

Exciting uranium target identified at Yolanda

Marmota Limited (ASX: MEU) (“Marmota”)

Marmota is excited to announce the results of the Yolanda Prospect project review by uranium specialist Mark Couzens. The Yolanda area is Stage 3 of the four part Junction Dam uranium review and drill program design currently being carried out [see ASX:MEU 6 Nov 2023, 20 Nov 2023, 5 Feb 2024]. The Yolanda Prospect is located to the south of Marmota’s Saffron Uranium resource area at Junction Dam [see Fig. 1], and is also immediately adjacent to the Boss (ASX:BOE) Honeymoon tenement [see Fig. 1].

Key Points

- An extensive uranium-bearing Eyre Formation palaeochannel has been interpreted from the Yolanda project review with a south to north trend heading towards Marmota’s Saffron Uranium Deposit [see Fig. 1 & 2].
- The Yolanda uranium exploration target **stretches over 8km long and more than 1km wide** [see Fig. 2].
- Drilling to date at Yolanda has shown that high-grade uranium mineralisation exists in floodplains on the sides of the palaeochannel as well as in the weathered sandstone basement near the palaeochannel.
- In part due to the small number of historical holes in this area, most of the previous drilling at the Yolanda Prospect missed the key palaeochannel as well as the corresponding floodplains, so the full extent of uranium mineralisation remains untested to date.
- None of the Yolanda Prospect area is currently included in Marmota’s Junction Dam uranium resource area, and so it provides further significant scope for growth of Marmota’s uranium resource at Junction Dam.

