent on a variety of factors. The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, based on the information contained in this and previous ASX announcements.

Bannerman is not aware of any new information or data that materially affects the information included in this ASX release, and Bannerman confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.

### Competent Person's Statement

The information in this announcement as it relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Marthinus Prinsloo. Mr Prinsloo is a full time employee of Bannerman Resources Limited and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Prinsloo has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activities, which he is undertaking. This qualifies Mr Prinsloo as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and a Qualified Person as defined by Canadian National Instrument 43-101. Mr Prinsloo consents to the inclusion in this announcement in the form and context in which it appears. Mr Prinsloo holds shares and performance rights in Bannerman Resources Limited.

**Listing Rule 5.3.3 tenement schedule:**

<b>BANNERMAN RESOURCES LIMITED CONSOLIDATED BASIS</b>				
<b>SCHEDULE OF INTERESTS IN MINING TENEMENTS</b>				
<b>Project</b>	<b>Mining tenements held</b>	<b>Location of tenements</b>	<b>Beneficial % interest at end of the quarter</b>	<b>Change in the quarter</b>
Etango	Mineral Deposit Retention License (MDRL) 3345	Namibia	95%	-
Etango	Exclusive Prospecting License (EPL) 3345	Namibia	95%	-