ASX ANNOUNCEMENT

20 November 2023

New High Priority Uranium Targets

Marmota Limited (ASX: MEU) ("Marmota")

Marmota is excited to announce the identification of **new high priority drill targets for additional uranium mineralisation** at its 100% owned Junction Dam Uranium deposit immediately adjacent to the Boss Honeymoon tenement.

These new targets represent the first results of the new stratigraphic and mineralisation review that is progressing rapidly thanks to the efforts of our geological team with recently engaged uranium specialist Mark Couzens [see ASX:MEU 6 Nov 2023].

Key Points

- First stage of the review has been completed around the Saffron Uranium deposit [Fig. 1] at Junction Dam.
- **Four new high priority drill targets have been identified** [see Fig. 2 & 3] to the North, East and South of Marmota's Saffron Uranium Resource where the geology is favourable for the deposition of uranium mineralisation and is supported by stratigraphic modelling, EM and gravity images.
- **3 of the 4 new targets lie outside of the current Saffron uranium resource area**, providing significant scope for growth of Marmota's uranium resource at Junction Dam.
- **Six main uranium-bearing palaeochannels have been identified** in the Saffron Uranium Deposit from the stratigraphic modelling completed. **They are all open** for further uranium mineralisation.

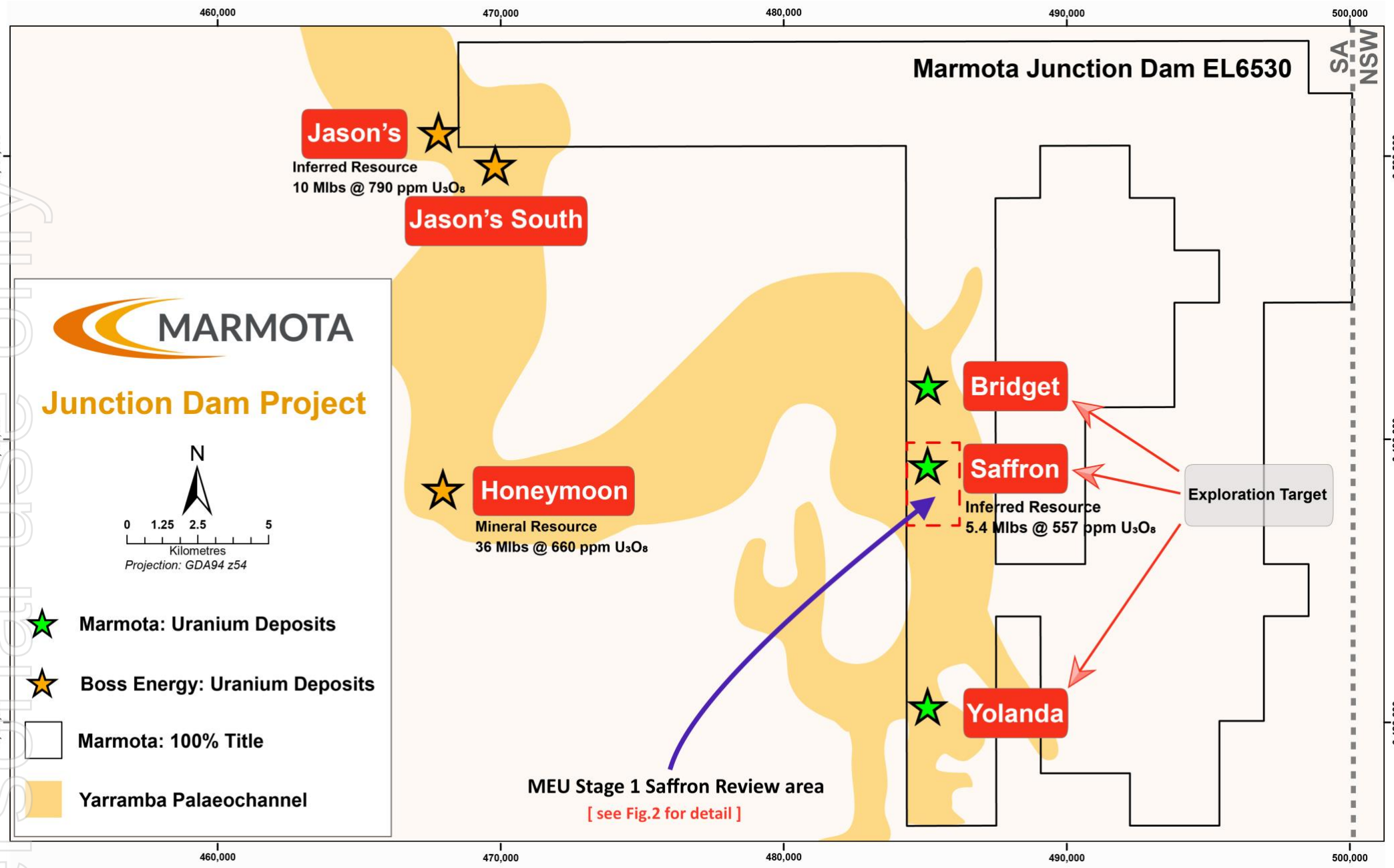

Fig. 1: **The Junction Dam uranium tenement (100% MEU) bookends both sides of the palaeochannel of the Boss Energy Ltd (ASX:BOE market cap ~ $1.5 billion) Honeymoon uranium plant**

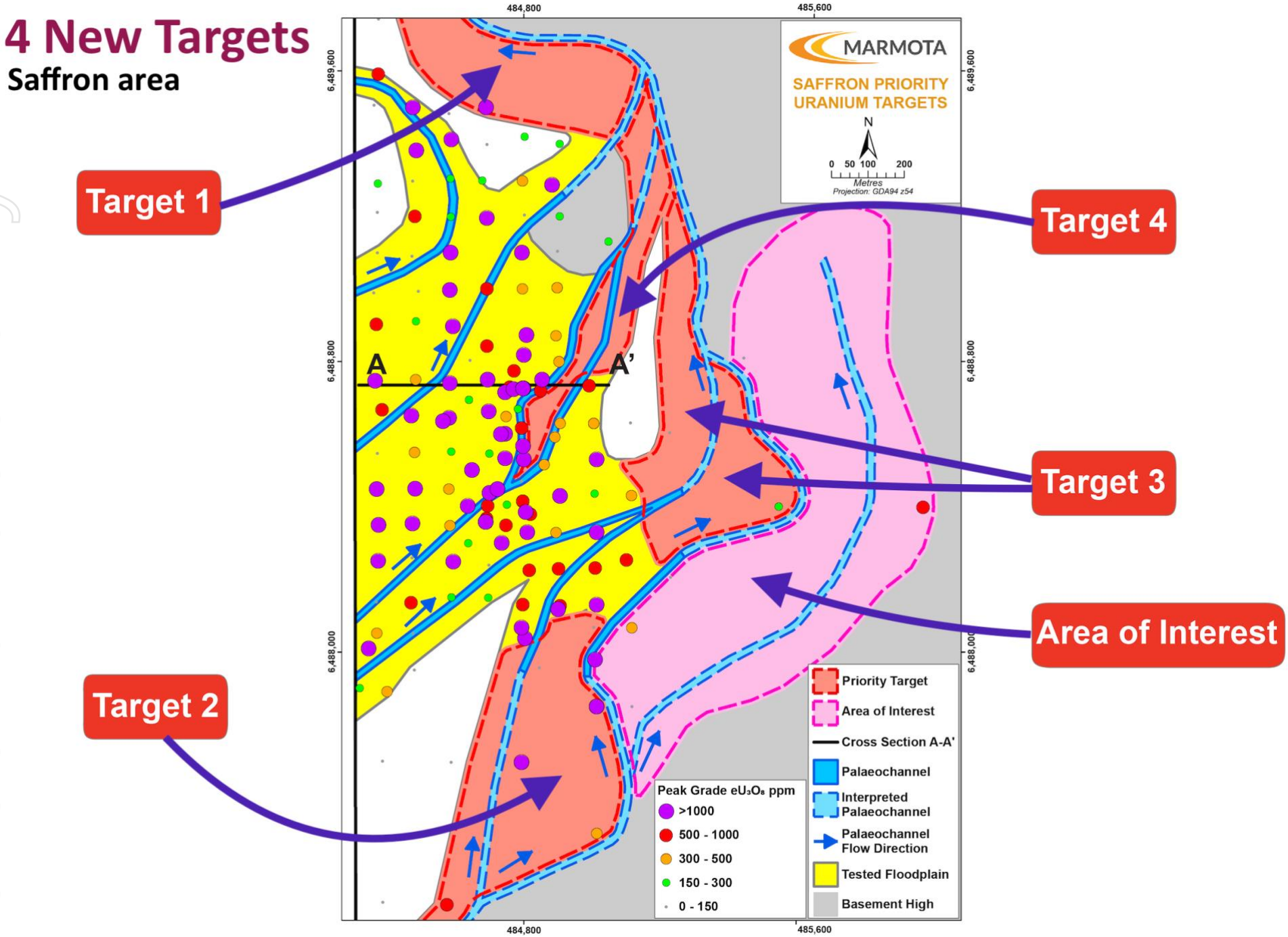

Fig. 2: **Four new exploration targets identified near the Saffron Resource Area**