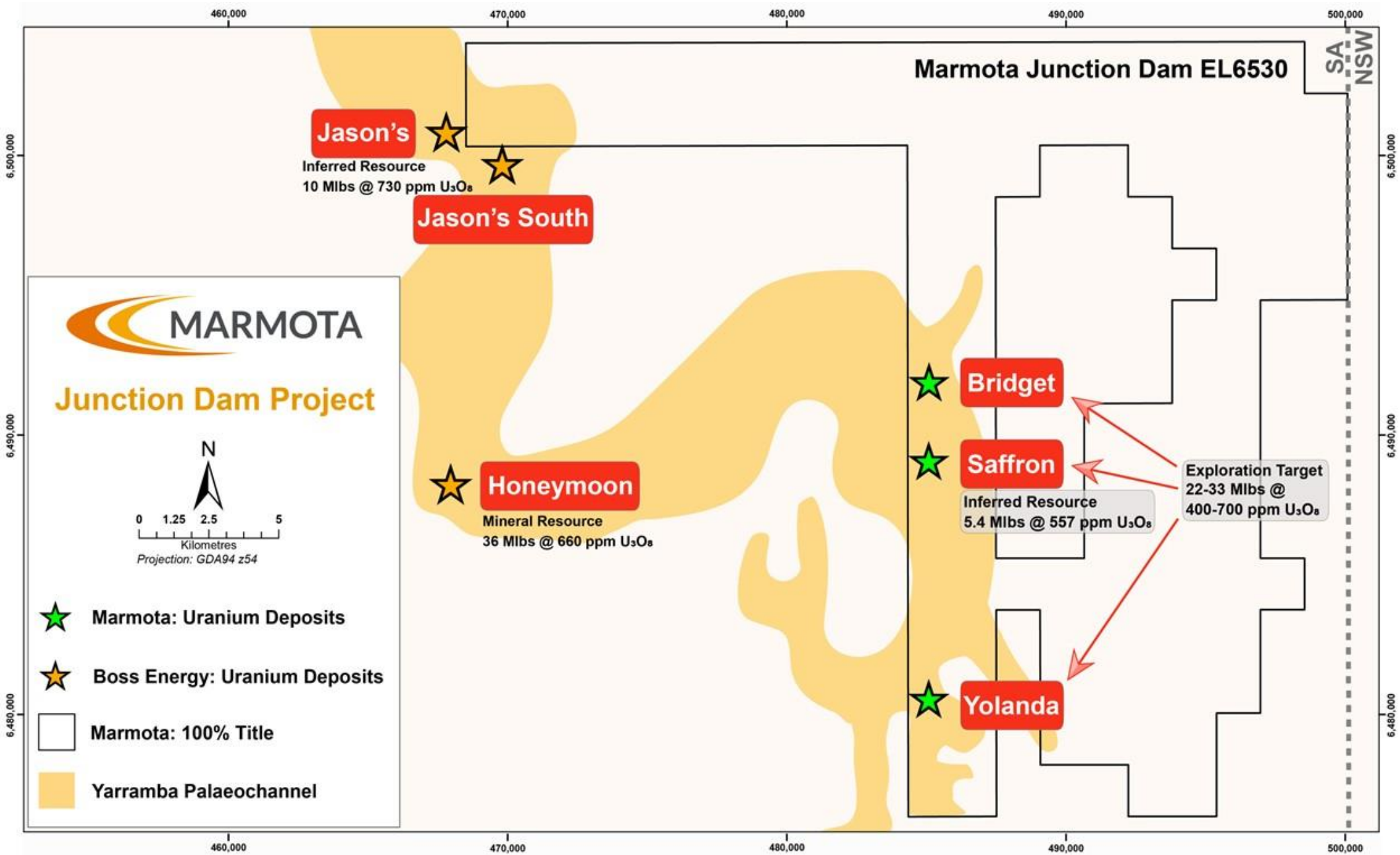
