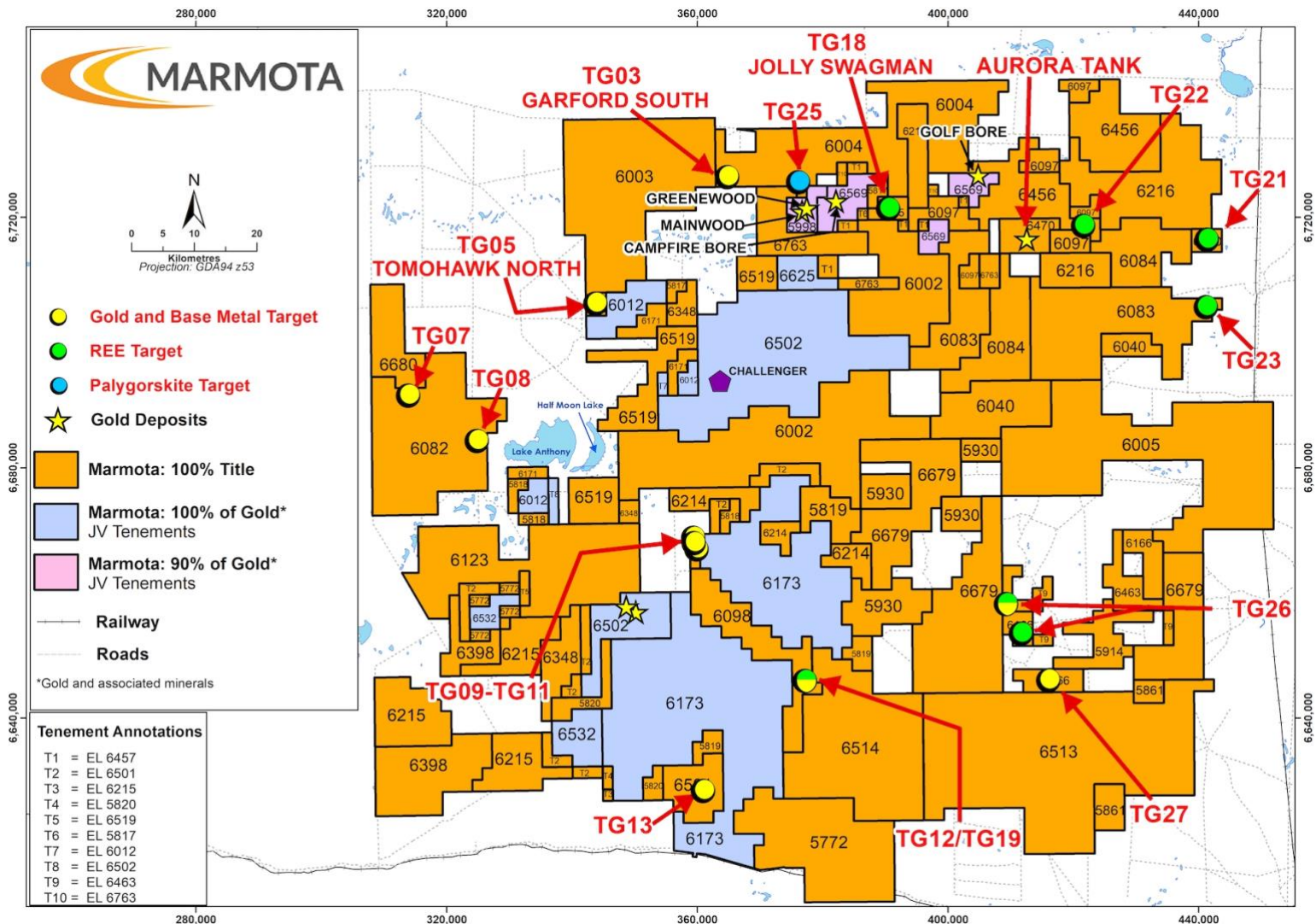


# 1. Project X Commenced

During the quarter [ ASX:MEU 1 Aug 2023, 20 Sept 2023 ], Marmota commenced its largest regional reconnaissance program ever, with **multiple targets** over **multiple minerals** on a **multitude of tenements** across the Company’s substantial ~10,000 km<sup>2</sup> tenement package.

Figure 1 provides an overview of the multiple targets in Stage 1 of Project X.