Target 1

- This target is at the junction of five of the six uranium-bearing palaeochannels appearing to merge alongside Willyama Basement as identified on the EM image [see Fig. 3 below]. The EM image shows a large bend in the basement that will force the palaeochannels to bend accordingly. The bend in these merged palaeochannels will most likely create a large well-developed floodplain to the southwest of the palaeochannels which would be an ideal location for high grade uranium to precipitate. The width of the floodplain appears to be at least 200 metres wide due to the drillhole shown with a purple peak uranium grade on the southern edge of the target.

Target 2

- This target is on the southern side of the current Saffron deposit. Drilling to date has shown that there are two south-to-north trending palaeochannels located here with a well-developed floodplain up to 70 metres wide. Drillholes in this section have shown high grade uranium present on three sides of these palaeochannels with the last side needing further testing. These palaeochannels are also open further south of the map shown and future follow-up work will determine whether they join up with the Yolanda Prospect to the south.

Target 3

- This target is located on the eastern edge of the Saffron resource area where three uranium-bearing palaeochannels have been interpreted to run along the Willyama Basement as interpreted on the EM image [see Fig. 3 below]. Very little drilling has been completed in this target area to-date but the stratigraphic interpretation and EM model suggest that there will likely be bends in the palaeochannels where well-developed floodplains should have formed on the inside of these bends with potentially high-grade uranium mineralisation.

Target 4

- This target is located within the current Saffron resource area. It is located around a palaeochannel that splits into two separate palaeochannels and creates an ox-bow lake type area. There are two historical holes that were drilled within the interpreted ox-bow lake which both intersected high uranium grades. There is a zone approximately 600 metres long by 150 metres wide amenable to high grade uranium and requires drill testing.

Area of Interest

- The 'Area of Interest' has been interpreted from the EM image [see Fig. 3]. This large region has very few drillholes and seen as a topographic low on the EM image. The recently developed stratigraphic model suggests the likelihood for it to contain possible palaeochannels and uranium mineralisation associated with floodplains.