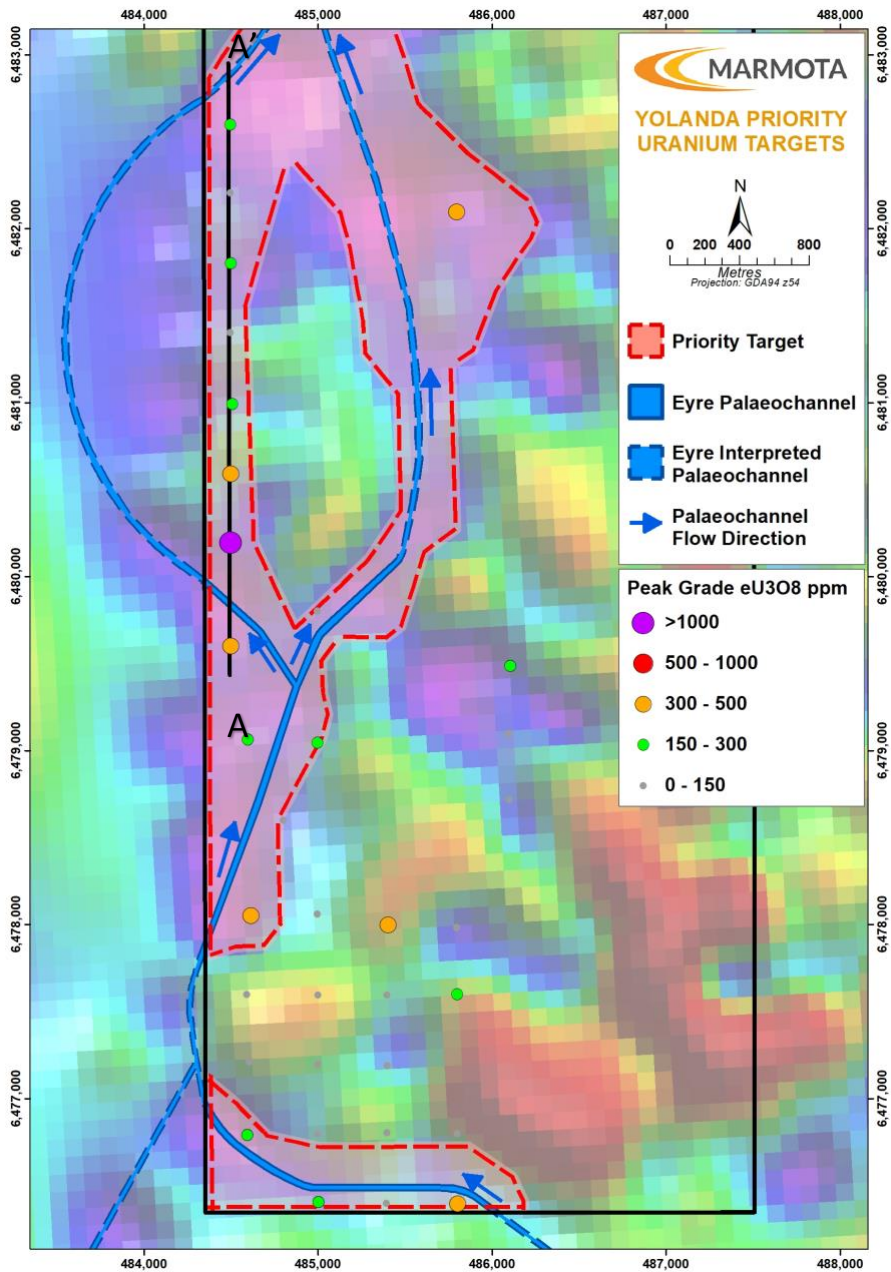