**Figure 1: Project X – Stage 1 TARGETS**

**PROGRAM: STAGE 1**

- **AC holes:** 258 holes 7,010 m
- **RC holes:** 11 holes (may vary) ~ 1,000 m
- **Auger holes:** 260 holes (may vary) ~ 1000 m

**Stage 1 AC Drilling has already completed on:**

<b>Target Number</b>	<b>Objective</b>
● <b>Target 5</b> <i>Tomohawk North</i>	Gold
● <b>Target 3</b> <i>Garford South</i>	Gold
● <b>Target 25</b>	Palygorskite
● <b>Target 18</b> <i>Jolly Swagman</i>	REE (rare earth elements)
● <b>Target 22</b>	REE
● <b>Target 21</b> <i>Manna From Heaven</i>	REE
● <b>Target 23</b> <i>More Manna</i>	REE
● <b>Target 12</b>	Gold and REE
● <b>Target 19</b>	Gold and REE
● <b>Target 9</b>	Gold
● <b>Target 10</b>	Gold

[ see targets clockwise from TOP LEFT in **Figure 1** ]

**Project X AC drilling total to date: 7,010m AC (258 holes)**

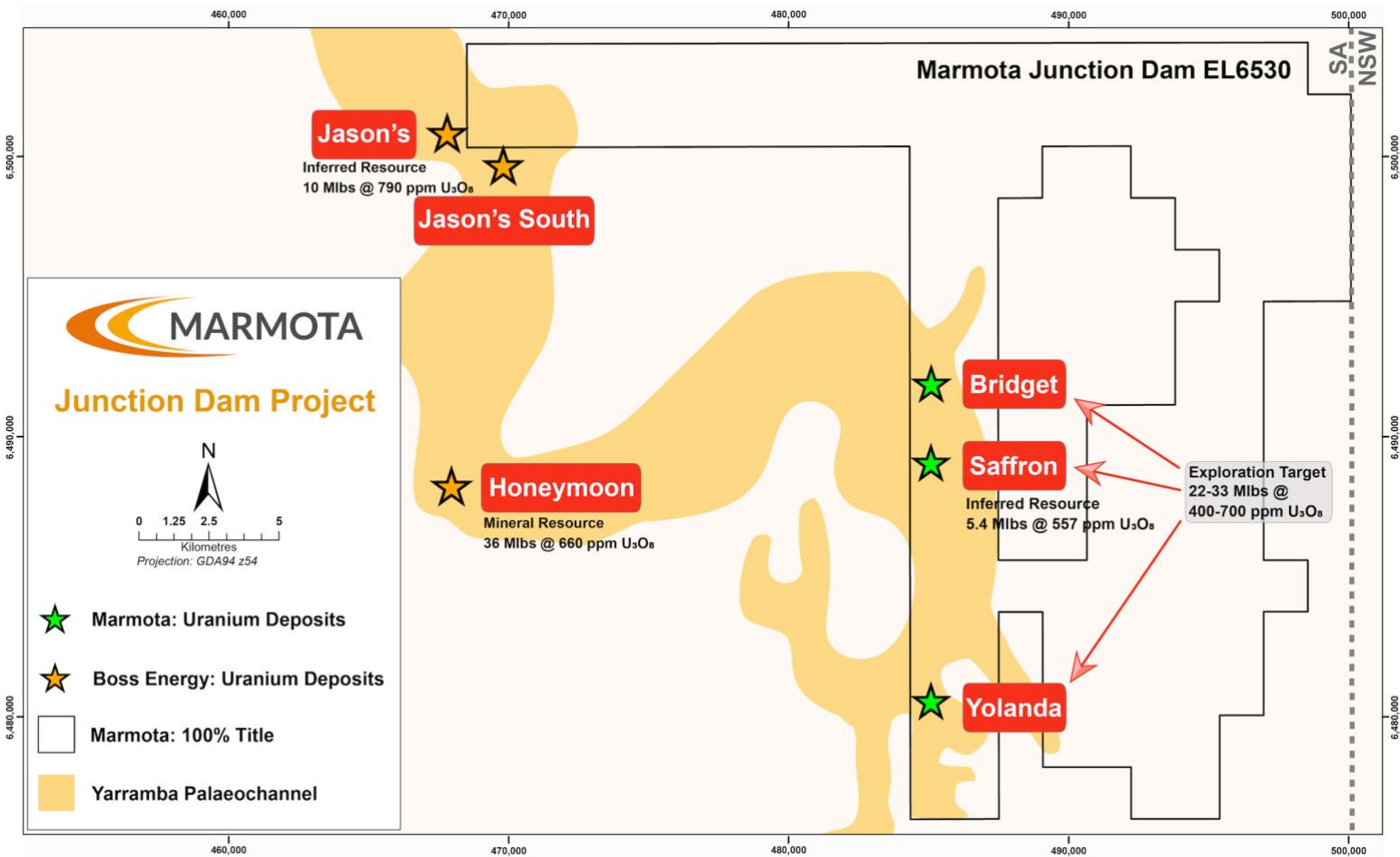
Samples from the above targets have been delivered to the laboratory for assaying. Labs are backlogged and first assay results are expected to start arriving mid-December.