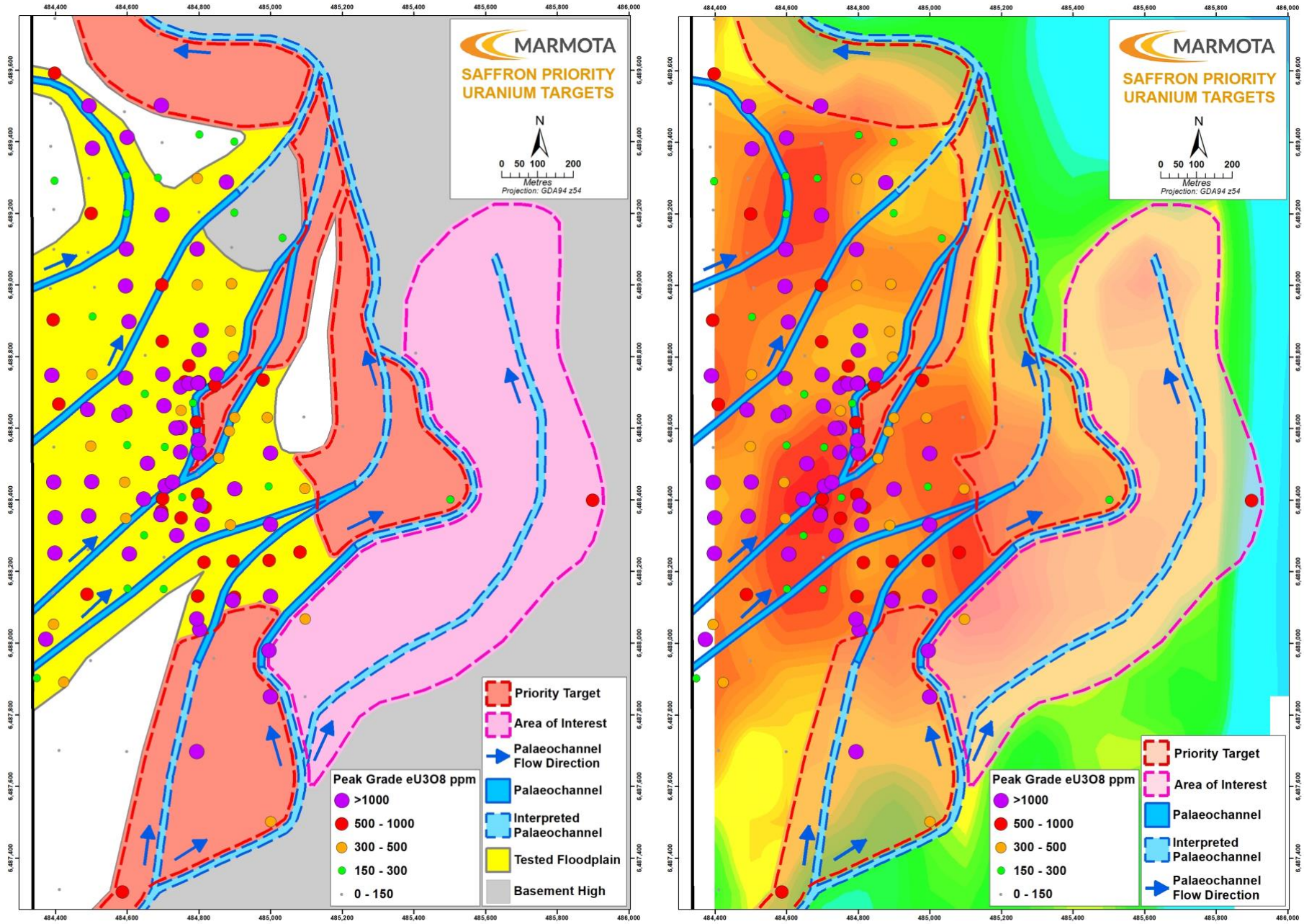

Fig. 3: High priority exploration targets shown (RHS) over 125m EM depth-slice image (green basement, red sediments)

New Saffron Stratigraphic Model

The stratigraphic review has identified that uranium mineralisation around the Saffron area is hosted primarily within floodplains adjacent to numerous uranium-bearing Eyre Formation palaeochannels [see Fig. 2 and 4].

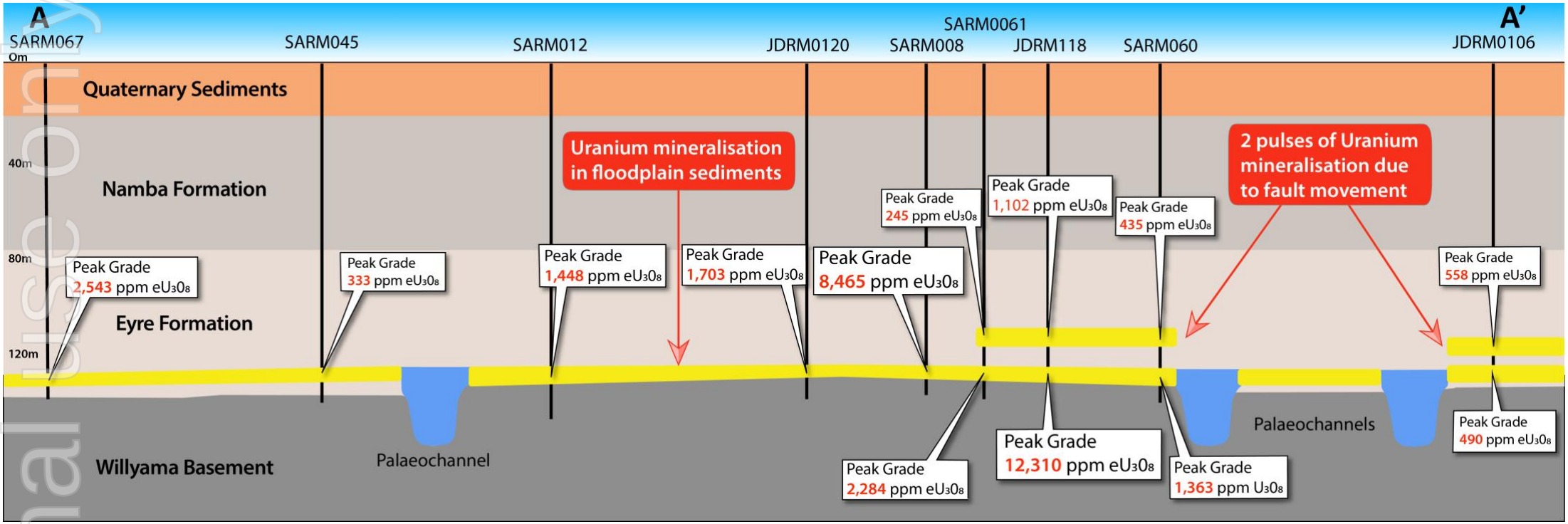

Fig. 4: Schematic cross-section A-A'with a length of 600 metres [see Fig. 2] **across the Saffron Uranium Deposit**

The diagram shows existing drillholes across the floodplains (with peak uranium grades).
Most of the uranium mineralisation lies in flood plains (yellow) adjacent to the palaeochannels (blue).