Fig. 1: The Junction Dam uranium tenement (100% MEU) bookends both sides of the palaeochannel of the Boss Energy Ltd (ASX:BOE market cap > \$2 billion) Honeymoon uranium plant



The Yolanda project review has identified one main Eyre Formation palaeochannel shown in the blue colour [see Fig. 2].

The palaeochannel has two major branches with both showing signs of uranium mineralisation associated with floodplains on the sides of the palaeochannel.

Cross Section A – A' shows the stratigraphic interpretation through a section of the Yolanda Prospect where the Eyre Formation palaeochannel crosses this transect twice [see Fig. 3].

Numerous drillholes in the Yolanda Prospect intersected significant uranium grades in the weathered basement and basement, especially in close proximity to the palaeochannel.

Priority targets have been identified from the stratigraphic interpretation completed, as well as from the state gravity image.

Fig. 2: Palaeochannel interpretation of the Yolanda Prospect showing priority drilling regions with the state gravity image

Yolanda Stratigraphic Model

- The main uranium-bearing palaeochannel seen at Yolanda is the Eyre Formation palaeochannel located just above or eroding into the underlying Willyama Basement similar to those seen in the Saffron Uranium Deposit: see the schematic cross-section in Fig. 3.

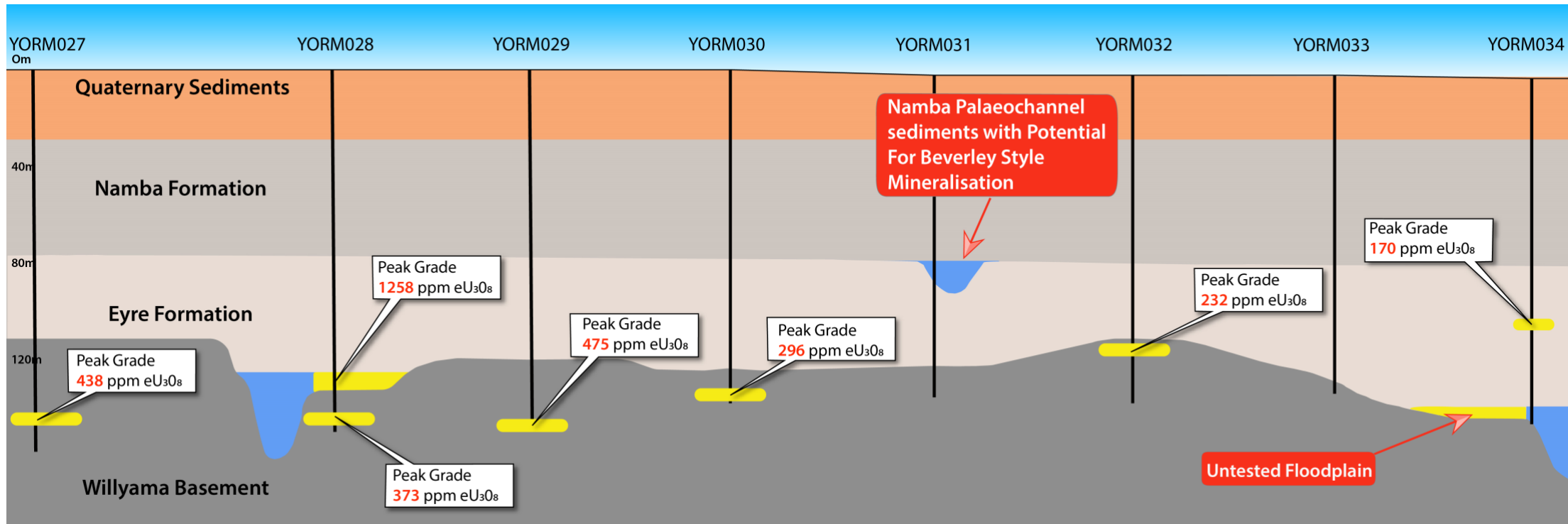


Fig. 3: Schematic cross-section A-A' across the Yolanda Prospect

- There was one historical drillhole that intersected a Namba Formation palaeochannel that incised into the underlying Eyre Formation but this drillhole did not intersect uranium mineralisation. The recent identification of Uranium in the Namba Formation palaeochannel at Bridget [see ASX:MEU 5 Feb 2024] indicates these channels should be investigated as well.

Yolanda Prospect Uranium Mineralisation

The Yolanda Prospect has one major south to north trending Eyre Formation palaeochannel. The palaeochannel splits into two separate branches towards the middle of the Yolanda Prospect around a basement high shown on the state gravity image in Fig. 2. Both branches of the palaeochannel are uranium-bearing based on downhole logging.

The highest uranium grades seen in the Yolanda Prospect are associated with floodplains on the edges of the main palaeochannel. Drillhole YORM028 had a peak grade of 1258 ppm eU_3O_8 and 3m @ 646 ppm eU_3O_8 from a depth of 124.2m metres on the edge of the western branch of the palaeochannel. As shown in Photo 1, the drill samples showed a mix of sand, gravel and some clays with evidence of an oxidised fluid moving through it.



Photo 1:

Sample photo from YORM028 at a depth of 124 to 130m showing mixed floodplain sediments

Uranium mineralisation was also identified in the weathered basement and basement in numerous drillholes, especially in close proximity to the palaeochannel. This mineralisation seems to be unique to Yolanda since it wasn't seen at Saffron or Bridget.

The basement at Yolanda was often noted to be a sandstone unit, in contrast to the dominant chlorite schist and albite altered igneous basement seen at Saffron and Bridget.

What this suggests is that there is a large volume of uranium-rich fluid moving through the Yolanda palaeochannel and that these uranium-rich fluids are entering the porous sandstone unit on the edges of the paleochannel where uranium is being precipitated.