Marmota Chairman, Dr Colin Rose, said:

“ This is shaping up as our most interesting and exciting exploration program since Marmota’s gold discovery of Aurora Tank, with multiple targets over multiple tenements. The program – known internally as Project X – has been under development for more than a year and represents an enormous amount of work by Marmota’s exploration team. ”

## 2. URANIUM Junction Dam

Marmota was excited to announce, just 5 days ago, its decision [ ASX:MEU 26 October 2023 ] to re-commence exploration at its Junction Dam Uranium Project to **substantially grow the Company’s uranium resource.**



**Figure 2:**

**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**

# Junction Dam Uranium JORC Resource

- JORC Inferred Resource of **5.4 million pounds**<sup>1</sup> U<sub>3</sub>O<sub>8</sub> [ Saffron deposit ] with average grade of 557 ppm U<sub>3</sub>O<sub>8</sub> [ ASX:MEU 18 Nov 2011, 20 Feb 2012, 17 July 2013 ]
- Overall Exploration Target<sup>2</sup> of **22–33 million pounds** U<sub>3</sub>O<sub>8</sub> at approx. 400 to 700 ppm U<sub>3</sub>O<sub>8</sub> [ ASX:MEU 9 July 2012 ]  
[ Uranium price is currently over US\$70 per pound ]
- Assay grades of up to **8,143ppm** U<sub>3</sub>O<sub>8</sub>.

## Key Points

- The Junction Dam uranium resource is located within the same Yarramba Palaeochannel as the Boss Energy ('Boss' ASX:BOE) Honeymoon Uranium mine (36 Mlb @ 660 ppm U<sub>3</sub>O<sub>8</sub>). Marmota's Junction Dam tenement bookends both sides of the palaeochannel of the Boss Honeymoon plant [ see [Figure 2](#) ].
- The value of uranium in the Yarramba Palaeochannel is self-evident from the market capitalisation of Boss Energy which currently exceeds \$1.5 billion.
- Previous exploration was highly successful: halted due to market conditions after Fukushima.
- **Potential to significantly increase the size of Marmota's Junction Dam uranium resource**, particularly since Marmota's two adjoining uranium prospects (Bridget and Yolanda) are not yet included in the current Junction Dam uranium resource.

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<sup>1</sup> By 2014, Marmota exploration work at Junction Dam ceased, and no further drilling work has been carried out subsequently. For comparison, at a similar point in time, in 2015, at the time of the Boss acquisition, the Honeymoon Uranium Project had global resources of 16.6 million pounds U<sub>3</sub>O<sub>8</sub> [ASX:BOE 4 Aug 2021 (p.6)], and with the benefit of further work, has grown substantially.

<sup>2</sup> Saffron deposit with Bridget and Yolanda prospects: see ASX:MEU 9 July 2012. The potential quantity and grade of an Exploration Target is conceptual in nature. The estimates of Exploration Targets should not be misunderstood or misconstrued as estimates of Mineral Resources. It is uncertain if further exploration over those zones currently defined by an Exploration Target will result in the determination of a Mineral Resource.

**Marmota Chairman, Dr Colin Rose, said:**

“ The Junction Dam Uranium Resource is one of the most exciting uranium deposits in South Australia. The future for Marmota looks very promising with both Aurora Tank gold and Junction Dam uranium showing the potential to be outstanding deposits.