There is also noticeable uranium mineralisation higher up in the stratigraphy near steps in the basement suggesting that there could be re-mobilisation of uranium locally along faults.

Technical Details (Saffron zone)

- The Saffron Uranium Deposit is located within a south-to-north trending section of the Yarramba Palaeovalley. Fig. 4 illustrates a 'west to east' trending stratigraphic cross-section through the middle of the Saffron Uranium Deposit from A – A' [see Fig. 2].
- The basement rocks consist of Willyama Basement comprising mainly of chlorite schist, sandstone as well as albite altered igneous intrusions.
- The base of the Yarramba Palaeovalley was filled locally with up to 15 metres of Eyre Formation basal sands in the lowest depressions within the basement.
- High energy paleochannels originating from the south then started to erode through the basal sands and Willyama Basement.
- Stratigraphic interpretation has identified four north-east trending palaeochannels as well as two south-to-north trending palaeochannels entering the Saffron Uranium Deposit.
- The palaeochannels are approximately 20 metres wide and up to 30 metres deep where they have eroded through the underlying units.
- The palaeochannels have well developed flood plains up to 200 metres wide where overbank sediments including sand and gravel has been dispersed across the Saffron region. The widest sections of floodplain are located on the inside of palaeochannel bends and this is also where the highest grades of uranium have been identified. There are many areas where the floodplains from palaeochannels have merged into one larger floodplain which can be seen in the cross-section in Fig. 4.
- All six palaeochannels identified are uranium-bearing. Most of the uranium seen across the Saffron region is located in the floodplains on the sides of the palaeochannels where disseminated pyrite has been commonly observed which is acting as the reductant for uranium to precipitate. This can be seen on Fig. 2 where most of the peak uranium grades occur within close proximity to the edges of all palaeochannel floodplains.

- The paleochannels themselves [see Fig. 2 & 3] are mostly barren of uranium since they have very little reduced material but remain important since they are the main passage for uranium migration throughout the Saffron region.
- All six palaeochannels identified are open. Combined with EM and gravity images, there are large regions within the Yarramba Palaeovalley where further uranium mineralisation could potentially be identified. In the Saffron area, a total of four high priority drill targets have been identified as well as an area of interest where only two holes have been drilled to date and where the geophysical images suggest that palaeochannels as well as uranium mineralisation have to potential to also exist. Figure 3 shows a 125m EM depth slice image with the interpreted palaeochannels and target regions.
- The new stratigraphic model will enable Marmota to target high-grade uranium mineralisation both within the current resource area and near resource exploration targets, as well as targets including the Bridget Prospect to the north and the Yolanda Prospect to the south.

Marmota chairman, Dr Colin Rose, said:

“ I am delighted with the remarkable progress of the stratigraphic review, its obvious success, and the remarkable speed with which this is happening.

The review has already shown the enormous potential for Junction Dam to develop and grow as one of South Australia’s premium uranium deposits, in the premier uranium jurisdiction of Australia. It has already completely changed our understanding of the nature of uranium mineralisation at Junction Dam, its scope and dramatically increased our perception of the potential of Junction Dam. And this is just stage 1 (Saffron). The review will next expand to Bridget (to the north) and Yolanda (to the South). ”

Follow Marmota on Twitter at: twitter.com/MarmotaLimited

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About Marmota Limited

Marmota Limited (ASX: MEU) is a South Australian mining exploration company, focused on gold, copper and uranium. Gold exploration is centred on the Company's dominant tenement holding in the highly prospective and significantly underexplored Gawler Craton, near the Challenger gold mine, in the Woomera Prohibited Defence Area. The Company's copper project is based at the Melton project on the Yorke Peninsula. The Company's uranium JORC resource is at Junction Dam adjacent to the Honeymoon mine.

For more information, please visit: www.marmota.com.au

Competent Persons Statement

Information in this Release relating to Exploration Results is based on information compiled by Aaron Brown, who is a Member of The Australian Institute of Geoscientists. He has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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." Mr Brown consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

Where results from previous announcements are quoted, Marmota confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.