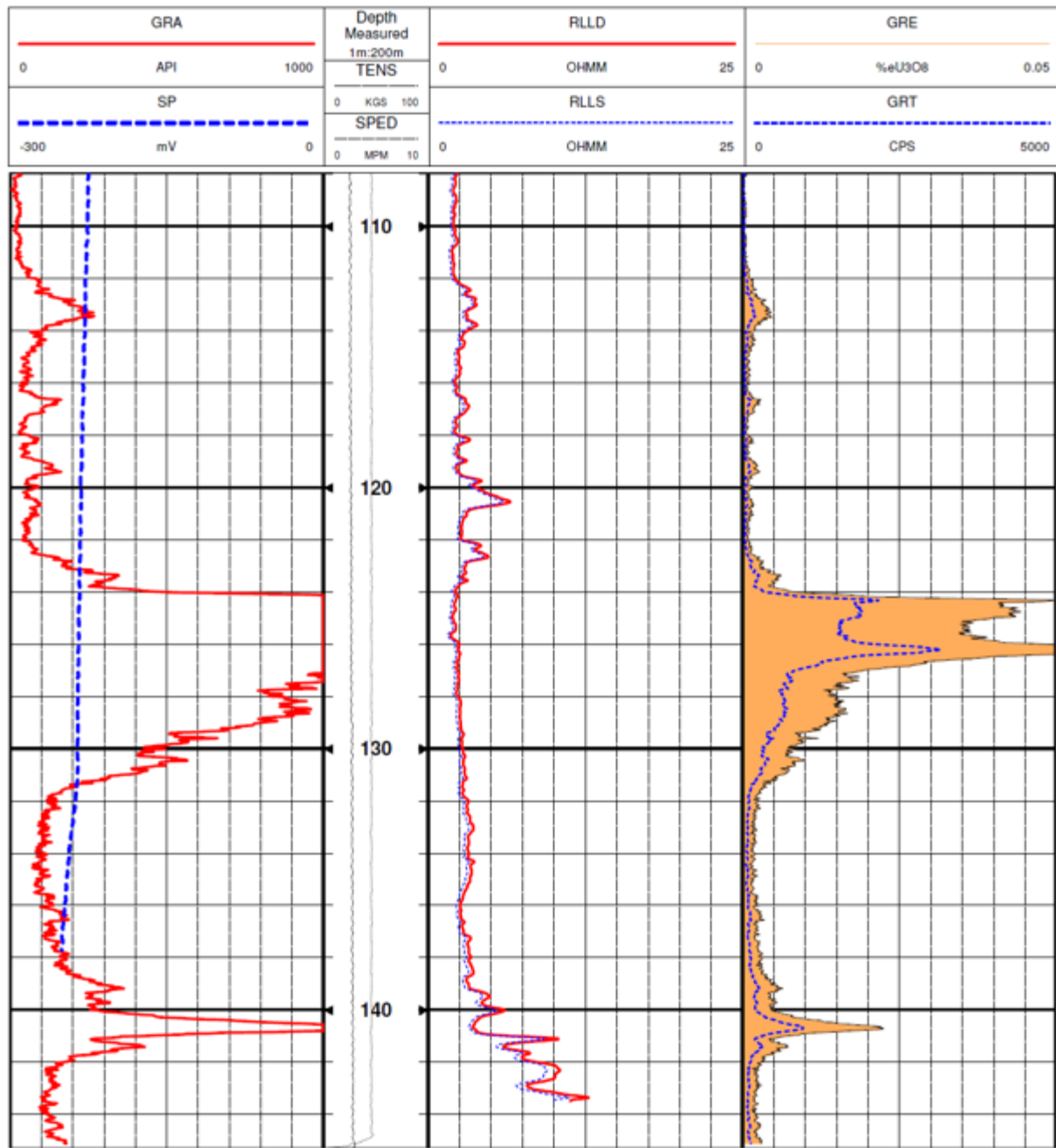


Fig. 4: Downhole logging on Drillhole YORM028 showing the uranium mineralisation within floodplain sediments

Marmota chairman, Dr Colin Rose said:

“ Of the 3 review areas so far, Yolanda has the smallest number of historical holes, and is therefore also the most underexplored of the 3 review areas to date. We also now know that at Yolanda, most of these historical holes missed the interesting targets — *i.e.* most missed the palaeochannel as well as the corresponding floodplains — so the full extent of uranium mineralisation at Yolanda remains untested to date.

The identification that a huge 8km of the main Eyre Formation palaeochannel runs through the Yolanda Prospect makes this Marmota’s THIRD exciting uranium exploration target at Junction Dam.

The next and final stage of the Junction Dam review will be focusing on the NW corner of Marmota’s Junction Dam tenement immediately adjacent to where Boss has just completed their own drilling program at Jasons. Boss’s best grades come from the Jasons area. ”

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About Marmota Limited

Marmota Limited (ASX: MEU) is a South Australian mining exploration company focused on gold and uranium. Gold exploration is centred on the Company's gold discovery at Aurora Tank that is yielding outstanding intersections in the highly prospective and significantly underexplored Gawler Craton in the Woomera Prohibited Defence Area. The Company's flagship uranium resource is at Junction Dam adjacent to the Honeymoon mine.

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

Competent Persons Statement

The information in this announcement regarding the exploration update was prepared by Mark Couzens of Indepth Geological Services who is an independent consultant. Mr Couzens is a member of the AusIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration (over 10 years uranium exploration and ISR experience) and to the activity he is undertaking to qualify as competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012). Mr Couzens approves of and consents to the inclusion of the information in this announcement and context in which it appears.

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.