The timing is also perfect for Marmota, with Aurora Tank gold reaching an advanced stage and focus there shifting from exploration to the production pathway (notably carrying out metallurgical testwork to optimise low-cost heap leach production), and with the uranium market fundamentals and sentiment dramatically increasing. ”

### 3. WGCJV

Marmota is the manager and majority partner in the Western Gawler Craton Joint Venture (WGCJV) by virtue of its acquisition of Half Moon Pty Ltd (the latter acquired as part of the Jumbuck gold transaction). Within the Joint Venture area, there is an existing JORC Resource of 319,000 ounces gold (see Resource Estimates Table below), most of which is located on tenements near Aurora Tank.

#### Resource Estimates

Table 1. Jumbuck Project Mineral Resource Estimates May 2018 - 0.5g/t cut-off grade

Deposit 0.5 g/t cut-off grade	Indicated Resources			Inferred Resources			Total Mineral Resources		
	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz	Mt	Au g/t	Au koz
Golf Bore	0.57	1.0	18	3.22	1.0	100	3.79	1.0	119
Campfire Bore	-	-	-	2.78	1.2	109	2.78	1.2	109
Greenwood	0.14	1.4	7	0.75	1.6	39	0.90	1.6	46
Monsoon	-	-	-	0.61	0.8	17	0.61	0.8	17
Typhoon	-	-	-	0.27	1.9	16	0.27	1.9	16
Mainwood	-	-	-	0.35	1.1	12	0.35	1.1	12
<b>Total</b>	<b>0.74</b>	<b>1.1</b>	<b>25</b>	<b>7.99</b>	<b>1.1</b>	<b>294</b>	<b>8.70</b>	<b>1.1</b>	<b>319</b>

\*The figures in these tables are rounded to reflect the precision of the estimates and include rounding errors.

Source: ASX:TYX 30 May 2018

During the quarter:

1. Marmota and Half Moon issued a pre-action claim pursuant to Rule 61.7 of the *Uniform Civil Court Rules 2020 (SA)* [ ASX:MEU 13 July 2023 ], giving formal notice of the intent to commence proceedings in the Supreme Court of South Australia against Barton Gold Holdings Ltd ('Barton' ASX:BGD) and Barton's wholly owned subsidiary Challenger 2 Pty Ltd ('Challenger 2'), including relating to their attempts to frustrate the WGCJV.
2. On 31 August 2023, Challenger 2 issued a Notice of Withdrawal from the WGCJV (effective 9 November 2023).

The consequence of the above is that, effective 9 November 2023, Marmota's ownership of the gold rights over JV tenements in [Figure 1](#) increase as follows:

- **BLUE** tenements: Gold rights increase from 78.84% to 100%
- **PINK** tenements: Gold rights increase from 70.96% to 90%

## 4. Corporate

### AGM in Sydney

The AGM will be held for the first time in Sydney, at 3pm (Sydney time) on:

**Thursday 23 November 2023** at:  
**BDO**, Level 11, 1 Margaret St, Sydney 2000

For full detail, please see the **Notice of Meeting** [ ASX:MEU 18 Oct 2023 ]

## What is next?

### Aurora Tank Gold

- Metallurgical testwork program commencing.
- Full suite of tests aimed at optimising heap leach gold recoveries.
- Essential component to transition Marmota's gold discovery at Aurora Tank to production via open-pittable low-cost low capex heap leach methods.

### Project X

- Multiple targets, multiple minerals, multiple tenements
- Marmota's largest recon program ever.
- AC drilling samples are already in labs.
- Labs are congested: first assays due to start arriving mid-Dec.

### Uranium

- Marmota has just announced its decision to re-commence exploration at Junction Dam, to substantially grow its uranium resource.
- Further announcements to follow.

### ASX Listing Rule 5.3

Pursuant to ASX Listing Rule 5.3, the Company's expenditure during the quarter was focused on exploration and evaluation activities (\$523K on exploration). Details are provided in the attached Appendix 5B. During the quarter, related party expenses were: executive directors salaries (\$34K), non-executive director fees (\$9K) and superannuation (\$7K).

#### Competent Persons Statement

*Information in this Release relating to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Aaron Brown, who is a Member of The Australian Institute of Geoscientists. He has sufficient experience which is 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 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.*

Follow Marmota on Twitter at: [twitter.com/MarmotaLimited](https://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 project is at Junction Dam adjacent to the Honeymoon mine.

For more information, please visit: [www.marmota.com.au](http://www.marmota.com.au)